



Indiana Department of Environmental Management
Office of Water Quality
Wetlands Section

Publication Date:
November 19, 2024

Closing Date:
December 10, 2024

IDEM ID Number:
2024-420-46-MTM-IWIP

Corps of Engineers ID Number:

PUBLIC NOTICE

To all interested parties: This letter shall serve as a formal notice of the receipt of an application for a **State Isolated Wetland Individual Permit** by the Indiana Department of Environmental Management (IDEM). The purpose of the notice is to inform the public of active applications submitted for permits required under IC 13-18-22 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 and all applicable provisions of IC 13-18-22.

1. Applicant: Department of Public Works
Michigan City
532 Franklin Street
Michigan City, IN 46360

2. Agent: Soil Solutions, Inc.
P.O. Box 229
Valparaiso, IN 46384

3. Project location: LaPorte County

Latitude:41.693613, Longitude: -86.830219

General vicinity of Swan Lake Gardens Memorial Gardens

4. Affected waterbody: Four (4) isolated Wetlands

5. Project Description: The applicant proposes to temporarily impact four (4) jurisdictional wetlands totaling 0.29 acre and twelve (12) isolated wetlands totaling 0.61 acre. Of these impacts 0.22 acre of emergent wetland will be restored after construction. Approximately 0.55 of forested wetland will be converted to emergent wetland and will be mitigated by the total purchase of 1.1 acre of wetland credit from the Indiana Stream and Wetland Mitigation Program. Approximately 0.19 acre of forested impact will be replanted with native trees. Native shrubs will be planted in all temporarily impacted areas.

The impacts are the result of constructing new water and sewer lines next to US 20. The goal is to bring water and sewer service to approximately 200 acres on annexed land near Michigan City Airport at the northeast end of the City.

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 state isolated wetland permit 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 Marty Maupin, Project Manager, at mmaupin@idem.in.gov or 317-233-2471. 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



Soil Solutions, Inc

Specializing in Soil and Environmental Consulting Services

360 Indiana Avenue, Suite B

P.O. Box 229

Valparaiso, Indiana 46384

Phone: 219-465-5885

October 30, 2024

Marty Maupin
Office of Water Quality
Indiana Department of Environmental Management
100 North Senate Avenue
MC 65-42 IGCN 1255
Indianapolis, Indiana 46204-2251

RE: Michigan City Annex Sanitary Extension Project

Dear Mr. Maupin,

The City of Michigan City recently annexed land near the Michigan City Municipal Airport at the northeast end of the city. This will bring water and sewer to a service area of approximately 200 acres. The project is located along an approximately 1.1 mile section of U.S. Highway 20.

This is a utility line installation project that requires 0.29 acres of temporary wetland impacts to jurisdictional wetlands as well 0.61 acres of temporary impacts to isolated wetlands. A wetland delineation was completed through the planned route in 2023. Twelve wetlands, seven roadside ditches, and two drainage ditches were identified within the project area. Installation of the water and sewer lines requires 18 temporary wetland impacts totaling 0.90 acres (see Table 1 below). The water and sewer lines will run adjacent to the existing Indiana Department of Transportation right of way in a new easement area along Highway 20. Additionally, a new easement will be established within the Swan Lake Memorial Gardens Cemetery property.

Once the water and sewer lines have been installed, grade will be restored to existing conditions. Forested wetland areas will be converted to emergent wetland as the easement area will have to remain open so that tree roots do not damage the sewer and water lines. As such, mitigation is being proposed for the conversion of forested to emergent wetland. Credits will be purchased through the Indiana DNR Stream and Wetland Mitigation Program. No mitigation is proposed for emergent wetland impacts as these areas will be seeded with native species and restored to emergent wetland. Native shrubs and seed will be installed across the impact areas. Proposed forested mitigation ratios are identified in Table 2 below. A floristic quality assessment was completed for the wetlands on site and each wetland was further classified by quality (low, moderate, or high quality) based on the species diversity, level of disturbance, and predominance of invasive species. This was used to determine mitigation ratios.

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Areas classified as high quality had minimal past disturbance, limited to no invasive species cover, and large diameter trees. Areas classified as moderate quality were areas that had been cleared and farmed in the past but had regrown. These areas had some invasive species cover, moderate species diversity, and younger trees in the canopy though these areas were dominated by native species. Low quality wetlands were dominated by invasive species such as reed canary grass, or were dominated by young sapling trees, or low quality tree species such as cottonwood (*Populus deltoides*). A total of 0.03 acres of low quality forested wetland will be temporarily impacted by this project.

The quality of the wetland was used to determine a mitigation ratio. Low quality forested wetland was dominated by either eastern cottonwood or young green ash (*Fraxinus pennsylvanica*) saplings. A 1:1 mitigation ratio is proposed for these impacts as this wetland on site will be slightly enhanced when a native seed mix and a variety of native shrubs are installed on site. These wetlands will continue to function as wetland on site and wetland mitigation credits will be purchased at a 1:1 ratio to mitigate for this conversion from low quality wetland to emergent wetland. See photos 3 and 7 in Appendix F for examples of low quality forested wetland.

Moderate quality wetland is the majority of the temporary impacts on site (0.40 acres). This forest conversion area is forested wetland dominated by pin oak (*Quercus palustris*), red maple (*Acer rubrum*), and slippery elm (*Ulmus rubra*), with herbaceous species such as harvestlice (*Agrimonia parviflora*), bluejoint grass (*Calamagrostis canadensis*), eastern star sedge (*Carex radiata*), Dudley's rush (*Juncus dudleyi*), and foxglove beard tongue (*Penstemon digitalis*) in the understory. A 2:1 mitigation ratio is proposed for these wetlands as the wetlands will still continue to function as wetland and herbaceous diversity will increase as species in the existing seed bank will return and seeded species will increase diversity within these areas. See photos 1, 2, 5, 6, 8, and 10 in Appendix F for examples of moderate quality wetland.

High quality wetland is found south of Highway 20. Only a small portion of this wetland will be impacted by the project (0.12 acres of temporary impact). The water line route was modified to reduce impacts to high quality wetland. High quality wetland was dominated by swamp white oak (*Quercus bicolor*), pin oak, and red maple trees. Herbaceous species in the understory included the species found in the moderate quality forested wetland as well as brome like sedge (*Carex bromoides*), fringed sedge (*Carex crinita*), and golden groundsel (*Packera aurea*). These wetlands will continue to function as wetland on site and wetland mitigation credits will be purchased at a 2:1 ratio to mitigate for this conversion from high quality forested wetland to emergent wetland. See photo 9 in Appendix F for an example of this community type.

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Work on the project will begin during the 2024 growing season so all tree clearing necessary for the project was completed prior to March 31, 2024, in order to avoid impacting the Indiana bat or other federally listed bat species.

Table 1. Summary of temporary wetland impacts and jurisdictional status.

Wetland Impact #	Impact Acreage	Wetland ID	Jurisdictional Status
I-01	0.044	Wetland 12	Isolated
I-02	0.044	Wetland 11	Isolated
I-03	0.001	Ditch 9	Isolated
I-04	0.008	Wetland 10	Isolated
I-05	0.016	Wetland 9	Isolated
I-06	0.002	Wetland 8	Isolated
I-07	0.005	Ditch 8	Isolated
I-08	0.003	Ditch 8	Isolated
I-09	0.064	Ditch 8A	Jurisdictional
I-10	0.174	Wetland 7	Jurisdictional
I-11	0.020	Wetland 7	Jurisdictional
I-12	0.039	Wetland 7	Jurisdictional
I-13	0.009	Wetland 1	Isolated
I-14	0.215	Wetland 2	Isolated
I-15	0.025	Wetland 2	Isolated
I-16	0.189	Wetland 4	Isolated
I-17	0.048	Wetland 5	Isolated
I-18	0.002	Wetland 5	Isolated
Total	0.90		

Table 2. Total temporary wetland impacts by community type and proposed mitigation ratios.

Temp Impacts (Wetland Conversion)	Sum of Area (acre)
Isolated	0.61
Jurisdictional	0.29
Grand Total	0.90

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Table 3. Total temporary wetland impacts by community type and proposed mitigation ratios.


	Temp Impact Acres	Mitigation Ratio	Comment
Ditch - Jurisdictional	0.11	0	ditch reconstruction
Ditch - Isolated	0.01	0	ditch reconstruction
Emergent Wetland Total - 0.22 acres	0.23	0	restoration after construction
Jurisdictional - Low quality	0.03	0	restoration after construction
Isolated - Low Quality	0.15	0	restoration after construction
Isolated - Moderate Quality	0.04	0	restoration after construction
Forested Wetland Total - 0.55 Acres	0.55		Mitigation Acres Required
Jurisdictional - Moderate quality	0.15	2:1	0.30
Isolated - Low Quality	0.03	1:1	0.03
Isolated - Moderate Quality	0.25	2:1	0.50
Isolated - High Quality	0.12	2:1	0.24
Total Mitigation Acres Required			1.1 Acres
Forested Wetland - Reforestation	0.19	0	replant trees after construction

Enclosed is an application for authorization to discharge dredged or fill material to isolated wetlands or waters of the state for the Michigan City Annex Project in Michigan City, Indiana. Please find enclosed the following attachments:

- Appendix A IDEM Permit Form
- Appendix B Location Maps and Existing Conditions
- Appendix C Wetland Impact Drawings and Cross Sections
- Appendix D Plant Species Lists for Restoration
- Appendix E Wetland Delineation Report and USACE Correspondence
- Appendix F Site Photos
- Appendix G Wetland Restoration Plan
- Appendix H Natural Heritage Database Review
- Appendix I Floristic Quality Assessment

Thank you for your review of this submittal. If you have any questions or would like to discuss this submittal, please call me at (219) 465-5885.

Thank you,


 Lydia Miramontes Loyd
 Soil Solutions, Inc.

7. SUPPLEMENTAL APPLICATION MATERIALS

A. Wetland Delineation

See attached in E.

B. Site Photos

See attached in Appendix F

C. USACE Correspondence

See attached in Appendix E

D. Wetland Mitigation Plan and Monitoring Report

No wetlands will be permanently impacted, instead the wetlands will be seeded and planted after the water/sewer lines are installed. See details on seeding and planting in the attached wetland restoration plan (Appendix G).

Mitigation credits will be purchased through the Indiana Stream and Wetland Mitigation Program at the ratios listed in Table 3 above.

During the field work in early 2024, the state threatened species, paper birch (*Betula papyrifera*) was identified and mapped within several of the wetlands on site. This species is within the impact area and several trees will be lost. Seed was collected from the trees on site and will be seeded after construction is completed so that this threatened species can reestablish within the project area.

Monitoring and Performance Criteria

The temporary wetland impact areas will be monitored using a meander survey for a period of two years to ensure that the following success criteria have been met:

- 1) The temporary wetland impact areas will meet the wetland hydrology criteria contained in the United States Army Corps of Engineers Wetland Delineation Manual, Technical Report Y-87-1 (January, 1987).
- 2) Vegetative cover is at least 90%.
- 3) The temporary wetland impact areas are free of the following exotic species: *Lythrum salicaria* (purple loosestrife) and *Phragmites australis* (common reed).

E. Classification of All Isolated Wetlands on the Tract

We are assuming all of the isolated wetlands on site are Class III wetlands and are not asking for any exemptions as none of the wetlands on site will be filled or permanently impacted. Of the 11 isolated wetlands on site, many of the wetlands that will be impacted are forested wetlands with moderate species diversity and minimal past disturbance. Additionally, a state

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listed species, paper birch, was found in several of the wetlands. The City is also proposing to restore all of the impacted wetlands in the same way (by installing a native seed mix and native shrubs). So, for these reasons, we are assuming all the isolated wetlands are Class III wetlands.

G. Tract history

Based on a review of historic aerials photos and observations of trees on site, the land north and west of Highway 20 was farmed as late as the 1960s and likely into the 1970s while the land to the south and east of Highway has remained forested. In the 1980s, the former farmland appears to have been left fallow so that by the 2000s much of the area had reforested.

10. ADJOINING PROPERTY OWNERS AND ADDRESSES

Continued:

DME Mich City LLC
310 Commerce Sq
Michigan City, IN 46360

Center Lane Investments LLC
27275 Mound Rd
Warren, MI 48092

Illinois Indiana Development Company LLC
The Railroad Exchange Building
224 S Michigan Ave Ste 330
Chicago, IL 60604

Woodcreek Triquad Drive LLC
c/o GAF
1 Campus Dr
Parsippany, NJ 07054

WORKSHEET – SUMMARY OF ONSITE WATER RESOURCES AND PROJECT IMPACTS

B. Isolated Wetlands (Existing Conditions) Continued.

Wetland Type	Name	Acreage	To Be Impacted	Impact Acreage	Fill Quantity	ATF	Quality
Forested	Wetland 1	0.02	Yes	0.009	0		Moderate
Forested	Wetland 2	0.82	Yes	0.24	0		Moderate/High
Forested	Wetland 3	0.14	No	-	-		High
Forested	Wetland 4	1.29	Yes	0.189	0		Low/Moderate/High
Non-forested	Wetland 5	0.09	Yes	0.05	0		Low
Non-forested	Wetland 6	0.01	No	-	-		Moderate
Forested	Wetland 8	0.29	Yes	0.002	0		High
Forested	Wetland 9	0.02	Yes	0.016	0		High

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Wetland Type	Name	Acreage	To Be Impacted	Impact Acreage	Fill Quantity	ATF	Quality
Non-forested	Wetland 10	0.02	Yes	0.008	0		Low
Forested/ Non-forested	Wetland 11	0.05	Yes	0.044	0		Moderate
Forested/ Non-forested	Wetland 12	0.06	Yes	0.044	0		Low/Moderate
			Total	0.602			

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Table 2. Ditches on Site. All impacted ditches will be reconstructed after sewer/water line installation.

Name	Length	To Be Impacted	Impact (Acres)	Impact (Linear Feet)	Fill Quantity	ATF
Ditch 1	58	No	-		-	
Ditch 2	124	No	-		-	
Ditch 3	72	No	-		-	
Ditch 4	141	No	-		-	
Ditch 5	109	No	-		-	
Ditch 6	643	No	-		-	
Ditch 7	505	No	-		-	
Ditch 8	1,118	Yes	0.008	47	0	
Ditch 9	6	Yes	0.001	6	0	
		Total	0.009	53		

Appendix D: Plant Species Lists for Restoration

Table 1. The proposed species list that will be planted in the wetland impact areas and reforestation areas. Of the 38 species listed below, at least 25 of the species listed below will be seeded or planted on site. Seed shall be sourced from nurseries specializing in local genotype seed.

SPECIES NAME (NWPL/ MOHLENBROCK)	COMMON NAME	C VALUE	NC-NE WET INDICATOR	WET INDICATOR (NUMERIC)
<i>Alisma subcordatum</i>	American Water-Plantain	3	OBL	-2
<i>Asclepias incarnata</i>	Swamp Milkweed	3	OBL	-2
<i>Calamagrostis canadensis</i>	Bluejoint	6	OBL	-2
<i>Carex crinita</i>	Fringed Sedge	7	OBL	-2
<i>Carex gracillima</i>	Graceful Sedge	7	FACU	1
<i>Carex grayi</i>	Gray's Sedge	7	FACW	-1
<i>Carex lacustris</i>	Lakebank Sedge	5	OBL	-2
<i>Carex lupulina</i>	Hop Sedge	6	OBL	-2
<i>Carex stipata</i>	Stalk-Grain Sedge	4	OBL	-2
<i>Carex stricta</i>	Uptight Sedge	5	OBL	-2
<i>Carex tribuloides</i>	Blunt Broom Sedge	7	FACW	-2
<i>Carex vulpinoidea</i>	Common Fox Sedge	2	OBL	-1
<i>Cinna arundinacea</i>	Sweet Wood-Reed	5	FACW	-1
<i>Doellingeria umbellata</i>	Parasol White-Top	8	FACW	-1
<i>Elymus virginicus</i>	Virginia Wild Rye	3	FACW	-1
<i>Eupatorium perfoliatum</i>	Common Boneset	4	FACW	-2
<i>Euthamia graminifolia</i>	Flat-Top Goldentop	4	FAC	-1
<i>Glyceria striata</i>	Fowl Manna Grass	4	OBL	-2
<i>Iris virginica</i> var. <i>shrevei</i>	Virginia Blueflag	5	OBL	-2
<i>Juncus effusus</i> ssp. <i>solutus</i>	Lamp Rush	5	OBL	-2
<i>Leersia oryzoides</i>	Rice Cut Grass	3	OBL	-2
<i>Lobelia cardinalis</i>	Cardinal-Flower	7	OBL	-2
<i>Lobelia siphilitica</i>	Great Blue Lobelia	4	FACW	-2
<i>Lycopus americanus</i>	Cut-Leaf Water-Horehound	4	OBL	-2
<i>Mimulus ringens</i>	Allegheny Monkey-Flower	4	OBL	-2
<i>Penstemon digitalis</i>	Foxglove Beardtongue	4	FAC	0
<i>Penthorum sedoides</i>	Ditch-Stonecrop	4	OBL	-2
<i>Physostegia virginiana</i>	Obedient-Plant	4	FACW	-1
<i>Pycnanthemum virginianum</i>	Virginia Mountain-Mint	5	FACW	-1

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SPECIES NAME (NWPL/ MOHLENBROCK)	COMMON NAME	C VALUE	NC-NE WET INDICATOR	WET INDICATOR (NUMERIC)
Scirpus atrovirens	Dark-Green Bulrush	4	OBL	-2
Scirpus cyperinus	Cottongrass Bulrush	6	OBL	-2
Solidago gigantea	Late Goldenrod	4	FACW	-1
Solidago rugosa	Wrinkle-Leaf Goldenrod	6	FAC	0
Symphotrichum lateriflorum	Farewell-Summer	4	FAC	-1
Symphotrichum puniceum	Purple-Stem American-Aster	8	OBL	-2
Verbena hastata	Simpler's-Joy	4	FACW	-1
Vernonia gigantea	Smooth Tall Ironweed	4	FAC	0
Vernonia missurica	Missouri Ironweed	4	FAC	0

Table 2. The proposed shrub species list that will be planted in the wetland impact areas and reforestation areas. At least 6 shrub species will be installed based on commercial availability.

SPECIES NAME (NWPL/ MOHLENBROCK)	COMMON NAME
Cornus alba	Red Osier
Hypericum kalmianum	Kalm's St. John's-Wort
Hypericum prolificum	Shrubby St. John's-Wort
Ilex verticillata	Common Winterberry
Lindera benzoin	Northern Spicebush
Ribes americanum	Wild Black Currant
Ribes cynosbati	Eastern Prickly Gooseberry
Ribes missouriense	Missouri Gooseberry
Rosa palustris	Swamp Rose
Spiraea alba	White Meadowsweet
Spiraea tomentosa	Steeplebush
Vaccinium corymbosum	Highbush Blueberry

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SPECIES NAME (NWPL/ MOHLENBROCK)	COMMON NAME
Viburnum lentago	Nanny-Berry

Table 3. The proposed tree species list that will be planted in the reforestation areas. At least 6 tree species will be installed based on commercial availability.

SPECIES NAME (NWPL/ MOHLENBROCK)	COMMON NAME
Acer rubrum	Red Maple
Carpinus caroliniana ssp. virginiana	American Hornbeam
Carya laciniosa	Shell-Bark Hickory
Celtis occidentalis	Common Hackberry
Crataegus mollis	Downy Hawthorn
Nyssa sylvatica	Black Tupelo
Platanus occidentalis	American Sycamore
Quercus bicolor	Swamp White Oak
Quercus palustris	Pin Oak
Ulmus americana	American Elm

Figure 2: Michigan City Project Boundary



360 Indiana Avenue, Suite B
Valparaiso, Indiana 46384
phone: (219) 465-5885
www.soilsolutions-inc.com

SSI Project #: 32-10B(24) W1
Lat: 41.6917561 Long: -86.833125
NW 1/4, S1, T37N, R4W
Coolspring Township, La Porte County, Indiana
Date Created: 2/20/2024



Figure 2: Michigan City Project Boundary



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Lat: 41.6917561 Long: -86.833125
NW 1/4, S1, T37N, R4W
Coolspring Township, La Porte County, Indiana
Date Created: 2/20/2024

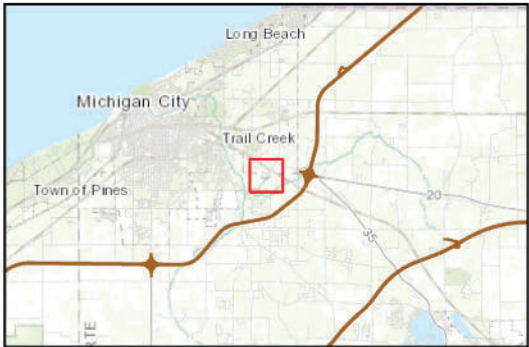


Figure 5.1: Data Point and Photo Locations




360 Indiana Avenue, Suite B
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SSI Project #: 32-10B(24) W1
 Lat: 41.6917561 Long: -86.833125
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 Date Created: 2/26/2024

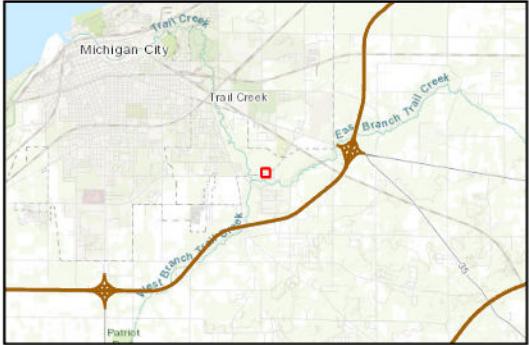
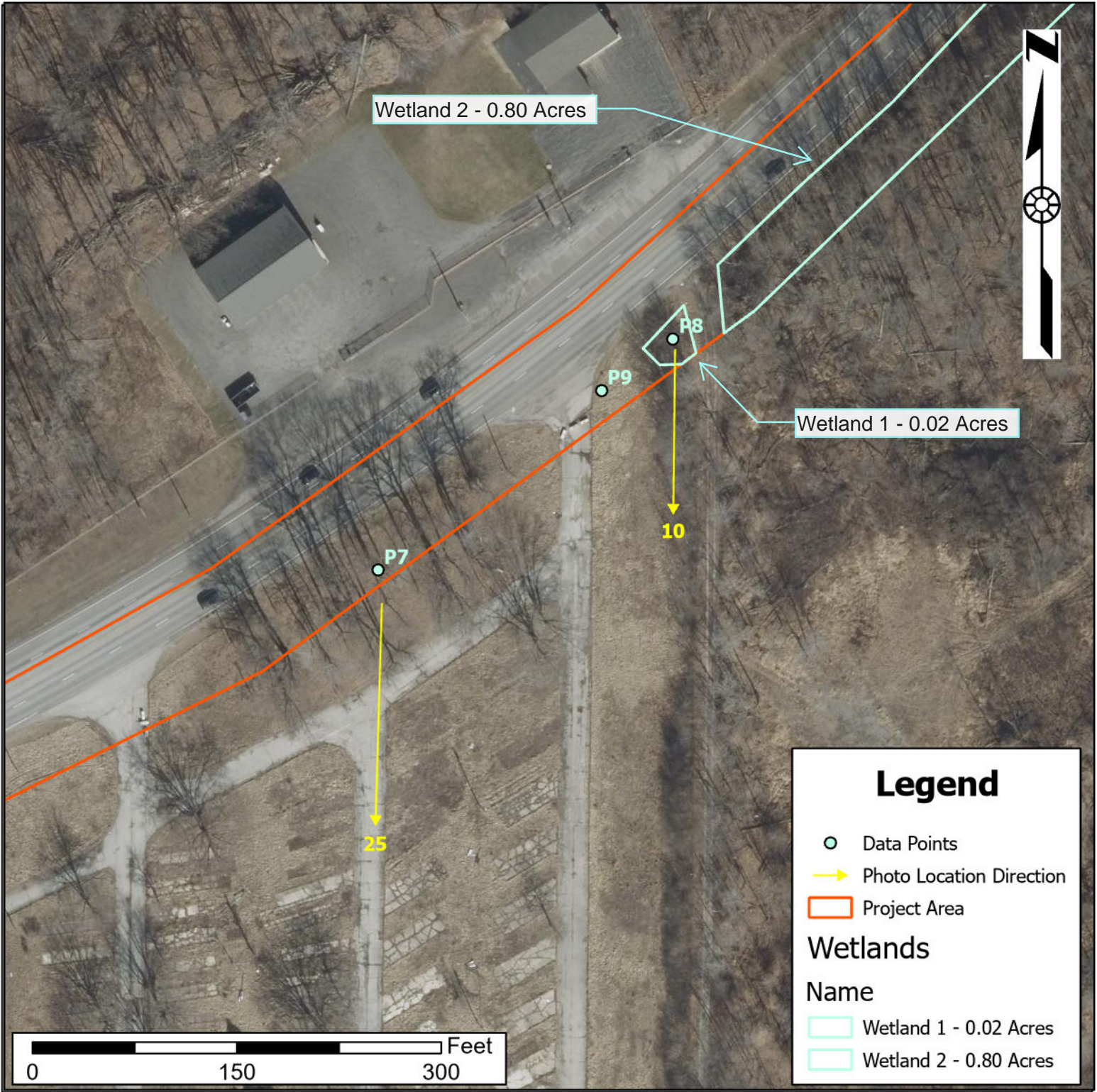


Figure 5.2: Data Point and Photo Locations



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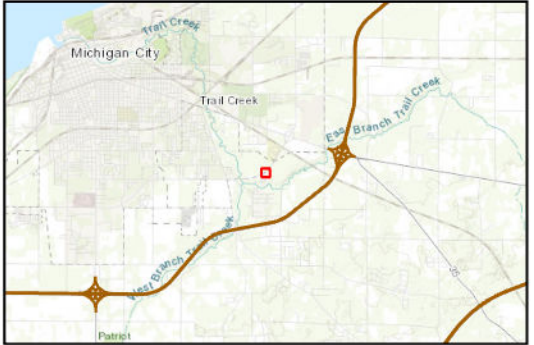
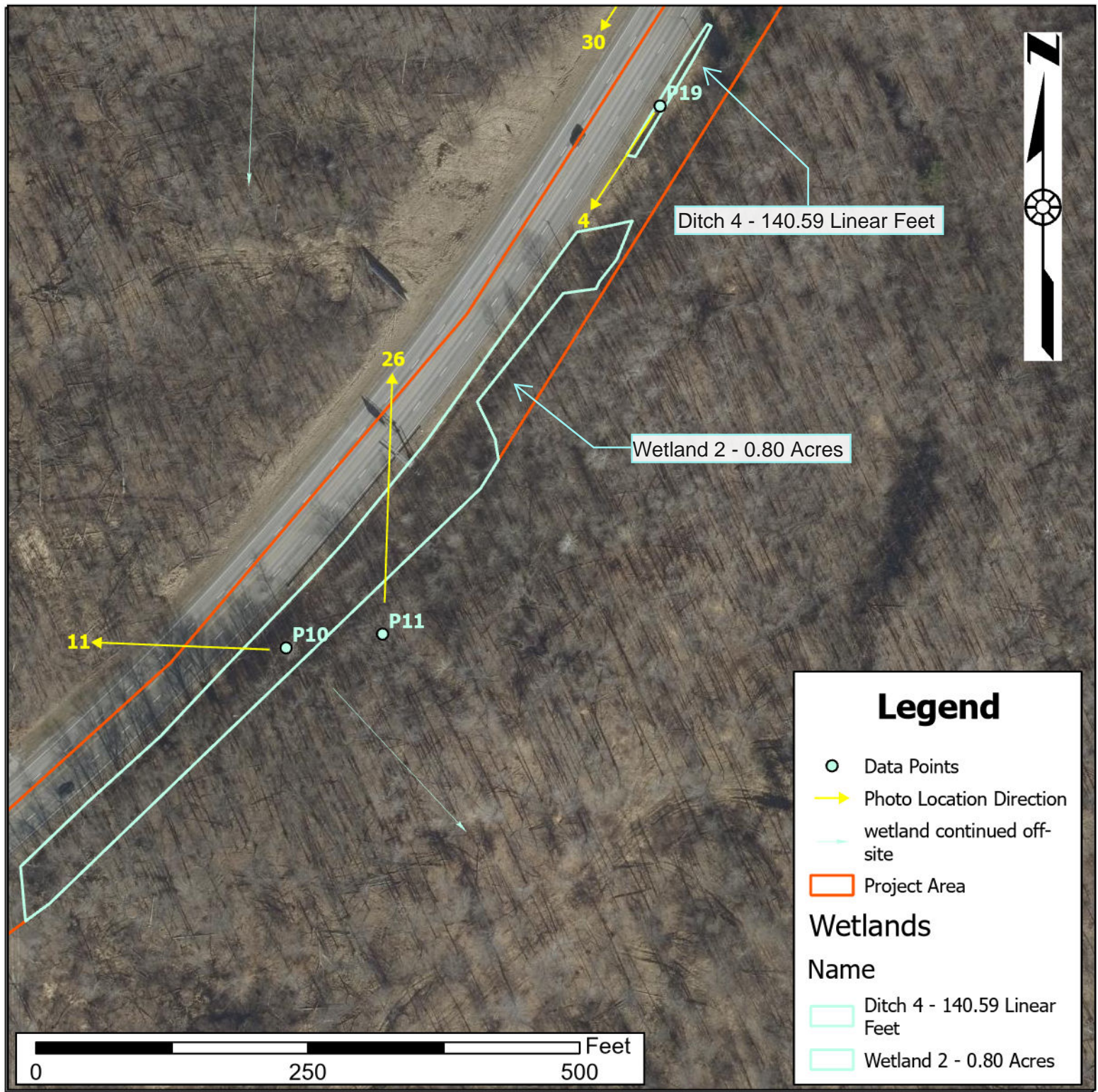


Figure 5.3: Data Point and Photo Locations




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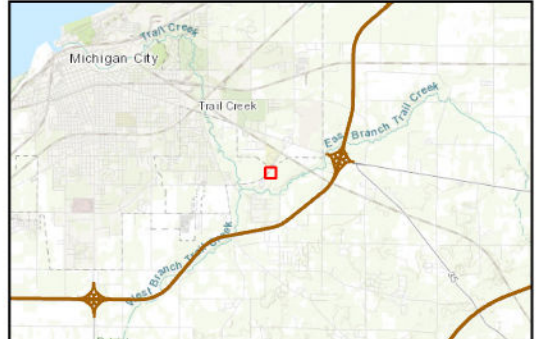


Figure 5.4: Data Point and Photo Locations




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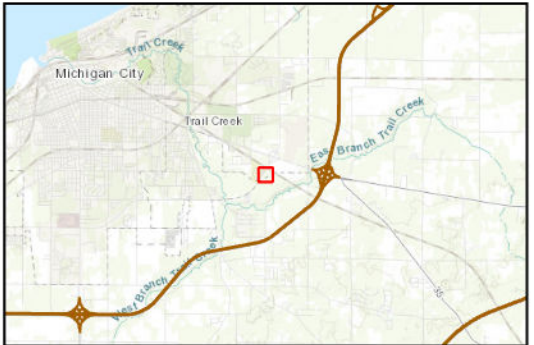
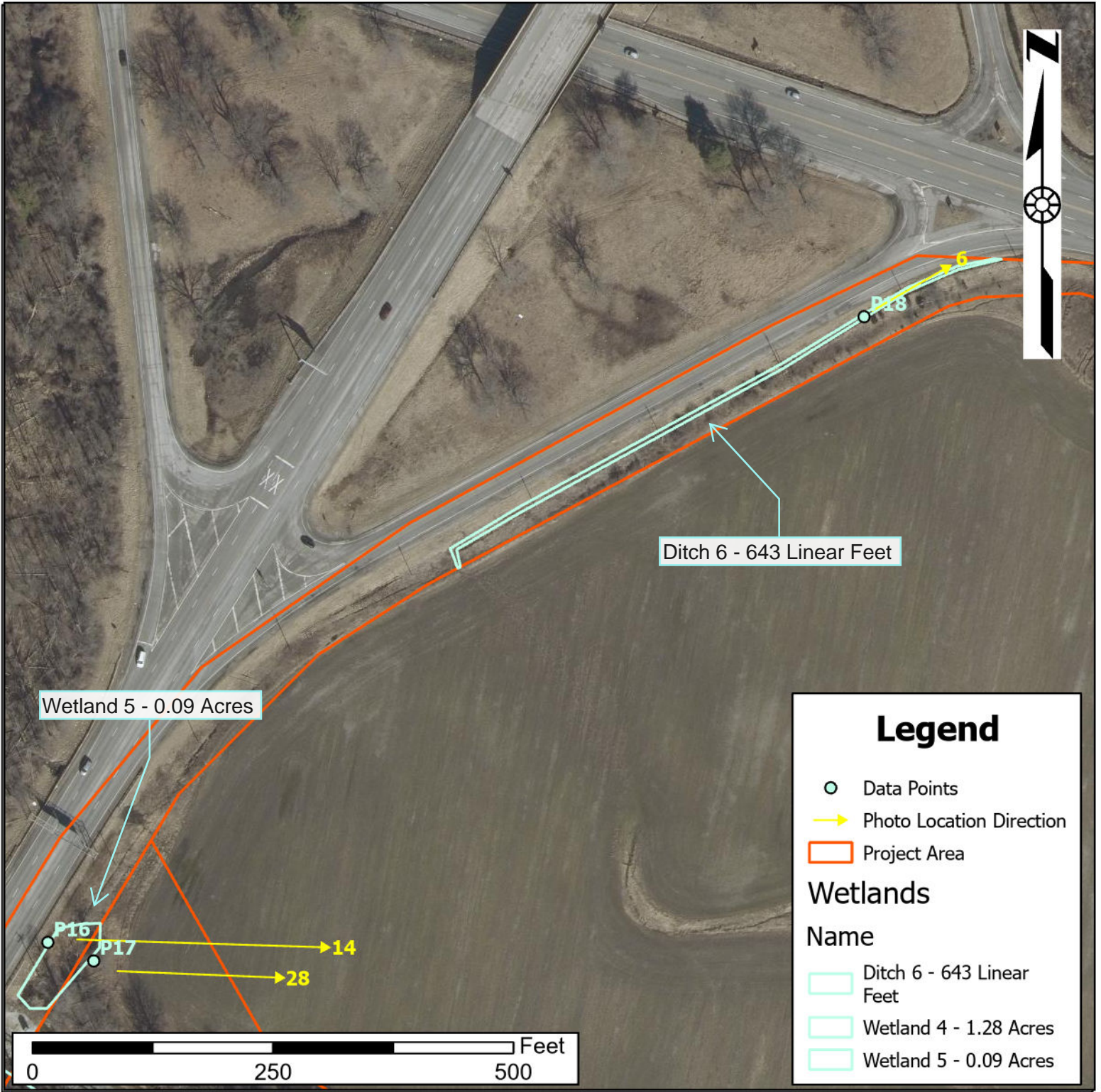


Figure 5.5: Data Point and Photo Locations

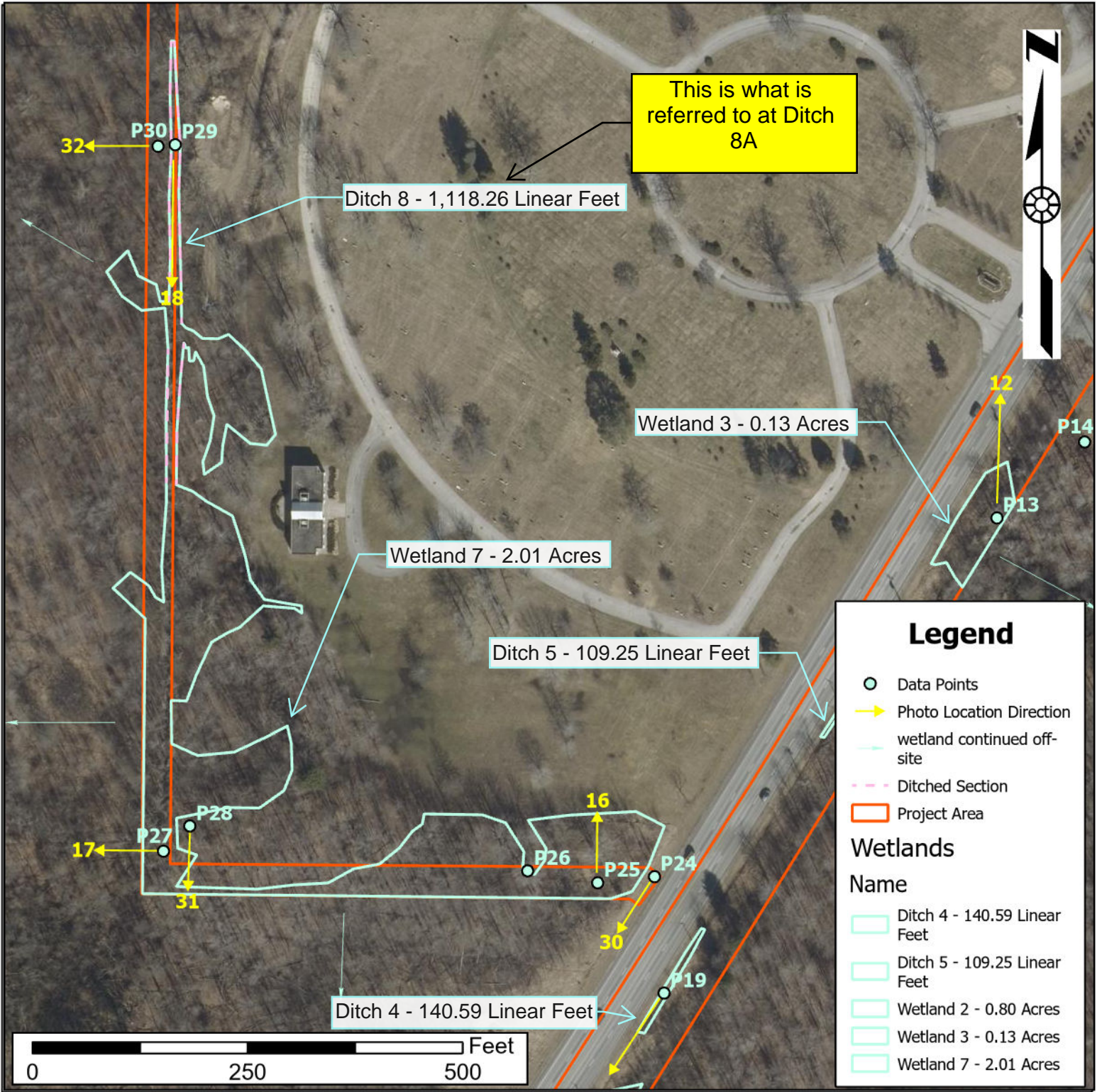



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 Coolspring Township, La Porte County, Indiana
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Figure 5.6: Data Point and Photo Locations



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Date Created: 2/26/2024

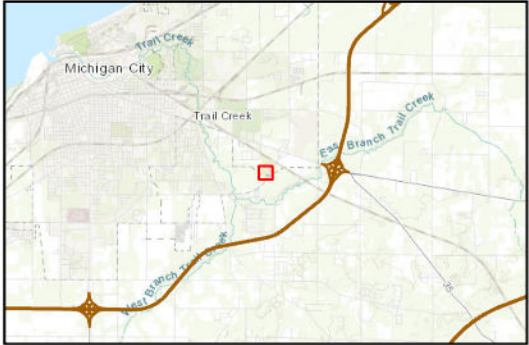
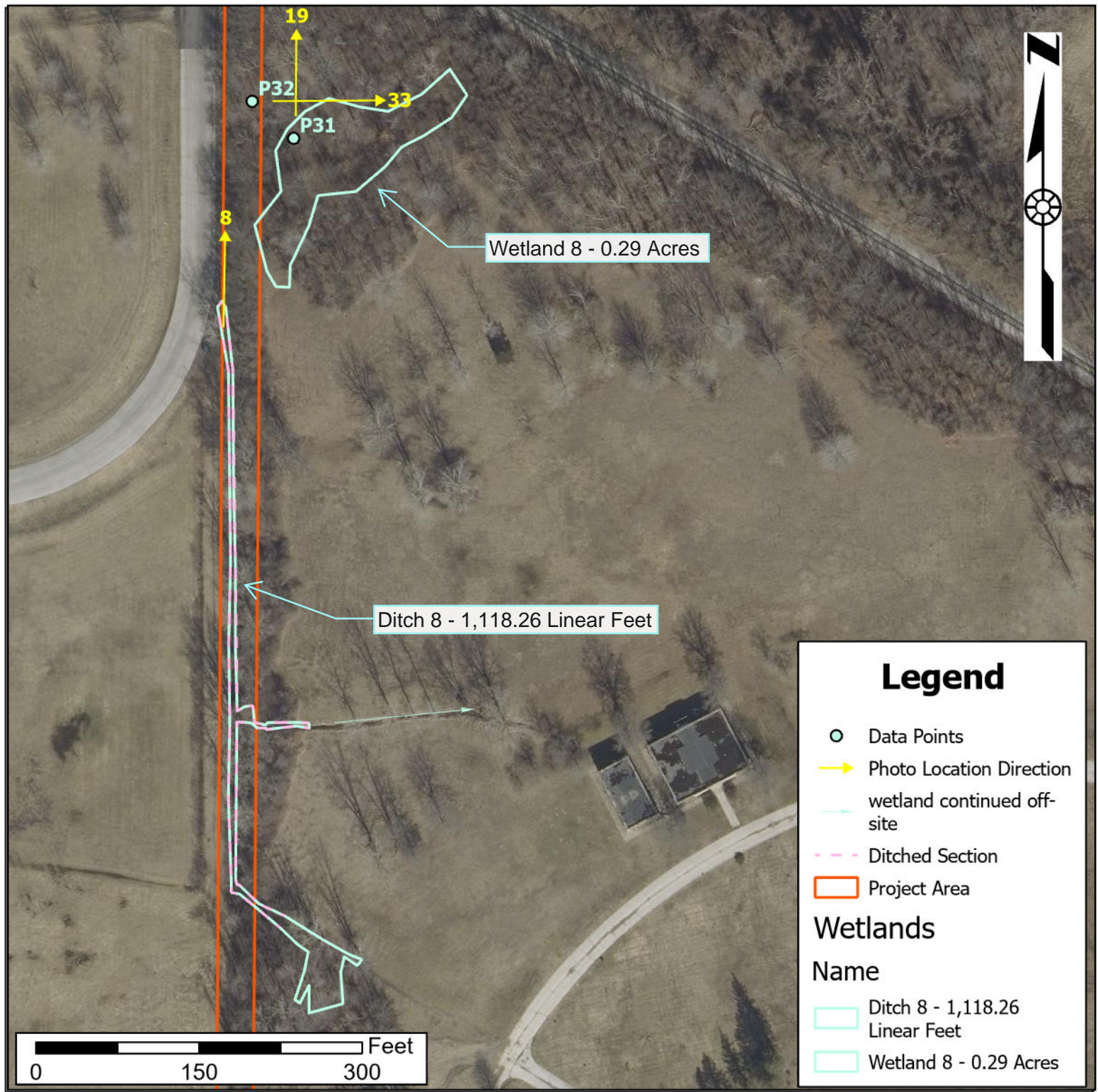


Figure 5.7: Data Point and Photo Locations




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 Date Created: 2/26/2024

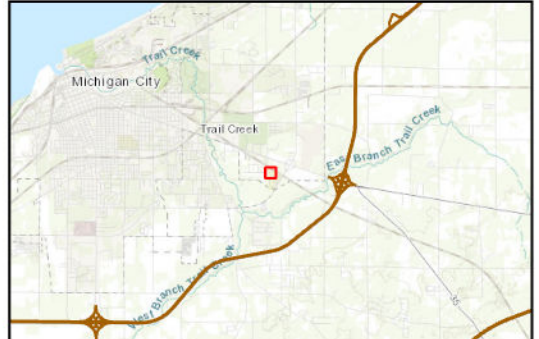
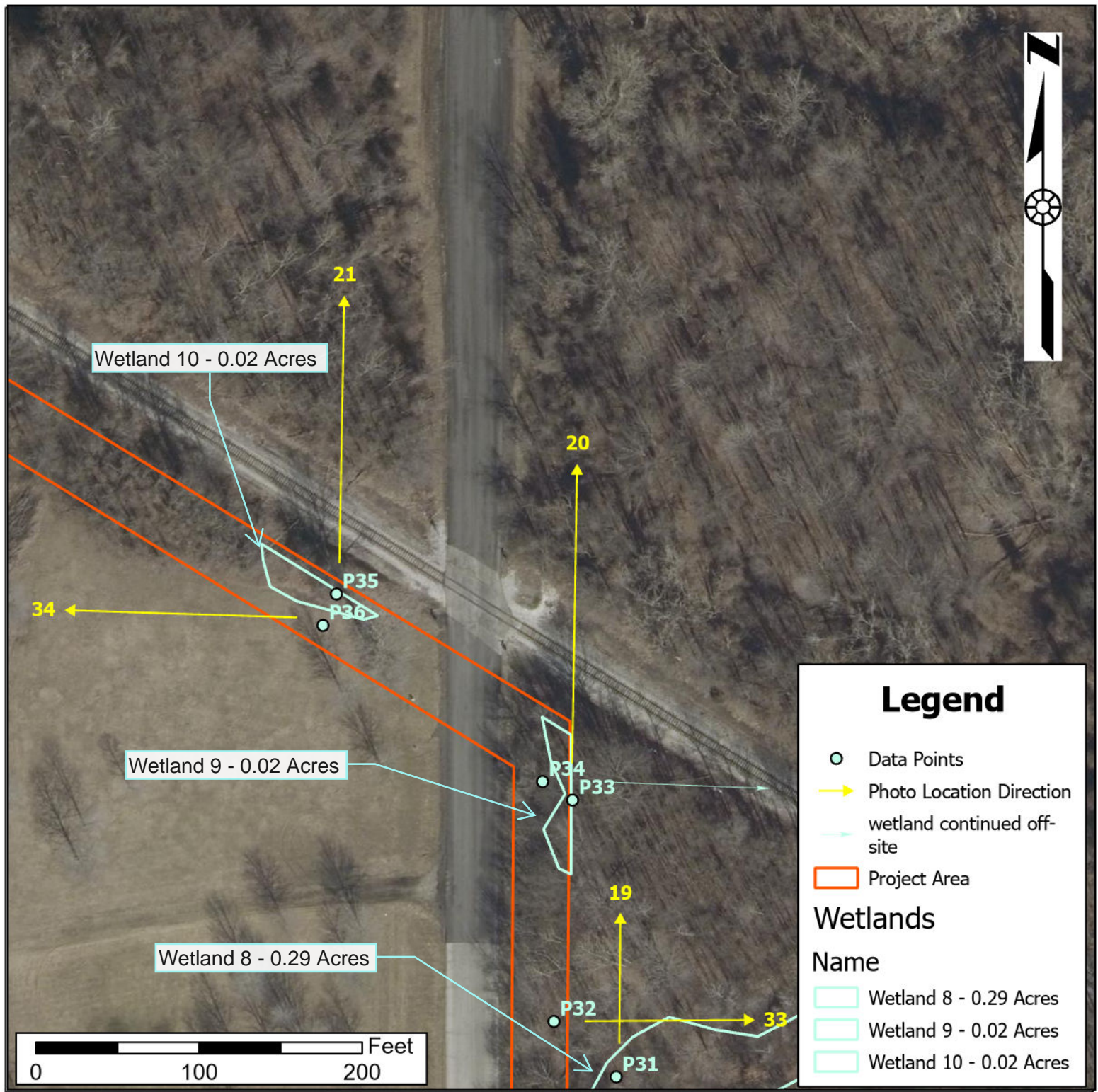


Figure 5.8: Data Point and Photo Locations




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 phone: (219) 465-5885
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SSI Project #: 32-10B(24) W1
 Lat: 41.6917561 Long: -86.833125
 NW 1/4, S1, T37N, R4W
 Coolspring Township, La Porte County, Indiana
 Date Created: 2/26/2024

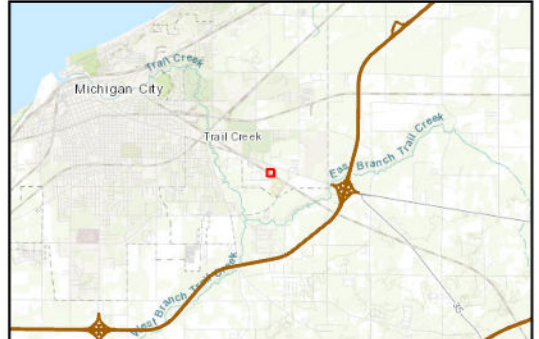
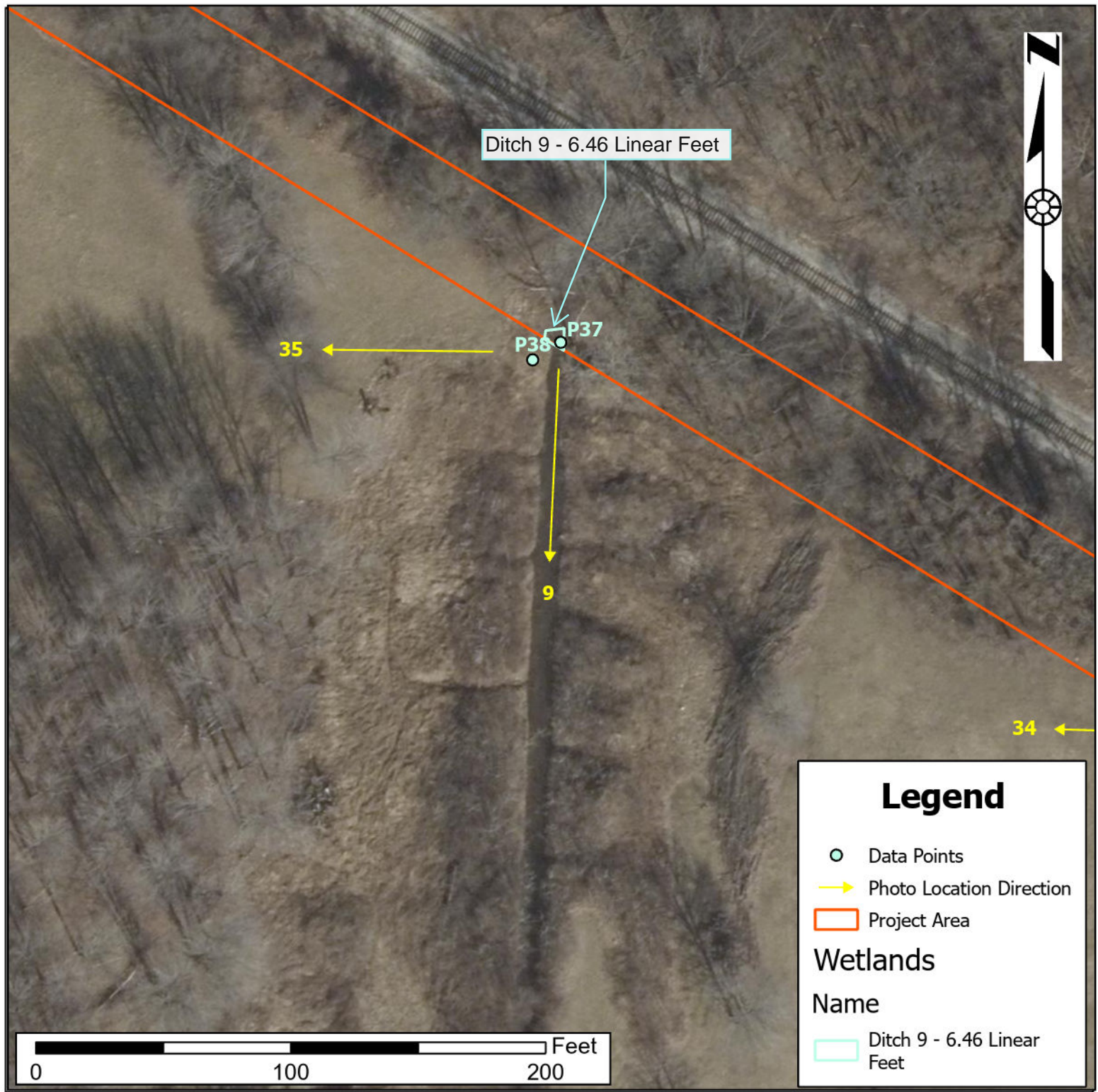


Figure 5.9: Data Point and Photo Locations




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Coolspring Township, La Porte County, Indiana
Date Created: 2/26/2024

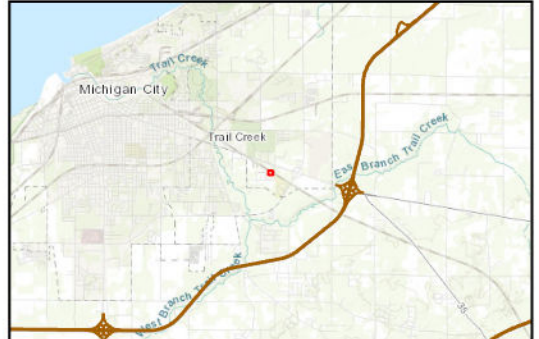
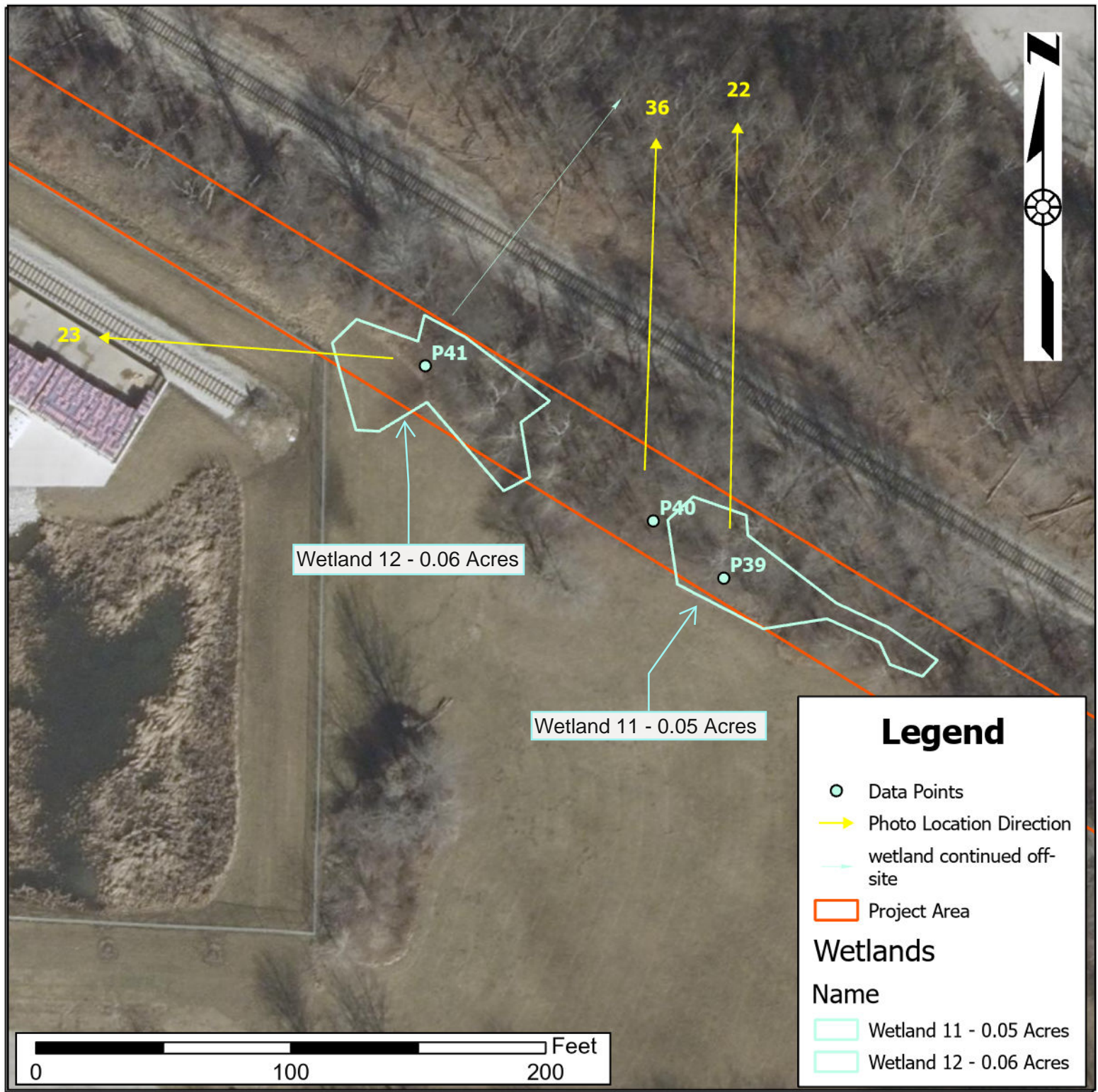


Figure 5.10: Data Point and Photo Locations




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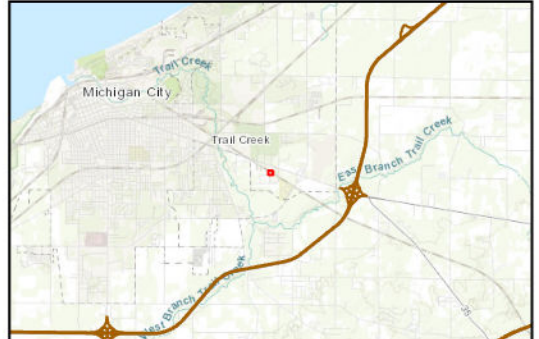
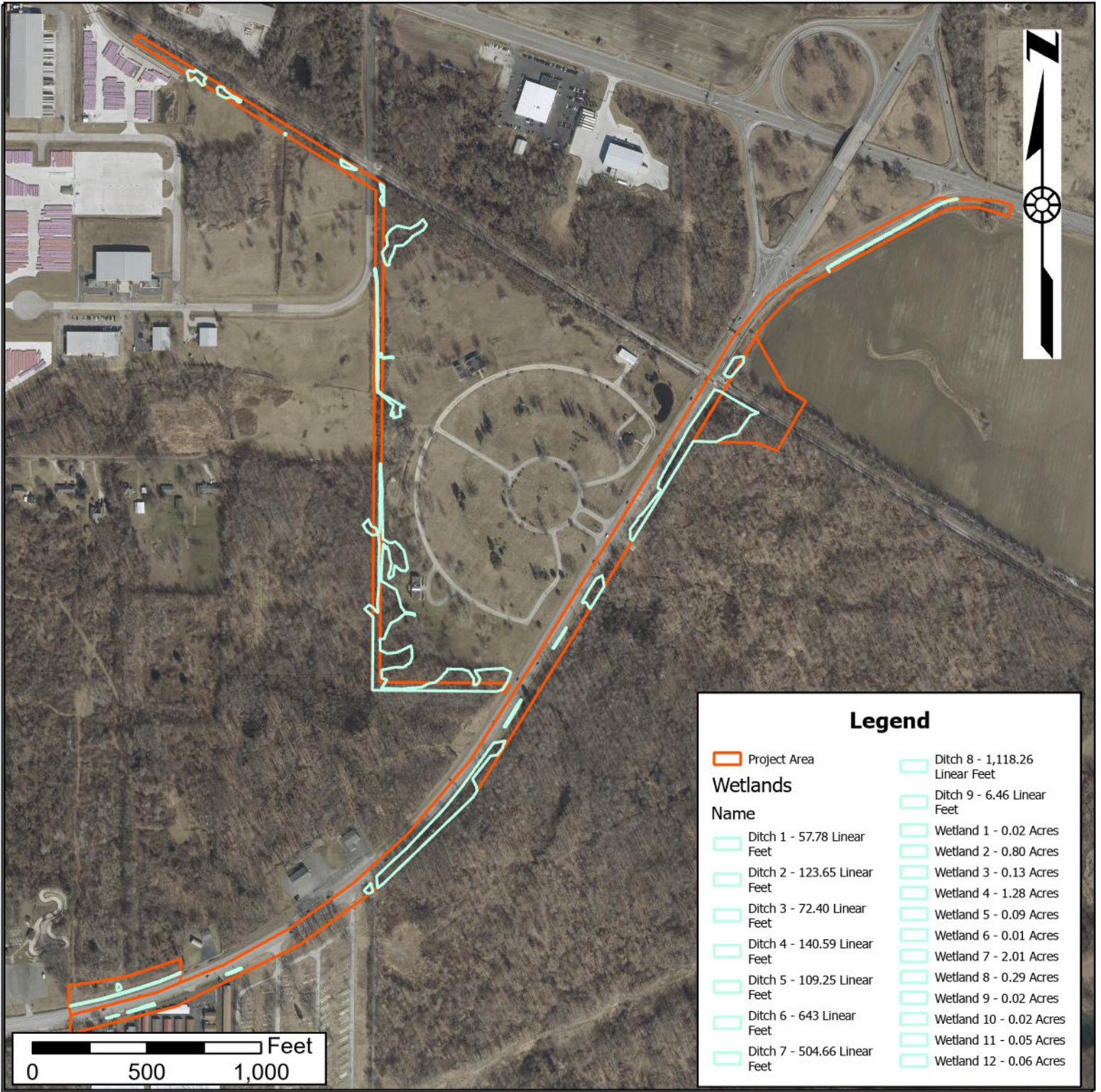


Figure 6: Wetland Survey



Legend	
▭ Project Area	▭ Ditch 8 - 1,118.26 Linear Feet
Wetlands	
Name	
▭ Ditch 1 - 57.78 Linear Feet	▭ Wetland 1 - 0.02 Acres
▭ Ditch 2 - 123.65 Linear Feet	▭ Wetland 2 - 0.80 Acres
▭ Ditch 3 - 72.40 Linear Feet	▭ Wetland 3 - 0.13 Acres
▭ Ditch 4 - 140.59 Linear Feet	▭ Wetland 4 - 1.28 Acres
▭ Ditch 5 - 109.25 Linear Feet	▭ Wetland 5 - 0.09 Acres
▭ Ditch 6 - 643 Linear Feet	▭ Wetland 6 - 0.01 Acres
▭ Ditch 7 - 504.66 Linear Feet	▭ Wetland 7 - 2.01 Acres
	▭ Wetland 8 - 0.29 Acres
	▭ Wetland 9 - 0.02 Acres
	▭ Wetland 10 - 0.02 Acres
	▭ Wetland 11 - 0.05 Acres
	▭ Wetland 12 - 0.06 Acres
	▭ Ditch 9 - 6.46 Linear Feet



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