From:	Robinson, William
То:	Kooy, Sam
Cc:	<u>Stevenson, Leigh; Everhart, Sarah</u>
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

# \*\*\*\* This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. \*\*\*\*

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!



From: Robinson, William <<u>WRobinso@idem.IN.gov</u>>
Sent: Tuesday, February 28, 2023 8:09 AM
To: Kooy, Sam <<u>SKooy@structurepoint.com</u>>
Cc: Stevenson, Leigh <<u>Istevenson@structurepoint.com</u>>; Everhart, Sarah
<<u>severhart@structurepoint.com</u>>
Swbinst: DE: 2022 122 72 WILD | McCreger Bood, Welput Street, and CD N 850 WILD target

**Subject:** RE: 2023-133-73-WLR-I McGregor Road, Walnut Street, and CR N 850 W Intersection Improvement Project

**EXTERNAL EMAIL:** Do not click any links or open any attachments unless you trust the sender and know the content is safe!

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

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

# \*\*\*\* This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. \*\*\*\*

Good afternoon,

Improvement Project

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!



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

**EXTERNAL EMAIL:** Do not click any links or open any attachments unless you trust the sender and know the content is safe!

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.



DISCLAIMER: This message contains confidential information and is intended only for the individual named. If you are not the named addressee, you should not disseminate, distribute, utilize, or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake, and delete this e-mail from your system. No design changes or decisions made by e-mail shall be considered part of the contract documents unless otherwise specified, and all design changes and/or decisions made by e-mail must be submitted as an RFI or a submittal unless otherwise specified. All designs, plans, specifications and other contract documents (including all electronic files) prepared by the sender shall remain the property of the sender, and the sender retains all rights thereto, including but not limited to copyright, statutory and common-law rights thereto, unless otherwise specified by contract. E-mail transmission cannot be guaranteed to be

secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this message which arise as a result of e-mail transmission. If verification is required, please request a hard-copy version. <u>https://www.structurepoint.com/</u>



**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 .:

AUTHORITY:

PROJECT NAME:

2023-133-73-WLR-Q

McGregor Road, Walnut Street, and County Road (CR) N 850 W Intersection Improvement Project 327 IAC 17-1-3(13), 327 IAC 17-1-3(17)

DATE OF ISSUANCE:

DATE OF EXPIRATION:

3/24/2028

3/24/2023

~ Wo

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 3/8<sup>th</sup> 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 3/8<sup>th</sup> 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 <u>http://www.in.gov/oea</u>.

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

cc: Samantha Kooy, American Structurepoint, Inc

From:	Kooy, Sam
То:	Robinson, William
Cc:	<u>Stevenson, Leigh; Everhart, Sarah</u>
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
	image010.png
	image011.png
	image012.png
	image013.png
	image015.png
	image016.png
	image017.png
	image018.png
	image019.png

# \*\*\*\* This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. \*\*\*\*

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!



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

Improvement Project

**EXTERNAL EMAIL:** Do not click any links or open any attachments unless you trust the sender and know the content is safe!

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) 240-6530 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



DISCLAIMER: This message contains confidential information and is intended only for the individual named. If you are not the named addressee, you should not disseminate, distribute, utilize, or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake, and delete this e-mail from your system. No design changes or decisions made by e-mail shall be considered part of the contract documents unless otherwise specified, and all design changes and/or decisions made by e-mail must be submitted as an RFI or a submittal unless otherwise specified. All designs, plans, specifications and other contract documents (including all electronic files) prepared by the sender shall remain the property of the sender, and the sender retains all rights thereto, including but not limited to copyright, statutory and common-law rights thereto, unless otherwise specified by contract. E-mail transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this message which arise as a result of e-mail transmission. If verification is required, please request a hard-copy version. <a href="https://www.structurepoint.com/">https://www.structurepoint.com/</a>



### 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 LOCA	TION OF PROJECT		
Name of Project McGregor Road, Walnut Stre Improvement Project	350 W Intersection	County Shelby		
Project Address (number and street, of	city, state, and ZIP code) (if available) o	r Brief Narrative Description of Projec	t Location (cross streets or landmark)	
The proposed project is loca CR N 850 W in Shelby Count	ated at the intersections of Mo ty, Indiana.	Gregor Road and Walnut St	reet, and McGregor Road and	
Latitude (decimal degrees)		Longitude (decimal degrees)		
39.658611		-85.944722		
	SITE OWNER	OF PROJECT		
Name of Company (If Applicable) Shelby County Highway Dep	partment			
Name of Project Site Owner (An Indiv	idual)	Title / Position		
Kem Anderson		Superintendent		
Address (number and street) 25 W. Polk Street, Room 206	5			
City		State	ZIP Code	
Shelbyville		Indiana	46176	
Telephone	FAX	E-Mail Address (If Available)		
317-392-6485		kem.anderson@co.shelby	.in.us	
	CONTACT INFORMA	ATION FOR PROJECT		
Contact Person		Name of Company (If Applicable)		
Samantha Kooy		American Structurepoint,	Inc.	
Affiliation to Project Site Owner				
Address (number and street) (if different	ent from above)			
9025 River Road, Suite 200				
City		State	ZIP Code	
Indianapolis		Indiana	46240	
	FAX	E-Mail Address (If Available)	_	
(317) 547-5580		skooy@structurepoint.com	n	
	PROJECT IN	FORMATION		
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) presen Two Wetland Delineation Re September 20, 2021 (Revised and one open water feature 2021-1070) was issued on M Report 2, dated June 3, 2022 (LRL-2022-733) was issued of these features, only Wetland Therefore, we are submitting (Report 1) and Wetlands A, B	t ports were prepared for the p d March 25, 2022), identified s (OW-1) totaling 1.5 acres. A C ay 10, 2022 and determined th d, identified three wetlands (W on September 1, 2022 and det d A from Report 1 and Wetland g a request for a Pre-Filing Me 3 and C (Report 2).	roject and adjacent agricult even wetlands (Wetlands A orps Approved Jurisdiction nat OW-1 and Wetlands A th detlands A through C) totalin ermined that Wetlands A thr ds A, B, and C from Report 2 eting and Waters of the Sta	ural land. Report 1, dated through G) totaling 1.88 acres al Determination (AJD) (LRL- rough G are isolated waters. g 1.15 acres. A Corps AJD rough C are isolated waters. Of 2 are within the project area. te Determination for Wetland A	

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: <u>1.13</u>	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 a	and <u>N/A</u> feet
1 Contraction of the	Proposed mitigation (acres and feet): $N/A$ acres and $N$	I/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	Date (month, day, year) Z - 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:/202101339ID: DrawingsArcView/Environmental/Exhibits/ECL/2021.01339.EV/2022-05-04.McGregor\_Road\_state\_Map.SMK.mxd Date:5/132022 User:SKooy









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

Indy-Pdf.pltcfg Indiana\_Color.tbl

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. s/Earess Es 155' Electric Line Esmt. ) |=|=| |=| -– Aøp. Exist. R/W -----OE--\_\_\_\_OE-\_ 11- -Proposed Water Main App. Exist. R/W \_\_\_\_\_Const. Limits Wetland C Permanent Impact - Roadway Construction 0.013 acre 19.2 cys Clean Earth Fill 64' long by 9' wide by 0.9' deep

	HORIZONTAL SCALE	BRIDGE FILE	
	1"=40'	N/A	
SHELDI COUNTI, INDIANA	VERTICAL SCALE	DESIGNATION	
	N/A	N/A	
	SURVEY BOOK SHEETS		ETS
	N/A	1 O	f 3
I TNE "DD_A" - WETLAND "C"	CONTRACT	PROJECT	
LINE FRA - WEILAND C	N/A	N,	/A

DRAWN:

CHECKED:

JAB

МСТ

DESIGNED:

CHECKED:

RJC

МСТ



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,

2022.05.10 07:12:32 -04'00'

Sarah Keller Team Leader Indianapolis Regulatory Office

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



	Project Number:	RCC.003	
Wetland Findings			
	Date: March, 2	2022	
Surge Industrial - SW 1/4 Carroll Road & McGregor Road	Scale:	NTS	
	Drawn By: GJG		Figure: 5

892011			
NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIO REQUEST FOR APPEAL	NS AND PROCESS AND		
Applicant: Runnebohm Construction Company File Number: LF	L-2021-1070 Date: 5/10/2022		
Attached is:	See Section below		
INITIAL PROFFERED PERMIT (Standard Permit or Letter of per	mission) A		
PROFFERED PERMIT (Standard Permit or Letter of permission)	В		
PERMIT DENIAL	С		
X APPROVED JURISDICTIONAL DETERMINATION	D		
PRELIMINARY JURISDICTIONAL DETERMINATION	Е		
SECTION I - The following identifies your rights and options regarding at	administrative appeal of the above		
decision. Additional information may be found at http://www.usace.army.m	il/CECW/Pages/reg materials.aspx or		
Corps regulations at 33 CFR Part 331.			
A: INITIAL PROFFERED PERMIT: You may accept or object to the per	rmit.		
• ACCEPT: If you received a Standard Permit, you may sign the permit document and authorization. If you received a Letter of Permission (LOP), you may accept the LOI signature on the Standard Permit or acceptance of the LOP means that you accept the to appeal the permit, including its terms and conditions, and approved jurisdictional of the standard permit.	return it to the district engineer for final and your work is authorized. Your permit in its entirety, and waive all rights leterminations associated with the permit.		
• OBJECT: If you object to the permit (Standard or LOP) because of certain terms and the permit be modified accordingly. You must complete Section II of this form and re Your objections must be received by the district engineer within 60 days of the date of to appeal the permit in the future. Upon receipt of your letter, the district engineer w modify the permit to address all of your concerns, (b) modify the permit to address so the permit having determined that the permit should be issued as previously written. district engineer will send you a proffered permit for your reconsideration, as indicated	I conditions therein, you may request that eturn the form to the district engineer. of this notice, or you will forfeit your right ill evaluate your objections and may: (a) ome of your objections, or (c) not modify After evaluating your objections, the ed 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 I by completing Section II of this form and sending the form to the division engineer. This engineer within 60 days of the date of this notice.	Engineers Administrative Appeal Process form must be received by the division		
D: APPROVED JURISDICTIONAL DETERMINATION: You may accurate provide new information.	ept or appeal the approved JD or		
• ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to of this notice, means that you accept the approved JD in its entirety, and waive all rig	notify the Corps within 60 days of the date hts to appeal the approved JD.		
• APPEAL: If you disagree with the approved JD, you may appeal the approved JD un Appeal Process by completing Section II of this form and sending the form to the div by the division engineer within 60 days of the date of this notice.	ider the Corps of Engineers Administrative ision engineer. This form must be received		
E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do no regarding the preliminary JD. The Preliminary JD is not appealable. If yo approved JD (which may be appealed), by contacting the Corps district for provide new information for further consideration by the Corps to reevaluate	ot need to respond to the Corps u wish, you may request an further instruction. Also you may te 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	If you only have questions regarding the appeal process you may	
process you may contact:	also contact:	
Sarah Keller	Katherine A. McCafferty	
U.S. Army Corps of Engineers—Louisville District	Regulatory Administrative Appeals Officer	
Indianapolis Regulatory Office	U.S. Army Corps of Engineers,	
8902 Otis Avenue, S106B	Great Lakes and Ohio River Division	
Indianapolis, IN 46216	550 Main Street, Room 10780	
(317) 543-9424	Cincinnati, Ohio 45202-3222	
Email: Sarah.J.Keller@usace.army.mil	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.

, U ,	1 0	
	Date:	Telephone number:
Signature of appellant or agent.		

#### 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<sup>2</sup> (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):<sup>3</sup>
  - 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.

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

 $<sup>^{2}</sup>$  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).

<sup>&</sup>lt;sup>3</sup> 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<sup>4</sup> 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:	<b>Pick List</b>
Average annual rainfa	ll: inches
Average annual snow	fall: inches

#### (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>
 ☐ 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 cross or serve as state boundaries. Explain:

Identify flow route to TNW<sup>5</sup>: Tributary stream order, if known:

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>&</sup>lt;sup>5</sup> 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:       Image: Characteristics (check all that apply):         Image: Characteristics (check all that apply):       Image: Characteristics (check all that apply):         Image: Characteristics (check all that apply):       Image: Characteristics (check all that apply):         Image: Characteristics (check all that apply):       Image: Characteristics (check all that apply):         Image: Characteristics (check all that apply):       Image: Characteristics (check all that apply):         Image: Characteristics (check all that apply):       Image: Characteristics (check all that apply):         Image: Characteristics (check all that apply):       Image: Characteristics (check all that apply):         Image: Characteristics (check all that apply):       Image: Characteristics (check all that apply):         Image: Characteristics (check all that apply):       Image: Characteristics (check all that apply):         Image: Characteristics (check all that apply):       Image: Check all that apply):         Image: Check all that apply (check all that apply):       Image: Check all that apply (check all that apply):         Image: Check all that apply (check all that apply):       Image: Check all that apply (check all that apply):         Image: Check all that apply (check all that apply):       Image: Check all that apply (check all that appl	
		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):	
		Tributary condition/stability [e.g., highly eroding, sloughing banks].Explain:Presence of run/riffle/pool complexes.Explain:Tributary geometry:Pick ListTributary gradient (approximate average slope):%	
	(c)	<u>Flow:</u> Tributary provides for: <b>Pick List</b> Estimate average number of flow events in review area/year: <b>Pick List</b> Describe flow regime: . Other information on duration and volume: .	
		Surface flow is: Pick List. Characteristics:	
		Subsurface flow: <b>Pick List</b> . Explain findings: Dye (or other) test performed: .	
		Tributary has (check all that apply):       Bed and banks         OHWM <sup>6</sup> (check all indicators that apply):       the presence of litter and debris         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. <sup>7</sup> Explain:	
		If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): <ul> <li>High Tide Line indicated by:</li> <li>oil or scum line along shore objects</li> <li>fine shell or debris deposits (foreshore)</li> <li>physical markings/characteristics</li> <li>tidal gauges</li> <li>other (list):</li> </ul>	
(iii)	<b>Che</b> Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics,	

etc.). Explain: . Identify specific pollutants, if known: .

<sup>&</sup>lt;sup>6</sup>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. <sup>7</sup>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) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
- (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain:

Surface flow is: Pick List Characteristics:

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

#### (c) <u>Wetland Adjacency Determination with Non-TNW:</u>

- 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):

- 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. <u>RPWs that flow directly or indirectly into TNWs.</u>
  - 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):

acres.

- Tributary waters: linear feet width (ft).
- Other non-wetland waters:
  - Identify type(s) of waters:
- 3. Non-RPWs<sup>8</sup> 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.<sup>9</sup>
  - 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):<sup>10</sup>

- 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:

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

<sup>&</sup>lt;sup>9</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>&</sup>lt;sup>10</sup> 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 <u>solely</u> 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 <u>sole</u> 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/su
    - 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  $\boxtimes$  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		Figure: 5



Inset #1 - Proposed Roundabout #1	Project Number: RCC.003 Drawing file: Site Figures	DHE
Surge Industrial Site - Proposed Roundabouts	Date: June, 2022	
	Scale: NTS	Figure: 6
	Drawn By: GJG	



Inset #2 - Proposed Roundabout #2 Surge Industrial Site - Proposed Roundabouts

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



892011 NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL			
Applicant: Dynachabus Construction Eile Nymbers I DI 2022 722	Dete: 0/1/2022		
Applicant: Runnebonm 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)	В		
PERMIT DENIAL Y ADDOVED HIDISDICTIONAL DETERMINATION			
X APPROVED JURISDICTIONAL DETERMINATION	D		
PRELIMINARY JURISDICTIONAL DETERMINATION	E		
SECTION I - The following identifies your rights and options regarding an administrative decision. Additional information may be found at <a href="http://www.usace.army.mil/CECW/Page">http://www.usace.army.mil/CECW/Page</a> Corps regulations at 33 CFR Part 331.	ve appeal of the above sveries of the solution		
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 authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entry to appeal the permit, including its terms and conditions, and approved jurisdictional determinations as	district engineer for final is authorized. Your irety, and waive all rights ssociated 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, or (c) not 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 authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its ent to appeal the permit, including its terms and conditions, and approved jurisdictional determinations as	district engineer for final is authorized. Your irety, and waive all rights ssociated with the permit.		
• APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms a may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by comform and sending the form to the division engineer. This form must be received by the division engine date of this notice.	and conditions therein, you bleting Section II of this leer within 60 days of the		
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 of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the	within 60 days of the date approved JD.		
• APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Appeal Process by completing Section II of this form and sending the form to the division engineer. by the division engineer within 60 days of the date of this notice.	Engineers Administrative This form must be received		
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	If you only have questions regarding the appeal process you may
process you may contact:	also contact:
Sarah Keller	Katherine A. McCafferty
U.S. Army Corps of Engineers—Louisville District	Regulatory Administrative Appeals Officer
Indianapolis Regulatory Office	U.S. Army Corps of Engineers,
8902 Otis Avenue, S106B	Great Lakes and Ohio River Division
Indianapolis, IN 46216	550 Main Street, Room 10780
(317) 543-9424	Cincinnati, Ohio 45202-3222
Email: Sarah.J.Keller@usace.army.mil	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.

, U ,	1 0	
	Date:	Telephone number:
Signature of appellant or agent.		

#### 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):

#### <u>SECTION II: SUMMARY OF FINDINGS</u> 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<sup>2</sup> (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):<sup>3</sup>
  - 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.

<sup>&</sup>lt;sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

 $<sup>^{2}</sup>$  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).

<sup>&</sup>lt;sup>3</sup> 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<sup>4</sup> 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:	<b>Pick List</b>
Average annual rainfa	ll: inches
Average annual snow	fall: inches

#### (ii) Physical Characteristics:

(a) <u>Relationship with TNW:</u>
 ☐ 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 cross or serve as state boundaries. Explain:

Identify flow route to TNW<sup>5</sup>: Tributary stream order, if known:

<sup>&</sup>lt;sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>&</sup>lt;sup>5</sup> 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:       Image: Natural         Image: Artificial (man-made).       Explain:         Image: 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):
		Tributary condition/stability [e.g., highly eroding, sloughing banks].Explain:Presence of run/riffle/pool complexes.Explain:Tributary geometry:Pick ListTributary gradient (approximate average slope):%
	(c)	<u>Flow:</u> Tributary provides for: <b>Pick List</b> Estimate average number of flow events in review area/year: <b>Pick List</b> Describe flow regime: . Other information on duration and volume: .
		Surface flow is: Pick List. Characteristics:
		Subsurface flow: <b>Pick List</b> . Explain findings: Dye (or other) test performed: .
		Tributary has (check all that apply):
		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/characteristics         physical markings/characteristics       vegetation lines/changes in vegetation types.         other (list):       other (list):
(iii)	<b>Che</b> Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics,

etc.). Explain: . Identify specific pollutants, if known: .

<sup>&</sup>lt;sup>6</sup>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. <sup>7</sup>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) <u>General Wetland Characteristics:</u> Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
- (b) <u>General Flow Relationship with Non-TNW</u>: Flow is: **Pick List**. Explain:

Surface flow is: Pick List Characteristics:

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

#### (c) <u>Wetland Adjacency Determination with Non-TNW:</u>

- 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):

- 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. <u>RPWs that flow directly or indirectly into TNWs.</u>
  - 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):

acres.

- Tributary waters: linear feet width (ft).
- Other non-wetland waters:
  - Identify type(s) of waters:
- 3. <u>Non-RPWs<sup>8</sup> that flow directly or indirectly into TNWs.</u>
  - 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.<sup>9</sup>
  - 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):<sup>10</sup>

- 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:

<sup>&</sup>lt;sup>8</sup>See Footnote # 3.

<sup>&</sup>lt;sup>9</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>&</sup>lt;sup>10</sup> 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 <u>solely</u> 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 <u>sole</u> 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.	SUPF	PORTING 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):
	$\boxtimes$	Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Wetland delineation report dated 6/3/2022 by DHE,
	Inc.	
	$\bowtie$	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.
	$\bowtie$	U.S. Geological Survey map(s). Cite scale & quad name:7.5', Acton, IN (delineation report).
	$\bowtie$	USDA Natural Resources Conservation Service Soil Survey. Citation: Web Soil Survey, Shelby County (delineation report).
	$\boxtimes$	National wetlands inventory map(s). Cite name: map in delineation report.
		State/Local wetland inventory map(s):
	$\boxtimes$	FEMA/FIRM maps: Panel 18145C0015C eff 11/5/2014.
		100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
	$\boxtimes$	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:
	$\boxtimes$	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.



INSTRUCTIONS

# State Regulated Wetland Class Determination Worksheet

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

(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 <u>https://www.in.gov/dnr/nature-preserves/heritage-datacenter/about-inhdc/</u>.

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: <u>WetlandsProgram@idem.IN.gov</u>

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	Кооу		American Structurepoint, Inc.	
Phone Number:		Email address:		
317-547-5580		skooy@struc	turepoint.com	
Project Name:		Wetland ID (per	the wetland delineation):	Wetland Size (Acres):
MGregor Road, Walnut Street, and CR N Project	850 W Intersection Improvement	Wetland A (	Report 1)	0.12 acre
STATE REGULATED WETLAND C	LASSIFICATION: 🗌 Class I 🛛	Class II	Class III	
Class III Assessment				
(1) Is the wetland a listed rare or eco	plogically important type under IC 1	3-11-2-25.8(3)	)(B)?	🗌 Yes 🛛 No
If yes, please indicate:				
🗌 Acid Bog 🔲 Acid Seep 🔲 C	Circumneutral Bog 🔲 Circumneutra	al Seep 🔲 Cy	/press Swamp 🔲 Dune and Sw	ale
E Fen E Forested Fen Fo	orested Swamp 🔲 Marl Beach [	Muck Flat	🗌 Panne 🔲 Sand Flat 🗌 Sec	lge Meadow
Shrub Swamp     Sinkhole F	Pond Sinkhole Swamp Wet	Floodplain Fo	rest 🔲 Wet Prairie 🗌 Wet Sa	nd Prairie
If yes, the Wetland is Class III. If no, proceed to Question (2).	Check Class III at the top of the	form and the	form is now complete.	
<ul> <li>(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?</li> </ul>			n a 🗌 Yes 🛛 No of	
If yes, the Wetland is Class III. If no, proceed to Question (3).	Check Class III at the top of the	form and the	form is now complete.	
(3) Is the wetland in an undisturbed	or minimally disturbed setting?			🗌 Yes 🖂 No
If yes, answer Question (4) an form and proceed to the Wetla	d Question (5). If no, please prov and Habitat Functional Assessme	vide a justifica ent.	ation as an attachment to this	
(4) Does the wetland support more Assessment below. If Question	than minimal wildlife or aquatic hat on 3 and Question 4 are checked	oitat? Please c yes, the Wet	complete the Habitat Functional land is Class III.	l 🛛 Yes 🗌 No
(5) Does the wetland support more	than minimal hydrological function?	Please com	plete the Hydrology Functiona	I 🛛 🛛 Yes 🗌 No
Assessment below. If Question	on 3 and Question 5 are checked	yes, the Wet	land is Class III.	
Please include any additional con separate attachment appended to	Please include any additional comments, justifications, and/or supporting documentation related to the Class III Assessment as a separate attachment appended to this form.			
<ul> <li>Any of the following scenarios indicate the Wetland is Class III:</li> <li>Checking 'Yes' for Question 1</li> <li>Checking 'Yes' for Question 2</li> <li>Checking 'Yes' for Question 3 and Question 4</li> <li>Checking 'Yes' for Question 3 and Question 5</li> </ul>				
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 H	abitat Functional Assessment:					
(6) Does th Check One "Y	<ul> <li>6) Does the wetland support moderate habitat? (see options below)</li></ul>					
• In •	<b>dicators of moderate habitat function:</b> Species of Special Concern within a ½ mile radius of the wetland according to the IDNR Natural Heritage Database <b>AND</b> 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? Indicate which method used: ORAM	🗌 Yes 🛛 No				
•	Are other moderate habitat indicators present (Explain in Remarks)?	🗌 Yes 🛛 No				
Please inc Assessme	lude any additional comments, justifications, and/or supporting documentation related to the Wetland Ha nt as a separate attachment appended to this form.	bitat Functional				
Wetland H	ydrology Functional Assessment:					
(7) Does th Checkir	e wetland support moderate hydrological function? <i>(see options below)</i> ng yes also meets the requirements of Question 5.	🛛 Yes 🗌 No				
Indicators moderate l	of moderate hydrological function. At least one primary indicator or two secondary indicators are needed hydrological function.	d to show				
• Pri	mary 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 1 <sup>st</sup> -3 <sup>rd</sup> order or 4 <sup>th</sup> – 5 <sup>th</sup> 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. <u>https://www.in.gov/idem/cleanwater/information-about/groundwater-monitoring-and-source-water-protection/wel</u> <u>program/source-water-proximity-determination-tool/</u>	Ihead-protection-				
• See	<ul> <li>Condary Indicators:</li> <li>Wetland is 0.75 acre or larger in size, indicating at least moderate water storage capacity.</li> <li>Dominant vegetation in wetland is highly adapted to prolonged inundation (FACW, OBL dominance).</li> <li>Wetland substrate is sand or silt, indicating higher hydraulic conductivity.</li> <li>Wetland is located within a highly developed landscape (&gt;75% impervious surface in ½ mile radius).</li> <li>Parcel with wetland is bordered by development, roads, or impervious surfaces.</li> <li>Wetland is located within a drinking water Source Water Susceptibility Area.</li> <li>Wetland is located within a drinking water Source Water Assessment Area</li> <li>Other (Explain in Remarks)</li> </ul>					
Please Functic Any of Only Ch Only Ch	include any additional comments, justifications and/or supporting documentation related to the Wetland onal Assessment as a separate attachment appended to this form. the following scenarios indicate the Wetland is Class II: necking 'Yes' to Question (6) necking 'Yes' to Question (7)	Hydrology				
lf the N If the N	/etland is Class II, check Class II at the top of the form, and the form is now complete. /etland is not Class III or Class II, check Class I at the top of the form and the form is now complete.					
Supporting	g Guidance Documents:					
• <u>St</u>	ate Regulated Wetlands: https://www.in.gov/idem/wetlands/information-about/state-regulated-wetlands-program	<u>m/</u>				



INSTRUCTIONS

# State Regulated Wetland Class Determination Worksheet

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

(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 <u>https://www.in.gov/dnr/nature-preserves/heritage-datacenter/about-inhdc/</u>.

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: <u>WetlandsProgram@idem.IN.gov</u>

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	Кооу		American Structurepoint, Inc.	
Phone Number:		Email address:		
317-547-5580		skooy@struc	turepoint.com	
Project Name:		Wetland ID (per	the wetland delineation):	Wetland Size (Acres):
McGregor Road, Walnut Street, and CR N 8 Project	350 W Intersection Improvement	Wetland A (	Report 2)	1.08 acres
STATE REGULATED WETLAND CLA	SSIFICATION: Class I	Class II 🗌	Class III	
Class III Assessment				
(1) Is the wetland a listed rare or ecolog	gically important type under IC 1	3-11-2-25.8(3)	)(B)?	🗌 Yes 🖂 No
If yes, please indicate:				
🗌 Acid Bog 🔲 Acid Seep 🔲 Circ	umneutral Bog 🔲 Circumneutra	al Seep 🔲 Cy	press Swamp 🔲 Dune and Sw	ale
🗌 Fen 🔲 Forested Fen 🔲 Fore	sted Swamp 🔲 Marl Beach [	Muck Flat	Panne 🗌 Sand Flat 🗌 Sec	lge Meadow
Shrub Swamp	nd 🗌 Sinkhole Swamp 🗌 Wet	Floodplain Fo	rest 🔲 Wet Prairie 🔲 Wet Sa	nd Prairie
If yes, the Wetland is Class III. C If no, proceed to Question (2).	heck Class III at the top of the	form and the	form is now complete.	
(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?			na <b>∐ Yes ⊠ No</b> of	
If yes, the Wetland is Class III. C If no, proceed to Question (3).	heck Class III at the top of the	form and the	form is now complete.	
(3) Is the wetland in an undisturbed or	minimally disturbed setting?			🗌 Yes 🛛 No
If yes, answer Question (4) and 0 form and proceed to the Wetland	Question (5). If no, please prov I Habitat Functional Assessme	vide a justifica ent.	ation as an attachment to this	
(4) Does the wetland support more that Assessment below. If Question	n minimal wildlife or aquatic hab 3 and Question 4 are checked	oitat? Please c ves. the Wet	omplete the Habitat Functiona land is Class III.	I 🛛 Yes 🗌 No
(5) Does the wetland support more that	an minimal hydrological function?	Please com	plete the Hydrology Functiona	I
Assessment below. If Question	3 and Question 5 are checked	yes, the Wet	land is Class III.	
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 indic Checking 'Yes' for Question 1 Checking 'Yes' for Question 2 Checking 'Yes' for Question 3 Checking 'Yes' for Question	ate the Wetland is Class III: and Question 4 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.			ent on Page 2 (if	

Wetland Ha	abitat Functional Assessment:					
(6) Does the Checki One "Y	<ul> <li>b) Does the wetland support moderate habitat? (see options below)</li> <li>Checking yes also meets the requirements of Question 4.</li> <li>One "Yes" response below is needed to show moderate habitat function.</li> </ul>					
• In( •	dicators 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? Indicate which method used: ORAM	🛛 Yes 🗌 No				
•	Are other moderate habitat indicators present (Explain in Remarks)?	🗌 Yes 🛛 No				
Please incl Assessme	lude any additional comments, justifications, and/or supporting documentation related to the Wetland Ha nt as a separate attachment appended to this form.	bitat Functional				
Wetland Hy	ydrology Functional Assessment:					
(7) Does the Checkin	e wetland support moderate hydrological function? (see options below) Ing yes also meets the requirements of Question 5.	🛛 Yes 🗌 No				
Indicators moderate I	of moderate hydrological function. At least one primary indicator or two secondary indicators are needed hydrological function.	d to show				
• Prin ⊠ □ □	mary 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 1 <sup>st</sup> -3 <sup>rd</sup> order or 4 <sup>th</sup> – 5 <sup>th</sup> 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. <u>https://www.in.gov/idem/cleanwater/information-about/groundwater-monitoring-and-source-water-protection/wel</u> <u>program/source-water-proximity-determination-tool/</u>	Ihead-protection-				
• Sec	<ul> <li>Condary Indicators:</li> <li>Wetland is 0.75 acre or larger in size, indicating at least moderate water storage capacity.</li> <li>Dominant vegetation in wetland is highly adapted to prolonged inundation (FACW, OBL dominance).</li> <li>Wetland substrate is sand or silt, indicating higher hydraulic conductivity.</li> <li>Wetland is located within a highly developed landscape (&gt;75% impervious surface in ½ mile radius).</li> <li>Parcel with wetland is bordered by development, roads, or impervious surfaces.</li> <li>Wetland is located within a drinking water Source Water Susceptibility Area.</li> <li>Wetland is located within a drinking water Source Water Assessment Area</li> <li>Other (<i>Explain in Remarks</i>)</li> </ul>					
Please Functio Any of Only Ch Only Ch	include any additional comments, justifications and/or supporting documentation related to the Wetland anal Assessment as a separate attachment appended to this form. the following scenarios indicate the Wetland is Class II: ecking 'Yes' to Question (6) ecking 'Yes' to Question (7)	Hydrology				
lf the W If the W	/etland is Class II, check Class II at the top of the form, and the form is now complete. /etland is not Class III or Class II, check Class I at the top of the form and the form is now complete.					
Supporting	g Guidance Documents:					
• <u>St</u>	ate Regulated Wetlands: https://www.in.gov/idem/wetlands/information-about/state-regulated-wetlands-program	<u>n/</u>				



INSTRUCTIONS

# State Regulated Wetland Class Determination Worksheet

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

(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 <u>https://www.in.gov/dnr/nature-preserves/heritage-datacenter/about-inhdc/</u>.

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: <u>WetlandsProgram@idem.IN.gov</u>

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	Кооу		American Structurepoint, Inc.	
Phone Number:		Email address:		
317-547-5580		skooy@struc	turepoint.com	
Project Name:		Wetland ID (per	the wetland delineation):	Wetland Size (Acres):
McGregor Road, Walnut Street, and CR N 8 Project	350 W Intersection Improvement	Wetland C (	Report 2)	0.05 acre
STATE REGULATED WETLAND CLA	ASSIFICATION: 🗌 Class I 🛛	Class II 🗌	Class III	
Class III Assessment				
(1) Is the wetland a listed rare or ecolo	gically important type under IC 1	3-11-2-25.8(3)	)(B)?	🗌 Yes 🛛 No
If yes, please indicate:				
🗌 Acid Bog 🔲 Acid Seep 🔲 Circ	cumneutral Bog 🔲 Circumneutra	al Seep 🔲 Cy	press Swamp 🔲 Dune and Sw	ale
🗌 Fen 🔲 Forested Fen 🔲 Fore	ested Swamp	] Muck Flat	Panne 🗌 Sand Flat 🗌 Sec	lge Meadow
Shrub Swamp	nd 🗌 Sinkhole Swamp 🗌 Wet	Floodplain For	rest 🔲 Wet Prairie 🔲 Wet Sa	nd 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?			na <b>∐ Yes ⊠ No</b> of	
If yes, the Wetland is Class III. C If no, proceed to Question (3).	heck Class III at the top of the	form and the	form is now complete.	
(3) Is the wetland in an undisturbed or	minimally disturbed setting?			🗌 Yes 🛛 No
If yes, answer Question (4) and ( form and proceed to the Wetland	Question (5). If no, please prov d Habitat Functional Assessme	ride a justifica ent.	ation as an attachment to this	
(4) Does the wetland support more that Assessment below. If Question	an minimal wildlife or aquatic hab 3 and Question 4 are checked	itat? Please c	omplete the Habitat Functiona	I 🗌 Yes 🛛 No
(5) Does the wetland support more that	an minimal hydrological function?	Please com	plete the Hydrology Functiona	I ⊠ Yes □ No
Assessment below. If Question	3 and Question 5 are checked	yes, the Wet	land is Class III.	
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 indic Checking 'Yes' for Question 1 Checking 'Yes' for Question 2 Checking 'Yes' for Question 3 Checking 'Yes' for Question	ate the Wetland is Class III: and Question 4 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 H	abitat Functional Assessment:	
(6) Does th Check One "`	ne wetland support moderate habitat? <i>(see options below)</i> ing yes also meets the requirements of Question 4. Yes" response below is needed to show moderate habitat function.	🗌 Yes 🛛 No
• In •	Dicators 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? <u>https://databasin.org/datasets/fdb91971a11d46d39661f0a56c3585ca/</u>	🗌 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? Indicate which method used: ORAM	🗌 Yes 🛛 No
•	Are other moderate habitat indicators present (Explain in Remarks)?	🗌 Yes 🛛 No
Please inc Assessme	lude any additional comments, justifications, and/or supporting documentation related to the Wetland Ha ant as a separate attachment appended to this form.	abitat Functional
Wetland H	lydrology Functional Assessment:	
(7) Does th Checki	ne wetland support moderate hydrological function? <i>(see options below)</i> ng yes also meets the requirements of Question 5.	🛛 Yes 🗌 No
Indicators moderate	of moderate hydrological function. At least one primary indicator or two secondary indicators are neede hydrological function.	d to show
• Pri	<ul> <li>imary Indicators:</li> <li>Wetland meets two or more primary hydrology indicators on the wetland determination data form.</li> <li>Wetland is located within a floodway or floodplain.</li> <li>Wetland position in the watershed is 1<sup>st</sup>-3<sup>rd</sup> order or 4<sup>th</sup> – 5<sup>th</sup> order if the substrate is sand or silt.</li> <li>Wetland possesses strong hydric soil indicators (gleyed matrix or &gt;20% redox/mottles present).</li> <li>Wetland is located within a groundwater Wellhead Protection Area.</li> <li><a href="https://www.in.gov/idem/cleanwater/information-about/groundwater-monitoring-and-source-water-protection/weprogram/source-water-proximity-determination-tool/">https://www.in.gov/idem/cleanwater/information-about/groundwater-monitoring-and-source-water-protection/weprogram/source-water-proximity-determination-tool/</a></li> </ul>	Ilhead-protection-
• Se	<ul> <li>condary Indicators:</li> <li>Wetland is 0.75 acre or larger in size, indicating at least moderate water storage capacity.</li> <li>Dominant vegetation in wetland is highly adapted to prolonged inundation (FACW, OBL dominance).</li> <li>Wetland substrate is sand or silt, indicating higher hydraulic conductivity.</li> <li>Wetland is located within a highly developed landscape (&gt;75% impervious surface in ½ mile radius).</li> <li>Parcel with wetland is bordered by development, roads, or impervious surfaces.</li> <li>Wetland is located within a drinking water Source Water Susceptibility Area.</li> <li>Wetland is located within a drinking water Source Water Assessment Area</li> <li>Other (<i>Explain in Remarks</i>)</li> </ul>	
Please Function Any of Only Cl	include any additional comments, justifications and/or supporting documentation related to the Wetland onal Assessment as a separate attachment appended to this form. the following scenarios indicate the Wetland is Class II: hecking 'Yes' to Question (6) hecking 'Yes' to Question (7)	Hydrology
lf the V If the V	Vetland is Class II, check Class II at the top of the form, and the form is now complete. Vetland is not Class III or Class II, check Class I at the top of the form and the form is now complete.	
Supportin	g Guidance Documents:	
• <u>S</u>	tate Regulated Wetlands: https://www.in.gov/idem/wetlands/information-about/state-regulated-wetlands-progra	<u>m/</u>





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**

## Page

1.0	Introd	uction	.1
	1.1	General Information	.1
	1.2	Methodology	.1
		1.2.1 Office Data Review	.2
		1.2.2 Site Reconnaissance	.2
		1.2.3 Data Collection	.3
		1.2.4 Preparation of Wetland Delineation Report	.3
2.0	Findin	gs	.4
	2.1	National Wetlands Inventory Map	.4
	2.2	Site Soils	.4
	2.3	Plant Communities	.5
	2.4	Hydrology	.5
	2.5	Wetlands	.6
	2.6	Other Waters	.7
3.0	Regula	atory Considerations	.9
4.0	Conal	acione.	11
4.0	Conch	1510115	11
5.0	Level	of Care	12
6.0	Refere	nces	13

## **APPENDICES**

Appendix A -	Figure 1 – Site Location Map
	Figure 2 – National Wetland Inventory Map
	Figure 3 – Soil Survey Map
	Figure 3a – Soil Survey Legend
	Figure 4 – FEMA Map
	Figure 5 – Jurisdictional Findings Map
	Figure 6 – Inset #1
	Figure 7 – Inset #2

Appendix B - Wetland Data Forms

Appendix C - Photographic Record



## **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 (MIB2)	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, Indian	a
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	AreaUSF&WSORAMPhotographWotland(agres)ClassificationHydroporiedScoreNumber								
A	0.12	PFO/EMA	Seasonally saturated	14	1, 2, 3 & 4				
В	0.39	PEMAf	Seasonally saturated	28	11 & 12				
С	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						
<b>Open Water Feature</b>	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

- Core, Earl L., and Ammons, Nelle P., 1958. *Woody Plants in Winter*. The Boxwood Press, Pacific Grove, California.
- 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.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterway Experiment Station, Vicksburg, Mississippi.
- Newcomb, Lawrence, 1977. Newcomb's Wildflower Guide, Little, Brown and Company, Boston, Massachusetts.
- Sabine, Bobbi Jones, 1999. National List of Plant Species that Occur in Wetlands: Region 3 North Central. Resource Management Group, Inc. Grand Haven, Michigan.
- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture (USDA). 2011a. Web Soil Survey. Available online at <a href="http://websoilsurvey.nrcs.usda.gov/">http://websoilsurvey.nrcs.usda.gov/</a>. Accessed September 15, 2021.
- United States Department of Agriculture (USDA) Natural Resources Conservation Service, Purdue Cooperative Extension Service, 1991. *Soil Survey for Shelby County, Indiana*.
- United States Department of Agriculture, Natural Resources Conservation Service (USDA). 2011b. 2011 National List of Hydric Soils by State. Available online at <u>http://soils.usda.gov/use/hydric/</u>. Accessed September 15, 2021.
- United States Geological Survey. 7.5-minute Topographic Map of the Acton, Indiana Quadrangle, dated 1998.



## APPENDIX A

## **FIGURES**





	2 22	
USGS 7.5 Minute Topographic Map Surge Industrial - SW 1/4 Carroll Road & McGregor Road	Project Number: RCC.003 Date: March, 2022 Scale: NTS	DRP Eigure:



## U.S. Fish and Wildlife Service **National Wetlands Inventory**

Wetlands



National Wetlands Inventory

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



This page was produced by the NWI mapper

Project Number: Drawing file:	RCC.003 Site Figures	
Date: March,	2022	L'ELEI
Scale: Drawn By: GJG	NIS	Figure: 2





	Project Number: F	RCC.003	
Shelby County Soil Survey			
	Date: March, 2022		
Surge Industrial - SW 1/4 Carroll Road & McGregor Road	Scale:	NTS	
	Drawn By: GJG		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 91.5 2 percent slopes		30.2%		
CrA	Crosby silt Ioam, 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%		
MIB2	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	1mC3 Miami clay loam, 6 to 12 percent slopes, severely eroded		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%		

Soil Map-Marion County, Indiana, and Shelby County, Indiana

	MAP L	EGEND		MAP INFORMATION
Area of	nterest (AOI)	8	Spoil Area	The soil surveys that comprise your AOI were mapped at
	Area of Interest (AOI)	0	Stony Spot	1:15,800.
Solls	Soil Map Linit Polygons	a	Very Stony Spot	Please rely on the bar scale on each map sheet for map measurements.
	Soil Map Unit Polygons	Ŷ	Wet Spot	Source of Map: Natural Resources Conservation Service
~	Soil Map Linit Points	$\triangle$	Other	Web Soil Survey URL: Coordinate System: Web Mercator (EBSG:3857)
Specia	al Point Features	-	Special Line Features	Maps from the Web Soil Survey are based on the Web Mercator
(0)	Blowout	Water Fea	atures	projection, which preserves direction and shape but distorts
53	Borrow Pit	~	Streams and Canals	distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more
-	Clay Snot	Transport	tation	accurate calculations of distance or area are required.
莱	only oper	+++	Rails	This product is generated from the USDA NECS settified data a
$\diamond$	Closed Depression	~	Interstate Highways	of the version date(s) listed below.
×	Gravel Pit	~	US Routes	Soil Survey Area: Marion County, Indiana
	Gravelly Spot	-	Major Roads	Survey Area Data: Version 25, Jun 8, 2020

	Landhii Lava Flow Marsh or swamp Mine or Quarry Miscellaneous Water Perennial Water Rock Outcrop Saline Spot Sandy Spot Severely Eroded Spot Sinkhole Silde or Slip Sodic Spot	Backgrou	Local Roads und Aerial Photography	Soil Survey Area: Shelby County, Indiana Survey Area Data: Version 24, Jun 11, 2027 Your area of interest (AOI) includes more tha area. These survey areas may have been ma scales, with a different land use in mind, at di different levels of detail. This may result in m properties, and interpretations that do not cor across soil survey area boundaries. Soil map units are labeled (as space allows) 1:50,000 or larger. Date(s) aerial images were photographed: 20, 2019 The orthophoto or other base map on which 1 compiled and digitized probably differs from t imagery displayed on these maps. As a resul shifting of map unit boundaries may be evide	0 n one soil survey apped at different ifferent times, or at ap unit symbols, soil mpletely agree for map scales Oct 17, 2019—Oct the soil lines were he background it, some minor nt.		
Natural Resourc	es rvice		Web Soil Survey National Cooperative Soil Survey		9/16/2021 Page 2 of 3		
					Project Number:	RCC.003	
Shelby County Soil Survey							
					Date: March, 20	022	
Surge Industrial - SVV 1/4 Carroll Road & McGrego	r Road				Scale:	NTS	
					Drawn By: GJG		Figure: 3a



CITY OF INDIAMAPOLIS MARION COUNTY 180159

18145C0015C eff. 11/5/2014

1

SHE LBY COUNTY 180235

Figure:

4

Drawn By: GJG





	Project Number: RCC.003		
Wetland Findings			
	Date: March, 2022		
Surge Industrial - SW 1/4 Carroll Road & McGregor Road	Scale: NTS		
	Drawn By: GJG	Figure: 5	


Wetland Findings - Inset 1

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

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



## **APPENDIX B**

### WETLAND AND STREAM DATA FORMS





# 14

End of Quantitative Rating. Complete Categorization Worksheets.

3

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality





## 28

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality





16

End of Quantitative Rating. Complete Categorization Worksheets.

2

3

Present in moderate amounts, but not of highest

quality or in small amounts of highest quality

Present in moderate or greater amounts

and of highest quality





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



End of Quantitative Rating. Complete Categorization Worksheets.

WETLAND E

ORAM v. 5.0 Field Form Quantitative Rating





End of Quantitative Rating. Complete Categorization Worksheets.

WETLAND



WETLAND F



20

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

ETLAND



WETLAND G ORAM v. 5.0 Field Form Quantitative Rating Date: 3/ Site: SURGE Rater(s): INDUSTRIAL 3JG subtotal first page

Metric 5. Special Wetlands.

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 28

Check all that apply and score as indicated.

subtotal

max 10 pts

max 20 pts.

Metric 6. Plant communities, interspersion, microtopography.

subtotal 6a. Wetland Vegetation Communities. Vegetation Community Cover Scale Absent or comprises <0.1ha (0.2471 acres) contiguous area Score all present using 0 to 3 scale. 0 Aquatic bed Present and either comprises small part of wetland's Emergent vegetation and is of moderate quality, or comprises a significant part but is of low quality Shrub Forest 2 Present and either comprises significant part of wetland's Mudflats vegetation and is of moderate quality or comprises a small Open water part and is of high quality Other 3 Present and comprises significant part, or more, of wetland's 6b. horizontal (plan view) Interspersion. vegetation and Is of high quality Select only one. High (5) Narrative Description of Vegetation Quality Moderately high(4) Low spp diversity and/or predominance of nonnative or low Moderate (3) disturbance tolerant native species Moderately low (2) mod Native spp are dominant component of the vegetation, Low (1) although nonnative and/or disturbance tolerant native spp None (0) can also be present, and species diversity moderate to 6c. Coverage of invasive plants. Refer moderately high, but generally w/o presence of rare to Table 1 ORAM long form for list. Add threatened or endangered spp or deduct points for coverage high A predominance of native species, with nonnative spp Extensive >75% cover (-5) and/or disturbance tolerant native spp absent or virtually Moderate 25-75% cover (-3) absent, and high spp diversity and often, but not always, Sparse 5-25% cover (-1) the presence of rare, threatened, or endangered spp Nearly absent <5% cover (0) Absent (1) Mudflat and Open Water Class Quality 6d. Microtopography. Absent <0.1ha (0.247 acres) 0 Low 0.1 to <1ha (0.247 to 2.47 acres) Score all present using 0 to 3 scale. 1 Vegetated hummucks/tussucks 2 Moderate 1 to <4ha (2.47 to 9.88 acres) 3 High 4ha (9.88 acres) or more

Coarse woody debris >15cm (6in) Standing dead >25cm (10in) dbh Amphibian breeding pools

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

End of Quantitative Rating. Complete Categorization Worksheets.

Project/Site:	Surge Industr	ial		City/County:	Pleasant	tview/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	e, terrace, etc.):	roadside ditch		Local	- I Relief (co	oncave, convex, none):	none		
Slope (%):	0 - 2%	Lat: 39 39 08 N		Long:	85 56 34	W.		Datum: W(	3584
Sibpe (70).	0-270	Dreakster silts slevels are 0	to 00/ alamaa	Eong.	00.00.04	vv		ifiantian:	5504
Soli Map Unit Nar		Brookston silly clay loam, U	to 2% slopes	(ВГ)			INVVI CIASS		
Are climatic/hydro Are Vegetation	logic conditions	s on the site typical for this ti , Soil, or Hydrol	ime of year? logy	significantly d	Yes !isturbed?	s <u>X</u> No_ Are "Norma	(If no I Circumstances Yes X	, explain in Remarks.) " present? No	
Are Vegetation		, Soil, or Hydrol	logy	naturally prob	lematic?	(If needed, e	xplain any answer	s in Remarks.)	
SUMMARY OF	FINDINGS -	Attach site map show	ing samplir	ng point locati	ions, tra	insects, importar	nt features, et	tc.	
Hydrophytic Vege	atation Present?	,	Yes X	( <u>No</u>		he Sampled Area			
Hydric Soil Prese	nt?		Yes X	<u>(</u> No	_ wi	thin a Wetland?	Yes X	No	
Wetland Hydrolog	gy Present?		Yes X	(No	_				
Dry swale	- Use scient	tific names of plants							
TEGETATION			Absolute	Dominant In	dicator	Dominance Test w	orksheet.		
Tree Stratum	(Plot size	e <sup>.</sup> 30.ft )	% Cover	Species?	Status	Number of Domina	nt Species		
1 Fraxinus pe	nnsvlvanica	<u> </u>	25	Y F	ACW	That Are OBL, FAC	W or FAC:	6 (A)	
2 Carva lacini	insa		25	<u> </u>	FAC	That Are Obe, 17.0	W, OFFAC.		
3 Quercus pa	lustris	;	25	<u> </u>	ACI	Total Number of Do	minant		
4 Quercus ma	acrocarba		25	Y	FAC	Species Across All	Strata:	7 (B)	
5.	101000.pa			<u> </u>	1710	000000000000000000000000000000000000000	Officia.	<u> </u>	
···			100	= Total Cover	-	Percent of Dominar	nt Species		
Sapling/Shrub Str	rat <u>um:</u> (Plot	Size: 15 ft. )	<u> </u>			That Are OBL, FAC	W, or FAC:	86 (A/	B)
1. Cornus amo	omum	,	40	Y F	ACW		,	,	_,
2.					_	Prevalence Index	worksheet:		
3.						Total % Cover	of:	Multiply by:	
4.					_	OBL species	x 1=		
5.					_	FACW species	x 2=		
			40	= Total Cover	-	FAC species	x 3 =		
Herb Stratum:	(Plot size:	5 ft. )				FACU species	x 4 =		
1. Phalaris aru	ındinacea		75	<u>    Y     </u> F	ACW	UPL species	x 5=		
2. Apocynum d	cannabinaceum		5	N F	ACW	Column Totals:	(A)	(B)	
<ol> <li>Festuca aru</li> <li>4.</li> </ol>	Indinacea		15	Y	F <u>AC</u> U	Prevalence Index =	B/A =		
5									
6.						Hydrophytic Vege	tation Indicator	rs:	
7.						1 - Rapid Te	est for Hydrophy	tic Vegetation	
8.						X 2 - Dominar	nce Test is >50%	6	
9.						3 - Prevaler	nce Index is ≤3.0	) <sup>1</sup>	
10.						4 - Morphol	ogical Adaptatio	ns <sup>1</sup> (Provide supportir	ng
			100	= Total Cover	r	data in F	Remarks or on a	separate sheet)	
Woody Vine Strat	<u>tum:</u>	(Plot size: 30 ft. )				Problemati	c Hydrophytic V	egetation <sup>1</sup> (Explain)	
1									
2.						<sup>1</sup> Indicators of hydri	c soil and wetla	nd hydrology must	
				= Total Cover	-	be present, unless	disturbed or prol	olematic.	
						Hydrophytic Vege Present?	tation	Yes	No_X
Remarks: (Include	e photo number:	s here or on a separate shee	et.)			1			

#### SOIL

Profile Desc	ription: (Describe to	the depth	needed to docume	nt the indi	cator or co	onfirm the ab	sence of indicators	.)
Depth	Matrix			Redox Feat	ures		_	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 15	10YR 3/2	90	5YR 4/6	10	D	М	silty clay loam	
15 - 18	10YR 3/3	95	5YR 4/6	5	D	М	silty clay loam	
<sup>1</sup> Type: C=Cor	centration, D=Depletion,	RM=Reduce	d Matrix, MS=Masked S	Sand Grains			<sup>2</sup> Location: PL= Pore	Lining, M=Matrix.
Hydric Soil In	dicators:						Indicators for Probl	ematic Hydric Soils <sup>3</sup> :
Histosol (A	1)		Sandy Gleyed Matri	x (S4)			Coast Prairie Red	с рх (А16)
Histic Epip	edon (A2)		Sandy Redox (S5)	. ,			Dark Surface (S7)	
Black Histi	c (A3)		Stripped Matrix (S6)				Iron-Manganese M	lasses (F12)
Hydrogen	Sulfide (A4)		Loamy Mucky Miner	al (F1)			Very Shallow Dark	Surface (TE12)
Stratified I	avers (A5)		Loamy Gleved Matri	x (F2)			Other (Explain in F	Remarks)
2 cm Muck	(A10)		X Depleted Matrix (E3	)				(chano)
Depleted B	elow Dark Surface (A11)		Bedox Dark Surface	, (E6)				
Depicted L	Surface (A12)		Needex Dark Surface	(10)				
Sondy Mus	Sullace (A12)		Depieted Dark Suita				<sup>3</sup> Indicators of hydr	ophytic vegetation and wetland
E om Muck	(31)			(10)			hydrology must b	e present, unless disturbed or
5 cm Muck	y Pear of Pear (53)							
Typo:	iyer (il observed).							
Donth (in	ahaa);						Hudria Sail Dracant	
Deptil (III							Hydric Soli Present	
	o.v.							
HYDROLO	GY							
Wetland Hydr	ology indicators:		at analy)			Casandanı in	diastana (minimum of tura a	
Primary Indicato	rs (minimum of one is require	eu; check all tr	iat apply)	(D0)		Secondary In	Quarters (minimum or two h	equired)
Surface w			water-Stained Leav	es (вэ)		<u> </u>	_Surface Soll Cracks (B6)	
			Aqualic Faulta (B15	/ (D14)		^		(02)
Saturation	(A3)			(D14)			Creatish Burrows (C2)	(62)
Water War	KS (BT)		Hydrogen Sullide Of		D (00)		Crayiish Burrows (Co)	
Sediment				res on Living	Roots (C3)		Saturation Visible on Aeri	al Imagery (C9)
Drift Depos	sits (B3)		Presence of Reduce	ed Iron (C4)	1. (00)		Stunted or Stressed Plan	ts (D1)
	or Crust (B4)		Recent Iron Reducti	on in Tilled So	olis (C6)		Geomorphic Position (D2	)
Iron Depos	its (B5)	_,	I hin Muck Surface (	(C7)			FAC-Neutral Test (D5)	
Inundation	Visible on Aerial Imagery (B	7)	Gauge or Well Data	(D9)				
Sparsely V	egetated Concave Surface (	B8)	Other (Explain in Re	emarks)				
Field Observa	ations:							
Surface Water F	Present? Yes	No	X Depth (inches):			Wetland Hy	drology Present?	Yes X No
Water Table Pre	sent? Yes	No	X Depth (inches):					
Saturation Prese	ent? Yes	No	X Depth (inches):					
(includes capilla	ry fringe)							
Describe Reco	orded Data (stream gauge	e, monitoring	well, aerial photos, pre-	vious inspec	tions), if ava	ilable:		
Remarks								
1								

Project/Site:	Surge Industr	rial		City/Count	iy: <u>Pleasa</u>	ntview/Shelby		Sampling Date:	Septmeber 14, 2021
Applicant/Owner:	Runnebohm	Construction Co.					State: IN	Sampling Point:	TP-2
Investigator(s):	GJG				Sectior	n, Township, Range:	NW1/4,	Sec. 23, T14N, R5E	
Landform (hillslope.	, terrace, etc.):	roadside ditch		Loc	al Relief (	(concave, convex, none):	none		
Slope (%):	0 - 2%	Lat: 39.39.08 N		Lon	g: 85.56.3	34 W		Datum: W(	GS84
Soil Map Unit Nam	ne:	Brookston silty clay loam, 0 to	o 2% slopes (	Br)			NWI clas	sification:	
Are climatic/hydrol Are Vegetation	logic condition	s on the site typical for this tim , Soil, or Hydrolo	ne of year? gy	significantly	Yo disturbed	res <u>X</u> No I? Are "Normal Y	(If n Circumstance	o, explain in Remarks.) s" present? No	
Are Vegetation		, Soil, or Hydrolog	ду	naturally pro	oblematic	? (If needed, ex	plain any answe	rs in Remarks.)	
SUMMARY OF	FINDINGS -	- Attach site map showir	ng samplin	g point loca	utions, tr	ransects, importan	t features, e	tc.	
Hydrophytic Veget	tation Present?	?	Yes	NoX	Is	the Sampled Area			
Hydric Soil Presen	nt?		Yes	NoX	v	within a Wetland?	Yes	NoX	
Wetland Hydrology	y Present?		Yes	NoX	<u> </u>				
VEGETATION	- Use scien	tific names of plants.							
			Absolute	Dominant	Indicator	Dominance Test w	orksheet:		
Tree Stratum	(Plot size	e: 30 ft. )	% Cover	Species?	Status	Number of Dominan	t Species	0 (4)	<u>`</u>
1. 。						That Are OBL, FAC	W, or FAC:	0 (A)	1
3						Total Number of Do	minant		
4.						Species Across All S	Strata:	2 (B)	)
5.					_				
				= Total Cov	er	Percent of Dominan	t Species		
Sapling/Shrub Stra	<u>atum:</u> (Plot	: Size: <u>15 ft.</u> )				That Are OBL, FAC	W, or FAC:	0 (A/	В)
1.						Brouclence Index v			
2.						Total % Cover of	VORKSNEEL.	Multiply by:	
4.						OBL species	x 1=	Watapiy by.	
5.						FACW species	x 2=		
				= Total Cov	er	FAC species	x 3 =		
<u>Herb Stratum:</u>	(Plot size:	<u> </u>				FACU species	x 4 =		
1. Solidago altis	ssima		40	<u>Y</u>	F <u>ACU</u>	UPL species	x 5=		
2. Carex trankli			10	<u>N</u>		Column I otals:	(A)	(B)	1
<ol> <li><u>resuca alui</u></li> <li><u>1</u></li> <li><u>5</u></li> </ol>	Idinacea		50	<u> </u>		Prevalence Index =	B/A =		
6.						Hydrophytic Veget	ation Indicato	ors:	
7.						1 - Rapid Te	st for Hydroph	ytic Vegetation	
8.						2 - Dominan	ce Test is >50	%	
9						3 - Prevalen	ce Index is ≤3.	0 <sup>1</sup>	
10						4 - Morpholo data in R	emarks or on a	ons' (Provide supportir separate sheet)	ng
<u>Woody Vine Stratu</u> 1	<u>um:</u>	(Plot size: <u>30 ft.</u> )	100	= Iotai Cov	er	Problematic	Hydrophytic V	/egetation <sup>1</sup> (Explain)	
2						1 ledinators of hydric			
				= Total Cov	er	be present, unless d	listurb <u>ed or pro</u>	blematic.	
						Hydrophytic Veget Present?	ation	Yes	No X
Domorko: (Includo	nhata numbai		• )						
Tremarks. (include	prioto number	S here of on a separate sheet.	.)						

US Army Corps of Engineers

#### SOIL

Profile Desc	ription: (Describe to	the depth	needed to docume					
Depth	Matrix			Redox Feat	tures		_	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 18	10YR 3/2	100					silty clay loam	
				·				
			-	·				
1	D. D. D. I. time						21	- I belie in MA MARMER
Hydric Soil In	dicators:	RM=Reduce	ed Matrix, MS=Masked	Sand Grains	•		Indicators for Brok	e Lining, M=Matrix.
listeed (A	1)		Condu Claured Mater	w (C.4)				
Histosol (A	1) 1 (A 2)		Sandy Gleyed Main	IX (54)				(81 A) XOL
HISTIC EPIPE	edon (A2)		Sandy Redox (S5)	``			Dark Surface (S	·)
Black Histic	C (A3)		Stripped Matrix (S6	)			Iron-Manganese	Masses (F12)
Hydrogen s	Suifide (A4)		Loamy Mucky Mine	rai (F1)			Very Shallow Da	
Stratified La	ayers (A5)		Loamy Gleyed Matri	1x (F2)			Other (Explain in	Remarks)
2 cm wuck	(AIU)		Depieted Matrix (F3	) (FC)				
Depleted B	elow Dark Surface (A11)		Redox Dark Surrace	e (F6)				
I NICK Dark	Surrace (A12)		Depleted Dark Surf	ace (F7)			<sup>3</sup> Indicators of hyd	Irophytic vegetation and wetland
Sandy Much	ky Mineral (ST)		Redox Depressions	(FO)			hydrology must	be present, unless disturbed or
D CITI MUCK	y Peal of Peal (53)							problematic.
	yei (il observeu).							
Depth (inc	shee):						Hydric Soil Presen	t? Vas No X
							inguite contriesen	
Remarks							1	
Remarks HYDROLO(	GY						<u></u>	
Remarks HYDROLO(	GY ology Indicators:						ļ	
Remarks HYDROLO( Wetland Hydr Primary Indicator	GY ology Indicators: 's (minimum of one is require	:d; check all th	nat apply)			Secondary In	L	required)
Remarks HYDROLO( Wetland Hydr Primary Indicator _Surface Wa	GY ology Indicators: 's (minimum of one is require ater (A1)	<u>⊧d; check all t</u> r	nat apply) Water-Stained Leav	ves (B9)		Secondary In	dicators (minimum of two Surface Soil Cracks (B6	required)
Remarks HYDROLOO Wetland Hydr Primary IndicatorSurface WaHigh Water	GY ology Indicators: 's (minimum of one is require ater (A1) 'Table (A2)	ю; check all tr	nat apply) Water-Stained Leav Aquatic Fauna (B13	ves (B9) 3)		Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10)	required)
Remarks HYDROLOG Wetland Hydr Primary Indicator Surface Wa High Water Saturation	GY ology Indicators: 's (minimum of one is require ater (A1) 'Table (A2) (A3)	id; check all th	nat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants	ves (B9) 3) 6 (B14)		Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10) Dry-Season Water Table	required) ) ) e (C2)
Remarks HYDROLOG Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Mark	GY ology Indicators: 's (minimum of one is require ater (A1) 'Table (A2) (A3) (s (B1)	id; check all th	nat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O	ves (B9) 3) 6 (B14) dor (C1)		Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10) Dry-Season Water Tabl Crayfish Burrows (C8)	required) ) ) e (C2)
Remarks HYDROLOG Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Mark Sediment D	GY ology Indicators: 's (minimum of one is require ater (A1) 'Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	id; check all th	nat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe	ves (B9) 3) 3) dor (C1) eres on Living I	Roots (C3)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Ae	required) ) ) e (C2) rial Imagery (C9)
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Mark Sediment [ Drift Depos	GY ology Indicators: 's (minimum of one is require ater (A1) 'Table (A2) (A3) (s (B1) Deposits (B2) its (B3)	id; check all th	nat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc	ves (B9) 3) 5 (B14) dor (C1) eres on Living I ed Iron (C4)	Roots (C3)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla	required) ) ) e (C2) rial Imagery (C9) nts (D1)
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Mark Sediment E Drift Depos Algal Mark	GY ology Indicators: 's (minimum of one is require ater (A1) 'Table (A2) (A3) (S (B1) Deposits (B2) its (B3) r Crust (B4)	id; check all th	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct	ves (B9) 3) 5 (B14) dor (C1) eres on Living I ed Iron (C4) ion in Tilled Sc	Roots (C3)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D	required) ) ) e (C2) rial Imagery (C9) nts (D1) 2)
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Mark Sediment D Drift Depos Algal Mat o Iron Depos	GY ology Indicators: 's (minimum of one is require ater (A1) 'Table (A2) (A3) (	न्त्र; check all th	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface	ves (B9) 3) 5 (B14) dor (C1) 9 eres on Living I eed Iron (C4) 10 ion in Tilled Sc (C7)	Roots (C3)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) ∋ (C2) rial Imagery (C9) nts (D1) 2)
Remarks HYDROLO( Wetland Hydre Primary Indicator Surface Wa High Water Saturation Water Mari Sediment [ Drift Depos Algal Mat o Iron Depos Inundation	GY ology Indicators: 's (minimum of one is required ater (A1) Table (A2) (A3) (A) (A) (A) (A) (A) (A) (A) (A	2d; check all th	nat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Furthin in D	ves (B9) 3) (B14) dor (C1) eres on Living I ed Iron (C4) ion in Tilled Sc (C7) (C7)	Roots (C3) bils (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) e (C2) rial Imagery (C9) nts (D1) 2)
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Mark Sediment D Drift Depos Algal Mat o Iron Depos Inundation Sparsely Ve	<b>GY</b> <b>ology Indicators:</b> (is (minimum of one is required) ater (A1) Table (A2) (A3) (K3)	<u>2d; check all tr</u> 7) 38)	nat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re	ves (B9) 3) 5 (B14) dor (C1) eres on Living I ed Iron (C4) ion in Tilled So (C7) 1 (D9) emarks)	Roots (C3)	Secondary In X	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) e (C2) rial Imagery (C9) nts (D1) 2)
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Mark Sediment E Drift Depos Algal Mat o Iron Depos Inundation Sparsely W Field Observa	GY ology Indicators: (minimum of one is required ater (A1) Table (A2) (A3	2 <u>d; check all tr</u> 7) 38)	nat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re	ves (B9) 3) is (B14) dor (C1) eres on Living I ed Iron (C4) ion in Tilled Sc (C7) a (D9) emarks)	Roots (C3) pils (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) e (C2) rial Imagery (C9) nts (D1) 2)
Remarks HYDROLO( Wetland Hydr Primary Indicator Surface Wat High Water Saturation Water Mark Sediment [ Drift Depos Algal Mat o Iron Depos Inundation Sparsely Vi Field Observa Surface Water P	GY ology Indicators: (minimum of one is required tater (A1) Table (A2) (A3) (A) (A) (A) (A) (A) (A) (A) (A	7) 38) No	nat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Reduct) X Depth (inches):	ves (B9) 3) (B14) dor (C1) eres on Living I ed Iron (C4) ion in Tilled Sc (C7) i (D9) emarks)	Roots (C3) bils (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes NoX
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Mark Sediment I Drift Depos Algal Mat o Iron Depos Inundation Sparsely Vi Field Observa Surface Water P Water Table Pre	GY ology Indicators: (minimum of one is required tater (A1) Table (A2) (A3) (A3) (S (B1) Deposits (B2) its (B3) r Crust (B4) its (B5) Visible on Aerial Imagery (B' agetated Concave Surface ( tions: resent? Yes	7) B8) No No	nat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re <u>X</u> Depth (inches): X Depth (inches):	/es (B9) 3) : (B14) dor (C1) res on Living I ed Iron (C4) ion in Tilled Sc (C7) i (D9) emarks)	Roots (C3) bils (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No _ X
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Vater Mark Sediment I Drift Depos Algal Mat o Iron Depos Inundation Sparsely Vi Field Observa Surface Water P Water Table Pre Saturation Prese	GY ology Indicators: rs (minimum of one is required tater (A1) Table (A2) (A3)	7) B8) No No No No	nat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches):	ves (B9) 3) : (B14) dor (C1) res on Living I ed Iron (C4) ion in Tilled Sc (C7) t (D9) emarks)	Roots (C3) bils (C6)	Secondary In X X Wetland Hy	dicators (minimum of two _Surface Soil Cracks (B6 _Drainage Patterns (B10) _Dry-Season Water Table _Crayfish Burrows (C8) _Saturation Visible on Ae _Stunted or Stressed Pla _Geomorphic Position (D _FAC-Neutral Test (D5)	required) ) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No _ X
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Mark Sediment E Drift Depos Algal Mat o Iron Depos Inundation Sparsely V Field Observa Surface Water P Water Table Pre Saturation Prese (includes capillar	GY ology Indicators: (minimum of one is required ater (A1) Table (A2) (A3	7) B8) No No No	nat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches):	ves (B9) 3) (B14) dor (C1) res on Living I ed Iron (C4) ion in Tilled Sc (C7) (C7) (D9) emarks)	Roots (C3) pils (C6)	_ Secondary InX	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No _ X
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Mark Sediment E Drift Depos Algal Mat o Iron Depos Inundation Sparsely W Field Observa Surface Water P Water Table Pre Saturation Prese (includes capillar Describe Reco	GY ology Indicators: 's (minimum of one is required ater (A1) 'Table (A2) (A3)	7) B8) No No No No	nat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches): X Depth (inches): X Depth (inches):	ves (B9) 3) (B14) dor (C1) eres on Living I ed Iron (C4) ion in Tilled Sc (C7) (C7) (D9) emarks) vious inspec	Roots (C3) pils (C6)	Secondary In X X Wetland Hy ilable:	dicators (minimum of two _Surface Soil Cracks (B6 _Drainage Patterns (B10) _Dry-Season Water Table _Crayfish Burrows (C8) _Saturation Visible on Ae _Stunted or Stressed Pla _Geomorphic Position (D _FAC-Neutral Test (D5)	required) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No _ X
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation I Sediment I Drift Depos Algal Mat o Iron Depos Inundation Sparsely W Field Observa Surface Water P Water Table Pre Saturation Prese (includes capillar Describe Reco	GY ology Indicators: rs (minimum of one is require ater (A1) Table (A2) (A3) rs (B1) Deposits (B2) its (B3) r Crust (B4) its (B5) Visible on Aerial Imagery (B' egetated Concave Surface ( tions: resent? Yes sent? Yes nt? Yes y fringe) rded Data (stream gauge	7) B8) No No No No	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches): (well, aerial photos, pre	ves (B9) 3) (B14) dor (C1) eres on Living I ed Iron (C4) ion in Tilled Sc (C7) (C7) (D9) emarks) vious inspec	Roots (C3) pils (C6)	Secondary In X X Wetland Hy ilable:	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No _ X
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation I Water Mark Sediment D Drift Depos Algal Mat o Iron Depos Inundation Sparsely Vi Field Observa Surface Water Pre Saturation Prese (includes capillar Describe Reco	GY ology Indicators: 's (minimum of one is require ater (A1) 'Table (A2) (A3) (A) (A) (A) (A) (A) (A) (A) (A	7) B8) No No No No No	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Red X Depth (inches): X Depth (inches): X Depth (inches): N Depth (inches): Y well, aerial photos, pred	ves (B9) 3) ( B14) dor (C1) eres on Living I ed Iron (C4) ion in Tilled Sc (C7) ( (D9) emarks) vious inspec	Roots (C3) pils (C6)	Secondary In X	dicators (minimum of two _Surface Soil Cracks (B6 _Drainage Patterns (B10 _Dry-Season Water Table _Crayfish Burrows (C8) _Saturation Visible on Ae _Stunted or Stressed Pla _Geomorphic Position (D _FAC-Neutral Test (D5)	required) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No _ X
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation I Vater Mark Sediment D Drift Depos Algal Mat o Iron Depos Inundation Sparsely W Field Observa Surface Water Prese (includes capillar Describe Recoo Remarks	GY ology Indicators: 's (minimum of one is require ater (A1) 'Table (A2) (A3) (A) (A) (A) (A) (A) (A) (A) (A	7) B8) No No No No No	Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Ro X Depth (inches): X Depth (inches): X Depth (inches):	ves (B9) 3) (B14) dor (C1) eres on Living I ed Iron (C4) ion in Tilled Sc (C7) (C7) (D9) emarks) vious inspec	Roots (C3) bils (C6)	Secondary In X 	dicators (minimum of two _Surface Soil Cracks (B6 _Drainage Patterns (B10, _Dry-Season Water Table _Crayfish Burrows (C8) _Saturation Visible on Ae _Stunted or Stressed Pla _Geomorphic Position (D _FAC-Neutral Test (D5)	required) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No X
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Marl Sediment E Drift Depos Algal Mat o Iron Depos Inundation Sparsely Vi Field Observa Surface Water P Water Table Pre Saturation Prese (includes capillar Describe Recoo Remarks	GY ology Indicators: 's (minimum of one is required ater (A1) 'Table (A2) (A3)	7) B8) No No No No No	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Red X Depth (inches): X Depth (inches): X Depth (inches): X Depth (inches):	ves (B9) 3) (B14) dor (C1) eres on Living I ed Iron (C4) ion in Tilled Sc (C7) (D9) emarks) vious inspec	Roots (C3) bils (C6)	_ Secondary InX	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) (C2) rial Imagery (C9) nts (D1) 2) Yes No X

Project/Site:	Surge Industr	ial		City/Cour	nty: <u>Pleasar</u>	tview/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, S	Sec. 14, T14N, R5E	
Landform (hillslope,	, terrace, etc.):	depression		Lo	cal Relief (c	oncave, convex, none):	none		
Slope (%):	0 - 2%	Lat: 39.39.16 N		Lo	ng: 85.57.0	8 W		Datum: W	GS84
Soil Map Unit Nam	ne:	Crosby silt loam. New Castle	Till Plain. 0 to	2% slopes (	CrA)		NWI class	ification:	
Are climatic/hvdrol	logic condition	s on the site typical for this tim	e of year?		Ye	s X No	(If no	explain in Remarks )	
Are Vegetation		, Soil, or Hydrolog	ју	_significantl	y disturbed	Are "Norma	I Circumstances	" present? No	
Are Vegetation		, Soil, or Hydrolog	ју	_naturally p	roblematic?	(If needed, ex	xplain any answers	s in Remarks.)	
SUMMARY OF	FINDINGS -	Attach site map showin	ıg sampling	g point loc	ations, tra	ansects, importar	nt features, et	с.	
Hydrophytic Veget	tation Present?	,	Yes X	No	Is	the Sampled Area			
Hydric Soil Preser	nt?		Yes X	No	w	ithin a Wetland?	Yes X	No	
Wetland Hydrolog	y Present?		Yes X	No					
Remarks: Dry swale									
VEGETATION	- Use scien	tific names of plants.							
			Absolute	Dominant	Indicator	Dominance Test w	vorksheet:		
Tree Stratum	(Plot size	e: 30 ft. )	% Cover	Species?	Status	Number of Dominal	nt Species		
1				·		That Are OBL, FAC	W, or FAC:	<u> </u>	)
2				<u> </u>		Total Number of Do	minant		
4						Species Across All	Strata:	1 (B)	)
5.						0,000,000,0000,000	o li di di		'
				= Total Co	ver	Percent of Dominar	nt Species		
Sapling/Shrub Stra	<u>atum:</u> (Plot	Size: <u>15 ft.</u> )				That Are OBL, FAC	W, or FAC:	100 (A	/B)
1				<u> </u>					
2.			<u> </u>	<u> </u>		Prevalence Index	worksheet:	Maritine Inc. Inc. 11	
3 4				·		OBL species	v 1=		
5.				·		FACW species	x 2 =		
-				= Total Co	ver	FAC species	x 3 =		
Herb Stratum:	(Plot size:	<u> </u>				FACU species	x 4 =		
1. Polygonum p	pennsylvanicur	n	80	Y	FACW	UPL species	x 5 =		
2. <u>Echinocloa c</u>	rus-galli		5	<u>N</u>	FACW	Column Totals:	(A)	(B)	)
3. <u>Panicum dici</u> 4	hotomiflorum		5	<u> </u>	FACW	Prevalence Index =	B/A =		
6.						Hydrophytic Vege	tation Indicator	s:	
7.						1 - Rapid Te	est for Hydrophy	tic Vegetation	
8				<u></u>		X 2 - Dominar	nce Test is >50%	, )	
9.				<u> </u>		3 - Prevaler	nce Index is ≤3.0	1	
10						4 - Morpholo data in R	ogical Adaptatio Remarks or on a	ns' (Provide supporti separate sheet)	ng
Waady Vina Strat	199.1	(Distaire: 20 ft.)	90	= I otal Co	ver	Droblomati	e Hudrenbutie V/	actation <sup>1</sup> (Evaluin)	
1.	<u></u>	(FIOLSIZE. <u>30 II.</u> )				FIDDemain		egetation (Explain)	
2.						<sup>1</sup> Indicators of hydri	c soil and wetlar	nd hydrology must	
				= Total Co	ver	be present, unless	disturbed or prot	plematic.	
						Hydrophytic Vege	tation		
						Present?		Yes X	No
Remarks: (Include	photo number	s here or on a separate sheet.	)			•			

US Army Corps of Engineers

Profile Desc	cription: (Describe to	the depth	needed to documer	nt the indica	ator or co	nfirm the ab	sence of indicator	s.)
Deptn		0/		Redox Featu	Turne <sup>1</sup>	L = = <sup>2</sup>	- -	Demonto
(inches)	Color (moist)		Color (moist)		Туре		l exture	Remarks
0 - 18	10YR 3/2	95	7.5YR 4/6	5	D	M	silt loam	
<sup>1</sup> Type: C=Cor	ncentration, D=Depletion,	RM=Reduc	ed Matrix, MS=Masked S	Sand Grains.			<sup>2</sup> Location: PL= Por	re Lining, M=Matrix.
Hydric Soil In	dicators:						Indicators for Prol	blematic Hydric Soils <sup>3</sup> :
Histosol (A	(1)		Sandy Gleyed Matrix	(S4)			Coast Prairie Re	edox (A16)
Histic Epip	edon (A2)		Sandy Redox (S5)				Dark Surface (S	7)
Black Histi	c (A3)		Stripped Matrix (S6)				Iron-Manganese	Masses (F12)
Hydrogen	Sulfide (A4)		Loamy Mucky Miner	al (F1)			Very Shallow Da	ark Surface (TF12)
Stratified L	ayers (A5)		Loamy Gleyed Matri	k (F2)			Other (Explain ir	n Remarks)
2 cm Muck	(A10)		X Depleted Matrix (F3)	1				
Depleted E	Below Dark Surface (A11)		Redox Dark Surface	(F6)				
Thick Dark	Surface (A12)		Depleted Dark Surfa	ce (F7)			<sup>3</sup> Indicators of hy	drankytic vegetation and watland
Sandy Mue	cky Mineral (S1)		Redox Depressions	(F8)			hydrology must	be present unless disturbed or
5 cm Muck	y Peat or Peat (S3)						njurenegj maet	problematic.
Restrictive La	ayer (if observed):							
Туре:								
Depth (in	ches):						Hydric Soil Preser	nt? Yes X No
HYDROLO	GY							
Wetland Hydr	rology Indicators:							
Primary Indicato	ors (minimum of one is require	d; check all t	hat apply)			Secondary In	dicators (minimum of two	o required)
Surface W	ater (A1)		Water-Stained Leav	es (B9)		Х	Surface Soil Cracks (Be	6)
High Wate	r Table (A2)		Aquatic Fauna (B13	)			Drainage Patterns (B10	))
Saturation	(A3)		True Aquatic Plants	(B14)			Dry-Season Water Tab	le (C2)
Water Mar	ks (B1)		Hydrogen Sulfide Od	lor (C1)			Crayfish Burrows (C8)	
Sediment I	Deposits (B2)		X Oxidized Rhizospher	es on Living R	oots (C3)	Х	Saturation Visible on A	erial Imagery (C9)
Drift Depos	sits (B3)		Presence of Reduce	d Iron (C4)			Stunted or Stressed Pla	ants (D1)
Algal Mat o	or Crust (B4)		Recent Iron Reduction	on in Tilled Soil	s (C6)		Geomorphic Position (E	02)
Iron Depos	sits (B5)		Thin Muck Surface (	C7)			FAC-Neutral Test (D5)	
Inundation	Visible on Aerial Imagery (B7	7)	Gauge or Well Data	(D9)				
Sparsely V	egetated Concave Surface (I	B8)	Other (Explain in Re	marks)				
Field Observa	ations:							
Surface Water F	Present? Yes	No	X Depth (inches):			Wetland Hy	drology Present?	Yes X No
Water Table Pre	esent? Yes	No	X Depth (inches):			-		
Saturation Prese	ent? Yes	No	X Depth (inches):					
(includes capilla	ry fringe)	_	、 ,					
Describe Reco	orded Data (stream gauge	, monitorino	g well, aerial photos, prev	/ious inspecti	ons), if ava	ilable:		
				·				
Remarks								
1								
1								

Project/Site:	Surge Indust	rial		City/County: Ple	asantview/Shelby		Sampling Date:	July 14, 2021	
Applicant/Owner:	Runnebohm	Construction Co.				State: IN	Sampling Point:	TP-4	
Investigator(s):	GJG			Se	ction, Township, Range:	SW1/4, S	Sec. 14, T14N, R5E		
Landform (hillslope,	, terrace, etc.):	upland		Local Re	lief (concave, convex, none):	none			
Slope (%):	0 - 2%	Lat: 39.39.16 N		Long: 85	.57.08 W	18 W Datum: WGS84			
Soil Map Unit Nam	ne:	Crosby silt loam, New Cas	tle Till Plain, 0 t	o 2% slopes (CrA)		NWI class	ification:		
Are climatic/hvdrol	loaic condition	s on the site typical for this	time of year?		Yes X No	(If no	explain in Remarks.)		
Are Vegetation		, Soil, or Hydro	ology	significantly distu	rbed? Are "Normal Y	I Circumstances ′es X	" present? No		
Are Vegetation		, Soil, or Hydro	ology	naturally problem	atic? (If needed, ex	xplain any answers	s in Remarks.)		
SUMMARY OF	FINDINGS	- Attach site map show	wing samplin	g point location	s, transects, importan	t features, et	tc.		
Hydrophytic Veget	tation Present	?	Yes	No X	Is the Sampled Area				
Hydric Soil Preser	nt?		Yes	NoX	within a Wetland?	Yes	<u>No X</u>		
Wetland Hydrolog	y Present?		Yes	No					
Dry swale	- Use scien	tific names of plants.							
1202////01			Absolute	Dominant Indica	tor Dominance Test w	orksheet:			
Tree Stratum	(Plot siz	ze: 30 ft.)	% Cover	Species? State	us Number of Dominar	nt Species			
1.					That Are OBL, FAC	W, or FAC:	(A)	1	
2.				<u> </u>	_				
3.					Total Number of Do	minant	-		
4		<u> </u>		<u> </u>	Species Across All	Strata:	(B)		
5.				= Total Cover	- Percent of Dominar	nt Species			
Sapling/Shrub Stra	atum: (Plot	t Size: <u>15 ft.</u> )			That Are OBL, FAC	W, or FAC:	(A/	В)	
2.					Prevalence Index	worksheet:			
3.					Total % Cover of	of:	Multiply by:		
4.				<u> </u>	OBL species	x 1 =			
5.					FACW species	x 2 =			
Harb Stratum	(Dist size:	E # \		= Total Cover	FAC species	x 3=			
1 Zea maize	(PIOL SIZE.	<u> </u>	80	Y FAC	U UPL species	x 4-			
2. Ajuga spp.			5	N NI	Column Totals:	(A)	(B)	1	
3.							( ,		
4.					Prevalence Index =	B/A =			
5.					-				
6.					Hydrophytic Veget	tation Indicator	's:		
/				<u> </u>	1 - Rapid Te	est for Hydrophy			
9					2 - Dominan 3 - Prevalen	ice Index is ≤3.0	0 ) <sup>1</sup>		
10.					4 - Morpholo	ogical Adaptatio	ns <sup>1</sup> (Provide supportir	ng	
			85	= Total Cover	data in R	emarks or on a	separate sheet)		
Woody Vine Stratu	um:	(Plot size: <u>30 ft.</u> )			Problematio	c Hydrophytic Ve	egetation <sup>1</sup> (Explain)		
1.				<u> </u>	-				
2.				- Total Course	- <sup>1</sup> Indicators of hydric	c soil and wetlar	nd hydrology must		
				- Total Cover	be present, unless of	isturbed or prot			
					Present?	lation	Yes	No X	
Remarks: (Include	photo numbe	rs here or on a separate she	eet.)		I				

US Army Corps of Engineers

#### SOIL

(inches) 0 - 18				Redox Feature	es			
0 - 18	Color (moist)	%	Color (moist)	%	Tvpe <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	10YR 3/3	100			.)po		silt loam	Romano
	1011( 0/0	100					Sittloatti	
						·		
						·		
						·		
	ntration D=Donlation		d Matrix MS=Maakad	Sand Craina			<sup>2</sup> Location: DL = Dor	a Lining M=Matrix
lydric Soil Indic	atore:		eu Maurix, Mo-Maskeu	Sanu Grains.			Indicators for Brok	e Lining, M-Maurix.
			Condu Claved Mater	in (C.4)				
Histosof (AT)	(40)		Sandy Gleyed Math	IX (54)			Coast Prairie Re	dox (A16)
Histic Epipedo	on (A2)		Sandy Redox (S5)				Dark Surface (S	()
Black Histic (A	43)		Stripped Matrix (S6	·)			Iron-Manganese	Masses (F12)
Hydrogen Sulf	tide (A4)		Loamy Mucky Mine	eral (F1)			Very Shallow Da	irk Surface (TF12)
Stratified Laye	ers (A5)		Loamy Gleyed Matr	rix (F2)			Other (Explain in	i Remarks)
2 cm Muck (A	10)		Depleted Matrix (F3	3)				
Depleted Belo	w Dark Surface (A11)		Redox Dark Surface	e (F6)				
Thick Dark Su	ırface (A12)		Depleted Dark Surfa	ace (F7)			<sup>3</sup> Indicators of hvo	drophytic vegetation and wetland
Sandy Mucky	Mineral (S1)		Redox Depressions	s (F8)			hydrology must	be present, unless disturbed or
5 cm Mucky P	Peat or Peat (S3)							problematic.
Restrictive Laye	r (if observed):							
Туре:								
Depth (inche	es):						Hydric Soil Preser	nt? Yes No X
	1							
HYDROLOG	f ogy Indicators:	ed: check all t	hat apply)			Secondary In	dicators (minimum of two	required)
HYDROLOGY Vetland Hydrold Primary Indicators (	f Dgy Indicators: minimum of one is require r (A1)	ed; check all ti	hat apply) Water-Stained Lea	ves (B0)		Secondary In	dicators (minimum of two	required)
HYDROLOGY Vetland Hydrolo Primary Indicators ( Surface Wate Hinh Water Ta	f ogy Indicators: minimum of one is require r (A1) able (A2)	ed; check all ti	hat apply) Water-Stained Leav Aquatic Fauna (813	ves (B9)		Secondary In	dicators (minimum of two _Surface Soil Cracks (Bf	required)
HYDROLOGY Vetland Hydrolo Primary Indicators ( Surface Wate High Water Ta Saturation (43	f ogy Indicators: minimum of one is require r (A1) able (A2)	d; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 Tue Aquatic Flants	ves (B9) 3)		Secondary In	dicators (minimum of two _Surface Soil Cracks (Bf _Drainage Patterns (B10 _Dry-Season Water Tabl	required) 3) ) e (C2)
HYDROLOGY Vetland Hydrolo Primary Indicators ( Surface Wate High Water Ta Saturation (A3 Water Marke (	f ogy Indicators: iminimum of one is require r (A1) able (A2) 3) (81)	ed; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydronen Sulfide O	ves (B9) 3) s (B14)		Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 _Dry-Season Water Tabl Cravifish Burrows (28)	required) 3) ) e (C2)
HYDROLOGY Vetland Hydrolo Primary Indicators ( Surface Wate High Water Ta Saturation (A3 Water Marks ( Sodimant Dan	f ogy Indicators: minimum of one is require r (A1) able (A2) 3) (B1) posite (P2)	ed; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Qvidized Pbizeenbe	ves (B9) 3) s (B14) bdor (C1)		Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on A	required) 5) ) e (C2)
HYDROLOGY         Vetland Hydrold         Primary Indicators (         Surface Wate         High Water Ta         Saturation (A3         Water Marks (         Sediment Dep         Drift Deposito	f pgy Indicators: minimum of one is require r (A1) able (A2) 3) (B1) posits (B2) (R2)	d; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Poduc	ves (B9) 3) s (B14) )dor (C1) eres on Living Ro	pots (C3)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae	required) 3) ) le (C2) srial Imagery (C9)
HYDROLOGY         Vetland Hydrold         Primary Indicators (         Surface Wate         High Water Ta         Saturation (A3         Water Marks (         Sediment Dep         Drift Deposits	f pgy Indicators: minimum of one is require r (A1) able (A2) 3) (B1) posits (B2) (B3) must (B4)	d; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Presence Jan Boduct	ves (B9) 3) s (B14) Ddor (C1) eres on Living Ro ved Iron (C4) tion in Tillod Solit	oots (C3)	Secondary In	dicators (minimum of two _Surface Soil Cracks (B6 _Drainage Patterns (B10 _Dry-Season Water Tabl _Crayfish Burrows (C8) _Saturation Visible on Ae _Stunted or Stressed Pla _Coemerchic Rection (C	required) 5) ) le (C2) erial Imagery (C9) ants (D1) 12)
HYDROLOGI         Vetland Hydrold         Primary Indicators (         Surface Wate         High Water Ta         Saturation (A3         Water Marks (         Sediment Dep         Drift Deposits         Algal Mat or C	f pgy Indicators: minimum of one is require r (A1) able (A2) 3) (B1) posits (B2) (B3) prust (B4) (FE)	d; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct This Much Surface	ves (B9) 3) s (B14) Ddor (C1) eres on Living Ro ered Iron (C4) tion in Tilled Soils	oots (C3)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (C	required) 5) 9 1e (C2) erial Imagery (C9) ants (D1) 12)
HYDROLOG         Vetland Hydrold         Primary Indicators (         Surface Wate         High Water Ta         Saturation (A3         Water Marks (         Sediment Dep         Drift Deposits         Algal Mat or C         Iron Deposits         Jourdation Vio	f         ogy Indicators:         minimum of one is required         r (A1)         able (A2)         3)         (B1)         posits (B2)         (B3)         Crust (B4)         (B5)	ed; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Cause as Well Pate	ves (B9) 3) s (B14) Odor (C1) eres on Living Ro red Iron (C4) tion in Tilled Soils (C7)	oots (C3) 6 (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) 5) ) le (C2) erial Imagery (C9) ants (D1) 2)
HYDROLOG         Vetland Hydrold         Primary Indicators (         Surface Wate         High Water Ta         Saturation (A3         Water Marks (         Sediment Dep         Drift Deposits         Algal Mat or C         Iron Deposits         Inundation Vis	<b>f ogy Indicators:</b> minimum of one is required         r (A1)         able (A2)         3)         (B1)         positis (B2)         (B3)         Crust (B4)         (B5)         sible on Aerial Imagery (B7)	rd; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Function in Br	ves (B9) 3) s (B14) Ddor (C1) eres on Living Ro red Iron (C4) tion in Tilled Soils (C7) a (D9)	oots (C3) s (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (Bf Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) 5) ) le (C2) erial Imagery (C9) ants (D1) (2)
HYDROLOG         Vetland Hydrold         rrimary Indicators (         Surface Wate         High Water Ta         Saturation (A3         Water Marks (         Sediment Dep         Drift Deposits         Algal Mat or C         Iron Deposits         Inundation Vis         Sparsely Vege	pogy Indicators:     minimum of one is require r (A1)     able (A2) 3) (B1) posits (B2) (B3) Crust (B4) (B5) sible on Aerial Imagery (B2) etated Concave Surface (	7) B8)	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re	ves (B9) 3) s (B14) Ddor (C1) eres on Living Ro red Iron (C4) tion in Tilled Soils (C7) a (D9) emarks)	oots (C3) s (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (Bf Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) s) ) le (C2) erial Imagery (C9) ants (D1) 12)
HYDROLOG         Vetland Hydrold         rrimary Indicators (         Surface Wate         High Water Ta         Saturation (A3         Water Marks (         Sediment Dep         Drift Deposits         Algal Mat or C         Inundation Vis         Sparsely Vege	pogy Indicators:     minimum of one is require r (A1)     able (A2)     3) (B1)     bosits (B2)     (B3)     Crust (B4)     (B5)     sible on Aerial Imagery (B7     sible on Aerial Imag	7) B8)	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re	ves (B9) 3) s (B14) bdor (C1) eres on Living Ro red Iron (C4) tion in Tilled Soils (C7) a (D9) emarks)	oots (C3) 5 (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) e (C2) erial Imagery (C9) ants (D1) )2)
HYDROLOG         Vetland Hydrold         Yrimary Indicators (         Surface Wate         High Water Ta         Saturation (A3         Water Marks (         Sediment Dep         Drift Deposits         Algal Mat or C         Iron Deposits         Inundation Vis         Sparsely Vege         'ield Observatic         unface Water Pres	<b>ogy Indicators:</b> minimum of one is require         r (A1)         able (A2)         3)         (B1)         bosits (B2)         (B3)         Crust (B4)         (B5)         sible on Aerial Imagery (B3)         cetated Concave Surface (in the sent? Yes	7) B8)	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches):	ves (B9) 3) s (B14) bdor (C1) eres on Living Ro sed Iron (C4) tion in Tilled Soils (C7) a (D9) emarks)	oots (C3) 5 (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (IC FAC-Neutral Test (D5)	required) 3) ) e (C2) srial Imagery (C9) ants (D1) 12) Yes No _ X
HYDROLOG         Vetland Hydrold         Primary Indicators (         Surface Water         High Water Ta         Saturation (A3         Water Marks (         Sediment Dep         Drift Deposits         Algal Mat or C         Iron Deposits         Inundation Vis         Sparsely Vege         Surface Water Prese         Vater Table Preser	gy Indicators:         minimum of one is require         r (A1)         able (A2)         3)         (B1)         bosits (B2)         (B3)         Crust (B4)         (B5)         sible on Aerial Imagery (B2)         etated Concave Surface (in the sent? Yes         mint? Yes	7) B8) No No	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Ref 	ves (B9) 3) s (B14) bdor (C1) eres on Living Ro red Iron (C4) tion in Tilled Soils (C7) a (D9) emarks)	oots (C3) 5 (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (IC FAC-Neutral Test (D5)	required) ) e (C2) erial Imagery (C9) ants (D1) 12) Yes No _ X
HYDROLOG Yrimary Indicators ( Surface Water High Water Ta Saturation (A3 Water Marks ( Sediment Dep Drift Deposits Algal Mat or C Iron Deposits Inundation Vis Sparsely Vege Surface Water Preser Vater Table Preser Saturation Present?	gy Indicators:         minimum of one is required         r (A1)         able (A2)         3)         (B1)         bosits (B2)         (B3)         Crust (B4)         (B5)         sible on Aerial Imagery (B3)         cetated Concave Surface (in the sent? Yes	7) B8) No No No	hat apply)  Water-Stained Leav Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches):	ves (B9) 3) s (B14) bdor (C1) eres on Living Ro red Iron (C4) tion in Tilled Soils (C7) a (D9) emarks)	oots (C3) s (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) (C2) srial Imagery (C9) ants (D1) 12) Yes No _ X
HYDROLOG Vetland Hydrold Primary Indicators ( Surface Water High Water Ta Saturation (A3 Water Marks ( Sediment Dep Drift Deposits Algal Mat or C Iron Deposits Inundation Vis Sparsely Vege Vege Sield Observatio Surface Water Preser Saturation Present? Includes capillary fr	gy Indicators:         minimum of one is required         r (A1)         able (A2)         3)         (B1)         posits (B2)         (B3)         Crust (B4)         (B5)         sible on Aerial Imagery (B7)         etated Concave Surface (1000)         post         sent?       Yes         ahr?       Yes         ?       Yes         ?       Yes         ringe)	7) B8) No No No	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches):	ves (B9) 3) s (B14) bdor (C1) eres on Living Ro sed Iron (C4) tion in Tilled Soils (C7) a (D9) emarks)	oots (C3) 5 (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) e (C2) srial Imagery (C9) ants (D1) )2) Yes No _X
HYDROLOG         Vetland Hydrold         Primary Indicators (         Surface Water         High Water Ta         Saturation (A3         Water Marks (         Sediment Dep         Drift Deposits         Algal Mat or C         Inon Deposits         Inundation Vis         Sparsely Vege         Vater Table Preser         Sturation Present?         ancludes capillary fr         Describe Record	gy Indicators:         minimum of one is required         r (A1)         able (A2)         3)         (B1)         posits (B2)         (B3)         Crust (B4)         (B5)         sible on Aerial Imagery (B2)         etated Concave Surface (10)         post         post:         sent?       Yes         ?       Yes         ?       Yes         ?       Yes         ringe)       ed Data (stream gauge	7) B8) No No No No	hat apply)  Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches):	ves (B9) 3) s (B14) bdor (C1) eres on Living Ro red Iron (C4) tion in Tilled Soils (C7) a (D9) emarks)  emarks)	oots (C3) s (C6) ons), if avail	Vetland Hy	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) e (C2) erial Imagery (C9) ants (D1) 12) Yes No X
HYDROLOG         Vetland Hydrold         Primary Indicators (         Surface Water         High Water Ta         Saturation (A3         Water Marks (         Sediment Dep         Drift Deposits         Algal Mat or C         Inundation Vis         Sparsely Vege         Vater Table Preser         Saturation Present?         includes capillary fr         Describe Recorder	yogy Indicators:         minimum of one is required         r (A1)         able (A2)         3)         (B1)         posits (B2)         (B3)         Crust (B4)         (B5)         sible on Aerial Imagery (B7         sent?       Yes         ant?       Yes         Yes       Yes         yes       Yes         inge)       ed Data (stream gauge	7) B8) No No No No	hat apply)Water-Stained LeavAquatic Fauna (B13True Aquatic PlantsHydrogen Sulfide OOxidized RhizosphePresence of ReducRecent Iron ReductThin Muck SurfaceGauge or Well DataOther (Explain in ReDepth (inches):Depth (inches):Depth (inches):Depth (inches):Depth (inches):Depth (inches):Depth (inches):	ves (B9) 3) s (B14) bdor (C1) eres on Living Ro red Iron (C4) tion in Tilled Soils (C7) a (D9) emarks)  emarks)	oots (C3) s (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) (C2) srial Imagery (C9) ants (D1) 12) Yes No _ X
HYDROLOG Vetland Hydrold Primary Indicators ( Surface Water High Water Ta Saturation (A3 Water Marks ( Sediment Dep Drift Deposits Algal Mat or C Iron Deposits Inundation Vis Sparsely Vege Field Observation Surface Water Preservator Surface Water Preservator Surface Water Preservator Surface Water Preservator Surface Comparison Surface Comparison Surface Comparison Network State Preservator Surface Comparison Surface Co	gy Indicators:         minimum of one is require         r (A1)         able (A2)         3)         (B1)         bosits (B2)         (B3)         Crust (B4)         (B5)         sible on Aerial Imagery (B7         sent?       Yes         ahr?       Yes         Yes	7) B8) No No No No No	hat apply)Water-Stained LeavAquatic Fauna (B13True Aquatic PlantsHydrogen Sulfide OOxidized RhizosphePresence of Reduc Recent Iron ReductThin Muck SurfaceGauge or Well DataOther (Explain in ReDepth (inches):Depth (inches):Depth (inches):Depth (inches):	ves (B9) 3) s (B14) bdor (C1) eres on Living Ro red Iron (C4) tion in Tilled Soils (C7) a (D9) emarks)  emarks)  evious inspectio	oots (C3) s (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) (C2) srial Imagery (C9) ants (D1) 12) Yes No _ X
HYDROLOG         Vetland Hydrold         rimary Indicators (         Surface Wate         High Water Ta         Saturation (A3         Water Marks (         Sediment Dep         Drift Deposits         Algal Mat or C         Inundation Vis         Sparsely Vege         Vater Table Preser         Saturation Present?         Includes capillary fr         Describe Recorde         Remarks	gy Indicators:         minimum of one is require         r (A1)         able (A2)         3)         (B1)         bosits (B2)         (B3)         Crust (B4)         (B5)         sible on Aerial Imagery (B7         sent?       Yes         2       Yes         ringe)	7) B8) No No No No No	hat apply)  Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches): g well, aerial photos, president	ves (B9) 3) s (B14) veres on Living Ro ved Iron (C4) tion in Tilled Soils (C7) a (D9) emarks)  envirous inspection	oots (C3) s (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) ie (C2) srial Imagery (C9) ants (D1) 12) Yes No _ X

Project/Site:	Surge Industri	al		City/Count	y: <u>Pleasant</u>	view/Shelby		Sampling Date:	September 14, 2021
Applicant/Owner:	Runnebohm C	Construction Co.					State: IN	Sampling Point:	TP-5
Investigator(s):	GJG				Section,	Township, Range:	SW 1/4, 8		=
Landform (hillslope,	terrace, etc.):	depression		Loc	al Relief (co	oncave, convex, none):	none		
Slope (%):	0 - 1%	Lat: 39.39.21 N		Lon	q: 85.56.49	W		Datum: \	NGS84
Soil Map Unit Nam	ne:	Treaty silty clay loam, 0 to 1%	slopes (Thr	A)	<u> </u>		NWI classi	fication:	
Are climatic/hvdrol	- ogic conditions	on the site typical for this time	e of vear?	/	Yes	X No	(If no.	explain in Remarks.'	
Are Vegetation	- 3	Soil , or Hydrolog	у	significantly	disturbed?	Are "Norma	l Circumstances'	' present?	
						Ŷ	′es X	No	
Are Vegetation		Soil, or Hydrolog	У	naturally pro	oblematic?	(If needed, ex	plain any answers	in Remarks.)	
	FINDINGS -	Attach site man showin	a samplin	a noint loca	tions tra	nsocts importar	t foaturos ot	c	
	ation Present?	Attach site map showin		No			it leatures, et		
Hydric Soil Presen	t?		Yes X	No	ls ti	ne Sampled Area	Yes X	No	
Wetland Hydrology	y Present?		Yes X	No	wi	thin a wetland?	···· <u>··</u>		
Remarks:					_				
Dry swale									
VEOETATION	11								
VEGETATION	- Use scient	inc names of plants.							
Troo Stratum	(Plot size	· 30 ft )	Absolute % Cover	Dominant	Indicator	Number of Domina	orksheet:		
1.	(1 101 3126	a. 30 ft. )		opecies:	Status	That Are OBL. FAC	W. or FAC:	1 (	A)
2.					_	- , -		`	,
3.						Total Number of Do	ominant		
4.						Species Across All	Strata:	(	В)
5.				- Total Cov		Porcent of Dominar	t Spacios		
Sapling/Shrub Stra	atum: (Plot	Size: 15 ft. )			ei	That Are OBL, FAC	W. or FAC:	100 (	A/B)
1.		,				,	· · , · · · · · · · ·	(	,
2.					_	Prevalence Index	worksheet:		
3						Total % Cover of	of:	Multiply by:	
4						OBL species	x 1=		
o				= Total Cov	er	FACW species	X 2= x 3=		
Herb Stratum:	(Plot size:	5 ft. )		10101 001	01	FACU species	x 4 =		
1. Echinocloa c	rus-galli		100	Y	F <u>ACW</u>	UPL species	x 5=		
2						Column Totals:	(A)	(	B)
3.							5/4		
4						Prevalence Index =	B/A =		
6						Hydrophytic Vege	tation Indicator	 S:	
7.					_	1 - Rapid Te	est for Hydrophyt	ic Vegetation	
8.						X 2 - Dominar	nce Test is >50%	1	
9.						3 - Prevalen	ice Index is ≤3.0	1	
10			100	- Tatal Cau		4 - Morpholo data in R	emarks or on a	is' (Provide suppoi separate sheet)	ting
Woody Vine Strati	ım.	(Plot size: 30 ft )	100	= Total Cov	er	Problemati	: Hydrophytic Ve	retation <sup>1</sup> (Explain)	
1.	<u></u>	(11010120.0011.)						getation (Explain)	
2.					_	<sup>1</sup> Indicators of hvdri	c soil and wetlan	d hydrology must	
				= Total Cov	er	be present, unless of	disturbed or prob	lematic.	
						Hydrophytic Vege	tation	No	N.
						Present?		Yes X	NO
Remarks: (Include	photo numbers	s here or on a separate sheet.)	)						

US Army Corps of Engineers

SOIL	
------	--

Profile Desc	ription: (Describe to	the depth	needed to documer	nt the indic	cator or co	nfirm the ab	sence of indicators	s.)
Depth	Matrix	-		Redox Feat	ures			-
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 5	10YR 3/3	70	10YR 3/6	20	D	М	silt loam	
			7.5YR 5/6	5	С	М		
5 - 18	10YR 4/2	90	10YR 2/2	5	D	М	silt loam	
			10YR 5/6	5	С	М		
<sup>1</sup> Type: C=Cor	centration, D=Depletion, F	RM=Reduce	ed Matrix, MS=Masked S	Sand Grains			<sup>2</sup> Location: PL= Por	e Lining, M=Matrix.
Hydric Soil In	dicators:						Indicators for Prob	lematic Hydric Soils <sup>3</sup> :
Histosol (A	.1)		Sandy Gleyed Matrix	(S4)			Coast Prairie Re	dox (A16)
Histic Epip	edon (A2)		Sandy Redox (S5)				Dark Surface (S	7)
Black Histi	c (A3)		Stripped Matrix (S6)				Iron-Manganese	Masses (F12)
Hydrogen	Sulfide (A4)		Loamy Mucky Miner	al (F1)			Very Shallow Da	rk Surface (TF12)
Stratified L	ayers (A5)		Loamy Gleyed Matri	x (F2)			Other (Explain in	Remarks)
2 cm Muck	: (A10)		Depleted Matrix (F3)	)				
Depleted B	elow Dark Surface (A11)		Redox Dark Surface	(F6)				
Thick Dark	Surface (A12)		X Depleted Dark Surfa	ice (F7)			<sup>3</sup> Indicators of hyr	drophytic vegetation and wetland
Sandy Muc	cky Mineral (S1)		Redox Depressions	(F8)			hydrology must	be present, unless disturbed or
5 cm Muck	y Peat or Peat (S3)							problematic.
Restrictive La	yer (if observed):							
Туре:								
Depth (in	ches):						Hydric Soil Presen	it? Yes X No
HYDROLO	GY							
Wetland Hydr	ology Indicators:							
Primary Indicato	rs (minimum of one is require	d; check all ti	nat apply)			Secondary In	dicators (minimum of two	required)
Surface W	ater (A1)		Water-Stained Leav	es (B9)		х	Surface Soil Cracks (B6	i)
High Wate	r Table (A2)		Aquatic Fauna (B13	)			Drainage Patterns (B10	)
Saturation	(A3)		True Aquatic Plants	(B14)			Dry-Season Water Tabl	e (C2)
Water Mar	ks (B1)		Hydrogen Sulfide Od	dor (C1)			Crayfish Burrows (C8)	
Sediment [	Deposits (B2)		X Oxidized Rhizospher	res on Living	Roots (C3)	Х	Saturation Visible on Ae	rial Imagery (C9)
Drift Depos	sits (B3)		Presence of Reduce	ed Iron (C4)			Stunted or Stressed Pla	ints (D1)
Algal Mat o	or Crust (B4)		Recent Iron Reduction	on in Tilled So	oils (C6)		Geomorphic Position (D	2)
Iron Depos	its (B5)		Thin Muck Surface (	C7)			FAC-Neutral Test (D5)	
Inundation	Visible on Aerial Imagery (B7	)	Gauge or Well Data	(D9)				
Sparsely V	egetated Concave Surface (E	38)	Other (Explain in Re	marks)				
Field Observa	ations:							
Surface Water F	Present? Yes	No	X Depth (inches):			Wetland Hy	drology Present?	Yes X No
Water Table Pre	sent? Yes	No	X Depth (inches):					
Saturation Prese	ent? Yes	No	X Depth (inches):					
(includes capilla	ry fringe)							
Describe Reco	orded Data (stream gauge	, monitoring	well, aerial photos, prev	ious inspec/	tions), if ava	ilable:		
Remarks								

Project/Site:	Surge Industr	ial		City/Cou	nty: <u>Pleasa</u>	antview/Shelby		Sampling Date:	September 1	14, 2021
Applicant/Owner:	Runnebohm (	Construction Co.					State: IN	Sampling Point:	TP-6	3
Investigator(s):	GJG				Sectio	n, Township, Range:	SW 1/4, 5	Sec. 14, T14N, R5E		
Landform (hillslope,	terrace, etc.):	upland		Lo	ocal Relief	(concave, convex, none):	none			
Slope (%):	0 - 2%	Lat: 39.39.21 N		Lc	ong: 85.56.4	49 W		Datum: V	VGS84	
Soil Map Unit Nam	ne:	Treaty silty clay loam. 0 to 1%	slopes (ThrA		<u> </u>		NWI classi	fication:		
Are climatic/hvdrol	ogic condition	s on the site typical for this tim	e of year?	-,	Y	es X No	(If no	explain in Remarks )		
Are Vegetation		, Soil, or Hydrolog	ду	significant	ly disturbed	<u>אריי</u> אר <u>יי</u> ארפ "Norma" אריי	Il Circumstances' Yes X	present? No		
Are Vegetation		, Soil, or Hydrolog	ду	_naturally p	oroblematic	? (If needed, ex	xplain any answers	in Remarks.)		
SUMMARY OF	FINDINGS -	Attach site map showing	ng sampling	g point loc	cations, t	ransects, importar	nt features, et	с.		
Hydrophytic Veget	ation Present?		Yes	No	X	the Sampled Area				
Hydric Soil Presen	nt?		Yes	No	X N	within a Wetland?	Yes	No <u>X</u>		
Wetland Hydrology	y Present?		Yes	No	<u>x</u>					
VEGETATION		ific names of plants								
	000 0000		Absolute	Dominant	Indicator	Dominance Test w	vorksheet <sup>.</sup>			
Tree Stratum	(Plot size	e: 30 ft. )	% Cover	Species?	Status	Number of Dominal	nt Species			
1.					_	That Are OBL, FAC	CW, or FAC:	0 (4	A)	
2										
3.		<u> </u>				Total Number of Do	ominant			
4.						Species Across All	Strata:	1(	B)	
5.				- Total Co		Percent of Dominar	nt Species			
Sapling/Shrub Stra	atum: (Plot	Size: 15 ft. )		- 1014100		That Are OBL, FAC	CW. or FAC:	0 (/	A/B)	
1.	(	/					,	(	,	
2.					_	Prevalence Index	worksheet:			
3						Total % Cover	of:	Multiply by:		
4.						OBL species	x 1 =	<u> </u>		
5						FACW species	x 2=			
Herb Stratum:	(Plot size:	5ft )			over	FAC species	X 3=			
1. Glvcine max	(1 101 3120.	<u> </u>	100	Y	FACU	UPL species	^ x 5=			
2.			_		_	Column Totals:	(A)	(	B)	
3. 4.					_	Prevalence Index =	= B/A =			
5. 6				<u> </u>		Hydrophytic Vege	tation Indicator	s:		
7.						1 - Rapid Te	est for Hydrophyl	ic Vegetation		
8.						2 - Dominar	nce Test is >50%	5		
9.					_	3 - Prevaler	nce Index is ≤3.0	1		
10			100	= Total Co	over	4 - Morpholo data in R	ogical Adaptation Remarks or on a	ns <sup>1</sup> (Provide suppor separate sheet)	ting	
Woody Vine Stratu	<u>ım:</u>	(Plot size: <u>30 ft.</u> )				Problemation	c Hydrophytic Ve	egetation <sup>1</sup> (Explain)		
2.		<u> </u>				1 Indicators of heads		d hydrology		
				= Total Co	over	be present, unless	disturbed or prob	lematic.		
						Hydrophytic Vege Present?	tation	Yes	No	x
Remarks: (Include	photo number	s here or on a separate sheet.	.)			1				

US Army Corps of Engineers

Profile Desc	ription: (Describe to	ine dopin	needed to document					,	
Depth	Matrix			Redox Featur	res1	. 2			
(inches)	Color (moist)	%	Color (moist)		Type'	Loc	Texture	Remarks	
0 - 18	10YR 4/3	95	7.5YR 4/6	5	С	M	silt loam		
<u> </u>									
<u> </u>									
	centration D-Depletion		d Matrix MS-Masked S	and Grains			<sup>2</sup> Location: PL = Por	e Lining M-Matrix	
Hydric Soil In	dicators:	INM-Reduce		dilu Grains.			Indicators for Prot	lomatic Hydric Soils <sup>3</sup>	
Histosol (A	1)		Sandy Gleved Matrix	(\$4)			Coast Prairie Re	dox (A16)	
Histic Enin	edon (A2)		Sandy Bedox (S5)	(04)			Dark Surface (S	7)	
Black Histi	c (A3)		Stripped Matrix (S6)				Dank Gunace (G	) Masses (F12)	
Hydrogen	Sulfide (A4)		L camy Mucky Miner:	al (E1)			Verv Shallow Da	rk Surface (TE12)	
Stratified I	avers (A5)		Loamy Gleved Matrix	x (F2)			Other (Explain in	Remarks)	
2 cm Muck	(A10)		Depleted Matrix (E3)	× (1 2)				Romanoj	
Depleted B	elow Dark Surface (A11)		Redox Dark Surface	(F6)					
Thick Dark	Surface (A12)		Depleted Dark Surfa	(F7)					
Sandy Muc	ckv Mineral (S1)		Redox Depressions	(F8)			<sup>3</sup> Indicators of hyd	Irophytic vegetation and wetland	ł
5 cm Muck	v Peat or Peat (S3)			()			nyarology musi	problematic.	
Restrictive La	yer (if observed):								
Type:	,								
Depth (ind	ches):						Hydric Soil Preser	t? Yes No	х
							-		
Remarks							ł		
Remarks	GY						1		
Remarks HYDROLO Wetland Hydr	GY ology Indicators:								
Remarks HYDROLO Wetland Hydr Primary Indicato	GY ology Indicators: rs (minimum of one is require	id; check all th	at apply)			Secondary In	dicators (minimum of two	required)	
Remarks HYDROLOG Wetland Hydr Primary Indicato Surface W	GY ology Indicators: rs (minimum of one is require ater (A1)	:d; check all th	iat apply) Water-Stained Leave	es (B9)		_ Secondary In	dicators (minimum of two _Surface Soil Cracks (B6	required)	
Remarks HYDROLOG Wetland Hydr Primary Indicato Surface W High Wate	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2)	<u>ad; check all th</u>	iat apply) Water-Stained Leave Aquatic Fauna (B13)	es (B9)		Secondary In	dicators (minimum of two _Surface Soil Cracks (Bf0 _Drainage Patterns (B10	required) )	
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W. High Wate Saturation	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3)	≥d; check all th	iat apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants	es (B9) ) (B14)		Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 _Dry-Season Water Tabl	required) ) ) e (C2)	
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W. High Wate Saturation Water Mar	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3) ks (B1)	ટાં; check all th	iat apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Od	es (B9) ) (B14) lor (C1)		Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8)	required) ) ) e (C2)	
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W High Wate Saturation Water Mar Sediment [	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2)	≥d; check all th	iat apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Od Oxidized Rhizospher	es (B9) ) (B14) lor (C1) es on Living Ro	pots (C3)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae	required) ) ) e (C2) rial Imagery (C9)	
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W High Wate Saturation Water Mar Sediment [ Drift Depose	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3)		iat apply) — Water-Stained Leave Aquatic Fauna (B13) — True Aquatic Plants — Hydrogen Sulfide Od — Oxidized Rhizospher — Presence of Reduce	es (B9) ) (B14) lor (C1) res on Living Ro d Iron (C4)	pots (C3)	Secondary In	dicators (minimum of two _Surface Soil Cracks (B6 _Drainage Patterns (B10 _Dry-Season Water Tabl _Crayfish Burrows (C8) _Saturation Visible on Ae _Stunted or Stressed Pla	required) ) ) e (C2) rial Imagery (C9) nts (D1)	
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W High Wate Saturation Water Mari Sediment [ Drift Depos Algal Mat co	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) pr Crust (B4)	jd; check all th	iat apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Od Oxidized Rhizospher Presence of Reduce Recent Iron Reductio	es (B9) ) (B14) lor (C1) res on Living Ro d Iron (C4) on in Tilled Soils		Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D	required) ) ) e (C2) rial Imagery (C9) nts (D1) 2)	
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W High Wate Saturation Water Mari Sediment I Drift Depos Algal Mat c I non Depos	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5)	ed; check all th	nat apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Od Oxidized Rhizospher Presence of Reduce Recent Iron Reductic Thin Muck Surface (	es (B9) ) (B14) lor (C1) res on Living Ro d Iron (C4) on in Tilled Soils C7)	pots (C3) s (C6)	_ Secondary In	dicators (minimum of two Surface Soil Cracks (Bf Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) e (C2) rial Imagery (C9) nts (D1) 2)	
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W High Water Saturation Water Mari Sediment I Drift Depos Algal Mat c Iron Depos Inundation	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B	ed; check all th	nat apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Od Oxidized Rhizospher Presence of Reduce Recent Iron Reductio Thin Muck Surface ( Gauge or Well Data	es (B9) ) (B14) tor (C1) res on Living Ro d Iron (C4) on in Tilled Soils C7) (D9)	pots (C3) s (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (Bf Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) e (C2) rial Imagery (C9) nts (D1) 2)	
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W High Water Saturation Water Mari Sediment I Drift Depos Algal Mat c Iron Depos Inundation Sparsely V	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B egetated Concave Surface (	<del>2d; check all th</del> 7) B8)	<ul> <li>at apply)</li> <li>Water-Stained Leave</li> <li>Aquatic Fauna (B13)</li> <li>True Aquatic Plants</li> <li>Hydrogen Sulfide Od</li> <li>Oxidized Rhizospher</li> <li>Presence of Reduce</li> <li>Recent Iron Reduction</li> <li>Thin Muck Surface (In Gauge or Well Data</li> <li>Other (Explain in Reduction)</li> </ul>	es (B9) ) (B14) lor (C1) res on Living Ro d Iron (C4) on in Tilled Soils C7) (D9) marks)	oots (C3) s (C6)	_ Secondary In	dicators (minimum of two Surface Soil Cracks (Bf Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (E FAC-Neutral Test (D5)	required) ) e (C2) rial Imagery (C9) nts (D1) 2)	
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W High Water Saturation Water Mari Sediment I Drift Depos Algal Mat c Iron Depos Inundation Sparsely V Field Observa	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B iegetated Concave Surface ( ttions:	7) B8)	<ul> <li>at apply)</li> <li>Water-Stained Leave</li> <li>Aquatic Fauna (B13)</li> <li>True Aquatic Plants</li> <li>Hydrogen Sulfide Od</li> <li>Oxidized Rhizospher</li> <li>Presence of Reduce</li> <li>Recent Iron Reductio</li> <li>Thin Muck Surface (I</li> <li>Gauge or Well Data</li> <li>Other (Explain in Reduction)</li> </ul>	es (B9) ) (B14) lor (C1) res on Living Ro d Iron (C4) on in Tilled Soils (C7) (D9) marks)	oots (C3) s (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (E FAC-Neutral Test (D5)	required) ) ) e (C2) rial Imagery (C9) nts (D1) 2)	
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W High Water Saturation Water Mari Sediment I Drift Depos Algal Mat c Iron Depos Inundation Sparsely V Field Observa Surface Water F	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) tist (B5) Visible on Aerial Imagery (B egetated Concave Surface ( titons: resent? Yes	7) B8)	tat apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Od Oxidized Rhizospher Presence of Reduce Recent Iron Reductio Thin Muck Surface (f Gauge or Well Data Other (Explain in Rei X Depth (inches):	es (B9) ) (B14) lor (C1) es on Living Ro d Iron (C4) on in Tilled Soils C7) (D9) marks)	oots (C3) s (C6)	Secondary In	dicators (minimum of two _Surface Soil Cracks (B6 _Drainage Patterns (B10 _Dry-Season Water Tabl _Crayfish Burrows (C8) _Saturation Visible on Ae _Stunted or Stressed Pla _Geomorphic Position (D _FAC-Neutral Test (D5)	required) ) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No	
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W. High Water Saturation Water Mari Sediment I Drift Depos Algal Mat co Iron Depos Inundation Sparsely V Field Observa Surface Water Fe	GY rology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) tis (B5) Visible on Aerial Imagery (B egetated Concave Surface ( titions: resent? Yes	7) B8) No No	nat apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Od Oxidized Rhizospher Presence of Reduce Recent Iron Reductid Thin Muck Surface (f Gauge or Well Data Other (Explain in Rei X Depth (inches): X Depth (inches):	es (B9) ) (B14) lor (C1) res on Living Ro d Iron (C4) on in Tilled Soils C7) (D9) marks)	oots (C3) s (C6)	Secondary In	dicators (minimum of two _Surface Soil Cracks (B6 _Drainage Patterns (B10 _Dry-Season Water Tabl _Crayfish Burrows (C8) _Saturation Visible on Ae _Stunted or Stressed Pla _Geomorphic Position (D _FAC-Neutral Test (D5)	required) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No _	
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W High Water Saturation Water Mari Sediment I Drift Depos Algal Mat co Iron Depos Inundation Sparsely V Field Observa Surface Water F Water Table Pres Saturation Prese	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B iegetated Concave Surface ( attions: Present? Yes esent? Yes ent? Yes	7) B8) No No No No	nat apply)         Water-Stained Leave         Aquatic Fauna (B13)         True Aquatic Plants         Hydrogen Sulfide Od         Oxidized Rhizospher         Presence of Reduce         Recent Iron Reductid         Thin Muck Surface (r         Gauge or Well Data         Other (Explain in Ret         X       Depth (inches):         X       Depth (inches):         X       Depth (inches):	es (B9) ) (B14) lor (C1) res on Living Ro d Iron (C4) on in Tilled Soils C7) (D9) marks)	pots (C3) s (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (Bf Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No _	
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W. High Water Saturation Water Mari Sediment I Drift Depos Algal Mat co Iron Depos Inundation Sparsely V Field Observa Surface Water F Water Table Pres Saturation Prese (includes capillar)	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B regetated Concave Surface ( tions: Present? Yes eant? Yes ry fringe)	7) B8) No No No	nat apply)         Water-Stained Leave         Aquatic Fauna (B13)         True Aquatic Plants         Hydrogen Sulfide Od         Oxidized Rhizospher         Presence of Reduce         Recent Iron Reductid         Thin Muck Surface (r         Gauge or Well Data         Other (Explain in Ret         X       Depth (inches):         X       Depth (inches):	es (B9) ) (B14) lor (C1) res on Living Ro d Iron (C4) on in Tilled Soils C7) (D9) marks)	pots (C3) s (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B6 Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No _	
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W High Water Saturation Water Mari Sediment I Drift Depos Algal Mat co Iron Depos Inundation Sparsely V Field Observa Surface Water P Water Table Pres (includes capillar Describe Reco	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B regetated Concave Surface ( titons: Present? Yes esent? Yes msent? Yes py fringe) prded Data (stream gauge	7) B8) No No No No No	hat apply)	es (B9) ) (B14) lor (C1) es on Living Ro d Iron (C4) on in Tilled Soils C7) (D9) marks)	oots (C3) s (C6) ons), if avai	_ Secondary In	dicators (minimum of two _Surface Soil Cracks (B6 _Drainage Patterns (B10 _Dry-Season Water Tabl _Crayfish Burrows (C8) _Saturation Visible on Ae _Stunted or Stressed Pla _Geomorphic Position (D _FAC-Neutral Test (D5)	required) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No	<u> </u>
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W High Water Saturation Water Mar Sediment I Drift Depos Algal Mat co Iron Depos Inundation Sparsely V Field Observa Surface Water Fe Water Table Pre Saturation Prese (includes capillar Describe Recco	GY ology Indicators: rs (minimum of one is require ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5) Visible on Aerial Imagery (B egetated Concave Surface ( titons: Present? Yes sent? Yes or Yes py fringe) or ded Data (stream gauge	7) B8) No No No No No	hat apply)	es (B9) ) (B14) lor (C1) res on Living Ro d Iron (C4) on in Tilled Soils (C7) (D9) marks)	oots (C3) s (C6)	_ Secondary In	dicators (minimum of two _Surface Soil Cracks (Bf0 _Drainage Patterns (B10 _Dry-Season Water Tabl _Crayfish Burrows (C8) _Saturation Visible on Ae _Stunted or Stressed Pla _Geomorphic Position (I _FAC-Neutral Test (D5)	required) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No	<u> </u>
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W High Water Saturation Water Mari Sediment I Drift Depos Algal Mat co Iron Depos Inundation Sparsely V Field Observa Surface Water Fable Pre Saturation Presse (includes capillar Describe Recco	GY ology Indicators: rs (minimum of one is required ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) visible on Aerial Imagery (B iegetated Concave Surface ( titons: rresent? Yes sent? Yes orded Data (stream gauge	7) B8) No No No No No	hat apply)         Water-Stained Leave         Aquatic Fauna (B13)         True Aquatic Plants         Hydrogen Sulfide Oc         Oxidized Rhizospher         Presence of Reduce         Recent Iron Reductic         Thin Muck Surface (r         Gauge or Well Data         Other (Explain in Red         X       Depth (inches):         X       Depth (inches):         W       Depth (inches):         well, aerial photos, prev	es (B9) ) (B14) lor (C1) res on Living Ro d Iron (C4) on in Tilled Soils (C7) (D9) marks)	oots (C3) s (C6) ons), if avai	_ Secondary In	dicators (minimum of two _Surface Soil Cracks (Bf0 _Drainage Patterns (B10 _Dry-Season Water Tabl _Crayfish Burrows (C8) _Saturation Visible on Ae _Stunted or Stressed Pla _Geomorphic Position (D _FAC-Neutral Test (D5)	required) ) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No	<u> </u>
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W High Watel Saturation Water Mari Sediment I Drift Depos Algal Mat c Iron Depos Inundation Sparsely V Field Observa Surface Water Fable Pres Saturation Presse (includes capillar Describe Recco	GY ology Indicators: rs (minimum of one is required ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagery (B egetated Concave Surface ( ations: Present? Yes present? Yes ant? Yes or ded Data (stream gauge	2d; check all th 2d; check all th 7) B8) No No No →, monitoring	hat apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Oc Oxidized Rhizospher Presence of Reduce Recent Iron Reductio Thin Muck Surface (f Gauge or Well Data Other (Explain in Ref X Depth (inches): X Depth (inches): X Depth (inches): Well, aerial photos, prev	es (B9) ) (B14) lor (C1) res on Living Ro d Iron (C4) on in Tilled Soils C7) (D9) marks)	oots (C3) s (C6) ons), if avai	_ Secondary In	dicators (minimum of two Surface Soil Cracks (Bf Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No	<u> </u>
Remarks HYDROLOO Wetland Hydr Primary Indicato Surface W High Water Saturation Water Mari Sediment I Drift Depos Algal Mat c Iron Depos Inundation Sparsely V Field Observa Surface Water Table Pres Saturation Prese (includes capillat Describe Record Remarks	GY ology Indicators: rs (minimum of one is required ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) dits (B5) Visible on Aerial Imagery (B egetated Concave Surface ( ations: Present? Yes eant? Yes ry fringe) or ded Data (stream gauge	7) B8) No No No No No No	hat apply)         Water-Stained Leave         Aquatic Fauna (B13)         True Aquatic Plants         Hydrogen Sulfide Oc         Oxidized Rhizospher         Presence of Reduce         Recent Iron Reduction         Thin Muck Surface (I         Gauge or Well Data         Other (Explain in Reduction         X       Depth (inches):         X       Depth (inches):         X       Depth (inches):         Well, aerial photos, prevention	es (B9) ) (B14) tor (C1) res on Living Ro d Iron (C4) on in Tilled Soils C7) (D9) marks)	oots (C3) s (C6) ons), if avai	_ Secondary In	dicators (minimum of two Surface Soil Cracks (Bf Drainage Patterns (B10 Dry-Season Water Tabl Crayfish Burrows (C8) Saturation Visible on Ae Stunted or Stressed Pla Geomorphic Position (D FAC-Neutral Test (D5)	required) ) e (C2) rial Imagery (C9) nts (D1) 2) Yes No	

Project/Site:	Surge Industr	al		City/County	Pleasant	view/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, S	Sec. 14, T14N, R5E	
Landform (hillslope,	, terrace, etc.):	swale		Loca	– I Relief (co	ncave, convex, none):	concave		
Slope (%):	0 - 1%	Lat: 39.39.30 N		Long	: 85.57.02	W		Datum: \	VGS84
Soil Map Unit Nam	ne:	Crosby silt loam, New Castle	Till Plain, 0 to	2% slopes (Cr	A)		NWI classi	fication:	
Are climatic/hydrol	logic conditions	s on the site typical for this time	e of year?		Ý	X No	(If no,	explain in Remarks.	
Are Vegetation		, Soil, or Hydrolog	IY	significantly o	listurbed?	Are "Normal Y	Circumstances" 'es X	present? No	
Are Vegetation		, Soil, or Hydrolog	IY	_naturally prob	olematic?	(If needed, ex	plain any answers	in Remarks.)	
SUMMARY OF	FINDINGS -	Attach site map showin	g sampling	point locat	ions, tra	nsects, importan	t features, etc	0.	
Hydrophytic Veget	tation Present?		Yes X	No	- Is th	e Sampled Area			
Hydric Soil Preser	nt?		Yes X	No	_ wit	hin a Wetland?	Yes X	No	
Wetland Hydrolog	y Present?		Yes X	No	-				
Remarks: Dry swale									
VEGETATION	- Use scient	ific names of plants.		<u> </u>					
Troo Stratum	(Plot size		Absolute % Cover	Dominant In	dicator	Number of Dominar	orksheet:		
<u>1.</u>		e. 30 ft. )		Species !	Status	That Are OBL, FAC	W. or FAC:	3 (	A)
2.						·····		(	,
3.					_	Total Number of Do	minant		
4						Species Across All	Strata:	3 (	В)
5.									
Conling/Chrub Ctre	Diat			= Total Cove	r	Percent of Dominar	It Species	100 /	A /D \
3 Sapiring/Shirub Stra	<u>alum.</u> (Piol	Size. <u>15 il.</u> )				That Ale OBL, FAC	W, OF FAC.	(	A/D)
2.						Prevalence Index	worksheet:		
3.						Total % Cover of	of:	Multiply by:	
4.						OBL species	x 1 =		
5						FACW species	x 2=		
		<b>5 (</b> )		= Total Cove	r	FAC species	x 3 =		
1 Echipodoa c	(Piol size:	<u> </u>	20	v	FACW		X 4=		
2. Panicum dicl	hotomiflorum		15	<u> </u>	FACW	Column Totals:	^ X 3 =	(	B)
<ol> <li>Typha angus</li> </ol>	stifolia		15	Y	OBL		(-)	(	_,
4. Zea maize			5	Ν	ACU	Prevalence Index =	B/A =		
5.									
6.						Hydrophytic Veget	ation Indicators	3:	
7.						1 - Rapid Te	est for Hydrophyt	ic Vegetation	
8. 0						X 2 - Dominan	ice lest is $>50\%$	I	
9. 10						4 - Morpholo	odical Adaptation	1s <sup>1</sup> (Provide suppo	rtina
			55	= Total Cove	r	data in R	emarks or on a s	eparate sheet)	5
Woody Vine Stratu	um:	(Plot size: <u>30 ft.</u> )				Problematio	c Hydrophytic Ve	getation <sup>1</sup> (Explain)	
1									
2			_	= Total Cove	 r	<sup>1</sup> Indicators of hydrid be present, unless o	c soil and wetlan listurbed or prob	d hydrology must lematic.	
						Hydrophytic Veget Present?	tation	Yes X	No
Remarks: (Include	photo number	s here or on a separate sheet.	)						

Profile Desc	Motriv			Doday Footu	r00			-
(inchoo)	Color (moiot)	0/	Color (moist)		Tuno <sup>1</sup>	L oo <sup>2</sup>	- Toyturo	Bemerke
(incries)					Туре			Remarks
0 - 18	10TR 3/2	90	101K 5/0		D	101		
						<u></u>		
						·		
<sup>1</sup> Type: C=Con	centration, D=Depletion.	_ RM=Reduce	ed Matrix, MS=Masked	Sand Grains.		·	<sup>2</sup> Location: PL= Pore	Lining, M=Matrix,
Hydric Soil In	dicators:						Indicators for Probl	ematic Hydric Soils <sup>3</sup> :
Histosol (A	1)		Sandy Gleved Matri	ix (S4)			Coast Prairie Red	ax (A16)
Histic Epipe	edon (A2)		Sandy Redox (S5)	( )			Dark Surface (S7)	
Black Histic	c (A3)		Stripped Matrix (S6)	)			Iron-Manganese M	/asses (F12)
Hvdrogen S	Sulfide (A4)		Loamv Muckv Miner	, ral (F1)			Verv Shallow Dark	Surface (TF12)
Stratified L	avers (A5)		Loamv Gleved Matr	ix (F2)			Other (Explain in F	Remarks)
2 cm Muck	(A10)		Depleted Matrix (F3	5)				,
Depleted B	elow Dark Surface (A11)		Redox Dark Surface	, e (F6)				
Thick Dark	Surface (A12)		X Depleted Dark Surfa	ace (F7)			2	
Sandy Muc	ky Mineral (S1)		Redox Depressions	(F8)			°Indicators of hydr	ophytic vegetation and wetland
5 cm Muck	y Peat or Peat (S3)		'	( -)			nydrology must b	problematic.
Restrictive La	yer (if observed):							,
Type:	,							
Donth (in	thes).						Hydric Soil Present	? Yes X No
Deptil (inc	<i>i</i> 100 <i>j</i> .							
Remarks								
Remarks	GY							
Remarks HYDROLO( Wetland Hydr	GY ology Indicators:							
HYDROLO Wetland Hydr Primary Indicator	GY ology Indicators: rs (minimum of one is require	d; check all th	hat apply)			Secondary Ir	dicators (minimum of two r	equired)
HYDROLOO Wetland Hydr Primary Indicato	GY ology Indicators: rs (minimum of one is require ater (A1)	d; check all th	hat apply) Water-Stained Leav	/es (B9)		Secondary Ir	dicators (minimum of two r	equired)
HYDROLOO Wetland Hydr Primary Indicator Surface W: High Water	GY ology Indicators: rs (minimum of one is require ater (A1) Table (A2)	d; check all th	hat apply) Water-Stained Leav Aquatic Fauna (B13	/es (B9) 3)		- Secondary Ir X X	Idicators (minimum of two r _Surface Soil Cracks (B6) _Drainage Patterns (B10)	equired)
HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation	GY ology Indicators: rs (minimum of one is require ater (A1) 'Table (A2) (A3)	d; check all th	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants	/es (B9) 3) : (B14)		Secondary Ir X X	dicators (minimum of two r Surface Soil Cracks (B6) Drainage Patterns (B10) _Dry-Season Water Table	equired)
HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Mark	GY ology Indicators: rs (minimum of one is require ater (A1) 'Table (A2) (A3) (s (B1)	d; check all th	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O	ves (B9) 3) ; (B14) dor (C1)		Secondary Ir X X	dicators (minimum of two r Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8)	equired)
HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Marl Sediment D	GY ology Indicators: rs (minimum of one is require ater (A1) • Table (A2) (A3) ks (B1) Deposits (B2)	d; check all th	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe	ves (B9) 3) : (B14) dor (C1) res on Living Ro	oots (C3)	Secondary Ir X X X	dicators (minimum of two n Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aeri	equired) (C2) al Imagery (C9)
HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Marl Sediment I Drift Depos	GY ology Indicators: rs (minimum of one is require ater (A1) - Table (A2) (A3) ks (B1) Deposits (B2) its (B3)	d; check all th	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce	ves (B9) 3) 5 (B14) dor (C1) eres on Living Ro ed Iron (C4)	oots (C3)	Secondary Ir X X X	dicators (minimum of two n Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aeri Stunted or Stressed Plan	equired) (C2) al Imagery (C9) ts (D1)
HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Marl Sediment I Drift Depos Algal Mat c	GY ology Indicators: rs (minimum of one is require ater (A1) - Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	<u>d; check all t</u>	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduci Recent Iron Reduct	ves (B9) 3) (B14) dor (C1) eres on Living Ro ed Iron (C4) ion in Tilled Soil:	oots (C3) s (C6)	Secondary Ir X X X	dicators (minimum of two r Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aeri Stunted or Stressed Plan Geomorphic Position (D2	equired) (C2) al Imagery (C9) ts (D1) )
HYDROLOO Wetland Hydr Primary Indicator Surface W: High Water Saturation Water Marl Sediment I Drift Depos Algal Mat c Iron Depos	GY ology Indicators: rs (minimum of one is require ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	<u>d;</u> check all th	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface	ves (B9) 3) ; (B14) dor (C1) eres on Living Ro ed Iron (C4) ion in Tilled Soil: (C7)	oots (C3) s (C6)	Secondary Ir X X X	dicators (minimum of two r Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aeri Stunted or Stressed Plan Geomorphic Position (D2 FAC-Neutral Test (D5)	equired) (C2) al Imagery (C9) ts (D1) )
HYDROLOO Wetland Hydr Primary Indicator Surface Wi High Water Saturation Water Mart Sediment I Drift Depos Algal Mat o Iron Depos Inundation	GY ology Indicators: rs (minimum of one is require ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	:d; check all th	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data	/es (B9) 3) i (B14) dor (C1) res on Living Re ed Iron (C4) ion in Tilled Soil: (C7) i (D9)	oots (C3) s (C6)	Secondary Ir X X X X	dicators (minimum of two r Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aeri Stunted or Stressed Plan Geomorphic Position (D2 FAC-Neutral Test (D5)	equired) (C2) al Imagery (C9) ts (D1) )
HYDROLOO Wetland Hydr Primary Indicator Surface Wi High Water Saturation Water Marl Sediment I Drift Depos Algal Mat o Iron Depos Inundation X Sparsely V	GY ology Indicators: rs (minimum of one is require ater (A1) • Table (A2) (A3) • (A3) • (C3) • (C3)	<sup>-</sup> ) 38)	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re	ves (B9) 3) (B14) dor (C1) eres on Living Ra ed Iron (C4) ion in Tilled Soil: (C7) (C7) (D9) emarks)	oots (C3) s (C6)	Secondary Ir X X X X	dicators (minimum of two r _Surface Soil Cracks (B6) _Drainage Patterns (B10) _Dry-Season Water Table _Crayfish Burrows (C8) _Saturation Visible on Aeri _Stunted or Stressed Plan _Geomorphic Position (D2 _FAC-Neutral Test (D5)	equired) (C2) al Imagery (C9) ts (D1) )
HYDROLOO Wetland Hydr Primary Indicator Surface Wi High Water Saturation Water Marl Sediment D Drift Depos Algal Mat c Iron Depos Inundation X Sparsely V Field Observa	GY ology Indicators: rs (minimum of one is require ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	<sup>r</sup> ) 38)	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re	ves (B9) 3) 5 (B14) dor (C1) eres on Living Ro ed Iron (C4) ion in Tilled Soil: (C7) 6 (D9) emarks)	oots (C3) s (C6)	Secondary Ir X X X X	dicators (minimum of two n _Surface Soil Cracks (B6) _Drainage Patterns (B10) _Dry-Season Water Table _Crayfish Burrows (C8) _Saturation Visible on Aeri _Stunted or Stressed Plan _Geomorphic Position (D2 _FAC-Neutral Test (D5)	equired) (C2) al Imagery (C9) ts (D1) )
HYDROLOO Wetland Hydr Primary Indicator Surface Wi High Water Saturation Water Marl Sediment I Drift Depos Algal Mat o Iron Depos Inundation X Sparsely V Field Observa Surface Water P	GY ology Indicators: rs (minimum of one is require ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	') 38) No	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X_Depth (inches):	ves (B9) 3) ; (B14) dor (C1) eres on Living Re ed Iron (C4) ion in Tilled Soil: (C7) i (D9) emarks)	oots (C3) s (C6)	Secondary Ir     X     X     X     X     X     X     X     X     X     X     X     X     X     X	dicators (minimum of two n _Surface Soil Cracks (B6) _Drainage Patterns (B10) _Dry-Season Water Table _Crayfish Burrows (C8) _Saturation Visible on Aeri _Stunted or Stressed Plan _Geomorphic Position (D2 _FAC-Neutral Test (D5)	equired) (C2) al Imagery (C9) ts (D1) ) Yes <u>X</u> No
HYDROLOO Wetland Hydr Primary Indicator Surface Wa High Water Saturation Water Marl Sediment ID Drift Depos Algal Mat co Iron Depos Inundation X Sparsely W Field Observa Surface Water P Water Table Pre	GY ology Indicators: rs (minimum of one is require ater (A1) Table (A2) (A3) (A3) (A3) (A3) (A3) (A3) (A3) (A3	') 38) No No	hat apply) — Water-Stained Leav Aquatic Fauna (B13 — True Aquatic Plants — Hydrogen Sulfide O — Oxidized Rhizosphe — Presence of Reduct — Recent Iron Reduct — Thin Muck Surface — Gauge or Well Data — Other (Explain in Ref — X Depth (inches): — X Depth (inches):	ves (B9) 3) is (B14) dor (C1) wres on Living Re ed Iron (C4) ion in Tilled Soile (C7) is (D9) emarks)	oots (C3) s (C6)	Secondary Ir X X X X Wetland H	dicators (minimum of two r Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aeri Stunted or Stressed Plan Geomorphic Position (D2 FAC-Neutral Test (D5)	equired) (C2) al Imagery (C9) ts (D1) ) Yes <u>X</u> No
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Water Saturation Water Marl Sediment ID Drift Depos Algal Mat co Iron Depos Inundation X Sparsely V Field Observa Surface Water P Water Table Prese Saturation Prese	GY ology Indicators: rs (minimum of one is require ater (A1) • Table (A2) (A3) • Table (A2) • Ta	') 	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches):	ves (B9) 3) i (B14) dor (C1) vres on Living Ra ed Iron (C4) ion in Tilled Soil (C7) i (D9) emarks)	oots (C3) s (C6)	Secondary Ir X X X Wetland H	dicators (minimum of two r Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aeri Stunted or Stressed Plan Geomorphic Position (D2 FAC-Neutral Test (D5)	equired) (C2) al Imagery (C9) ts (D1) ) Yes <u>X</u> No
Beptil (Interpretent of the second	GY ology Indicators: rs (minimum of one is require ater (A1) Table (A2) (A3) (A) (A) (A) (A) (A) (A) (A) (A	') 	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches):	/es (B9) 3) (B14) dor (C1) res on Living Ra ed Iron (C4) ion in Tilled Soil: (C7) (C7) (D9) emarks)	oots (C3) s (C6)	Secondary Ir X X X X	dicators (minimum of two r Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aeri Stunted or Stressed Plan Geomorphic Position (D2 FAC-Neutral Test (D5)	equired) (C2) al Imagery (C9) ts (D1) ) Yes X No
Beptil (International Content of the second content of th	GY ology Indicators: rs (minimum of one is require ater (A1) Table (A2) (A3) (	') 38) - No - No - No - No - No	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches): Y Depth (inches):	ves (B9) 3) (B14) dor (C1) res on Living Ra ed Iron (C4) ion in Tilled Soil: (C7) (C7) (D9) emarks)  vious inspection	oots (C3) s (C6) ons), if avail	Secondary Ir X X X X Wetland Hy	dicators (minimum of two m Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aeri Stunted or Stressed Plan Geomorphic Position (D2 FAC-Neutral Test (D5)	equired) (C2) al Imagery (C9) ts (D1) ) Yes X No
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface W: High Water Saturation Water Marl Sediment D Drift Depos Algal Mat c Iron Depos Inundation X Sparsely V Field Observa Surface Water Pe Saturation Prese (includes capillar Describe Recco	GY ology Indicators: rs (minimum of one is require ater (A1) Table (A2) (A3) (A) (A) (A) (A) (A) (A) (A) (A	') 38) No No No No No	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches): Y well, aerial photos, pre	ves (B9) 3) (B14) dor (C1) res on Living Ro ed Iron (C4) ion in Tilled Soil: (C7) (C7) (D9) emarks) vious inspection	oots (C3) s (C6) ons), if avail	Secondary Ir X X X Wetland Hy Iable:	dicators (minimum of two r Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aeri Stunted or Stressed Plan Geomorphic Position (D2 FAC-Neutral Test (D5)	equired) (C2) al Imagery (C9) ts (D1) ) Yes <u>X</u> No
Remarks  HYDROLOO Wetland Hydr Primary Indicator Surface W: High Water Saturation Water Marl Sediment I Drift Depos Algal Mat c Iron Depos Inundation X Sparsely V Field Observa Surface Water P Water Table Pre Saturation Prese (includes capillar Describe Recco	GY ology Indicators: rs (minimum of one is require ater (A1) Table (A2) (A3) (A) (A) (A) (A) (A) (A) (A) (A	') 38) No No No No	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches): 9 well, aerial photos, pre	ves (B9) 3) (B14) dor (C1) res on Living Ro ed Iron (C4) ion in Tilled Soil: (C7) (C7) (C9) emarks) vious inspection	oots (C3) s (C6) ons), if avail	Secondary Ir X X X Wetland Hy lable:	dicators (minimum of two r Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aeri Stunted or Stressed Plan Geomorphic Position (D2 FAC-Neutral Test (D5)	equired) (C2) al Imagery (C9) ts (D1) ) Yes X No
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Water Saturation Water Mart Sediment I Drift Depos Algal Mat oc Iron Depos Inundation X Sparsely V Field Observa Surface Water P Water Table Pre Saturation Prese (includes capillar Describe Recoo	GY ology Indicators: rs (minimum of one is require ater (A1) Table (A2) (A3) rs (B1) Deposits (B2) its (B3) r Crust (B4) its (B5) Visible on Aerial Imagery (B3 egetated Concave Surface (I tions: resent? Yes sent? Yes sent? Yes y fringe) rded Data (stream gauge	') 38) No No No No	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches): y well, aerial photos, pre	ves (B9) 3) (B14) dor (C1) eres on Living Ro ed Iron (C4) ion in Tilled Soil: (C7) (C7) (D9) emarks) vious inspection	oots (C3) s (C6) ons), if avail	Secondary Ir X X X X Wetland Hy lable:	dicators (minimum of two r Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aeri Stunted or Stressed Plan Geomorphic Position (D2 FAC-Neutral Test (D5)	equired) (C2) al Imagery (C9) ts (D1) ) Yes X No
Remarks HYDROLOO Wetland Hydr Primary Indicator Surface Wit Saturation Water Marl Sediment I Drift Depos Algal Mat oc Iron Depos Inundation X Sparsely V Field Observa Surface Water P Water Table Pre Saturation Prese (includes capillar Describe Record Remarks	GY ology Indicators: rs (minimum of one is require ater (A1) • Table (A2) (A3) • Table (A2) • Table (A	') 38) No No No , monitoring	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches): X Depth (inches): X Depth (inches): X Depth (inches):	ves (B9) 3) (B14) dor (C1) eres on Living Ro ed Iron (C4) ion in Tilled Soil: (C7) (C7) (D9) emarks) vious inspection	oots (C3) s (C6) ons), if avail	Secondary Ir X X X X Wetland Hy lable:	dicators (minimum of two r Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table Crayfish Burrows (C8) Saturation Visible on Aeri Stunted or Stressed Plan Geomorphic Position (D2 FAC-Neutral Test (D5)	equired) (C2) al Imagery (C9) ts (D1) ) Yes X No

Project/Site:	Surge Industr	ial		City/Cour	nty: <u>Pleas</u>	antview/Shelby		Sampling Date:	September 14, 2021
Applicant/Owner:	Runnebohm (	Construction Co.					State: IN	Sampling Point:	TP-8
Investigator(s):	GJG				Secti	on, Township, Range:	SW 1/4,	Sec. 14, T14N, R5E	:
Landform (hillslope,	, terrace, etc.):	upland		Lo	cal Relie	f (concave, convex, none):	none		
Slope (%):	0 - 2%	Lat: 39.39.21 N		Lo	ng: 85.56	6.49 W		Datum: V	VGS84
Soil Map Unit Nam	ne:	Crosby silt loam. New Castle	Till Plain, 0 to	2% slopes (	(CrA)		NWI class	ification:	
Are climatic/hvdrol	- loaic condition	s on the site typical for this tin	ne of vear?		- /	Yes X No	(If no	explain in Remarks )	
Are Vegetation		, Soil, or Hydrolo	ду	_significantl	y disturbe	ed? Are "Norma	l Circumstances Yes X	" present? No	
Are Vegetation		, Soil, or Hydrolo	ду	_naturally p	roblemati	c? (If needed, e>	xplain any answers	s in Remarks.)	
SUMMARY OF	FINDINGS -	Attach site map showing	ng samplin	g point loc	ations,	transects, importan	nt features, et	c.	
Hydrophytic Veget	tation Present?		Yes	No	x	is the Sampled Area			
Hydric Soil Presen	nt?		Yes	No	<u>x</u>	within a Wetland?	Yes	No <u>X</u>	
Wetland Hydrolog	y Present?		Yes	No	<u>X</u>				
Dry swale	- Use scient	ific names of plants.							
			Absolute	Dominant	Indicato	Dominance Test w	vorksheet:		
Tree Stratum	(Plot size	e: 30 ft. )	% Cover	Species?	Status	Number of Dominar	nt Species		
1.						That Are OBL, FAC	W, or FAC:	0 (4	A)
2									
3.		<u> </u>				Total Number of Do	ominant		
4.						Species Across All	Strata:	(	3)
5.				- Total Co		Percent of Dominar	nt Species		
Sapling/Shrub Stra	<u>atum:</u> (Plot	Size: <u>15 ft.</u> )		- Total Co	vei	That Are OBL, FAC	CW, or FAC:	0 (	A/B)
1.						Brovelence Index :	worksheat		
2. 3						Total % Cover	of.	Multiply by:	
4.						OBL species	x 1=	Malaply by:	
5.						FACW species	x 2=		
				= Total Co	ver	FAC species	x 3 =		
<u>Herb Stratum:</u>	(Plot size:	<u> </u>				FACU species	x 4 =		
1. Zea maize			100	Y	FACU	UPL species	x 5 =		
2.						Column Totals:	(A)	(	3)
3 4					_	Prevalence Index =	B/A =		
5. 6						Hydrophytic Vege	tation Indicator	·c·	
7.						1 - Rapid Te	est for Hvdrophv	tic Vegetation	
8.						2 - Dominar	nce Test is >50%	6	
9.						3 - Prevaler	nce Index is ≤3.0	1	
10						4 - Morpholo	ogical Adaptation	ns <sup>1</sup> (Provide suppor	ting
Woody Vine Stratu	<u>um:</u>	(Plot size: <u>30 ft.</u> )	100	= Total Co	ver	Problematic	c Hydrophytic Ve	egetation <sup>1</sup> (Explain)	
1.									
2				= Total Co	ver	<sup>1</sup> Indicators of hydrid be present, unless of	c soil and wetlar <u>disturbed or p</u> rot	nd hydrology must	
						Hydrophytic Veger Present?	tation	Yes	No X
Remarks: (Include	photo number	s here or on a separate sheet	.)			I			

US Army Corps of Engineers

#### SOIL

(in alt a a)	iviauix			Redox Featu	ures			
(Inches)	Color (moist)	%	Color (moist)	%	Tvpe <sup>1</sup>	Loc <sup>2</sup>	_ Texture	Remarks
0 - 18	10YR 2/2	100			.)po		silt loam	Romano
0 - 10	1011(2/2	100					Sittloam	
· .								
<u> </u>								
Turney 0-0-0	antration D-Daulation		A Matrix MC-Maakad					na Linina M-Matrix
Type: C=Conce	cators:		eu maurix, mo-maskeu	Sanu Grains.			Indicators for Bro	hemotic Hydric Soile <sup>3</sup> :
	cutors.		Condu Claured Mater	(64)				
Histosol (AT)	(AQ)		Sandy Gleyed Math	x (54)			Coast Prairie R	
Histic Epiped	ion (A2)		Sandy Redox (S5)				Dark Surface (S	(7)
Black Histic (	A3)		Stripped Matrix (S6	)			Iron-Manganese	e Masses (F12)
Hydrogen Su	Ilfide (A4)		Loamy Mucky Mine	ral (F1)			Very Shallow D	ark Surface (TF12)
Stratified Lay	vers (A5)		Loamy Gleyed Matr	ix (F2)			Other (Explain i	n Remarks)
2 cm Muck (/	A10)		Depleted Matrix (F3	)				
Depleted Bel	ow Dark Surface (A11)		Redox Dark Surface	e (F6)				
Thick Dark S	urface (A12)		Depleted Dark Surfa	ace (F7)			<sup>3</sup> Indicators of hv	drophytic vegetation and wetland
Sandy Mucky	y Mineral (S1)		Redox Depressions	(F8)			hydrology mus	t be present, unless disturbed or
5 cm Mucky	Peat or Peat (S3)						I	problematic.
Restrictive Lay	er (if observed):							
Туре:								
Depth (inch	ies):						Hydric Soil Prese	nt? Yes No X
Remarks								
Remarks	Y							
Remarks HYDROLOG Netland Hydrol Primary Indicators	Y logy Indicators: (minimum of one is require	d: check all t	nat apply)			Secondary In	dicators (minimum of two	p required)
Remarks HYDROLOG Wetland Hydrol Primary Indicators Surface Wat	Y logy Indicators: (minimum of one is require er (A1)	ed; check all t	hat apply) Water-Stained Leav	res (B9)		_ <u>Secondary In</u>	dicators (minimum of two Surface Soil Cracks (B	p required)
Remarks HYDROLOG Vetland Hydrol Primary IndicatorsSurface Wate High Water T	Y logy Indicators: (minimum of one is require er (A1) Table (A2)	ed; check all ti	hat apply) Water-Stained Leav Aquatic Fauna (B13	ves (B9)		Secondary In	dicators (minimum of two _Surface Soil Cracks (B Drainage Patterns (B1)	p required) 6)
Remarks HYDROLOG Vetland Hydrol Primary Indicators Surface Wate High Water T Saturation (A	Y logy Indicators: (minimum of one is require er (A1) fable (A2)	d; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants	ves (B9) 3) (B14)		Secondary In	dicators (minimum of two _Surface Soil Cracks (B _Drainage Patterns (B1) Dry-Season Water Tat	) b required) 6) 0)
Remarks HYDROLOG Wetland Hydrol Primary Indicators Surface Wate High Water T Saturation (A Water Marks	Y logy Indicators: (minimum of one is require er (A1) fable (A2) (3) (B1)	d; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydronen Sulfide O	ves (B9) ;) (B14) dor (C1)		Secondary In	dicators (minimum of two _Surface Soil Cracks (B _Drainage Patterns (B1 _Dry-Season Water Tab _Cravifieh Burrows (CR)	0 required) 6) )) le (C2)
Remarks HYDROLOG Vetland Hydrol Primary Indicators Surface Wate High Water T Saturation (A Water Marks Serdiment De	Y logy Indicators: (minimum of one is require er (A1) Table (A2) .3) .(B1) unseite (B2)	ed; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Ovidized Pbizoenba	res (B9) i) (B14) dor (C1) res on Living R	Prote (C3)	Secondary In	dicators (minimum of two _Surface Soil Cracks (B _Drainage Patterns (B1 _Dry-Season Water Tab _Crayfish Burrows (C8) _Saturation Visible on A	o required) 6) 3) He (C2)
Remarks HYDROLOG Primary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Depositi	Y logy Indicators: (minimum of one is require er (A1) Table (A2) (3) (B1) (B1) posits (B2) (B3)	ed; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Peduc	res (B9) 3) (B14) dor (C1) res on Living R ad Iron (C1)	Roots (C3)	Secondary In	dicators (minimum of two Surface Soil Cracks (B Drainage Patterns (B1) Dry-Season Water Tat Crayfish Burrows (C8) Saturation Visible on A Sturted or Strassed D	o required) 6) 0) le (C2) erial Imagery (C9)
Remarks HYDROLOG Primary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mater or	Y logy Indicators: (minimum of one is require er (A1) Table (A2) (B1) (B1) (B1) (B1) (B2) s (B3) Crust (B4)	d; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc	res (B9) 3) (B14) dor (C1) res on Living R ed Iron (C4) ion in Tilled Soi	Roots (C3)	Secondary In	dicators (minimum of two Surface Soil Cracks (B Drainage Patterns (B1) Dry-Season Water Tat Crayfish Burrows (C8) Saturation Visible on A Stunted or Stressed PI Geomorphic Position (U	o required) 6) 0) le (C2) erial Imagery (C9) ants (D1) 20)
Remarks HYDROLOG Primary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or Iron Deposits	Y logy Indicators: (minimum of one is require er (A1) Table (A2) (B1) (B1) (B1) posits (B2) s (B3) Crust (B4) crust (B4)	ed; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct	res (B9) 3) (B14) dor (C1) res on Living R ed Iron (C4) ion in Tilled Soi (C7)	Roots (C3)	Secondary In	dicators (minimum of two Surface Soil Cracks (B Drainage Patterns (B1) Dry-Season Water Tat Crayfish Burrows (C8) Saturation Visible on A Stunted or Stressed PI Geomorphic Position (I EAC-Neutral Test (D5)	o required) 6) 0) le (C2) erial Imagery (C9) ants (D1) 02)
Remarks HYDROLOG Wetland Hydrol Primary Indicators Surface Wate High Water Ta Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or Iron Deposits Inundation (A	Y logy Indicators: (minimum of one is require er (A1) Table (A2) (B1) (B1) (B1) (B1) s (B3) Crust (B4) s (B5) isible on Arrial Imagent (Pit	od; check all ti	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface	res (B9) (B14) dor (C1) res on Living R ed Iron (C4) ion in Tilled Soi (C7)	Roots (C3) ils (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B Drainage Patterns (B1) Dry-Season Water Tat Crayfish Burrows (C8) Saturation Visible on A Stunted or Stressed PI Geomorphic Position (I FAC-Neutral Test (D5)	o required) 6) 0) le (C2) erial Imagery (C9) ants (D1) 02)
Remarks HYDROLOG Primary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or Iron Deposits Inundation Vi Search Via	Y logy Indicators: (minimum of one is require er (A1) Fable (A2) (B1) (B1) (B1) (B2) s (B3) Crust (B4) s (B5) isible on Aerial Imagery (B)	rd; check all ti	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data	res (B9) (B14) dor (C1) res on Living R ed Iron (C4) ion in Tilled Soi (C7) (D9)	Roots (C3) ils (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B Drainage Patterns (B1) Dry-Season Water Tat Crayfish Burrows (C8) Saturation Visible on A Stunted or Stressed PI Geomorphic Position (I FAC-Neutral Test (D5)	o required) 6) 0) le (C2) erial Imagery (C9) ants (D1) 02)
Armarks         HYDROLOG         Vetland Hydrol         Primary Indicators         Surface Wate         High Water T         Saturation (A         Water Marks         Sediment De         Drift Deposits         Algal Mat or u         Iron Deposits         Inundation V         Sparsely Veg	Y logy Indicators: (minimum of one is require er (A1) Table (A2) (3) (B1) (B1) (B3) (B3) Crust (B2) s (B3) Crust (B4) s (B5) isible on Aerial Imagery (B7) getated Concave Surface (	rd; check all ti 7) B8)	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Reduct)	res (B9) (B14) dor (C1) ares on Living R ed Iron (C4) ion in Tilled Soi (C7) (D9) emarks)	Roots (C3) ils (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tat Crayfish Burrows (C8) Saturation Visible on A Stunted or Stressed Pl Geomorphic Position (I FAC-Neutral Test (D5)	o required) 6) 0) le (C2) erial Imagery (C9) ants (D1) 02)
Remarks HYDROLOG Vetland Hydrol Primary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or Iron Deposits Inundation V Sparsely Veg Field Observati	Y logy Indicators: (minimum of one is require er (A1) Table (A2) (B1) (B1) (B1) (B1) (B3) Crust (B2) s (B3) Crust (B4) s (B5) isible on Aerial Imagery (B' isible on Aerial Imagery (B' ons:	7) 	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re	res (B9) (B14) dor (C1) res on Living R ed Iron (C4) ion in Tilled Soi (C7) i (D9) emarks)	Roots (C3) ils (C6)	Secondary In	dicators (minimum of two Surface Soil Cracks (B Drainage Patterns (B10 Dry-Season Water Tat Crayfish Burrows (C8) Saturation Visible on A Stunted or Stressed Pl Geomorphic Position (I FAC-Neutral Test (D5)	o required) 6) 0) le (C2) erial Imagery (C9) ants (D1) 02)
Remarks HYDROLOG Vetland Hydrol Primary Indicators Surface Water High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or Iron Deposits Inundation V Sparsely Veg Field Observati Surface Water Pre	Y logy Indicators: (minimum of one is required er (A1) Table (A2) (B1) (B1) (B1) (B1) (B3) Crust (B4) s (B3) Crust (B4) s (B5) isible on Aerial Imagery (B' isible on Aerial Imagery (B' ons: esent? Yes	7) B8)	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Ref X Depth (inches):	res (B9) (B14) dor (C1) res on Living R ed Iron (C4) ion in Tilled Soi (C7) i (D9) emarks)	Roots (C3) ils (C6)	Secondary In	dicators (minimum of two _Surface Soil Cracks (B _Drainage Patterns (B10 _Dry-Season Water Tat _Crayfish Burrows (C8) _Saturation Visible on A _Stunted or Stressed Pl _Geomorphic Position (I _FAC-Neutral Test (D5)	o required) 6) 0) le (C2) erial Imagery (C9) ants (D1) 02) Yes No _ X
Remarks HYDROLOG Wetland Hydrol Primary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or Iron Deposits Inundation V Sparsely Veg Field Observati Surface Water Prese Nater Table Prese	Y logy Indicators: (minimum of one is required er (A1) Table (A2) (B1) uposits (B2) s (B3) Crust (B4) s (B5) isible on Aerial Imagery (B' isible on Aerial Imagery (B' isible on Aerial Imagery (B' updated Concave Surface ( ons: updated Concave Surfac	7) B8) No	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Ref X Depth (inches): X Depth (inches):	res (B9) (B14) dor (C1) res on Living R ed Iron (C4) ion in Tilled Soi (C7) (D9) emarks)	Roots (C3) ils (C6)	Secondary In	dicators (minimum of two _Surface Soil Cracks (B _Drainage Patterns (B10 _Dry-Season Water Tat _Crayfish Burrows (C8) _Saturation Visible on A _Stunted or Stressed Pl _Geomorphic Position (I _FAC-Neutral Test (D5)	o required) 6) 0) le (C2) erial Imagery (C9) ants (D1) 02) Yes No _ X
Remarks HYDROLOG Vetland Hydrol Primary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or Iron Deposits Inundation Vi Sparsely Veg Field Observati Surface Water Pres Nater Table Presen	Y logy Indicators: (minimum of one is required er (A1) Table (A2) (B1) uposits (B2) s (B3) Crust (B4) s (B5) isible on Aerial Imagery (B' isible on Aerial Imagery (B' isible on Aerial Imagery (B' updated Concave Surface ( ons: updated Concave Surfac	7) B8) No No No No	hat apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Ref X Depth (inches): X Depth (inches):	res (B9) (B14) dor (C1) res on Living R ed Iron (C4) ion in Tilled Soi (C7) (D9) emarks)	Roots (C3) ils (C6)	Secondary In	dicators (minimum of two _Surface Soil Cracks (B _Drainage Patterns (B10 _Dry-Season Water Tat _Crayfish Burrows (C8) _Saturation Visible on A _Stunted or Stressed Pl _Geomorphic Position (I _FAC-Neutral Test (D5)	o required) 6) 0) le (C2) erial Imagery (C9) ants (D1) 02) Yes No _ X
Remarks HYDROLOG Wetland Hydrol Primary Indicators Surface Water High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or Iron Deposits Inundation V Sparsely Veg Field Observati Surface Water Prese Saturation Presen Vincludes capillary	Y logy Indicators: (minimum of one is require er (A1) Table (A2) (B1) (B1) (B1) (B1) (B3) Crust (B4) (B5) (B5) (Crust (B4) (B5) (Crust (B4) (B5) (Crust (B4) (Crus	7) B8) No No No No	hat apply)  Water-Stained Leave Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches):	res (B9) (B14) dor (C1) res on Living R ed Iron (C4) ion in Tilled Soi (C7) (D9) mmarks)	Roots (C3) ils (C6)	Secondary In	dicators (minimum of two _Surface Soil Cracks (B _Drainage Patterns (B10 _Dry-Season Water Tat _Crayfish Burrows (C8) _Saturation Visible on A _Stunted or Stressed Pl _Geomorphic Position (I _FAC-Neutral Test (D5) /drology Present?	o required) 6) 0) le (C2) erial Imagery (C9) ants (D1) 02) Yes No _ X
Remarks HYDROLOG Wetland Hydrol Primary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or Iron Deposits Inundation Vi Sparsely Veg Field Observati Surface Water Prese Saturation Present Cincludes capillary Describe Record	Y logy Indicators: (minimum of one is require er (A1) Table (A2) (B1) (B1) (B1) (B1) (B3) Crust (B4) (B5) (B5) (B5) (B5) (B5) (B5) (B5) (B5	7) B8) No No No No No No	hat apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Ref X Depth (inches): X Depth (inches): X Depth (inches): X Depth (inches): X Depth (inches):	res (B9) (B14) dor (C1) res on Living R ed Iron (C4) ion in Tilled Soi (C7) (D9) emarks)	Roots (C3) ils (C6)	Secondary In	dicators (minimum of two _Surface Soil Cracks (B _Drainage Patterns (B10 _Dry-Season Water Tat _Crayfish Burrows (C8) _Saturation Visible on A _Stunted or Stressed Pl _Geomorphic Position (I _FAC-Neutral Test (D5)	o required) 6) 0) le (C2) erial Imagery (C9) ants (D1) 02) Yes No _ X
Remarks HYDROLOG Wetland Hydrol Primary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or Iron Deposits Inundation Vi Sparsely Veg Field Observati Surface Water Prese Saturation Present Vater Table Prese Saturation Present Cincludes capillary Describe Record	Y logy Indicators: (minimum of one is required er (A1) Table (A2) (B1) uposits (B2) s (B3) Crust (B4) s (B5) isible on Aerial Imagery (B' isible on Aerial Imagery (B' isible on Aerial Imagery (B' isible on Aerial Imagery (B' crust (B4) s (B5) isible on Aerial Imagery (B' yes ent? Yes t? Yes fringe) Hed Data (stream gauge	7) B8) No No No No 3, monitoring	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches): X Depth (inches): X Depth (inches):	res (B9) (B14) dor (C1) res on Living R ed Iron (C4) ion in Tilled Soi (C7) (D9) emarks) vious inspect	Roots (C3) ils (C6) ions), if ava	Secondary In	dicators (minimum of two _Surface Soil Cracks (B _Drainage Patterns (B10 _Dry-Season Water Tat _Crayfish Burrows (C8) _Saturation Visible on A _Stunted or Stressed Pl _Geomorphic Position (I _FAC-Neutral Test (D5)	o required) 6) 0) le (C2) erial Imagery (C9) ants (D1) 02) Yes No _ X
Remarks HYDROLOG Wetland Hydrol Primary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or Iron Deposits Inundation Vi Sparsely Veg Field Observati Surface Water Prese Vater Table Prese Saturation Present Cincludes capillary Describe Record	Y logy Indicators: (minimum of one is required er (A1) Table (A2) (B1) uposits (B2) s (B3) Crust (B4) s (B5) isible on Aerial Imagery (B' isible on Aerial Imagery (B' isible on Aerial Imagery (B' isible on Aerial Imagery (B' updated Concave Surface ( ons: esent? Yes ent? Yes (Yes fringe) Hed Data (stream gauge	7) B8) No No No No 3, monitoring	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches): Y Depth (inches): X Depth (inches):	res (B9) (B14) dor (C1) res on Living R ed Iron (C4) ion in Tilled Soi (C7) (D9) emarks)  vious inspect	Roots (C3) ils (C6) ions), if ava	_ Secondary In	dicators (minimum of two _Surface Soil Cracks (B _Drainage Patterns (B10 _Dry-Season Water Tat _Crayfish Burrows (C8) _Saturation Visible on A _Stunted or Stressed Pl _Geomorphic Position (I _FAC-Neutral Test (D5)	o required) 6) D) le (C2) erial Imagery (C9) ants (D1) D2) Yes No _ X
Remarks HYDROLOG Vetland Hydrol Primary Indicators Surface Wate High Water T Saturation (A Water Marks Sediment De Drift Deposits Algal Mat or Iron Deposits Inundation Vi Sparsely Veg Field Observati Surface Water Prese Vater Table Prese Saturation Present includes capillary Describe Record Remarks	Y logy Indicators: (minimum of one is required er (A1) Table (A2) (B1) uposits (B2) s (B3) Crust (B4) s (B5) isible on Aerial Imagery (B' getated Concave Surface ( ons: esent? Yes ent? Yes t? Yes fringe) ded Data (stream gauge	7) B8) No No 3, monitoring	hat apply)  Water-Stained Leave Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduc Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re X Depth (inches): X Depth (inches): X Depth (inches): Y Depth (inches):	res (B9) (B14) dor (C1) res on Living R ed Iron (C4) ion in Tilled Soi (C7) (D9) emarks)  vious inspect	Roots (C3) ils (C6) ions), if ava	_ Secondary In	dicators (minimum of two _Surface Soil Cracks (B _Drainage Patterns (B10 _Dry-Season Water Tat _Crayfish Burrows (C8) _Saturation Visible on A _Stunted or Stressed Pl _Geomorphic Position (I _FAC-Neutral Test (D5)	<u>o required)</u> 6) 0) le (C2) erial Imagery (C9) ants (D1) 02) Yes No X

Project/Site:	Surge Industr	ial		City/County: Pleasantview/Shelby				Sampling Date: July 14, 2021		
Applicant/Owner:	er: Runnebohm Construction Co.						State: IN	Sampling Point:	TP-9	
Investigator(s):	GJG				Section	n, Township, Range:	- Sec. 23, T14N, R5E			
Landform (hillslope.	terrace, etc.): depression				cal Relief	(concave, convex, none);				
Slope (%):	0 - 2% Lat: 39 38 59 N				ng: 85 56	17 W		Datum: WGS84		
Soil Man Linit Nam	<u>0 2/0</u>	Brookston silty clay loam 0 to	2% slopes (B				NW/L class	ification:		
Are elimetic/budgel	logic condition	a on the site tunical for this time	2 / 3 3 0 p c 3 ( D	')	V		///	avelain in Demarka )		
Are Vegetation		, Soil, or Hydrolog	ly	significant	، ly disturbec	I? Are "Normal Y	I Circumstances	" present? No		
Are Vegetation		, Soil, or Hydrolog	IY	_naturally p	roblematic	? (If needed, ex	kplain any answer	s in Remarks.)		
SUMMARY OF	FINDINGS ·	<ul> <li>Attach site map showin</li> </ul>	g sampling	g point loc	ations, t	ransects, importan	it features, e	tc.		
Hydrophytic Veget	tation Present?	)	Yes	No	X Is	the Sampled Area				
Hydric Soil Presen	nt?		Yes	No	X N	within a Wetland?	Yes	<u>No X</u>		
Wetland Hydrolog	y Present?		Yes X	No						
VEGETATION	- Use scien	tific names of plants								
TEGETATION	000 001011		Absolute	Dominant	Indicator	Dominance Test w	orksheet.			
Tree Stratum	(Plot siz	e: 30 ft.)	% Cover	Species?	Status	Number of Dominar	nt Species			
1.	(* * * * * * *	/	· <u>· · · · ·</u> ··			That Are OBL, FAC	W, or FAC:	1 (A)		
2.					_					
3						Total Number of Do	ominant			
4.						Species Across All	Strata:	(B)		
5.				C		Demonst of Deminent	t Caracian			
Sapling/Shrub Stra	<u>atum:</u> (Plot	Size: <u>15 ft.</u> )		- Total Co	iver	That Are OBL, FAC	W, or FAC:	(A/	3)	
2.						Prevalence Index	worksheet:			
3.			_		_	Total % Cover of	of:	Multiply by:		
4.						OBL species	x 1 =			
5.						FACW species	x 2 =			
	(D) / ·	- 4 )		= Total Co	over	FAC species	x 3=			
Herb Stratum:	(Plot size:	<u>5π.</u> )	40	V	EACU		X 4=			
2 Echinocloa c	rus-aalli		40	Y	FACW	Column Totals	^ X 3 =	(B)		
3. Xanthium str	umarium		10	N	FACW	-	(	(2)		
4. Apocynum c	cannabinaceun	n	5	N	ACW	Prevalence Index =	B/A =			
6.					_	Hydrophytic Veget	tation Indicato	rs:		
7.						1 - Rapid Te	est for Hydrophy	tic Vegetation		
8						2 - Dominan	nce Test is >50%	6		
9				<u> </u>	—	3 - Prevalen	ice Index is ≤3.(	)' na <sup>1</sup> (Provido cupportir		
10.			95	= Total Co		data in R	emarks or on a	separate sheet)	ıg	
Woody Vine Stratu	um:	(Plot size: <u>30 ft.</u> )		- 1010100		Problematio	c Hydrophytic V	egetation <sup>1</sup> (Explain)		
2.						<sup>1</sup> Indicators of budgi	c coil and wotto	nd hydrology must		
				= Total Co	over	be present, unless of	disturbed or pro	blematic.		
			_			Hydrophytic Veget Present?	tation	Yes	No X	
Remarks: (Include	photo number	s here or on a separate sheet.)	)			1				

US Army Corps of Engineers

#### SOIL

Code:         Code:         Texture         Remarks           0 - 18         10YR 3/2         100	Depth	 Matri	x		Redox Featu	ures			
0.16       10YFR 32       100	(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
million       million       million       million         million       million       million       million       million         million       million       million       million       million       million         million	0 - 18	10YR 3/2	100	- · · ·				silt loam	
minimized control in the second of the se									
minimum									
pr:       C-Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       ************************************									
pe: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grane. <sup>1</sup> Location: PL = Pore Lining, M=Matrix.       the Soll Indicators:     Indicators in transform Construction:     Indicators in transform Construction:       the Sol Indicators:     Indicators in transform Construction:     Indicators in transform Construction:       the Sol Indicators:     Indicators in transform Construction:     Indicators in transform Construction:       the Sol Indicators:     Indicators in transform Construction:     Indicators in transform Construction:       the Sol Indicators:     Indicators in transform Construction:     Indicators in transform Construction:       the Sol Indicators:     Indicators in transform Construction:     Indicators in transform Construction:       the Sol Indicators:     Indicators in transform Construction:     Indicators in transform Construction:       the Sol Indicators:     Indicators in transform Construction:     Indicators in transform Construction:       the Sol Indicators:     Indicators in transform Construction:     Indicators in transform       Sond Mack Miners (61)     Indicators (71)     Indicators in transform Construction:     Indicators in transform Construction:       Transform     Indicators (71)     Indicators (71)     Indicators in transform     Indicators in transform       Transform     Indicators (71)     Indicators (71)     Indicators in transform     Indicators in transform       the Mark (1) </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
pr: C-Connentration. D-Depletion, RM-Reduced Matrix, MS-Masked Sand Graina.           *Location: PL: Pore Lining, M-Matrix         Helios Di Indicators:         *Hatos (A)         *Latos (A)							<u> </u>		
proc. Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       *Location:       *Location:       Indicators for Problematic Hydric Solis?:         Histore (X2)       Sandy Kesok (S5)       Dark Sattine (S7)       Dark Sattine (S7)         Hate: Expender, (X2)       Sandy Kesok (S5)       Dark Sattine (S7)       Dark Sattine (S7)         Histore (X4)       Loamy Muoky Mineral (F1)       Very Statute, (S7)       Dark Sattine (S7)         Patriete Bows Dark Surface (A11)       Redox Dark Surface (F6)       Thisto Dark Surface (T2)       Depleted Dark Surface (F7)         Table Dark Surface (A12)       Depleted Dark Surface (F7)       Redox Dark Surface (F7)       *Indicators of Prydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sardy Mucky Mineral (S1)       Redox Dark Surface (F8)       *Indicators (minmum of two required)         Sardy Mucky Mineral (S1)       Redox Dark Surface (F8)       *Indicators (minmum of two required)         Sardy Mucky Mineral (S1)       Redox Dark Surface (F8)       *Indicators (minmum of two required)         Sardy Mucky Mineral (S1)       Redox Dark Surface (F8)       Surface Sarl Crack, 680         Sardy Mucky Mineral (S1)       Aquate Farma (S13)       Dark Surface Sarl Crack, 680         Sardy Mucky Mineral (S1)       Aquate Farma (S13)       Dark Surface Sarl Crack, 680         "generation (R3)       <									
drfc Soll Indicators:     Indicators indicators:     Indicators of Problematic Hydric Solls':       Histic Epipedon (A2)     Sandy Redox (S5)	pe: C=Conc	centration, D=Deplet	ion, RM=Reduc	ed Matrix, MS=Masked	Sand Grains.			<sup>2</sup> Location: PL= P	ore Lining, M=Matrix.
Helse Bigleon (A)	dric Soil Ind	licators:						Indicators for Pr	oblematic Hydric Soils <sup>3</sup> :
Lists: Epipedon (A2)	Histosol (A1	)		Sandy Gleyed Matri	x (S4)			Coast Prairie F	Redox (A16)
lack-thilds (A3)	Histic Epipe	don (A2)		Sandy Redox (S5)				Dark Surface (	S7)
Hydrogen Suffixe (A4)        Loamy Gloyek Matrix (F2)        Other (Explain in Remarks)           2 cm Muck (A10)        Depleted Matrix (F2)        Other (Explain in Remarks)           2 cm Muck (A10)        Depleted Matrix (F3)        Other (Explain in Remarks)           2 cm Muck (A10)        Depleted Matrix (F3)        Other (Explain in Remarks)          Sandy Mucky Mineral (F1)        Redox Depressions (F8)         Type:	Black Histic	(A3)		Stripped Matrix (S6)				Iron-Mangane	se Masses (F12)
Standing Layers (A5) Comp Geyed Matrix (F2)Other (Explain In Remarks) 2 rm Muck (N1) Depleted Matrix (F2)Other (Explain In Remarks)	Hydrogen S	ulfide (A4)		Loamy Mucky Miner	al (F1)			Very Shallow [	Dark Surface (TF12)
2 cm Muck (A10)	Stratified La	iyers (A5)		Loamy Gleyed Matr	x (F2)			Other (Explain	in Remarks)
Depleted Below Dark Surface (A11)	2 cm Muck (	(A10)		Depleted Matrix (F3	)				
Thick Dark Surface (A12) Depleted Dark Surface (F7) <sup>a</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   Sandy Mudxy Minaral (S1)	_ Depleted Be	elow Dark Surface (A11	1)	Redox Dark Surface	e (F6)				
	Thick Dark S	Surface (A12)		Depleted Dark Surfa	ace (F7)			<sup>3</sup> Indicators of h	ydrophytic vegetation and wetland
5 cm Muky Peat or Peat (S3)       problematic.         strictive Layer (if observed):       Type:         Depth (inches):	Sandy Muck	ky Mineral (S1)		Redox Depressions	(F8)			hydrology mu	st be present, unless disturbed or
strictive Layer (if observed):       Type:	5 cm Mucky	Peat or Peat (S3)						1	problematic.
Type:	strictive Lay	ver (if observed):							
Depth (inches):	Туре:								
marks         /CROLOGY         wtland Hydrology Indicators:         mary indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)	Depth (incl	hes):						Hydric Soil Pres	ent? Yes No_X
ettand Hydrology Indicators:       Secondary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)									
mary indicators (minimum of one is required; check all that apply)       Secondary indicators (minimum of two required)	<b>YDROLO</b> G	9Y							
Surface Water (A1)       Water-Staned Leaves (B9)       Surface Sol Cracks (B6)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sodiment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       X         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Agal 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)         Vide Cobservations:       Mo       Depth (inches):       Q         face Water Present?       Yes       X       No       Depth (inches):       Q         surface Solid Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       wetland Hydrology Present?       Yes       X       No         scripter before from Present?       Yes       X       Depth (inches):       Q       Vestland Hydrology Present?       Yes       <	YDROLOG	SY blogy Indicators:							
High Water Table (A2)	YDROLOG etland Hydro mary Indicators	SY blogy Indicators: s (minimum of one is re	equired; check all t	hat apply)			Secondary In	dicators (minimum of tv	vo required)
	(DROLOG tiland Hydro nary Indicators _ Surface Wa	BY blogy Indicators: s (minimum of one is re ter (A1)	equired; check all t	hat apply) Water-Stained Leav	es (B9)		Secondary In	dicators (minimum of tv _Surface Soil Cracks (	/o required)
water Marks (b1)	/DROLOG ttland Hydro mary Indicators Surface Wa High Water	BY blogy Indicators: s (minimum of one is re ter (A1) Table (A2)	equired; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13	es (B9) )		Secondary In	dicators (minimum of tv _Surface Soil Cracks (i _Drainage Patterns (B	/o required) 36) 10)
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)         Id Observations:       2       Wetland Hydrology Present?       Yes_X       No_         ter Table Present?       Yes_X       No       Depth (inches):       0       2       Id Character (Saturation Visible)       No_         uration Present?       Yes_X       No       Depth (inches):       0       0       1       No_       1         uration Present?       Yes_X       No       Depth (inches):       0       0       1 <td>/DROLOG tland Hydro nary Indicators _ Surface Wa _ High Water _ Saturation ()</td> <td>BY blogy Indicators: s (minimum of one is re ter (A1) Table (A2) A3)</td> <td>equired; check all t</td> <td>hat apply)  Water-Stained Leav  Aquatic Fauna (B13  True Aquatic Plants</td> <td>es (B9) ) (B14)</td> <td></td> <td>Secondary In</td> <td>dicators (minimum of tv _Surface Soil Cracks ( _Drainage Patterns (B _Dry-Season Water Ta</td> <td>/o required) 36) 10) ble (C2)</td>	/DROLOG tland Hydro nary Indicators _ Surface Wa _ High Water _ Saturation ()	BY blogy Indicators: s (minimum of one is re ter (A1) Table (A2) A3)	equired; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants	es (B9) ) (B14)		Secondary In	dicators (minimum of tv _Surface Soil Cracks ( _Drainage Patterns (B _Dry-Season Water Ta	/o required) 36) 10) ble (C2)
Diff Deposits (B3)       Presence of Reduced iron (C4)       Stunied of 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)       Other (Explain in Remarks)       Wetland Hydrology Present?       Yes       X       No         Id Observations:       2       Wetland Hydrology Present?       Yes       X       No	<b>(DROLOG</b> <b>itland Hydro</b> nary Indicators Surface Wa' High Water Saturation ( <i>i</i> Water Marks	BY blogy Indicators: s (minimum of one is re ter (A1) Table (A2) A3) s (B1)	equired; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O	es (B9) ) (B14) dor (C1)		_ Secondary In	dicators (minimum of tv _Surface Soil Cracks ( _Drainage Patterns (B _Dry-Season Water Ta _Crayfish Burrows (C8	/o required) 36) 10) ble (C2)
Again Mat of Crust (64)	<b>DROLOG</b> tland Hydro ary Indicators Surface Wa High Water Saturation (/ Water Marks Sediment D	SY blogy Indicators: s (minimum of one is re ter (A1) Table (A2) A3) s (B1) eposits (B2) t (B2)	equired; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe	es (B9) ) (B14) dor (C1) res on Living F	Roots (C3)	Secondary In	dicators (minimum of tv _Surface Soil Cracks ( _Drainage Patterns (B _Dry-Season Water Ta _Crayfish Burrows (C8 _Saturation Visibe on .	/o required) 36) 10) ble (C2) ) Aerial Imagery (C9)
Indice Surface (B3)	<b>DROLOG</b> tland Hydro ary Indicators Surface War High Water Saturation (/ Water Marks Sediment De Drift Deposit	<b>SY</b> <b>blogy Indicators:</b> s (minimum of one is re ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) - Cart (P(A))	equired; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce	es (B9) ) (B14) dor (C1) res on Living F ed Iron (C4)	Roots (C3)	Secondary In	dicators (minimum of tv _Surface Soil Cracks ( _Drainage Patterns (B _Dry-Season Water Ta _Crayfish Burrows (C8 _Saturation Visible on _Stunted or Stressed F	/o required) 36) 10) ble (C2) ) Aerial Imagery (C9) Plants (D1)
	<b>(DROLOG</b> <b>itland Hydro</b> ary Indicators Surface War High Water Saturation (/ Water Marks Sediment De Drift Deposit Algal Mat or	SY blogy Indicators: s (minimum of one is re ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) ter (P2)	equired; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct This Much Surface	es (B9) ) (B14) dor (C1) res on Living F ed Iron (C4) ion in Tilled Soi (C7)	Roots (C3) ils (C6)	Secondary In	dicators (minimum of tw Surface Soil Cracks ( Drainage Patterns (B Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on Stunted or Stressed F Geomorphic Position	/o required) 36) 10) ble (C2) ) Aerial Imagery (C9) Plants (D1) (D2)
Sparsely vegetated Concave Surface (68)Other (Explain in Remarks) eld Observations: face Water Present? Yes X No Depth (inches): ter Table Present? Yes X No Depth (inches): uration Present? Yes X No Depth (inches): scribes Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: marks	YDROLOG etland Hydro mary Indicators Surface War High Water Saturation (/ Water Marks Sediment Du Drift Deposit Algal Mat or Iron Deposit	SY blogy Indicators: s (minimum of one is re ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) · Crust (B4) ts (B5)	equired; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface	es (B9) ) (B14) dor (C1) res on Living F ed Iron (C4) ion in Tilled Soi (C7)	Roots (C3) ils (C6)	Secondary In	dicators (minimum of tw Surface Soil Cracks ( Drainage Patterns (B Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on Stunted or Stressed F Geomorphic Position FAC-Neutral Test (D5	vo required) 36) 10) ble (C2) ) Aerial Imagery (C9) Plants (D1) (D2) )
Id Observations:         face Water Present?       Yes       X       No       Depth (inches):       2       Wetland Hydrology Present?       Yes       X       No         ter Table Present?       Yes       X       No       X       Depth (inches):	YDROLOG atland Hydro mary Indicators Surface Wa High Water Saturation (/ Water Marks Sediment Du Drift Deposit Algal Mat or Iron Deposit Inn Deposit	SY blogy Indicators: s (minimum of one is re ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) • Crust (B4) ts (B5) //isible on Aerial Imagel	equired; check all t	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data	es (B9) ) (B14) dor (C1) res on Living F ad Iron (C4) on in Tilled Soi (C7) (D9)	Roots (C3) ils (C6)	Secondary In	dicators (minimum of tw _Surface Soil Cracks ( _Drainage Patterns (B _Dry-Season Water Ta _Crayfish Burrows (C8 _Saturation Visible on _Stunted or Stressed F _Geomorphic Position _FAC-Neutral Test (D5	vo required) 36) 10) ble (C2) ) Aerial Imagery (C9) Plants (D1) (D2) )
tace Water Present?       Yes       X       No       Depth (inches):       2       Wetland Hydrology Present?       Yes       X       No         ter Table Present?       Yes        No        Depth (inches):          uration Present?       Yes       X       No        Depth (inches):          uration Present?       Yes       X       No        Depth (inches):          scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	CONTRACTORY     CONTRACTORY	SY blogy Indicators: s (minimum of one is re ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) · Crust (B4) ts (B5) /isible on Aerial Imagen sgetated Concave Surfa	equired; check all t ry (B7) ace (B8)	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re	es (B9) ) (B14) dor (C1) res on Living F ed Iron (C4) on in Tilled Soi (C7) (D9) emarks)	Roots (C3) ils (C6)	Secondary In	dicators (minimum of tw Surface Soil Cracks ( Drainage Patterns (B Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on Stunted or Stressed F Geomorphic Position FAC-Neutral Test (D5	vo required) 36) 10) ble (C2) ) Aerial Imagery (C9) Plants (D1) (D2) )
Iter I able Present?       Yes       No       X       Depth (inches):	YDROLOG mary Indicators Surface Wa High Water Saturation (/ Water Marka Sediment Do Drift Deposit Algal Mat or Iron Deposit Inundation V Sparsely Ve	SY blogy Indicators: s (minimum of one is re ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) • Crust (B4) ts (B5) /isible on Aerial Imagele egetated Concave Surfations:	equired; check all t ny (B7) ace (B8)	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re	es (B9) ) (B14) dor (C1) res on Living F ad Iron (C4) don in Tilled Soi (C7) (D9) mmarks)	Roots (C3) ils (C6)	Secondary In	dicators (minimum of tw Surface Soil Cracks ( Drainage Patterns (B Dry-Season Water Ta Crayfish Burrows (C8 Saturation Visible on Stunted or Stressed F Geomorphic Position FAC-Neutral Test (D5	/o required) 36) 10) ble (C2) Aerial Imagery (C9) Plants (D1) (D2) )
uration Present ? Yes X No Depth (inches): U Ludes capillary fringe) scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: marks	YDROLOG mary Indicators Surface Wa High Water Saturation (/ Water Marks Sediment Do Drift Deposit Algal Mat or Iron Deposit Inundation V Sparsely Ve Std Observat face Water Pri	SY blogy Indicators: s (minimum of one is re- ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) • Crust (B4) ts (B5) /isible on Aerial Imager egetated Concave Sufficients resent? Yes	equired; check all t ny (B7) ace (B8) X No	hat apply)Water-Stained LeavAquatic Fauna (B13True Aquatic PlantsHydrogen Sulfide OOxidized RhizosphePresence of ReductRecent Iron ReductThin Muck SurfaceGauge or Well DataOther (Explain in Ref)	es (B9) ) (B14) dor (C1) res on Living F ad Iron (C4) on in Tilled Soi (C7) (D9) emarks) 2	Roots (C3) ils (C6)	Secondary In	dicators (minimum of tw _Surface Soil Cracks ( _Drainage Patterns (B _Dry-Season Water Ta _Crayfish Burrows (C8 _Saturation Visible on . _Stunted or Stressed F _Geomorphic Position _FAC-Neutral Test (D5	<u>vo required)</u> 36) 10) ble (C2) ) Aerial Imagery (C9) Plants (D1) (D2) ) Yes <u>X</u> No
scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	DROLOG     mary Indicators	blogy Indicators: s (minimum of one is re- ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) ts (B5) /isible on Aerial Imagelegetated Concave Surfa- tions: resent? Yes ent? Yes	ry (B7) ace (B8) X No	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re Depth (inches): X Depth (inches):	es (B9) ) (B14) dor (C1) res on Living F ad Iron (C4) on in Tilled Soi (C7) (D9) marks) 	Roots (C3) ils (C6)	Secondary In	dicators (minimum of tw _Surface Soil Cracks ( _Drainage Patterns (B _Dry-Season Water Ta _Crayfish Burrows (C8 _Saturation Visible on . _Stunted or Stressed F _Geomorphic Position _FAC-Neutral Test (D5	<u>/o required)</u> 36) 10) ble (C2) ) Aerial Imagery (C9) Plants (D1) (D2) ) Yes X No
marks	YDROLOG atland Hydro mary Indicators Surface Wa High Water ' Saturation (/ Water Marks Sediment Dr Drift Deposit Algal Mat or Iron Deposit Inundation \v Sparsely Ve ald Observat rface Water Pre- turation Preser Water Table Press	SY blogy Indicators: s (minimum of one is re- ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) · Crust (B4) ts (B5) /isible on Aerial Imagele getated Concave Surfa- tions: resent? Yes ent? Yes	equired; check all t ry (B7) ace (B8) X No X No X No	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re Depth (inches): Depth (inches):	es (B9) ) (B14) dor (C1) res on Living F ed Iron (C4) ion in Tilled Soi (C7) (D9) marks) <u>2</u> 0	Roots (C3) ils (C6)	_ Secondary In	dicators (minimum of tw _Surface Soil Cracks ( _Drainage Patterns (B _Dry-Season Warer Ta _Crayfish Burrows (C8 _Saturation Visible on _Stunted or Stressed F _Geomorphic Position _FAC-Neutral Test (D5 ydrology Present?	/o required) 36) 10) ble (C2) ) Aerial Imagery (C9) Plants (D1) (D2) ) Yes X No
emarks	YDROLOG etland Hydro mary Indicators Surface Wa High Water ' Saturation (/ Water Marks Sediment Dr Drift Deposit Algal Mat or Iron Deposit Inundation V Sparsely Ve eld Observat rface Water Pr- ater Table Pres turation Preser cludes capillary	SY blogy Indicators: s (minimum of one is re- ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) Crust (B4) ts (B5) /isible on Aerial Imageles getated Concave Surfa- tions: resent? Yes ent? Yes tringe)	equired; check all t ry (B7) ace (B8) X No X No	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re Depth (inches): X Depth (inches):	es (B9) ) (B14) dor (C1) res on Living F ad Iron (C4) ion in Tilled Soi (C7) (D9) marks) 2 0 	Roots (C3) ils (C6)	_ Secondary In	dicators (minimum of tw _Surface Soil Cracks ( _Drainage Patterns (B _Dry-Season Water Ta _Crayfish Burrows (C8 _Saturation Visible on . _Stunted or Stressed F _Geomorphic Position _FAC-Neutral Test (D5	/o required) 36) 10) ble (C2) ) Aerial Imagery (C9) Plants (D1) (D2) ) Yes X No
amarks	YDROLOG etland Hydro mary Indicators C Surface Wa High Water ' Saturation (/ Water Marks Sediment Do Drift Deposit Algal Mat or Iron Deposit Inundation \ Sparsely Ve eld Observat rface Water Pres turation Preser cludes capillary escribe Recor	blogy Indicators: s (minimum of one is re- ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) • Crust (B4) ts (B5) /isible on Aerial Imagele getated Concave Surfa- tions: resent? Yes esent? Yes esent? Yes ont? Yes of ringe) rded Data (stream getated concave)	equired; check all t equired; check all t equired; check all t ry (B7) ace (B8) X No X No auge, monitoring	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re Depth (inches): X Depth (inches): Depth (inches): Q well, aerial photos, pre	es (B9) ) (B14) dor (C1) res on Living F ed Iron (C4) ion in Tilled Soi (C7) (D9) marks) 2 0 vious inspect	Roots (C3) ils (C6)	_ Secondary In	dicators (minimum of tw _Surface Soil Cracks ( _Drainage Patterns (B _Dry-Season Water Ta _Crayfish Burrows (C8 _Saturation Visible on _Stunted or Stressed F _Geomorphic Position _FAC-Neutral Test (D5 rdrology Present?	/o required) 36) 10) ble (C2) ) Aerial Imagery (C9) Plants (D1) (D2) ) Yes X No
	YDROLOG etland Hydro mary Indicators (Surface Wa High Water ' Saturation ( Water Marks Sediment Du Drift Deposit Algal Mat or Iron Deposit Inundation \ Sparsely Ve eld Observat rface Water Pr ater Table Prese turation Preser cludes capillary escribe Recor	SY blogy Indicators: s (minimum of one is re- ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) • Crust (B4) ts (B5) /isible on Aerial Imager septated Concave Surfa- tions: resent? Yes ent? Yes of ringe) rded Data (stream gamma)	equired; check all t ny (B7) ace (B8) X No X No auge, monitoring	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re Depth (inches): X Depth (inches): Depth (inches): Well, aerial photos, pre	es (B9) ) (B14) dor (C1) res on Living F ed Iron (C4) ion in Tilled Soi (C7) (D9) marks) 2 0 vious inspect	Roots (C3) ils (C6) tions), if avai	_ <u>Secondary In</u>	dicators (minimum of tw _Surface Soil Cracks ( _Drainage Patterns (B _Dry-Season Water Ta _Crayfish Burrows (C8 _Saturation Visible on _Stunted or Stressed F _Geomorphic Position _FAC-Neutral Test (D5 /drology Present?	/o required) 36) 10) ble (C2) ) Aerial Imagery (C9) Plants (D1) (D2) ) Yes X No
	YDROLOG stland Hydro mary Indicators Surface Wa' High Water Saturation (/ Water Marks Sediment Do Drift Deposit Algal Mat or Iron Deposit Inundation V Sparsely Ve sld Observat face Water Preser uration Preser scribe Recor	SY blogy Indicators: s (minimum of one is re- ter (A1) Table (A2) A3) s (B1) eposits (B2) ts (B3) • Crust (B4) ts (B5) /isible on Aerial Imager getated Concave Surfa- tions: resent? Yes ent? Yes int? Yes of ringe) rded Data (stream getains)	equired; check all t ny (B7) ace (B8) X No X No auge, monitoring	hat apply) Water-Stained Leav Aquatic Fauna (B13 True Aquatic Plants Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduct Recent Iron Reduct Thin Muck Surface Gauge or Well Data Other (Explain in Re Depth (inches): X Depth (inches): Depth (inches): y well, aerial photos, pre	es (B9) ) (B14) dor (C1) res on Living F ed Iron (C4) ion in Tilled Soi (C7) (D9) marks) 2 0 vious inspect	Roots (C3) ils (C6) iions), if avai	Secondary In	dicators (minimum of tw _Surface Soil Cracks ( _Drainage Patterns (B _Dry-Season Water Ta _Crayfish Burrows (C8 _Saturation Visible on . _Stunted or Stressed F _Geomorphic Position _FAC-Neutral Test (D5 //drology Present?	/o required) 36) 10) ble (C2) ) Aerial Imagery (C9) Plants (D1) (D2) ) Yes X No

Project/Site:	Surge Industr	ial		City/County:	Pleasantv	iew/Shelby	Sampling Date: February 22, 2022			
Applicant/Owner:	Runnebohm Construction Co.						State: IN Sampling Point: TP-10			
Investigator(s):	GJG			Section, T	n, Township, Range: NW1/4, Sec. 23, T14N, R5E					
Landform (hillslope,	terrace, etc.):	rrace, etc.): depression Local Relief (cor					none			
Slope (%):	0 - 2%	- 2% Lat: 39.38.56 N Long: 85.56.1				5 W Datum: WGS84				
Soil Map Unit Nam	ne:	Crosby silt loam. New Castle Ti	ll Plain. Miar	ni silt loam. 0 t	o 2% slope	s (CrA)	NWI classi	ification:		
Are climatic/hvdrol	loaic conditions	s on the site typical for this time	of vear?	,	Yes	X No	(If no	explain in Remarks.)		
Are Vegetation		, Soil, or Hydrology		significantly d	isturbed?	Are "Normal	Circumstances	" present?		
Are Vegetation		, Soil, or Hydrology		naturally prob	lematic?	(If needed, ex	plain any answers	in Remarks.)		
SUMMARY OF	FINDINGS -	Attach site map showing	sampling	point locati	ons, tran	isects, importan	t features, et	с.		
Hydrophytic Veget	ation Present?		Yes X	No	- Is the	e Sampled Area				
Hydric Soil Presen	nt?		Yes X	No	with	nin a Wetland?	Yes X	No		
Wetland Hydrology	y Present?		Yes X	No	-					
VEGETATION	- Use scient	tific names of plants.								
			Absolute	Dominant In	dicator	Dominance Test w	orksheet:			
Tree Stratum	(Plot size	e: 30 ft.)	% Cover	Species? S	Status	Number of Dominar	nt Species	2 (	•	
2.						That Ale OBL, FAC	W, OFFAC.	(		
3.						Total Number of Do	minant			
4.					_	Species Across All	Strata:	3 (	В)	
5										
				= Total Cover		Percent of Dominan	t Species			
Sapling/Shrub Stra	<u>atum:</u> (Plot	Size: <u>15 ft.</u> )				That Are OBL, FAC	W, or FAC:	<u> </u>	4/В)	
2.						Prevalence Index v	worksheet:			
3.						Total % Cover of	of:	Multiply by:		
4.						OBL species	x 1=			
5.						FACW species	x 2=			
				= Total Cover		FAC species	x 3 =			
Herb Stratum:	(Plot size:	<u> </u>	50			FACU species	x 4 =			
1. <u>Panicum dicr</u>	notomitiorum		20			OPL species	x 5=		וס	
3 Amaranthus	retroflexus	<u> </u>	20	<u> </u>	FACU		(A)	(	5)	
4. Xanthium str	umarium		10	N	ACW	Prevalence Index =	B/A =			
6		<u> </u>				Hydrophytic Veget	ation Indicator	s:		
7.						1 - Rapid Te	est for Hydrophy	tic Vegetation		
8.						X 2 - Dominan	ce Test is >50%	5		
9.						3 - Prevalen	ce Index is ≤3.0	1		
10						4 - Morpholo	ogical Adaptation	ns <sup>1</sup> (Provide suppor	ting	
			100	= Total Cover						
vvoody Vine Stratu	<u>ım:</u>	(Plot size: <u>30 ft.</u> )				Problematio	c Hydrophytic Ve	egetation (Explain)		
2.					—	1 Indiantors of human				
				= Total Cover		be present, unless c	listurbed or prob	plematic.		
						Hydrophytic Veget	ation			
						Present?		Yes X	No	
Remarks: (Include	photo number	s here or on a separate sheet.)								

US Army Corps of Engineers
Depth	inplicit. (Describe to t	ine uepin	needed to documen	nt the indication	tor or con	firm the ab	sence of indicators.	
	Matrix			Redox Feature	es		_	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 7	10YR 4/2	95	10YR 7/8	5	С	М	silt loam	
7 - 18	2.5Y 3/2	100					silty clay loam	
<sup>1</sup> Type: C=Con	ncentration, D=Depletion, F	RM=Reduce	d Matrix, MS=Masked S	Sand Grains.			<sup>2</sup> Location: PL= Pore	Lining, M=Matrix.
Hydric Soil In	dicators:						Indicators for Proble	ematic Hydric Soils <sup>3</sup> :
Histosol (A	(1)		Sandy Gleyed Matrix	x (S4)			Coast Prairie Redo	x (A16)
Histic Epip	edon (A2)		Sandy Redox (S5)				Dark Surface (S7)	
Black Histi	.c (A3)		Stripped Matrix (S6)				Iron-Manganese M	asses (F12)
Hydrogen S	Sulfide (A4)		Loamy Mucky Minera	al (F1)			Very Shallow Dark	Surface (TF12)
Stratified L	.ayers (A5)		Loamy Gleyed Matrix	x (F2)			Other (Explain in R	emarks)
2 cm Muck	(A10)		X Depleted Matrix (F3)	)				
Depleted B	Below Dark Surface (A11)		Redox Dark Surface	(F6)				
Thick Dark	Surface (A12)		Depleted Dark Surfa	ice (F7)			<sup>3</sup> Indicators of hydro	ophytic vegetation and wetland
Sandy Muc	cky Mineral (S1)	-	Redox Depressions	(F8)			hydrology must be	e present, unless disturbed or
5 cm Muck	cy Peat or Peat (S3)							problematic.
Restrictive La	ayer (if observed):							
Type:	• •							
Depth (ind	ches):	<u> </u>					Hydric Son Present	Yes <u>X</u> No
Domarks							ł	
HYDROLO	GY							
Wetland Hydr	rology Indicators:							
Primary Indicato	ors (minimum of one is required							
		d; check all th	at apply)			Secondary In	idicators (minimum of two re	quired)
X Surface W	ʻater (A1)	l; check all th	at apply) Water-Stained Leave	es (B9)		Secondary In	idicators (minimum of two re _Surface Soil Cracks (B6)	quired)
X Surface W	′ater (A1) ⊧r Table (A2)	d; check all th	at apply) Water-Stained Leave Aquatic Fauna (B13)	es (B9) )		Secondary In	idicators (minimum of two re _Surface Soil Cracks (B6) _Drainage Patterns (B10)	quired)
X Surface W High Water X Saturation	/ater (A1) r Table (A2) (A3)	l; check all th	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants	es (B9) ) (B14)		Secondary In	idicators (minimum of two re _Surface Soil Cracks (B6) _Drainage Patterns (B10) _Dry-Season Water Table (	quired)
X Surface W High Water X Saturation Water Mar	′ater (A1) ⊧r Table (A2) (A3) ks (B1)	d; check all th	at apply) Water-Stained Leavo Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Od	es (B9) ) (B14) ior (C1)		Secondary In	idicators (minimum of two re _Surface Soil Cracks (B6) _Drainage Patterns (B10) _Dry-Season Water Table ( _Crayfish Burrows (C8)	quired)
X Surface W High Water X Saturation Water Mari Sediment [	/ater (A1) ır Table (A2) (A3) tks (B1) Deposits (B2)	t; check all th	at apply) Water-Stained Leavi Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Od Oxidized Rhizospher	es (B9) ) (B14) Jor (C1) res on Living Rod	nots (C3)	Secondary In	idicators (minimum of two re Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table ( Crayfish Burrows (C8) Saturation Visible on Aeria	quired) C2) Il Imagery (C9)
X Surface W High Wate X Saturation Water Mar Sediment I Drift Depos	/ater (A1) rr Table (A2) (A3) ks (B1) Deposits (B2) sits (B3)	t; check all th	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Od Oxidized Rhizospher Presence of Reduce	es (B9) ) (B14) Jor (C1) res on Living Rot rd Iron (C4)	uots (C3)	Secondary In	idicators (minimum of two re Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table ( Crayfish Burrows (C8) Saturation Visible on Aeria Stunted or Stressed Plant	quired) C2) Il Imagery (C9) s (D1)
X Surface W High Wate X Saturation Water Mari Sediment I Drift Depos Algal Mat c	/ater (A1) rr Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)	l; check all th	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Od Oxidized Rhizospher Presence of Reduce Recent Iron Reductio	es (B9) ) (B14) dor (C1) res on Living Ro rd Iron (C4) on in Tilled Soils	nots (C3) ; (C6)	Secondary In	dicators (minimum of two re Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table ( Crayfish Burrows (C8) Saturation Visible on Aeria Stunted or Stressed Plant Geomorphic Position (D2)	quired) C2) Il Imagery (C9) s (D1)
X Surface W High Wate X Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos	/ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	l; check all th	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Od Oxidized Rhizospher Presence of Reduce Recent Iron Reductio Thin Muck Surface (	es (B9) ) (B14) dor (C1) res on Living Rom rd Iron (C4) on in Tilled Soils C7)	nots (C3) ; (C6)	Secondary In	dicators (minimum of two re Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table ( Crayfish Burrows (C8) Saturation Visible on Aeria Stunted or Stressed Plant Geomorphic Position (D2) FAC-Neutral Test (D5)	quired) C2) Il Imagery (C9) s (D1)
X Surface W High Wate X Saturation Water Mari Sediment I Drift Depos Algal Mat c Iron Depos Inundation	Vater (A1) Ar Table (A2) (A3) (A3) Arks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagery (B7)	t; check all th	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Od Oxidized Rhizospher Presence of Reduce Recent Iron Reductio Thin Muck Surface ( Gauge or Well Data	es (B9) ) (B14) dor (C1) res on Living Ro- rd Iron (C4) on in Tilled Soils C7) (D9)	oots (C3) 5 (C6)	Secondary In	dicators (minimum of two re Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table ( Crayfish Burrows (C8) Saturation Visible on Aeria Stunted or Stressed Plant Geomorphic Position (D2) FAC-Neutral Test (D5)	quired) C2) Il Imagery (C9) s (D1)
X Surface W High Wate Saturation Water Mari Sediment I Drift Depos Algal Mat c Iron Depos Inundation Sparsely V	/ater (A1) er Table (A2) (A3) (ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagery (B7 'egetated Concave Surface (B	t; check all th , , ,8)	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Oc Oxidized Rhizospher Presence of Reduce Recent Iron Reductio Thin Muck Surface ( Gauge or Well Data Other (Explain in Red	es (B9) ) (B14) dor (C1) res on Living Rou d Iron (C4) on in Tilled Soils C7) (D9) marks)	oots (C3) 5 (C6)	Secondary In	dicators (minimum of two re Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table ( Crayfish Burrows (C8) Saturation Visible on Aeria Stunted or Stressed Plant Geomorphic Position (D2) FAC-Neutral Test (D5)	quired) C2) Il Imagery (C9) s (D1)
X Surface W High Wate Saturation Water Mari Sediment I Drift Depos Algal Mat o Iron Depos Inundation Sparsely V Field Observa	Ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagery (B7 'egetated Concave Surface (B ations:	t; check all th	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Oc Oxidized Rhizospher Presence of Reduce Recent Iron Reductio Thin Muck Surface ( Gauge or Well Data Other (Explain in Red	es (B9) ) (B14) dor (C1) res on Living Rod d Iron (C4) on in Tilled Soils (C7) (D9) marks)	oots (C3) ; (C6)	Secondary In	dicators (minimum of two re Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table ( Crayfish Burrows (C8) Saturation Visible on Aeria Stunted or Stressed Plant Geomorphic Position (D2) FAC-Neutral Test (D5)	quired) C2) Il Imagery (C9) s (D1)
X Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Inundation Sparsely V Field Observa Surface Water F	Ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagery (B7) regetated Concave Surface (B ations: Present? Yes X	1; check all th , , ,8) No	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Oc Oxidized Rhizospher Presence of Reduce Recent Iron Reductio Thin Muck Surface (i Gauge or Well Data Other (Explain in Red Depth (inches):	es (B9) ) (B14) dor (C1) res on Living Ro d Iron (C4) on in Tilled Soils C7) (D9) marks)	nots (C3) s (C6)	Secondary In	dicators (minimum of two re _Surface Soil Cracks (B6) _Drainage Patterns (B10) _Dry-Season Water Table ( _Crayfish Burrows (C8) _Saturation Visible on Aeria _Stunted or Stressed Plant _Geomorphic Position (D2) _FAC-Neutral Test (D5)	<u>quired)</u> C2) Il Imagery (C9) s (D1) Yes X No
X Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Inundation Sparsely V Field Observa Surface Water F Water Table Pre	Ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagery (B7) regetated Concave Surface (B ations: Present? Yes X isent? Yes	1; check all th ) .8) No	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Oc Oxidized Rhizospher Presence of Reduce Recent Iron Reductio Thin Muck Surface (i Gauge or Well Data Other (Explain in Rei Depth (inches): X Depth (inches):	es (B9) ) (B14) dor (C1) res on Living Ro d Iron (C4) on in Tilled Soils (C7) (D9) marks)	oots (C3) ; (C6)	Secondary In	dicators (minimum of two re Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table ( Crayfish Burrows (C8) Saturation Visible on Aeria Stunted or Stressed Plant Geomorphic Position (D2) FAC-Neutral Test (D5)	quired) C2) Il Imagery (C9) s (D1) Yes X No
X Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Inundation Sparsely V Field Observa Surface Water F Water Table Pres	Ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagery (B7) regetated Concave Surface (B ations: Present? Yes X sent? Yes X	1; check all th ) .8) No No No	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Oc Oxidized Rhizospher Presence of Reducete Recent Iron Reductic Thin Muck Surface (r Gauge or Well Data Other (Explain in Rei Depth (inches): X Depth (inches): Depth (inches):	es (B9) ) (B14) dor (C1) res on Living Ro res on Living Ro r	oots (C3) ; (C6)	Secondary In	dicators (minimum of two re Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table ( Crayfish Burrows (C8) Saturation Visible on Aeria Stunted or Stressed Plant Geomorphic Position (D2) FAC-Neutral Test (D5)	quired) C2) Il Imagery (C9) s (D1) Yes <u>X</u> No
X Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Inundation Sparsely V Field Observa Surface Water F Water Table Pres Saturation Prese (includes capillar	/ater (A1) er Table (A2) (A3) /ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagery (B7) /egetated Concave Surface (B ations: -present? Yes X sent? Yes X pringe)	1; check all th ) 8) No No No	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Oc Oxidized Rhizospher Presence of Reducet Recent Iron Reductic Thin Muck Surface ( Gauge or Well Data Other (Explain in Rei Depth (inches): Depth (inches): Depth (inches):	es (B9) ) (B14) dor (C1) res on Living Ro res on Living Ro d Iron (C4) on in Tilled Soils (C7) (D9) marks)  	oots (C3) ; (C6)	Secondary In	dicators (minimum of two re Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table ( Crayfish Burrows (C8) Saturation Visible on Aeria Stunted or Stressed Plant Geomorphic Position (D2) FAC-Neutral Test (D5)	quired) C2) Il Imagery (C9) s (D1) Yes X No
X Surface W High Wate Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Inundation Sparsely V Field Observa Surface Water F Water Table Pres Saturation Prese (includes capillar Describe Reco	/ater (A1) er Table (A2) (A3) /ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagery (B7) /egetated Concave Surface (B ations: Present? Yes X esent? Yes X ent? Yes X pringe) prded Data (stream gauge,	l; check all th ) .8) No No No No	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Oc Oxidized Rhizospher Presence of Reducete Recent Iron Reductie Thin Muck Surface (r Gauge or Well Data Other (Explain in Rei Depth (inches): Depth (inches): Depth (inches): Well, aerial photos, prevent	es (B9) ) (B14) dor (C1) res on Living Ro d Iron (C4) on in Tilled Soils (C7) (D9) marks)     /ious inspectio	oots (C3) ; (C6)	Secondary In	dicators (minimum of two re Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table ( Crayfish Burrows (C8) Saturation Visible on Aeria Stunted or Stressed Plant Geomorphic Position (D2) FAC-Neutral Test (D5)	quired) C2) Il Imagery (C9) s (D1) Yes <u>X</u> No
X Surface W High Wate X Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Inundation Sparsely V Field Observa Surface Water F Water Table Pres Saturation Prese (includes capillar Describe Recc	Ater (A1) er Table (A2) (A3) (ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagery (B7) /egetated Concave Surface (B ations: Present? Yes X sent? Yes X ry fringe) orded Data (stream gauge,	t; check all th ) 8) No No No Monitoring	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Oc Oxidized Rhizospher Presence of Reducet Recent Iron Reductit Thin Muck Surface ( Gauge or Well Data Other (Explain in Ret Depth (inches): Depth (inches): Depth (inches): well, aerial photos, prevent	es (B9) ) (B14) dor (C1) res on Living Ro do Iron (C4) on in Tilled Soils (C7) (D9) marks)    /ious inspectio	oots (C3) ; (C6) ons), if availa	Secondary In	dicators (minimum of two re Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table ( Crayfish Burrows (C8) Saturation Visible on Aeria Stunted or Stressed Plant Geomorphic Position (D2) FAC-Neutral Test (D5)	quired) C2) Il Imagery (C9) s (D1) Yes X No
X Surface W High Wate X Saturation Water Mar Sediment I Drift Depos Algal Mat c Iron Depos Inundation Sparsely V Field Observa Surface Water F Water Table Pre Saturation Prese (includes capillar Describe Recc	/ater (A1) er Table (A2) (A3) (ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagery (B7) /egetated Concave Surface (B ations: Present? Yes X esent? Yes X ry fringe) orded Data (stream gauge,	t; check all th () (8) No No No Monitoring	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Oc Oxidized Rhizospher Presence of Reducet Recent Iron Reductit Thin Muck Surface ( Gauge or Well Data Other (Explain in Ret Depth (inches): Depth (inches): Depth (inches): well, aerial photos, prev	res (B9) ) (B14) dor (C1) res on Living Ro res on Living Ro d Iron (C4) on in Tilled Soils (C7) (D9) marks)    /ious inspectio	oots (C3) ; (C6) ons), if availa	Secondary In	dicators (minimum of two re Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table ( Crayfish Burrows (C8) Saturation Visible on Aeria Stunted or Stressed Plant Geomorphic Position (D2) FAC-Neutral Test (D5)	quired) C2) Il Imagery (C9) s (D1) Yes <u>X</u> No
X Surface W High Wate X Saturation Water Mar Sediment I Drift Depos Algal Mat o Iron Depos Inundation Sparsely V Field Observa Surface Water F Water Table Pre Saturation Prese (includes capillar Describe Reco	/ater (A1) er Table (A2) (A3) (ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagery (B7) //egetated Concave Surface (B ations: Present? Yes X esent? Yes X ry fringe) orded Data (stream gauge,	t; check all th ) )8) No No monitoring	at apply) Water-Stained Leave Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Oc Oxidized Rhizospher Presence of Reducee Recent Iron Reductit Thin Muck Surface ( Gauge or Well Data Other (Explain in Ref Depth (inches): Depth (inches): Depth (inches): well, aerial photos, prev	res (B9) ) (B14) dor (C1) res on Living Ro dor (C4) on in Tilled Soils (C7) (D9) marks)	oots (C3) ; (C6) ons), if availa	Secondary In	dicators (minimum of two re Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table ( Crayfish Burrows (C8) Saturation Visible on Aeria Stunted or Stressed Plant Geomorphic Position (D2) FAC-Neutral Test (D5)	quired) C2) Il Imagery (C9) s (D1) Yes X No
X Surface W High Wate X Saturation Water Mar Sediment I Drift Depos Algal Mat of Iron Depos Inundation Sparsely V Field Observa Surface Water F Water Table Pres Saturation Prese (includes capillar Describe Reco	fater (A1) er Table (A2) (A3) fks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagery (B7) /egetated Concave Surface (B ations: Present? Yes <u>X</u> esent? Yes <u>X</u> ry fringe) orded Data (stream gauge,	t; check all th ) (8) No No monitoring	at apply) Water-Stained Leav Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Oc Oxidized Rhizospher Presence of Reduce Recent Iron Reductic Thin Muck Surface ( Gauge or Well Data Other (Explain in Ref Depth (inches): X Depth (inches): Depth (inches): well, aerial photos, prev	res (B9) ) (B14) dor (C1) res on Living Ro- res	ots (C3) ; (C6)	Secondary In	dicators (minimum of two re _Surface Soil Cracks (B6) _Drainage Patterns (B10) _Dry-Season Water Table ( _Crayfish Burrows (C8) _Saturation Visible on Aeria _Stunted or Stressed Plant _Geomorphic Position (D2) _FAC-Neutral Test (D5)	quired) C2) Il Imagery (C9) s (D1) Yes X No
X Surface W High Wate X Saturation Water Mar Sediment I Drift Depos Inundation Sparsely V Field Observa Surface Water F Water Table Pres Saturation Prese (includes capillar Describe Recco	/ater (A1) er Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial Imagery (B7) /egetated Concave Surface (B ations: Present? Yes X ssent? Yes X ent? Yes X ry fringe) orded Data (stream gauge,	t; check all th 	at apply) Water-Stained Leav Aquatic Fauna (B13) True Aquatic Plants Hydrogen Sulfide Oc Oxidized Rhizospher Presence of Reduce Recent Iron Reductic Thin Muck Surface ( Gauge or Well Data Other (Explain in Ref Depth (inches): Depth (inches): Depth (inches): well, aerial photos, prev	es (B9) ) (B14) dor (C1) res on Living Ro- ed Iron (C4) on in Tilled Soils (C7) (D9) marks)     /ious inspectio	ots (C3) ; (C6)	Secondary In	dicators (minimum of two re _Surface Soil Cracks (B6) _Drainage Patterns (B10) _Dry-Season Water Table ( _Crayfish Burrows (C8) _Saturation Visible on Aeria _Stunted or Stressed Plant _Geomorphic Position (D2) _FAC-Neutral Test (D5)	quired) C2) Il Imagery (C9) s (D1) Yes X No

# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site:	Surge Industr	rial		_ City/County: Pleasa	antview/Shelby		Sampling Date:	February 17, 2022
Applicant/Owner:	Runnebohm	Construction Co.			St	ate: IN	Sampling Point:	TP-11
Investigator(s):	GJG			Sectio	n, Township, Range:	NW1/4, S	ec. 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: W	GS84
Soil Map Unit Nar	ne:	Crosby silt loam. New Castle	Till Plain. Mia	ami silt loam. 0 to 2%	slopes (CrA)	NWI classi	fication:	
Are climatic/hvdro	loaic conditior	ns on the site typical for this ti	me of vear?	Ŷ	es X No	(If no.	explain in Remarks.)	
Are Vegetation	0	, Soil , or Hydrolog	gy	significantly disturbe	d? Are "Normal C	Circumstances	" present?	
				-	Yes	s	No <u>X</u>	
Are Vegetation		, Soil, or Hydrolog	ду	_naturally problematio	? (If needed, expl	lain any answers	s in Remarks.)	
		Attach aita man ahawi	ing complin	a point locations	trancasta importa	nt faaturaa	ata	
		- Attach site map show			, transects, importa	nt reatures,	etc.	
Hydrophylic Vege	tation Present	<i>!</i>	Yes		the Sampled Area	Vos	No X	
Wetland Hydrolog	v Present?		Yes X	- <u>No</u> No	within a Wetland?			
	,							
Significant floodin	q							
U I	5							
VEGETATION	- Use scien	tific names of plants.						
			Absolute	Dominant Indicator	Dominance Test wo	orksheet:		
Tree Stratum	(Plot size	e: 30 ft.)	% Cover	Species? Status	Number of Dominant	Species	0 (4	\
1 2					That Are OBL, FACW	v, or FAC:	(A	)
3					Total Number of Dom	ninant		
4.					Species Across All S	trata:	1 (B	)
5.						-	(	,
				= Total Cover	Percent of Dominant	Species		
Sapling/Shrub Stra	<u>atum:</u> (Plot	Size: <u>15 ft.</u> )			That Are OBL, FACW	V, or FAC:	0 (A	/В)
1.								
2 3					Total % Cover of	orksneet:	Multiply by:	
4.					OBL species	x <u>1 =</u>		
5.					FACW species	x 2=		
				= Total Cover	FAC species	x 3=		
<u>Herb Stratum:</u>	(Plot size:	5 ft)			FACU species	x 4 =		
1. Glycine max			20	Y FACU	UPL species	x 5=		
2.					Column Totals:	(A)	(B	)
3. 1					Brovalanca Inday - P	2/A -		
 5.						<i></i>		
6.					Hydrophytic Vegeta	tion Indicator	'S:	
7.					1 - Rapid Tes	t for Hydrophy	tic Vegetation	
8.					2 - Dominance	e Test is >50%	, D	
9.					3 - Prevalence	e Index is ≤3.0	1	
10					4 - Morpholog data in Rei	lical Adaptatio	ns' (Provide suppor separate sheet)	ting
Woody Vine Strat	ım.	(Plot cize: 20 ft )		= Total Cover	Problematic			
1.	<u>uiii.</u>	(1 101 SIZE. 30 IL. )					-yetation (Explain)	
2.					<sup>1</sup> Indicators of hydric	soil and wetle	nd hydrology must	
			_	= Total Cover	be present, unless dis	sturbed or prol	olematic.	
					Hydrophytic Vegeta	tion		
					Present?		Yes	No_X
Remarks: (Include	photo numbe	rs here or on a separate shee	et.)					

US Army Corps of Engineers

Midwest Region - Version 2.0

Profile Desc	ription: (Describe to	the depth	needed to docume	ent the inc	dicator or o	confirm the a	absence of indicat	tors.)	
Depth	Matrix			Redox Feat	tures		-		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remark	s
0 - 14	10YR 3/3	100					silt loam		
14 - 18	2.5Y 3/2	80	10YR 5/2	20			silt loam		
				_					
<sup>1</sup> Type: C=Cor	ncentration, D=Depletion,	RM=Redu	ced Matrix, MS=Maske	ed Sand Gra	ains.		<sup>2</sup> Location: PL= Pc	ore Lining, M=Matrix.	3
Hydric Soil Ir	idicators:						Indicators for Pro	blematic Hydric Soil	s':
Histosol (A	.1)		Sandy Gleyed Matri	x (S4)			Coast Prairie Re	edox (A16)	
Histic Epip	edon (A2)		Sandy Redox (S5)				Dark Surface (S	67)	
Black Histi	c (A3)		Stripped Matrix (S6)	)			Iron-Manganese	e Masses (F12)	
Hydrogen	Sulfide (A4)		Loamy Mucky Mine	ral (F1)			Very Shallow Da	ark Surface (TF12)	
Stratified L	ayers (A5)		Loamy Gleyed Matr	ix (F2)			Other (Explain i	n Remarks)	
2 cm Muck	: (A10)		Depleted Matrix (F3	)					
Depleted E	elow Dark Surface (A11)		Redox Dark Surface	e (F6)					
Thick Dark	Surface (A12)		Depleted Dark Surfa	ace (F7)			<sup>3</sup> Indicators of hyd	drophytic vegetation ar	nd wetland
Sandy Muo	cky Mineral (S1)		Redox Depressions	(F8)			hydrology must	be present, unless dis	turbed or
5 cm Muck	y Peat or Peat (S3)							problematic.	
Restrictive La	ayer (if observed):								
Туре:									
Depth (in	ches):						Hydric Soil Prese	ent? Yes	NoX
HYDROLO	GY								
Wetland Hyd	rology Indicators:								
Primary Indicato	rs (minimum of one is require	d: check all f	hat apply)			Secondary In	dicators (minimum of tw	o required)	
Surface W	ater (A1)		Water-Stained Leav	(B9)			Surface Soil Cracks (B	6)	_
High Wate	r Table (A2)		Aquatic Fauna (B13	3)			Drainage Patterns (B10	0)	
X Saturation	(A3)		True Aquatic Plants	, (B14)			- Orv-Season Water Tab	ble (C2)	
Water Mar	ks (B1)		Hydrogen Sulfide O	dor (C1)			Crayfish Burrows (C8)		
Sediment I	Deposits (B2)		Oxidized Rhizosphe	eres on Living	Roots (C3)		Saturation Visible on A	erial Imagery (C9)	
Drift Depos	sits (B3)		Presence of Reduce	ed Iron (C4)			- Stunted or Stressed PI	lants (D1)	
Algal Mat o	or Crust (B4)		Recent Iron Reduct	ion in Tilled S	Soils (C6)		- Geomorphic Position (I	D2)	
Iron Depos	sits (B5)		Thin Muck Surface	(C7)			- FAC-Neutral Test (D5)	,	
Inundation	Visible on Aerial Imagery (B)	7)	Gauge or Well Data	(D9)					
Sparsely V	egetated Concave Surface (	38)	Other (Explain in Re	emarks)					
Field Observ	ations:			-					
Surface Water F	Present? Yes	No	X Depth (inches):			Wetland H	/drology Present?	Yes X	No
Water Table Pre	esent? Yes	- No	X Depth (inches):						
Saturation Prese	ent? Yes X	- No	Depth (inches):	0					
(includes capilla	ry fringe)	-	/						
Describe Reco	orded Data (stream gaug	e, monitorir	ig well, aerial photos, p	previous ins	pections), if	available:			
Pomorko									
Remarks									
			Recent	heavy prec	cipitation and	l flooding			

# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site:	Surge Indust	ial		City/County: Pleasa	intview/Shelby	Sampling Date: February 17, 2022
Applicant/Owner:	Runnebohm	Construction Co.			St	ate: <u>IN</u> Sampling Point: TP-12
Investigator(s):	GJG			Section	n, Township. Range:	NW1/4, Sec. 23, T14N. R5E
l andform (hillslope	terrace etc.)	depression		Local Relief	(concave convex none):	none
Slope (%):	0 - 2%	Lat: 30 38 58 N		long: 85.56 (	15 \N/	Datum: WGS84
Siope (70).	0-270	Creeky silt loom New Cestle		Long. <u>65.50.</u>		
Soli Map Unit Nar	ne:	Crosby slit loam, New Castle	Till Plain, iv	liami siit ioam, 0 to 2% s		
Are climatic/hydro Are Vegetation	logic condition	is on the site typical for this till, , Soil, or Hydrolog	me of year? gy	Young significantly disturbed	es <u>X</u> No d? Are "Normal C Ye:	(If no, explain in Remarks.) Circumstances" present? s No X
Are Vegetation		, Soil, or Hydrolog	ду	naturally problematic	? (If needed, expl	lain any answers in Remarks.)
SUMMARY OF	FINDINGS	- Attach site map showi	ing sampl	ing point locations,	transects, importa	nt features, etc.
Hydrophytic Vege	tation Present	?	Yes X	No le	the Sampled Area	
Hydric Soil Presei Wetland Hydrolog	nt? jy Present?		Yes <u>X</u> Yes <u>X</u>	No No W	vithin a Wetland?	Yes <u>X</u> No
Remarks:				I		
Significant floodin	g					
VEGETATION	- Use scier	tific names of plants				
	000 00101		Absolute	Dominant Indicator	Dominanco Tost wo	rkshoot.
Tree Stratum	(Plot siz	e <sup>.</sup> 30 ft )	% Cover	Species? Status	Number of Dominant	Species
1.	(1101012	o. oo n. j			That Are OBL FACW	$\sqrt{100}$ or FAC: 2 (A)
2						
3					Total Number of Dom	ninant
٥. ۱					Species Across All S	trata: 3 (B)
+ 5					opecies Acioss Ali o	(D)
<u> </u>				= Total Cover	Percent of Dominant	Species
Sapling/Shrub Str	<u>atum:</u> (Plot	Size: <u>15 ft.</u> )			That Are OBL, FACW	V, or FAC: <u>67</u> (A/B)
1 2					Prevalence Index w	orksheet.
3					Total % Cover of	Multiply by:
J.						<u> </u>
+ 5						^ ^ I =
				= Total Cover	$F\Delta C$ energies	x 3=
Herh Stratum:	(Plot size:	5ft \			FACIL species	x =
1 Paniaum dia	hotomiflorum	<u> </u>	20		LIPL species	^
			20		Column Totala	(A) (B)
2. <u>Echinocida (</u> 3. Amaranthus	retroflevus		20			(¤)
4. Xanthium sti	rumarium		10	N ACW	Prevalence Index = P	3/A =
5. Lyconus am	ericanus		10	N OBI		
6. Glvcine max	,		10	N FACU	Hydrophytic Vegeta	tion Indicators:
7				<u> </u>	1 - Rapid Tes	t for Hydrophytic Vegetation
8.					X 2 - Dominance	e Test is >50%
9.					3 - Prevalence	e Index is $\leq 3.0^{1}$
 10					4 - Morpholog	lical Adaptations <sup>1</sup> (Provide supporting
			100	= Total Cover	data in Rei	marks or on a separate sheet)
Woody Vine Strat	um.	(Plot size 30 ft )	100		Problematic I	Hydrophytic Vegetation <sup>1</sup> (Explain)
1	<u>MIII.</u>	(1.101.3120.0011.)				
···					1	
۷				= Total Cover	' Indicators of hydric be present, unless dis	soil and wetland hydrology must sturbed or problematic.
					Hydrophytic Vegeta Present?	tion Yes XNo

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

US Army Corps of Engineers

Midwest Region - Version 2.0

Profile Desc	cription: (Describe to	the depth	needed to docume	ent the ind	licator or c	onfirm the a	absence of indicato	ors.)		
Depth	Matrix			Redox Feat	ures		_			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	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			
		. <u> </u>								
							<u> </u>			
<sup>1</sup> Type: C=Co	ncentration, D=Depletion,	RM=Reduc	ced Matrix, MS=Maske	ed Sand Gra	ains.		<sup>2</sup> Location: PL= Por	e Lining, M=Matrix.		
Hydric Soil Ir	ndicators:						Indicators for Prob	olematic Hydric Soils <sup>3</sup> :		
Histosol (A	<b>\</b> 1)		Sandy Gleyed Matri	x (S4)			Coast Prairie Rec	lox (A16)		
Histic Epip	pedon (A2)		Sandy Redox (S5)				Dark Surface (S7	)		
Black Histi	ic (A3)		Stripped Matrix (S6)	)			Iron-Manganese	Masses (F12)		
Hydrogen	Sulfide (A4)		Loamy Mucky Miner	ral (F1)			Very Shallow Dar	k Surface (TF12)		
Stratified L	₋ayers (A5)		Loamy Gleyed Matri	ix (F2)			Other (Explain in	Remarks)		
2 cm Mucl	k (A10)		X Depleted Matrix (F3	)						
Depleted E	Below Dark Surface (A11)		Redox Dark Surface	e (F6)						
Thick Dark	x Surface (A12)		Depleted Dark Surfa	ace (F7)			<sup>3</sup> Indicators of hvdr	ophytic vegetation and wetland		
Sandy Mu	cky Mineral (S1)		Redox Depressions	(F8)		hydrology must be present, unless disturbed or				
5 cm Mucl	ky Peat or Peat (S3)							problematic.		
Restrictive L	ayer (if observed):									
Туре:										
Depth (in	iches):						Hydric Soil Presen	t? Yes <u>X</u> No		
HYDROLO Wetland Hyd	GY rology Indicators:									
Primary Indicato	ors (minimum of one is require	d; check all t	hat apply)			Secondary In	dicators (minimum of two	required)		
Surface W	/ater (A1)		Water-Stained Leav	ves (B9)			Surface Soil Cracks (B6	)		
High Wate	er Table (A2)		Aquatic Fauna (B13	6)			Drainage Patterns (B10)			
X Saturation	(A3)		True Aquatic Plants	(B14)		Dry-Season Water Table (C2)				
Water Mar	rks (B1)		Hydrogen Sulfide O	dor (C1)		Crayfish Burrows (C8)				
Sediment	Deposits (B2)		Oxidized Rhizosphe	res on Living	Roots (C3)	Х	Saturation Visible on Ae	rial Imagery (C9)		
X Drift Depos	sits (B3)		Presence of Reduce	ed Iron (C4)			Stunted or Stressed Pla	nts (D1)		
Algal Mat	or Crust (B4)		Recent Iron Reducti	ion in Tilled S	oils (C6)		Geomorphic Position (D	2)		
Iron Depos	sits (B5)		Thin Muck Surface	(C7)			FAC-Neutral Test (D5)			
Inundation	Nisible on Aerial Imagery (B7	")	Gauge or Well Data	(D9)						
Sparsely V	/egetated Concave Surface (I	38)	Other (Explain in Re	emarks)						
Field Observ	ations:									
Surface Water	Present? Yes X	No	Depth (inches):	6		Wetland Hy	/drology Present?	Yes <u>X</u> No		
Water Table Pre	esent? Yes	No	X Depth (inches):							
Saturation Pres	ent? Yes X	No	Depth (inches):	0						
(includes capilla	ary fringe)									
Describe Rec	orded Data (stream gauge	e, monitorin	g well, aerial photos, p	previous insp	pections), if a	available:				
Remarks										
i terriarită										
			Recent	heavy prec	ipitation and	flooding				

Recent heavy precipitation and flooding

# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site:	Surge Industria	1		City/County: Pleas	antview/Shelby		Sampling Date: February 17, 2022		
Applicant/Owner:	Runnebohm Co	Instruction Co.			Sta	ate: IN	Sampling Point:	TP-13	
Investigator(s):	GJG			Secti	on, Township, Range:	NW1/4, S			
Landform (hillslope	, terrace, etc.):	depression		Local Relie	f (concave, convex, none):	none			
Slope (%):	0 - 2%	Lat: 39.38.59 N		Long: 85.56	.41 W		Datum: W	/GS84	
Soil Map Unit Nan	ne: Ci	rosby silt loam New Castle	Till Plain Mia	ami silt loam 0 to 2%	slopes (CrA)	NWI classi	fication:		
Are climatic/bydro	logic conditions	on the site typical for this tin	ne of year?			(If no	ovaloin in Romarka )		
Are Vegetation	, S	Soil, or Hydrolog	y	_significantly disturb	ed? Are "Normal C Yes	Circumstances	" present? No X		
Are Vegetation	, §	Soil, or Hydrolog	у	_naturally problemat	c? (If needed, expla	ain any answer	s in Remarks.)		
SUMMARY OF	FINDINGS -	Attach site map showir	ng samplin	g point location	s, transects, importar	nt features,	etc.		
Hydrophytic Vege	tation Present?		Yes X	No	s the Sampled Area				
Hydric Soil Preser	nt?		Yes	No <u>X</u>	within a Wetland?	res	No <u>X</u>		
Wetland Hydrolog	y Present?		Yes X	No					
Significant floodin	g - Use scienti	fic names of plants							
VEGETATION			Abaaluta	Dominant Indiaata	Dominance Test was	rkohooti			
Tree Stratum	(Plot size:	30 ft )	Absolute % Cover	Species? Status	Number of Dominant	rksneet: Species			
1.	(1 101 3120.				That Are OBL, FACW	. or FAC:	2 (A	A)	
2.						,	(	·)	
3.					Total Number of Dom	inant			
4.					Species Across All St	irata:	(E	3)	
5.									
Sapling/Shrub Stra	<u>atum:</u> (Plot Si	ze: <u>15 ft.</u> )		= Total Cover	Percent of Dominant S That Are OBL, FACW	Species /, or FAC:	67(A	V/B)	
2.					Prevalence Index wo	orksheet:			
3.					Total % Cover of:		Multiply by:		
4.					OBL species	x 1=			
5.					FACW species	x 2=			
				= Total Cover	FAC species	x 3 =			
<u>Herb Stratum:</u>	(Plot size:	<u> </u>			FACU species	x 4 =			
1. <u>Glycine max</u>			20	Y FACU	UPL species	x 5 =	/r	2	
3 Amaranthus	retroflexus		20	Y FACU		(A)	(E	<b>)</b>	
4. Xanthium str	rumarium		10	N ACW	Prevalence Index = B	/A =			
5. Panicum dici	hotomiflorum		25	Y ACW					
6.					Hydrophytic Vegetat	tion Indicato	rs:		
7					1 - Rapid Test	for Hydrophy	tic Vegetation		
8					X 2 - Dominance	e Test is >50%	6		
9					3 - Prevalence	e Index is ≤3.(	)' 		
10.			100	- Total Caver	4 - Morphologi data in Ren	ical Adaptatic narks or on a	ns (Provide suppo separate sheet)	rung	
Woody Vine Strat	um.	(Plot size: 30 ft )	100		Prohlematic L	lydronhytic V	egetation <sup>1</sup> (Evolution)		
1.	<u>uill.</u>	(1 101 3120 <u>. 00 11.</u> )				iyaropriyuo v			
2.					<sup>1</sup> Indicators of hydric s	soil and wette	nd hydrology must		
				= Total Cover	be present, unless dis	sturbed or pro	blematic.		
					Hydrophytic Vegetat Present?	tion	Yes X	No	
Remarks: (Include	e photo numbers	here or on a separate sheet	.)						

US Army Corps of Engineers

Midwest Region - Version 2.0

Profile Desc	ription: (Describe to	the depth	needed to docum	ent the ind	licator or c	onfirm the	absence of indicat	tors.)		
Depth	Matrix	-		Redox Feat	ures					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	- Texture	Remarks		
0 - 14	10YR 3/2	100					silt loam			
14 - 18	2.5YR 5/3	100					silt loam			
				_						
<sup>1</sup> Type: C=Co	ncentration, D=Depletion	, RM=Reduc	ed Matrix, MS=Maske	ed Sand Gra	ains.		<sup>2</sup> Location: PL= Po	ore Lining, M=Matrix.		
Hydric Soil Ir	dicators:						Indicators for Pro	blematic Hydric Soils	3	
Histosol (A	.1)	-	Sandy Gleyed Matri	ix (S4)			Coast Prairie Re	edox (A16)		
Histic Epip	edon (A2)	-	Sandy Redox (S5)				Dark Surface (S	57)		
Black Histi	c (A3)	-	Stripped Matrix (S6	)			Iron-Manganese	e Masses (F12)		
Hydrogen	Sulfide (A4)	-	Loamy Mucky Mine	ral (F1)			Very Shallow Da	ark Surface (TF12)		
Stratified L	ayers (A5)	-	Loamy Gleyed Matr	ix (F2)			Other (Explain in	n Remarks)		
2 cm Mucł	: (A10)	-	Depleted Matrix (F3	3)						
Depleted E	Below Dark Surface (A11)	-	Redox Dark Surface	e (F6)						
Thick Dark	Surface (A12)	-	Depleted Dark Surfa	ace (F7)			<sup>3</sup> Indicators of hyd	drophytic vegetation and	d wetland	
Sandy Mu	cky Mineral (S1)	-	Redox Depressions	; (F8)		hydrology must be present, unless disturbed or				
5 cm Muck	y Peat or Peat (S3)							problematic.		
Restrictive L	ayer (if observed):									
Туре:								10 X.		
Depth (in	cnes):						Hydric Soil Prese	nt? Yes	NO X	
HYDROLO	GY									
Wetland Hyd	rology Indicators:									
Primary Indicato	rs (minimum of one is requir	ed; check all th	nat apply)			Secondary In	dicators (minimum of two	o required)	_	
Surface W	ater (A1)	_	Water-Stained Leav	/es (B9)			Surface Soil Cracks (B	6)		
High Wate	r Table (A2)	-	Aquatic Fauna (B13	3)			Drainage Patterns (B10	0)		
X Saturation	(A3)	-	True Aquatic Plants	s (B14)			Dry-Season Water Tab	ole (C2)		
Water Mar	ks (B1)	-	Hydrogen Sulfide O	dor (C1)			Crayfish Burrows (C8)			
Sediment	Deposits (B2)	-	Oxidized Rhizosphe	eres on Living	Roots (C3)	Х	Saturation Visible on A	erial Imagery (C9)		
Drift Depos	sits (B3)	-	Presence of Reduc	ed Iron (C4)			Stunted or Stressed Pla	ants (D1)		
Algal Mat o	or Crust (B4)	-	Recent Iron Reduct	ion in Tilled S	oils (C6)		Geomorphic Position (	02)		
Iron Depos	sits (B5)	-	Thin Muck Surface	(C7)			FAC-Neutral Test (D5)			
Inundation	Visible on Aerial Imagery (B		Gauge or Well Data	a (D9)						
Sparsely V	egetated Concave Surface	(B8) <mark>-</mark>	Other (Explain in Re	emarks)						
Field Observ	ations:									
Surface Water F	Present? Yes X	No	Depth (inches):	4		Wetland H	ydrology Present?	Yes X	No	
Water Table Pre	esent? Yes	No	X Depth (inches):							
Saturation Pres	ent? Yes X	No	Depth (inches):	0						
(includes capilla	ry fringe)									
Describe Rec	orded Data (stream gaug	ge, monitoring	g well, aerial photos, p	previous ins	pections), if a	available:				
Remarks										
i tomarto										
			Recent heav	vy precipitati	on and flood	ling conditions	3			

# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site:	Surge Indust	rial		City/County: Pleasantview/Shelby Sampling Date: February 17,					
Applicant/Owner:	Runnebohm	Construction Co.			S	Sampling Point:	TP-14		
Investigator(s):	GJG			Se	ection, Township, Range:	NW1/4, S	Sec. 23, T14N, R5E		
Landform (hillslope	, terrace, etc.):	low-lying area		Local Re	lief (concave, convex, none):	none			
Slope (%):	0 - 2%	Lat: 39.39.04 N		Long: 85	.56.51 W		Datum: W	/GS84	
Soil Map Unit Nan	ne:	Brookston silty clay loam, 0 to	o 2% slopes (	0		NWI classi	fication:		
Are climatic/hydro Are Vegetation	logic condition	ns on the site typical for this ti , Soil, or Hydrolog	me of year? gy	_significantly distu	Yes <u>X</u> No urbed? Are "Normal Ye	(If no Circumstances	, explain in Remarks.) s" present? No X		
Are Vegetation		, Soil, or Hydrolog	ду	_naturally problem	natic? (If needed, exp	blain any answer	s in Remarks.)		
SUMMARY OF	FINDINGS	- Attach site map show	ing samplir	ng point locatio	ons, transects, importa	int features,	, etc.		
Hydrophytic Vege	tation Present	?	Yes	No X	Is the Sampled Area				
Hydric Soil Preser	nt?		Yes	No <u>X</u>	within a Wetland?	Yes	No <u>X</u>		
Wetland Hydrolog	y Present?		Yes X	No					
Significant floodin	g								
VEGETATION	- Use scier	ntific names of plants.							
Tree Stratum           1.           2.           3.           4.           5.           Sapling/Shrub Strate           1.           2.           3.	(Plot siz	e: 30 ft. ) Size: <u>15 ft.</u> )	Absolute <u>Cov</u> er   	Dominant Indica Species? Stat	tor Dominance Test we us Number of Dominan That Are OBL, FACV Total Number of Dor Species Across All S Percent of Dominant That Are OBL, FACV Prevalence Index w Total % Cover of	orksheet: t Species W, or FAC: minant Strata: t Species W, or FAC: <b>vorksheet:</b>	2 (4 1 (E 50 (4	\) 3) //В)	
4.					OBL species	x 1=	manipiy by:		
5. <u>Herb Stratum:</u> 1. <u>Glycine max</u>	(Plot size:	<u> </u>	20	= Total Cover	FACW species FAC species FACU species UUUPL species	x 2 = $x 3 =$ $x 4 =$ $x 5 =$			
2. <u>Echinocida c</u> 3 4	rus-gaili			<u> </u>	Prevalence Index = 1	(A) B/A =		s)	
6. 7. 8. 9. 10. <u>Woody Vine Strat</u> 1. 2.	<u>um:</u>	(Plot size: <u>30 ft.</u> )	45	= Total Cover	Hydrophytic Vegeta 1 - Rapid Tes 2 - Dominand 3 - Prevalend 4 - Morpholog data in Re Problematic <sup>1</sup> Indicators of hydric be present, unless d Hydrophytic Vegeta	ation Indicato st for Hydrophy ce Test is >50% ce Index is ≤3.0 gical Adaptatic emarks or on a Hydrophytic V soil and wetla isturbed or pro ation	<b>rs:</b> /tic Vegetation % ons <sup>1</sup> (Provide suppo separate sheet) egetation <sup>1</sup> (Explain) nd hydrology must blematic.	rting	
Remarks: (Include	photo numbe	rs here or on a senarate shee	et.)		Present?		Yes	No <u>X</u>	

US Army Corps of Engineers

Midwest Region - Version 2.0

Profile Desc	cription: (Describe to	the depth	needed to docum	ent the ind	licator or c	onfirm the a	absence of indicato	rs.)
Depth	Matrix	-		Redox Feat	ures			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 14	10YR 3/2	100					silt loam	
14 - 18	10YR 3/2	90	2.5YR 3/1				silty clay loam	
						<u> </u>		
							- <u> </u>	
<sup>1</sup> Type: C=Co	ncentration, D=Depletion,	RM=Reduc	ed Matrix, MS=Maske	ed Sand Gra	iins.		<sup>2</sup> Location: PL= Pore	Lining, M=Matrix.
Hydric Soil Ir	idicators:						Indicators for Probl	ematic Hydric Soils':
Histosol (A	(1)		Sandy Gleyed Matr	ix (S4)			Coast Prairie Redo	ox (A16)
Histic Epip	edon (A2)		Sandy Redox (S5)				Dark Surface (S7)	
Black Histi	c (A3)		Stripped Matrix (S6	)			Iron-Manganese M	1asses (F12)
Hydrogen	Sulfide (A4)		Loamy Mucky Mine	ral (F1)			Very Shallow Dark	Surface (TF12)
Stratified L	ayers (A5)		Loamy Gleyed Matr	ix (F2)			Other (Explain in F	(emarks)
	(A1U)	•	Depleted Matrix (F3	) (FC)				
Depleted E		•	Redox Dark Surrac	e (F6)				
Eandy Mu	Surface (ATZ)		Depieted Dark Sun				<sup>3</sup> Indicators of hydro	ophytic vegetation and wetland
5 and Much	cky Mineral (ST)	-	Redox Depressions	(FO)			hydrology must be	e present, unless disturbed or
Restrictive I	aver (if observed):							biobiematic.
Type <sup>.</sup>	ayer (ii observeu).							
Depth (in	ches):						Hvdric Soil Present	? Yes No X
	<u></u>							
HYDROLO	GY							
Wetland Hyd	rology Indicators:					0		and the D
Primary Indicato	ors (minimum of one is require	ed; check all t		(00)		Secondary In	dicators (minimum of two r	equired)
High Wate	ater $(AT)$	-	Aquatic Fauna (B1)	/es (B9)			Drainage Patterns (B10)	
X Saturation	$(\Delta 3)$			2) (B14)			Drainage Fatterns (BT0)	(C2)
Water Mar	(A3)		Hydrogen Sulfide O	dor(C1)			Cravfish Burrows (C8)	(02)
Sediment	Deposits (B2)	-	Oxidized Rhizosphe	eres on Living	Roots (C3)	×	Saturation Visible on Aeri	al Imagery (C9)
Drift Depo	sits (B3)	-	Presence of Reduc	ed Iron (C4)	110013 (00)		Stunted or Stressed Plan	ts (D1)
Algal Mat	or Crust (B4)		Recent Iron Reduct	ion in Tilled S	oils (C6)		Geomorphic Position (D2	)
Iron Depos	sits (B5)		Thin Muck Surface	(C7)	0.00		- FAC-Neutral Test (D5)	,
Inundation	Visible on Aerial Imagery (B	7)	Gauge or Well Data	a (D9)				
Sparsely V	/egetated Concave Surface (	B8)	Other (Explain in Re	emarks)				
Field Observ	ations:							
Surface Water	Present? Yes X	No	Depth (inches):	2		Wetland Hy	drology Present?	Yes X No
Water Table Pre	esent? Yes	No	X Depth (inches):			•		
Saturation Pres	ent? Yes X	No	Depth (inches):	0				
(includes capilla	ry fringe)	- · ·						
Describe Rec	orded Data (stream gaug	e, monitorin	g well, aerial photos, p	previous insp	pections), if a	available:		
Remarka								
Remarks								
			Recent heav	vy precipitati	on and flood	ling conditions	3	

#### WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site:	Surge Industr	ial		City/Cou	nty: <u>Pleasar</u>	tview/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, S	Sec. 23, T14N, R5E	
Landform (hillslope,	terrace, etc.):	low-lying area		Lo	ocal Relief (c	oncave, convex, none):	none		
Slope (%):	0 - 2%	Lat: 39.39.16 N		Lo	na: 85.56.5	D W		Datum: V	VGS84
Soil Map Unit Nam	<u>.</u>	Brookston silty clay loam 0 to 2	2% slopes (F				NWI classi	fication <sup>.</sup>	
Are climatic/bydrol	logic condition	s on the site typical for this time	of year?	51)	Ve	s X No	(If no	ovalain in Romarka )	
Are Vegetation		, Soil, or Hydrology	/	significant	ly disturbed?	P Are "Normal Y	I Circumstances'	present?	
Are Vegetation		, Soil, or Hydrology	/	_naturally p	roblematic?	(If needed, ex	cplain any answers	in Remarks.)	
SUMMARY OF	FINDINGS -	Attach site map showing	g sampling	g point loc	ations, tra	ansects, importan	it features, et	с.	
Hydrophytic Veget	ation Present?	,	Yes X	No	le i	the Sampled Area			
Hydric Soil Presen	nt?		Yes X	No	w	ithin a Wetland?	Yes X	No	
Wetland Hydrology	y Present?		Yes X	No					
Significant flooding	3								
VEGETATION	- Use scien	tific names of plants.				<u> </u>			
Tree Chrone	(Dist siz	20.41	Absolute	Dominant	Indicator	Dominance Test w	orksheet:		
1	(PIOL SIZ	e. <u> </u>	% Cover	Species	Status	That Are OBL FAC	W or FAC	1 (	A)
2.						That AIC ODE, I AO			~)
3.						Total Number of Do	ominant		
4.						Species Across All	Strata:	1(	В)
5									
Sanling/Shrub Stra	atum: (Plot	Size: 15 ft )		= Total Co	over	Percent of Dominan	nt Species	100 (	۵/B)
1.	<u>atum.</u> (1101	012e. <u>10 ft.</u> )				That Are ODE, I AC	W, OLLAG.	(	~0)
2.					_	Prevalence Index v	worksheet:		
3.						Total % Cover of	of:	Multiply by:	
4.						OBL species	x 1 =		
5.						FACW species	x 2=		
Harb Stratum	(Dist size)	E# \		= Total Co	over	FAC species	x 3=		
1	(Piot size.	<u> </u>				LIPL species	X 4 x 5=		
2. Echinocloa c	rus-galli		20	Y	FACW	Column Totals:	(A)	(	В)
3. Xanthium stru 4.	umarium		10	N	FACW	 Prevalence Index =	B/A =	`	
5									
6.						Hydrophytic Veget	tation Indicator	s:	
7						1 - Rapid Te	est for Hydrophyl	ic Vegetation	
δ. ο						X 2 - Dominan	100  Lest is  >50%	1	
10.			30	= Total Co		4 - Morpholo data in R	ogical Adaptation	ns <sup>1</sup> (Provide suppor separate sheet)	ting
Woody Vine Stratu	<u>ım:</u>	(Plot size: <u>30 ft.</u> )				Problematio	c Hydrophytic Ve	egetation <sup>1</sup> (Explain)	
2.				= Total Co	over	<sup>1</sup> Indicators of hydrid be present, unless o	c soil and wetlan disturbed or prob	d hydrology must lematic.	
						Hydrophytic Veget Present?	tation	Yes X	Νο
Remarks: (Include	photo number	s here or on a separate sheet.)							

US Army Corps of Engineers

Midwest Region - Version 2.0

Profile Desc	ription: (Describ	e to the depth	needed to documer	nt the indic	ator or co	onfirm the ab	sence of indicator	s.)
Depth	Matri	x		Redox Featu	ures		_	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 6	10YR 5/2	95	10YR 6/8	5	С	М	silt loam	
6 - 18	10YR 3/2	100					silty clay loam	
<sup>1</sup> Type: C=Con	centration, D=Deplet	tion, RM=Reduce	d Matrix, MS=Masked S	Sand Grains.			<sup>2</sup> Location: PL= Por	e Lining, M=Matrix.
Hydric Soil In	dicators:						Indicators for Prot	olematic Hydric Soils <sup>3</sup> :
Histosol (A	1)		Sandy Gleyed Matrix	x (S4)			Coast Prairie Re	dox (A16)
Histic Epipe	edon (A2)		Sandy Redox (S5)				Dark Surface (S	7)
Black Histic	c (A3)		Stripped Matrix (S6)				Iron-Manganese	Masses (F12)
Hydrogen S	Sulfide (A4)		Loamy Mucky Miner	al (F1)			Very Shallow Da	rk Surface (TF12)
Stratified L	ayers (A5)		Loamy Gleyed Matri	x (F2)			Other (Explain in	Remarks)
2 cm Muck	(A10)		X Depleted Matrix (F3)	)				
Depleted B	elow Dark Surface (A1	1)	Redox Dark Surface	e (F6)				
Thick Dark	Surface (A12)		Depleted Dark Surfa	ace (F7)			<sup>3</sup> Indicators of hyd	trophytic vegetation and wetland
Sandy Muc	ky Mineral (S1)		Redox Depressions	(F8)			hydrology must	be present, unless disturbed or
5 cm Muck	y Peat or Peat (S3)							problematic.
Restrictive La	yer (if observed):							
Туре:								
Depth (inc	ches):						Hydric Soil Preser	nt? Yes <u>X</u> No
HYDROLO	GY							
Wetland Hydr	ology Indicators:							
Primary Indicator	rs (minimum of one is re	equired; check all th	at apply)			Secondary In	dicators (minimum of two	required)
X Surface Wa	ater (A1)		Water-Stained Leav	es (B9)			Surface Soil Cracks (B6	5)
High Water	Table (A2)		X Aquatic Fauna (B13	)		Х	Drainage Patterns (B10	)
X Saturation	(A3)		True Aquatic Plants	(B14)			Dry-Season Water Tabl	e (C2)
Water Marl	ks (B1)		Hydrogen Sulfide Oo	dor (C1)			Crayfish Burrows (C8)	
Sediment [	Deposits (B2)		Oxidized Rhizosphere	res on Living F	Roots (C3)	Х	Saturation Visible on Ae	erial Imagery (C9)
X Drift Depos	its (B3)		Presence of Reduce	ed Iron (C4)			Stunted or Stressed Pla	ints (D1)
Algal Mat c	r Crust (B4)		Recent Iron Reducti	on in Tilled Soi	ils (C6)		_Geomorphic Position (D	2)
Iron Depos	its (B5)		Thin Muck Surface (	(C7)			FAC-Neutral Test (D5)	
Inundation	Visible on Aerial Image	ry (B7)	Gauge or Well Data	(D9)				
Sparsely V	egetated Concave Surf	ace (B8)	Other (Explain in Re	marks)				
Field Observa	tions:							
Surface Water P	resent? Yes	X No	Depth (inches):	3		Wetland Hy	drology Present?	Yes X No
Water Table Pre	sent? Yes	No	X Depth (inches):					
Saturation Prese	ent? Yes	X No	Depth (inches):	0				
(includes capillar	y fringe)							
Describe Reco	orded Data (stream g	auge, monitoring	well, aerial photos, prev	vious inspect	ions), if ava	ilable:		
D								
Remarks								
			Recent hear	w nrecinitati	on and floor	ling conditions		

#### WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site:	Surge Industr	ial		City/Cou	nty: <u>Pleasa</u>	ntview/Shelby	Sampling Date:	March 15, 2022	
Applicant/Owner:	Runnebohm	Construction Co.					Sampling Point:	TP-16	
Investigator(s):	GJG				Section	n, Township, Range:	NW1/4,	Sec. 23, T14N, R5E	
Landform (hillslope,	, terrace, etc.):	low-lying area		Lo	ocal Relief	(concave, convex, none):	none		
Slope (%):	0 - 2%	Lat: 39.39.17 N		Lo	ona: 85.56.	59 W		Datum: \	VGS84
Soil Map Unit Nam	1e.	Brookston silty clay loam 0 to	2% slopes (F				NWI class	sification:	
Are climatic/bydrol	logic condition	s on the site typical for this tim	e of year?	51)	v	les X No	/lf n	o oveloin in Romarks	
Are Vegetation		, Soil, or Hydrolog	ас ог усан Эу	_significant	ly disturbed	ואס <u>אר</u> אפ <u>ו</u> ארפ "Norma" ארפ ארפ	I Circumstance Yes X	s" present? No	
Are Vegetation		, Soil, or Hydrolog	ЭУ	_naturally p	oroblematic	? (If needed, ex	xplain any answe	rs in Remarks.)	
SUMMARY OF	FINDINGS ·	Attach site map showir	ng sampling	g point loc	ations, t	ransects, importan	nt features, e	tc.	
Hydrophytic Veget	tation Present?	,	Yes X	No	Is	the Sampled Area			
Hydric Soil Presen	nt?		Yes	No	<u>x</u>	within a Wetland?	Yes	<u>No X</u>	
Wetland Hydrology	y Present?		Yes	No	<u>x</u>				
VEOFTATION									
VEGETATION	- Use scien	tific names of plants.	A.L	During	In the state	Dente and Test			
Troo Stratum	(Plot siz	e. 30 ff )	Absolute % Cover	Dominant Species?	Indicator	Number of Domina	vorksneet:		
1.	(1 101 312	e. 30 n. )	7 <u>0 COve</u> i	opecies	Olalus	That Are OBL. FAC	W. or FAC:	2 (	A)
2.						,	,	(	,
3.					_	Total Number of Do	ominant		
4.						Species Across All	Strata:	(	В)
5.									
Conling/Chrub Stra	otumi (Diot			= I otal Co	over	Percent of Dominar	nt Species	100 (	A /D)
Saping/Shirub Sira	<u>alum.</u> (Piol	Size. <u>15 ii.</u> )				That Are Obl., FAC	W, OF FAC.	(	A/D)
2.					_	Prevalence Index	worksheet:		
3.			_		_	Total % Cover	of:	Multiply by:	
4.						OBL species	x 1 =		
5						FACW species	x 2 =		
				= Total Co	over	FAC species	x 3 =		
Herb Stratum:	(Plot size:	<u> </u>	10	V		FACU species	X 4=		
2 Poa pratense	e		5	<u> </u>	Y FAC	Column Totals	X 3 = (A)		B)
3	•					Prevalence Index =	B/A =		_)
5.									
6.					—	Hydrophytic Vege	tation Indicato	rs:	
/					—	1 - Rapid Te	est for Hydroph	ytic Vegetation	
o				·	—	3 - Prevaler	nce Index is <3	∞ ∩ <sup>1</sup>	
10.			15	= Total Co	over	4 - Morpholo data in R	ogical Adaptatio Remarks or on a	ons <sup>1</sup> (Provide suppo separate sheet)	rting
Woody Vine Stratu	um:	(Plot size: <u>30 ft.</u> )				Problematio	cHydrophytic V	/egetation <sup>1</sup> (Explain)	
1.		<u> </u>				1			
۷				= Total Co	over	<sup>'</sup> Indicators of hydri be present, unless o	c soil and wetla disturbed or pro	nd hydrology must blematic.	
						Hydrophytic Vege Present?	tation	Yes X	No
Remarks: (Include	photo number	s here or on a separate sheet.	.)						

US Army Corps of Engineers

Profile Desc	ription: (Describe to	the depth	needed to docume	nt the indic	cator or co	nfirm the ab	sence of indicato	rs.)		
Depth	Matrix			Redox Feat	ures		_			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remark	S	
0 - 6	10YR 4/2	100					silt loam			
6 - 18	10YR 3/2	100					silt loam			
<sup>1</sup> Type: C=Cor	centration, D=Depletion,	RM=Reduce	d Matrix, MS=Masked	Sand Grains.			<sup>2</sup> Location: PL= Po	ore Lining, M=Matrix.		
Hydric Soil In	dicators:						Indicators for Pro	blematic Hydric Soils	<sup>1</sup> :	
Histosol (A	.1)		Sandy Gleyed Matri	Sandy Gleyed Matrix (S4)			Coast Prairie R	edox (A16)		
Histic Epip	edon (A2)		Sandy Redox (S5)				Dark Surface (S7)			
Black Histi	c (A3)		Stripped Matrix (S6)				Iron-Manganese Masses (F12)			
Hydrogen Sulfide (A4)			Loamy Mucky Mineral (F1)				Very Shallow Dark Surface (TF12)			
Stratified L	ayers (A5)		Loamy Gleyed Matrix (F2)			Other (Explain in Remarks)				
2 cm Muck	: (A10)		Depleted Matrix (F3	3)						
Depleted E	elow Dark Surface (A11)		Redox Dark Surface	e (F6)						
Thick Dark	Surface (A12)		Depleted Dark Surf	ace (F7)		<sup>3</sup> Indicators of hydrophytic vegetation and wetland				
Sandy Muc	cky Mineral (S1)		Redox Depressions	; (F8)			hydrology must be present, unless disturbed or			
5 cm Muck	y Peat or Peat (S3)							problematic.		
Restrictive La	yer (if observed):									
Туре:										
Depth (in	ches):						Hydric Soil Prese	nt? Yes	NoX	
HYDROLO Wetland Hydr	GY ology Indicators:									
Primary Indicato	rs (minimum of one is require	ed; check all th	at apply)			Secondary Indicators (minimum of two required)				
Surface W	ater (A1)		Water-Stained Leaves (B9)			Surface Soil Cracks (B6)				
High Wate	r Table (A2)		Aquatic Fauna (B13)			Drainage Patterns (B10)				
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 Depos	sits (B3)		Presence of Reduced Iron (C4)			Stunted or Stressed Plants (D1)				
Algal Mat o	or Crust (B4)		Recent Iron Reduction in Tilled Soils (C6)			Geomorphic Position (D2)				
Iron Depos	sits (B5)		Thin Muck Surface	face (C7) X			FAC-Neutral Test (D5)	1		
Inundation	Visible on Aerial Imagery (B	7)	Gauge or Well Data	Gauge or Well Data (D9)						
Sparsely V	egetated Concave Surface (	B8)	Other (Explain in Re	emarks)						
Field Observa	ations:									
Surface Water F	Present? Yes	No	X Depth (inches):			Wetland Hy	/drology Present?	Yes	No X	
Water Table Pre	esent? Yes	No	X Depth (inches):							
Saturation Prese	ent? Yes	No	X Depth (inches):							
(includes capilla	ry fringe)									
Describe Reco	orded Data (stream gauge	e, monitoring	well, aerial photos, pre	vious inspec	tions), if avai	ilable:				
Pomarka										
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).





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.



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**

### Page

1.0	Intro	Introduction1					
	1.1	1.1 General Information					
	1.2	Methodology					
		1.2.1 Office Data Review	2				
		1.2.2 Site Reconnaissance	2				
		1.2.3 Data Collection	3				
		1.2.4 Preparation of Wetland Delineation Report	3				
2.0	Findings						
	2.1	National Wetlands Inventory Map	4				
	2.2	Site Soils	4				
	2.3	Plant Communities	5				
	2.4	Hydrology	5				
	2.5	Wetlands	6				
	2.6	Other Waters	7				
3.0	Regu	latory Considerations	9				
4.0	Conc	Conclusions					
5.0	Leve	Level of Care12					
6.0	Refe	References					

### APPENDICES

Appendix A -	Figure 1 – Site Location Map Figure 2 – National Wetland Inventory Map Figure 3 – Soil Survey Map Figure 3a – Soil Survey Legend Figure 4 – FEMA Map Figure 5 – Overall Jurisdictional Findings Map Figure 6 – Inset #1 Figure 7 – Inset #2
	Figure 0 – Inset #1 Figure 7 – Inset #2 Figure 8 – Inset #3

Appendix B - Wetland Data Forms

Appendix C - Photographic Record



### **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 nonjurisdictional 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					
AreaUSF&WSOFWetland(acres)ClassificationHydroperiodSo					Photograph Number
А	1.08	PFO/EMA	Seasonally saturated	43	1, 2, 3, 4, 7, 8 & 9
В	0.05	PEMA	Seasonally saturated	20	10 & 11
С	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

- Core, Earl L., and Ammons, Nelle P., 1958. *Woody Plants in Winter*. The Boxwood Press, Pacific Grove, California.
- 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.
- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterway Experiment Station, Vicksburg, Mississippi.
- Newcomb, Lawrence, 1977. Newcomb's Wildflower Guide, Little, Brown and Company, Boston, Massachusetts.
- Sabine, Bobbi Jones, 1999. National List of Plant Species that Occur in Wetlands: Region 3 North Central. Resource Management Group, Inc. Grand Haven, Michigan.
- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture (USDA). 2011a. Web Soil Survey. Available online at <a href="http://websoilsurvey.nrcs.usda.gov/">http://websoilsurvey.nrcs.usda.gov/</a>. Accessed May 30, 2022.
- United States Department of Agriculture (USDA) Natural Resources Conservation Service, Purdue Cooperative Extension Service, 1991. *Soil Survey for Shelby County, Indiana*.
- United States Department of Agriculture, Natural Resources Conservation Service (USDA). 2011b. 2011 National List of Hydric Soils by State. Available online at <u>http://soils.usda.gov/use/hydric/</u>. Accessed May 30, 2022.
- United States Geological Survey. 7.5-minute Topographic Map of the Acton, Indiana Quadrangle, dated 1998.



# APPENDIX A

# **FIGURES**







National Wetlands Inventory

Surge Industrial Site - Proposed Roundabouts

Project Number:	RCC.003	
Drawing file:	Site Figures	
Date: June, 20	)22	
Scale:	NTS	Fierra -
Drawn By: GJG		<sup>rigure:</sup> 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%
СгВ	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%

. 1



Surge Industrial Site - Proposed Roundabouts



<i>Project Number:</i> <i>Drawing file:</i> <i>Date:</i> June, 2	RCC.003 Site Figures	DHE
Scale:	NTS	
Drawn By: GJG		Figure: 3a
	Project Number: Drawing file: Date: June, 2 Scale: Drawn By: GJG	Project Number: RCC.003 Drawing file: Site Figures Date: June, 2022 Scale: NTS Drawn By: GJG



	Project Number: F	RCC.003	
Shelby County Soil Survey			
	Date: June, 2022		
Surge Industrial - Proposed Roundabouts	Scale:	NTS	
	Drawn By: GJG		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%





	Project Number: F	RCC.003	
Shelby County Soil Survey			
	Date: June, 2022		
Surge Industrial - Proposed Roundabouts	Scale:	NTS	
	Drawn By: GJG		Figure: 3c



CITY OF INDIAMAPOLIS MARION COUNTY 180159

18145C0015C eff. 11/5/2014

2

and so

SHE LBY COUNTY 180235



Surge Industrial Site - Proposed Roundabouts
--

Project Number:	RCC.003	
Date: June, 2022		
Scale:	NTS	
Drawn By: GJG		Figure: 4



	Project Number: F	RCC.003	
Overall Site Map			
	Date: June, 2022		
Surge Industrial Site - Proposed Roundabouts	Scale:	NTS	
	Drawn By: GJG		<sup>Figure:</sup> 5



Inset #1 - Proposed Roundabout #1

Surge Industrial Site - Proposed Roundabouts

Project Number:	RCC.003	
Drawing file:	Site Figures	DEE
<i>Date:</i> June, 20	22	
Scale:	NTS	Figure: O
Drawn By: GJG		Figure. 6





F	Project Number: RCC.	003	
Inset #2 - Proposed Roundabout #2			
	Date: June, 2022		
Surge Industrial Site - Proposed Roundabouts	Scale: N1	S	
	Drawn By: GJG		Figure: 7



	Project Number: F	RCC.003	
Inset #3 - Proposed Roundabout #3			
	Date: June, 2022		
Surge Industrial Site - Proposed Roundabouts	Scale:	NTS	
	Drawn By: GJG		Figure: 8



## **APPENDIX B**

## WETLAND AND STREAM DATA FORMS

Applicant/Owner: <u>H</u> Investigator(s): <u>(</u>	Runnebohm C	Construction Co.			S	tato: IN		
Investigator(s):						nale. IN	Sampling Point:	TP-1a
	GIG			Secti	n Townshin Range	NW/1/4	Sec 23 T14N R5E	
Landform (hillolona t		depression				<u></u> ,	000. 20, 1144, 10E	
Landionn (nilisiope, la	errace, etc.):	depression			(concave, convex, none).	none		
Slope (%): (	0 - 2%	Lat: <u>39.39.36 N</u>		Long: 85.56	.40 W		Datum: W	GS84
Soil Map Unit Name	e:	Brookston silty clay loam, 0	to 2% slopes (	Br)		NWI clas	sification:	
Are climatic/hydrolo	gic conditions	on the site typical for this ti	me of year?		Yes X No	(If n	io, explain in Remarks.)	
Are Vegetation		, Soil, or Hydrol	ogy	significantly disturbe	d? Are "Normal of	Circumstance	es" present?	
					Ye	es X	No	
Are Vegetation		, Soil, or Hydrol	ogy	naturally problemati	c? (If needed, exp	lain any answe	ers in Remarks.)	
		Attach site man show	ina samplin	a point locations	transacts important	fosturos (	ate	
		Allach sile map show		g point locations,	transects, important	leatures, e	<i>.</i>	
Hydropnytic Vegeta	tion Present?		Yes X	No	s the Sampled Area	Vee V	Na	
Mational Hydrology	( Dresent?		Yes X	No	within a Wetland?	tes <u>A</u>	NO	
wetiand Hydrology	Present?		res					
Remarks:								
VEGETATION -	Use scient	ific names of plants.						
			Absolute	Dominant Indicator	Dominance Test wo	orksheet:		
Tree Stratum	(Plot size	e: 30 ft. )	% Cover	Species? Status	Number of Dominant	Species		
1. Fraxinus penn	sylvanicum		40	Y FACW	That Are OBL, FACV	V, or FAC:	<u> </u>	)
2.								
3.					Total Number of Don	ninant		
4.					Species Across All S	strata:	(B	)
5								
			40	= Total Cover	Percent of Dominant	Species		
Sapling/Shrub Strate	<u>um:</u> (Plot	Size: <u>15 ft.</u> )			That Are OBL, FACV	V, or FAC:	<u>71</u> (A	/B)
1. Cornus amom	um		25	Y FACW				
2.					Prevalence Index w	orksheet:		
3.					Total % Cover of	f:	Multiply by:	
4.					OBL species	x 1=		
5.					FACW species	x 2 =	·	
			25	= Total Cover	FAC species	x 3 =	·	
Herb Stratum: (	(Plot size:	<u>5 ft.</u> )			FACU species	x 4 =		
1. Dipsacus sylve	estris		20	Y FACU	UPL species	x 5=		
2. Carex granula	ris		5	N OBL	Column Totals:	(A)	(B	)
3. Glabella packe	era	<u> </u>	5	<u>N</u> FACW				
4. Toxicodendror	n radicans	<u> </u>	20	Y FAC	Prevalence Index = E	3/A =		
5. Solidago altiss	sima	<u> </u>	15	Y FACU				
6. Carex vulpinoi	idea	<u> </u>	15	Y OBL	Hydrophytic Vegeta	tion Indicato	ors:	
7. Geum canade	nse		15	Y FAC	1 - Rapid Tes	t for Hydroph	ytic Vegetation	
8.					X 2 - Dominanc	e Test is >50	%	
9.					3 - Prevalenc	e Index is ≤3.	.0'	
10					4 - Morpholog	gical Adaptati marks or on a	ons: (Provide supporti a separate sheet)	ng
			95	= Total Cover				
Woody Vine Stratun	<u>n:</u>	(Plot size: <u>30 ft.</u> )			Problematic	Hydrophytic \	/egetation' (Explain)	
1.								
2.					<sup>1</sup> Indicators of hydric	soil and wetla	and hydrology must	
				= Total Cover	be present, unless di	sturbed or pro	oblematic.	
					Hydrophytic Vegeta	ation	V	N
							Vee V	No

US Army Corps of Engineers

Midwest Region - Version 2.0

### SOIL

Profile Desc	ription: (Descr	ibe to the	depth	needed to docume	nt the indic	ator or co	nfirm the ab	sence of indicators	5.)
Depth	Ma	atrix			Redox Feat	ures			
(inches)	Color (moi	st)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 18	7.5YR 3/2	2	90	10YR 4/6	10	D	М	silty clay loam	
<sup>1</sup> Type: C=Cor	centration, D=Dep	oletion, RM	=Reduce	d Matrix, MS=Masked	Sand Grains.			<sup>2</sup> Location: PL= Por	e Lining, M=Matrix.
Hydric Soil In	dicators:							Indicators for Prob	lematic Hydric Soils <sup>3</sup> :
Histosol (A	.1)		-	Sandy Gleyed Matri	x (S4)			Coast Prairie Re	dox (A16)
Histic Epip	edon (A2)		-	Sandy Redox (S5)				Dark Surface (S7	7)
Black Histi	c (A3)		-	Stripped Matrix (S6)	)			Iron-Manganese	Masses (F12)
Hydrogen	Sulfide (A4)		-	Loamy Mucky Miner	ral (F1)			Very Shallow Da	rk Surface (TF12)
Stratified L	ayers (A5)		-	Loamy Gleyed Matr	ix (F2)			Other (Explain in	Remarks)
2 cm Muck	(A10)		-	X Depleted Matrix (F3	i)				
Depleted E	Below Dark Surface (	A11)	-	Redox Dark Surface	e (F6)				
Thick Dark	Surface (A12)		-	Depleted Dark Surfa	ace (F7)			<sup>3</sup> Indicators of hyd	Irophytic vegetation and wetland
Sandy Muc	cky Mineral (S1)		-	Redox Depressions	(F8)			hydrology must	be present, unless disturbed or
5 cm Muck	y Peat or Peat (S3)								problematic.
Restrictive La	iyer (if observed)								
Type.	abos):							Hydric Soil Broson	ta Yac X No
Deptil (in								Hydric Soli Flesen	
HYDROLO	GY								
Wetland Hydr	ology Indicators:								
Primary Indicato	rs (minimum of one i	s required; c	heck all the	at apply)			Secondary In	dicators (minimum of two	required)
X Surface W	ater (A1)		-	X Water-Stained Leav	/es (B9)			_Surface Soil Cracks (B6	)
X High Wate	r Table (A2)		-	Aquatic Fauna (B13	3)		Х	Drainage Patterns (B10)	)
X Saturation	(A3)		-	True Aquatic Plants	(B14)			Dry-Season Water Table	e (C2)
Water Mar	ks (B1)		-	Hydrogen Sulfide O	dor (C1)			Crayfish Burrows (C8)	
Sediment [	Deposits (B2)		-	Oxidized Rhizosphe	eres on Living F	Roots (C3)		_Saturation Visible on Ae	rial Imagery (C9)
X Drift Depos	sits (B3)		-	Presence of Reduce	ed Iron (C4)			_Stunted or Stressed Pla	nts (D1)
Algal Mat o	or Crust (B4)		-	Recent Iron Reduct	ion in Tilled So	ils (C6)		Geomorphic Position (D	2)
Iron Depos	Nicible on Acriel Inc	mam ( (D.7)	-		(07)			_FAC-Neutral Test (D5)	
Inundation		igery (B7)	-	Gauge of Weil Data	r (D9) morko)				
Sparsely v	egetated Concave S	unace (Bo)	-	Other (Explain in Re	emarks)				
Field Observa	ations:								
Surface Water F	Present? Yes	<u> </u>	No _	Depth (inches):			Wetland Hy	/drology Present?	Yes <u>X</u> No
Water Table Pre	esent? Yes	<u> </u>	No -	Depth (inches):					
Saturation Prese	ent? Yes	<u> </u>	No	Depth (inches):	0				
(Includes capilla	ry fringe) arded Dete (etreen		onitoring	wall aarial photos, pro	vieue inened	tiona) if ava	ilabla		
Describe Reco	orded Data (Stream	rgauge, m	onitoring	weii, aeriai priotos, pre	vious inspeci	uons), ii ava	liable.		
Remarks									
1									

Project/Site:	Roundabout #	<i>‡</i> 1		City/Cou	unty: <u>Plea</u>	santview/Shelby		Sampling Date:	May 31, 2022
Applicant/Owner:	Runnebohm (	Construction Co.				:	State: IN	Sampling Point:	TP-2a
Investigator(s):	GJG				Sect	ion, Township, Range:	NW1/4, 9	Sec. 23, T14N, R5E	
Landform (hillslope,	terrace, etc.):	slope		L	ocal Relie	ef (concave, convex, none):	none		
Slope (%):	10%	Lat: 39.39.37 N		L	ona: 85.5	6.40 W		Datum: W	GS84
Soil Map Unit Nam	ne:	Brookston silty clay loam.	0 to 2% slopes (	Br)	<u> </u>		NWI class	ification:	
Are climatic/hvdrol	ogic conditions	s on the site typical for this	s time of year?	,		Yes X No	(If no	explain in Remarks.)	
Are Vegetation		, Soil , or Hydr	rology	significan	tly disturb	ed? Are "Normal	Circumstances	" present?	
						Y	′es X	No	
Are Vegetation		, Soil, or Hyd	rology	naturally	problemat	ic? (If needed, ex	plain any answer	s in Remarks.)	
SUMMARY OF	FINDINGS -	Attach site map sho	wing samplin	g point lo	cations,	transects, importan	it features, ei	tc.	
Hydrophytic Veget	ation Present?		Yes	No	X	Is the Sampled Area	N <sub>2</sub> -		
Hydric Soll Presen	N Present?		Yes	No	X	within a Wetland?	Yes	<u>NO X</u>	
Wetland Hydrolog	y i lesent:		163		<u>^</u>				
Remarks:									
VEGETATION	- Use scient	ific names of plants.							
			Absolute	Dominant	Indicato	Dominance Test w	orksheet:		
Tree Stratum	(Plot size	e: 30 ft. )	% Cover	Species?	Status	Number of Dominar	nt Species		
1. Populus delte	oides		10	Y	F <u>ACW</u>	That Are OBL, FAC	W, or FAC:	(A	)
2									
3.						Total Number of Do	minant	- (5)	
4						Species Across All	Strata:	<u> </u>	)
J		<u> </u>	10	= Total Co	over	Percent of Dominan	nt Species		
Sapling/Shrub Stra	atum: (Plot	Size: 15 ft. )		i otali ot		That Are OBL, FAC	W, or FAC:	10 (A	′B)
1. Lonicera mad	ckii		100	Y	NI				
2						Prevalence Index v	worksheet:		
3.						Total % Cover of	of:	Multiply by:	
4.						OBL species	x 1=		
5.			25	- Total C		FACW species	X 2=		
Herb Stratum:	(Plot size:	5 ft. )		- 10tai 0t	over	FACU species	x 4=		
1. Ionicera mac	kii	/	10	Y	NI	UPL species	x 5=		
2. Parthenociss	sus quinquefoli	а	10	Y	FACU	Column Totals:	(A)	(B	)
3									
4						Prevalence Index =	B/A =		
5.						Hudrophytic Vocat	hatian Indianta		
7						1 - Rapid Te	est for Hydrophy	rs: rtic Vegetation	
8.						2 - Dominan	ice Test is >50%	%	
9.						3 - Prevalen	ice Index is ≤3.0	) <sup>1</sup>	
10.					_	4 - Morpholo	ogical Adaptatio	ns <sup>1</sup> (Provide supporti	ng
			20	= Total Co	over	data in R	emarks or on a	separate sheet)	
Woody Vine Stratu	<u>um:</u>	(Plot size: <u>30 ft.</u> )			<b>F 1 0 1</b>	Problematio	c Hydrophytic V	egetation <sup>1</sup> (Explain)	
1. Vitis aestivali	IS	<u> </u>	10	<u>     Y      </u>	FACU	4			
Z			10	= Total Co	over	Indicators of hydric be present unless of	c soil and wetla disturbed or prol	nd hydrology must blematic	
				. 5141 01		Hydrophytic Veget	tation		
						Present?		Yes	No <u>X</u>
Remarks: (Include	photo number	s here or on a separate sh	neet.)						

US Army Corps of Engineers

### SOIL

SOIL							Sampling Point: TP-
Profile Descr	ription: (Describe to	the denth	needed to document t	he indicator or	confirm the ab	sence of indicators	)
Depth	Matrix	the depth	Re	dox Features	0011111111110100		•)
(inchos)	Color (moist)	0/-	Color (moist)	% Type <sup>1</sup>	l oc <sup>2</sup>	- Toxturo	Pomarka
		100				silt loom	Reliains
0 - 18	101K 3/3	100		········	·	Silt IOdili	
1				· ·	·	2	
'Type: C=Cond	centration, D=Depletion,	RM=Reduce	ed Matrix, MS=Masked San	d Grains.		Location: PL= Pore	e Lining, M=Matrix.
Hydric Soil Ind	licators:					Indicators for Prob	lematic Hydric Soils":
Histosol (A1	))		Sandy Gleyed Matrix (S	4)		Coast Prairie Rec	lox (A16)
Histic Epipe	don (A2)		Sandy Redox (S5)			Dark Surface (S7	)
Black Histic	(A3)		Stripped Matrix (S6)			Iron-Manganese	Masses (F12)
Hydrogen S	ulfide (A4)		Loamy Mucky Mineral (I	.=1)		Very Shallow Dar	k Surface (TF12)
Stratified La	iyers (A5)		Loamy Gleyed Matrix (F	2)		Other (Explain in	Remarks)
2 cm Muck	(A10)		Depleted Matrix (F3)				
Depleted Be	elow Dark Surface (A11)		Redox Dark Surface (F6	3)			
Thick Dark S	Surface (A12)		Depleted Dark Surface	(F7)		<sup>3</sup> Indicators of hvd	rophytic vegetation and wetland
Sandy Muck	ky Mineral (S1)		Redox Depressions (F8	·)		hvdrology must l	be present, unless disturbed or
5 cm Mucky	Peat or Peat (S3)					, , ,	problematic.
Restrictive Lay	yer (if observed):						
Туре:							
Depth (inc	hes):					Hydric Soil Present	? Yes No X
HYDROLOG	<u>SY</u>						
Wetland Hydro	logy Indicators:						
Primary Indicators	s (minimum of one is require	d: check all th	nat apply)		Secondary In	dicators (minimum of two	required)
Surface Wa	ter (A1)		Water-Stained Leaves (	(B9)		Surface Soil Cracks (B6)	. ,
High Water	Table (A2)		Aquatic Fauna (B13)			Drainage Patterns (B10)	
Saturation (	A3)		True Aquatic Plants (B1	4)		Drv-Season Water Table	(C2)
Water Mark	s (B1)		Hydrogen Sulfide Odor	(C1)		Cravfish Burrows (C8)	(02)
Sediment D	eposits (B2)		Oxidized Rhizospheres	on Living Roots (C3)		Saturation Visible on Aer	ial Imagery (C9)
Drift Deposi	ts (B3)		Presence of Reduced Ir	ron (C4)		Stunted or Stressed Plar	nts (D1)
Algal Mat or	Crust (B4)		Recent Iron Reduction i	in Tilled Soils (C6)		Geomorphic Position (D2	2)
Iron Denosit	ts (B5)		Thin Muck Surface (C7)	)		EAC-Neutral Test (D5)	-/
Inundation \	/isible on Aerial Imagery (B7	7)	Gauge or Well Data (D	2)			
Sparsely Ve	eretated Concave Surface (I	, 38)	Other (Explain in Remai	"/ rks)			
		50)		(3)			
Field Observat	tions:						
Surface Water Pr	resent? Yes	No	X Depth (inches):		Wetland Hy	drology Present?	Yes NO X
Water Table Pres	sent? Yes	No	X Depth (inches):				
Saturation Preser	nt? Yes	No	X Depth (inches):				
(includes capillary	/ fringe)						
Describe Recor	rded Data (stream gauge	, monitoring	well, aerial photos, previou	us inspections), if a	ivailable:		
Remarks							

	Ttouridabout #	#1		_ City/County: Pl	easantview/Shelby		Sampling Date:	May 31, 2022
Applicant/Owner:	Runnebohm (	Construction Co.			:	State: IN	Sampling Point:	TP-3a
Investigator(s):	GJG			Se	ection, Township, Range:	NW1/4,	Sec. 23, T14N, R5E	
Landform (hillslope	, terrace, etc.):	depression		Local Re	elief (concave, convex, none):	none		
Slope (%):	0 - 2%	Lat: 39.39.31 N		Lona: 85	.56.47 W		Datum: W0	GS84
Soil Man Unit Nan	<u>e</u> .	Crosby silt loam New Castle	Till Plain 0 to	2% slopes (CrA)		NWI class	ification:	
Are elimetic/budro		on the site typical for this time	o of year?	270 010000 (0171)	Voc V No	/If no	avelain in Romarka )	
Are Vegetation		, Soil, or Hydrolog	ly	_significantly distu	irbed? Are "Normal Y	Circumstances	s" present? No	
Are Vegetation		, Soil, or Hydrolog	IY	_naturally problen	natic? (If needed, ex	plain any answer	s in Remarks.)	
SUMMARY OF	FINDINGS -	<ul> <li>Attach site map showin</li> </ul>	g sampling	point location	s, transects, importan	t features, e	tc.	
Hydrophytic Veget	tation Present?	>	Yes X	No	is the Sampled Area			
Hydric Soil Preser	nt?		Yes X	No	within a Wetland?	Yes X	No	
Wetland Hydrolog	y Present?		Yes X	No				
VEGETATION	- Use scien	tific names of plants.		<u> </u>				
Trac Stratum	(Plot siz	20 ft )	Absolute % Covor	Dominant Indic	ator Dominance lest w	t Species		
1.	(1 101 312)	e. 30 n. j			That Are OBL, FAC	N. or FAC:	3 (A)	
2.							(1)	
3.					Total Number of Do	minant		
4.					Species Across All	Strata:	<u> </u>	
5					_			
				= Total Cover	Percent of Dominan	t Species		
Sapling/Shrub Stra	<u>atum:</u> (Plot	Size: <u>15 ft.</u> )			That Are OBL, FAC	N, or FAC:	(A/	В)
2				<u> </u>	Prevalence Index v	vorksheet.		
3.						of:	Multiply by:	
4.					OBL species	x 1=		
5.					FACW species	x 2=		
				= Total Cover	FAC species	x 3 =		
Herb Stratum:	(Plot size:	<u> </u>			FACU species	x 4 =		
1. <u>Eleocaris pa</u>	lustris		20	<u>Y</u> <u>OE</u>	UPL species	x 5=		
2. <u>Carex vuipin</u> 3. Poa pratens	is		20			(A)	(B)	
4					Prevalence Index =	B/A =		
6.			_		Hydrophytic Veget	ation Indicato	rs:	
7.			_		1 - Rapid Te	st for Hydrophy	tic Vegetation	
8					X 2 - Dominan	ce Test is >50%	%	
9		<u> </u>			3 - Prevalen	ce Index is ≤3.0	)' 1 (5 · ) (7	
10					4 - Morpholo data in R	gical Adaptatic emarks or on a	separate sheet)	ng
Woody Vine Stratu	um:	(Plot size: <u>30 ft.</u> )	90	= Total Cover	Problematic	Hydrophytic V	egetation <sup>1</sup> (Explain)	
2.				<u> </u>	- 1 Indianters of heads	بليب المعالمة	nd budrologit	
				= Total Cover	be present, unless d	isturbed or pro	blematic.	
					Hydrophytic Veget	ation	Vor V	No

US Army Corps of Engineers

### SOIL

Profile Desc	cription: (Desc	ribe to th	e depth	needed to documer	nt the indic	cator or co	onfirm the at	sence of indicato	ors.)
Depth	N	/latrix			Redox Feat	tures			
(inches)	Color (mc	oist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0 - 18	10YR 4/	/2	80	10YR 4/4	10	С	M	silty clay loam	
				10YR 4/6	10	С	M		
<sup>1</sup> Type: C=Co	ncentration, D=De	pletion, RM	1=Reduce	d Matrix, MS=Masked S	Sand Grains	i		<sup>2</sup> Location: PL= Po	ore Lining, M=Matrix.
Hydric Soli ir	idicators:							Indicators for Pro	oblematic Hydric Soils":
Histosol (A	A1)			Sandy Gleyed Matrix	< (S4)			Coast Prairie F	Redox (A16)
Histic Epip	pedon (A2)			Sandy Redox (S5)				Dark Surface (	(\$7)
Black Hist	aic (A3)			Stripped Matrix (So)	• /= 4 \			Iron-Manganes	se Masses (F12)
Hyarogen	Sulfide (A4)			Loamy Mucky Minera	al (⊢1)			Very Snallow L	Jark Surface (TF12)
Strauneu i	Layers (A5)			Loamy Gleyeu Wauk	x (F2)			Other (Explain	in Remarks)
2 cm wuu	K (AIU)	(411)		A Depleted Wattrix (1.5)	1				
Thick Dar		(ATT)		Doploted Dark Surfa	(FO)				
Sandy Mu	K Surrace (A12)			Depleted Dark Suna	.Ce (F/)			<sup>3</sup> Indicators of h	ydrophytic vegetation and wetland
5 cm Muc	ICKy Willielar (GT)				(Fo)			hydrology mus	st be present, unless disturbed or
Restrictive L	aver (if observed	<b>.</b>						Т	problematic.
Type:	ayor (in obcorres	<i>.</i>							
Depth (in	iches):							Hvdric Soil Pres	ent? Yes X No
- , ,									••••••••••••••••••••••••••••••••••••••
HYDROLO	)GY								
Wetland Hyd	rology Indicators	3:							
Primary Indicate	ors (minimum of one	is required;	check all th	iat apply)			Secondary In	dicators (minimum of tw	<i>v</i> o required)
X Surface W	√ater (A1)			Water-Stained Leave	es (B9)			_Surface Soil Cracks (I	B6)
X High Wate	er Table (A2)			Aquatic Fauna (B13)	)		. <u> </u>	_ Drainage Patterns (B1	10)
X Saturation	1 (A3)			I rue Aquatic Plants	(B14)			_Dry-Season Water Ta	able (C2)
Water Ma	rks (B1)			Hydrogen Sulfide Oc	lor (C1)			_Crayfish Burrows (C8)	·)
Sediment	Deposits (B2)			Oxidized Rhizospher	res on Living i	R0015 (C3)		_Saturation Visible on /	Aerial Imagery (C9)
	or Cruct (P4)			Presence of Reduce	ia Iron (C4)			_Stunted or Stressed F	Plants (D1)
Iron Dono	or Crust (B4)			Thin Muck Surface (				_ Geomorphic Position	(D2) 5)
	n Visible on Aerial Im	ageny (B7)		Gauge or Well Data	(DQ)				<i>''</i>
Sparsely	Vegetated Concave	Surface (B8)	۱	Other (Explain in Re	(D9) marks)				
Eield Obeen	regelated concave s				marks)				
Field Observ	ations:	. v	No	Donth (inchoo);	1		Wotland H	udrology Brocont?	Yes Y No
Surface water i	Present? Yes	<u>~</u>	NO	Depth (inches):			wettand n	arology Present?	res <u>x</u> no
Saturation Proc	cont? Yes	<u> </u>	No	Depth (inches):					
(includes capilla	arv fringe)		INC						
Describe Rec	orded Data (strea	m daude, r	nonitorina	well aerial photos, prev	vious inspec	tions), if ava	ilable:		
D0001120		n gaage,	lonne	Woll, donar priotoo, p	1000 1.000		lidbio.		
Remarks									

Project/Site:	Roundabout #	:1		City/County: Ple	easantview/Shelby		Sampling Date:	May 31, 2022
Applicant/Owner:	Runnebohm C	Construction Co.				State: IN	Sampling Point:	TP-4a
Investigator(s):	GJG			Se	ction, Township, Range:	NW1/4, S	ec. 23, T14N, R5E	
Landform (hillslope,	, terrace, etc.):	none		Local Re	lief (concave, convex, none):	none		
Slope (%):	0-2%	Lat: 39.39.31 N		Long: 85	.56.47 W		Datum: WG	S84
Soil Map Unit Nam	ne:	Crosby silt loam. New Castle	Till Plain. 0 tr	2% slopes (CrA)		NWI classi	fication:	
Are climatic/hvdro	- logic conditions	on the site typical for this tim	e of year?		Yes X No	(If no	explain in Remarks )	
Are Vegetation		, Soil, or Hydrolog	зу	significantly distu	rbed? Are "Normal Y	Circumstances' 'es X	present? No	
Are Vegetation	;	, Soil, or Hydrolog	ЭУ	naturally problem	atic? (If needed, ex	plain any answers	in Remarks.)	
SUMMARY OF	FINDINGS -	Attach site map showin	ng samplin	g point location	s, transects, importan	t features, et	с.	
Hydrophytic Veget	ation Present?		Yes	No X	Is the Sampled Area			
Hydric Soil Preser	ıt?		Yes	<u>No X</u>	within a Wetland?	Yes	No <u>X</u>	
Wetland Hydrolog	y Present?		Yes	No X				
VEGETATION	- Use scient	ific names of plants						
LOLIANON	- 030 30011		Absolute	Dominant Indica	tor Dominance Test w	orksheet.		
Tree Stratum	(Plot siz€	e: 30 ft. )	% Cover	Species? State	us Number of Dominar	nt Species		
1. Morus rubra	(1.101.0120	<u> </u>	10	Y FAC	U That Are OBL, FAC	W, or FAC:	0 (A)	
2.			_			,	()	
3.					Total Number of Do	minant		
4					Species Across All	Strata:	(B)	
5					-			
Sapling/Shrub Stra	<u>atum:</u> (Plot	Size: <u>15 ft.</u> )		= Total Cover	Percent of Dominan That Are OBL, FAC	It Species W, or FAC:	<u> </u>	3)
2.			_		Prevalence Index v	worksheet:		
3.			_		Total % Cover of	of:	Multiply by:	
4					OBL species	x 1 =		
5				<u> </u>	FACW species	x 2=		
				= Total Cover	FAC species	x 3 =		
Herb Stratum:	(Plot size:	<u>5π.</u> )	100	V EAC		X 4=		
1. <u>1 0a annuus</u> 2			100	<u> </u>	Column Totals	X 3(A)	(B)	
3.					-	(	(=)	
4 5				<u> </u>	Prevalence Index =	B/A =		
6.					Hydrophytic Veget	ation Indicator	s:	
7.			_		1 - Rapid Te	est for Hydrophyt	ic Vegetation	
8.					2 - Dominan	ce Test is >50%		
9.				<u> </u>	3 - Prevalen	ce Index is ≤3.0	1	
10				<u> </u>	4 - Morpholo	ogical Adaptation	is' (Provide supportin separate sheet)	g
Woody Vine Stratu	<u>um:</u>	(Plot size: <u>30 ft.</u> )	100	= Total Cover	Problematic	c Hydrophytic Ve	getation <sup>1</sup> (Explain)	
1					_			
2.				= Total Cover	<ul> <li><sup>1</sup> Indicators of hydrid be present, unless of</li> </ul>	c soil and wetlan listurbed or prob	d hydrology must lematic.	
					Hydrophytic Veget Present?	ation	Yes	No X
Remarks: (Include	photo number:	s here or on a separate sheet	)					
	,		/					

US Army Corps of Engineers

Midwest Region - Version 2.0

### SOIL

Profile Desc	ription: (Describe to	the depth I	needed to documer	nt the indic	ator or co	nfirm the ab	sence of indicators	3.)	
Depth	Matrix			Redox Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remar	ks
0 - 10	10YR 4/3	90	10YR 4/4	10			silt loam		
10 - 18	10YR 4/2	60	10YR 4/3	40			silt loam		
<sup>1</sup> Type: C=Con	centration, D=Depletion,	RM=Reduced	d Matrix, MS=Masked S	Sand Grains.			<sup>2</sup> Location: PL= Pore	e Lining, M=Matrix.	
Hydric Soil In	dicators:						Indicators for Prob	lematic Hydric Soils	<sup>3</sup> :
Histosol (A	1)	_	Sandy Gleyed Matrix	(S4)			Coast Prairie Rec	dox (A16)	
Histic Epip	edon (A2)		Sandy Redox (S5)				Dark Surface (S7	<sup>'</sup> )	
Black Histi	c (A3)		Stripped Matrix (S6)				Iron-Manganese	Masses (F12)	
Hydrogen	Sulfide (A4)	_	Loamy Mucky Miner	al (F1)			Very Shallow Da	rk Surface (TF12)	
Stratified L	ayers (A5)	_	Loamy Gleyed Matri	x (F2)			Other (Explain in	Remarks)	
2 cm Muck	(A10)		Depleted Matrix (F3)	)					
Depleted B	elow Dark Surface (A11)		Redox Dark Surface	(F6)					
Thick Dark	Surface (A12)	_	Depleted Dark Surfa	ice (F7)			<sup>3</sup> Indicators of hyd	Irophytic vocatation a	nd wotland
Sandy Muc	ky Mineral (S1)	_	Redox Depressions	(F8)			hvdrology must	be present, unless di	sturbed or
5 cm Muck	y Peat or Peat (S3)						, 3,	problematic.	
Restrictive La	yer (if observed):								
Type:									
Depth (ind	ches):						Hydric Soil Presen	t? Yes	<u>No X</u>
HYDROLO	GY								
Wetland Hydr	ology Indicators:								
Primary Indicato	rs (minimum of one is require	d; check all that	at apply)			Secondary In	dicators (minimum of two	required)	
Surface W	ater (A1)	-	Water-Stained Leave	es (B9)			Surface Soil Cracks (B6	)	
High Wate	r Table (A2)	-	Aquatic Fauna (B13)	)			Drainage Patterns (B10)	)	
X Saturation	(A3)	-	True Aquatic Plants	(B14)			Dry-Season Water Table	e (C2)	
Water Mar	ks (B1)	-	Hydrogen Sulfide Oc	dor (C1)			Crayfish Burrows (C8)		
Sediment [	Deposits (B2)	-	Oxidized Rhizospher	res on Living F	Roots (C3)		Saturation Visible on Ae	rial Imagery (C9)	
Drift Depos	sits (B3)	-	Presence of Reduce	ed Iron (C4)			Stunted or Stressed Pla	nts (D1)	
Algal Mat o	or Crust (B4)	-	Recent Iron Reduction	on in Tilled So	ils (C6)		Geomorphic Position (D	2)	
Iron Depos	its (B5)	-	Thin Muck Surface (	C7)		. <u> </u>	FAC-Neutral Test (D5)		
Inundation	Visible on Aerial Imagery (B)	7)	Gauge or Well Data	(D9)					
Sparsely V	egetated Concave Surface (	B8)	Other (Explain in Re	marks)					
Field Observa	itions:								
Surface Water F	Present? Yes	No	Depth (inches):			Wetland Hy	drology Present?	Yes	<u>No X</u>
Water Table Pre	sent? Yes	No	Depth (inches):						
Saturation Prese	ent? Yes	No	X Depth (inches):	6					
(includes capillar	ry fringe)								
Describe Reco	orded Data (stream gauge	e, monitoring	well, aerial photos, prev	ious inspec	tions), if avai	ilable:			
Remarks									

Project/Site:	Roundabout	#3		City/County: Plea	asantview/Shelby		Sampling Date:	May 31, 2022
Applicant/Owner:	Runnebohm	Construction Co.			S	tate: IN	Sampling Point:	TP-5a
Investigator(s):	GJG			Sec	tion, Township, Range:	NW1/4, 5	Sec. 23, T14N, R5E	
Landform (hillslope	, terrace, etc.):	low-lying area		Local Reli	ef (concave, convex, none):	concave		
Slope (%):	0 - 2%	Lat: 39.38.54 N		Lona: 85.5	6.34 W		Datum: W0	GS84
Soil Map Unit Nar	ne:	Brookston silty clay loam, 0 to	2% slopes (B	ir)		NWI class	ification:	
Are climatic/bydro	logic condition	s on the site typical for this time	of vear?	·/	Yes X No	(If no	explain in Remarks )	
Are Vegetation		, Soil, or Hydrolog	y	_significantly disturt	bed? Are "Normal (	Circumstances	" present? No	
Are Vegetation		, Soil, or Hydrolog	у	_naturally problema	tic? (If needed, exp	lain any answer	s in Remarks.)	
SUMMARY OF		<ul> <li>Attach site map showing</li> </ul>	g sampling	point locations	, transects, important	features, et	tc.	
Hydrophytic Vege	tation Present?	)	Yes X	No	Is the Sampled Area			
Hydric Soil Preser	nt?		Yes X	No	within a Wetland?	Yes X	No	
Wetland Hydrolog	y Present?		Yes X	No				
VEGETATION	- Use scien	tific names of plants.			1			
		00.6	Absolute	Dominant Indicate	Dominance Test wo	rksheet:		
1 Iree <u>Stratum</u>	(Plot siz	e: 30π.)	% Cover	Species? Status	That Are OBL EACM		2 (A)	
1 2.					That Are Obe, FACT	V, ULFAC.	2 (A)	
3.					Total Number of Dom	ninant		
4.					Species Across All S	trata:	3 (B)	
5.								
				= Total Cover	Percent of Dominant	Species		
Sapling/Shrub Stra	atum: (Plot	Size: <u>15 ft.</u> )			That Are OBL, FACV	V, or FAC:	67(A/	В)
1			—		Brovalanca Index w	orkehoot:		
3					Total % Cover of		Multiply by:	
4.					OBL species	x 1=	manipiy by:	
5.					FACW species	x 2=		
				= Total Cover	FAC species	x 3=		
Herb Stratum:	(Plot size:	<u> </u>			FACU species	x 4 =		
1. Rumex crisp	ous		40	Y FACV	V UPL species	x 5=		
2. <u>Festuca arui</u>	ndinacea		40	Y FACL	J Column Lotals:	(A)	(B)	
5. <u>Typna angus</u> 4 5.	Sulona		15		Prevalence Index = E	8/A =		
6.					Hydrophytic Vegeta	tion Indicator	rs:	
7.					1 - Rapid Tes	t for Hydrophy	tic Vegetation	
0					X 2 - Dominanc	e Test is >50%	6	
0.					3 - Prevalenc	e Index is ≤3.0	)'	
9					4 Manual at a		1 (D	
o. 9. 10.					4 - Morpholog data in Re	gical Adaptatio marks or on a	ns <sup>1</sup> (Provide supportir separate sheet)	ıg
o. 9. 10. <u>Woody Vine Strat</u> 1.	um:	(Plot size: <u>30 ft.</u> )	95	= Total Cover	4 - Morpholog data in Re Problematic	jical Adaptatio marks or on a Hydrophytic V	ns <sup>1</sup> (Provide supportir separate sheet) egetation <sup>1</sup> (Explain)	ng
o. 9. 10 <u>Woody Vine Strat</u> 1 2.	um:	(Plot size: <u>30 ft.</u> )	95	= Total Cover	4 - Morpholog data in Re Problematic	gical Adaptatio marks or on a Hydrophytic V	ns <sup>1</sup> (Provide supportir separate sheet) egetation <sup>1</sup> (Explain) nd hydrology must	ng
o	<u>um:</u>	(Plot size: <u>30 ft.</u> )	95	= Total Cover	4 - Morpholog data in Re Problematic <sup>1</sup> Indicators of hydric be present, unless di	jical Adaptatio marks or on a Hydrophytic V soil and wetlar sturbed or prol	ns <sup>1</sup> (Provide supportir separate sheet) egetation <sup>1</sup> (Explain) nd hydrology must blematic.	ng

US Army Corps of Engineers

Midwest Region - Version 2.0

\_\_\_\_

Industrie       Network       Network         (inches)       Color (moist)       %       Type <sup>1</sup> 0 - 18       10YR 3/1       99       10YR 3/4       1       PL	Loc <sup>2</sup> M .	Texture silt loam sitter loam silt loam silt loam silt loam silt loam silt l	Remarks			
0 - 18       10YR 3/1       99       10YR 3/4       1       PL         0 - 18       10YR 3/1       99       10YR 3/4       1       PL         -       1       10YR 3/1       99       10YR 3/4       1       PL         -       1       1       PL       1       PL         -       1       1       PL       1         -       1       1       PL       1         -       1       1       1       PL         -       1       1       1       1         -       1       1       1       1         -       1       1       1       1         -       1       1       1       1         -       1       1       1       1         -       1       1       1       1         -       1       1       1       1         -       1       1       1       1         -       1       1       1       1         -       1       1       1       1       1         -       1       1       1       1       <		silt loam	ng, M=Matrix. tic Hydric Soils <sup>3</sup> : 16) es (F12) iace (TF12) rks) /tic vegetation and wetland esent, unless disturbed or plematic. Yes X No			
1       1		<sup>2</sup> Location: PL= Pore Linir Indicators for Problema Coast Prairie Redox (A Dark Surface (S7) Iron-Manganese Masse Very Shallow Dark Surf Other (Explain in Rema <sup>3</sup> Indicators of hydrophy hydrology must be pro prot	ng, M=Matrix. tic Hydric Soils <sup>3</sup> : 16) as (F12) face (TF12) rks) /tic vegetation and wetland esent, unless disturbed or plematic. Yes X No			
"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.         Hydric Soil Indicators:		<sup>2</sup> Location: PL= Pore Linir Indicators for Problema Coast Prairie Redox (A Dark Surface (S7) Iron-Manganese Masse Very Shallow Dark Surf Other (Explain in Rema <sup>3</sup> Indicators of hydrophy hydrology must be pro prob	ng, M=Matrix. <b>tic Hydric Soils<sup>3</sup>:</b> 16) as (F12) face (TF12) rks) rks) rktore determined on plematic. Yes X No			
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.         Hydric Soil Indicators:		<sup>2</sup> Location: PL= Pore Linir Indicators for Problema Coast Prairie Redox (A Dark Surface (S7) Iron-Manganese Masse Very Shallow Dark Surf Other (Explain in Rema <sup>3</sup> Indicators of hydrophy hydrology must be pro prob	ng, M=Matrix. tic Hydric Soils <sup>3</sup> : 16) as (F12) ace (TF12) rks) rks) ytic vegetation and wetland esent, unless disturbed or plematic. Yes X No			
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.         Hydric Soil Indicators:         Histosol (A1)       Sandy Gleyed Matrix (S4)         Histic Epipedon (A2)       Sandy Redox (S5)         Black Histic (A3)       Stripped Matrix (S6)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Restrictive Layer (if observed):         Type:		<sup>2</sup> Location: PL= Pore Linir Indicators for Problema Coast Prairie Redox (A Dark Surface (S7) Iron-Manganese Masse Very Shallow Dark Surf Other (Explain in Rema <sup>3</sup> Indicators of hydrophy hydrology must be pro prob	ng, M=Matrix. tic Hydric Soils <sup>3</sup> : 16) as (F12) acce (TF12) rks) /tic vegetation and wetland esent, unless disturbed or plematic. Yes X No			
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.         Hydric Soil Indicators:         Histosol (A1)       Sandy Gleyed Matrix (S4)         Histic Epipedon (A2)       Sandy Redox (S5)         Black Histic (A3)       Stripped Matrix (S6)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Restrictive Layer (if observed):         Type:       Depth (inches):         Depth (inches):       Remarks		<sup>2</sup> Location: PL= Pore Linir Indicators for Problema Coast Prairie Redox (A Dark Surface (S7) Iron-Manganese Masse Very Shallow Dark Surf Other (Explain in Rema <sup>3</sup> Indicators of hydrophy hydrology must be pro prob	ng, M=Matrix. tic Hydric Soils <sup>3</sup> : 16) as (F12) (rks) rks) rkic vegetation and wetland esent, unless disturbed or plematic. Yes X No			
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.         Hydric Soil Indicators:         Histosol (A1)       Sandy Gleyed Matrix (S4)         Histic Epipedon (A2)       Sandy Redox (S5)         Black Histic (A3)       Stripped Matrix (S6)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Restrictive Layer (if observed):         Type:		<sup>2</sup> Location: PL= Pore Linir Indicators for Problema Coast Prairie Redox (A Dark Surface (S7) Iron-Manganese Masse Very Shallow Dark Surf Other (Explain in Rema <sup>3</sup> Indicators of hydrophy hydrology must be pro- prob	ng, M=Matrix. tic Hydric Soils <sup>3</sup> : 16) as (F12) face (TF12) rks) /tic vegetation and wetland esent, unless disturbed or lematic. Yes X No			
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.         Hydric Soil Indicators:		<sup>2</sup> Location: PL= Pore Linir Indicators for Problema Coast Prairie Redox (A Dark Surface (S7) Iron-Manganese Masse Very Shallow Dark Surf Other (Explain in Rema <sup>3</sup> Indicators of hydrophy hydrology must be pro- prob	ng, M=Matrix. tic Hydric Soils <sup>3</sup> : 16) as (F12) rks) r/tic vegetation and wetland esent, unless disturbed or lematic. Yes X No			
Hydric Soil Indicators:	-	Indicators for Problema Coast Prairie Redox (A Dark Surface (S7) Iron-Manganese Massa Very Shallow Dark Surf Other (Explain in Rema <sup>3</sup> Indicators of hydrophy hydrology must be pro prob	tic Hydric Soils <sup>3</sup> : 16) es (F12) iace (TF12) rks) ytic vegetation and wetland esent, unless disturbed or blematic. Yes <u>X</u> No			
Histosol (A1)       Sandy Gleyed Matrix (S4)         Histic Epipedon (A2)       Sandy Redox (S5)         Black Histic (A3)       Stripped Matrix (S6)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Type:         Type:       Depth (inches):         Depth (inches):       Remarks	-	Coast Prairie Redox (A Dark Surface (S7) Iron-Manganese Masse Very Shallow Dark Surf Other (Explain in Rema <sup>3</sup> Indicators of hydrophy hydrology must be pro prot	16) es (F12) face (TF12) rrks) ytic vegetation and wetland esent, unless disturbed or olematic. Yes X No			
Histic Epipedon (A2)       Sandy Redox (S5)         Black Histic (A3)       Stripped Matrix (S6)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Type:         Depth (inches):       Depth (inches):         Remarks       Remarks	-	Dark Surface (S7) Iron-Manganese Massa Very Shallow Dark Surf Other (Explain in Rema <sup>3</sup> Indicators of hydrophy hydrology must be pro prot	es (F12) face (TF12) rks) /tic vegetation and wetland esent, unless disturbed or olematic. Yes <u>X</u> No			
Black Histic (A3)       Stripped Matrix (S6)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)         Restrictive Layer (if observed):         Type:         Depth (inches):         Remarks	-	Iron-Manganese Masse Very Shallow Dark Surf Other (Explain in Rema <sup>3</sup> Indicators of hydrophy hydrology must be pro prob	es (F12) face (TF12) rks) /tic vegetation and wetland esent, unless disturbed or olematic. Yes <u>X</u> No			
Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Type:         Depth (inches):       Depth (inches):		Very Shallow Dark Surf Other (Explain in Rema <sup>3</sup> Indicators of hydrophy hydrology must be pro prot	riace (TF12) (rics) (tic vegetation and wetland esent, unless disturbed or plematic. Yes X No			
Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         2 cm Muck (A10)       X       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)         Restrictive Layer (if observed):         Type:         Depth (inches):         Remarks		Other (Explain in Rema <sup>3</sup> Indicators of hydrophy hydrology must be pro prot	rks) /tic vegetation and wetland esent, unless disturbed or plematic. Yes X No			
2 cm Muck (A10)       X       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)         Restrictive Layer (if observed):         Type:         Depth (inches):         Remarks		<sup>3</sup> Indicators of hydrophy hydrology must be pro prob <b>Hydric Soil Present?</b>	vic vegetation and wetland esent, unless disturbed or plematic. Yes X No			
Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         5 cm Mucky Peat or Peat (S3)       Restrictive Layer (if observed):         Type:		<sup>3</sup> Indicators of hydrophy hydrology must be pro prot	vic vegetation and wetland esent, unless disturbed or plematic. Yes X No			
Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Som Mucky Peat or Peat (S3)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks		<sup>3</sup> Indicators of hydrophy hydrology must be pro prob	rtic vegetation and wetland esent, unless disturbed or olematic. Yes X No			
Sandy Mucky Mineral (S1)Redox Depressions (F8)Restrictive Layer (if observed): Type: Depth (inches): Remarks		hydrology must be pro prob	Ver vegetation and weitand esent, unless disturbed or elematic.			
5 cm Mucky Peat or Peat (S3)         Restrictive Layer (if observed):         Type:         Depth (inches):         Remarks		Hydric Soil Present?	Yes X No			
Restrictive Layer (if observed):         Type:         Depth (inches):         Remarks		Hydric Soil Present?	Yes <u>X</u> No			
Type: Depth (inches): Remarks		Hydric Soil Present?	Yes <u>X</u> No			
Depth (inches):		Hydric Soil Present?	Yes X No			
Remarks						
HYDROLOGY Wetland Hydrology Indicators:						
Primary Indicators (minimum of one is required; check all that apply)	econdary Indic	ators (minimum of two require	ed)			
X Surface Water (A1) Water-Stained Leaves (B9)	Surface Soil Cracks (B6)					
X High Water Table (A2) Aquatic Fauna (B13)	D	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)					
X 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)						
X Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)						
Field Observations:						
Surface Water Present? Yes X No Depth (inches): 3 V	/etland Hydr	rology Present?	Yes X No			
Water Table Present? Yes X No Depth (inches): 0						
Saturation Present? Yes X No Depth (inches): 0						
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available	e:					
Remarks						

Project/Site:	Roundabout #3 City/County: Pleasantview/Shelb						Sampling Date: May 31, 2022			
Applicant/Owner:	Runnebohm Construction Co.						State: IN	Sampling Point:	TP-6a	
Investigator(s):	GJG			Township, Range: NW1/4, Sec. 23, T14N, R5E						
Landform (hillslope,	e, terrace, etc.): none Local					ief (concave, convex, none): none				
Slope (%):	0-2%	Lat: 39.38.54 N		Lo	ng: 85.56.3	34 W	Datum: WGS84			
Soil Map Unit Nam	ne:	Brookston silty clay loam. 0 to	2% slopes (E	Br)	<u> </u>		NWI class	ification:		
Are climatic/hvdrol	oaic conditions	s on the site typical for this tim	e of vear?	/	Y	es X No	(If no	explain in Remarks )		
Are Vegetation		, Soil, or Hydrolog	ау	significant	ly disturbed	I? Are "Normal Ye	Circumstances es X	" present? 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 Veget	ation Present?	1	Yes	No	X	the Sampled Area				
Hydric Soil Presen	nt?		Yes X	No	\\	within a Wetland?	Yes	<u>No X</u>		
Wetland Hydrolog	y Present?		Yes X	No						
VEGETATION	- Use scient	tific names of plants.								
			Absolute	Dominant	Indicator	Dominance Test we	orksheet:			
Tree Stratum	(Plot size	e: 30 ft.)	% Cover	Species?	S <u>tatu</u> s	Number of Dominan	t Species	0 (4)		
1 2			10	<u> </u>	FACU	That Are Obl, FAC	W, OFFAC.	(A)		
3.						Total Number of Dor	minant			
4.						Species Across All S	Strata:	2 (B)	1	
5.					_					
			10	= Total Co	ver	Percent of Dominant	t Species			
Sapling/Shrub Stra	atum: (Plot	Size: <u>15 ft.</u> )				That Are OBL, FAC	N, or FAC:	0 (A/	В)	
1 2						Provalance Index w	vorkshoot:			
3.						Total % Cover o	f:	Multiply by:		
4.		_				OBL species	x 1=			
5.						FACW species	x 2=			
				= Total Co	ver	FAC species	x 3 =			
Herb Stratum:	(Plot size:	<u> </u>				FACU species	x 4 =			
1. <u>Poa annuus</u>	4		95	<u>Y</u>	FACU	UPL species	x 5=	(D)		
2. <u>Infolium prat</u>	tense		5	<u> </u>	FACU		(A)	(B)		
4 5.						Prevalence Index =	B/A =			
6.						Hydrophytic Veget	ation Indicator	's:		
7.					_	1 - Rapid Te	st for Hydrophy	tic Vegetation		
8.						2 - Dominand	ce Test is >50%	0		
9.						3 - Prevalence	ce Index is ≤3.0	)' 		
10.			100	= Total Co	ver	4 - Morpholo data in Re	emarks or on a	separate sheet)	ng	
Woody Vine Stratu	<u>um:</u>	(Plot size: <u>30 ft.</u> )				Problematic	Hydrophytic V	egetation <sup>1</sup> (Explain)		
2.						1				
				= Total Co	ver	be present, unless d	soli and wetlai	na nyarology must		
						Hydrophytic Vegeta Present?	ation	Yes	No_X	
Remarks: (Include	photo number	s here or on a separate sheet.	)			1				

US Army Corps of Engineers

Midwest Region - Version 2.0

### SOIL

Profile Desc	ription: (Describe to	the depth	needed to docume	nt the indic	cator or co	onfirm the ab	sence of indicator	rs.)			
Depth	Matrix			Redox Feat	ures		_				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks			
0 - 16	10YR 3/1	100					silt loam				
16 - 18	10YR 4/1	90	10YR 4/6	10	D	М	silty clay loam				
<sup>1</sup> Type: C=Con	centration, D=Depletion,	RM=Reduce	d Matrix, MS=Masked	Sand Grains			<sup>2</sup> Location: PL= Po	re Lining, M=Matrix.			
Hydric Soil Indicators:						Indicators for Problematic Hydric Soils <sup>3</sup> :					
Histosol (A1) Sandy Gleyed Matrix (S4)					Coast Prairie Redox (A16)						
Histic Epipe	Histic Epipedon (A2) Sandy Redox (S5)					Dark Surface (S7)					
Black Histic	Black Histic (A3) Stripped Matrix (S6)					Iron-Manganese Masses (F12)					
Hydrogen S	Sulfide (A4)		Loamy Mucky Mine	ral (F1)		Very Shallow Dark Surface (TF12)					
Stratified L	ayers (A5)		Loamy Gleyed Matr	ix (F2)		Other (Explain in Remarks)					
2 cm Muck	(A10)		X Depleted Matrix (F3	5)							
Depleted B	elow Dark Surface (A11)		Redox Dark Surface	e (F6)							
Thick Dark	Surface (A12)		Depleted Dark Surfa	ace (F7)			<sup>3</sup> Indicators of hy	drophytic vegetation and wetland			
Sandy Muc	ky Mineral (S1)		Redox Depressions	(F8)		hydrology must be present, unless disturbed or					
5 cm Muck	y Peat or Peat (S3)						problematic.				
Restrictive La	yer (if observed):										
Type:											
Depth (inc	ches):						Hydric Soil Prese	nt? Yes <u>X</u> NO			
Remarks											
HYDROLO	GY										
Wetland Hydr	ology Indicators:										
Primary Indicator	rs (minimum of one is require	d; check all th	at apply)			Secondary Indicators (minimum of two required)					
Surface Wa	ater (A1)		Water-Stained Leav	/es (B9)		Surface Soil Cracks (B6)					
X High Water	Table (A2)		Aquatic Fauna (B13	3)		Drainage Patterns (B10)					
X Saturation	(A3)		True Aquatic Plants	(B14)		Dry-Season Water Table (C2)					
Water Mar	ks (B1)		Hydrogen Sulfide O	dor (C1)		Crayfish Burrows (C8)					
Sediment [	Deposits (B2)		Oxidized Rhizosphe	res on Living I	Roots (C3)	Saturation Visible on Aerial Imagery (C9)					
Drift Depos	its (B3)		Presence of Reduce	ed Iron (C4)		Stunted or Stressed Plants (D1)					
Algal Mat d	r Crust (B4)		Recent Iron Reduct	ion in Tilled Sc	oils (C6)	Geomorphic Position (D2)					
Iron Depos	its (B5)		Thin Muck Surface	(C7)		FAC-Neutral Test (D5)					
Inundation	Visible on Aerial Imagery (B7	7)	Gauge or Well Data	i (D9)							
Sparsely V	egetated Concave Surface (I	38)	Other (Explain in Re	emarks)							
Field Observa	tions:										
Surface Water P	resent? Yes	No	Depth (inches):			Wetland Hy	drology Present?	Yes X No			
Water Table Pre	sent? Yes X	No	Depth (inches):	6							
Saturation Prese	ent? Yes X	No	Depth (inches):	0							
(includes capillar	y fringe)										
Describe Reco	orded Data (stream gauge	, monitoring	well, aerial photos, pre	vious inspec	tions), if ava	ilable:					
Damarla											
Remarks											

WETLAND A

ORAM v. 5.0 Field Form Quantitative Rating


ORAM v. 5.0 Field Form Quantitative Rating



43

End of Quantitative Rating. Complete Categorization Worksheets.

2

2

Present in moderate amounts, but not of highest quality or in small amounts of highest quality Present in moderate or greater amounts

and of highest quality

8

WETLAND B

ORAM v. 5.0 Field Form Quantitative Rating



ORAM v. 5.0 Field Form Quantitative Rating



20

End of Quantitative Rating. Complete Categorization Worksheets.

3

Present in moderate or greater amounts

and of highest quality

WETLAND C

ORAM v. 5.0 Field Form Quantitative Rating



ORAM v. 5.0 Field Form Quantitative Rating



## End of Quantitative Rating. Complete Categorization Worksheets.

8



## **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).





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). Surge Industrial Site - Proposed Roundabouts Pleasant View, Shelby County, Indiana DHE Project No. RCC.003 Photographs Taken on May 31, 2022





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). Surge Industrial Site - Proposed Roundabouts Pleasant View, Shelby County, Indiana DHE Project No. RCC.003 Photographs Taken on May 31, 2022