Wetland Delineation Report

Project Site:

IL 131 (FAP 880/FAP 2711) Addendum A
Lake County, Illinois

IDOT Sequence Number: 14766A

Prepared by:
Paul Marcum, George Geatz, Brad Zercher, and Ben Beas

Wetland Science Program
Illinois Natural History Survey
1816 South Oak Street
Champaign, Illinois, 61820

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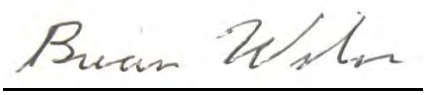
ILLINOIS NATURAL HISTORY SURVEY
PRAIRIE RESEARCH INSTITUTE

ILLINOIS
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Project Summary

A wetland survey was conducted for proposed work on IL 131 (FAP 880/FAP 2711) in Lake County, Illinois. This report documents wetland and Waters Of the United States (WOUS) sites on Addendum A for the proposed project. In addition, all wetlands within the original project limits were field checked to verify that they were still present and of the same size/shape. Also, WOUS sites were delineated within the original project limits. In all, sixty-six 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. Fifty-one sites were from the original project area (Feist et al. 2009; Feist et al. 2010) while fifteen sites are reported for the first time in this report. One previously reported site (Site 43) has been filled since the original delineations. 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 Positioning System. The spatial data have been digitally uploaded to the Illinois Site Assessment Tracking System (http://frostycap.isgs.uiuc.edu/idot_extranet). Locations of determination sites were overlaid on a digital orthophoto quadrangle (DOQ) using ArcGIS; the resulting figure is included in Appendix C. Additional maps and figures are also included in Appendix C.

Signed:  Date: July 8, 2013

Brian W. Wilm
Wetland Science Program
Assistant Project Leader for Botany

Conducted By: Paul Marcum and Ben Beas (Vegetation, Hydrology, and GPS)
George Geatz (Soils and Hydrology)
Brad Zercher (GIS)
University of Illinois
Prairie Research Institute
Illinois Natural History Survey
Wetland Science Program
1816 South Oak Street
Champaign, Illinois 61820
marcum@illinois.edu
(217) 333-8459 (Marcum)

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Cover Photo: Looking north from near the south edge of wetland Site 70 (marsh/wet meadow).

IL 131 (FAP 880/FAP 2711) Addendum A
Lake County, Illinois

Introduction

A wetland survey was conducted on 14-15 May and 11-12 June, 2013 for the proposed work on IL 131 (FAP 880/FAP 2711) Addendum A in Lake County, Illinois. This report documents a continuation of work reported on in 2009 (Feist et al.) and 2010 (Feist et al.). Sites 1 to 56 (Feist et al. 2009) and Site 57 (Feist et al. 2010) were field checked to verify they were still present and of the same size/shape. These sites were delineated using a previous system in which dominant species were determined using a meander survey of the site as a whole (i.e. sampling points were not used). The species lists, delineation forms, and site summaries for these sites can be found in the original reports (Feist et al. 2009; Feist et al. 2010). This report documents wetland and WOUS sites within Addendum A for the proposed project. A few new wetland sites within the original project area are also included in this report: these sites were either missed or newly created since the original project was completed. Wetlands in this report are continued from the original numbering, starting at Site 58, as requested by the Illinois Department of Transportation (Hargrove 2013). In addition, WOUS sites were also delineated throughout the original project area. Construction work is to include additional area for drainage design for a depressed roadway along the airport and extended eastbound turn lanes at IL 173 and Russell Road.

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. States Geological Survey topographic maps (Wadsworth and Zion 7.5 minute quadrangles); National Wetlands Inventory (NWI) maps (Wadsworth and Zion 7.5 minute quadrangles) (U.S. Fish and Wildlife Service); Lake County Wetland Inventory (LCWI) maps (Lake County Stormwater Management Commission 2000), Lake County Advanced Identification (ADID) wetland maps (Northeastern Illinois Planning Commission, U.S. Environmental Protection Agency, Lake County Stormwater Management Commission 1992), Illinois Wetlands Inventory (U.S. Fish and Wildlife Service, Illinois Department of Natural Resources, Illinois Natural History Survey 1996); 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 also completed for these areas. Comprehensive plant species lists were compiled for each wetland site and are presented in Appendix B.

Wetland and water boundaries were recorded using a Trimble Global Positioning System (either model Pathfinder Pro XR or Pathfinder Pro XRS), with a presumed accuracy of +/- 0.5 m under optimal field conditions. Occasionally, conditions prohibit field-delineation of boundaries using GPS equipment, and these boundaries are digitized in the office using aerial photography. Typically this is done when one of three issues prevents field personnel from conducting a normal field delineation:

- Site cannot be accessed due to fence, lack of permission, hostile landowner, or other reason.
- Current conditions make delineation impossible (for example, delineating a stream or other water during a major flood when boundaries cannot be seen in the field).
- Current conditions make field delineation dangerous to our personnel. This often occurs with very steep-sided banks on creeks that have a great deal of vegetation obscuring the drop-off.

When a site is delineated using aerial photography, the site boundary must be readily visible from the aerial photo, and not obscured by overhanging vegetation or other features on the photo.

Spatial data were digitally uploaded to the Illinois Site Assessment Tracking System (http://frostycap.isgs.uiuc.edu/idot_extranet). Locations of determination sites were overlaid on a digital orthophoto quadrangle (DOQ) and approximate area was determined for each wetland site using ArcGIS 10.1 software (ESRI 2012). All wetland delineation and WOUS sites are depicted on the wetland delineation figures (Appendix C, Figure 6 A to H). Delineation sites from the original project area (Sites 1 to 57) are depicted in yellow while new sites and those within the Addendum A project limits are in orange. Resulting areas are calculated in acres, reported to two decimal places. Area of streams and ditches is given for the open channel and omits any portion enclosed in a pipe or culvert. Length of streams and ditches is given for the entire length within the project corridor; this includes pipes and culverts where visual observation can locate both ends. 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) (Swink and Wilhelm 1994), 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 *Plants of the Chicago Region* (*ibid*.), while wetland indicator status for each species follows *North American Digital Flora: National Wetland Plant List, version 2.4.0* (Lichvar and Kartesz 2009).

Wetland Site Summaries

2009/2010 wetland delineation sites

Sites 1 to 57 are from the original wetland surveys conducted for this project in 2009 (Feist et al. 2009) and 2010 (Feist et al. 2010). These sites were field checked in 2013 to verify their presence and that they were of the same size/shape. HGM and waters type determinations were not given in the original report. Only isolated verses non-isolated wetland status was indicated. While mapping WOUS sites, it was determined that the isolated status of seven wetland sites should be changed from isolated to not isolated. These changes are indicated in the abbreviated wetland site summaries below. Complete species lists, wetland delineation forms, and wetland site summaries for Sites 1 to 57 can be found in the original reports (Feist et al. 2009; Feist et al. 2010).

Site Number: 1
Community Type: **Wet meadow**
Waters type (USACE and USEPA 2007): **Wetlands directly abutting RPWs that flow directly or indirectly into Traditional Navigable Waters (RPWWD)**

Site Number: 2
Community type: **Marsh**
Waters type (USACE and USEPA 2007): **Wetlands directly abutting RPWs that flow directly or indirectly into Traditional Navigable Waters (RPWWD)**

Site Number: 6
Community type: **Marsh**
Waters type (USACE and USEPA 2007): **Wetlands adjacent to non-RPWs that flow directly or indirectly into Traditional Navigable Waters (NRPWW)**

Site Number: 26
Community type: **Wet meadow**
Waters type (USACE and USEPA 2007): **Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into Traditional Navigable Waters (RPWWN)**

Site Number: 51
Community type: **Wet meadow**
Waters type (USACE and USEPA 2007): **Wetlands adjacent to non-RPWs that flow directly or indirectly into Traditional Navigable Waters (NRPWW)**

Site Number: 52
Community type: **Forested wetland**
Waters type (USACE and USEPA 2007): **Wetlands adjacent to non-RPWs that flow directly or indirectly into Traditional Navigable Waters (NRPWW)**

Site Number: 53
Community type: **Wet meadow**
Waters type (USACE and USEPA 2007): **Wetlands directly abutting RPWs that flow directly or indirectly into Traditional Navigable Waters (RPWWD)**

2013 wetland delineation sites

Site Number: 58
Community type: **Marsh**
National Wetlands Inventory code: **U (upland)**
Site location: **Approximately 12, 14, 16 feet north, 6 and 60 feet south of Russell Road**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.36 ac**
Total site area: **Undetermined**
Is this a county wetlands inventory site? **Yes**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
Waters type (USACE and USEPA 2007): **Wetlands adjacent to non-RPWs that flow directly or indirectly into Traditional Navigable Waters (NRPWW)**
HGM type: **Depressional**
Mean Coefficient of Conservatism (mean C): **2.8** Floristic Quality Index (FQI): **16.4**

Site Number: 59
Community type: **Wetland pond**
National Wetlands Inventory code: **U (upland)**
Site location: **Approximately 147 feet east of IL 131**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.12 ac**
Total site area: **0.25 ac**
Is this a county wetlands inventory site? **No**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**

Waters type (USACE and USEPA 2007): **Isolated interstate or intrastate waters including isolated wetlands (ISOLATE)**
HGM type: **Depressional**
Mean Coefficient of Conservatism (mean C): **1.6** Floristic Quality Index (FQI): **4.2**

Site Number: 60
Community type: **Wet meadow**
National Wetlands Inventory code: **U (upland)**
Site location: **To the roadside on the east and west side of IL 131**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.32 ac**
Total site area: **0.32 ac**
Is this a county wetlands inventory site? **No**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
Waters type (USACE and USEPA 2007): **Isolated interstate or intrastate waters including isolated wetlands (ISOLATE)**
HGM type: **Depressional**
Mean Coefficient of Conservatism (mean C): **3.2** Floristic Quality Index (FQI): **11.0**

Site Number: 61
Community type: **Wet meadow**
National Wetlands Inventory code: **U (upland)**
Site location: **Approximately 78, 95 and 129 feet north of Rosecrans Road**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.03 ac**
Total site area: **0.03 ac**
Is this a county wetlands inventory site? **No**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
Waters type (USACE and USEPA 2007): **Wetlands adjacent to non-RPWs that flow directly or indirectly into Traditional Navigable Waters (NRPWW)**
HGM type: **Depressional**
Mean Coefficient of Conservatism (mean C): **1.0** Floristic Quality Index (FQI): **1.4**

Site Number: 62
Community type: **Marsh**
National Wetlands Inventory code: **U (upland)**
Site location: **Approximately 62 feet south of Rosecrans Road and 57 feet east of IL 131**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.17 ac**

Total site area: **0.20 ac**
Is this a county wetlands inventory site? **No**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
Waters type (USACE and USEPA 2007): **Isolated interstate or intrastate waters including isolated wetlands (ISOLATE)**
HGM type: **Depressional**
Mean Coefficient of Conservatism (mean C): **2.5** Floristic Quality Index (FQI): **8.9**

Site Number: 63
Community type: **Marsh**
National Wetlands Inventory code: **U (upland)**
Site location: **Approximately 134 feet south of Rosecrans Road**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.02 ac**
Total site area: **0.05 ac**
Is this a county wetlands inventory site? **No**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
Waters type (USACE and USEPA 2007): **Isolated interstate or intrastate waters including isolated wetlands (ISOLATE)**
HGM type: **Depressional**
Mean Coefficient of Conservatism (mean C): **1.6** Floristic Quality Index (FQI): **4.2**

Site Number: 64
Community type: **Wet meadow**
National Wetlands Inventory code: **U (upland)**
Site location: **Approximately 79 feet west of IL 131**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.12 ac**
Total site area: **0.12 ac**
Is this a county wetlands inventory site? **No**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
Waters type (USACE and USEPA 2007): **Wetlands adjacent to non-RPWs that flow directly or indirectly into Traditional Navigable Waters (NRPWW)**
HGM type: **Depressional**
Mean Coefficient of Conservatism (mean C): **2.2** Floristic Quality Index (FQI): **5.3**

Site Number: 65
Community type: **Wet meadow**
National Wetlands Inventory code: **U (upland) and PEMC (seasonally flooded, emergent, palustrine wetland)**
Site location: **Approximately 5 feet north of and to the roadside south of Taylor Lane**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **1.69 ac**
Total site area: **Undetermined**
Is this a county wetlands inventory site? **Yes**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
Waters type (USACE and USEPA 2007): **Wetlands directly abutting RPWs that flow directly or indirectly into Traditional Navigable Waters (RPWWD)**
HGM type: **Depressional**
Mean Coefficient of Conservatism (mean C): **2.1** Floristic Quality Index (FQI): **9.6**

Site Number: 66
Community type: **Wetland pond**
National Wetlands Inventory code: **U (upland)**
Site location: **Approximately 13 feet north of Van Court**
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: **0.15 ac**
Is this a county wetlands inventory site? **No**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
Waters type (USACE and USEPA 2007): **Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into Traditional Navigable Waters (RPWWN)**
HGM type: **Depressional**
Mean Coefficient of Conservatism (mean C): **3.4** Floristic Quality Index (FQI): **12.2**

Site Number: 67
Community type: **Marsh**
National Wetlands Inventory code: **U (upland)**
Site location: **Approximately 59 feet east of IL 131**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.07 ac**
Total site area: **0.13 ac**
Is this a county wetlands inventory site? **No**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**

Waters type (USACE and USEPA 2007): **Isolated interstate or intrastate waters including isolated wetlands (ISOLATE)**
HGM type: **Depressional**
Mean Coefficient of Conservatism (mean C): **2.2** Floristic Quality Index (FQI): **8.8**

Site Number: 68
Community type: **Marsh**
National Wetlands Inventory code: **U (upland)**
Site location: **Approximately 85 feet north of Wadsworth Road**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.07 ac**
Total site area: **0.13 ac**
Is this a county wetlands inventory site? **No**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
Waters type (USACE and USEPA 2007): **Wetlands adjacent to non-RPWs that flow directly or indirectly into Traditional Navigable Waters (NRPWW)**
HGM type: **Depressional**
Mean Coefficient of Conservatism (mean C): **3.1** Floristic Quality Index (FQI): **12.3**

Site Number: 69
Community type: **Marsh**
National Wetlands Inventory code: **PEMC (seasonally flooded, emergent, palustrine wetland), PUBF (semipermanently flooded, unconsolidated bottom, palustrine wetland), PEMF (semipermanently flooded, emergent, palustrine wetland), U (upland)**
Site location: **Approximately 142 feet north of Townline Road**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **13.00 ac**
Total site area: **16.20 ac**
Is this a county wetlands inventory site? **Yes**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **Yes**
Rationale: **This site has a FQI of 20 or greater (Swink and Wilhelm 1994).**
Waters type (USACE and USEPA 2007): **Wetlands directly abutting RPWs that flow directly or indirectly into Traditional Navigable Waters (RPWWD)**
HGM type: **Depressional**
Mean Coefficient of Conservatism (mean C): **3.3** Floristic Quality Index (FQI): **25.4**

Site Number: 70
Community type: **Marsh/Wet meadow**
National Wetlands Inventory code: **PEMC (seasonally flooded, emergent, palustrine wetland), PSS1C (seasonally flooded, broad-leaved deciduous, scrub-shrub, palustrine wetland), PUBF (semipermanently flooded, unconsolidated bottom, palustrine wetland), U (upland)**
Site location: **Approximately 92 feet north of Yorkhouse Road**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **8.78 ac**
Total site area: **10.23 ac**
Is this a county wetlands inventory site? **Yes**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **Yes**
Rationale: **This site has a FQI of 20 or greater and a mean C-value of 3.5 or greater (Swink and Wilhelm 1994).**
Waters type (USACE and USEPA 2007): **Wetlands directly abutting RPWs that flow directly or indirectly into Traditional Navigable Waters (RPWWD)**
HGM type: **Depressional**
Mean Coefficient of Conservatism (mean C): **3.8** Floristic Quality Index (FQI): **32.8**

Site Number: 71
Community type: **Wet shrubland**
National Wetlands Inventory code: **U (upland)**
Site location: **To the roadside south of Yorkhouse Road**
Hydrophytic Vegetation? **Yes** Hydric Soils? **Yes** Wetland Hydrology? **Yes**
Is this site a wetland? **Yes**
Area of site occurring within the project corridor: **0.09 ac**
Total site area: **Undetermined**
Is this a county wetlands inventory site? **Yes**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **Yes**
Rationale: **This site has a FQI of 20 or greater (Swink and Wilhelm 1994).**
Waters type (USACE and USEPA 2007): **Wetlands directly abutting RPWs that flow directly or indirectly into Traditional Navigable Waters (RPWWD)**
HGM type: **Riverine**
Mean Coefficient of Conservatism (mean C): **3.4** Floristic Quality Index (FQI): **23.8**

Site Number: 72
Community type: **Wet meadow**
National Wetlands Inventory code: **U (upland)**
Site location: **Approximately 165 feet east of IL 131**
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: **Undetermined**
Is this a county wetlands inventory site? **Yes**
Is this site an Advanced Identification (ADID) High Functional Value wetland? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
Waters type (USACE and USEPA 2007): **Isolated interstate or intrastate waters including isolated wetlands (ISOLATE)**
HGM type: **Depressional**
Mean Coefficient of Conservatism (mean C): **2.7** Floristic Quality Index (FQI): **6.5**

Wetland Site Summary Table

Site no.	NWI code	Community type	Area (ac.)[1]	>50%[2]	FQI	Mean C	ADID/ CWI[3]	HQAR[4]	Waters type
58	U	Marsh	0.36	No	16.4	2.8	CWI	No	NRPWW
59	U	Wetland pond	0.12	No	4.2	1.6	None	No	ISOLATE
60	U	Wet meadow	0.32	Yes	11.0	3.2	None	No	ISOLATE
61	U	Wet meadow	0.03	Yes	1.4	1.0	None	No	NRPWW
62	U	Marsh	0.17	Yes	8.9	2.5	None	No	ISOLATE
63	U	Marsh	0.02	No	4.2	1.6	None	No	ISOLATE
64	U	Wet meadow	0.12	Yes	5.3	2.2	None	No	NRPWW
65	U, PEMC	Wet meadow	1.69	No	9.6	2.1	CWI	No	RPWWD
66	U	Wetland pond	0.13	Yes	12.2	3.4	None	No	RPWWN
67	U	Marsh	0.07	Yes	8.8	2.2	None	No	ISOLATE
68	U	Marsh	0.07	Yes	12.3	3.1	None	No	NRPWW
69	PEMC, PUBF, PEMF, U	Marsh	13.00	Yes	25.4	3.3	CWI	Yes	RPWWD
70	PEMC, PSS1C, PUBF, U	Marsh/Wet meadow	8.78	Yes	32.8	3.8	CWI	Yes	RPWWD
71	U	Wet shrubland	0.09	Yes	23.8	3.4	CWI	Yes	RPWWD
72	U	Wet meadow	<0.01	No	6.5	2.7	CWI	No	ISOLATE

[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? [3] Is this site an Advanced Identification High Habitat Value wetland (HHV), a High Functional Value wetland (HFV) or a Lake County Wetland Inventory (CWI) site? [4] Is this site a High Quality Aquatic Resource?

Waters of the United States

Site Number: W1
Site Location: **Approximately 91 feet west of IL 131**
Latitude: **42.49591** Longitude: **- 87.88784**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
Area of site occurring within the project corridor: **0.02 ac**
Linear feet: **422 ft**
Waters type (USACE 2007): **RPW (Relatively Permanent Waters that flow directly or indirectly into Traditional Navigable Waters)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07120004 (Des Plaines River)**
Watershed area: **0.04 mi^2 (USGS 2012)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **Yes**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
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 Number: W2
Site Location: **Approximately 1262 feet east of IL 131, across from Lynn Dale Drive**
Latitude: **42.49408** Longitude: **- 87.88207**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
Area of site occurring within the project corridor: **<0.01 ac**
Linear feet: **97 ft**
Waters type (USACE 2007): **RPW (Relatively Permanent Waters that flow directly or indirectly into Traditional Navigable Waters)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07120004 (Des Plaines River)**
Watershed area: **0.19 mi^2 (USGS 2012)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **Yes**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
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 Number: W3
Site Location: **Approximately 86 feet west of IL 131 and 55 feet north of 9th Street**
Latitude: **42.47936** Longitude: **- 87.88666**
Community type: **Ditch**
National Wetlands Inventory code: **U (upland)**
Area of site occurring within the project corridor: **0.08 ac**

Linear feet: **986 ft**
Waters type (USACE 2007): **NRPW (Non-RPWs that flow directly or indirectly into Traditional Navigable Waters)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07120004 (Des Plaines River)**
Watershed area: **0.06 mi^2 (USGS 2012)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
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 Number: W4
Site Location: **Approximately 92 feet west of IL 131**
Latitude: **42.47321** Longitude: **- 87.88406**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
Area of site occurring within the project corridor: **0.01 ac**
Linear feet: **154 ft**
Waters type (USACE 2007): **RPW (Relatively Permanent Waters that flow directly or indirectly into Traditional Navigable Waters)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07120004 (Des Plaines River)**
Watershed area: **0.11 mi^2 (USGS 2012)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **Yes**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
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 Number: W5
Site Location: **Crosses under IL 131 approximately 54 feet northwest of Bluestem Circle**
Latitude: **42.47162** Longitude: **- 87.88272**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
Area of site occurring within the project corridor: **94.00 ac**
Linear feet: **273 ft**
Waters type (USACE 2007): **RPW (Relatively Permanent Waters that flow directly or indirectly into Traditional Navigable Waters)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07120004 (Des Plaines River)**
Watershed area: **0.26 mi^2 (USGS 2012)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **Yes**

Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
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 Number: W6
Site Name: **Unnamed Tributary to Des Plaines River**
Site Location: **Approximately 1472 feet west of IL 131, it flows under Townline Road and Yorkhouse Road**
Latitude: **42.41270** Longitude: **- 87.88434**
Community type: **Stream**
National Wetlands Inventory code: **U (upland)**
Area of site occurring within the project corridor: **0.30 ac**
Linear feet: **2219 ft**
Waters type (USACE 2007): **RPW (Relatively Permanent Waters that flow directly or indirectly into Traditional Navigable Waters)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07120004 (Des Plaines River)**
Watershed area: **1.68 mi^2 (USGS 2012)**
Riffles observed? **Yes** Pools observed? **Yes**
Mussel shell material observed? **Yes**
Is the stream or body of water permanent? **Yes**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
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 Number: W7
Site Location: **Runs along the east side of IL 131 and crosses under IL 131 approximately 340 feet south of Graves Avenue**
Latitude: **42.40312** Longitude: **- 87.88036**
Community type: **Stream And Roadside Ditch**
National Wetlands Inventory code: **U (upland)**
Area of site occurring within the project corridor: **0.01 ac**
Linear feet: **518 ft**
Waters type (USACE 2007): **NRPW (Non-RPWs that flow directly or indirectly into Traditional Navigable Waters)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07120004 (Des Plaines River)**
Watershed area: **0.01 mi^2 (USGS 2012)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
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 Number: W8
Site Location: **Runs along the south side of Rosecrans Road approximately 1440 feet east of IL 131**
Latitude: **42.46457** Longitude: **- 87.87584**
Community type: **Roadside Ditch**
National Wetlands Inventory code: **U (upland)**
Area of site occurring within the project corridor: **<0.01 ac**
Linear feet: **79 ft**
Waters type (USACE 2007): **NRPW (Non-RPWs that flow directly or indirectly into Traditional Navigable Waters)**
USGS 8-Digit Hydrologic Unit Code (HUC): **04040002 (Lake Michigan, Pike-Root Watershed)**
Watershed area: **<0.01 mi^2 (USGS 2012)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **No**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**
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 Number: W9
Site Location: **Approximately 67 feet east of IL 131 and 80 feet north of 9th Street**
Latitude: **42.48007** Longitude: **-87.88407**
Community type: **Pond**
National Wetlands Inventory code: **PEMF (semipermanently flooded, emergent, palustrine wetland), PUBGx (excavated, intermittently exposed, unconsolidated bottom, palustrine wetland)**
Area of site occurring within the project corridor: **1.16 ac**
Linear feet: **597ft**
Waters type (USACE 2007): **RPW (Relatively Permanent Waters that flow directly or indirectly into Traditional Navigable Waters)**
USGS 8-Digit Hydrologic Unit Code (HUC): **07120004 (Des Plaines River)**
Watershed area: **0.04 mi^2 (USGS 2012)**
Riffles observed? **No** Pools observed? **No**
Mussel shell material observed? **No**
Is the stream or body of water permanent? **Yes**
Is this site a High Quality Aquatic Resource (HQAR) (USACE-CD 2012)? **No**

Waters of the United States Summary Table

Site no.	NWI code	Community type	USGS 8-digit HUC	Area (ac.)[1]	Linear feet[1]	INDR BSS[2]	INDR SIR[2]	INDR SDR[2]	Waters type
W1	U	Stream	07120004	0.02	422.0	No	Not Rated	Not Rated	RPW
W2	U	Stream	07120004	<0.01	97.0	No	Not Rated	Not Rated	RPW
W3	U	Ditch	07120004	0.08	986.0	No	Not Rated	Not Rated	NRPW
W4	U	Stream	07120004	0.01	154.0	No	Not Rated	Not Rated	RPW
W5	U	Stream	07120004	94	273.0	No	Not Rated	Not Rated	RPW
W6	U	Stream	07120004	0.3	2219.0	No	Not Rated	Not Rated	RPW
W7	U	Stream and roadside ditch	07120004	0.01	518.0	No	Not Rated	Not Rated	NRPW
W8	U	Roadside ditch	04040002	<0.01	79.0	No	Not Rated	Not Rated	NRPW
W9	PEMF, PUBGx	Deepwater Aquatic Hatitat	07120004	1.16	597.0	No	Not Rated	Not Rated	RPW

[1] Area and linear feed within the ESR project limits. [2] INDR 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.

Three wetlands within the Addendum A project area are considered high quality aquatic resources (HQAR) because of high mean C/FQI scores. Site 69, a large marsh site with 13.00 ac within the project limits (total area of 16.20 ac), had a high FQI score (25.4); Site 70, a large marsh/wet meadow with 8.78 ac within the project limits (total area of 10.23 ac), had both a high FQI score (32.8) and a high mean C value (3.8); and Site 71, a narrow wet shrubland site, had a high FQI score (23.8).

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APPENDIX A

Wetland Determination Forms

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/10/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 58A

Investigator(s): Marcum, Geatz, and Beas Section, Township, Range: Sec 6, T46N, R12E

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

Slope (%): 0-1 Lat: 42.49338 Long: -87.88127 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Beecher SIL; revised to Aquent 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 latifolia*	10	Yes	OBL
2. *Alisma subcordatum*	3	Yes	OBL
3. *Carex tribuloides*	2	No	OBL
4. *Eleocharis erythropoda*	2	No	OBL
5. *Lythrum salicaria*	2	No	OBL
6. *Eleocharis acicularis*	1	No	OBL
7.			
8.			
9.			
10.			
	20	= 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: 58A

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	10YR 4/1	100					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? Yes Depth (inches): 8

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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/10/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 58B

Investigator(s): Marcum, Geatz, and Beas Section, Township, Range: Sec 6, T46N, R12E

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

Slope (%): 0-1 Lat: 42.49342 Long: -87.88143 Datum: NAD 83

Soil Map Unit Name: Beecher 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?	No	**Is the Sampled Area within a Wetland?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is lawn.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer negundo*	15	Yes	FAC
2. *Elaeagnus umbellata*	15	Yes	UPL
3. *Malus pumila*	15	Yes	UPL
4.			
5.			
	45	= 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. *Poa pratensis*	95	Yes	FAC
2. *Taraxacum officinale*	5	No	FACU
3. *Plantago lanceolata*	2	No	FACU
4. *Cichorium intybus*	1	No	FACU
5.			
6.			
7.			
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: 4 (B)

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☐ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < 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.)

SOIL

Sampling Point: 58B

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
0-11	10YR 3/2	100					SIL	
11-20	10YR 5/3	95	10YR 5/6	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? **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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/10/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 59A

Investigator(s): Marcum, Geatz, and Beas Section, Township, Range: Sec 1, T46N, R11E

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

Slope (%): 0-1 Lat: 42.49338 Long: -87.88127 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Ozaukee SIL; revised to Aquent 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 wetland pond.

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*	45	Yes	OBL
2. *Typha latifolia*	20	Yes	OBL
3. *Eleocharis erythropoda*	5	No	OBL
4. *Lemna minor*	1	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	71	= 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: 59A

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
0-10	2.5Y 4/1	100					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? Yes Depth (inches): 24

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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/10/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 59B

Investigator(s): Marcum, Geatz, and Beas Section, Township, Range: Sec 1, T46N, R11E

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

Slope (%): ~10 Lat: 42.49342 Long: -87.88142 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Ozaukee SIL; revised to Orthent 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?	No	**Is the Sampled Area within a Wetland?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is non-native grassland.

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. *Poa pratensis*	85	Yes	FAC
2. *Agropyron repens*	40	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	125	= 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: 1 (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☐ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < 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.)

SOIL

Sampling Point: 59B

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
0-10	10YR 3/2	100					SIL	
10-13	10YR 4/2	100					SICL	~5% Gravel

[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? 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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/10/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 60A

Investigator(s): Marcum, Geatz, and Beas Section, Township, Range: Sec 18, T46N, R12E

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

Slope (%): 0-1 Lat: 42.46782 Long: -87.88201 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Mundelein SIL; revised to Aquent 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: 5 ft x 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 5 ft x 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Typha angustifolia*	65	Yes	OBL
2. *Phalaris arundinacea*	5	No	FACW
3. *Lythrum salicaria*	4	No	OBL
4. *Salix amygdaloides*	2	No	FACW
5. *Carex sp.*	1	No	-
6. *Solidago graminifolia*	1	No	FACW
7.			
8.			
9.			
10.			
	78	= Total Cover	
Woody Vine Stratum (Plot size: 5 ft x 30 ft)			
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: 60A

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 2/1	100					MKSICL	
2-13	10YR 5/2	75	10YR 5/6	25	C	M	SIC	

[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): 2

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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/10/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 60B

Investigator(s): Marcum, Geatz, and Beas Section, Township, Range: Sec 18, T46N, R12E

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

Slope (%): 2-4 Lat: 42.46785 Long: -87.88198 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Mundelein SIL; revised to Orthent 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?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is 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. *Rubus occidentalis*	3	Yes	UPL
2. *Sambucus canadensis*	2	Yes	FACW
3.			
4.			
5.			
	5	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	50	Yes	FACW
2. *Poa pratensis*	30	Yes	FAC
3. *Solidago canadensis*	30	Yes	FACU
4. *Cirsium arvense*	8	No	FACU
5. *Parthenocissus quinquefolia*	5	No	FACU
6. *Vitis riparia*	5	No	FACW
7. *Rumex crispus*	3	No	FAC
8. *Convolvulus sepium*	1	No	FAC
9.			
10.			
	132	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1. *Vitis riparia*	3	No	FACW
2.			
	3	= 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: 5 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 60% (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: 60B

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
0-13	10YR 2/2	100					L	~5% Gravel

[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? 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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/10/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 61A

Investigator(s): Marcum, Geatz, and Beas Section, Township, Range: Sec 18, T46N, R12E

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

Slope (%): 0-1 Lat: 42.46496 Long: -87.87590 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Mundelein SIL; revised to Aquent 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: 5 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 5 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Eleocharis erythropoda*	70	Yes	OBL
2. *Poa pratensis*	10	No	FAC
3. *Polygonum sp.*	1	No	-
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	81	= Total Cover	
Woody Vine Stratum (Plot size: 5 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: 61A

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 3/1	100					SIL	
6-13	10YR 5/1	65	10YR 5/6	35	C	M	SICL	~5% Gravel

[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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/10/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 61B

Investigator(s): Marcum, Geatz, and Beas Section, Township, Range: Sec 18, T46N, R12E

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

Slope (%): 0 Lat: 42.46499 Long: -87.87603 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Mundelein SIL; revised to Orthent 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?	No	**Is the Sampled Area within a Wetland?**	**No**
Hydric Soil Present?	Yes		
Wetland Hydrology Present?	No		

Remarks: Community type is non-native grassland.

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. *Poa pratensis*	60	Yes	FAC
2. *Trifolium repens*	40	Yes	FACU
3. *Taraxacum officinale*	1	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	101	= 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: 1 (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☐ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < 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.)

SOIL

Sampling Point: 61B

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
0-7	10YR 3/1	100					SIL	
7-13	10YR 4/2	95	10YR 5/6	5	C	M	SICL	~5% Gravel

[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? **No**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/10/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 62A

Investigator(s): Marcum, Geatz, and Beas Section, Township, Range: Sec 18, T46N, R12E

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

Slope (%): 0-1 Lat: 42.46400 Long: -87.88035 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Mundelein SIL; revised to Aquent 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: 5 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 5 ft radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Typha angustifolia*	70	Yes	OBL
2. *Eleocharis erythropoda*	3	No	OBL
3. *Scirpus atrovirens*	2	No	OBL
4. *Scirpus pendulus*	2	No	OBL
5. *Lythrum salicaria*	1	No	OBL
6. *Scirpus validus var. creber*	1	No	OBL
7.			
8.			
9.			
10.			
	79 = Total Cover		
Woody Vine Stratum (Plot size: 5 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: 62A

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	10YR 4/2	90	10YR 5/6	10	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? Yes Depth (inches): 3

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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/10/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 62B

Investigator(s): Marcum, Geatz, and Beas Section, Township, Range: Sec 18, T46N, R12E

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

Slope (%): 0-2 Lat: 42.46403 Long: -87.88039 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Mundelein SIL; revised to Orthent 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?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is non-native grassland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft radius)			
1. *Crataegus sp.*	1	No	-
2.			
3.			
4.			
5.			
	1	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Pinus sylvestris*	3	No	UPL
2.			
3.			
4.			
5.			
	3	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Poa pratensis*	75	Yes	FAC
2. *Taraxacum officinale*	4	No	FACU
3. *Medicago lupulina*	1	No	FACU
4. *Trifolium repens*	1	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	81	= 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: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☑ 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: 62B

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 3/2	100					SIL	
4-8	10YR 4/3	100					SICL	~5% Gravel
8+								Gravel Fill

[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? 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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/10/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 63A

Investigator(s): Marcum, Geatz, and Beas Section, Township, Range: Sec 18, T46N, R12E

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

Slope (%): 0-1 Lat: 42.46415 Long: -87.88242 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Mundelein SIL; revised to Aquent 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: whole site)			
1. *Fraxinus pennsylvanica var. subintegerrima*	2	No	FACW
2.			
3.			
4.			
5.			
	2	= Total Cover	
Sapling/Shrub Stratum (Plot size: whole site)			
1. *Salix interior*	2	No	FACW
2. *Lonicera morrowii*	1	No	FACU
3. *Ulmus americana*	1	No	FACW
4.			
5.			
	4	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Typha angustifolia*	65	Yes	OBL
2. *Parthenocissus quinquefolia*	1	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	66	= Total Cover	
Woody Vine Stratum (Plot size: whole site)			
1. *Parthenocissus quinquefolia*	1	No	FACU
2.			
	1	= 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: 63A

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
0-10	10YR 4/2	80	10YR 5/6	20	C	M	SICL	~5% Gravel

[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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/10/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 63B

Investigator(s): Marcum, Geatz, and Beas Section, Township, Range: Sec 18, T46N, R12E

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

Slope (%): 0-2 Lat: 42.46419 Long: -87.88237 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Mundelein SIL; revised to Orthent 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?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is non-native grassland.

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. *Poa pratensis*	85	Yes	FAC
2. *Medicago lupulina*	5	No	FACU
3. *Taraxacum officinale*	2	No	FACU
4. *Trifolium repens*	2	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	94	= 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: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☑ 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: 63B

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
0-5	10YR 3/2	100					SIL	
5+								Gravel Fill

[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? 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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 64A

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 12, T46N, R11E

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

Slope (%): 0-1 Lat: 42.48162 Long: -87.88527 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Landfill; revised to Aquoll 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: whole site)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: whole site)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5 ft radius)			
1. *Phragmites australis*	60	Yes	FACW
2. *Phalaris arundinacea*	20	Yes	FACW
3. *Solidago canadensis*	4	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	84 = Total Cover		
Woody Vine Stratum (Plot size: whole site)			
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: 64A

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 3/1	100					SIL	
4-13	10YR 3/1	90	10YR 5/6	10	C	M	SIL	~10% Gravel

[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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 64B

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 12, T46N, R11E

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

Slope (%): 0-1 Lat: 42.48163 Long: -87.88516 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Landfill; revised to Orthent 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?	No	**Is the Sampled Area within a Wetland?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is non-native grassland.

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. *Poa pratensis*	65	Yes	FAC
2. *Solidago canadensis*	40	Yes	FACU
3. *Festuca elatior*	15	No	FACU
4. *Chrysanthemum leucanthemum var. pinnatifidum*	2	No	UPL
5.			
6.			
7.			
8.			
9.			
10.			
	122	= 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: 1 (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☐ 2-Dominance Test is >50%
- ☐ 3-Prevalence Index is < 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.)

SOIL

Sampling Point: 64B

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
0-8	10YR 3/2	100					SIL	~15% Gravel
8+								Gravel Fill

[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? 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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 65A

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 18, T46N, R12E

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

Slope (%): 0-1 Lat: 42.46137 Long: -87.88280 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Ashkum SICL; revised to Peotone SICL, 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. *Phalaris arundinacea*	75	Yes	FACW
2. *Typha angustifolia*	2	No	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	77 = 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: 65A

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
0-10	10YR 3/1	95	2.5Y 5/6	5	C	MC	MKSICL	

[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? Yes Depth (inches): 1

Saturation Present? (includes capillary fringe) Yes Depth (inches): 1

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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 65B

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 18, T46N, R12E

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

Slope (%): 1-2 Lat: 42.46165 Long: -87.88304 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Ashkum SICL; revised to Beecher 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?	No	**Is the Sampled Area within a Wetland?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is 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. *Lonicera morrowii*	5	Yes	FACU
2. *Rubus allegheniensis*	5	Yes	FACU
3. *Juglans nigra*	2	No	FACU
4. *Acer negundo*	1	No	FAC
5. *Rosa multiflora*	1	No	FACU
	15	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Poa pratensis*	35	Yes	FAC
2. *Bromus inermis*	15	Yes	FACU
3. *Solidago canadensis*	15	Yes	FACU
4. *Daucus carota*	10	No	UPL
5. *Fragaria virginiana*	10	No	FACU
6. *Solidago rigida*	8	No	FACU
7. *Melilotus officinalis*	5	No	FACU
8. *Aster novae-angliae*	3	No	FACW
9. *Aster sagittifolius var. drummondii*	3	No	UPL
10. *Taraxacum officinale*	3	No	FACU
	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: 1 (A)

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

Percent of Dominant Species That are OBL, FACW, or FAC: 20% (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.)

SOIL

Sampling Point: 65B

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
0-8	10YR 3/1	100					SIL	
8-13	10YR 4/2	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: _____

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? 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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 66A

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 19, T46N, R12E

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

Slope (%): 0-1 Lat: 42.45267 Long: -87.87228 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Ashkum SICL; revised Aquent 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 wetland pond.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: whole site)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: whole site)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Phalaris arundinacea*	20	Yes	FACW
2. *Alisma subcordatum*	15	Yes	OBL
3. *Eleocharis erythropoda*	7	No	OBL
4. *Lemna minor*	4	No	OBL
5. *Agrostis alba*	2	No	FACW
6. *Rumex crispus*	1	No	FAC
7.			
8.			
9.			
10.			
	49	= Total Cover	
Woody Vine Stratum (Plot size: whole site)			
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: 66A

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	2.5Y 4/1	70	7.5YR 4/6	30	C	M	SICL	
6+								Gravel Fill

[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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 66B

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 19, T46N, R12E

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

Slope (%): 4-6 Lat: 42.46267 Long: -87.87245 Datum: NAD 83

Soil Map Unit Name: Ozaukee SIL, 4-6% 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?	No	**Is the Sampled Area within a Wetland?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is lawn.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus virginiana var. crebra*	5	Yes	FACU
2. *Pinus sylvestris*	5	Yes	UPL
3.			
4.			
5.			
	10	= 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. *Poa pratensis*	100	Yes	FAC
2.			
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: 1 (A)

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

Percent of Dominant Species That are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
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.)

SOIL

Sampling Point: 66B

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
0-11	10YR 2/2	100					SIL	
11-13	10YR 4/3	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: _____

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? 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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 67A

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 30, T46N, R12E

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

Slope (%): 0-1 Lat: 42.42939 Long: -87.87591 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Ozaukee SIL; revised to Aquent 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: 10 ft x 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10 ft x 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Typha angustifolia*	80	Yes	OBL
2. *Cirsium arvense*	2	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	82	= Total Cover	
Woody Vine Stratum (Plot size: 10 ft x 30 ft)			
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: 67A

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 2/2	100					MKSIL	
2-13	2.5Y 3/1	95	2.5Y 5/4	5	C	M	SICL	~5% Gravel

[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): 1

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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 67B

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 30, T46N, R12E

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

Slope (%): 0-2 Lat: 42.42945 Long: -87.87588 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Ozaukee SIL; revised to Orthent 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?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is non-native grassland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 10 ft x 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10 ft x 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Poa pratensis*	90	Yes	FAC
2. *Cirsium arvense*	4	No	FACU
3. *Chrysanthemum leucanthemum var. pinnatifidum*	2	No	UPL
4. *Verbascum thapsus*	2	No	UPL
5.			
6.			
7.			
8.			
9.			
10.			
	98	= Total Cover	
Woody Vine Stratum (Plot size: 10 ft x 30 ft)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

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

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

- ☐ 1-Rapid Test for Hydrophytic Vegetation
- ☑ 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: 67B

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 3/1	100					SIL	
4-7	10YR 4/3	100					SICL	
7+								Gravel Fill

[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? 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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 68A

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 30, T46N, R12E

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

Slope (%): 0-1 Lat: 42.42878 Long: -87.87997 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Markham SIL; revised to Aquent 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: 10 ft x 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10 ft x 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Eleocharis erythropoda*	75	Yes	OBL
2. *Phalaris arundinacea*	15	No	FACW
3. *Lythrum salicaria*	3	No	OBL
4. *Polygonum pensylvanicum*	3	No	FACW
5. *Rumex crispus*	1	No	FAC
6.			
7.			
8.			
9.			
10.			
	97	= Total Cover	
Woody Vine Stratum (Plot size: 10 ft x 30 ft)			
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: 68A

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	10YR 3/1	90	7.5YR 4/6	10	C	M	SIL	
8+								Gravel Fill

[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): 1

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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 68B

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 30, T46N, R12E

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

Slope (%): 2-5 Lat: 42.42879 Long: -87.87991 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Markham SIL; revised to Orthent 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?**	**No**
Hydric Soil Present?	No		
Wetland Hydrology Present?	No		

Remarks: Community type is lawn.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 10 ft x 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Betula nigra*	5	Yes	FACW
2. *Fraxinus pennsylvanica var. subintegerrima*	5	Yes	FACW
3.			
4.			
5.			
	10	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10 ft x 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Poa pratensis*	98	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	98	= Total Cover	
Woody Vine Stratum (Plot size: 10 ft x 30 ft)			
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: 68B

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
0-10	10YR 3/2	100					SIL	
10+								Gravel Fill

[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? 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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 69A

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 31, T45N, R12E

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

Slope (%): 0-1 Lat: 42.41745 Long: -87.88374 Datum: NAD 83

Soil Map Unit Name: Peotone SICL, 0-2% slopes NWI classification: PEMC

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. *Cornus obliqua*	15	Yes	FACW
2. *Fraxinus pennsylvanica var. subintegerrima*	2	No	FACW
3. *Rhamnus frangula*	2	No	FACW
4.			
5.			
	19	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Typha angustifolia*	65	Yes	OBL
2. *Impatiens capensis*	30	Yes	FACW
3. *Solanum dulcamara*	30	Yes	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	125	= 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: 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: 69A

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
0-13	2.5Y	3/1	100				MKSIL	

[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): <72

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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 69B

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 31, T45N, R12E

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

Slope (%): 2-4 Lat: 42.41745 Long: -87.88397 Datum: NAD 83

Soil Map Unit Name: Markham SIL, 2-4% 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?	No	**Is the Sampled Area within a Wetland?** **No**
Hydric Soil Present?	Yes	
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. *Rhamnus cathartica*	40	Yes	FAC
2. *Malus pumila*	25	Yes	UPL
3. *Juniperus virginiana var. crebra*	20	Yes	FACU
4. *Fraxinus pennsylvanica var. subintegerrima*	5	No	FACW
5. *Ulmus americana*	3	No	FACW
	93	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Lonicera morrowii*	15	Yes	FACU
2. *Malus pumila*	10	Yes	UPL
3. *Cornus obliqua*	3	No	FACW
4. *Rosa multiflora*	3	No	FACU
5. *Rhamnus cathartica*	2	No	FAC
	33	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Rhamnus cathartica*	18	Yes	FAC
2. *Lonicera morrowii*	5	Yes	FACU
3. *Rosa multiflora*	5	Yes	FACU
4. *Cornus obliqua*	4	No	FACW
5. *Geum canadense*	1	No	FAC
6. *Prunella vulgaris var. lanceolata*	1	No	FAC
7. *Prunus virginiana*	1	No	FACU
8. *Sanicula gregaria*	1	No	FAC
9. *Viburnum opulus*	1	No	FAC
10.			
	37	= 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: 8 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 25% (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.)

SOIL

Sampling Point: 69B

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
0-7	10YR 2/1	100					SIL	
7-13	10YR 2/1	95	7.5YR 4/6	5	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? **No**

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

Remarks:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 70A

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 1, T45N, R11E

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

Slope (%): 0-1 Lat: 42.41112 Long: -87.88512 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Peotone SICL; revised to Houghton muck, 0-2% slopes NWI classification: PEMC

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. *Salix nigra*	4	No	OBL
2.			
3.			
4.			
5.			
	4	= 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. *Phalaris arundinacea*	85	Yes	FACW
2. *Aster simplex*	2	No	FAC
3. *Boehmeria cylindrica*	2	No	OBL
4. *Carex tribuloides*	2	No	OBL
5. *Impatiens capensis*	2	No	FACW
6. *Apocynum cannabinum*	1	No	FAC
7.			
8.			
9.			
10.			
	94	= 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: 70A

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
0-10	10YR 2/1	100					MK	

[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): 11

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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 70B

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 1, T45N, R11E

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

Slope (%): 0-2 Lat: 42.41119 Long: -87.88543 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Peotone SICL; revised to Elliot SIL, 0-2% slopes NWI classification: PSS1C

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?**	**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. *Rhamnus cathartica*	50	Yes	FAC
2. *Fraxinus pennsylvanica var. subintegerrima*	5	No	FACW
3.			
4.			
5.			
	55	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Rhamnus cathartica*	15	Yes	FAC
2. *Lonicera morrowii*	10	Yes	FACU
3.			
4.			
5.			
	25	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Rhamnus cathartica*	60	Yes	FAC
2. *Carex granularis*	3	No	FACW
3. *Sanicula gregaria*	3	No	FAC
4. *Allium vineale*	2	No	FACU
5. *Aster simplex*	2	No	FAC
6. *Carex blanda*	2	No	FAC
7. *Penstemon digitalis*	2	No	FAC
8. *Fraxinus pennsylvanica var. subintegerrima*	1	No	FACW
9.			
10.			
	75	= 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: 70B

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
0-13	10YR 2/2	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: _____

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? 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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 71A

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 1, T45N, R11E

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

Slope (%): 0-1 Lat: 42.41017 Long: -87.88601 Datum: NAD 83

Soil Map Unit Name: Peotone SICL, 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 shrubland.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 10 ft x 30 ft)			
1.			
2.			
3.			
4.			
5.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 10 ft x 30 ft)			
1. *Salix interior*	10	Yes	FACW
2.			
3.			
4.			
5.			
	10	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Typha angustifolia*	70	Yes	OBL
2. *Phalaris arundinacea*	25	Yes	FACW
3. *Convolvulus sepium*	3	No	FAC
4. *Bidens frondosa*	1	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	99	= Total Cover	
Woody Vine Stratum (Plot size: 10 ft x 30 ft)			
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: 71A

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
0-9	19YR 3/1	100					MK	
9-13	10YR 4/2	85	10YR 5/6	15	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? 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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 71B

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 1, T45N, R11E

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

Slope (%): 0-4 Lat: 42.41005 Long: -87.88625 Datum: NAD 83

Soil Map Unit Name: Wauconda and Beecher SILs, 2-4% 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?**	**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. *Rhamnus cathartica*	40	Yes	FAC
2.			
3.			
4.			
5.			
	40	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Lonicera morrowii*	60	Yes	FACU
2. *Rhamnus cathartica*	10	No	FAC
3. *Cornus racemosa*	2	No	FAC
4.			
5.			
	72	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Rhamnus cathartica*	65	Yes	FAC
2. *Equisetum arvense*	3	No	FAC
3. *Taraxacum officinale*	3	No	FACU
4. *Penstemon digitalis*	2	No	FAC
5. *Fragaria virginiana*	1	No	FACU
6. *Potentilla simplex*	1	No	FACU
7. *Thalictrum revolutum*	1	No	FAC
8.			
9.			
10.			
	76	= 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: 71B

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
0-13	10YR 3/1	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: _____

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? 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: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 72A

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 7, T45N, R12E

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

Slope (%): 0-1 Lat: 42.39475 Long: -87.88214 Datum: NAD 83

Soil Map Unit Name: Ashkum SICL, 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. *Phalaris arundinacea*	95	Yes	FACW
2.			
3.			
4.			
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: 72A

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
0-7	10YR 2/1	100					SICL	
7-13	10YR 2/1	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:

WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: IL 131 (FAP 880/2711) Addendum A City/County: Lake Sampling Date 6/11/2013

Applicant/Owner: IDOT District 1 State: IL Sampling Point 72B

Investigator(s): Marcum and Geatz Section, Township, Range: Sec 7, T45N, R12E

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

Slope (%): 1-2 Lat: 42.39483 Long: -87.88215 Datum: NAD 83

Soil Map Unit Name: NRCS mapped Ashkum SICL; revised to Orthent 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?**	**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. *Acer negundo*	45	Yes	FAC
2. *Rhamnus cathartica*	45	Yes	FAC
3.			
4.			
5.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Rhamnus cathartica*	60	Yes	FAC
2. *Prunus virginiana*	1	No	FACU
3.			
4.			
5.			
	61	= Total Cover	
Herb Stratum (Plot size: 5 ft radius)			
1. *Rhamnus cathartica*	2	No	FAC
2. *Taraxacum officinale*	1	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	3	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft radius)			
1. *Vitis riparia*	3	No	FACW
2.			
	3	= 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: 72B

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
0-8	10YR 3/1	100					SIL	
8-13	10YR 3/1	100					SIL	~5% Gravel

[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? 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:

APPENDIX B

Wetland Plant Species Lists

Project Title: IL 131 (FAP 880/2711) Addendum A **Sequence No: 14766A**
Site 58 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Typha angustifolia	**narrow-leaved cattail**	**H**	**OBL**	**1**
Typha latifolia	**broad-leaved cattail**	**H**	**OBL**	**1**
Acer negundo	box elder	T	FAC	0
Acer saccharinum	silver maple	S	FACW	0
Alisma subcordatum	common water plantain	H	OBL	4
Ambrosia trifida	giant ragweed	H	FAC	0
Asclepias incarnata	swamp milkweed	H	OBL	4
Aster puniceus	bristly aster	H	OBL	8
Aster simplex	panicled aster	H	FAC	3
*Barbarea vulgaris**	winter cress	H	FAC	-
Bidens frondosa	common beggar's ticks	H	FACW	1
*Bromus inermis**	Hungarian brome	H	FACU	-
Carex tribuloides	awl-fruited oval sedge	H	OBL	3
*Cirsium arvense**	field thistle	H	FACU	-
Convolvulus sepium	American bindweed	H	FAC	1
Cornus obliqua	pale dogwood	S	FACW	6
*Daucus carota**	Queen Anne's lace	H	UPL	-
Eleocharis acicularis	needle spike rush	H	OBL	2
Eleocharis erythropoda	red-rooted spike rush	H	OBL	2
Galium aparine	annual bedstraw	H	FACU	1
Geum laciniatum	rough avens	H	FACW	5
*Glechoma hederacea**	ground ivy	H	FACU	-
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
*Hordeum jubatum**	squirrel-tail grass	H	FAC	-
Lycopus americanus	common water horehound	H	OBL	5
*Lythrum salicaria**	purple loosestrife	H	OBL	-
Mentha arvensis var. villosa	wild mint	H	FACW	5
Phragmites australis	common reed	H	FACW	1
*Poa pratensis**	Kentucky blue grass	H	FAC	-
Polygonum pensylvanicum	pinkweed	H	FACW	0
Quercus macrocarpa	burr oak	T	FAC	5
Ranunculus sceleratus	cursed crowfoot	H	OBL	6
*Rhamnus cathartica**	common buckthorn	S	FAC	-
*Rhamnus frangula**	glossy buckthorn	S	FACW	-
*Rosa multiflora**	Japanese rose	S	FACU	-
*Rumex crispus**	curly dock	H	FAC	-
Salix amygdaloides	peach-leaved willow	ST	FACW	5
Salix interior	sandbar willow	S	FACW	1
Salix nigra	black willow	T	OBL	4
Sambucus canadensis	common elder	S	FACW	1
Scirpus atrovirens	dark green rush	H	OBL	4
Scirpus validus var. creber	soft-stem bulrush	H	OBL	5
*Solanum dulcamara**	bittersweet nightshade	H	FAC	-
Solidago canadensis	Canada goldenrod	H	FACU	1
Verbena urticifolia	white vervain	H	FAC	5
Vitis riparia	riverbank grape	W	FACW	2

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 2.8
H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 16.4

Site 59 - Wetland pond

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Typha angustifolia	**narrow-leaved cattail**	**H**	**OBL**	**1**
Asclepias syriaca	common milkweed	H	FACU	0
*Cirsium vulgare**	bull thistle	H	FACU	-
Eleocharis acicularis	needle spike rush	H	OBL	2
Eleocharis erythropoda	red-rooted spike rush	H	OBL	2
Lemna minor	small duckweed	H	OBL	5
*Lythrum salicaria**	purple loosestrife	H	OBL	-
Plantago rugelii	red-stalked plantain	H	FAC	0
*Poa pratensis**	Kentucky blue grass	H	FAC	-
*Rumex crispus**	curly dock	H	FAC	-
*Solanum dulcamara**	bittersweet nightshade	H	FAC	-
Typha latifolia	broad-leaved cattail	H	OBL	1

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 1.6

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 4.2

Site 60 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Acer negundo	box elder	HS	FAC	0
Asclepias incarnata	swamp milkweed	H	OBL	4
Carex normalis	spreading oval sedge	H	FACW	5
Carex sp.	sedge	H	-	-
*Cirsium arvense**	field thistle	H	FACU	-
Juncus dudleyi	Dudley's rush	H	FACW	4
*Lepidium campestre**	field cress	H	UPL	-
*Lythrum salicaria**	purple loosestrife	H	OBL	-
Phragmites australis	common reed	H	FACW	1
Populus deltoides	eastern cottonwood	S	FAC	2
*Rorippa sylvestris**	creeping yellow cress	H	OBL	-
*Rumex crispus**	curly dock	H	FAC	-
Salix amygdaloides	peach-leaved willow	HS	FACW	5
Scirpus pendulus	red bulrush	H	OBL	4
Scirpus validus var. creber	soft-stem bulrush	H	OBL	5
Solidago graminifolia	grass-leaved goldenrod	H	FACW	4
Typha angustifolia	narrow-leaved cattail	H	OBL	1
Ulmus americana	American elm	H	FACW	3

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 3.2

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 11.0

Site 61 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Eleocharis erythropoda	**red-rooted spike rush**	**H**	**OBL**	**2**
Plantago rugelii	red-stalked plantain	H	FAC	0
*Poa pratensis**	Kentucky blue grass	H	FAC	-
Polygonum sp.	smartweed	H	-	-
*Taraxacum officinale**	common dandelion	H	FACU	-

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 1.0

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 1.4

Site 62 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Typha angustifolia	**narrow-leaved cattail**	**H**	**OBL**	**1**
Ambrosia artemisiifolia var. elatior	common ragweed	H	FACU	0
Asclepias syriaca	common milkweed	H	FACU	0
Eleocharis erythropoda	red-rooted spike rush	H	OBL	2
*Lythrum salicaria**	purple loosestrife	H	OBL	-
*Phalaris arundinacea**	reed canary grass	H	FACW	-
*Poa pratensis**	Kentucky blue grass	H	FAC	-
Salix amygdaloides	peach-leaved willow	ST	FACW	5
Salix interior	sandbar willow	S	FACW	1
Salix nigra	black willow	S	OBL	4
Scirpus atrovirens	dark green rush	H	OBL	4
Scirpus pendulus	red bulrush	H	OBL	4
Scirpus validus var. creber	soft-stem bulrush	H	OBL	5
Solidago canadensis	Canada goldenrod	H	FACU	1
Solidago graminifolia	grass-leaved goldenrod	H	FACW	4
*Sonchus arvensis**	field sow thistle	H	FACU	-
Typha latifolia	broad-leaved cattail	H	OBL	1

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 2.5

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 8.9

Site 63 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Typha angustifolia	**narrow-leaved cattail**	**H**	**OBL**	**1**
*Cirsium arvense**	field thistle	H	FACU	-
Eleocharis erythropoda	red-rooted spike rush	H	OBL	2
Fraxinus pennsylvanica var. subintegerrima	green ash	T	FACW	1
*Glechoma hederacea**	ground ivy	H	FACU	-
*Lonicera morrowii**	Morrow's honeysuckle	S	FACU	-
*Lythrum salicaria**	purple loosestrife	H	OBL	-
Parthenocissus quinquefolia	Virginia creeper	HW	FACU	2
*Phalaris arundinacea**	reed canary grass	H	FACW	-
*Poa pratensis**	Kentucky blue grass	H	FAC	-
Salix interior	sandbar willow	S	FACW	1
Solidago canadensis	Canada goldenrod	H	FACU	1
Ulmus americana	American elm	S	FACW	3

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 1.6

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 4.2

Site 64 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Phragmites australis	**common reed**	**H**	**FACW**	**1**
*Agropyron repens**	quack grass	H	FACU	-
Aster novae-angliae	New England aster	H	FACW	4
Aster sagittifolius var. drummondii	Drummond's aster	H	UPL	2
Carex pellita	wooly sedge	H	OBL	4
*Chrysanthemum leucanthemum var. pinnatifidum**	ox-eye daisy	H	UPL	-
*Festuca elatior**	tall fescue	H	FACU	-
*Phalaris arundinacea**	reed canary grass	H	FACW	-
*Poa pratensis**	Kentucky blue grass	H	FAC	-
*Rumex crispus**	curly dock	H	FAC	-
Solidago canadensis	Canada goldenrod	H	FACU	1
*Sonchus arvensis**	field sow thistle	H	FACU	-
Typha angustifolia	narrow-leaved cattail	H	OBL	1

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 2.2

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 5.3

Site 65 - Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Acer saccharinum	silver maple	HS	FACW	0
Ambrosia trifida	giant ragweed	H	FAC	0
Aster novae-angliae	New England aster	H	FACW	4
Carex pellita	wooly sedge	H	OBL	4
Carex stipata	common fox sedge	H	OBL	3
*Cirsium arvense**	field thistle	H	FACU	-
Cornus racemosa	gray dogwood	S	FAC	1
*Daucus carota**	Queen Anne's lace	H	UPL	-
Eleocharis erythropoda	red-rooted spike rush	H	OBL	2
Equisetum arvense	common horsetail	H	FAC	0
*Festuca elatior**	tall fescue	H	FACU	-
Fragaria virginiana	wild strawberry	H	FACU	1
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
*Lonicera morrowii**	Morrow's honeysuckle	S	FACU	-
*Lythrum salicaria**	purple loosestrife	H	OBL	-
*Poa pratensis**	Kentucky blue grass	H	FAC	-
*Rhamnus frangula**	glossy buckthorn	S	FACW	-
Salix amygdaloides	peach-leaved willow	T	FACW	5
Salix discolor	pussy willow	S	FACW	2
Salix interior	sandbar willow	S	FACW	1
Sambucus canadensis	common elder	S	FACW	1
Scirpus pendulus	red bulrush	H	OBL	4
Senecio pauperculus	balsam ragwort	H	FAC	6
Solidago canadensis	Canada goldenrod	H	FACU	1
*Sonchus arvensis**	field sow thistle	H	FACU	-
Typha angustifolia	narrow-leaved cattail	H	OBL	1
Typha latifolia	broad-leaved cattail	H	OBL	1
Ulmus americana	American elm	T	FACW	3
*Ulmus pumila**	Siberian elm	T	UPL	-
*Urtica dioica**	stinging nettle	H	FACW	-
Vitis riparia	riverbank grape	W	FACW	2

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 2.1

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 9.6

Site 66 - Wetland pond

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Alisma subcordatum	**common water plantain**	**H**	**OBL**	**4**
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Potamogeton pectinatus	**comb pondweed**	**H**	**OBL**	**5**
Ranunculus longirostris	**white water crowfoot**	**H**	**OBL**	**8**
Acer saccharinum	silver maple	H	FACW	0
*Agrostis alba**	red top	H	FACW	-
Bidens frondosa	common beggar's ticks	H	FACW	1
*Chenopodium album**	lamb's quarters	H	FACU	-
*Cirsium arvense**	field thistle	H	FACU	-
Eleocharis erythropoda	red-rooted spike rush	H	OBL	2
Galium aparine	annual bedstraw	H	FACU	1
Leersia oryzoides	rice cut grass	H	OBL	4
Lemna minor	small duckweed	H	OBL	5
Ludwigia palustris var. americana	marsh purslane	H	OBL	5
*Poa pratensis**	Kentucky blue grass	H	FAC	-
Polygonum sp.	smartweed	H	-	-
Populus deltoides	eastern cottonwood	H	FAC	2
Ranunculus sceleratus	cursed crowfoot	H	OBL	6
*Rumex crispus**	curly dock	H	FAC	-
*Solanum dulcamara**	bittersweet nightshade	H	FAC	-
*Sonchus arvensis**	field sow thistle	H	FACU	-
*Taraxacum officinale**	common dandelion	H	FACU	-
Typha angustifolia	narrow-leaved cattail	H	OBL	1

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 3.4

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 12.2

Site 67 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Typha angustifolia	**narrow-leaved cattail**	**H**	**OBL**	**1**
Acer saccharinum	silver maple	S	FACW	0
Aster novae-angliae	New England aster	H	FACW	4
Carex sp.	sedge	H	-	-
*Chrysanthemum leucanthemum var. pinnatifidum**	ox-eye daisy	H	UPL	-
*Cirsium arvense**	field thistle	H	FACU	-
*Cirsium vulgare**	bull thistle	H	FACU	-
Cornus racemosa	gray dogwood	S	FAC	1
Eleocharis erythropoda	red-rooted spike rush	H	OBL	2
Fragaria virginiana	wild strawberry	H	FACU	1
Fraxinus pennsylvanica var. subintegerrima	green ash	H	FACW	1
Geum laciniatum	rough avens	H	FACW	5
*Hypericum perforatum**	common St. John's-wort	H	FACU	-
Juncus dudleyi	Dudley's rush	H	FACW	4
*Lythrum salicaria**	purple loosestrife	H	OBL	-
Oenothera biennis	common evening primrose	H	FACU	0
Penstemon digitalis	foxglove beard tongue	H	FAC	4
*Solanum dulcamara**	bittersweet nightshade	H	FAC	-
Solidago canadensis	Canada goldenrod	H	FACU	1
Solidago graminifolia	grass-leaved goldenrod	H	FACW	4
Typha latifolia	broad-leaved cattail	H	OBL	1
Verbena hastata	blue vervain	H	FACW	4
Vitis riparia	riverbank grape	W	FACW	2

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 2.2

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 8.8

Site 68 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Eleocharis erythropoda	**red-rooted spike rush**	**H**	**OBL**	**2**
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Polygonum pensylvanicum	**pinkweed**	**H**	**FACW**	**0**
Typha angustifolia	**narrow-leaved cattail**	**H**	**OBL**	**1**
Acer negundo	box elder	S	FAC	0
Acer saccharinum	silver maple	S	FACW	0
Alisma subcordatum	common water plantain	H	OBL	4
Ambrosia artemisiifolia var. elatior	common ragweed	H	FACU	0
Carex stipata	common fox sedge	H	OBL	3
*Cirsium arvense**	field thistle	H	FACU	-
Geum laciniatum	rough avens	H	FACW	5
*Lythrum salicaria**	purple loosestrife	H	OBL	-
Mimulus ringens	monkey flower	H	OBL	6
*Poa pratensis**	Kentucky blue grass	H	FAC	-
Ranunculus sceleratus	cursed crowfoot	H	OBL	6
*Rumex crispus**	curly dock	H	FAC	-
Salix amygdaloides	peach-leaved willow	S	FACW	5
Salix discolor	pussy willow	S	FACW	2
Scirpus atrovirens	dark green rush	H	OBL	4
Scirpus cyperinus	wool grass	H	OBL	6
Scirpus validus var. creber	soft-stem bulrush	H	OBL	5

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 3.1

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 12.3

Site 69 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Typha angustifolia	**narrow-leaved cattail**	**H**	**OBL**	**1**
Acer negundo	box elder	S	FAC	0
Acer saccharinum	silver maple	HS	FACW	0
*Achillea millefolium**	common milfoil	H	FACU	-
*Agrostis alba**	red top	H	FACW	-
Alisma subcordatum	common water plantain	H	OBL	4
*Alliaria petiolata**	garlic mustard	H	FAC	-
Asclepias incarnata	swamp milkweed	H	OBL	4
Asclepias syriaca	common milkweed	H	FACU	0
Aster novae-angliae	New England aster	H	FACW	4
Aster simplex	panicled aster	H	FAC	3
*Barbarea vulgaris**	winter cress	H	FAC	-
Bidens frondosa	common beggar's ticks	H	FACW	1
Carex lacustris	common lake sedge	H	OBL	6
Carex pellita	wooly sedge	H	OBL	4
Carex sp.	sedge	H	-	-
Carex stipata	common fox sedge	H	OBL	3
Carex stricta	common tussock sedge	H	OBL	5
Carex tribuloides	awl-fruited oval sedge	H	OBL	3
Cicuta maculata	water hemlock	H	OBL	6
*Cirsium arvense**	field thistle	H	FACU	-
Cornus obliqua	pale dogwood	S	FACW	6
Cornus racemosa	gray dogwood	S	FAC	1
Cornus stolonifera	red osier dogwood	S	FACW	6
*Elaeagnus umbellata**	autumn olive	S	UPL	-
Eleocharis erythropoda	red-rooted spike rush	H	OBL	2
Epilobium coloratum	cinnamon willow herb	H	OBL	3
Equisetum arvense	common horsetail	H	FAC	0
*Festuca elatior**	tall fescue	H	FACU	-
Fragaria virginiana	wild strawberry	H	FACU	1
Fraxinus pennsylvanica var. subintegerrima	green ash	HST	FACW	1
Galium aparine	annual bedstraw	H	FACU	1
Galium obtusum	wild madder	H	FACW	5
Geum laciniatum	rough avens	H	FACW	5
*Glechoma hederacea**	ground ivy	H	FACU	-
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
Impatiens capensis	spotted touch-me-not	H	FACW	3
Iris virginica var. shrevei	southern blue flag	H	OBL	5
Juncus dudleyi	Dudley's rush	H	FACW	4
*Lactuca serriola**	prickly lettuce	H	FACU	-
Leersia oryzoides	rice cut grass	H	OBL	4
Lemna minor	small duckweed	H	OBL	5
Lycopus americanus	common water horehound	H	OBL	5
*Lythrum salicaria**	purple loosestrife	H	OBL	-
Mentha arvensis var. villosa	wild mint	H	FACW	5
Parthenocissus quinquefolia	Virginia creeper	H	FACU	2
Penthorum sedoides	ditch stonecrop	H	OBL	5
*Phalaris arundinacea**	reed canary grass	H	FACW	-
Phragmites australis	common reed	H	FACW	1
*Poa pratensis**	Kentucky blue grass	H	FAC	-
Polygonum lapathifolium	curttip lady's thumb	H	FACW	0

Species list is continued on the following page …

Site 69 - Marsh

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Populus deltoides	eastern cottonwood	HS	FAC	2
*Potamogeton crispus**	beginner's pondweed	H	OBL	-
Potamogeton nodosus	American pondweed	H	OBL	7
Ranunculus sceleratus	cursed crowfoot	H	OBL	6
*Rhamnus cathartica**	common buckthorn	ST	FAC	-
*Rhamnus frangula**	glossy buckthorn	S	FACW	-
Ribes americanum	wild black currant	S	FACW	7
*Rosa multiflora**	Japanese rose	S	FACU	-
Rumex altissimus	pale dock	H	FACW	2
*Rumex crispus**	curly dock	H	FAC	-
*Salix alba**	white willow	T	FACW	-
Salix amygdaloides	peach-leaved willow	S	FACW	5
Salix interior	sandbar willow	S	FACW	1
Sambucus canadensis	common elder	HS	FACW	1
Scirpus atrovirens	dark green rush	H	OBL	4
Scirpus pendulus	red bulrush	H	OBL	4
Scirpus validus var. creber	soft-stem bulrush	H	OBL	5
Scutellaria lateriflora	mad-dog skullcap	H	OBL	5
Senecio pauperculus	balsam ragwort	H	FAC	6
Sium suave	water parsnip	H	OBL	7
*Solanum dulcamara**	bittersweet nightshade	HW	FAC	-
Solidago canadensis	Canada goldenrod	H	FACU	1
Solidago graminifolia	grass-leaved goldenrod	H	FACW	4
*Taraxacum officinale**	common dandelion	H	FACU	-
Typha latifolia	broad-leaved cattail	H	OBL	1
Verbena hastata	blue vervain	H	FACW	4
Veronica peregrina	purslane speedwell	H	FACW	0
Viburnum lentago	nannyberry	S	FAC	5
Vitis riparia	riverbank grape	W	FACW	2

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 3.3

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 25.4

Site 70 - Marsh/Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Typha angustifolia	**narrow-leaved cattail**	**H**	**OBL**	**1**
Acer negundo	box elder	T	FAC	0
Acer saccharinum	silver maple	ST	FACW	0
*Achillea millefolium**	common milfoil	H	FACU	-
Agrimonia gryposepala	tall agrimony	H	FACU	2
*Agrostis alba**	red top	H	FACW	-
*Alliaria petiolata**	garlic mustard	H	FAC	-
Apocynum cannabinum	dogbane	H	FAC	4
Asclepias incarnata	swamp milkweed	H	OBL	4
Aster puniceus	bristly aster	H	OBL	8
Aster simplex	panicled aster	H	FAC	3
*Barbarea vulgaris**	winter cress	H	FAC	-
Boehmeria cylindrica	false nettle	H	OBL	2
Calamagrostis canadensis	blue joint grass	H	OBL	3
Carex lacustris	common lake sedge	H	OBL	6
Carex pellita	wooly sedge	H	OBL	4
Carex sp.	sedge	H	-	-
Carex stricta	common tussock sedge	H	OBL	5
Carex tribuloides	awl-fruited oval sedge	H	OBL	3
Cicuta maculata	water hemlock	H	OBL	6
*Cirsium arvense**	field thistle	H	FACU	-
Convolvulus sepium	American bindweed	H	FAC	1
Cornus obliqua	pale dogwood	S	FACW	6
Cornus racemosa	gray dogwood	S	FAC	1
Cryptotaenia canadensis	honewort	H	FAC	2
Eleocharis erythropoda	red-rooted spike rush	H	OBL	2
Equisetum arvense	common horsetail	H	FAC	0
Erigeron philadelphicus	marsh fleabane	H	FACW	4
Fragaria virginiana	wild strawberry	H	FACU	1
Galium aparine	annual bedstraw	H	FACU	1
Galium obtusum	wild madder	H	FACW	5
Geum canadense	white avens	H	FAC	1
Geum laciniatum	rough avens	H	FACW	5
*Glechoma hederacea**	ground ivy	H	FACU	-
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
Impatiens capensis	spotted touch-me-not	H	FACW	3
Iris virginica var. shrevei	southern blue flag	H	OBL	5
Juncus dudleyi	Dudley's rush	H	FACW	4
Juniperus virginiana var. crebra	eastern red cedar	S	FACU	2
Lilium michiganense	Michigan lily	H	FACW	6
*Lonicera morrowii**	Morrow's honeysuckle	S	FACU	-
Lycopus americanus	common water horehound	H	OBL	5
Lycopus uniflorus	nothern bugle weed	H	OBL	7
Lysimachia thyrsiflora	tufted loosestrife	H	OBL	9
*Lythrum salicaria**	purple loosestrife	H	OBL	-
Malus ioensis	Iowa crab	S	UPL	3
Mentha arvensis var. villosa	wild mint	H	FACW	5
Monarda fistulosa	wild bergamot	H	FACU	4
Onoclea sensibilis	sensitive fern	H	FACW	8
Penstemon digitalis	foxglove beard tongue	H	FAC	4
Polygonatum canaliculatum	great Solomon seal	H	FACU	3

Species list is continued on the following page …

Site 70 - Marsh/Wet meadow

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Polygonum amphibium var. stipulaceum	water knotweed	H	OBL	4
*Populus alba**	white poplar	S	UPL	-
Populus deltoides	eastern cottonwood	T	FAC	2
Potentilla simplex	common cinquefoil	H	FACU	4
Prunella vulgaris var. lanceolata	self-heal	H	FAC	0
Prunus virginiana	common choke cherry	HS	FACU	3
Pycnanthemum virginianum	common mountain mint	H	FACW	5
Ranunculus abortivus	little-leaf buttercup	H	FACW	0
Ranunculus recurvatus	hooked buttercup	H	FACW	5
Ranunculus sceleratus	cursed crowfoot	H	OBL	6
Ratibida pinnata	yellow coneflower	H	UPL	4
*Rhamnus cathartica**	common buckthorn	ST	FAC	-
*Rhamnus frangula**	glossy buckthorn	S	FACW	-
Rorippa palustris var. fernaldiana	marsh yellow cress	H	OBL	4
Rosa palustris	swampy rose	S	OBL	7
Rosa setigera	Illinois rose	HS	FACU	7
*Rumex crispus**	curly dock	H	FAC	-
Salix discolor	pussy willow	S	FACW	2
Salix nigra	black willow	T	OBL	4
Salix petiolaris	meadow willow	S	OBL	7
Sanicula gregaria	clustered black snakeroot	H	FAC	2
Scirpus fluviatilis	river bulrush	H	OBL	4
Scutellaria epilobiifolia	marsh skullcap	H	OBL	5
Scutellaria lateriflora	mad-dog skullcap	H	OBL	5
Senecio pauperculus	balsam ragwort	H	FAC	6
Silphium terebinthinaceum	prairie dock	H	FAC	5
Solidago canadensis	Canada goldenrod	H	FACU	1
Solidago gigantea	late goldenrod	H	FACW	4
Solidago graminifolia	grass-leaved goldenrod	H	FACW	4
*Taraxacum officinale**	common dandelion	H	FACU	-
Thalictrum dasycarpum	purple meadow rue	H	FACW	5
Ulmus americana	American elm	HT	FACW	3
Verbena hastata	blue vervain	H	FACW	4
Verbena urticifolia	white vervain	H	FAC	5
Veronicastrum virginicum	culver's root	H	FAC	7
*Viburnum opulus**	European high-bush cranberry	S	FAC	-
Viburnum prunifolium	black haw	S	FACU	5
Viola sororia	common blue violet	H	FAC	3
Vitis riparia	riverbank grape	W	FACW	2

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 3.8

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 32.8

Site 71 - Wet shrubland

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Salix interior	**sandbar willow**	**S**	**FACW**	**1**
Typha angustifolia	**narrow-leaved cattail**	**H**	**OBL**	**1**
Agrimonia gryposepala	tall agrimony	H	FACU	2
Alisma subcordatum	common water plantain	H	OBL	4
*Allium vineale**	field garlic	H	FACU	-
Ambrosia trifida	giant ragweed	H	FAC	0
Apocynum cannabinum	dogbane	H	FAC	4
Asclepias incarnata	swamp milkweed	H	OBL	4
Aster simplex	panicled aster	H	FAC	3
*Barbarea vulgaris**	winter cress	H	FAC	-
Bidens frondosa	common beggar's ticks	H	FACW	1
Boehmeria cylindrica	false nettle	H	OBL	2
Carex granularis	pale sedge	H	FACW	4
Carex pellita	wooly sedge	H	OBL	4
*Chenopodium album**	lamb's quarters	H	FACU	-
Cicuta maculata	water hemlock	H	OBL	6
*Cirsium arvense**	field thistle	H	FACU	-
Convolvulus sepium	American bindweed	H	FAC	1
Cornus obliqua	pale dogwood	S	FACW	6
Cornus racemosa	gray dogwood	S	FAC	1
Eleocharis erythropoda	red-rooted spike rush	H	OBL	2
Equisetum arvense	common horsetail	H	FAC	0
Erigeron philadelphicus	marsh fleabane	H	FACW	4
Fragaria virginiana	wild strawberry	H	FACU	1
Galium obtusum	wild madder	H	FACW	5
Geum canadense	white avens	H	FAC	1
Helianthus grosseserratus	sawtooth sunflower	H	FACW	2
*Hordeum jubatum**	squirrel-tail grass	H	FAC	-
Iris virginica var. shrevei	southern blue flag	H	OBL	5
*Lonicera morrowii**	Morrow's honeysuckle	S	FACU	-
Ludwigia palustris var. americana	marsh purslane	H	OBL	5
Lycopus americanus	common water horehound	H	OBL	5
Malus ioensis	Iowa crab	T	UPL	3
Mentha arvensis var. villosa	wild mint	H	FACW	5
Mimulus ringens	monkey flower	H	OBL	6
Monarda fistulosa	wild bergamot	H	FACU	4
Parthenocissus quinquefolia	Virginia creeper	HW	FACU	2
Penstemon digitalis	foxglove beard tongue	H	FAC	4
*Poa pratensis**	Kentucky blue grass	H	FAC	-
*Rhamnus cathartica**	common buckthorn	S	FAC	-
*Rhamnus frangula**	glossy buckthorn	S	FACW	-
Rhus radicans	poison ivy	H	FAC	2
*Rosa multiflora**	Japanese rose	S	FACU	-
*Rumex crispus**	curly dock	H	FAC	-
Salix amygdaloides	peach-leaved willow	ST	FACW	5
Salix nigra	black willow	ST	OBL	4
Sanicula gregaria	clustered black snakeroot	H	FAC	2
Scirpus atrovirens	dark green rush	H	OBL	4
Scirpus validus var. creber	soft-stem bulrush	H	OBL	5
Senecio pauperculus	balsam ragwort	H	FAC	6
Sium suave	water parsnip	H	OBL	7

Species list is continued on the following page …

Site 71 - Wet shrubland

Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
*Solanum dulcamara**	bittersweet nightshade	H	FAC	-
Solidago canadensis	Canada goldenrod	H	FACU	1
Solidago graminifolia	grass-leaved goldenrod	H	FACW	4
Stachys tenuifolia var. hispida	marsh hedge nettle	H	OBL	5
*Taraxacum officinale**	common dandelion	H	FACU	-
Thalictrum revolutum	waxy meadow rue	H	FAC	6
Verbena hastata	blue vervain	H	FACW	4
Viola sororia	common blue violet	H	FAC	3
Vitis riparia	riverbank grape	W	FACW	2
Zizia aurea	golden Alexanders	H	FAC	7

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 3.4

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 23.8

Site 72 - Wet meadow

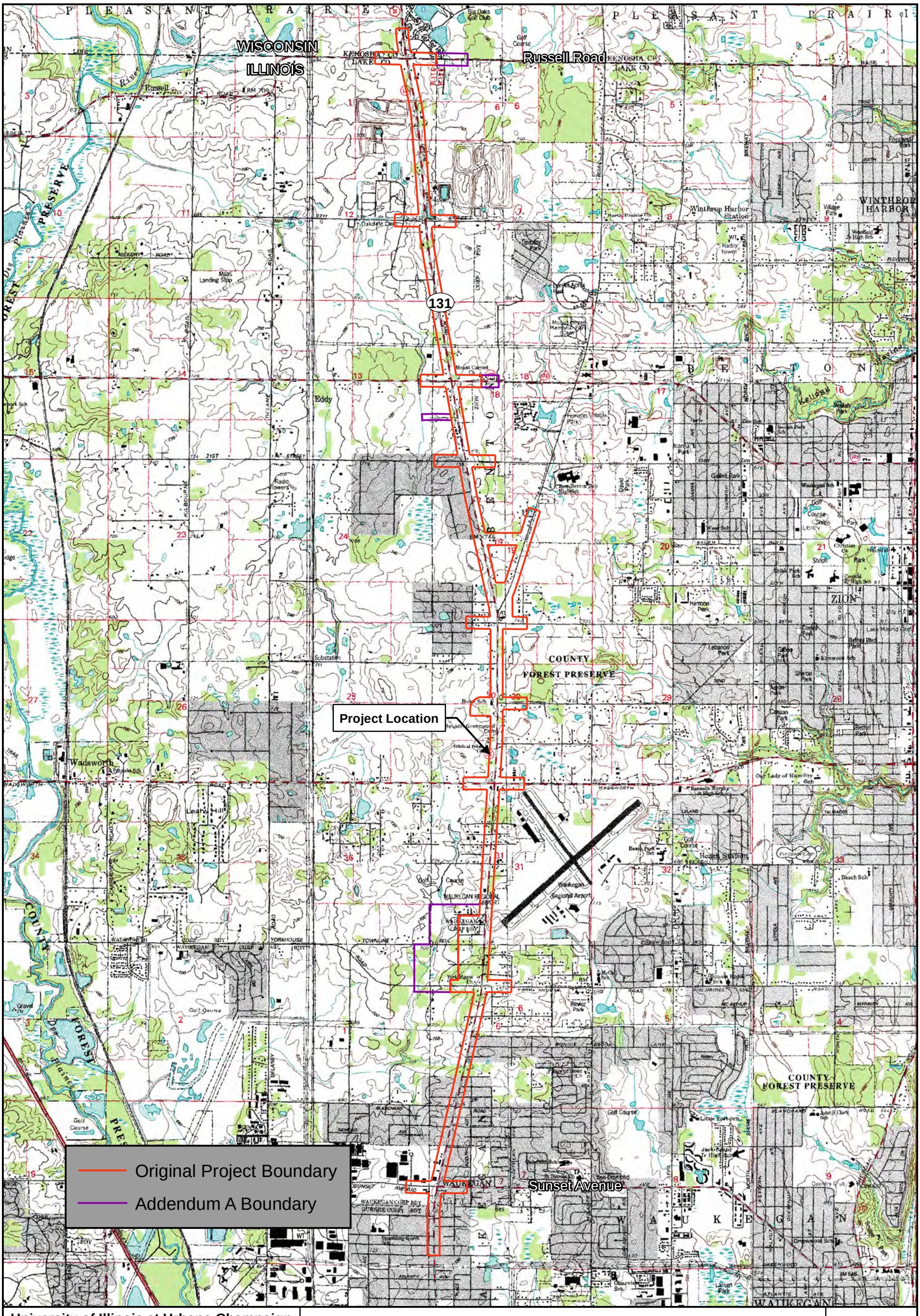
Scientific Name	Common Name	Strata	Wetland Indicator Status	Coefficient of Conservatism
Phalaris arundinacea*	**reed canary grass**	**H**	**FACW**	**-**
Aster simplex	panicled aster	H	FAC	3
Carex pellita	wooly sedge	H	OBL	4
Carex vulpinoidea	brown fox sedge	H	FACW	2
*Festuca elatior**	tall fescue	H	FACU	-
Fraxinus pennsylvanica var. subintegerrima	green ash	H	FACW	1
*Poa pratensis**	Kentucky blue grass	H	FAC	-
*Rhamnus cathartica**	common buckthorn	S	FAC	-
*Rumex crispus**	curly dock	H	FAC	-
Scirpus pendulus	red bulrush	H	OBL	4
Vitis riparia	riverbank grape	W	FACW	2

*Non-native species **Bolded species is dominant in the denoted stratum** Mean C = 2.7

H = Herb, T = Tree, S = Sapling/Shrub, W = Woody Vine FQI = 6.5

APPENDIX C

Figures



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ILLINOIS NATURAL HISTORY SURVEY
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1816 South Oak Street
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Figure 1
Project Location Map
IL 131 (FAP 880 and FAP 2711) Addendum A
Lake County

Seq. No: 14766A

Meters 0 1,000
Feet 0 3,000

June 2013

N W E S

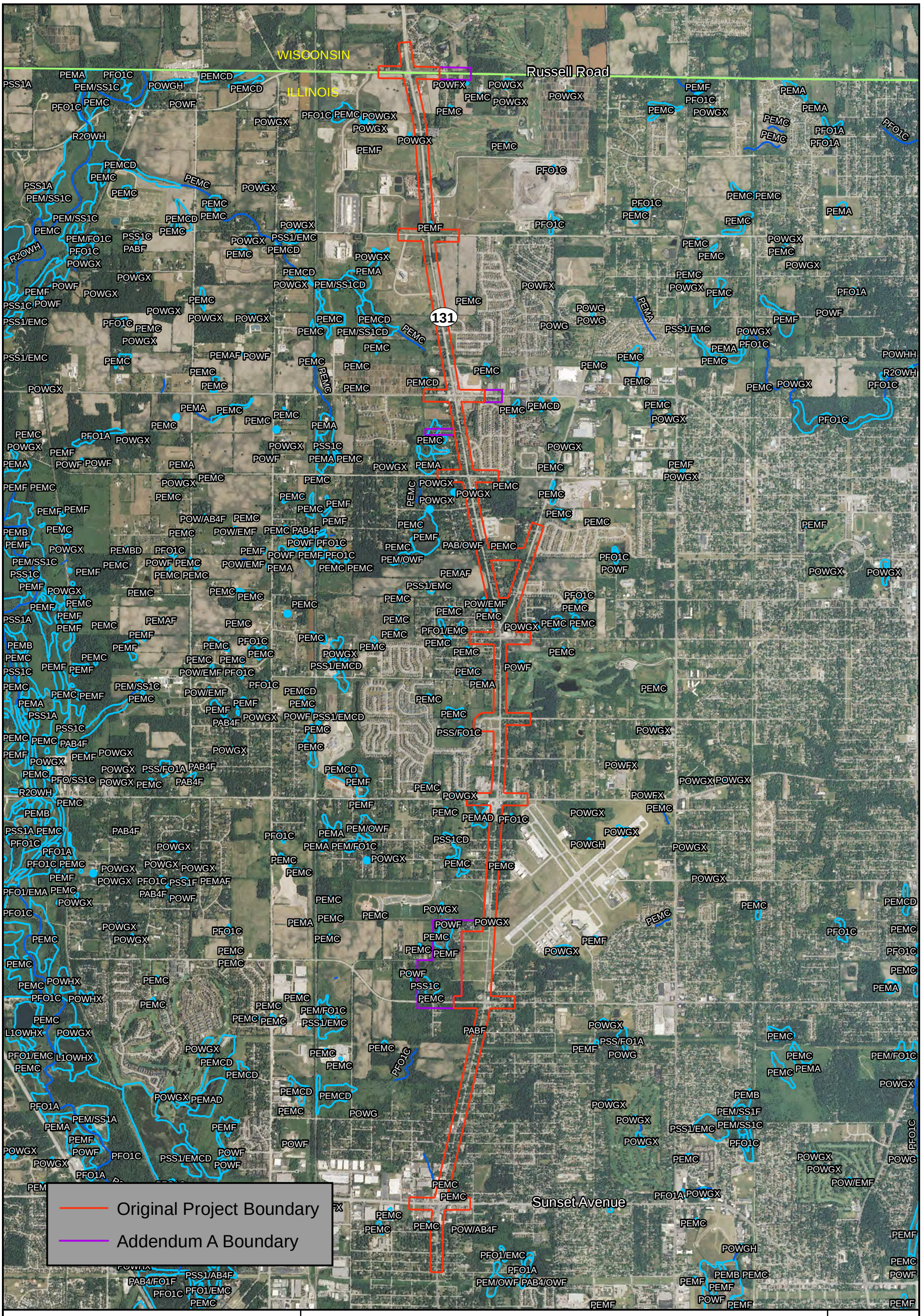

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Figure 2
National Wetlands Inventory Map
IL 131 (FAP 880 and FAP 2711) Addendum A
Lake County
Seq. No: 14766A

Meters 0 1,000
Feet 0 3,000

June 2013

N W E S

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Figure 3
Lake County ADID & Wetland Inventory Map
IL 131 (FAP 880 and FAP 2711) Addendum A
Lake County

Seq. No: 14766A

Meters 0 1,000
Feet 0 3,000

June 2013

N W E S

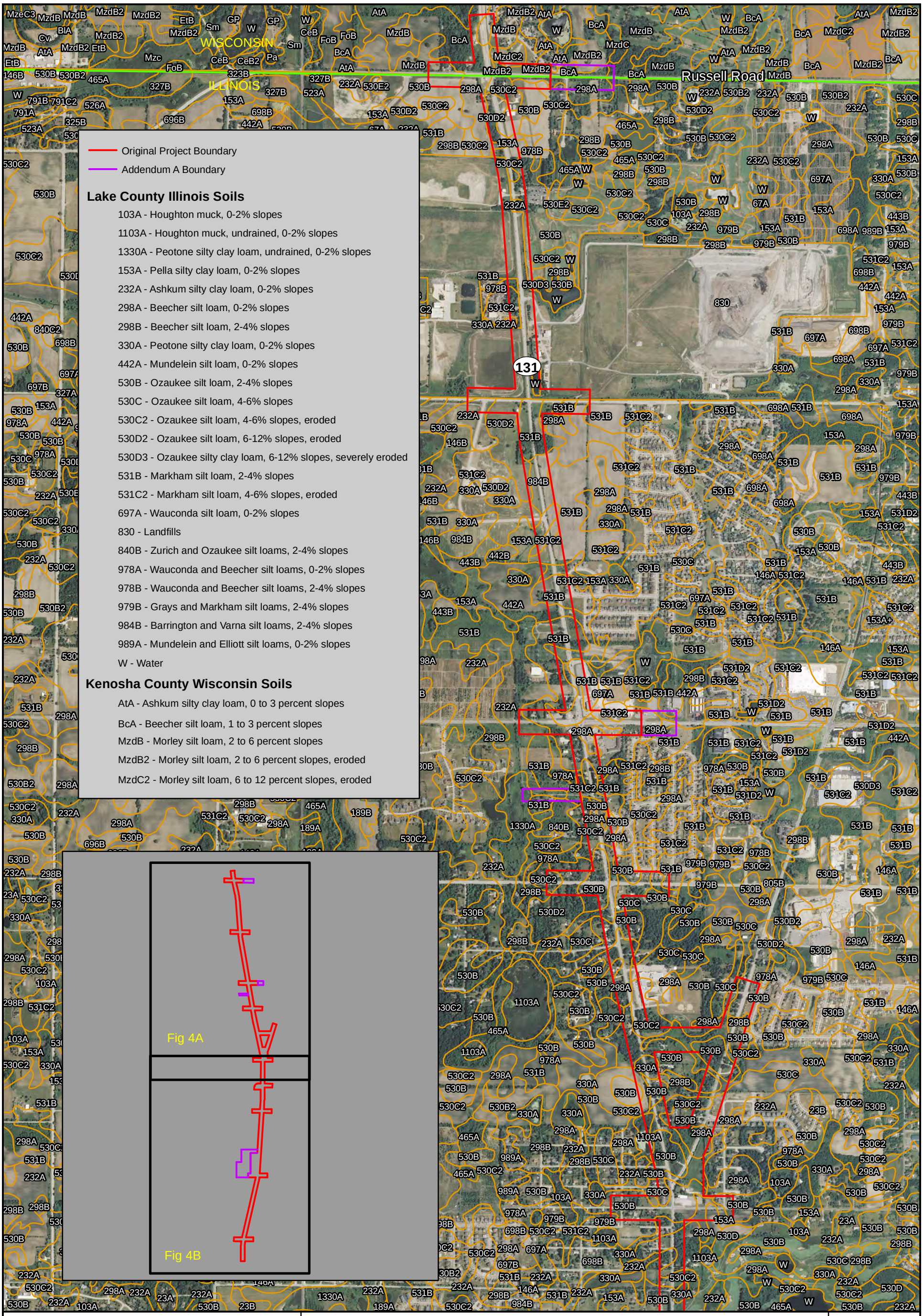

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Figure 4A
Soil Survey Map
IL 131 (FAP 880 and FAP 2711) Addendum A
Lake County

Seq. No: 14766A

Meters 0 500
Feet 0 1,500

June 2013

N W E S

Original Project Boundary

Addendum A Boundary

Lake County Illinois Soils

103A - Houghton muck, 0-2% slopes

1103A - Houghton muck, undrained, 0-2% slopes

1330A - Peotone silty clay loam, undrained, 0-2% slopes

153A - Pella silty clay loam, 0-2% slopes

232A - Ashkum silty clay loam, 0-2% slopes

298A - Beecher silt loam, 0-2% slopes

298B - Beecher silt loam, 2-4% slopes

330A - Peotone silty clay loam, 0-2% slopes

442A - Mundelein silt loam, 0-2% slopes

530B - Ozaukee silt loam, 2-4% slopes

530C - Ozaukee silt loam, 4-6% slopes

530C2 - Ozaukee silt loam, 4-6% slopes, eroded

530D2 - Ozaukee silt loam, 6-12% slopes, eroded

530D3 - Ozaukee silty clay loam, 6-12% slopes, severely eroded

531B - Markham silt loam, 2-4% slopes

531C2 - Markham silt loam, 4-6% slopes, eroded

697A - Wauconda silt loam, 0-2% slopes

830 - Landfills

840B - Zurich and Ozaukee silt loams, 2-4% slopes

978A - Wauconda and Beecher silt loams, 0-2% slopes

978B - Wauconda and Beecher silt loams, 2-4% slopes

979B - Grays and Markham silt loams, 2-4% slopes

984B - Barrington and Varna silt loams, 2-4% slopes

989A - Mundelein and Elliott silt loams, 0-2% slopes

W - Water

Kenosha County Wisconsin Soils

AtA - Ashkum silty clay loam, 0 to 3 percent slopes

BcA - Beecher silt loam, 1 to 3 percent slopes

MzdB - Morley silt loam, 2 to 6 percent slopes

MzdB2 - Morley silt loam, 2 to 6 percent slopes, eroded

MzdC2 - Morley silt loam, 6 to 12 percent slopes, eroded

Fig 4A

Fig 4B

Sunset Avenue

131

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Figure 4B
Soil Survey Map
IL 131 (FAP 880 and FAP 2711) Addendum A
Lake County

Seq. No: 14766A

Meters 0 500

Feet 0 1,500

June 2013

N W E S

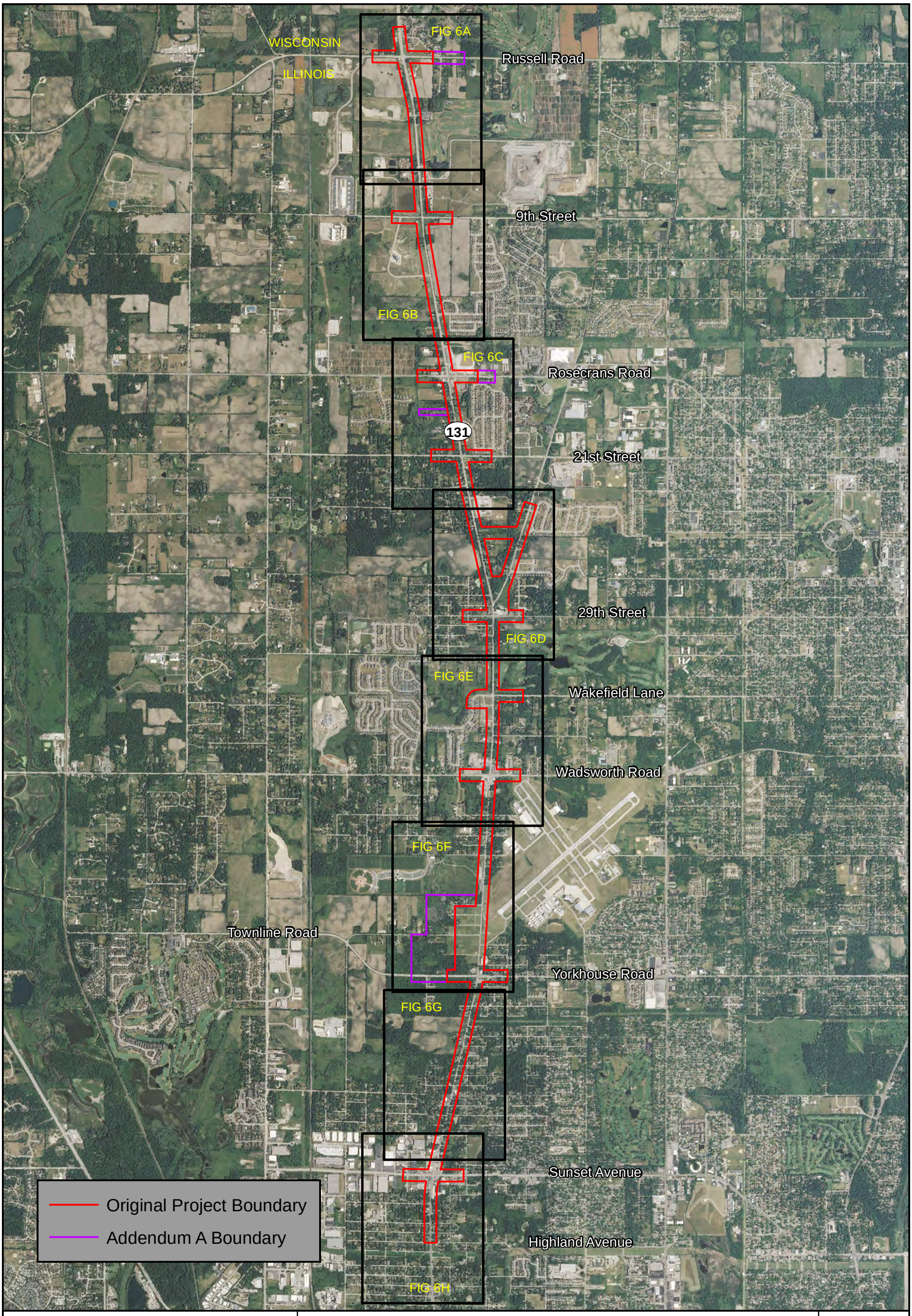

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Figure 5
Wetland Delineation Overview Map
IL 131 (FAP 880 and FAP 2711) Addendum A
Lake County

Seq. No: 14766A

Meters 0 1,000
Feet 0 3,000

June 2013

N W E S

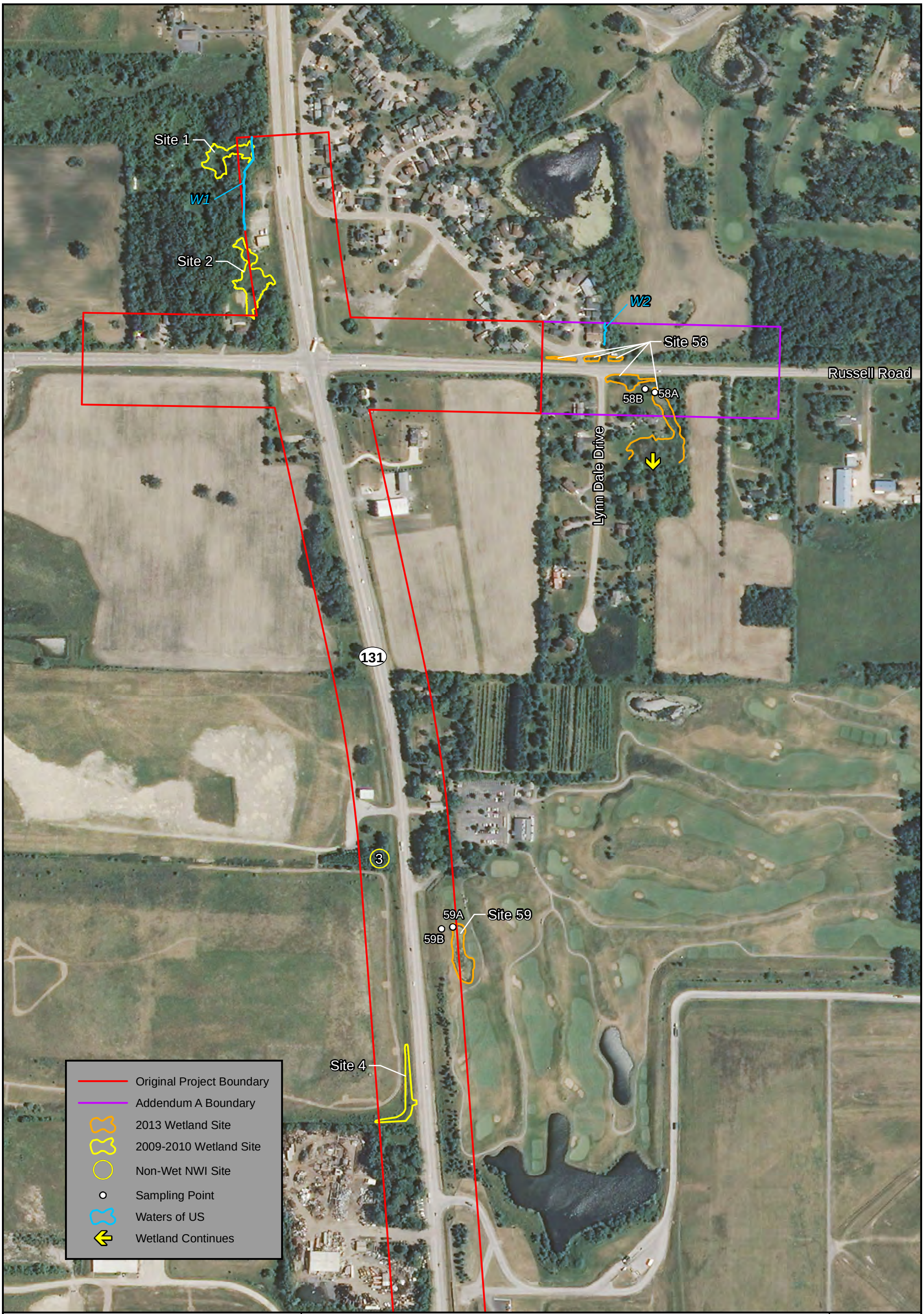

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Figure 6A
Wetland Delineation Map
IL 131 (FAP 880 and FAP 2711) Addendum A
Lake County

Seq. No: 14766A

Meters 0 100
Feet 0 400

June 2013

N W E S

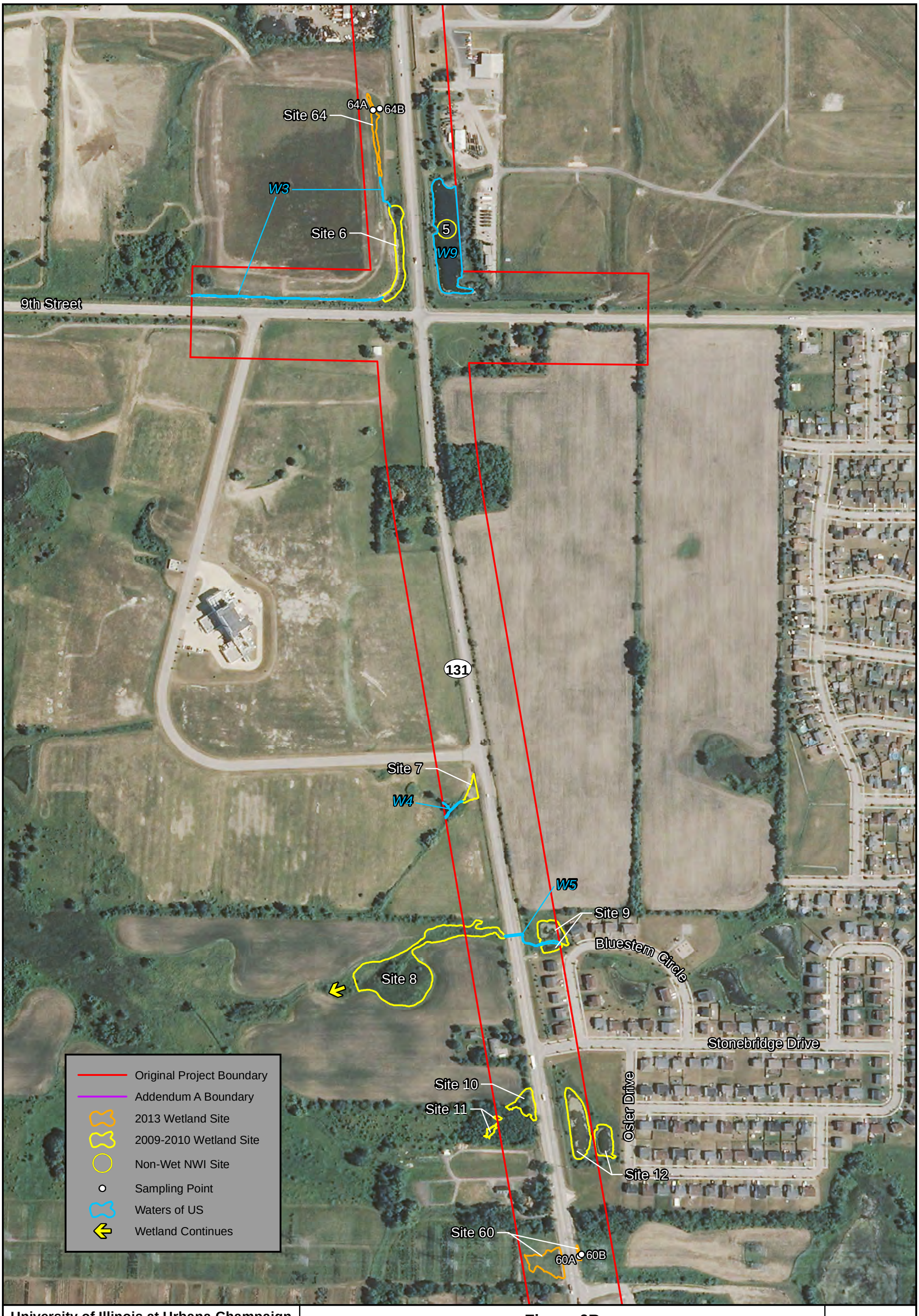

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Figure 6B
Wetland Delineation Map
IL 131 (FAP 880 and FAP 2711) Addendum A
Lake County

Seq. No: 14766A

Meters 0 100
Feet 0 400

June 2013

N W E S

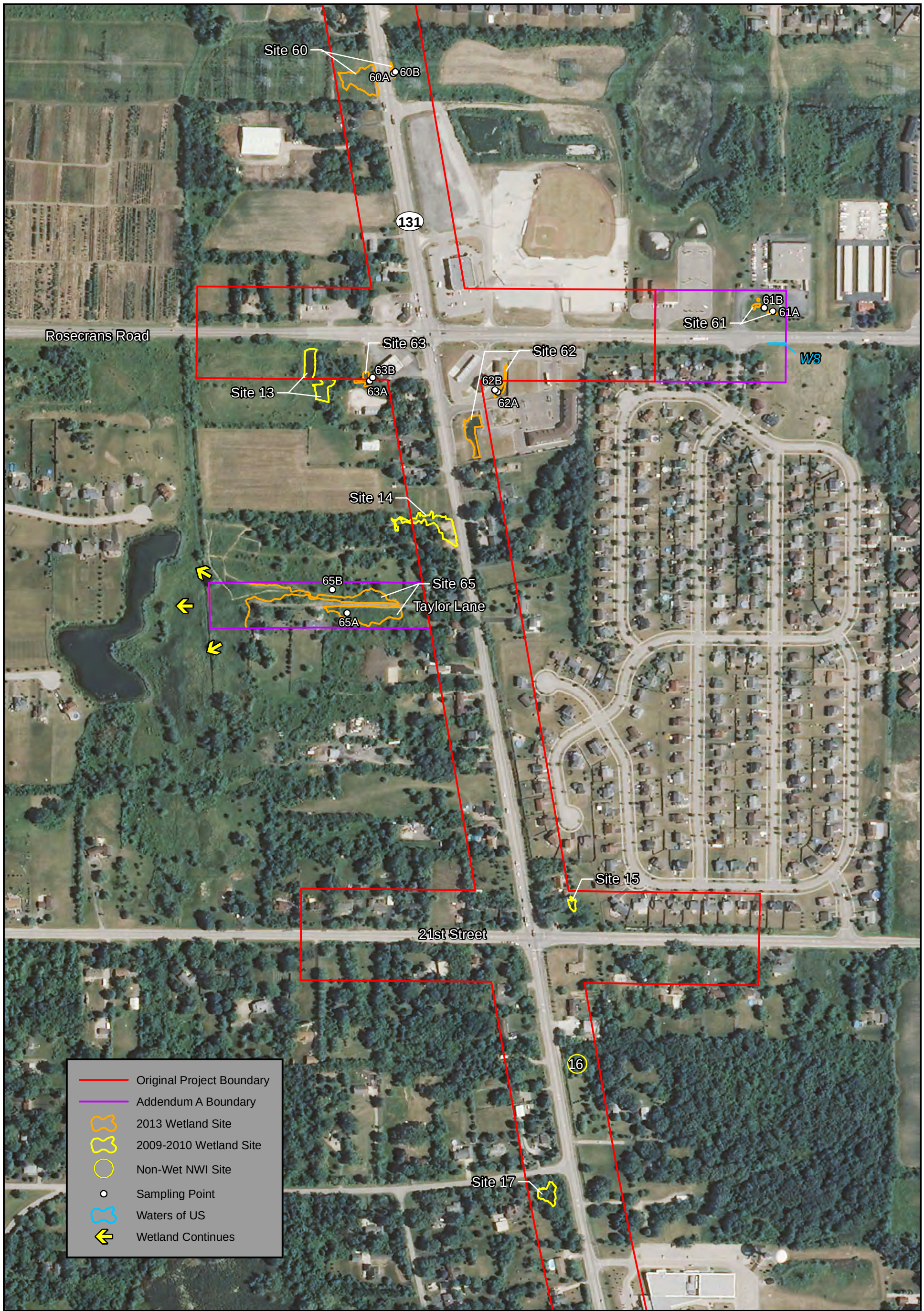

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Figure 6C
Wetland Delineation Map
IL 131 (FAP 880 and FAP 2711) Addendum A
Lake County

Seq. No: 14766A

Meters 0 100
Feet 0 400

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Figure 6D
Wetland Delineation Map
IL 131 (FAP 880 and FAP 2711) Addendum A
Lake County

Seq. No: 14766A

Meters 0 100
Feet 0 400

June 2013

N W E S

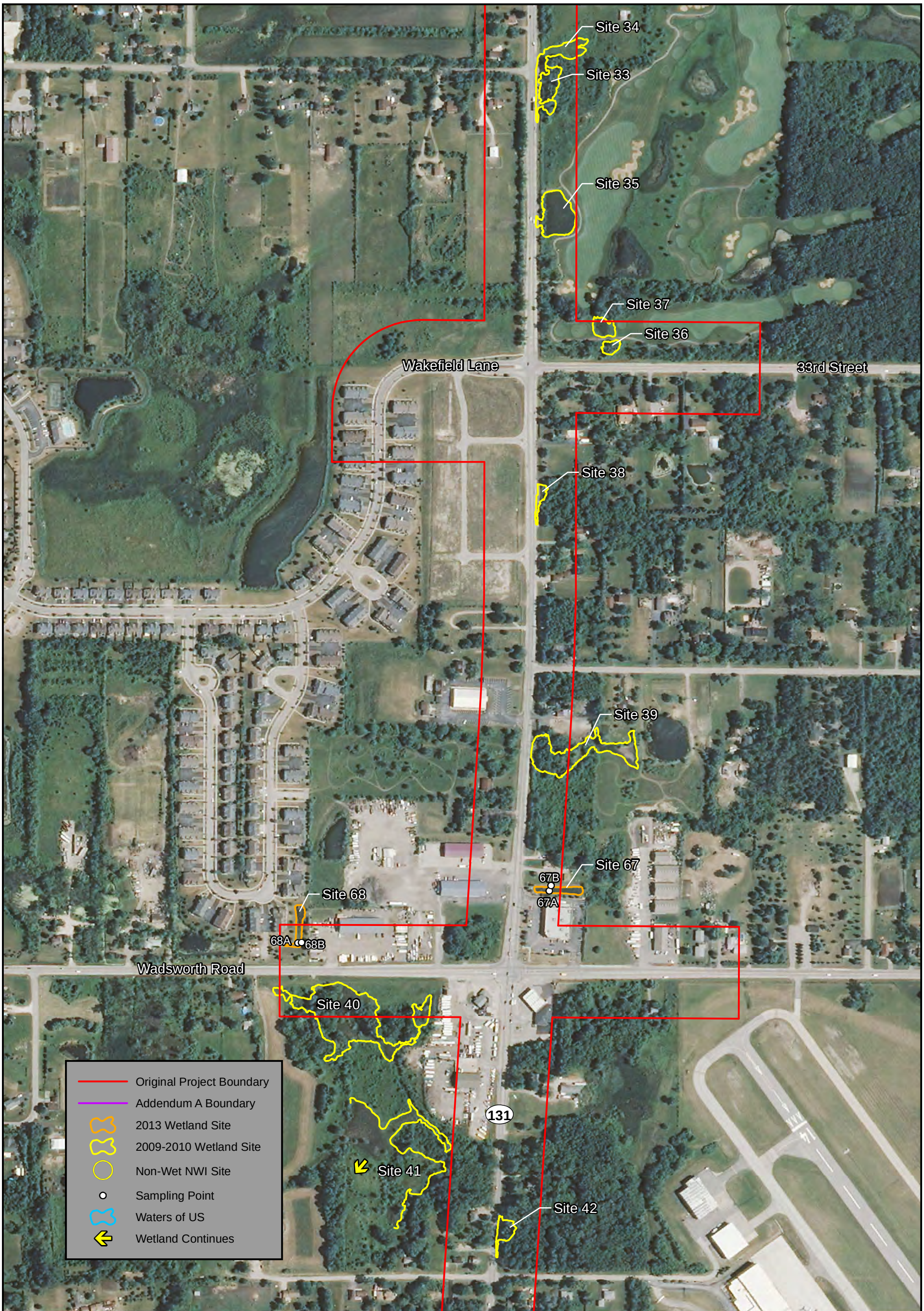

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Figure 6E
Wetland Delineation Map
IL 131 (FAP 880 and FAP 2711) Addendum A
Lake County

Seq. No: 14766A

Meters 0 100
Feet 0 400

June 2013

N W E S

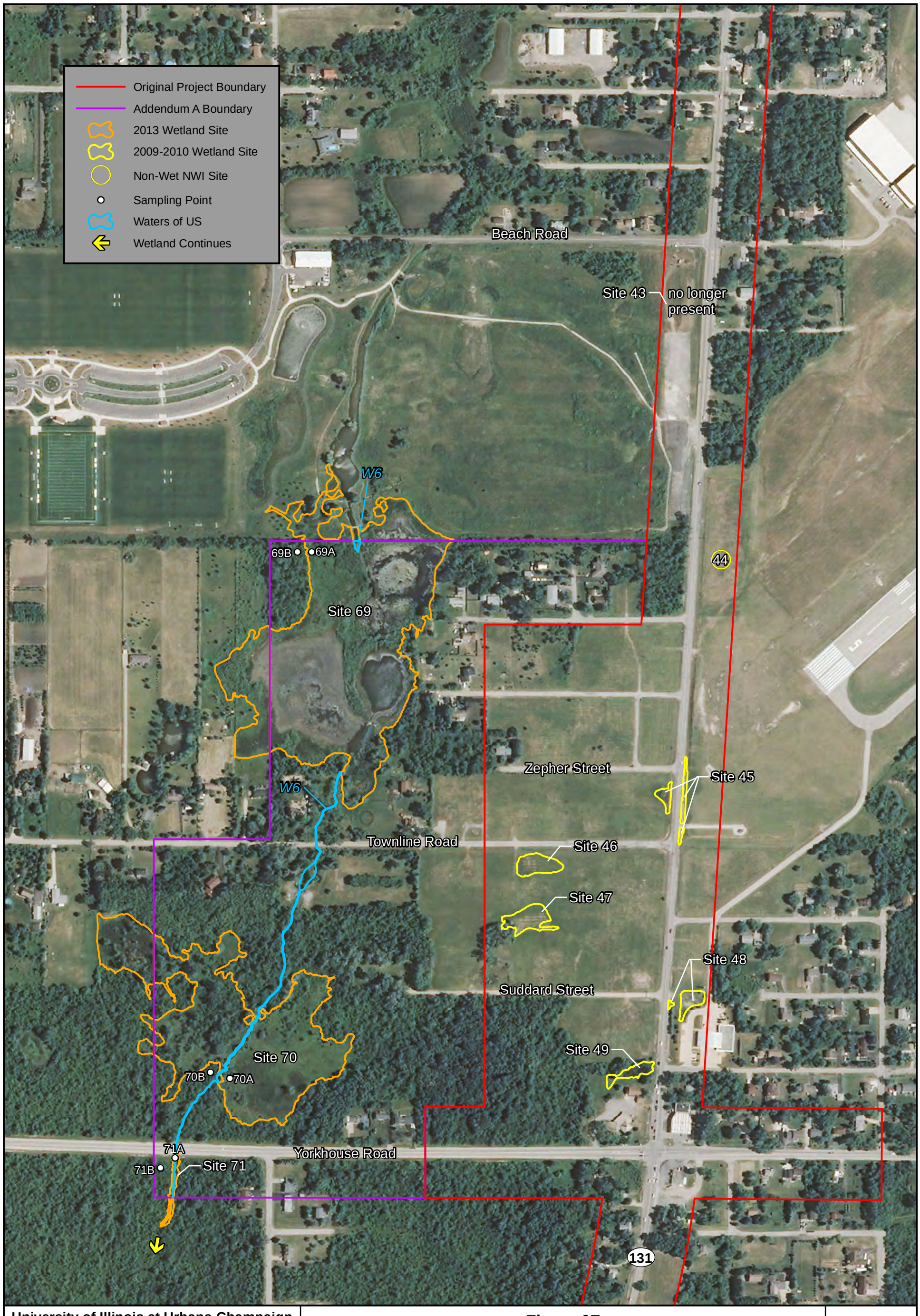

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Figure 6F
Wetland Delineation Map
IL 131 (FAP 880 and FAP 2711) Addendum A
Lake County

Seq. No: 14766A

Meters 0 100
Feet 0 400

June 2013

N W E S

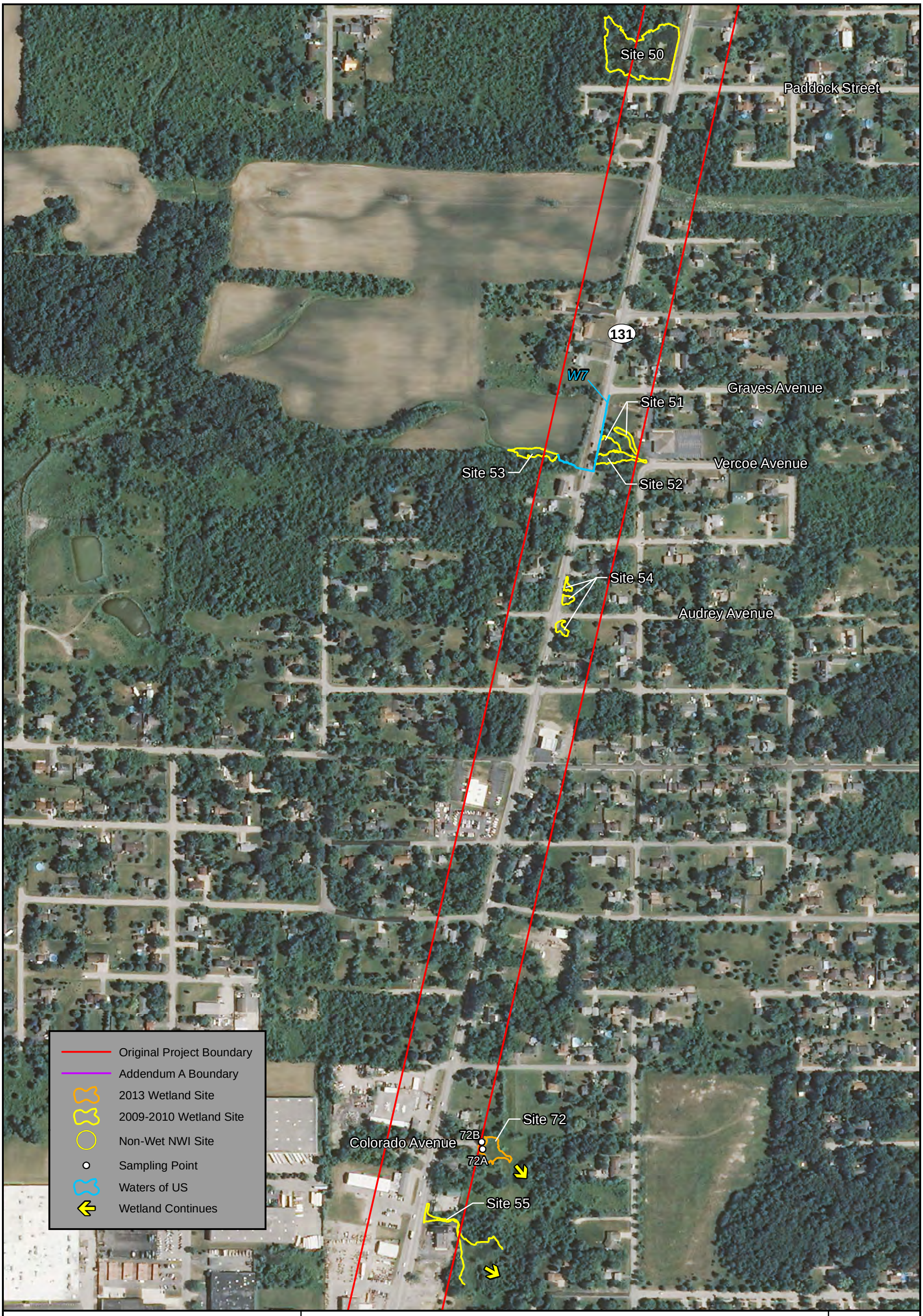

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Figure 6G
Wetland Delineation Map
IL 131 (FAP 880 and FAP 2711) Addendum A
Lake County

Seq. No: 14766A

Meters 0 100
Feet 0 400

June 2013

N W E S

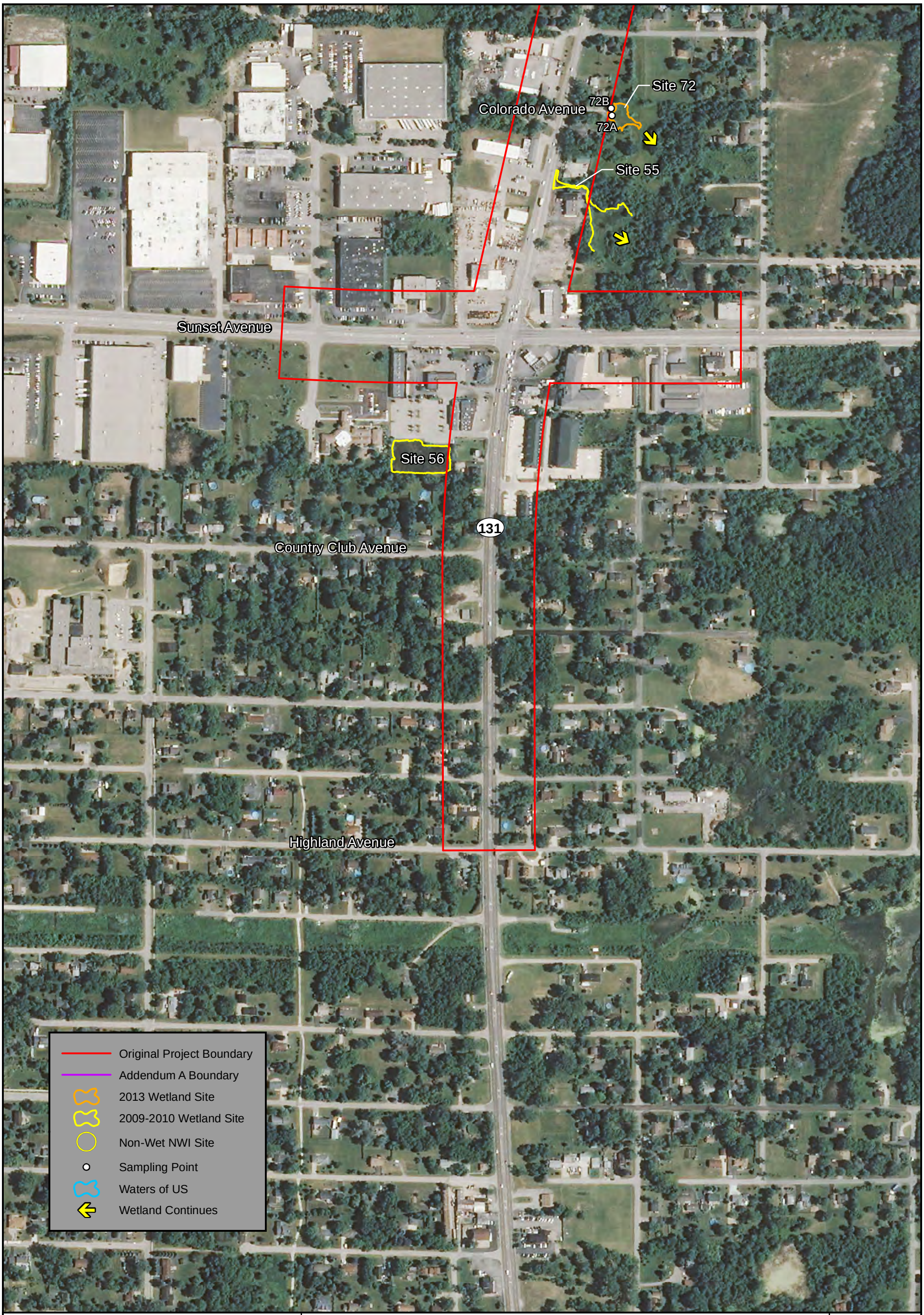

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Figure 6H
Wetland Delineation Map
IL 131 (FAP 880 and FAP 2711) Addendum A
Lake County

Seq. No: 14766A

Meters 0 100
Feet 0 400

June 2013

N W E S