Illinois Department of Transportation
Office of Highways Project Implementation / Region 5 / District 8
1102 Eastport Plaza Drive / Collinsville, Illinois 62234-6198

January 12, 2022

ADVERTISEMENT DATE: March 25, 2022
RESPONSE DATE: April 29, 2022
CONTACT PERSON(S):
Philip Coppernoll 618-346-3181
philip.coppernoll@illinois.gov

County: Marion
Route: FAI 57
Section: 61-(1,1-1,1-2,2)RS-1
Contract # 76F79

Mr. Brenton Barkley
Department of the Army
Corps of Engineers
1222 Spruce Street
St. Louis, MO 63103-2833

Dear Mr. Barkley:

Enclosed are the permit drawings and application for the Department of the Army for activities in waterways as required under Section 404 of Public Law 92-500. Also enclosed is a copy of the Cultural Resources Clearance, Natural Resource Clearance, and Environment Survey Request. Based on an inspection of the project location, 408 permitting is not anticipated, but additional information in support of a 408 permit can be provided if needed.

This project consists of the removal and replacement of approximately 3.72 miles of interstate pavement, interchange ramp reconfiguration, a significant culvert widening, minor bridge repairs to the overhead structures, drainage improvements, pipe underdrain installation, and the earthwork, traffic control, temporary pavement cross-overs, and miscellaneous items required to complete the work. The project begins at the Jefferson County line and extends to 0.7 miles north of the IL 161 interchange. With the exception of the temporary cross-over pavements, and the four interchange ramps at IL 161, the alignment remains the same as the existing alignment with minor widening of the inside and outside shoulders in order to accommodate stage traffic and to improve safety. The proposed typical section consists of 2 - 12ft wide lanes with a 6ft inside and 12ft outside paved shoulders. The four interchange ramps will be re-aligned to incorporate policy taper/transition lengths and will have the same paved width as the existing, one 16ft lane with 8ft and 10ft shoulders. Vertical profile changes are minimal, therefore extensive shoulder earthwork is not necessary.

Approximately 223,202 cubic yards of Earth Excavation, 46,768 cubic yards of Subbase Granular Material, Type B, 133,812 square yards of Subbase Granular Material, Type B 12”, 85,827 square yards of Subbase Granular

Material, Type C 4", 917 tons of Aggregate Base Course, Type A will be used to reconstruct the pavement and reconfigure the interchange ramps. Approximately 116 square yards of Stone Riprap, Class A3, 686 square yards of Stone Riprap, Class A4, and 699 square yards of Stone Riprap, Class A5 will be used at culvert outlets to provide channel stabilization and permanent erosion control.

The adjacent land use is agricultural. It is anticipated that 554 trees of 6 to 15 unit diameter and 302 trees of greater than 15 unit diameter will be impacted by the proposed project. In addition, 9.25 acres of tree removal for trees below the minimum diameter listed above will occur. Tree removal is necessary to improve drainage, ensure adequate roadside safety, and to accommodate the ramp alignment which will improve safety. Trees will be replaced in accordance with IDOT tree removal policy. In order to ensure protection of endangered bat species, a commitment is provided in the plans and a special provision for tree removal is included in the contract documents.

Wetlands will be impacted by the proposed project. Approximately 3.94 acres of wet meadow and wet shrubland, 0.83 acres of forested wetland, and 1.68 acres of marsh will be impacted. In-kind mitigation credits will be deducted from the IDOT District 8 Cahokia Wetland Mitigation Site ledger in the amount of 16.815 acres. The individual wetland impacts and mitigation ratios are found in the attached wetland impact evaluation. No utilities will be relocated into wetlands due to this project. The Department will implement erosion control measures consistent with the "Standards and Specifications for Erosion and Sediment Control." Stormwater will be monitored and controlled in accordance with the Stormwater Pollution Prevention Plan. Erosion Control Blanket, Temporary Erosion Control Seeding, Temporary Ditch Checks, Perimeter Erosion Barrier, Inlet and Pipe Protection, and Temporary Erosion Control Blanket will be used as best management practices. The details are shown in the erosion control plan sheets.

Based on the total wetland impacts, The Illinois Department of Transportation anticipates that an individual 404 and individual IEPA water quality permit is necessary. It is IDOT's understanding that all coordination with IEPA will be initiated by your office. Please notify IDOT if this is not the case, so that we can ensure IEPA has what they need to review the permit.

Sincerely,

Kirk H Brown

Kirk H. Brown, P.E.
Program Development Engineer

Attachments
- Joint Application
- Clearances and Coordination
- Plans, Provisions, and SWPPP

Attention: Central Office BD&E
Environment Section
Room 330

Environmental Survey Request

A. Project Information ☐ Bio ☐ Cultural ☐ Wetlands ☑ Special Waste

Submittal Date: 02/09/2018 **Sequence No:** 21410
District: 8 **Requesting Agency:** DOH **Project No:**
Contract #: 76F79 **Job No.:** D- 98-064-12
Counties: Marion
Route: FAI 57 **Marked:** I-57
Street: **Section:** 61-(1,1-1,1-2,2)RS-1
Municipality(ies) **Project Length:** km miles
FromTo (At): I-57 from Jefferson County Line to just N of IL 161
Quadrangle: Salem South/Kell **Township-Range-Section:** T1N-R2E-Sec 15,23,26,35
Survey Completion Target Date 08/09/2018 **Anticipated Design Approval:** 09/09/2018 **Anticipated NEPA Processing:** CE

B. Reason for Submittal: (Check all that apply) ; includes SW Level 1 Screening Criteriea

Survey Types: B = Biological; C = Cultural; SW = Special Waste

B,C,SW ☐ Involves Acquisition of additional ROW or temporary or permanent easements. ha/ acres
SW ☐ On a state-maintained route, crosses or involves RR ROW (except a single rail rural ROW with no maintenance facilities).
B,C ☐ Requires In-Stream work (e.g., drainage structure runaround). Stream Name:
C ☐ Potential to affect a historic district or historic property.
C ☐ Involves replacement or rehabilitation of a bridge/culvert 40 years old or older.
SW ☑ Involves acquisition of, excavation (defined in BDE Manual 27-3.01) on, or subsurface utility relocation on State ROW.
☐ Other:

C. Project Description: Shoulder replacement and bridge overlay

Proposed Work: ☑ Roadway ☑ Bridge ☐ Railroad ☐ Airport ☐ Other

Tree Removal?: No **Number?:** 0 ha/ acres

Historic District Involved? **Historic Buildings Involved?**
Section 4(f) Lands Involved? **Section 6(f) Lands Involved?**
Wetland delineation performed by: **End. Species Consultation performed by:**

D. Funding: ☑ Federal ☐ State ☐ TBP ☐ MFT ☐ Local Non-MFT Other
☐ 404 Permit Required

E.
District Contact: Liz Burnside
Telephone #: (618) 346-3180 ext.
Env.Contact: Brian Macias
Telephone #: 6183463144

Local Contact:
Telephone #:
E-Mail:
Title/Company:

☐ Closed ☐ PSI/RMP Only ☐ ESR Rec'd in CO ☐ SW Rec'd

Special Waste

Special Waste Submittal Date: 02/09/2018 **Anticipated Design Approval:** 09/09/2018 **Cleared for Design Approval:**

Cleared for Letting: **Survey Target Date:** 08/09/2018

Step 1: Level 1 Screening Criteria - District Sign-Off [27-3.02(a)]*

No	**1. Acquisition of additional right-of-way or easements (temporary or permanent)**
No	**2. Railroad ROW (other than single rail rural ROW with no maintenance facilities)**
Yes	**3. Excavation or subsurface utility relocation**

** For a Local Roads project, Level 1 and Level 2 screening criteria apply to the state route/state jurisdiction portion of the project. For the non-state route portion of the project, the Local Roads Manual/procedures should be followed. If all responses are No, then the SWC may Sign-Off the project. Projects answering "Yes" or "Don't Know" to #2 above are not eligible for District Sign-Off and must go through the PESA process. If any response is "Yes" or "Don't Know", continue to Step 2: Level 2 Screening Criteria.*

☐ **District Sign-Off of Special Waste - Level 1:** ☐ **Validation - Level 1**

Conducted By: Brian Macias **Revised Level 1 Sign-Off Date:**

Position: Sr. Env. Specialist

Telephone #: 618-346-3144 **Ext.:**

Note: This Level 1 District Sign-Off is valid for a maximum of 6 months, after which it must be validated; enter a "Revised Level 1 Sign-Off Date" in the box to the right above and click the "Validation - Level 1" box.

Level 1 Screening Comments: *Include your name and date with your comments.*

Step 2: Level 2 Screening Criteria - District Sign-Off [27-3.02(b)]

☐ **If for any reason, the presence of any environmental condition cannot be determined from the site reconnaissance or from database searches, please check this box, add an explanation below, and submit for PESA.**

2.A. Does the project involve any of the following environmental conditions within the corresponding minimum search distance?

Environmental Condition	Minimum Search Distance	Database Search	Site Reconnaissance
Industrial and/or commercial property	0.25 miles		No
Other Environmental Conditions* (Please detail below 1)	Property & adjoining property		No
Crosses or otherwise involves RR ROW. (Please detail below 2)	Property & adjoining property		No
State UST	Property & adjoining property	No	
State LUST	0.5 miles	No	
State Voluntary Cleanup, Brownfield, or landfills	0.5 miles	No	
Federal NPL; NPL delisted; SEMS; SEMS NFRAP	1.0 miles; 0.5 miles; 0.5 miles; 0.5 miles, respectively	No	
Federal RCRA CORRACTS facilities; RCRA non-CORRACTS TSD facilities	1.0 miles; 0.5 miles, respectively	No	
Federal RCRA generators list	Property & adjoining property	No	
Federal Brownfield sites	0.5 miles	No	
Federal ERNS System	Property	No	

1. *Other Environmental Conditions are identified through site reconnaissance and include current and historic situations that may negatively af the property including the presence of, for example, illegal dumping, unknown containers, waste associated with "crack" or methamphetamir houses (i.e., discarded hazardous material on the outside of a property), battery piles, paint spills, abandoned transformers, surface staining vegetative damage, etc. Historic land uses that include any of these activiities also qualify.*

2. *Crosses or otherwise involves railroad ROW, other than a single rail rural ROW with no maintenance facilities.*

*** Describe Findings/Other Environmental Conditions:**

2.B. Were photographs taken of the site and/or surrounding area?

In an effort to identify any property or condition that may negatively affect the project site or potential historical, industrial and/or commercial use, the following sources of information can be helpful while screening the project.

2.C. Place a check next to each reference that is reviewed. (Optional)

☑ **Google - type aerial maps**	☑ **Extranet data**	☑ **Historic Aerial Photos**	☐ **Survey Books**	☐ **Other Files & Photos**
☐ **City Directories**	☐ **County Assessor**	☐ **Sanborn Fire Insurance Maps**	☐ **Plat Books**	
☑ **Other source (describe):**	IEPA Databases			

If any historical reference indicates the possible presence of a property or condition that may negatively affect the project site, then a PESA is required.

If all responses for database search and site reconnaissance are "No", then the District Special Waste Coordinator may sign-off the project. Ensure the special waste box in section A is checked. The level 2 District Sign-off is valid for a maximum of six months. If any response for database search and site reconnaissance is "Yes", or if a database search or site reconnaissance is not performed or is inconclusive, then a PESA is required. See BDE Manual 27-3 for additional instructions.

☑ **District Sign-Off of Special Waste - Level 2:** 02/09/2018

☐ **Validation - Level 2**

Prepared by (name): Brian Macias

Organization/firm: IDOT D8

Position/title: Sr. Env. Specialist

Telephone #: 618-346-3144 **Ext #:**

Email: Brian.Macias.illinois.gov

Revised Level 2 Sign-Off Date:

Cleared for Design Approval:

Note: This Level 2 District Sign-Off is valid for a maximum of 6 months. After that date, the District Sign-Off must be validated and a Revised Sign-Off Date entered in the box to the right above.

After this Level 1 or Level 2 District Sign-Off has been completed:
1. Email a screen shot or Adobe.pdf of the form to the Central Office, BDE, Environment Section, Geologic & Waste Assessment Unit for Processing.
2. Complete the Cleared for Design Approval step by clicking on the Dist/CBLRS tab and adding the date to the special waste cell.
3. Complete the Cleared for Letting step in a similar fashion.
4. Add explanatory note in the Addtl. Info tab.

For questions about this form, see the submittal instructions, contact the District Special Waste Coordinator or contact the BDE Geologic & Waste Assessment Unit.

Sequence No: **21410**

Memo Date:	02/07/2018	**Memo By:**	Brian Macias
Memo:	No ROW or in-stream work.		
Memo Date:	02/07/2018	**Memo By:**	Brian Macias
Memo:	District level II sign-off for special waste.		

Attention: Central Office BD&E
Environment Section
Room 330

Environmental Survey Request Addendum

A. Project Information

☑ Bio ☑ Cultural ☐ Wetlands ☑ Special Waste

Submittal Date: 03/26/2020 **Sequence No:** 21410 A

District: 8 **Requesting Agency:** DOH **Project No:**

Contract #: 76F79 **Job No.:** D- 98-064-12

Counties: Marion

Route: FAI 57 **Marked:** I-57

Street: **Section:** 61-(1,1-1,1-2,2)RS-1

Municipality(ies): **Project Length:** 6.1155 **km** 3.8 **miles**

FromTo (At): I-57 from Jefferson County Line to just N of IL 161

Quadrangle: Salem South/Kell **Township-Range-Section:** T1N-R2E-Sec 15,23,26,35

Survey Target Date: 09/26/2020 **Anticipated Design Approval:** 10/26/2020 **Anticipated NEPA Processing:** CE

B. Reason for Submittal: (Check all that apply) ; includes SW Level 1 Screening Criteriea

Survey Types: B = Biological; C = Cultural; SW = Special Waste

B,C,SW ☑ **Involves Acquisition of additional ROW or temporary or permanent easements. Addendum:** ____ **acres**
Total Project: ____ **acres**

SW ☐ **On a state-maintained route, crosses or involves RR ROW (except a single rail rural ROW with no maintenance facilities).**

B,C ☑ **Requires In-Stream work (e.g., drainage structure runaround).** **Stream Name:** Raccon Creek

C ☐ **Potential to affect a historic district or historic property.**

C ☑ **Involves replacement or rehabilitation of a bridge/culvert 40 years old or older.**

SW ☑ **Involves acquisition of, excavation (defined in BDE Manual 27-3.01) on, or subsurface utility relocation on State ROW.**

☐ **Other:**

C. Addendum Description:

Addendum being submitted additional in-stream work within the I-57/IL 161 interchange along with shoulder reconstrution along I-57.

D.

Tree Removal?: Don't Know **Number?:** ____ ____ **ha/** ____ **acres** ☐ **Within Mahomet SSA Project Review Area**

Existing Bridge(s) Structure Number:	061-2474	**On Historic Bridge List:**	No
Existing Bridge(s) Structure Number:	061-0017	**On Historic Bridge List:**	No
Existing Bridge(s) Structure Number:	061-2000	**On Historic Bridge List:**	No
Existing Bridge(s) Structure Number:	061-2473	**On Historic Bridge List:**	No
Existing Bridge(s) Structure Number:	061-2472	**On Historic Bridge List:**	No
Existing Bridge(s) Structure Number:	061-0046	**On Historic Bridge List:**	No
Existing Bridge(s) Structure Number:	061-2471	**On Historic Bridge List:**	No
Existing Bridge(s) Structure Number:	061-0027	**On Historic Bridge List:**	No

Wetland delineation performed by: **End. Species Consultation performed by:**

E.

Contact Person:	Sarah Wiszkon	**Local Contact Person:**	
Telephone #:	(618) 346-3309 ext.	**Telephone #:**	
Env.Contact:	Brian Macias	**E-Mail:**	
Telephone #:	(618) 346-3144 ext.	**Title/Company:**	

F.

☑ **Update Entire Project**

☐ **Addendum Only**

☐ **Closed** ☐ **PSI/RMP Only** ☐ **ESR Rec'd in CO** ____ ☐ **SW Rec'd** ____

Special Waste

Special Waste Submittal Date: 03/26/2020 **Anticipated Design Approval:** 10/26/2020 **Cleared for Design Approval:**

Cleared for Letting: **Survey Target Date:** 09/26/2020

Step 1: Level 1 Screening Criteria - District Sign-Off [27-3.02(a)]*

Don't Know	**1. Acquisition of additional right-of-way or easements (temporary or permanent)**
No	**2. Railroad ROW (other than single rail rural ROW with no maintenance facilities)**
Yes	**3. Excavation or subsurface utility relocation**

** For a Local Roads project, Level 1 and Level 2 screening criteria apply to the state route/state jurisdiction portion of the project. For the non-state route portion of the project, the Local Roads Manual/procedures should be followed. If all responses are No, then the SWC may Sign-Off the project. Projects answering "Yes" or "Don't Know" to #2 above are not eligible for District Sign-Off and must go through the PESA process. If any response is "Yes" or "Don't Know", continue to Step 2: Level 2 Screening Criteria.*

☐ **District Sign-Off of Special Waste - Level 1:** ☐ **Validation - Level 1**

Conducted By: Brian Macias **Revised Level 1 Sign-Off Date:**

Position: Sr. Env. Specialist

Telephone #: 618-346-3144 **Ext.:**

Note: This Level 1 District Sign-Off is valid for a maximum of 6 months, after which it must be validated; enter a "Revised Level 1 Sign-Off Date" in the box to the right above and click the "Validation - Level 1" box.

Level 1 Screening Comments: *Include your name and date with your comments.*

Step 2: Level 2 Screening Criteria - District Sign-Off [27-3.02(b)]

☐ **If for any reason, the presence of any environmental condition cannot be determined from the site reconnaissance or from database searches, please check this box, add an explanation below, and submit for PESA.**

2.A. Does the project involve any of the following environmental conditions within the corresponding minimum search distance?

Environmental Condition	Minimum Search Distance	Database Search	Site Reconnaissance
Industrial and/or commercial property	0.25 miles		Yes
Other Environmental Conditions* (Please detail below 1)	Property & adjoining property		No
Crosses or otherwise involves RR ROW. (Please detail below 2)	Property & adjoining property		No
State UST	Property & adjoining property	No	
State LUST	0.5 miles	No	
State Voluntary Cleanup, Brownfield, or landfills	0.5 miles	No	
Federal NPL; NPL delisted; SEMS; SEMS NFRAP	1.0 miles; 0.5 miles; 0.5 miles; 0.5 miles, respectively	No	
Federal RCRA CORRACTS facilities; RCRA non-CORRACTS TSD facilities	1.0 miles; 0.5 miles, respectively	No	
Federal RCRA generators list	Property & adjoining property	No	
Federal Brownfield sites	0.5 miles	No	
Federal ERNS System	Property	No	

1. *Other Environmental Conditions are identified through site reconnaissance and include current and historic situations that may negatively a the property including the presence of, for example, illegal dumping, unknown containers, waste associated with "crack" or methamphetam houses (i.e., discarded hazardous material on the outside of a property), battery piles, paint spills, abandoned transformers, surface stainin vegetative damage, etc. Historic land uses that include any of these activiities also qualify.*

2. *Crosses or otherwise involves railroad ROW, other than a single rail rural ROW with no maintenance facilities.*

*** Describe Findings/Other Environmental Conditions:**

2.B. Were photographs taken of the site and/or surrounding area?

In an effort to identify any property or condition that may negatively affect the project site or potential historical, industrial and/or commercial use, the following sources of information can be helpful while screening the project.

2.C. Place a check next to each reference that is reviewed. (Optional)

☑ **Google - type aerial maps**	☑ **Extranet data**	☑ **Historic Aerial Photos**	☐ **Survey Books**	☐ **Other Files & Photos**
☐ **City Directories**	☐ **County Assessor**	☐ **Sanborn Fire Insurance Maps**	☐ **Plat Books**	
☑ **Other source (describe):**	IEPA Database, NETR Online			

If any historical reference indicates the possible presence of a property or condition that may negatively affect the project site, then a PESA is required.

If all responses for database search and site reconnaissance are "No", then the District Special Waste Coordinator may sign-off the project. Ensure the special waste box in section A is checked. The level 2 District Sign-off is valid for a maximum of six months. If any response for database search and site reconnaissance is "Yes", or if a database search or site reconnaissance is not performed or is inconclusive, then a PESA is required. See BDE Manual 27-3 for additional instructions.

☐ **District Sign-Off of Special Waste - Level 2:**

Prepared by (name): Brian Macias
Organization/firm: IDOT D8
Position/title:
Telephone #: 618-346-3144 **Ext #:**
Email: Brian.Macias@illinois.gov

☐ **Validation - Level 2**

Revised Level 2 Sign-Off Date:
Cleared for Design Approval:

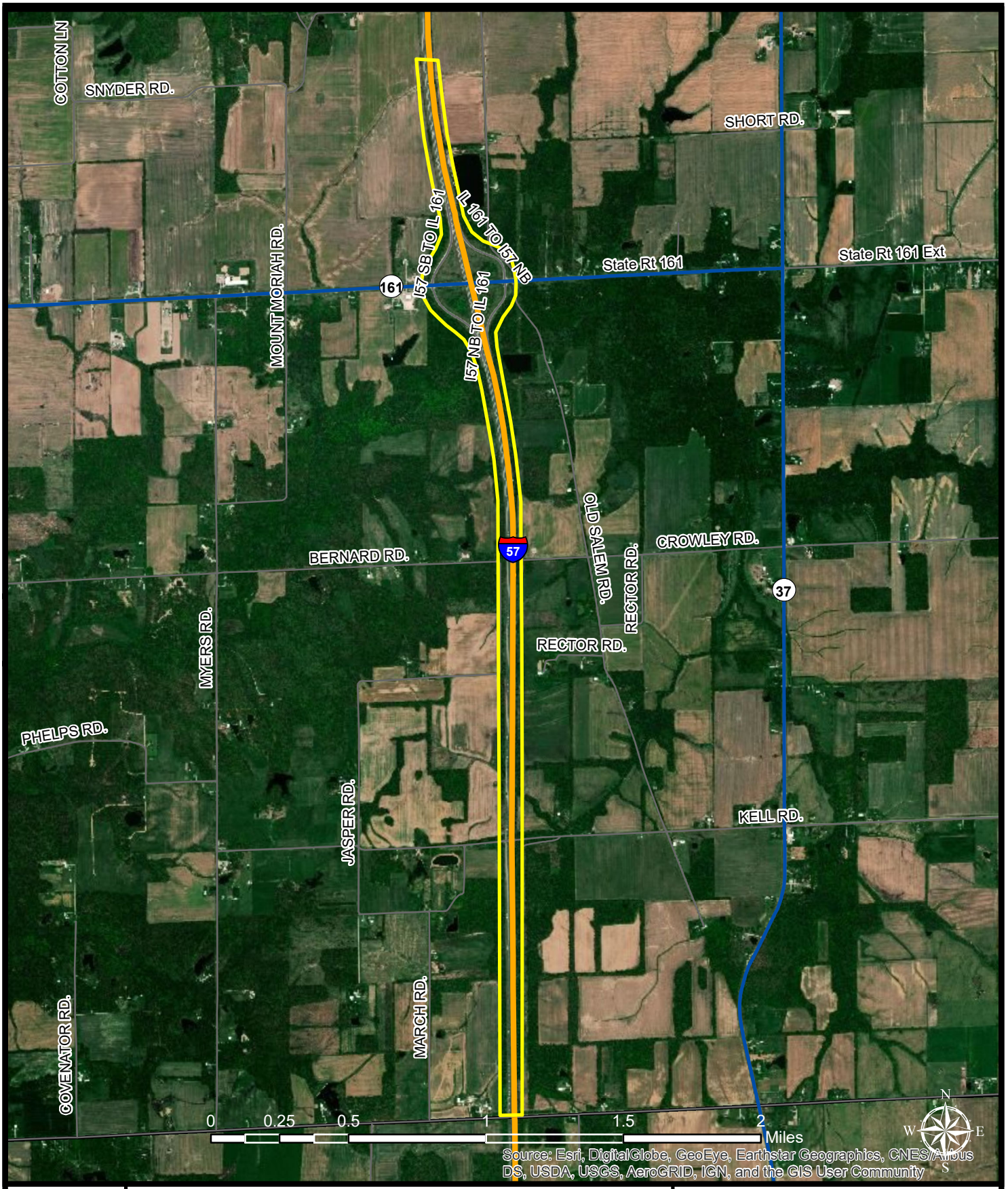
Note: This Level 2 District Sign-Off is valid for a maximum of 6 months. After that date, the District Sign-Off must be validated and a Revised Sign-Off Date entered in the box to the right above.

After this Level 1 or Level 2 District Sign-Off has been completed:
1. Email a screen shot or Adobe.pdf of the form to the Central Office, BDE, Environment Section, Geologic & Waste Assessment Unit for Processing.
2. Complete the Cleared for Design Approval step by clicking on the Dist/CBLRS tab and adding the date to the special waste cell.
3. Complete the Cleared for Letting step in a similar fashion.
4. Add explanatory note in the Addtl. Info tab.

For questions about this form, see the submittal instructions, contact the District Special Waste Coordinator or contact the BDE Geologic & Waste Assessment Unit.

Sequence No: **21410 A**

Memo Date:	03/26/2020	**Memo By:**	Brian Macias
Memo:	Survey limitys: Along I-57 from the Jefferson County Line to 0.7 mi N of IL 161; 150' from the edge of pavement (See attached maps)		



LEGEND

- Interstate Route
- State Route
- US Route
- Local Route
- Survey Limits

Illinois Department of Transportation

FAI 57 (I-57)
Section 61-(1,1-1,1-2,2)RS-1
Marion County
Sequence No. 21410A

Illinois Department of Transportation

Memorandum

To:	Jeffrey L. Keirn	Attn: Keith Rogers
From:	Jack A. Elston	By: Thomas C. Brooks
Subject:	Natural Resources Review	
Date:	December 7, 2021	

FAI 57
T 1N, R 2E, Sec15
Marion County
Sequence # 21410 and 21410 A

This review covers the original project as well as addendum A. The proposed project is for shoulder replacement and bridge overlay on several structures along I 57 from the Jefferson County Line to just north of IL 16.

The original scope of work has been changed. Previously the project did not include right if way right-of-way acquisition or temporary easements, in stream work, or tree removal. However, it has since been determined that a small unknown amount of right of way or easements will be required to complete the project. Additionally, there will be in stream work to Raccoon Creek. The project will require 8.75 acres of tree removal.

Review for Illinois Endangered Species Protection and Illinois Natural Areas Preservation – Part 1075

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location. Additionally, no threatened or endangered species or natural communities of interest were found during the 3-parameter survey and the wetland delineations which were conducted for this project. **Therefore, consultation under Part 1075 is terminated**.

This review for compliance with 17 Ill. Adm. Code Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed improvement is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the proposed improvement has not been implemented within two years of the date of this memorandum, or any of the above listed conditions develop, a new review will be necessary.

Review for Illinois Interagency Wetland Policy Act – Part 1090

The National Wetlands Inventory, Ducks Unlimited Wetlands Inventory, ground level and aerial photos, USDA Soil Survey, and topographic quadrangle maps were examined. A Wetland Impact Evaluation was sent in. This office has reviewed the Wetland Impact Evaluation. Wetland impacts were minimized as

much as possible but due to widening and shoulder work as well as in stream work and land acquisition, there are unavoidable wetland impacts. The project will impact 6.45 acres of wetlands including 3.94 acres of wet meadow and wet shrubland, 0.83 acres of forested wetland, and 1.68 acres of marsh. Some of the impacts are considered significant impacts and qualify as destruction due to impacts larger than 0.5 acres to a single wetland. The appropriate mitigation ratios have been applied as required under IWPA. In Kind mitigation credits will be deducted from the IDOT District 8 Cahokia Wetland Mitigation Site ledger in the amount of 16.815 acres. **Therefore, review for wetlands under Part 1090 is terminated.**

Review for Endangered Species Act - Section 7

The proposed improvement was reviewed in fulfillment of our obligation under Section 7(a)2 of the Endangered Species Act. Our review included use of the US Fish and Wildlife Service's Information for Planning and Conservation (IPaC) web-based review tool. Through IPaC, an official species list was received and is saved to the project folder. The list contains the endangered, threatened, proposed and candidate species and proposed and designated critical habitat that may be present within or in the vicinity of the proposed improvement. The following species are listed: Indiana bat (Ibat), Northern long-eared bat (NLEB), Rattlesnake-master borer moth, and Eastern prairie fringed orchid. There is no proposed or designated critical habitat in Marion County. Under 50 CFR 402.12(e), **the accuracy of the species list is limited to 90 days.**

Within IPaC there is a Determination Key for the NLEB and Ibat. We used the key to determine applicability of the project with the USFWS revised programmatic biological opinion for transportation projects and to assess what effect the project would have on NLEB or Ibat. We completed an IPaC qualification interview and determined that **the project is within the scope of the programmatic biological opinion and is not likely to adversely affect either bat species provided the following commitment is implemented:**

Trees three (3) inches or greater in diameter at breast height shall not be cleared from April 1st through September 30th of any given year.

This determination is based in part on the results of the bridge/structure assessment. No bats or signs of bats were observed on the bridge. **Please note that all bat bridge/structure assessments are valid for two years and that expired assessments shall be updated prior to construction.**

We cross-referenced the preferred habitat of each of the remaining listed species with our knowledge of the project area and determined that the project will have no effect on those species.

Should the proposed improvement be modified or new information indicates listed or proposed species may be affected; consultation or additional coordination should be initiated.

KCB

ILLINOIS
Illinois Natural History Survey
PRAIRIE RESEARCH INSTITUTE

WETLAND
DETERMINATION REPORT

Interstate 57 (FAI 57)
Marion County, Illinois

IDOT Sequence Number: 21410A

Prepared by:
Julie Nieset, Elizabeth Miernicki, Jeannine Adomaitis and Tari Tweddale

INHS/IDOT Wetland Science Program

January 2021

Project Summary

A wetland survey was conducted for proposed work on Interstate 57 (FAI 57) in Marion County, Illinois. All potential wetlands within the specified project area were examined. Twenty-one sites met the three criteria of a wetland established in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (U.S. Army Corps of Engineers [USACE] 2010) and were, therefore, determined to be wetlands. Summary information regarding the wetland determination sites is presented in the wetland project report. Wetland determination forms are found in Appendix A and wetland plant species lists are included in Appendix B. Wetland boundaries were recorded using a Trimble Global Navigation Satellite System (GNSS). The spatial data have been digitally uploaded to the Illinois Site Assessment Tracking System (https://isats.dot.illinois.gov/login.aspx). Locations of determination sites were overlaid on a digital aerial orthophoto using ArcGIS; the resulting figure is included in Appendix C. Additional maps and figures are also included in Appendix C.

Signed: Paul B. Marcum Date: January 14, 2021

Paul B. Marcum
Wetland Science Program
Associate Scientist/Project Leader for Botany

Conducted By: Julie Nieset (Vegetation, Hydrology, and GNSS)
Elizabeth Miernicki (Soils and Hydrology)
Jeannine Adomaitis (GIS and NRCS Method Determination)
Tari Tweddale (GIS)
University of Illinois
Prairie Research Institute
Illinois Natural History Survey
Wetland Science Program
1816 South Oak Street
Champaign, Illinois 61820
jenieset@illinois.edu
(217) 300-2472 (Nieset)

Table of Contents

Cover Photo: Milkweed tussock moth caterpillars (*Euchaetes egle*) on common milkweed (*Asclepias syriaca*) within the project corridor, September 2020.

Interstate 57 (FAI 57)
Marion County, Illinois

Introduction

A wetland survey was conducted on September 2-3, September 10 and 21, 2020, for the proposed work on Interstate 57 (FAI 57) in Marion County, Illinois. This is an addendum to construction work due to additional in-stream work within the I-57/IL 161 interchange along with shoulder reconstruction along I-57.

Methods

All potential wetlands within the specified study area were examined. Characteristics of vegetation, soils, hydrology, and topography were evaluated during field investigation and on-site wetland determination. Locations of observation points for wetland determinations were selected based on plant community borders and topographic changes. The following sources were examined while surveying the project corridor to determine wetland locations and boundaries: aerial photographs; U.S. Geological Survey topographic map (Salem South/Kell 7.5 minute quadrangles); National Wetlands Inventory (NWI) website (USFWS 2020); the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987); the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (USACE 2010); the USDA-NRCS *Official Series Descriptions*; and the USDA-NRCS *Web Soil Survey*. Positional inaccuracies are known to occur with downloaded sources of digital data listed above. As presented on maps and figures in this report, data can be shifted from their actual position when compared to modern aerial photography.

Wetland determinations were conducted using definitions and guidelines established in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)* (USACE 2010). Data from these determinations were recorded on U.S. Army Corps of Engineers' Wetland Determination Data Forms – Midwest Region (Appendix A); a data form was completed for each wetland sampling point. All potential wetlands, including all areas mapped as wetlands by the NWI, were described using at least one sampling point. Results of these determinations are summarized in the following text. Adjacent upland areas were also investigated; forms were not completed for these areas. Comprehensive plant species lists were compiled for each wetland site and are presented in Appendix B.

All areas of agricultural land use within the project corridor were evaluated following the NRCS method of wetland determination (for more information, see: USDA-NRCS 2016). Briefly, this method involves examining five years of aerial photography taken during the early summer for evidence of saturation or inundation (wetland signature). The years used are determined to be five years during which precipitation was closest to the long-term precipitation averages. Any area which showed a wetland signature in three years out of five (or in two years out of five if the site was also mapped as wetland by the NWI) was investigated by a site visit. If hydric soils

were present at the site, the site was determined to be wetland. The site was then delineated from the aerial photography based on an average wetland signature. Photographic documentation for this procedure is presented only when a wetland is determined to be present or when a site was mapped as wetland in the NWI. Twenty-one potential sites were investigated in the field but none of the sites met farmed wetland requirements.

Wetland location data were recorded using a Trimble Global Navigation Satellite System (model GeoExplorer 6000 Series GeoXT), with a presumed accuracy of +/- 0.5 m under optimal field conditions. Spatial data were digitally uploaded to the Illinois Site Assessment Tracking System (https://isats.dot.illinois.gov/login.aspx). Locations of determination sites were overlaid on a digital aerial orthophoto and approximate area was determined for each wetland site using ArcGIS Desktop 10.7.1 (ESRI 2019). Resulting areas are calculated in acres, reported to two decimal places. Site location, with respect to the nearest road, was measured from the edge of the pavement and is reported to the nearest foot.

Each native plant species was assigned a "coefficient of conservatism" (C) (Taft et al. 1997), a subjective rating of species fidelity to undegraded natural communities, ranging from zero to ten. Conservative species - those more likely to be found in "pristine" natural areas - were assigned high numbers, whereas non-conservative species - those that occur in anthropogenically disturbed areas - were given lower numbers. Non-native species and those not identifiable to species level were not assigned a rating. The Floristic Quality Index (FQI) is computed as FQI = (mean C) X (√N), where mean C is the mean coefficient of conservatism for all native plant species at a site and N is the total number of native plant species at the site. In very general terms, higher FQI values for plant communities indicate more similarity to "pristine" natural areas, as compared to those communities with lower FQI values. Botanical nomenclature follows *Vascular Flora of Illinois* (Mohlenbrock 2002), while wetland indicator status for each species follows *National Wetland Plant List, version 3.3* (USACE 2016, Lichvar et al. 2016).

Wetland Determination Site Summaries

Site Number: 1

Community type: **Wet meadow**

National Wetlands Inventory code**: U (upland)**

Site location: **Approximately 20 ft west of southbound I-57 and 14 ft east of northbound I-57**

Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**

Is this site a wetland? **Yes**

Area of site occurring within the project corridor: **0.56 ac**

Total site area: **Undetermined**

Mean Coefficient of Conservatism (mean C): **2.0** Floristic Quality Index (FQI): **12.2**

Additional remarks: **The parcels of this site are connected via culverts.**

Site Number: 2
Community type: **Marsh**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 15 ft west of southbound I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.01 ac**
Total site area: **0.01 ac**
Mean Coefficient of Conservatism (mean C): **1.4** Floristic Quality Index (FQI): **5.8**
Additional remarks: **It's possible that this site is connected to Site 3 but that the culvert is crushed. We noticed an area along the roadside that suggested so, but since we couldn't confirm, did not connect the sites.**

Site Number: 3
Community type: **Wet meadow**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 15 ft west of northbound I-57 and 9 ft east of northbound I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.08 ac**
Total site area: **0.08 ac**
Mean Coefficient of Conservatism (mean C): **1.7** Floristic Quality Index (FQI): **7.3**
Additional remarks: **The parcels of this site are connected via culverts.**

Site Number: 4
Community type: **Wet shrubland**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 18 ft west of the southbound I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.06 ac**
Total site area: **0.06 ac**
Mean Coefficient of Conservatism (mean C): **2.0** Floristic Quality Index (FQI): **9.2**

Site Number: 5
Community type: **Marsh**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 6 ft west of the southbound I-57 exit ramp, 11 ft west of northbound I-57 and 25 ft east of northbound I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.75 ac**
Total site area: **Undetermined**
Mean Coefficient of Conservatism (mean C): **2.3** Floristic Quality Index (FQI): **11.4**

Additional remarks: **The parcels of this site are connected via culverts.**

Site Number: 6
Community type: **Marsh**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 23 ft east of northbound I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.13 ac**
Total site area: **0.13 ac**
Mean Coefficient of Conservatism (mean C): **1.9** Floristic Quality Index (FQI): **8.5**
Additional remarks: **During field survey no culverts to connect this site to Site 5 were observed nor drainage marks between the two.**

Site Number: 7
Community type: **Upland forest**
National Wetlands Inventory code**: PUBGx (excavated, intermittently exposed, unconsolidated bottom, palustrine wetland)**
Site location: **Sampling point 10A approximately 51 ft east of northbound I-57**
Hydrophytic Vegetation? **No** Hydric Soils? **No** Wetland Hydrology? **No**
Is this site a wetland? **No**

Site Number: 8
Community type: **Deepwater Aquatic Habitat**
National Wetlands Inventory code**: PUBGx (excavated, intermittently exposed, unconsolidated bottom, palustrine wetland)**
Site location: **Approximately 109 ft east of northbound I-57**
Hydrophytic Vegetation? **No** Hydric Soils? **No** Wetland Hydrology? **No**
Is this site a wetland? **No**

Site Number: 9
Community type: **Upland forest**
National Wetlands Inventory code**: PUBGh (diked/impounded, intermittently exposed, unconsolidated bottom, palustrine wetland)**
Site location: **Sampling point 12A approximately 39 ft east of the exit ramp from IL 161 onto northbound I-57**
Hydrophytic Vegetation? **No** Hydric Soils? **No** Wetland Hydrology? **No**
Is this site a wetland? **No**

Site Number: 10
Community type: **Forested wetland**
National Wetlands Inventory code**: PUBGh (diked/impounded, intermittently exposed, unconsolidated bottom, palustrine wetland)**
Site location: **Approximately 67 ft east of the exit ramp from IL 161 onto northbound I-57**

Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.26 ac**
Total site area: **Undetermined**
Mean Coefficient of Conservatism (mean C): **3.1** Floristic Quality Index (FQI): **13.6**

Site Number: 11
Community type: **Wet meadow**
National Wetlands Inventory code**: U (upland); R2UBH (permanently flooded, unconsolidated bottom, lower perennial, riverine wetland)***
Site location: **Approximately 14 ft west and 22 ft east of southbound I-57, north of IL 161; and 17 ft west and 12 ft east of southbound I-57, south of IL 161**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **1.27 ac**
Total site area: **1.27 ac**
Mean Coefficient of Conservatism (mean C): **1.8** Floristic Quality Index (FQI): **9.7**
Additional remarks: **The six parcels of this site are connected via culverts and ditches.*Note that even though this wetland technically includes the R2UBH according to the NWI map (see Figure 2), the stream has been channelized and concretized under the roadway at depth. Due to past construction efforts, this portion of Site 11 over the R2UBH looks indistinguishable from the portion of Site 11 marked as upland by the NWI in this area.**

Site Number: 12
Community type: **Wet meadow**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 42 ft west of the exit ramp from IL 161 onto northbound I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.16 ac**
Total site area: **0.16 ac**
Mean Coefficient of Conservatism (mean C): **2.1** Floristic Quality Index (FQI): **11.1**

Site Number: 13
Community type: **Marsh**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 58 ft east of northbound I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.19 ac**
Total site area: **0.19 ac**
Mean Coefficient of Conservatism (mean C): **2.0** Floristic Quality Index (FQI): **9.4**

Site Number: 14
Community type: **Wet floodplain forest**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 58 ft east of the northbound I-57 exit ramp onto IL 161**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.42 ac**
Total site area: **Undetermined**
Mean Coefficient of Conservatism (mean C): **2.9** Floristic Quality Index (FQI): **17.6**

Site Number: 15
Community type: **Wet floodplain forest**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 62 ft east of southbound I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.56 ac**
Total site area: **Undetermined**
Mean Coefficient of Conservatism (mean C): **2.9** Floristic Quality Index (FQI): **16.9**

Site Number: 16
Community type: **Wet meadow**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 6 ft east of I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.18 ac**
Total site area: **0.18 ac**
Mean Coefficient of Conservatism (mean C): **2.3** Floristic Quality Index (FQI): **11.4**

Site Number: 17
Community type: **Wet meadow**
National Wetlands Inventory code**: U (upland)**
Site location: **As near as 12 ft east of I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.14 ac**
Total site area: **0.14 ac**
Mean Coefficient of Conservatism (mean C): **2.4** Floristic Quality Index (FQI): **11.7**
Additional remarks: **The six parcels of this site are connected via a ditch.**

Site Number: 18
Community type: **Wet meadow**
National Wetlands Inventory code**: U (upland)**

Site location: **Approximately 83 ft east of I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.06 ac**
Total site area: **0.10 ac**
Mean Coefficient of Conservatism (mean C): **2.1** Floristic Quality Index (FQI): **9.6**

Site Number: 19
Community type: **Forested wetland**
National Wetlands Inventory code**: R4SBC (seasonally flooded, streambed, intermittent, riverine wetland) and U (upland)**
Site location: **Approximately 12 ft west of I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.15 ac**
Total site area: **0.15 ac**
Mean Coefficient of Conservatism (mean C): **2.9** Floristic Quality Index (FQI): **16.9**
Additional remarks: **There are two parcels that are hydrologically connected to W9 - Unnamed tributary to Raccoon Creek #8, an intermittent stream.**

Site Number: 20
Community type: **Wet meadow**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 13 ft west of I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.31 ac**
Total site area: **0.31 ac**
Mean Coefficient of Conservatism (mean C): **2.2** Floristic Quality Index (FQI): **12.0**

Site Number: 21
Community type: **Marsh**
National Wetlands Inventory code**: U (upland)**
Site location: **As near as 14 ft east of I-57 and 18 ft west of northbound I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.60 ac**
Total site area: **0.60 ac**
Mean Coefficient of Conservatism (mean C): **2.0** Floristic Quality Index (FQI): **8.9**
Additional remarks: **The three parcels of this site are connected via culverts.**

Site Number: 22
Community type: **Wet meadow**
National Wetlands Inventory code**: U (upland)**

Site location: **As near as 8 ft west of I-57; 18 ft east of southbound I-57; and as near as 17 ft east of I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.87 ac**
Total site area: **0.87 ac**
Mean Coefficient of Conservatism (mean C): **2.5** Floristic Quality Index (FQI): **16.0**
Additional remarks: **The seven parcels of this site are connected via ditches and culverts.**

Site Number: 23
Community type: **Forested wetland**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 83 ft east of I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.08 ac**
Total site area: **0.08 ac**
Mean Coefficient of Conservatism (mean C): **2.8** Floristic Quality Index (FQI): **15.8**
Additional remarks: **Area outside of project is < 0.01 ac.**

Site Number: 24
Community type: **Wet meadow**
National Wetlands Inventory code**: U (upland)**
Site location: **Approximately 9 ft west and 14 ft east of I-57**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.31 ac**
Total site area: **0.31 ac**
Mean Coefficient of Conservatism (mean C): **1.8** Floristic Quality Index (FQI): **9.4**
Additional remarks: **The two parcels of this site are connected via culverts.**

Wetland Determination Site Summary

Site no.	NWI code	Community type	Area (ac.)[1]	>50%[2]	FQI	Mean C
1	U	Wet meadow	0.56	Yes	12.2	2.0
2	U	Marsh	0.01	Yes	5.8	1.4
3	U	Wet meadow	0.08	Yes	7.3	1.7
4	U	Wet shrubland	0.06	Yes	9.2	2.0
5	U	Marsh	0.75	Yes	11.4	2.3
6	U	Marsh	0.13	Yes	8.5	1.9
10	PUBGh	Forested wetland	0.26	Yes	13.6	3.1
11	U	Wet meadow	1.27	Yes	9.7	1.8

Site no.	NWI code	Community type	Area (ac.)[1]	>50%[2]	FQI	Mean C
12	U	Wet meadow	0.16	Yes	11.1	2.1
13	U	Marsh	0.19	Yes	9.4	2.0
14	U	Wet floodplain forest	0.42	No	17.6	2.9
15	U	Wet floodplain forest	0.56	No	16.9	2.9
16	U	Wet meadow	0.18	Yes	11.4	2.3
17	U	Wet meadow	0.14	Yes	11.7	2.4
18	U	Wet meadow	0.06	Yes	9.6	2.1
19	R4SBC and U	Forested wetland	0.15	Yes	16.9	2.9
20	U	Wet meadow	0.31	Yes	12.0	2.2
21	U	Marsh	0.60	Yes	8.9	2.0
22	U	Wet meadow	0.87	Yes	16.0	2.5
23	U	Forested wetland	0.08	Yes	15.8	2.8
24	U	Wet meadow	0.31	Yes	9.4	1.8

[1] Area within the ESR project limits. [2] In our best professional judgment is more than 50% of the total site area within the ESR project limits.

Stream Descriptions

Site Name: **Unnamed Tributary to Raccoon Creek #1**
Site Location: **Approximately 31 ft east of I-57**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07140202 (Middle Kaskaskia River)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water perennial/intermittent/ephemeral? **Ephemeral**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**
Additional Remarks: **This stream flows under I-57 and becomes an NWI (R4SBC) outside the project corridor.**

Site Name: **Unnamed Tributary to Raccoon Creek #2**
Site Location: **Approximately 151 ft northeast of the I-57 northbound on-ramp**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07140202 (Middle Kaskaskia River)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water perennial/intermittent/ephemeral? **Ephemeral**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**

Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**
Additional Remarks: **The area of the stream within the project corridor is a concretized channel.**

Site Name: **Unnamed Tributary to Raccoon Creek #3**
Site Location: **Approximately 116 ft northeast of the I-57 northbound on-ramp**
Community type: **Stream**
National Wetlands Inventory code: **R4SBC (seasonally flooded, streambed, intermittent, riverine wetland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07140202 (Middle Kaskaskia River)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water perennial/intermittent/ephemeral? **Intermittent**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**
Additional Remarks: **The area of the stream within the project corridor is a concretized channel.**

Site Name: **Unnamed Tributary to Raccoon Creek #4**
Site Location: **Approximately 103 ft east of the I-57 northbound exit ramp onto IL 161**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07140202 (Middle Kaskaskia River)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water perennial/intermittent/ephemeral? **Ephemeral**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**
Additional Remarks: **The concretized channel in the mowed area next to IL-161 becomes natural in the forested area in the south and flows through wetland Site 14 into Raccoon Creek.**

Site Name: **Raccoon Creek**
Site Location: **Passes under I-57 approximately 1022 ft south of IL 161**
Community type: **Stream**
National Wetlands Inventory code: **R2UBH (permanently flooded, unconsolidated bottom, lower perennial, riverine wetland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07140202 (Middle Kaskaskia River)**
Watershed area: **12.6 mi^2 (USGS 2017)**
Riffles observed? **Yes** Pools observed? **Yes**
Mussel shell material observed? **No**
Is the stream or body of water perennial/intermittent/ephemeral? **Perennial**

Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**

Site Name: **Unnamed Tributary to Raccoon Creek #5**
Site Location: **Approximately 77 ft west of the I-57 southbound on-ramp**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07140202 (Middle Kaskaskia River)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water perennial/intermittent/ephemeral? **Ephemeral**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**

Site Name: **Unnamed Tributary to Raccoon Creek #6**
Site Location: **Approximately 36 ft west of I-57**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07140202 (Middle Kaskaskia River)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water perennial/intermittent/ephemeral? **Ephemeral**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**
Additional Remarks: **This stream flows under I-57.**

Site Name: **Unnamed Tributary to Raccoon Creek #7**
Site Location: **Approximately 65 ft east of I-57**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07140202 (Middle Kaskaskia River)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water perennial/intermittent/ephemeral? **Ephemeral**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**

Site Name: **Unnamed Tributary to Raccoon Creek #8**
Site Location: **Passes under I-57 approximately 1297 ft north of Kell Road**
Community type: **Stream**

National Wetlands Inventory code: **R4SBC (seasonally flooded, streambed, intermittent, riverine wetland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07140202 (Middle Kaskaskia River)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water perennial/intermittent/ephemeral? **Intermittent**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**

Site Name: **Unnamed Tributary to Raccoon Creek #9**
Site Location: **Approximately 30 ft east of I-57**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07140202 (Middle Kaskaskia River)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water perennial/intermittent/ephemeral? **Ephemeral**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**

Site Name: **Unnamed Tributary to Raccoon Creek #10**
Site Location: **Passes under I-57 approximately 2075 ft south of Kell Road**
Community type: **Stream**
National Wetlands Inventory code: **R4SBC (seasonally flooded, streambed, intermittent, riverine wetland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07140202 (Middle Kaskaskia River)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water perennial/intermittent/ephemeral? **Intermittent**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**

Site Name: **Unnamed Tributary to Raccoon Creek #11**
Site Location: **Approximately 30 ft west of I-57**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07140202 (Middle Kaskaskia River)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water perennial/intermittent/ephemeral? **Ephemeral**

Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**

Site Name: **Unnamed Tributary to Raccoon Creek #12**
Site Location: **Approximately 35 ft east of I-57**
Community type: **Stream**
National Wetlands Inventory code: **R4SBC (seasonally flooded, streambed, intermittent, riverine wetland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07140202 (Middle Kaskaskia River)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water perennial/intermittent/ephemeral? **Intermittent**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**

Site Name: **Unnamed Tributary to Raccoon Creek #13**
Site Location: **Approximately 66 ft east of I-57**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07140202 (Middle Kaskaskia River)**
Watershed area: **<1 mi^2 (USGS 2017)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water perennial/intermittent/ephemeral? **Ephemeral**
Is the stream identified by the IDNR (2008) as a biologically significant stream? **No**
Stream Integrity Rating: **Not Rated** Stream Diversity Rating: **Not Rated**

Stream Descriptions Summary Table

Waters Name	NWI code	Community type	USGS 8-digit HUC	IDNR BSS[1]	IDNR SIR[1]	IDNR SDR[1]
Unnamed Tributary to Raccoon Creek #1	U	Ephemeral Stream	07140202	No	Not Rated	Not Rated
Unnamed Tributary to Raccoon Creek #2	U	Ephemeral Stream	07140202	No	Not Rated	Not Rated
Unnamed Tributary to Raccoon Creek #3	R4SBC	Intermittent Stream	07140202	No	Not Rated	Not Rated
Unnamed Tributary to Raccoon Creek #4	U	Ephemeral Stream	07140202	No	Not Rated	Not Rated
Raccoon Creek	R2UBH	Perennial Stream	07140202	No	Not Rated	Not Rated
Unnamed Tributary to Raccoon Creek #5	U	Ephemeral Stream	07140202	No	Not Rated	Not Rated

Waters Name	NWI code	Community type	USGS 8-digit HUC	IDNR BSS[1]	IDNR SIR[1]	IDNR SDR[1]
Unnamed Tributary to Raccoon Creek #6	U	Ephemeral Stream	07140202	No	Not Rated	Not Rated
Unnamed Tributary to Raccoon Creek #7	U	Ephemeral Stream	07140202	No	Not Rated	Not Rated
Unnamed Tributary to Raccoon Creek #8	R4SBC	Intermittent Stream	07140202	No	Not Rated	Not Rated
Unnamed Tributary to Raccoon Creek #9	U	Ephemeral Stream	07140202	No	Not Rated	Not Rated
Unnamed Tributary to Raccoon Creek #10	R4SBC	Intermittent Stream	07140202	No	Not Rated	Not Rated
Unnamed Tributary to Raccoon Creek #11	U	Ephemeral Stream	07140202	No	Not Rated	Not Rated
Unnamed Tributary to Raccoon Creek #12	R4SBC	Intermittent Stream	07140202	No	Not Rated	Not Rated
Unnamed Tributary to Raccoon Creek #13	U	Ephemeral Stream	07140202	No	Not Rated	Not Rated

[1]IDNR 2008 BSS (Biologically Significant Stream), SIR (Stream Integrity Rating), and SDR (Stream Diversity Rating).

Threatened/Endangered Species and Natural Communities of Special Interest

No species listed as threatened or endangered federally or in Illinois were found during our wetland survey within the project corridor. Also, no natural communities of special interest were noted.

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APPENDIX A

Wetland Determination Forms

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/2/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 1A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 15, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated channel/ditch Local relief (concave, convex, none): Concave

Slope (%): <2 Lat: 38.53028 Long: -88.96480 Datum: NAD 83

Soil Map Unit Name: Cisne-Huey SILs, 0-2% slopes NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Salix interior*	5	Yes	FACW
2. *Diospyros virginiana*	1	No	FAC
3.			
4.			
5.			
	6	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Bidens aristosa*	55	Yes	FACW
2. *Asclepias incarnata*	10	No	OBL
3. *Penstemon digitalis*	10	No	FAC
4. *Iva annua*	5	No	FAC
5. *Juncus gerardii*	5	No	OBL
6. *Lycopus americanus*	5	No	OBL
7. *Scirpus georgianus*	5	No	OBL
8.			
9.			
10.			
	95	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 1A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	2.5Y 5/1	98	7.5YR 4/6	2	C	PL & M	SICL	
8-15	10YR 4/1	97	7.5YR 5/8	3	C	M	SICL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/2/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 2A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 15, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated depression Local relief (concave, convex, none): Concave

Slope (%): 1-2 Lat: 38.52694 Long: -88.96418 Datum: NAD 83

Soil Map Unit Name: Orthents, Silty, Undulating NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is marsh.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Phragmites australis*	65	Yes	FACW
2. *Toxicodendron radicans*	30	Yes	FAC
3. *Parthenocissus quinquefolia*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 2A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/2	98	7.5YR 4/6	2	C	M	SICL	
7-10	10YR 5/2	88	5YR 4/6	10	C	M	SICL	
7-10			2.5Y 7/1	2	D	M		
10-16	10YR 5/2	83	7.5YR 5/8	15	C	M	SICL	
10-16			10YR 6/1	2	D	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/2/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 3A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 15, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated channel/ditch Local relief (concave, convex, none): Concave

Slope (%): <1 Lat: 38.52702 Long: -88.96387 Datum: NAD 83

Soil Map Unit Name: Orthents, Silty, Undulating NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is marsh.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Leersia oryzoides*	70	Yes	OBL
2. *Carex tribuloides*	10	No	OBL
3. *Paspalum sp.*	10	No	-
4. *Juncus tenuis*	5	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	95 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 3A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 4/1	98	7.5YR 4/6	2	C	PL & M	SIL	
9-17	2.5Y 6/1	70	5YR 4/6	10	C	M	SICL	
9-17	2.5Y 7/1	20						

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? Yes

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/2/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 4A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 15, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated channel/ditch Local relief (concave, convex, none): Concave

Slope (%): <1 Lat: 38.52481 Long: -88.96373 Datum: NAD 83

Soil Map Unit Name: Orthents, Silty, Undulating NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet shrubland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Fraxinus lanceolata*	70	Yes	FACW
2.			
3.			
4.			
5.			
	70	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Festuca arundinacea*	30	Yes	FACU
2. *Agrostis gigantea*	20	Yes	FACW
3. *Fraxinus lanceolata*	20	Yes	FACW
4. *Juncus tenuis*	15	No	FAC
5. *Lonicera japonica*	5	No	FACU
6.			
7.			
8.			
9.			
10.			
	90	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

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

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

Percent of Dominant Species That are OBL, FACW, or FAC: 75% (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 4A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/1	95	5YR 4/6	5	C	PL	SICL	
6-8	10YR 5/1	95	7.5YR 4/4	5	C	M	SICL	
8-15	5Y 6/1	87	7.5YR 4/6	10	C	M	SIC	
8-15			2.5Y 7/1	3	D	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? Yes

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/2/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 5A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 15, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated channel/ditch Local relief (concave, convex, none): Concave

Slope (%): <1 Lat: 38.52389 Long: -88.96352 Datum: NAD 83

Soil Map Unit Name: Orthents, Silty, Undulating NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is marsh.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Leersia oryzoides*	80	Yes	OBL
2. *Scirpus georgianus*	20	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 5A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	96	7.5YR 5/8	2	C	M	SIL	
0-4			10YR 5/1	2	D	M		
4-8	10YR 4/1	96	5YR 4/6	2	C	PL	SICL	
4-8			10YR 6/2	2	D	M		
8-15	10YR 5/1	95	7.5YR 4/6	2	C	M	SIC	
8-15			5Y 6/1	3	D	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/2/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 6A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 15, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated channel/ditch Local relief (concave, convex, none): Concave

Slope (%): 1-2 Lat: 38.52566 Long: -88.96320 Datum: NAD 83

Soil Map Unit Name: Orthents, Silty, Undulating NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is marsh.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Phragmites australis*	80	Yes	FACW
2. *Toxicodendron radicans*	10	No	FAC
3. *Dipsacus fullonum*	5	No	FACU
4. *Lonicera japonica*	5	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 6A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/1	98	7.5YR 4/6	2	C	PL & M	SIL	
5-11	10YR 5/1	97	7.5YR 4/6	3	C	M	SICL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? Yes

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/2/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 7A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 15, T1N, R2E

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

Slope (%): <2 Lat: 38.52452 Long: -88.96269 Datum: NAD 83

Soil Map Unit Name: Orthents, Silty, Undulating NWI classification: PUBGx

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks: Community type is upland forest.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Diospyros virginiana*	30	Yes	FAC
2. *Sassafras albidum*	30	Yes	FACU
3. *Pinus strobus*	25	Yes	FACU
4. *Salix nigra*	3	No	OBL
5.			
	88	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Sassafras albidum*	20	Yes	FACU
2. *Elaeagnus umbellata*	15	Yes	UPL
3. *Juniperus virginiana*	10	No	FACU
4. *Acer rubrum*	5	No	FAC
5. *Diospyros virginiana*	5	No	FAC
	60	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Lonicera japonica*	80	Yes	FACU
2. *Rubus allegheniensis*	10	No	FACU
3. *Sanicula odorata*	5	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1. *Lonicera japonica*	1	No	FACU
2. *Toxicodendron radicans*	1	No	FAC
	2	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 17% (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **No**

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

Additional species are present in one or more strata, therefore the total cover may be greater than the sum of the individual cover values listed on this form.

SOIL

Sampling Point: 7A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/1	100					SIL	
2-10	2.5Y 5/2	100					SIL	

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

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

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: Compaction

Depth (inches): 10

Hydric Soil Present? No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches):

Water Table Present? No Depth (inches):

Saturation Present? (includes capillary fringe) No Depth (inches):

Wetland Hydrology Present? No

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/3/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 8A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 15, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated depression Local relief (concave, convex, none): Concave

Slope (%): <1 Lat: 38.52424 Long: -88.96247 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Water; revised to Undetermined NWI classification: PUBGx

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks: Community type is deepwater aquatic habitat.
This site is a deepwater aquatic habitat with an average water depth greater than 2 m. According to the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) it is therefore not a wetland and the remaining fields on this form are not appropriate to describe this site.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present?

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

SOIL

Sampling Point: 8A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? _____ Depth (inches): _____

Water Table Present? _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) _____ Depth (inches): _____

Wetland Hydrology Present? _____

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/2/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 9A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 15, T1N, R2E

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

Slope (%): 3-5 Lat: 38.52236 Long: -88.96196 Datum: NAD 83

Soil Map Unit Name: Orthents, Silty, Undulating NWI classification: PUBGh

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

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

Remarks: Community type is upland forest.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Sassafras albidum*	30	Yes	FACU
2. *Diospyros virginiana*	20	Yes	FAC
3. *Quercus imbricaria*	20	Yes	FACU
4. *Prunus serotina*	7	No	FACU
5. *Carpinus caroliniana*	5	No	FAC
	82	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Elaeagnus umbellata*	15	Yes	UPL
2. *Lonicera maackii*	10	Yes	UPL
3. *Symphoricarpos occidentalis*	10	Yes	UPL
4. *Quercus imbricaria*	2	No	FACU
5. *Rosa multiflora*	2	No	FACU
	39	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Symphoricarpos occidentalis*	40	Yes	UPL
2. *Parthenocissus quinquefolia*	10	No	FACU
3. *Sanicula odorata*	5	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	55	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1. *Toxicodendron radicans*	2	No	FAC
2. *Lonicera japonica*	1	No	FACU
	4	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 14% (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **No**

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

Additional species are present in one or more strata, therefore the total cover may be greater than the sum of the individual cover values listed on this form.

SOIL

Sampling Point: 9A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-9	2.5Y 5/3	100					SIL	
9-12+	2.5Y 5/3	99	7.5YR 5/6	1	C	M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **No**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? _____ Depth (inches): _____

Water Table Present? _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) _____ Depth (inches): _____

Wetland Hydrology Present? **No**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/3/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 10A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 15, T1N, R2E

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

Slope (%): 1-2 Lat: 38.52251 Long: -88.96180 Datum: NAD 83

Soil Map Unit Name: Mapped as Bluford SIL, 2-5% slopes; revised to Undetermined NWI classification: PUBGh

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is forested wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Betula nigra*	60	Yes	FACW
2. *Acer rubrum*	20	Yes	FAC
3.			
4.			
5.			
	80	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Wolffia columbiana*	40	Yes	OBL
2. *Spirodela polyrhiza*	10	No	OBL
3. *Ludwigia peploides var. glabrescens*	5	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	55	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 10A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	5Y 5/1	98	7.5YR 5/6	2	C	M	SIL	
5-10	2.5Y 4/1	95	7.5YR 4/4	5	C	PL & M	SIL	
10-15	10YR 5/1	95	7.5YR 4/6	5	C	PL & M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? Yes Depth (inches): <5

Water Table Present? Yes Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes Depth (inches): 0

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/3/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 11A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 22, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated depression Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.51813 Long: -88.96180 Datum: NAD 83

Soil Map Unit Name: Orthents, Silty, Undulating NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?** **Yes**
Hydric Soil Present?	Yes	
Wetland Hydrology Present?	Yes	

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Leersia oryzoides*	50	Yes	OBL
2. *Campsis radicans*	15	Yes	FACU
3. *Eupatorium serotinum*	15	Yes	FAC
4. *Asclepias incarnata*	10	No	OBL
5. *Agrostis gigantea*	5	No	FACW
6. *Carex vulpinoidea*	5	No	FACW
7. *Rumex crispus*	3	No	FAC
8.			
9.			
10.			
	103	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 11A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/2	97	7.5YR 4/6	3	C	PL & M	SIL	
6-12	2.5Y 5/1	98	7.5YR 3/4	2	C	PL	L	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/2/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 12A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 15, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated channel/ditch Local relief (concave, convex, none): Concave

Slope (%): 2-3 Lat: 38.52028 Long: -88.96025 Datum: NAD 83

Soil Map Unit Name: Orthents, Silty, Undulating NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Leersia oryzoides*	40	Yes	OBL
2. *Carex vulpinoidea*	35	Yes	FACW
3. *Agrostis gigantea*	10	No	FACW
4. *Echinochloa muricata*	10	No	OBL
5. *Cyperus esculentus*	5	No	FACW
6.			
7.			
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 12A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/2	95	5YR 4/6	5	C	PL & M	SIL	
5-12	10YR 5/2	87	5YR 4/6	10	C	PL & M	SIL	
5-12			2.5Y 6/1	3	D	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/3/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 13A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 22, T1N, R2E

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

Slope (%): <1 Lat: 38.51830 Long: -88.96079 Datum: NAD 83

Soil Map Unit Name: Orthents, Silty, Undulating NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is marsh.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Typha angustifolia*	30	Yes	OBL
2. *Leersia oryzoides*	20	Yes	OBL
3. *Juncus torreyi*	15	Yes	FACW
4. *Agrostis gigantea*	10	No	FACW
5. *Cyperus esculentus*	10	No	FACW
6. *Echinochloa muricata*	10	No	OBL
7. *Asclepias incarnata*	5	No	OBL
8.			
9.			
10.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 13A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/2	97	2.5YR 4/8	3	C	PL	SIL	
5-10	5Y 5/1	85	7.5YR 4/6	15	C	PL & M	SICL	
10-16	5Y 6/1	80	10YR 5/8	20	C	M	SICL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/3/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 14A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 22, T1N, R2E

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

Slope (%): <1 Lat: 38.51838 Long: -88.95985 Datum: NAD 83

Soil Map Unit Name: Wakeland SIL, 0-2% slopes, frequently flooded NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?** **Yes**
Hydric Soil Present?	Yes	
Wetland Hydrology Present?	Yes	

Remarks: Community type is wet floodplain forest.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharinum*	65	Yes	FACW
2. *Populus deltoides*	15	No	FAC
3. *Ulmus americana*	10	No	FACW
4.			
5.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Acer saccharinum*	5	Yes	FACW
2. *Fraxinus lanceolata*	3	Yes	FACW
3. *Ulmus americana*	3	Yes	FACW
4.			
5.			
	11	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Lysimachia nummularia*	40	Yes	FACW
2. *Aster lanceolatus*	20	Yes	FAC
3. *Carex lupulina*	10	No	OBL
4. *Cinna arundinacea*	10	No	FACW
5. *Chasmanthium latifolium*	5	No	FACW
6. *Carex sp.*	2	No	-
7.			
8.			
9.			
10.			
	87	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1. *Toxicodendron radicans*	1	No	FAC
2.			
	1	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 14A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/1	95	5YR 4/6	5	C	PL & M	SIL	
6-12	2.5Y 5/1	97	7.5YR 5/6	3	C	M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/3/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 15A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 22, T1N, R2E

Landform (hillslope, terrace, etc.): Enclosed depression Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 38.51585 Long: -88.96135 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Wakeland SIL; revised to Birds NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet floodplain forest.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	50	Yes	FAC
2. *Acer saccharinum*	10	No	FACW
3. *Ulmus americana*	10	No	FACW
4. *Acer rubrum*	5	No	FAC
5. *Salix nigra*	5	No	OBL
	80	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Ludwigia palustris var. americana*	25	Yes	OBL
2. *Spirodela polyrhiza*	25	Yes	OBL
3. *Wolffia columbiana*	20	Yes	OBL
4. *Leersia oryzoides*	15	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	85	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1. *Toxicodendron radicans*	1	No	FAC
2. *Vitis riparia*	1	No	FACW
	2	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 15A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 3/1	100					SIL	
1-12	5Y 5/1	97	5YR 4/6	3	C	PL & M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? Yes Depth (inches): <15

Water Table Present? Yes Depth (inches): 0

Saturation Present? (includes capillary fringe) Yes Depth (inches): 0

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/21/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 16A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 23, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated channel/ditch Local relief (concave, convex, none): Concave

Slope (%): <1 Lat: 38.51122 Long: -88.95940 Datum: NAD 83

Soil Map Unit Name: Passport SIL, 5-10% slopes, eroded NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?** **Yes**
Hydric Soil Present?	Yes	
Wetland Hydrology Present?	Yes	

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Bidens aristosa*	45	Yes	FACW
2. *Agrostis gigantea*	20	Yes	FACW
3. *Festuca arundinacea*	10	No	FACU
4. *Asclepias incarnata*	5	No	OBL
5. *Carex vulpinoidea*	5	No	FACW
6. *Diospyros virginiana*	5	No	FAC
7. *Eupatorium serotinum*	5	No	FAC
8. *Iva annua*	5	No	FAC
9. *Lonicera japonica*	2	No	FACU
10. *Toxicodendron radicans*	2	No	FAC
	104	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 16A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 5/2	99	7.5YR 4/6	1	C	M	SIL	
4-12	10YR 5/2	98	7.5YR 4/6	2	C	M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/21/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 17A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 26, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated channel/ditch Local relief (concave, convex, none): Concave

Slope (%): <2 Lat: 38.50517 Long: -88.95904 Datum: NAD 83

Soil Map Unit Name: Bluford SIL, 0-2% slopes NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Agrostis gigantea*	35	Yes	FACW
2. *Bidens aristosa*	30	Yes	FACW
3. *Scirpus georgianus*	15	No	OBL
4. *Toxicodendron radicans*	15	No	FAC
5. *Campsis radicans*	10	No	FACU
6. *Solidago canadensis*	5	No	FACU
7.			
8.			
9.			
10.			
	110 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 17A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 4/2	99	5YR 4/6	1	C	M	SIL	
3-7	10YR 5/2	98	7.5YR 5/8	2	C	M	SIL	
7-12	10YR 5/1	80	7.5YR 5/8	3	C	M	SICL	
7-12	10YR 5/2	17						

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/21/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 18A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 26, T1N, R2E

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

Slope (%): <2 Lat: 38.50314 Long: -88.95875 Datum: NAD 83

Soil Map Unit Name: Hoyleton SIL, 2-5% slopes NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Euthamia graminifolia*	30	Yes	FACW
2. *Asclepias incarnata*	25	Yes	OBL
3. *Agrostis gigantea*	20	Yes	FACW
4. *Panicum dichotomiflorum*	20	Yes	FACW
5. *Carex squarrosa*	10	No	OBL
6. *Helianthus grosseserratus*	5	No	FACW
7. *Cyperus esculentus*	3	No	FACW
8. *Persicaria punctata*	3	No	OBL
9. *Lonicera japonica*	2	No	FACU
10.			
	118	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 18A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/2	100					SIL	
2-5	10YR 4/2	99	7.5YR 4/6	1	C	PL & M	SIL	
5-10	10YR 5/2	98	5YR 3/4	2	C	M	SIL	
10-15	10YR 5/2	97	7.5YR 4/6	3	C	M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/10/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 19A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 26, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated channel/ditch Local relief (concave, convex, none): Concave

Slope (%): <2 Lat: 38.49430 Long: -88.95995 Datum: NAD 83

Soil Map Unit Name: Racoon SIL, 0-2% slopes NWI classification: R4SBC

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is forested wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus americana*	40	Yes	FACW
2. *Fraxinus lanceolata*	10	Yes	FACW
3.			
4.			
5.			
	50	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Fraxinus lanceolata*	10	Yes	FACW
2.			
3.			
4.			
5.			
	10	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	95	Yes	FACW
2. *Toxicodendron radicans*	5	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1. *Toxicodendron radicans*	2	No	FAC
2. *Campsis radicans*	1	No	FACU
	4	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

Additional species are present in one or more strata, therefore the total cover may be greater than the sum of the individual cover values listed on this form.

SOIL

Sampling Point: 19A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 3/2	100					SIL	
1-5	10YR 3/2	98	5YR 4/6	2	C	M	SICL	
5-9	10YR 5/2	95	5YR 3/4	5	C	M	SICL	
9-15	2.5Y 5/2	90	7.5YR 4/6	10	C	PL & M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/10/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 20A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 26, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated channel/ditch Local relief (concave, convex, none): Concave

Slope (%): <2 Lat: 38.49273 Long: -88.95997 Datum: NAD 83

Soil Map Unit Name: Racoon SIL, 0-2% slopes NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Fraxinus lanceolata*	10	Yes	FACW
2.			
3.			
4.			
5.			
	10	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Bidens aristosa*	25	Yes	FACW
2. *Juncus brachycarpus*	25	Yes	FACW
3. *Campsis radicans*	20	Yes	FACU
4. *Pycnanthemum tenuifolium*	10	No	FAC
5. *Scirpus georgianus*	10	No	OBL
6. *Echinochloa muricata*	5	No	OBL
7. *Iva annua*	5	No	FAC
8. *Toxicodendron radicans*	5	No	FAC
9. *Solidago canadensis*	3	No	FACU
10. *Vernonia missurica*	2	No	FAC
	110	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

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

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

Percent of Dominant Species That are OBL, FACW, or FAC: 75% (A/B)

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 20A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 3/1	99	10YR 4/6	1	C	PL	SIL	
1-2	10YR 4/2	98	5YR 4/6	2	C	M	SIL	
2-12	10YR 5/2	98	7.5YR 4/6	2	C	M	SICL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/10/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 21A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 26, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated channel/ditch Local relief (concave, convex, none): Concave

Slope (%): <1 Lat: 38.49083 Long: -88.95968 Datum: NAD 83

Soil Map Unit Name: Bluford SIL, 2-5% slopes NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is marsh.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Phragmites australis*	90	Yes	FACW
2. *Agrostis gigantea*	5	No	FACW
3. *Rumex crispus*	2	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	97 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 21A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 5/3	98	7.5YR 4/6	2	C	M	SICL	
6-12	10YR 4/2	95	5YR 3/4	2	C	M	SIL	
6-12			7.5YR 4/6	3	C	M		

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/10/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 22A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 35, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated channel/ditch Local relief (concave, convex, none): Concave

Slope (%): 2-3 Lat: 38.48973 Long: -88.96005 Datum: NAD 83

Soil Map Unit Name: Bluford SIL, 0-2% slopes NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Agrostis gigantea*	30	Yes	FACW
2. *Bidens aristosa*	30	Yes	FACW
3. *Apocynum cannabinum*	25	Yes	FAC
4. *Toxicodendron radicans*	10	No	FAC
5. *Helianthus grosseserratus*	8	No	FACW
6. *Iva annua*	5	No	FAC
7. *Vernonia missurica*	5	No	FAC
8. *Solidago canadensis*	2	No	FACU
9.			
10.			
	115 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 22A

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 5/3	100					SIL	
3-6	10YR 5/2	98	7.5YR 4/6	2	C	M	SIL	
6-10	10YR 5/2	97	7.5YR 5/8	3	C	M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: Compaction

Depth (inches): 10

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches):

Water Table Present? No Depth (inches):

Saturation Present? (includes capillary fringe) No Depth (inches):

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/21/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 23A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 35, T1N, R2E

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

Slope (%): <1 Lat: 38.47894 Long: -88.95922 Datum: NAD 83

Soil Map Unit Name: Creal SIL, 2-5% slopes, rarely flooded NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?** **Yes**
Hydric Soil Present?	Yes	
Wetland Hydrology Present?	Yes	

Remarks: Community type is forested wetland.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharinum*	40	Yes	FACW
2. *Quercus palustris*	20	Yes	FACW
3. *Ulmus rubra*	15	Yes	FAC
4.			
5.			
	75	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Ulmus rubra*	5	Yes	FAC
2.			
3.			
4.			
5.			
	5	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Aster lanceolatus*	20	Yes	FAC
2. *Persicaria hydropiperoides*	15	Yes	OBL
3. *Senecio glabellus*	15	Yes	FACW
4. *Glyceria striata*	10	No	OBL
5. *Carex squarrosa*	5	No	OBL
6. *Cinna arundinacea*	5	No	FACW
7.			
8.			
9.			
10.			
	70	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1. *Toxicodendron radicans*	1	No	FAC
2.			
	1	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 7 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 23A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/1	97	5YR 4/6	1	C	M	SIL	
0-4			2.5Y 6/2	2	D	M		
4-12	10YR 5/2	98	7.5YR 4/6	2	C	M	SIL	
12-15+	10YR 5/2	97	7.5YR 4/6	3	C	M	SIL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/10/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 24A

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 34, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated depression Local relief (concave, convex, none): Concave

Slope (%): 1-2 Lat: 38.47635 Long: -88.96009 Datum: NAD 83

Soil Map Unit Name: Bluford SIL, 2-5% slopes NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Echinochloa muricata*	65	Yes	OBL
2. *Persicaria punctata*	10	No	OBL
3. *Setaria glauca*	10	No	FAC
4. *Cyperus esculentus*	5	No	FACW
5. *Iva annua*	5	No	FAC
6. *Ipomoea lacunosa*	2	No	FACW
7.			
8.			
9.			
10.			
	97 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 24A

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/2	99	7.5YR 4/6	1	C	PL	SIL	
2-5	10YR 3/2	98	5YR 4/6	2	C	PL & M	SIL	
5-9	2.5Y 4/2	98	7.5YR 4/6	2	C	PL	SICL	
9-15	2.5Y 5/2	97	7.5YR 4/6	3	C	PL + M	SICL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: Interstate 57 (FAI 57) City/County: Marion Sampling Date: 9/21/2020

Applicant/Owner: IDOT District 8 State: IL Sampling Point 24B

Investigator(s): Nieset and Miernicki Section, Township, Range: Sec. 35, T1N, R2E

Landform (hillslope, terrace, etc.): Excavated channel/ditch Local relief (concave, convex, none): Concave

Slope (%): <1 Lat: 38.47775 Long: -88.95945 Datum: NAD 83

Soil Map Unit Name: Bluford SIL, 2-5% slopes NWI classification: U

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

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

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes	**Is the Sampled Area within a Wetland?**	**Yes**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	Yes		

Remarks: Community type is wet meadow.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Bidens aristosa*	35	Yes	FACW
2. *Agrostis gigantea*	30	Yes	FACW
3. *Echinochloa muricata*	20	No	OBL
4. *Juncus brachycarpus*	10	No	FACW
5. *Pycnanthemum tenuifolium*	5	No	FAC
6. *Setaria glauca*	5	No	FAC
7. *Diospyros virginiana*	2	No	FAC
8.			
9.			
10.			
	107 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
	0 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: _____ (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators

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

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

Hydrophytic Vegetation Present? **Yes**

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

SOIL

Sampling Point: 24B

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 4/2	99	7.5YR 5/8	1	C	M	SICL	
1-6	10YR 4/2	97	7.5YR 5/8	2	C	M	SICL	
1-6			10YR 5/2	1	D	M		
6-10	2.5Y 5/2	97	7.5YR 4/6	3	C	M	SICL	
10-15	10YR 6/2	95	7.5YR 4/6	5	C	M	SICL	

[1] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2] Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two is required)

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

Field Observations:

Surface Water Present? No Depth (inches): _____

Water Table Present? No Depth (inches): _____

Saturation Present? (includes capillary fringe) No Depth (inches): _____

Wetland Hydrology Present? **Yes**

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

Remarks:

APPENDIX B

Wetland Plant Species Lists

Site 1 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Bidens aristosa	**swamp marigold**	**H**	**FACW**	**1**
Iva annua	**marsh elder**	**H**	**FAC**	**0**
Agrimonia parviflora	swamp agrimony	H	FACW	5
Agrostis gigantea	red top	H	FACW	0
Ambrosia artemisiifolia	common ragweed	H	FACU	0
Ambrosia trifida	giant ragweed	H	FAC	0
Apocynum cannabinum	dogbane	H	FAC	2
Asclepias incarnata	swamp milkweed	H	OBL	4
Asclepias syriaca	common milkweed	H	FACU	0
Calystegia sepium	American bindweed	H	FAC	1
Campsis radicans	trumpet creeper	H	FACU	2
Carex frankii	bristly cattail sedge	H	OBL	4
Chamaecrista fasciculata	golden cassia	H	FACU	1
Cyperus esculentus	field nut sedge	H	FACW	0
Desmodium illinoense	Illinois tick trefoil	H	UPL	5
Diospyros virginiana	persimmon	HS	FAC	2
Echinochloa muricata	spiny barnyard grass	H	OBL	0
Elymus virginicus	Virginia wild rye	H	FACW	4
Eupatorium serotinum	late boneset	H	FAC	1
Euthamia graminifolia	grass-leaved goldenrod	H	FACW	3
*Festuca arundinacea**	tall fescue	H	FACU	-
Fraxinus lanceolata	green ash	HS	FACW	2
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
Juncus brachycarpus	short-fruited rush	H	FACW	5
*Juncus gerardii**	black grass	H	OBL	-
Juncus tenuis	path rush	H	FAC	0
Leersia oryzoides	rice cut grass	H	OBL	3
*Lonicera japonica**	Japanese honeysuckle	H	FACU	-
Ludwigia alternifolia	seedbox	H	OBL	5
Lycopus americanus	common water horehound	H	OBL	3
Panicum dichotomiflorum	fall panicum	H	FACW	0
Penstemon digitalis	foxglove beard tongue	H	FAC	4
Persicaria lapathifolia	curttop lady's thumb	H	FACW	0
*Rumex crispus**	curly dock	H	FAC	-
Salix interior	sandbar willow	HS	FACW	1
Scirpus georgianus	bristleless dark green rush	H	OBL	4
*Setaria glauca**	pigeon grass	H	FAC	-
*Sida spinosa**	prickly sida	H	FACU	-
Solidago canadensis	Canada goldenrod	H	FACU	1
Toxicodendron radicans	poison ivy	H	FAC	1
Tridens flavus	common purpletop	H	UPL	1
Verbena hastata	blue vervain	H	FACW	3
Vernonia missurica	Missouri ironweed	H	FAC	5
Xanthium strumarium	cocklebur	H	FAC	0

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.0

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 12.2

Site 2 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Leersia oryzoides	**rice cut grass**	**H**	**OBL**	**3**
Phragmites australis*	**common reed**	**H**	**FACW**	**-**
Toxicodendron radicans	**poison ivy**	**H**	**FAC**	**1**
Agrostis gigantea	red top	H	FACW	0
Apocynum cannabinum	dogbane	H	FAC	2
Asclepias syriaca	common milkweed	H	FACU	0
Carex tribuloides	awl-fruited oval sedge	H	OBL	3
Chamaecrista fasciculata	golden cassia	H	FACU	1
Cyperus echinatus	hedgehog club rush	H	FAC	2
Cyperus esculentus	field nut sedge	H	FACW	0
Diospyros virginiana	persimmon	S	FAC	2
Echinochloa muricata	spiny barnyard grass	H	OBL	0
*Festuca arundinacea**	tall fescue	H	FACU	-
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
Iva annua	marsh elder	H	FAC	0
Juncus tenuis	path rush	H	FAC	0
*Lonicera japonica**	Japanese honeysuckle	H	FACU	-
Parthenocissus quinquefolia	Virginia creeper	H	FACU	2
*Setaria glauca**	pigeon grass	H	FAC	-
Tridens flavus	common purpletop	H	UPL	1
Vernonia missurica	Missouri ironweed	H	FAC	5

*Non-native species Bold species are dominant in the denoted stratum Mean C = 1.4

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 5.8

Site 3 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Leersia oryzoides	**rice cut grass**	**H**	**OBL**	**3**
Phragmites australis*	**common reed**	**H**	**FACW**	**-**
Agrostis gigantea	red top	H	FACW	0
Ambrosia artemisiifolia	common ragweed	H	FACU	0
Ammannia coccinea	long-leaved ammannia	H	OBL	5
Apocynum cannabinum	dogbane	H	FAC	2
Asclepias syriaca	common milkweed	H	FACU	0
Bidens aristosa	swamp marigold	H	FACW	1
Carex tribuloides	awl-fruited oval sedge	H	OBL	3
Cyperus esculentus	field nut sedge	H	FACW	0
Diospyros virginiana	persimmon	H	FAC	2
Echinochloa muricata	spiny barnyard grass	H	OBL	0
Fraxinus lanceolata	green ash	H	FACW	2
Iva annua	marsh elder	H	FAC	0
Juncus tenuis	path rush	H	FAC	0
Paspalum sp.	bead grass	H	-	-
*Setaria glauca**	pigeon grass	H	FAC	-
Sorghastrum nutans	Indian grass	H	FACU	4
Toxicodendron radicans	poison ivy	H	FAC	1
Tridens flavus	common purpletop	H	UPL	1
Verbena hastata	blue vervain	H	FACW	3
Vernonia missurica	Missouri ironweed	H	FAC	5

*Non-native species Bold species are dominant in the denoted stratum Mean C = 1.7

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 7.3

Site 4 - Wet shrubland

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Agrostis gigantea	**red top**	**H**	**FACW**	**0**
Fraxinus lanceolata	**green ash**	**HS**	**FACW**	**2**
Apocynum cannabinum	dogbane	H	FAC	2
Asclepias incarnata	swamp milkweed	H	OBL	4
Campsis radicans	trumpet creeper	H	FACU	2
Chamaecrista fasciculata	golden cassia	H	FACU	1
Cyperus esculentus	field nut sedge	H	FACW	0
Desmodium illinoense	Illinois tick trefoil	H	UPL	5
Diospyros virginiana	persimmon	H	FAC	2
Echinochloa muricata	spiny barnyard grass	H	OBL	0
Eupatorium perfoliatum	common boneset	H	OBL	4
Euthamia graminifolia	grass-leaved goldenrod	H	FACW	3
*Festuca arundinacea**	tall fescue	H	FACU	-
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
Iva annua	marsh elder	H	FAC	0
*Juncus gerardii**	black grass	H	OBL	-
Juncus tenuis	path rush	H	FAC	0
Juncus torreyi	Torrey's rush	H	FACW	3
*Lonicera japonica**	Japanese honeysuckle	H	FACU	-
*Lonicera maackii**	Amur honeysuckle	H	UPL	-
Paspalum sp.	bead grass	H	-	-
Rubus allegheniensis	common blackberry	H	FACU	2
*Setaria glauca**	pigeon grass	H	FAC	-
Toxicodendron radicans	poison ivy	H	FAC	1
Tridens flavus	common purpletop	H	UPL	1
Verbena hastata	blue vervain	H	FACW	3
Vernonia missurica	Missouri ironweed	H	FAC	5

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.0

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 9.2

Site 5 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Apocynum cannabinum	**dogbane**	**H**	**FAC**	**2**
Leersia oryzoides	**rice cut grass**	**H**	**OBL**	**3**
Phragmites australis*	**common reed**	**H**	**FACW**	**-**
Scirpus georgianus	**bristleless dark green rush**	**H**	**OBL**	**4**
Acer rubrum	red maple	H	FAC	5
Agrostis gigantea	red top	H	FACW	0
Ambrosia artemisiifolia	common ragweed	H	FACU	0
Ammannia coccinea	long-leaved ammannia	H	OBL	5
Aster lateriflorus	side-flowering aster	H	FACW	2
Bidens aristosa	swamp marigold	H	FACW	1
Campsis radicans	trumpet creeper	H	FACU	2
Cyperus esculentus	field nut sedge	H	FACW	0
Diospyros virginiana	persimmon	H	FAC	2
Echinochloa muricata	spiny barnyard grass	H	OBL	0
Euthamia graminifolia	grass-leaved goldenrod	H	FACW	3
Fraxinus lanceolata	green ash	HST	FACW	2
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
Iva annua	marsh elder	H	FAC	0
*Juncus gerardii**	black grass	H	OBL	-
Juncus tenuis	path rush	H	FAC	0
Juncus torreyi	Torrey's rush	H	FACW	3
*Lonicera japonica**	Japanese honeysuckle	H	FACU	-
Pycnanthemum tenuifolium	slender mountain mint	H	FAC	4
*Rumex crispus**	curly dock	H	FAC	-
Salix nigra	black willow	T	OBL	3
*Setaria glauca**	pigeon grass	H	FAC	-
Toxicodendron radicans	poison ivy	H	FAC	1
*Typha angustifolia**	narrow-leaved cattail	H	OBL	-
Ulmus americana	American elm	S	FACW	5
Verbena hastata	blue vervain	H	FACW	3
Vernonia missurica	Missouri ironweed	H	FAC	5

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.3

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 11.4

Site 6 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Agrostis gigantea	**red top**	**H**	**FACW**	**0**
Bidens aristosa	**swamp marigold**	**H**	**FACW**	**1**
Phragmites australis*	**common reed**	**H**	**FACW**	**-**
Apocynum cannabinum	dogbane	H	FAC	2
Chamaecrista fasciculata	golden cassia	H	FACU	1
Cornus drummondii	rough-leaved dogwood	S	FAC	2
Cyperus esculentus	field nut sedge	H	FACW	0
Desmodium illinoense	Illinois tick trefoil	H	UPL	5
Diospyros virginiana	persimmon	S	FAC	2
*Dipsacus fullonum**	common teasel	H	FACU	-
Echinochloa muricata	spiny barnyard grass	H	OBL	0
*Festuca arundinacea**	tall fescue	H	FACU	-
Fraxinus lanceolata	green ash	HS	FACW	2
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
Juncus tenuis	path rush	H	FAC	0
*Lonicera japonica**	Japanese honeysuckle	H	FACU	-
Paspalum sp.	bead grass	H	-	-
Pycnanthemum tenuifolium	slender mountain mint	H	FAC	4
Scirpus georgianus	bristleless dark green rush	H	OBL	4
*Setaria glauca**	pigeon grass	H	FAC	-
Solidago canadensis	Canada goldenrod	H	FACU	1
Sorghastrum nutans	Indian grass	H	FACU	4
Toxicodendron radicans	poison ivy	H	FAC	1
Tridens flavus	common purpletop	H	UPL	1
Vernonia missurica	Missouri ironweed	H	FAC	5

*Non-native species Bold species are dominant in the denoted stratum Mean C = 1.9

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 8.5

Site 10 - Forested wetland

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Acer rubrum	**red maple**	H**T**	**FAC**	**5**
Betula nigra	**river birch**	S**T**	**FACW**	**4**
Wolffia columbiana	**water meal**	**H**	**OBL**	**5**
Acer saccharinum	silver maple	T	FACW	1
Campsis radicans	trumpet creeper	H	FACU	2
Carex sp.	sedge	H	-	-
Carex tribuloides	awl-fruited oval sedge	H	OBL	3
Carya sp.	hickory	H	-	-
Cinna arundinacea	common wood reed	H	FACW	5
Echinochloa muricata	spiny barnyard grass	H	OBL	0
Eclipta prostrata	yerba de tajo	H	FACW	2
*Elaeagnus umbellata**	autumn olive	S	UPL	-
Elymus virginicus	Virginia wild rye	H	FACW	4
Fraxinus lanceolata	green ash	HS	FACW	2
Geum canadense	white avens	H	FAC	2
Leersia oryzoides	rice cut grass	H	OBL	3
*Lonicera japonica**	Japanese honeysuckle	H	FACU	-
Ludwigia peploides var. glabrescens	creeping primrose willow	H	OBL	5
Parthenocissus quinquefolia	Virginia creeper	H	FACU	2
*Rosa multiflora**	Japanese rose	S	FACU	-
*Sida spinosa**	prickly sida	H	FACU	-
Smilax tamnoides	bristly green brier	H	FAC	3
Solidago canadensis	Canada goldenrod	H	FACU	1
Spirodela polyrhiza	great duckweed	H	OBL	5
Symphoricarpos occidentalis	wolfberry	HS	UPL	6
Toxicodendron radicans	poison ivy	H	FAC	1

*Non-native species Bold species are dominant in the denoted stratum Mean C = 3.1

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 13.6

Site 11 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Agrostis gigantea	**red top**	**H**	**FACW**	**0**
Echinochloa muricata	**spiny barnyard grass**	**H**	**OBL**	**0**
Leersia oryzoides	**rice cut grass**	**H**	**OBL**	**3**
Acer negundo	box elder	HS	FAC	1
Ammannia coccinea	long-leaved ammannia	H	OBL	5
Apocynum cannabinum	dogbane	H	FAC	2
Asclepias incarnata	swamp milkweed	H	OBL	4
Asclepias syriaca	common milkweed	H	FACU	0
Bidens aristosa	swamp marigold	H	FACW	1
Campsis radicans	trumpet creeper	H	FACU	2
Carex vulpinoidea	brown fox sedge	H	FACW	3
Chamaecrista fasciculata	golden cassia	H	FACU	1
Cyperus esculentus	field nut sedge	H	FACW	0
Desmodium illinoense	Illinois tick trefoil	H	UPL	5
Diospyros virginiana	persimmon	H	FAC	2
*Dipsacus fullonum**	common teasel	H	FACU	-
Eupatorium serotinum	late boneset	H	FAC	1
*Festuca arundinacea**	tall fescue	H	FACU	-
Fraxinus lanceolata	green ash	HS	FACW	2
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
Iva annua	marsh elder	H	FAC	0
*Juncus gerardii**	black grass	H	OBL	-
Juncus tenuis	path rush	H	FAC	0
Juncus torreyi	Torrey's rush	H	FACW	3
Persicaria lapathifolia	curttop lady's thumb	H	FACW	0
*Persicaria vulgaris**	lady's thumb	H	FACW	-
*Phragmites australis**	common reed	H	FACW	-
Populus deltoides	eastern cottonwood	T	FAC	2
*Rumex crispus**	curly dock	H	FAC	-
*Setaria glauca**	pigeon grass	H	FAC	-
Solidago canadensis	Canada goldenrod	H	FACU	1
Teucrium canadense	germander	H	FACW	3
Toxicodendron radicans	poison ivy	H	FAC	1
*Typha angustifolia**	narrow-leaved cattail	H	OBL	-
Verbena hastata	blue vervain	H	FACW	3
Vernonia missurica	Missouri ironweed	H	FAC	5
Xanthium strumarium	cocklebur	H	FAC	0

*Non-native species Bold species are dominant in the denoted stratum Mean C = 1.8

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 9.7

Site 12 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Carex vulpinoidea	**brown fox sedge**	**H**	**FACW**	**3**
Leersia oryzoides	**rice cut grass**	**H**	**OBL**	**3**
Agrostis gigantea	red top	H	FACW	0
Ambrosia artemisiifolia	common ragweed	H	FACU	0
Apocynum cannabinum	dogbane	H	FAC	2
Asclepias syriaca	common milkweed	H	FACU	0
Asclepias verticillata	horsetail milkweed	H	FACU	1
Campsis radicans	trumpet creeper	H	FACU	2
Carex frankii	bristly cattail sedge	H	OBL	4
Carex normalis	spreading oval sedge	H	FACW	4
Carex squarrosa	narrow-leaved cattail sedge	H	OBL	5
Cyperus esculentus	field nut sedge	H	FACW	0
Diospyros virginiana	persimmon	HS	FAC	2
*Dipsacus fullonum**	common teasel	H	FACU	-
Echinochloa muricata	spiny barnyard grass	H	OBL	0
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	H	FACW	2
*Juncus gerardii**	black grass	H	OBL	-
Juncus tenuis	path rush	H	FAC	0
*Lonicera japonica**	Japanese honeysuckle	H	FACU	-
Panicum capillare	old witch grass	H	FAC	0
Paspalum sp.	bead grass	H	-	-
*Phalaris arundinacea**	reed canary grass	H	FACW	-
Pycnanthemum tenuifolium	slender mountain mint	H	FAC	4
*Rumex crispus**	curly dock	H	FAC	-
Scirpus georgianus	bristleless dark green rush	H	OBL	4
*Setaria glauca**	pigeon grass	H	FAC	-
Solanum carolinense	horse nettle	H	FACU	0
Solidago canadensis	Canada goldenrod	H	FACU	1
Teucrium canadense	germander	H	FACW	3
Toxicodendron radicans	poison ivy	H	FAC	1
Ulmus americana	American elm	H	FACW	5
Verbena hastata	blue vervain	H	FACW	3
Verbena urticifolia	white vervain	H	FAC	3
Vernonia missurica	Missouri ironweed	H	FAC	5
Vitis riparia	riverbank grape	H	FACW	2

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.1

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 11.1

Site 13 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Apocynum cannabinum	**dogbane**	**H**	**FAC**	**2**
Juncus torreyi	**Torrey's rush**	**H**	**FACW**	**3**
Leersia oryzoides	**rice cut grass**	**H**	**OBL**	**3**
Typha angustifolia*	**narrow-leaved cattail**	**H**	**OBL**	**-**
Agrostis gigantea	red top	H	FACW	0
Asclepias incarnata	swamp milkweed	H	OBL	4
Campsis radicans	trumpet creeper	H	FACU	2
Carex molesta	field oval sedge	H	FAC	2
Carex vulpinoidea	brown fox sedge	H	FACW	3
Cyperus esculentus	field nut sedge	H	FACW	0
Diospyros virginiana	persimmon	H	FAC	2
*Dipsacus fullonum**	common teasel	H	FACU	-
Echinochloa muricata	spiny barnyard grass	H	OBL	0
Eupatorium serotinum	late boneset	H	FAC	1
*Festuca arundinacea**	tall fescue	H	FACU	-
Fraxinus lanceolata	green ash	H	FACW	2
Iva annua	marsh elder	H	FAC	0
Juncus tenuis	path rush	H	FAC	0
*Lonicera japonica**	Japanese honeysuckle	H	FACU	-
Lycopus americanus	common water horehound	H	OBL	3
*Melilotus sp.**	sweet clover	H	D	-
*Rumex crispus**	curly dock	H	FAC	-
Salix nigra	black willow	S	OBL	3
*Setaria glauca**	pigeon grass	H	FAC	-
Verbena hastata	blue vervain	H	FACW	3
Verbena urticifolia	white vervain	H	FAC	3
Vernonia missurica	Missouri ironweed	H	FAC	5
Vitis riparia	riverbank grape	H	FACW	2

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.0

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 9.4

When possible, the wetland indicator status has been determined for taxa identified only to the genus level (D = non-hydrophytic; H =hydrophytic).

Site 14 – Wet floodplain forest

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Acer saccharinum	**silver maple**	H**ST**	**FACW**	**1**
Aster lanceolatus	**panicled aster**	**H**	**FAC**	**3**
Lysimachia nummularia*	**moneywort**	**H**	**FACW**	**-**
Populus deltoides	**eastern cottonwood**	HS**T**	**FAC**	**2**
Ulmus americana	**American elm**	HS**T**	**FACW**	**5**
Acalypha rhomboidea	three-seeded mercury	H	FACU	0
Acer negundo	box elder	ST	FAC	1
Ambrosia trifida	giant ragweed	H	FAC	0
Antenoron virginianum	Virginia knotweed	H	FAC	3
Asimina triloba	pawpaw	S	FAC	4
Betula nigra	river birch	HT	FACW	4
Boehmeria cylindrica	false nettle	H	OBL	3
Campsis radicans	trumpet creeper	H	FACU	2
Carex lupulina	common hop sedge	H	OBL	5
Carex sp.	sedge	H	-	-
Carex tribuloides	awl-fruited oval sedge	H	OBL	3
Carex vulpinoidea	brown fox sedge	H	FACW	3
Cephalanthus occidentalis	buttonbush	S	OBL	4
Chasmanthium latifolium	sea oats	H	FACW	4
Cinna arundinacea	common wood reed	H	FACW	5
Elymus virginicus	Virginia wild rye	H	FACW	4
Fraxinus lanceolata	green ash	HS	FACW	2
Geum canadense	white avens	H	FAC	2
Impatiens capensis	spotted touch-me-not	H	FACW	2
Laportea canadensis	Canada wood nettle	H	FACW	2
Ludwigia peploides var. glabrescens	creeping primrose willow	H	OBL	5
Lycopus virginicus	bugle weed	H	OBL	5
Panicum capillare	old witch grass	H	FAC	0
Parthenocissus quinquefolia	Virginia creeper	H	FACU	2
Persicaria hydropiperoides	mild water pepper	H	OBL	4
Platanus occidentalis	sycamore	ST	FACW	3
Pluchea camphorata	camphor weed	H	FACW	7
Quercus palustris	pin oak	T	FACW	4
Senecio glabellus	butterweed	H	FACW	0
*Setaria glauca**	pigeon grass	H	FAC	-
Silphium perfoliatum	cup plant	H	FACW	4
Smilax tamnoides	bristly green brier	H	FAC	3
Solidago canadensis	Canada goldenrod	H	FACU	1
Toxicodendron radicans	poison ivy	HW	FAC	1
Verbesina alternifolia	wingstem	H	FACW	4

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.9

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 17.6

Site 15 - Wet floodplain forest

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Acer saccharinum	**silver maple**	S**T**	**FACW**	**1**
Aster lanceolatus	**panicled aster**	**H**	**FAC**	**3**
Cinna arundinacea	**common wood reed**	**H**	**FACW**	**5**
Leersia oryzoides	**rice cut grass**	**H**	**OBL**	**3**
Lysimachia nummularia*	**moneywort**	**H**	**FACW**	**-**
Populus deltoides	**eastern cottonwood**	S**T**	**FAC**	**2**
Ulmus americana	**American elm**	S**T**	**FACW**	**5**
Acer negundo	box elder	T	FAC	1
Acer rubrum	red maple	T	FAC	5
Alisma subcordatum	common water plantain	H	OBL	2
Antenoron virginianum	Virginia knotweed	H	FAC	3
Asimina triloba	pawpaw	HS	FAC	4
Betula nigra	river birch	T	FACW	4
Bidens frondosa	common beggar's ticks	H	FACW	1
Boehmeria cylindrica	false nettle	H	OBL	3
Campsis radicans	trumpet creeper	H	FACU	2
Carex lupulina	common hop sedge	H	OBL	5
Cephalanthus occidentalis	buttonbush	S	OBL	4
Chasmanthium latifolium	sea oats	H	FACW	4
Eclipta prostrata	yerba de tajo	H	FACW	2
*Elaeagnus umbellata**	autumn olive	S	UPL	-
Elymus virginicus	Virginia wild rye	H	FACW	4
Eupatorium serotinum	late boneset	H	FAC	1
Impatiens capensis	spotted touch-me-not	H	FACW	2
Laportea canadensis	Canada wood nettle	H	FACW	2
*Lonicera maackii**	Amur honeysuckle	S	UPL	-
Ludwigia palustris var. americana	marsh purslane	H	OBL	4
Persicaria hydropiperoides	mild water pepper	H	OBL	4
*Persicaria vulgaris**	lady's thumb	H	FACW	-
Phyla lanceolata	fog fruit	H	OBL	1
*Rosa multiflora**	Japanese rose	S	FACU	-
Salix nigra	black willow	T	OBL	3
Senecio glabellus	butterweed	H	FACW	0
Spirodela polyrhiza	great duckweed	H	OBL	5
Toxicodendron radicans	poison ivy	HW	FAC	1
Verbesina alternifolia	wingstem	H	FACW	4
Vitis riparia	riverbank grape	HW	FACW	2
Wolffia columbiana	water meal	H	OBL	5

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.9

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 16.9

Site 16 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Agrostis gigantea	**red top**	**H**	**FACW**	**0**
Bidens aristosa	**swamp marigold**	**H**	**FACW**	**1**
Leersia oryzoides	**rice cut grass**	**H**	**OBL**	**3**
Asclepias incarnata	swamp milkweed	H	OBL	4
Campsis radicans	trumpet creeper	H	FACU	2
Carex sp.	sedge	H	-	-
Carex tribuloides	awl-fruited oval sedge	H	OBL	3
Carex vulpinoidea	brown fox sedge	H	FACW	3
Cyperus esculentus	field nut sedge	H	FACW	0
Desmodium illinoense	Illinois tick trefoil	H	UPL	5
Diospyros virginiana	persimmon	HS	FAC	2
Echinochloa muricata	spiny barnyard grass	H	OBL	0
Eupatorium serotinum	late boneset	H	FAC	1
Euthamia graminifolia	grass-leaved goldenrod	H	FACW	3
*Festuca arundinacea**	tall fescue	H	FACU	-
Fraxinus lanceolata	green ash	H	FACW	2
Iva annua	marsh elder	H	FAC	0
*Juncus gerardii**	black grass	H	OBL	-
*Lonicera japonica**	Japanese honeysuckle	H	FACU	-
Ludwigia alternifolia	seedbox	H	OBL	5
Panicum dichotomiflorum	fall panicum	H	FACW	0
Pycnanthemum tenuifolium	slender mountain mint	H	FAC	4
Quercus palustris	pin oak	T	FACW	4
Scirpus georgianus	bristleless dark green rush	H	OBL	4
*Setaria glauca**	pigeon grass	H	FAC	-
Solidago canadensis	Canada goldenrod	H	FACU	1
Toxicodendron radicans	poison ivy	H	FAC	1
*Typha angustifolia**	narrow-leaved cattail	H	OBL	-
Ulmus rubra	slippery elm	S	FAC	3
Vernonia missurica	Missouri ironweed	H	FAC	5

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.3

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 11.4

Site 17 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Agrostis gigantea	**red top**	**H**	**FACW**	**0**
Bidens aristosa	**swamp marigold**	**H**	**FACW**	**1**
Campsis radicans	**trumpet creeper**	**H**	**FACU**	**2**
Phragmites australis*	**common reed**	**H**	**FACW**	**-**
Toxicodendron radicans	**poison ivy**	**H**	**FAC**	**1**
Ambrosia trifida	giant ragweed	H	FAC	0
Asclepias incarnata	swamp milkweed	H	OBL	4
Aster lanceolatus	panicled aster	H	FAC	3
Cinna arundinacea	common wood reed	H	FACW	5
Cyperus echinatus	hedgehog club rush	H	FAC	2
Cyperus esculentus	field nut sedge	H	FACW	0
Desmodium illinoense	Illinois tick trefoil	H	UPL	5
Diospyros virginiana	persimmon	HS	FAC	2
*Dipsacus fullonum**	common teasel	H	FACU	-
Echinochloa muricata	spiny barnyard grass	H	OBL	0
Eupatorium serotinum	late boneset	H	FAC	1
Euthamia graminifolia	grass-leaved goldenrod	H	FACW	3
*Festuca arundinacea**	tall fescue	H	FACU	-
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
Liquidambar styraciflua	sweet gum	S	FACW	6
Pycnanthemum tenuifolium	slender mountain mint	H	FAC	4
Scirpus georgianus	bristleless dark green rush	H	OBL	4
Solidago canadensis	Canada goldenrod	H	FACU	1
Verbena hastata	blue vervain	H	FACW	3
Vernonia missurica	Missouri ironweed	H	FAC	5
Vitis riparia	riverbank grape	H	FACW	2

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.4

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 11.7

Site 18 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Agrostis gigantea	**red top**	**H**	**FACW**	**0**
Asclepias incarnata	**swamp milkweed**	**H**	**OBL**	**4**
Euthamia graminifolia	**grass-leaved goldenrod**	**H**	**FACW**	**3**
Panicum dichotomiflorum	**fall panicum**	**H**	**FACW**	**0**
Ambrosia trifida	giant ragweed	H	FAC	0
Asclepias syriaca	common milkweed	H	FACU	0
Aster lanceolatus	panicled aster	H	FAC	3
Bidens aristosa	swamp marigold	H	FACW	1
Campsis radicans	trumpet creeper	H	FACU	2
Carex squarrosa	narrow-leaved cattail sedge	H	OBL	5
Cyperus esculentus	field nut sedge	H	FACW	0
Eupatorium serotinum	late boneset	H	FAC	1
*Festuca arundinacea**	tall fescue	H	FACU	-
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
*Juncus gerardii**	black grass	H	OBL	-
Juncus tenuis	path rush	H	FAC	0
*Lonicera japonica**	Japanese honeysuckle	H	FACU	-
Lycopus americanus	common water horehound	H	OBL	3
*Medicago sativa**	alfalfa	H	FACU	-
Persicaria punctata	smartweed	H	OBL	3
Quercus palustris	pin oak	H	FACW	4
Scirpus georgianus	bristleless dark green rush	H	OBL	4
*Setaria glauca**	pigeon grass	H	FAC	-
Solidago canadensis	Canada goldenrod	H	FACU	1
Verbena hastata	blue vervain	H	FACW	3
Vernonia missurica	Missouri ironweed	H	FAC	5

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.1

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 9.6

Site 19 - Forested wetland

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Ambrosia trifida	**giant ragweed**	**H**	**FAC**	**0**
Fraxinus lanceolata	**green ash**	H**S**T	**FACW**	**2**
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Ulmus americana	**American elm**	S**T**	**FACW**	**5**
Acer rubrum	red maple	HST	FAC	5
Apocynum cannabinum	dogbane	H	FAC	2
Aster lanceolatus	panicled aster	H	FAC	3
Bidens aristosa	swamp marigold	H	FACW	1
Bidens frondosa	common beggar's ticks	H	FACW	1
Campsis radicans	trumpet creeper	HW	FACU	2
Carex squarrosa	narrow-leaved cattail sedge	H	OBL	5
Carya illinoiensis	pecan	S	FACW	6
*Catalpa bignonioides**	common catalpa	H	FACU	-
Cinna arundinacea	common wood reed	H	FACW	5
Diospyros virginiana	persimmon	ST	FAC	2
Echinochloa muricata	spiny barnyard grass	H	OBL	0
Elymus virginicus	Virginia wild rye	H	FACW	4
Eupatorium perfoliatum	common boneset	H	OBL	4
Eupatorium serotinum	late boneset	H	FAC	1
Fallopia scandens	climbing false buckwheat	H	FAC	2
Geum canadense	white avens	H	FAC	2
Glyceria striata	fowl manna grass	H	OBL	4
Iva annua	marsh elder	H	FAC	0
*Lonicera japonica**	Japanese honeysuckle	H	FACU	-
Lycopus americanus	common water horehound	H	OBL	3
Parthenocissus quinquefolia	Virginia creeper	HW	FACU	2
Persicaria hydropiperoides	mild water pepper	H	OBL	4
Pycnanthemum tenuifolium	slender mountain mint	H	FAC	4
Quercus palustris	pin oak	T	FACW	4
Quercus rubra	northern red oak	T	FACU	5
*Rosa multiflora**	Japanese rose	HS	FACU	-
Rubus allegheniensis	common blackberry	H	FACU	2
Salix nigra	black willow	T	OBL	3
Scirpus georgianus	bristleless dark green rush	H	OBL	4
Senecio glabellus	butterweed	H	FACW	0
Solidago canadensis	Canada goldenrod	H	FACU	1
Symphoricarpos occidentalis	wolfberry	S	UPL	6
Toxicodendron radicans	poison ivy	HW	FAC	1
*Typha angustifolia**	narrow-leaved cattail	H	OBL	-
Vernonia missurica	Missouri ironweed	H	FAC	5

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.9

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 16.9

Site 20 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Bidens aristosa	**swamp marigold**	**H**	**FACW**	**1**
Fraxinus lanceolata	**green ash**	**H**S	**FACW**	**2**
Iva annua	**marsh elder**	**H**	**FAC**	**0**
Juncus brachycarpus	**short-fruited rush**	**H**	**FACW**	**5**
Agrostis gigantea	red top	H	FACW	0
Ambrosia trifida	giant ragweed	H	FAC	0
Apocynum cannabinum	dogbane	H	FAC	2
Asclepias incarnata	swamp milkweed	H	OBL	4
Asclepias syriaca	common milkweed	H	FACU	0
Aster lateriflorus	side-flowering aster	H	FACW	2
Campsis radicans	trumpet creeper	H	FACU	2
Chamaecrista fasciculata	golden cassia	H	FACU	1
Cyperus echinatus	hedgehog club rush	H	FAC	2
Cyperus esculentus	field nut sedge	H	FACW	0
Diospyros virginiana	persimmon	HT	FAC	2
Echinochloa muricata	spiny barnyard grass	H	OBL	0
Elymus virginicus	Virginia wild rye	H	FACW	4
Eupatorium perfoliatum	common boneset	H	OBL	4
Eupatorium serotinum	late boneset	H	FAC	1
*Festuca arundinacea**	tall fescue	H	FACU	-
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
*Juncus gerardii**	black grass	H	OBL	-
Liquidambar styraciflua	sweet gum	S	FACW	6
*Phalaris arundinacea**	reed canary grass	H	FACW	-
Pycnanthemum tenuifolium	slender mountain mint	H	FAC	4
Quercus palustris	pin oak	T	FACW	4
Schizachyrium scoparium	little bluestem	H	FACU	5
Scirpus georgianus	bristleless dark green rush	H	OBL	4
*Setaria glauca**	pigeon grass	H	FAC	-
Solidago canadensis	Canada goldenrod	H	FACU	1
Toxicodendron radicans	poison ivy	H	FAC	1
Vernonia missurica	Missouri ironweed	H	FAC	5
Vitis riparia	riverbank grape	H	FACW	2
Xanthium strumarium	cocklebur	H	FAC	0

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.2

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 12.0

Site 21 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Cyperus esculentus	**field nut sedge**	**H**	**FACW**	**0**
Iva annua	**marsh elder**	**H**	**FAC**	**0**
Persicaria pensylvanica	**pinkweed**	**H**	**FACW**	**1**
Phragmites australis*	**common reed**	**H**	**FACW**	**-**
Agrostis gigantea	red top	H	FACW	0
Ammannia coccinea	long-leaved ammannia	H	OBL	5
Apocynum cannabinum	dogbane	H	FAC	2
Asclepias incarnata	swamp milkweed	H	OBL	4
Carex normalis	spreading oval sedge	H	FACW	4
Carex vulpinoidea	brown fox sedge	H	FACW	3
*Dipsacus fullonum**	common teasel	H	FACU	-
Echinochloa muricata	spiny barnyard grass	H	OBL	0
Erechtites hieracifolia	fireweed	H	FAC	2
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	H	FACW	2
Panicum capillare	old witch grass	H	FAC	0
Panicum dichotomiflorum	fall panicum	H	FACW	0
Paspalum floridanum	giant bead grass	H	FACW	7
Populus deltoides	eastern cottonwood	H	FAC	2
*Rumex crispus**	curly dock	H	FAC	-
*Setaria glauca**	pigeon grass	H	FAC	-
*Sida spinosa**	prickly sida	H	FACU	-
Solidago canadensis	Canada goldenrod	H	FACU	1
Sorghastrum nutans	Indian grass	H	FACU	4
Verbena hastata	blue vervain	H	FACW	3
Xanthium strumarium	cocklebur	H	FAC	0

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.0

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 8.9

Site 22 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Agrostis gigantea	**red top**	**H**	**FACW**	**0**
Bidens aristosa	**swamp marigold**	**H**	**FACW**	**1**
Fraxinus lanceolata	**green ash**	**H**	**FACW**	**2**
Toxicodendron radicans	**poison ivy**	**H**	**FAC**	**1**
Ambrosia trifida	giant ragweed	H	FAC	0
Apocynum cannabinum	dogbane	H	FAC	2
Asclepias incarnata	swamp milkweed	H	OBL	4
Aster lanceolatus	panicled aster	H	FAC	3
Bidens frondosa	common beggar's ticks	H	FACW	1
Campsis radicans	trumpet creeper	H	FACU	2
Carex tribuloides	awl-fruited oval sedge	H	OBL	3
Carex vulpinoidea	brown fox sedge	H	FACW	3
Chamaecrista fasciculata	golden cassia	H	FACU	1
Cinna arundinacea	common wood reed	H	FACW	5
Cornus drummondii	rough-leaved dogwood	HS	FAC	2
Cyperus esculentus	field nut sedge	H	FACW	0
Diospyros virginiana	persimmon	HST	FAC	2
Echinochloa muricata	spiny barnyard grass	H	OBL	0
Elymus virginicus	Virginia wild rye	H	FACW	4
Eupatorium perfoliatum	common boneset	H	OBL	4
Eupatorium serotinum	late boneset	H	FAC	1
Fallopia scandens	climbing false buckwheat	H	FAC	2
*Festuca arundinacea**	tall fescue	H	FACU	-
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
Iva annua	marsh elder	H	FAC	0
Leersia oryzoides	rice cut grass	H	OBL	3
*Lonicera japonica**	Japanese honeysuckle	H	FACU	-
Ludwigia alternifolia	seedbox	H	OBL	5
Mimulus alatus	winged monkey flower	H	OBL	6
Panicum dichotomiflorum	fall panicum	H	FACW	0
Paspalum floridanum	giant bead grass	H	FACW	7
Persicaria pensylvanica	pinkweed	H	FACW	1
Quercus palustris	pin oak	H	FACW	4
Rubus allegheniensis	common blackberry	H	FACU	2
Salix interior	sandbar willow	S	FACW	1
Salix nigra	black willow	S	OBL	3
Scirpus georgianus	bristleless dark green rush	H	OBL	4
*Setaria faberi**	giant foxtail	H	FACU	-
Smilax tamnoides	bristly green brier	H	FAC	3
Solidago canadensis	Canada goldenrod	H	FACU	1
Symphoricarpos occidentalis	wolfberry	H	UPL	6
*Typha angustifolia**	narrow-leaved cattail	H	OBL	-
Ulmus americana	American elm	H	FACW	5
Verbena hastata	blue vervain	H	FACW	3
Vernonia missurica	Missouri ironweed	H	FAC	5
Xanthium strumarium	cocklebur	H	FAC	0

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.5

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 16.0

Site 23 - Forested wetland

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Acer saccharinum	**silver maple**	HS**T**	**FACW**	**1**
Aster lanceolatus	**panicled aster**	**H**	**FAC**	**3**
Quercus palustris	**pin oak**	S**T**	**FACW**	**4**
Toxicodendron radicans	**poison ivy**	**H**W	**FAC**	**1**
Ulmus rubra	**slippery elm**	S**T**	**FAC**	**3**
Asclepias incarnata	swamp milkweed	H	OBL	4
Bidens frondosa	common beggar's ticks	H	FACW	1
Campsis radicans	trumpet creeper	H	FACU	2
Carex squarrosa	narrow-leaved cattail sedge	H	OBL	5
Celtis occidentalis	hackberry	ST	FAC	3
Cinna arundinacea	common wood reed	H	FACW	5
Crataegus mollis	downy hawthorn	T	FAC	2
Diospyros virginiana	persimmon	HT	FAC	2
Elymus virginicus	Virginia wild rye	H	FACW	4
Eupatorium perfoliatum	common boneset	H	OBL	4
Euthamia graminifolia	grass-leaved goldenrod	H	FACW	3
Glyceria striata	fowl manna grass	H	OBL	4
Iva annua	marsh elder	H	FAC	0
Leersia oryzoides	rice cut grass	H	OBL	3
*Lonicera japonica**	Japanese honeysuckle	H	FACU	-
Mimulus alatus	winged monkey flower	H	OBL	6
Onoclea sensibilis	sensitive fern	H	FACW	5
Panicum dichotomiflorum	fall panicum	H	FACW	0
Parthenocissus quinquefolia	Virginia creeper	H	FACU	2
Persicaria hydropiperoides	mild water pepper	H	OBL	4
Persicaria pensylvanica	pinkweed	H	FACW	1
*Phalaris arundinacea**	reed canary grass	H	FACW	-
*Phragmites australis**	common reed	H	FACW	-
Populus deltoides	eastern cottonwood	HT	FAC	2
Salix nigra	black willow	ST	OBL	3
Scirpus cyperinus	wool grass	H	OBL	5
Scirpus georgianus	bristleless dark green rush	H	OBL	4
Senecio glabellus	butterweed	H	FACW	0
Vitis riparia	riverbank grape	H	FACW	2

*Non-native species Bold species are dominant in the denoted stratum Mean C = 2.8

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 15.8

Site 24 - Wet meadow

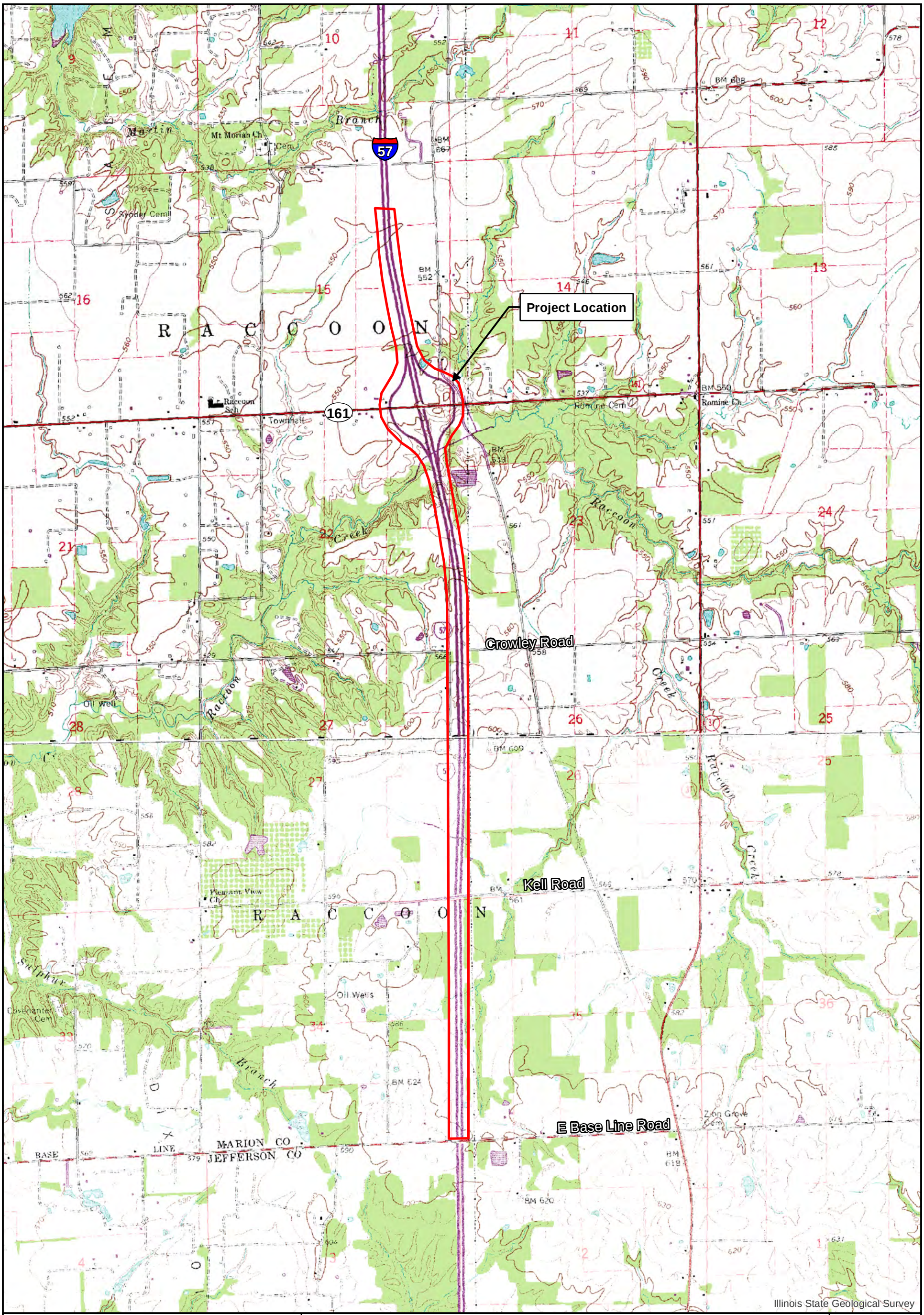
Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Agrostis gigantea	**red top**	**H**	**FACW**	**0**
Echinochloa muricata	**spiny barnyard grass**	**H**	**OBL**	**0**
Iva annua	**marsh elder**	**H**	**FAC**	**0**
Setaria glauca*	**pigeon grass**	**H**	**FAC**	**-**
Apocynum cannabinum	dogbane	H	FAC	2
Bidens aristosa	swamp marigold	H	FACW	1
Bidens frondosa	common beggar's ticks	H	FACW	1
Calystegia sepium	American bindweed	H	FAC	1
Campsis radicans	trumpet creeper	H	FACU	2
Carex molesta	field oval sedge	H	FAC	2
Carex sp.	sedge	H	-	-
Chamaecrista fasciculata	golden cassia	H	FACU	1
Cyperus esculentus	field nut sedge	H	FACW	0
*Daucus carota**	Queen Anne's lace	H	UPL	-
Diospyros virginiana	persimmon	HS	FAC	2
*Dipsacus fullonum**	common teasel	H	FACU	-
Eupatorium serotinum	late boneset	H	FAC	1
Fraxinus lanceolata	green ash	H	FACW	2
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
Ipomoea lacunosa	small morning glory	H	FACW	1
Juncus brachycarpus	short-fruited rush	H	FACW	5
Juncus tenuis	path rush	H	FAC	0
*Lonicera japonica**	Japanese honeysuckle	H	FACU	-
Panicum anceps	beaked panic grass	H	FACW	3
Paspalum sp.	bead grass	H	-	-
Persicaria punctata	smartweed	H	OBL	3
*Phragmites australis**	common reed	H	FACW	-
Pycnanthemum tenuifolium	slender mountain mint	H	FAC	4
Rudbeckia hirta	black-eyed Susan	H	FACU	2
*Rumex crispus**	curly dock	H	FAC	-
Scirpus georgianus	bristleless dark green rush	H	OBL	4
Toxicodendron radicans	poison ivy	H	FAC	1
*Typha angustifolia**	narrow-leaved cattail	H	OBL	-
Verbena hastata	blue vervain	H	FACW	3
Vernonia missurica	Missouri ironweed	H	FAC	5
Vitis riparia	riverbank grape	H	FACW	2
Xanthium strumarium	cocklebur	H	FAC	0

*Non-native species Bold species are dominant in the denoted stratum Mean C = 1.8

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 9.4

APPENDIX C

Figures



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PRAIRIE RESEARCH INSTITUTE

INHS/IDOT Wetland Science Program
1816 South Oak Street
Champaign, Illinois 61820

Figure 1
Project Location Map
Interstate 57 (FAI 57)
Marion County

Seq. No: 21410A

Meters 0 500
Feet 0 2,000

January 2021

N W E S

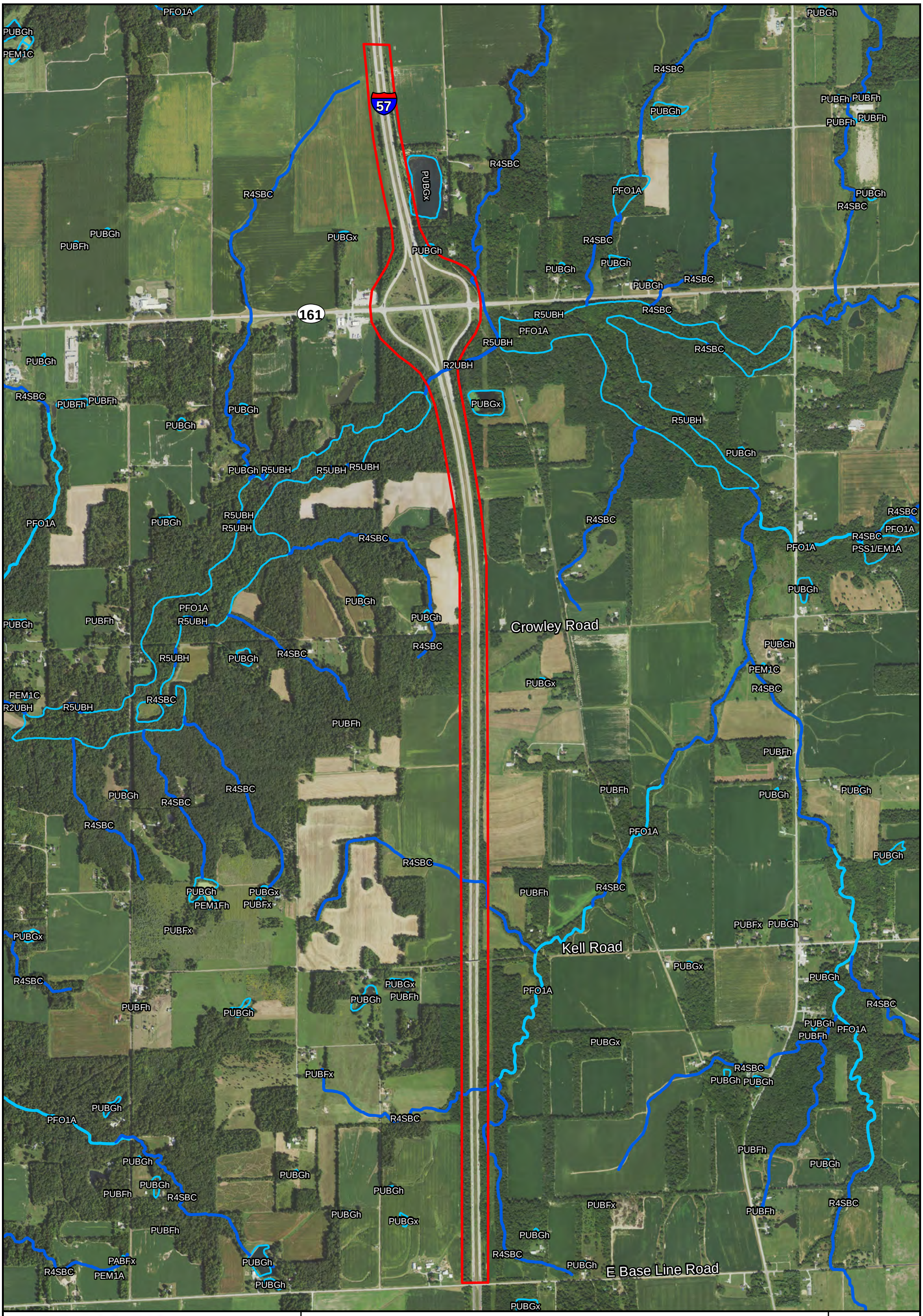

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Figure 2
National Wetlands Inventory Map
Interstate 57 (FAI 57)
Marion County

Seq. No: 21410A

Meters 0 500
Feet 0 2,000

January 2021

N W E S

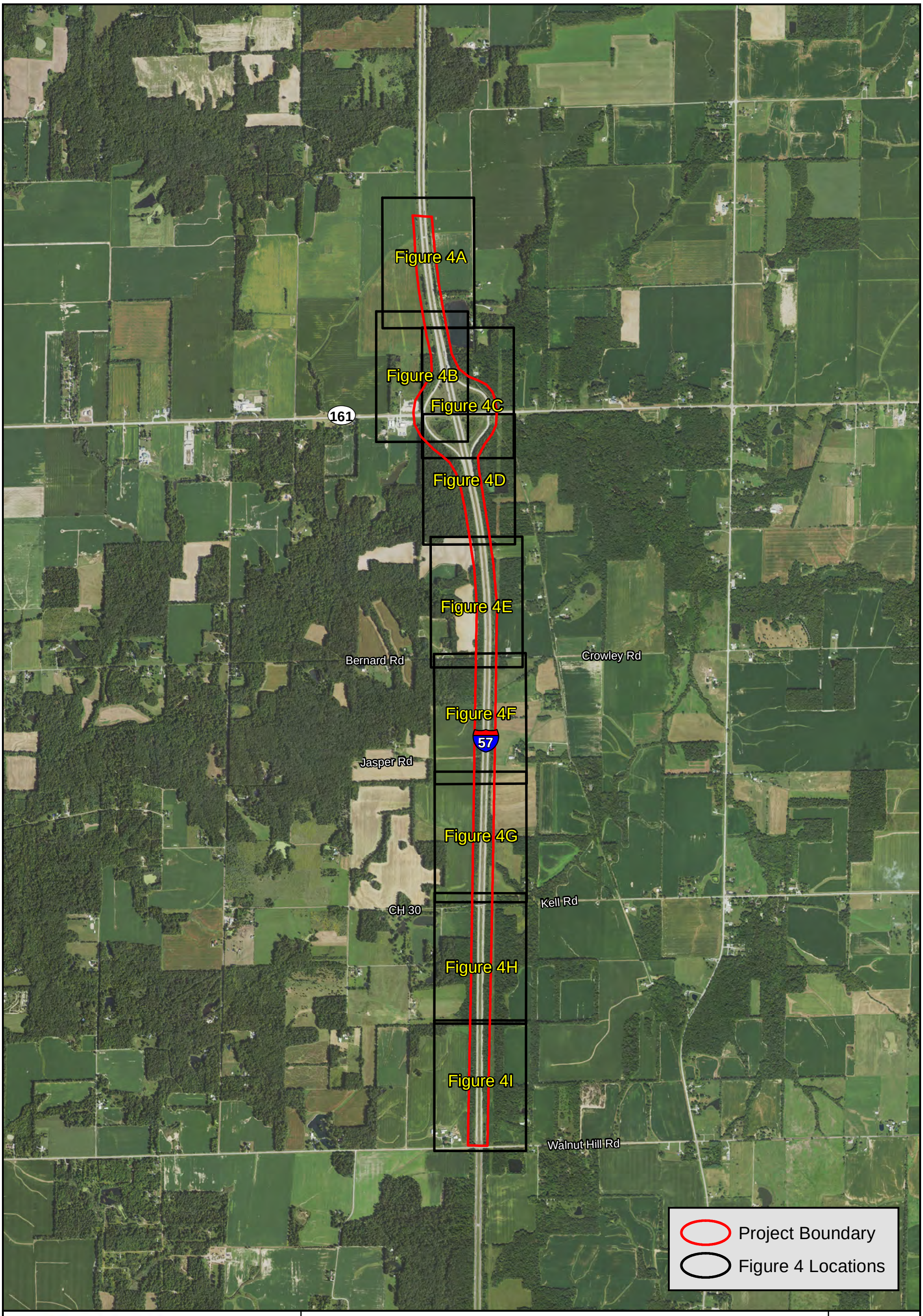

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Figure 3
Wetland Determination Overview Map
Interstate 57 (FAI 57)
Marion County

Seq. No: 21410A

Meters 0 500
Feet 0 2,000

January 2021

N W E S

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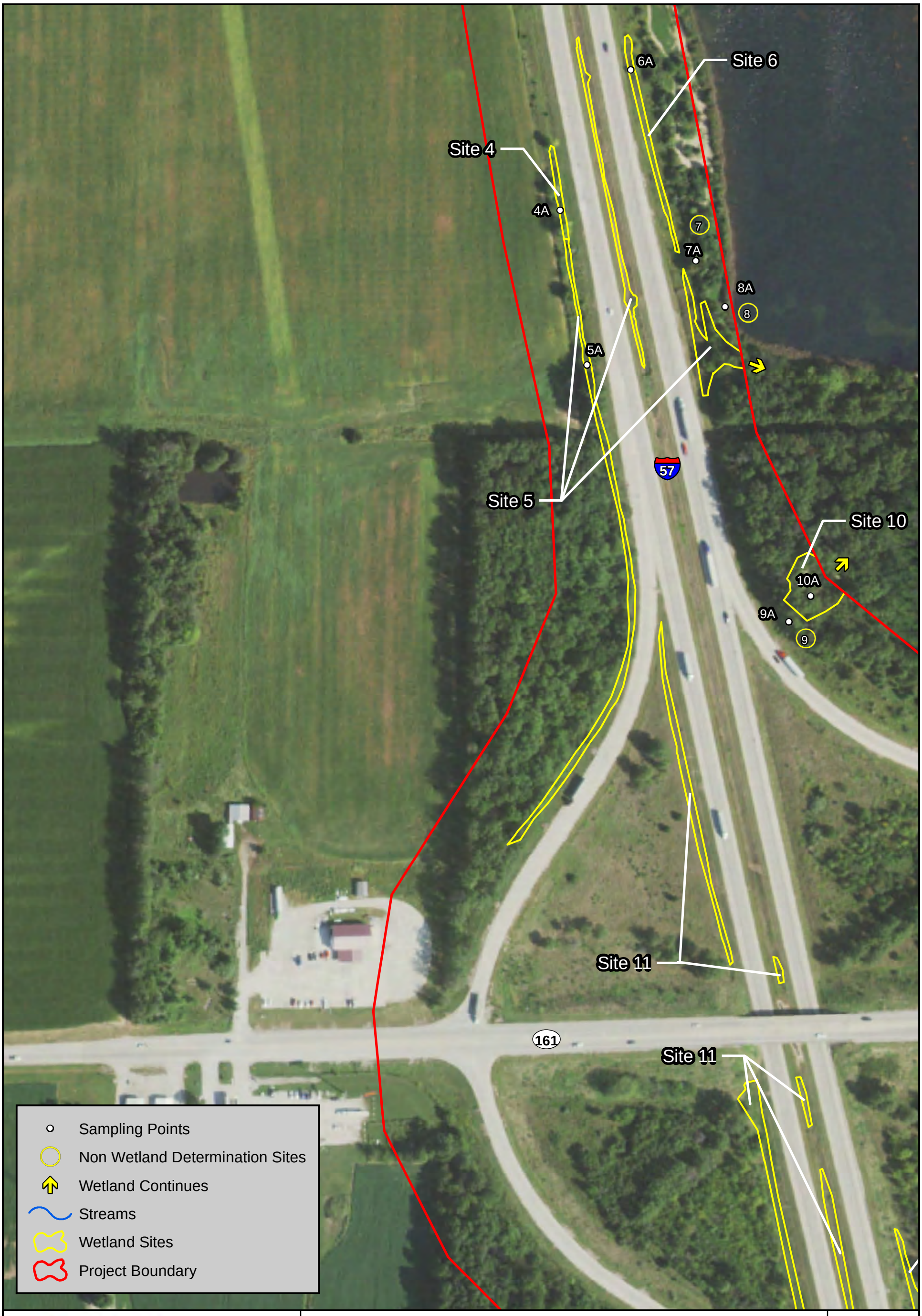
Figure 4A
Wetland Determination Map
Interstate 57 (FAI 57)
Marion County

Seq. No: 21410A

Meters 0 50
Feet 0 200

January 2021

N W E S



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Champaign, Illinois 61820

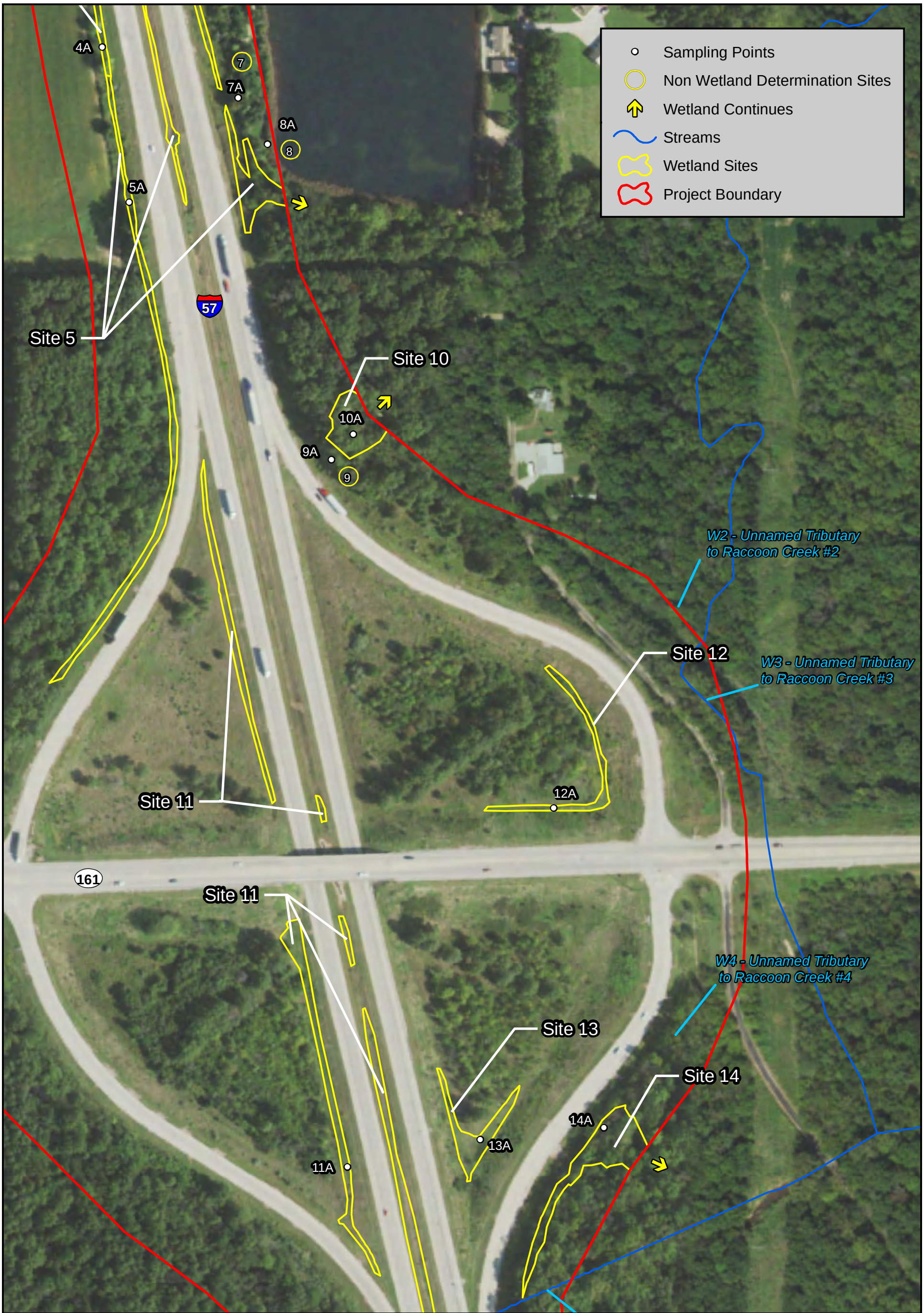
Figure 4B
Wetland Determination Map
Interstate 57 (FAI 57)
Marion County

Seq. No: 21410A

Meters 0 50
Feet 0 200

January 2021

N W E S



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1816 South Oak Street
Champaign, Illinois 61820

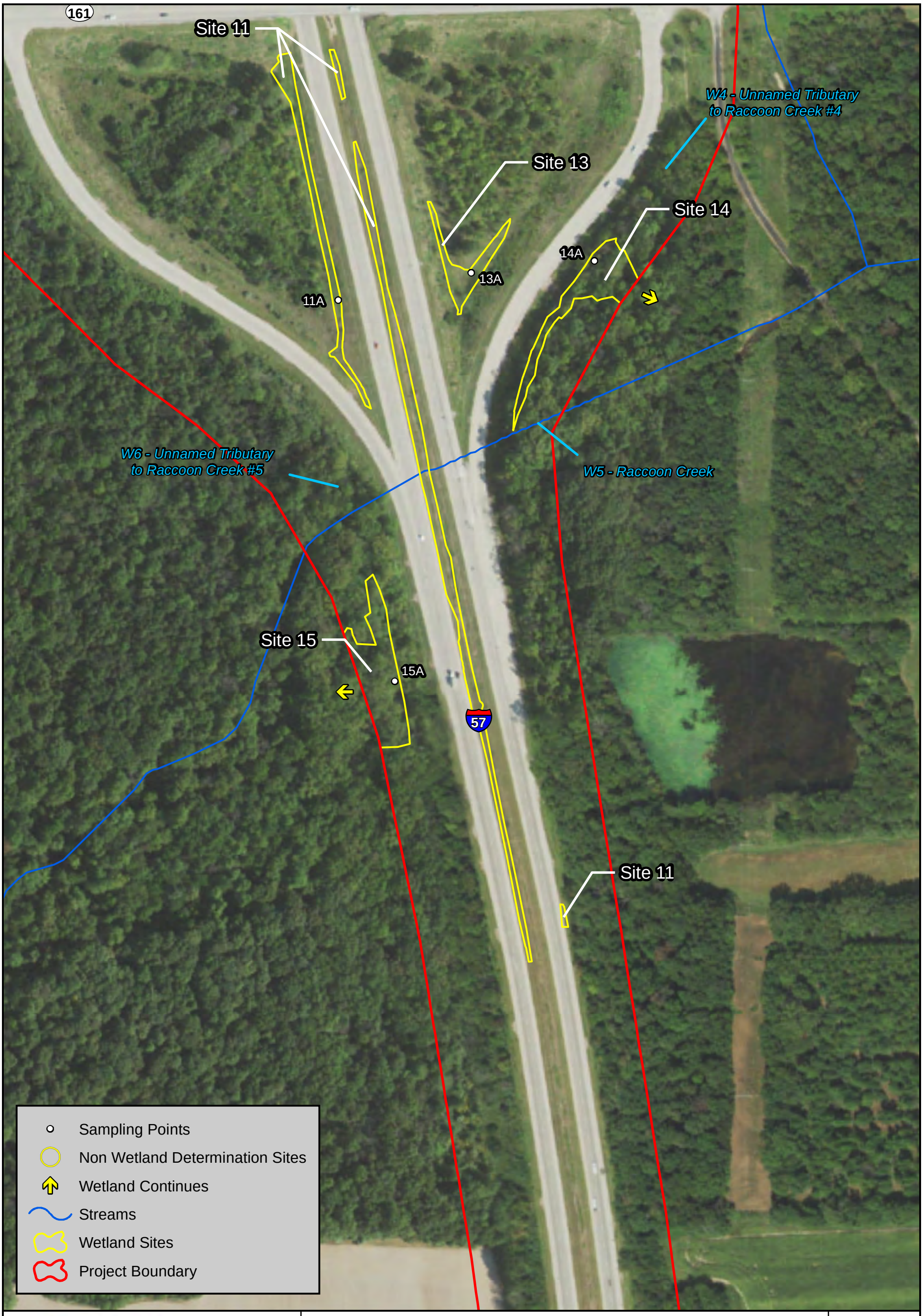
Figure 4C
Wetland Determination Map
Interstate 57 (FAI 57)
Marion County

Seq. No: 21410A

Meters 0 50
Feet 0 200

January 2021

N W E S



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1816 South Oak Street
Champaign, Illinois 61820

Figure 4D
Wetland Determination Map
Interstate 57 (FAI 57)
Marion County

Seq. No: 21410A

Meters 0 50
Feet 0 200

January 2021

N W E S

16A

Site 16

W7 - Unnamed Tributary
to Raccoon Creek #6

57

Bernard Rd

17A

Crowley Rd

Sampling Points
Non Wetland Determination Sites
Wetland Continues
Streams
Wetland Sites
Project Boundary

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INHS/IDOT Wetland Science Program
1816 South Oak Street
Champaign, Illinois 61820

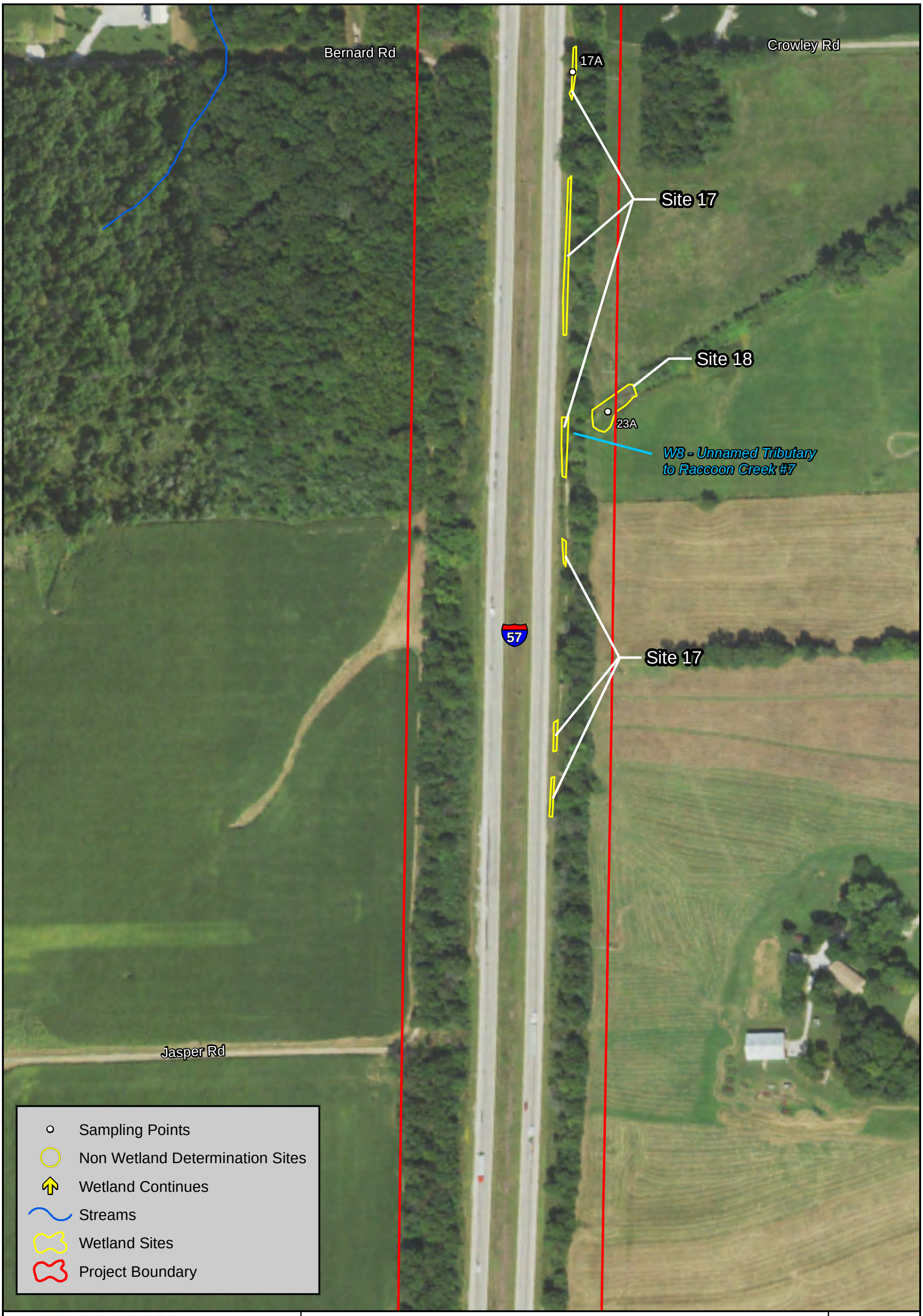
Figure 4E
Wetland Determination Map
Interstate 57 (FAI 57)
Marion County

Seq. No: 21410A

Meters 0 50
Feet 0 200

January 2021

N W E S



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Champaign, Illinois 61820

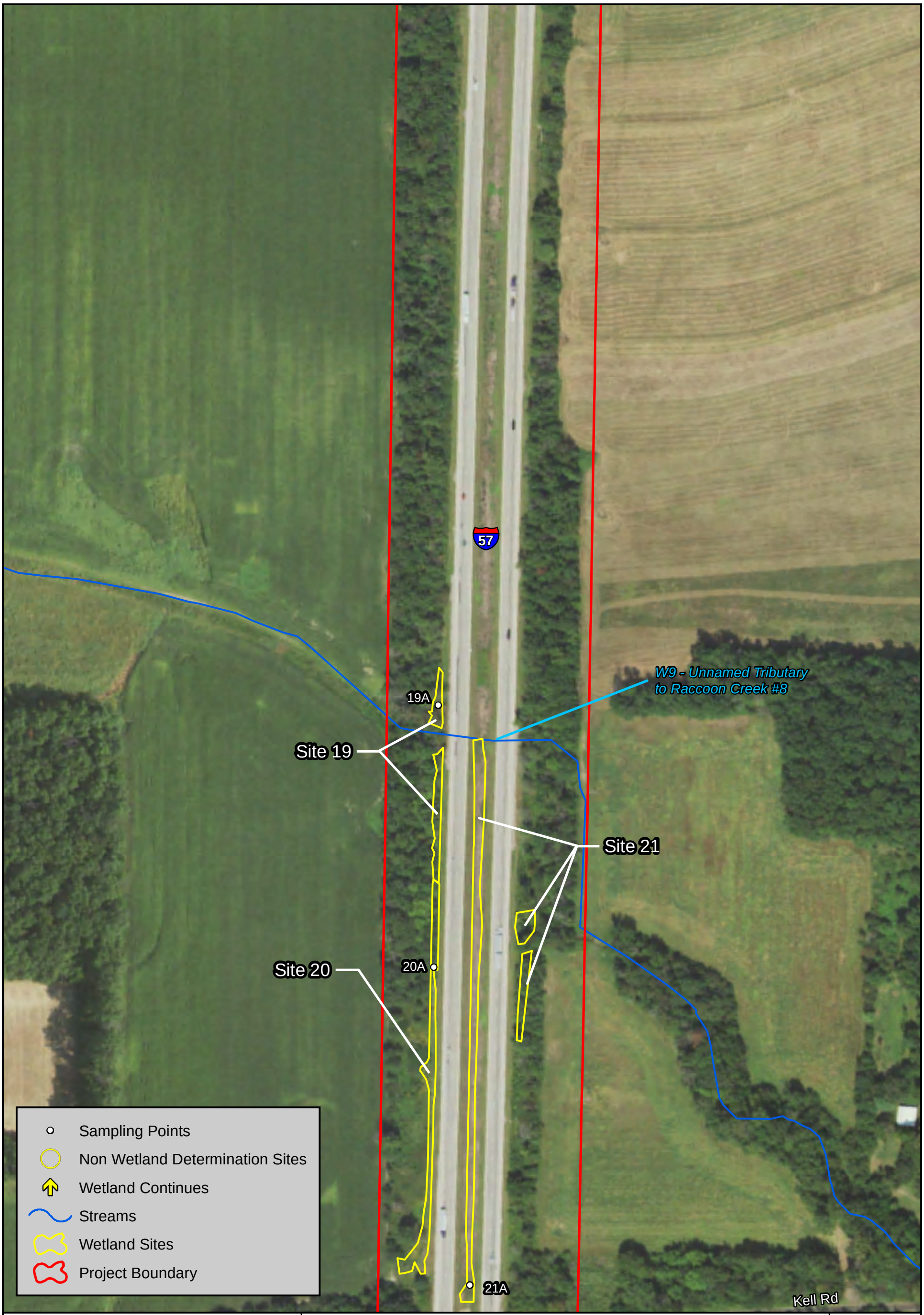
Figure 4F
Wetland Determination Map
Interstate 57 (FAI 57)
Marion County

Seq. No: 21410A

Meters 0 50
Feet 0 200

January 2021

N W E S



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Champaign, Illinois 61820

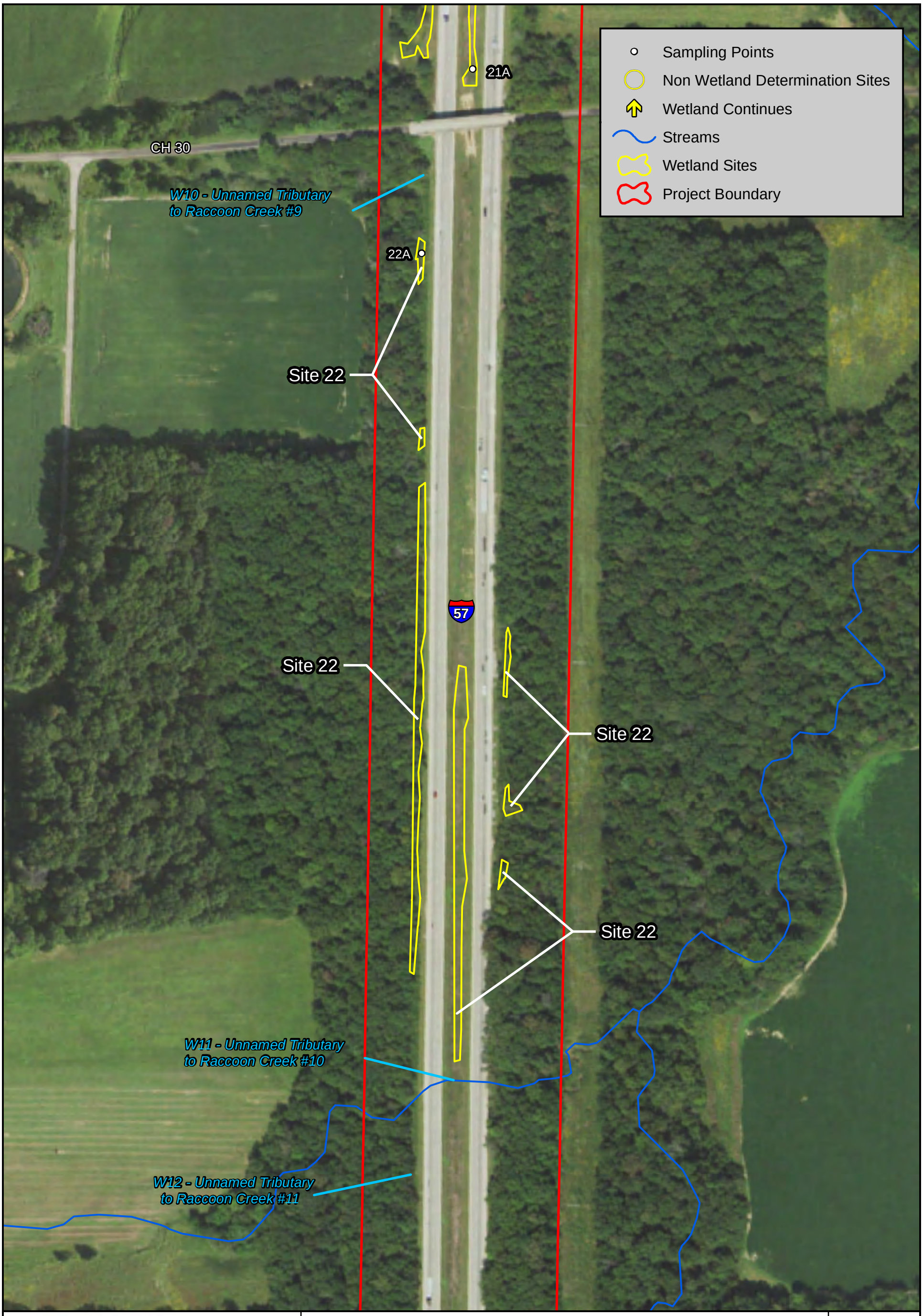
Figure 4G
Wetland Determination Map
Interstate 57 (FAI 57)
Marion County

Seq. No: 21410A

Meters 0 50
Feet 0 200

January 2021

N W E S



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Champaign, Illinois 61820

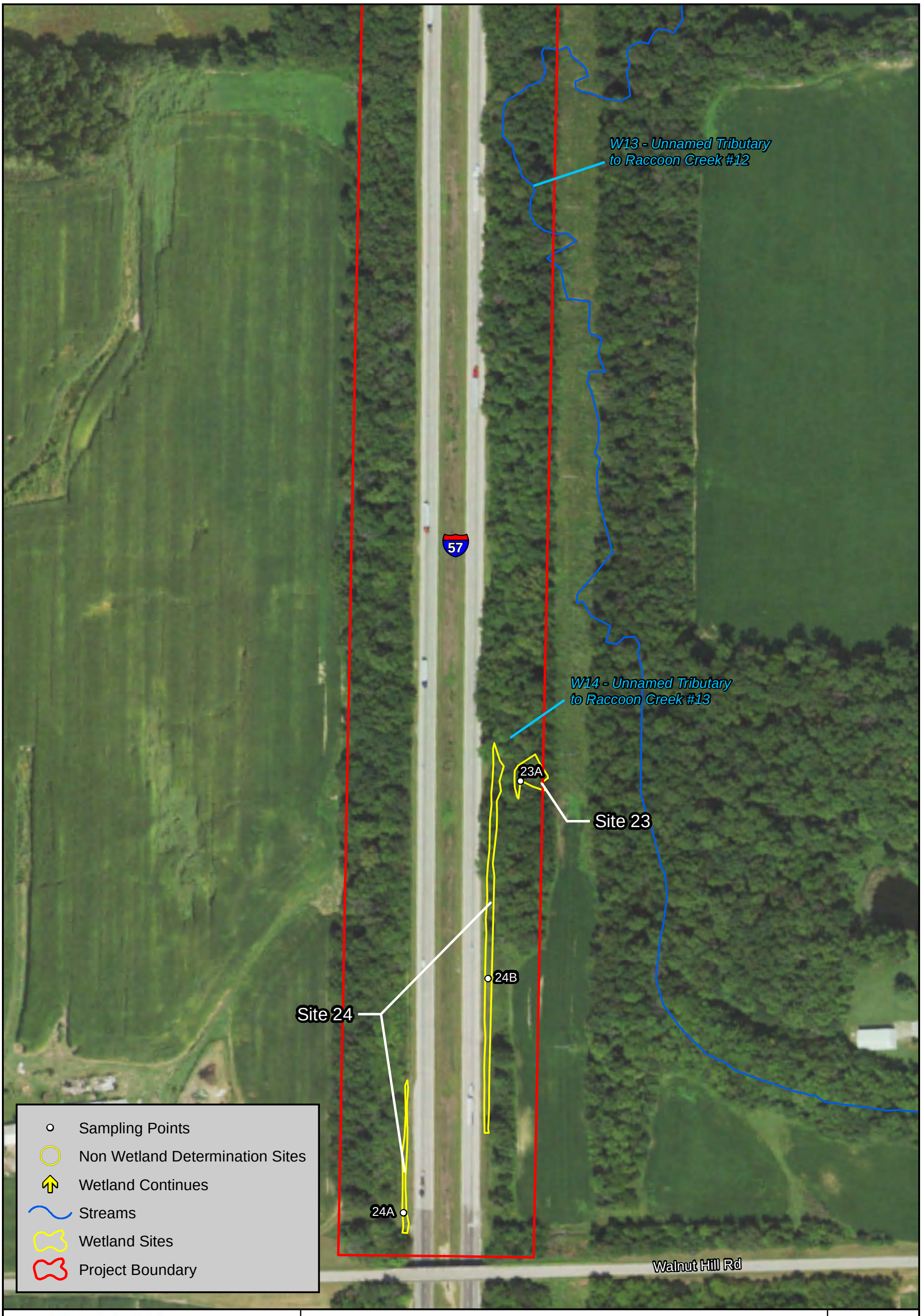
Figure 4H
Wetland Determination Map
Interstate 57 (FAI 57)
Marion County

Seq. No: 21410A

Meters 0 50
Feet 0 200

January 2021

N W E S



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INHS/IDOT Wetland Science Program
1816 South Oak Street
Champaign, Illinois 61820

Figure 4I
Wetland Determination Map
Interstate 57 (FAI 57)
Marion County

Seq. No: 21410A

Meters 0 50
Feet 0 200

January 2021

N W E S

Wetlands

Submittal Date: 02/14/2018 **Sequence No:** 21410
District: 8 **Requesting Agency:** DOH **Project No:**
Contract #: 76F79 **Job No.:** D- 98-064-12
Counties: Marion
Route: FAI 57 **Marked:** I-57
Street: **Section:** 61-(1,1-1,1-2,2)RS-1
Municipality(ies): **Project Length:** **km** **miles**
FromTo (At): I-57 from Jefferson County Line to just N of IL 161
Quadrangle: Salem South/Kell **Township-Range-Section:** T1N-R2E-Sec 15,23,26,35
Anticipated Design Approval: 09/14/2018 **Cleared for Design Approval:** 09/08/2020
Cleared for Letting: 12/07/2021 **Mitigation:** Yes **Mitigation Completed:**

Wetland Impacts Evaluation

Submittal Date: 08/25/2021 **Submitted By:**

Does the project have wetland impacts? Yes **Type:** Permanent

Briefly describe the measures considered to avoid and minimize adverse impacts to the wetlands: Designs were looked at to minimize area.

Summarize briefly why there are no practicable alternatives to the use of the wetland(s): Since there is wdending/shoulder work and stream work and ROW, there are wetland impacts. Wetland mitigation at Cahokia Site.

Wetland mitigation is being proposed: wetland bank site ☑ **Reviewed**

Memo Date: 12/07/2021 **Memo By:** Kimberly Burkwald

Memo: This office has reviewed the Wetland Impact Evaluation. Wetland impacts were minimize as much as possible but due to widening and shoulder work as well as in stream work and land acquiaition, there are unavoidable wetland impacts. The project will impact 6.45 acres of wetlands including 3.94 acres of wet meadow and wet shrubland, 0.83 acres of forested wetland, and 1.68 acres of marsh. Some of the impacts are considered significant impacts and qualify as destruction due to impacts larger than 0.5 acres to a single wetland. The appropriate mitigation ratios have been applied as required under IWPA. In Kind mitigation credits will be deducted from the IDOT District 8 CahokiaWetland Mitigation Site ledger in the amount of 16.815 acres. Therefore, review for wetlands under Part 1090 is terminated.

Memo Date: 09/08/2020 **Memo By:** Kimberly Burkwald

Memo: The National Wetlands Inventory, Ducks Unlimited Wetlands Inventory, ground level and aerial photos, USDA Soil Survey, and topographic quadrangle maps were examined. The original scope of work was such that wetland delineations were not required. However, because there will be in stream work and right of way acquisition and possible tree removal, wetland delineations are required. The Illinois Natural History Survey has been tasked to conduct wetland delineations. Their report is anticipated in October 2020.

Therefore, Review for Wetlands under Part 1090 remains open until the wetland report has been received and any wetland impacts are evaluated.

Wetland Impacts and Mitigation Required

Site No.	Type	T&E	Nature Preserve	Natural Area	Essential Habitat	Size (acres)	Acres of Impact	Ratio	Acres of Compensation
1	Wet Mead	No	No	No	No	0.56	.560	3.0	1.680
Basin		**Quadrangle**			**FQI**	12.2			
Describe the work:									
2	Marsh	No	No	No	No	0.01	.010	2.0	.020
Basin		**Quadrangle**			**FQI**	5.8			
Describe the work:									
3	Wet Mead	No	No	No	No	0.08	.080	1.5	.120
Basin		**Quadrangle**			**FQI**	7.3			
Describe the work:									

4	Wet Shrub	No	No	No	No	0.06	.060	1.5	.090
Basin		**Quadrangle**			**FQI**	9.2			
Describe the work:									
5	Marsh	No	No	No	No	0.75	.750	3.0	2.250
Basin		**Quadrangle**			**FQI**	11.4			
Describe the work:									
6	Marsh	No	No	No	No	0.13	.130	1.5	.195
Basin		**Quadrangle**			**FQI**	8.5			
Describe the work:									
10	Forested	No	No	No	No	0.26	.260	2.0	.520
Basin		**Quadrangle**			**FQI**	13.6			
Describe the work:									
11	Wet Mead	No	No	No	No	1.27	1.270	3.0	3.810
Basin		**Quadrangle**			**FQI**	9.7			
Describe the work:									
12	Wet Mead	No	No	No	No	0.16	.160	2.0	.320
Basin		**Quadrangle**			**FQI**	11.1			
Describe the work:									
13	Marsh	No	No	No	No	0.19	.190	2.0	.380
Basin		**Quadrangle**			**FQI**	9.4			
Describe the work:									
14	Forested	No	No	No	No	0.42	.420	2.0	.840
Basin		**Quadrangle**			**FQI**	17.6			
Describe the work:									
16	Wet Mead	No	No	No	No	0.18	.180	2.0	.360
Basin		**Quadrangle**			**FQI**	11.4			
Describe the work:									
17	Wet Mead	No	No	No	No	0.14	.140	2.0	.280
Basin		**Quadrangle**			**FQI**	11.7			
Describe the work:									
19	Forested	No	No	No	No	0.15	.150	2.0	.300
Basin		**Quadrangle**			**FQI**	16.9			
Describe the work:									
20	Wet Mead		No	No	No	0.31	.310	2.0	.620
Basin		**Quadrangle**			**FQI**	12.0			
Describe the work:									
21	Marsh	No	No	No	No	0.60	.600	3.0	1.800
Basin		**Quadrangle**			**FQI**	8.9			
Describe the work:									
22	Wet Mead	No	No	No	No	0.87	.870	3.0	2.610
Basin		**Quadrangle**			**FQI**	16.0			
Describe the work:									
24	Wet Mead	No	No	No	No	0.31	.310	2.0	.620
Basin		**Quadrangle**			**FQI**	9.4			
Describe the work:									
					Total		6.450		16.815

December 13, 2021

Antidegradation Assessment for 401 Water Quality Certification for the following project:

FAI 57 (I-57)
Section 61-(1,1-1,1-2,2)RS-2
From Jefferson County Line to 0.7 miles North of IL Route 161
Marion County

The scope of work for the following project consists of pavement removal and replacement between the Jefferson County line to 0.7 miles north of IL Route 161. There will also be ramp reconstruction at I-57 at IL 161 which will cause the need for a culvert extension at Raccoon Creek. The proposed project is along I-57 and located in a rural area adjacent to agricultural fields, wooded areas, floodplains, surface water bodies, and wetlands. See attached location map exhibit for the project.

This project is being processed as a State Approved Categorical Exclusion (Project Report) which is the required NEPA document for this project.

A1. **2016 Identification and Characterization of the Affected Water Body**

Raccoon Creek

- Hydrologic Unit Code (HUD): 0714020208
- AUID IL_ROK
- Layer: 305(b) Streams 2016
- Causes: 322
    1. 322: Oxygen, dissolved
- Sources: 58, 156
    1. 58: Impacts from hydrostructure flow, regulation/modification
    2. 156: Agriculture
- Use attainment: N582, X583, X585, X586, F590
    1. N582: Not supporting aquatic life
    2. X583: Not assessed fish consumption
    3. X585: Not assessed primary contact
    4. X586: Secondary contact
    5. F590: Fully supporting aesthetic quality

A2. **2018 Identification and Characterization of the Affected Water Body**

Raccoon Creek

Designated Use	Cause
Aesthetic Quality	Total Suspended Solids (TSS)
Aquatic Life	Terbufos
Fish Consumption	Mercury
Fish Consumption	Polychlorinated biphenyls

- Priority: Medium
- Raccoon Creek is listed not supporting aquatic life and not supporting fish consumption. This may be caused by the mercury, polychlorinated biphenyls, and Terbufos that the 2016 Identification and Characterization of the Affected Water Body shows is caused by dissolved oxygen with the sources being agriculture and impacts from hydrostructure flow, regulation/modification.
- Raccoon Creek at this location is not listed on the Nationwide Rivers Inventory (NRI) of Wild and Scenic River candidate streams by the National Park Service
- There is no rating for Raccoon Creek at the project location for a biologically significant stream under the IDNR publication: Integrating Multiple Taxa in a Biological Stream Rating System
- Raccoon Creek at the project location is not an Illinois Natural Areas Inventory site
- The drainage area for Raccoon Creek is 12.52 square miles
- The following wetland sites will be impacted:

Site	Type of Wetland	Floristic Quality Index	Mean C
1	Wet meadow	12.2	2
2	Marsh	5.8	2
3	Wet meadow	7.3	1.7
4	Wet shrubland	9.2	2
5	Marsh	11.4	2.3
6	Marsh	8.5	1.9
10	Forested	13.6	3.1
11	Wet meadow	9.7	1.8
12	Wet meadow	11.1	2.1
13	Marsh	9.4	2
14	Forested	17.6	2.9
16	Wet meadow	11.4	2.3
17	Wet meadow	11.7	2.4
19	Forested	16.9	2.9
20	Wet meadow	12	2.2
21	Marsh	8.9	2
22	Wet meadow	16	2.5
24	Wet meadow	9.4	1.8

B (1) Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses

It has been determined that there will be a total of 6.45 acres of impact to wetlands. The following is a breakdown of wetland impacts:

Site	Type of Wetland	Floristic Quality Index	Type of Impact	Impact in Acres	Mitigation Ratio	Calculated Acres of Mitigation
1	Wet meadow	12.2	Permanent	0.56	3	1.68
2	Marsh	5.8	Permanent	0.01	2	0.02
3	Wet meadow	7.3	Permanent	0.08	1.5	0.12
4	Wet shrubland	9.2	Permanent	0.06	1.5	0.9
5	Marsh	11.4	Permanent	0.75	3	2.25
6	Marsh	8.5	Permanent	0.13	1.5	0.195
10	Forested	13.6	Permanent	0.26	2	0.52
11	Wet meadow	9.7	Permanent	1.27	3	3.81
12	Wet meadow	11.1	Permanent	0.16	2	0.32
13	Marsh	9.4	Permanent	0.19	2	0.38
14	Forested	17.6	Permanent	0.42	2	0.84
16	Wet meadow	11.4	Permanent	0.18	2	0.36
17	Wet meadow	11.7	Permanent	0.14	2	0.28
19	Forested	16.9	Permanent	0.15	2	0.3
20	Wet meadow	12	Permanent	0.31	2	0.62
21	Marsh	8.9	Permanent	0.6	3	1.8
22	Wet meadow	16	Permanent	0.87	3	2.61
24	Wet meadow	9.4	Permanent	0.31	2	0.62

Wetland impacts are mitigated at the IDOT Cahokia Wetland Mitigation Bank.

The following is an environmental commitment for the proposed project:

- For any tree removal conducted in Illinois: Trees three (3) inches or greater in diameter at breast height shall not be cleared from April 1 through September 30 of any given year.

B (2) Fate and Effect of Parameters Proposed for Increased Loading

To minimize the surface water impacts during construction appropriate erosion and sediment control Best Management Practices will be implemented in accordance with local, state, and federal regulations. With proper implementation of Best Management Practices and compliance with the National Pollution Discharge Elimination System construction permit, short-term construction-related water quality impacts will be avoided or minimized. Per the NPDES permit a uniform perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area must be established on all unpaved areas and areas not covered by permanent structure. The IDOT Resident Engineer will verify this occurs prior to closing out the contract.

IDOT implements the following Winter Operations Best Management Practices:

- ID Annual training for low operators to improve the efficiency of de-icing application and to reduce loss of de-icing chemicals.
- IDOT utilizes calibrated spreaders equipped with ground sensors that can accurately control the rate of spreading.
- Pre-wetting solid deicing chemicals/mixtures for better adhesion to the pavement surface and for melting of the ice/snow.
- Adjusting the application rates of de-icing chemicals according to pavement temperature and weather conditions.

C. Purpose and Social and Economic Benefits of the Proposed Activity

The purpose of the project is to improve the pavement condition, repair bridges and improve safety on I-57 in Marion County. In 2014, emergency repairs were conducted to the existing pavement within the project limits due to pavement failures. For this project, there will be full removal and replacement of the existing pavement. In addition, there will be ramp reconstruction at I-57 at IL 161 in order to meet the current profile and sight distance requirements for a design speed of 55 mph. There needs to be a culvert extension at Raccoon Creek due to the ramp reconstruction. The social benefit for the proposed activity is roadway safety.

D. Assessment of Alternatives

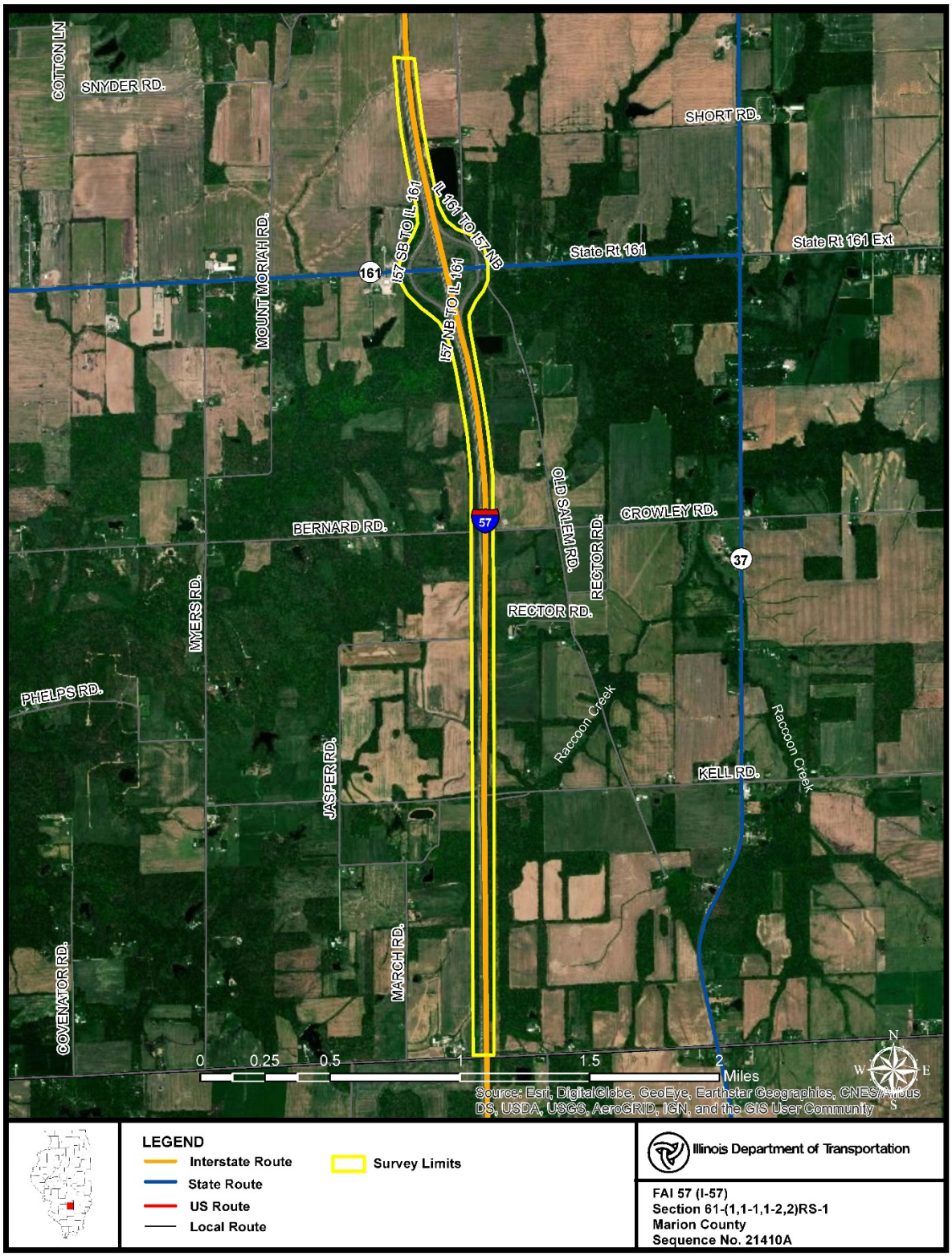
There was not an alternatives analysis as is done for an Environmental Assessment or an Environmental Impact Statement project. This project involved resurfacing pavement and improving the ramps to meet design policy on an already existing interchange at I-57 at IL 161. As minimal ROW as possible will be impacted in order to meet design policy.

E. Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, and Other Entities

The Illinois Department of Transportation has had various meetings with various groups throughout the project. Enclosed is a list of groups that IDOT met with during the studies phase of the project.

Mayor, Centralia	9/8/2020	Project introduction
Mayor, Mt. Vernon	9/8/2020	Project introduction
Mayor, Salem	9/8/2020	Project introduction
Mayor, Effingham	9/8/2020	Project introduction
State Representative Terri Bryant	9/8/2020	Project introduction
State Senator Jason Plummer	9/8/2020	Project introduction
State Senator Paul Schimpf	9/8/2020	Project introduction
Dix Village President	9/8/2020	Project introduction
US Fish & Wildlife Service	10/14/2020	Coordination for any listed threatened or endangered species
US Fish & Wildlife Service	12/7/2021	Concurrence letter of project within the range of the Indiana bat and the Northern long-eared bat

In addition, the Illinois Department of Transportation sent an updated Natural Resources Review memo was updated on December 7, 2021.


COTTON LN
SNYDER RD.
SHORT RD.
IL 161 TO I57 NB
I57 SB TO IL 161
I57 NB TO IL 161
State Rt 161
State Rt 161 Ext
161
MOUNT MORIAH RD.
57
BERNARD RD.
OLD SALEM RD.
RECTOR RD.
CROWLEY RD.
37
RECTOR RD.
MYERS RD.
PHELPS RD.
Raccoon Creek
Raccoon Creek
JASPER RD.
KELL RD.
MARCH RD.
COVENATOR RD.
0
0.25
0.5
1
1.5
2
Miles
N
W
E
S
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
LEGEND
Interstate Route
State Route
US Route
Local Route
Survey Limits
Illinois Department of Transportation
FAI 57 (I-57)
Section 61-(1,1-1,1-2,2)RS-1
Marion County
Sequence No. 21410A

S.W.P.P.P INFORMATION

Soil Type	Soil Symbol	Drainage	Permeability	Flooding	Slopes (%)	Water Erosion	Wind Erosion
Cisne Silt Loam	2A	Poorly	Very Slow - Moderately Slow	None	0 - 2	Low	Low
Hoyleton Silt Loam	3A	Somewhat Poorly	Slow - Moderately Slow	None	0 - 2	Low	Low
Hoyleton Silt Loam	3B	Somewhat Poorly	Slow - Moderately Slow	None	2 - 5	Moderate	Low
Hoyleton Silt Loam, Eroded	3B2	Somewhat Poorly	Slow - Moderately Slow	None	2 - 5	Moderate	Low
Atlas Silt Loam, Eroded	7C2	Somewhat Poorly	Slow - Moderately Slow	None	5 - 10	High	Low
Atlas Silt Loam, Eroded	7D2	Somewhat Poorly	Slow - Moderately Slow	None	10 - 18	High	Low
Hickory Silt Loam	8F	Well	Moderately Slow - Moderate	None	18 - 35	High	Low
Wynoose Silt Loam	12A	Poorly	Very Slow - Slow	None	0 - 2	Low	Low
Bluford Silt Loam	13A	Somewhat Poorly	Slow	None	0 - 2	Low	Low
Bluford Silt Loam	13B	Somewhat Poorly	Slow	None	2 - 5	Moderate	Low
Bluford Silt Loam, Eroded	13B2	Somewhat Poorly	Slow	None	2 - 5	Moderate	Low
Ava Silt Loam	14B	Moderately Well	Very Slow - Moderately Slow	None	2 - 5	Moderate	Low
Ava Silt Loam, Eroded	14C2	Moderately Well	Very Slow - Moderately Slow	None	5 - 10	Moderate	Low
Racoon Silt Loam	109A	Poorly	Slow - Moderately Slow	None	0 - 2	Low	Low
Passport Silt Loam, Eroded	652C2	Somewhat Poorly	Slow	None	5 - 10	Moderate	Low
Passport Silt Loam, Eroded	652D2	Somewhat Poorly	Slow	None	10 - 18	High	Low
Orthents Silty, Undulating	801B	Somewhat Poorly	Moderately Slow - Moderate	None	N/A	Moderate	Moderate
Passport-Grantfork Silt Loam, Eroded	888C2	Somewhat Poorly	Slow	None	5 - 10	Moderate - High	Low
Hoyleton-Darmstadt Silt Loam	912A	Somewhat Poorly	Slow - Moderately Slow	None	0 - 2	Low	Low
Hoyleton-Darmstadt Silt Loam, Eroded	912B2	Somewhat Poorly	Slow - Moderately Slow	None	2 - 5	Moderate	Low
Atlas-Grantfork Silt Loam, Eroded	914C2	Somewhat Poorly	Slow - Moderately Slow	None	5 - 10	High	Low
Hickory-Passport Silt Loam, Eroded	947D2	Well	Moderately Slow - Moderate	None	10 - 18	High	Low
Hickory-Gasport Silt Loam	967F	Well	Moderately Slow - Moderate	None	18 - 35	High	Low
Cisne-Huey Silt Loam	991A	Poorly	Very Slow - Moderately Slow	None	0 - 2	Low	Low
Bonnie Silt Loam, Sodic	3108T	Poorly	Slow	Frequent	0 - 2	Low	Low
Holton Silt Loam	3225A	Somewhat Poorly	Moderate - Moderately Rapid	Frequent	0 - 2	Low	Low
Wakeland Silt Loam	3333A	Somewhat Poorly	Moderate	Frequent	0 - 2	Low	Low
Creal Silt Loam	7337B	Somewhat Poorly	Moderately Slow	Rare (Jan - June)	2 - 5	Low	Low

EXAMPLE: SOIL TYPE (SOIL SYMBOL) - a DRAINAGE soil with PERMEABILITY permeability. This soil is FLOODING flooded with SLOPES slopes. This soil has a WATER EROSION susceptibility to water erosion and a WIND EROSION susceptibility to wind erosion.

Illinois Department of Transportation

Memorandum

To:	Keith Roberts	Attn: Jennifer Hunt
From:	Jack Elston	By: Brad Koldehoff
Subject:	Cultural Resources - No Historic Properties Affected Clearance	
Date:	May 4, 2020	

Marion County
FAI 57, I-57
South of Marion
Sec. 61-(1,1-1,1-2,2)RS-1
Job No. D-98-064-12
Seq. 21410A

For the above referenced undertaking, IDOT's qualified Cultural Resources staff hereby make a **"No Historic Properties Affected"** finding pursuant to Section 106 of the National Historic Preservation Act.

This finding concludes the Section 106 process in accordance with the stipulations of the Programmatic Agreement Regarding Section 106 Implementation for Federal-Aid Transportation Projects in the State of Illinois, executed March 6, 2018 by FHWA, Illinois SHPO, IDOT and the Advisory Council on Historic Preservation.

No further cultural resources coordination is required for this undertaking, unless design modifications or new information indicate that historic properties may be affected. If so, then, additional coordination with my office is required.

Brad H. Koldehoff
Cultural Resources Unit Chief
Bureau of Design & Environment

BK:km

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Southern Illinois Sub-Office
Southern Illinois Sub-office
8588 Route 148
Marion, IL 62959-5822
Phone: (618) 997-3344 Fax: (618) 997-8961
http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html

In Reply Refer To: December 07, 2021
Consultation code: 03E18100-2018-I-0417
Event Code: 03E18100-2022-E-00363
Project Name: 21410 I 57 shoulders and bridge overlay

Subject: Concurrence verification letter for the '21410 I 57 shoulders and bridge overlay' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request to verify that the **21410 I 57 shoulders and bridge overlay** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the threatened Northern long-eared bat (*Myotis septentrionalis*).

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances,

Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

For Proposed Actions that include bridge/structure removal, replacement, and/or maintenance activities: If your initial bridge/structure assessments failed to detect Indiana bats, but you later detect bats during construction, please submit the Post Assessment Discovery of Bats at Bridge/Structure Form (User Guide Appendix E) to this Service Office. In these instances, potential incidental take of Indiana bats may be exempted provided that the take is reported to the Service.

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or Northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required. If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

The following species may occur in your project area and **are not** covered by this determination:

- Monarch Butterfly *Danaus plexippus* Candidate

Project Description

The following project name and description was collected in IPaC as part of the endangered species review process.

Name

21410 I 57 shoulders and bridge overlay

Description

The proposed project is for shoulder replacement and bridge overlay on several structures along I 57 from the Jefferson County Line to just north of IL 161. There will be no right-of-way acquisition or temporary easements required for the completion of this project. Additionally, there will be no in stream work and no tree removal . Due to the scope of work, there will be excavation within the State's Right-of-Way.

Determination Key Result

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the threatened Northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

Qualification Interview

1. Is the project within the range of the Indiana bat[1]?

   [1] See Indiana bat species profile

   Automatically answered
   Yes

2. Is the project within the range of the Northern long-eared bat[1]?

   [1] See Northern long-eared bat species profile

   Automatically answered
   Yes

3. Which Federal Agency is the lead for the action?

   A) Federal Highway Administration (FHWA)

4. Are *all* project activities limited to non-construction[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

   [1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

   No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces[1]?

   [1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

   No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum[1]?

   [1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

   No

7. Is the project located **within** a karst area?

   No

8. Is there *any* suitable[1] summer habitat for Indiana Bat or NLEB **within** the project action area[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   [2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the national consultation FAQs.

   Yes

9. Will the project remove *any* suitable summer habitat[1] and/or remove/trim any existing trees **within** suitable summer habitat?

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   Yes

10. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

    No

11. Have presence/probable absence (P/A) summer surveys[1][2] been conducted[3][4] **within** the suitable habitat located within your project action area?

    [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

    [2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

    [3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

    [4] Negative presence/probable absence survey results obtained using the summer survey guidance are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

    No

12. Does the project include activities **within documented Indiana bat habitat**[1][2]?

    [1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

    [2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

    No

13. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors?

    Yes

14. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors occur[1]?

    [1] Coordinate with the local Service Field Office for appropriate dates.

    B) During the inactive season

15. Does the project include activities **within documented NLEB habitat**[1][2]?

    [1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

    [2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

    No

16. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors?

    Yes

17. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

    B) During the inactive season

18. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

    Yes

19. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

    No

20. Are *all* trees that are being removed clearly demarcated?

    Yes

21. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?

    No

22. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

    No

23. Does the project include slash pile burning?

    No

24. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

    Yes

25. Is there *any* suitable habitat[1] for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

    [1] See the Service's current summer survey guidance for our current definitions of suitable habitat.

    Yes

26. Has a bridge assessment[1] been conducted **within** the last 24 months[2] to determine if the bridge is being used by bats?

    [1] See User Guide Appendix D for bridge/structure assessment guidance

    [2] Assessments must be completed no more than 2 years prior to conducting any work below the deck surface on all bridges that meet the physical characteristics described in the Programmatic Consultation, regardless of whether assessments have been conducted in the past. Due to the transitory nature of bat use, a negative result in one year does not guarantee that bats will not use that bridge/structure in subsequent years.

    Yes

    SUBMITTED DOCUMENTS

    - *HPSCAN_20200909164340555_2020-09-09_164516816 1.pdf https://ecos.fws.gov/ipac/project/CKJG6ZHPZVBC3KL5AR3OIXHQOQ/projectDocuments/108043660*
    - *HPSCAN_20200909164340555_2020-09-09_164516816.pdf https://ecos.fws.gov/ipac/project/CKJG6ZHPZVBC3KL5AR3OIXHQOQ/projectDocuments/108043661*
    - *HPSCAN-20200909163555005-2020-09-09-163729674.pdf https://ecos.fws.gov/ipac/project/CKJG6ZHPZVBC3KL5AR3OIXHQOQ/projectDocuments/108043662*
    - *HPSCAN-20200909164123709-2020-09-09-164313849.pdf https://ecos.fws.gov/ipac/project/CKJG6ZHPZVBC3KL5AR3OIXHQOQ/projectDocuments/108043663*

27. Did the bridge assessment detect *any* signs of Indiana bats and/or NLEBs roosting in/under the bridge (bats, guano, etc.)[1]?

    [1] If bridge assessment detects signs of *any* species of bats, coordination with the local FWS office is needed to identify potential threatened or endangered bat species. Additional studies may be undertaken to try to identify which bat species may be utilizing the bridge prior to allowing *any* work to proceed.

    Note: There is a small chance bridge assessments for bat occupancy do not detect bats. Should a small number of bats be observed roosting on a bridge just prior to or during construction, such that take is likely to occur or does occur in the form of harassment, injury or death, the PBO requires the action agency to report the take. Report all unanticipated take within 2 working days of the incident to the USFWS. Construction activities may continue without delay provided the take is reported to the USFWS and is limited to 5 bats per project.

    No

28. Will the bridge removal, replacement, and/or maintenance activities include installing new or replacing existing **permanent** lighting?

    No

29. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

    No

30. Will the project involve the use of **temporary** lighting *during* the active season?

    No

31. Will the project install new or replace existing **permanent** lighting?

    No

32. Does the project include percussives or other activities (**not including tree removal/ trimming or bridge/structure work**) that will increase noise levels above existing traffic/ background levels?

    No

33. Are *all* project activities that are **not associated with** habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

    Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

    Yes

34. Will the project raise the road profile **above the tree canopy**?

    No

35. Are the project activities that are not associated with habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives consistent with a No Effect determination in this key?

    Automatically answered

    Yes, other project activities are limited to actions that DO NOT cause any additional stressors to the bat species as described in the BA/BO

36. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered

    Yes, because the tree removal/trimming that occurs outside of the Indiana bat's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

37. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered

    Yes, because the tree removal/trimming that occurs outside of the NLEB's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

38. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

    Automatically answered

    Yes, because the bridge has been assessed using the criteria documented in the BA and no signs of bats were detected

39. **General AMM 1**

    Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

    Yes

40. **Tree Removal AMM 1**
    Can *all* phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal[1] in excess of what is required to implement the project safely?

    Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

    [1] The word “trees” as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS’ current summer survey guidance for our latest definitions of suitable habitat.

    Yes

41. **Tree Removal AMM 3**
    Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

    Yes

42. **Tree Removal AMM 4**
    Can the project avoid cutting down/removal of *all* (1) **documented**[1] Indiana bat or NLEB roosts[2] (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

    [1] The word documented means habitat where bats have actually been captured and/or tracked.

    [2] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

    Yes

Project Questionnaire

1. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

   Yes

2. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

   No

3. How many acres[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

   [1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

   8.75

4. Please describe the proposed bridge work:
   bridge overlay, shoulder repair, in stream work
5. Please state the timing of all proposed bridge work:
   uknown likley summer or spring
6. Please enter the date of the bridge assessment:
   09/09/2020

Avoidance And Minimization Measures (AMMs)

This determination key result includes the committment to implement the following Avoidance and Minimization Measures (AMMs):

TREE REMOVAL AMM 2

Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

TREE REMOVAL AMM 3

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

TREE REMOVAL AMM 4

Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or
documented foraging habitat any time of year.

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat

This key was last updated in IPaC on April 22, 2021. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the threatened **Northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects. The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

Transportation Review for Ecological Compliance: Report of Possible Resource Conflicts

Sequence #: 21410 A

FAI 57
Reconstruction Br Repair

Resource in Vicinity of Project Polygon

*Ducks Unlimited Wetlands
*National Wetlands Inventory

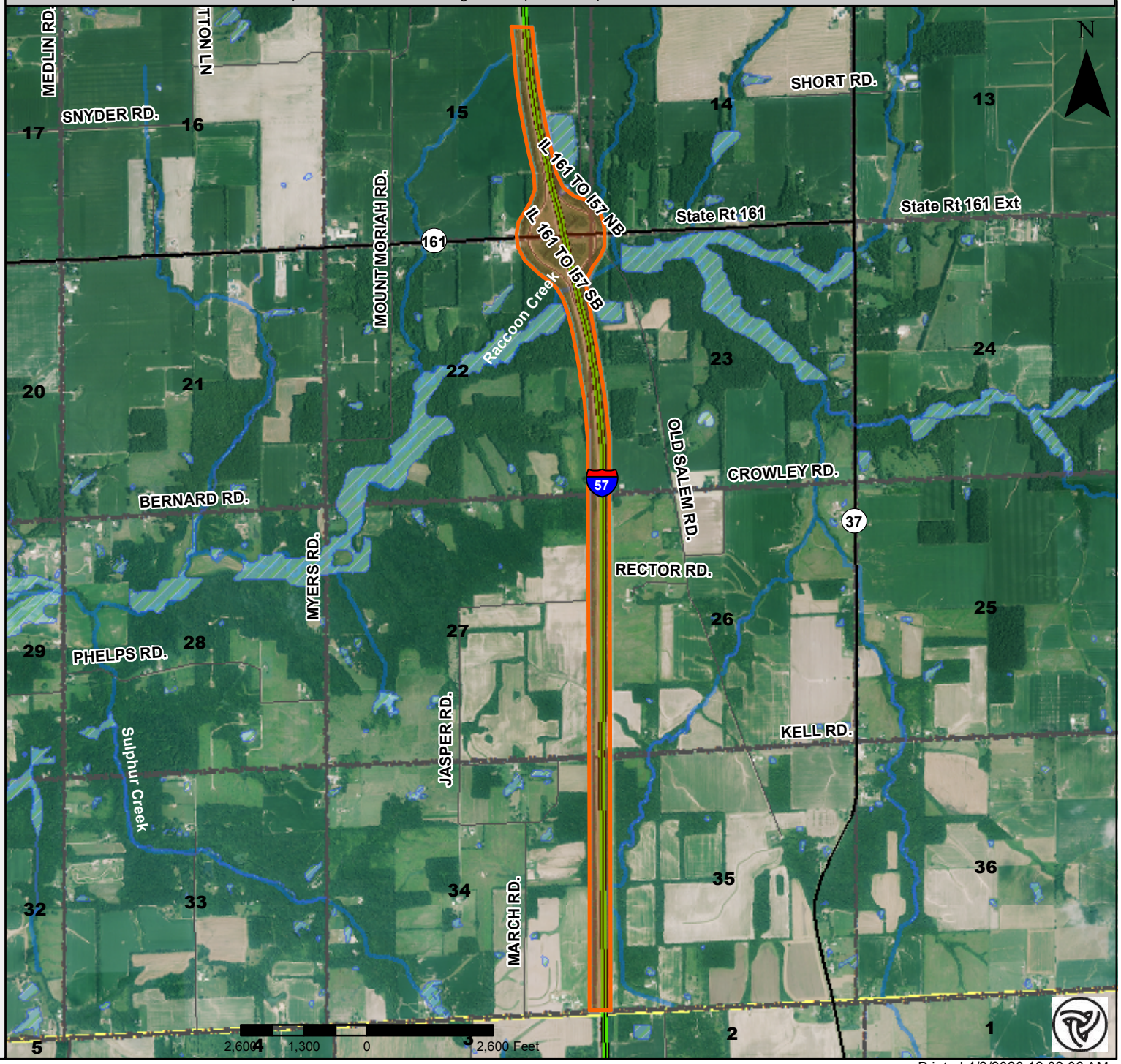
INAI & NP w/in 1 mile

*none found

No Resource Found

*INAI
*T&E
*Nature Preserve
*INHS Wetland
*Roadside Prairie Inventory

County: MARION
Section(PLSS): 3 1N2E14
Area: 0.39084 sq. miles = 250.13661 acres
Report created by Burkwaldk



Threatened & Endangered Species (T&E)
Nature Preserve (NP)
Illinois Natural Areas Inventory (INAI)
Wetlands
INHS Wetland
Roadside Prairie Inventory

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Include as additional documentation with permit applications (USACE).

Printed 4/2/2020 12:02:06 AM

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Southern Illinois Sub-Office
Southern Illinois Sub-office
8588 Route 148
Marion, IL 62959-5822
Phone: (618) 997-3344 Fax: (618) 997-8961
http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html

In Reply Refer To: December 07, 2021
Consultation Code: 03E18100-2018-SLI-0417
Event Code: 03E18100-2022-E-00361
Project Name: 21410 I 57 shoulders and bridge overlay

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project “may affect” listed species or critical habitat. Under the ESA, it is the responsibility of the Federal action agency or its designated representative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service to make "no effect" determinations. If you determine that your proposed action will have "no effect" on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally-listed threatened or endangered fish or wildlife species without the appropriate permit.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website http://ecos.fws.gov/ipac/ at regular intervals during project planning and implementation and

completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website http://www.fws.gov/midwest/endangered/section7/s7process/index.html. This website contains step-by-step instructions which will help you determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all wind energy projects and projects that include installing towers that use guy wires or are over 200 feet in height, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*) and Migratory Bird Treaty Act *(*16 U.S.C. 703 *et seq*), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website USFWS Midwest Region - Bald and Golden Eagle Permits to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Southern Illinois Sub-Office
Southern Illinois Sub-office
8588 Route 148
Marion, IL 62959-5822
(618) 997-3344

Project Summary

Consultation Code: 03E18100-2018-SLI-0417
Event Code: Some(03E18100-2022-E-00361)
Project Name: 21410 I 57 shoulders and bridge overlay
Project Type: TRANSPORTATION
Project Description: The proposed project is for shoulder replacement and bridge overlay on several structures along I 57 from the Jefferson County Line to just north of IL 161. There will be no right-of-way acquisition or temporary easements required for the completion of this project. Additionally, there will be no in stream work and no tree removal . Due to the scope of work, there will be excavation within the State's Right-of-Way.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.50393637694205,-88.95945190038141,14z

Counties: Marion County, Illinois

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

ILLINOIS
Illinois Natural History Survey
PRAIRIE RESEARCH INSTITUTE

Aquatic
Survey Report

Survey for Fishes in Raccoon Creek at the Interstate 57 (IDOT FAI 57), Marion County, Illinois

IDOT Sequence Number: 21410A

Prepared by:
Jeremy S. Tiemann

INHS/IDOT Statewide Biological Survey & Assessment Program
2021:58

October 2021

PROJECT SUMMARY

This report is submitted in response to a request made by the Illinois Department of Transportation (IDOT) to the Illinois Natural History Survey (INHS) to conduct a three-parameter survey (fish, macroinvertebrates, and water quality and physical characterization) in Raccoon Creek at the Interstate 57 (IDOT FAI 57 / I-57) crossing, 7.5 miles south of Salem, Marion County, Illinois. Construction on will occur along Interstate 57 (IDOT FAI 57) from just north of Illinois Route 161 (IL 161), south to the Jefferson County line. The project includes instream work and replacement/rehabilitation of >40-year-old culverts within the I-57 / IL 161 interchange, along with shoulder reconstruction along I-57.

A survey for fishes was conducted in Raccoon Creek at the Interstate 57 crossing by INHS personnel on 29 September 2021. Fishes were collected from old Salem Road, downstream to the I-57 crossing (approximately 170 yards). We used a Midwest Lakes Electrofishing Infinity Xtreme powered by a Lithium smart 24v 19.2 amp-hr battery set at 200v along both banks (=dual pass) for 45 minutes.

Eight species of fishes were collected during these surveys. All taxa encountered are common inhabitants of northern Illinois headwater streams. None of the species collected during this survey are listed as threatened or endangered at the federal or state level, nor are they candidates for listing in Illinois.

A separate report will summarize the results of the survey for aquatic macroinvertebrates, the values recorded during measurement of physical and chemical water quality parameters in the field and those resulting from laboratory analyses for physicochemical constituents of raw water samples collected in the field, and the information resulting from physical characterization of the stream.

Surveys Lead By: Jeremy S. Tiemann, Aquatic Zoologist
Kathryn E. Conatser, INHS Hourly Assistant
Aaron L. Devin, INHS Hourly Assistant

Edited by: Mark J. Wetzel, INHS Research Affiliate

GIS Layers: Janet L. Jarvis, INHS GIS and Remote Sensing Specialist

University of Illinois
Prairie Research Institute
Illinois Natural History Survey
Statewide Biological Survey and Assessment Program
1816 South Oak Street
Champaign, Illinois 61820

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Cover photo: Raccoon Creek at the Interstate 57 (IDOT FAI 57) crossing, 7.5 miles south of Salem, Marion County, Illinois (Latitude 38.5180° North, Longitude 88.9583° West) by INHS personnel on 29 September 2021 (J.S. Tiemann photo). Picture facing downstream in a westerly direction, with the I-57 culvert in the background.

INTRODUCTION

This report is submitted in response made by Kimberly Burkwald of the Illinois Department of Transportation (IDOT) to Rachel Vinsel and Wendy Schelsky of the Illinois Natural History Survey (INHS) on 26 August 2021 for a three-parameter survey (fish, macroinvertebrates, and water quality and physical characterization) in Raccoon Creek at the Interstate 57 (IDOT FAI 57 / I-57) crossing, 7.5 miles south of Salem, Marion County, Illinois [IDOT Sequence No. 21410A; IDOT Job No. D-98-064-12; IDOT Contract No. 76F79; IDOT Section No. 61-(1,1-1,1-2,2)RS-1; INHS Project No. FS-1550]. Construction on will occur along a 6.1-mile section of Interstate 57 from just north of Illinois Route 161 (IL 161), south to the Jefferson County line. The project includes instream work and replacement/rehabilitation of >40-year-old culverts within the I-57 / IL 161 interchange, along with shoulerd reconstruction along I-57.

This report summarizes the results of the survey for fishes conducted in Raccoon Creek at the Interstate 57 crossing by INHS personnel on 29 September 2021. A separate report will summarize the results of the survey for aquatic macroinvertebrates, the values recorded during measurement of physical and chemical water quality parameters in the field and those resulting from laboratory analyses for physicochemical constituents of raw water samples collected in the field, and the information resulting from physical characterization of the stream.

PROJECT LOCATION

The Interstate 57 (IDOT FAI 57) project area consisted of one perennial stream site (**Figure 1**):

1) Raccoon Creek at the Interstate 57 (IDOT FAI 57) crossing, located approximately 7.5 miles south of Salem, Marion County, Illinois (Latitude 38.5180° North, Longitude 88.9583° West) (**cover photo**).

Appendix 1 references a shapefile with sampling point information for the Interstate 57 (IDOT FAI 57) crossing as discussed in this report.

HABITAT CHARACTERIZATION

Raccoon Creek at the Interstate 57 (IDOT FAI 57) crossing was visited by INHS personnel on 29 September 2021 (**cover photo**). We examined a reach of the stream (approximately 170 yards in length) from old Salem Road, downstream (WSW), to the I-57 crossing. The stream ranged between 1 foot and 25 feet (mean: 15 feet) in width and from <1 inch to ~4 feet (mean: 2 feet) in depth. Substrates were predominantly clay hardpan and sand; woody debris and some undercut banks were present but aquatic vegetation was not observed. Raccoon Creek was not flowing during our visit. The banks along this stream in the project area were steeply sloped and tree lined.

BACKGROUND

Raccoon Creek is a tributary of Crooked Creek (Kaskaskia River basin). This small (<100 mi^2) basin originates near Kell in Marion County and flows in a westerly direction before depositing its waters into Crooked Creek at the north edge of Centralia. The conversion of native prairies to cropland has resulted in several anthropogenic alterations in the Kaskaskia River drainage (Page et al. 1992), and the Crooked Creek basin (i.e., Raccoon Creek) is no exception as it has

been channelized and drain tiles have been added to the row-crop agricultural fields. Although Raccoon Creek was not included [or discussed] in The Biological Stream Characterization (Bertrand et al. 1996), Crooked Creek was rated therein as a "C" Stream (Moderate Aquatic Resource). The INHS Fish Collection database (Champaign) has limited data for the Crooked Creek basin since 1960 (29 species), especially Raccoon Creek (only 5 species) (INHS 2021).

METHODS

A survey for fishes was conducted in Raccoon Creek at the Interstate 57 (IDOT FAI 57) crossing on 29 September 2021 at 10:30 a.m. by INHS personnel J.S. Tiemann, K.E. Conatser and A.L. Devine. Fishes were collected from old Salem Road, downstream to the I-57 crossing (approximately 170 yards). We used a Midwest Lakes Electrofishing Infinity Xtreme powered by a Lithium smart 24v 19.2 amp-hr battery set at 200v along both banks (=dual pass) for 45 minutes. One person operated the backpack electrofisher by manipulating the anode with one hand while flicking the cathode with the other (free) hand. The other two team members netted fishes while also carrying the aerated bucket that served as a live-well. Available habitat types were covered. Efforts were made to cover all available habitat types present at the site, including areas of differing substrates.

All fishes were identified, counted, and released. Nomenclature for fishes discussed in this report follows Page and Burr (2011) except that subspecies are not recognized. The current status of threatened and endangered species of fishes discussed in this report are taken from U.S. Department of Interior, Fish and Wildlife Service (USDI, FWS) (1996, 1997) and Illinois Endangered Species Protection Board (IESPB) (2020). All fishes were collected and processed according to Institute of Animal Care and Use Committee (IACUC) protocol # 16057.

RESULTS AND DISCUSSION

Eight species of fishes were collected from Raccoon Creek at the Interstate 57 (IDOT FAI 57) crossing on 29 September 2021 (**Table 1**). All taxa encountered are common inhabitants of northern Illinois headwater streams (Smith 1979). None of the species collected during this survey are listed as threatened or endangered at the federal or state level, nor are they candidates for listing in Illinois (IESPB 2020). None of the species collected are considered intolerant species (Bertrand et al. 1996). Three of the species (38%) collected – Golden Shiner (*Notemigonus crysoleucas*), Creek Chub (*Semotilus atromaculatus*), and Green Sunfish (*Lepomis cyanellus*) – are listed as “tolerant” by Smogor (2000). These species adapt well to changing environmental conditions.

ACKNOWLEDGMENTS

K.E. Conatser (INHS) and A.L. Devine (INHS) assisted in the field survey; J.L. Jarvis (INHS) prepared the map in **Figure 1** and associated shape file referenced in **Appendix 1**; N. Maass (IDNR) provide element occurrence records; and M.J. Wetzel (INHS) edited the report.

LITERATURE CITED

Bertrand, W.A., R.L. Hite, and D.M. Day. 1996. Biological Stream Characterization (BSC): Biological assessment of Illinois stream quality through 1993. Biological Streams Characterization Work Group, Springfield, Illinois. 44 pp.

Illinois Endangered Species Protection Board (IESPB). 2020. Checklist of Endangered and Threatened Animals and Plants of Illinois. Illinois Endangered Species Protection Board, Springfield, Illinois. 10 pp. Published online at https://www2.illinois.gov/dnr/ESPB/Documents/ET%20List%20Review%20and%20Revision/Illinois%20Endangered%20and%20Threatened%20Species.pdf

Illinois Natural History Survey (INHS) Fish Collection Database. 2021. https://biocoll.inhs.illinois.edu/portalx/collections/index.php. Accessed on 30 September 2021.

Page, L.M. and B.M. Burr. 2011. Peterson Field Guide to Freshwater Fishes of North America North of Mexico. Houghton Mifflin Harcourt, Boston. xix + 663 pp.

Page, L.M., K.S. Cummings, C.A. Mayer, S.L. Post, and M.E. Retzer. 1992. Biologically significant Illinois streams, an evaluation of the streams of Illinois based on aquatic biodiversity. Technical Report. Illinois Department of Conservation and Illinois Department of Energy and Natural Resources, Springfield, Illinois. 498 pp.

Smith, P.W. 1979. Fishes of Illinois. University of Illinois Press, Urbana, Illinois. 314 pp.

Smogor, R. 2000. Draft manual for calculating index of biotic integrity scores for streams in Illinois. Illinois EPA, Bureau of Water, Division of Water Pollution Control, Springfield. 23 pp.

U.S. Department of the Interior, Fish and Wildlife Service (USDI, FWS). 1996. Endangered and threatened species, plant and animal taxa; proposed rule. Part III. 50 CFR Part 17. Federal Register 61(40):7596-7613. February 28.

U.S. Department of Interior, Fish and Wildlife Service (USDI, FWS). 1997. Endangered and threatened wildlife and plants. Federal Register, 50 CFR Part 17.11 and 17.12. October 31, 1996. 46 pp. [This document is a compilation and special reprint, current as of October 31, 1996, that was printed by the U.S. Government Printing Office in 1997].

Table 1. List of fish species and number of individuals collected in Raccoon Creek at the Interstate 57 (IDOT FAI 57) crossing, 7.5 miles south of Salem, Marion County, Illinois (Latitude 38.5180° North, Longitude 88.9583° West) by INHS personnel on 29 September 2021. None of the species collected during this survey are listed as threatened or endangered at the federal or state level, nor are they candidates for listing in Illinois (IESPB 2020).

Family	Scientific name	Common name	# individ
Leuciscidae	*Notemigonus crysoleucas*	Golden Shiner	1
	Semotilus atromaculatus	Creek Chub	15
Catostomidae	*Erimyzon claviformis*	Western Creek Chubsucker	6
Aphredoderidae	*Aphredoderus sayanus*	Pirate Perch	1
Fundulidae	*Fundulus notatus*	Blackstripe Topminnow	63
Centrarchidae	*Lepomis cyanellus*	Green Sunfish	3
	Lepomis macrochirus	Bluegill	24
	Micropterus salmoides	Largemouth Bass	4

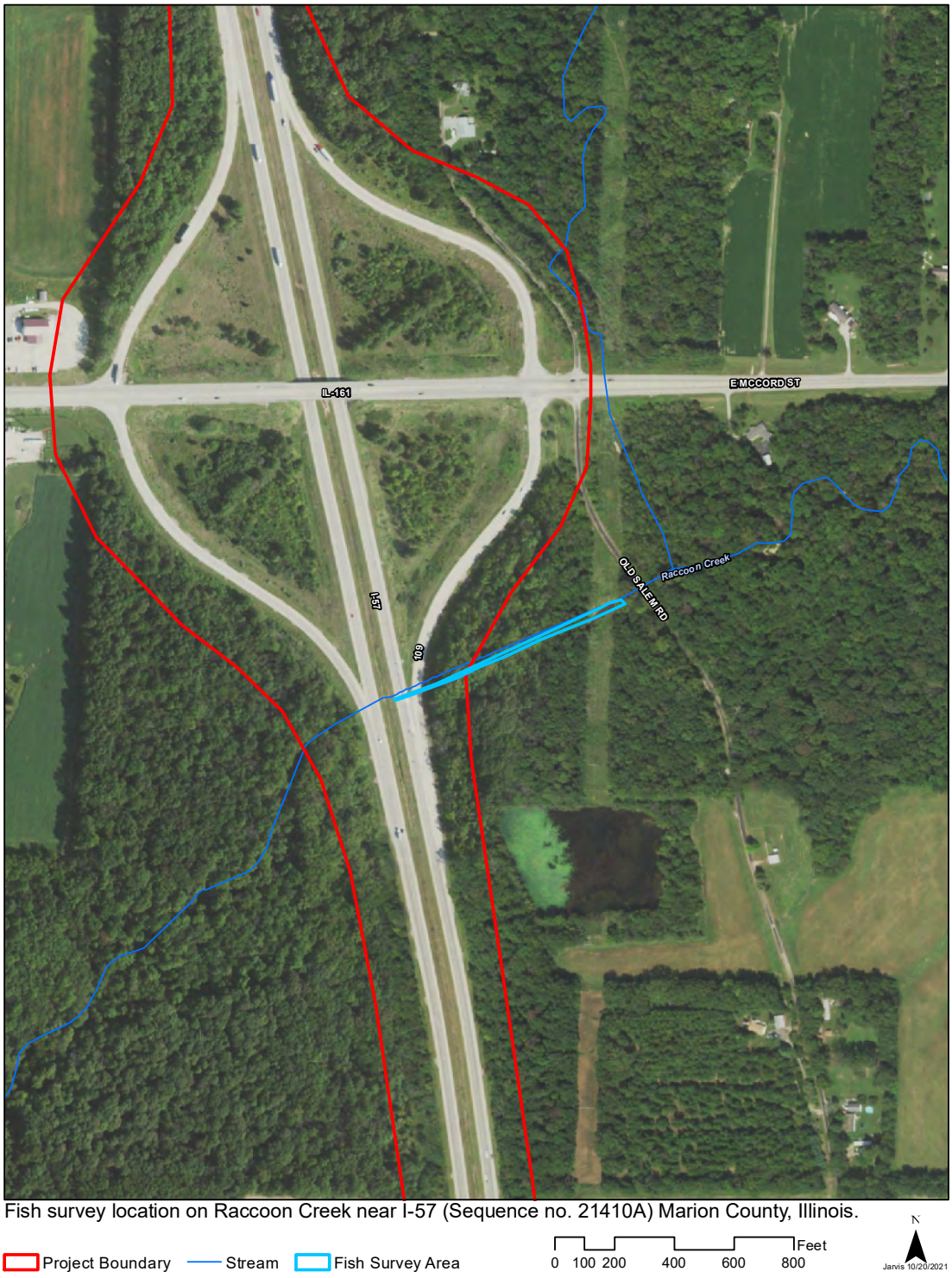

Figure 1. Map of Raccoon Creek at the Interstate 57 (IDOT FAI 57) crossing, 7.5 miles south of Salem, Marion County, Illinois (Latitude 38.5180° North, Longitude 88.9583° West), where a survey for fishes was conducted by INHS personnel on 29 September 2021 (Map created by J.L. Jarvis, INHS GIS and Remote Sensing Specialist).

Appendix 1

This appendix cover page references < **21410A_Fish_Survey_GIS.zip** > containing an ArcGIS shapefile with sampling point information for the site discussed in this report. Specifically, this shapefile includes site information for Raccoon Creek at the Interstate 57 (IDOT FAI 57) crossing, 7.5 miles south of Salem, Marion County, Illinois (Latitude 38.5180° North, Longitude 88.9583° West), where a survey for fishes was conducted by INHS personnel on 29 September 2021.

The ArcGIS shapefile and this report were both submitted to IDOT via the IDOT Site Assessment Tracking System extranet website (Frostycap) on 22 October 2021.

ILLINOIS
Illinois Natural History Survey
PRAIRIE RESEARCH INSTITUTE

Aquatic
Survey Report

Three Parameter Water Quality Estimation in Raccoon Creek, at Interstate 57 crossing, in Marion County, Illinois

IDOT Sequence Numbers: 21410A

Prepared by:
Jason L. Robinson

INHS/IDOT Statewide Biological Survey & Assessment Program
2021: 85

December 2021

Project Summary

This report is submitted in response to a request from IDOT for INHS personnel to assess existing stream habitat and the potential for three-parameter benthic macroinvertebrate condition assessment in Raccoon Creek (within the IDOT Sequence No. 21401A project corridor, Marion County, Illinois). Habitat surveys and biological sampling were conducted on 29 September 2021. No stream flow was detected within the sampled segment during sampling, but downstream segments (with markedly different instream conditions) did exhibit flow just above the threshold of observability. This segment ranked as "Poor", relative to the distribution of these features among wadeable streams in Illinois. Shifting sands and deep undercut banks, likely associated with high-discharge flow events, were the predominant habitats in the sampled reach. Benthic macroinvertebrate abundance and diversity was low; a total of 277 benthic macroinvertebrates were identified from the entire sample of the collection from Raccoon Creek in the proposed IDOT Sequence ~~Seq.~~ 21410A project area on 29 September 2021. Twelve terminal taxa were recorded from this sample, representing 3 phyla, 5 classes, 10 orders and 12 families. Three EPT taxa and 2 intolerant taxa were identified from this site.

Signed: Wendy McMeekin

Date: 12/10/2021

Conducted By: Dr. Jason L. Robinson (field surveys, benthic macroinvertebrate identification, report writing), Mark J. Wetzel (benthic macroinvertebrate identification, report editing), Janet L. Jarvis (GIS and Maps),

GIS Layers: Janet Jarvis, Remote Sensing Specialist

University of Illinois
Prairie Research Institute
Illinois Natural History Survey
Statewide Biological Survey and Assessment Program
1816 South Oak Street
Champaign, Illinois 61820

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Appendix 1. This appendix cover page references < **21410A_Macroinvert_Survey_GIS.shp**> - an ArcGIS shapefile with sampling point information for **Site FS1550** (Raccoon Creek at Interstate 57) within the IDOT Sequence 21410A project corridor (Marion County, IL), where surveys for aquatic

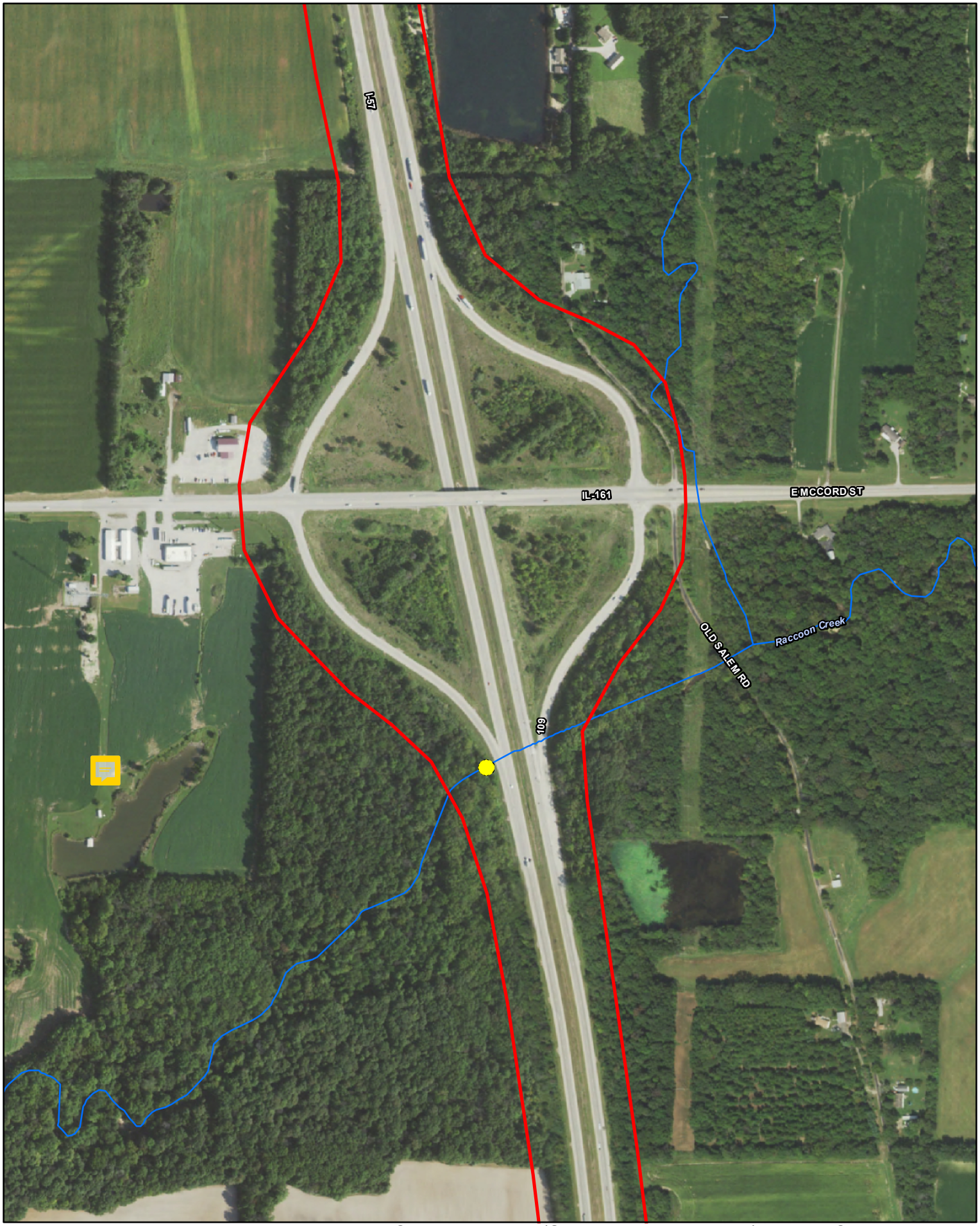
Cover Photo: Raccoon Creek at **Site FS1550,** just downstream (West-Southwest) of the Interstate 57 stream crossing, on 29 September 2021, in Marion County, IL. Photo credit: J.L. Robinson, INHS.

INTRODUCTION

This report is part of a response to a recent Further Studies Transmittal from Kim Burkwald, Illinois Department of Transportation, Springfield (IDOT) to Rachel Vinsel and Wendy Schelsky, Illinois Natural History Survey (INHS) dated 26 August 2021. IDOT requested that INHS conduct three parameter (biological, chemical and physical) water quality surveys in the proposed IDOT Sequence 21410A project corridor (Interstate 57 from just north of East McCord Street (Illinois State Route 161), south for approximately 3 miles, to East Base Line Road (also known as Walnut Road and Walnut Hill Road), located just north of the Marion and Jefferson county line in south-central Illinois. We performed site reconnaissance from aerial photography, GIS layers, and in the course of a field visit. IDOT tasked us specifically to assess in-stream habitat, benthic macroinvertebrates and chemical water quality in suitable streams in the project corridor (**Figure 1**). INHS entomologist Jason L. Robinson determined the suitability of stream sampling sites from aerial photography, GIS, and the U.S. Geological Survey StreamStats Application (2021), and observations recorded during a site visit conducted 29 September 2021 to characterize stream habitat, complete field water quality monitoring and collect water samples for laboratory analyses. The results from the U.S. Geological Survey StreamStats Application (2021) showed three small streams in the project corridor that did not provide perennial flow and did not fit minimum watershed area criteria for habitat and benthic macroinvertebrate assessment.

PROJECT CORRIDOR

Raccoon Creek, at the Interstate 57 stream crossing (Site **FS1550** in the IDOT Sequence No. 21410A project corridor in Marion County, Illinois), has a watershed area of approximately 12.5 mi^2 **(Figure 2**). Raccoon Creek, ultimately a tributary of the Kaskaskia River, flows northerly and westerly to meet Crooked Creek just downstream of the Raccoon Creek Reservoir just northwest of Central City, Illinois. Crooked Creek flows west to join the Kaskaskia River southeast of Damiansville. The watershed sourcing the stream where we conducted the work in this report is fan-shaped, comprised of several small and unnamed branch tributaries that mostly drain northwards and westerly before joining Raccoon Creek just upstream (east) of the Interstate 57 crossing. The study watershed drains a mixture of forested, agricultural and residential land uses in Marion County, Illinois. We excluded from study, on the basis of absence of permanent flow and watershed minimum area criteria, three smaller watersheds crossing Interstate 57. The northernmost watershed in the study area (**Figure 3**) is an unnamed intermittent tributary of Raccoon Creek with a watershed area of 0.09 mi^2. South of Raccoon Creek, flowing westerly underneath Interstate 57 (**Figure 4**) is the smallest unnamed and intermittent tributary of Raccoon Creek in this study, with a watershed area of 0.06 mi^2. Still further south, just north of Kell Road (**Figure 5**), is an unnamed and intermittent headwaters tributary of Raccoon Creek that has a watershed area of 0.35 mi^2.



Water quality sample location on Raccoon Creek near I-57 (Sequence no. 21410A) Marion County, Illinois.

Project Boundary Stream Water Quality Sample

0 200 400 800 Feet

7

N

Jarvis 12/8/2021

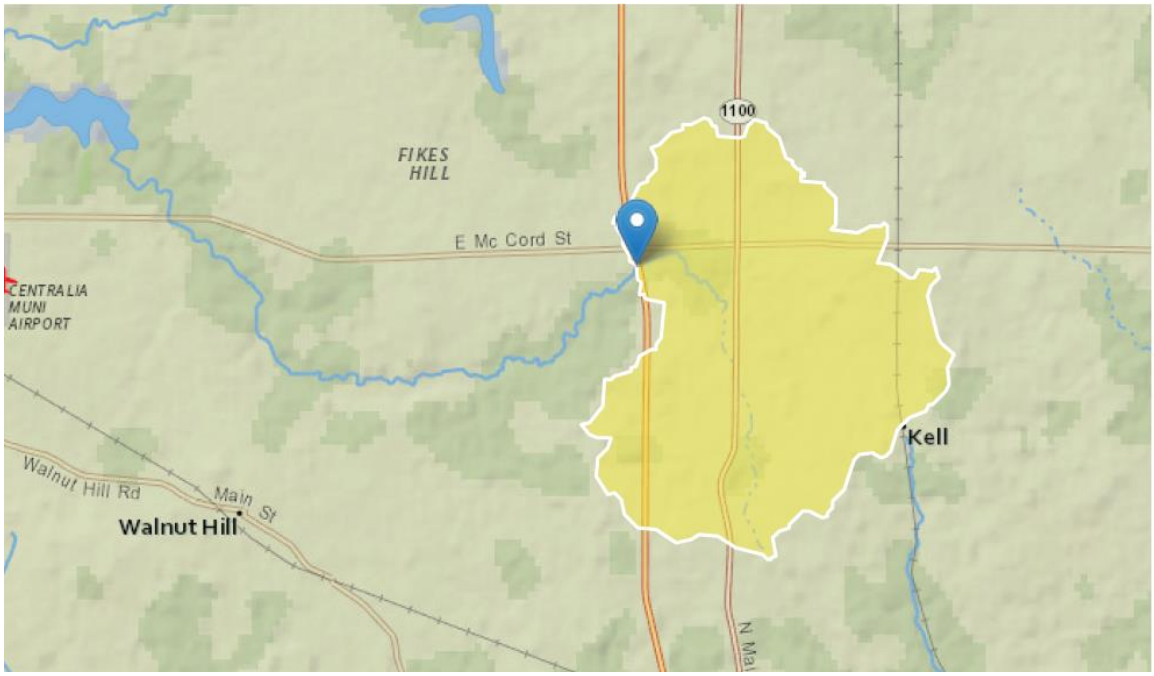


Figure 2. Raccoon Creek at the Interstate 57 crossing (38.51684, -88.96173) (blue balloon), has a watershed area of approximately 12.58 mi^2. Watershed delineation by U.S. Geological Survey StreamStats Application (2021).

Site selection. Initial site reconnaissance we performed from aerial maps, GIS and the results from the U.S. Geological Survey StreamStats Application (2021). Selection of the sampling sites were dictated by project design, stream access and field conditions. Several smaller intermittent streams in the project area were not sampleable per the watershed area rule; Raccoon Creek was sampled downstream (west-southwest) of the Interstate 57 crossing, in order to accumulate all of the flow from the eastern side of the interstate before entering the assessment area. The exact location of sampling site chosen with the primary goal of meeting minimum sufficient watershed and flow criteria, and the secondary goal to sample the best possible habitat present in the reach identified for assessment. Habitat features varied little over the course of several hundred meters downstream of the culvert from which Raccoon Creek exits from underneath Interstate 57. The information in **Appendix 1** references a GIS shapefile with sampling point information for Raccoon Creek, in the Sequence 21410A (Interstate 57) project area (Marion and Jefferson Counties, Illinois).

Figure 3. At the Interstate 57 crossing, the unnamed tributary of Raccoon Creek (blue balloon) has an area of approximately 0.09 mi^2. Watershed delineation by U.S. Geological Survey StreamStats Application (2021).

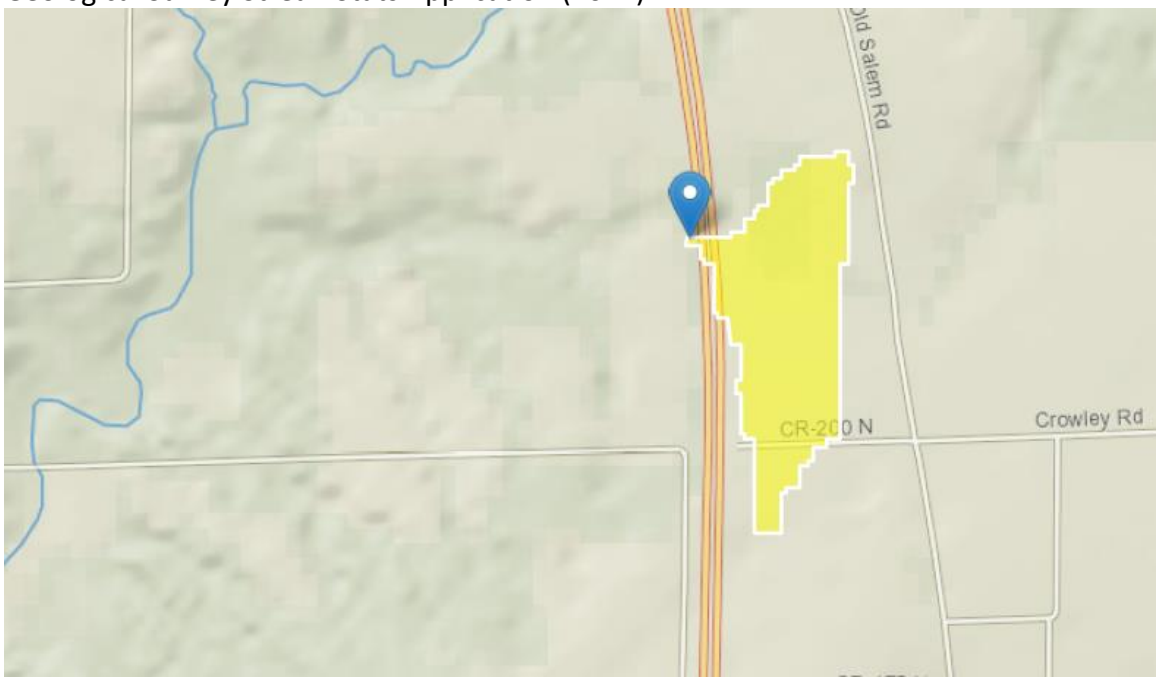


Figure 4. At the confluence with Interstate 57 (blue balloon) the intermittent tributary of Raccoon Creek has the smallest watershed area (0.06 mi^2). Watershed delineation by U.S. Geological Survey StreamStats Application (2021).

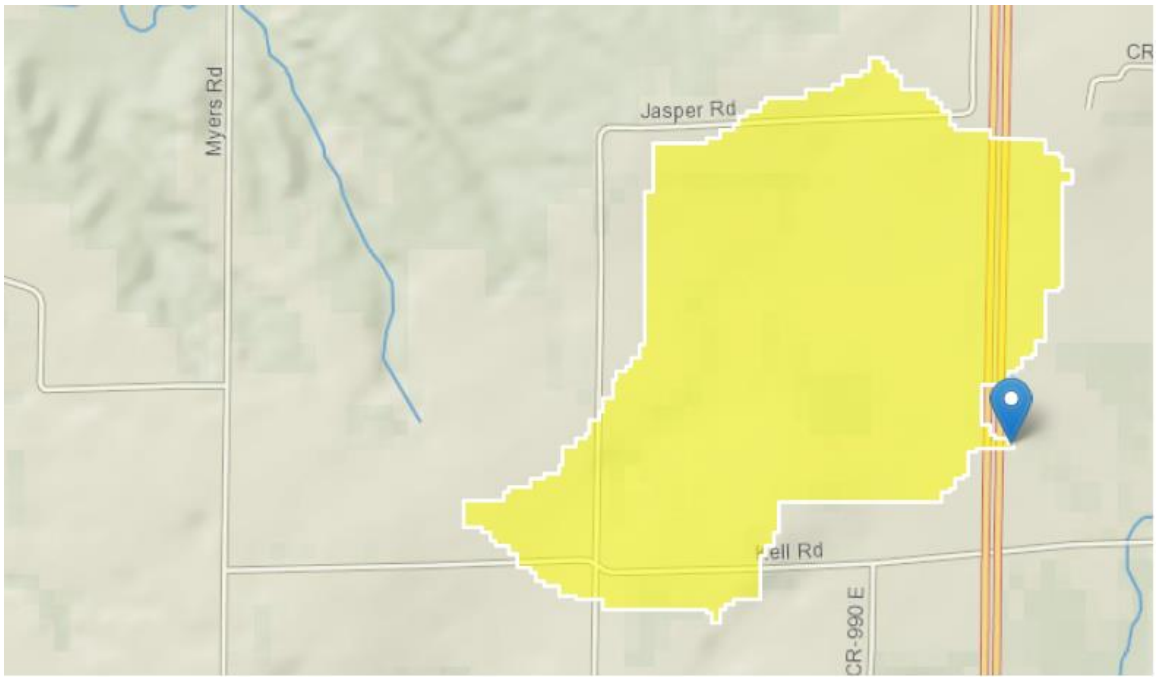


Figure 5. The largest unnamed intermittent tributary of Raccoon Creek in the project corridor is still too small for sampling (0.35 mi^2) at the Interstate 57 crossing. Watershed delineation by U.S. Geological Survey StreamStats Application (2021).

PHYSICAL CHARACTERIZATION OF STREAM

Stream measurements — Site FS1550: INHS personnel assessed **Site FS1550** (Raccoon Creek, downstream of Interstate 57) on 29 September 2021. Width, depth and flow were measured along 3 cross-stream transects (**Figure 6**), within 50 meters distance of the culvert exit. Transects were chosen to represent the variability in conditions at the sampling site. Average **width** in this segment was 11 feet, while average **depth** was 9.7 inches (ranging from 1 -28 inches). Discharge velocities in the thalweg were below the threshold of visual detection at all three transects (**Figure 6).** Average depths were skewed towards higher numbers by deep water near undercut banks, possibly as a result of increased flows during flooding constrained by the culvert crossing underneath Interstate 57 (**Figure 7**). Further downstream (west-southwest) of the sample site, below a large pool and deposits of sand (**Figure 8**), some flow was evident in a narrowed channel (**Figure 9**).

Substrates— Substrates observed in the sampled segment at **Site FS1550** were dominated by sand (90%), with silt and clay contributing 5% of the stream bottom in the sampled reach, respectively. Seasonal flooding likely influences the distribution and quality of of benthic habitat structure in this reach, depositing silt and fine particles downstream of the very narrow culvert constriction (**Figure 7**). The stream gradient is very low, instream base flows small, and fluvial sand deposits extensive along the

stream banks and channel, except for directly downstream of the outflow of the box culverty underneath Interstate 57.

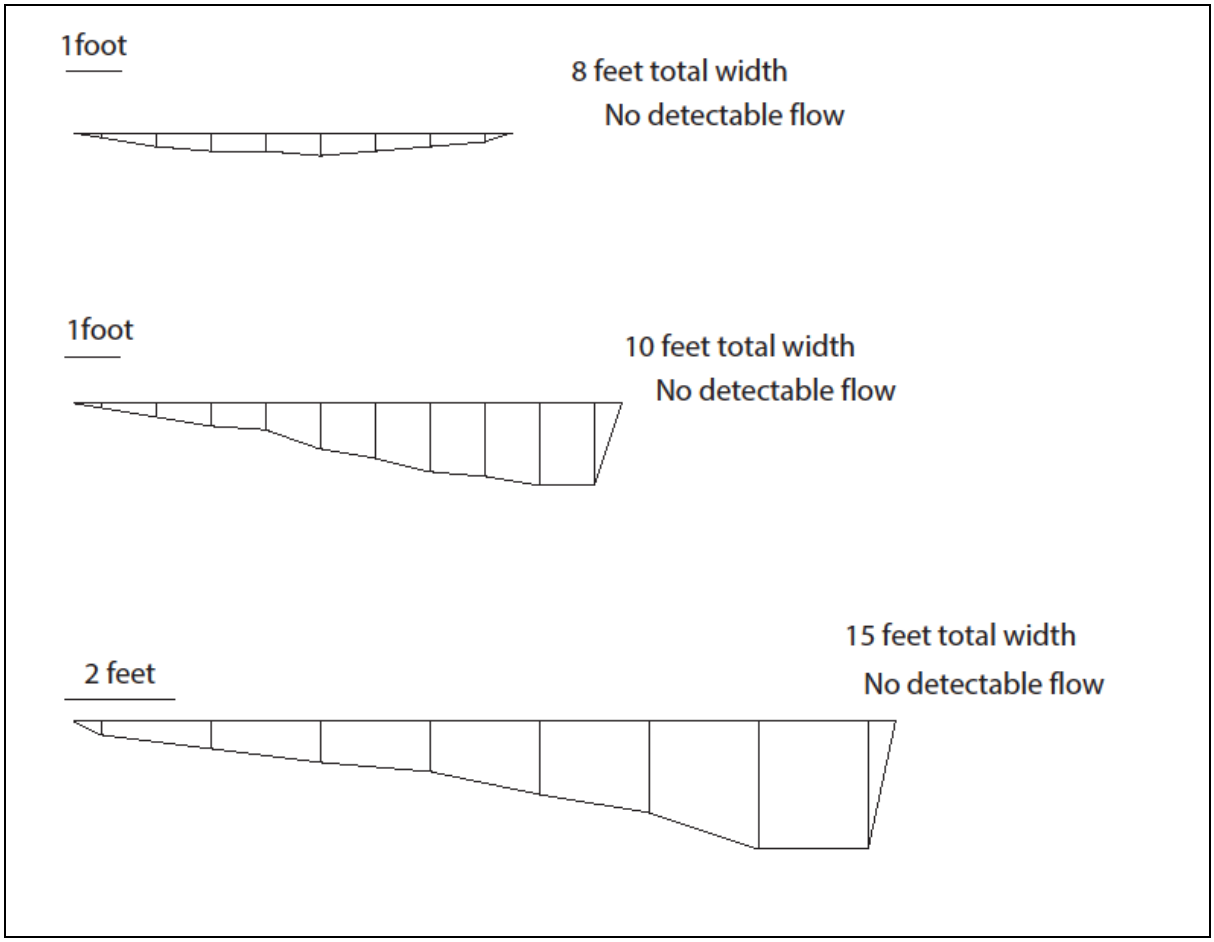


Figure 6. Representative stream cross sections (south to north) of Raccoon Creek at **Site FS1550** in Marion County, Illinois recorded by INHS personnel on 29 September 2021.

Figure 7. Raccoon Creek **Site 1550**, facing east towards the downstream exit from a culvert crossing underneath Interstate 57 (IDOT Seq. No. 21410A) in Marion County, Illinois, on 29 September 2021 (Photo credit: J.L. Robinson, INHS).

Riparian vegetation — The riparian zone and surrounding landscape of the unnamed tributary, downstream of the sample site, is mostly forested. This remains true at the scale of the larger project area, save the interruption of the stream by Interstate 57 and the box culvert through which it passes underneath. Although not sampled for this project, maps of the area appear to indicate the likelihood that the stream channel of Raccoon Creek immediately upstream of Interstate 57 and Old Salem Road has been straightened (Figure 10).

Figure 8. Large deposits of sand, deposited during high-discharge flow events in Raccoon Creek, are the dominant riparian habitat element downstream (west) of Interstate 57 in Marion County, Illinois on 29 September 2021 (Photo credit: J.L. Robinson, INHS).

Figure 9. Instream sand deposits reduce channel dimensions significantly, allowing detection of instream flows in narrowed sections of Raccoon Creek, downstream (west) Interstate 57 stream crossing, in Marion County, Illinois, on 29 September 2021 (Photo credit: J.L. Robinson, INHS).

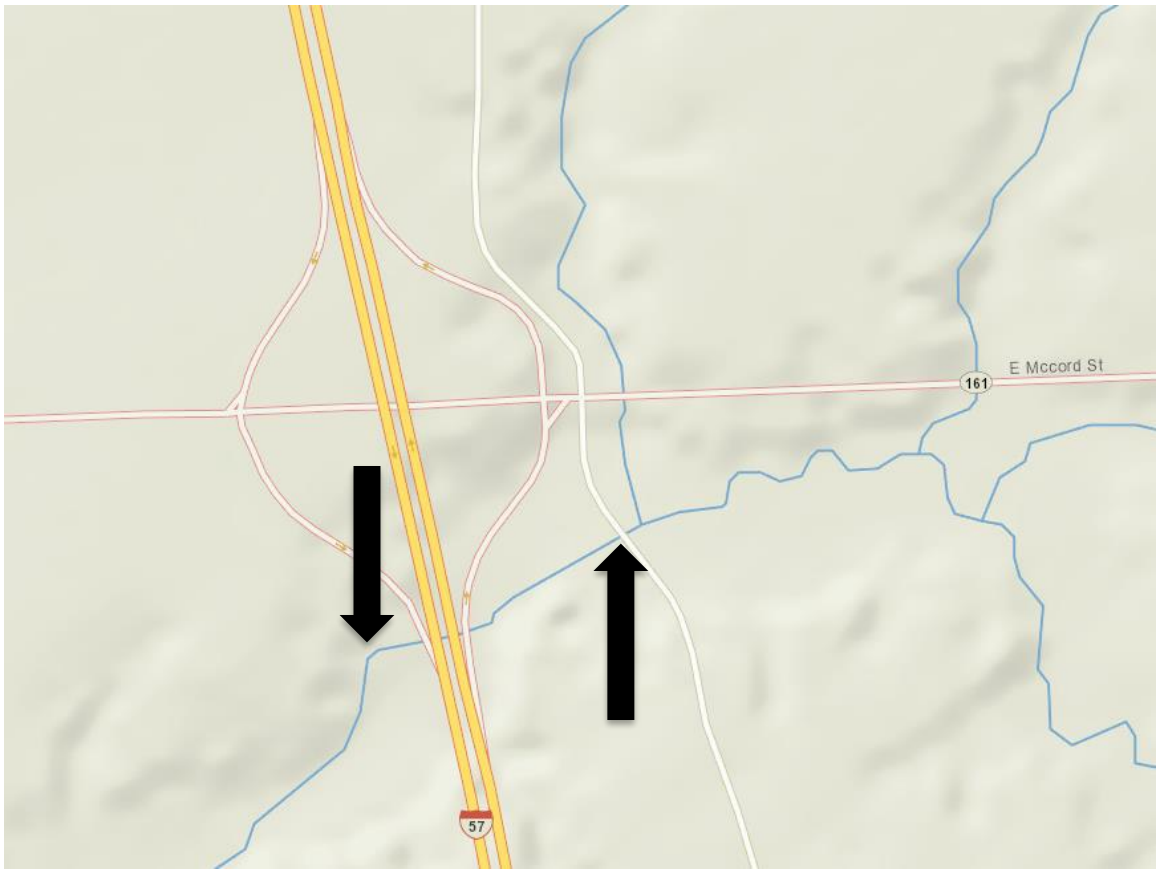


Figure 10. Raccoon Creek (between arrows), downstream (west- southwest) of Old Salem Road, extending to downstream (west) of the Interstate 57 crossing, has likely been straightened (map created from U.S. Geological Survey StreamStats Application (2021).

HABITAT ASSESSMENTS, STREAM CHARACTERIZATIONS, AND SURVEYS FOR AQUATIC MACROINVERTEBRATES

METHODS

On 29 September 2021, INHS personnel J.L. Robinson visited the project corridor to complete habitat assessments, stream characterizations, take photographs, and conduct surveys for aquatic macroinvertebrates in Raccoon Creek, downstream of Interstate 57, in the proposed IDOT Sequence 21410A project corridor in Marion County, IL (**Figure 1**).

SITE ASSESSMENT

Site assessment (based upon habitation conditions) is used to evaluate, and then select, sites suitable for sampling fishes, freshwater mussels, aquatic macroinvertebrates, and conducting water quality monitoring. These assessments are primarily useful for larger projects where numerous possible sampling locations are possible, allowing for site selection, as well as assessment of the relationship between habitat quality and biotic integrity. For small projects with one to few sites, site assessments serve to characterize the habitat quality, and sites may be sampled in spite of scoring poorly in site assessment.

Site assessment utilizes the *Qualitative Stream Habitat Assessment Procedure (SHAP)* in Appendix E-9 of the Illinois Environmental Protection Agency (ILEPA) Division of Water Pollution Control (DWPC) Field QA Manual (DWPC-ILEPA 1994). This approach is described in detail in the section *5.0 Qualitative Stream Habitat Assessment Procedures (SHAP)* of the DWPC Field QA Manual (DWPC-ILEPA 1994, Appendix E-5.1). Based on the assessment of 15 parameters, this assessment results in a total score, providing an overall habitat quality rating for the stream reach. The total raw score could, theoretically, range from 15 to 208 (**Table 1**), but because different metrics may be better or worse, extreme values for the total score are unlikely. Overall score cutoff points for "poor", "fair", "good" and "excellent" are not provided by ILEPA, but guidance based on relative similarity of sites to reference conditions is provided (**Table 2**). The scores and metrics differ from the U.S. EPA Habitat Assessment approach (Plafkin et al. 1989, Barbour et al. 1999), though the general approach is similar. To allow evaluation of habitat assessments in cases where there is only a single site (with no comparisons among sites possible), and to allow more detailed understanding of individual sites, we first report the overall habitat assessment score then plot the individual metrics after

adjusting them to a standardized scale to allow comparisons. The standardized scale ranges from 0 to 100 for each metric, and the value is calculated as

$$X_s = ((X-1) / (X_{max}-1)) \times 100$$

where X_s is the standardized metric value, X is the metric value, and X_{max} is the maximum possible value for the metric.

Table 1. Habitat metrics and habitat quality categories for the qualitative Stream Habitat Assessment Procedure (SHAP). Minimum and maximum values for metrics from DWPC-ILEPA (1994: Table 5.1). The maximum value for "Excellent" is used as X_{max} in calculation of the standardized metric value (see methods).

		Habitat Quality Categories							
		Poor		Fair		Good		Excellent	
Metric		Min	Max	Min	Max	Min	Max	Min	Max
Substrate and In-stream Cover									
1	**Bottom Substrate**	1	5	6	10	11	15	16	20
2	**Deposition**	1	3	4	6	7	9	10	12
3	**Substrate Stability**	1	4	5	8	9	12	13	16
4	**In-stream Cover**	1	3	4	6	7	9	10	12
5	**Pool Substrate**	1	5	6	10	11	15	16	20
Channel Morphology and Hydrology									
6	**Pool Quality**	1	4	5	8	9	12	13	16
7	**Pool Variability**	1	4	5	8	9	12	13	16
8	**Channel Alteration**	1	2	3	4	5	6	7	8
9	**Channel Sinuosity**	1	3	4	6	7	9	10	12
10	**Width/Depth**	1	4	5	8	9	12	13	16
11	**Hydrologic Diversity**	1	3	4	6	7	9	10	12
Riparian and Bank Features									
12	**Canopy Cover**	1	3	4	6	7	9	10	12
13	**Bank Vegetation**	1	4	5	8	9	12	13	16
14	**Immediate Land Use**	1	2	3	4	5	6	7	8
15	**Flow Related Refugia**	1	3	4	6	7	9	10	12

Table 2. Stream habitat percent similarity categories for site comparability assessments from Michigan Department of Natural Resources (1991), as given in the DWPC Field QA Manual [DWPC-ILEPA 1994: Table 5.2]).

Habitat Quality Category		Percent Similarity
Excellent	Very Similar to Reference	>= 90%
Good	Slightly Different	75-89%
Fair	Moderately Different	60-74%
Poor	Substantially Different	<=59%

TYPES AND PROPORTIONS OF PERTINENT MACROINVERTEBRATE HABITATS

Aquatic macroinvertebrate sampling using the ILEPA 20-Jab Allocation method (ILEPA 2011a), which we use in the present study, requires that the types and amounts of pertinent habitats be determined in advance. We follow the methods given in ILEPA (2011b) to allocate the 20 jabs to appropriate bank and bottom habitats across a 300-foot long stream reach, which constitutes a sampling site. When suitably qualified, trained, and experienced personnel are conducting the sampling, we use the *Non-transect habitat characterization method* (ILEPA 2011b); otherwise, the *11-transect habitat characterization method* (ILEPA 2011b), is used. Regardless, at each site we create three stream profiles and measure average flow (ft/sec).

SAMPLING AQUATIC MACROINVERTEBRATES

Site sampling of aquatic macroinvertebrates utilizes the 20-jab allocation method (ILEPA 2011a) with jabs allocated based on methods described above. Sample collection and preservation follows the standard operating procedures given by ILEPA (2011a). The 20 jabs are combined in the field to produce a single sample, preserved with 95% ethanol, and then taken to the laboratory for processing.

LABORATORY PROCESSING, IDENTIFICATION, ANALYSES, AND CALCULATION OF mIBI

In the laboratory, samples are sorted, subsampled (when appropriate) with specimens picked from samples, then counted and identified following ILEPA methodology (ILEPA 2011c). Laboratory subsampling typically results in a random subsample comprised of ~300 (+/- 60) aquatic macroinvertebrate specimens, but in some instances fewer than 300 individual macroinvertebrates are collected in the entire sample. In these circumstances, the entire sample is processed. For this project, due to low abundance

in the sample, the entire sample from **Site 1550** on Raccoon Creek was sampled. Specimens are identified to the lowest level of taxonomic resolution using Merritt et al. (2008), Morse et al. (2017), Page (1985), Thorp and Covich (2001), Wetzel (1992), Kathman and Brinkhurst (1998), Wetzel et al. (2009), Wetzel et al. (2021), Reynolds and Wetzel (2021), and pertinent literature cited within these references.

For each taxon, a tolerance value and functional feeding group is assigned based on values from ILEPA (2010). Using the identifications, counts, tolerance values, and functional feeding groups for the taxa present in the sample, we calculate site-level scores for seven metrics (**Table 3**). Note that Coleoptera Taxa, Intolerant Taxa, and Total Taxa metrics ***do not*** include taxa which are not considered aquatic by ILEPA – that is, these metrics do not include taxa for which there is no taxon tolerance value (ILEPA 2010).

Table 3. Seven metrics calculated for aquatic macroinvertebrates with response of metric to perturbation and best values (ILEPA 2011c: Table 1).

Metric	Response to Perturbation	Best Value
Coleoptera Taxa	Decrease	5
Ephemeroptera Taxa	Decrease	10.2
Total Taxa	Decrease	46
Intolerant Taxa	Decrease	9
MBI	Increase	4.9
Percent Scraper	Decrease	29.6
Percent EPT	Decrease	74

After calculation of metrics in **Table 3**, metrics are standardized and then averaged to produce the final macroinvertebrate Index of Biotic Integrity (mIBI), as described in ILEPA (2011c). The mIBI provides a basis for categorizing sites into mIBI quality categories based upon analyses of the aquatic macroinvertebrate fauna (**Table 4**).

Calculation of the seven metrics and the mIBI is carried out in the R statistical analysis software (R Core Team 2012), reading in a reference file of tolerance values and functional feeding groups for all Illinois aquatic macroinvertebrates based on ILEPA (2010). Project aquatic macroinvertebrate identifications and counts are read in as a second file, with a code for each taxon allowing matching of the two files and assignment of functional feeding groups and tolerance values. Within R, packages *plyr* (Wickham 2011) and *reshape* (Wickham 2007) are called to facilitate completion of analyses.

Table 4. Macroinvertebrate IBI quality categories (ILEPA 2011c: Table 2).

mIBI Index Score			
Lower Boundary	**Upper Boundary**	**Comparison to Reference**	**Narrative Description**
73.0	100.0	>75th percentile	Exceptional
41.8	72.9	>10th percentile	Good
20.9	41.8	bisect 10th percentile (upper)	Fair
0.0	20.8	bisect 10th percentile (lower)	Poor

RESULTS AND DISCUSSION

HABITAT ASSESSMENT

Site FS1550— Physical habitat assessment of Raccoon Creek in the Seq. 21410A project corridor (Marion County, Illinois), scored **71** on the **raw** field score, and **34.1** on the standardized **IEPA SHAP** scale – a score associated with **Poor** values (i.e. a poor correspondence with expected natural conditions; **Table 2**). Despite this "poor" score, when we plot individual site metrics from this reach against the standardized range of values, three measures of benthic habitat quality in this stream section scored as "fair" (**Figure 11**): instream cover, canopy cover and top of bank land use. The undercut banks contributed to enhancing the instream cover score, since these habitats provide refugia and cover to stream organisms in this section of Raccoon Creek during all levels of discharge.

Figure 11. The fifteen metrics used to calculate the habitat assessment score, adjusted to standardized metric values, as scored for Raccoon Creek at **Site FS1550** by INHS personnel on 29 September 2021.

AQUATIC MACROINVERTEBRATES

Site FS1550— Benthic macroinvertebrate abundance was notably low, in the field collection. Due to this paucity of individuals, the entire sample was identified (**Figure 12**). A total of 277 macroinvertebrates were identified from the sample collected from Raccoon Creek, at Interstate 57, in Marion County, Illinois, on 29 September 2021. Twelve terminal taxa were recorded from this sample, representing 3 phyla, 5 classes, 10 orders and 12 families.

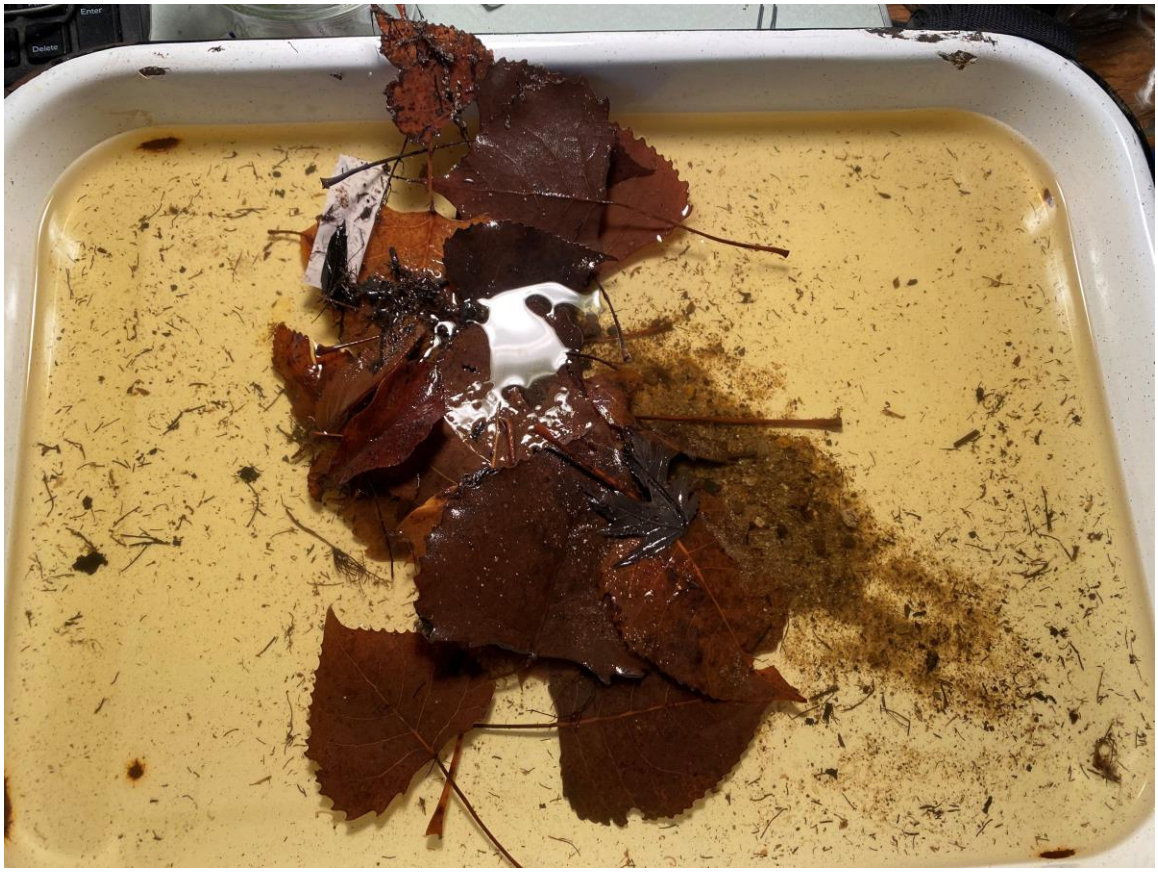


Figure 12. The sample from **Site 1550** was particularly depauperate, in terms of individual benthic macrovinvertebrate density and diversity. The entire sample was sorted, and all specimens were identified and enumerated for inclusion in this report.

One benthic macroinvertebrate metric (MBI) was in the higher range of observed values in Illinois, but most macroinvertebrate metrics were in the lower fraction of the possible range of values (**Figure 13**). Chironomids were by far the dominant taxa at the site, comprising 61.0% of the total number of individuals in the sample (**Table 5**). Raccoon Creek at **Site 1550,** just downstream (west-southwest) of the Interstate 57 crossing, scored a **6.1** on the **MBI** tolerance metric. This score is in the upper quartile of expected IL values and **20.5** on the **mIBI** composite metric (in the upper range of "**Poor**" values in the narrative description; **Table 4**). Collector-gatherers accounted for 99.1% of the individuals in the assemblage with *known trophic status* (**Figure 14**; trophic relations for 55 individuals in this sample were unknown, including mites, cladocerans, and copepods). Cladocerans and copepods, in particular, are more frequently associated with lentic habitats than stream habitats (Robinson, pers. observations). We collected two intolerant taxa, and three EPT taxa, from this site.

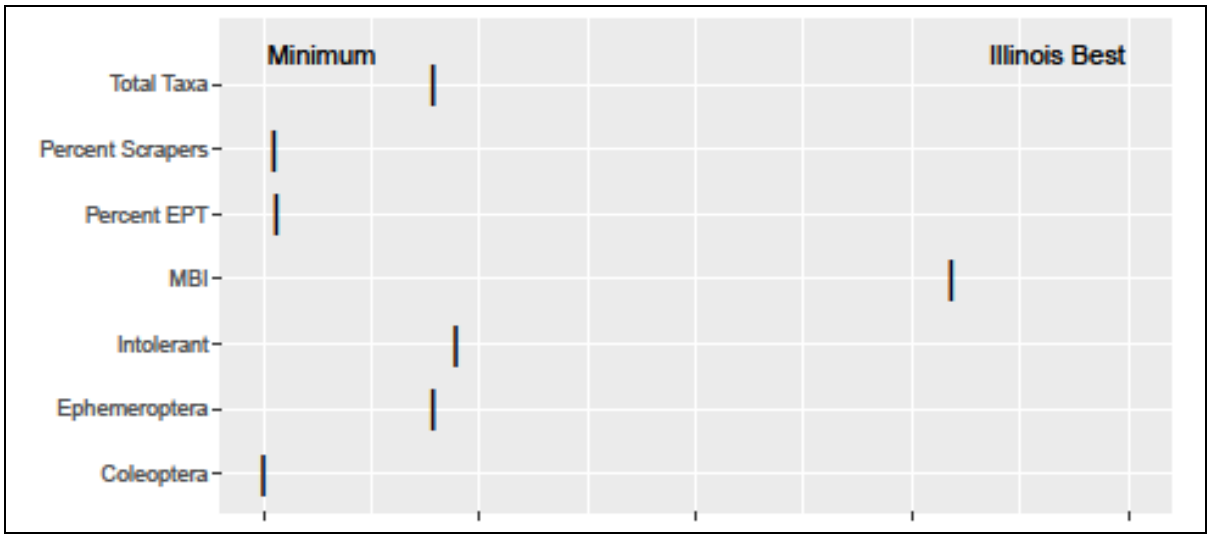


Figure 13. Aquatic macroinvertebrate summary metrics from sample collected at **Site FS1550**, Raccoon Creek at Interstate 57, in the IDOT Sequence 21410A project corridor, Marion County, Illinois by INHS personnel on 29 September 2021.

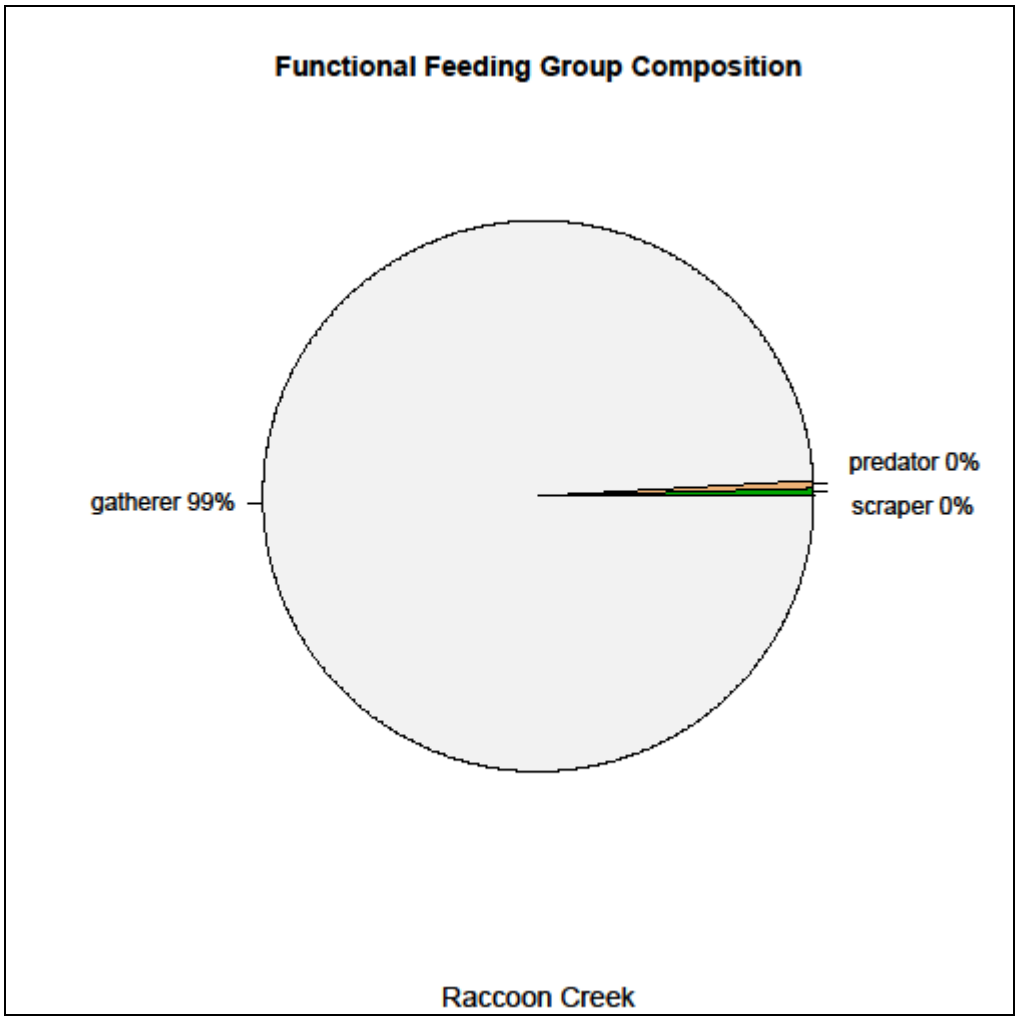


Figure 14. Proportions of functional feeding groups (FFG) of aquatic macroinvertebrates present in the sample collected from **Site FS1550** on Raccoon Creek in Marion County, Illinois by INHS personnel on 29 September 2021.

No federal or state listed taxa were observed during the course of this sampling (USDI-FWS 1996, USDI-FWS 1997, USDI-FWS 1999, Mankowski 2010, IESPB 2015). **Appendix 1** is a shapefile of the project area and stream sampling site. **Appendix 2** gives laboratory measurements of water quality parameters from water samples collected 2 October 2020 and shipped to PDC Laboratories, Inc. (Hazelwood, Missouri) the following day.

Table 5. List of aquatic macroinvertebrates identified from the sample collected by INHS personnel from **Site FS1550** in Raccoon Creek in Marion County, Illinois on 29 September 2021. Taxa denoted by * have not been assigned tolerance values by ILEPA.

Phylum: Class	Order: Family	Taxon	Stage	Count
Annelida: Clitellata				
	Tubificida: Naididae			
		Stylaria lacustris	N	18
Arthropoda: Crustacea				
	Amphipoda: Gammaridae			
		Gammarus sp.	N	11
	Cladocera			
		Cladocera *	N	6
	Copepoda			
		Copepoda *	N	10
	Arachnida: Acarii			
		Acarii *	N	10
Arthropoda: Insecta				
	Diptera: Chironomidae			
		Chironomidae	L	169
	Diptera: Ephydridae			
		Ephydridae	L	2
	Ephemeroptera: Caenidae			
		Caenis sp.	N	47
	Ephemeroptera: Ameletidae			
		Ameletus sp.	N	1
	Odonata: Coenagrionidae			
		Enallagma sp.	N	1
	Trichoptera: Hydroptilidae			
		Hydroptilidae	P	1

ACKNOWLEDGEMENTS

Jennifer Solomon (PDC Laboratories, Inc., Hazelwood, Missouri) facilitated laboratory assessment of water quality. The map in **Figure 1** was created by Janet L. Jarvis, INHS GIS and Remote Sensing Specialist. Mark J. Wetzel provided identifications for the annelid taxa collected during this study and edited the draft version of this report.

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APPENDIX 1

This appendix cover page references < **21410A_Macroinvert_Survey_GIS.shp**> - an ArcGIS shapefile - with sampling point information for **Site FS1550** (Raccoon Creek) within the IDOT Sequence No. 21410A project corridor (Marion County, Illinois), where surveys for aquatic macroinvertebrates, habitat assessments, stream characterizations and water quality sampling were conducted by INHS personnel on 29 September 2021. The ArcGIS shapefile and this report were both submitted to IDOT (via the IDOT Site Assessment Tracking System extranet website).

APPENDIX 2

Values for water quality parameters resulting from analyses of raw water samples collected by INHS personnel from **Site FS1550** on Raccoon Creek at the Interstate 57 crossing, within the IDOT Sequence No. 21410A project corridor (Marion County, Illinois) on 29 September 2021.

ANALYTICAL RESULTS

Sample: EJ00050-01
Name: 10 Sample Grab
Matrix: Surface Water - Regular Sample

Sampled: 09/30/21 14:30
Received: 10/01/21 10:50
PO #: P2093718

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Miscellaneous - Pace Analytical - Green Bay									
Mercury - subcontracted	2.58	ng/L			1	0.5	10/12/21 10:10		Subcontracted

ANALYTICAL RESULTS

Sample: EJ00050-01
Name: 10 Sample Grab
Matrix: Surface Water - Regular Sample

Sampled: 09/30/21 14:30
Received: 10/01/21 10:50
PO #: P2093718

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Anions - STL									
Chloride	21	mg/L		10/01/21 16:22	10	5.0	10/01/21 16:27	DAS	EPA 300.0
Fluoride	< 0.50	mg/L	Xa	10/05/21 14:33	1	0.50	10/06/21 00:34	DAS	EPA 300.0*
Nitrate-N	< 0.50	mg/L	X	10/05/21 14:33	1	0.50	10/06/21 00:34	DAS	EPA 300.0
Nitrite-N	< 0.50	mg/L		10/01/21 16:22	1	0.50	10/01/21 18:13	DAS	EPA 300.0
Sulfate	87	mg/L		10/01/21 16:22	25	12	10/01/21 17:20	DAS	EPA 300.0
General Chemistry - PIA									
Oil & Grease - total	< 5.1	mg/L		10/05/21 06:06	1.013069	5.1	10/05/21 06:06	DLE	EPA 1664A
General Chemistry - STL									
Cyanide	< 0.0050	mg/L		10/14/21 07:30	1	0.0050	10/14/21 19:01	CLH	SM 4500-CN C E*
Cyanide - weak acid dissociable	< 0.0050	mg/L		10/14/21 07:30	1	0.0050	10/14/21 19:01	CLH	ASTM 1310*
Cyanide - weak acid dissociable	< 0.0050	mg/L	C	10/11/21 10:55	1	0.0050	10/11/21 16:56	CLH	ASTM 1310*
Hexavalent chromium	< 0.005	mg/L		10/01/21 12:23	1	0.005	10/01/21 12:23	BCH	SM 3500-Cr B*
Phenol	< 0.050	mg/L		10/08/21 16:41	1	0.050	10/08/21 16:52	CLH	EPA 420.1
Solids - total suspended solids (TSS)	10	mg/L		10/05/21 13:38	1	4.0	10/05/21 16:50	SJP	SM 2540D
Total Nitrogen	< 1.0	mg/L		10/07/21 16:13	1	1.0	10/11/21 16:32	BCH	calculated
Nutrients - STL									
Total Kjeldahl Nitrogen (TKN)	< 1.0	mg/L		10/07/21 16:13	1	1.0	10/11/21 16:32	BCH	OIA/PAI-DK03 & EPA 351.2 REV 2*
Ammonia-N	< 0.50	mg/L		10/05/21 12:13	1	0.50	10/05/21 16:04	BCH	EPA 350.1 REV2

ANALYTICAL RESULTS

Sample: EJ00050-01
Name: 10 Sample Grab
Matrix: Surface Water - Regular Sample

Sampled: 09/30/21 14:30
Received: 10/01/21 10:50
PO #: P2093718

Parameter	Result	Unit	Qualifier	Prepared	Dilution	MRL	Analyzed	Analyst	Method
Soluble Metals - STL									
Iron	0.0406	mg/L		10/05/21 18:31	1	0.0300	10/06/21 07:47	KAM	EPA 200.7 REV 4.4
Total Metals - STL									
Arsenic	< 0.0250	mg/L		10/01/21 14:48	1	0.0250	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4
Barium	0.0651	mg/L		10/01/21 14:48	1	0.0100	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4
Hardness	164	mg/L		10/01/21 14:48	1	0.237	10/04/21 11:50	JMW1	SM 2340B 1997
Cadmium	< 0.00100	mg/L		10/01/21 14:48	1	0.00100	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4
Calcium	41.8	mg/L		10/01/21 14:48	1	0.0950	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4
Chromium	< 0.00500	mg/L		10/01/21 14:48	1	0.00500	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4
Copper	< 0.00500	mg/L		10/01/21 14:48	1	0.00500	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4
Iron	1.15	mg/L		10/01/21 14:48	1	0.0300	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4
Lead	< 0.0400	mg/L		10/01/21 14:48	1	0.0400	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4
Magnesium	14.5	mg/L		10/01/21 14:48	1	0.0500	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4
Manganese	0.792	mg/L		10/01/21 14:48	1	0.00300	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4
Nickel	< 0.00500	mg/L		10/01/21 14:48	1	0.00500	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4
Selenium	< 0.0400	mg/L		10/01/21 14:48	1	0.0400	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4
Silver	< 0.00500	mg/L		10/01/21 14:48	1	0.00500	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4
Phosphorus	0.135	mg/L		10/01/21 14:48	1	0.0500	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4
Zinc	< 0.0100	mg/L		10/01/21 14:48	1	0.0100	10/04/21 11:50	JMW1	EPA 200.7 REV 4.4

JOINT APPLICATION FORM FOR ILLINOIS

ITEMS 1 AND 2 FOR AGENCY USE

1. Application Number	2. Date Received

3. and 4. (SEE SPECIAL INSTRUCTIONS) NAME, MAILING ADDRESS AND TELEPHONE NUMBERS

3a. Applicant's Name	3b. Co-Applicant/Property Owner Name (if needed or if different from applicant)	4. Authorized Agent (an agent is not required)
Keith Roberts, PE Acting Region 5 Engineer Illinois Department of Transportation District 8 1102 Eastport Plaza Drive Collinsville, IL 62234-6198		Philip Coppernoll, PE Illinois Department of Transportation District 8 1102 Eastport Plaza Drive Collinsville, IL 62234-6198 philip.coppernoll@illinois.gov
Applicant's Phone Nos. w/area code Business: 618-346-3100 Residence: Cell: Fax:	Applicant's Phone Nos. w/area code Business: Residence: Cell: Fax:	Agent's Phone Nos. w/area code Business: 618-346-3181 Residence: Cell: Fax: 618-346-3203

STATEMENT OF AUTHORIZATION

I hereby authorize, _____Philip Coppernoll_____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

_____ _____

Applicant's Signature Date

5. ADJOINING PROPERTY OWNERS (Upstream and Downstream of the water body and within Visual Reach of Project)

Name	Mailing Address	Phone No. w/area code
a. b. c. d.	See Attached	

6. PROJECT TITLE:
I-57 Pavement and Ramp Reconstruction

7. PROJECT LOCATION From Jefferson County line to 0.7 miles North of IL 161 Interchange

	Project Start	Project End	Culvert Extension
LATITUDE:	38.516983	38.530152	38.516983
LONGITUDE:	-88.961104	-88.964415	-88.961104

UTMs 16S

	Project Start	Project End	Culvert Extension
Northing:	4260447.31 N	4266468.64 N	4265000.38 N
Easting:	329047.08 E	328771.80 E	329028.47 E

STREET, ROAD, OR OTHER DESCRIPTIVE LOCATION	LEGAL DESCRIPT	QUARTER	SECTION	TOWNSHIP NO.	RANGE
I-57		NW Kell SW Salem	35-34, 27-26, 23-22, 15-14	1N	2E

☐ IN OR ☒ NEAR CITY OF TOWN (check appropriate box)
Municipality Name
Kell, IL; Walnut Hill, IL

COUNTY	STATE	ZIP CODE
Marion	IL	62893 62801

WATERWAY: Raccoon Creek and Unnamed Tributaries to Raccoon Creek

RIVER MILE (if applicable):

Revised 2011

☐ Corps of Engineers ☐ IL Dept of Natural Resources ☐ IL Environmental Protection Agency ☐ Applicant's Copy

8. PROJECT DESCRIPTION (Include all features) This project consists of the removal and replacement of approximately 3.72 miles of interstate pavement, interchange ramp reconfiguration, a significant culvert widening, minor bridge repairs to the overhead structures, drainage improvements, pipe underdrain installation, and the earthwork, traffic control, temporary pavement cross-overs, and miscellaneous items required to complete the work. The project begins at the Jefferson County line and extends to 0.7 miles north of the IL 161 interchange. With the exception of the temporary cross-over pavements, and the four interchange ramps at IL 161, the alignment remains the same as the existing alignment with minor widening of the inside and outside shoulders in order to accommodate stage traffic and to improve safety. The proposed typical section consists of 2 - 12ft wide lanes with a 6ft inside and 12ft outside paved shoulders. The four interchange ramps will be re-aligned to incorporate policy taper/transition lengths and will have the same paved width as the existing, one 16ft lane with 8ft and 10ft shoulders. Vertical profile changes are minimal, therefore extensive shoulder earthwork is not necessary. Approximately 223,202 cubic yards of Earth Excavation, 46,768 cubic yards of Subbase Granular Material, Type B, 133,812 square yards of Subbase Granular Material, Type B 12", 85,827 square yards of Subbase Granular Material, Type C 4", 917 tons of Aggregate Base Course, Type A will be used to reconstruct the pavement and reconfigure the interchange ramps. Approximately 116 square yards of Stone Riprap, Class A3, 686 square yards of Stone Riprap, Class A4, and 699 square yards of Stone Riprap, Class A5 will be used at culvert outlets to provide channel stabilization and erosion control.

9. PURPOSE AND NEED OF PROJECT:
The project's purpose is to replace a failed pavement structure and to improve safety.

COMPLETE THE FOLLOWING FOUR BLOCKS IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

10. REASON(S) FOR DISCHARGE:

See attached Antidegradation Assessment

11. TYPE(S) OF MATERIAL BEING DISCHARGED AND THE AMOUNT OF EACH TYPE IN CUBIC YARDS FOR WATERWAYS:

TYPE: See attached Antidegradation Assessment

AMOUNT IN CUBIC YARDS:

12. SURFACE AREA IN ACRES OF WETLANDS OR OTHER WATERS FILLED (See Instructions)

3.94 acres of wet meadow and wet shrubland, 0.83 acres of forested wetland, and 1.68 acres of marsh

13. DESCRIPTION OF AVOIDANCE, MINIMIZATION AND COMPENSATION (See instructions)

See attached Antidegradation Assessment

14. Date activity is proposed to commence: May of 2022 — Date activity is expected to be completed: October of 2023

15. Is any portion of the activity for which authorization is sought now complete? Yes [ ] No [x] NOTE: If answer is "YES" give reasons in the Project Description and Remarks section. Indicate the existing work on drawings.
Month and Year the activity was completed

16. List all approvals or certification and denials received from other Federal, interstate, state, or local agencies for structures, construction, discharges or other activities described in this application.

Issuing Agency	Type of Approval	Identification No.	Date of Application	Date of Approval	Date of Denial

17. CONSENT TO ENTER PROPERTY LISTED IN PART 7 ABOVE IS HEREBY GRANTED. [Yes] No

18. APPLICATION VERIFICATION (SEE SPECIAL INSTRUCTIONS)

Application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

Signature of Applicant or Authorized Agent — Date

Signature of Applicant or Authorized Agent — Date

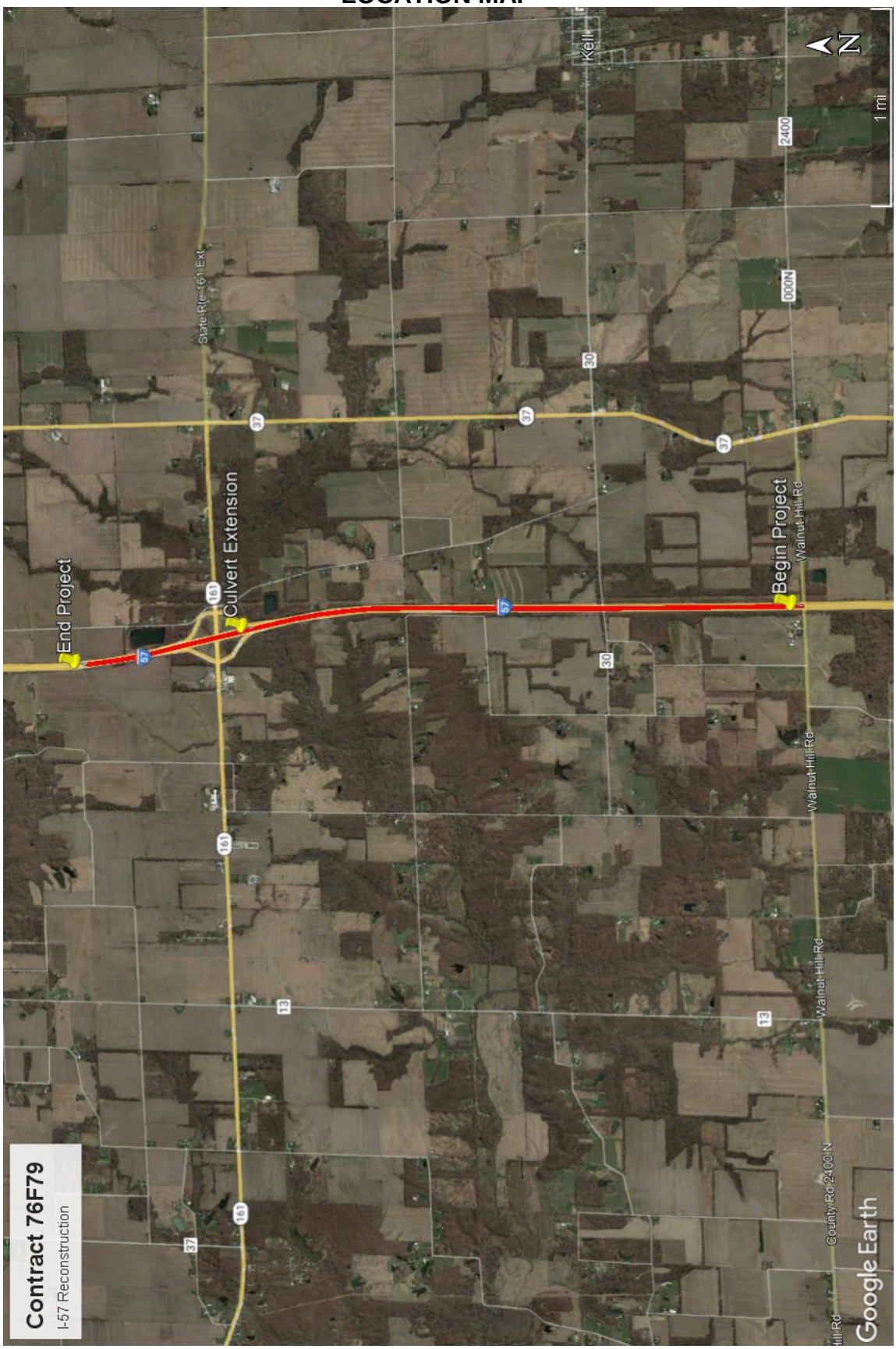
Signature of Applicant or Authorized Agent — Date

[ ] Corps of Engineers [ ] IL Dept of Natural Resources [ ] IL Environmental Protection Agency [ ] Applicant's Copy

Revised 2011

SEE INSTRUCTIONS FOR ADDRESS

LOCATION MAP



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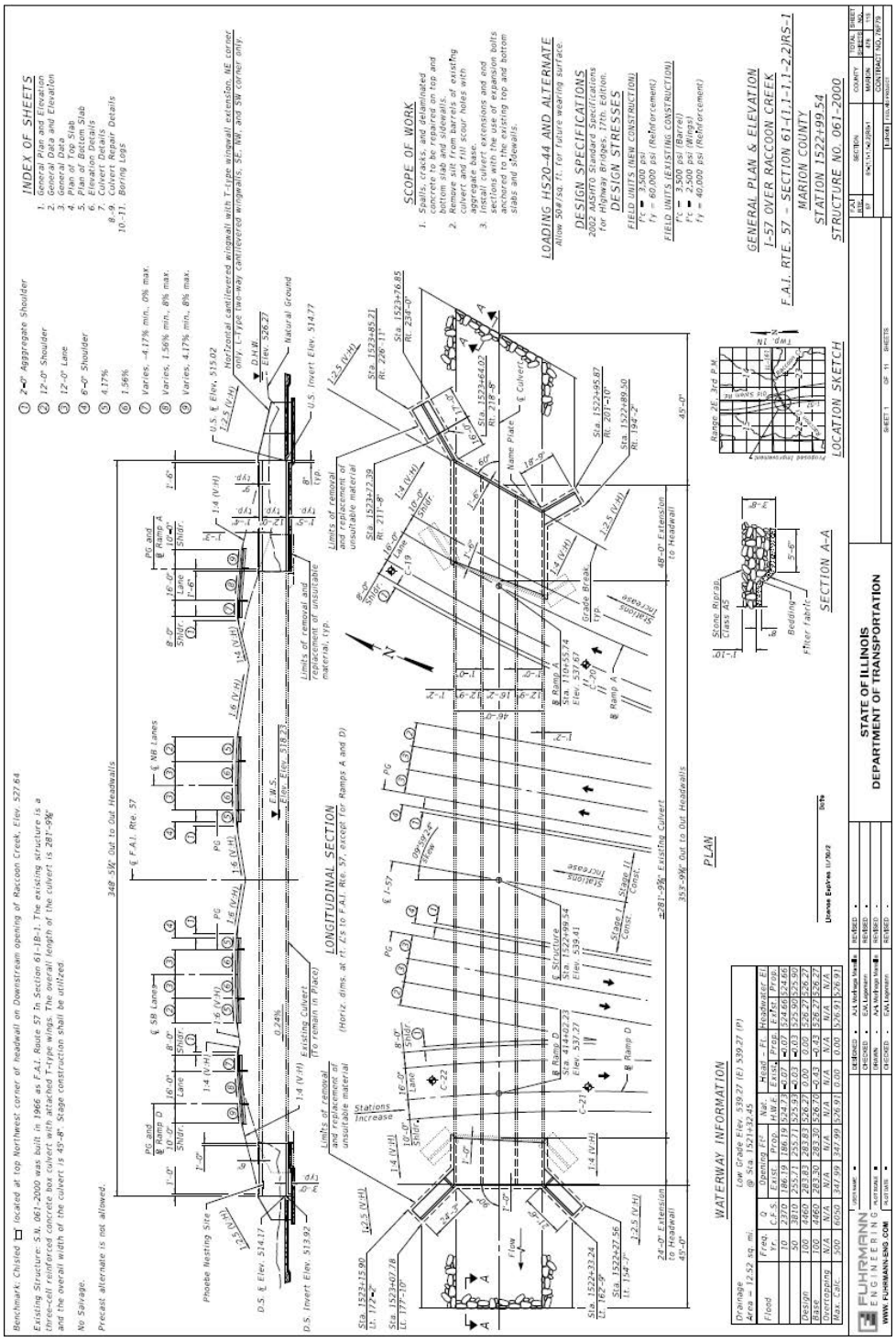
☐ Corps of Engineers ☐ IL Dept of Natural Resources ☐ IL Environmental Protection Agency ☐ Applicant's Copy

PLAN VIEW



Culvert Extension Plan
(additional plan details
attached at end of submittal)

FOR AGENCY USE ONLY

Revised 2011

☐ Corps of Engineers ☐ IL Dept of Natural Resources ☐ IL Environmental Protection Agency ☐ Applicant's Copy

Parcel Info					Owner Info				
Number	Address	Town	State	Zip	Name	Address	Town	State	Zip
1535300011	4071 Walnut Hill Road	Walnut Hill	IL	62893	Walter and Susan Lapie	4071 Walnut Hill Road	Walnut Hill	IL	62893
1534400002	3963 Walnut Hill Road	Walnut Hill	IL	62893	Revocable Liv Tr Donald and Peggy Hester	3963 Walnut Hill Road	Walnut Hill	IL	62893
1534200010	250 March Road	Walnut Hill	IL	62893	Michael Caldwell	250 March Road	Walnut Hill	IL	62893
1535100008	281 Old Salem Road	Kell	IL	62853	George and Cynthia Oglesby	1230 Racetrack Road	Centralia	IL	62801
1534200019	312 March Road	Walnut Hill	IL	62893	Mack Jr and Anna Schmitt	312 March Road	Walnut Hill	IL	62893
1534200020	NA				Mack Schmitt Jr	312 March Road	Walnut Hill	IL	62893
1534200004	NA				Charles Klingenberg	C/O James Klingenberg 405 N Walnut	Centralia	IL	62801
1534200002	305 March Road	Walnut Hill	IL	62893	Harry Braddock and Cindy Lynn McCleary	C/O Olive June Braddock 301 Jasper Road	Walnut Hill	IL	62893
1534200029	3881 Kell Road	Centralia	IL	62801	Aaron and Melissa Shaw	3881 Kell Road	Centralia	IL	62801
1534200025	3846 Kell Road	Centralia	IL	62801	Cody Winkler	3846 Kell Road	Centralia	IL	62801
1535100001	NA				Travis Oglesby	1724 Gragg	Centralia	IL	62801
1535100004	NA				Travis and George Oglesby	1796 Satellite Blvd Unit 1404	Duluth	GA	30097
1535200010	NA				William and Amy Mathena	741 St Route 37	Kell	IL	62853
1526300007	NA				William and Amy Mathena	741 St Route 37	Kell	IL	62853
1526300005	4105 Kell Road	Salem	IL	62881	Jada Webb	2106 Maplewood Ave	Salen	IL	62801
1526300006	4075 Kell Road	Centralia	IL	62801	Edward McCracken Jr and Jolean Harvey	4075 Kell Road	Centralia	IL	62801
1526300002	NA				William and Amy Mathena	741 St Route 37	Kell	IL	62853
1527400003	NA				Timothy and Matthew Pheonix	28200 W 4th St.	Centralia	IL	62801
1527400001	NA				Charles Klingenberg	C/O James Klingenberg 405 N Walnut	Centralia	IL	62801
1527200007	NA				Timothy and Matthew Pheonix	28200 W 4th St.	Centralia	IL	62801
1527400004	NA				Timothy and Matthew Pheonix	28201 W 4th St.	Centralia	IL	62801
1526100010	639 Old Salem Rd.	Salem	IL	62853	Revocable Living Trust Paul and Linda Rector	639 Old Salem Rd.	Salem	IL	62853
1527200006	NA				Timothy and Matthew Pheonix	28200 W 4th St.	Centralia	IL	62801
1527200005	NA				James Michael Clark Et. Al.	2121 University Drive	Charleston	IL	61920
1527200004	Jasper Road	Centralia	IL	62801	Ryan and April Kent	3939 Bernard Road	Centralia	IL	62801
1527200003	Bernard Road	Centralia	IL	62801	Ryan and April Kent	3939 Bernard Road	Centralia	IL	62801
1522400005	3939 Bernard Road	Centralia	IL	62801	Ryan and April Kent	3939 Bernard Road	Centralia	IL	62801
1526100008	Old Salem Road	Kell	IL	62853	Revocable Living Trust Paul and Linda Rector	639 Old Salem Rd.	Salem	IL	62853
1526100007	711 Old Salem Road	Kell	IL	62853	Draven Hutchings and Brittany Miller	711 Old Salem Road	Kell	IL	62853
1526100009	729 Old Salem Road	Kell	IL	62853	Charles and Debra Branch	729 Old Salem Road	Kell	IL	62853
1523300007	867 Old Salem Road	Centralia	IL	62801	C/O David and Margaret Holthaus	2958 Wellen Road	Highland	IL	62801
1523300009	Crowley Road	Kell	IL	62853	C/O Property Tax Dept	PO Box 723597	Atlanta	GA	31139
1522400002	NA				Ryan and April Kent	3939 Bernard Road	Centralia	IL	62801
1523300001	957 Old Salem Road	Centralia	IL	62801	Dennis and Doris Els	957 Old Salem Road	Centralia	IL	62801
1523100006	1026 Old Salem Road	Centralia	IL	62801	Phillip Collin	3016 West Dunes Highway	Michigan City	IN	46360
1522200007	NA				William and Amy Mathena	741 St Route 37	Kell	IL	62853
1522200017	State Route 161	Centralia	IL	62801	Kenneth Thomas Et. Al.	4005 State Route 161	Kell	IL	62853
1523100014	1074 Old Salem Road	Centralia	IL	62801	William and Amy Mathena	741 St Route 37	Kell	IL	62853
1523100002	1099 Old Salem Road	Centralia	IL	62801	Robert Johnson	1687 Community Beach Road	Odin	IL	62870
1523100008	4002 State Route 161	Kell	IL	62853	Thomas Baker	4002 State Route 161	Kell	IL	62853
1514300014	4005 State Route 161	Kell	IL	62853	Kenneth Thomas	4005 State Route 161	Kell	IL	62853
1523100015	NA				Glen Carpenter Et. Al.	2302 State Route 37	Salem	IL	62881
1514300004	4025 State Route 161	Kell	IL	62853	Daniel and Brittany Foutch	4025 State Route 161	Kell	IL	62853
1522200016	State Route 161	Centralia	IL	62801	Daryl Ramsour	25518 St Route 161	Centralia	IL	62801
1522200014	State Route 161	Centralia	IL	62801	Daryl Ramsour	C/O SBA Properties 8051 Congress Ave	Boca Raton	FL	33487
1522200011	3846 State Route 161	Centralia	IL	62801	Herman Rowcliff	1532 S. Poplar	Centralia	IL	62801
1522200015	NA				Jears Market Inc.	4086 Pontoon Road	Granite City	IL	62040
1522200003	3858 State Route 161	Centralia	IL	62801	Jears Market Inc.	4086 Pontoon Road	Granite City	IL	62040
1515400003	NA				Robert and Shelby Heser	224 S Pine	Centralia	IL	62801
1515400007	State Route 161	Centralia	IL	62801	ESPI Commercials, LLC.	822 129th Infantry Drive	Joliet	IL	60435
1515400006	3855 State Route 161	Centralia	IL	62801	Olympic Property #1, LLC.	3336 Olympic Lane	Centralia	IL	62801

Parcel Info					Owner Info				
Number	Address	Town	State	Zip	Name	Address	Town	State	Zip
1515400019	3853 State Route 161	Centralia	IL	62801	Ruth Kent	3450 State Route 161	Centralia	IL	62801
1515400014	1260 Old Salem Road	Kell	IL	62853	Rebecca Hocking and Robert Spencer	1260 Old Salem Road	Kell	IL	62853
1515400013	1262 Old Salem Road	Kell	IL	62853	Thomas Rozella Et. Al.	409 S 29th St	Herrin	IL	62948
1515400027	1275 Old Salem Road	Kell	IL	62853	Karon and Charles Mills	1275 Old Salem Road	Kell	IL	62853
1515400021	1343 Old Salem Road	Kell	IL	62853	Richard Glasgow	1343 Old Salem Road	Kell	IL	62853
1515400023	1347 Old Salem Road	Kell	IL	62853	Donald and Nancy Glasgow	1347 Old Salem Road	Kell	IL	62853
1515400022	NA				Kenneth Thomas	4005 State Route 161	Kell	IL	62853
1515400025	1244 Old Salem Road	Kell	IL	62853	Bryce Jeffords and Taylor Jones	1344 Old Salem Road	Kell	IL	62853
1515400026	1372 Old Salem Road	Kell	IL	62853	Scott and Amanda Carpenter	1372 Old Salem Road	Kell	IL	62853
1515400016	1383 Old Salem Road	Kell	IL	62853	Andrew Crundwell	1383 Old Salem Road	Kell	IL	62853
1515200007	NA				Gerald White	3766 White Farm Road	Centralia	IL	62801
1515200004	NA				Blair Farms LLC.	C/O Kenneth W Blair R/A 1201 W 7th St	Centralia	IL	62801
1515200002	NA				Barbara and Glen Carpenter	2302 State Route 37	Salem	IL	62881