From:	Robinson, William
To:	Kooy, Sam
Cc:	Stevenson, Leigh; Everhart, Sarah
Subject:	RE: 2023-133-73-WLR-I McGregor Road, Walnut Street, and CR N 850 W Intersection Improvement Project
Date:	Friday, March 24, 2023 11:37:00 AM
Attachments:	image001.png image002.png image003.png image004.png image005.png image006.png image007.png image009.png image010.png image011.png image012.png image013.png 2023-133-73-WLR-Q WOSD approved.pdf

Yep, just got it approved, here is the Waters of the State determination. Send in the permit application whenever you are ready.

From: Kooy, Sam <SKooy@structurepoint.com>
Sent: Monday, March 20, 2023 10:03 AM
To: Robinson, William <WRobinso@idem.IN.gov>
Cc: Stevenson, Leigh <lstevenson@structurepoint.com>; Everhart, Sarah <severhart@structurepoint.com>
Subject: RE: 2023-133-73-WLR-I McGregor Road, Walnut Street, and CR N 850 W Intersection Improvement Project

Good morning,

We have completed the permit application and are ready to submit it. Could you please provide an update on the status of the waters of the state determination?

Thank you!

Samantha Kooy
Environmental Scientist

9025 River Road, Suite 200
Indianapolis, IN 46240
317-547-5580 OFFICE
317-607-3398 CELL
structurepoint.com WEB

AMERICAN STRUCTUREPOINT INC.

Best Places to Work in Indiana
Best Employers in Ohio

From: Robinson, William <WRobinso@idem.IN.gov>
Sent: Tuesday, February 28, 2023 8:09 AM
To: Kooy, Sam <SKooy@structurepoint.com>
Cc: Stevenson, Leigh <lstevenson@structurepoint.com>; Everhart, Sarah <severhart@structurepoint.com>
Subject: RE: 2023-133-73-WLR-I McGregor Road, Walnut Street, and CR N 850 W Intersection Improvement Project

Sounds good to me. It is in review right now, I'll send it out once its been approved, thanks!

From: Kooy, Sam <SKooy@structurepoint.com>
Sent: Thursday, February 23, 2023 3:35 PM
To: Robinson, William <WRobinso@idem.IN.gov>
Cc: Stevenson, Leigh <lstevenson@structurepoint.com>; Everhart, Sarah <severhart@structurepoint.com>
Subject: RE: 2023-133-73-WLR-I McGregor Road, Walnut Street, and CR N 850 W Intersection Improvement Project

---

Good afternoon,

I agree that there is not a need for an onsite meeting, however we wanted to receive your input in case you found it to be necessary. I will submit the permit application after we receive the approved waters of the state determination.

Thank you!

Samantha Kooy
Environmental Scientist

9025 River Road, Suite 200
Indianapolis, IN 46240
317-547-5580 OFFICE
317-607-3398 CELL
structurepoint.com WEB

AMERICAN STRUCTUREPOINT INC.

From: Robinson, William <WRobinso@idem.IN.gov>
Sent: Tuesday, February 14, 2023 1:58 PM
To: Kooy, Sam <SKooy@structurepoint.com>
Subject: 2023-133-73-WLR-I McGregor Road, Walnut Street, and CR N 850 W Intersection Improvement Project

Hello Sam, I will be handling this project.

I was wondering what you wanted to meet about. I am working on the waters of the state determination right now and agree that the impacted wetlands are class 2. Wetland B will be exempt, pending our traditional review process. There will be mitigation required since the impacts are over 0.1 acres.

Unless you anticipate ways to avoid these wetlands and want to discuss them, I don't see a need for an on site meeting. After I send you the approved waters of the state determination you can send in the application. Let me know if you have any questions.

William Robinson, Wetland Project Manager
Wetlands and Stormwater Section, Office of Water Quality
100 North Senate Avenue, Room 1255
Indianapolis Indiana 46204
Phone: (317) 460-6530
Fax: (317) 234-4145
Wrobinso@idem.IN.gov

Storm Water Program: http://www.in.gov/idem/stormwater
Indiana Storm Water Quality Manual: http://www.in.gov/idem/stormwater/2363.htm
Section 401 Water Quality Certification and Isolated Wetlands Program:
http://www.in.gov/idem/wetlands

Indiana Department of Environmental Management

IDEM values your feedback.
Please take two minutes and complete this brief survey.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov
Eric J. Holcomb, *Governor*
Brian Rockensuess, *Commissioner*

WATER OF THE STATE DETERMINATION

PROJECT NO.:	2023-133-73-WLR-Q
PROJECT NAME:	McGregor Road, Walnut Street, and County Road (CR) N 850 W Intersection Improvement Project
AUTHORITY:	327 IAC 17-1-3(13), 327 IAC 17-1-3(17)
DATE OF ISSUANCE:	3/24/2023
DATE OF EXPIRATION:	3/24/2028

APPROVED: _____

Brian Wolff, Branch Chief
Surface Water and Operations
Office of Water Quality

RESPONSIBLE PARTIES:
Shelby County Highway Department
Attn: Kem Anderson
25 W. Polk Street, Room 206
Shelbyville, IN, 46176

DELINEATOR(S):
Samantha Kooy
American Structurepoint, Inc
9025 River Road, Suite 200
Indianapolis, IN 46240

AGENT(S):
Samantha Kooy
American Structurepoint, Inc
9025 River Road, Suite 200
Indianapolis, IN 46240

DELINEATION DATE: 5/31/2022

DATE REPORT RECEIVED: 2/9/2023

TRACT LOCATION: Shelby County

Latitude: 39.658611, Longitude: -85.944722

The project tract is approximately 300 acres and is located west of N county road 850 w and south of E MacGregor Road in/near Acton

USACE ID: LRL-2022-733

CONCLUSIONS:

The Indiana Department of Environmental Management (IDEM) has reached the following conclusions about whether any Waters, as defined in 327 IAC 17-1-3(13), exist on the property. In accordance with 327 IAC 17-1-3(17) the department makes all isolated wetland determinations consistent with the Wetland Delineation Manual, Technical Report Y-87-1 of the United States Army Corps of Engineers.

SITE ID	ACRES	CLASS	FORESTED	EXEMPT	EXEMPTION AUTHORITY	REGULATED UNDER IC 13-18-22
Wetland A1	0.12	2	Yes	Yes	IC 13-11-2-74.5(a)(6)	No
Wetland A2	1.08	2	Yes	No	NA	Yes
Wetland B	0.02	NA	No	Yes	IC 13-11-2-74.5(a)(2)(A)	No
Wetland C	0.05	2	Yes	Yes	IC 13-11-2-74.5(a)(6)	No

COMMENTS:

Wetland A1 has greater than 30% canopy cover and is forested. It has moderate hydrological function and supports moderate habitat and is a Class II Wetland. As a Class II wetland under 3/8th of an acre in size, it is exempt from regulation under IC 13-11-2-74.5(a)(6).
Wetland A2 has greater than 30% canopy cover and is forested. It has moderate hydrological function and supports moderate habitat and is a regulated Class II wetland.

Wetland B exists as an incidental feature of a residential lawn and is exempt from regulation under IC 13-11-2-74.5(a)(2)(A).

Wetland C has greater than 30% canopy cover and is forested. It has moderate hydrological function and supports moderate habitat and is a Class II. As a Class II wetland under 3/8th of an acre in size, it is exempt from regulation under under IC 13-11-2-74.5(a)(6).

DISCLAIMER:

This determination is based upon the information provided in the above referenced delineation report and/or the above referenced field evaluation. This determination does not relieve the recipient from the responsibility of obtaining any permits or authorizations that may be required for this project or related activities from IDEM or any other agency or person. The project site and the associated construction may be subject to 327 IAC 15-5 (Rule 5). Rule 5 specifically addresses storm water run-off and the pollutants associated with all land disturbing activities of one acre or more. If applicable, this permit must be obtained prior to the initiation of land disturbing activities. Please contact the IDEM Storm Water Program at 317-233-1864 concerning permitting for 327 IAC 15-5 (Rule 5). You may also wish to contact the Indiana Department of Natural Resources at 317-232-4160, or toll free at 877-928-3755, concerning the possible requirement of a Natural Freshwater Lake or Construction in a Floodway Permit.

This determination does not:

(1) authorize impacts or activities;
(2) authorize any injury to persons or private property or invasion of other private rights, or any infringement of federal, state or local laws or regulations;
(3) convey any property rights of any sort, or any exclusive privileges;
(4) preempt any duty to obtain federal, state or local permits or authorizations required by law for the execution of the project or related activities; or
(5) authorize changes in the plan design detailed in the application.

APPEALS PROCEDURES:

This decision may be appealed in accordance with IC 4-21.5, the Administrative Orders and Procedures Act. The steps that must be followed to qualify for review are:

1. You must petition for review in writing that states facts demonstrating that you are either the person to whom this decision is directed, a person who is aggrieved or adversely affected by the decision, or a person entitled to review under any law.

2. You must file the petition for review with the Office of Environmental Adjudication (OEA) at the following address:

   Office of Environmental Adjudication
   100 North Senate Avenue
   IGCN Room N103
   Indianapolis, IN 46204

3. You must file the petition within eighteen (18) days of the mailing date of this decision. If the eighteenth day falls on a Saturday, Sunday, legal holiday, or other day that the OEA offices are closed during regular business hours, you may file the petition the next day that the OEA offices are open during regular business hours. The petition is deemed filed on the earliest of the following dates: the date it is personally delivered to OEA; the date that the envelope containing the petition is postmarked if it is mailed by United States mail; or, the date it is shown to have been deposited with a private carrier on the private carrier's receipt, if sent by private carrier.

Identifying the permit, decision, or other order for which you seek review by number, name of the responsible, location, or date of this notice will expedite review of the petition.

Note that if a petition for review is granted pursuant to IC 4-21.5-3-7, the petitioner will, and any other person may, obtain notice of any prehearing conferences, preliminary hearings, hearings, stays, and any orders disposing of the proceedings by requesting copies of such notices from OEA.

If you have procedural or scheduling questions regarding your Petition for Administrative Review, additional information on the review process is available at the website of the Office of Environmental Adjudication at http://www.in.gov/oea.

If you have any questions about this determination, contact William Robinson by phone at 317-460-6530 or by e-mail at WRobinso@IDEM.IN.gov.

cc: Samantha Kooy, American Structurepoint, Inc

From: Kooy, Sam
To: Robinson, William
Cc: Stevenson, Leigh; Everhart, Sarah
Subject: RE: 2023-133-73-WLR-I McGregor Road, Walnut Street, and CR N 850 W Intersection Improvement Project
Date: Thursday, February 23, 2023 3:35:02 PM
Attachments: image007.png
image008.png
image009.png
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image011.png
image012.png
image013.png
image015.png
image016.png
image017.png
image018.png
image019.png

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Thank you!

Samantha Kooy
Environmental Scientist

9025 River Road, Suite 200
Indianapolis, IN 46240
317-547-5580 OFFICE
317-607-3398 CELL
structurepoint.com WEB

AMERICAN STRUCTUREPOINT INC.

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Best Employers in Ohio

From: Robinson, William <WRobinso@idem.IN.gov>
Sent: Tuesday, February 14, 2023 1:58 PM
To: Kooy, Sam <SKooy@structurepoint.com>
Subject: 2023-133-73-WLR-I McGregor Road, Walnut Street, and CR N 850 W Intersection Improvement Project

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William Robinson, Wetland Project Manager
Wetlands and Stormwater Section, Office of Water Quality
100 North Senate Avenue, Room 1255
Indianapolis Indiana 46204
Phone: (317) 460-6530
Fax: (317) 234-4145
Wrobinso@idem.IN.gov

Storm Water Program: http://www.in.gov/idem/stormwater
Indiana Storm Water Quality Manual: http://www.in.gov/idem/stormwater/2363.htm
Section 401 Water Quality Certification and Isolated Wetlands Program:
http://www.in.gov/idem/wetlands

Indiana Department of Environmental Management

IDEM values your feedback.
Please take two minutes and complete this brief survey.

SECTION 401 WQC
WETLANDS, LAKES, AND STREAMS
PRE-FILING MEETING REQUEST

State Form 57030 (10-20)
Indiana Department of Environmental Management
Office of Water Quality

Type of Submittal *(Check Appropriate Box):*
☒ Pre-Filing ☐ Early Coordination

For Agency Use Only:

IDEM Identification Number:

Note: Submission of this Pre-Filing Meeting Request a minimum of thirty (30) days prior to submission of a Section 401 Water Quality Certification Request meets the requirement under 40 CFR Part 121.4. A copy of this request must accompany any Section 401 Water Quality Certification Request for the aforementioned project per 40 CFR Part 121.5.

NAME AND LOCATION OF PROJECT

Name of Project
McGregor Road, Walnut Street, and County Road (CR) N 850 W Intersection Improvement Project

County
Shelby

Project Address *(number and street, city, state, and ZIP code) (if available)* or Brief Narrative Description of Project Location *(cross streets or landmark)*
The proposed project is located at the intersections of McGregor Road and Walnut Street, and McGregor Road and CR N 850 W in Shelby County, Indiana.

Latitude (*decimal degrees*)
39.658611

Longitude (*decimal degrees*)
-85.944722

SITE OWNER OF PROJECT

Name of Company *(If Applicable)*
Shelby County Highway Department

Name of Project Site Owner *(An Individual)*
Kem Anderson

Title / Position
Superintendent

Address *(number and street)*
25 W. Polk Street, Room 206

City
Shelbyville

State
Indiana

ZIP Code
46176

Telephone
317-392-6485

FAX

E-Mail Address *(If Available)*
kem.anderson@co.shelby.in.us

CONTACT INFORMATION FOR PROJECT

Contact Person
Samantha Kooy

Name of Company *(If Applicable)*
American Structurepoint, Inc.

Affiliation to Project Site Owner
Consultant

Address *(number and street) (if different from above)*
9025 River Road, Suite 200

City
Indianapolis

State
Indiana

ZIP Code
46240

Telephone
(317) 547-5580

FAX

E-Mail Address *(If Available)*
skooy@structurepoint.com

PROJECT INFORMATION

Project Description (*Describe the proposed project and methods to be used.)*
Shelby County, with the administrative oversight from the Indiana Department of Transportation (INDOT), intends to construct a roundabout at the intersection of McGregor Road and Walnut Street, as well as realign CR N 850 W. The scope of the project will also include the addition of lighting, landscaping, curb and gutter, and a new storm and sanitary sewer.

Type of aquatic resource(s) present
Two Wetland Delineation Reports were prepared for the project and adjacent agricultural land. Report 1, dated September 20, 2021 (Revised March 25, 2022), identified seven wetlands (Wetlands A through G) totaling 1.88 acres and one open water feature (OW-1) totaling 1.5 acres. A Corps Approved Jurisdictional Determination (AJD) (LRL-2021-1070) was issued on May 10, 2022 and determined that OW-1 and Wetlands A through G are isolated waters. Report 2, dated June 3, 2022, identified three wetlands (Wetlands A through C) totaling 1.15 acres. A Corps AJD (LRL-2022-733) was issued on September 1, 2022 and determined that Wetlands A through C are isolated waters. Of these features, only Wetland A from Report 1 and Wetlands A, B, and C from Report 2 are within the project area. Therefore, we are submitting a request for a Pre-Filing Meeting and Waters of the State Determination for Wetland A (Report 1) and Wetlands A, B and C (Report 2).

It is anticipated that Wetland A (Report 1) and Wetlands A and C (Report 2), totaling approximately 1.25 acres, would be considered isolated Class 2 Waters of the State. State Regulated Wetland Class Determination Worksheets have been included for these wetlands. Wetland B (Report 2), totaling approximately 0.02 acre, is anticipated to be exempted from regulation as it is an incidental feature formed within a residential lawn.

The proposed project would impact approximately 0.177 acre of isolated Class 2 Waters of the State (Wetland A (Report 1) and Wetlands A and C (Report 2)). We are requesting Wetland A (Report 1), totaling 0.12 acre, be considered an exempt Class 2 isolated wetland. Therefore, anticipated permanent impacts to non-exempt wetlands would only occur in Wetlands A and C (Report 2). A total of approximately 0.137 acre of permanent impacts will occur due to roadway and roadside ditch construction with approximately 29 cys of cut and 105 cys of clean earth fill and asphalt within Wetland A (Report 2) and approximately 19.2 cys of clean earth fill within Wetland C (Report 2). Temporary impacts will also occur within Wetland C (Report 2) due to the relocation of a water main. Excavated fill within Wetland C will be replaced to existing grade and the area restored with Emergent Wetland Seedmix following the relocation.

Wetlands:

Total Acreage: **1.13** Proposed impacts to wetlands *(in acres)*: **0.137** Proposed mitigation *(if applicable)*: **INSWMP**

Streams:

Total Linear Feet: N/A Proposed impacts to streams *(acres and feet)*: N/A acres and N/A feet

Proposed mitigation *(acres and feet)*: N/A acres and N/A feet

Project Duration

May 2023 to November 2023

(Continued on Reverse Side)

SUPPLEMENTAL INFORMATION

In addition to this form, the following **REQUIRED** information has been included:

- ☒ A map of the location
- ☒ Wetland delineation
- ☒ Verification of the delineation or an Approved Jurisdictional Determination by the U.S. Army Corps of Engineers
- ☒ Conceptual drawings

SITE OWNER OF PROJECT RESPONSIBILITY STATEMENT

I swear or affirm, under penalty of perjury as specified by IC 35-44.1-2-1 and other penalties specified by IC 13-30-10, that the statements and representations in this notification are true, accurate, and complete.

The project proponent herby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief. I, the project proponent, 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.

Signature of Project Owner: Kem Anderson Supt

Date *(month, day, year)*: 2-8-23

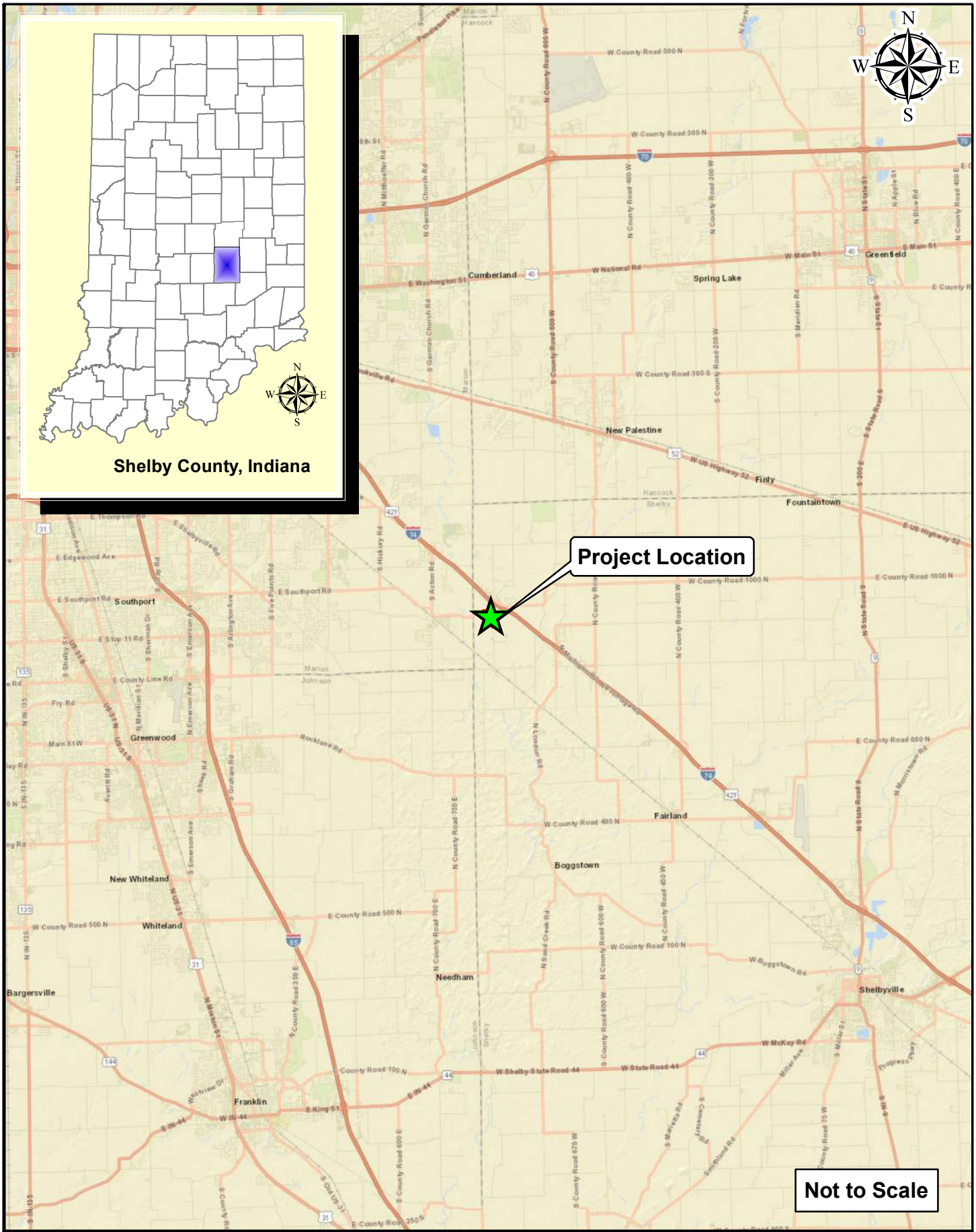
Printed Name of Project Owner

Kem Anderson

Note:

Once your pre-certification request has been received, the responsible IDEM project manager will review the information and will be in contact if there are any questions, concerns or the need for an on-site or formal early coordination meeting.

The pre-certification request does not constitute a formal review for a Section 401 Water Quality Certification. However, a dated copy of this request must also be included with your certification request along with the other required elements. Information contained in this request will be used to determine potential project concerns and the requirement for additional information. Should a formal on-site or early coordination meeting be necessary, any formal submission of a 401 WQC application should be delayed until completion of a meeting.



Path: P:\2021\01339\D. Drawings\ArcView\Environmental\Exhibits\ECL\2021.01339.EV.2022-05-04.McGregor_Road_state_Map.SMK.mxd Date:5/13/2022 User:SKooy

AMERICAN STRUCTUREPOINT INC.

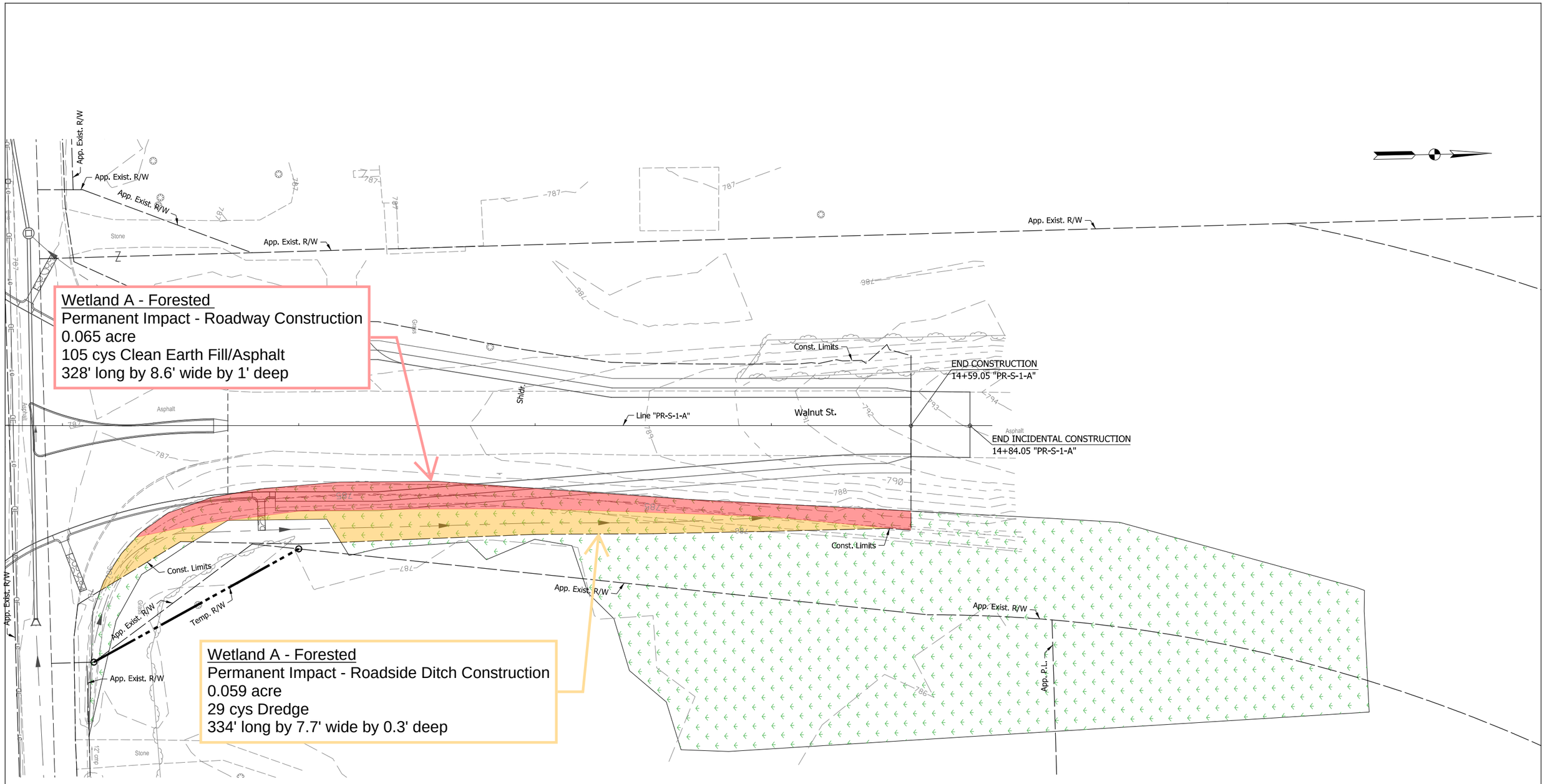
Project Location Map

Shelby County
8561 N 175 E
City, State 00000

McGregor Road, Walnut Street, and
CR N 850 W Intersection Improvement Project
Des. No. 2003058

Township: Moral
County: Shelby
State: Indiana

Date: 05/05/2022



DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: JAB DRAWN: RJC

CHECKED: TJM CHECKED: TJM

SHELBY COUNTY, INDIANA

WETLAND IMPACT EXHIBIT
LINE "PR-S-1-A" - WETLAND "A"

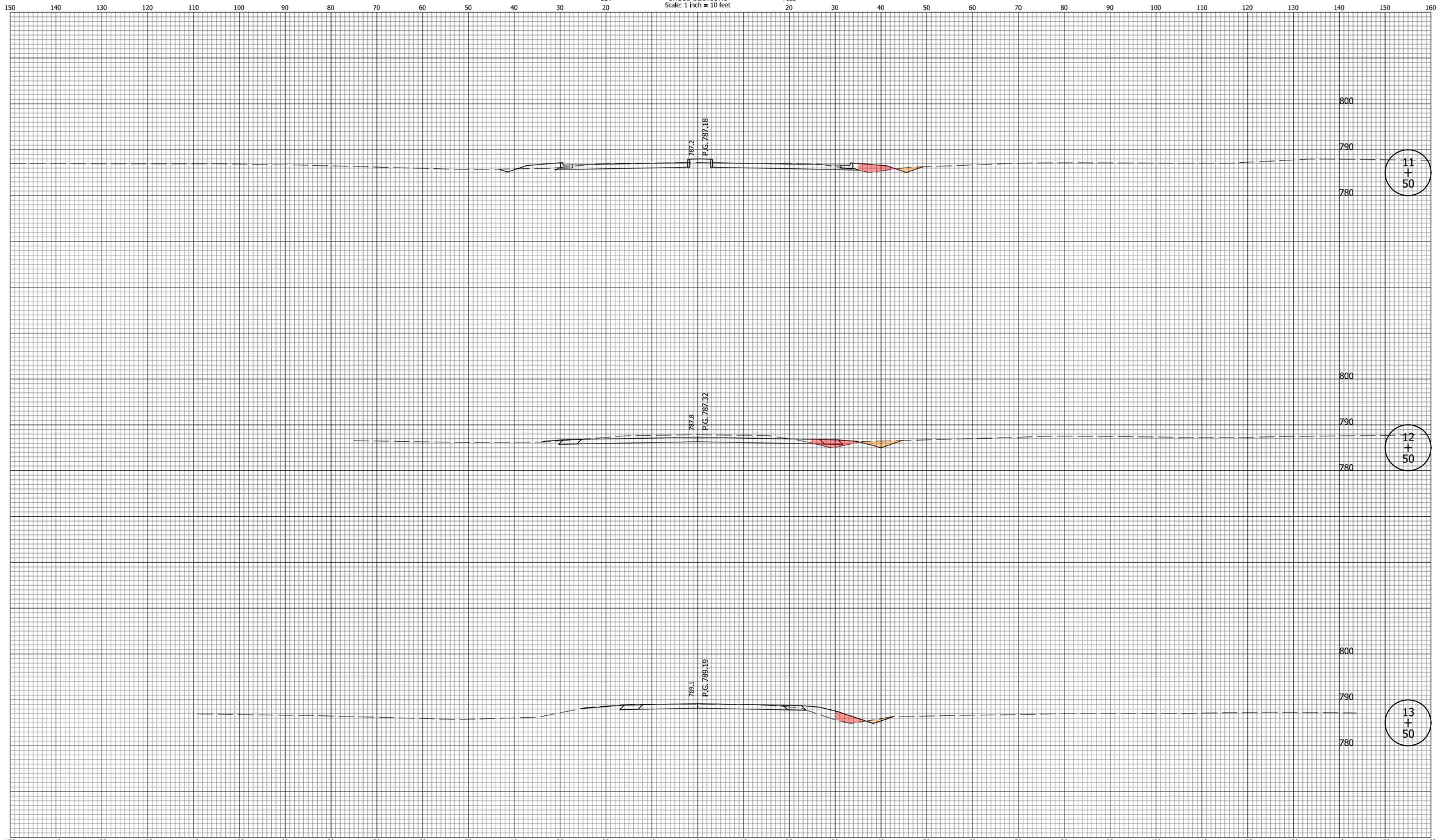
HORIZONTAL SCALE	BRIDGE FILE
1"=40'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2003058
SURVEY BOOK	SHEETS
N/A	3 of 3
CONTRACT	PROJECT
N/A	2003058

Jhoffman 2/3/2023 11:40:08 AM P:\2021\01339\D. Drawings\Working Drawings\ASV\Wetland A Exhibit.dgn

Indy-Pdf.cfg
Indiana_Shade.tbl

CROSS SECTIONS

Scale: 1 inch = 10 feet



DATE	REVISION

SHELBY COUNTY, INDIANA

DESIGNED: JAB DRAWN: JAB

CHECKED: TJM CHECKED: TJM

WETLAND A CROSS SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	N/A
VERTICAL SCALE	DESIGNATION
1"=10'	2003058
SURVEY BOOK	SHEETS
N/A	2 of 3
CONTRACT	PROJECT
N/A	2003058

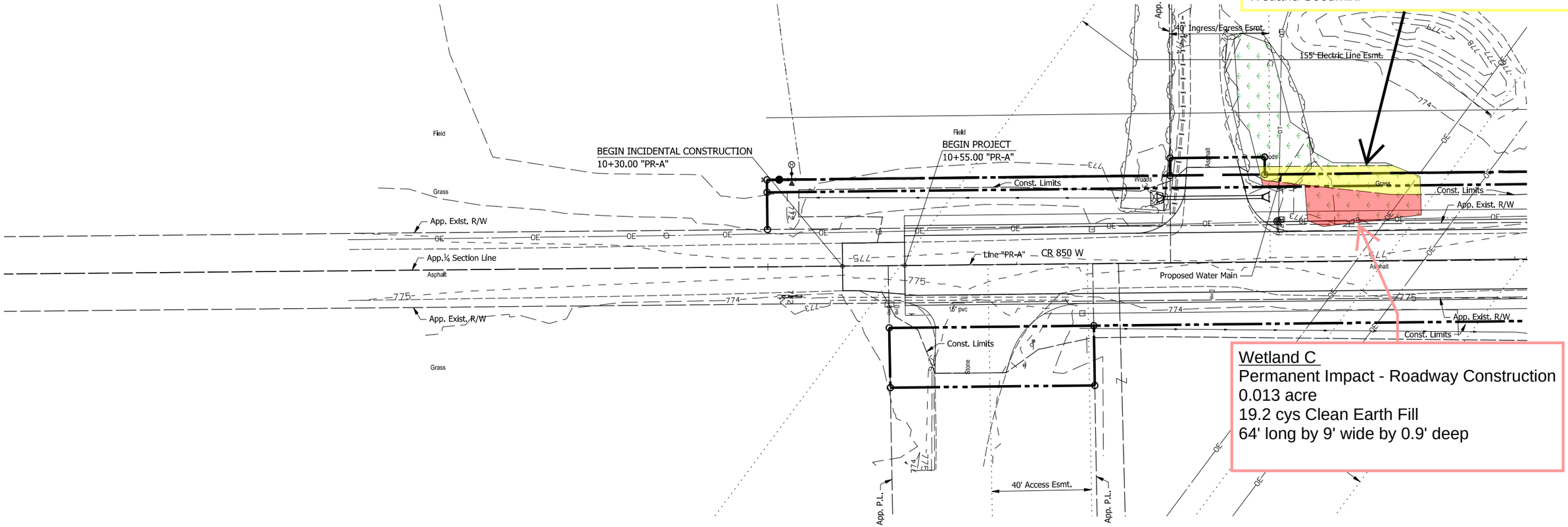
Jhoffman 2/3/2023 11:40:07 AM P:\2021\01339\D. Drawings\Working Drawings\ASV\Wetland A Cross Section Exhibit.dgn

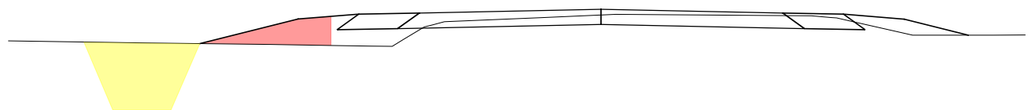
Indy-ref_alloc1g
Indiana_Shade.tbl

10

Wetland C - Emergent
Temporary Impact - Water Main Relocation
0.013 acre
93.2 cys excavation
65' long by 8.6' wide by 4.5' deep

Following relocation of the water main, clean earth fill will be replaced within Wetland C to existing grade and area will be restored with Emergent Wetland Seedmix.





DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: JAB DRAWN: RJC

CHECKED: TJM CHECKED: TJM

SHELBY COUNTY, INDIANA

WETLAND IMPACT EXHIBIT
LINE "PR-A" - WETLAND "C"

HORIZONTAL SCALE	BRIDGE FILE
1"=40'	N/A
VERTICAL SCALE	DESIGNATION
N/A	N/A
SURVEY BOOK	SHEETS
N/A	1 of 3
CONTRACT	PROJECT
N/A	N/A

Indy-ptf.dfconfig
Indiana_Color.tbl

Jhoffman 2/3/2023 11:40:06 AM P:\2021\01339\D. Drawings\Working Drawings\ASV\Wetland C Exhibit.dgn

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

May 10, 2022

Regulatory Division
North Branch
ID No. LRL-2021-1070-sjk

Mr. Christopher King
Runnebohm Construction Company
144 East Rampart Street
Shelbyville, Indiana 46176

Dear Mr. King:

This is regarding electronic correspondence from DHE, requesting a jurisdictional determination on your behalf for a portion of the 300-acre Surge Industrial site located at latitude 39.6524° and longitude -85.9461°, Pleasant View, Shelby 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 A, B, C, D, E, G, and OW-1 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 **July 9, 2022**.

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.

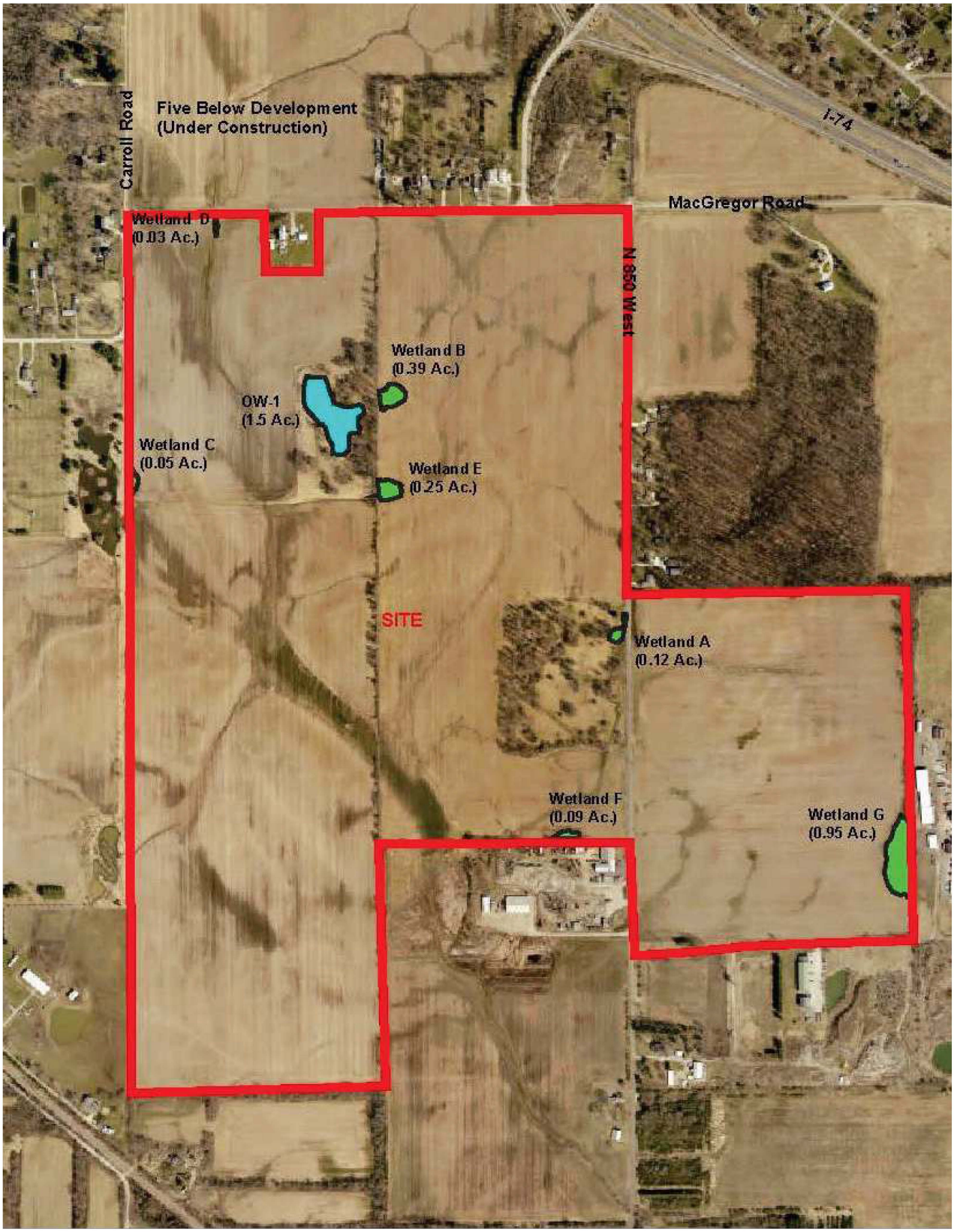
If we can be of any further assistance, please contact me by calling 317-543-9424 or emailing Sarah.J.Keller@usace.army.mil. Any correspondence on this matter should reference our Identification Number LRL-2021-1070-sjk.

Sincerely,

Sarah Keller
Team Leader
Indianapolis Regulatory Office

Enclosures
Copy Furnished: IDEM (Boyd)
DHE (Gerke)

Approved Jurisdictional Determination
Runnebohm Construction Company
LRL-2021-1070-sjk
May 10, 2022



Wetland Findings

Surge Industrial - SW 1/4 Carroll Road & McGregor Road

Project Number:	RCC.003
Date:	March, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 5

892011

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Runnebohm Construction Company	File Number: LRL-2021-1070	Date: 5/10/2022
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): 5/10/2022

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: LRL-2021-1070-sjk

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State:IN County/parish/borough: Shelby City: Pleasant View
Center coordinates of site (lat/long in degree decimal format): Lat. 39.6524° **N**, Long. -85.9461° **W**.
Universal Transverse Mercator:
Name of nearest waterbody: Buck Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A
Name of watershed or Hydrologic Unit Code (HUC): 05120204
☒ 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: 4/14/2022
☒ Field Determination. Date(s): 3/18/2022

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 A (0.12 ac), B (0.39 ac), C (0.05 ac), D (0.03 ac), E (0.25 ac), and G (0.95 ac) and OW-1 (1.5 ac) are isolated with no hydrologic or ecologic connection to Waters of the U.S. and are not susceptible to use in interstate or foreign commerce.** .

[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: .

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[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: 1.5 acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☒ Wetlands: 1.79 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 9/20/2021, revised 3/30/2021 by DHE .
☒ 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' Acton, IN .
☒ USDA Natural Resources Conservation Service Soil Survey. Citation:Web Soil Survey, Shelby County.
☒ National wetlands inventory map(s). Cite name:maps in delineation reports.
☐ State/Local wetland inventory map(s): .
☒ FEMA/FIRM maps: Panel 18145C0015C eff. 11/5/2014 (delineation).
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): undated aerials in deleineation report; 6/2008, 3/2/2018 (Google Earth); 4/3/2021, 11/19/2021 (DigitalGlobe) .
or ☒ Other (Name & Date):Site photos in delineation report (9/14/2021, 2/17/2022, 3/2022); USACE site photos (3/18/2022).
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify): LiDAR (NRV); County regulated drains (Beacon).

B. ADDITIONAL COMMENTS TO SUPPORT JD: Wetland A is located in a scrubby area along a county road. Aerials show a potential drainage going south from the general vicinity of the wetland; however, inspection of the site indicated there is a much higher elevation area bisecting the parcel between Wetland A and the swale, preventing flow from entering the swale. Wetlands C, D, and G are in depressions against county and/or private roads with no roadside ditches. Wetlands B and E lie in depressions that collect drainage from much higher elevation areas to the east and are impounded against a fencerow. OW-1 is an excavated pond with no outlet. There are no known ecologic pathways or connections with any WOUS. Therefore, the wetlands and pond in question are isolated, not susceptible to use in interstate or foreign commerce, and are not WOUS. .

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

September 1, 2022

Regulatory Division
North Branch
ID No. LRL-2022-733-sjk

Mr. Christopher King
Runnebohm Construction Company
144 East Rampart Road
Shelbyville, Indiana 46176

Dear Mr. King:

This is regarding electronic correspondence dated August 5, 2022, from DHE requesting a jurisdictional determination on your behalf for three areas of proposed roundabouts in the vicinity of County Road N 850 West and MacGregor Road in Pleasant View, Shelby County, Indiana. Location maps are 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 A, B, and C 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 wetland 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 **October 31, 2022**.

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.

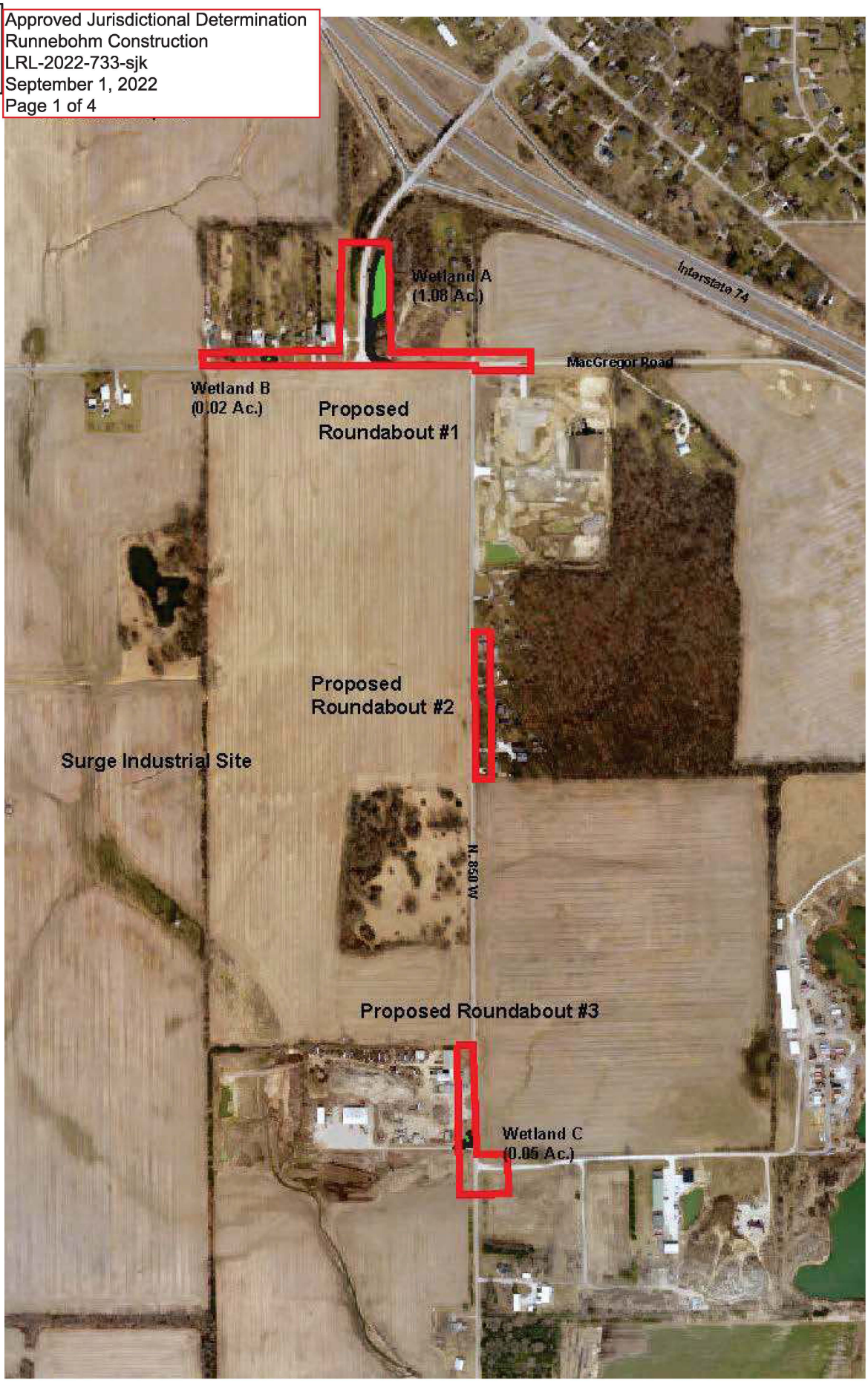
If we can be of any further assistance, please contact me by calling 317-543-9424 or emailing Sarah.J.Keller@usace.army.mil. Any correspondence on this matter should reference our Identification Number LRL-2022-733-sjk.

Sincerely,

2022.09.01
08:09:16 -04'00'

Sarah J. Keller
Team Leader
Indianapolis Regulatory Office

Enclosures
Copy Furnished: IDEM (Boyd)
DHE (Gerke)



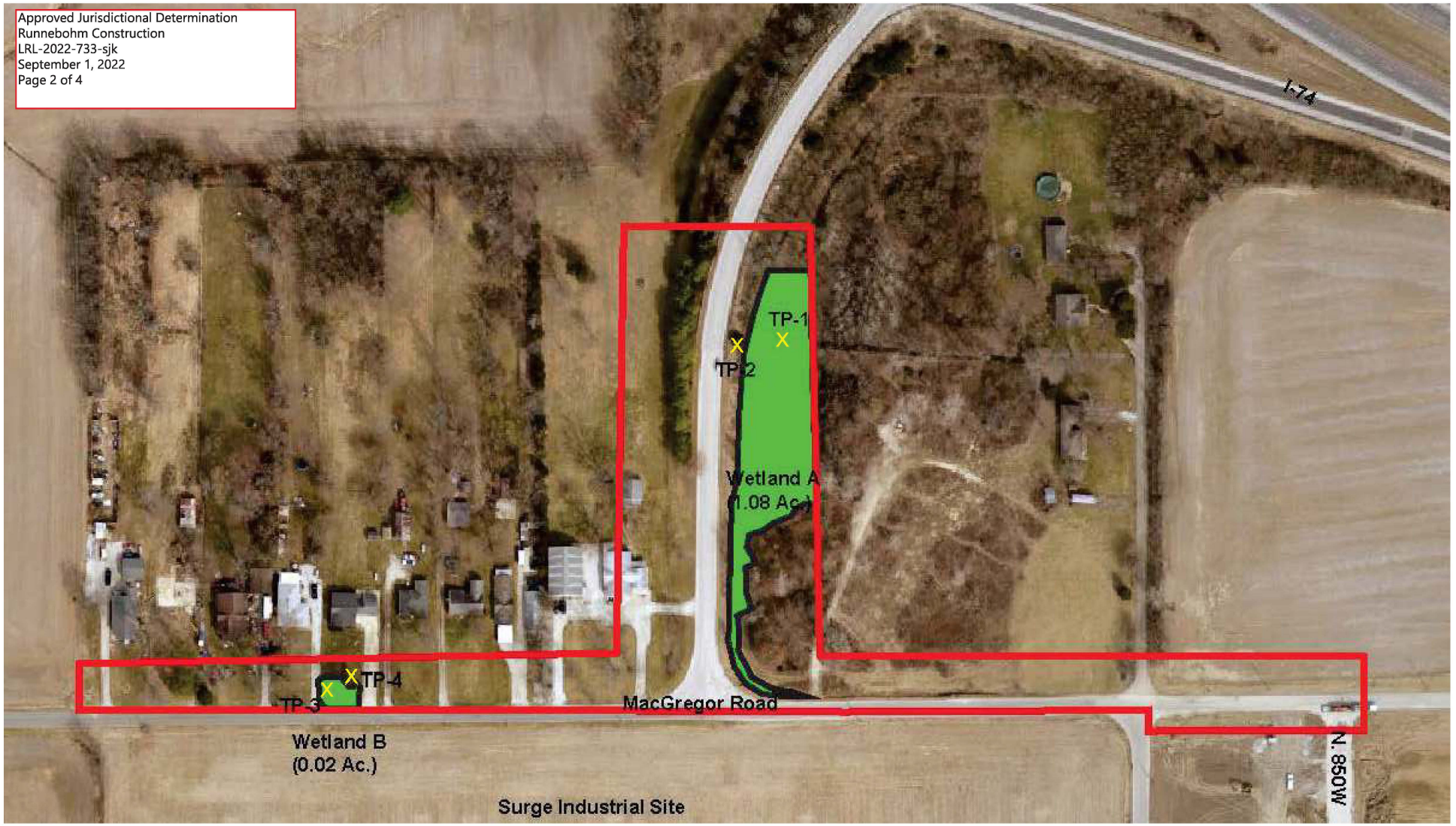
Overall Site Map

Surge Industrial Site - Proposed Roundabouts

Project Number:	RCC.003
Date:	June, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 5



Inset #1 - Proposed Roundabout #1

Surge Industrial Site - Proposed Roundabouts

Project Number:	RCC.003
Drawing file:	Site Figures
Date:	June, 2022
Scale:	NTS
Drawn By:	GJG

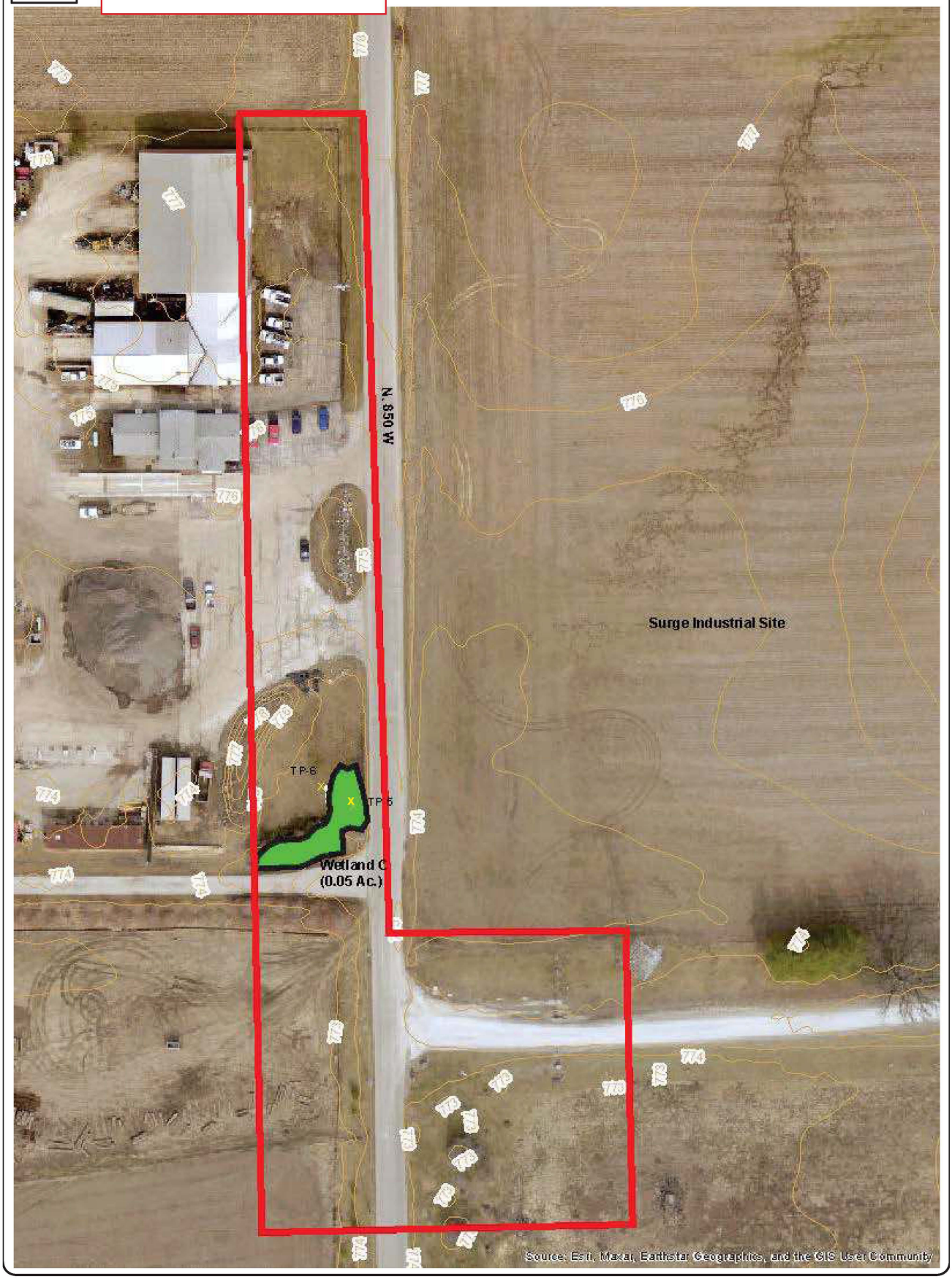
DHE

Figure: 6

Inset #2 - Proposed Roundabout #2

Surge Industrial Site - Proposed Roundabouts

Project Number: RCC.003	DHE
Date: June, 2022	
Scale: NTS	
Drawn By: GJG	Figure: 7



Inset #3 - Proposed Roundabout #3

Surge Industrial Site - Proposed Roundabouts

Project Number:	RCC.003
Date:	June, 2022
Scale:	NTS
Drawn By:	GJG
Figure:	8

892011

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Runnebohm Construction	File Number: LRL-2022-733	Date: 9/1/2022
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): 9/1/2022

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: LRL-2022-733-sjk

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State:IN County/parish/borough: Shelby City: Pleasant View
Center coordinates of site (lat/long in degree decimal format): Lat. 39.6595° **N**, Long. -85.9443° **W**.
Universal Transverse Mercator:
Name of nearest waterbody: Buck Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: N/A
Name of watershed or Hydrologic Unit Code (HUC): 05120204
☒ 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: 8/10/2022
☐ Field Determination. Date(s):

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 A (1.08 ac), B (0.02 ac), and C (0.05 ac) are isolated with no hydrologic or ecologic connection to Waters of the U.S. and are not susceptible to use in interstate or foreign commerce.** .

[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
  - ☐ changes in the character of soil
  - ☐ shelving
  - ☐ vegetation matted down, bent, or absent
  - ☐ leaf litter disturbed or washed away
  - ☐ sediment deposition
  - ☐ water staining
  - ☐ other (list):
  - ☐ the presence of litter and debris
  - ☐ destruction of terrestrial vegetation
  - ☐ the presence of wrack line
  - ☐ sediment sorting
  - ☐ scour
  - ☐ multiple observed or predicted flow events
  - ☐ abrupt change in plant community
- ☐ 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:
  - ☐ oil or scum line along shore objects
  - ☐ fine shell or debris deposits (foreshore)
  - ☐ physical markings/characteristics
  - ☐ tidal gauges
  - ☐ other (list):
- ☒ Mean High Water Mark indicated by:
  - ☐ survey to available datum;
  - ☐ physical markings;
  - ☐ vegetation lines/changes in vegetation types.

(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: 1.15 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 6/3/2022 by DHE, Inc. .
☒ 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', Acton, IN (delineation report) .
☒ USDA Natural Resources Conservation Service Soil Survey. Citation:Web Soil Survey, Shelby County (delineation report).
☒ National wetlands inventory map(s). Cite name: map in delineation report.
☐ State/Local wetland inventory map(s): .
☒ FEMA/FIRM maps: Panel 18145C0015C eff 11/5/2014 .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): 2020 (delineation report); 1992 (Google Earth) .
or ☒ Other (Name & Date): Site photos in delineation report (5/31/2022).
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify):LiDAR DEM (NRV) .

B. ADDITIONAL COMMENTS TO SUPPORT JD: Wetland A is located in a regional depression at the I-74/Walnut Street interchange. There is no indication that there are roadside ditches or other drainages that would convey flow to a tributary. Weltand B and C

are located in depressions along roadsides with no evidence of flow outside their respective boundaries. The wetlands in question are isolated, not susceptible to use in interstate or foreign commerce, and are not WOUS. .

State Regulated Wetland Class Determination Worksheet

State Form 57155 (R / 8-22)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM, Office of Water Quality
Wetlands Program
100 North Senate Avenue, Room 1255
Indianapolis, IN 46204

Questions regarding this form may be directed to:

Phone: (317) 233-8488 or
(800) 451-6027, ext. 38488 (within Indiana)

Program Email: WetlandsProgram@idem.IN.gov

Program Staff: https://www.in.gov/idem/wetlands/

Program Website:
https://www.in.gov/idem/wetlands/

INSTRUCTIONS

(1) Complete this form when conducting wetland delineations One form should be completed for each wetland on-site.

(2) If a wetland meets the definition for multiple wetland classes, the wetland will be classified according to the higher class.

(3) *Submit all completed forms with your wetland delineation and Approved Jurisdictional Determination or official U.S. Army Corps of Engineers correspondence when applying for Waters of the State Determinations or State Regulated Wetland Permits. Additional information regarding how to request Indiana Natural Heritage Data, including fees, required information, and timeframes, is available at https://www.in.gov/dnr/nature-preserves/heritage-data-center/about-inhdc/.*

Form Completed By:

First Name:	Last Name:	Agent Affiliation *(Company Name)*:
Samantha	Kooy	**American Structurepoint, Inc.**

Phone Number:	Email address:
317-547-5580	**skooy@structurepoint.com**

Project Name:	Wetland ID *(per the wetland delineation)*:	Wetland Size *(Acres)*:
MGregor Road, Walnut Street, and CR N 850 W Intersection Improvement Project	Wetland A (Report 1)	**0.12 acre**

STATE REGULATED WETLAND CLASSIFICATION: ☐ **Class I** ☒ **Class II** ☐ **Class III**

Class III Assessment

(1) Is the wetland a listed rare or ecologically important type under IC 13-11-2-25.8(3)(B)? ☐ **Yes** ☒ **No**

If yes, please indicate:

☐ Acid Bog ☐ Acid Seep ☐ Circumneutral Bog ☐ Circumneutral Seep ☐ Cypress Swamp ☐ Dune and Swale

☐ Fen ☐ Forested Fen ☐ Forested Swamp ☐ Marl Beach ☐ Muck Flat ☐ Panne ☐ Sand Flat ☐ Sedge Meadow

☐ Shrub Swamp ☐ Sinkhole Pond ☐ Sinkhole Swamp ☐ Wet Floodplain Forest ☐ Wet Prairie ☐ Wet Sand Prairie

If yes, the Wetland is Class III. Check Class III at the top of the form and the form is now complete.
If no, proceed to Question (2).

(2) Does the wetland generally possess the presence of, or habitat for rare, threatened, or endangered species within a ½ mile radius according to the IDNR Natural Heritage Database **AND** the species uses the habitat for any stage of its life cycle? ☐ **Yes** ☒ **No**

If yes, the Wetland is Class III. Check Class III at the top of the form and the form is now complete.
If no, proceed to Question (3).

(3) Is the wetland in an undisturbed or minimally disturbed setting? ☐ **Yes** ☒ **No**

If yes, answer Question (4) and Question (5). If no, please provide a justification as an attachment to this form and proceed to the Wetland Habitat Functional Assessment.

(4) Does the wetland support more than minimal wildlife or aquatic habitat? **Please complete the Habitat Functional Assessment below. If Question 3 and Question 4 are checked yes, the Wetland is Class III.** ☒ **Yes** ☐ **No**

(5) Does the wetland support more than minimal hydrological function? **Please complete the Hydrology Functional Assessment below. If Question 3 and Question 5 are checked yes, the Wetland is Class III.** ☒ **Yes** ☐ **No**

Please include any additional comments, justifications, and/or supporting documentation related to the Class III Assessment as a separate attachment appended to this form.

Any of the following scenarios indicate the Wetland is Class III:

- *Checking 'Yes' for Question 1*
- *Checking 'Yes' for Question 2*
- *Checking 'Yes' for Question 3 and Question 4*
- *Checking 'Yes' for Question 3 and Question 5*

If the Wetland is Class III, check Class III at the top of the form, complete the appropriate functional assessment on Page 2 (if applicable), and the form is now complete.

Wetland Habitat Functional Assessment:

(6) Does the wetland support moderate habitat? *(see options below)* ☒ **Yes** ☐ **No**

Checking yes also meets the requirements of Question 4.

One "Yes" response below is needed to show moderate habitat function.

- **Indicators of moderate habitat function:**
  - Species of Special Concern within a ½ mile radius of the wetland according to the IDNR Natural Heritage Database **AND** the listed species or a life cycle stage uses wetlands for habitat? ☐ **Yes** ☒ **No**
  - Does the wetland provide habitat corridors between necessary habitat for mobile, state-listed species? ☐ **Yes** ☒ **No**
  - Are there Important Bird Areas (IBA) mapped for the wetland or within a ½ mile radius? ☐ **Yes** ☒ **No**
    https://databasin.org/datasets/fdb91971a11d46d39661f0a56c3585ca/
  - Is the wetland dominated by native species? ☒ **Yes** ☐ **No**
  - Does the wetland support multiple layers of species habitat (wading birds, dabblers, reptiles, amphibians, etc.)? ☐ **Yes** ☒ **No**
  - Do Rapid Assessment Methods indicate that the wetland supports moderate habitat? ☐ **Yes** ☒ **No**
    Indicate which method used: ORAM
  - Are other moderate habitat indicators present *(Explain in Remarks)*? ☐ **Yes** ☒ **No**

Please include any additional comments, justifications, and/or supporting documentation related to the Wetland Habitat Functional Assessment as a separate attachment appended to this form.

Wetland Hydrology Functional Assessment:

(7) Does the wetland support moderate hydrological function? *(see options below)* ☒ **Yes** ☐ **No**

Checking yes also meets the requirements of Question 5.

Indicators of moderate hydrological function. At least one primary indicator or two secondary indicators are needed to show moderate hydrological function.

- **Primary Indicators:**
  - ☐ Wetland meets two or more primary hydrology indicators on the wetland determination data form.
  - ☐ Wetland is located within a floodway or floodplain.
  - ☐ Wetland position in the watershed is 1st-3rd order or 4th – 5th order if the substrate is sand or silt.
  - ☐ Wetland possesses strong hydric soil indicators (gleyed matrix or >20% redox/mottles present).
  - ☐ Wetland is located within a groundwater Wellhead Protection Area.
    https://www.in.gov/idem/cleanwater/information-about/groundwater-monitoring-and-source-water-protection/wellhead-protection-program/source-water-proximity-determination-tool/

- **Secondary Indicators:**
  - ☐ Wetland is 0.75 acre or larger in size, indicating at least moderate water storage capacity.
  - ☒ Dominant vegetation in wetland is highly adapted to prolonged inundation (FACW, OBL dominance).
  - ☐ Wetland substrate is sand or silt, indicating higher hydraulic conductivity.
  - ☐ Wetland is located within a highly developed landscape (>75% impervious surface in ½ mile radius).
  - ☒ Parcel with wetland is bordered by development, roads, or impervious surfaces.
  - ☐ Wetland is located within a drinking water Source Water Susceptibility Area.
  - ☐ Wetland is located within a drinking water Source Water Assessment Area
  - ☐ Other *(Explain in Remarks)*

Please include any additional comments, justifications and/or supporting documentation related to the Wetland Hydrology Functional Assessment as a separate attachment appended to this form.

Any of the following scenarios indicate the Wetland is Class II:
Only Checking 'Yes' to Question (6)
Only Checking 'Yes' to Question (7)

If the Wetland is Class II, check Class II at the top of the form, and the form is now complete.
If the Wetland is not Class III or Class II, check Class I at the top of the form and the form is now complete.

Supporting Guidance Documents:

- **State Regulated Wetlands:** https://www.in.gov/idem/wetlands/information-about/state-regulated-wetlands-program/

State Regulated Wetland Class Determination Worksheet

State Form 57155 (R / 8-22)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INSTRUCTIONS

(1) Complete this form when conducting wetland delineations One form should be completed for each wetland on-site.

(2) If a wetland meets the definition for multiple wetland classes, the wetland will be classified according to the higher class.

(3) *Submit all completed forms with your wetland delineation and Approved Jurisdictional Determination or official U.S. Army Corps of Engineers correspondence when applying for Waters of the State Determinations or State Regulated Wetland Permits. Additional information regarding how to request Indiana Natural Heritage Data, including fees, required information, and timeframes, is available at https://www.in.gov/dnr/nature-preserves/heritage-data-center/about-inhdc/.*

IDEM, Office of Water Quality
Wetlands Program
100 North Senate Avenue, Room 1255
Indianapolis, IN 46204

Questions regarding this form may be directed to:

Phone: (317) 233-8488 or
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Program Email: WetlandsProgram@idem.IN.gov

Program Staff: https://www.in.gov/idem/wetlands/

Program Website:
https://www.in.gov/idem/wetlands/

Form Completed By:

First Name:	Last Name:	Agent Affiliation *(Company Name)*:
Samantha	Kooy	**American Structurepoint, Inc.**

Phone Number:	Email address:
317-547-5580	**skooy@structurepoint.com**

Project Name:	Wetland ID *(per the wetland delineation)*:	Wetland Size *(Acres)*:
McGregor Road, Walnut Street, and CR N 850 W Intersection Improvement Project	Wetland A (Report 2)	**1.08 acres**

STATE REGULATED WETLAND CLASSIFICATION: ☐ **Class I** ☒ **Class II** ☐ **Class III**

Class III Assessment

(1) Is the wetland a listed rare or ecologically important type under IC 13-11-2-25.8(3)(B)? ☐ **Yes** ☒ **No**

If yes, please indicate:

☐ Acid Bog ☐ Acid Seep ☐ Circumneutral Bog ☐ Circumneutral Seep ☐ Cypress Swamp ☐ Dune and Swale

☐ Fen ☐ Forested Fen ☐ Forested Swamp ☐ Marl Beach ☐ Muck Flat ☐ Panne ☐ Sand Flat ☐ Sedge Meadow

☐ Shrub Swamp ☐ Sinkhole Pond ☐ Sinkhole Swamp ☐ Wet Floodplain Forest ☐ Wet Prairie ☐ Wet Sand Prairie

If yes, the Wetland is Class III. Check Class III at the top of the form and the form is now complete.
If no, proceed to Question (2).

(2) Does the wetland generally possess the presence of, or habitat for rare, threatened, or endangered species within a ½ mile radius according to the IDNR Natural Heritage Database **AND** the species uses the habitat for any stage of its life cycle? ☐ **Yes** ☒ **No**

If yes, the Wetland is Class III. Check Class III at the top of the form and the form is now complete.
If no, proceed to Question (3).

(3) Is the wetland in an undisturbed or minimally disturbed setting? ☐ **Yes** ☒ **No**

If yes, answer Question (4) and Question (5). If no, please provide a justification as an attachment to this form and proceed to the Wetland Habitat Functional Assessment.

(4) Does the wetland support more than minimal wildlife or aquatic habitat? **Please complete the Habitat Functional Assessment below. If Question 3 and Question 4 are checked yes, the Wetland is Class III.** ☒ **Yes** ☐ **No**

(5) Does the wetland support more than minimal hydrological function? **Please complete the Hydrology Functional Assessment below. If Question 3 and Question 5 are checked yes, the Wetland is Class III.** ☒ **Yes** ☐ **No**

Please include any additional comments, justifications, and/or supporting documentation related to the Class III Assessment as a separate attachment appended to this form.

Any of the following scenarios indicate the Wetland is Class III:

- *Checking 'Yes' for Question 1*
- *Checking 'Yes' for Question 2*
- *Checking 'Yes' for Question 3 and Question 4*
- *Checking 'Yes' for Question 3 and Question 5*

If the Wetland is Class III, check Class III at the top of the form, complete the appropriate functional assessment on Page 2 (if applicable), and the form is now complete.

Wetland Habitat Functional Assessment:

(6) Does the wetland support moderate habitat? *(see options below)* ☒ **Yes** ☐ **No**

Checking yes also meets the requirements of Question 4.

One "Yes" response below is needed to show moderate habitat function.

- **Indicators of moderate habitat function:**
  - Species of Special Concern within a ½ mile radius of the wetland according to the IDNR Natural Heritage Database **AND** the listed species or a life cycle stage uses wetlands for habitat? ☐ **Yes** ☒ **No**
  - Does the wetland provide habitat corridors between necessary habitat for mobile, state-listed species? ☐ **Yes** ☒ **No**
  - Are there Important Bird Areas (IBA) mapped for the wetland or within a ½ mile radius? https://databasin.org/datasets/fdb91971a11d46d39661f0a56c3585ca/ ☐ **Yes** ☒ **No**
  - Is the wetland dominated by native species? ☒ **Yes** ☐ **No**
  - Does the wetland support multiple layers of species habitat (wading birds, dabblers, reptiles, amphibians, etc.)? ☐ **Yes** ☒ **No**
  - Do Rapid Assessment Methods indicate that the wetland supports moderate habitat? ☒ **Yes** ☐ **No**
    Indicate which method used: ORAM
  - Are other moderate habitat indicators present *(Explain in Remarks)*? ☐ **Yes** ☒ **No**

Please include any additional comments, justifications, and/or supporting documentation related to the Wetland Habitat Functional Assessment as a separate attachment appended to this form.

Wetland Hydrology Functional Assessment:

(7) Does the wetland support moderate hydrological function? *(see options below)* ☒ **Yes** ☐ **No**

Checking yes also meets the requirements of Question 5.

Indicators of moderate hydrological function. At least one primary indicator or two secondary indicators are needed to show moderate hydrological function.

- **Primary Indicators:**
  - ☒ Wetland meets two or more primary hydrology indicators on the wetland determination data form.
  - ☐ Wetland is located within a floodway or floodplain.
  - ☐ Wetland position in the watershed is 1st-3rd order or 4th – 5th order if the substrate is sand or silt.
  - ☐ Wetland possesses strong hydric soil indicators (gleyed matrix or >20% redox/mottles present).
  - ☐ Wetland is located within a groundwater Wellhead Protection Area. https://www.in.gov/idem/cleanwater/information-about/groundwater-monitoring-and-source-water-protection/wellhead-protection-program/source-water-proximity-determination-tool/

- **Secondary Indicators:**
  - ☒ Wetland is 0.75 acre or larger in size, indicating at least moderate water storage capacity.
  - ☐ Dominant vegetation in wetland is highly adapted to prolonged inundation (FACW, OBL dominance).
  - ☐ Wetland substrate is sand or silt, indicating higher hydraulic conductivity.
  - ☐ Wetland is located within a highly developed landscape (>75% impervious surface in ½ mile radius).
  - ☒ Parcel with wetland is bordered by development, roads, or impervious surfaces.
  - ☐ Wetland is located within a drinking water Source Water Susceptibility Area.
  - ☐ Wetland is located within a drinking water Source Water Assessment Area
  - ☐ Other *(Explain in Remarks)*

Please include any additional comments, justifications and/or supporting documentation related to the Wetland Hydrology Functional Assessment as a separate attachment appended to this form.

Any of the following scenarios indicate the Wetland is Class II:
Only Checking 'Yes' to Question (6)
Only Checking 'Yes' to Question (7)

If the Wetland is Class II, check Class II at the top of the form, and the form is now complete.
If the Wetland is not Class III or Class II, check Class I at the top of the form and the form is now complete.

Supporting Guidance Documents:

- **State Regulated Wetlands:** https://www.in.gov/idem/wetlands/information-about/state-regulated-wetlands-program/

State Regulated Wetland Class Determination Worksheet

State Form 57155 (R / 8-22)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INSTRUCTIONS

(1) Complete this form when conducting wetland delineations One form should be completed for each wetland on-site.

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Program Website:
https://www.in.gov/idem/wetlands/

Form Completed By:

First Name:	Last Name:	Agent Affiliation *(Company Name)*:
Samantha	Kooy	**American Structurepoint, Inc.**

Phone Number:	Email address:
317-547-5580	**skooy@structurepoint.com**

Project Name:	Wetland ID *(per the wetland delineation)*:	Wetland Size *(Acres)*:
McGregor Road, Walnut Street, and CR N 850 W Intersection Improvement Project	Wetland C (Report 2)	**0.05 acre**

STATE REGULATED WETLAND CLASSIFICATION: ☐ **Class I** ☒ **Class II** ☐ **Class III**

Class III Assessment

(1) Is the wetland a listed rare or ecologically important type under IC 13-11-2-25.8(3)(B)? ☐ **Yes** ☒ **No**

If yes, please indicate:

☐ Acid Bog ☐ Acid Seep ☐ Circumneutral Bog ☐ Circumneutral Seep ☐ Cypress Swamp ☐ Dune and Swale

☐ Fen ☐ Forested Fen ☐ Forested Swamp ☐ Marl Beach ☐ Muck Flat ☐ Panne ☐ Sand Flat ☐ Sedge Meadow

☐ Shrub Swamp ☐ Sinkhole Pond ☐ Sinkhole Swamp ☐ Wet Floodplain Forest ☐ Wet Prairie ☐ Wet Sand Prairie

If yes, the Wetland is Class III. Check Class III at the top of the form and the form is now complete.
If no, proceed to Question (2).

(2) Does the wetland generally possess the presence of, or habitat for rare, threatened, or endangered species within a ½ mile radius according to the IDNR Natural Heritage Database **AND** the species uses the habitat for any stage of its life cycle? ☐ **Yes** ☒ **No**

If yes, the Wetland is Class III. Check Class III at the top of the form and the form is now complete.
If no, proceed to Question (3).

(3) Is the wetland in an undisturbed or minimally disturbed setting? ☐ **Yes** ☒ **No**

If yes, answer Question (4) and Question (5). If no, please provide a justification as an attachment to this form and proceed to the Wetland Habitat Functional Assessment.

(4) Does the wetland support more than minimal wildlife or aquatic habitat? **Please complete the Habitat Functional Assessment below. If Question 3 and Question 4 are checked yes, the Wetland is Class III.** ☐ **Yes** ☒ **No**

(5) Does the wetland support more than minimal hydrological function? **Please complete the Hydrology Functional Assessment below. If Question 3 and Question 5 are checked yes, the Wetland is Class III.** ☒ **Yes** ☐ **No**

Please include any additional comments, justifications, and/or supporting documentation related to the Class III Assessment as a separate attachment appended to this form.

Any of the following scenarios indicate the Wetland is Class III:

- *Checking 'Yes' for Question 1*
- *Checking 'Yes' for Question 2*
- *Checking 'Yes' for Question 3 and Question 4*
- *Checking 'Yes' for Question 3 and Question 5*

If the Wetland is Class III, check Class III at the top of the form, complete the appropriate functional assessment on Page 2 (if applicable), and the form is now complete.

Wetland Habitat Functional Assessment:

(6) Does the wetland support moderate habitat? *(see options below)* ☐ **Yes** ☒ **No**

Checking yes also meets the requirements of Question 4.

One "Yes" response below is needed to show moderate habitat function.

- **Indicators of moderate habitat function:**
  - Species of Special Concern within a ½ mile radius of the wetland according to the IDNR Natural Heritage Database **AND** the listed species or a life cycle stage uses wetlands for habitat? ☐ **Yes** ☒ **No**
  - Does the wetland provide habitat corridors between necessary habitat for mobile, state-listed species? ☐ **Yes** ☒ **No**
  - Are there Important Bird Areas (IBA) mapped for the wetland or within a ½ mile radius? ☐ **Yes** ☒ **No**
    https://databasin.org/datasets/fdb91971a11d46d39661f0a56c3585ca/
  - Is the wetland dominated by native species? ☐ **Yes** ☒ **No**
  - Does the wetland support multiple layers of species habitat (wading birds, dabblers, reptiles, amphibians, etc.)? ☐ **Yes** ☒ **No**
  - Do Rapid Assessment Methods indicate that the wetland supports moderate habitat? ☐ **Yes** ☒ **No**
    Indicate which method used: ORAM
  - Are other moderate habitat indicators present *(Explain in Remarks)*? ☐ **Yes** ☒ **No**

Please include any additional comments, justifications, and/or supporting documentation related to the Wetland Habitat Functional Assessment as a separate attachment appended to this form.

Wetland Hydrology Functional Assessment:

(7) Does the wetland support moderate hydrological function? *(see options below)* ☒ **Yes** ☐ **No**

Checking yes also meets the requirements of Question 5.

Indicators of moderate hydrological function. At least one primary indicator or two secondary indicators are needed to show moderate hydrological function.

- **Primary Indicators:**
  - ☒ Wetland meets two or more primary hydrology indicators on the wetland determination data form.
  - ☐ Wetland is located within a floodway or floodplain.
  - ☐ Wetland position in the watershed is 1st-3rd order or 4th – 5th order if the substrate is sand or silt.
  - ☐ Wetland possesses strong hydric soil indicators (gleyed matrix or >20% redox/mottles present).
  - ☐ Wetland is located within a groundwater Wellhead Protection Area.
    https://www.in.gov/idem/cleanwater/information-about/groundwater-monitoring-and-source-water-protection/wellhead-protection-program/source-water-proximity-determination-tool/

- **Secondary Indicators:**
  - ☐ Wetland is 0.75 acre or larger in size, indicating at least moderate water storage capacity.
  - ☒ Dominant vegetation in wetland is highly adapted to prolonged inundation (FACW, OBL dominance).
  - ☐ Wetland substrate is sand or silt, indicating higher hydraulic conductivity.
  - ☐ Wetland is located within a highly developed landscape (>75% impervious surface in ½ mile radius).
  - ☒ Parcel with wetland is bordered by development, roads, or impervious surfaces.
  - ☐ Wetland is located within a drinking water Source Water Susceptibility Area.
  - ☐ Wetland is located within a drinking water Source Water Assessment Area
  - ☐ Other *(Explain in Remarks)*

Please include any additional comments, justifications and/or supporting documentation related to the Wetland Hydrology Functional Assessment as a separate attachment appended to this form.

Any of the following scenarios indicate the Wetland is Class II:
Only Checking 'Yes' to Question (6)
Only Checking 'Yes' to Question (7)

If the Wetland is Class II, check Class II at the top of the form, and the form is now complete.
If the Wetland is not Class III or Class II, check Class I at the top of the form and the form is now complete.

Supporting Guidance Documents:

- **State Regulated Wetlands:** https://www.in.gov/idem/wetlands/information-about/state-regulated-wetlands-program/

Report 1

400 Boone Hollow Lane, Springville, IN 47462

(812) 583-0200

WETLAND DELINEATION REPORT

APPROXIMATE 300-ACRE UNDEVELOPED SITE
PLEASANTVIEW, INDIANA

Prepared for:

RUNNEBOHM CONSTRUCTION COMPANY
144 EAST RAMPART STREET
SHELBYVILLE, INDIANA 46176

Prepared by:

Gregory J. Gerke, PWS, CESSWI
DHE, INC.
400 BOONE HOLLOW LANE
SPRINGVILLE, IN 47462

DHE Project RCC.003

September 20, 2021
Revised March 25, 2022

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

1.1 GENERAL INFORMATION

This report presents the findings of a wetland delineation study conducted at the Surge Industrial Property located near the southeast intersection of McGregor Road and South Carroll Road on the northwest side of Pleasant View, Shelby County, Indiana (Appendix A, Figure 1). Alternatively, the site is located at SW¼, Section 14 and NW¼, Section 23, Township 14 North, Range 5 East. The project is bounded on the south, east and west by undeveloped agricultural and residential properties and on the north by McGregor Road followed by the Five Below development. The overall subject site is approximately 300 acres in size and primarily consists of undeveloped agricultural fields bisected by narrow, forested fence rows and a few sparsely forested tracts. The agricultural tracts were cultivated with both corn and soybeans at the time of the site study. The land use of the surrounding area is a mixture of cultivated fields, residential and commercial areas.

1.2 METHODOLOGY

The purpose of the study was to identify and delineate wetland and stream boundaries within the property to locate limiting environmental factors for potential commercial development of the undeveloped parcels that comprise the subject Site. The delineation was based on DHE's (DHE) professional judgment and interpretation of the technical criteria presented in the 1987 *U.S. Army Corps of Engineers Wetlands Delineation Manual* (1987 *Corps Manual*) and the Midwest Supplement.

The wetland boundaries, where present, were delineated using the routine on-site determination method described in the 1987 Corps Manual and Midwest Region Supplement and supported by the *National List of Plant Species That Occur in Wetlands: North Central (Region 3)* (RMG, Inc.

1999) and *Hydric Soils of Indiana* (USDA-NRCS 1992). DHE completed the following scope of services to identify and delineate jurisdictional wetland and stream boundaries at the site:

1.2.1. Office Data Review:

DHE personnel reviewed the U.S. Geological Survey (USGS) topographic mapping (Appendix A, Figure 1), U.S. Fish & Wildlife Service (USFWS), National Wetlands Inventory (NWI) Map (Appendix A, Figure 2) and the U.S. Department of Agriculture (USDA-NRCS) *Soil Survey for Shelby County, Indiana* (Appendix A, Figure 3). These resources were used to establish site characteristics that may identify potential wetland areas.

1.2.2. Site Reconnaissance:

The wetland delineation was performed by DHE biologists on September 14, 2021, February 17, 2022 March 15, 2022 using the routine on-site determination method, appropriate supplements and assumptions for areas of significant disturbance. First, plant communities present on the site were identified. The dominant plant species within each community were identified and a determination made on whether the plant community was dominated by hydrophytic (wetland) plants. Next, a representative test site was located within the plant community and soils were sampled using a spade shovel to determine if hydric soil indicators were present. A test site was located outside the wetland to delineate where the wetland boundary could be located. Finally, the test site was inspected to determine if indicators of wetland hydrology (ponding, soil saturation, etc.) were present. The boundaries of areas having wetland vegetation, hydric soils, and wetland hydrology were marked in the field with pink surveyor's ribbon. These locations were field surveyed by DHE biologists using a GeoXT Global Positioning System (GPS). The GPS coordinates were then incorporated into the Jurisdictional Findings Map (Appendix A, Figure 5).

1.2.3. Data Collection:

Data forms for the routine on-site determination method were completed for sixteen (16) representative locations within the site boundaries (see Appendix B for the wetland data forms). The data sheets were completed to record the vegetation, soils and hydrology observations used in making the wetland determination. ORAM forms that rank the quality of the wetland resource were used for each wetland area and HHEI forms were used for stream areas. Photographs of the wetlands were taken with their locations and direction described in the Photographic Record (Appendix C).

1.2.4. Preparation of Wetland Delineation Report:

DHE prepared this wetland delineation report that presents the methodology, findings, wetland delineation map, regulatory considerations, conclusions, completed data forms, and site photographs.

2.0 FINDINGS

2.1 NATIONAL WETLANDS INVENTORY MAP

NWI maps have been prepared by the USFWS based on high altitude infrared aerial photography and limited ground truthing. Wetlands and deep-water habitats are identified on these maps and classified according to the system developed by Cowardin and co-workers (1979).

The NWI Map for the Acton, Indiana quadrangle covering the site vicinity was reviewed by DHE (Appendix A - Figure 2). The NWI Map identified one large Palustrine Unconsolidated Bottom Excavated (PUBh) waterbody feature within the Site boundary with others located nearby on adjacent properties. No streams or wetlands were identified on the NWI Map.

2.2 SITE SOILS

The *Soil Survey for Shelby County, Indiana* (NRCS 1991) was reviewed by DHE (Table 1 and Figure 3). According to the USDA-NRCS, eight (8) soil types are mapped within the Site. Two of the eight soil types have been identified by the USDA NRCS as hydric. The soil mapping units identified for the site are summarized in Table 1.

TABLE 1
SOILS INFORMATION
~300-Acre Surge Industrial Site
Pleasant View, Shelby County, Indiana

Soil Mapping Unit Name (Symbol)	Hydric Soil List Designation
Brookston silty clay loam, 0 to 2% slopes (Br)	Hydric
Crosby silt loam, New Castle Till Plain, 0 to 2% slopes (CrA)	Not Hydric
Crosby silt loam, 2 to 4% slopes (CrB)	Not Hydric
Crosby-Miami silt loams, 0 to 6% slopes, eroded (CsB)	Not Hydric
Miami silt loam, 2 to 6% slopes, eroded (MlB2)	Not Hydric
Miami clay loam, 2 to 6% slopes, severely eroded (MmB3)	Not Hydric

TABLE 1 SOILS INFORMATION ~300-Acre Surge Industrial Site Pleasant View, Shelby County, Indiana	
Miami clay loam, 6 to 12% slopes, severely eroded (MmC3)	Not Hydric
Treaty silt loam, 0 to 1% slopes (ThrA)	Hydric

The soils map is presented as Appendix A, Figure 3.

2.3 PLANT COMMUNITIES

The plant communities present on the site consist mainly of agricultural weeds, second-growth forested fencerows, emergent wetlands and disturbed areas. Dominant plant species encountered in the various plant communities included corn (*Zea maize*), Soybeans (*Glycine max*), turfgrass (*Poa annus*), Sugar Maple (*Acer sacharinum*), Bur Oak (*Quercus macrocarpa*), Shellbark Hickory (*Carya laciniosa*), (Red Mulberry (*Morus rubra*), Poison Ivy (*Toxicodendron radicans*) Catbriar (*Smilax glauca*), Bush Honeysuckle (*Lonicera mackii*), Garlic Mustard (*Alliaria petiolata*), Green Ash (*Fraxinus pennsylvanica*), Canada Thistle (*Cersium canadensis*), Silky Dogwood (*Cornus amomum*), Hackberry (*Celtis occidentalis*), Blackberry (*Rubus allegheniensis*), Tall Goldenrod (*Solidago altissima*), Cocklebur (*Xanthium strumarium*), Velvet Leaf (*Abutilon theophrasti)*, Kentucky Fescue (*Festuca arundinacea*), Dandelion (*Taraxacum officinalis),* Johnsongrass (*Sorghum halepense*), Nutsedge (*Cyperus esculentus*), Reed Canarygrass (*Phalaris arundinacea*), Panicgrass (*Panicum dichotomiflorum*) and Multiflora Rose (*Rosa multiflora*). The vegetation found in each delineated wetland has been detailed in the individual wetland data forms in Appendix B.

2.4 HYDROLOGY

The site is located in a somewhat rural area that is becoming increasingly urban on the southeast side of Indianapolis in Shelby County, Indiana. Site elevations range from approximately 778

feet to 760 feet above MSL (mean sea level). The site is level to gently rolling and generally drains to the southeast into a series of swales and ditches towards Buck Creek. The ultimate drainage is the East Fork White River, which is approximately 30 miles south of the Site.

Other hydrologic features on the site include occasional farm swales and an excavated pond near the center of the Site. No streams or similar features were observed within the boundaries of the Site. No part of the Site appeared to be located within the 100-year floodplain. The FEMA Map for the area is provided in Appendix A, Figure 4.

2.5 WETLANDS

In addition to one open water pond, seven (7) wetland areas, totaling approximately **1.5** acres were identified and delineated at the site (Wetlands A through Wetland G). ORAM forms, used to determine the quality of the wetland areas, were compiled for the wetland and can be found in Appendix B. None of the wetlands contained an obvious connection to a stream and would likely be considered "isolated in nature" and therefore may be found jurisdictional by the Indiana Department of Environmental Management (IDEM).

Wetlands B, C, D E F and G are considered emergent wetlands. Wetland A has a forested portion of the feature connected to the roadside ditch. All wetland features encountered on the Site appear to be isolated in nature and would likely be considered non-jurisdictional according to the USACE. The wetland data forms are provided in Appendix B. A field survey of the delineated boundaries of the on-site wetlands was completed by using a Trimble GeoXT GPS unit. All wetland boundaries are shown on Figures 5, 6 and 7. Photographs of the wetlands are presented in Appendix C.

The size, DHE's interpretation of the USFWS classification, and hydrological characteristics of the individual wetlands that were delineated at the project site are summarized in Table 2.

TABLE 2 WETLAND CHARACTERISTICS ~300-Acre Surge Industrial Site Pleasant View, Shelby County, Indiana					
Wetland	**Area (acres)**	**USF&WS Classification**	**Hydroperiod**	**ORAM Score**	**Photograph Number**
A	0.12	PFO/EMA	Seasonally saturated	14	1, 2, 3 & 4
B	0.39	PEMAf	Seasonally saturated	28	11 & 12
C	0.05	PEMAf	Seasonally saturated	16	7 & 8
D	0.03	PEMA	Seasonally inundated	19	17 & 18
E	0.25	PEMAf	Seasonally inundated	19	31, 32 & 33
F	0.09	PEMAf	Seasonally saturated	20	25, 29, 34, 35, 36
G	0.95	PEMA	Seasonally inundated	28	27 & 28
Total	**1.88**				

2.6 OTHER WATERS

In addition to the identified wetland areas, stream system and open water features would likely be classified as jurisdictional waters by either or both the USACE and the State of Indiana. The approximate on-site acreage of the open water feature, the USGS classification, and protected water uses of the water bodies located on the project site are summarized in Table 3. OW-1 is an unnamed open water feature (pond) that appears to be excavated from upland soil near the center of the Site. The open water feature appears to be isolated in nature and not connected to any stream systems that flow off-site. No "blueline" streams on the USGS Topographic Map (Figure 1) were identified on the Site.

TABLE 3 OPEN WATER CHARACTERISTICS ~300-Acre Surge Industrial Site Pleasant View, Shelby County, Indiana			
Open Water Feature	**Acreage**	**NWI Classification**	**Photograph Number**
OW-1	1.5	PUBh	15 & 16
Total	**1.5**		

3.0 REGULATORY CONSIDERATIONS

Jurisdictional waters of the U.S., including wetlands, are defined by *33 Code of Federal Regulations (CFR) Part 328* and are protected by Sections 404 and 401 of the Clean Water Act (*33 USC 1344*).

Impacts to jurisdictional wetlands and streams are regulated in the State of Indiana by the U.S. Army Corps of Engineers (Corps) and the Indiana Department of Environmental Management (IDEM). Discharges of dredged or fill material into jurisdictional waters of the United States, including non-isolated wetlands, must obtain a permit from the Corps under the provisions of Section 404 of the Clean Water Act (CWA). Impacts to these waters or isolated waters must obtain a Section 401 Water Quality Certification through IDEM before a Section 404 permit will be issued by the Corps. Impacts to waters of the State, including isolated wetlands may require a permit from IDEM under SB 389 depending on the wetland's size and quality classification. Proposed wetland impacts that exceed 0.5 acres require an Individual Section 404/401 Permit from the Corps.

Current regulations state that jurisdictional stream impacts of less than 0.5 acres and/or 300 linear feet (for intermittent and perennial streams) can be permitted by the Corps using a Regional General Permit (RGP) or Section 404 Nationwide Permit (NWP) and Section 401 Water Quality Certification (WQC – IDEM). Additionally, an isolated wetlands permit (IDEM) may be required if cumulative impacts to isolated Class II wetlands greater than 0.375 acres are planned. Impacts to Class III isolated wetlands require an IDEM permit. Impacts greater than 1.0 acres to wetlands may require an individual permit from the Corps, which is more scrutinized and can take longer to approve than the more streamlined permits.

Individual permits require a sequencing review. Sequencing requires the permit applicant to demonstrate that the project purpose cannot be accomplished without impacting wetlands and waters. If this can be demonstrated, then the applicant is required to further demonstrate that the scope of the project has been revised to minimize wetland and water impacts. The sequencing process requires that an alternative analysis be performed, and that the alternatives analysis must address other potential sites. Alternative site plans which attempt to avoid or minimize wetland and water impacts must be developed and evaluated. The regulatory agencies will only consider mitigation of wetlands impacts after satisfactory completion of the sequencing requirements.

DHE suggests that any site plan for proposed construction activities be designed to avoid and minimize wetland and stream impacts to the extent possible. An alternatives analysis that demonstrates the need to encroach upon wetlands and jurisdictional waters, including actions to minimize environmental impacts to these resources may need to be completed if an individual permit is required. A mitigation plan for any unavoidable wetland impacts may be required to be submitted with the permit application.

It is the responsibility of any party that intends to discharge dredge or fill material into jurisdictional waters of the U.S. and/or isolated wetlands to comply with all applicable regulations.

4.0 CONCLUSIONS

DHE biologists inspected the Site on September 14, 2021, February 17, 2022 and March 15, 2022. Seven (7) wetland areas (Wetlands A through G), totaling approximately **1.88 acres**, were identified and delineated within the subject Site. In addition, one open water feature (OW-1) comprised of approximately **1.5 acres** was identified within the Site boundary. This open water pond appeared to have been excavated from upland soil and contained no outlet connected to any stream system. These waterbodies may be considered "isolated" features based on their apparent lack of connection to nearby streams and therefore may be considered non-jurisdictional features regulated by the federal Clean Water Act. Wetlands B, C, D, E, F, and G, due to their lack of trees or shrubs would be considered emergent (non-forested) wetlands. A portion of Wetland A contained some forested area within its boundary.

The wetland and stream determination boundaries were located in the field by DHE using a Trimble GeoXT GPS Unit. Pink flagging was hung during the field determination to mark wetland boundaries. Stream boundaries were marked with blue survey ribbon. Wetland and stream boundaries are shown in Appendix A, Figures 5, 6 and 7.

Due to the lack of surface outlets and apparent isolated nature of the wetland and stream features, all on-site waterbody features identified by DHE, may be considered "Isolated" waters subject to IC 13-22-18 and HEA 1798 of the State of Indiana Isolated Wetland Law and SB 389. All efforts should be made to avoid and minimize potential impacts to the jurisdictional wetland features during the planning of the project.

5.0 LEVEL OF CARE

The wetland delineation services performed by DHE were conducted in a manner consistent with the criteria contained in the 1987 Corps Manual and with the level of care and skill ordinarily exercised by members of the environmental consulting profession practicing contemporaneously under similar conditions in the locality of the project. It must be recognized that the jurisdictional wetland delineation was based on field observations and DHE's professional interpretation of the criteria in the 1987 Corps Manual and appropriate supplements at the time of our fieldwork. Wetland determinations may change subsequent to DHE's delineation based on changes in the regulatory criteria, seasonal variations in hydrology, alterations to drainage patterns and other human activities and/or land disturbances.

This report is intended for the use of Runnebohm Construction Company only, consistent with the qualifications outlined herein and the terms and conditions of DHE's proposal. Our services have been performed under mutually agreed upon terms and conditions. If other parties wish to rely on this report, please have them contact us so that a mutual understanding and agreement of the terms and conditions for our services can be established prior to their use of this information.

6.0 REFERENCES

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Cowardin, L. M., V. Carter, and F. C. Golet. 1979. *Classification of Wetlands and Deep Water Habitats of the United States*. U.S. Department of the Interior, Fish and Wildlife Service. Washington D. C. FWS/OBS-79/31.

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United States Department of Agriculture, Natural Resources Conservation Service (USDA). 2011b. 2011 National List of Hydric Soils by State. Available online at http://soils.usda.gov/use/hydric/. Accessed September 15, 2021.

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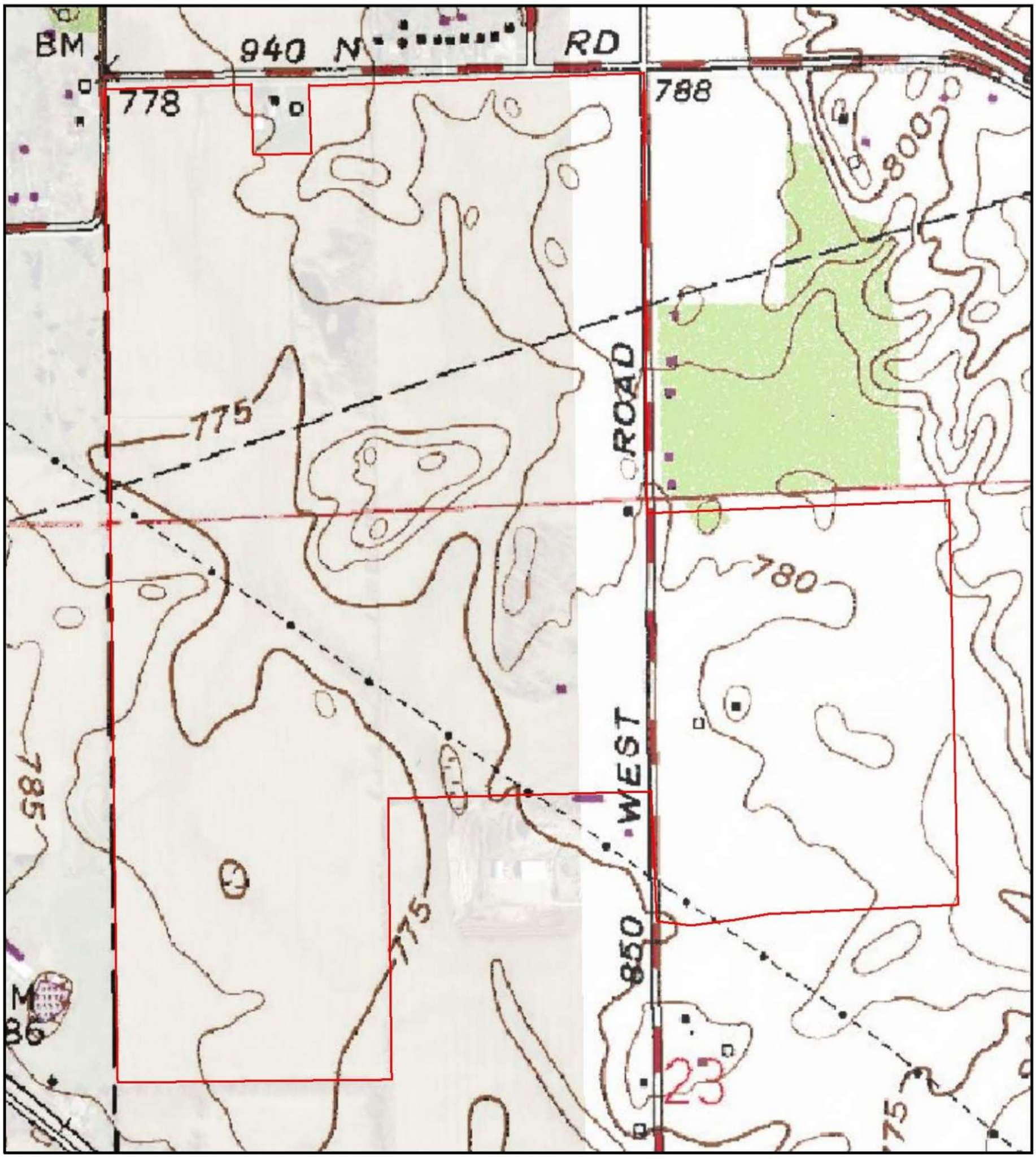
APPENDIX A

FIGURES



USGS 7.5 Minute Topographic Map

Surge Industrial - SW 1/4 Carroll Road & McGregor Road

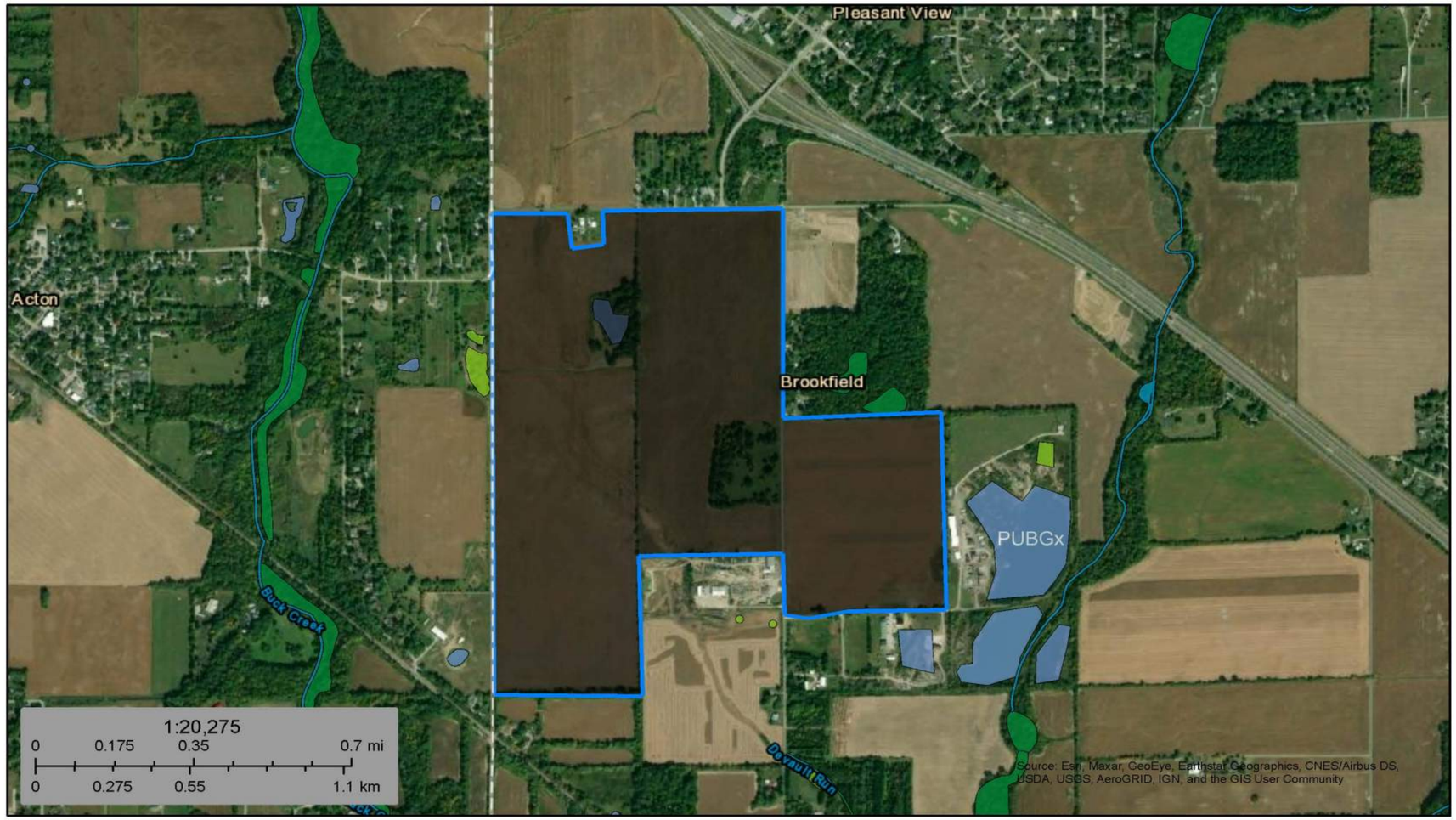
Project Number:	RCC.003
Date:	March, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 1

U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetlands



September 16, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

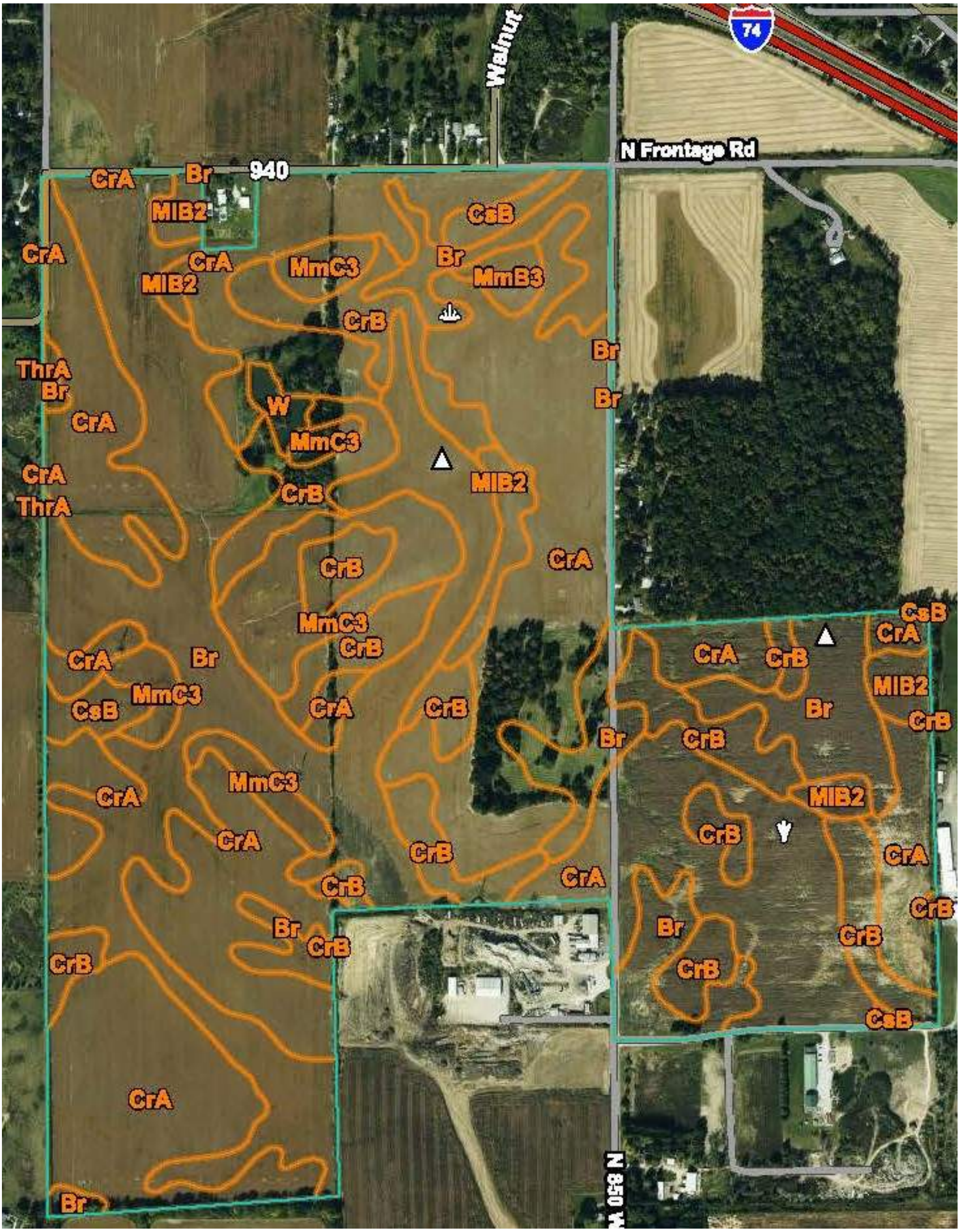
National Wetlands Inventory

Runnebohm Site - NW 1/4 Carroll Road & CR 940 North

Project Number:	RCC.003
Drawing file:	Site Figures
Date:	March, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 2



Shelby County Soil Survey

Surge Industrial - SW 1/4 Carroll Road & McGregor Road

Project Number:	RCC.003
Date:	March, 2022
Scale:	NTS
Drawn By:	GJG

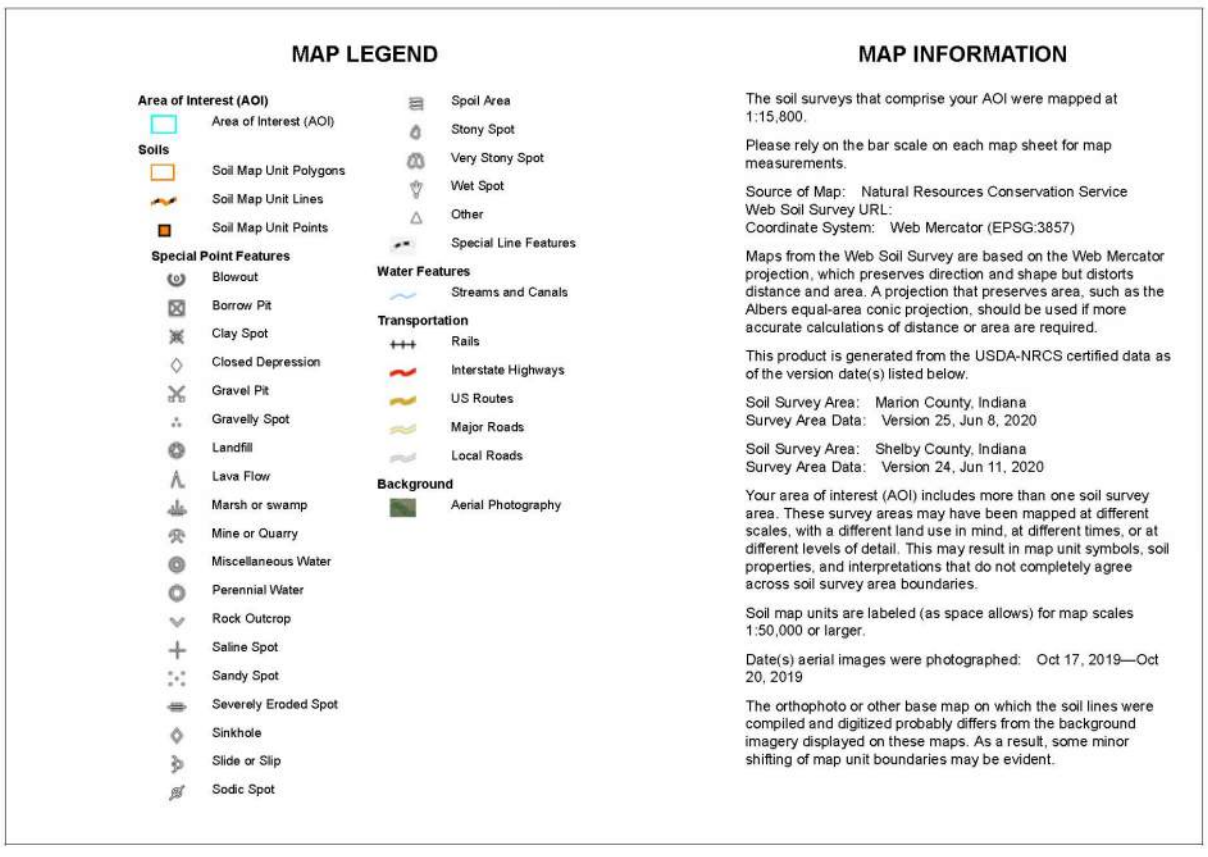
DHE

Figure: 3

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CrA	Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes	0.2	0.1%
ThrA	Treaty silty clay loam, 0 to 1 percent slopes	0.1	0.0%
Subtotals for Soil Survey Area		**0.3**	**0.1%**
Totals for Area of Interest		**303.4**	**100.0%**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Br	Brookston silty clay loam, 0 to 2 percent slopes	91.5	30.2%
CrA	Crosby silt loam, New Castle Till Plain, 0 to 2 percent slopes	137.3	45.3%
CrB	Crosby silt loam, 2 to 4 percent slopes	40.8	13.5%
CsB	Crosby-Miami silt loams, 0 to 6 percent slopes	4.3	1.4%
MlB2	Miami silt loam, 2 to 6 percent slopes, eroded	8.5	2.8%
MmB3	Miami clay loam, 2 to 6 percent slopes, severely eroded	1.9	0.6%
MmC3	Miami clay loam, 6 to 12 percent slopes, severely eroded	17.4	5.7%
W	Water	1.4	0.5%
Subtotals for Soil Survey Area		**303.1**	**99.9%**
Totals for Area of Interest		**303.4**	**100.0%**



Shelby County Soil Survey

Surge Industrial - SW 1/4 Carroll Road & McGregor Road

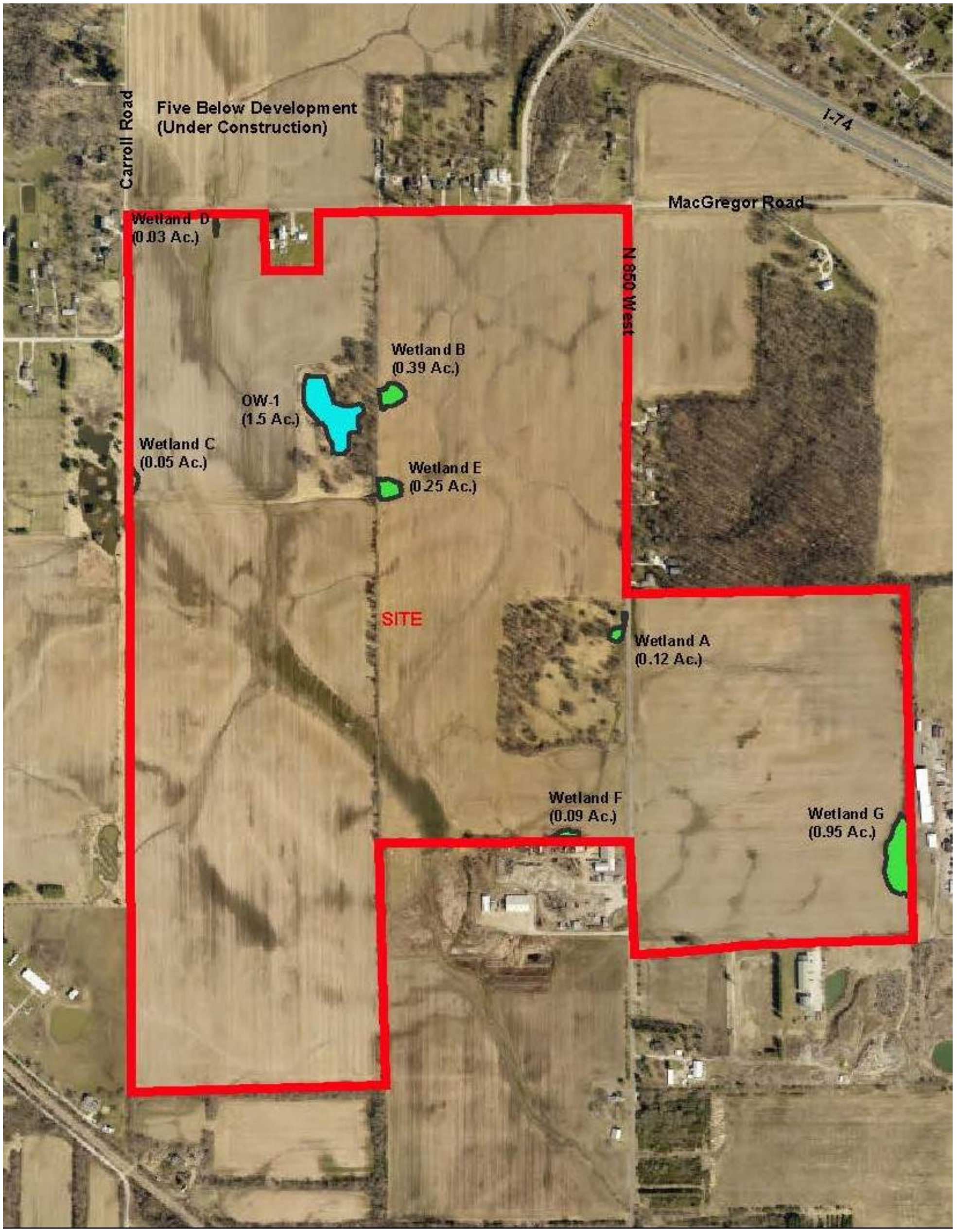
Project Number: RCC.003
Date: March, 2022
Scale: NTS
Drawn By: GJG
Figure: 3a

FEMA Flood Insurance Rate Map

Surge Industrial - SW 1/4 Carroll Road & McGregor Road

Project Number:	RCC.003
Date:	March, 2022
Scale:	NTS
Drawn By:	GJG

Figure: 4



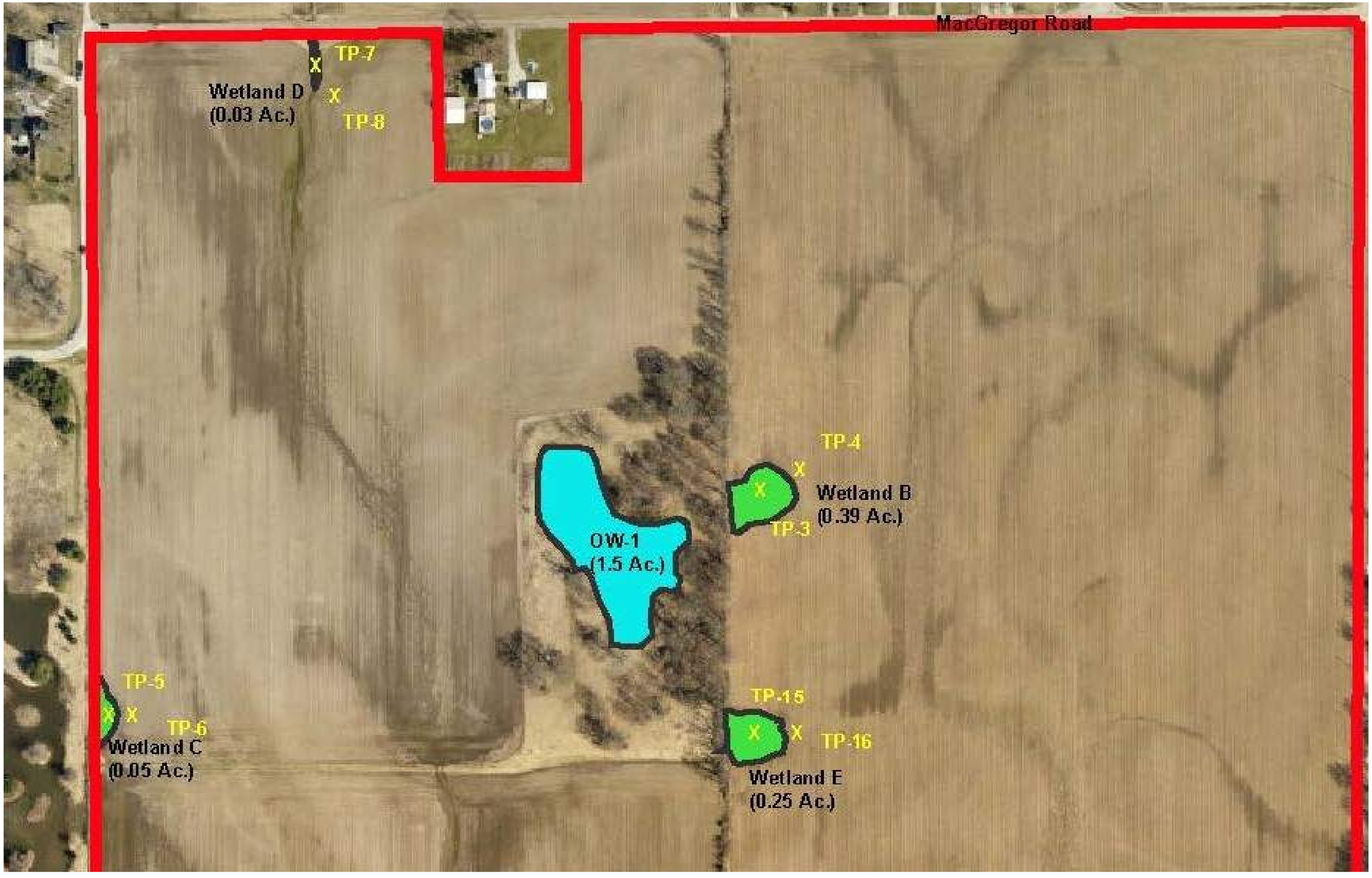
Wetland Findings

Surge Industrial - SW 1/4 Carroll Road & McGregor Road

Project Number:	RCC.003
Date:	March, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 5



Wetland Findings - Inset 1

Runnebohm Site - NW 1/4 Carroll Road & CR 940 North

Project Number:	RCC.003
Drawing file:	Site Figures
Date:	March, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 6

Wetland Findings - Inset 2

Surge Industrial - SW 1/4 Carroll Road & McGregor Road

Project Number:	RCC.003
Date:	March, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 7

APPENDIX B

WETLAND AND STREAM DATA FORMS

ORAM v. 5.0 Field Form Quantitative Rating

Site: WETLAND A	Rater(s): GJG	Date: 9/14/21

Metric 1. Wetland Area (size).

1 (max 6 pts.) | 1 (subtotal)

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [ ] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [ ] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [x] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [ ] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

1 (max 14 pts.) | 2 (subtotal)

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [ ] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [x] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [ ] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [ ] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [ ] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [ ] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

5 (max 30 pts.) | 7 (subtotal)

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [ ] Seasonal/intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [x] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [ ] >0.7 (27.6in) (3)
- [ ] 0.4 to 0.7m (15.7 to 27.6in) (2)
- [x] <0.4m (<15.7in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [ ] Seasonally inundated (2)
- [x] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [ ] Recovering (3)
- [x] Recent or no recovery (1)

Check all disturbances observed

- [ ] ditch
- [ ] tile
- [ ] dike
- [ ] weir
- [x] stormwater input
- [ ] point source (nonstormwater)
- [ ] filling/grading
- [x] road bed/RR track
- [ ] dredging
- [ ] other_____

Metric 4. Habitat Alteration and Development.

7 (max 20 pts.) | 14 (subtotal)

4a. Substrate disturbance. Score one or double check and average.

- [ ] None or none apparent (4)
- [ ] Recovered (3)
- [x] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [ ] Moderately good (4)
- [ ] Fair (3)
- [x] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [ ] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [x] mowing
- [ ] grazing
- [ ] clearcutting
- [ ] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [ ] sedimentation
- [ ] dredging
- [ ] farming
- [ ] nutrient enrichment

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ORAM v. 5.0 Field Form Quantitative Rating

Site: WETLAND A	Rater(s): GJG	Date: 9/14/21

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subtotal first page

Metric 5. Special Wetlands.

0 (max 10 pts.) | 14 (subtotal)

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

Metric 6. Plant communities, interspersion, microtopography.

0 (max 20 pts.) | 14 (subtotal)

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [0] Aquatic bed
- [ ] Emergent
- [1] Shrub
- [1] Forest
- [ ] Mudflats
- [ ] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high(4)
- [ ] Moderate (3)
- [X] Moderately low (2)
- [ ] Low (1)
- [ ] None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [X] Extensive >75% cover (-5)
- [ ] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [ ] Nearly absent <5% cover (0)
- [ ] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [ ] Vegetated hummucks/tussucks
- [ ] Coarse woody debris >15cm (6in)
- [1] Standing dead >25cm (10in) dbh
- [ ] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

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End of Quantitative Rating. Complete Categorization Worksheets.

ORAM v. 5.0 Field Form Quantitative Rating

Site: WETLAND B	Rater(s): GJG	Date: 9/14/21

Metric 1. Wetland Area (size).

2 (max 6 pts.) | 2 (subtotal)

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [ ] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [x] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [ ] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [ ] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

6 (max 14 pts.) | 8 (subtotal)

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [x] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [x] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [ ] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [ ] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [ ] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [ ] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [x] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

10 (max 30 pts.) | 18 (subtotal)

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [x] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [x] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [ ] >0.7 (27.6in) (3)
- [ ] 0.4 to 0.7m (15.7 to 27.6in) (2)
- [x] <0.4m (<15.7in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [ ] Seasonally inundated (2)
- [x] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] ditch
- [x] tile
- [ ] dike
- [ ] weir
- [ ] stormwater input
- [ ] point source (nonstormwater)
- [ ] filling/grading
- [ ] road bed/RR track
- [ ] dredging
- [ ] other_____

Metric 4. Habitat Alteration and Development.

8 (max 20 pts.) | 26 (subtotal)

4a. Substrate disturbance. Score one or double check and average.

- [ ] None or none apparent (4)
- [x] Recovered (3)
- [ ] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [ ] Moderately good (4)
- [ ] Fair (3)
- [x] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [ ] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] mowing
- [ ] grazing
- [ ] clearcutting
- [ ] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [ ] sedimentation
- [ ] dredging
- [x] farming
- [x] nutrient enrichment

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ORAM v. 5.0 Field Form Quantitative Rating

Site: WETLAND B	Rater(s): GJG	Date: 9/14/21

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Metric 5. Special Wetlands.

0 (max 10 pts.) | 26 (subtotal)

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

Metric 6. Plant communities, interspersion, microtopography.

2 (max 20 pts.) | 28 (subtotal)

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic bed
- [1] Emergent
- [ ] Shrub
- [ ] Forest
- [ ] Mudflats
- [ ] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high(4)
- [ ] Moderate (3)
- [ ] Moderately low (2)
- [X] Low (1)
- [ ] None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [ ] Extensive >75% cover (-5)
- [ ] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [X] Nearly absent <5% cover (0)
- [ ] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [0] Vegetated hummucks/tussucks
- [0] Coarse woody debris >15cm (6in)
- [0] Standing dead >25cm (10in) dbh
- [0] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

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End of Quantitative Rating. Complete Categorization Worksheets.

ORAM v. 5.0 Field Form Quantitative Rating

Site: WETLAND C	Rater(s): GJG	Date: 9/14/21

Metric 1. Wetland Area (size).

0 | 0 — max 6 pts. | subtotal

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [ ] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [ ] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [ ] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [x] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

5 | 5 — max 14 pts. | subtotal

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [x] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [ ] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [ ] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [ ] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [ ] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [x] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

7 | 12 — max 30 pts. | subtotal

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [ ] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [ ] Part of wetland/upland (e.g. forest), complex (1)
- [x] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [ ] >0.7 (27.6in) (3)
- [ ] 0.4 to 0.7m (15.7 to 27.6in) (2)
- [x] <0.4m (<15.7in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [ ] Seasonally inundated (2)
- [x] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] ditch
- [x] tile
- [ ] dike
- [ ] weir
- [ ] stormwater input
- [ ] point source (nonstormwater)
- [ ] filling/grading
- [ ] road bed/RR track
- [ ] dredging
- [ ] other_____

Metric 4. Habitat Alteration and Development.

7 | 14 — max 20 pts. | subtotal

4a. Substrate disturbance. Score one or double check and average.

- [ ] None or none apparent (4)
- [ ] Recovered (3)
- [x] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [ ] Moderately good (4)
- [ ] Fair (3)
- [x] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [ ] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] mowing
- [ ] grazing
- [ ] clearcutting
- [ ] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [ ] sedimentation
- [ ] dredging
- [x] farming
- [x] nutrient enrichment

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Site: WETLAND C	Rater(s): GJG	Date: 9/14/21

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subtotal first page

Metric 5. Special Wetlands.

0 max 10 pts. | 14 subtotal

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

Metric 6. Plant communities, interspersion, microtopography.

2 max 20 pts. | 16 subtotal

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic bed
- [/] Emergent
- [ ] Shrub
- [ ] Forest
- [ ] Mudflats
- [ ] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high(4)
- [ ] Moderate (3)
- [ ] Moderately low (2)
- [X] Low (1)
- [ ] None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [ ] Extensive >75% cover (-5)
- [ ] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [X] Nearly absent <5% cover (0)
- [ ] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [ ] Vegetated hummucks/tussucks
- [ ] Coarse woody debris >15cm (6in)
- [ ] Standing dead >25cm (10in) dbh
- [ ] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprisee small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

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End of Quantitative Rating. Complete Categorization Worksheets.

ORAM v. 5.0 Field Form Quantitative Rating

Site: WETLAND D	Rater(s): GJG	Date: 9/14/21

Metric 1. Wetland Area (size).

0 (max 6 pts.) | 0 (subtotal)

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [ ] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [ ] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [ ] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [x] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

1 (max 14 pts.) | 1 (subtotal)

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [ ] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [ ] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [x] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [ ] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [ ] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [x] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

8 (max 30 pts.) | 9 (subtotal)

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [x] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [ ] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [ ] >0.7 (27.6in) (3)
- [ ] 0.4 to 0.7m (15.7 to 27.6in) (2)
- [x] <0.4m (<15.7in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [x] Seasonally inundated (2)
- [ ] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [ ] Recovering (3)
- [x] Recent or no recovery (1)

Check all disturbances observed

- [x] ditch
- [x] tile
- [ ] dike
- [ ] weir
- [x] stormwater input
- [ ] point source (nonstormwater)
- [ ] filling/grading
- [ ] road bed/RR track
- [ ] dredging
- [x] other UPSTREAM CONSTRUCTION

Metric 4. Habitat Alteration and Development.

7 (max 20 pts.) | 16 (subtotal)

4a. Substrate disturbance. Score one or double check and average.

- [ ] None or none apparent (4)
- [ ] Recovered (3)
- [x] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [ ] Moderately good (4)
- [ ] Fair (3)
- [x] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [ ] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [x] mowing
- [ ] grazing
- [ ] clearcutting
- [ ] selective cutting
- [ ] woody debris removal
- [x] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [ ] sedimentation
- [ ] dredging
- [ ] farming
- [ ] nutrient enrichment

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ORAM v. 5.0 Field Form Quantitative Rating

Site: WETLAND D	Rater(s): GJG	Date: 9/14/21

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subtotal first page

Metric 5. Special Wetlands.

0 (max 10 pts.) | 16 (subtotal)

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

Metric 6. Plant communities, interspersion, microtopography.

3 (max 20 pts.) | 19 (subtotal)

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic bed
- [1] Emergent
- [ ] Shrub
- [ ] Forest
- [1] Mudflats
- [ ] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high(4)
- [ ] Moderate (3)
- [ ] Moderately low (2)
- [X] Low (1)
- [ ] None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [ ] Extensive >75% cover (-5)
- [ ] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [X] Nearly absent <5% cover (0)
- [ ] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [0] Vegetated hummucks/tussucks
- [0] Coarse woody debris >15cm (6in)
- [0] Standing dead >25cm (10in) dbh
- [0] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprisee small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

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End of Quantitative Rating. Complete Categorization Worksheets.

WETLAND E

ORAM v. 5.0 Field Form Quantitative Rating

Site: SURGE INDUSTRIAL	Rater(s): GJG	Date: 3/21/22

Metric 1. Wetland Area (size).

max 6 pts.	subtotal
0	0

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [ ] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [ ] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [ ] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [x] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

max 14 pts.	subtotal
1	1

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [ ] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [ ] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [x] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [ ] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [ ] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [x] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

max 30 pts.	subtotal
10	9

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [x] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [x] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [ ] >0.7 (27.6in) (3)
- [ ] 0.4 to 0.7m (15.7 to 27.6in) (2)
- [x] <0.4m (<15.7in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [ ] Seasonally inundated (2)
- [x] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [x] Recovering (3)
- [x] Recent or no recovery (1)

Check all disturbances observed

- [ ] ditch
- [x] tile
- [ ] dike
- [ ] weir
- [ ] stormwater input
- [ ] point source (nonstormwater)
- [ ] filling/grading
- [ ] road bed/RR track
- [ ] dredging
- [ ] other_____

Metric 4. Habitat Alteration and Development.

max 20 pts.	subtotal
19	9

4a. Substrate disturbance. Score one or double check and average.

- [x] None or none apparent (4)
- [ ] Recovered (3)
- [ ] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [ ] Moderately good (4)
- [ ] Fair (3)
- [x] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [ ] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] mowing
- [ ] grazing
- [ ] clearcutting
- [ ] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [x] sedimentation
- [ ] dredging
- [x] farming
- [x] nutrient enrichment

subtotal this page
19

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WETLAND E

ORAM v. 5.0 Field Form Quantitative Rating

Site: SURGE INDUSTRIAL	Rater(s): GJG	Date: 3/21/22

19
subtotal first page

Metric 5. Special Wetlands.

19 (max 10 pts.) | 0 (subtotal)

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

Metric 6. Plant communities, interspersion, microtopography.

24 (max 20 pts.) | 5 (subtotal)

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic bed
- [1] Emergent
- [ ] Shrub
- [ ] Forest
- [1] Mudflats
- [ ] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high(4)
- [ ] Moderate (3)
- [ ] Moderately low (2)
- [X] Low (1)
- [ ] None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [ ] Extensive >75% cover (-5)
- [ ] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [ ] Nearly absent <5% cover (0)
- [X] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [0] Vegetated hummucks/tussucks
- [0] Coarse woody debris >15cm (6in)
- [0] Standing dead >25cm (10in) dbh
- [1] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

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End of Quantitative Rating. Complete Categorization Worksheets.

WETLAND F

ORAM v. 5.0 Field Form Quantitative Rating

Site: SURGE INDUSTRIAL	Rater(s): GJG	Date: 3/21/22

Metric 1. Wetland Area (size).

max 6 pts. | subtotal: 0 | 0

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [ ] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [ ] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [ ] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [x] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

max 14 pts. | subtotal: 1 | 1

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [ ] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [ ] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [x] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [ ] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [ ] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [x] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

max 30 pts. | subtotal: 8 | 7

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [x] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [ ] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [ ] >0.7 (27.6in) (3)
- [ ] 0.4 to 0.7m (15.7 to 27.6in) (2)
- [x] <0.4m (<15.7in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [ ] Seasonally inundated (2)
- [x] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [x] Recovering (3)
- [x] Recent or no recovery (1)

Check all disturbances observed

- [ ] ditch
- [x] tile
- [ ] dike
- [ ] weir
- [ ] stormwater input
- [ ] point source (nonstormwater)
- [ ] filling/grading
- [ ] road bed/RR track
- [ ] dredging
- [ ] other_____

Metric 4. Habitat Alteration and Development.

max 20 pts. | subtotal: 16 | 8

4a. Substrate disturbance. Score one or double check and average.

- [x] None or none apparent (4)
- [ ] Recovered (3)
- [ ] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [ ] Moderately good (4)
- [ ] Fair (3)
- [x] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [ ] Recovered (6)
- [x] Recovering (3)
- [x] Recent or no recovery (1)

Check all disturbances observed

- [ ] mowing
- [ ] grazing
- [ ] clearcutting
- [ ] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [x] sedimentation
- [ ] dredging
- [x] farming
- [x] nutrient enrichment

subtotal this page: 16

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WETLAND F

ORAM v. 5.0 Field Form Quantitative Rating

Site: SURGE INDUSTRIAL	Rater(s): GJG	Date: 3/21/22

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subtotal first page

16	0
max 10 pts.	subtotal

Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

20	4
max 20 pts.	subtotal

Metric 6. Plant communities, interspersion, microtopography.

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic bed
- [1] Emergent
- [ ] Shrub
- [ ] Forest
- [1] Mudflats
- [ ] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high(4)
- [ ] Moderate (3)
- [ ] Moderately low (2)
- [X] Low (1)
- [ ] None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [ ] Extensive >75% cover (-5)
- [ ] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [ ] Nearly absent <5% cover (0)
- [X] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [0] Vegetated hummucks/tussucks
- [0] Coarse woody debris >15cm (6in)
- [0] Standing dead >25cm (10in) dbh
- [0] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

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End of Quantitative Rating. Complete Categorization Worksheets.

WETLAND G

ORAM v. 5.0 Field Form Quantitative Rating

Site: SURGE INDUSTRIAL	Rater(s): GJG	Date: 3/15/22

Metric 1. Wetland Area (size).

max 6 pts. | subtotal: 2 | 2

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [ ] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [x] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [ ] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [ ] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

max 14 pts. | subtotal: 3 | 1

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [ ] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [ ] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [x] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [ ] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [ ] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [x] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

max 30 pts. | subtotal: 14 | 11

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [x] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [ ] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [ ] >0.7 (27.6in) (3)
- [ ] 0.4 to 0.7m (15.7 to 27.6in) (2)
- [x] <0.4m (<15.7in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [x] Seasonally inundated (2)
- [ ] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [x] Recovered (7)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] ditch
- [x] tile
- [ ] dike
- [ ] weir
- [ ] stormwater input
- [ ] point source (nonstormwater)
- [ ] filling/grading
- [ ] road bed/RR track
- [ ] dredging
- [ ] other_____

Metric 4. Habitat Alteration and Development.

max 20 pts. | subtotal: 24 | 10

4a. Substrate disturbance. Score one or double check and average.

- [x] None or none apparent (4)
- [ ] Recovered (3)
- [ ] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [ ] Moderately good (4)
- [ ] Fair (3)
- [x] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [x] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] mowing
- [ ] grazing
- [ ] clearcutting
- [ ] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [x] sedimentation
- [ ] dredging
- [x] farming
- [x] nutrient enrichment

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WETLAND G

ORAM v. 5.0 Field Form Quantitative Rating

Site: SURGE INDUSTRIAL	Rater(s): GJG	Date: 3/15/22

24
subtotal first page

Metric 5. Special Wetlands.

24 max 10 pts. | 0 subtotal

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

Metric 6. Plant communities, interspersion, microtopography.

28 max 20 pts. | 4 subtotal

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic bed
- [1] Emergent
- [ ] Shrub
- [ ] Forest
- [1] Mudflats
- [ ] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high(4)
- [ ] Moderate (3)
- [ ] Moderately low (2)
- [X] Low (1)
- [ ] None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [ ] Extensive >75% cover (-5)
- [ ] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [X] Nearly absent <5% cover (0)
- [ ] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [0] Vegetated hummucks/tussucks
- [0] Coarse woody debris >15cm (6in)
- [0] Standing dead >25cm (10in) dbh
- [1] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
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3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

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End of Quantitative Rating. Complete Categorization Worksheets.

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: September 14, 2021

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-1

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

Landform (hillslope, terrace, etc.): roadside ditch Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.39.08 N Long: 85.56.34 W Datum: WGS84

Soil Map Unit Name: Brookston silty clay loam, 0 to 2% slopes (Br) NWI classification:

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

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

Are Vegetation , Soil , or Hydrology 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 X** **No**
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Remarks:
Dry swale

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	25	Y	FACW
2. *Carya laciniosa*	25	Y	FAC
3. *Quercus palustris*	25	Y	FAC\
4. *Quercus macrocarpa*	25	Y	FAC
5.			
	100	= Total Cover	
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1. *Cornus amomum*	40	Y	FACW
2.			
3.			
4.			
5.			
	40	= Total Cover	
Herb Stratum: (Plot size: 5 ft.)			
1. *Phalaris arundinacea*	75	Y	FACW
2. *Apocynum cannabinaceum*	5	N	FACW
3. *Festuca arundinacea*	15	Y	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
1.			
2.			
		= Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)
Total Number of Dominant Species Across All Strata: 7 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 86 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species x	1 =
FACW species x	2 =
FAC species x	3 =
FACU species x	4 =
UPL species x	5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

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** **No X**

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

SOIL

Sampling Point: TP-1

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 - 15	10YR 3/2	90	5YR 4/6	10	D	M	silty clay loam	
15 - 18	10YR 3/3	95	5YR 4/6	5	D	M	silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)
- X 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): ___

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

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

(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: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: Septmeber 14, 2021

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-2

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

Landform (hillslope, terrace, etc.): roadside ditch Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.39.08 N Long: 85.56.34 W Datum: WGS84

Soil Map Unit Name: Brookston silty clay loam, 0 to 2% slopes (Br) NWI classification:

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

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

Are Vegetation , Soil , or Hydrology 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 within a Wetland?** **Yes** **No X**
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	

Remarks:
Dry swale

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Herb Stratum: (Plot size: 5 ft.)			
1. *Solidago altissima*	40	Y	FACU
2. *Carex frankii*	10	N	OBL
3. *Festuca arundinacea*	50	Y	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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: 2 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-2

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 - 18	10YR 3/2	100					silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)
- X 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): ___	**Wetland Hydrology Present?**	**Yes** ___ **No** **X**
Water Table Present?	Yes ___	No X	Depth (inches): ___		
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___		

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

Remarks

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: September 14, 2021

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-3

Investigator(s): GJG Section, Township, Range: SW1/4, Sec. 14, T14N, R5E

Landform (hillslope, terrace, etc.): depression Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.39.16 N Long: 85.57.08 W Datum: WGS84

Soil Map Unit Name: Crosby silt loam, New Castle Till Plain, 0 to 2% slopes (CrA) NWI classification:

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X** **No**
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Remarks:
Dry swale

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum: (Plot size: 5 ft.)			
1. *Polygonum pennsylvanicum*	80	Y	FACW
2. *Echinocloa crus-galli*	5	N	FACW
3. *Panicum dichotomiflorum*	5	N	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90 = Total Cover		
Woody Vine Stratum: (Plot size: 30 ft.)			
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:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-3

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 - 18	10YR 3/2	95	7.5YR 4/6	5	D	M	silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)
- X 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)
- X 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):	____
Water Table Present?	Yes	____	No	X	Depth (inches):	____
Saturation Present? (includes capillary fringe)	Yes	____	No	X	Depth (inches):	____

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: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: July 14, 2021

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-4

Investigator(s): GJG Section, Township, Range: SW1/4, Sec. 14, T14N, R5E

Landform (hillslope, terrace, etc.): upland Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.39.16 N Long: 85.57.08 W Datum: WGS84

Soil Map Unit Name: Crosby silt loam, New Castle Till Plain, 0 to 2% slopes (CrA) NWI classification:

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ 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 within a Wetland?** **Yes** ____ **No X**
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Dry swale

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum: (Plot size: 5 ft.)			
1. *Zea maize*	80	Y	FACU
2. *Ajuga spp.*	5	N	NI
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	85	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A = ____

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: TP-4

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 - 18	10YR 3/3	100					silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? Yes _____ No X Depth (inches): _____

(includes capillary fringe)

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: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: September 14, 2021

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-5

Investigator(s): GJG Section, Township, Range: SW 1/4, Sec. 14, T14N, R5E

Landform (hillslope, terrace, etc.): depression Local Relief (concave, convex, none): none

Slope (%): 0 - 1% Lat: 39.39.21 N Long: 85.56.49 W Datum: WGS84

Soil Map Unit Name: Treaty silty clay loam, 0 to 1% slopes (ThrA) NWI classification:

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X** **No ____**
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Dry swale

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Herb Stratum: (Plot size: 5 ft.)			
1. *Echinocloa crus-galli*	100	Y	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A = ____

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: TP-5

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 - 5	10YR 3/3	70	10YR 3/6	20	D	M	silt loam	
			7.5YR 5/6	5	C	M		
5 - 18	10YR 4/2	90	10YR 2/2	5	D	M	silt loam	
			10YR 5/6	5	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- X Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)
- X 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)
- X 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):	___
Water Table Present?	Yes	___	No	X	Depth (inches):	___
Saturation Present? (includes capillary fringe)	Yes	___	No	X	Depth (inches):	___

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: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: September 14, 2021

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-6

Investigator(s): GJG Section, Township, Range: SW 1/4, Sec. 14, T14N, R5E

Landform (hillslope, terrace, etc.): upland Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.39.21 N Long: 85.56.49 W Datum: WGS84

Soil Map Unit Name: Treaty silty clay loam, 0 to 1% slopes (ThrA) NWI classification:

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

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

Are Vegetation , Soil , or Hydrology 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 within a Wetland?** **Yes** **No X**
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	

Remarks:
Dry swale

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Herb Stratum: (Plot size: 5 ft.)			
1. *Glycine max*	100	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-6

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 - 18	10YR 4/3	95	7.5YR 4/6	5	C	M	silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? Yes _____ No X Depth (inches): _____

(includes capillary fringe)

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: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: September 14, 2021

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-7

Investigator(s): GJG Section, Township, Range: SW 1/4, Sec. 14, T14N, R5E

Landform (hillslope, terrace, etc.): swale Local Relief (concave, convex, none): concave

Slope (%): 0 - 1% Lat: 39.39.30 N Long: 85.57.02 W Datum: WGS84

Soil Map Unit Name: Crosby silt loam, New Castle Till Plain, 0 to 2% slopes (CrA) NWI classification:

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X** **No ____**
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Dry swale

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum: (Plot size: 5 ft.)			
1. *Echinocloa crus-galli*	20	Y	FACW
2. *Panicum dichotomiflorum*	15	Y	FACW
3. *Typha angustifolia*	15	Y	OBL
4. *Zea maize*	5	N	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	55	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A = ____

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: TP-7

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 - 18	10YR 3/2	95	10YR 5/6	20	D	M	silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- X Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)
- X 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)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X 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):	___
Water Table Present?	Yes	___	No	X	Depth (inches):	___
Saturation Present? (includes capillary fringe)	Yes	___	No	X	Depth (inches):	___

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: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: September 14, 2021

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-8

Investigator(s): GJG Section, Township, Range: SW 1/4, Sec. 14, T14N, R5E

Landform (hillslope, terrace, etc.): upland Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.39.21 N Long: 85.56.49 W Datum: WGS84

Soil Map Unit Name: Crosby silt loam, New Castle Till Plain, 0 to 2% slopes (CrA) NWI classification:

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ 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 within a Wetland?** **Yes** **No X**
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	

Remarks:
Dry swale

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Herb Stratum: (Plot size: 5 ft.)			
1. *Zea maize*	100	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-8

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 - 18	10YR 2/2	100					silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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): ___

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

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

(includes capillary fringe)

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: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: July 14, 2021

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-9

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

Landform (hillslope, terrace, etc.): depression Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.38.59 N Long: 85.56.47 W Datum: WGS84

Soil Map Unit Name: Brookston silty clay loam 0 to 2% slopes (Br) NWI classification:

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

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

Are Vegetation , Soil , or Hydrology 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 within a Wetland?** **Yes** **No X**
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes X	No	

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Herb Stratum: (Plot size: 5 ft.)			
1. *Amaranthus retroflexus*	40	Y	FACU
2. *Echinocloa crus-galli*	40	Y	FACW
3. *Xanthium strumarium*	10	N	FACW
4. *Apocynum cannabinaceum*	5	N	ACW
5.			
6.			
7.			
8.			
9.			
10.			
	95	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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: 2 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-9

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 - 18	10YR 3/2	100					silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)

- 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)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth (inches):	2
Water Table Present?	Yes	___	No	X	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

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

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

Remarks

Recent heavy precipitation

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: February 22, 2022

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-10

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

Landform (hillslope, terrace, etc.): depression Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.38.56 N Long: 85.56.15 W Datum: WGS84

Soil Map Unit Name: Crosby silt loam, New Castle Till Plain, Miami silt loam, 0 to 2% slopes (CrA) NWI classification:

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

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

Are Vegetation , Soil , or Hydrology 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 X** **No**
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Remarks:

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Herb Stratum: (Plot size: 5 ft.)			
1. *Panicum dichotomiflorum*	50	Y	FACW
2. *Echinocloa crus-galli*	20	Y	FACW
3. *Amaranthus retroflexus*	20	Y	FACU
4. *Xanthium strumarium*	10	N	ACW
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-10

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 - 7	10YR 4/2	95	10YR 7/8	5	C	M	silt loam	
7 - 18	2.5Y 3/2	100					silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ 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):	
Saturation Present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

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

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

Remarks

Recent heavy precipitation

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: February 17, 2022

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-11

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

Landform (hillslope, terrace, etc.): depression Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.38.56 N Long: 85.56.15 W Datum: WGS84

Soil Map Unit Name: Crosby silt loam, New Castle Till Plain, Miami silt loam, 0 to 2% slopes (CrA) NWI classification:

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ 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 within a Wetland?**	**Yes ____ No X**
Hydric Soil Present?	Yes ____	No X		
Wetland Hydrology Present?	Yes X	No ____		

Remarks:
Significant flooding

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum: (Plot size: 5 ft.)			
1. *Glycine max*	20	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	20 = Total Cover		
Woody Vine Stratum: (Plot size: 30 ft.)			
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: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-11

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 - 14	10YR 3/3	100					silt loam	
14 - 18	2.5Y 3/2	80	10YR 5/2	20			silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)		Secondary Indicators (minimum of two required)
___ Surface Water (A1)	___ Water-Stained Leaves (B9)	___ Surface Soil Cracks (B6)
___ High Water Table (A2)	___ Aquatic Fauna (B13)	___ Drainage Patterns (B10)
X Saturation (A3)	___ True Aquatic Plants (B14)	___ Dry-Season Water Table (C2)
___ Water Marks (B1)	___ Hydrogen Sulfide Odor (C1)	___ Crayfish Burrows (C8)
___ Sediment Deposits (B2)	___ Oxidized Rhizospheres on Living Roots (C3)	___ Saturation Visible on Aerial Imagery (C9)
___ Drift Deposits (B3)	___ Presence of Reduced Iron (C4)	___ Stunted or Stressed Plants (D1)
___ Algal Mat or Crust (B4)	___ Recent Iron Reduction in Tilled Soils (C6)	___ Geomorphic Position (D2)
___ Iron Deposits (B5)	___ Thin Muck Surface (C7)	___ FAC-Neutral Test (D5)
___ Inundation Visible on Aerial Imagery (B7)	___ Gauge or Well Data (D9)	
___ Sparsely Vegetated Concave Surface (B8)	___ Other (Explain in Remarks)	

Field Observations:

Surface Water Present?	Yes	___	No	X	Depth (inches):	___
Water Table Present?	Yes	___	No	X	Depth (inches):	___
Saturation Present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

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

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

Remarks

Recent heavy precipitation and flooding

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: February 17, 2022

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-12

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

Landform (hillslope, terrace, etc.): depression Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.38.58 N Long: 85.56.15 W Datum: WGS84

Soil Map Unit Name: Crosby silt loam, New Castle Till Plain, Miami silt loam, 0 to 2% slopes (CrA) NWI classification:

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

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

Are Vegetation , Soil , or Hydrology 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 X** **No**
Hydric Soil Present?	Yes X	No		
Wetland Hydrology Present?	Yes X	No		

Remarks:
Significant flooding

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum: (Plot size: 5 ft.)			
1. *Panicum dichotomiflorum*	20	Y	FACW
2. *Echinocloa crus-galli*	30	Y	FACW
3. *Amaranthus retroflexus*	20	Y	FACU
4. *Xanthium strumarium*	10	N	ACW
5. *Lycopus americanus*	10	N	OBL
6. *Glycine max*	10	N	FACU
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-12

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 - 10	10YR 3/2	90	10YR 6/1	10			silt loam	
			10YR 2/2	10				
10 - 18	10YR 3/1	100					silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)
- X 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)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth (inches):	6
Water Table Present?	Yes	___	No	X	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

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

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

Remarks

Recent heavy precipitation and flooding

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: February 17, 2022

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-13

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

Landform (hillslope, terrace, etc.): depression Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.38.59 N Long: 85.56.41 W Datum: WGS84

Soil Map Unit Name: Crosby silt loam, New Castle Till Plain, Miami silt loam, 0 to 2% slopes (CrA) NWI classification:

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X		
Wetland Hydrology Present?	Yes X	No ____		

Remarks:
Significant flooding

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum: (Plot size: 5 ft.)			
1. *Glycine max*	20	Y	FACU
2. *Echinocloa crus-galli*	25	Y	FACW
3. *Amaranthus retroflexus*	20	Y	FACU
4. *Xanthium strumarium*	10	N	ACW
5. *Panicum dichotomiflorum*	25	Y	ACW
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-13

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 - 14	10YR 3/2	100					silt loam	
14 - 18	2.5YR 5/3	100					silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)		Secondary Indicators (minimum of two required)	
___ Surface Water (A1)	___ Water-Stained Leaves (B9)	___ Surface Soil Cracks (B6)	
___ High Water Table (A2)	___ Aquatic Fauna (B13)	___ Drainage Patterns (B10)	
X Saturation (A3)	___ True Aquatic Plants (B14)	___ Dry-Season Water Table (C2)	
___ Water Marks (B1)	___ Hydrogen Sulfide Odor (C1)	___ Crayfish Burrows (C8)	
___ Sediment Deposits (B2)	___ Oxidized Rhizospheres on Living Roots (C3)	X Saturation Visible on Aerial Imagery (C9)	
___ Drift Deposits (B3)	___ Presence of Reduced Iron (C4)	___ Stunted or Stressed Plants (D1)	
___ Algal Mat or Crust (B4)	___ Recent Iron Reduction in Tilled Soils (C6)	___ Geomorphic Position (D2)	
___ Iron Deposits (B5)	___ Thin Muck Surface (C7)	___ FAC-Neutral Test (D5)	
___ Inundation Visible on Aerial Imagery (B7)	___ Gauge or Well Data (D9)		
___ Sparsely Vegetated Concave Surface (B8)	___ Other (Explain in Remarks)		

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth (inches):	4
Water Table Present?	Yes	___	No	X	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

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

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

Remarks

Recent heavy precipitation and flooding conditions

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: February 17, 2022

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-14

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

Landform (hillslope, terrace, etc.): low-lying area Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.39.04 N Long: 85.56.51 W Datum: WGS84

Soil Map Unit Name: Brookston silty clay loam, 0 to 2% slopes (Br) NWI classification:

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ 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 within a Wetland?**	**Yes ____ No X**
Hydric Soil Present?	Yes ____	No X		
Wetland Hydrology Present?	Yes X	No ____		

Remarks:
Significant flooding

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Herb Stratum: (Plot size: 5 ft.)			
1. *Glycine max*	20	Y	FACU
2. *Echinocloa crus-galli*	25	Y	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	45	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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: 1 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-14

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 - 14	10YR 3/2	100					silt loam	
14 - 18	10YR 3/2	90	2.5YR 3/1				silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth (inches):	2
Water Table Present?	Yes	___	No	X	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

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

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

Remarks

Recent heavy precipitation and flooding conditions

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: February 17, 2022

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-15

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

Landform (hillslope, terrace, etc.): low-lying area Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.39.16 N Long: 85.56.50 W Datum: WGS84

Soil Map Unit Name: Brookston silty clay loam, 0 to 2% slopes (Br) NWI classification:

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

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

Are Vegetation , Soil , or Hydrology 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 X** **No**
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Remarks:
Significant flooding

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum: (Plot size: 5 ft.)			
1.			
2. *Echinocloa crus-galli*	20	Y	FACW
3. *Xanthium strumarium*	10	N	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	30 = Total Cover		
Woody Vine Stratum: (Plot size: 30 ft.)			
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:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-15

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 - 6	10YR 5/2	95	10YR 6/8	5	C	M	silt loam	
6 - 18	10YR 3/2	100					silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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

Field Observations:

Surface Water Present?	Yes	X	No	___	Depth (inches):	3
Water Table Present?	Yes	___	No	X	Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

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

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

Remarks

Recent heavy precipitation and flooding conditions

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Surge Industrial City/County: Pleasantview/Shelby Sampling Date: March 15, 2022

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-16

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

Landform (hillslope, terrace, etc.): low-lying area Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.39.17 N Long: 85.56.59 W Datum: WGS84

Soil Map Unit Name: Brookston silty clay loam, 0 to 2% slopes (Br) NWI classification:

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

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

Are Vegetation , Soil , or Hydrology 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	No X	
Wetland Hydrology Present?	Yes	No X	

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Herb Stratum: (Plot size: 5 ft.)			
1. *Packera glabella*	10	Y	FACW
2. *Poa pratense*	5	Y	Y FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	15	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-16

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 - 6	10YR 4/2	100					silt loam	
6 - 18	10YR 3/2	100					silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? Yes _____ No X Depth (inches): _____

(includes capillary fringe)

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

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

Remarks

APPENDIX C

PHOTOGRAPHIC RECORD

Photo 1: View of typical soils at Test Pit #1.

Photo 2: View of Wetland A (looking north).

Approximate 300-Acre Surge Industrial Site
Pleasant View, Shelby County, Indiana
DHE Project No. RCC.003
Photographs Taken on September 14, 2021, February 17, 2022 and March 15, 2022

Photo 3: View of Wetland A from near Test Pit #2 (looking north).

Photo 4: View of forest area within Wetland A (looking south).

Approximate 300-Acre Surge Industrial Site
Pleasant View, Shelby County, Indiana
DHE Project No. RCC.003
Photographs Taken on September 14, 2021, February 17, 2022 and March 15, 2022

Photo 5: View of typical soils at Test Pit #2.

Photo 6: View of open area near Test Pit #2 (looking west).

Photo 7: View of typical soils found at Test Pit #5.

Photo 8: View of Wetland C (looking north along western border of Site).

Photo 9: View of typical soils found at Test Pit #6.

Photo 10: View of cultivated farm field from near Test Pit #6 (looking northeast).

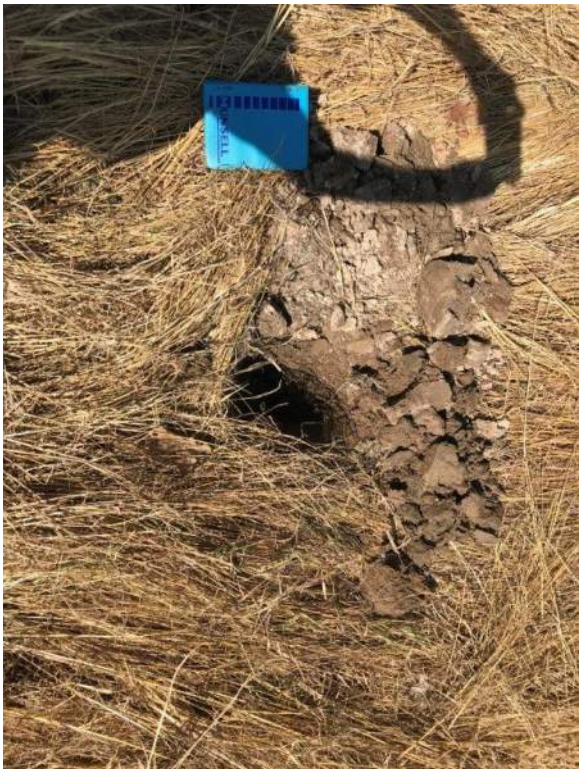

Photo 11: View of typical soils found at Test Pit #3.

Photo 12: View of Wetland B (looking northeast).

Photo 13: View of typical soils found at Test Pit #4.

Photo 14: View of cultivated field from near Test Pit #4 (looking northeast).

Photo 15: View of OW-1 from northeast shoreline (looking southeast at island).

Photo 16: View of OW-1 from south shoreline (looking north).

Photo 17: View of typical soils found at Test Pit #7.

Photo 18: View of Wetland D showing Five Below development in background (looking north).

Photo 19: View of typical soils found at Test Pit #8.

Photo 20: View of typical soils found at Test Pit #9.

Photo 21: View of depressional area surrounding Test Pit #9 (looking northwest).

Photo 22: View of typical soils found at Test Pit #11.

Photo 23: View of Wetland F from near Test Pit #10 (looking west).

Photo 24: View of typical soils found at Test Pit #10 in February, 2022.

Photo 25: View of inundated soils pit at Test Pit #12 in February, 2022.

Photo 26: View of upland area near Test Pit #11 in February, 2022 (looking north).

Photo 27: View of Wetland E in February, 2022 (looking east).

Photo 28: View of typical soils and inundated Test Pit #12 in February, 2022.

Photo 29: View of depressional area surrounding Test Pit #13 in February, 2022 (looking east).

Photo 30: View of depressional area surrounding Test Pit #14 (looking north).

Photo 31: View of Wetland E near Test Pit #15 (looking south).

Photo 32: View of typical soils at depressional area surrounding Test Pit #15 (looking north).

Photo 33: View of Wetland E from near Test Pit #15 (looking north).

Photo 34: View of typical soils found at Test Pit #16.

Photo 35: View of typical soils found at Test Pit #10.

Photo 36: View of Wetland F from near Test Pit #10 (looking east).

Approximate 300-Acre Surge Industrial Site
Pleasant View, Shelby County, Indiana
DHE Project No. RCC.003
Photographs Taken on September 14, 2021, February 17, 2022 and March 15, 2022

Photo 37: View of typical soils found at Test Pit #13.

Report 2

400 Boone Hollow Lane, Springville, IN 47462

(812) 583-0200

WETLAND DELINEATION REPORT

PROPOSED ROUNDABOUTS
SURGE INDUSTRIAL SITE
PLEASANT VIEW, INDIANA

Prepared for:

RUNNEBOHM CONSTRUCTION COMPANY
144 EAST RAMPART STREET
SHELBYVILLE, INDIANA 46176

Prepared by:

Gregory J. Gerke, PWS, CESSWI
DHE, INC.
400 BOONE HOLLOW LANE
SPRINGVILLE, IN 47462

DHE Project RCC.003

June 3, 2022

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

1.1 GENERAL INFORMATION

This report presents the findings of a wetland delineation study conducted at the Surge Industrial Property located near the southeast intersection of McGregor Road and South Carroll Road on the northwest side of Pleasant View, Shelby County, Indiana (Appendix A, Figure 1). This wetland and stream delineation study only focused on three proposed roundabouts connected to the Surge Industrial Site. The site is located at SW¼, Section 14 and NW¼, Section 23, Township 14 North, Range 5 East. The project is bounded on the south, east and west by undeveloped agricultural and residential properties and on the north by Interstate 74. The sites vary in size and landuse and primarily consist of undeveloped agricultural fields, forested wetlands and residential lots. All border roadways (MacGregor Road or County Road N. 800 West). The agricultural tracts were cultivated with both corn and soybeans at the time of the site study. The land use of the surrounding area is a mixture of cultivated fields, residential and industrial areas and is quickly developing.

1.2 METHODOLOGY

The purpose of the study was to identify and delineate wetland and stream boundaries within the property to locate limiting environmental factors for potential commercial development of the undeveloped parcels that comprise the subject Site. The delineation was based on DHE's (DHE) professional judgment and interpretation of the technical criteria presented in the 1987 *U.S. Army Corps of Engineers Wetlands Delineation Manual* (1987 *Corps Manual*) and the Midwest Supplement.

The wetland boundaries, where present, were delineated using the routine on-site determination method described in the 1987 Corps Manual and Midwest Region Supplement and supported by

the *National List of Plant Species That Occur in Wetlands: North Central (Region 3)* (RMG, Inc. 1999) and *Hydric Soils of Indiana* (USDA-NRCS 1992). DHE completed the following scope of services to identify and delineate jurisdictional wetland and stream boundaries at the site:

1.2.1. Office Data Review:

DHE personnel reviewed the U.S. Geological Survey (USGS) topographic mapping (Appendix A, Figure 1), U.S. Fish & Wildlife Service (USFWS), National Wetlands Inventory (NWI) Map (Appendix A, Figure 2) and the U.S. Department of Agriculture (USDA-NRCS) *Soil Survey for Shelby County, Indiana* (Appendix A, Figure 3). These resources were used to establish site characteristics that may identify potential wetland areas.

1.2.2. Site Reconnaissance:

The wetland delineation was performed by a DHE biologist on May 31, 2022 using the routine on-site determination method, appropriate supplements and assumptions for areas of significant disturbance. First, plant communities present on the site were identified. The dominant plant species within each community were identified and a determination made on whether the plant community was dominated by hydrophytic (wetland) plants. Next, a representative test site was located within the plant community and soils were sampled using a spade shovel to determine if hydric soil indicators were present. A test site was located outside the wetland to delineate where the wetland boundary could be located. Finally, the test site was inspected to determine if indicators of wetland hydrology (ponding, soil saturation, etc.) were present. The boundaries of areas having wetland vegetation, hydric soils, and wetland hydrology were marked in the field with pink surveyor's ribbon. These locations were field surveyed by DHE biologists using a GeoXT Global Positioning System (GPS). The GPS coordinates were then incorporated into the Jurisdictional Findings Map (Appendix A, Figures 5, 6, 7 and 8).

1.2.3. Data Collection:

Data forms for the routine on-site determination method were completed for six (6) representative locations within the site boundaries (see Appendix B for the wetland data forms). The data sheets were completed to record the vegetation, soils and hydrology observations used in making the wetland determination. ORAM forms that rank the quality of the wetland resource were used for each wetland area and HHEI forms were used for stream areas. Photographs of the wetlands were taken with their locations and direction described in the Photographic Record (Appendix C).

1.2.4. Preparation of Wetland Delineation Report:

DHE prepared this wetland delineation report that presents the methodology, findings, wetland delineation map, regulatory considerations, conclusions, completed data forms, and site photographs.

2.0 FINDINGS

2.1 NATIONAL WETLANDS INVENTORY MAP

NWI maps have been prepared by the USFWS based on high altitude infrared aerial photography and limited ground truthing. Wetlands and deep-water habitats are identified on these maps and classified according to the system developed by Cowardin and co-workers (1979).

The NWI Map for the Acton, Indiana quadrangle covering the site vicinity was reviewed by DHE (Appendix A - Figure 2). The NWI Map identified no wetlands or streams within the proposed roundabout boundaries.

2.2 SITE SOILS

The *Soil Survey for Shelby County, Indiana* (NRCS 1991) was reviewed by DHE (Table 1 and Figure 3). According to the USDA-NRCS, eight (8) soil types are mapped within the Site. One of the four (4) soil types have been identified by the USDA NRCS as hydric. The soil mapping units identified for the site are summarized in Table 1.

TABLE 1
SOILS INFORMATION
Surge Industrial Site – Proposed Roundabouts
Pleasant View, Shelby County, Indiana

Soil Mapping Unit Name (Symbol)	Hydric Soil List Designation
Brookston silty clay loam, 0 to 2% slopes (Br)	Hydric
Crosby silt loam, New Castle Till Plain, 0 to 2% slopes (CrA)	Not Hydric
Crosby silt loam, 2 to 4% slopes (CrB)	Not Hydric
Crosby-Miami silt loams, 0 to 6% slopes, eroded (CsB)	Not Hydric

The soils map is presented as Appendix A, Figures 3a, 3b and 3c .

2.3 PLANT COMMUNITIES

The plant communities present on the site consist mainly of agricultural weeds, second-growth forested fencerows, emergent wetlands and disturbed areas. Dominant plant species encountered in the various plant communities included corn (*Zea maize*), Soybeans (*Glycine max*), turfgrass (*Poa annus*), Silver Maple (*Acer sacharum*), Red Mulberry (*Morus rubra*), Poison Ivy (*Toxicodendron radicans*) Catbriar (*Smilax glauca*), Bush Honeysuckle (*Lonicera mackii*), Garlic Mustard (*Alliaria petiolata*), Green Ash (*Fraxinus pennsylvanica*), Canada Thistle (*Cersium canadensis*), Silky Dogwood (*Cornus amomum*), Hackberry (*Celtis occidentalis*), Blackberry (*Rubus allegheniensis*), Tall Goldenrod (*Solidago altissima*), Fox Sedge (*Carex vulpinoidea*), Velvet Leaf (*Abutilon theophrasti)*, Kentucky Fescue (*Festuca arundinacea*), Dandelion (*Taraxacum officinalis),* Johnsongrass (*Sorghum halepense*), Nutsedge (*Cyperus esculentus*), Reed Canarygrass (*Phalaris arundinacea*), Panicgrass (*Panicum dichotomiflorum*) and Multiflora Rose (*Rosa multiflora*). The vegetation found in each delineated wetland has been detailed in the individual wetland data forms in Appendix B.

2.4 HYDROLOGY

The site is located in a somewhat rural area that is becoming increasingly urban on the southeast side of Indianapolis in Shelby County, Indiana. Site elevations range from approximately 952 feet to 850 feet above MSL (mean sea level). The site is level to gently rolling and generally drains to the southeast into a series of swales and ditches towards Buck Creek. The ultimate drainage is the East Fork White River, which is approximately 30 miles south of the Site. No other hydrologic features were encountered on the site. A nearby landowner explained that several field tiles run through the area and a tile clean-out was observed (see photograph #9 in Appendix C) within one of the proposed roundabout footprints.

Other hydrologic features on the site include occasional farm swales and roadside ditches. No streams or similar features were observed within the boundaries of the Site. No part of the Site appeared to be located within the 100-year floodplain. The FEMA Map for the area is provided in Appendix A, Figure 4.

2.5 WETLANDS

Three (3) wetland areas, totaling approximately 1.15 acres were identified and delineated on the proposed roundabout sites (Wetlands A, B and C). ORAM forms, used to determine the quality of the wetland areas, were compiled for the wetlands and can be found in Appendix B. No wetlands were encountered within the boundaries of Proposed Roundabout #2.

Proposed Roundabout #1 contained 2 wetlands (Wetlands A and B). Wetland A is considered a forested wetland and extends off-site to the east. Wetland B is a small depression in a residential yard and is considered an emergent wetland. Wetland A drains into a surface swale that runs under the interstate exit and appears to dissipate in the adjacent development, which was recently constructed. As noted previously, several agricultural tiles are present in the area that help drain wet soils. Wetland B appears to have no outlet. Both features in Proposed Roundabout #1 appear to be "isolated in nature" with no apparent connection to any stream systems and are likely to be considered non-jurisdictional according to the USACE. Similarly, Wetland C, which is located within the boundaries of Proposed Roundabout #3, is a small emergent wetland with some shrubs within its area. This wetland appears to be a depression along the roadway that may be a result of poor grading around the road intersection. This feature also to appears to be "isolated in nature" with no apparent connection to any stream systems and is likely to be considered non-jurisdictional according to the USACE. The wetland data forms for site wetlands are provided in Appendix B. A field survey of the delineated boundaries of the on-site wetlands was completed by using a Trimble GeoXT GPS unit. All wetland boundaries are shown in Appendix A, Figures 5, 6, 7 and 8. Photographs of the wetlands are presented in Appendix C.

The size, DHE's interpretation of the USFWS classification, and hydrological characteristics of the individual wetlands that were delineated at the project site are summarized in Table 2.

TABLE 2
WETLAND CHARACTERISTICS
Surge Industrial Site – Proposed Roundabouts
Pleasant View, Shelby County, Indiana

Wetland	Area (acres)	USF&WS Classification	Hydroperiod	ORAM Score	Photograph Number
A	1.08	PFO/EMA	Seasonally saturated	43	1, 2, 3, 4, 7, 8 & 9
B	0.05	PEMA	Seasonally saturated	20	10 & 11
C	0.02	PEMA	Seasonally saturated	25	18 & 19
Total	**1.15**				

2.6 OTHER WATERS

In addition to the identified wetland areas, stream systems and open water features would likely be classified as jurisdictional waters by either or both the USACE and IDEM. No "blueline" streams on the USGS Topographic Map (Figure 1) were identified on the Site and no streams or open water ponds were encountered within any of the proposed roundabout boundaries.

3.0 REGULATORY CONSIDERATIONS

Jurisdictional waters of the U.S., including wetlands, are defined by *33 Code of Federal Regulations (CFR) Part 328* and are protected by Sections 404 and 401 of the Clean Water Act (*33 USC 1344*).

Impacts to jurisdictional wetlands and streams are regulated in the State of Indiana by the U.S. Army Corps of Engineers (Corps) and the Indiana Department of Environmental Management (IDEM). Discharges of dredged or fill material into jurisdictional waters of the United States, including non-isolated wetlands, must obtain a permit from the Corps under the provisions of Section 404 of the Clean Water Act (CWA). Impacts to these waters or isolated waters must obtain a Section 401 Water Quality Certification through IDEM before a Section 404 permit will be issued by the Corps. Impacts to waters of the State, including isolated wetlands may require a permit from IDEM under SB 389 depending on the wetland's size and quality classification. Proposed wetland impacts that exceed 0.5 acres require an Individual Section 404/401 Permit from the Corps.

Current regulations state that jurisdictional stream impacts of less than 0.5 acres and/or 300 linear feet (for intermittent and perennial streams) can be permitted by the Corps using a Regional General Permit (RGP) or Section 404 Nationwide Permit (NWP) and Section 401 Water Quality Certification (WQC – IDEM). Additionally, an isolated wetlands permit (IDEM) may be required if cumulative impacts to isolated Class II wetlands greater than 0.375 acres are planned. Impacts to Class III isolated wetlands require an IDEM permit. Impacts greater than 1.0 acres to wetlands may require an individual permit from the Corps, which is more scrutinized and can take longer to approve than the more streamlined permits.

Individual permits require a sequencing review. Sequencing requires the permit applicant to demonstrate that the project purpose cannot be accomplished without impacting wetlands and waters. If this can be demonstrated, then the applicant is required to further demonstrate that the scope of the project has been revised to minimize wetland and water impacts. The sequencing process requires that an alternative analysis be performed, and that the alternatives analysis must address other potential sites. Alternative site plans which attempt to avoid or minimize wetland and water impacts must be developed and evaluated. The regulatory agencies will only consider mitigation of wetlands impacts after satisfactory completion of the sequencing requirements.

DHE suggests that any site plan for proposed construction activities be designed to avoid and minimize wetland and stream impacts to the extent possible. An alternatives analysis that demonstrates the need to encroach upon wetlands and jurisdictional waters, including actions to minimize environmental impacts to these resources may need to be completed if an individual permit is required. A mitigation plan for any unavoidable wetland impacts may be required to be submitted with the permit application.

It is the responsibility of any party that intends to discharge dredge or fill material into jurisdictional waters of the U.S. and/or isolated wetlands to comply with all applicable regulations.

4.0 CONCLUSIONS

A DHE biologist inspected the Site on May 31, 2022. Three (3) wetland areas (Wetlands A through C), totaling approximately **1.15 acres**, were identified and delineated within the boundaries of the proposed roundabout sites. These waterbodies may be considered "isolated" features based on their apparent lack of connection to nearby streams and therefore may be considered non-jurisdictional features regulated by the federal Clean Water Act. Wetlands B and C, due to their lack of trees or shrubs would be considered emergent (non-forested) wetlands. Wetland A has a large portion of forested area within its boundary and would likely be considered a forested wetland.

The wetland and stream determination boundaries were located in the field by DHE using a Trimble GeoXT GPS Unit. Pink flagging was hung during the field determination to mark wetland boundaries. Wetland and stream boundaries are shown in Appendix A, Figures 5, 6, 7 and 8.

Due to the lack of surface outlets and apparent isolated nature of the wetland and open water features, all on-site waterbody features identified by DHE, may be considered "Isolated" waters subject to IC 13-22-18 and HEA 1798 of the State of Indiana Isolated Wetland Law. All efforts should be made to avoid and minimize potential impacts to the jurisdictional wetland features during the planning of the project.

5.0 LEVEL OF CARE

The wetland delineation services performed by DHE were conducted in a manner consistent with the criteria contained in the 1987 Corps Manual and with the level of care and skill ordinarily exercised by members of the environmental consulting profession practicing contemporaneously under similar conditions in the locality of the project. It must be recognized that the jurisdictional wetland delineation was based on field observations and DHE's professional interpretation of the criteria in the 1987 Corps Manual and appropriate supplements at the time of our fieldwork. Wetland determinations may change subsequent to DHE's delineation based on changes in the regulatory criteria, seasonal variations in hydrology, alterations to drainage patterns and other human activities and/or land disturbances.

This report is intended for the use of Runnebohm Construction Company only, consistent with the qualifications outlined herein and the terms and conditions of DHE's proposal. Our services have been performed under mutually agreed upon terms and conditions. If other parties wish to rely on this report, please have them contact us so that a mutual understanding and agreement of the terms and conditions for our services can be established prior to their use of this information.

6.0 REFERENCES

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United States Department of Agriculture, Natural Resources Conservation Service (USDA). 2011b. 2011 National List of Hydric Soils by State. Available online at http://soils.usda.gov/use/hydric/. Accessed May 30, 2022.

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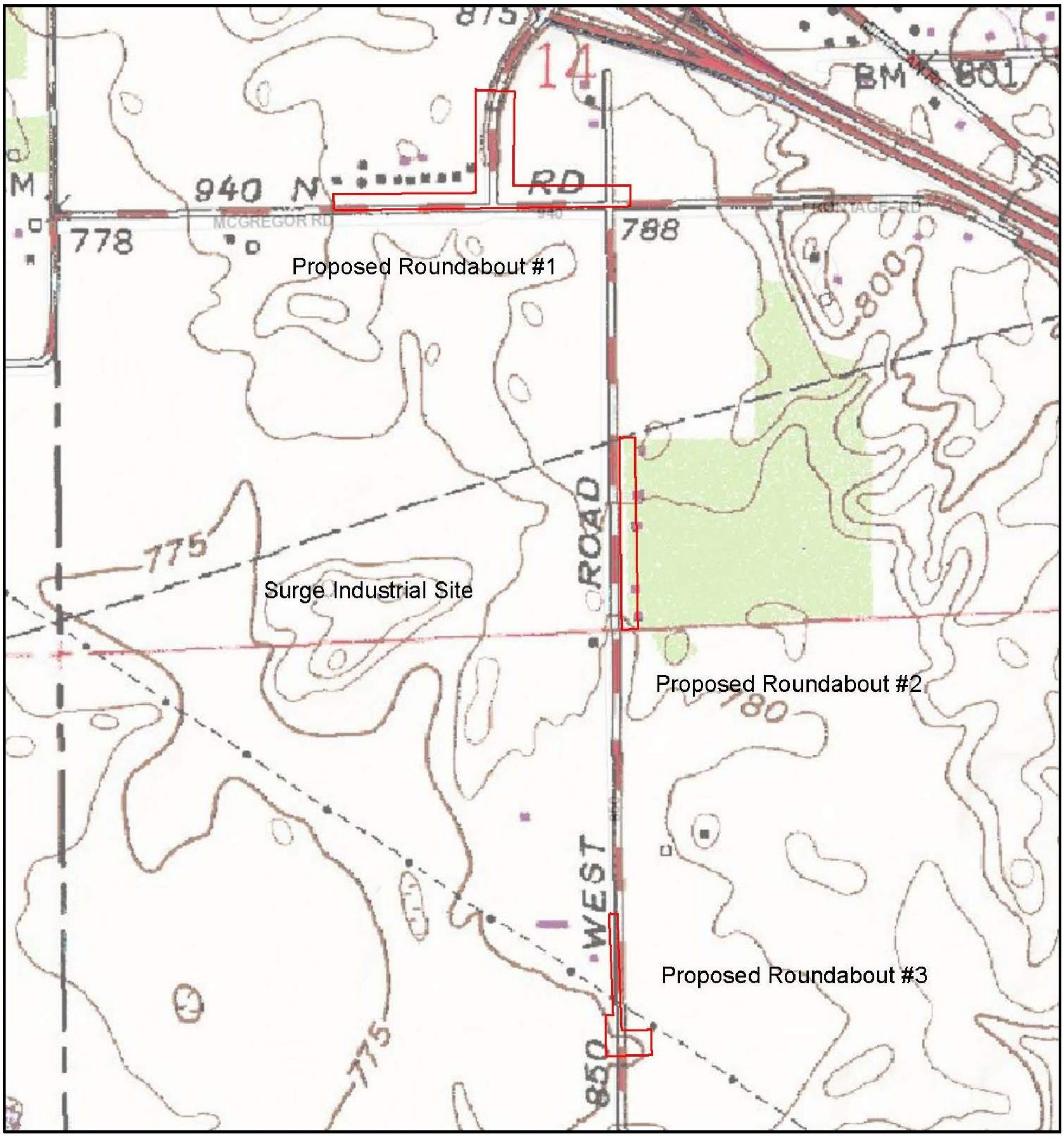
APPENDIX A

FIGURES



USGS 7.5 Minute Topographic Map

Surge Industrial - Proposed Roundabouts

Project Number:	RCC.003
Date:	June, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 1

National Wetlands Inventory

Surge Industrial Site - Proposed Roundabouts

Project Number:	RCC.003
Drawing file:	Site Figures
Date:	June, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 2

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Br	Brookston silty clay loam, 0 to 2 percent slopes	1.3	27.7%
CrA	Crosby silt loam, New Castle Till Plain, 0 to 2 percent slopes	3.0	66.3%
CrB	Crosby silt loam, 2 to 4 percent slopes	0.1	1.4%
CsB	Crosby-Miami silt loams, 0 to 6 percent slopes	0.2	4.6%
Totals for Area of Interest		**4.5**	**100.0%**

Shelby County Soil Survey

Surge Industrial Site - Proposed Roundabouts

Project Number:	RCC.003
Drawing file:	Site Figures
Date:	June, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 3a

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Br	Brookston silty clay loam, 0 to 2 percent slopes	0.2	11.7%
CrA	Crosby silt loam, New Castle Till Plain, 0 to 2 percent slopes	1.8	88.3%
Totals for Area of Interest		2.0	100.0%

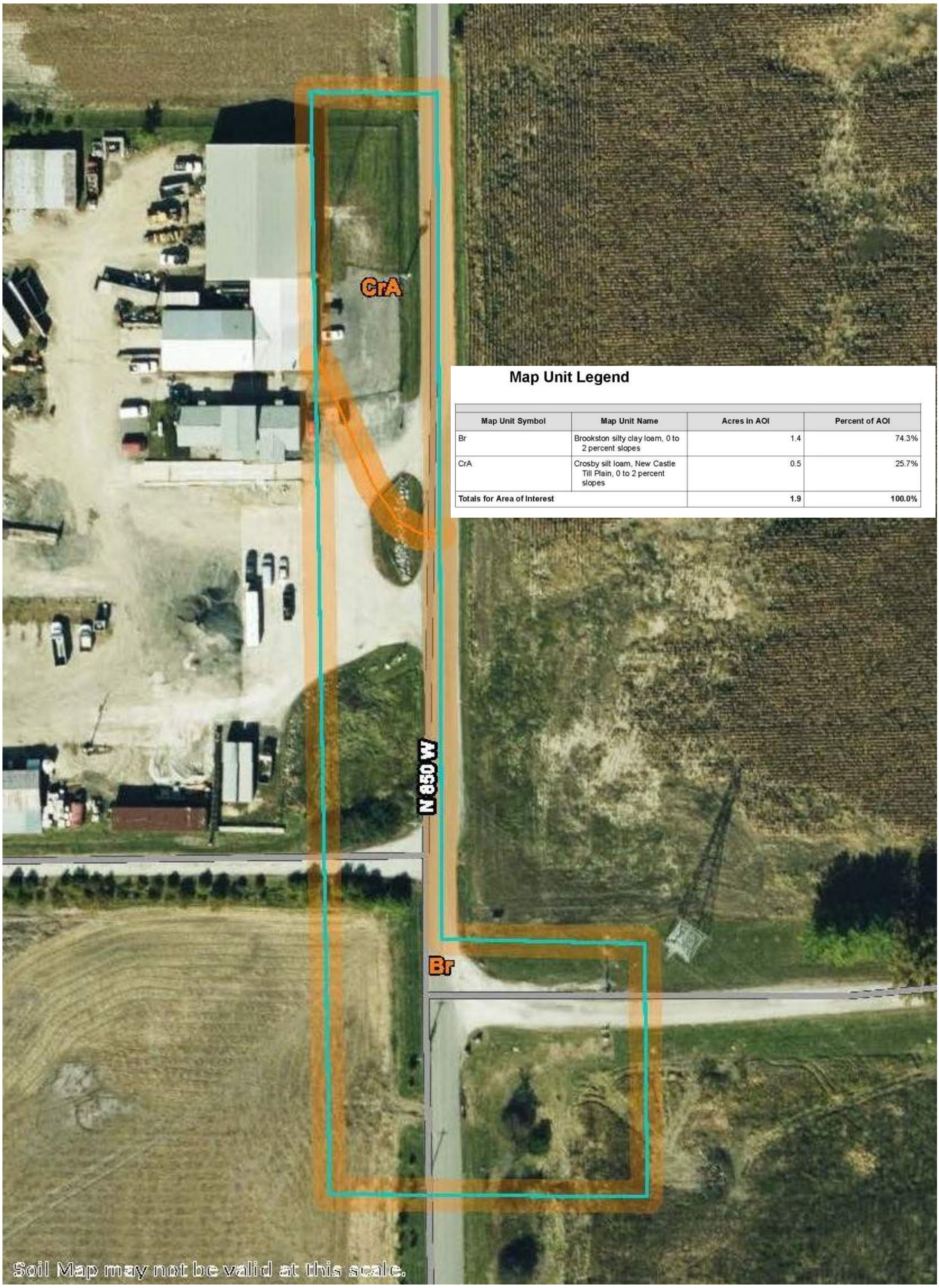
Shelby County Soil Survey

Surge Industrial - Proposed Roundabouts

Project Number:	RCC.003
Date:	June, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 3b



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Br	Brookston silty clay loam, 0 to 2 percent slopes	1.4	74.3%
CrA	Crosby silt loam, New Castle Till Plain, 0 to 2 percent slopes	0.5	25.7%
Totals for Area of Interest		**1.9**	**100.0%**

Shelby County Soil Survey

Surge Industrial - Proposed Roundabouts

Project Number:	RCC.003
Date:	June, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 3c

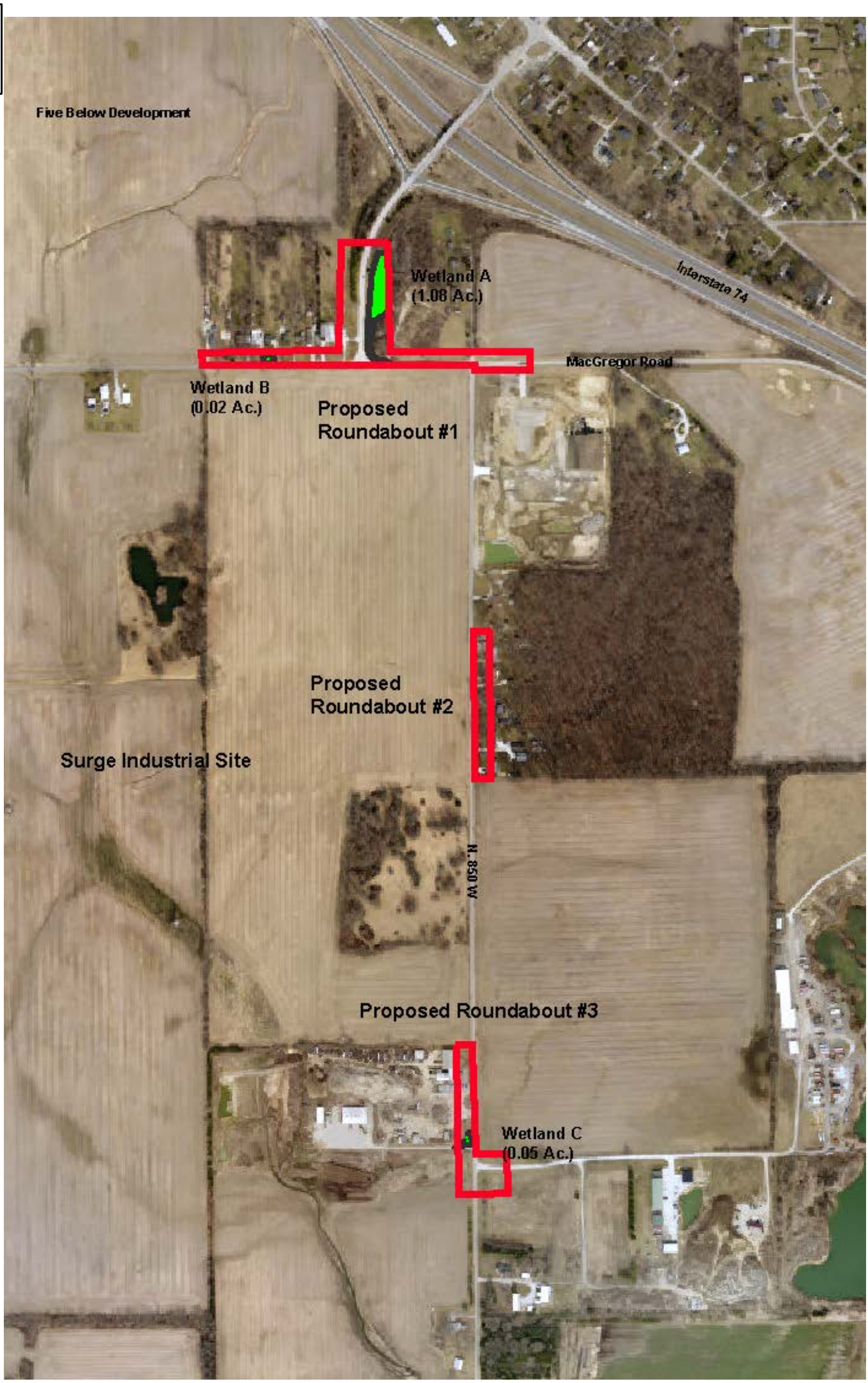
FEMA Flood Insurance Rate Map

Surge Industrial Site - Proposed Roundabouts

Project Number:	RCC.003
Date:	June, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 4



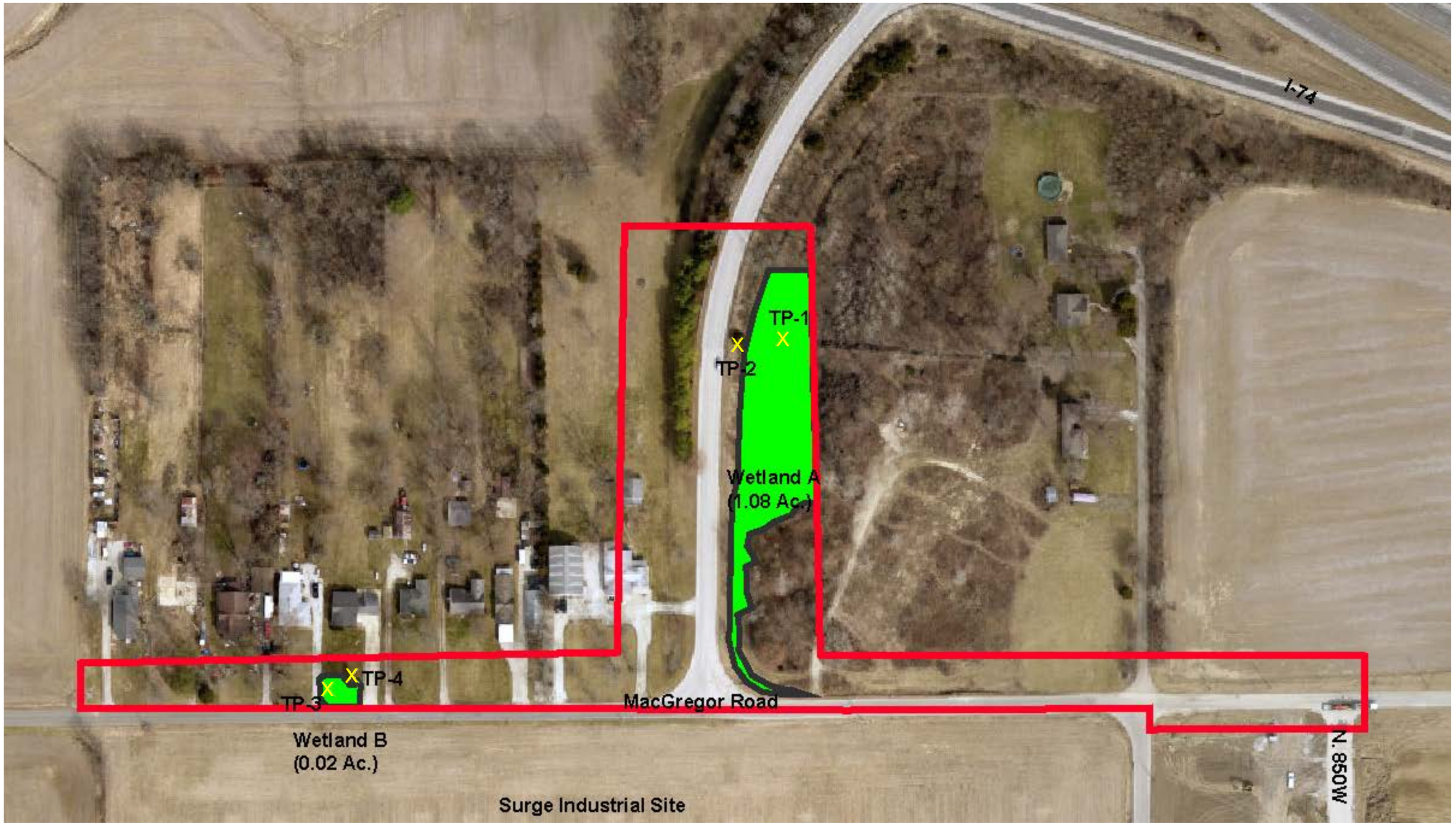
Overall Site Map

Surge Industrial Site - Proposed Roundabouts

Project Number:	RCC.003
Date:	June, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 5



Inset #1 - Proposed Roundabout #1

Surge Industrial Site - Proposed Roundabouts

Project Number:	RCC.003
Drawing file:	Site Figures
Date:	June, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 6

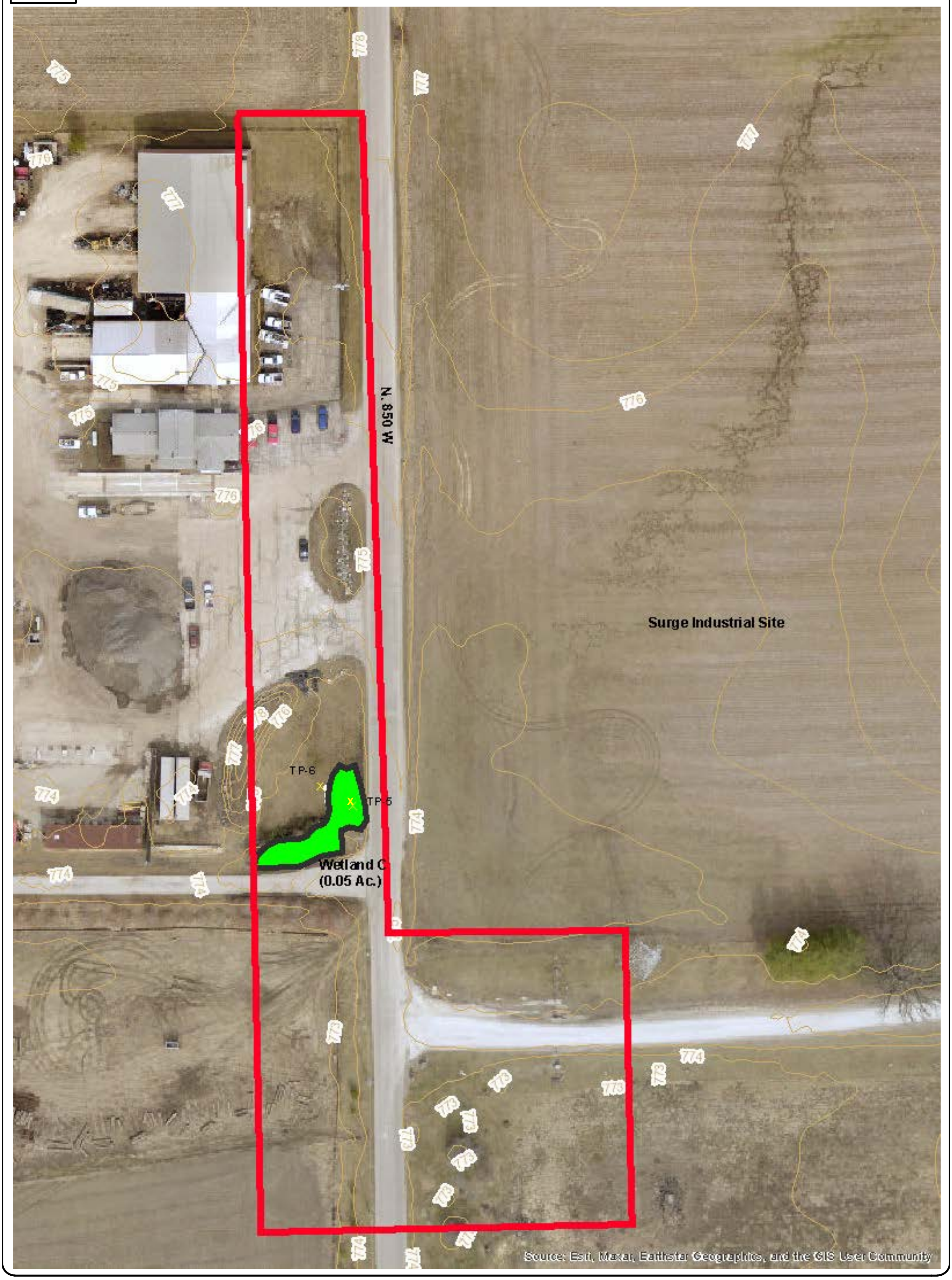
Inset #2 - Proposed Roundabout #2

Surge Industrial Site - Proposed Roundabouts

Project Number:	RCC.003
Date:	June, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 7



Inset #3 - Proposed Roundabout #3

Surge Industrial Site - Proposed Roundabouts

Project Number:	RCC.003
Date:	June, 2022
Scale:	NTS
Drawn By:	GJG

DHE

Figure: 8

APPENDIX B

WETLAND AND STREAM DATA FORMS

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Roundabout #1 City/County: Pleasantview/Shelby Sampling Date: May 31, 2022

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-1a

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

Landform (hillslope, terrace, etc.): depression Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.39.36 N Long: 85.56.40 W Datum: WGS84

Soil Map Unit Name: Brookston silty clay loam, 0 to 2% slopes (Br) NWI classification:

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

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

Are Vegetation , Soil , or Hydrology 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 X** **No**
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanicum*	40	Y	FACW
2.			
3.			
4.			
5.			
	40	= Total Cover	
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1. *Cornus amomum*	25	Y	FACW
2.			
3.			
4.			
5.			
	25	= Total Cover	
Herb Stratum: (Plot size: 5 ft.)			
1. *Dipsacus sylvestris*	20	Y	FACU
2. *Carex granularis*	5	N	OBL
3. *Glabella packera*	5	N	FACW
4. *Toxicodendron radicans*	20	Y	FAC
5. *Solidago altissima*	15	Y	FACU
6. *Carex vulpinoidea*	15	Y	OBL
7. *Geum canadense*	15	Y	FAC
8.			
9.			
10.			
	95	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 71 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

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: TP-1a

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 - 18	7.5YR 3/2	90	10YR 4/6	10	D	M	silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)
- X 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)
- X 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	X	No	___	Depth (inches):	1
Water Table Present?	Yes	X	No	___	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

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: Roundabout #1 City/County: Pleasantview/Shelby Sampling Date: May 31, 2022

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-2a

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

Landform (hillslope, terrace, etc.): slope Local Relief (concave, convex, none): none

Slope (%): 10% Lat: 39.39.37 N Long: 85.56.40 W Datum: WGS84

Soil Map Unit Name: Brookston silty clay loam, 0 to 2% slopes (Br) NWI classification:

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

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

Are Vegetation , Soil , or Hydrology 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 within a Wetland?** **Yes** **No X**
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	10	Y	FACW
2.			
3.			
4.			
5.			
	10	= Total Cover	
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1. *Lonicera mackii*	100	Y	NI
2.			
3.			
4.			
5.			
	25	= Total Cover	
Herb Stratum: (Plot size: 5 ft.)			
1. *Ionicera mackii*	10	Y	NI
2. *Parthenocissus quinquefolia*	10	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	20	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
1. *Vitis aestivalis*	10	Y	FACU
2.			
	10	= 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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 10 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species x	1 =
FACW species x	2 =
FAC species x	3 =
FACU species x	4 =
UPL species x	5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

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: TP-2a

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 - 18	10YR 3/3	100					silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? Yes _____ No X Depth (inches): _____

(includes capillary fringe)

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: Roundabout #1 City/County: Pleasantview/Shelby Sampling Date: May 31, 2022

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-3a

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

Landform (hillslope, terrace, etc.): depression Local Relief (concave, convex, none): none

Slope (%): 0 - 2% Lat: 39.39.31 N Long: 85.56.47 W Datum: WGS84

Soil Map Unit Name: Crosby silt loam, New Castle Till Plain, 0 to 2% slopes (CrA) NWI classification:

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X** **No**
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Herb Stratum: (Plot size: 5 ft.)			
1. *Eleocaris palustris*	20	Y	OBL
2. *Carex vulpinoidea*	50	Y	OBL
3. *Poa pratensis*	20	Y	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-3a

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 - 18	10YR 4/2	80	10YR 4/4	10	C	M	silty clay loam	
			10YR 4/6	10	C	M		

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)
- ___ 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	X	No	___	Depth (inches):	1
Water Table Present?	Yes	X	No	___	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

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: Roundabout #1 City/County: Pleasantview/Shelby Sampling Date: May 31, 2022

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-4a

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

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

Slope (%): 0-2% Lat: 39.39.31 N Long: 85.56.47 W Datum: WGS84

Soil Map Unit Name: Crosby silt loam, New Castle Till Plain, 0 to 2% slopes (CrA) NWI classification:

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

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

Are Vegetation ____, Soil ____, or Hydrology ____ 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 within a Wetland?** **Yes** **No X**
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Morus rubra*	10	Y	FACU
2.			
3.			
4.			
5.			
	10	= Total Cover	
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Herb Stratum: (Plot size: 5 ft.)			
1. *Poa annuus*	100	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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: 2 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-4a

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 - 10	10YR 4/3	90	10YR 4/4	10			silt loam	
10 - 18	10YR 4/2	60	10YR 4/3	40			silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)
- _____ Geomorphic Position (D2)
- _____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	___	No	___	Depth (inches):	___
Water Table Present?	Yes	___	No	___	Depth (inches):	___
Saturation Present? (includes capillary fringe)	Yes	___	No	X	Depth (inches):	6

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: Roundabout #3 City/County: Pleasantview/Shelby Sampling Date: May 31, 2022

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-5a

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

Landform (hillslope, terrace, etc.): low-lying area Local Relief (concave, convex, none): concave

Slope (%): 0 - 2% Lat: 39.38.54 N Long: 85.56.34 W Datum: WGS84

Soil Map Unit Name: Brookston silty clay loam, 0 to 2% slopes (Br) NWI classification:

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

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

Are Vegetation , Soil , or Hydrology 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 X** **No**
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum: (Plot size: 5 ft.)			
1. *Rumex crispus*	40	Y	FACW
2. *Festuca arundinacea*	40	Y	FACU
3. *Typha angustifolia*	15	Y	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95 = Total Cover		
Woody Vine Stratum: (Plot size: 30 ft.)			
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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species x	1 =
FACW species x	2 =
FAC species x	3 =
FACU species x	4 =
UPL species x	5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

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: TP-5a

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 - 18	10YR 3/1	99	10YR 3/4	1	PL	M	silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)
- X 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	X	No	___	Depth (inches):	3
Water Table Present?	Yes	X	No	___	Depth (inches):	0
Saturation Present? (includes capillary fringe)	Yes	X	No	___	Depth (inches):	0

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: Roundabout #3 City/County: Pleasantview/Shelby Sampling Date: May 31, 2022

Applicant/Owner: Runnebohm Construction Co. State: IN Sampling Point: TP-6a

Investigator(s): GJG Section, Township, Range: NW1/4, Sec. 23, T14N, R5E

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

Slope (%): 0-2% Lat: 39.38.54 N Long: 85.56.34 W Datum: WGS84

Soil Map Unit Name: Brookston silty clay loam, 0 to 2% slopes (Br) NWI classification:

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

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

Are Vegetation , Soil , or Hydrology 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 within a Wetland?** **Yes** **No X**
Hydric Soil Present?	Yes X	No	
Wetland Hydrology Present?	Yes X	No	

Remarks:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % Cover	Dominant Species?	Indicator Status
1.	10	Y	FACU
2.			
3.			
4.			
5.			
	10	= Total Cover	
Sapling/Shrub Stratum: (Plot Size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	
Herb Stratum: (Plot size: 5 ft.)			
1. *Poa annuus*	95	Y	FACU
2. *Trifolium pratense*	5	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum: (Plot size: 30 ft.)			
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: 2 (B)

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	x	1 =	
FACW species	x	2 =	
FAC species	x	3 =	
FACU species	x	4 =	
UPL species	x	5 =	
Column Totals:	(A)		(B)

Prevalence Index = B/A =

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: TP-6a

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	
16 - 18	10YR 4/1	90	10YR 4/6	10	D	M	silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL= Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ 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)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

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)
- X 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)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No ___	Depth (inches): ___	**Wetland Hydrology Present?**	**Yes** X **No** ___
Water Table Present?	Yes X	No ___	Depth (inches): 6		
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0		

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

Remarks

WETLAND A

ORAM v. 5.0 Field Form Quantitative Rating

Site: SURGE INDUSTRIAL - ROUNDABOUT **Rater(s):** GJG **Date:** 5/31/22

Metric 1. Wetland Area (size).

2 (max 6 pts.) | 2 (subtotal)

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [ ] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [x] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [ ] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [ ] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

7 (max 14 pts.) | 9 (subtotal)

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [x] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [ ] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [ ] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [ ] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [x] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [ ] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

12 (max 30 pts.) | 21 (subtotal)

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [x] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [x] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [ ] >0.7 (27.6in) (3)
- [ ] 0.4 to 0.7m (15.7 to 27.6in) (2)
- [x] <0.4m (<15.7in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [x] Regularly inundated/saturated (3)
- [ ] Seasonally inundated (2)
- [ ] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [x] ditch
- [x] tile
- [ ] dike
- [ ] weir
- [ ] stormwater input
- [ ] point source (nonstormwater)
- [ ] filling/grading
- [x] road bed/RR track
- [ ] dredging
- [ ] other_____

Metric 4. Habitat Alteration and Development.

11 (max 20 pts.) | 32 (subtotal)

4a. Substrate disturbance. Score one or double check and average.

- [ ] None or none apparent (4)
- [ ] Recovered (3)
- [x] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [x] Moderately good (4)
- [ ] Fair (3)
- [ ] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [x] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] mowing
- [ ] grazing
- [ ] clearcutting
- [ ] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [x] sedimentation
- [ ] dredging
- [ ] farming
- [ ] nutrient enrichment

32 subtotal this page

last revised 1 February 2001 jjm

Site: SURGE INDUSTRIAL - ROUNDABOUTS	Rater(s): GJG	Date: 5/31/22

32
subtotal first page

Metric 5. Special Wetlands.

0 (max 10 pts.) | 32 (subtotal)

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

Metric 6. Plant communities, interspersion, microtopography.

11 (max 20 pts.) | 43 (subtotal)

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [2] Aquatic bed
- [2] Emergent
- [1] Shrub
- [1] Forest
- [ ] Mudflats
- [ ] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [X] Moderately high(4)
- [ ] Moderate (3)
- [ ] Moderately low (2)
- [ ] Low (1)
- [ ] None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [ ] Extensive >75% cover (-5)
- [ ] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [X] Nearly absent <5% cover (0)
- [ ] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [1] Vegetated hummucks/tussucks
- [ ] Coarse woody debris >15cm (6in)
- [ ] Standing dead >25cm (10in) dbh
- [ ] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

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End of Quantitative Rating. Complete Categorization Worksheets.

WETLAND B

ORAM v. 5.0 Field Form Quantitative Rating

Site: SURGE INDUSTRIAL - ROUNDABOUTS **Rater(s):** GJG **Date:** 5/31/22

Metric 1. Wetland Area (size).

0 (max 6 pts.) | 0 (subtotal)

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [ ] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [ ] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [ ] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [x] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

4 (max 14 pts.) | 4 (subtotal)

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [ ] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [x] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [ ] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [ ] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [x] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [ ] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

8 (max 30 pts.) | 12 (subtotal)

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [x] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [ ] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [ ] >0.7 (27.6in) (3)
- [ ] 0.4 to 0.7m (15.7 to 27.6in) (2)
- [x] <0.4m (<15.7in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [x] Seasonally inundated (2)
- [ ] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [ ] Recovering (3)
- [x] Recent or no recovery (1)

Check all disturbances observed

- [ ] ditch
- [ ] tile
- [ ] dike
- [ ] weir
- [ ] stormwater input
- [x] point source (nonstormwater)
- [ ] filling/grading
- [x] road bed/RR track
- [ ] dredging
- [ ] other_____

Metric 4. Habitat Alteration and Development.

4 (max 20 pts.) | 16 (subtotal)

4a. Substrate disturbance. Score one or double check and average.

- [ ] None or none apparent (4)
- [ ] Recovered (3)
- [ ] Recovering (2)
- [x] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [ ] Moderately good (4)
- [ ] Fair (3)
- [x] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [ ] Recovered (6)
- [ ] Recovering (3)
- [x] Recent or no recovery (1)

Check all disturbances observed

- [x] mowing
- [ ] grazing
- [ ] clearcutting
- [ ] selective cutting
- [ ] woody debris removal
- [x] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [x] sedimentation
- [ ] dredging
- [ ] farming
- [x] nutrient enrichment

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ORAM v. 5.0 Field Form Quantitative Rating

Site: SURGE INDUSTRIAL - ROUNDABOUTS	Rater(s): GJG	Date: 5/31/22

16
subtotal first page

0	16
max 10 pts.	subtotal

Metric 5. Special Wetlands.

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

4	20
max 20 pts.	subtotal

Metric 6. Plant communities, interspersion, microtopography.

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [ ] Aquatic bed
- [/] Emergent
- [ ] Shrub
- [ ] Forest
- [ ] Mudflats
- [/] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high(4)
- [ ] Moderate (3)
- [ ] Moderately low (2)
- [X] Low (1)
- [ ] None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [ ] Extensive >75% cover (-5)
- [ ] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [X] Nearly absent <5% cover (0)
- [ ] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [/] Vegetated hummucks/tussucks
- [ ] Coarse woody debris >15cm (6in)
- [ ] Standing dead >25cm (10in) dbh
- [ ] Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

20

End of Quantitative Rating. Complete Categorization Worksheets.

WETLAND C

ORAM v. 5.0 Field Form Quantitative Rating

Site: SURGE INDUSTRIAL - ROUNDABOUTS **Rater(s):** GJG **Date:** 5/31/22

Metric 1. Wetland Area (size).

max 6 pts.	subtotal
0	0

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [ ] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [ ] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [ ] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [x] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

max 14 pts.	subtotal
4	4

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [ ] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [x] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [ ] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [ ] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [x] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [ ] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

max 30 pts.	subtotal
9	13

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [x] Precipitation (1)
- [x] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [ ] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [ ] >0.7 (27.6in) (3)
- [ ] 0.4 to 0.7m (15.7 to 27.6in) (2)
- [x] <0.4m (<15.7in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [ ] Seasonally inundated (2)
- [x] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] ditch
- [ ] tile
- [ ] dike
- [ ] weir
- [x] stormwater input
- [ ] point source (nonstormwater)
- [ ] filling/grading
- [x] road bed/RR track
- [ ] dredging
- [ ] other_____

Metric 4. Habitat Alteration and Development.

max 20 pts.	subtotal
8	21

4a. Substrate disturbance. Score one or double check and average.

- [ ] None or none apparent (4)
- [ ] Recovered (3)
- [x] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [ ] Moderately good (4)
- [x] Fair (3)
- [ ] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [ ] Recovered (6)
- [x] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [x] mowing
- [ ] grazing
- [ ] clearcutting
- [ ] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [ ] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [ ] sedimentation
- [ ] dredging
- [ ] farming
- [x] nutrient enrichment

21

subtotal this page

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Site: SURGE INDUSTRIAL - ROUNDABOUT	Rater(s): GJG	Date: 5/31/22

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Metric 5. Special Wetlands.

0 max 10 pts. | 21 subtotal

Check all that apply and score as indicated.

- [ ] Bog (10)
- [ ] Fen (10)
- [ ] Old growth forest (10)
- [ ] Mature forested wetland (5)
- [ ] Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
- [ ] Lake Erie coastal/tributary wetland-restricted hydrology (5)
- [ ] Lake Plain Sand Prairies (Oak Openings) (10)
- [ ] Relict Wet Prairies (10)
- [ ] Known occurrence state/federal threatened or endangered species (10)
- [ ] Significant migratory songbird/water fowl habitat or usage (10)
- [ ] Category 1 Wetland. See Question 1 Qualitative Rating (-10)

Metric 6. Plant communities, interspersion, microtopography.

4 max 20 pts. | 25 subtotal

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

- [1] Aquatic bed
- [1] Emergent
- [ ] Shrub
- [ ] Forest
- [ ] Mudflats
- [1] Open water
- [ ] Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

- [ ] High (5)
- [ ] Moderately high(4)
- [ ] Moderate (3)
- [ ] Moderately low (2)
- [X] Low (1)
- [ ] None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

- [ ] Extensive >75% cover (-5)
- [ ] Moderate 25-75% cover (-3)
- [ ] Sparse 5-25% cover (-1)
- [X] Nearly absent <5% cover (0)
- [ ] Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

- [0] Vegetated hummucks/tussucks
- [0] Coarse woody debris >15cm (6in)
- [0] Standing dead >25cm (10in) dbh
- [0] Amphibian breeding pools

Vegetation Community Cover Scale

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Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
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3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

25

End of Quantitative Rating. Complete Categorization Worksheets.

APPENDIX C

PHOTOGRAPHIC RECORD

Photo 1: View of wet area on east side of Proposed Roundabout #1 (looking east).

Photo 2: View of wet area on east side of Proposed Roundabout #1 (looking west).

Surge Industrial Site - Proposed Roundabouts
Pleasant View, Shelby County, Indiana
DHE Project No. RCC.003
Photographs Taken on May 31, 2022

Photo 3: View of typical soils at Test Pit #1a.

Photo 4: View of Wetland A from near Test Pit #1 (looking north).

Surge Industrial Site - Proposed Roundabouts
Pleasant View, Shelby County, Indiana
DHE Project No. RCC.003
Photographs Taken on May 31, 2022

Photo 5: View of typical soils at Test Pit #2.

Photo 6: View of honeysuckle jungle near Test Pit #2 (looking south).

Photo 7: View of forested portion of Wetland A (looking north).

Photo 8: View of emergent portion of Wetland A on south side of Proposed Roundabout #1 (looking north along interstate exit).

Photo 9: View of tile cleanout area in yard on west side of Proposed Roundabout #1.

Photo 10: View of typical soils at Test Pit #3 along MacGregor Road.

Photo 11: View of Wetland B from near Test Pit #3 (looking west).

Photo 12: View of upland area from near Test Pit #4 (looking north).

Photo 13: View of typical soils found at Test Pit #4.

Photo 14: View of roadside culvert and dry swale along N. 850 West in Proposed Roundabout #2 (looking north).

Photo 15: View of grassy area along Proposed Roundabout #3 (looking west).

Photo 16: View of grassy area along Proposed Roundabout #3 (looking north).

Photo 17: View of agricultural area along Proposed Roundabout #3 (looking north).

Photo 18: View of Wetland C from near Test Pit #5 (looking north).

Photo 19: View of typical soils found at Test Pit #5.

Photo 20: View of grassy area along Proposed Roundabout #3 from near Test Pit #6 (looking west).

Photo 21: View of typical soils at Test Pit #6.

Photo 22: View of roadside area along Proposed Roundabout #3 (looking north).

Photo 23: View of roadside area along Proposed Roundabout #1 (looking west).

24. View of residential area along Proposed Roundabout #1 (looking north).