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

State Form 51821 (R2 / 11-15)

Indiana Department of Environmental Management

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
Name of Applicant GP-CM County Line Partners, LLC	Name of Agent Stantec
Mailing address *(Street/ PO Box/ Rural Route, City, State, ZIP Code)* 350 Massachusetts Avenue, Suite 400 Indianapolis, IN 46204	Mailing address *(Street/ PO Box/ Rural Route, City, State, ZIP Code)* 3901 Industrial Boulevard Indianapolis, IN 46254
Daytime Telephone Number	Daytime Telephone Number (463) 269-1622
Fax Number	Fax Number
E-mail address *(optional)* rgershman@gershmanpartners.com	E-mail address *(optional)* benjamin.harvey@stantec.com
Contact person *(required)* Ryan Gershman	Contact person Ben Harvey

3. Project / Tract Location

County Marion		Nearest city or town Indianapolis	
U.S.G.S. Quadrangle map name *(Topographic map)* Beech Grove		Project street address *(if applicable)* Northeast of County Line Road and Arlington Avenue, Indianapolis, IN 46237	
Quarter SW	Section 23	Township 14 North	Range 4 East
Type of aquatic resource(s) to be impacted *(Attach Worksheet One.)* Isolated Wetlands		Project name or title *(if applicable)* County Line Road at Arlington Avenue - Northeast Corner	

Other location descriptions or driving directions

From Indianapolis, take I-65 S to E Southport Road and head east. Turn South onto S Arlington Avenue until you reach the project site at the northeast corner of the intersection of Arlington Avenue and County Line Road.

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

Has any construction been started? ☐ Yes ☒ No	Anticipated start date *(month, day, year)* March 2024

If yes, how much work is completed?

Purpose of project and overview of activities

The purpose of the project is to develop the property into commercial warehouses. A total of 4 wetlands were identified within the project area, all of which were determined isolated wetlands in a USACE Jurisdictional Determination dated March 1, 2023 (included as an Attachment) and correspondence with the USACE Project Manager more recently. Wetlands 1, 2, 3, and 4 were identified as Isolated Wetlands by the Corps. It is anticipated that Wetland 1, Wetland 2, the emergent portion of Wetland 3, and the impacted portion of Wetland 4 are not regulated resources under state statute. However, the forested portions of Wetland 3 are anticipated to be regulated by IDEM. Each of these wetland areas appear to meet the definition of "cropland" in Indiana Code.

Wetland 1 and Wetland 2 will be entirely impacted within the project limits. Portions of Wetland 3 and Wetland 4 extend beyond the proposed project limits, and those portions beyond the project limits will not be impacted. Wetland 1, Wetland 2, and emergent sections of Wetland 3 and Wetland 4 will be discussed as impacts in this application but are anticipated to not be regulated under IC 13-18-22.

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. Is there a reasonable alternative to the proposed activity?
   No Class II wetlands requiring a permit will be impacted as wetlands located in active agricultural fields are exempt under IC 13-18-22.

2. Is the proposed activity reasonably necessary or appropriate?

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

1. Is there a practicable alternative to the proposed activity?
   The purpose of the project would not be successfully completed without impacts to the Class III Wetlands. Other properties were considered but this property offers the proximity to the interstate that is desirable, and is also available for development. The area has been zoned for development, is considered a priority development area by the City of Indianapolis, and a TIF (Tax Increment Financing) district has been proposed in this area to encourage development of the site.

2. Have practicable and appropriate steps to minimize impacts to water resources been taken?
   Yes, appropriate steps have been taken to avoid impacts to water resources. Eastern portions of Wetland 3 and Wetland 4, totaling an additional 1.0 and 13.1 acres respectively, were eliminated from the project to avoid and minimize impacts, and this portion of the project included most of the forested wetlands of higher quality. This preserves an additional 2.8 acres of isolated forested wetland.

Describe all compensatory mitigation required for unavoidable impacts.
Mitigation will be provided through purchase of mitigation bank or In-Leiu Fee credit.
Impacts to forested non-exempt wetlands were evaluated to determine required mitigation. Impacts are as follows: Wetland 3 - 0.244 acres, for a total of 0.244 acres of impacted Class 3 forested wetland. Ratio for this impact is 2.5:1 per IC 13-18-22-6 resulting in 0.610 acres/credits of mitigation required.

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

a. Top/aerial/overhead views of the project site showing existing conditions and proposed construction.
b. Cross sectional view of areas of fill or alterations to streams and other waters.
c. North arrow, scale, property boundaries.
d. Include wetland delineation boundary *(if applicable)*. Label all wetlands (jurisdictional, isolated and exempt) as I-1, I-2, I-3, etc. and the mitigation areas as M-1, M-2, etc.
e. Location of all surface waters, including wetlands, erosion control measures, existing and proposed structures, fill and excavation locations, disposal area for excavated material, including quantities, and wetland mitigation site *(if applicable)*.
f. Approximate water depths and bottom configurations *(if applicable)*.

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

a. A wetland delineation of all wetlands on the project site *(for projects with wetland impacts)*.
b. At least three photographs of the project site. Indicate the photo locations on the project plans.
c. If isolated wetlands are present, a letter from the Corps of Engineers verifying this statement.
d. Wetland mitigation plan and monitoring report.
e. Classification of all isolated wetlands on the tract *(if isolated wetlands are present onsite)*.
f. Copies of all applicable local permits and/or resolutions pertaining to the project or tract.
g. Tract history *(see instructions)*.

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

a. Erosion control and/or storm water management plans.
b. Sediment analysis.
c. Species surveys for fish, mussels, plants and threatened or endangered species.
d. Stream habitat assessment.
e. Any other information IDEM deems necessary to review the proposed project.

9. Permitting Requirements

a. Does this project require the issuance of a Department of the Army Section 404 Permit from the US Army Corps of Engineers? ☐ Yes ☒ No

If no, you do not need to answer Part b.

b. Have you applied for an Army Corps of Engineers Section 404 permit? ☐ Yes ☒ No

If yes, please supply the Corps of Engineers ID Number, the Corps of Engineers District, the project manager, and a copy of any correspondence with the Corps. **If no, contact** the Army Corps of Engineers regarding the possible need for a permit application.

A permit application was submitted for the project, but as a result of regulatory changes since initial submittal there are now no wetlands under USACE jurisdiction within the project limits.

c. Have you applied for, received, or been denied a permit from the Department of Natural Resources for this project? ☐ Yes ☒ No

Please give the permit name, permit number, and date of application, issuance or denial.

d. Have you applied for, received, or been denied any other federal, state, or local permits, variances, licenses, or certifications for this project? ☒ Yes ☐ No

Please give the permit name, agency from which it was obtained, permit number, and date of issuance or denial.

Local development permitting obtained or in process.

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.

Name	Address *(number and street)*	City	State	ZIP Code
David A & Deborah A Morford	6021 Royal Gate Ct	Indianapolis	IN	46237-9321
Howard P & Cathy L Eads	6039 Royal Gate Ct	Indianapolis	IN	46237
Indiana Department of Transportation	100 N Senate Ave Ste N642	Indianapolis	IN	46204
Indianapolis Department of Public Works	200 E Washington St Ste 2460	Indianapolis	IN	46204
Charles D & Christina D Haydon	6041 Royal Gate Place	Indianapolis	IN	46237
James E Mehling & Susan J Ellspermann	212 E 25th St	Ferdinand	IN	47532-9385
Carla Jean Phipps	6103 Royal Gate Place	Indianapolis	IN	46237
Marla Fielder	6111 Royal Gate Pl	Indianapolis	IN	46237
Rachel Lyons	6119 Royal Gate Pl	Indianapolis	IN	46237
John Howad & Nanacy Susan Vice	6127 Royal Gate Pl	Indianapolis	IN	46237-9262
Rodney Forrest & Cathy Lynn Kirby	6135 Royal Gate Pl	Indianapolis	IN	46237
Gary Stringer	6143 Royal Gate Pl	Indianapolis	IN	46237

James F & Sue A Winton 6159
Royal Gate Pl Indianapolis, IN
46237

David A SR & Wendy C Straub
6205 Royal Gate Pl
Indianapolis, IN 46237

Navtej & Sarabjot Kaur Singh
6213 Royal Gate Pl
Indianapolis, IN 46237

Michael J & Karla R Woodward
6221 Royal Gate Pl
Indianapolis, IN 46237

Melissa Ann & Michael Bernard O'Maley
6229 Royal Gate Pl
Indianapolis, IN 46237

MJRR Property INC
2817 Halfaker Way
Greenwood, IN 46143

Christy W Mackerodt
10160 N 700 E
Indianapolis, IN 46259-9551

11. Signature - Statement of Affirmation

I certify that I am familiar with the information contained in this application and, to the best of my knowledge and belief, such information is true and accurate. I certify that I have the authority to undertake and will undertake the activities as described in this application. I am aware that there are penalties for submitting false information. I understand that any changes in project design subsequent to IDEM's granting of authorization to discharge to a water of the state are not authorized and I may be subject to civil and criminal penalties for proceeding without proper authorization. I agree to allow representatives of the IDEM to enter and inspect the project site. I understand that the granting of other permits by local, state, or federal agencies does not release me from the requirement of obtaining the authorization requested herein before commencing the project.

Applicant's Signature: _____ Date: 2/27/24 *(mm/dd/yyyy)*

Print Name: Ryan Gershman Title: Principal

Worksheet – Summary of Onsite Water Resources and Project Impacts

A. Jurisdictional Wetlands (Existing Conditions)		Jurisdictional Wetlands (Proposed Impacts)			
Wetland Type	**Size of wetland *(acreage)***	**To be Impacted?**	**Acreage**	**Fill quantity *(cys)***	**ATF**
☐ EM ☐ SS ☐ FO		☐ Yes ☐ No			
☐ EM ☐ SS ☐ FO		☐ Yes ☐ No			
☐ EM ☐ SS ☐ FO		☐ Yes ☐ No			
☐ EM ☐ SS ☐ FO		☐ Yes ☐ No			
☐ EM ☐ SS ☐ FO		☐ Yes ☐ No			
☐ EM ☐ SS ☐ FO		☐ Yes ☐ No			
☐ EM ☐ SS ☐ FO		☐ Yes ☐ No			

Describe the type and composition of fill material to be placed in wetlands on the project site:

Describe the type and composition and quantity *(cubic yards)* of material proposed to be dredged or excavated from wetlands on the project site:

B. Isolated Wetlands (Existing Conditions)			Isolated Wetlands (Proposed Impacts)			
Wetland Class	**Type**	**Size of wetland *(acreage)***	**To be Impacted?**	**Acreage**	**Fill quantity *(cys)***	**ATF**
☒ 1 ☐ 2 ☐ 3	☒ NF ☐ F	0.077 (WL01)	☒ Yes ☐ No	0.077	129	No
☒ 1 ☐ 2 ☐ 3	☒ NF ☐ F	0.695 (WL02)	☒ Yes ☐ No	0.695	1,100	No
☒ 1 ☐ 2 ☐ 3	☒ NF ☐ F	2.45 (WL03)	☒ Yes ☐ No	1.401	2,300	No
☐ 1 ☐ 2 ☒ 3	☐ NF ☒ F	1.24 (WL03)	☒ Yes ☐ No	0.244	400	No
☒ 1 ☐ 2 ☐ 3	☒ NF ☐ F	19.38 (WL04)	☒ Yes ☐ No	8.078	13,000	No
☐ 1 ☐ 2 ☒ 3	☐ NF ☒ F	1.80 (WL04)	☐ Yes ☒ No	0.00	0	No

Describe the type and composition of fill material to be placed in isolated wetlands on the project site:
Gravel, Stone, Clean Earthen Fill, Foundations for buildings, access roads, and parking lots.

Describe the type and composition and quantity *(cubic yards)* of material proposed to be dredged or excavated from isolated wetlands on the project site:
No excavation of material is anticipated but re-grading is anticipated.

C. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if required.*)

Stream name

Description of impacts

Length of upstream bank impacts:
Left side: Right side:

Length of downstream bank impacts:
Left side: Right side:

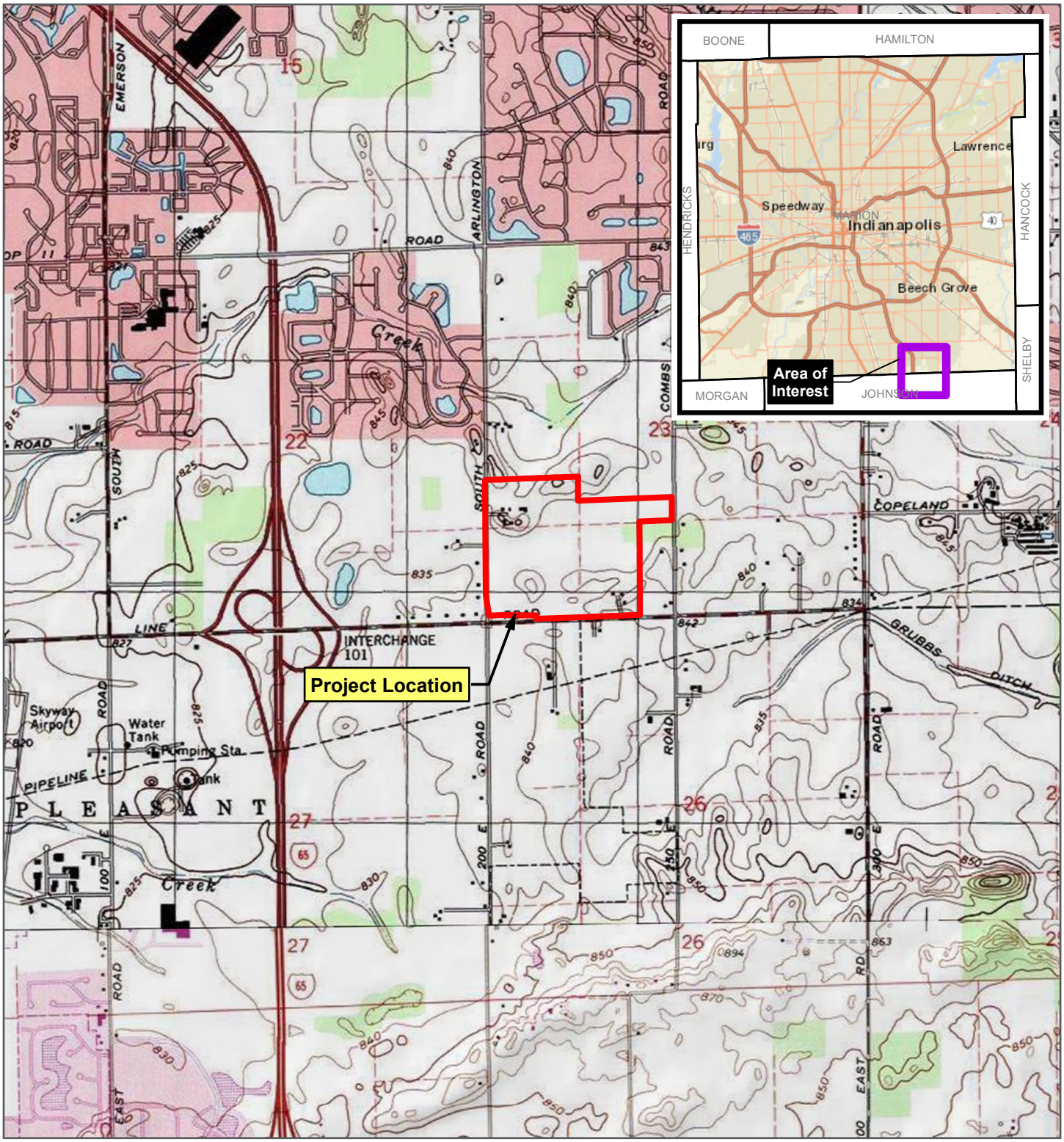
Bank protection fill placed below the Ordinary High Water Mark:
Volume per running foot:

Bank protection fill placed below the Ordinary High Water Mark:
Area of coverage:

D. Bank Stabilization – provide the following information for EACH segment (*Use additional sheet(s) if required.*)
Water body name
Description of impacts
Length of shoreline or bank protection
Volume *(cubic yards)* of bank protection fill placed below the Ordinary High Water Mark per running foot
Area *(square feet)* of bank protection fill placed below the Ordinary High Water Mark

E. Stream Relocation	
Water body name	
Description of impacts	
Length of existing channel to be relocated *(linear feet)*	
Length of new channel to be constructed *(linear feet)*	
Existing channel to be backfilled? ☐ Yes ☐ No	Type of relocation ☐ Piping ☐ Open ☐ Channel ☐ Other:____
Type of fill and volume *(cubic yards)*	

F. Open Water Fill
Water body name
Description of impacts
Area of water body to be filled *(acres)*
Type of fill and volume *(cubic yards)*



0 500 1,000 2,000 Feet

0 100 200 300 400 500 600 Meters

Project Location

N
W E
S

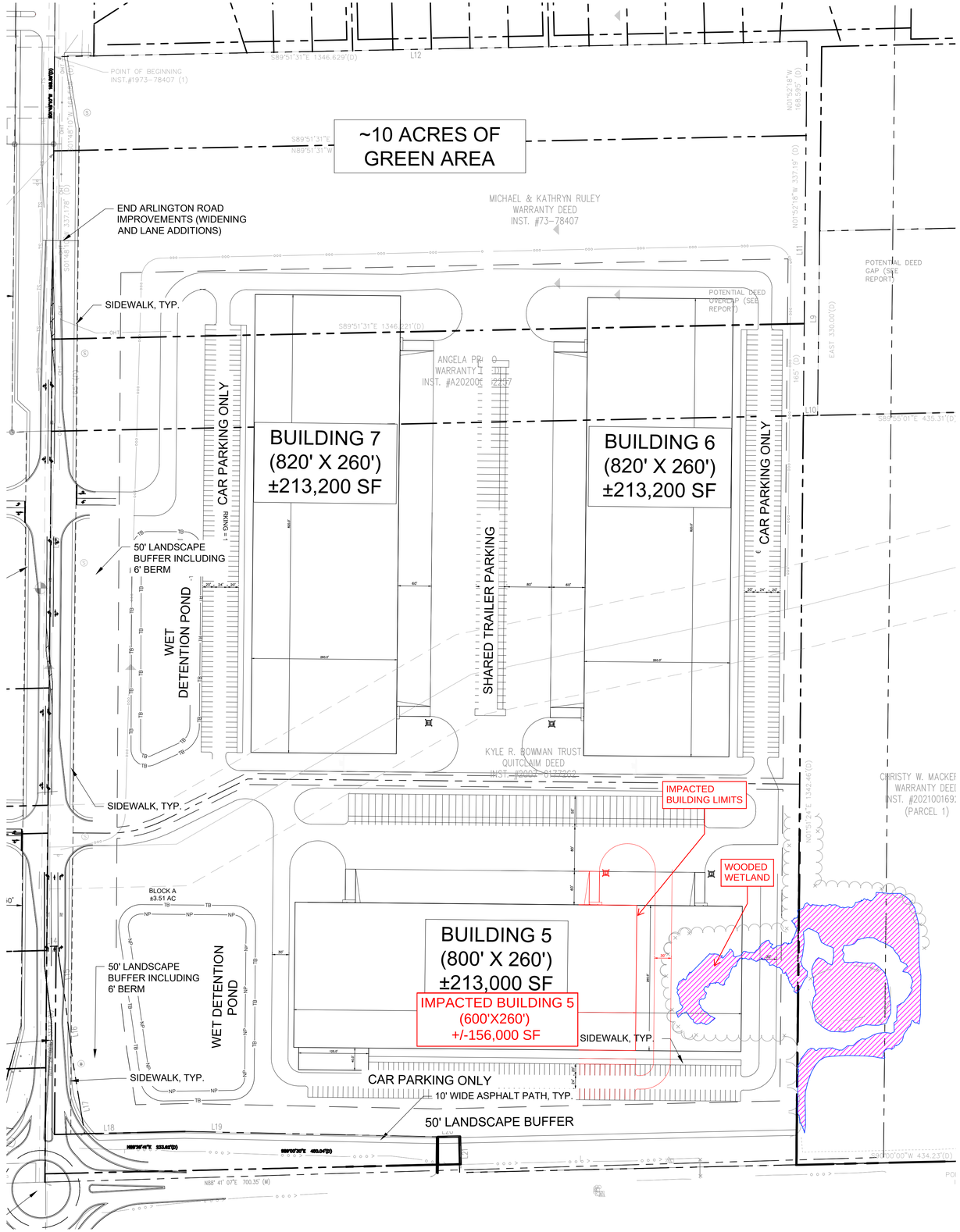
7.5' Quadrangle:
BEACH GROVE
T14n R4e Sec23
Project No.
j193137m36

Figure 1: Project Location

NEC of County Line Rd and Arlington Rd
Regulated Waters Delineation Report
Kimley-Horn and Associates, Inc.
Marion County, Indiana

Cardno
now
Stantec
3901 Industrial Blvd.,Indianapolis, IN 46254
Phone (+1) 317-388-1982 Fax (+1) 317-388-1986
www.cardno.com

Date: 5/25/2022 File Path: R:\Projects\19\193\193137M_KimleyHorn_Master\36_Arlington&CoLineRd\GIS\MXD\Delineation\F1_Location.mxd Saved By: ben.harvey



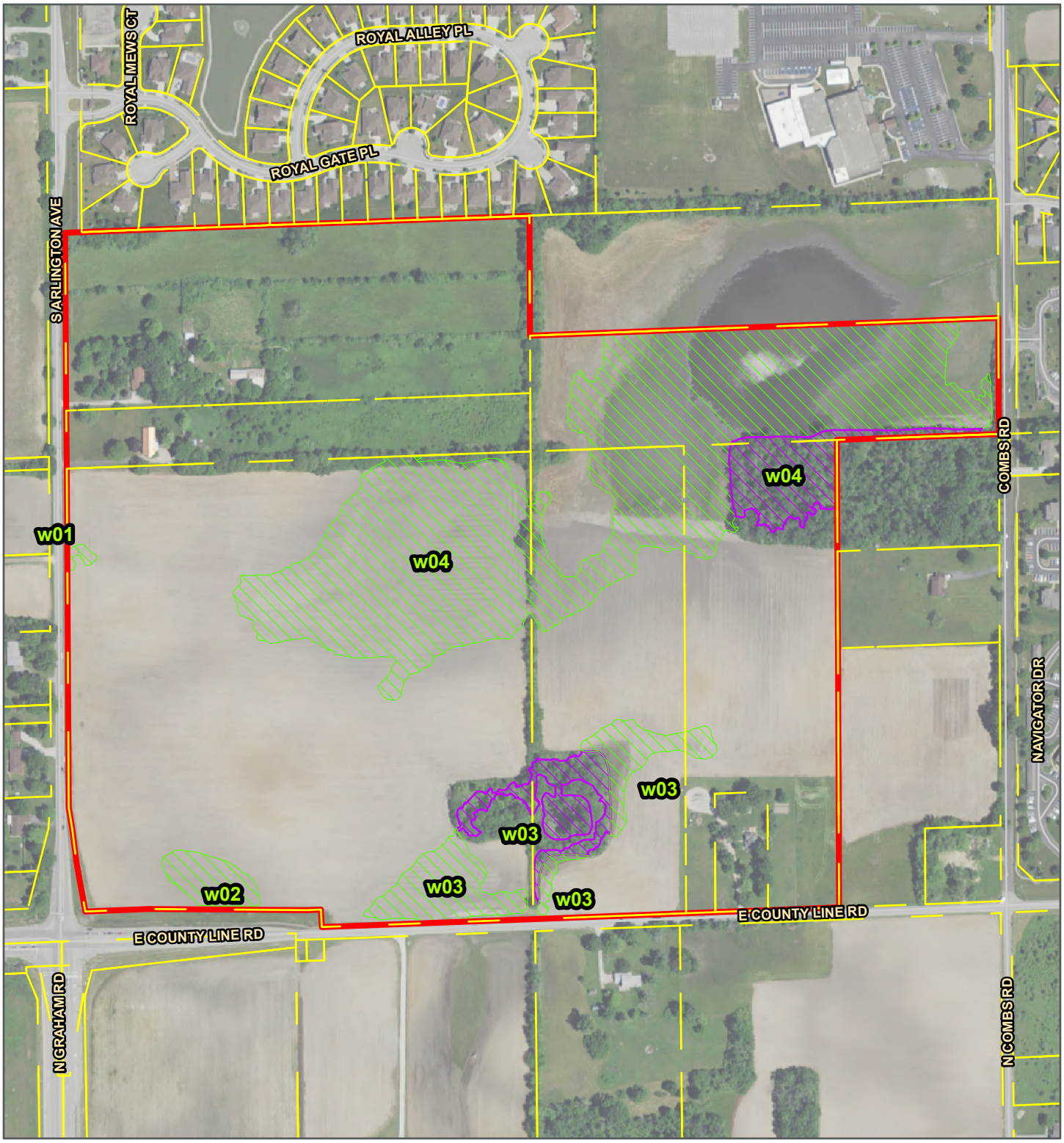
Kimley»Horn

ARLINGTON AVE & CO LINE RD PROPOSED DEVELOPMENT

NEC CONCEPTUAL SITE PLAN
INDIANAPOLIS, IN
FEBRUARY 23, 2024

0' 80' 160' 320' 480'

NORTH



0 200 400 Feet
0 40 80 120 Meters

Project Location
COUNTY_Parcel
Delineated Wetland
PFO
PEM

N
W E
S

7.5' Quadrangle:
BEACH GROVE
T14n R4e Sec23
Project No.
j193137m36

Figure 5: Delinated Features

NEC of County Line Rd and Arlington Rd
Regulated Waters Delineation Report
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Date: 6/15/2022
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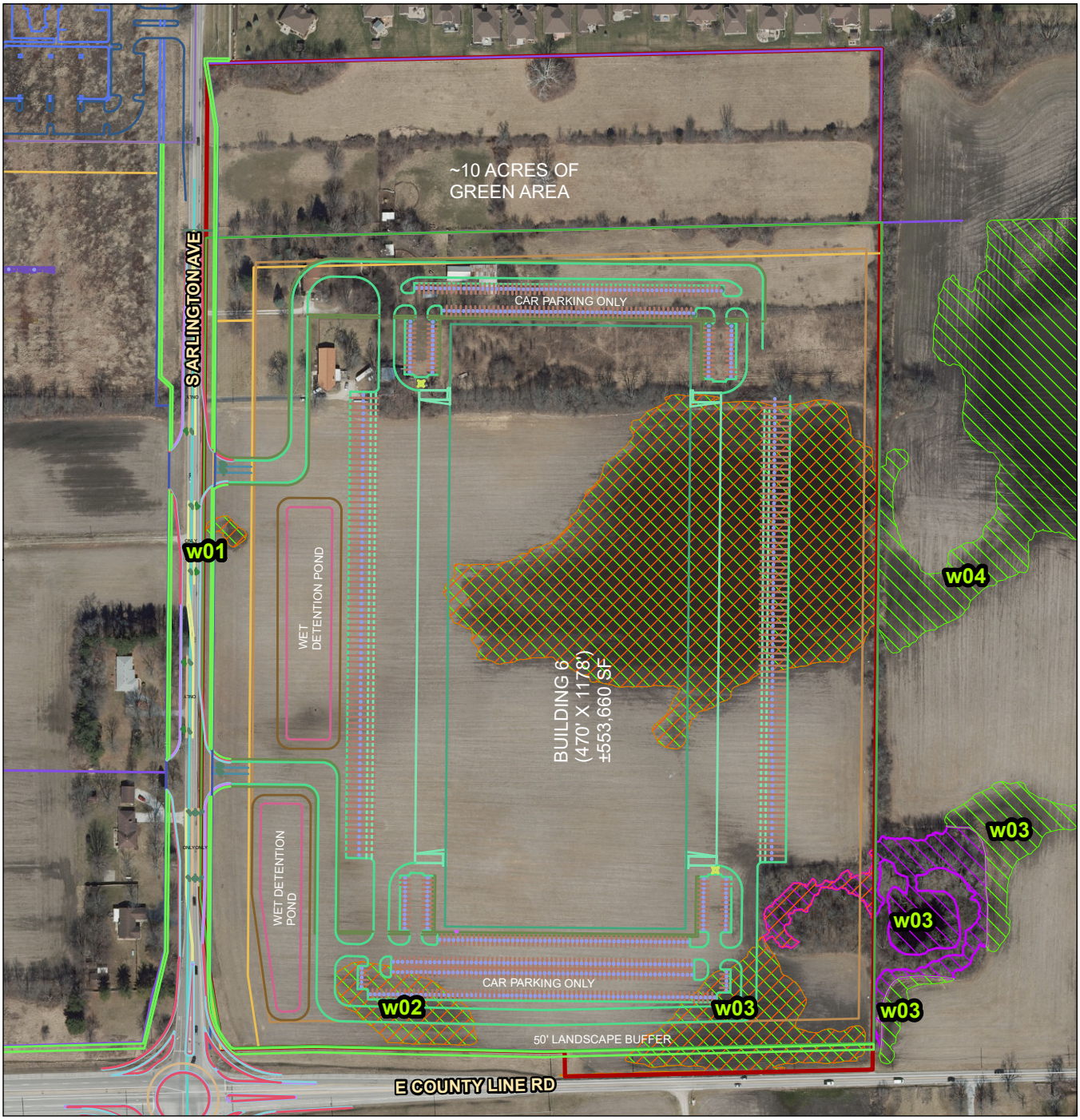

Legend

- Project Location
- Impacted Wetland

Delineated Wetland

- PEM
- PFO

0 150 300 Feet

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1:3,600

N

Stantec

Project Location
T14N, R4E, S22
T. of Franklin, Marion Co., IN

Client/Project Proposed Impacts REV0
Kimley Horn and Associates
County Line Road and Arlington - Northeast Corner
Permit Application

Figure No.
1

Title
Proposed Impacts

Notes
1. Coordinate System: NAD 1983 StatePlane Indiana East FIPS 1301 Feet
2. Data Sources:
3. Background: Indiana Department of Transportation (INDOT), U.S. Census Bureau (USCB), Indiana Geographic Information Council (IGIC), UITS, Indiana Spatial Data Portal National Geographic, Esri, Garmin, HERE, UNEP-

Figure 1

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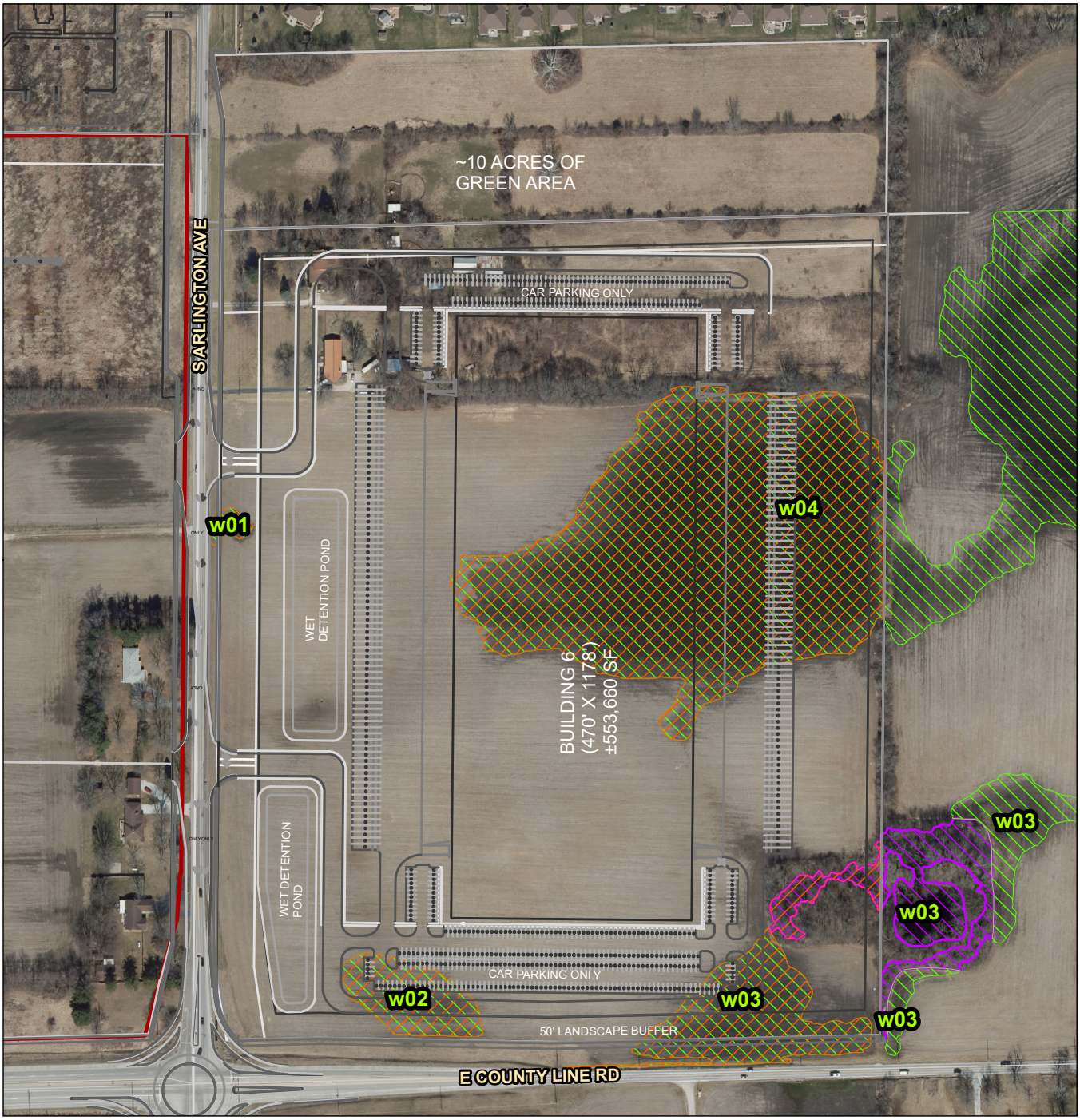


Legend

- Project Location
- Impacted Wetland

Delineated Wetland

- PEM
- PFO

0 160 320 Feet

(At original document size of 8.5x11)
1:3,600

N

Stantec

Project Location
T14N, R4E, S22
T. of Franklin, Marion Co., IN

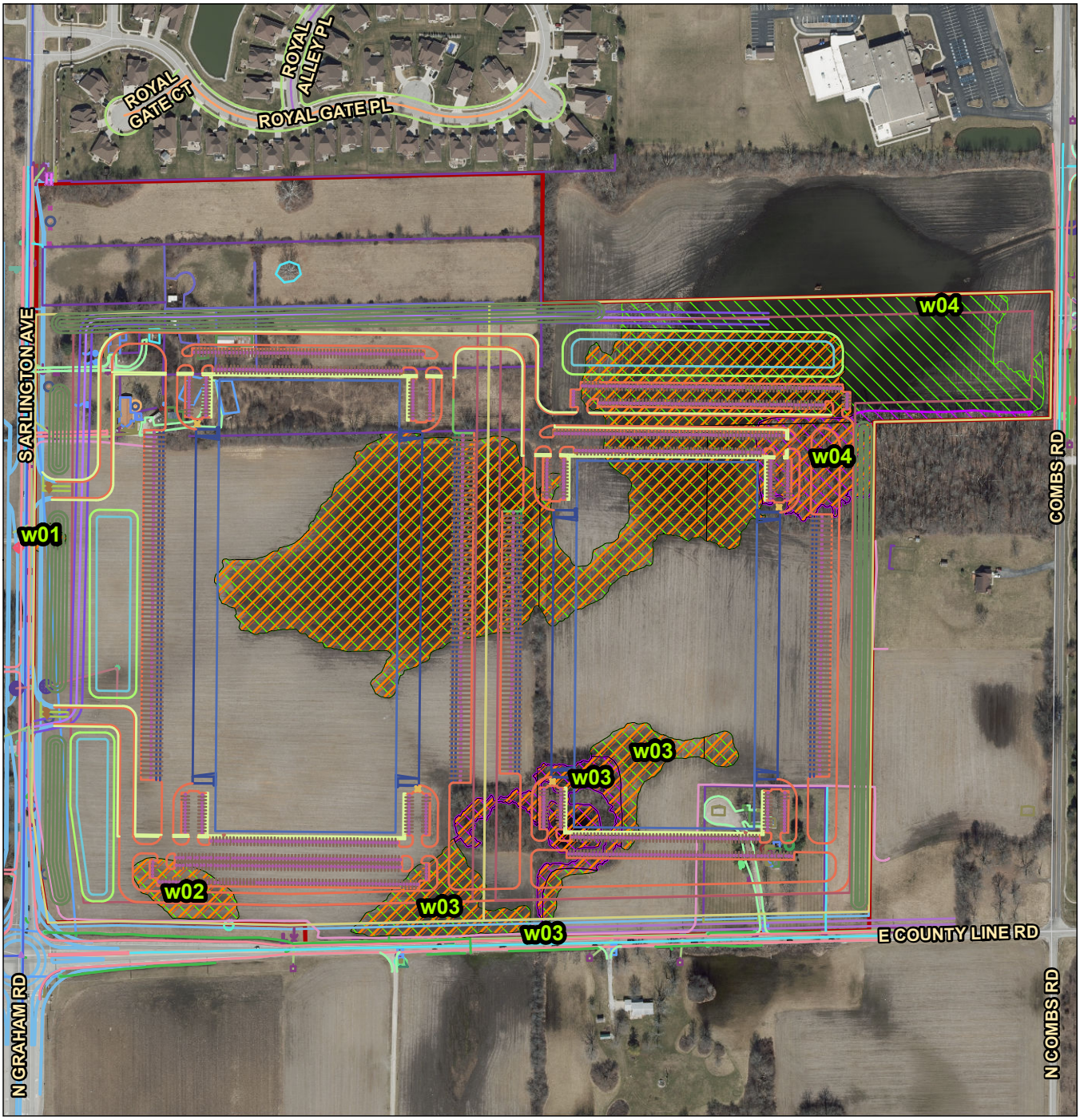
Client/Project Proposed Impacts REV0
Kimley Horn and Associates
County Line Road and Arlington - Northwest Corner
Isolated Wetlands Application

Figure No.
1

Title
Proposed Impacts

Notes
1. Coordinate System: NAD 1983 StatePlane Indiana East FIPS 1301 Feet
2. Data Sources:
3. Background: Indiana Department of Transportation (INDOT), U.S. Census Bureau (USCB), Indiana Geographic Information Council (IGIC), UITS, Indiana Spatial Data Portal National Geographic, Esri, Garmin, HERE, UNEP-

Figure 1



Legend

- Project Location
- Impacted Wetland

Delineated Wetland

- PEM
- PFO

0 200 400 Feet

(At original document size of 8.5x11)
1:4,800

N

Stantec

Project Location
T14N, R4E, S22
T. of Franklin, Marion Co., IN

Client/Project Originally Proposed Impacts REV0
Kimley Horn and Associates
County Line Road and Arlington - Northeast Corner
Permit Application

Figure No.
2

Title
Originally Proposed Impacts

Notes
1. Coordinate System: NAD 1983 StatePlane Indiana East FIPS 1301 Feet
2. Data Sources:
3. Background: Indiana Department of Transportation (INDOT), U.S. Census Bureau (USCB), Indiana Geographic Information Council (IGIC), UITS, Indiana Spatial Data Portal National Geographic, Esri, Garmin, HERE, UNEP-

Figure 1

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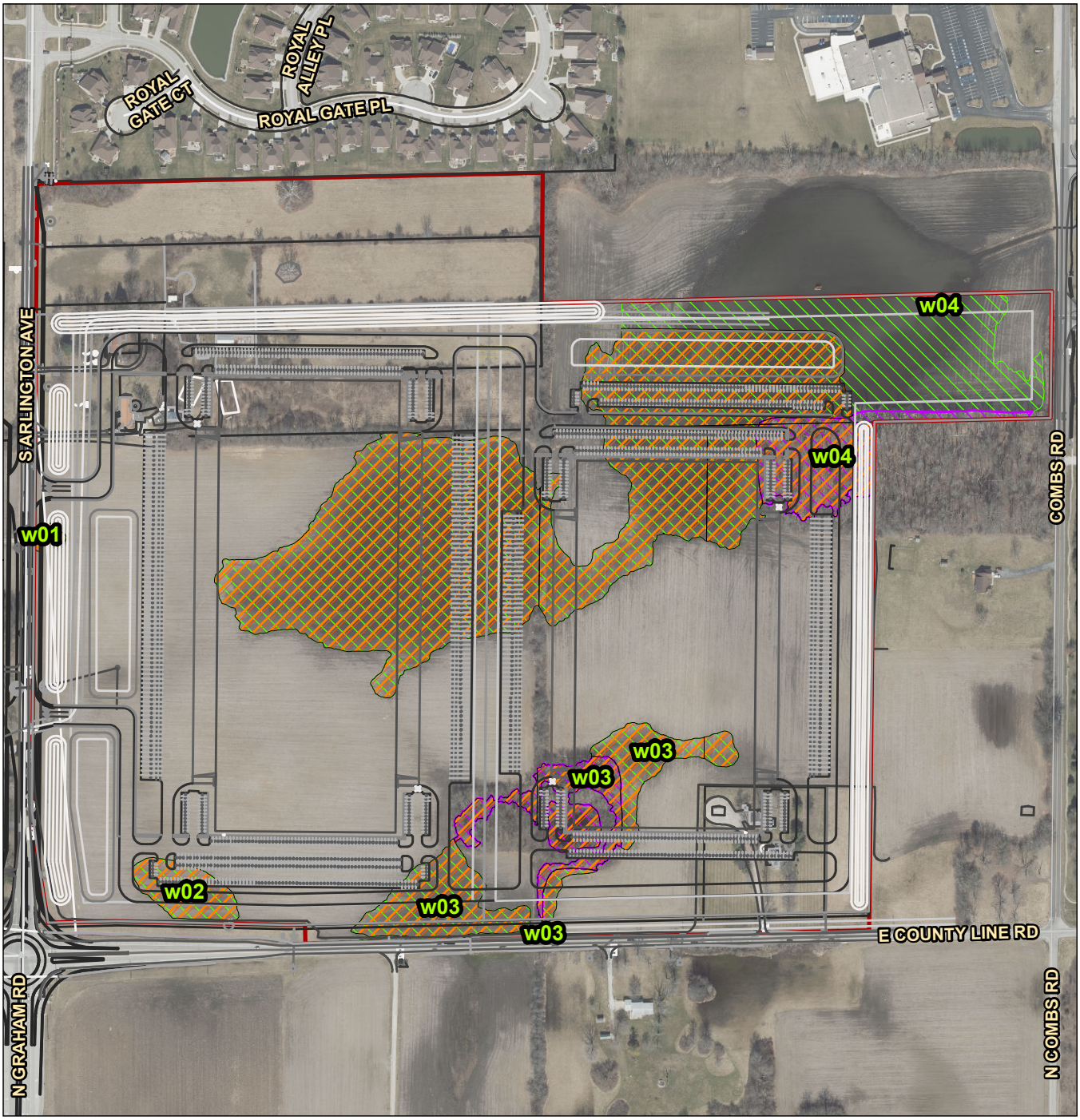

Legend

- Project Location
- Impacted Wetland

Delineated Wetland

- PEM
- PFO

0 200 400 Feet

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1:4,800

N

Stantec

Project Location
T14N, R4E, S22
T. of Franklin, Marion Co., IN

Client/Project Originally Proposed Impacts REV0
Kimley Horn and Associates
County Line Road and Arlington - Northeast Corner
Permit Application

Figure No.
2

Title
Originally Proposed Impacts

Notes
1. Coordinate System: NAD 1983 StatePlane Indiana East FIPS 1301 Feet
2. Data Sources:
3. Background: Indiana Department of Transportation (INDOT), U.S. Census Bureau (USCB), Indiana Geographic Information Council (IGIC), UITS, Indiana Spatial Data Portal National Geographic, Esri, Garmin, HERE, UNEP-

Figure 1

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, LOUISVILLE DISTRICT
INDIANAPOLIS REGULATORY OFFICE
8902 OTIS AVENUE, SUITE S106B
INDIANAPOLIS, IN 46216

October 25, 2023

Regulatory Division
North Branch
ID No. LRL-2022-00935-sjk

Mr. Ryan Gershman
GP-CM County Line Partners, LLC
350 Massachusetts Avenue, Suite 400
Indianapolis, Indiana 46204

Dear Mr. Gershman:

This is regarding electronic correspondence dated September 26, 2023, from Stantec requesting an Approved Jurisdictional Determination on your behalf for Wetland 4 located generally northwest of Combs Road and County Line Road in Indianapolis, Marion County, Indiana. A location map is enclosed. We have reviewed the submitted data relative to Section 404 of the Clean Water Act.

The U.S. Army Corps of Engineers exercises regulatory authority under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344) for certain activities in "waters of the United States (U.S.)." These waters include all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce.

The reported Wetland 4 is not considered to be a "water of the U.S." and is not regulated under Section 404 of the Clean Water Act. However, this determination does not relieve you of the responsibility to comply with applicable State law. We urge you to contact the Indiana Department of Environmental Management (IDEM), Office of Water Quality at wetlandsprogram@idem.in.gov to determine the applicability of State law to the wetlands mentioned above and verification of the wetland boundaries.

This letter contains an approved jurisdictional determination (JD) for your site. If you object to this JD, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this JD you must submit a completed RFA form to the Lakes and Rivers Division Office at the address on the enclosed NAP RFA form.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **December 24, 2023**.

This jurisdictional determination is valid for a period of 5 years from the date of this letter unless new information warrants revision of the determination before the expiration date. It is not necessary to submit an RFA form to the Division office if you do not object to the JD in this letter.

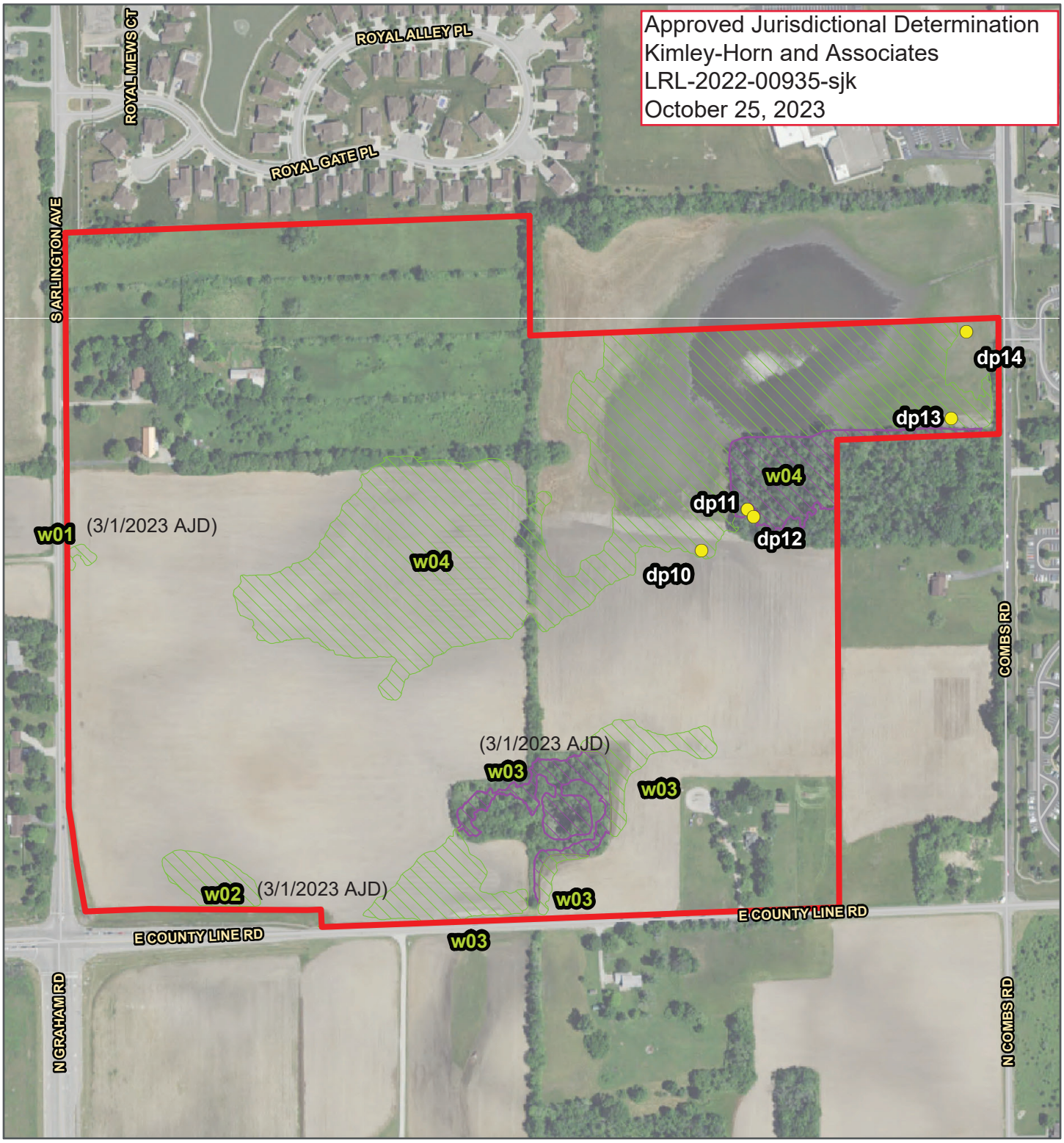
The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center prior to starting work.

If we can be of any further assistance, please contact me by calling 317-543-9424 or emailing Sarah.J.Keller@usace.army.mil. Any correspondence on this matter should reference our Identification Number LRL-2022-00935-sjk.

Sincerely,

Sarah J. Keller
Team Leader
Indianapolis Regulatory Office

Enclosures
Copy Furnished: IDEM (Wrin)
Stantec (Harvey)



N
W E
S

7.5' Quadrangle:
BEACH GROVE
T14n R4e Sec23
Project No.
j193137m36

Figure 5: Delinated Features

NEC of County Line Rd and Arlington Rd
Regulated Waters Delineation Report
Kimley-Horn and Associates, Inc.
Marion County, Indiana

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now
Stantec
3901 Industrial Blvd.,Indianapolis, IN 46254
Phone (+1) 317-388-1982 Fax (+1) 317-388-1986
www.cardno.com

Date: 6/15/2022
Basemap:

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Saved By: ben.harvey

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: GP-CM County Line Partners LLC	File Number: LRL-2022-935	Date: 10/25/2023
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL WITHOUT PREJUDICE	C
	PERMIT DENIAL WITH PREJUDICE	D
X	APPROVED JURISDICTIONAL DETERMINATION	E
	PRELIMINARY JURISDICTIONAL DETERMINATION	F

SECTION I

The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/appeals/ or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C. PERMIT DENIAL WITHOUT PREJUDICE: Not appealable
You received a permit denial without prejudice because a required Federal, state, and/or local authorization and/or certification has been denied for activities which also require a Department of the Army permit before final action has been taken on the Army permit application. The permit denial without prejudice is not appealable. There is no prejudice to the right of the applicant to reinstate processing of the Army permit application if subsequent approval is received from the appropriate Federal, state, and/or local agency on a previously denied authorization and/or certification.

D: PERMIT DENIAL WITH PREJUDICE: You may appeal the permit denial
You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information for reconsideration

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety and waive all rights to appeal the approved JD.

- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

- RECONSIDERATION: You may request that the district engineer reconsider the approved JD by submitting new information or data to the district engineer within 60 days of the date of this notice. The district will determine whether the information submitted qualifies as new information or data that justifies reconsideration of the approved JD. A reconsideration request does not initiate the appeal process. You may submit a request for appeal to the division engineer to preserve your appeal rights while the district is determining whether the submitted information qualifies for a reconsideration.

F: PRELIMINARY JURISDICTIONAL DETERMINATION: Not appealable
You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also, you may provide new information for further consideration by the Corps to reevaluate the JD.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision you may contact:
Sarah Keller
U.S. Army Corps of Engineers—Louisville District
Indianapolis Regulatory Office
8902 Otis Avenue, S106B
Indianapolis, IN 46216
(317) 543-9424
Email: Sarah.J.Keller@usace.army.mil

If you have questions regarding the appeal process, or to submit your request for appeal, you may contact:
Katherine A. McCafferty
Regulatory Administrative Appeals Officer
U.S. Army Corps of Engineers,
Great Lakes and Ohio River Division
550 Main Street, Room 10780
Cincinnati, Ohio 45202-3222
Office Phone: 513-684-2699, FAX: 513-684-2460
e-mail: katherine.a.mccafferty@usace.army.mil

SECTION II – REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. Use additional pages as necessary. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:
Email address of appellant and/or agent:	Telephone number:

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, LOUISVILLE DISTRICT
INDIANAPOLIS REGULATORY OFFICE
8902 OTIS AVENUE, SUITE S106B
INDIANAPOLIS, IN 46216

CELRL-RDN 25 OCT 2023

MEMORANDUM FOR RECORD

SUBJECT: US Army Corps of Engineers (Corps) Pre-2015 Regulatory Regime Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023) ,[1] LRL-2022-00935 (MFR 1 of 1)[2]

BACKGROUND. An Approved Jurisdictional Determination (AJD) is a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. AJDs are clearly designated appealable actions and will include a basis of JD with the document.[3] AJDs are case-specific and are typically made in response to a request. AJDs are valid for a period of five years unless new information warrants revision of the determination before the expiration date or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.[4] For the purposes of this AJD, we have relied on section 10 of the Rivers and Harbors Act of 1899 (RHA),[5] the Clean Water Act (CWA) implementing regulations published by the Department of the Army in 1986 and amended in 1993 (references 2.a. and 2.b. respectively), the 2008 *Rapanos-Carabell* guidance (reference 2.c.), and other applicable guidance, relevant case law and longstanding practice, (collectively the pre-2015 regulatory regime), and the *Sackett* decision (reference 2.d.) in evaluating jurisdiction.

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. The features addressed in this AJD were evaluated consistent with the definition of “waters of the United States” found in the pre-2015 regulatory regime and consistent with the Supreme Court's decision in *Sackett*. This

[1] While the Supreme Court’s decision in *Sackett* had no effect on some categories of waters covered under the CWA, and no effect on any waters covered under RHA, all categories are included in this Memorandum for Record for efficiency.
[2] When documenting aquatic resources within the review area that are jurisdictional under the Clean Water Act (CWA), use an additional MFR and group the aquatic resources on each MFR based on the TNW, interstate water, or territorial seas that they are connected to. Be sure to provide an identifier to indicate when there are multiple MFRs associated with a single AJD request (i.e., number them 1, 2, 3, etc.).
[3] 33 CFR 331.2.
[4] Regulatory Guidance Letter 05-02.
[5] USACE has authority under both Section 9 and Section 10 of the Rivers and Harbors Act of 1899 but for convenience, in this MFR, jurisdiction under RHA will be referred to as Section 10.

AJD did not rely on the 2023 "Revised Definition of 'Waters of the United States,'" as amended on 8 September 2023 (Amended 2023 Rule) because, as of the date of this decision, the Amended 2023 Rule is not applicable in this state due to litigation.

1. SUMMARY OF CONCLUSIONS.

    a. Provide a list of each individual feature within the review area and the jurisdictional status of each one (i.e., identify whether each feature is/is not a water of the United States and/or a navigable water of the United States).

        i. Wetland 4 (21.18 acres), non-jurisdictional (not a waters of the U.S. and not a navigable waters of the U.S.)

2. REFERENCES.

    a. Final Rule for Regulatory Programs of the Corps of Engineers, 51 FR 41206 (November 13, 1986).

    b. Clean Water Act Regulatory Programs, 58 FR 45008 (August 25, 1993).

    c. U.S. EPA & U.S. Army Corps of Engineers, Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States* (December 2, 2008)

    d. *Sackett v. EPA*, 598 U.S. _, 143 S. Ct. 1322 (2023)

3. REVIEW AREA. 96 acres total (this request excludes the areas associated with the previous AJD issued for non-jurisdictional Wetlands 1, 2, and 3 on 3/1/2023); latitude 39.6396° and longitude -86.0597°; Indianapolis, Marion County, Indiana.

4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), INTERSTATE WATER, OR THE TERRITORIAL SEAS TO WHICH THE AQUATIC RESOURCE IS CONNECTED. East Fork White River via flow into watershed 05120204 to the east or White River via watershed 05120201 to the west (both are on the district Section 10 list).

5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, INTERSTATE WATER, OR THE TERRITORIAL SEAS. Wetland 4 has been historically manipulated to alleviate flooding, resulting in two potential flow routes through two watersheds (See Section 10 of this MFR for more information). The

eastern portion of the wetland flows through a culvert under Combs Road during high water events, into a city storm sewer system, that flows southeast into a series of two, non-jurisdictional, man-made stormwater ponds and then back into a pipe to Five Points Road, where the storm sewer outfalls into Grubbs Ditch southeast of the intersection of County Line Road and Five Points Road. The total flow path was determined to be approximately 0.82 miles between the wetland inlet at Combs Road and the outfall within Grubbs Ditch, the nearest potential tributary. Grubbs Ditch flows into Leatherwood Creek, Little Sugar Creek, Sugar Creek, Driftwood River, then East Fork White River (31straight-line miles between Wetland 4 and TNW).

The western portion of Wetland 4 historically flowed through a subsurface drainage tile that has been manipulated by INDOT during construction of the I-65/County Line Road interchange, allegedly resulting in reduced drainage of the general region (per statements from the tenant farmer). No evidence of subsurface drains were present within or near Wetland 4 during a Corps site inspection on 11/10/2022 or along the general mapped alignment of the alleged drainage tile per the MapIndy GIS site. The wetland would have to flow through unknown subsurface drainage tile to the west/southwest across Arlington Road and then south to County Line Road where it would need to enter a series of INDOT drainage structures to flow south into Pleasant Creek in Johnson County. The total flow distance based on available maps between Wetland 4 and Pleasant Creek (nearest potential tributary) would be approximately 1.38 miles. Pleasant Creek flows into Pleasant Run Creek, then White River where it becomes a Section 10 water at Daviess County (94 straight-line miles between Wetland 4 and TNW)).

6. SECTION 10 JURISDICTIONAL WATERS[6]: Describe aquatic resources or other features within the review area determined to be jurisdictional in accordance with Section 10 of the Rivers and Harbors Act of 1899. Include the size of each aquatic resource or other feature within the review area and how it was determined to be jurisdictional in accordance with Section 10.[7] N/A

7. SECTION 404 JURISDICTIONAL WATERS: Describe the aquatic resources within the review area that were found to meet the definition of waters of the United States

[6] 33 CFR 329.9(a) A waterbody which was navigable in its natural or improved state, or which was susceptible of reasonable improvement (as discussed in § 329.8(b) of this part) retains its character as "navigable in law" even though it is not presently used for commerce, or is presently incapable of such use because of changed conditions or the presence of obstructions.

[7] This MFR is not to be used to make a report of findings to support a determination that the water is a navigable water of the United States. The district must follow the procedures outlined in 33 CFR part 329.14 to make a determination that water is a navigable water of the United States subject to Section 10 of the RHA.

in accordance with the pre-2015 regulatory regime and consistent with the Supreme Court's decision in *Sackett*. List each aquatic resource separately, by name, consistent with the naming convention used in section 1, above. Include a rationale for each aquatic resource, supporting that the aquatic resource meets the relevant category of "waters of the United States" in the pre-2015 regulatory regime. The rationale should also include a written description of, or reference to a map in the administrative record that shows, the lateral limits of jurisdiction for each aquatic resource, including how that limit was determined, and incorporate relevant references used. Include the size of each aquatic resource in acres or linear feet and attach and reference related figures as needed.

a. TNWs (a)(1): N/A

b. Interstate Waters (a)(2): N/A

c. Other Waters (a)(3): N/A

d. Impoundments (a)(4): N/A

e. Tributaries (a)(5): N/A

f. The territorial seas (a)(6): N/A

g. Adjacent wetlands (a)(7): N/A

8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

a. Describe aquatic resources and other features within the review area identified as "generally non-jurisdictional" in the preamble to the 1986 regulations (referred to as "preamble waters").[8] Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA as a preamble water. N/A

b. Describe aquatic resources and features within the review area identified as "generally not jurisdictional" in the *Rapanos* guidance. Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA based on the criteria listed in the guidance. N/A

[8] 51 FR 41217, November 13, 1986.

c. Describe aquatic resources and features identified within the review area as waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA. Include the size of the waste treatment system within the review area and describe how it was determined to be a waste treatment system. N/A

d. Describe aquatic resources and features within the review area determined to be prior converted cropland in accordance with the 1993 regulations (reference 2.b.). Include the size of the aquatic resource or feature within the review area and describe how it was determined to be prior converted cropland. N/A

e. Describe aquatic resources (i.e. lakes and ponds) within the review area, which do not have a nexus to interstate or foreign commerce, and prior to the January 2001 Supreme Court decision in "*SWANCC*," would have been jurisdictional based solely on the "Migratory Bird Rule." Include the size of the aquatic resource or feature, and how it was determined to be an "isolated water" in accordance with *SWANCC*. N/A

f. Describe aquatic resources and features within the review area that were determined to be non-jurisdictional because they do not meet one or more categories of waters of the United States under the pre-2015 regulatory regime consistent with the Supreme Court's decision in *Sackett* (e.g., tributaries that are non-relatively permanent waters; non-tidal wetlands that do not have a continuous surface connection to a jurisdictional water).

   Wetland 4 does not have a continuous surface connection to a jurisdictional water and is more than 0.82 miles from the nearest potential tributary. See Section 10 of this MFR for more information.

9. DATA SOURCES. List sources of data/information used in making determination. Include titles and dates of sources used and ensure that information referenced is available in the administrative record.

a. Corps field inspections and associated site photos: 8/14/2018 (associated with LRL-2018-00726); 11/10/2022.
b. "Regulated Waters Delineation Report" dated June 2022 by Cardno/Stantec, including the following data/maps used to support this determination: USACE APT for 5/12/2022; USGS Topo, 7.5' Beech Grove, IN quad (Accessed 5/25/2022); NWI and HUC14 map (accessed 6/3/2022); FEMA DFIRM (accessed 5/25/2023); USDA-NRCS Web Soil Survey, Marion County (accessed 5/25/2023); 5/12/2022 site photos.

c. Approved Jurisdictional Determination dated 3/1/2023 for Wetlands 1, 2, and 3 and associated supporting information.

d. LiDAR (Hillshade, DEM), Section 10 waters, watershed boundary (National Regulatory Viewer, accessed 11/1/2022, 9/26/2023).

e. 1937, 1956, 1993, 1997, 1999, 2008, 2010, 2016, 2017, 2018 aerials with city storm sewer and legal drains layers and measurements to nearest potential tributaries (MapIndy).

f. June 2019 Google Streetview from Combs Road.

10. OTHER SUPPORTING INFORMATION. Wetland 4 appears in aerial photos dating back to 1937 and has been a persistent feature than experiences regular, seasonal inundation. Historically, the wetland may have flowed through a mapped subsurface drainage tile to the southwest ("Peggs Drain" as labeled on MapIndy GIS), but the presence of any subsurface drain could not be confirmed through either the 5/12/2022 delineation inspection completed by Cardno/Stantec or the Corps' site inspection on 11/10/2022. Additionally, the tenant farmer stated in 2018 that regional drainage was adversely impacted in the 1980s after INDOT constructed the County Line interchange with I-65, which made flooding worse. Off-site, subsurface flow from Wetland 4 to the west could not be verified during site inspections, and no evidence of surface flow was observed. Any potential subsurface flow path would require flow through a series of tiles, INDOT culverts, and roadside ditches to reach Pleasant Creek to the south more than 1.3 miles away from Wetland 4.
In 2017, a swale was constructed to attempt to artificially drain Wetland 4 into a culvert under Combs Road to the east (into a different 8-digit HUC watershed) to alleviate flooding. Based on Corps site inspections on 8/14/2018 and 11/10/2022, water appears to enter the culvert only during extreme flooding events. Based on available maps from the MapIndy GIS system, the culvert drains into a city storm sewer system that flows through two non-jurisdictional, man-made stormwater ponds within a residential development, back into a storm sewer pipe, and eventually outfalls 0.82-mile to the east into Grubbs Drain, the nearest potential tributary. Therefore, there is no evidence that Wetland 4 possesses a "continuous surface connection" to a jurisdictional, relatively permanent body of water connected to traditional navigable waters.

11. NOTE: The structure and format of this MFR were developed in coordination with the EPA and Department of the Army. The MFR's structure and format may be subject to future modification or may be rescinded as needed to implement additional guidance from the agencies; however, the approved jurisdictional determination described herein is a final agency action.

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, LOUISVILLE DISTRICT
INDIANAPOLIS REGULATORY OFFICE
8902 OTIS AVENUE, SUITE S106B
INDIANAPOLIS, IN 46216

March 1, 2023

Regulatory Division
North Branch
ID No. LRL-2022-935-sjk

Mr. Benjamin Harvey
Cardno
3901 Industrial Boulevard
Indianapolis, Indiana 46254

Dear Mr. Harvey:

This is regarding your electronic correspondence dated October 17, 2022, requesting a jurisdictional determination on behalf of Kimley-Horn and Associates for certain resources identified on a 96-acre site located northeast of the intersection of County Line Road and Arlington Road in Indianapolis, Marion County, Indiana. A location map is enclosed. We have reviewed the submitted data relative to Section 404 of the Clean Water Act.

The U.S. Army Corps of Engineers exercises regulatory authority under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344) for certain activities in "waters of the United States (U.S.)." These waters include all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce.

The reported isolated Wetlands 1, 2, and 3 do not appear to be used or be susceptible to use in interstate or foreign commerce. As such, the wetlands are not considered to be "waters of the U.S." and are not regulated under Section 404 of the Clean Water Act. However, this determination does not relieve you of the responsibility to comply with applicable State law. We urge you to contact the Indiana Department of Environmental Management (IDEM), Office of Water Quality at wetlandsprogram@idem.in.gov to determine the applicability of State law to the isolated wetlands mentioned above and verification of the wetland boundaries.

This letter contains an approved jurisdictional determination (JD) for your site. If you object to this JD, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this JD you must submit a completed RFA form to the Lakes and Rivers Division Office at the following address:

US Army Corps of Engineers
Attn: Appeal Review Officer, CELRD-PD-REG
550 Main Street, Room 10780
Cincinnati, OH 45202-3222

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by **May 1, 2023**.

This jurisdictional determination is valid for a period of 5 years from the date of this letter unless new information warrants revision of the determination before the expiration date. It is not necessary to submit an RFA form to the Division office if you do not object to the JD in this letter.

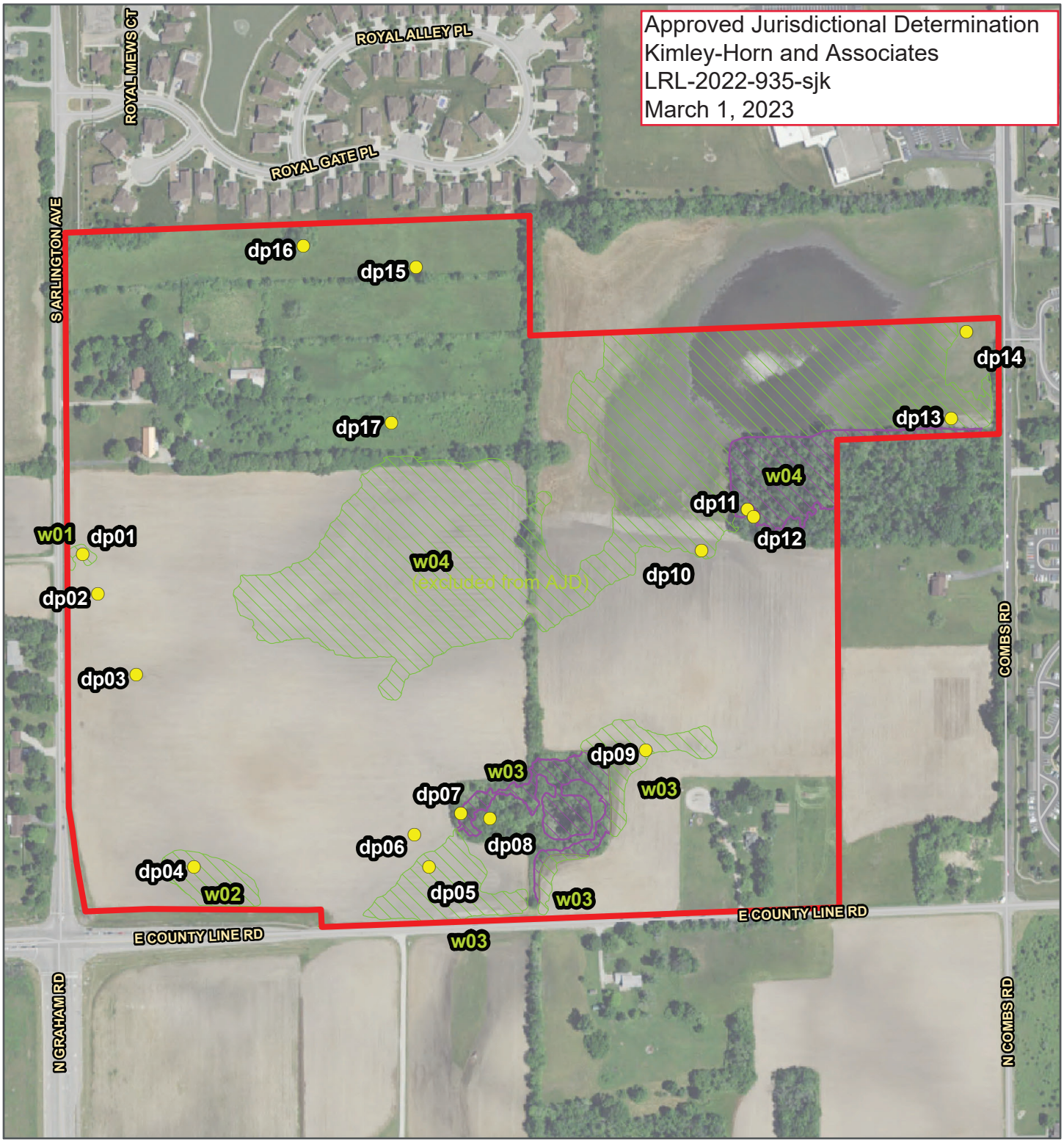
The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center prior to starting work.

If we can be of any further assistance, please contact me by calling 317-543-9424 or emailing Sarah.J.Keller@usace.army.mil. Any correspondence on this matter should reference our Identification Number LRL-2022-935-sjk.

Sincerely,

Sarah J. Keller
Team Leader
Indianapolis Regulatory Office

Enclosures
Copy Furnished: IDEM (Wrin, Randolph)



N
W
E
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7.5' Quadrangle:
BEACH GROVE
T14n R4e Sec23
Project No.
j193137m36

Figure 5: Delinated Features

NEC of County Line Rd and Arlington Rd
Regulated Waters Delineation Report
Kimley-Horn and Associates, Inc.
Marion County, Indiana

Cardno
now
Stantec
3901 Industrial Blvd.,Indianapolis, IN 46254
Phone (+1) 317-388-1982 Fax (+1) 317-388-1986
www.cardno.com

Date: 6/15/2022
Basemap:

File Path: R:\Projects\19\193\193137M_KimleyHorn_Master\36_Arlington&CoLineRd\GIS\MXD\Delineation\F5_DelinatedFeatures.mxd

Saved By: ben.harvey

892011

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Kimley-Horn and Associates	File Number: LRL-2022-935	Date: 3/1/2023
Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/CECW/Pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:

Sarah Keller
U.S. Army Corps of Engineers—Louisville District
Indianapolis Regulatory Office
8902 Otis Avenue, S106B
Indianapolis, IN 46216
(317) 543-9424
Email: Sarah.J.Keller@usace.army.mil

If you only have questions regarding the appeal process you may also contact:

Katherine A. McCafferty
Regulatory Administrative Appeals Officer
U.S. Army Corps of Engineers,
Great Lakes and Ohio River Division
550 Main Street, Room 10780
Cincinnati, Ohio 45202-3222
Office Phone: 513-684-2699, FAX: 513-684-2460
e-mail: katherine.a.mccafferty@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number:

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 3/1/2023

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: LRL-2022-935-sjk

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State:IN County/parish/borough: Marion City: Indianapolis
Center coordinates of site (lat/long in degree decimal format): Lat. 39.6396° **N**, Long. -86.0597° **W**.
Universal Transverse Mercator:
Name of nearest waterbody: Pleasant Run Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A
Name of watershed or Hydrologic Unit Code (HUC): 05120201
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: 11/2/2022
☒ Field Determination. Date(s): 11/10/2022

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: linear feet: width (ft) and/or acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Pick List**
      Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain: **The reported Wetlands 1 (0.08 ac), 2 (0.69 ac), and 3 (3.69 ac) are located in isolated depressions with no hydrologic or ecologic connection to Waters of the U.S. and are not susceptible to use in interstate or foreign commerce. As such, they are not WOUS**.

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW
Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:
Watershed size: **Pick List**
Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: .
Tributary stream order, if known: .

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):

☐ Silts	☐ Sands	☐ Concrete
☐ Cobbles	☐ Gravel	☐ Muck
☐ Bedrock	☐ Vegetation. Type/% cover:	
☐ Other. Explain: .		

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: .
Other information on duration and volume: .

Surface flow is: **Pick List.** Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by:	☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects	☐ survey to available datum;
☐ fine shell or debris deposits (foreshore)	☐ physical markings;
☐ physical markings/characteristics	☐ vegetation lines/changes in vegetation types.
☐ tidal gauges	
☐ other (list):	

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .
Identify specific pollutants, if known: .

[6]A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.
[7]Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width): .
- ☐ Wetland fringe. Characteristics: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain: .

Wetland quality. Explain: .

Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain: .

Surface flow is**: Pick List**

Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

- ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

- ☐ Directly abutting
- ☐ Not directly abutting
  - ☐ Discrete wetland hydrologic connection. Explain: .
  - ☐ Ecological connection. Explain: .
  - ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List.**

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: .

Identify specific pollutants, if known: .

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian buffer. Characteristics (type, average width): .
- ☐ Vegetation type/percent cover. Explain: .
- ☐ Habitat for:
  - ☐ Federally Listed species. Explain findings: .
  - ☐ Fish/spawn areas. Explain findings: .
  - ☐ Other environmentally-sensitive species. Explain findings: .
  - ☐ Aquatic/wildlife diversity. Explain findings: .

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**
   - ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
   - ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

---

[8] See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☒ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☒ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☒ Wetlands: 4.46 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Wetland delineation report dated June 2022 by Cardno.
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name:7.5' Beech Grove quad (delineation report) .
☒ USDA Natural Resources Conservation Service Soil Survey. Citation:Web Soil Survey, Marion County (delineation report).
☒ National wetlands inventory map(s). Cite name: map in delineation report.
☐ State/Local wetland inventory map(s): .
☒ FEMA/FIRM maps: panel 18081C0039E eff date 1/29/2021 and Panel 18097C0264F eff date 4/19/2016 (delineation report) .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): undated aerial in delineation report; 3/29/2016, 6/18/2016, 8/25/2017, 9/5/2017, 5/10/2018, 5/11/2018,11/19/2021, 9/15/2022 (DigitalGlobe); 1937, 1941, 1956, 1972, 1978, 1979, 1986, 1993, 1995, 1997, 1999, 2000, 2001, 2002, 2003, 2005, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017 (MapIndy); Google Streetview 2019 .
or ☒ Other (Name & Date): Site photos in delineation report (9/14/2022); USACE site photos (11/10/2022).
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify):LiDAR DEM/Hillshade (NRV); WETS data (dleineation report); Fall 2017 aerial with storm sewers and county regulated drains; Approved JD issued for western adjacent parcel, LRL-2022-181; administrative record for previous action on parcel to north, LRL-2018-726. .

B. ADDITIONAL COMMENTS TO SUPPORT JD: Wetland 1, 2 and 3 are located in depressions near or adjacent to road infrastructure that do not flow outside of their respective boundaries. A county regulated drain named "Peggs" is mapped south of the location of Wetland 3. A breather structure is present in the vicinity of dp03, and the USACE site inspection noted an inlet structure on the east side of Arlington Road across from dp03. However, Wetland 3 appears to be contained within its depresional area and would not enter the potential subsurface tile.

THIS IS NOT A PERMIT

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

DNR#: ER-25606

Request Received: May 8, 2023

Requestor:
Ben Blocher
Stantec
3901 Industrial Boulevard
Indianapolis, IN 46254

Project:
Development of a property for future warehouse and retail space, including the construction of parking space, sidewalks, and structure foundations, northwest of the Arlington Avenue and County Line Road intersection

County/Site Info: Marion County

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:
Formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project.

Natural Heritage Database:
The Natural Heritage Program's data have been checked. A Bald Eagle (*Haliaeetus leucocephalus*) nest has been documented within 0.5 miles of the project.

Fish and 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 area:

A) Heritage Species:
The documented Bald Eagle nest near the project area was destroyed by natural causes in 2021. No significant negative effects are expected.

B) Site Layout / Conservation Design:
No preliminary site layout was provided for review making it difficult to comment on how the proposed development will impact fish, wildlife, and botanical resources. There are a number of forested and wetland areas within the project limits that are likely important habitat sites in a rapidly developing urban area. It is understood that some of the forested and wetland areas will be preserved as green space and that a 10 acre area will be planted along the northern boundary of the property but none of those details were provided for review. The Division of Fish and Wildlife recommends that the developer further explore ways to minimize and avoid impacts using conservation design principles and practices. Conservation design is a design system that takes into account the natural landscape and ecology of a development site and facilitates development while

maintaining the most valuable natural features and functions of the site. Conservation design includes a collection of site design principles and practices that can be combined to create environmentally sound development. The main principles for conservation design are flexibility in site design and lot size, thoughtful protection and management of natural areas, reduction of impervious surface areas, and sustainable stormwater management. The following link is a good introduction to the concept of conservation design: https://www.cmap.illinois.gov/about/2040/supporting-materials/process-archive/strategy-papers/conservation-design/principles-and-practices

C) Existing Pond:
Submitted maps and aerial photos appear to show a pond in the northwest corner of the project area. Ponds can be important habitat features in urban areas. Avoiding impacts to the pond is recommended if possible. The Division of Fish and Wildlife has guidelines available for private pond management on our website: https://www.in.gov/dnr/fish-and-wildlife/fishing/private-pond-and-lake-management/.

D) Wetlands:
Several of the areas identified as wetlands often maintain surface water for extended periods. The forested areas around these wetlands provide an important refuge to wetland species in an otherwise urban landscape. Avoiding wetlands and nearby forested areas will significantly reduce impacts to wildlife. We recommend contacting and coordinating with the Indiana Department of Environmental Management (IDEM) 401 program (https://www.in.gov/idem/wetlands/2344.htm) and the US Army Corps of Engineers (USACE) 404 program (https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Obtain-a-Permit/) to discuss wetland issues. Impacts to wetlands should be mitigated at the appropriate ratio if required (see http://iac.iga.in.gov/iac/20200527-IR-312200284NRA.xml.pdf).

E) Urban Tree Removal:
The Division of Fish and Wildlife recommends avoiding removing urban trees to the greatest extent possible and replacing trees that must be removed. Urban trees are important to fish and wildlife resources in urban areas. Indiana's urban trees also provide millions of dollars of tangible benefits to Indiana communities by their presence in the urban environment. Their shade and beauty contribute to the quality of life. They provide significant increases in real estate values, create attractive settings for commercial businesses, and improve community neighborhood appeal. Trees decrease energy consumption by providing shade and acting as windbreaks. They reduce water treatment costs and impede soil erosion by slowing the runoff of stormwater. Trees also cool the air temperature, cleanse pollutants from the air, and produce oxygen while absorbing carbon dioxide. Trees are an integral component of the urban environment. Proactively managing and maintaining a street tree population will ultimately maximize the benefits afforded by their aesthetic and ecological functions. The following links give a good overview of the benefits of urban tree conservation and how to select the right species to avoid the negative impacts of non-native invasive species such as the common and popular Bradford pear: https://www.in.gov/dnr/forestry/forestry-publications-and-presentations/ (scroll down to the Community & Urban Forestry section).

F) Drainage and Stormwater Management:
The Division of Fish and Wildlife recommends considering a more sustainable approach to stormwater management. The traditional model of stormwater management aims to drain runoff as quickly as possible with the help of channels and pipes, which increases peak flows and costs of stormwater management. This type of solution only transfers drainage problems from one section of a basin to another. A more sustainable approach should aim to rebuild the natural water cycle by using storage techniques (retention basins, constructed wetlands, raingardens, etc.) and recharging groundwater using infiltration techniques (infiltration basins or trenches, pervious pavement, etc.). The following links give a good overview of traditional and sustainable stormwater management systems and their pros and cons for consideration during the design of the proposed project: https://www.epa.gov/greeningepa/epa-facility-stormwater-management; https://www.epa.gov/greeningepa/stormwater-management-practices-epa-facilities.

G) Landscaping:
Consider using native plants for any proposed on-site landscaping and revegetation. The following is a link to information on landscaping with native plants on the Indiana Native Plant Society (INPS) website: https://indiananativeplants.org/landscaping/.

H) LED Lighting:
Most developers are trending toward LED lighting. Certain types of LED lighting can have negative impacts on both human and wildlife health and safety. Scientific evidence suggests that artificial light at night has negative and deadly effects on many organisms including amphibians, birds, mammals, insects and plants (https://www.darksky.org/light-pollution/wildlife/). A June 2016 American Medical Association (AMA) report, "Human and Environmental Effects of Light Emitting Diode Community Lighting," concluded that "white LED street lighting patterns may contribute to the risk of chronic disease in the populations of cities in which they have been installed."

The International Dark-Sky Association has developed recommendations (https://www.darksky.org/our-work/lighting/lighting-for-citizens/led-guide/) for communities choosing LED lighting systems that will aid in the selection of lighting that is energy and cost efficient, yet ensures safety and security, protects wildlife, and promotes the goal of reducing light pollution:
- Always choose fully shielded fixtures that emit no light upward.
- Use "warm-white" or filtered LEDs (CCT < 3,000 K; S/P ratio < 1.2) to minimize harmful blue light emission.
- Look for products with adaptive controls like dimmers, timers, and motion sensors.
- Consider dimming or turning off lights during non-peak overnight hours.
- Avoid the temptation to over-light because of the higher luminous efficiency of LEDs.
- Only light the exact space and in the amount required for particular tasks.

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 that are not currently mowed and maintained with a mixture of grasses, sedges, and wildflowers native to Central Indiana 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 currently mowed areas only. A native herbaceous seed mixture must include at least 5 species of grasses and sedges and 5 species of wildflowers.
2. Minimize and contain within the project limits all tree and brush clearing.
3. Do not cut any trees suitable for Indiana Bat or Northern Long-eared Bat roosting (3 inches or greater diameter-at-breast height, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
4. 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.
5. 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.
6. Plant five trees, 1 inch to 2 inches in diameter-at-breast height, for each tree which is removed that is 10 inches or greater in diameter-at-breast height.
7. Do not excavate or place fill in any riparian wetland.

Contact Staff:
Our agency appreciates this opportunity to be of service. Please contact me at mbuffington@dnr.in.gov or (317) 233-4666 if we can be of further assistance.

Matt Buffington

Date: June 5, 2023

Matt Buffington
Environmental Unit Supervisor
Division of Fish and Wildlife

Regulated Waters Delineation Report

Northeast Parcel of County Line and Arlington, Indianapolis, Marion County, Indiana

June 2022

Cardno

now

Stantec

Document Information

Prepared for	Kimley-Horn and Associates
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Appendices

Acronyms

APA	Administrative Procedure Act
BF	Bank Full
CFR	Code of Federal Regulations
CWA	Clean Water Act
DBH	Diameter at Breast Height
DNP	Division of Nature Preserves
DP	Data Point
EPA	U.S. Environmental Protection Agency
EPH	Ephemeral (Stream Type)
ETR	Endangered, Threatened, and Rare
FAC	Facultative Plant
FACU	Facultative Upland Plant
FACW	Facultative Wetland Plant
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GIS	Geographical Information System
HHEI	Headwater Habitat Evaluation Index
IC	Indiana Code

Acronyms (continued)

IDEM	Indiana Department of Environmental Management
IDNR	Indiana Department of Natural Resources
INT	Intermittent (Stream Type)
MS4	Municipal Separate Storm Water Sewer Systems
NHD	National Hydrography Dataset
NRCS	U.S. Department of Agriculture Natural Resources Conservation Service
NWI	National Wetland Inventory
NWP	Nationwide Permit
NWPL	National Wetland Plant List
OBL	Obligate Wetland Plant
OHWM	Ordinary High Water Mark
PEM	Palustrine Emergent Wetland
PER	Perennial (Stream Type)
PFO	Palustrine Forested Wetland
PSS	Palustrine Shrub Scrub Wetland
PUB	Palustrine Unconsolidated Bottom
RGP	Regional General Permit
SNE	Significant Nexus
SWANCC	Solid Waste Agency of Northern Cook County
TNW	Traditional Navigable Water
TOB	Top of Bank
UPL	Upland Plant
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WOTUS	Waters of the United States
WQC	Water Quality Certification

1 Introduction

Cardno now Stantec (Cardno) was contracted to perform a regulated waters delineation, including wetlands and streams, which are located at the Northeast Parcel of County Line and Arlington Study Area in Section 23, Township 14 North, Range 4 East, in Marion County, Indiana (Figure 1, Appendix A). Field work was performed on May 12, 2022. The total size of the Study Area was approximately 95.7 acres. The Study Area was an agricultural and prairie field. Four wetlands were identified within the Study Area.

This report identifies the jurisdictional status of the Study Area based on Cardno's best professional understanding and interpretation of the Corps of Engineers' Wetland Delineation Manual (Environmental Laboratory, 1987) and U.S. Army Corps of Engineers' (USACE) guidance documents and regulations. Jurisdictional determinations for other "waters of the U.S." were made based on definitions and guidance found in 33 CFR 328.3, USACE Regulatory Guidance Letters, and the wetland delineation manual. The USACE administers Section 404 of the Clean Water Act (CWA), which regulates the discharge of fill or dredged material into all "waters of the U.S.," and is the regulatory authority that must make the final determination as to the jurisdictional status of the Study Area.

2 Regulatory Definitions

2.1 Wetlands

Wetlands are a category of "waters of the U.S." for which a specific identification methodology has been developed. As described in detail in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987), wetland boundaries are delineated using three criteria: hydrophytic vegetation, hydric soils, and wetland hydrology. In addition to the criteria defined in the 1987 Manual, the procedures described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (Environmental Laboratory, 2010) were used to evaluate the Study Area for the presence of wetlands.

2.1.1 Hydrophytic Vegetation

On June 1, 2012, the National Wetland Plant List (NWPL), formerly called the National List of Plant Species that Occur in Wetlands (Reed 1988), went into effect after being released by the U.S. Army Corps of Engineers (USACE) as part of an interagency effort with the U.S. Fish and Wildlife Service (USFWS), the U.S. EPA, and the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) (Lichvar and Kartesz, 2009). This list is periodically updated, with the most recently published list dated 2018. The NWPL, along with the information implied by its wetland plant species status ratings, provides general botanical information about wetland plants and is used extensively in wetland delineation, restoration, and mitigation efforts. The NWPL consists of a comprehensive list of wetland plant species that occur within the United States along with their respective wetland indicator statuses by region. An indicator status reflects the likelihood that a particular plant species occurs in a wetland or upland (Lichvar et al. 2012). Definitions of the five indicator categories are presented below.

OBL (Obligate Wetland Plants): almost always occur in wetlands. With few exceptions, these plants (herbaceous or woody) are found in standing water or seasonally saturated soils (14 or more consecutive days) near the surface. These plants are of four types: submerged, floating, floating-leaved, and emergent.

FACW (Facultative Wetland Plants): usually occur in wetlands, but may occur in non-wetlands. These plants predominately occur with hydric soils, often in geomorphic settings where water saturates the soils or floods the soil surface at least seasonally.

FAC (Facultative Plants): occur in wetlands and non-wetlands. These plants can grow in hydric, mesic, or xeric habitats. The occurrence of these plants in different habitats represents responses to a variety of environmental variables other than just hydrology, such as shade tolerance, soil pH, and elevation, and they have a wide tolerance of soil moisture conditions.

FACU (Facultative Upland Plants): usually occur in non-wetlands, but may occur in wetlands. These plants predominately occur on drier or more mesic sites in geomorphic settings where water rarely saturates the soils or floods the soil surface seasonally.

UPL (Upland Plants)*:* almost never occur in wetlands. These plants occupy mesic to xeric non-wetland habitats. They almost never occur in standing water or saturated soils. Typical growth forms include herbaceous, shrubs, woody vines, and trees.

According to the USACE's Midwest Regional Supplement, plants that are rated as FAC, FACW, or OBL are classified as wetland plant species. The percentage of dominant wetland species in each of the four vegetation strata (tree, shrub/sapling, herbaceous, and woody vine) in the sample area determines the hydrophytic (wetland) status of the plant community. Dominant species are chosen independently from each stratum of the community. In general, dominants are the most abundant species that individually or collectively account for more than 50 percent of the total coverage of vegetation in the stratum, plus any other species that, by itself, accounts for at least 20 percent of the total.

For the purposes of determining dominant plant species, the four vegetation strata are defined. Trees consist of woody species 3 inches or greater in diameter at breast height (DBH). Shrubs and saplings are woody species that are over 1 meter in height and less than 3 inches DBH. Herbaceous species consist of all herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 1 meter tall. Woody vines consist of vine species greater than 1 meter in height, such as wild grapes.

2.1.2 Hydric Soils

Hydric soils are defined as soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. In general, hydric soils are flooded, ponded, or saturated for a week or more during the growing season when soil temperatures are above 32 degrees Fahrenheit. The anaerobic conditions created by repeated or prolonged saturation or flooding result in permanent changes in soil color and chemistry, which are used to differentiate hydric from non-hydric soils.

In this report, soil colors are described using the Munsell notation system. This method of describing soil color consists of separate notations for hue, value, and chroma that are combined in that order to form the color designation. The hue notation of a color indicates its relation to red, yellow, green, blue, and purple; the value notation indicates its lightness, and the chroma notation indicates its strength or departure from a neutral of the same lightness.

The symbol for hue consists of a number from 1 to 10, followed by the letter abbreviation of the color. Within each letter range, the hue becomes more yellow and less red as the numbers increase. The notation for value consists of numbers from 0 for absolute black, to 10 for absolute white. The notation for chroma consists of numbers beginning with /0 for neutral grays and increasing at equal intervals. A soil described as 10YR 3/1 soil is more gray than a soil designated 10YR 3/6.

2.1.3 Wetland Hydrology

Wetland hydrology is defined as the presence of water for a significant period of time at or near the surface (within the root zone) during the growing season. Wetland hydrology is present only seasonally in many cases, and is often inferred by indirect evidence. Hydrology is controlled by such factors as seasonal and long-term rainfall patterns, local geology and topography, soil type, local water table conditions, and drainage. Primary indicators of hydrology are inundation, soil saturation in the upper 12 inches of the soil, watermarks, sediment deposits, and drainage patterns. Secondary indicators such as oxidized root channels in the upper 12 inches of the soil, water-stained leaves, local soil survey data, and the FAC-neutral vegetation test are sometimes used to identify hydrology. A primary indicator or two or more secondary indicators are required to establish a positive indication of hydrology.

2.1.4 **Wetland Definition Summary**

In general, an area must meet all three criteria to be classified as a wetland. In certain problem areas such as seasonal wetlands, which are not wet at all times, or in recently disturbed (atypical) situations, areas may be considered a wetland if only two criteria are met. In special situations, an area that meets the wetland definition may not be within the USACE's jurisdiction due to a specific regulatory exemption.

2.2 Streams, Rivers, Watercourses & Jurisdictional Ditches

With non-tidal waters, in the absence of adjacent wetlands, the extent of the USACE's jurisdiction is defined by the OHWM. USACE regulations define the term "ordinary high water mark" for purposes of the CWA lateral jurisdiction at 33 CFR 328.3(e), which states:

> The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Waterways were classified by the following flow regimes:

- Perennial streams have a well-defined channel and typically have water flowing in them year-round. Most of the water comes from smaller upstream waters or groundwater while runoff from rainfall or other precipitation is supplemental. A perennial stream exhibits the typical biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water.
- Intermittent streams have a well-defined channel and flow during certain times of the year when smaller upstream waters are flowing and when groundwater provides enough water for stream flow. Runoff from rainfall or other precipitation supplements the flow of seasonal stream. During dry periods, seasonal streams may not have flowing surface water. An intermittent stream often lacks the biological and hydrological characteristics commonly associated with the conveyance of water.
- Ephemeral streams may or may not have a well-defined channel and flow only during and for a short duration after precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Runoff from rainfall is the primary source of water for these streams. An ephemeral stream typically lacks the biological, hydrological, and physical characteristics commonly associated with the continuous or intermittent conveyance of water

Streams, rivers, watercourses, and ditches within the Study Area were evaluated using the above definitions and documented. Waterways that did exhibit an OHWM were recorded and evaluated using the Ohio EPA's Primary Headwater Habitat Evaluation Index (HHEI) or Qualitative Habitat Evaluation Index (QHEI) methodology. A combination of the HHEI, climate data, stream basin analysis, and the field conditions were utilized to determine the stream flow type. If applicable, the results of the stream assessments are presented in section 4.2. and the summary table; the datasheets are provided in Appendix D.

3 Background Information

3.1 Existing Maps

Several sources of information were consulted to identify potential wetlands and wetland soil units within the Study Area. These include the USFWS's *National Wetland Inventory* (NWI), the USGS's *National Hydrography Dataset* (NHD), and the NRCS *Soil Survey* for this county. These maps identify potential wetlands and wetland soil units within the Study Area. The NHD maps are used to identify low-lying areas, historical waterways, drainage patterns, and potential surface waters. The NHD maps are not field verified, and do not always account for human alteration such as ditching and tiling. The NWI maps were prepared from high altitude photography and in most cases were not field checked. Because of this, wetlands are sometimes erroneously identified, missed, or misidentified. Additionally, the criteria used in identifying these wetlands were different from those currently used by the USACE. The county soil maps, on the other hand, were developed from actual field investigations. However, they address only one of the three required wetland criteria and may reflect historical conditions rather than current site conditions. The resolution of the soil maps limits their accuracy as well. The mapping units are often generalized based on topography and many mapping units contain inclusions of other soil types for up to 15 percent of the area of the unit. The USACE does not accept the use of either of these maps to make wetland determinations. Additional data sources utilized to support analysis of streams and wetlands included the National Flood Hazard Layer, compiled by the Federal Emergency Management Agency (FEMA) and StreamStats, a spatial analysis tool provided by USGS.

3.1.1 National Wetland Inventory

The NWI map of the area (Figure 2) identified one wetland complex within the Study Area. The wetland was identified as a palustrine unconsolidated bottom wetland.

3.1.2 National Flood Hazard Layer

The FEMA floodplain digital mapping of the area (Figure 3) identified no areas of flood hazard within the Study Area.

3.1.3 Stream Stats Basin Analysis

No streams were identified within the Study (Figure 3).

3.1.4 National Hydrography Dataset

The NHD map of the area (Figure 4) identified four NHD Flowlines within the Study Area.

3.1.5 Soil Survey

The NRCS Soil Survey of Marion County identified 6 soil series within the Study Area (Figure 4). The following table identifies the soil unit symbol, soil unit name, and whether or not the soil type contains components that meet the hydric soil criteria.

Table 3-1 Soil Types Within the Northeast Parcel of County Line and Arlington Study Area

Symbol	Description	Hydric
CrA	Crosby silt loam, fine-loamy subsoil,0 to 2 percent slopes	No
MmB2	Miami silt loam, 2 to 6 percent slopes, eroded	No
ThrA	Treaty silty clay loam, 0 to 1 percent slopes	Yes
YbvA	Brookston silty clay loam- Urban land complex, 0 to 2 percent slopes	Yes
YclA	Crosby silt loam, fine-loamy subsoil- Urban land complex, 0 to 2 percent slopes	No
YcmB2	Crosby-Urban land-Miami silt loams complex, 2 to 4 percent slopes, eroded	No

3.2 Climate Data

A “typical year” considers the normal periodic range of precipitation and other climactic variables for that waterbody. Factors utilized in determining if conditions meet the definition of “typical year” includes comparing precipitation, drought and other climatic factors from a period of interest (e.g., from the past season or year) with the normal range of those factors that would be expected, based on the past 30 years of data. The data below provides information on drought conditions at the time of the field survey and antecedent precipitation.

The May 10, 2022 US Drought Monitor map for Indiana indicated that the Study Area was not exhibiting drought conditions during the May 12, 2022 field survey (US Drought Monitor 2022).

The USACE’s Antecedent Precipitation Tool (version 1.0.19) compiles information from weather stations within 30 miles of the Study Area to determine if conditions were dry, normal, or wet using antecedent precipitation conditions

Table 3-2 Calculation of Normal Weather Conditions (WET)

30 Days Ending	<30%	>30%	Actual	Condition	Condition Value	Month Weight Value	Condition Value X Month Weight
2022-05-12	2.90”	5.20”	4.43”	Normal	2	3	6
2022-04-12	3.15”	4.23”	3.85”	Normal	2	2	4
2022-03-13	2.27”	3.49”	4.78”	Wet	3	1	3
						***Sum:**	**13**

*6 to 9: drier than normal
10 to 14: normal
15 to 18: wetter than normal

condition values:
(1) Dry
(2) Normal
(3) Wet

No precipitation occurred during the field survey completed on May 12, 2022. A total of 0.49 inches of precipitation occurred the seven (7) days prior to the field survey and the most recent rain event (0.02 inches) occurred on May 7, 2022.

Conditions observed within the Study Area during the delineation completed on May 12, 2022 were considered to be normal for this time of year.

4 Methodology and Description

4.1 Regulated Waters Investigation

The delineation of regulated waters within the Study Area was based on the methodology described in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (Environmental Laboratory, 2010) as required by current USACE policy.

Prior to the field work, the background information was reviewed to establish the probability and potential location of wetlands and regulated waters within the Study Area. Next, a general reconnaissance of the Study Area was conducted to determine site conditions. The site was then walked with the specific intent of determining wetland and jurisdictional stream boundaries. Data stations were established at locations within and near the wetland areas to document soil characteristics, evidence of hydrology and dominant vegetation. Note that no attempt was made to examine a full soil profile to confirm any soil series designations; however, when possible, soils were examined to a depth of at least 16 inches to assess soil characteristics and site hydrology. Complete descriptions of typical soil series can be found in the soil survey for this county.

4.1.1 Site Photographs

Photographs of the site are located in Appendix B. These photographs are the visual documentation of site conditions at the time of inspection. The photographs are intended to provide representative visual samples of any wetlands or other special features identified within the Study Area.

4.1.2 Delineation Data Sheets

Where stations represent a wetland boundary point they are typically presented as paired data points, one each documenting the wetland and upland sides of the wetland boundary. The routine wetland delineation data sheets used in the jurisdictional delineation process are located in Appendix C. These forms are the written documentation of how representative sample stations met or did not meet each of the wetland criteria. For plant species included on the National Wetlands Plant List, nomenclature will follow their lead. For all other plants not listed in the NWPL, nomenclature will follow the USDA's Plants Database. Data point locations are shown on Figure 5.

4.1.3 Stream Data Sheets

Waterways that exhibited an OHWM were recorded and evaluated using the Ohio EPA's Primary Headwater Habitat Evaluation Index (HHEI) or Qualitative Habitat Evaluation Index (QHEI) methodology. A combination of the HHEI, climate data, stream basin analysis, and the field conditions were utilized to determine the stream flow type. If applicable, the results of the stream assessments are presented in section 4.2. and the summary table; the datasheets are provided in Appendix D.

4.2 Technical Descriptions

Complete field data sheets from the site investigation are located in Appendix C. The site is located in Marion County, Indiana, DIRECTIONS (Figure 1). The area investigated was approximately 95.7 acres. The Study Area was an agricultural and prairie field.

4.2.1 Data Point and Wetland Descriptions

Wetland 01 (0.08 Acres)

This wetland was an emergent wetland located in an agricultural field. This wetland appears to consist entirely of a depressional area located within a farm field. No surface water connection with any "waters of the United States" was observed. This wetland should be considered a "waters of the state".

Wetland Data Point

Data Point 01 (dp01)

Dominant vegetation in the vicinity of dp01 included Tufted Meadow-Foxtail (*Alopecurus carolinianus*, FACW), and Neckweed (*Veronica peregrina*, FACW). The plants at this data point qualified as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 5/1 with concentrations in the matrix at 2 percent, and a texture of Loam. The soil at the data point was mapped as Treaty silty clay loam, 0 to 1 percent slopes (ThrA), and met the Depleted Matrix (F3) hydric soil criteria. Primary indicators of hydrology included Surface Water (A1), Saturation (A3), and secondary indicators of hydrology observed included Surface Soil Cracks (B6), Geomorphic Position (D2), and the FAC-Neutral Test (D5). This data point qualified as a wetland.

Upland Data Point

Data Point 02 (dp02)

Dominant vegetation in the vicinity of dp02 included Shepherd's-Purse (*Capsella bursa-pastoris*, FACU), Field Pennycress (*Thlaspi arvense*, FACU), and Common Chickweed (*Stellaria media*, FACU). In addition, non-dominant vegetation observed included Eastern Daisy Fleabane (*Erigeron annuus*, FACU), Spiny-Leaf Sow-Thistle (*Sonchus asper*, FACU), and Crow Garlic (*Allium vineale*, FACU). The plants at this data point did not qualify as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 4/3 with a texture of Silt Loam. The soil at the data point was mapped as Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes (CrA), and did not meet any hydric soil criteria. No indicators of hydrology were observed. This data point did not meet wetland criteria.

Upland Data Point

Data Point 03 (dp03)

Dominant vegetation in the vicinity of dp03 included Cress-Leaf Groundsel (*Packera glabella*, FACW), and Curly Dock (*Rumex crispus*, FAC). In addition, non-dominant vegetation observed included Neckweed (FACW), and Tufted Meadow-Foxtail (FACW). The plants at this data point qualified as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 4/1 with a texture of Silt Loam. The soil from 0 to 16 inches had a matrix soil color of 10YR 4/2 with a texture of Silt Loam. The soil at the data point was mapped as Treaty silty clay loam, 0 to

1 percent slopes (ThrA), and did not meet any hydric soil criteria. Primary indicators of hydrology included Saturation (A3), and secondary indicators of hydrology observed included Geomorphic Position (D2), and the FAC-Neutral Test (D5). This data point did not meet wetland criteria.

Wetland 02 (0.69 Acres)

This wetland was an emergent wetland located in an agricultural field. No surface water connection with any "waters of the United States" was observed. This wetland should be considered a "waters of the state".

Wetland Data Point

Data Point 04 (dp04)

Dominant vegetation in the vicinity of dp04 included Tiny Mousetail (*Myosurus minimus*, FACW), Tufted Meadow-Foxtail (FACW), and Neckweed (FACW). The plants at this data point qualified as hydrophytic vegetation. The soil from 0 to 8 inches had a matrix soil color of 10YR 4/2 with a texture of Clay Loam. The soil from 8 to 16 inches had a matrix soil color of 10YR 5/1 with concentrations in the matrix at 2 percent, and a texture of Clay Loam. The soil at the data point was mapped as Treaty silty clay loam, 0 to 1 percent slopes (ThrA), and met the Depleted Matrix (F3) hydric soil criteria. Secondary indicators of hydrology observed included Surface Soil Cracks (B6), Geomorphic Position (D2), and the FAC-Neutral Test (D5). This data point qualified as a wetland.

Wetland 03 (3.69 Total Acres, 2.45 acres Emergent & 1.24 acres Forested)

This wetland was an emergent and forested wetland, with the emergent portion located in an agricultural field and the forested portion located in an adjacent woodlot. The wetland appears to drain to the south or west generally, but there was no observed pathway to a downstream "water of the US" identified during field activities. Because there was no identified hydrologic connection to another "waters of the U.S.," this feature should not be considered a "waters of the U.S."

Wetland Data Point

Data Point 05 (dp05)

Dominant vegetation in the vicinity of dp05 included Tufted Meadow-Foxtail (FACW), and Neckweed (FACW). In addition, non-dominant vegetation observed included Tiny Mousetail (FACW), Cursed Buttercup (*Ranunculus sceleratus*, OBL), and Blunt Spike-Rush (*Eleocharis obtusa*, OBL). The plants at this data point qualified as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 5/1 with concentrations in the matrix at 3 percent, and a texture of Clay Loam. The soil at the data point was mapped as Treaty silty clay loam, 0 to 1 percent slopes (ThrA), and met the Depleted Matrix (F3) hydric soil criteria. Primary indicators of hydrology included Surface Water (A1), Saturation (A3), Algal Mat or Crust (B4), and secondary indicators of hydrology observed included Geomorphic Position (D2), and the FAC-Neutral Test (D5). This data point qualified as a wetland.

Upland Data Point

Data Point 06 (dp06)

Dominant vegetation in the vicinity of dp06 included Tufted Meadow-Foxtail (FACW), and Neckweed (FACW). In addition, non-dominant vegetation observed included Kidney-Leaf

Buttercup (*Ranunculus abortivus*, FACW), Shepherd's-Purse (FACU), and Canadian Horseweed (*Erigeron canadensis*, FACU). The plants at this data point qualified as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 5/1 with a texture of Silt Loam. The soil at the data point was mapped as Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes (CrA), and met the Depleted Matrix (F3) hydric soil criteria. Only the secondary indicator the FAC-Neutral Test (D5) was observed. This data point did not meet wetland criteria.

Wetland Data Point

Data Point 07 (dp07)

Dominant vegetation in the vicinity of dp07 included Rough-Leaf Dogwood (*Cornus drummondii*, FAC), and Eastern Woodland Sedge (*Carex blanda*, FAC). In addition, non-dominant vegetation observed included Spring Avens (*Geum vernum*, FACU), Harvestlice (*Agrimonia parviflora*, FACW), Hooded Blue Violet (*Viola sororia*, FAC), and Eastern Poison Ivy (*Toxicodendron radicans*, FAC). The plants at this data point qualified as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 4/1 with concentrations in the matrix at 3 percent, and a texture of Silt Loam. The soil at the data point was mapped as Treaty silty clay loam, 0 to 1 percent slopes (ThrA), and met the Depleted Matrix (F3) hydric soil criteria. The primary indicators of hydrology observed were Surface Water (A1), Saturation (A3), and the secondary indicator of hydrology was Geomorphic Position (D2). This data point qualified as a wetland.

Upland Data Point

Data Point 08 (dp08)

Dominant vegetation in the vicinity of dp08 included Common Hackberry (*Celtis occidentalis*, FAC), Amur honeysuckle (*Lonicera maackii*, UPL) in multiple strata, and Eastern Woodland Sedge (FAC). In addition, non-dominant vegetation observed included Shag-Bark Hickory (*Carya ovata*, FACU), Rough-Leaf Dogwood (FAC), Common Hackberry (FAC), Spring Avens (FACU), and Eastern Poison Ivy (FAC). The plants at this data point did not qualify as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 4/2 with a texture of Silt Loam. The soil at the data point was mapped as Treaty silty clay loam, 0 to 1 percent slopes (ThrA), and did not meet any hydric soil criteria. No indicators of hydrology were observed. This data point did not meet wetland criteria.

Wetland Data Point

Data Point 09 (dp09)

Dominant vegetation in the vicinity of dp09 included Cursed Buttercup (OBL), and Blunt Spike-Rush (OBL). In addition, non-dominant vegetation observed included Tufted Meadow-Foxtail (FACW), and Neckweed (FACW). The plants at this data point qualified as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 5/1 with concentrations in the matrix at 4 percent, and a texture of Clay Loam. The soil at the data point was mapped as Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes (CrA), and met the Depleted Matrix (F3) hydric soil criteria. The primary indicators of hydrology observed were Surface Water (A1), High Water Table (A2), Saturation (A3), Algal Mat or Crust (B4), and the secondary indicator of hydrology was the FAC-Neutral Test (D5). This data point qualified as a wetland.

Wetland 04 (21.18 Acres, 19.38 acres Emergent & 1.80 acres Forested)

This wetland was an emergent and forested wetland, with the emergent portion located in an agricultural field and the forested portion located in an adjacent woodlot. The wetland appears to drain to the northeast generally based on surface contours, but there was no observed pathway to a downstream "water of the US" identified during field activities. There is a Marion County Legal drain running northeast to southwest through this wetland. No direct input to this legal drain was observed during field investigations. For these reasons there does not appear to be a hydrologic outlet for this wetland. Because there was no identified hydrologic connection to another "waters of the U.S.," this feature should not be considered a "waters of the U.S."

Wetland Data Point

Data Point 10 (dp10)

Dominant vegetation in the vicinity of dp10 included Blunt Spike-Rush (OBL), and Common Spike-Rush (*Eleocharis palustris*, OBL). In addition, non-dominant vegetation observed included Reed Canary Grass (*Phalaris arundinacea*, FACW), American Water-Plantain (*Alisma subcordatum*, OBL), and Devil's-Pitchfork (*Bidens frondosa*, FACW). The plants at this data point qualified as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 3/1 with concentrations in the matrix at 4 percent, and a texture of Clay Loam. The soil at the data point was mapped as Treaty silty clay loam, 0 to 1 percent slopes (ThrA), and met the Redox Dark Surface (F6) hydric soil criteria. The primary indicators of hydrology observed were Surface Water (A1), Saturation (A3), Algal Mat or Crust (B4), and the secondary indicator of hydrology was the FAC-Neutral Test (D5). This data point qualified as a wetland.

Upland Data Point

Data Point 11 (dp11)

Dominant vegetation in the vicinity of dp11 included Pin Oak (*Quercus palustris*, FACW), Green Ash (*Fraxinus pennsylvanica*, FACW), Common Hackberry (FAC), Silver Maple (*Acer saccharinum*, FACW), and White Panicled American-Aster (*Symphyotrichum lanceolatum*, FAC). In addition, non-dominant vegetation observed included American Elm (*Ulmus americana*, FACW), Common Hackberry (FAC), and Small-Spike False Nettle (*Boehmeria cylindrica*, OBL). The plants at this data point qualified as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 2/2 with concentrations in the matrix at 2 percent, and a texture of Clay Loam. The soil at the data point was mapped as Treaty silty clay loam, 0 to 1 percent slopes (ThrA), and did not meet any hydric soil criteria. Primary indicators of hydrology included Saturation (A3), Water-Stained Leaves (B9), and secondary indicators of hydrology observed included Geomorphic Position (D2), and the FAC-Neutral Test (D5). This data point did not meet wetland criteria.

Upland Data Point

Data Point 12 (dp12)

Dominant vegetation in the vicinity of dp12 included Honey-Locust (*Gleditsia triacanthos*, FACU), Common Hackberry (FAC), Red Maple (*Acer rubrum*, FAC), Amur honeysuckle (UPL), Aniseroot (*Osmorhiza longistylis*, FACU), Spotted Touch-Me-Not (*Impatiens capensis*, FACW), and Garlic-Mustard (*Alliaria petiolata*, FAC). In addition, non-dominant vegetation observed included Slippery

Elm (*Ulmus rubra*, FAC), Rough-Leaf Dogwood (FAC), and Spring Avens (FACU). The plants at this data point qualified as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 3/1 with a texture of Silt Loam. The soil at the data point was mapped as Treaty silty clay loam, 0 to 1 percent slopes (ThrA), and did not meet any hydric soil criteria. No indicators of hydrology were observed. This data point did not meet wetland criteria.

Wetland Data Point

Data Point 13 (dp13)

Dominant vegetation in the vicinity of dp13 included Tufted Meadow-Foxtail (FACW). In addition, non-dominant vegetation observed included Cress-Leaf Groundsel (FACW), Little Barley (*Hordeum pusillum*, FAC), Neckweed (FACW), Cursed Buttercup (OBL), and Late Goldenrod (*Solidago gigantea*, FACW). The plants at this data point qualified as hydrophytic vegetation. The soil from 0 to 3 inches had a matrix soil color of 10YR 2/1 with a texture of Silt Loam. The soil from 3 to 16 inches had a matrix soil color of 10YR 4/1 with concentrations in the matrix at 2 percent, and a texture of Silt Loam. The soil at the data point was mapped as Treaty silty clay loam, 0 to 1 percent slopes (ThrA), and met the Depleted Below Dark Surface (A11), and Depleted Matrix (F3) hydric soil criteria. Primary indicators of hydrology included Saturation (A3), and secondary indicators of hydrology observed included Geomorphic Position (D2), and the FAC-Neutral Test (D5). This data point qualified as a wetland.

Upland Data Point

Data Point 14 (dp14)

Dominant vegetation in the vicinity of dp14 included Norwegian Cinquefoil (*Potentilla norvegica*, FAC), and Curly Dock (FAC). In addition, non-dominant vegetation observed included Lesser Poverty Rush (*Juncus tenuis*, FAC), Carolina geranium (*Geranium carolinianum*, UPL), Little Barley (FAC), Lance-Leaf Gayfeather (*Liatris lancifolia*, FACW), and Neckweed (FACW). The plants at this data point qualified as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 3/1 with a texture of Silt Loam. The soil at the data point was mapped as Treaty silty clay loam, 0 to 1 percent slopes (ThrA), and did not meet any hydric soil criteria. No indicators of hydrology were observed. This data point did not meet wetland criteria.

Upland Data Point

Data Point 15 (dp15)

Dominant vegetation in the vicinity of dp15 included White Bedstraw (*Galium mollugo*, FACU), Kentucky Blue Grass (*Poa pratensis*, FAC), and Red Clover (*Trifolium pratense*, FACU). In addition, non-dominant vegetation observed included Tall False Rye Grass (*Schedonorus arundinaceus*, FACU), and Common Dandelion (*Taraxacum officinale*, FACU). The plants at this data point did not qualify as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 5/3 with a texture of Silt Loam. The soil at the data point was mapped as Miami silt loam-Urban land complex, 2 to 6 percent slopes, eroded (YmsB2), and did not meet any hydric soil criteria. No indicators of hydrology were observed. This data point did not meet wetland criteria.

Upland Data Point

Data Point 16 (dp16)

Dominant vegetation in the vicinity of dp16 included American Sycamore (*Platanus occidentalis*, FACW), Common Hackberry (FAC), Rough-Leaf Dogwood (FAC), Amur honeysuckle (UPL), Eastern Cottonwood (*Populus deltoides*, FAC), and winter creeper (*Euonymus fortunei*, UPL). The plants at this data point qualified as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 4/2 with a texture of Silt Loam. The soil at the data point was mapped as Crosby silt loam, fine-loamy subsoil-Urban land complex, 0 to 2 percent slopes (YclA), and did not meet any hydric soil criteria. No indicators of hydrology were observed. This data point did not meet wetland criteria.

Upland Data Point

Data Point 17 (dp17)

Dominant vegetation in the vicinity of dp17 included Rough-Leaf Dogwood (FAC), Honey-Locust (FACU), Tall Goldenrod (*Solidago altissima*, FACU), and Kentucky Blue Grass (FAC). In addition, non-dominant vegetation observed included Green Ash (FACW), Callery pear (*Pyrus calleryana*, UPL), autumn olive (*Elaeagnus umbellata*, UPL), Giant Ironweed (*Vernonia gigantea*, FAC), and Eastern Poison Ivy (FAC). The plants at this data point did not qualify as hydrophytic vegetation. The soil from 0 to 16 inches had a matrix soil color of 10YR 4/1 with a texture of Silt Loam. The soil at the data point was mapped as Treaty silty clay loam, 0 to 1 percent slopes (ThrA), and did not meet any hydric soil criteria. No indicators of hydrology were observed. This data point did not meet wetland criteria.

5 Jurisdictional Analysis

5.1 U.S. Army Corps of Engineers

The USACE has authority over the discharge of fill or dredged material into “waters of the U.S.”. This includes authority over any filling, mechanical land clearing, or construction activities that occur within the boundaries of any “waters of the U.S.”. A permit must be obtained from the USACE under Section 404 of the CWA before any of these activities occur. Permits can be divided into three general categories: Individual Permits, Nationwide Permits (NWP), and the Regional General Permits for Indiana.

Individual Permits are required for projects that do not fall into one of the specific NWP or the Regional General Permit (RGP) or are deemed to have significant environmental impacts. These permits are much more difficult to obtain and receive a much higher level of regulatory agency and public scrutiny and may require several months to more than a year for processing.

NWP have been developed for projects which meet specific criteria and are deemed to have minimal impact on the aquatic environment. In Indiana, however, most NWP's have been rescinded and replaced by the RGP.

The RGP for Indiana authorizes activities associated with the construction or installation of new facilities or structures as well as for agriculture or mining. Proposed wetland impacts must be less than 1 acre and meet specific criteria in order to qualify for these permits. Section 401 WQC must be obtained from IDEM before the USACE will finalize their permit review.

5.2 Indiana Department of Environmental Management

5.2.1 401 Water Quality Certification

IDEM is responsible for issuing CWA Section 401 WQCs in conjunction with the USACE Section 404 permits. IDEM requires notification for all permanent non-isolated wetland impacts less than 0.10 acre, which entails a brief notification form that must be signed by the applicant. If only temporary wetland impacts are proposed, then notification is also required for the cumulative wetland temporary impacts that exceed 0.10 acre. However, for non-isolated wetland impacts greater than 0.10 acre, an application for WQC must be submitted concurrently with a wetland mitigation plan. IDEM will not initiate their review process until both the application and wetland mitigation plan have been submitted.

5.2.2 Isolated Wetland Law

Applicants proposing an impact to an “isolated wetland,” which is a wetland that the USACE has determined to be a non-federally jurisdictional wetland, are required to apply for and obtain Isolated Wetland Permits from IDEM. Isolated wetland permits are required under Indiana’s State Isolated Wetland Law (Indiana Code 13-18-22 and 327 Indiana Administrative Code 17). Under Indiana’s Isolated Wetlands Law, certain activities are exempt from permitting, and certain wetlands are considered to be “exempt isolated wetlands”. Actions exempt from permitting are explained under 327 IAC 17-1-7 and wetlands exempt from permitting are defined under IC 13-11-2-74.5, as amended by P.L.113-2014, Section 47, [EFFECTIVE JULY 1, 2021].

5.3 Indiana Department of Natural Resources

Indiana Department of Natural Resources (IDNR) has jurisdiction over mapped floodways, floodplains where there is no mapped floodway (Figure 3), and the floodway of ditches and streams with a watershed greater than one (1) square mile (Figure 3). If impacts are proposed to jurisdictional floodways, a Construction-In-A-Floodway Permit may be required from IDNR.

6 Summary and Conclusion

6.1 Summary

Cardno now Stantec inspected the Northeast Parcel of County Line and Arlington Study Area on May 12, 2022. Delineated features are shown on Figure 5 and in Table 6-1. Four wetlands were identified within the Study Area.

6.1.1 Wetlands and Waterways

Table 6-1 Features Identified Within the Northeast Parcel of County Line and Arlington Study Area

Feature Name	USGS/NWI Identified	Feature Class [1]	Regulatory Status [2]	Dimensions (FT)		QHEI/HHEI Score	Linear Feet (LF)	Acreage (AC)
				Width	Depth			
Wetland 01	No	PEM	Non-JD	-	-	-	-	0.08
Wetland 02	No	PEM	Non-JD	-	-	-	-	0.69
Wetland 03	Yes	PEM/PFO	Non-JD	-	-	-	-	3.69
Wetland 04	No	PEM/PFO	Non-JD	-	-	-	-	21.18
TOTALS		**WETLAND**		**PEM**		**Non-JD**	**-**	**22.60**
				PFO				**3.04**

[1] Feature Class is based on our professional judgement and experience, however, the USACE makes the final determination on stream classes and non-isolated wetland classes, and IDEM makes the final determination on isolated wetland classes.

[2] Regulatory Status is based on our professional judgment and experience; however, the USACE makes the final determination

6.1.2 Floodways and Floodplains

The FEMA floodplain digital mapping of the area (Figure 3) identified no areas of flood hazard within the Study Area.

6.2 Conclusion

Four wetlands were identified within the Study Area. While this report represents our best professional judgment based on our knowledge and experience, it is important to note that the Louisville District of the U.S. Army Corps of Engineers has final discretionary authority over all jurisdictional determinations of 'waters of the U.S.' including wetlands under Section 404 of the CWA in this region. It is therefore, recommended that a copy of this report be furnished to the Louisville District of the U.S. Army Corps of Engineers to confirm the results of our findings.

7 References

Environmental Laboratory. 1987. U.S. Army Corps of Engineers' Wetland Delineation Manual, Technical Report Y-87-1, U.S. Waterways Experiment Station, Vicksburg, MS.

Environmental Laboratory. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, ERDC/EL TR-10-16, U.S. Army Engineer Research and Development Center, Vicksburg, MS.

Reed, P. B., Jr. 1988. National List of Plant Species that Occur in Wetlands: 1988. Washington, DC: U.S. Fish and Wildlife Service.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed [8/8/2022].

StreamStats, United States Geological Survey. Available online at https://streamstats.usgs.gov. Accessed [8/8/2022].

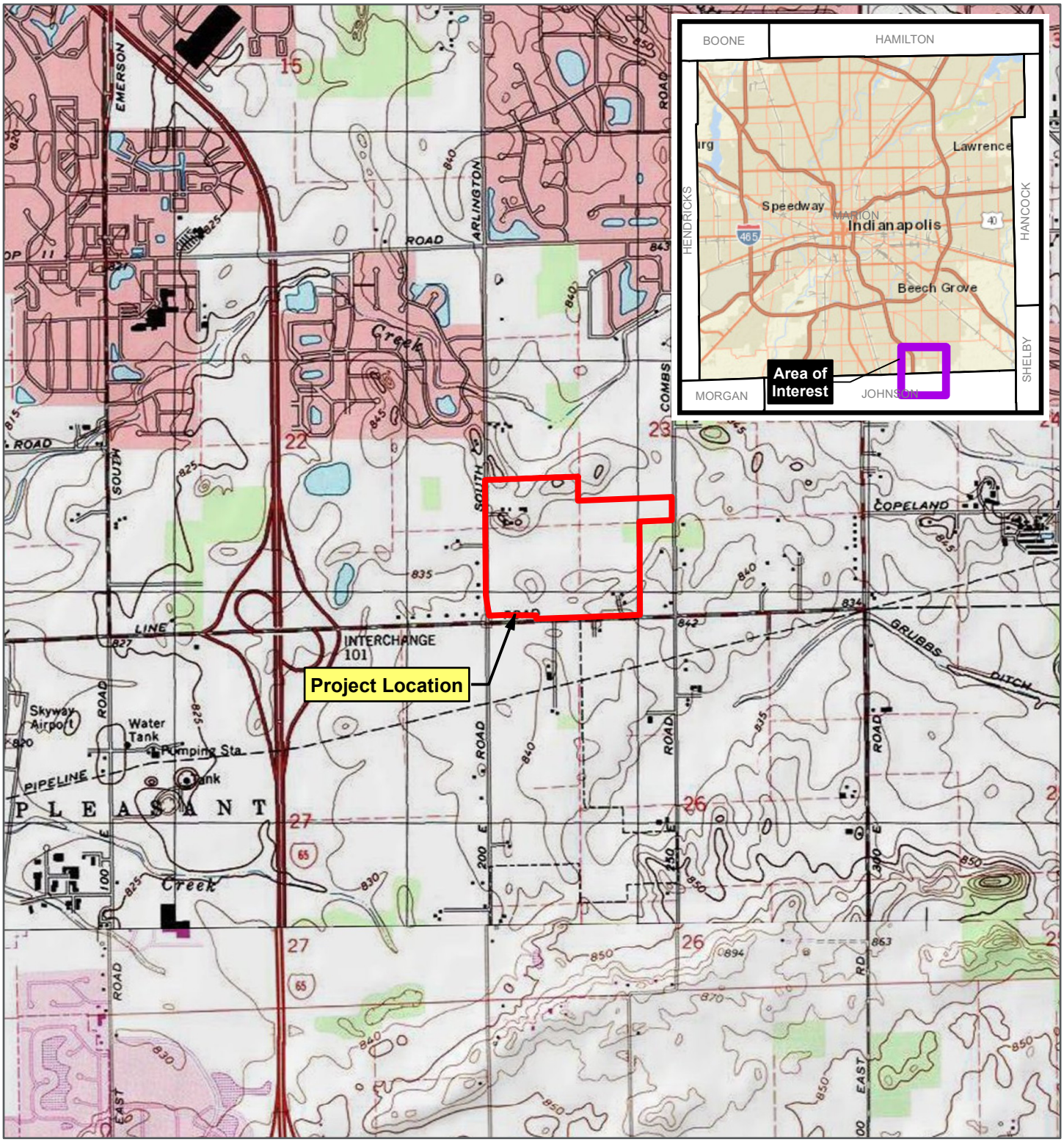
U.S. Army Corps of Engineers 2018. National Wetland Plant List, version 3.4 http://wetland-plants.usace.army.mil/ U.S. Army Corps of Engineers Engineer Research and Development Center Cold Regions Research and Engineering Laboratory, Hanover, NH

U.S. Drought Monitor. 2021. U.S. Drought Monitor. Website: http://droughtmonitor.unl.edu/. Site Accessed [8/8/2022].

Northeast Parcel of County Line and Arlington, Indianapolis, Marion County, Indiana

APPENDIX A

FIGURES



0 500 1,000 2,000 Feet

0 100 200 300 400 500 600 Meters

Project Location

N
W E
S

7.5' Quadrangle:
BEACH GROVE
T14n R4e Sec23
Project No.
j193137m36

Figure 1: Project Location

NEC of County Line Rd and Arlington Rd
Regulated Waters Delineation Report
Kimley-Horn and Associates, Inc.
Marion County, Indiana

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Stantec
3901 Industrial Blvd.,Indianapolis, IN 46254
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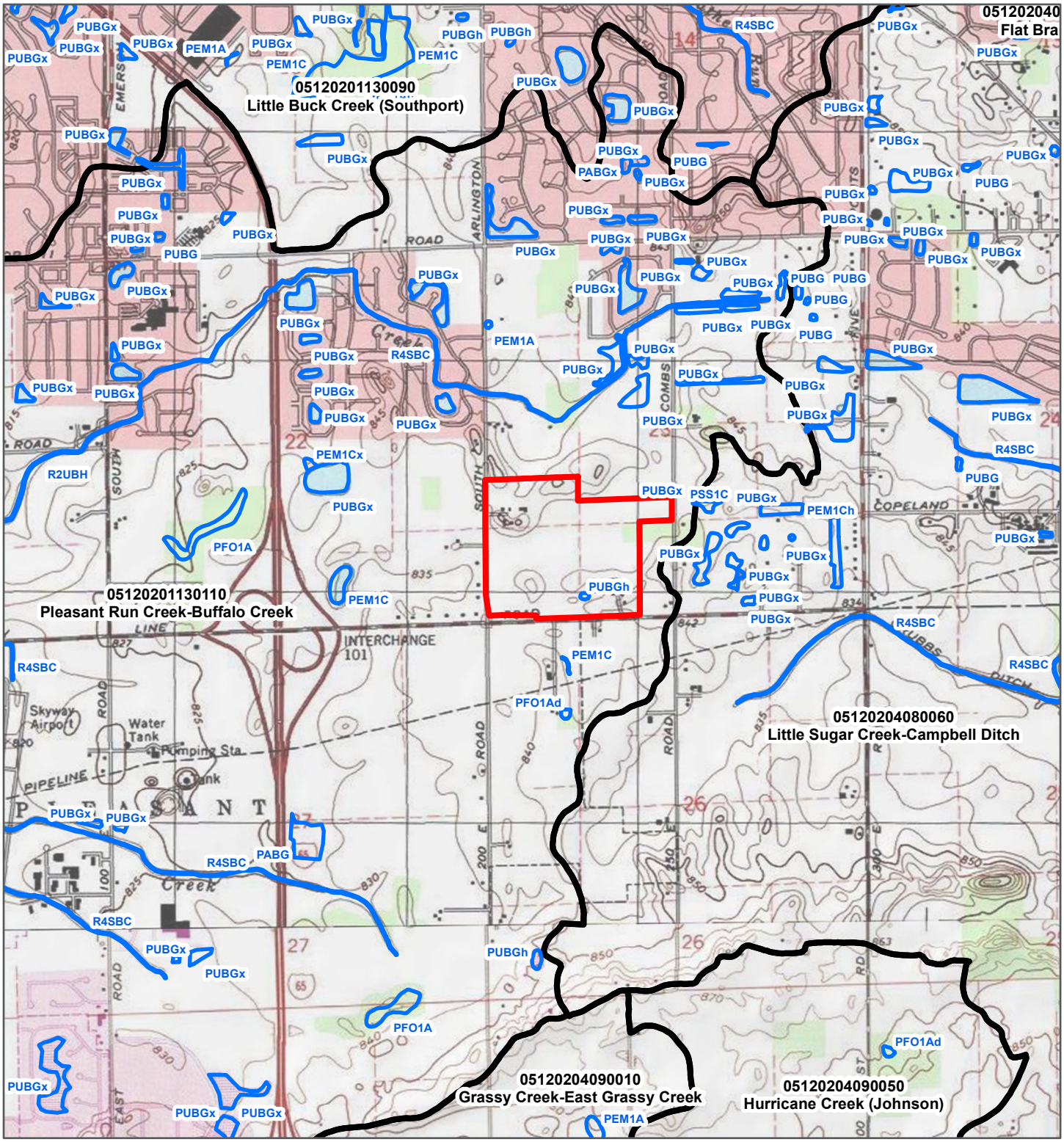
Date: 5/25/2022 File Path: R:\Projects\19\193\193137M_KimleyHorn_Master\36_Arlington&CoLineRd\GIS\MXD\Delineation\F1_Location.mxd Saved By: ben.harvey



N
W E
S

7.5' Quadrangle:
BEACH GROVE
T14n R4e Sec23
Project No.
j193137m36

Figure 2: NWI and Watersheds

NEC of County Line Rd and Arlington Rd
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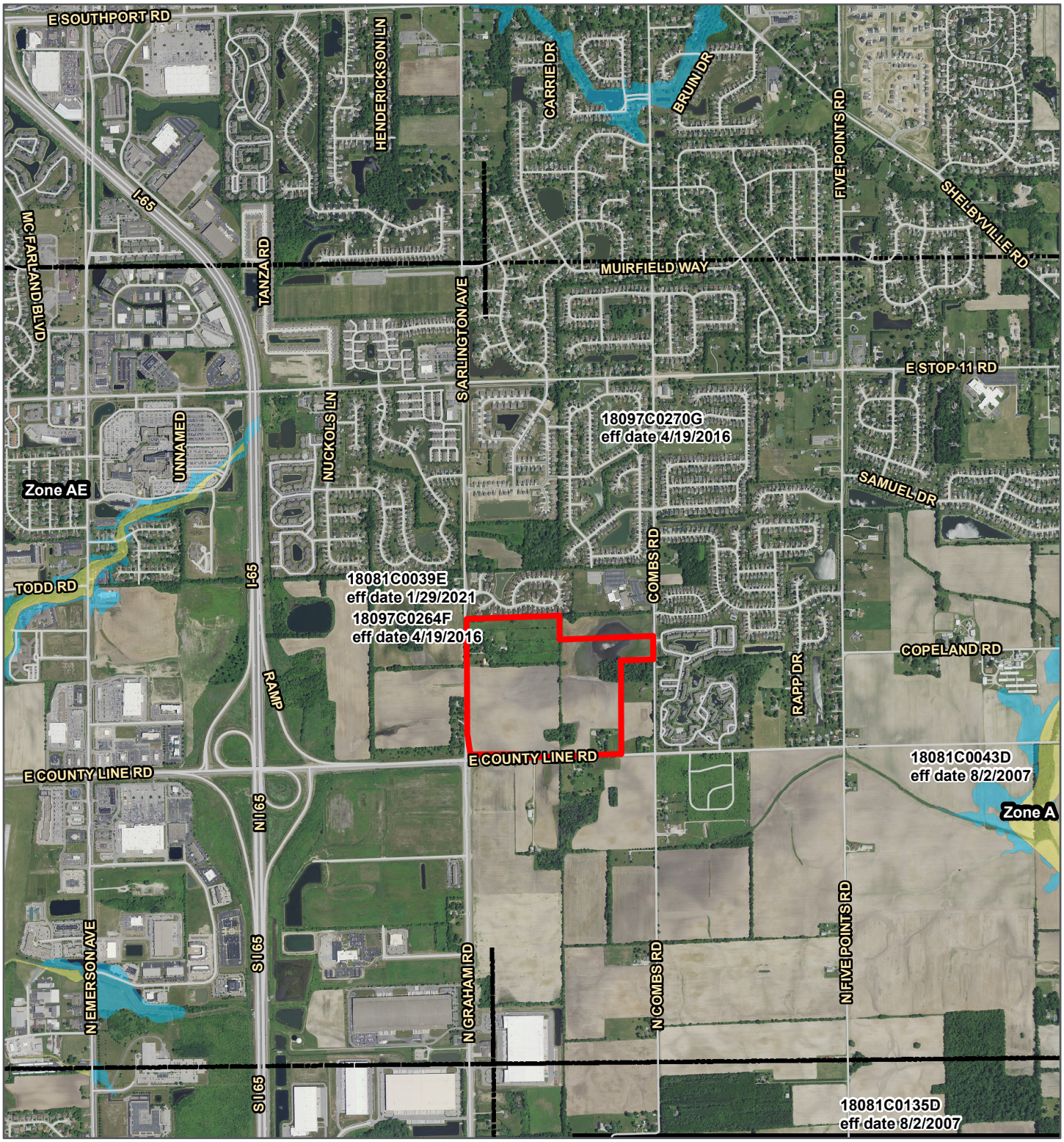

0 500 1,000 2,000 Feet
0 100 200 300 400 500 600 Meters

- Mapped 100-year Floodplain
- Approximate Floodway
- Floodway
- National Flood Hazard - FIRM Panels
- Project Location

N W E S

7.5' Quadrangle:
BEACH GROVE
T14n R4e Sec23
Project No.
j193137m36

Figure 3: CIF Constraints

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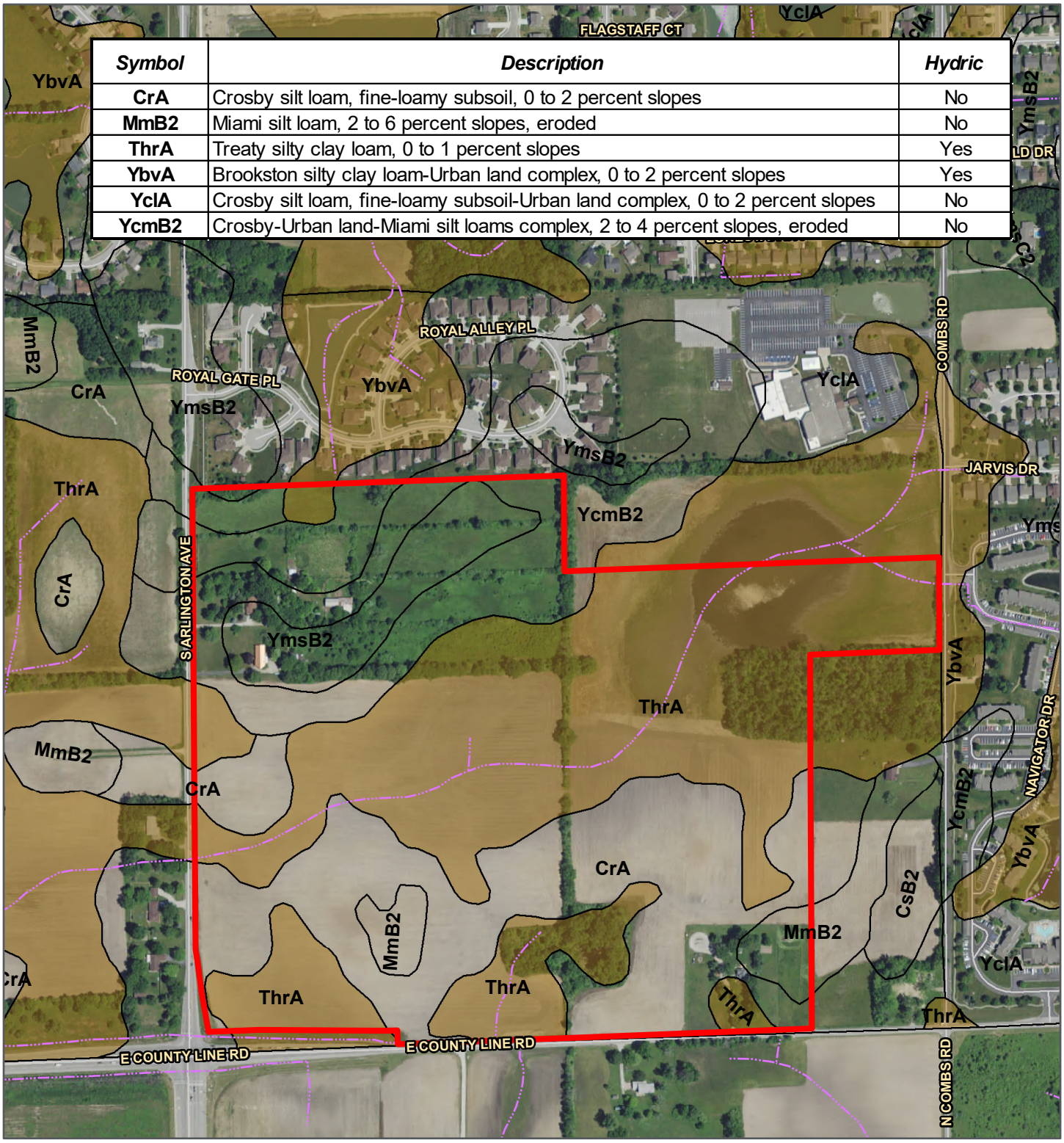
Date: 5/25/2022
Basemap:
File Path: R:\Projects\19\193\193137M_KimleyHorn_Master\36_Arlington&CoLineRd\GIS\MXD\Delineation\F3_CIF_Constraints.mxd
Saved By: ben.harvey

Symbol	Description	Hydric
CrA	Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes	No
MmB2	Miami silt loam, 2 to 6 percent slopes, eroded	No
ThrA	Treaty silty clay loam, 0 to 1 percent slopes	Yes
YbvA	Brookston silty clay loam-Urban land complex, 0 to 2 percent slopes	Yes
YclA	Crosby silt loam, fine-loamy subsoil-Urban land complex, 0 to 2 percent slopes	No
YcmB2	Crosby-Urban land-Miami silt loams complex, 2 to 4 percent slopes, eroded	No



0 250 500 Feet
0 50 100 150 Meters

NHD Flowline
Soil Unit
Soil Unit - Hydric
Project Location

N
W E
S

7.5' Quadrangle:
BEACH GROVE
T14n R4e Sec23
Project No.
j193137m36

Figure 4: Soil Survey

NEC of County Line Rd and Arlington Rd
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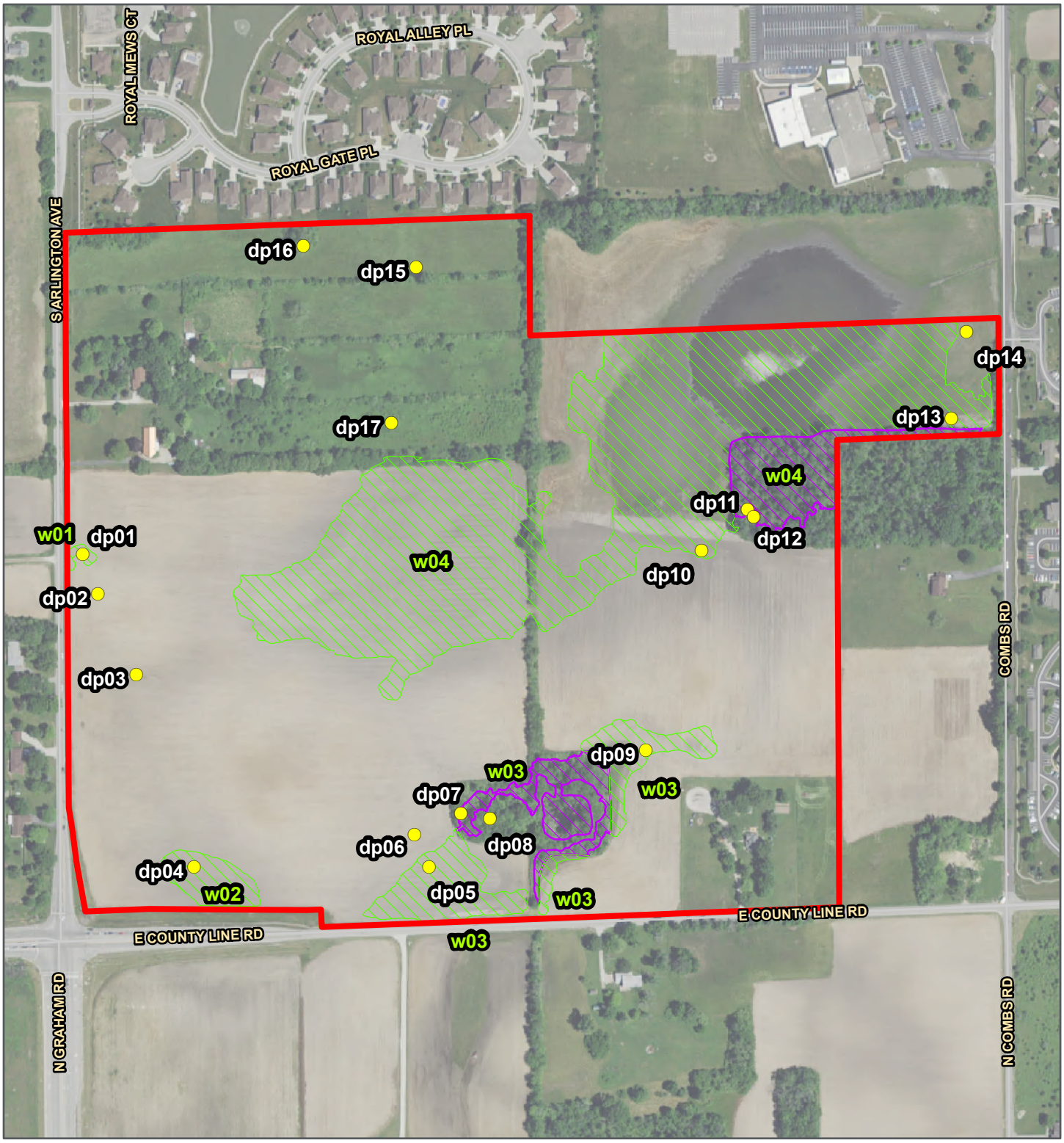

0 200 400 Feet
0 40 80 120 Meters

Project Location
Data Point
Delineated Wetland
PFO
PEM

N W E S

7.5' Quadrangle:
BEACH GROVE
T14n R4e Sec23
Project No.
j193137m36

Figure 5: Delinated Features

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Northeast Parcel of County Line and Arlington, Indianapolis, Marion County, Indiana

APPENDIX

B

SITE PHOTOGRAPHS

DP01, View Looking North

DP01, View Looking East

DP01, View Looking South

DP01, View Looking West

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DP02, View Looking North

DP02, View Looking East

DP02, View Looking South

DP02, View Looking West

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DP03, View Looking North

DP03, View Looking East

DP03, View Looking South

DP03, View Looking West

Project Number:
J193137M36

Site Photographs
County Line Road and S. Arlington Ave, Northeast Parcels
Regulated Waters Delineation Report
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Marion County, Indiana

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DP04, View Looking North

DP04, View Looking East

DP04, View Looking South

DP04, View Looking West

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DP05, View Looking North

DP05, View Looking East

DP05, View Looking South

DP05, View Looking West

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DP06, View Looking North

DP06, View Looking East

DP06, View Looking South

DP06, View Looking West

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DP07, View Looking North

DP07, View Looking East

DP07, View Looking South

DP07, View Looking West

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DP08, View Looking North

DP08, View Looking East

DP08, View Looking South

DP08, View Looking West

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DP09, View Looking North

DP09, View Looking East

DP09, View Looking South

DP09, View Looking West

Project Number:
J193137M36

Site Photographs
County Line Road and S. Arlington Ave, Northeast Parcels
Regulated Waters Delineation Report
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DP10, View Looking North

DP10, View Looking East

DP10, View Looking South

DP10, View Looking West

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DP11, View Looking North

DP11, View Looking East

DP11, View Looking South

DP11, View Looking West

Site Photographs
County Line Road and S. Arlington Ave, Northeast Parcels
Regulated Waters Delineation Report
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Marion County, Indiana

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J193137M36

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DP12, View Looking North

DP12, View Looking East

DP12, View Looking South

DP12, View Looking West

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DP13, View Looking North

DP13, View Looking East

DP13, View Looking South

DP13, View Looking West

Project Number:
J193137M36

Site Photographs
County Line Road and S. Arlington Ave, Northeast Parcels
Regulated Waters Delineation Report
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DP15, View Looking East

DP15, View Looking South

DP15, View Looking West

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DP16, View Looking North

DP16, View Looking East

DP16, View Looking South

DP16, View Looking West

Site Photographs

County Line Road and S. Arlington Ave, Northeast Parcels
Regulated Waters Delineation Report
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Marion County, Indiana

Project Number:
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DP17, View Looking North

DP17, View Looking East

DP17, View Looking South

DP17, View Looking West

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Northeast Parcel of County Line and Arlington, Indianapolis, Marion County, Indiana

APPENDIX C

WETLAND DELINEATION DATA SHEETS – MIDWEST REGION

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp01

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 1% | Lat: 39.63984257 | Long: -86.06345175 | Datum: NAD83 UTM16N

Soil Map Unit Name: Treaty silty clay loam, 0 to 1 percent slopes (ThrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	Yes X No
Wetland Hydrology Present?	Yes X	No		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Alopecurus carolinianus*	5%	Yes	FACW
2. *Veronica peregrina*	5%	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	10%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
That Are OBL, FACW, or FAC:			A/B
OBL species		x1 =	
FACW species	10%	x2 =	0.20
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	10% (A)		0.20 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- X 1-Rapid Test for Hydrophytic Vegetation
- X 2-Dominance Test is >50%
- X 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 5/1	98	10YR 5/6	2	C	M	Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X No ___	Depth (inches):	1"
Water Table Present?	Yes ___ No X	Depth (inches):	>18"
Saturation Present? (includes capillary fringe)	Yes X No ___	Depth (inches):	Surface

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp02

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 1% | Lat: 39.63953101 | Long: -86.06330334 | Datum: NAD83 UTM16N

Soil Map Unit Name: Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes (CrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area**	
Hydric Soil Present?	Yes	No X	**within a Wetland?**	Yes No X
Wetland Hydrology Present?	Yes	No X		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Capsella bursa-pastoris*	40%	Yes	FACU
2. *Thlaspi arvense*	40%	Yes	FACU
3. *Stellaria media*	30%	Yes	FACU
4. *Erigeron annuus*	5%	No	FACU
5. *Sonchus asper*	5%	No	FACU
6. *Allium vineale*	5%	No	FACU
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	125%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
That Are OBL, FACW, or FAC:			A/B
OBL species		x1 =	
FACW species		x2 =	
FAC species		x3 =	
FACU species	125%	x4 =	5.00
UPL species		x5 =	
Column Totals:	125% (A)		5.00 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

- 1-Rapid Test for Hydrophytic Vegetation
- 2-Dominance Test is >50%
- 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 4/3	100					Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___ No X	Depth (inches):	N/A
Water Table Present?	Yes ___ No X	Depth (inches):	N/A
Saturation Present? (includes capillary fringe)	Yes ___ No X	Depth (inches):	N/A

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp03

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 2% | Lat: 39.63889944 | Long: -86.06292519 | Datum: NAD83 UTM16N

Soil Map Unit Name: Treaty silty clay loam, 0 to 1 percent slopes (ThrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes	No X	**within a Wetland?**	Yes No X
Wetland Hydrology Present?	Yes X	No		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Packera glabella*	60%	Yes	FACW
2. *Rumex crispus*	25%	Yes	FAC
3. *Veronica peregrina*	10%	No	FACW
4. *Alopecurus carolinianus*	5%	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	100%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
That Are OBL, FACW, or FAC:		A/B
OBL species	x1 =	
FACW species 75%	x2 =	1.50
FAC species 25%	x3 =	0.75
FACU species	x4 =	
UPL species	x5 =	
Column Totals: 100% (A)		2.25 (B)

Prevalence Index = B/A = 2.25

Hydrophytic Vegetation Indicators:

- 1-Rapid Test for Hydrophytic Vegetation
- **X** 2-Dominance Test is >50%
- 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 4/1	100					Silt Loam	Mixed
0-16"	10YR 4/2	100					Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___ No X	Depth (inches):	N/A
Water Table Present?	Yes ___ No X	Depth (inches):	N/A
Saturation Present? (includes capillary fringe)	Yes X No ___	Depth (inches):	Surface

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp04

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 0% | Lat: 39.63739554 | Long: -86.06236431 | Datum: NAD83 UTM16N

Soil Map Unit Name: Treaty silty clay loam, 0 to 1 percent slopes (ThrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	Yes X No
Wetland Hydrology Present?	Yes X	No		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Myosurus minimus*	5%	Yes	FACW
2. *Alopecurus carolinianus*	5%	Yes	FACW
3. *Veronica peregrina*	10%	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	20%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
That Are OBL, FACW, or FAC:	A/B
OBL species	x1 =
FACW species 20%	x2 = 0.40
FAC species	x3 =
FACU species	x4 =
UPL species	x5 =
Column Totals: 20% (A)	0.40 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

- X 1-Rapid Test for Hydrophytic Vegetation
- X 2-Dominance Test is >50%
- X 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8"	10YR 4/2	100					Clay Loam	
8-16"	10YR 5/1	98	10YR 4/6	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___ No X	Depth (inches):	N/A
Water Table Present?	Yes ___ No X	Depth (inches):	N/A
Saturation Present? (includes capillary fringe)	Yes ___ No X	Depth (inches):	N/A

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp05

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 1% | Lat: 39.63737676 | Long: -86.05999453 | Datum: NAD83 UTM16N

Soil Map Unit Name: Treaty silty clay loam, 0 to 1 percent slopes (ThrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	Yes X No
Wetland Hydrology Present?	Yes X	No		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Myosurus minimus*	1%	No	FACW
2. *Alopecurus carolinianus*	5%	Yes	FACW
3. *Veronica peregrina*	10%	Yes	FACW
4. *Ranunculus sceleratus*	2%	No	OBL
5. *Eleocharis obtusa*	4%	No	OBL
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	22%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
That Are OBL, FACW, or FAC:			A/B
OBL species	6%	x1 =	0.06
FACW species	16%	x2 =	0.32
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	22% (A)		0.38 (B)

Prevalence Index = B/A = 1.73

Hydrophytic Vegetation Indicators:

- X 1-Rapid Test for Hydrophytic Vegetation
- X 2-Dominance Test is >50%
- X 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 5/1	97	10YR 7/6	3	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 1"

Water Table Present? Yes ___ No X Depth (inches): N/A

Saturation Present? Yes X No ___ Depth (inches): Surface

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp06

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 1% | Lat: 39.63763178 | Long: -86.06013674 | Datum: NAD83 UTM16N

Soil Map Unit Name: Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes (CrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes No X
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes	No X	

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Ranunculus abortivus*	10%	No	FACW
2. *Alopecurus carolinianus*	40%	Yes	FACW
3. *Veronica peregrina*	25%	Yes	FACW
4. *Capsella bursa-pastoris*	5%	No	FACU
5. *Erigeron canadensis*	1%	No	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	81%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
That Are OBL, FACW, or FAC:		A/B
OBL species	x1 =	
FACW species 75%	x2 =	1.50
FAC species	x3 =	
FACU species 6%	x4 =	0.24
UPL species	x5 =	
Column Totals: 81% (A)		1.74 (B)

Prevalence Index = B/A = 2.15

Hydrophytic Vegetation Indicators:

- X 1-Rapid Test for Hydrophytic Vegetation
- X 2-Dominance Test is >50%
- 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp06

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 5/1	100					Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___ No X	Depth (inches):	N/A
Water Table Present?	Yes ___ No X	Depth (inches):	N/A
Saturation Present? (includes capillary fringe)	Yes ___ No X	Depth (inches):	N/A

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp07

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 1% | Lat: 39.63779278 | Long: -86.05966551 | Datum: NAD83 UTM16N

Soil Map Unit Name: Treaty silty clay loam, 0 to 1 percent slopes (ThrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	Yes X No
Wetland Hydrology Present?	Yes X	No		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Cornus drummondii*	100%	Yes	FAC
2.			
3.			
4.			
5.			
	100%	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Carex blanda*	60%	Yes	FAC
2. *Geum vernum*	5%	No	FACU
3. *Agrimonia parviflora*	5%	No	FACW
4. *Viola sororia*	5%	No	FAC
5. *Toxicodendron radicans*	10%	No	FAC
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	85%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
That Are OBL, FACW, or FAC:			A/B
OBL species		x1 =	
FACW species	5%	x2 =	0.10
FAC species	175%	x3 =	5.25
FACU species	5%	x4 =	0.20
UPL species		x5 =	
Column Totals:	185% (A)		5.55 (B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:

- 1-Rapid Test for Hydrophytic Vegetation
- X 2-Dominance Test is >50%
- X 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp07

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 4/1	97	10YR 6/8	3	C	M	Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 1"

Water Table Present? Yes ___ No X Depth (inches): N/A

Saturation Present? Yes X No ___ Depth (inches): Surface

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp08

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 3% | Lat: 39.63774853 | Long: -86.05937598 | Datum: NAD83 UTM16N

Soil Map Unit Name: Treaty silty clay loam, 0 to 1 percent slopes (ThrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area**	
Hydric Soil Present?	Yes	No X	**within a Wetland?**	Yes No X
Wetland Hydrology Present?	Yes	No X		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Celtis occidentalis*	70%	Yes	FAC
2. *Carya ovata*	10%	No	FACU
3.			
4.			
5.			
	80%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Cornus drummondii*	10%	No	FAC
2. *Celtis occidentalis*	5%	No	FAC
3. *Lonicera maackii*	90%	Yes	UPL
4.			
5.			
	105%	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Carex blanda*	10%	Yes	FAC
2. *Geum vernum*	5%	No	FACU
3. *Lonicera maackii*	10%	Yes	UPL
4. *Toxicodendron radicans*	5%	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	30%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:
	That Are OBL, FACW, or FAC:	A/B
OBL species		x1 =
FACW species		x2 =
FAC species	100%	x3 = 3.00
FACU species	15%	x4 = 0.60
UPL species	100%	x5 = 5.00
Column Totals:	215% (A)	8.60 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

- 1-Rapid Test for Hydrophytic Vegetation
- 2-Dominance Test is >50%
- 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp08

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 4/2	100					Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___ No X	Depth (inches):	N/A
Water Table Present?	Yes ___ No X	Depth (inches):	N/A
Saturation Present? (includes capillary fringe)	Yes ___ No X	Depth (inches):	N/A

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp09

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 2% | Lat: 39.63826813 | Long: -86.05779524 | Datum: NAD83 UTM16N

Soil Map Unit Name: Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes (CrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	Yes X No
Wetland Hydrology Present?	Yes X	No		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Ranunculus sceleratus*	45%	Yes	OBL
2. *Eleocharis obtusa*	20%	Yes	OBL
3. *Alopecurus carolinianus*	5%	No	FACW
4. *Veronica peregrina*	10%	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	80%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
That Are OBL, FACW, or FAC:			A/B
OBL species	65%	x1 =	0.65
FACW species	15%	x2 =	0.30
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	80% (A)		0.95 (B)

Prevalence Index = B/A = 1.19

Hydrophytic Vegetation Indicators:

- X 1-Rapid Test for Hydrophytic Vegetation
- X 2-Dominance Test is >50%
- X 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp09

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 5/1	96	10YR 5/6	4	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X No ___	Depth (inches):	2"
Water Table Present?	Yes X No ___	Depth (inches):	3"
Saturation Present? (includes capillary fringe)	Yes X No ___	Depth (inches):	Surface

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp10

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 1% | Lat: 39.63982065 | Long: -86.05721341 | Datum: NAD83 UTM16N

Soil Map Unit Name: Treaty silty clay loam, 0 to 1 percent slopes (ThrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	Yes X No
Wetland Hydrology Present?	Yes X	No		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Phalaris arundinacea*	5%	No	FACW
2. *Eleocharis obtusa*	10%	Yes	OBL
3. *Eleocharis palustris*	15%	Yes	OBL
4. *Alisma subcordatum*	2%	No	OBL
5. *Bidens frondosa*	2%	No	FACW
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	34%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
That Are OBL, FACW, or FAC:			A/B
OBL species	27%	x1 =	0.27
FACW species	7%	x2 =	0.14
FAC species		x3 =	
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	34% (A)		0.41 (B)

Prevalence Index = B/A = 1.21

Hydrophytic Vegetation Indicators:

- X 1-Rapid Test for Hydrophytic Vegetation
- X 2-Dominance Test is >50%
- X 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 3/1	96	10YR 5/6	4	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X No ___	Depth (inches):	1"
Water Table Present?	Yes ___ No X	Depth (inches):	N/A
Saturation Present? (includes capillary fringe)	Yes X No ___	Depth (inches):	Surface

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp11

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 1% | Lat: 39.64014022 | Long: -86.05674374 | Datum: NAD83 UTM16N

Soil Map Unit Name: Treaty silty clay loam, 0 to 1 percent slopes (ThrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No ____

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes	No X	**within a Wetland?**	Yes ____ No X
Wetland Hydrology Present?	Yes X	No		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus palustris*	20%	Yes	FACW
2. *Fraxinus pennsylvanica*	30%	Yes	FACW
3. *Ulmus americana*	10%	No	FACW
4. *Celtis occidentalis*	10%	No	FAC
5.			
	70%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Celtis occidentalis*	5%	Yes	FAC
2. *Acer saccharinum*	10%	Yes	FACW
3.			
4.			
5.			
	15%	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Symphyotrichum lanceolatum*	65%	Yes	FAC
2. *Boehmeria cylindrica*	10%	No	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	75%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
That Are OBL, FACW, or FAC:			A/B
OBL species	10%	x1 =	0.10
FACW species	70%	x2 =	1.40
FAC species	80%	x3 =	2.40
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	160% (A)		3.90 (B)

Prevalence Index = B/A = 2.44

Hydrophytic Vegetation Indicators:

- ____ 1-Rapid Test for Hydrophytic Vegetation
- **X** 2-Dominance Test is >50%
- ____ 3-Prevalence Index is ≤3.0[1]
- ____ 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 2/2	98	10YR 7/8	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___ No X	Depth (inches):	N/A
Water Table Present?	Yes ___ No X	Depth (inches):	N/A
Saturation Present? (includes capillary fringe)	Yes X No ___	Depth (inches):	Surface

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp12

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): convex

Slope (%): 2% | Lat: 39.64008176 | Long: -86.05668292 | Datum: NAD83 UTM16N

Soil Map Unit Name: Treaty silty clay loam, 0 to 1 percent slopes (ThrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes	No X	**within a Wetland?**	Yes No X
Wetland Hydrology Present?	Yes	No X		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Gleditsia triacanthos*	25%	Yes	FACU
2. *Ulmus rubra*	15%	No	FAC
3. *Celtis occidentalis*	20%	Yes	FAC
4. *Acer rubrum*	20%	Yes	FAC
5.			
	80%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Lonicera maackii*	85%	Yes	UPL
2. *Cornus drummondii*	5%	No	FAC
3.			
4.			
5.			
	90%	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Osmorhiza longistylis*	10%	Yes	FACU
2. *Impatiens capensis*	10%	Yes	FACW
3. *Alliaria petiolata*	20%	Yes	FAC
4. *Geum vernum*	5%	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	45%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 57% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
That Are OBL, FACW, or FAC:			A/B
OBL species		x1 =	
FACW species	10%	x2 =	0.20
FAC species	80%	x3 =	2.40
FACU species	40%	x4 =	1.60
UPL species	85%	x5 =	4.25
Column Totals:	215% (A)		8.45 (B)

Prevalence Index = B/A = 3.93

Hydrophytic Vegetation Indicators:

- 1-Rapid Test for Hydrophytic Vegetation
- **X** 2-Dominance Test is >50%
- 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 3/1	100					Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___ No X	Depth (inches):	N/A
Water Table Present?	Yes ___ No X	Depth (inches):	N/A
Saturation Present? (includes capillary fringe)	Yes ___ No X	Depth (inches):	N/A

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp13

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 1% | Lat: 39.64082918 | Long: -86.05468009 | Datum: NAD83 UTM16N

Soil Map Unit Name: Treaty silty clay loam, 0 to 1 percent slopes (ThrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes X	No	**within a Wetland?**	Yes X No
Wetland Hydrology Present?	Yes X	No		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Packera glabella*	15%	No	FACW
2. *Alopecurus carolinianus*	60%	Yes	FACW
3. *Hordeum pusillum*	10%	No	FAC
4. *Veronica peregrina*	15%	No	FACW
5. *Ranunculus sceleratus*	5%	No	OBL
6. *Solidago gigantea*	5%	No	FACW
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	110%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
That Are OBL, FACW, or FAC:			A/B
OBL species	5%	x1 =	0.05
FACW species	95%	x2 =	1.90
FAC species	10%	x3 =	0.30
FACU species		x4 =	
UPL species		x5 =	
Column Totals:	110% (A)		2.25 (B)

Prevalence Index = B/A = 2.05

Hydrophytic Vegetation Indicators:

- X 1-Rapid Test for Hydrophytic Vegetation
- X 2-Dominance Test is >50%
- X 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3"	10YR 2/1	100					Silt Loam	
3-16"	10YR 4/1	98	10YR 5/6	2	C	M	Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): N/A

Water Table Present? Yes ___ No X Depth (inches): N/A

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): Surface

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp14

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 1% | Lat: 39.64150265 | Long: -86.05451685 | Datum: NAD83 UTM16N

Soil Map Unit Name: Treaty silty clay loam, 0 to 1 percent slopes (ThrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes	No X	**within a Wetland?**	Yes No X
Wetland Hydrology Present?	Yes	No X		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Potentilla norvegica*	55%	Yes	FAC
2. *Rumex crispus*	20%	Yes	FAC
3. *Juncus tenuis*	5%	No	FAC
4. *Geranium carolinianum*	10%	No	UPL
5. *Hordeum pusillum*	10%	No	FAC
6. *Liatris lancifolia*	5%	No	FACW
7. *Veronica peregrina*	5%	No	FACW
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	110%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
That Are OBL, FACW, or FAC:			A/B
OBL species		x1 =	
FACW species	10%	x2 =	0.20
FAC species	90%	x3 =	2.70
FACU species		x4 =	
UPL species	10%	x5 =	0.50
Column Totals:	110% (A)		3.40 (B)

Prevalence Index = B/A = 3.09

Hydrophytic Vegetation Indicators:

- 1-Rapid Test for Hydrophytic Vegetation
- **X** 2-Dominance Test is >50%
- 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 3/1	100					Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___ No X	Depth (inches):	N/A
Water Table Present?	Yes ___ No X	Depth (inches):	N/A
Saturation Present? (includes capillary fringe)	Yes ___ No X	Depth (inches):	N/A

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp15

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 4% | Lat: 39.64205393 | Long: -86.06006061 | Datum: NAD83 UTM16N

Soil Map Unit Name: Miami silt loam-Urban land complex, 2 to 6 percent slopes, eroded (YmsB2) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area**	
Hydric Soil Present?	Yes	No X	**within a Wetland?**	Yes No X
Wetland Hydrology Present?	Yes	No X		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Galium mollugo*	35%	Yes	FACU
2. *Poa pratensis*	60%	Yes	FAC
3. *Schedonorus arundinaceus*	10%	No	FACU
4. *Trifolium pratense*	30%	Yes	FACU
5. *Taraxacum officinale*	5%	No	FACU
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	140%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
That Are OBL, FACW, or FAC:		A/B
OBL species		x1 =
FACW species		x2 =
FAC species	60%	x3 = 1.80
FACU species	80%	x4 = 3.20
UPL species		x5 =
Column Totals:	140% (A)	5.00 (B)

Prevalence Index = B/A = 3.57

Hydrophytic Vegetation Indicators:

- 1-Rapid Test for Hydrophytic Vegetation
- 2-Dominance Test is >50%
- 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 5/3	100					Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___ No X	Depth (inches):	N/A
Water Table Present?	Yes ___ No X	Depth (inches):	N/A
Saturation Present? (includes capillary fringe)	Yes ___ No X	Depth (inches):	N/A

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp16

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 4% | Lat: 39.64222705 | Long: -86.06119523 | Datum: NAD83 UTM16N

Soil Map Unit Name: Crosby silt loam, fine-loamy subsoil-Urban land complex, 0 to 2 percent slopes (YclA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**	
Hydric Soil Present?	Yes	No X	**within a Wetland?**	Yes No X
Wetland Hydrology Present?	Yes	No X		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Platanus occidentalis*	60%	Yes	FACW
2. *Celtis occidentalis*	30%	Yes	FAC
3.			
4.			
5.			
	90%	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Cornus drummondii*	30%	Yes	FAC
2. *Lonicera maackii*	30%	Yes	UPL
3.			
4.			
5.			
	60%	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Populus deltoides*	20%	Yes	FAC
2. *Euonymus fortunei*	30%	Yes	UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	50%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
That Are OBL, FACW, or FAC:			A/B
OBL species		x1 =	
FACW species	60%	x2 =	1.20
FAC species	80%	x3 =	2.40
FACU species		x4 =	
UPL species	60%	x5 =	3.00
Column Totals:	200% (A)		6.60 (B)

Prevalence Index = B/A = 3.30

Hydrophytic Vegetation Indicators:

- 1-Rapid Test for Hydrophytic Vegetation
- **X** 2-Dominance Test is >50%
- 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 4/2	100					Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___ No X	Depth (inches):	N/A
Water Table Present?	Yes ___ No X	Depth (inches):	N/A
Saturation Present? (includes capillary fringe)	Yes ___ No X	Depth (inches):	N/A

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site: Northeast Corner of County Line & Arlington | City/County: Indianapolis/Marion | Sampling Date: 5/12/2022

Applicant/Owner: Kimley Horn | State: IN | Sampling Point: dp17

Investigator(s): Ben Hess & Paige Eichelberger | Section, Township, Range: S23 T14N R4E

Landform (hillslope, terrace, etc.): | Local relief (concave, convex, none): none

Slope (%): 2% | Lat: 39.6408397 | Long: -86.06032801 | Datum: NAD83 UTM16N

Soil Map Unit Name: Treaty silty clay loam, 0 to 1 percent slopes (ThrA) | NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation N, Soil N, or Hydrology N significantly disturbed? | Are "Normal Circumstances" present? Yes X No

Are Vegetation N, Soil N, or Hydrology N naturally problematic? | (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area**	
Hydric Soil Present?	Yes	No X	**within a Wetland?**	Yes No X
Wetland Hydrology Present?	Yes	No X		

Remarks:

VEGETATION -- Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Cornus drummondii*	20%	Yes	FAC
2. *Gleditsia triacanthos*	20%	Yes	FACU
3. *Fraxinus pennsylvanica*	5%	No	FACW
4. *Pyrus calleryana*	10%	No	UPL
5. *Elaeagnus umbellata*	10%	No	UPL
	65%	= Total Cover	

Herb Stratum (Plot size: 5' radius)			
1. *Solidago altissima*	40%	Yes	FACU
2. *Vernonia gigantea*	5%	No	FAC
3. *Poa pratensis*	20%	Yes	FAC
4. *Toxicodendron radicans*	10%	No	FAC
5.			
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14.			
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16.			
17.			
18.			
19.			
20.			
	75%	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
That Are OBL, FACW, or FAC:		A/B
OBL species	x1 =	
FACW species 5%	x2 =	0.10
FAC species 55%	x3 =	1.65
FACU species 60%	x4 =	2.40
UPL species 20%	x5 =	1.00
Column Totals: 140% (A)		5.15 (B)

Prevalence Index = B/A = 3.68

Hydrophytic Vegetation Indicators:

- 1-Rapid Test for Hydrophytic Vegetation
- 2-Dominance Test is >50%
- 3-Prevalence Index is ≤3.0[1]
- 4-Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: dp17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16"	10YR 4/1	100					Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators[3]:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
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- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Test Indicators of Hydric Soils:

- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]The hydric soil indicators have been updated to comply with the *Field Indicators of Hydric Soils in the United States* , Version 8.0, 2016.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required: check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___ No X	Depth (inches):	N/A
Water Table Present?	Yes ___ No X	Depth (inches):	N/A
Saturation Present? (includes capillary fringe)	Yes ___ No X	Depth (inches):	N/A

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

TOGETHER we can do great things

Community

When we say community, we don't just mean the neighborhoods that people call home. We mean everyone and everything with a stake in the work that we do—from our Stantec and industry colleagues to the clients we collaborate with and the people and places we impact.

Whether creating, sustaining, or revitalizing a community, we help diverse cultures and perspectives work together toward shared successes.

Although our work helps to create physical communities, our ultimate goal is to create something far more meaningful—a sense of community.

Creativity

For us, creativity is driven by purpose. Knowing that transformation is truly possible inspires us to approach every situation with a fresh perspective.

Our inventive and collaborative approach to problem-solving helps bring big ideas to life through creative solutions.

Whether our contribution is a design that strikes the perfect balance between function and aesthetics, a feat of engineering that redefines what's possible, or a project management approach that delivers results, we strive for outcomes that transcend the challenges they solve and shape the communities we serve for the better.

Client Relationships

We're better together. This belief shapes how we collaborate with our clients, our partners, and our communities.

We listen so we can deeply understand our clients' needs, communicate with purpose so we maintain alignment, and remain open and flexible so we never miss an opportunity to strengthen a project and positively transform a community.

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