Indiana Department of Environmental Management
Office of Water Quality
Wetlands Section

Publication Date:
May 2, 2024

Closing Date:
May 23, 2024

PUBLIC NOTICE

IDEM ID Number:
2023-1151-18-EJW-A

Corps of Engineers ID Number:
LRL-2023-00982-cte

To all interested parties:

This letter shall serve as a formal notice of the receipt of an application for **Section 401 Water Quality Certification** by the Indiana Department of Environmental Management (IDEM). The purpose of the notice is to inform the public of active applications submitted for water quality certification under Section 401 of the Clean Water Act (33 U.S.C. § 1341) and to solicit comments and information on any impacts to water quality related to the proposed project. IDEM will evaluate whether the project complies with Indiana's water quality standards as set forth at 327 IAC 2.

1. Applicant: Kelli D. Boren
AEP Indiana Michigan Transmission Co., Inc.
212 E 6th Street, 04
Tulsa, OK 74119

2. Agent: Jen Walker
AEP Indiana Michigan Transmission Co., Inc.
8600 Smiths Mill Road
New Albany, OH 43054

3. Project location: Approximately 0.18 miles East of N Wheeling Ave and W Moore Rd intersection in Muncie, Delaware County.
Latitude: 40.2370 Longitude: -85.4099

4. Affected waterbody: Federally jurisdictional forested Wetland DK-1

5. Project Description: To rebuild 2.8 miles of an existing 69 kV transmission line. Permanent impacts include conversion of 0.37 acres of federally jurisdictional forested wetland to emergent wetland and a structure installation. Temporary impacts include temporary construction matting on 0.07 acres of wetland. Temporarily impacted wetlands will be restored and compensatory mitigation requirements will be met by purchasing 1.2 acres of forested wetland credit from the Bell-Buck Wetland Mitigation Bank.
Additional information may be found on line at https://www.in.gov/idem/5474.htm

Comment period: Any person or entity who wishes to submit comments or information relevant to the aforementioned project may do so by the closing date noted above. Only comments or information related to water quality or potential impacts of the project on water quality can be considered by IDEM in the water quality certification review process.

Public Hearing: Any person may submit a written request that a public hearing be held to consider issues related to water quality in connection with the project detailed in this notice. The request for a hearing should be submitted within the comment period to be considered timely. The request should also state the reason for the public hearing as specifically as possible to assist IDEM in determining whether a public hearing is warranted.

Questions? Additional information may be obtained from Evan White, Project Manager, by phone at 317-671-6698 or by e-mail at evwhite@idem.in.gov. Please address all correspondence to the project manager and reference the IDEM project identification number listed on this notice. Indicate if you wish to receive a copy of IDEM's final decision. Written comments and inquiries may be forwarded to -

Indiana Department of Environmental Management
100 North Senate Avenue
MC65-42 WQS IGCN 1255
Indianapolis, Indiana 46204-2251 FAX: 317/232-8406

February 28, 2024

Mr. Evan White
Indiana Department of Environmental Management
Office of Water Quality
Section 401 Regional General Permit Notification
100 North Senate Avenue
Indianapolis, IN 46204-2251

RE: Response to Preliminary IDEM Comments; AEP Indiana Michigan Transmission Company's Bethel – Delaware 69 kV Transmission Line Rebuild Project (IDEM ID 2023-1151-18-JW-A); Delaware County, Indiana.

Dear Mr. White:

This document is in response to preliminary comments provided by IDEM via email on December 18, 2023 regarding the Indiana Michigan Transmission Company (I&M) Clean Water Act Section 401 Water Quality Certification (WQC) and Nationwide Permit (NWP) 57 pre-construction notification (PCN) for construction activities to occur in jurisdictional wetlands to the Indiana Department of Environmental Management (IDEM) and the United States Army Corps of Engineers (USACE) for the Bethel – Delaware 69 kV Transmission Line Rebuild Project (Project), in Delaware County, Indiana. The Project has been assigned IDEM ID 2023-1151-18-EJW-A. Per IDEM's comments State Form 51821 has been completed included as Attachment 1, and a restoration plan and seed mix has been included as Attachment 2. All necessary site drawings and supplemental application materials for State Form 51821 have been submitted with the previous submittal or attached with this response.

IDEM further commented that the USACE mitigation hierarchy prioritizes wetland mitigation banks over the Indiana in-lieu fee program. The Bull-Buck Wetland Mitigation Bank (USACE Action No LRL-2021-00188) currently has available forested mitigation credits sufficient to meet the needs of the Project and I&M has arranged payment for the required credits. An executed wetland mitigation credit reservation and purchase agreement for 1.2-acres of forested wetland mitigation credits is provided as Attachment 3.

As you review the attached supplemental information for the initial permit application package, please contact Matt Thomayer with WSP at 513-375-4910 or matt.thomayer@wsp.com; or Jennifer Walker with AEP at 614-477-5410 or jlwalker2@aep.com with any questions or if you require additional information.

Sincerely,

Matthew D. Thomayer
Assistant Vice President, Environmental Scientist
WSP USA

Attachments:
1 — State Form 51821
2 — Restoration Plan and Seed Mix
3 — Mitigation Credit Reservation and Purchase Agreement

Cc: Jennifer Walker, AEP I&M
Laban Lindley, Chief, North Branch Regulatory Division USACE, Louisville District

ATTACHMENT 1

State Form 51821

APPLICATION FOR AUTHORIZATION TO DISCHARGE DREDGED OR FILL MATERIAL TO ISOLATED WETLANDS AND/OR WATERS OF THE STATE

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INSTRUCTIONS: *1. Read the instruction sheet before filling out this form.*

2. You must complete all applicable sections of this form

1. Applicant Information	2. Agent Information
□□□ □□of □□□□□□□□□ AEP Indiana Michigan Transmission Co., Inc.	□□□ □□□□□A□en□ AEP Indiana Michigan Transmission Co., Inc.
M□□□□□□□□ddr□□□ *(Street/ PO Box/ Rural Route, City, State, ZIP Code)* General Office 212 E 6th Street, 04 Tulsa, OK 74119	M□□□□□□□□ddr□□□ *(Street/ PO Box/ Rural Route, City, State, ZIP Code)* 8600 Smiths Mill Road New Albany, OH 43054
D□□□□□ □□□□□□□□□□□□□□□ □□ □□r 918-691-0435	D□□□□□ □□□□□□□□□□□□□□□ □□ □□r 614-477-5410
Fax □□ □□ □□r	Fax □□ □□ □□r
E-ma □□□ddr□□□ *(optional)* kdboren@aep.com	E-ma □□□ddr□□□ *(optional)* jwalker2@aep.com
□□□□□□□□□r□□□ *(required)* Kelli D. Boren	□□□□□□□□□r□□□ Jen Walker

3. Project / Tract Location	
□□□□□□ Delaware	□□r□□□□□□□□□r□□□□ □ Muncie, IN
□□□. □□. □ □□dr□□□□□□□ □□□□□□ □ *(Topographic map)* Muncie West, IN	□r□□□□□□r□□□□ddr□□□ *(if applicable)* W County Road 325 N Muncie, IN 47304
□ □□r□□r S□cti□n 29	□□□ □□□□□ 21N R□□□□ 10E
□□□□□□□□□□□□□□□res□□rce□s□□□□□□□□□□ □□□□□d *(Attach Worksheet One.)* Jurisdictional Wetland	□r□□□□□□□□□ □□□r□itl□ *(if applicable)* Bethel-Delaware 69 kV Transmission Line Rebuild

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From Indianapolis: travel east on I-70 to exit 89 toward I-465N. Continue north on I-465 for 7 miles and keep right to continue onto I-69N. Travel 40 miles to exit 241to IN-332. Turn right onto IN-332 and travel 7.5 miles. Turn left on Tillotson Avenue, travel 0.6 miles, and continue onto North Everett Road. Travel 0.8 miles then turn right onto W Moore Road. Travel 0.7 miles to location of STR 38.

4. Project Purpose and Description □*Use additional sheet(s) if required.*□

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The purpose of the Project is to rebuild approximately 2.8 miles of an existing 69 kV transmission line, thereby supporting system reinforcement and area reliability needs to provide sustainable, safe, and reliable power for regional homes and businesses.

Proposed impacts to a likely-jurisdictional wetland with Palustrine Forested (PFO) and Palustrine Emergent (PEM) components. Proposed permanent impacts include clearing (conversion) of approximately 0.37 ac of PFO wetland to PEM wetland, in addition to the installation of one transmission structure within the same area. Temporary impacts from construction matting will also occur within the conversion area, totaling 0.04 acres. Temporary impacts from construction matting will also occur within likely-jurisdictional PEM wetland, totaling 0.03 ac.

5. Avoidance, Minimization, and Mitigation Information: Applicants must answer all of the following questions

Use additional sheet(s) if necessary - provide a detailed response to all applicable questions.

A. For projects with Class II isolated wetlands –

1

N/A

2

N/A

B. For projects with Class III wetlands, adjacent wetlands, and/or streams, rivers, lakes or other water bodies –

1

N/A

2

N/A

Since there are permanent conversion and/or permanent fill over 0.10-acre, compensatory mitigation is required for the Project. Compensatory mitigation for the Project is anticipated to be fulfilled through the purchase of 1.2-acres of forested wetland mitigation credits at the Bell-Buck Wetland Mitigation Bank for any unavoidable impacts. This will result in a mitigation ratio greater than 3:1 for impacts to forested wetlands. This will serve as the mitigation plan for the Proposed Project. All required mitigation credits will be purchased, prior to any proposed work in identified water resources.

6. Drawing / Plan Requirements *(Applicants must provide the following.)*

7. Supplemental Application Materials *(Applicants must provide the following.)*

(for projects with wetland impacts)

(if isolated wetlands are present onsite)

(see instructions)

8. Additional information that MAY be required *(IDEM will notify you if needed.)*

9. Permitting Requirements

[illegible] ☑ [illegible] ☐ [illegible]

[illegible] ☑ [illegible] ☐ [illegible]

[illegible] **If no, contact** [illegible]

Initial submission of the joint application to USACE and IDEM was made on December 19, 2023. A USACE ID number nor a project manager have been provided at this time.

[illegible] ☐ [illegible] ☑ [illegible]

[illegible]

[illegible] ☐ [illegible] ☑ [illegible]

[illegible]

10. Adjoining Property Owners and Addresses

List the names and addresses of landowners adjacent to the property on which your project is located and the names and addresses of other persons (or entities) potentially affected by your project. Use additional sheet(s) if required.

Indiana Michigan Power Company *(number and street)* PO Box 16428 Columbus OH 43216-6428	Bellwinart, Inc. *(number and street)* 1901 W Enterprise Ave Muncie IN 47304
Delbert F Clune Supplemental Care Trust *(number and street)* 4313 N Tillotson Ave Muncie IN 47304	IUBAC Local #4 *(number and street)* 8455 Moller Rd, Ste 100 Indianapolis IN 46268-1509
JU Properties LLC *(number and street)* 14327 E County Rd 150 S Parker City IN 47368	*(number and street)*
(number and street)	*(number and street)*
(number and street)	*(number and street)*
(number and street)	*(number and street)*

11. Signature - Statement of Affirmation

Kelli Boren

2/22/2024
(mm/dd/yyyy)

ATTACHMENT 2

Restoration Plan and Seed Mix

RESTORATION WORKPLAN

BETHEL – DELAWARE 69 KV TRANSMISSION LINE REBUILD PROJECT

The following discussion includes an outline and general plan for restoring temporary impacts to existing wetlands located along the above referenced Project corridor, including Wetland Dk-1, a wetland which includes both palustrine emergent (PEM) and palustrine forested (PFO) components which will be permanently impacted by the conversion of PFO vegetation to PEM, and will also be temporarily impacted by the placement of temporary construction access matting. The locations of temporary impacts are shown on mapping included in the initial Project permit application to both the USACE, Louisville District and IDEM.

Avoidance and Minimization

To avoid unintentional wetland impacts, wetlands occurring outside the active construction area will be protected with high visibility construction fencing (orange barrier fencing and wetland signage) to clearly indicate the presence of additional wetland area extending beyond the immediate work zone. Wetlands to be avoided are included on the Plan Drawings (SWPPP Figures) included in the permit package. All construction personnel working on the Project will be advised of the locations of the protected wetlands during a pre-construction meeting as well as daily safety meetings.

To protect wetlands within the active project area, all construction workpads/access roads within wetlands will be overlain with timber or composite mats with geotextile fabric underneath. In order to minimize impacts to existing vegetation as much as possible, AEP will attempt to maintain as much of the existing woody vegetation within wetlands when possible by minimizing clearing by forestry crews and only clearing what is necessary to install matting. In addition, matting will be installed over vegetation when possible to allow for possible restoration with existing species and to minimize the need for supplemental plantings. Any temporary timber mats installed for work pads or access roads will be fully removed as soon as work at the immediate location is complete.

The following additional mitigation measures will be employed during construction:

- Erosion and sediment controls will be properly installed and maintained as detailed in the Project Storm Water Pollution Prevention Plan (SWPPP) to minimize potential impacts to regulated water resources. E&S Controls will remain in place until vegetation is established.

- The use of chemicals within 50 feet or on slopes leading to waters of the U.S. will be prohibited, with the exception of aquatic-approved herbicides for vegetation management within the maintained transmission line ROW.

- No equipment staging or storage of construction materials will occur within 50 feet or on slopes leading to waters of the U.S.

- Equipment will be refueled in level, designated containment areas, a minimum of 100 feet from waters of the U.S.

- Suggested modifications to construction routing and access will be reviewed by AEP Environmental to assure continued compliance with applicable state and federal terms and conditions.

Soil Preparation

After construction is complete, all construction matting, woody debris, temporary fills, or non-soil materials will be removed from the areas to be restored. If saturated or inundated, soils must be left to dry prior to preparation.

Portions of the restoration areas where grade has been modified will be final graded to preconstruction contours. Excavated and filled sections and adjacent transition areas will be reasonably smooth, firm, and free from irregular surface changes.

If the topsoil has been compacted, a spring tooth harrow equipped with utility or seedbed teeth, or similar equipment, will be used to loosen and smooth the soil surface. If topsoil is loose, it will be compacted with a cultipacker or similar implement to provide a firm seedbed.

Incorporation of fertilizers or soil amendments are not recommended within wetlands.

The soil surface will be protected from erosion and washouts until seeded. Damaged surfaces must be repaired as required before seeding occurs.

Seeding

Seeding should occur in early spring or late fall with suitable ground conditions. Seed should not be sown when the soil is in a frozen or crusted state, or in areas where water depth exceeds 0.5 inch. If seeding cannot be conducted, erosion control shall be maintained, and a temporary cover crop utilized until permanent seeding can occur. Seeding will be done using the attached seed mix typically used by AEP for PEM wetlands.

Wetland seed will be surface sown using a broadcast method. If conditions do not allow all-terrain vehicle access, hand application of seed may be conducted by experienced personnel. Seeded areas will be tamped or rolled to provide satisfactory soil contact.

Wetland seed should not be mulched or covered; however, barriers and erosion control will be installed as needed to protect seeded areas from damage during establishment.

Future Line Maintenance for Wetland DK-1

As with other AEP overhead transmission lines, the recruitment of woody species within Wetland DK-1 will be allowed to remain as long as shrubs do not exceed 15 feet in height. Future line maintenance may require selective hand-cutting of any shrubs that exceed 15 feet in height to ensure safe operation of the transmission line.

Recommended Emergent Wetland Seed Mix

Suggested application rate of 34.37 PLS Lbs/Acre

Temporary Cover

Common Name	Botanical Name	PLS lbs/Acre
Annual Rye	*Lolium multiflorum*	6.25
Common Oat	*Avena Sativa*	22.50
	Temporary Cover Total:	**28.75**

Permanent Grasses/Sedges/Rushes

Common Name	Botanical Name	PLS Lbs/Acre
Bottlebrush Sedge	*Carex lurida*	0.25
Bristly Sedge	*Carex comosa*	0.16
Brown Fox Sedge	*Carex vulpinoidea*	0.38
Chairmaker's Bulrush	*Scirpus pungens*	0.19
Common Lake Sedge	*Carex lacustris*	0.02
Common Rush	*Juncus effusus*	0.06
Common Tussock Sedge	*Carex stricta*	0.06
Great Bulrush	*Scirpus validus*	0.38
Great Spike Rush	*Eleocharis palustris*	0.06
Hard-stemmed Bulrush	*Scirpus acutus*	0.16
Rice Cut Grass	*Leersia oryzoides*	0.19
River Bulrush	*Scirpus fluviatilis*	0.06
	Permanent Grasses/Sedges/Rushes Total:	**1.95**

Permanent Forbes

Common Name	Botanical Name	PLS Lbs/Acre
Arrow Arum	*Peltandra virginica*	1.00
Blue Flag	*Iris virginica*	0.38
Blue Vervain	*Verbena hastata*	0.06
Buttonbush	*Cephalanthus occidentalis*	0.38
Cardinal Flower	*Lobelia cardinalis*	0.02
Common Arrowhead	*Sagittaria latifolia*	0.13
Common Bur Reed	*Sparganium eurycarpum*	0.38
Common Water Horehound	*Lycopus americanus*	0.02
Ditch Stonecrop	*Penthorum sedoides*	0.03
Great Blue Lobelia	*Lobelia siphilitica*	0.02
Monkey Flower	*Mimulus ringens*	0.06
Pickerel Weed	*Pontederia cordata*	0.63
Pinkweed (Various Mix)	*Persicaria spp.*	0.03
Rosemallow (Various Mix)	*Hibiscus spp.*	0.25
Spotted Joe-Pye Weed	*Eupatorium maculatum*	0.03
Swamp Loosestrife	*Decodon verticillatus*	0.03
Swamp Milkweed	*Asclepias incarnata*	0.09
Sweet Flag	*Acorus calamus*	0.03
Water Plantain (Various Mix)	*Alisma spp.*	0.13
	Permanent Forbes Total:	**3.67**

Total Lbs/Acre:	**34.37**

INSTALLATION NOTES:

1. Northern Indiana Native Seed Suppliers – Spence Restoration Nursery, 2220 East Fuson Road, Muncie, Indiana 47302 – (765) 286-7154; Cardno Native Plant Nursery, 128 Sunset Drive, Walkerton, Indiana 46574 – (574) 586-2412; Earth Source Inc. Heartland Restoration Services, 14921 Hand Road, Fort Wayne, Indiana 46818 – (260) 489-8511
2. All native seed shall be stored in a cooler at 40 degrees Fahrenheit prior to installation. All native seed must be of wild ecotype. No hybrids or cultivars may be included. Seed shall be local genotype as supplied by Spence Restoration Nursery or an approved local source.
3. Installation shall be performed between April 20th and July 20th or October 15th through freeze. If site is prepared at any other time of the year, stabilize with the following seed mix per acre
    i. 64 lbs. seed oats (Avena sativa)
    ii. 25 lbs. annual ryegrass (Lolium multiflorum)
4. Under no circumstances shall the site be stabilized with winter rye, grain rye, or winter wheat. These plants produce toxins that inhibit native seed germination.

APPLICATION:

Soil Preparation (Timber Mat Removal):

1. Once timber matting is removed, verify that the site is clean and free of debris (ie stones, rebar, geotextile fabric, wood debris etc.)
2. To reduce compaction of the affected areas, site shall be disked to a depth of 4”-6”.
3. Verify that the site is within 4 inches of the original grade.
4. Verify that the seed bed is sufficiently firm.

Seed Bed Preparation (Native Seeding):

1. If vegetation exists on the restoration areas, apply a glyphosate herbicide at least three days prior to installation on all actively growing vegetation. NEVER APPLY FERTILIZER TO THE SITE.
2. Grade area smooth and conforming to the final grade elevations, fill in low spots or depressions.
3. Remove stones larger than 1 inch diameter and all sticks, roots, rubbish, and other extraneous matter and dispose at a designated location.
4. Fine grade all areas to receive permanent seed mix.

Seed Installation (Drill Seeding):

1. Ensure Native Seed Drill (Truax, Great Plains, or John Deere Inc.) is properly calibrated to receive an evenly distributed rate per acre of the seed mix specified above.
2. Seed shall be installed no greater than ¼” below the finish grade.

Seed Installation (Broadcasting):

1. Sow seed with a broadcast hand spreader or seeding machine.
2. Evenly distribute seed by sowing equal quantities in two directions at right angle to each other.
3. Rake or cultipack seed lightly into the top ¼” of soil and roll lightly.

Erosion Control:

1. Mulch seeded areas with fresh and clean straw mulch at a rate of 2 TONS per acre.
2. Crimp or tack straw mulch to keep in place.

MAINTENANCE:

1. Inspect within 24 hours of each rain event and at least once every SEVEN calendar days.
2. Check for erosion or movement of mulch and repair immediately.
3. Monitor for erosion damage and adequate cover (80 percent density); reseed and apply mulch where necessary.

ATTACHMENT 3

Mitigation Credit Reservation and Purchase Agreement

MITIGATION CREDIT RESERVATION AND PURCHASE AGREEMENT

THIS MITIGATION CREDIT RESERVATION AND PURCHASE AGREEMENT (the "Agreement") is made as of this 2nd day of February, 2024 ("Effective Date"), by and between **Central Indiana Mitigation Providers, LLC**, as seller ("Seller"), and **Indiana Michigan Transmission Company**, as purchaser ("Purchaser").

RECITALS

A. Seller is the sponsor and owner of that certain mitigation bank identified as **Bull-Buck** Mitigation Bank, USACE Action No.: **LRL-2021-00188** (the "Mitigation Bank"). The establishment, use, operation, and maintenance of the Mitigation Bank are subject to the requirements of that certain **Bull-Buck** Mitigation Bank Banking Instrument ("MBI") approved by the Interagency Review Team (as defined in the MBI) on **February 27, 2023**.

B. Pursuant to the requirements of the Clean Water Act, regulations promulgated thereunder, and as a condition to the issuance of permit number **TBD** by the United States Army Corps of Engineers ("USACE") and permit number **IDEM ID 2023-1151-18-JW-A** by the Indiana Department of Environmental Management ("IDEM"). Purchaser must mitigate for impacts to **Forested Wetland** on certain property commonly known as **Bethel – Delaware 69 kV Transmission Line Rebuild** located in **Delaware County, IN** (the "Development Impacts").

C. Purchaser desires to reserve and purchase from Seller **1.20 Forested Wetland** bank credits (the "Reserved Credits"), and Seller has agreed to reserve and sell to Purchaser such Reserved Credits, on the terms and conditions hereinafter set forth below.

AGREEMENT

NOW, THEREFORE, in consideration of the promises and the mutually dependent covenants contained herein and other good and valuable consideration, the adequacy and receipt of which is hereby acknowledged, and intending to be legally bound, Seller and Purchaser agree to the following terms and conditions:

1. **Reservation and Sale of Credits.**

(a) Reservation of Credits. So long as Purchaser delivers to Seller this Agreement signed by Purchaser together with a cash deposit in the amount of **Sixteen Thousand Two Hundred Dollars and 00/100 Cents ($16,200.00)** (the "Deposit"), Seller agrees to reserve the Reserved Credits for Purchaser and its project for a period of **Ninety (90)** days from the Effective Date (the "Reservation Period"). Purchaser shall have the right and option to extend the Reservation Period for a **Ninety (90)** days by delivering written notice thereof to Seller together with an addition to the Deposit in the amount of **Sixteen Thousand Two Hundred Dollars and 00/100 Cents ($16,200.00)** on or before the expiration of the Reservation Period. The Deposit shall, except in the case of default by Seller hereunder, be non-refundable to Purchaser.

(b) Sale of Credits. Subject to the terms and conditions of this Agreement and upon thirty (30) days advance written notice to Seller from Purchaser, Seller agrees to sell, assign, convey and transfer to Purchaser, and Purchaser agrees to purchase from Seller, the Reserved Credits solely to mitigate Development Impacts.

2. **Closing; Term and Termination.** This Agreement shall commence upon the Effective Date and shall automatically expire upon the expiration of the Reservation Period. The Closing on the purchase and sale of the Reserved Credits shall take place on or before the expiration of the Reservation Period ("Closing"). In the event the Agreement has expired, and Closing has not occurred, Seller, shall, without any rights, obligations, or liability to Purchaser whatsoever, be entitled to retain the Deposit.

3. **Purchase Price.** The aggregate purchase price for the Reserved Credits shall be **One Hundred Thirty-Five Thousand Dollars and 00/100 Cents ($135,000.00)** per **Forested Wetland Credit**, for a total purchase price of **One Hundred Sixty-Two Thousand Dollars and 00/100 Cents ($162,000.00)** (the "Purchase Price").

4. **Payment of Purchase Price.** The Purchase Price shall be paid by Purchaser to Seller in the following manner:

(a) Deposit. Within ten (10) days of Purchaser's execution and delivery to Seller of this Agreement, Purchaser shall deliver to Seller a cash deposit by wire transfer of immediately available funds in the amount of **Sixteen Thousand Two Hundred Dollars and 00/100 Cents ($16,200.00)** (the "Deposit"). The Deposit shall, except in the case of default by Seller hereunder, be non-refundable to Purchaser, non-transferrable by Purchaser and shall be applied toward the Purchase Price at Closing.

(b) Balance of Purchase Price. The Purchase Price, *less* all Deposits paid pursuant to Section 2(a) above, shall be paid by wire transfer to Seller of immediately available funds at Closing in full satisfaction of the Purchase Price.

5. **Buyer's Deliveries.** At Closing, Buyer shall deliver to Seller the balance of the Purchase Price as provided in Section 4 above.

6. **Seller's Deliveries.** Upon receipt of the full Purchase Price and within thirty (30) days after Closing, Seller shall deliver to Purchaser a **Bill of Sale** evidencing the sale of the Reserved Credits to Purchaser.

7. **Closing Costs.** Seller shall pay the cost of preparing the Bill of Sale, any taxes and costs customarily paid by sellers of credits from the Mitigation Bank, and Seller's attorney's fees. Purchaser shall pay the cost of Purchaser's attorney's fees, any taxes, and any costs customarily paid by purchasers of credits from the Mitigation Bank, if any.

8. **Effect of Condemnation, Regulatory Action or Force Majeure.**

(a) Condemnation. If the Mitigation Bank or any part thereof is taken prior to Closing pursuant to eminent domain proceedings, or if such proceedings are commenced prior to Closing, and, in either case, as a result the Seller determines that it will be unable to transfer the Reserved Credits to Purchaser at Closing as specified in this Agreement, then either party may terminate this Agreement by providing written notice thereof to the other at any time prior to Closing. If either party elects to terminate this Agreement as provided in this subparagraph, the Deposit shall be refunded to Purchaser and neither party shall have any further rights or obligations hereunder, except as expressly provided herein.

(b) Regulatory Action.

(i) If Seller is unable to transfer the Reserved Credits to Purchaser as provided in this Agreement because of the action or order of any regulatory agency, regardless of whether or not

Seller has contested or challenged such action or order, either party may terminate this Agreement by providing written notice to the other party at any time prior to Closing. If either party elects to terminate this Agreement as provided in this subparagraph, the Deposit shall be refunded to Purchaser and neither party shall have any further rights or obligations hereunder, except as expressly provided herein.

(ii) If Purchaser is prevented by any regulatory agency from acquiring the Reserved Credits from Seller as provided in this Agreement, or if Purchaser's mitigation plan for its Development Impacts is not approved, despite Purchaser's diligent efforts, either party may terminate this Agreement by providing written notice to the other party at any time prior to Closing. If either party elects to terminate this Agreement as provided in this subparagraph, the Deposit shall be retained by Seller and neither party shall have any further rights or obligations hereunder, except as expressly provided herein.

(c) Force Majeure. If Seller determines that Seller will be unable to transfer the Reserved Credits, or any part thereof, to Purchaser at Closing as provided in this Agreement because of damage to or loss of the Mitigation Bank resulting from fire, flood, storm, drought, pandemic or other natural disaster, or from any other cause that is not the fault of Seller and is beyond Seller's reasonable ability to prevent or control (a "Force Majeure Event"), Seller shall notify Purchaser that Seller is unable to transfer the Reserved Credits as a result of a Force Majeure Event, whereupon either party may terminate this Agreement by providing written notice to the other party at any time prior to the scheduled date for Closing. If either party elects to terminate this Agreement as provided in this subparagraph, the Deposit shall be refunded to Purchaser and neither party shall have any further rights or obligations hereunder, except as expressly provided herein.

9. **Limitations on Purchaser's Rights.** Seller's sale and conveyance of the Reserved Credits to Purchaser shall not constitute the conveyance or transfer of any right, interest or ownership in real property, nor shall such sale and conveyance impose upon Purchaser any right, obligation, duty or liability arising from or incident to any right, interest or ownership in real property.

10. **Default.**

(a) By Purchaser. If Purchaser fails to make any payment required of it in Section 4 hereunder, or fails to otherwise perform any of its other material obligations under this Agreement, or if any representation or warranty provided by Purchaser in this Agreement proves to have been misleading or false in any material respect when made or as of Closing, Purchaser shall be deemed to be in default and, at Seller's election, in its sole and absolute discretion, Seller may terminate this Agreement and all of Seller's obligations hereunder. Upon any such termination, (A) if prior to Closing, (i) the Deposit shall be forfeited to Seller, (ii) Purchaser shall lose all of its right and privilege to purchase the Reserved Credits from Seller, (iii) Seller may notify, if required by law, [USACE OR OTHER REQUIRED STATE OR AUTHORITY] of Purchaser's failure to fulfill its obligations under this Agreement; and (B) if after Closing (or is discovered by Seller after Closing), Seller shall have the right to pursue all remedies as may be available to Seller at law or in equity. All rights and remedies of Seller hereunder shall be cumulative and not mutually exclusive of one another.

(b) By Seller. If Seller defaults in performing any of Seller's material obligations under this Agreement, and such default continues for a period of thirty (30) days after Purchaser has provided written notice to Seller of such default, or if any representation or warranty provided by Seller in this Agreement proves to have been misleading or false in any material respect when made or as of Closing, then Seller shall be deemed to be in default and (i) if prior to Closing, Purchaser's sole remedies shall be to terminate this Agreement by providing written notice thereof to Seller, and to receive a refund of the Deposit, in which event neither party shall have any further rights or obligations hereunder, except as

expressly provided herein; or (ii) if after Closing (or such default is discovered by Purchaser after Closing), Purchaser shall have the right to pursue such remedies as may be available to it at law or in equity.

(c) NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTINUED IN THIS AGREEMENT, IN THE EVENT OF A DEFAULT, THE DEFAULTING PARTY'S LIABILITY SHALL BE LIMITED TO DIRECT, ACTUAL DAMAGES ONLY, AND SUCH DIRECT ACTUAL DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY HEREUNDER. IN NO EVENT SHALL ANY OTHER LIABILITY BE INCURRED BY EITHER PARTY FOR ANY OBLIGATIONS WHICH ARISE UNDER THIS AGREEMENT, INCLUDING (BUT NOT LIMITED TO) CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY, OR INDIRECT DAMAGES IN TORT, CONTRACT OR OTHERWISE. EXCEPT AS OTHERWISE PROVIDED UNDER THIS AGREEMENT, SELLER MAKES NO REPRESENTATION OR WARRANTY HEREUNDER REGARDING THE MERCHANTABILITY OF THE RESERVED CREDITS, OR WITH RESPECT TO THE RSERVED CREDITS, ANY ACTION OR FAILURE TO ACT, OR APPROVAL OR FAILURE TO APPROVE, OF ANY GOVERNMENTAL AUTHORITY. REDRESS FOR ANY CLAIM AGAINST SELLER UNDER THIS AGREEMENT SHALL BE LIMITED TO AND ENFORCEABLE ONLY AGAINST AND TO THE EXTENT OF SELLER'S INTEREST IN THE MITIGATION BANK. THE OBLIGATIONS OF SELLER AND PURCHASER UNDER THIS AGREEMENT ARE NOT INTENDED TO BE AND SHALL NOT BE PERSONALLY BINDING ON, NOR SHALL ANY RESORT BE HAD TO THE PRIVATE PROPERTIES OF, ANY OF THEIR DIRECTORS, OFFICERS, PARTNERS, BENEFICIARIES, MEMBERS, STOCKHOLDERS, EMPLOYEES, OR AGENTS.

(d) This Section 10 shall survive Closing or earlier termination of this Agreement.

11. **Representations and Warranties.** Each of Seller and Purchaser represents and warrants to the other now and as of Closing that: (i) it is organized and validly existing under the laws of the jurisdiction of its organization or incorporation; and (ii) it has the power to execute this Agreement and any other documentation relating to this Agreement to which it is a party, to deliver this Agreement and any other relevant documentation and to perform its obligations under this Agreement, and has taken all necessary action to authorize such execution, delivery and performance.

12. **Miscellaneous.**

(a) No Joint Venture. This Agreement is made solely for the purposes set forth herein and no joint venture, partnership or other relationship between Purchaser and Seller is created hereby.

(b) No Third-Party Beneficiary. This Agreement shall bind and inure to the benefit of the parties hereto and their respective successors and authorized assigns. The Agreement does not create or convey any rights, benefits or interests on behalf of any other person.

(c) Assignment. This Agreement may not be assigned by Purchaser without Seller's prior written consent in Seller's sole and absolute discretion, and any assignee shall assume the rights and obligations of its assignor.

(d) Entire Agreement. This Agreement sets forth the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior negotiations and agreement, written or oral. This Agreement may be modified only by a written instrument duly executed by Seller and Purchaser.

(e) Prior Agreements. This Agreement shall supersede any and all prior understandings and agreements between the parties hereto, whether written or oral, with respect to the

subject matter hereof and may be amended only by a written document stating the specifics of such amendment, executed by both Seller and Buyer.

(f) Choice of Laws. This agreement shall be construed, performed and enforced under the laws of the State of **Indiana**.

(g) Attorney's Fees. In the event any action, suit, or other proceeding at law or in equity is brought to enforce the covenants and agreements contained in this Agreement or to obtain monetary damages for breach thereof, and such action results in an award judgment for monetary damages, or the granting of any equitable relief in favor of any party hereto, all expenses, including reasonable attorney's fees, of the successful party in such action, suit, or other proceeding shall, upon demand of such party, be paid by the other party.

(h) Counterparts. This Agreement may be executed in one or more counterparts by the parties. All counterparts shall collectively constitute a single agreement.

(i) Notices. All notices shall be in writing and sent by hand, facsimile transmission, overnight delivery service or certified mail, return-receipt requested, to the following addresses (or such other addresses as either party may designate to the other from time to time by written notice) and any such notice of other communication shall be deemed to have been given on the day so delivered or refused by the party to whom such notice was sent (it being acknowledged that a facsimile or an e-mail transmission shall not be deemed to be a "writing"):

If to Seller: Central Indiana Mitigation Providers, LLC
248 Southwoods Centre
Columbia, IL 62236

With a copy to: Michael Best & Friedrich LLP
Attn: Michael S. Green, Esq.
1 South Pinckney Street, Suite 700
P.O. Box 1806
Madison, WI 53701-1806

If to Purchaser: Indiana Michigan Transmission Company
Attn: Kelli Boren
212 E 6th Street, 04
Tulsa, OK 74119

(j) Legal Capacity of Signatory. Each person executing this Agreement in a representative capacity hereby warrants that he/she has been duly authorized by his/her principal to execute this Agreement on such principal's behalf.

[Signature page follows]

IN WITNESS WHEREOF, Seller and Purchaser have caused this Agreement to be executed on their behalf by their duly authorized representatives as of the date first written above.

SELLER:

CENTRAL INDIANA MITIGATION PROVIDERS, LLC

By: Kae Hovater

Name: Kae Hovater

Title: Authorized Agent

PURCHASER:

INIDIANA MICHIGAN TRANSMISSION COMPANY

By: Kelli Boren

Name: Kelli Boren

Title: Project Environmental Manager

EXHIBIT A

BILL OF SALE

This Bill of Sale is made by **Central Indiana Mitigation Providers, LLC** ("Seller") to **Indiana Michigan Transmission Company**, ("Purchaser").

WHEREAS, Seller and Purchaser have entered into that certain Mitigation Credit Purchase Agreement dated as of _____ ("Purchase Agreement"), with respect to the sale and purchase of **Forested Wetland** bank credits generated within the **Bull-Buck** Mitigation Bank in **Henry, IN**, USACE Action No.: **LRL-2021-00188**. ("Mitigation Site").

NOW THEREFORE, for and in consideration of the payment of the Purchase Price (as defined in the Purchase Agreement) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Seller hereby sells, assigns, conveys and transfers to **1.20 Forested Wetland Credits** from the Mitigation Bank, for the purpose of Purchaser's mitigation of impacts to that certain property commonly known as **Bethel – Delaware 69 kV Transmission Line Rebuild** located in **Delaware, IN (PERMIT IDEM Number: 2023-1151-18-JW-A.**

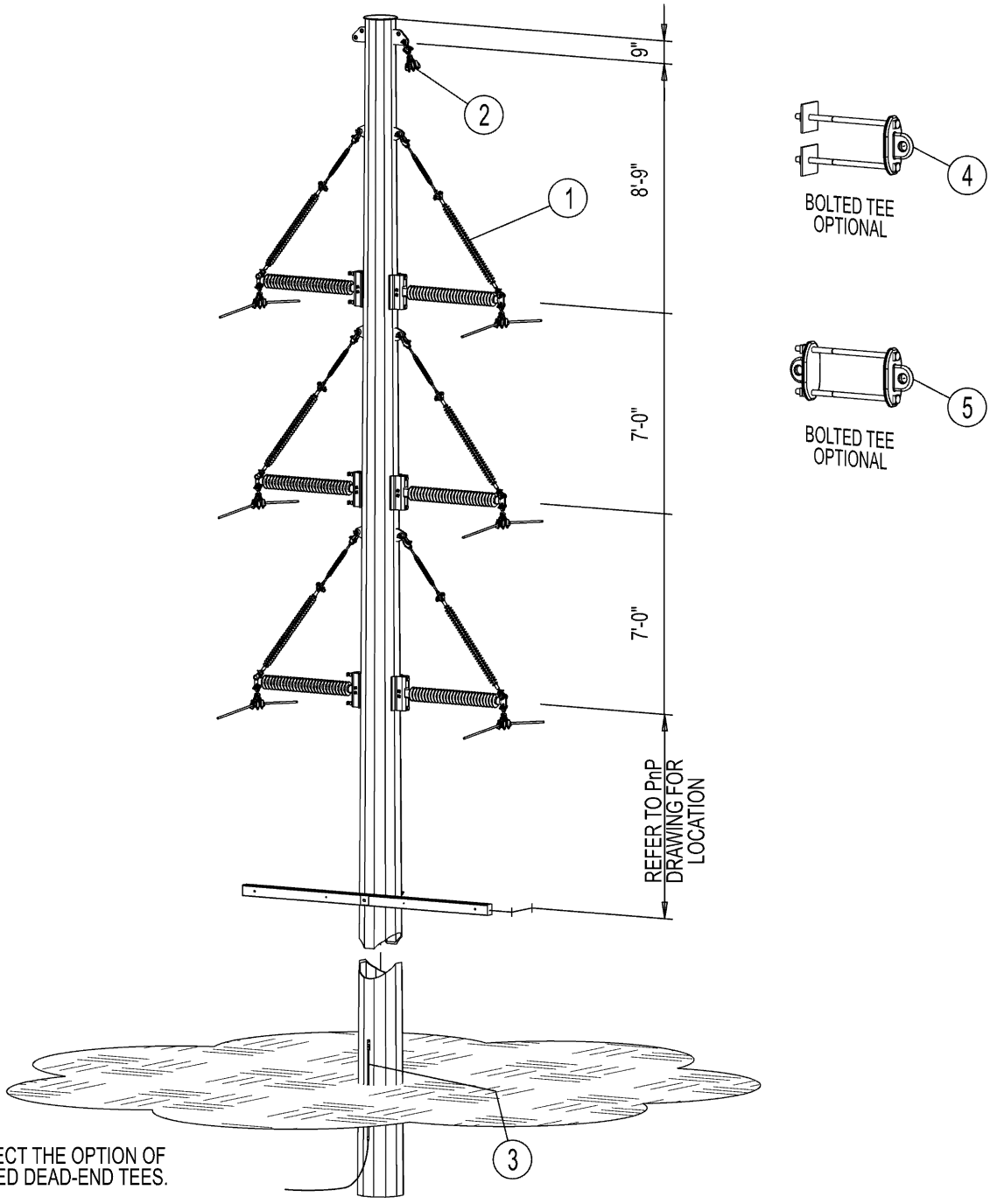
Dated this _____ day of _____, 2024.

Central Indiana Mitigation Providers, LLC
a Delaware limited liability company

_____
By: Kae Hovater, Authorized Agent

REF. DRAWINGS

ITEM	QTY.	ASSEMBLY	DESCRIPTION	
1	6	13A5-1280	69KV INSULATOR, POLYMER, 0° DEGREE BRACED POST, BACK TO BACK	
2	1	30T0-1102	OHGW, SUSPENSION, CONCRETE, STEEL OR WOOD POLE	
3	1	21SE-1456	GROUND ROD FOR DIRECT EMBEDDED STEEL POLE	
4	1	71A0-1231	3/4 IN FLAT DEAD-END TEE	
5	3	71A0-1234	7/8 IN FLAT DEAD-END TEE BACK TO BACK	



NOTES:
1. T-LINE ENGINEER TO SELECT THE OPTION OF WELDED VANGS OR BOLTED DEAD-END TEES.

REV	DESCRIPTION	BY	DATE
4	REVISED DRAWING - VANG TABLE	EJB	05/15/20

AMERICAN ELECTRIC POWER

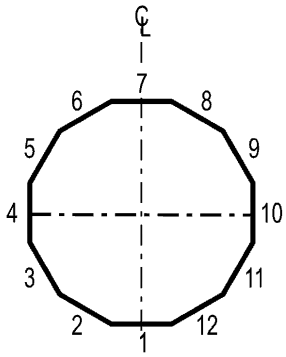
TRANSMISSION LINE STANDARDS

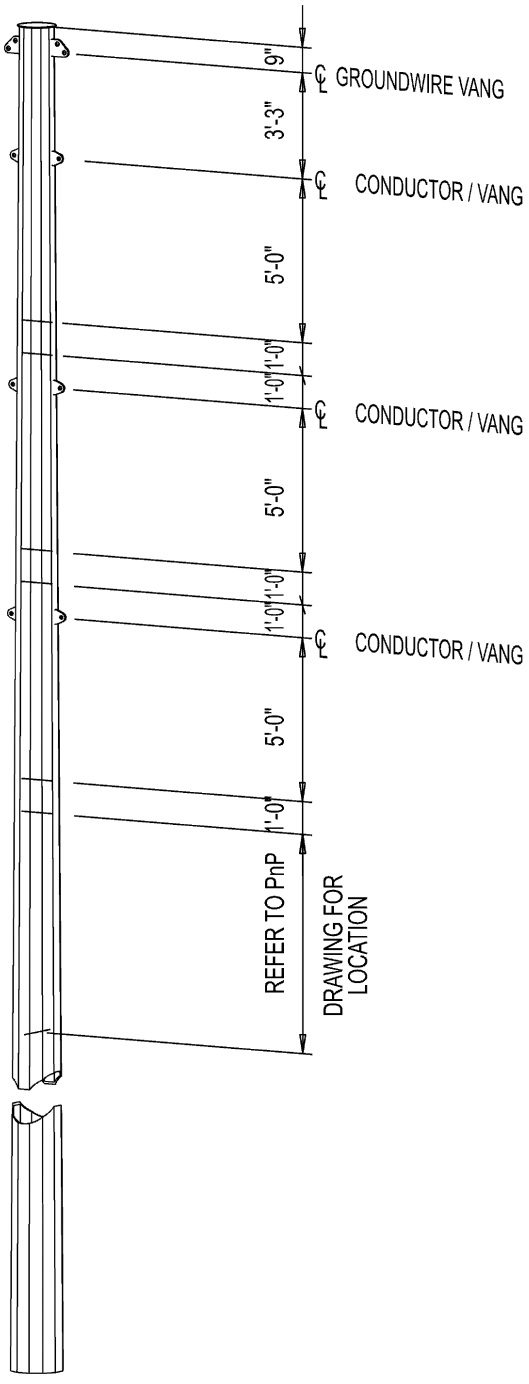
POLYMER - 69KV DOUBLE CIRCUIT, VERTICAL, ZERO DEGREE BRACED POST, STEEL

ENGR:	DRAWN: McP	CHECKED:	APPROVED: DJO	DATE: 09/07/07

DRAWING No. BS11-1299 | SHEET No. 1 | REV. No. 4

Archive ID: 907-151





VANG TABLE		
VANG ULT. LOAD (KIPS)	SHIELD WIRE / GUY ATTACH.	COND./ GUY ATTACH.
16.5K	PE3	PE1
24.75K	PE3	PE1
33K	PE7	PE1
49.5K	PE7	PE5

NOTES:
1. ALL HOLES AND VANGS FOR TRANSMISSION LINE ARE ON AXIS "4-10"
2. ALL HOLES SHALL BE $^{15}/_{16}$"Ø UNLESS NOTED.
3. PLEASE REFER TO DRAWING NO. 01D5-1225 FOR VANG DETAILS

REV	DESCRIPTION	BY	DATE
4	REVISED DRAWING - VANG TABLE	EJB	05/15/20

AMERICAN ELECTRIC POWER

TRANSMISSION LINE STANDARDS
DRILL LOCATIONS
POLYMER - 69KV DOUBLE CIRCUIT, VERTICAL, ZERO DEGREE BRACED POST, STEEL

ENGR:	DRAWN: McP	CHECKED:	APPROVED: DJO	DATE: 09/07/07

DRAWING No. BS11-1299 | SHEET No. 2 | REV. No. 4

December 18, 2023

Mr. Evan White
Indiana Department of Environmental Management
Office of Water Quality
Section 401 Regional General Permit Notification
100 North Senate Avenue
Indianapolis, IN 46204-2251

RE: IDEM Section 401 Water Quality Certification and USACE Nationwide Permit 57 Notification for AEP Indiana Michigan Transmission Company's Bethel – Delaware 69 kV Transmission Line Rebuild Project; Delaware County, Indiana.

Dear Mr. White:

On behalf of Indiana Michigan Transmission Company (I&M), a unit of American Electric Power, WSP USA (WSP) is submitting this Clean Water Act Section 401 Water Quality Certification (WQC) and Nationwide Permit (NWP) 57 pre-construction notification (PCN) for construction activities to occur in jurisdictional wetlands to the Indiana Department of Environmental Management (IDEM) and the United States Army Corps of Engineers (USACE) for the Bethel – Delaware 69 kV Transmission Line Rebuild Project (Project), in Delaware County, Indiana. This submittal is required, as wetland/waterbody impacts to a forested wetland exceed the PCN threshold of 0.10 acres, associated with Nationwide Permit 57. Therefore, Mr. Laban Lindley of the USACE Louisville District is copied on this notification, to satisfy the PCN notification condition. Signed copies of the IDEM Section 401 WQC Notification Form (Attachment 1) and the USACE NWP 57 PCN Form (Attachment 2) are provided within this application package, in addition to supporting information.

I&M is proposing to rebuild the approximately 2.8-mile Bethel - Delaware 69 kV Transmission line from the existing Bethel Station traveling generally north and east to the existing Delaware Station in Delaware County, Indiana. The Project alignment is depicted on the Sediment and Erosion Control Plan (Select Pages), provided in Attachment 3. I&M is requesting authorization to proceed with the Project based upon the details contained within the enclosed Section 401 WQC RGP Notification Form (State Form 51937 [R5/7-18]) (Attachment 1), and USACE Application for Department of the Army Permit (OMB No: 0710-0003) (Attachment 2), as well as additional information provided herein.

The purpose of the Project is to rebuild an existing 69 kV transmission line, thereby supporting system reinforcement and area reliability needs to provide sustainable, safe, and reliable power for regional homes and businesses. Construction activities are currently scheduled to begin in July 2024. Restoration of disturbed areas will commence after the completion of construction activities. Wetland areas will be restored as soon as all work is complete in the wetland areas.

Within wetlands, back grading to pre-construction elevations shall be required to ensure pre-project hydrologic conditions are re-established. Temporary and permanent seeding with appropriate stabilization measures shall be conducted, if required, following removal of the temporary matting across wetlands. An appropriate Wetland Area Restoration Seed Mix or approved equal, shall be installed within all wetland areas requiring restoration. In certain circumstances a variation and customization of this seed mix may be required to accommodate different hydrologic conditions or landowner preference.

Project activities are proposed to be authorized through a PCN to the USACE for the Clean Water Act (CWA) Section 404 NWP for NWP #57 – Electric Utility Line and Telecommunication Activities, since permanent impacts to wetlands are anticipated to be > 0.10 ac. in addition to an IDEM Section 401 WQC for NWP #57. Notification to IDEM is also required for any utility or telecommunication activities that involve crossing wetlands, per NWP #57 General Condition 2. No streams or ponds will be impacted by the construction of the Project. Details related to permanent and temporary impacts are provided later in this cover letter and in the 401 WQC RGP Notification form and PCN in Attachments 1 and 2 respectively.

PROPOSED FACILITIES

I&M is proposing to rebuild approximately 2.8 miles of 69 kV electric transmission line and pole structures in Delaware County, Indiana. This will include approximately 2.4 miles of overhead transmission line and approximately 0.4 miles of underground transmission line. The proposed transmission line will be built within a new and existing 60-foot-wide Right-of-Way (ROW) for overhead portions and 30-foot wide ROW for underground portions. The dimensions of structures and foundations will vary, based on the required height of each structure as well as location and soil conditions.

Disturbance within the ROW will vary throughout the ROW and will include disturbance related to access roads, construction of workpads, and structure installation. The majority of the ROW disturbance will be limited to the width of temporary access roads. Temporary access roads within upland and wetland areas will be approximately 15 feet wide. Temporary access roads occurring in upland areas will consist of overland access or stone aggregate compacted over geotextile fabric. Temporary access roads within wetland areas will consist of wood timber mats placed over geotextile fabric. Wider temporary access roads may be needed at temporary construction entrances. All impacted wetlands will be restored to pre-construction grade, contours, and vegetative conditions.

The Project Sediment and Erosion Control Figures (Select Pages) (Attachment 3) identify the Project location, proposed structure locations, access roads, work pads, and other construction work components associated with the ecological features proposed to be impacted.

WATER RESOURCES WITHIN THE PROJECT AREA

An ecological survey consisting of wetland and waterbody assessments, as well as observations of habitat suitable for state and federally-listed species was conducted within the Environmental Survey Corridor (ESC) on August 11, 2020, March 24, 2022, and May 25, 2022 by WSP. The ESC encompassed the approximately 2.8-mile 60-foot wide ROW, in addition to multiple proposed access routes and temporary workspace areas along the ESC.

The Project is located in 8-digit Hydrologic Unit Code 05120201 (Upper White River), as well as two 12-digit HUC sub-watersheds: HUC 051202010302 (Jake's Creek) and HUC 051202010305 (York Prairie Creek-White River). Unnamed tributaries within the vicinity of the Project Area generally flow to either Riggins Ditch or York Prairie Creek. Riggins Ditch is a tributary to Jake's Creek, which in turn flows into Killbuck Creek, a tributary to the White River, a traditionally navigable waterway (TNW). York Prairie Creek is also a tributary to the White River.

The field investigations of the ESC identified a total of five (5) wetlands and three (3) streams, within the Bethel-Delaware 69 kV Transmission Line ROW. Delineated wetlands include four palustrine forested (PFO) wetlands as well as one wetland (Wetland DK-1) which included palustrine emergent (PEM) and PFO components. Delineated streams included two named perennial streams and one intermittent stream. A copy of the Wetland Delineation Report is provided in Attachment 4.

Wetland DK-1, to which impacts are proposed, drains into an existing, maintained railroad ditch which flows northwest to Riggins Ditch, from which point waters flow via the path described above to the White River, a TNW. Based on this, Wetland DK-1 should be considered jurisdictional. In support of this, a Preliminary Jurisdictional Determination (PJD) Form is included as Attachment 5.

PROPOSED WETLAND IMPACTS

It is anticipated that one wetland (Wetland DK-1) will be permanently and temporarily impacted by the Project as described below. All other wetland and water features identified within the Project Area will be avoided entirely by construction equipment by having wire strung over without placing structures, fill material, or other temporary disturbances.

Wetland DK-1 will be permanently impacted by the non-mechanized clearing (conversion) of a portion of the delineated PFO wetland to PEM wetlands, totaling 0.37 acres, for the creation of the proposed 60-foot wide ROW. In addition, permanent impacts will result from the placement of one proposed structure (STR 38) within the wetland boundary. This impact will occur within the area of the converted PFO wetland and is therefore included within the proposed 0.37 acres of permanent impact to PFO wetlands. No permanent impacts have been proposed to PEM or Palustrine Scrub/Shrub (PSS) wetlands. Table 1 (below) provides an overview of permanent impacts to wetlands associated with the Project.

Table 1. Bethel – Delaware 69 kV Transmission Line Project
Permanent Wetland Impacts

Wetland Name	Cowardin Classification	Delineated Acreage	Impacted Acreage	Impact Source	Nearest Structure(s)
Wetland DK-1	PFO	1.19	0.37	PFO Clearing (Conversion)	38
			*	Proposed Structure	38
		1.19	**0.37**		

*Construction of STR 38 overlaps the location of PFO conversion and is therefore included in the same 0.37 acres.

Temporary wetland impacts will occur to Wetland DK-1 through the use of timber mats to create temporary access and a temporary work pad associated with STR 38. The use of timber mats with Wetland DK-1 will total 0.07 acres. This includes 0.04 acres of this proposed temporary impact within the PFO wetland conversion area described above, and an additional 0.03 acres of PEM wetland. Therefore, additional temporary impacts not overlapping the previously discussed permanent impacts totals 0.03 acres of PEM wetland.

Table 2. Bethel – Delaware 69 kV Transmission Line Project
Temporary Wetland Impacts

Wetland Name	Cowardin Classification	Delineated Acreage	Impacted Acreage	Impact Source	Nearest Structure(s)
Wetland DK-1	PFO	1.19	0.04*	Temporary Matting	38
Wetland DK-1	PEM	0.24	0.03	Temporary Matting	38
		1.43	**0.03***		

*Temporary impacts from timber matting in PFO portions of Wetland DK-1 overlap the permanent impacts described in Table 1. Therefore, additional temporary wetland impacts total 0.03 acres of PEM wetland.

AVOIDANCE, MINIMIZATION, AND RESTORATION

Installation of the transmission line structures utilizes the existing ROW as much as practical and has been designed to minimize wetland and stream impacts to the maximum extent possible. Wetlands and streams will be avoided to the maximum extent practical during construction of the Project; however, wetlands that need to be crossed for construction access will be done so using construction timber matting, sediment and erosion control best management practices (BMPs) or similar acceptable methods. Areas of delineated wetlands planned to be permanently impacted have been minimized to the maximum extent practicable.

To avoid unintentional wetland impacts, wetlands occurring outside the active construction area will be protected with high visibility construction fencing. Wetlands to be avoided have been included on the Erosion and Sediment Control Plan Drawings (part of the Storm Water Pollution Prevention Plan) and construction personnel have been informed of the locations of the protected wetlands.

To protect wetlands within the active ROW, all construction workpads within wetlands and all access roads that cross wetlands will be overlain with 15-foot-wide timber mats. Timber mats used for temporary access roads within wetlands will be 15 feet wide, unless otherwise stated in the Project-specific Stormwater Pollution Prevention Plan; timber mats used for construction workpads will be approximately 50' x 50', centered on the structure locations. Timber mats will be removed immediately after construction is complete and areas restored to pre-construction contours when necessary.

All temporarily impacted wetlands will be restored to pre-construction grade, contours, and vegetative conditions. All temporarily impacted wetlands from construction activities will be restored to the maximum extent practicable.

Typical projects result in ground disturbance from structure and/or other facility installation, construction access activities, and, as required, the establishment of any new permanent ROW. Overall ground disturbance is expected to be intermittent and dependent upon weather conditions and vehicle and equipment type. Temporary construction matting shall be required, where feasible, to minimize impacts to wetlands, unless otherwise noted on plans (if prepared for a specific project). Construction matting shall be in sufficient condition as to not break apart and shall be removed from regulated waters in its entirety upon project completion. The type of construction matting utilized shall be appropriate for the ground conditions and equipment type and weight to be supported in order to minimize or eliminate ground disturbance.

Back grading in wetlands to pre-construction elevations shall be required to ensure pre-project hydrologic conditions are re-established. Temporary and permanent seeding with appropriate stabilization measures shall be conducted, if required, following removal of the temporary matting across wetlands. An appropriate Wetland Area Restoration Seed Mix or approved equal, shall be utilized within all wetland areas requiring restoration. In certain circumstances a variation and customization of this seed mix may be required to accommodate different hydrologic conditions or landowner preference.

The following additional mitigation measures will be employed during construction:

- Erosion and sediment controls will be properly installed and maintained as detailed in the Project Storm Water Pollution Prevention Plan (SWPPP) to minimize potential impacts to regulated water resources. Controls will remain in place until vegetation is established.
- The refueling of equipment, and use of any hazardous substance, within 50 feet or on slopes leading to Waters of the U.S. will be prohibited. Equipment will be refueled in level, designated containment areas.
- No equipment staging or storage of construction materials will occur within 50 feet or on slopes leading to Waters of the U.S.
- Modifications to construction routing and access will be reviewed by I&M to assure continued compliance with applicable state and federal permit terms and conditions.

COMPENSATORY MITIGATION

This Project will result in a total of 0.37-acre of unavoidable permanent wetland conversion, in addition to 0.03-acre of temporary impacts. No streams or ponds will be impacted by the construction of the Project. Temporarily affected areas will be restored to pre-construction contours and the site will be reseeded and stabilized after construction.

Since there are permanent conversion and/or permanent fill over 0.10-acre, compensatory mitigation is required for the Project. Compensatory mitigation for the Project is anticipated to be fulfilled through the statewide in-lieu fee (ILF) mitigation program, Indiana's Stream & Wetland Mitigation Program (IN SWMP) for any unavoidable impacts. This will include the purchase of 1.11-acres of wetland mitigation credits, resulting in a mitigation ratio of 3:1 for impacts to forested wetlands. This will serve as the mitigation plan for the Proposed Project. All required mitigation credits will be purchased, prior to any proposed work in identified water resources.

THREATENED AND ENDANGERED SPECIES CONSULTATION

A data request was submitted to the USFWS's Indiana Ecological Services Field Office on June 16, 2022 by WSP for review and comment on any federally-listed species occurrences potentially in close proximity to the ESC. In an email dated June 24, 2022, USFWS provided comments on the Project. The USFWS response indicated that the Project lies within the range of the Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*). It was further noted that "there are no records of either bat species within the Project area, and no habitat is known to be present. Therefore, the existing transmission line is not likely to have impact on these species or their habitat." The USFWS further indicated that seasonal clearing restrictions are not necessary for the Project. The USFWS response is included as Attachment 6.

A request for records was submitted to the Indiana Natural Heritage Data Center (INHDC) on June 16, 2022. In an email dated June 21, 2022, INHDC provided comments on the Project. Indiana Natural Heritage Database records within a 0.5-mile radius of the ESC include one state-threatened plant species, American wisteria (*Wisteria frutescens*). Similarly, a request for Environmental Review was submitted to Indiana Department of Natural Resources Division of Fish and Wildlife (IDNR-DFW) on June 16, 2022. The July 15, 2022 IDNR-DFW response indicated that impacts to the documented species are not anticipated as a result of the Project. IDNR-DFW recommended minimizing tree/brush removal for any new utility lines and maintaining as much forested habitat as possible. Additionally, IDNR recommended to not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30. The INHDC response and IDNR-DFW environmental review are included as Attachment 6.

CULTURAL RESOURCES REVIEW

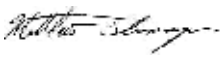
WSP also completed a cultural resource evaluation (archaeological and historic architectural) for the Bethel - Delaware 69kV Transmission Line project in Delaware County, Indiana on April 18, 2023. WSP conducted a records check/literature and database review as outlined in the Division of Historic Preservation and Archaeology's *Guidebook for Indiana Historic Sites and Structures Inventory – Archaeological Sites* to determine the presence of any known cultural resources in the projects' areas of potential effect (APEs). WSP's recommendation is that the proposed Project as currently designed will have no effects on historic architectural properties or archaeological sites, and that no further cultural resource investigation is needed. The Cultural Resources Desktop Analysis is included as Attachment 7.

CONCLUSION

The proposed construction of the Bethel - Delaware 69 kV Transmission Line Project by I&M has been designed so that construction and maintenance results in minimal impacts to wetlands and streams within the Project ROW. Although wetland encroachments within the Project ROW couldn't be avoided, the impacts are minimal and are proposed to be mitigated under Indiana's Stream & Wetland Mitigation Program, thus triggering the need for this combined USACE PCN and IDEM Section 401 WQC RGP Notification Permit Application.

As you review the permit application package for completeness, please contact Matt Thomayer with WSP at 513-375-4910 or matt.thomayer@wsp.com; or Jennifer Walker with AEP at 614-477-5410 or jlwalker2@aep.com with any questions or if you require additional information.

Sincerely,



Matthew D. Thomayer
Assistant Vice President, Environmental Scientist
WSP USA

Attachments:

1 — IDEM Section 401 WQC Notification Permit Application Form
2 — USACE PCN Application Form
3 — Project Sediment and Erosion Control Figures (Select Pages)
4 — Wetland Delineation Report
5 — Preliminary Jurisdictional Determination Form
6 — Threatened and Endangered Species Coordination
7 — Cultural Resources Evaluation

Cc: Jennifer Walker, AEP I&M
Lindley Laban, Chief, North Branch Regulatory Division USACE, Louisville District

ATTACHMENT 2

USACE PCN Application Form

NATIONWIDE PERMIT PRE-CONSTRUCTION NOTIFICATION (PCN)

Form Approved - OMB No. 0710-0003 Expires: 08-31-2023

DATA REQUIRED BY THE PRIVACY ACT OF 1974

Authority R[illegible] 10 33 [illegible] 03 [illegible] 0 33 [illegible] 13 [illegible] R[illegible] 33 [illegible] R 320-332

Principal Purpose [illegible]

Routine Uses [illegible]

Disclosure [illegible]

[illegible] 0710-0003 [illegible] 11 [illegible]

PLEASE DO NOT RETURN YOUR RESPONSE TO THE ABOVE EMAIL.

[illegible] *see sample drawings and/or instructions* [illegible]

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1 [illegible]	2 [illegible] D	3 D [illegible] R [illegible] D	[illegible] D [illegible] M [illegible]

(ITEMS BELOW TO BE FILLED BY APPLICANT)

[illegible] M	[illegible] R D [illegible] M D *agent is not required*
[illegible]: Kelli M dd: D [illegible]: Boren	[illegible]: Jen M dd: [illegible]: Walker
[illegible]: Indiana Michigan Transmission Company Inc.	[illegible]: Indiana Michigan Transmission Company Inc.
[illegible]: Project Environmental Support Manager - PEPM	[illegible]: jlwalker2@aep.com
[illegible]: kdboren@aep.com	
[illegible] DDR [illegible]	[illegible] DDR [illegible]
ddr [illegible]: General Office, 212 E 6th Street, 04	ddr [illegible]: 8600 Smiths Mill Road
[illegible]: Tulsa [illegible]: OK [illegible]: 74119 [illegible]: USA	[illegible]: New Albany [illegible]: Ohio [illegible]: 43054 [illegible]: USA
7 [illegible] R [illegible] D	10 [illegible] R [illegible] D
[illegible] R [illegible] d [illegible] [illegible] d M [illegible] 918-691-0435	[illegible] R [illegible] d [illegible] [illegible] d M [illegible] 614-477-5410

STATEMENT OF AUTHORIZATION

11 [illegible] Jen Walker [illegible]

Kelli Boren [illegible] R [illegible] 12/7/2023 D [illegible]

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12 [illegible] R [illegible] M [illegible] *see instructions*

AEP Bethel - Delaware 69 kV Transmission Line Rebuild Project

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

13. (*if applicable*)
N/A

1 (*if applicable*)
N Wheeling Ave.
Muncie IN 47304

1 (*see instructions*)
40.2370 -85.4099

1 (*see instructions*)
Multiple
City of Muncie
29 T21N R10E

17.
From Indianapolis: travel east on I-70 to exit 89 toward I-465N. Continue north on I-465 for 7 miles and keep right to continue onto I-69N. Travel 40 miles to exit 241to IN-332. Turn right onto IN-332 and travel 7.5 miles. Turn left on Tillotson Avenue, travel 0.6 miles, and continue onto North Everett Road. Travel 0.8 miles then turn right onto W Moore Road. Travel 0.7 miles to location of STR 38.

1
NWP #57 – Electric Utility Line and Telecommunication Activities

1 (*see instructions*)
Proposed impacts to a likely-jurisdictional wetland with Palustrine Forested (PFO) and Palustrine Emergent (PEM) components. Proposed permanent impacts include clearing (conversion) of approximately 0.37 ac of PFO wetland to PEM wetland, in addition to the installation of one transmission structure within the same area. Temporary impacts from construction matting will also occur within the conversion area, totaling 0.04 acres.
Temporary impacts from construction matting will also occur within likely-jurisdictional PEM wetland, totaling 0.03 ac.

20. (*see instructions*)
1.11-acres of compensatory mitigation credit is to be purchased for the Project through Indiana's Stream & Wetland Mitigation Program (IN SWMP), the statewide in-lieu fee (ILF) mitigation program. This will result in a 3:1 mitigation ration for permanent conversion impacts to 0.37-acres of PFO wetland.

21. (*Describe the reason or purpose of the project, see instructions*)
The purpose of the Project is to rebuild an existing 69 kV transmission line, thereby supporting system reinforcement and area reliability needs to provide sustainable, safe, and reliable power for regional homes and businesses.

22. (*see instructions*)
0.37 ac (Permanent) / 0.03 ac (Temporary) N/A N/A

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site.

23. (*see instructions*)
Indiana Department of Environmental Management (IDEM) Section 401 Water Quality Certification (WQC)
IDEM Construction Stormwater General Permit (CSGP) for land disturbing activities.

2
1.11-acres of compensatory mitigation credit is to be purchased for the Project through Indiana's Stream & Wetland Mitigation Program (IN SWMP), the statewide in-lieu fee (ILF) mitigation program. This will result in a 3:1 mitigation ration for permanent conversion impacts to 0. 37-acres of PFO wetland.

26 [illegible] ☐ [illegible] ☒ [illegible]

26 [illegible] see instructions
Based on coordination with USFWS and the results of general ecological field surveys, impacts to species protected under the Endangered Species Act are not anticipated.

27 [illegible] see instructions
N/A

28 [illegible] Rivers [illegible]
N/A

29 [illegible] 33 [illegible] 0 [illegible] 0 [illegible] ☐ [illegible] ☒ [illegible]

30 [illegible] see instructions

31 [illegible]

Kelli Boren — 12/7/2023 — Jennifer Walker — 12-7-2023

[illegible] 1001 [illegible] 10,000 [illegible] 11 [illegible]

ATTACHMENT 3

Project Sediment and Erosion Control Figures (Select Pages)

HAND CLEARING ONLY WITHIN 50 FEET OF STREAMS AND WETLANDS

NOTE: ANCHOR MATS IN FLOODPLAIN AS DIRECTED BY TCR

W Enterprise Ave

W Moore Rd

N Wheeling Ave

Authorized Temporary Impact
1,093 sq. ft. / 0.025 ac.

TCE-40a
40.2377,
-85.4134

TCE-40b
40.2371,
-85.4131

TCE-37
40.2369,
-85.4131

TCE-38
40.2360,
-85.4114

TCE-39
40.2365,
-85.4109

AR-40c
AR-40d
AR-40a
AR-39b
AR-39a
AR-38
AR-37
AR-33b
AR-X07

G-15'-G
D-15'-T
D-15'-G

Pull Pad 16
100' x 100'

STR 37
STR 36
STR 35

Wetland DK-1b (PEM)
50' x 50'

50' x 50'

75' x 75'

Proposed PFO Clearing in ROW (Conversion)
0.37 ac

Wetland DK-1a (PFO)

Wetland DK-2 (PFO)

Stream DK-3
Perennial

NOTE: New building located on the Southwest corner of Moore Rd. and Wheeling Ave. Adjust access accordingly and update the SWPPP.

MUNCIE (CITY)

HAMILTON TOWNSHIP

DELAWARE COUNTY

Access Road Labeling
Constructed Width
D-15'-G
Existing Material | Installed Material

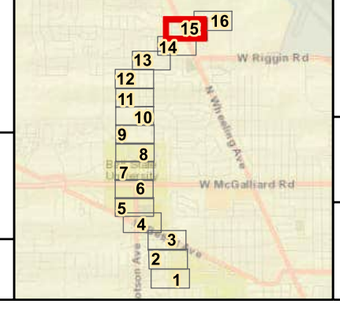
Aerial Photograph Not Representative of Existing Conditions in All Areas

- AEP Substation
- Proposed Overhead Transmission Structure
- Existing Structure to be Removed
- Proposed Bethel - Delaware 69 kV (Overhead)
- Proposed Bethel - Delaware 69 kV (Underground)
- Existing Bethel - Delaware 69 kV to be Removed
- Approximate 60' Overhead Right-of-Way
- Proposed Underground Right-of-Way
- Existing Access Road
- Gravel Access Road
- Matted Access Road
- Gravel Work Pad
- Timber Matted Work Pad
- Gravel Pull Pad
- Timber Pull Pad
- Turnaround (50' x 50')
- Limit of Disturbance
- Temporary Construction Entrance
- Access Material Change
- Existing Culvert
- Inlet Protection
- Concrete Washout
- Soil Stockpile
- 2 ft. Contour
- Filter Sock
- Orange Construction Fencing
- Field Delineated Waterway
- Field Delineated Pond
- Field Delineated PEM Wetland
- Field Delineated PFO Wetland
- Environmental Survey Corridor
- FEMA 100-Yr Floodplain
- FEMA Floodway
- Parcel Boundary
- Municipal Boundary
- Township Boundary
- County Boundary

Sources:
Contours (USGS)
Imagery (IndianaMap)
Floodplain (FEMA)
Parcels (Delaware Co.)

Coordinate System:
State Plane Indiana East
NAD 1983

November 16, 2023



Bethel - Delaware 69 kV
Transmission Line Rebuild Project

Figure 2.
Soil Erosion and Sediment Control Plan

0 100 200 Feet

HAND CLEARING ONLY WITHIN 50 FEET OF STREAMS AND WETLANDS

NOTE: ANCHOR MATS IN FLOODPLAIN AS DIRECTED BY TCR

HAMILTON TOWNSHIP

MUNCIE (CITY)

DELAWARE COUNTY

Delaware Station

TCE-41
40.2377, -85.4079

Cardinal Greenway

W Enterprise Ave

N County Road 100 W

AR-01b

AR-01c

AR-01d

AR-40a

AR-40b

AR-40c

AR-40d

AR-39a

AR-39b

G-15'-G

D-15'-G

D-15'-T

Authorized Temporary Impact
1,093 sq. ft. / 0.025 ac.

Authorized Temporary Impact
327 sq. ft. / 0.008 ac.

Authorized Temporary Impact
1,765 sq. ft. / 0.041 ac.

Wetland DK-1b (PEM)

Wetland DK-1a (PFO)

Wetland DK-2 (PFO)

Wetland DK-4 (PFO)

EX STR 1B

EX STR 1A

EX STR 2

KENMORE

BETHEL

STR 37

STR 38

50' x 50'

Pull Pad 16
100' x 100'

Pull Pad 17
100' x 100'

Proposed PFO Clearing in ROW (Conversion)
0.37 ac

NOTE: Adjust Pull Pad 17 as needed based on the expanded station. Update SWPPP accordingly.

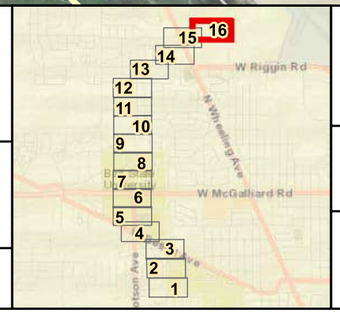
Access Road Labeling
Constructed Width
D-15'-G
Existing Material
Installed Material
Aerial Photograph Not Representative of Existing Conditions in All Areas

- AEP Substation
- Proposed Overhead Transmission Structure
- Existing Structure to be Removed
- Proposed Bethel - Delaware 69 kV (Overhead)
- Proposed Bethel - Delaware 69 kV (Underground)
- Existing Bethel - Delaware 69 kV to be Removed
- Approximate 60' Overhead Right-of-Way
- Proposed Underground Right-of-Way
- Existing Access Road
- Gravel Access Road
- Matted Access Road
- Gravel Work Pad
- Timber Matted Work Pad
- Gravel Pull Pad
- Timber Pull Pad
- Turnaround (50' x 50')
- Limit of Disturbance
- Temporary Construction Entrance
- Access Material Change
- Existing Culvert
- Inlet Protection
- Concrete Washout
- Soil Stockpile
- 2 ft. Contour
- Filter Sock
- Orange Construction Fencing
- Field Delineated Waterway
- Field Delineated Pond
- Field Delineated PEM Wetland
- Field Delineated PFO Wetland
- Environmental Survey Corridor
- FEMA 100-Yr Floodplain
- FEMA Floodway
- Parcel Boundary
- Municipal Boundary
- Township Boundary
- County Boundary

Sources:
Contours (USGS)
Imagery (IndianaMap)
Floodplain (FEMA)
Parcels (Delaware Co.)

Coordinate System:
State Plane Indiana East
NAD 1983

November 16, 2023



Bethel - Delaware 69 kV
Transmission Line Rebuild Project

Figure 2.
Soil Erosion and Sediment Control Plan

0 100 200 Feet

ATTACHMENT 4

Wetland Delineation Report

D□□□□ □R□-□□□□M□R□□□□□□ □R□□□M□□□□□ □□□□□□R□□□□□ □□□□□□□□□□□□□□R□□□ R□□□R□

D□□□□□□□M□□R□2023
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312□□□M□□R□□□□□□□□□□2□00
□□□□□□□□□□□□□□□□202

□□□□□M

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TABLES

FIGURES

APPENDICES

1 INTRODUCTION

On behalf of Indiana Michigan Transmission Company, Inc. (I&M), a subsidiary of American Electric Power (AEP), WSP USA (WSP) conducted environmental surveys for the approximately 3.7-mile Delaware - Kenmore 69 kV Transmission Line Project ("Project"), located within the City of Muncie and Hamilton Township, Delaware County, Indiana. The environmental survey included a wetland and water resource delineation and characterization of potential habitat for state and federally listed species. The wetland delineation was performed to determine whether wetlands and streams are present within the vicinity of the Project that would meet the definition of Waters of the United States (WOTUS) or be subject to regulations implemented by the Indiana Department of Environmental Management (IDEM), and to document their extents and current conditions if present. The wetland delineation was performed by individuals trained in the three-parameter methodology (hydrophytic vegetation, wetland hydrology, and hydric soils) adopted by the U.S. Army Corps of Engineers (USACE) as outlined in the USACE *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (USACE, 2010) and in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987).

This report presents the results of the ecological considerations and review of the site's existing and reasonably foreseeable site conditions at the time of the environmental surveys. The results cannot apply to site changes occurring after the survey which WSP has not had the opportunity to review. During the course of any survey, site conditions may change over time due to human and/or natural causes; as such, the results presented in this report may be invalidated, either wholly or in part, by changes beyond the control of WSP.

2 □□□□□R□ □□D□□□ □□RM□□□□ □

2□1 □R□ □□□□□□R□□

The approximately 3.7-mile Project is located within the City of Muncie, in Center and Hamilton Townships, Delaware County, Indiana. The approximately 65.5-acre Environmental Survey Corridor (ESC) begins at the existing Kenmore Substation (approximate coordinate 40.1990°, -85.4195°) and heads generally north to the existing Delaware Substation (approximate coordinates 40.2379°, -85.4085°) (Figure 1, Appendix A). The ESC encompasses the existing 60-foot-wide right-of-way (ROW) of the Delaware – Kenmore 69 kV transmission line, the ROW for the proposed Kenmore-Bethel 69 kV transmission line and proposed Bethel-Delaware 69 kV transmission line, as well as all proposed access roads and off-ROW work areas. The ESC is located entirely within the Muncie West, Indiana U.S. Geological Survey (USGS) 7.5-minute topographic map quadrangle boundary. Table 2-1 provides an overview of the project location.

TABLE 2-1: GENERAL PROJECT INFORMATION

COUNTY:	Delaware
TOWNSHIP:	Center and Hamilton
APPROXIMATE COORDINATES:	Kenmore Substation: 40.1990°, -85.4195° Delaware Substation: 40.2379°, -85.4085°
USGS QUADRANGLE:	Muncie West
ENVIRONMENTAL SURVEY CORRIDOR LENGTH (mi.):	3.7
ENVIRONMENTAL SURVEY CORRIDOR SIZE (ac.):	65.5
ENVIRONMENTAL SURVEY CORRIDOR WIDTH (ft.):	60
ELEVATION RANGE (ft. above sea level):	750 - 824
8-DIGIT HYDROLOGIC UNIT CODE:	05120201
12-DIGIT HYDROLOGIC UNIT CODE(S) :	05120201-03-02 05120201-03-05
DATE(S) OF SURVEY :	August 11, 2020 March 24, 2022 May 25, 2022

2.1.1 DRAINAGE BASINS

All streams in the vicinity of the ESC drain to the White River, which is a traditionally navigable waterway (TNW). The ESC is located within the Upper White drainage basin (Hydrologic Unit Code [HUC] 05120201). The ESC lies within two 12-digit sub-watersheds, as outlined in Table 2-2 (USDA, 2019).

TABLE 2-2: 12-DIGIT HUC'S CROSSED BY THE ESC

8-DIGIT HUC CODE[1]	8-DIGIT HUC CODE NAME[1]	12-DIGIT HUC CODE[1]	12-DIGIT HUC NAME[1]	LENGTH OF PROJECT CENTERLINE WITHIN EACH WATERSHED (mi.)
05120201	Upper White	05120201-03-02	Jake's Creek	1.9
		05120201-03-05	York Prairie Creek-White River	1.8

[1] □□□r□□□□ □D□□201□

3 METHODOLOGY

On August 11, 2020, March 24, 2022, and May 25, 2022, two WSP ecologists traversed the approximately 65.5-acre ESC to conduct a wetland and waters delineation. The physical boundaries of aquatic resources were recorded using a Trimble Global Positioning System (GPS) unit rated for sub-decimeter accuracy. The GPS data was then geo-corrected using Trimble GPS Pathfinder Office software (version 5.60) and reviewed for quality control.

Prior to conducting field surveys, WSP ecologists completed a desktop review by analyzing several federal and state documents for the presence of wetland and streams. This review included Natural Resources Conservation Service (NRCS) soil survey data, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps of Indiana, USGS 7.5-minute topographic maps, and USGS National Hydrography Dataset (NHD) stream and river data as an exercise to identify the occurrence and location of potential wetlands and streams.

3.1 DESKTOP REVIEW AND FIELD METHODOLOGY

3.1.1 WETLAND DELINEATION

The USACE and the U.S. Environmental Protection Agency (USEPA) define wetlands as areas inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 CFR, Part 328.3).

Wetlands were delineated according to Section 404 of the Clean Water Act, Technical Report Y-87-1 *Corps of Engineers Wetlands Delineation Manual ('87 Manual)* (Environmental Laboratory, 1987), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest, (Version 2.0)* (*Regional Supplement*) (USACE, 2010). Representative data points were collected for wetlands and corresponding, adjacent upland areas. Wetland data was recorded on the USACE *Regional Supplement* Wetland Determination Data Forms. Wetland vegetation communities were classified according to the *Classification of Wetlands and Deepwater Habitats of the United States*, commonly referred to as the Cowardin Classification System (Cowardin et al., 1979).

3.1.2 STREAM DELINEATION AND ASSESSMENT

Streams were identified by the presence of a defined bed and bank, and evidence of an ordinary high-water mark (OHWM). The OHWM is defined in the USACE *Regulatory Guidance Letter No. 05*-05 (USACE, 2005). Generally, the OHWM is identified by a clearly defined, natural line along the stream bank created by fluctuations and flow of water; this may include changes in contours, substrate, vegetation, and debris (USACE, 2005).

On August 11, 2020, March 24, 2022, and May 25, 2022, two WSP ecologists traversed the approximately 65.5-acre ESC to evaluate for wetlands and other WOTUS. Five wetlands and three streams were identified within the ESC. The identified water resources are depicted on the Delineated Features Map (Figure 3, Appendix A).

□1 D□□□□□ □R□□□□

4.1.1 SOILS EVALUATION

According to the NRCS Soil Data for Delaware County, Indiana, there are seven soil map units shown within the ESC, as presented in Table 4-1. The soils observed by the WSP ecologists during the environmental survey of the ESC were consistent with the NRCS soil survey mapping.

TABLE 4-1: SOIL UNITS MAPPED WITHIN THE ESC

SOIL UNIT SYMBOL	SOIL UNIT NAME	PERCENT HYDRIC	HYDRIC RATING[1]	AREA WITHIN ESC (ac.)
BmlA	Blount-Del Rey silt loams, 0 to 1 percent slopes	10	Predominately Non-Hydric	13.0
GlrB2	Glynwood silt loam, 1 to 4 percent slopes, eroded	7	Predominately Non-Hydric	0.3
PkkA	Pewamo silty clay loam, 0 to 1 percent slopes	91	Predominantly Hydric	9.4
SmsAH	Sloan silt loam, 0 to 2 percent slopes, frequently flooded	90	Predominantly Hydric	3.4
UdmA	Urban land-Blount-Pewamo complex, 0 to 2 percent slopes	20	Predominately Non-Hydric	32.0
UetB	Urban land-Glynwood complex, 2 to 6 percent slopes	0	Non-Hydric	6.9
UfuA	Urban land-Millgrove complex, 0 to 1 percent slopes	45	Partially Hydric	0.5
			Total Area of Non-Hydric Soils	6.9
			Total Area of Predominantly Non-Hydric Soils	45.3
			Total Area of Partially Hydric Soils	0.5
			Total Area of Predominantly Hydric Soils	12.8

[1]Non-Hydric = 0% hydric soil component; Predominantly Non-Hydric = 1-32%; Partially Hydric =33-65%; Predominantly Hydric = 66-99%; and All Hydric = 100%.
Source: Soil Survey Staff, NRCS. Web Soil Survey.

4.1.2 NATIONAL WETLAND INVENTORY REVIEW

According to the NWI maps of the Muncie West, Indiana quadrangle boundary, there are two mapped NWI features within the ESC. The documented NWI features within the ESC and associated identified resources are presented in Table 4-2. Locations of mapped NWI features in the vicinity of the ESC are shown on Figure 2 (Appendix A).

TABLE 4-2: NWI FEATURES MAPPED WITHIN THE ESC

NWI CODE	NWI DESCRIPTION	MAP PAGE	ASSOCIATED DELINEATED RESOURCE
R4SBCx	Riverine, intermittent, streambed, seasonally flooded, excavated	Pages 1–2 of 6	Stream DK-1
R4SBC	Riverine, intermittent, streambed, seasonally flooded	Page 6 of 6	Stream DK-3

Source: USFWS National Wetlands Inventory Map.

4.1.3 FEMA FLOODPLAIN REVIEW

According to Federal Emergency Management Agency (FEMA) National Flood Hazard Layer, the Project crosses mapped 100-year floodplains associated with York Prairie Creek (2.6 acres) and Riggins Ditch (2.9 acres). The location of the documented 100-year floodplain boundaries in relation to the ESC are provided in Figure 2 (Appendix A).

□2 D□□□□ □□□□D□ □□□□D□

During environmental surveys of the ESC, the WSP ecologists identified five wetlands totaling 2.38 acres. The identified wetlands ranged in size from 0.01 acres to 1.43 acres within the ESC. All five of the delineated wetlands included palustrine forested (PFO) communities (totaling 2.14 ac) and one of the delineated wetlands included a palustrine emergent (PEM) community (totaling 0.24 ac). Three of the five wetlands (Wetland DK-2, Wetland DK-3, and Wetland DK-5) appeared to be hydrologically isolated and are unlikely to be considered jurisdictional by the USACE and will fall within the jurisdiction of IDEM. Two of the wetlands (Wetland DK-1 and Wetland DK-4) drain northwest through an existing railroad ditch to Riggins Ditch, a tributary to Jake's Creek, which in turn flows into Killbuck Creek. Killbuck Creek is a tributary to the White River, a TNW. Therefore, Wetland DK-1 and Wetland DK-4 are to be considered jurisdictional by the USACE. It should be noted that final determination of wetland jurisdiction will be made by the USACE. The identified wetlands in relation to the ESC are shown on Figure 3, Appendix A.

Table 4-3 provides specific wetland habitat types, acreages within the ESC, as well as information regarding jurisdictional status. USACE wetland determination forms are provided in Appendix B. Representative photographs of the wetlands and upland verification data points were taken and are provided in Appendix C.

TABLE 4-3: WETLANDS DELINEATED WITHIN THE ESC

WETLAND ID	LOCATION		COWARDIN CLASS.[1]	DELINEATED AREA[2] (acres)	HYDROLOGIC CONNECTION	PROXIMAL WATERBODY
	LAT.	LON.				
Wetland DK-1a	40.2371	-85.4099	PFO	1.19	Yes	Riggins Ditch
Wetland DK-1b	40.2370	-85.4099	PEM	0.24	Yes	Riggins Ditch
Wetland DK-2	40.2366	-85.4096	PFO	0.03	No	Isolated

TABLE 4-3: WETLANDS DELINEATED WITHIN THE ESC

WETLAND ID	LOCATION		COWARDIN CLASS.[1]	DELINEATED AREA[2] (acres)	HYDROLOGIC CONNECTION	PROXIMAL WATERBODY
	LAT.	LON.				
Wetland DK-3	40.2357	-85.4093	PFO	0.11	No	Isolated
Wetland DK-4	40.2359	-85.4081	PFO	0.80	Yes	Riggins Ditch
Wetland DK-5	40.2358	-85.4069	PFO	0.01	No	Isolated
			Sum of PEM Wetland Areas	0.24		
			Sum of PFO Wetland Areas	2.14		
			Total Wetland Area	2.38		

[1]PEM = palustrine emergent, PSS = palustrine scrub/shrub. PFO = palustrine forested;
[2]Acreages reflect the area delineated within the ESC and are approximate based on GPS data and are rounded to the nearest 0.01-acre.

□3 □□R□□M□□□D□R□□R□

During the environmental surveys, the WSP ecologists identified three streams totaling 704 linear feet within the ESC. Two of the three streams were identified as perennial (totaling 644 lf) and the remaining stream was identified as intermittent (totaling 60 lf). Locations of the identified streams within the ESC are shown in Figure 3 (Appendix A). Table 4-4 provides waterbody name, flow regime, and stream length within the ESC. Representative photographs were taken of each stream during the field survey and are provided in Appendix C.

TABLE 4-4: STREAMS DELINEATED WITHIN THE ESC

STREAM ID	LOCATION		STREAM NAME	STREAM TYPE	DELINEATED LENGTH (FEET)	BANKFULL WIDTH (FEET)	OHWM WIDTH (FEET)
	LAT	LONG					
Stream DK-1	40.2083	-85.4150	York Prairie Creek	Perennial	507	15	8
Stream DK-2	40.2321	-85.4201	UNT to Riggins Ditch	Intermittent	60	6	6
Stream DK-3	40.2346	-85.4140	Riggins Ditch	Perennial	137	20	12
			Length of Perennial Streams		644		
			Length of Intermittent Streams		60		
			Total Streams Length in ESC		704		

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No ponds or open water features were identified within the approximately 65.5-acre ESC during the environmental surveys.

The WSP ecologists conducted a general habitat survey in conjunction with the stream and wetland delineation. A variety of woody and herbaceous habitats, as described below in Table 4-5, are present within the ESC. A breakdown of vegetated land cover is provided, overlain on aerial photography in Figure 4 (Appendix A).

TABLE 4-5: VEGETATIVE COMMUNITIES WITHIN THE ESC

VEGETATIVE COMMUNITY	DESCRIPTION	ACREAGE WITHIN THE ESC	PERCENTAGE OF ESC
Agricultural Cropland	Agricultural land primarily consisting of soybean and corn fields were present within the ESC.	7.2	11.0%
Developed, High Intensity	These areas consist of developed residential, industrial, and commercial land uses, including roads, buildings, and parking lots. These areas are generally devoid of significant vegetation.	13.7	20.9%
Developed, Low Intensity	Developed, low-density residential areas, included driveways, buildings, mowed lawns, and landscaped areas.	11.5	17.6%
Developed, Medium Intensity	Developed areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 50-79% of the total cover. These areas most commonly include single-family housing units.	12.4	18.9%
Developed, Open Space	Developed areas, including residential and commercial properties and maintained roadsides, generally consisting of landscaped areas and frequently mowed or maintained lawns.	7.4	11.3%
Old Field	The successional stage between Developed, Open Space and Scrub/Shrub habitat. Oftentimes these areas are previously developed areas that have been left fallow, which area maintained (mowed) once or twice a year.	0.6	0.9%
Scrub Shrub	The successional stage between old field and second growth forest, dominated by woody species generally between 3- and 15-feet in height and less than 3-inches diameter-at-breast-height (dbh).	0.1	0.2%
Successional Forest	Areas dominated by woody tree species generally greater than 15-feet in height and 3-inches dbh.	10.0	15.3%
Wetlands and Waterbodies	Water resources delineated within the ESC (wetlands and streams)	2.6	3.9%
	Total	**65.5**	**100.0%**

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4.6.1 USFWS COORDINATION

A request for review was submitted to the USFWS on June 16, 2022. In an email dated June 24, 2022 the USFWS provided comments on the Project with regard to federally-listed threatened and endangered species within the Project vicinity. The USFWS noted that the Project lies within the range of the federally-listed Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*). USFWS noted that "there are no records of either bat species within the Project area, and no habitat is known to be present. Therefore, the existing transmission line is not likely to have impact on these species or their habitat". USFWS further indicated that seasonal clearing restrictions are not necessary for the project. For details regarding impacts to individual species, refer to Table 4-6 below. The USFWS response is included in Appendix D.

4.6.2 IDNR COORDINATION

A request for records was submitted to the Indiana Natural Heritage Data Center (INHDC) on June 16, 2022. In an email dated June 21, 2022, INHDC provided comments on the Project. Indiana Natural Heritage Database records within a 0.5-mile radius of the ESC include one state-threatened plant species, American wisteria (*Wisteria frutescens*). Similarly, a request for Environmental Review was submitted to Indiana Department of Natural Resources Division of Fish and Wildlife (IDNR-DFW) on June 16, 2022. The July 15, 2022 IDNR-DFW response indicated that impacts to the documented species are not anticipated as a result of the Project. IDNR-DFW recommended minimizing tree/brush removal for any new utility lines and maintaining as much forested habitat as possible. Additionally, IDNR recommended to not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30. The INHDC response and IDNR-DFW environmental review are included as Appendix D.

TABLE 4-6: LISTED SPECIES COMMENTED ON BY IDNR AND USFWS

COMMON NAME (SCIENTIFIC NAME)	STATE STATUS	FEDERAL STATUS	HABITAT DESCRIPTION	POTENTIAL HABITAT OBSERVED IN ESC	WSP IMPACT ASSESSMENT
Mammals					
Indiana bat (*Myotis sodalis*)	Endangered	Endangered	Winter hibernacula are provided by caves and mines. Summer roost habitat typically includes live or dead trees with exfoliating bark, crevices, or cavities that can be used for roosting. Open sub-canopy areas and flight corridors are important to allow maneuvering during foraging. Proximity to water sources provides a greater density of insect prey.	Yes	Potentially suitable habitat may be provided by approximately 10.0 acres of successional forest within the ESC. Comments from USFWS indicate that implementation of seasonal clearing restrictions is not necessary. However, the IDNR-DFW environmental review also recommended that clearing of potentially suitable habitat not occur from April 1 through September 30.
northern long-eared bat (*Myotis septentrionalis*)	Endangered	Endangered			
Plants					
American wisteria (*Wisteria frutescens*)	Threatened	Not Listed	Habitat for this species is typically provided by river floodplains, floodplain swamps, and wooded ravines.	No	Potentially suitable habitat was not observed within the ESC. Therefore, impacts to this species are not anticipated as a result of the Project

WSP conducted environmental surveys of the proposed approximately 3.7-mile Delaware-Kenmore 69 kV Transmission Line Project on August 11, 2020, March 24, 2022, and May 25, 2022. WSP ecologists delineated five wetlands, totaling 2.38 acres. Five of the delineated wetlands included PFO communities (totaling 2.14 acres) and one delineated wetland included a PEM community (totaling 0.24 acres). Three of the five wetlands (Wetland DK-2, Wetland DK-3, and Wetland DK-5) appeared to be hydrologically isolated and are unlikely to fall within the jurisdiction of IDEM. Two of the wetlands (Wetland DK-1 and Wetland DK-4) appear to be hydrologically connected to WOTUS and are to be considered jurisdictional by the USACE. However, it should be noted that the final determination of wetland jurisdiction will be made by the USACE.

During the environmental survey, the WSP ecologists identified three streams totaling 704 linear feet within the ESC. Two of the three streams were identified as perennial (totaling 644 lf) and the remaining stream was identified as intermittent (totaling 60 lf).

The results discussed in this report are confined to the ESC limits described in earlier sections and depicted on Figure 3. Additionally, the results presented in this report should not be construed as a jurisdictional determination. If a jurisdictional determination is desired, one can be acquired through obtaining an approved Jurisdictional Determination (JD) or Preliminary Jurisdictional Determination (PJD) through the USACE. Wetlands, excavated ponds, stream channels, and rivers are regulated by the USACE. Any encroachments, fill material, or crossings of these areas will require permit authorization from the associated state and federal agencies. Should it be determined that the Project may impact potentially regulated waters, WSP can work to determine whether a JD or PJD is recommended, as well as support submittal for necessary permits.

Based on observations within the ESC during the field assessment, USFWS comments, potential impacts to the Indiana bat and northern long-eared bat are not anticipated if the recommended seasonal clearing dates are utilized. Potentially suitable habitat for American wisteria was also not observed within the ESC.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. Office of Biological Services, U.S. Fish and Wildlife Service, Washington, D.C.

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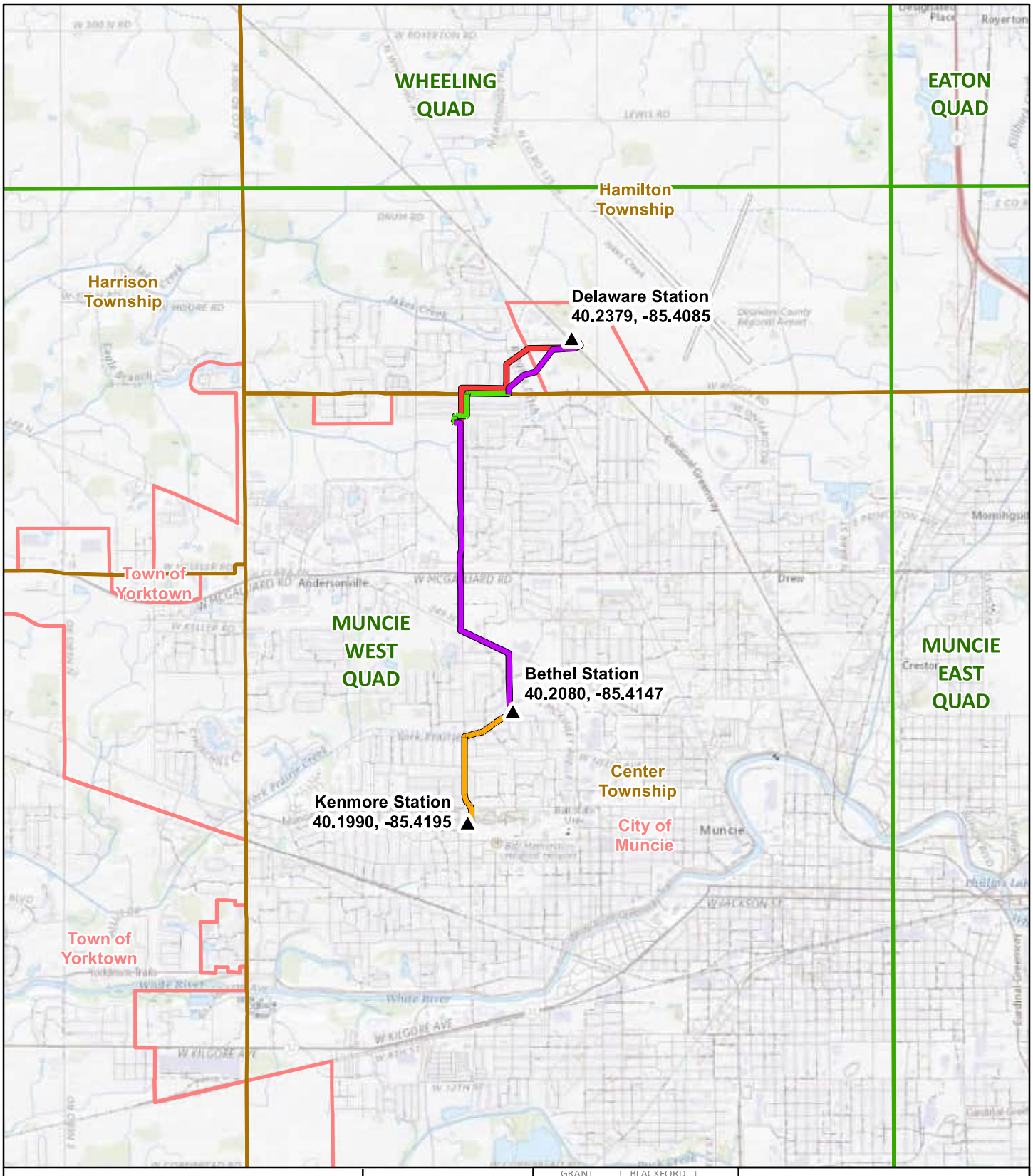
USGS. 2007. National Hydrography Dataset. Available at: http://nhd.usgs.gov/data.html.

APPENDIX

A □□□ □R□□


WHEELING QUAD
EATON QUAD
Hamilton Township
Harrison Township
Delaware Station
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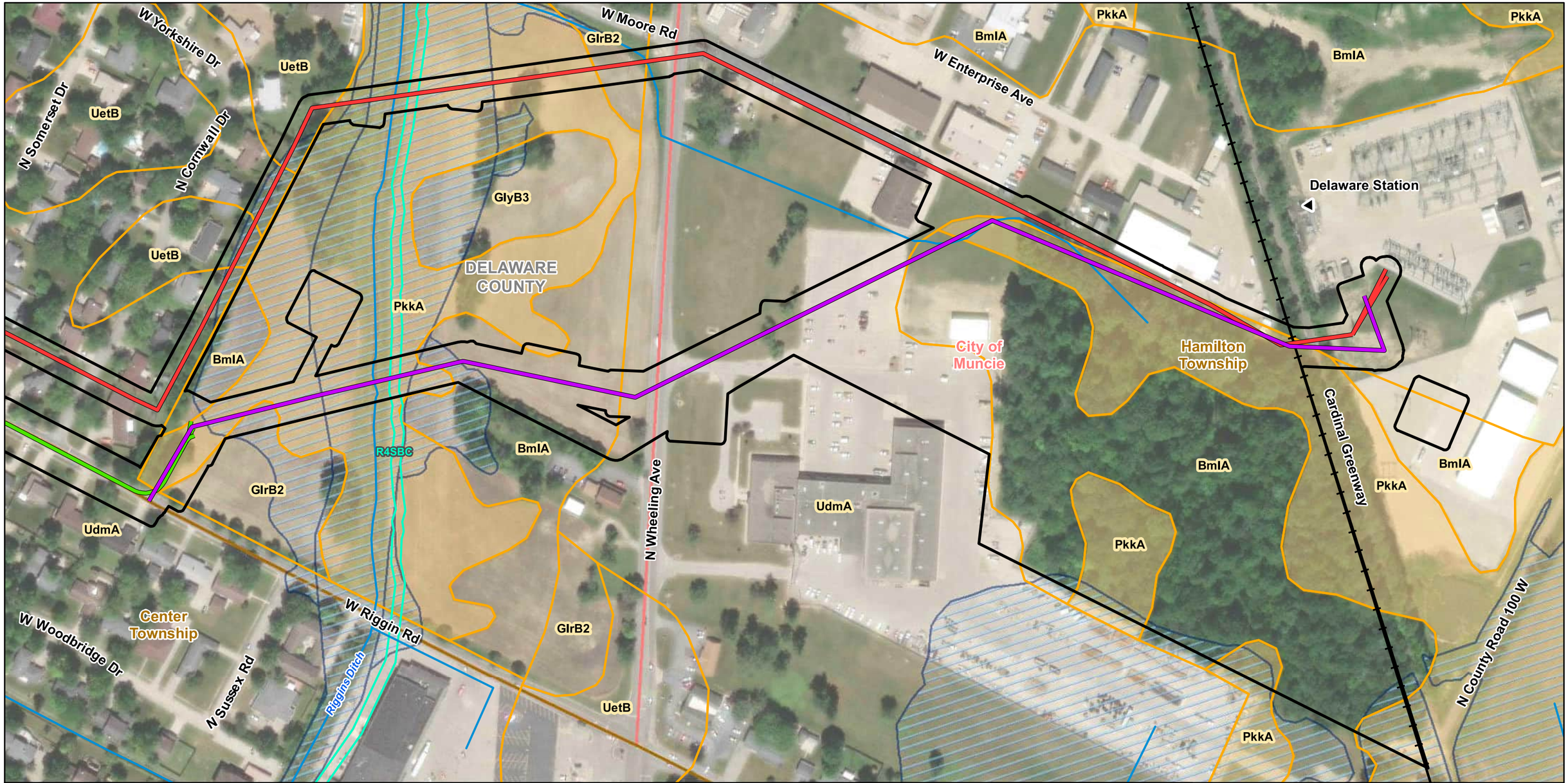
Town of Yorktown
MUNCIE WEST QUAD
MUNCIE EAST QUAD
Bethel Station
40.2080, -85.4147
Center Township
Kenmore Station
40.1990, -85.4195
City of Muncie
Town of Yorktown
Existing Substations
Proposed Kenmore - Bethel 69 kV (Underground)
Proposed Bethel - Delaware 69 kV (Overhead)
Proposed Bethel - Delaware 69 kV (Underground)
Existing Bethel - Delaware 69 kV to be Removed
USGS 24k Topo Quad Boundary
County Boundary
Township Boundary
Municipal Boundary
Sources:
Basemap (ESRI)
Coordinate System:
Indiana State Plane East
NAD 1983
August 25, 2023
GRANT
BLACKFORD
JAY
DELAWARE
Muncie
MADISON
RANDOLPH
Anderson
HENRY
WAYNE
HANCOCK
New Castle
DELAWARE - KENMORE 69 KV
TRANSMISSION LINE PROJECT
Figure 1: Project Location
0
0.5
1
Miles

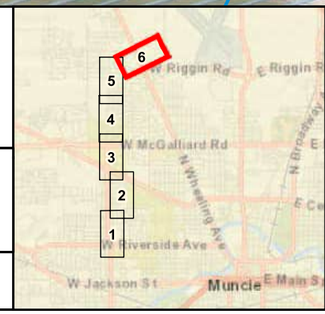


- Existing Substations
- Proposed Bethel - Delaware 69 kV (Overhead)
- Proposed Bethel - Delaware 69 kV (Underground)
- Existing Bethel - Delaware 69 kV to be Removed
- Railroad
- Environmental Survey Corridor
- County Boundary
- Township Boundary
- Municipal Boundary
- NHD Stream
- NWI Wetland
- NHD Waterbody
- Soil Map Unit
- Soil Map Unit (> 35% hydric)
- 100 yr. Floodplain

Sources:
Imagery (ESRI)
NHD (USGS)
NWI (USFWS)
Soils (USDA-NRCS)

Coordinate System:
Indiana State Plane East
NAD 1983

October 02, 2023



DELAWARE - KENMORE 69 KV
TRANSMISSION LINE PROJECT

Figure 2: Environmental Basemap

INDIANA MICHIGAN POWER

wsp

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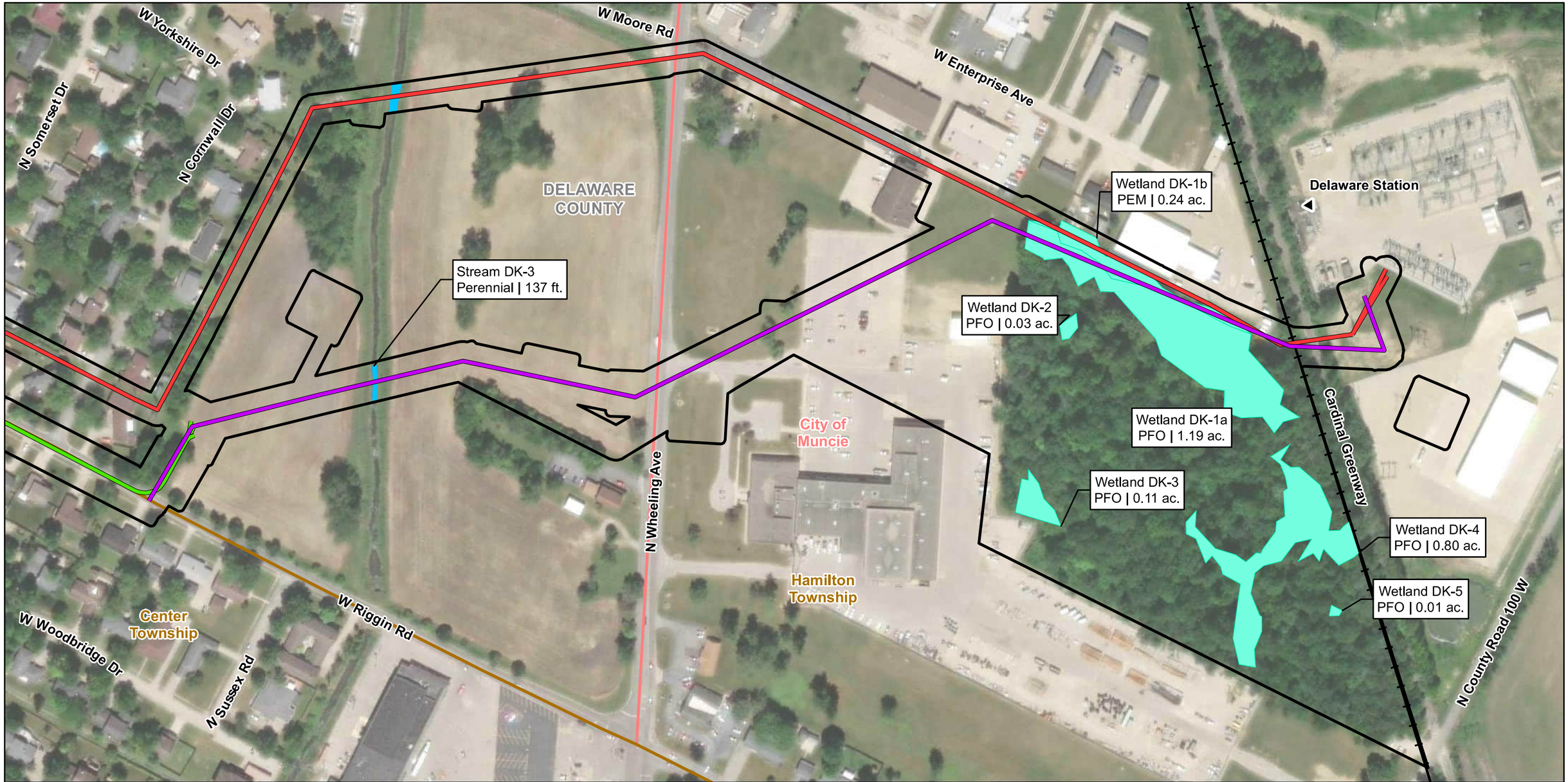
0 100 200 400 Feet

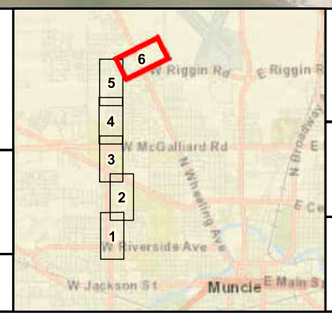


- Existing Substations
- Proposed Bethel - Delaware 69 kV (Overhead)
- Proposed Bethel - Delaware 69 kV (Underground)
- Existing Bethel - Delaware 69 kV to be Removed
- Railroad
- Environmental Survey Corridor
- County Boundary
- Township Boundary
- Municipal Boundary
- Delineated Wetland
- Delineated Stream

Sources:
Imagery (ESRI)

Coordinate System:
Indiana State Plane East
NAD 1983

October 02, 2023



DELAWARE - KENMORE 69 KV
TRANSMISSION LINE PROJECT

Figure 3: Delineated Features

INDIANA MICHIGAN POWER
An AEP Company

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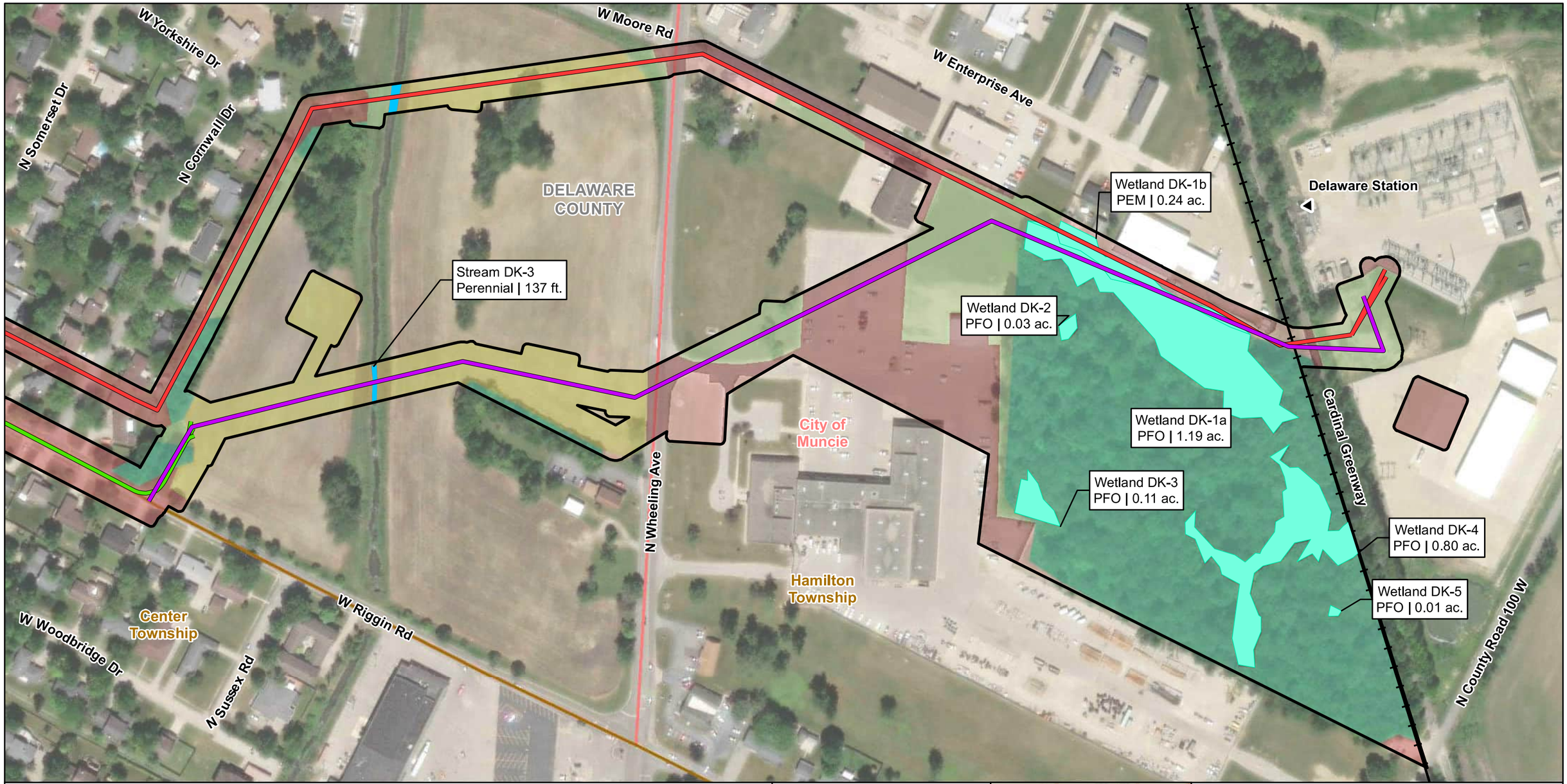
0 100 200 400 Feet



- Existing Substations
- Proposed Bethel - Delaware 69 kV (Overhead)
- Proposed Bethel - Delaware 69 kV (Underground)
- Existing Bethel - Delaware 69 kV to be Removed
- Railroad
- Environmental Survey Corridor
- County Boundary
- Township Boundary
- Municipal Boundary
- Delineated Wetland
- Delineated Stream

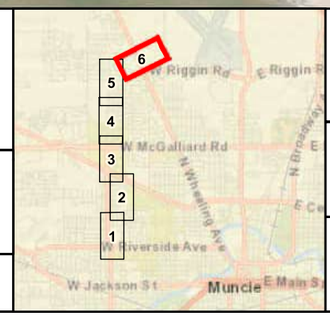
Vegetation Coverage

- Agricultural Cropland
- Developed, High Intensity
- Developed, Medium Intensity
- Developed, Low Intensity
- Developed, Open Space
- Old Field
- Successional Forest

Sources:
Imagery (ESRI)

Coordinate System:
Indiana State Plane East
NAD 1983

October 02, 2023



DELAWARE - KENMORE 69 KV
TRANSMISSION LINE PROJECT

Figure 4: Vegetation Coverage

INDIANA MICHIGAN POWER
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0 100 200 400 Feet

APPENDIX

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PHOTOGRAPH 1

Wetland DK-1b (PEM), facing north on August 11, 2020.

PHOTOGRAPH 2

Wetland DK-1b (PEM), facing south on August 11, 2020.

PHOTOGRAPH 3

Wetland DK-1b (PEM), facing east on August 11, 2020.

PHOTOGRAPH 4

Wetland DK-1b (PEM), facing west on August 11, 2020.

PHOTOGRAPH 5

Wetland DK-1a (PFO), facing north on August 11, 2020.

PHOTOGRAPH 6

Wetland DK-1a (PFO), facing south on August 11, 2020.

PHOTOGRAPH 7

Wetland DK-1a (PFO), facing east on August 11, 2020.

PHOTOGRAPH 8

Wetland DK-1a (PFO), facing west on August 11, 2020.

APPENDIX

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United States Department of the Interior
Fish and Wildlife Service

Indiana Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

June 24, 2022

Mr. Philip J. Renner
WSP USA, Inc.
312 Vine Street, Suite 2500
Cincinnati, Ohio 45202

Project: AEP Delaware-Kenmore Electric Transmission Line Rebuild
Location: Muncie, Delaware County, Indiana

Dear Mr. Renner:

This responds to your letter dated June 16, 2022, requesting our comments on the aforementioned project.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (l6 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of l969, the Endangered Species Act of l973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The proposed project consists of the reconstruction of 2.75 miles of existing 34.5 kV overhead electric transmission line between the Bethel Station and the Delaware Station, with part of the line being within a new overhead alignment and part within a new underground alignment. The existing poles and conductor will be removed from the old alignment. The project also consists of reconstruction of 0.8 miles of underground transmission line between the Bethel Station and the Kenmore Station.

The Bethel Station and a portion of the overhead line reconstruction are along the west side of Ball State University. The remainder of the project is primarily within residential areas; the very north end of the project crosses the Cardinal Greenway trail just before entering the Delaware Station. Tree clearing or tree trimming may be required, particularly where the route will be within a new right-of-way.

ENDANGERED SPECIES

The proposed project is within the range of the Federally endangered Indiana bat (*Myotis sodalis*) and the threatened/proposed endangered northern long-eared bat (*Myotis septentrionalis*). There are no records of either bat species within the project area, and no habitat is known to be present. Although trees may be trimmed or removed within certain areas, the entire project is within the developed City of Muncie, and the wooded areas that would be impacted do not provide suitable habitat for these species. Therefore, no tree clearing time restrictions are necessary for this proposed project. The U.S. Fish and Wildlife Service concurs with the determination that the project as proposed is not likely to adversely affect these Federally listed bat species.

The candidate Monarch butterfly (*Danaus plexippus*) is also likely to be present. As a candidate species, the Monarch butterfly is not afforded legal protection under the authorities of the Endangered Species Act, and we have no specific comments/recommendations concerning this species at this time. Due to the lack of suitable habitat, none of the bird species listed in the IPac Resource List provided with your letter are likely to be present.

This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of l973, as amended. However, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation.

We appreciate the opportunity to comment on this proposed project. For further discussion, please contact Elizabeth McCloskey at elizabeth_mccloskey@fws.gov.

Sincerely yours,

/s/ *Elizabeth S. McCloskey*

for Scott E. Pruitt
Supervisor

Sent via email June 24, 2022; no hard copy to follow.

Division of Nature Preserves
402 W. Washington St., Rm W267
Indianapolis, IN 46204-2739

June 21, 2022

Philip Renner
WSP USA, Inc.
312 Elm Street, Suite 2500
Cincinnati, OH 45202

Dear Philip Renner:

I am responding to your request for information on the threatened or endangered (T&E) species, high quality natural communities, and natural areas for the AEP Delaware-Kenmore 34.5 kV Transmission Line Rebuild Project located in Delaware County, Indiana. The Indiana Natural Heritage Data Center has been checked and included you will find a datasheet with information on the T&E species documented within 0.5 mile of the project area.

The T&E vascular plant occurrence is historical and does not occur precisely at the project site. Therefore, if project activities are limited to only within the proposed project right-of-way, no impacts are expected on this occurrence.

If you need a review of the impacts to the animal species mentioned or a general environmental review, you can submit the project information to Christie Stanifer, DNR Environmental Coordinator, at environmentalreview@dnr.in.gov (preferred), or send to the street address below. For more help or guidance contact Christie Stanifer at cstanifer@dnr.in.gov.

Department of Natural Resources
Environmental Review
Division of Fish and Wildlife
402 W. Washington Street, Room W273
Indianapolis, IN 46204

The information I am providing does not preclude the requirement for further consultation with the U.S. Fish and Wildlife Service as required under Section 7 of the Endangered Species Act of 1973. If you have concerns about potential Endangered Species Act issues you should contact the Service at their Bloomington, Indiana office.

U.S. Fish and Wildlife Service
620 South Walker St.
Bloomington, Indiana 47403-2121
(812)334-4261

Please note that the Indiana Natural Heritage Data Center relies on the observations of many individuals for our data. In most cases, the information is not the result of comprehensive field surveys conducted at particular sites. Therefore, our statement that there are no documented significant natural features at a site should not be interpreted to mean that the site does not support special plants or animals.

Due to the dynamic nature and sensitivity of the data, this information should not be used for any project other than that for which it was originally intended. It may be necessary for you to request updated material from us in order to base your planning decisions on the most current information.

Thank you for contacting the Indiana Natural Heritage Data Center. You may reach me at (317)233-2558 if you have any questions or need additional information.

Sincerely,

Taylor Davis
Indiana Natural Heritage Data Center

Enclosure: invoice
datasheet

June 21, 2022

INDIANA HERITAGE DATA WITHIN 0.5 MILE OF:

AEP Delaware-Kenmore 34.5 kV Transmission Line Rebuild Project, Delaware County

Sci. Name	Com. Name	State	Fed.	Date	Site
Vascular Plant					
Wisteria frutescens	American wisteria	ST		1924	W JACKSON STREET, MUNCIE

Fed: E = Federal endangered; T = Federal threatened; C = Federal candidate species

State: SE = State endangered; ST= State threatened; SR = State rare; SSC = State species of special concern; SG = State significant; WL = watch list; no rank - not ranked but tracked to monitor status

THIS IS NOT A PERMIT

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment

DNR #: ER-24801 **Request Received:** June 16, 2022

Requestor:
WSP USA, Inc
Philip Renner
312 Vine Street, Suite 2500
Cincinnati, OH 45202

Project: Delaware-Kenmore 34.5 kV Transmission Line Project, Muncie:
1) Bethel - Delaware: rebuilding 2.75 miles of overhead transmission line
2) Bethel - Kenmore: rebuilding 0.80 miles of below-ground transmission line

County/Site info: Delaware

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

Regulatory Assessment: This proposal may require the formal approval(s) for construction in a floodway under the Flood Control Act, IC 14-28-1, unless it qualifies for a general license under Administrative Rule 312 IAC 10-5 that applies to utility line crossings (see enclosure). Please include a copy of this letter with the permit application if the project does not meet the general license criteria.

Natural Heritage Database: The Natural Heritage Program's data have been checked.
As indicated in the June 21, 2022, letter from Taylor Davis, Division of Nature Preserves, only the state threatened American wisteria (Wisteria frutescens) has been documented within 1/2 mile of the project area.

Fish & Wildlife Comments: Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are recommendations that address potential impacts identified in the proposed project areas:

1) Transmission Line Placement:
We recommend minimizing the removal of trees and brush by locating any new utility lines on the side of the road containing the least amount of forested habitat (including placing as much of the temporary construction areas as possible in previously cleared/disturbed areas).

Where forested habitat is located on both sides of the road, the temporary and permanent construction disturbance should be minimized by placing the line as close to the existing previously disturbed area/right of way as possible to minimize forest fragmentation. The width of disturbance through a forested area should be 20' or less (if the disturbed width cannot be reduced to 20', then the cleared area should be replanted with container-grown native hardwood trees and shrubs to within 10' of the center of the line).

2) Trees/Forest Habitat:
We recommend a mitigation plan be developed (and submitted with the permit application, if required) for any unavoidable habitat impacts that will occur. The DNR's Habitat Mitigation Guidelines (and plant lists) can be found online at:

Attachments: A - Utility Exemption Criteria

http://iac.iga.in.gov/iac/20200527-IR-312200284NRA.xml.pdf.

Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, 1 inch to 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10" dbh or greater (5:1 mitigation based on the number of large trees) or by using the 1:1 replacement ratio based on area depending on the type of habitat impacted (individual canopy tree removal in an urban streetscape or park-like environment versus removal of habitat supporting a tree canopy, woody understory, and herbaceous layer). Impacts under 0.10 acre in an urban area may still involve the replacement of large diameter trees but typically do not require any additional mitigation or additional plantings beyond seeding and stabilizing disturbed areas. There are exceptions for high quality habitat sites however.

3) Stream Impacts:
For any in-stream impacts, you may need to contact the Indiana Department of Environmental Management (IDEM) 401 program and the US Army Corps of Engineers (USACE) 404 program. Impacts on in-stream habitat may require mitigation. Please refer to the Habitat Mitigation Guidelines above for more details.

The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:
1. Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in regularly mowed areas only.
2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.
3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
4. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
5. Do not excavate in the low flow area except for the removal of the old structure or placement of the transmission lines.
6. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds.
7. Minimize the movement of resuspended bottom sediment from the immediate project area.
8. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
9. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

Attachments: A - Utility Exemption Criteria

THIS IS NOT A PERMIT

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife

Early Coordination/Environmental Assessment

Contact Staff: Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife

Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.

Christie L. Stanifer

Date: July 15, 2022

Christie L. Stanifer
Environ. Coordinator
Division of Fish and Wildlife

Attachments: A - Utility Exemption Criteria

ARTICLE 10. FLOOD PLAIN MANAGEMENT

312 IAC 10-2-42 "Utility line crossing" defined

Authority: IC 14-28-1-5; IC 14-28-3-2
Affected: IC 14-27-7; IC 14-28-1; IC 14-28-3

Sec. 42. "Utility line crossing" means the utility crosses the waterway in a straight line at an angle of between forty-five (45) degrees and one hundred thirty-five (135) degrees from the streambank and does not parallel the waterway for more than fifty (50) feet in the floodway before crossing unless the parallel portion of the line is contained within existing road right-of-way. *(Natural Resources Commission; 312 IAC 10-2-42; filed Jul 5, 2001, 9:12 a.m.: 24 IR 3389, eff Jan 1, 2002)*

Rule 5. General Licenses and Specific Exemptions from Floodway Licensing

312 IAC 10-5-0.3 Determining project eligibility for a general license; general criteria

Authority: IC 14-10-2-4; IC 14-28-1-5
Affected: IC 14-28-1; IC 14-29-1

Sec. 0.3. (a) Except as provided in subsections (b) and (c), a project for a utility line crossing, the removal of logjams and obstructions, or the placement of outfall projects within a floodway is eligible for a general license if the project satisfies the requirements of this rule. For the removal of logjams and obstructions, these requirements include the procedures established by section 0.6 of this rule.

(b) Subsection (a) does not authorize a project in any of the following circumstances:

(1) Within a river or stream listed in the Indiana Register at 16 IR 1677 in the Outstanding Rivers List for Indiana unless prior written approval from the division of water's environmental unit has been obtained.

(2) Within a salmonid stream designated under 327 IAC 2-1.5-5(a)(3).

(3) Within a natural, scenic, or recreational river or stream designated under 312 IAC 7-2.

(4) For a utility line crossing, below the ordinary high watermark of a navigable waterway listed in the Indiana Register at 20 IR 2920 in the Roster of Indiana Waterways Declared Navigable or Nonnavigable unless the utility line is placed beneath the bed of the waterway under section 4(b) of this rule.

(5) Where the project requires an individual permit from the United States Army Corps of Engineers under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act.

(c) Subsection (a) does not authorize the removal of logjams or obstructions within one-half (½) mile of any of the following:

(1) A species listed in the Indiana Register at 15 IR 1312 in the Roster of Indiana Animals and Plants Which Are Extirpated, Endangered, Threatened, or Rare.

(2) A known mussel resource.

(3) An outstanding natural area, as contained on the registry of natural areas maintained in the natural heritage data center of the department.

(d) The limitations contained in subsection (b) and subsection (c) *[subsections (b) and (c)]* do not apply to section 7 of this rule. *(Natural Resources Commission; 312 IAC 10-5-0.3; filed Aug 2, 2004, 3:18 p.m.: 27 IR 3875)*

312 IAC 10-5-2 General licensing for utility line crossings

Authority: IC 14-10-2-4; IC 14-28-1-5
Affected: IC 14-27-7; IC 14-28-1; IC 14-29-1

Sec. 2. Except as provided in sections 3 and 4 of this rule, a license is required under IC 14-28-1, IC 14-29-1, and 312 IAC 10-4 to place a utility line in or on a floodway where:

(1) the drainage area of a river or stream is at least one (1) square mile at the downstream end of the line's floodway segment; or

(2) a dam or levee regulated under IC 14-27-7 is affected.

(Natural Resources Commission; 312 IAC 10-5-2; filed Jul 5, 2001, 9:12 a.m.: 24 IR 3394, eff Jan 1, 2002)

312 IAC 10-5-3 Aerial electric, telephone, or cable television lines; general license

Authority: IC 14-10-2-4; IC 14-28-1-5
Affected: IC 14-28-1; IC 14-29-1; IC 14-29-6

Sec. 3. The placement of an aerial electric, telephone, or cable television line is authorized without a written license issued by the department under IC 14-28-1, IC 14-29-1, and 312 IAC 10-4 if:

(1) the activity does not disturb the bed of the waterway beneath the line;

(2) the activity conforms with the minimum clearance requirements of section 4(b)(9) of this rule;

(3) the support mechanisms are located at least seventy-five (75) feet from the top of the bank; and

(4) the utility line crossing is not within the floodway of a natural river, scenic river, or recreational river designated under 312 IAC 7-2.

(Natural Resources Commission; 312 IAC 10-5-3; filed Jul 5, 2001, 9:12 a.m.: 24 IR 3394, eff Jan 1, 2002; filed Aug 2, 2004, 3:18 p.m.: 27 IR 3876)

312 IAC 10-5-4 Qualified utility line crossings; general license

Authority: IC 14-10-2-4

Affected: IC 13-11-2-260; IC 14-27-7; IC 14-28-1-29; IC 14-33; IC 36-9-27

Sec. 4. (a) This section establishes a general license for the placement of a qualified utility line crossing in a floodway.

(b) A person who wishes to implement a project for the placement of a qualified utility line crossing on a river or stream, other than on a river or stream identified in section 0.3(b) or 0.3(c) of this rule, may do so without notice to the department if the project conforms to the following conditions:

(1) Tree removal and brush clearing shall be contained and minimized within the utility line crossing area. No more than one (1) acre of trees shall be removed within the floodway.

(2) Construction activities within the waterway from April 1 through June 30 shall not exceed a total of two (2) calendar days.

(3) Best management practices shall be used during and after construction to minimize erosion and sedimentation.

(4) Following the completion of construction, disturbed areas shall be reclaimed and revegetated. Disturbed areas shall be mulched with straw, wood fiber, biodegradable erosion blanket, or other suitable material. To prevent erosion until revegetated species are established, loose mulch shall be anchored by crimping, tackifiers, or netting. To the extent practicable, revegetation must restore species native to the site. If revegetation with native species is not practicable, revegetation shall be performed by the planting of a mixture of red clover, orchard grass, timothy, perennial rye grass, or another species that is approved by the department as being suitable to site and climate conditions. In no case shall tall fescue be used to revegetate disturbed areas.

(5) Disturbed areas with slopes of three to one (3:1) or steeper, or areas where run-off is conveyed through a channel or swale, shall be stabilized with erosion control blankets or suitable structural armament.

(6) No pesticide will be used on the banks.

(7) If a utility line transports a substance that may cause water pollution as defined in IC 13-11-2-260, the utility line will be equipped with an emergency closure system.

(8) If a utility line is placed beneath the bed of a river or stream, the following conditions are met:

(A) Cover of at least three (3) feet measured perpendicularly to the utility line is provided between the utility line and the banks.

(B) If the placement of a utility line is not subject to regulation under IC 14-28-1-29, IC 14-33, or IC 36-9-27, cover is provided as follows:

(i) At least three (3) feet, measured perpendicularly to the utility line, between the lowest point of the bed and the top of the utility line or its encasement, whichever is higher, if the bed is composed of unconsolidated materials.

(ii) At least one (1) foot, measured perpendicularly to the line, between the lowest point of the bed and the top of the utility line or its encasement, whichever is higher, if the bed is composed of consolidated materials.

(C) If the placement of the utility line is subject to regulation under IC 14-28-1-29, IC 14-33, or IC 36-9-27, cover is provided as follows:

(i) At least three (3) feet, measured perpendicularly to the utility line, between the design bed and the top of the line or its encasement, whichever is higher, if the bed is composed of unconsolidated materials.

(ii) At least one (1) foot, measured perpendicularly to the line, between the design bed and the top of the line or its encasement, whichever is higher, if the bed is composed of consolidated materials.

(D) Negative buoyancy compensation is provided where the utility line has a nominal diameter of at least eight (8) inches and transports a substance having a specific gravity of less than one (1).

(9) If a utility line is placed above the bed of a river or stream, the following conditions are met:

(A) Except as provided in clauses (B) and (C), minimum clearance is provided from the lowest point of the utility line (determined at the temperature, load, wind, length of span, and type of supports that produce the greatest sag) calculated as the higher of the following:

(i) Twelve and one-half (12½) feet above the ordinary high watermark.

(ii) Three (3) feet above the regulatory flood elevation.

(B) If the river or stream is a navigable waterway that is subject to IC 14-28-1, the utility line that crosses over the waterway must be placed to provide the greater of the following:

(i) The minimum clearance required under clause (A).

(ii) The minimum clearance required for the largest watercraft that is capable of using the waterway. The utility must consult in advance with the department to determine the minimum clearance for watercraft at the crossing.

(C) If a utility line is attached to or contained in the embankment of an existing bridge or culvert, no portion of the utility line or its support mechanism may project below the low structure elevation or otherwise reduce the effective waterway area.

(10) A utility line placed in a dam or levee regulated under IC 14-27-7 does not qualify for a general license under this subsection.

(c) A person who elects to act under this section must comply with the general conditions under subsection (b). Failure to comply with these terms and conditions may result in the revocation of the general license, a civil penalty, a commission charge, and any other sanction provided by law for the violation of a license issued under IC 14-28-1 and, if the waterway is navigable, the violation of a license issued under IC 14-29-1. *(Natural Resources Commission; 312 IAC 10-5-4; filed Jul 5, 2001, 9:12 a.m.: 24 IR 3394, eff Jan 1, 2002; filed Dec 26, 2001, 2:42 p.m.: 25 IR 1545; errata filed Mar 13, 2002, 11:51 a.m.: 25 IR 2521; filed Aug 2, 2004, 3:18 p.m.: 27 IR 3876)*

ATTACHMENT 5

Preliminary Jurisdictional Determination (PJD) Form

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: [illegible] 2023

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: [illegible]

C. DISTRICT OFFICE, FILE NAME, AND NUMBER: [illegible]

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:
(USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

[illegible]

[illegible] 0[illegible]2371 [illegible] -[illegible]0[illegible]

[illegible]

[illegible]

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

☐ [illegible]

☒ [illegible] 11 2020 [illegible] 3 2 [illegible] 2022 [illegible] 2 [illegible] 2022

TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
[illegible]-1	[illegible]0[illegible]2371	-[illegible]0[illegible]	1[illegible]3[illegible]	[illegible]	[illegible]0[illegible]
[illegible]-1	[illegible]0[illegible]20[illegible]3	-[illegible]1[illegible]0	[illegible]07[illegible]	[illegible]	[illegible]0[illegible]
[illegible]-2	[illegible]0[illegible]2321	-[illegible]201	[illegible]0[illegible]	[illegible]	[illegible]0[illegible]
[illegible]-3	[illegible]0[illegible]23[illegible]	-[illegible]1[illegible]0	137[illegible]	[illegible]	[illegible]0[illegible]

1. [illegible]

2. [illegible]

SUPPORTING DATA. Data reviewed for PJD (check all that apply)

[illegible]

- ☒ M [illegible] D [illegible]
  M [illegible] R [illegible] 1 - [illegible]
- ☒ D [illegible] D [illegible]
  - ☐ [illegible]
  - ☐ [illegible] R [illegible]
- ☐ D [illegible]
- ☐ [illegible]
- ☒ [illegible] M [illegible]
  - ☒ [illegible] D [illegible]
  - ☒ [illegible] 12 [illegible]
- ☒ [illegible] M [illegible]
- ☒ [illegible] R [illegible] D [illegible]
- ☒ [illegible]
- ☐ [illegible]
- ☒ [illegible] M [illegible] RM [illegible]
- ☐ 100- [illegible] D [illegible] 1 2 [illegible]
- ☒ [illegible] ☐ [illegible] D [illegible]
  or ☒ [illegible] D [illegible] R [illegible]
- ☐ [illegible]
- ☐ [illegible]

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

______________________	*Kelli Boren* 12/7/2023
[illegible]	[illegible]
R [illegible]	[illegible] D
[illegible] D	R [illegible] R D [illegible]
	[illegible][1]

[1] D [illegible]

ATTACHMENT 6

Threatened and Endangered Species Coordination

United States Department of the Interior
Fish and Wildlife Service

Indiana Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

June 24, 2022

Mr. Philip J. Renner
WSP USA, Inc.
312 Vine Street, Suite 2500
Cincinnati, Ohio 45202

Project: AEP Delaware-Kenmore Electric Transmission Line Rebuild
Location: Muncie, Delaware County, Indiana

Dear Mr. Renner:

This responds to your letter dated June 16, 2022, requesting our comments on the aforementioned project.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (l6 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of l969, the Endangered Species Act of l973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The proposed project consists of the reconstruction of 2.75 miles of existing 34.5 kV overhead electric transmission line between the Bethel Station and the Delaware Station, with part of the line being within a new overhead alignment and part within a new underground alignment. The existing poles and conductor will be removed from the old alignment. The project also consists of reconstruction of 0.8 miles of underground transmission line between the Bethel Station and the Kenmore Station.

The Bethel Station and a portion of the overhead line reconstruction are along the west side of Ball State University. The remainder of the project is primarily within residential areas; the very north end of the project crosses the Cardinal Greenway trail just before entering the Delaware Station. Tree clearing or tree trimming may be required, particularly where the route will be within a new right-of-way.

ENDANGERED SPECIES

The proposed project is within the range of the Federally endangered Indiana bat (*Myotis sodalis*) and the threatened/proposed endangered northern long-eared bat (*Myotis septentrionalis*). There are no records of either bat species within the project area, and no habitat is known to be present. Although trees may be trimmed or removed within certain areas, the entire project is within the developed City of Muncie, and the wooded areas that would be impacted do not provide suitable habitat for these species. Therefore, no tree clearing time restrictions are necessary for this proposed project. The U.S. Fish and Wildlife Service concurs with the determination that the project as proposed is not likely to adversely affect these Federally listed bat species.

The candidate Monarch butterfly (*Danaus plexippus*) is also likely to be present. As a candidate species, the Monarch butterfly is not afforded legal protection under the authorities of the Endangered Species Act, and we have no specific comments/recommendations concerning this species at this time. Due to the lack of suitable habitat, none of the bird species listed in the IPac Resource List provided with your letter are likely to be present.

This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of l973, as amended. However, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation.

We appreciate the opportunity to comment on this proposed project. For further discussion, please contact Elizabeth McCloskey at elizabeth_mccloskey@fws.gov.

Sincerely yours,

/s/ *Elizabeth S. McCloskey*

for Scott E. Pruitt
Supervisor

Sent via email June 24, 2022; no hard copy to follow.

Division of Nature Preserves
402 W. Washington St., Rm W267
Indianapolis, IN 46204-2739

June 21, 2022

Philip Renner
WSP USA, Inc.
312 Elm Street, Suite 2500
Cincinnati, OH 45202

Dear Philip Renner:

I am responding to your request for information on the threatened or endangered (T&E) species, high quality natural communities, and natural areas for the AEP Delaware-Kenmore 34.5 kV Transmission Line Rebuild Project located in Delaware County, Indiana. The Indiana Natural Heritage Data Center has been checked and included you will find a datasheet with information on the T&E species documented within 0.5 mile of the project area.

The T&E vascular plant occurrence is historical and does not occur precisely at the project site. Therefore, if project activities are limited to only within the proposed project right-of-way, no impacts are expected on this occurrence.

If you need a review of the impacts to the animal species mentioned or a general environmental review, you can submit the project information to Christie Stanifer, DNR Environmental Coordinator, at environmentalreview@dnr.in.gov (preferred), or send to the street address below. For more help or guidance contact Christie Stanifer at cstanifer@dnr.in.gov.

Department of Natural Resources
Environmental Review
Division of Fish and Wildlife
402 W. Washington Street, Room W273
Indianapolis, IN 46204

The information I am providing does not preclude the requirement for further consultation with the U.S. Fish and Wildlife Service as required under Section 7 of the Endangered Species Act of 1973. If you have concerns about potential Endangered Species Act issues you should contact the Service at their Bloomington, Indiana office.

U.S. Fish and Wildlife Service
620 South Walker St.
Bloomington, Indiana 47403-2121
(812)334-4261

Please note that the Indiana Natural Heritage Data Center relies on the observations of many individuals for our data. In most cases, the information is not the result of comprehensive field surveys conducted at particular sites. Therefore, our statement that there are no documented significant natural features at a site should not be interpreted to mean that the site does not support special plants or animals.

Due to the dynamic nature and sensitivity of the data, this information should not be used for any project other than that for which it was originally intended. It may be necessary for you to request updated material from us in order to base your planning decisions on the most current information.

Thank you for contacting the Indiana Natural Heritage Data Center. You may reach me at (317)233-2558 if you have any questions or need additional information.

Sincerely,

Taylor Davis
Indiana Natural Heritage Data Center

Enclosure: invoice
datasheet

June 21, 2022

INDIANA HERITAGE DATA WITHIN 0.5 MILE OF:

AEP Delaware-Kenmore 34.5 kV Transmission Line Rebuild Project, Delaware County

Sci. Name	Com. Name	State	Fed.	Date	Site
Vascular Plant					
Wisteria frutescens	American wisteria	ST		1924	W JACKSON STREET, MUNCIE

Fed: E = Federal endangered; T = Federal threatened; C = Federal candidate species

State: SE = State endangered; ST= State threatened; SR = State rare; SSC = State species of special concern; SG = State significant; WL = watch list; no rank - not ranked but tracked to monitor status

THIS IS NOT A PERMIT

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment

DNR #: ER-24801 **Request Received:** June 16, 2022

Requestor:
WSP USA, Inc
Philip Renner
312 Vine Street, Suite 2500
Cincinnati, OH 45202

Project: Delaware-Kenmore 34.5 kV Transmission Line Project, Muncie:
1) Bethel - Delaware: rebuilding 2.75 miles of overhead transmission line
2) Bethel - Kenmore: rebuilding 0.80 miles of below-ground transmission line

County/Site info: Delaware

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

Regulatory Assessment: This proposal may require the formal approval(s) for construction in a floodway under the Flood Control Act, IC 14-28-1, unless it qualifies for a general license under Administrative Rule 312 IAC 10-5 that applies to utility line crossings (see enclosure). Please include a copy of this letter with the permit application if the project does not meet the general license criteria.

Natural Heritage Database: The Natural Heritage Program's data have been checked.
As indicated in the June 21, 2022, letter from Taylor Davis, Division of Nature Preserves, only the state threatened American wisteria (Wisteria frutescens) has been documented within 1/2 mile of the project area.

Fish & Wildlife Comments: Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are recommendations that address potential impacts identified in the proposed project areas:

1) Transmission Line Placement:
We recommend minimizing the removal of trees and brush by locating any new utility lines on the side of the road containing the least amount of forested habitat (including placing as much of the temporary construction areas as possible in previously cleared/disturbed areas).

Where forested habitat is located on both sides of the road, the temporary and permanent construction disturbance should be minimized by placing the line as close to the existing previously disturbed area/right of way as possible to minimize forest fragmentation. The width of disturbance through a forested area should be 20' or less (if the disturbed width cannot be reduced to 20', then the cleared area should be replanted with container-grown native hardwood trees and shrubs to within 10' of the center of the line).

2) Trees/Forest Habitat:
We recommend a mitigation plan be developed (and submitted with the permit application, if required) for any unavoidable habitat impacts that will occur. The DNR's Habitat Mitigation Guidelines (and plant lists) can be found online at:

Attachments: A - Utility Exemption Criteria

http://iac.iga.in.gov/iac/20200527-IR-312200284NRA.xml.pdf.

Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, 1 inch to 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10" dbh or greater (5:1 mitigation based on the number of large trees) or by using the 1:1 replacement ratio based on area depending on the type of habitat impacted (individual canopy tree removal in an urban streetscape or park-like environment versus removal of habitat supporting a tree canopy, woody understory, and herbaceous layer). Impacts under 0.10 acre in an urban area may still involve the replacement of large diameter trees but typically do not require any additional mitigation or additional plantings beyond seeding and stabilizing disturbed areas. There are exceptions for high quality habitat sites however.

3) Stream Impacts:
For any in-stream impacts, you may need to contact the Indiana Department of Environmental Management (IDEM) 401 program and the US Army Corps of Engineers (USACE) 404 program. Impacts on in-stream habitat may require mitigation. Please refer to the Habitat Mitigation Guidelines above for more details.

The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:
1. Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in regularly mowed areas only.
2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.
3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
4. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
5. Do not excavate in the low flow area except for the removal of the old structure or placement of the transmission lines.
6. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds.
7. Minimize the movement of resuspended bottom sediment from the immediate project area.
8. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
9. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

Attachments: A - Utility Exemption Criteria

THIS IS NOT A PERMIT

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife

Early Coordination/Environmental Assessment

Contact Staff: Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife

Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.

Christie L. Stanifer

Date: July 15, 2022

Christie L. Stanifer
Environ. Coordinator
Division of Fish and Wildlife

Attachments: A - Utility Exemption Criteria

ARTICLE 10. FLOOD PLAIN MANAGEMENT

312 IAC 10-2-42 "Utility line crossing" defined

Authority: IC 14-28-1-5; IC 14-28-3-2
Affected: IC 14-27-7; IC 14-28-1; IC 14-28-3

Sec. 42. "Utility line crossing" means the utility crosses the waterway in a straight line at an angle of between forty-five (45) degrees and one hundred thirty-five (135) degrees from the streambank and does not parallel the waterway for more than fifty (50) feet in the floodway before crossing unless the parallel portion of the line is contained within existing road right-of-way. *(Natural Resources Commission; 312 IAC 10-2-42; filed Jul 5, 2001, 9:12 a.m.: 24 IR 3389, eff Jan 1, 2002)*

Rule 5. General Licenses and Specific Exemptions from Floodway Licensing

312 IAC 10-5-0.3 Determining project eligibility for a general license; general criteria

Authority: IC 14-10-2-4; IC 14-28-1-5
Affected: IC 14-28-1; IC 14-29-1

Sec. 0.3. (a) Except as provided in subsections (b) and (c), a project for a utility line crossing, the removal of logjams and obstructions, or the placement of outfall projects within a floodway is eligible for a general license if the project satisfies the requirements of this rule. For the removal of logjams and obstructions, these requirements include the procedures established by section 0.6 of this rule.

(b) Subsection (a) does not authorize a project in any of the following circumstances:

(1) Within a river or stream listed in the Indiana Register at 16 IR 1677 in the Outstanding Rivers List for Indiana unless prior written approval from the division of water's environmental unit has been obtained.

(2) Within a salmonid stream designated under 327 IAC 2-1.5-5(a)(3).

(3) Within a natural, scenic, or recreational river or stream designated under 312 IAC 7-2.

(4) For a utility line crossing, below the ordinary high watermark of a navigable waterway listed in the Indiana Register at 20 IR 2920 in the Roster of Indiana Waterways Declared Navigable or Nonnavigable unless the utility line is placed beneath the bed of the waterway under section 4(b) of this rule.

(5) Where the project requires an individual permit from the United States Army Corps of Engineers under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act.

(c) Subsection (a) does not authorize the removal of logjams or obstructions within one-half (½) mile of any of the following:

(1) A species listed in the Indiana Register at 15 IR 1312 in the Roster of Indiana Animals and Plants Which Are Extirpated, Endangered, Threatened, or Rare.

(2) A known mussel resource.

(3) An outstanding natural area, as contained on the registry of natural areas maintained in the natural heritage data center of the department.

(d) The limitations contained in subsection (b) and subsection (c) *[subsections (b) and (c)]* do not apply to section 7 of this rule. *(Natural Resources Commission; 312 IAC 10-5-0.3; filed Aug 2, 2004, 3:18 p.m.: 27 IR 3875)*

312 IAC 10-5-2 General licensing for utility line crossings

Authority: IC 14-10-2-4; IC 14-28-1-5
Affected: IC 14-27-7; IC 14-28-1; IC 14-29-1

Sec. 2. Except as provided in sections 3 and 4 of this rule, a license is required under IC 14-28-1, IC 14-29-1, and 312 IAC 10-4 to place a utility line in or on a floodway where:

(1) the drainage area of a river or stream is at least one (1) square mile at the downstream end of the line's floodway segment; or

(2) a dam or levee regulated under IC 14-27-7 is affected.

(Natural Resources Commission; 312 IAC 10-5-2; filed Jul 5, 2001, 9:12 a.m.: 24 IR 3394, eff Jan 1, 2002)

312 IAC 10-5-3 Aerial electric, telephone, or cable television lines; general license

Authority: IC 14-10-2-4; IC 14-28-1-5
Affected: IC 14-28-1; IC 14-29-1; IC 14-29-6

Sec. 3. The placement of an aerial electric, telephone, or cable television line is authorized without a written license issued by the department under IC 14-28-1, IC 14-29-1, and 312 IAC 10-4 if:

(1) the activity does not disturb the bed of the waterway beneath the line;

(2) the activity conforms with the minimum clearance requirements of section 4(b)(9) of this rule;

(3) the support mechanisms are located at least seventy-five (75) feet from the top of the bank; and

(4) the utility line crossing is not within the floodway of a natural river, scenic river, or recreational river designated under 312 IAC 7-2.

(Natural Resources Commission; 312 IAC 10-5-3; filed Jul 5, 2001, 9:12 a.m.: 24 IR 3394, eff Jan 1, 2002; filed Aug 2, 2004, 3:18 p.m.: 27 IR 3876)

312 IAC 10-5-4 Qualified utility line crossings; general license

Authority: IC 14-10-2-4

Affected: IC 13-11-2-260; IC 14-27-7; IC 14-28-1-29; IC 14-33; IC 36-9-27

Sec. 4. (a) This section establishes a general license for the placement of a qualified utility line crossing in a floodway.

(b) A person who wishes to implement a project for the placement of a qualified utility line crossing on a river or stream, other than on a river or stream identified in section 0.3(b) or 0.3(c) of this rule, may do so without notice to the department if the project conforms to the following conditions:

(1) Tree removal and brush clearing shall be contained and minimized within the utility line crossing area. No more than one (1) acre of trees shall be removed within the floodway.

(2) Construction activities within the waterway from April 1 through June 30 shall not exceed a total of two (2) calendar days.

(3) Best management practices shall be used during and after construction to minimize erosion and sedimentation.

(4) Following the completion of construction, disturbed areas shall be reclaimed and revegetated. Disturbed areas shall be mulched with straw, wood fiber, biodegradable erosion blanket, or other suitable material. To prevent erosion until revegetated species are established, loose mulch shall be anchored by crimping, tackifiers, or netting. To the extent practicable, revegetation must restore species native to the site. If revegetation with native species is not practicable, revegetation shall be performed by the planting of a mixture of red clover, orchard grass, timothy, perennial rye grass, or another species that is approved by the department as being suitable to site and climate conditions. In no case shall tall fescue be used to revegetate disturbed areas.

(5) Disturbed areas with slopes of three to one (3:1) or steeper, or areas where run-off is conveyed through a channel or swale, shall be stabilized with erosion control blankets or suitable structural armament.

(6) No pesticide will be used on the banks.

(7) If a utility line transports a substance that may cause water pollution as defined in IC 13-11-2-260, the utility line will be equipped with an emergency closure system.

(8) If a utility line is placed beneath the bed of a river or stream, the following conditions are met:

(A) Cover of at least three (3) feet measured perpendicularly to the utility line is provided between the utility line and the banks.

(B) If the placement of a utility line is not subject to regulation under IC 14-28-1-29, IC 14-33, or IC 36-9-27, cover is provided as follows:

(i) At least three (3) feet, measured perpendicularly to the utility line, between the lowest point of the bed and the top of the utility line or its encasement, whichever is higher, if the bed is composed of unconsolidated materials.

(ii) At least one (1) foot, measured perpendicularly to the line, between the lowest point of the bed and the top of the utility line or its encasement, whichever is higher, if the bed is composed of consolidated materials.

(C) If the placement of the utility line is subject to regulation under IC 14-28-1-29, IC 14-33, or IC 36-9-27, cover is provided as follows:

(i) At least three (3) feet, measured perpendicularly to the utility line, between the design bed and the top of the line or its encasement, whichever is higher, if the bed is composed of unconsolidated materials.

(ii) At least one (1) foot, measured perpendicularly to the line, between the design bed and the top of the line or its encasement, whichever is higher, if the bed is composed of consolidated materials.

(D) Negative buoyancy compensation is provided where the utility line has a nominal diameter of at least eight (8) inches and transports a substance having a specific gravity of less than one (1).

(9) If a utility line is placed above the bed of a river or stream, the following conditions are met:

(A) Except as provided in clauses (B) and (C), minimum clearance is provided from the lowest point of the utility line (determined at the temperature, load, wind, length of span, and type of supports that produce the greatest sag) calculated as the higher of the following:

(i) Twelve and one-half (12½) feet above the ordinary high watermark.

(ii) Three (3) feet above the regulatory flood elevation.

(B) If the river or stream is a navigable waterway that is subject to IC 14-28-1, the utility line that crosses over the waterway must be placed to provide the greater of the following:

(i) The minimum clearance required under clause (A).

(ii) The minimum clearance required for the largest watercraft that is capable of using the waterway. The utility must consult in advance with the department to determine the minimum clearance for watercraft at the crossing.

(C) If a utility line is attached to or contained in the embankment of an existing bridge or culvert, no portion of the utility line or its support mechanism may project below the low structure elevation or otherwise reduce the effective waterway area.

(10) A utility line placed in a dam or levee regulated under IC 14-27-7 does not qualify for a general license under this subsection.

(c) A person who elects to act under this section must comply with the general conditions under subsection (b). Failure to comply with these terms and conditions may result in the revocation of the general license, a civil penalty, a commission charge, and any other sanction provided by law for the violation of a license issued under IC 14-28-1 and, if the waterway is navigable, the violation of a license issued under IC 14-29-1. *(Natural Resources Commission; 312 IAC 10-5-4; filed Jul 5, 2001, 9:12 a.m.: 24 IR 3394, eff Jan 1, 2002; filed Dec 26, 2001, 2:42 p.m.: 25 IR 1545; errata filed Mar 13, 2002, 11:51 a.m.: 25 IR 2521; filed Aug 2, 2004, 3:18 p.m.: 27 IR 3876)*

ATTACHMENT 7

Cultural Resources Evaluation

April 18, 2023

Jennifer Walker, Environmental Specialist
American Electric Power
8600 Smith's Mill Road
New Albany, OH 43054

Subject: Desktop Analysis for the Delaware-Kenmore 34.5kV Transmission Line Project, Delaware County, Indiana

Dear Ms. Walker:

WSP USA Inc. (WSP) conducted a desktop analysis for the Delaware-Kenmore 34.5kV Transmission Line Project (Project) in Delaware County, Indiana, to understand what cultural resources may be potentially affected by the proposed Project elements listed below. The Project components include the following two transmission line rebuilds (Figure 1).

- Bethel-Delaware 34.5kV Transmission Line (overhead): Rebuild approximately 2.75 miles of the existing 34.5kV transmission line using overhead construction north of Bethel Station to Delaware Station.

- Bethel-Kenmore 34.5kV Transmission Line (underground): Rebuild approximately 0.80 mile of existing 34.5kV transmission line using underground construction between Bethel Station and Kenmore Station.

WSP's desktop analysis consisted of a records check/database review to determine the presence of any known cultural resources (architectural and archaeological) in the Project area, which consists of a 0.5-mile buffer on either side of the transmission line centerline. The review included resources listed in the National Register of Historic Places (NRHP), the Indiana State Historic Architectural and Archaeological Research Database (SHAARD), and known cemeteries shown on United States Geological Survey (USGS) topographic maps and within SHAARD. Given the proximity of the lines within the Project, some resources are included in the Project areas for both lines.

A. Bethel-Delaware 34.5kV Transmission Line Project (Overhead) (Figure 2; Tables 1-4)

Architectural Resources
Architectural resources in the Project area have been previously surveyed, as Delaware County was surveyed in 1985. Eight previously surveyed architectural resources are located in the Project area (see Figure 2 and Table 1). No previously surveyed architectural resources are located in or immediately adjacent to the transmission line right-of-way (ROW). The eight resources in the Project area are not individually listed in the NRHP. Two of the eight resources are recorded as demolished, and several appear to be documented twice in SHAARD. The duplicate entries have been left in the resource count and can be verified in the field if a survey is conducted. In addition, the NRHP-listed Westwood Historic District (NR-1042), contains 82 architectural resources that fall within the Project area (see Table 2).

Individual resources listed in ***bold, italic font*** are close to the transmission line ROW (within 0.25 mile of the centerline) and have either an outstanding or notable rating (as listed in SHAARD), which means they are likely eligible for listing in the NRHP or have been listed or previously

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determined eligible for listing in the NRHP. Outstanding, notable, and contributing resources within NRHP-eligible or -listed historic districts are also listed in ***bold, italic*** font.

TABLE 1: KNOWN ARCHITECTURAL RESOURCES IN BETHEL-DELAWARE 34.5kV (OVERHEAD) TRANSMISSION LINE PROJECT AREA

SHAARD ID	RESOURCE	RATING	DISTANCE TO CENTERLINE (miles)
008-442-45024	Physical Plant Annex	Contributing	0.11
008-442-45025†	North Grounds Building	Contributing	0.44
008-442-45030†	Display Services	Demolished	0.47
035-442-45006	Farm	Demolished	0.30
035-442-45086†	House	Contributing	0.23
035-442-45087†	***House***	***Notable***	***0.13***
035-442-45088†	House	Contributing	0.26
035-442-45089†	***House***	***Notable***	***0.08***

†Also located in Bethel-Kenmore 34.5kV Transmission Line Project area

TABLE 2: WESTWOOD HISTORIC DISTRICT RESOURCES IN BETHEL-DELAWARE 34.5kV (OVERHEAD) TRANSMISSION LINE PROJECT AREA

SHAARD ID	RESOURCE	RATING	DISTANCE TO CENTERLINE (miles)
008-442-45022†	***President's Residence***	***Contributing***	***0.39***
035-442-43001†	House	Notable	0.19
035-442-43002†	***House***	***Contributing***	***0.22***
035-442-43003†	***House***	***Contributing***	***0.23***
035-442-43004†	***House***	***Contributing***	***0.24***
035-442-43005†	House	Non-Contributing	0.25
035-442-43006†	House	Non-Contributing	0.26
035-442-43007†	***House***	***Outstanding***	***0.27***
035-442-43008†	***House***	***Notable***	***0.26***
035-442-43009†	***House***	***Contributing***	***0.27***
035-442-43010†	***House***	***Contributing***	***0.28***
035-442-43011†	***House***	***Notable***	***0.28***
035-442-43012†	***House***	***Notable***	***0.29***
035-442-43013†	House	Non-Contributing	0.30
035-442-43014†	***House***	***Notable***	***0.31***
035-442-43015†	***House***	***Notable***	***0.30***
035-442-43016†	House	Demolished	0.30
035-442-43017†	***House***	***Contributing***	***0.31***
035-442-43018†	***Bracken House***	***Notable***	***0.31***
035-442-43019†	***House***	***Contributing***	***0.33***
035-442-43020†	***Bracken House***	***Outstanding***	***0.33***
035-442-43021†	House	Non-Contributing	0.39
035-442-43022†	House	Non-Contributing	0.41
035-442-43023†	House	Non-Contributing	0.44

SHAARD ID	RESOURCE	RATING	DISTANCE TO CENTERLINE (miles)
035-442-43024†	House	Non-Contributing	0.32
035-442-43025†	***House***	***Contributing***	***0.34***
035-442-43026†	***House***	***Contributing***	***0.35***
035-442-43027†	Vacant Lot	Non-Contributing	0.36
035-442-43028†	House	Non-Contributing	0.29
035-442-43029†	House	Non-Contributing	0.33
035-442-43030†	House	Non-Contributing	0.30
035-442-43031†	Vacant Lot	Non-Contributing	0.29
035-442-43032†	House	Non-Contributing	0.31
035-442-43033†	House	Non-Contributing	0.34
035-442-43034†	House	Non-Contributing	0.39
035-442-43044†	House	Non-Contributing	0.24
035-442-43045†	Vacant Lot	Non-Contributing	0.25
035-442-43046†	***House***	***Contributing***	***0.26***
035-442-43047†	***House***	***Notable***	***0.25***
035-442-43048†	***House***	***Notable***	***0.25***
035-442-43049†	House	Non-Contributing	0.25
035-442-43050†	***House***	***Contributing***	***0.25***
035-442-43051	Vacant Lot	Non-Contributing	0.25
035-442-43052†	***House***	***Contributing***	***0.24***
035-442-43053†	***House***	***Contributing***	***0.21***
035-442-43054†	***House***	***Outstanding***	***0.20***
035-442-43056†	House	Non-Contributing	0.29
035-442-43057†	House	Non-Contributing	0.28
035-442-43058†	House	Non-Contributing	0.34
035-442-43059†	***House***	***Contributing***	***0.36***
035-442-43060†	***House***	***Contributing***	***0.38***
035-442-43061†	House	Non-Contributing	0.38
035-442-43062†	House	Non-Contributing	0.40
035-442-43063†	House	Non-Contributing	0.38
035-442-43064†	***House***	***Notable***	***0.40***
035-442-43065†	***House***	***Notable***	***0.41***
035-442-43066†	***House***	***Contributing***	***0.41***
035-442-43067†	***House***	***Notable***	***0.41***
035-442-43068†	House	Non-Contributing	0.40
035-442-43069†	House	Non-Contributing	0.29
035-442-43073†	***House***	***Contributing***	***0.48***
035-442-43074†	***House***	***Notable***	***0.47***
035-442-43075†	***House***	***Notable***	***0.46***
035-442-43076†	***House***	***Contributing***	***0.44***
035-442-43077†	***House***	***Notable***	***0.37***
035-442-43078†	House	Non-Contributing	0.36
035-442-43079†	***House***	***Contributing***	***0.35***

SHAARD ID	RESOURCE	RATING	DISTANCE TO CENTERLINE (miles)
035-442-43080†	Vacant Lot	Non-Contributing	0.33
035-442-43083†	***House***	***Outstanding***	***0.48***
035-442-43084†	***E. Arthur Ball House***	***Contributing***	***0.47***
035-442-43085†	House	Non-Contributing	0.45
035-442-43086†	***House***	***Notable***	***0.39***
035-442-43087†	***House***	***Outstanding***	***0.36***
035-442-43088†	***House***	***Notable***	***0.35***
035-442-43094†	***House***	***Contributing***	***0.48***
035-442-43095†	Lot	Non-Contributing	0.47
035-442-43096†	House	Non-Contributing	0.42
035-442-43097†	House	Non-Contributing	0.40
035-442-43098†	***House***	***Contributing***	***0.39***
035-442-43099†	House	Non-Contributing	0.37
035-442-43100†	***House***	***Contributing***	***0.34***
035-442-43101	***House***	***Notable***	***0.31***

†Also located in Bethel-Kenmore 34.5kV Transmission Line Project Area

Archaeological Resources

Six previous archaeological investigations have overlapped the transmission line ROW (see Figure 2 and Table 3). These include records reviews and archaeological field surveys for transportation (Conover and Cochran 1985a, 1985b; Holsten and Cochran 1985; Zoll 2012) and development projects (Conover and Cochran 1984; Zoll 2011). Archaeological field investigations consisted of pedestrian survey; Zoll (2011) also conducted shovel testing. No archaeological resources were identified in the transmission line ROW.

An additional five archaeological investigations have been conducted previously in the Project area (see Table 3). These consist of investigations for transportation (Smith and Cochran 1999), development (Stillwell 2009; Stillwell and Cochran 1989), and telecommunications (Branstner 2017; Stillwell 2010) projects.

TABLE 3: PREVIOUS ARCHAEOLOGIAL INVESTIGATIONS IN BETHEL-DELAWARE 34.5kV (OVERHEAD) TRANSMISSION LINE PROJECT AREA

REPORT NO.	REPORT NAME	CITATION	OVERLAP WITH TRANSMISSION LINE REBUILD (Y/N)
AR-18-00094 / AR-18-00148	*Archaeological Field Reconnaissance Improvements to Wheeling Avenue, Delaware County, Indiana*	Conover and Cochran 1985	Y
AR-18-00098 / AR-18-00147	*Archaeological Records Review, Wheeling Avenue, Delaware County, Indiana**	Conover and Cochran 1985b	Y
AR-18-00103	*Archaeological Records Review: Muncie Sewer Project, Delaware County, Indiana**	Conover and Cochran 1984	Y
AR-18-00192	Construction of Wildlife/Security Fence at the Delaware County Regional Airport [Indiana Archaeological Short Report]	Zoll 2011	Y

REPORT NO.	REPORT NAME	CITATION	OVERLAP WITH TRANSMISSION LINE REBUILD (Y/N)
AR-18-00207	Archaeological Field Reconnaissance: Tillotson Avenue and Purdue Avenue Sidewalk Construction in Muncie, Delaware County, Indiana [Indiana Archaeological Short Report]	Zoll 2012	Y
AR-18-00096	*Archaeological Field Reconnaissance Parker Banking Company Branch, Delaware County, Indiana*	Stillwell and Cochran 1989	N
AR-18-00104	*Archaeological Records Review: McKinley Avenue Improvements, Delaware County, Indiana*	Smith and Cochran 1999	N
AR-18-00164	*An Archaeological Field Reconnaissance of a Proposed Telecommunications Facility (Project #IN-1129) in Muncie, Delaware County, Indiana*	Stillwell 2010	N
AR-18-00208	*An Archaeological Field Reconnaissance of a Proposed Wastewater Treatment Facility Expansion in Muncie, Delaware County, Indiana*	Stillwell 2009	N
AR-18-00250	*Cultural Resource Inventory Survey: Proposed Cell Tower Site, 9INX000384, Muncie, Delaware County, IN 47306*	Branstner 2017	N

*Not mapped: no fieldwork conducted

One previously recorded archaeological site is located in the transmission line ROW (see Figure 2 and Table 4). Site 12-Dl-0046 is a prehistoric site documented in 1967, and site records indicate that the site has been destroyed by construction. No investigations have been conducted at the site since 1967, however, and the Indiana Division of Historic Preservation & Archaeology (DHPA) has not made an assessment of the site. Therefore Site 12-Dl-0046 remains unevaluated for the NRHP.

Two previously recorded archaeological sites are located in the Project area (see Table 4). Sites 12-Dl-0031_R1 and 12-Dl-0047 are prehistoric and unevaluated for the NRHP.

TABLE 4: KNOWN ARCHAEOLOGICAL RESOURCES IN BETHEL-DELAWARE 34.5kV (OVERHEAD) TRANSMISSION LINE PROJECT AREA

SITE NO.	SITE TYPE	STATUS	DISTANCE FROM CENTERLINE (miles)
12-Dl-0046	***Unidentified Prehistoric, Destroyed***	***No Determination***	0
12-Dl-0031_R1	Prehistoric, Archaic	No Determination	0.05
12-Dl-0047	Unidentified Prehistoric	No Determination	0.41

Bethel-Delaware 34.5kV (Overhead) Transmission Line Project Summary

Two houses, rated notable, are located within 0.13 and 0.8 mile, respectively, of the Bethel-Delaware 34.5kV transmission line centerline. Examination of the Google Street view and the SHAARD Database of the two houses indicates that the house at 2604 W. Petty Road (035-442-45087) is an example of a ca. 1870 Gothic/Greek Revival residence that appears intact, although it may lack the distinction to be eligible for the NRHP. The second notable house, at 1301 N. Alden

Road (035-442-45089), is an example of a ca. 1850 Federal residence that, if intact (the house was not visible on Google Street view), appears to be potentially eligible for the NRHP.

The remaining architectural resources were recommended as contributing, making them likely to be eligible for the NRHP only as contributing resources within a potential historic district. Based on aerial imagery, the Physical Plant Annex (008-442-45024) at 2824 W. Bethel Avenue has been demolished. The North Grounds Building (008-442-45025) near 1709 W. Bethel Avenue does not appear to be located in a potential historic district and is therefore not likely to be eligible. Two additional houses, rated contributing, at 2204 W. Petty Road (035-442-45086) and 1901 N. Tillotson Avenue (035-442-45088), do not appear to be located in potential historic districts and are therefore not likely to be eligible.

The NRHP-listed Westwood Historic District is located approximately 0.22 mile south of the southern end of the Bethel-Delaware (Overhead) Transmission Line ROW. The NRHP Registration form for the district indicates that it is significant under Criteria A and C as an important early 1900s residential development in Muncie, Indiana, representative of "garden suburb" landscape planning in the city and containing a distinctive collection of Tudor Revival dwellings (Cavanaugh 1991). Based on Google Street view, the district appears intact with sufficient integrity to remain listed in the NRHP.

One previously recorded archaeological site (12-Dl-0046), which has not been evaluated with respect to NRHP criteria, is located in the current transmission line ROW.

B. Bethel-Kenmore 34.5kV (Underground) Transmission Line Project (Figure 3; Tables 5-8)

Architectural Resources

No previously surveyed architectural resources are located in or immediately adjacent to the proposed transmission line. Thirty-seven previously surveyed architectural resources are located in the Project area (see Figure 3 and Table 5). Three of the 37 previously surveyed resources have been demolished, and several appear to be documented twice in SHAARD. The duplicate entries have been left in the resource count and can be verified in the field if a survey is conducted. In addition, the NRHP-listed Westwood Historic District (NR-1042), contains 102 resources that fall within the Project area (see Table 6).

Individual resources listed in ***bold, italic*** font are close to the transmission line ROW (within 0.25 mile of the centerline) and have either an outstanding or notable rating (as listed in SHAARD), which means they are likely eligible for listing in the NRHP or have been listed or previously determined eligible for listing in the NRHP. Outstanding, notable, and contributing resources within NRHP eligible or listed historic districts are also listed in ***bold, italic*** font.

TABLE 5: KNOWN ARCHITECTURAL RESOURCES IN BETHEL-KENMORE 34.5kV (UNDERGROUND) TRANSMISSION LINE PROEJCT AREA

SHAARD ID	RESOURCE	RATING	DISTANCE TO CENTERLINE (miles)
+42-45005	***Burris School***	***Outstanding***	***0.39***
008-442-45006	***Medical Education***	***Notable***	***0.36***
008-442-45025†	North Grounds Building	Contributing	0.44
008-442-45030†	Display Services	Demolished	0.47
008-442-45035	Boiler House	Contributing	0.38
008-442-45037	***Lucina Hall***	***Outstanding***	***0.40***
008-442-45038	***Christy Woods***	***Notable***	***0.25***

SHAARD ID	RESOURCE	RATING	DISTANCE TO CENTERLINE (miles)
008-442-45041	***Kitselman House***	***Outstanding***	***0.32***
008-442-45043	***Arts Building***	***Outstanding***	***0.45***
008-442-45044	***Ball Gym***	***Outstanding***	***0.35***
008-442-45045	***Elliot Hall***	***Outstanding***	***0.46***
008-442-45046	***Educational Fine Arts Building***	***Outstanding***	***0.46***
008-442-45050	***Sculpture***	***Outstanding***	***0.47***
008-442-45051	***Lucina Hall***	***Outstanding***	***0.41***
008-442-45052	***Gymnasium***	***Outstanding***	***0.38***
010-442-00077	Beneficence	Contributing	0.48
035-442-41005	---	Not Rated	0.47
035-442-41006	---	Not Rated	0.41
035-442-41007	---	Not Rated	0.37
035-442-45077	***Elliot Hall***	***Outstanding***	***0.45***
035-442-45081	***House***	***Outstanding***	***0.39***
035-442-45082	***Burris School***	***Outstanding***	***0.37***
035-442-45083	***Ball Hospital***	***Outstanding***	***0.31***
035-442-45084	***Ball Hospital***	***Outstanding***	***0.25***
035-442-45085	House	Demolished	0.50
035-442-45086†	House	Contributing	0.23
035-442-45087†	***House***	***Notable***	***0.13***
035-442-45088†	House	Contributing	0.26
035-442-45089†	***House***	***Notable***	***0.08***
035-442-45090	***House***	***Outstanding***	***0.18***
035-442-45091	***Kitselman House***	***Outstanding***	***0.33***
035-442-45097	House	Contributing	0.49
035-442-45103	House	Demolished	0.38
035-442-45104	House	Contributing	0.45
035-442-45105	House	Contributing	0.49
035-442-45107	***House***	***Notable***	***0.47***
035-442-45108	House	Contributing	0.48

†Also located in the Bethel-Delaware 34.5kV Transmission Line Project Area

TABLE 6: WESTWOOD HISTORIC DISTRICT RESOURCES IN BETHEL-KENMORE 34.5kV (UNDERGROUND) TRANSMISSION LINE PROJECT AREA

SHAARD ID	RESOURCE	RATING	DISTANCE TO CENTERLINE (miles)
008-442-45018	Visiting Professor House	Demolished	0.48
008-442-45022†	***President's Residence***	***Contributing***	***0.39***
035-442-43001†	***House***	***Notable***	***0.19***
035-442-43002†	***House***	***Contributing***	***0.22***
035-442-43003†	***House***	***Contributing***	***0.23***
035-442-43004†	***House***	***Contributing***	***0.24***
035-442-43005†	House	Non-Contributing	0.25

SHAARD ID	RESOURCE	RATING	DISTANCE TO CENTERLINE (miles)
035-442-43006†	House	Non-Contributing	0.26
035-442-43007†	***House***	***Outstanding***	***0.27***
035-442-43008†	***House***	***Notable***	***0.26***
035-442-43009†	***House***	***Contributing***	***0.27***
035-442-43010†	***House***	***Contributing***	***0.28***
035-442-43011†	***House***	***Notable***	***0.28***
035-442-43012†	***House***	***Notable***	***0.29***
035-442-43013†	House	Non-Contributing	0.30
035-442-43014†	***House***	***Notable***	***0.31***
035-442-43015†	***House***	***Notable***	***0.30***
035-442-43016†	House	Demolished	0.30
035-442-43017†	***House***	***Contributing***	***0.31***
035-442-43018†	***Bracken House***	***Notable***	***0.31***
035-442-43019†	***House***	***Contributing***	***0.33***
035-442-43020†	***Bracken House***	***Outstanding***	***0.33***
035-442-43021†	House	Non-Contributing	0.39
035-442-43022†	House	Non-Contributing	0.41
035-442-43023†	House	Non-Contributing	0.44
035-442-43024†	House	Non-Contributing	0.32
035-442-43025†	***House***	***Contributing***	***0.34***
035-442-43026†	***House***	***Contributing***	***0.35***
035-442-43027†	Vacant Lot	Non-Contributing	0.36
035-442-43028†	House	Non-Contributing	0.29
035-442-43029†	House	Non-Contributing	0.33
035-442-43030†	House	Non-Contributing	0.30
035-442-43031†	Vacant Lot	Non-Contributing	0.29
035-442-43032†	House	Non-Contributing	0.31
035-442-43033†	House	Non-Contributing	0.34
035-442-43034†	House	Non-Contributing	0.39
035-442-43035	House	Non-Contributing	0.28
035-442-43036	***House***	***Notable***	***0.30***
035-442-43037	***House***	***Outstanding***	***0.34***
035-442-43038	***House***	***Outstanding***	***0.37***
035-442-43039	***House***	***Contributing***	***0.32***
035-442-43040	Vacant Lot	Non-Contributing	0.41
035-442-43041	House	Non-Contributing	0.44
035-442-43042	***House***	***Outstanding***	***0.24***
035-442-43043	***House***	***Notable***	***0.24***
035-442-43044†	House	Non-Contributing	0.24
035-442-43045†	Vacant Lot	Non-Contributing	0.25
035-442-43046†	***House***	***Contributing***	***0.26***
035-442-43047†	***House***	***Notable***	***0.25***
035-442-43048†	***House***	***Notable***	***0.25***

SHAARD ID	RESOURCE	RATING	DISTANCE TO CENTERLINE (miles)
035-442-43049†	House	Non-Contributing	0.25
035-442-43050†	***House***	***Contributing***	***0.25***
035-442-43051†	Vacant Lot	Non-Contributing	0.25
035-442-43052†	***House***	***Contributing***	***0.24***
035-442-43053†	***House***	***Contributing***	***0.21***
035-442-43054†	***House***	***Outstanding***	***0.20***
035-442-43055	House	Demolished	0.27
035-442-43056†	House	Non-Contributing	0.29
035-442-43057†	House	Non-Contributing	0.28
035-442-43058†	House	Non-Contributing	0.34
035-442-43059†	***House***	***Contributing***	***0.36***
035-442-43060†	***House***	***Contributing***	***0.38***
035-442-43061†	House	Non-Contributing	0.38
035-442-43062†	House	Non-Contributing	0.40
035-442-43063†	House	Non-Contributing	0.38
035-442-43064†	***House***	***Notable***	***0.40***
035-442-43065†	***House***	***Notable***	***0.41***
035-442-43066†	***House***	***Contributing***	***0.41***
035-442-43067†	***House***	***Notable***	***0.41***
035-442-43068†	House	Non-Contributing	0.40
035-442-43069†	House	Non-Contributing	0.29
035-442-43070	House	Non-Contributing	0.42
035-442-43071	House	Non-Contributing	0.42
035-442-43072	House	Non-Contributing	0.49
035-442-43073†	***House***	***Contributing***	***0.48***
035-442-43074†	***House***	***Notable***	***0.47***
035-442-43075†	***House***	***Notable***	***0.46***
035-442-43076†	***House***	***Contributing***	***0.44***
035-442-43077†	***House***	***Notable***	***0.37***
035-442-43078†	House	Non-Contributing	0.36
035-442-43079†	***House***	***Contributing***	***0.35***
035-442-43080†	Vacant Lot	Non-Contributing	0.33
035-442-43081	***House***	***Contributing***	***0.45***
035-442-43082	***House***	***Contributing***	***0.45***
035-442-43083†	***House***	***Outstanding***	***0.48***
035-442-43084†	***E. Arthur Ball House***	***Contributing***	***0.47***
035-442-43085†	House	Non-Contributing	0.45
035-442-43086†	***House***	***Notable***	***0.39***
035-442-43087†	***House***	***Outstanding***	***0.36***
035-442-43088†	***House***	***Notable***	***0.35***
035-442-43089	Parking Lot	Non-Contributing	0.48
035-442-43090	***House***	***Contributing***	***0.49***
035-442-43091	House	Non-Contributing	0.49

SHAARD ID	RESOURCE	RATING	DISTANCE TO CENTERLINE (miles)
035-442-43093	***House***	***Contributing***	***0.50***
035-442-43094†	***House***	***Contributing***	***0.48***
035-442-43095†	Lot	Non-Contributing	0.47
035-442-43096†	House	Non-Contributing	0.42
035-442-43097†	House	Non-Contributing	0.40
035-442-43098†	***House***	***Contributing***	***0.39***
035-442-43099†	House	Non-Contributing	0.37
035-442-43100†	***House***	***Contributing***	***0.34***
035-442-43101†	***House***	***Notable***	***0.31***
†Also located in the Bethel-Delaware 34.5kV Transmission Line Project Area			

Archaeological Resources

Five previous archaeological surveys have overlapped the transmission line ROW (see Figure 3 and Table 7). These consist of records reviews and archaeological field surveys for transportation (Conover and Cochran 1985a, 1985b; Holsten and Cochran 1985; Zoll 2012) and development (Conover and Cochran 1984) projects. Previous archaeological field investigations that have overlapped the transmission line ROW consisted of pedestrian survey. No archaeological resources were identified in the transmission line ROW.

An additional six archaeological surveys have been conducted previously in the Project area (see Figure 3 and Table 7). These consist of investigations for transportation (Smith and Cochran 1999), development (Stillwell 2009; Stillwell and Cochran 1989), and telecommunications (Branstner 2017; Stillwell 2010; Walz and McGowan 2018) projects.

TABLE 7: PREVIOUS ARCHAEOLOGIAL SURVEYS IN BETHEL-KENMORE 34.5kV (UNDERGROUND) TRANSMISSION LINE PROJECT AREA

REPORT NO.	REPORT NAME	CITATION	OVERLAP WITH TRANSMISSION LINE REBUILD (Y/N)
AR-18-00094 / AR-18-00148	*Archaeological Field Reconnaissance Improvements to Wheeling Avenue, Delaware County, Indiana*	Holsten and Cochran 1985	Y
AR-18-00098 / AR-18-00147	*Archaeological Records Review, Wheeling Avenue, Delaware County, Indiana**	Conover and Cochran 1985	Y
AR-18-00103	*Archaeological Records Review: Muncie Sewer Project, Delaware County, Indiana**	Conover and Cochran 1984	Y
AR-18-00207	Archaeological Field Reconnaissance: Tillotson Avenue and Purdue Avenue Sidewalk Construction in Muncie, Delaware County, Indiana [Indiana Archaeological Short Report]	Zoll 2012	Y
AR-18-00096	*Archaeological Field Reconnaissance Parker Banking Company Branch, Delaware County, Indiana*	Stillwell and Cochran 1989	N
AR-18-00104	*Archaeological Records Review: McKinley Avenue Improvements, Delaware County, Indiana*	Smith and Cochran 1999	N
AR-18-00164	*An Archaeological Field Reconnaissance of a Proposed Telecommunications Facility*	Stillwell 2010	N

REPORT NO.	REPORT NAME	CITATION	OVERLAP WITH TRANSMISSION LINE REBUILD (Y/N)
	(Project #IN-1129) in Muncie, Delaware County, Indiana		
AR-18-00208	*An Archaeological Field Reconnaissance of a Proposed Wastewater Treatment Facility Expansion in Muncie, Delaware County, Indiana*	Stillwell 2009	N
AR-18-00250	*Cultural Resource Inventory Survey: Proposed Cell Tower Site, 9INX000384, Muncie, Delaware County, IN 47306*	Branstner 2017	N
AR-18-00269	Phase Ia Archaeological Reconnaissance of the Proposed Westview Boulevard Telecommunications Facility in Delaware County, Indiana [Indiana Archaeological Short Report]	Walz and McGowan 2018	N

*Not mapped: no fieldwork conducted

No previously recorded archaeological sites are located in the transmission line ROW. Two previously recorded archaeological sites are located in the Project area (see Figure 3 and Table 8). Sites 12-Dl-0031_R1 and 12-Dl-0047 are prehistoric and unevaluated for the NRHP.

TABLE 8: KNOWN ARCHAEOLOGICAL RESOURCES IN BETHEL-KENMORE 34.5kV TRANMISSION LINE PROJECT AREA

SITE NO.	SITE TYPE	STATUS	DISTANCE FROM CENTERLINE (miles)
12-Dl-0031_R1	Prehistoric, Archaic	No Determination	0.08
12-Dl-0047	Unidentified Prehistoric	No Determination	0.27

Bethel-Kenmore 34.5kV (Underground) Transmission Line Project Summary

Of the 23 architectural resources rated outstanding or notable previously recorded in the Project area, four appear to be included in a proposed historic district at the Ball State University Quadrangle approximately 0.40 mile from the transmission line centerline (Sculpture: 008-442-45050; Lucina Hall: 008-442-45051; Gymnasium: 008-442-45052; and Arts Building: 008-442-45043).[1] Four additional buildings, rated notable or outstanding, are recorded in SHAARD on the campus of Ball State University approximately 0.27 mile from the transmission line centerline (Elliot Hall: 008-442-45045; Burris School: 008-442-45005; Medical Education: 008-442-45006; and Ball Hospital: 035-442-45084).[2]

Christy Woods (008-442-45038), rated notable, is located approximately 0.25 mile from the transmission centerline. A brief review of SHAARD indicates Christy Woods is a ca. 1918 wooded park with gravel paths and an iron gateway on the Ball State University campus that appears intact and is therefore likely to be eligible for the NRHP.

The Kitselman House (008-442-45041 and 035-442-45091), rated outstanding, is located approximately 0.32 mile from the transmission line centerline. The house is an intact ca. 1910 residence constructed in the Jacobean Revival style at 3401 W. University Avenue that appears to remain intact and therefore potentially eligible for the NRHP. Two houses, rated notable, are located

[1] Duplicate and triple entries for these properties are noted in Table 3 (035-442-41005, 035-442-41006, 008-442-45037, 035-442-41007, 008-442-45044, 008-442-45046).

[2] Duplicate entries for three of these properties are noted in Table 3 (035-442-45077, 035-442-45082, and 035-442-45083).

within 0.13 and 0.8 mile, respectively, of the transmission line centerline. Examination of the Google Street view and the SHAARD Database of the two houses indicates that the house at 2604 W. Petty Road (035-442-45087) is an example of a ca. 1870 Gothic/Greek Revival residence that appears intact, although it may lack the distinction to be eligible for the NRHP. The second notable house, at 1301 N. Alden Road (035-442-45089), is an example of a ca. 1850 Federal residence that, if intact (the house was not visible on Google Street view), appears to be potentially eligible for the NRHP. The house (035-442-45081) rated outstanding approximately 0.39 mile from the transmission line, at 100 N. Celia Avenue on the Ball State University campus, appears intact and therefore likely eligible for the NHRP. The house (035-442-45090) rated outstanding approximately 0.18 mile from the transmission line centerline at 3100 W. University Avenue and the house (035-442-45107) rated notable approximately 0.47 mile from the transmission line at 215 S. Celia were not visible on Google Street view.

The remaining nine architectural resources were recommended as contributing, making them likely to be eligible for the NRHP only as contributing resources within a historic district. The North Grounds Building (008-442-45025) near 1709 W. Bethel Avenue does not appear to be located in a potential historic district and therefore is not likely to be eligible. The Boiler House at 2000 W. University Avenue (008-442-45035) has been significantly altered by Ball State University and does not appear to retain sufficient integrity to be eligible for the NRHP if located in a historic district. The Beneficence (010-442-00077) is a sculpture located approximately 0.39 mile from the transmission line centerline that appears to retain sufficient integrity to be eligible for the NRHP. The Beneficence appears to be located within the boundaries of the Old Quadrangle Historic District at Ball State University and therefore appears eligible for the NRHP. Four houses rated contributing (035-442-45097, 035-442-45104, 035-442-45105, and 035-442-45108), located between 0.45 and 0.49 mile from the transmission line centerline, do not appear to be located in potential historic districts and are therefore not likely to be eligible. Two additional houses, rated contributing, at 2204 W. Petty Road (035-442-45086) and 1901 N. Tillotson Avenue (035-442-45088), do not appear to be located in potential historic districts and are therefore not likely to be eligible.

The three unrated resources are accounted for as duplicates of buildings located on the Ball State University campus (035-442-41005, 035-442-41006, and 035-442-41007). Three resources have been demolished (008-442-45030, 035-442-45085, and 035-442-45103).

The NRHP-listed Westwood Historic District is approximately 0.20 mile from the Bethel-Kenmore (Underground) Transmission Line. The NRHP Registration form for the district indicates it is significant under Criteria A and C as an important early 1900s residential development in Muncie, Indiana, representative of “garden suburb” landscape planning in the city and containing a distinctive collection of Tudor Revival dwellings (Cavanaugh 1991). Based on the Google Street view, the district appears intact with sufficient integrity to remain listed in the NRHP.

No previously recorded archaeological sites are located in the current transmission line ROW.

C. Summary

One archaeological site is located within the Bethel-Delaware 34.5kV Transmission Line Project ROW. No archaeological sites have previously been identified in the Bethel-Kenmore 34.5kV Transmission Line Project ROW.

Three documented archaeological sites and 45 known architectural resources are located in the Project area (within 0.5 mile of the transmission line centerline). One of the architectural resources is the Westwood Historic District, listed in the NRHP. No known architectural resources are individually listed in the NRHP. Two potentially eligible houses are located in the Bethel-Delaware 34.5kV (Overhead) Transmission Line Project area. Eight potentially eligible Ball State University buildings, one potentially eligible university park, one university sculpture, and five potentially eligible houses are located in the Bethel-Kenmore 34.5kV (Underground) Transmission Line Project area. All other architectural resources across the two transmission line Projects are not likely to be

eligible because they are rated as contributing and do not appear to be located in potential historic districts.

Once the final designs for the transmission lines have been completed, those architectural resources that have not been evaluated with respect to NRHP criteria and are within the Project areas will need to be evaluated, and previously surveyed potentially eligible resources will need to be re-evaluated, to complete the Section 106 review for the Project. The relative distance to the proposed transmission lines and the urban and suburban setting of the Project areas limit the potential for the Project to affect the setting of the potentially eligible buildings, and it is therefore unlikely that the Project's two transmission lines will have an effect on these historic architectural resources.

Archaeological survey will also need to be conducted in any unsurveyed portions of the Project areas. All sites within the ROW should be avoided. The remaining archaeological sites are located outside the Project ROW and therefore are not likely to be affected by the project. Should Project activities extend outside the Project ROW, these sites should be avoided.

Kind regards,

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Architectural Historian

Marlis Muschal
Archaeologist

CM
Encl.
File: LP2043151.066–069

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