

WETLAND DETERMINATION DATA FORM
Great Plains Region

Project/Site:	L3R	Date:	07/02/14
Applicant:	Enbridge	County:	Kittson
Investigators:	EAB/RAJ	State:	MN
Soil Unit:	I132A	Subregion (MLRA or LRR):	MLRA 56
Landform:	Depression	NWI Classification:	
Slope (%):	0 - 2%	Local Relief:	CL
	Latitude: 48.58737	Longitude: -96.954782	Datum:
Are climatic/hydrologic conditions on the site typical for this time of year? (if no, explain in remarks)			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> significantly disturbed?	Are normal circumstances present?		
Are Vegetation <input type="checkbox"/> Soil <input type="checkbox"/> or Hydrology <input type="checkbox"/> naturally problematic?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Section:			
Township:			
Range:			Dir:

SUMMARY OF FINDINGS

Hydrophytic Vegetation Present?	Yes	Hydic Soils Present? Yes	
Wetland Hydrology Present?	Yes	Is This Sampling Point Within A Wetland?	Yes

Remarks: The wetland is a fresh meadow in a large ditch adjacent to an old, overgrown road. There is a flowing waterbody at the bottom of the ditch. Prairie cordgrass dominates the wetland itself. Recent heavy rains have affected the area.

HYDROLOGY

Wetland Hydrology Indicators (Check all that apply; Minimum of one primary or two secondary required):

<p><u>Primary:</u></p> <input type="checkbox"/> A1 - Surface Water <input type="checkbox"/> A2 - High Water Table <input type="checkbox"/> A3 - Saturation <input type="checkbox"/> B1 - Water Marks <input type="checkbox"/> B2 - Sediment Deposits <input type="checkbox"/> B3 - Drift Deposits <input type="checkbox"/> B4 - Algal Mat or Crust <input type="checkbox"/> B5 - Iron Deposits <input type="checkbox"/> B7 - Inundation Visible on Aerial Imagery <input type="checkbox"/> B9 - Water-Stained Leaves	<input type="checkbox"/> B11 - Salt Crust <input type="checkbox"/> B13 - Aquatic Fauna <input type="checkbox"/> C1 - Hydrogen Sulfide Odor <input type="checkbox"/> C2 - Dry Season Water Table <input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots (not till) <input type="checkbox"/> C4 - Presence of Reduced Iron <input type="checkbox"/> C7 - Thin Muck Surface <input type="checkbox"/> Other (Explain)	<p><u>Secondary:</u></p> <input type="checkbox"/> B6 - Surface Soil Cracks <input type="checkbox"/> B8 - Sparsely Vegetated Concave Surface <input type="checkbox"/> B10 - Drainage Patterns <input type="checkbox"/> C3 - Oxidized Rhizospheres on Living Roots (tilled) <input type="checkbox"/> C8 - Crayfish Burrows <input type="checkbox"/> C9 - Saturation Visible on Aerial Imagery <input checked="" type="checkbox"/> D2 - Geomorphic Position <input checked="" type="checkbox"/> D5 - FAC-Neutral Test <input type="checkbox"/> D7 - Frost-Heaved Hummocks (LRR F)
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Field Observations:	Wetland Hydrology Present? <u>Y</u>
Surface Water Present? Yes <input type="checkbox"/> Depth: _____ (in.)	
Water Table Present? Yes <input type="checkbox"/> Depth: _____ (in.)	
Saturation Present? Yes <input type="checkbox"/> Depth: _____ (in.)	

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

Remarks: The landscape position and FAC-Neutral vegetation meet the criteria for wetland hydrology. Water table and saturation depths are unknown since soils could not be sampled within the roadside ditch.

SOILS

Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.)
 (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix)

Depth (In.)	Matrix		Mottles				Texture	Remarks
	Color (Moist)	%	Color (Moist)	%	Type	Location		

NRCS Hydic Soil Field Indicators (check here if indicators are not present):

<input type="checkbox"/> A1- Histosol <input type="checkbox"/> A2 - Histic Epipedon <input type="checkbox"/> A3 - Black Histic <input type="checkbox"/> A4 - Hydrogen Sulfide <input type="checkbox"/> A5 - Stratified Layers (LRR F) <input type="checkbox"/> A9 - 1 cm Muck (LRR FGH) <input type="checkbox"/> A11 - Depleted Below Dark Surface <input type="checkbox"/> A12 - Thick Dark Surface <input type="checkbox"/> S1 - Sandy Mucky Mineral <input type="checkbox"/> S2 - 2.5 cm Mucky Peat or Peat (LRR G, H) <input type="checkbox"/> S3 - 5 cm Mucky Peat or Peat (LRR F) <input type="checkbox"/> S4 - Sandy Gleyed Matrix	<input type="checkbox"/> S5 - Sandy Redox <input type="checkbox"/> S6 - Stripped Matrix <input type="checkbox"/> F1 - Loamy Mucky Mineral <input type="checkbox"/> F2 - Loamy Gleyed Matrix <input type="checkbox"/> F3 - Depleted Matrix <input type="checkbox"/> F6 - Redox Dark Surface <input type="checkbox"/> F7 - Depleted Dark Surface <input type="checkbox"/> F8 - Redox Depressions <input type="checkbox"/> F16 - High Plains Depressions (MLRA 72, 73 of LRR H)	<p>Indicators for Problematic Soils¹</p> <input type="checkbox"/> A9 - 1 cm Muck (LRR I, J) <input type="checkbox"/> A16 - Cost Prairie Redox (LRR F, G, H) <input type="checkbox"/> S7 - Dark Surface (LRR G) <input type="checkbox"/> F16 - High Plains Depressions (LRR H, outside MLRA 72, 73) <input type="checkbox"/> F18 - Reduced Vertic <input type="checkbox"/> TF2 - Red Parent Material <input type="checkbox"/> TF12 - Very Shallow Dark Surface <input checked="" type="checkbox"/> Other (Explain in Remarks)
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¹Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer	Type: _____	Depth: _____	Hydic Soil Present? <u>Y</u>
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Remarks: Soils could not be sampled due to potential buried utilities. Soils are assumed to be hydic based on the hydrology and vegetation observed at the site.

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Project/Site: **L3R** Sample Point: **w-159n49w23-g1**

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft. radius)

1.	Species Name	% Cover	Dominant	Ind. Status
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

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: 100.0% (A/B)

Prevalence Index Worksheet

Total % Cover of:		Multiply by:	
OBL spp.	<u>0</u>	x 1 =	<u>0</u>
FACW spp.	<u>85</u>	x 2 =	<u>170</u>
FAC spp.	<u>0</u>	x 3 =	<u>0</u>
FACU spp.	<u>10</u>	x 4 =	<u>40</u>
UPL spp.	<u>5</u>	x 5 =	<u>25</u>
Total		<u>100</u> (A)	<u>235</u> (B)
Prevalence Index = B/A = <u>2.350</u>			

Total Cover = 0

Sapling/Shrub Stratum (Plot size: 15 ft. radius)

1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Hydrophytic Vegetation Indicators:

 Rapid Test for Hydrophytic Vegetation
 X Dominance Test is > 50%
 X Prevalence Index is ≤ 3.0 *
 Morphological Adaptations (Explain) *
 Problem Hydrophytic Vegetation (Explain) *

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

Total Cover = 0

Herb Stratum (Plot size: 5 ft. radius)

1.	<i>Spartina pectinata</i>	85	Y	FACW
2.	<i>Elymus repens</i>	10	N	FACU
3.	<i>Symphoricarpos occidentalis</i>	5	N	NI
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.
Herb - All herbaceous (non-woody) plants, regardless of size.
Woody Vines - All woody vines, regardless of height.

Total Cover = 100

Woody Vine Stratum (Plot size: 30 ft. radius)

1.				
2.				
3.				
5.				
4.				

Hydrophytic Vegetation Present? Y

Total Cover = 0

Remarks: **The community is dominated by prairie cordgrass.**

Additional Remarks: