Transmittal of Wetland Delineation Boundaries for Processing and Assessment of Wetland Impacts:

Enclosed is a copy of the Wetland Report for the above-mentioned project, including copies of air photos showing the locations of the wetlands. The disc is included.

Please transmit this CADD wetland data to the consultant to be incorporated into CADD per IDOT standards. As hard copy, request the consultant make a plot of the project with the wetlands and the proposed right-of-way and any wetland impacts in a thorough manner - including temporary easements, culvert replacements, etc.

Request a calculation of the area of each wetland within the right-of-way, the area of impacts, and a calculation of the total area of each wetland. Some of the wetlands may extend beyond the survey area. In that case, calculate only the wetland area shown in the study area and note that the area is an estimate. The Environmental Studies Unit will need 2 copies of the CADD plot showing the boundary location of the wetlands as well as the areas of wetland impacts depicted as a cross-hatched pattern.

Based on the entire scope of work for the entire project, including all aspects of the proposed work, such as, temporary easements, drainage, utilities and traffic signals, etc, estimate the area of wetland impacts. Prepare a Wetland Impact Evaluation (WIE) form for each wetland within the project area. The content of the WIE forms should accompany the CADD plot exhibit. Include a WIE form for each wetland. If no impacts to a wetland are expected, document no impact on the WIE form for that particular wetland.

Upon completion, provide the WIE forms and exhibits to the District One, Environmental Studies Unit, for further processing.

The WIE form can be found under District Forms, BDE 2328.
TRANSMITTAL FORM

To: Bureau of Design and Environment
Attn: Susan Dees
From: Illinois Natural History Survey
Re: Wetland Survey

Route and Location
Route: FAP 880/FAP 2711 (IL 131), Addition
At: Sunset Ave. to Russel Rd.
County: Lake
Applicant: IDOT District 1
Seq No: 14766

Survey Conducted By: Mary Ann Feist, Ian Draheim, Jason Zylka, and Brad Zercher (maps)
Division of Ecology and Conservation Science
Section for Wildlife and Plant Ecology
Illinois Natural History Survey
1816 South Oak St.
Champaign, Illinois 61820
(217) 244-6858 (Feist)

Date Conducted: 1 June 2010

Project Summary:
This report is an addition to the following report submitted to IDOT on 19 October 2009: Feist, M.A., and J. Kurylo, P. Marcum, J. Zylka, V. Sivicek, and B. Zercher. 2009.
Wetland Survey Report for FAP 880/FAP 2711 (IL 131) from Sunset Ave. to Russel Rd., Lake County, Illinois. On 1 June 2010 a portion of the original FAP 880/FAP 2711 (IL 131) project area between IL 131 and Kenosha Road was revisited to survey for potential wetlands. One site was found and determined to be a wetland. This site should be added to the report cited above as Site 57. Results of this determination are summarized in the site summary below and are described in more detail on the accompanying form. A printout of the DOQ showing the locations of the determination site is included with this report. GIS data have been uploaded to the IDOT extranet.

Signed: [Signature]
Dr. Allen E. Plocher
INHS>IDOT Project Coordinator

Date: 7/1/2010
Site Summary

Site 57: This wet meadow/marsh occurs in two locations between IL 131 and Kenosha Rd. The larger part is approximately 360 m (1118 ft) north of 29th St. while the smaller part is approximately 250 m (820 ft) north of 29th St. Dominant hydrophytic vegetation, hydric soils and wetland hydrology are present; therefore, this site is a wetland. The NWI did not identify this site as wetland. This wetland occupies a total area of 0.290 ha (0.717 ac). The mean C value (C̄) for this site is 2.7 and the FQI is 14.4, which indicates that this site is of fair natural quality. This wetland is isolated.
ROUTINE ON-SITE WETLAND DETERMINATION
Site 57 (page 1 of 3)

Field Investigators: Feist, Draheim, and Zylka, Dates: 1 June 2010
Sequence No.: 14766 Project Name: FAP 880/FAP 2711 (IL 131)
State: Illinois County: Lake Applicant: IDOT District 1
Site Name: Wet meadow/marsh
Legal Description: T. 46 N., R. 12 E., Sect. 19, SW/4
Location: This site is located in two parts between IL 131 and Kenosha Rd. The
larger part is approximately 360 m (1181 ft) north of 29th St., while the smaller part
is approximately 250 m (820 ft) north of 29th St.

Are climatic/hydrologic conditions typical for time of year? Yes: X No:
Do normal environmental conditions exist at this site? Yes: X No:
Has the vegetation, soil, or hydrology been significantly disturbed? Yes: No: X

VEGETATION

<table>
<thead>
<tr>
<th>Dominant Plant Species</th>
<th>Indicator Status</th>
<th>Stratum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Phalaris arundinacea</td>
<td>FACW+</td>
<td>herb</td>
</tr>
<tr>
<td>2. Scirpus fluviatilis</td>
<td>OBL</td>
<td>herb</td>
</tr>
</tbody>
</table>

Percentage of dominant species that are OBL, FACW, or FAC: 100%

Hydrophytic vegetation: Yes: X No:
Rationale: More than 50% of the dominants are OBL, FACW, or FAC.

SOILS
Series and phase: NRCS mapped as Ashkum silty clay loam, revised to Peotone silty
clay loam.
On Lake County hydric soils list? Yes: X No:
Is the soil a histosol? Yes: No: X
Histic epipedon present? Yes: No: X
Redox concentrations: Yes: X No: Color: 10YR 5/4 & 10YR 4/6
Redox depletions: Yes: No: X
Matrix color: N 2.5/0 over N 6/0
Other indicators: This site is located in a depression.

Hydric soils: Yes: X No:
Rationale: The NRCS classifies Peotone silty clay loam as a
Cumulic Vertic Endoaquoll that is very poorly drained.
This soil contains redivomorphc concentrations within a
gleyed matrix, which indicates saturated or reduced
conditions for an extended duration during the growing
season. Therefore, the soil at this site meets the hydric
soil criterion. This soil meets NRCS hydric soil indicator
A12 – Thick Dark Surface.
ROUTINE ON-SITE WETLAND DETERMINATION
Site 57 (page 2 of 3)

Field Investigators: Feist, Draheim, and Zylka, Dates: 1 June 2010
Sequence No.: 14766 Project Name: FAP 880/FAP 2711 (IL 131)
State: Illinois County: Lake Applicant: IDOT District 1
Site Name: Wet meadow/marsh
Legal Description: T. 46 N., R. 12 E., Sect. 19, SW/4
Location: This site is located in two parts between IL 131 and Kenosha Rd. The larger part is approximately 360 m (1181 ft) north of 29th St., while the smaller part is approximately 250 m (820 ft) north of 29th St.

HYDROLOGY
Landform: Depression Local Relief: Concave
Inundated: Yes (in parts) Depth of standing water: up to 0.25 m (10 in)
Depth to saturated soil: varies from inundated to 0.41 m (16 in)
Overview of hydrological flow through the system: Primary hydrologic inputs to this site are precipitation and runoff from the surrounding uplands. Evapotranspiration is the major output.
Size of watershed: < 10 km² (3.9 mi²)
Primary indicators: Surface Water, Saturation
Secondary indicators: Geomorphic Position (depression)

Wetland hydrology: Yes: X No:
Rationale: Field evidence cited above indicates that this site is inundated or saturated for a sufficient duration to satisfy the wetland hydrology criterion.

WETLAND DETERMINATION AND RATIONALE:
Is the site a wetland?: Yes: X No:
Rationale: Dominant hydrophytic vegetation, hydric soils, and wetland hydrology are present at this site; therefore, this site is a wetland. The NWI did not identify this site as wetland.

ISOLATED STATUS
Is the wetland isolated? Yes: X No:
Rationale: There is no surface connection to waters of the U. S.

Determined by: Mary Ann Feist and (vegetation, hydrology)
Jason Zylka (vegetation, hydrology, and GPS)
Ian Draheim (soils and hydrology)
Illinois Natural History Survey
1816 S. Oak St.
Champaign, Illinois 61820
(217) 244-6858 (Feist)
**ROUTINE ONSITE WETLAND DETERMINATION**

Site 57 (page 3 of 3)

**Field Investigators:** Feist, Draheim, and Zylka, **Dates:** 1 June 2010  
**Sequence No.:** 14766 **Project Name:** FAP 880/FAP 2711 (IL 131)  
**State:** Illinois **County:** Lake **Applicant:** IDOT District 1  
**Site Name:** Wet meadow/marsh  
**Legal Description:** T. 46 N., R. 12 E., Sect. 19, SW/4  
**Location:** This site is located in two parts between IL 131 and Kenosha Rd. The larger part is approximately 360 m (1181 ft) north of 29th St., while the smaller part is approximately 250 m (820 ft) north of 29th St.

**SPECIES LIST**

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Common name</th>
<th>Stratum</th>
<th>Wetland indicator status</th>
<th>C°</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Acer saccharinum</em></td>
<td>silver maple</td>
<td>tree, shrub</td>
<td>FACW</td>
<td>1</td>
</tr>
<tr>
<td><em>Alisma plantago-aquatica</em></td>
<td>broad-leaf water-plantain</td>
<td>herb</td>
<td>OBL</td>
<td>2</td>
</tr>
<tr>
<td><em>Barbarea vulgaris</em></td>
<td>winter cress</td>
<td>herb</td>
<td>FAC</td>
<td>*</td>
</tr>
<tr>
<td><em>Calyxsetia septifera</em></td>
<td>American bindweed</td>
<td>herb</td>
<td>FAC</td>
<td>1</td>
</tr>
<tr>
<td><em>Carex fluitans</em></td>
<td>wooly sedge</td>
<td>herb</td>
<td>OBL</td>
<td>4</td>
</tr>
<tr>
<td><em>Carex normalis</em></td>
<td>normal sedge</td>
<td>herb</td>
<td>FACW</td>
<td>4</td>
</tr>
<tr>
<td><em>Carex stipata</em></td>
<td>prickly sedge</td>
<td>herb</td>
<td>OBL</td>
<td>3</td>
</tr>
<tr>
<td><em>Carex vulpinoida</em></td>
<td>foxtail sedge</td>
<td>herb</td>
<td>FACW*</td>
<td>5</td>
</tr>
<tr>
<td><em>Cornus obliqua</em></td>
<td>pale dogwood</td>
<td>shrub</td>
<td>FACW+</td>
<td>4</td>
</tr>
<tr>
<td><em>Cornus racemosa</em></td>
<td>gray dogwood</td>
<td>shrub</td>
<td>FACW-</td>
<td>2</td>
</tr>
<tr>
<td><em>Dipsacus sylvestris</em></td>
<td>common teasel</td>
<td>herb</td>
<td>UPL</td>
<td>*</td>
</tr>
<tr>
<td><em>Erigeron annuus</em></td>
<td>annual fleabane</td>
<td>herb</td>
<td>FAC-</td>
<td>1</td>
</tr>
<tr>
<td><em>Euonymus granifolius</em></td>
<td>grassleaf goldenrod</td>
<td>herb</td>
<td>FACW-</td>
<td>3</td>
</tr>
<tr>
<td><em>Fraxinus pennsylvanica</em></td>
<td>green ash</td>
<td>tree, shrub, herb</td>
<td>FACW</td>
<td>2</td>
</tr>
<tr>
<td><em>Genus laciniatum</em></td>
<td>rough avens</td>
<td>herb</td>
<td>FACW</td>
<td>2</td>
</tr>
<tr>
<td><em>Glechoma hederacea</em></td>
<td>ground ivy</td>
<td>herb</td>
<td>FACU*</td>
<td>3</td>
</tr>
<tr>
<td><em>Glyceria striata</em></td>
<td>fowl manna grass</td>
<td>herb</td>
<td>OBL</td>
<td>4</td>
</tr>
<tr>
<td><em>Helianthus grosseserratus</em></td>
<td>sawtooth sunflower</td>
<td>herb</td>
<td>FACW-</td>
<td>2</td>
</tr>
<tr>
<td><em>Juncus dudleyi</em></td>
<td>Dudley's rush</td>
<td>herb</td>
<td>FAC</td>
<td>4</td>
</tr>
<tr>
<td><em>Lonicera tatarica</em></td>
<td>Tatarian honeysuckle</td>
<td>shrub</td>
<td>FACU*</td>
<td>3</td>
</tr>
<tr>
<td><em>Lycopus americanus</em></td>
<td>common water horehound</td>
<td>herb</td>
<td>OBL</td>
<td>3</td>
</tr>
<tr>
<td><em>Lythrum salicaria</em></td>
<td>purple loosestrife</td>
<td>herb</td>
<td>OBL*</td>
<td>4</td>
</tr>
<tr>
<td><em>Monarda fistulosa</em></td>
<td>wild bergamot</td>
<td>herb</td>
<td>FACU</td>
<td>4</td>
</tr>
<tr>
<td><em>Parthenocissus quinquefolia</em></td>
<td>Virginia creeper</td>
<td>woody vine</td>
<td>FAC-</td>
<td>2</td>
</tr>
<tr>
<td><em>Phalaris arundinacea</em></td>
<td>reed canary grass</td>
<td>herb</td>
<td>FACW*</td>
<td>3</td>
</tr>
<tr>
<td><em>Poa pratensis</em></td>
<td>Kentucky bluegrass</td>
<td>herb</td>
<td>FAC-</td>
<td>*</td>
</tr>
<tr>
<td><em>Polygonum amphibium</em></td>
<td>water smartweed</td>
<td>herb</td>
<td>OBL</td>
<td>3</td>
</tr>
<tr>
<td><em>Populus deltoides</em></td>
<td>eastern cottonwood</td>
<td>tree, herb</td>
<td>FAC+</td>
<td>2</td>
</tr>
<tr>
<td><em>Potamogeton nodosus</em></td>
<td>American pondweed</td>
<td>herb</td>
<td>OBL</td>
<td>7</td>
</tr>
<tr>
<td><em>Rhamnus cathartica</em></td>
<td>common buckthorn</td>
<td>shrub</td>
<td>FACU*</td>
<td>3</td>
</tr>
<tr>
<td><em>Rhus glabra</em></td>
<td>smooth sumac</td>
<td>shrub</td>
<td>UPL</td>
<td>1</td>
</tr>
<tr>
<td><em>Rosa multiflora</em></td>
<td>multiflora rose</td>
<td>shrub</td>
<td>FACU*</td>
<td>4</td>
</tr>
</tbody>
</table>

*Continued on next page*
ROUTINE ONSITE WETLAND DETERMINATION
Site 57 (page 4 of 4)

Field Investigators:  Feist, Draheim, and Zylka, Dates:  1 June 2010
Sequence No.:  14766 Project Name:  FAP 880/FAP 2711 (IL 131)
State:  Illinois County:  Lake Applicant:  IDOT District 1
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SPECIES LIST continued

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Common name</th>
<th>Stratum</th>
<th>Wetland indicator status</th>
<th>C\textsuperscript{v}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rumex crispus</td>
<td>curly dock</td>
<td>herb</td>
<td>FAC+</td>
<td>*</td>
</tr>
<tr>
<td>Scirpus atrovirens</td>
<td>dark green bulrush</td>
<td>herb</td>
<td>OBL</td>
<td>4</td>
</tr>
<tr>
<td>Scirpus fluitatilis</td>
<td>river bulrush</td>
<td>herb</td>
<td>OBL</td>
<td>3</td>
</tr>
<tr>
<td>Solanum dulcamara</td>
<td>false bittersweet</td>
<td>herb</td>
<td>FAC</td>
<td>*</td>
</tr>
<tr>
<td>Solidago canadensis</td>
<td>Canada goldenrod</td>
<td>herb</td>
<td>FACU</td>
<td>1</td>
</tr>
<tr>
<td>Solidago gigantea</td>
<td>late goldenrod</td>
<td>herb</td>
<td>FACW</td>
<td>3</td>
</tr>
<tr>
<td>Typha angustifolia</td>
<td>narrow-leaved cattail</td>
<td>herb</td>
<td>OBL</td>
<td>*</td>
</tr>
<tr>
<td>Viburnum opulus</td>
<td>European high-bush cranberry</td>
<td>shrub</td>
<td>UPIL</td>
<td>*</td>
</tr>
<tr>
<td>Vitis riparia</td>
<td>riverbank grape</td>
<td>woody vine, herb</td>
<td>FACW\textsuperscript{-}</td>
<td>2</td>
</tr>
</tbody>
</table>

\textsuperscript{v} Coefficient of Conservatism (Taft et al. 1997)

\textsuperscript{*} Non-native species

\[ C = \sum \frac{C}{N} = 76/28 = 2.7 \]
\[ FQI = \sum C/\sqrt{N} = 76/\sqrt{28} = 14.4 \]
FAP 880 / 2711
IL Route 131
Wetland site 57
Lake County