WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site: Applicant:	Enbridge									Date: County:	06/28/14 Kittson	
	Investigators: EAB/RAJ			Subregion (MLRA or LRR): MLRA 56							State:	MN
Soil Unit: I132A Landform: Depression					NWI Classification:						Cample Doint	: w-159n49w25-c2
Slope (%):											Sample i oin	W-1031143W20-02
		nditions on the site							□Yes	☑ No	Section:	
Are Vegetati		☐ or Hydrology	□gnific	cantly	disturbed?		Are	e normal circun	stances pre	esent?	Township:	
Are Vegetati		☐ or Hydrology	□atural	ly prob	olematic?			Yes	□No		Range:	Dir:
SUMMARY (
Hydrophytic '			_	Yes						ls Present?		
Wetland Hyd		ent? d is located in a roa		Yes	the fringe o	f a mann	ad water	hody Proirie oc			t Within A W	
Remarks:	rne wettand	is located in a ro	ausiue ui	itch on	the iringe o	и а тарре	ed wateri	body. Prairie co	rugrass and	u lance-leav	ved aster are	prevalent.
HYDROLOG	Υ											
		iestere (Chaak all	that ann	he Mie	imum of on	o primory	or two o	ooondon, roqui	ad).			
Primary		icators (Check all	шасарр	iy, iviii	iiiiiuiii oi oii	e primary	OI two Si	econdary requi	eu).	Secondary:		
A1 - Surface Water						B11 - Salt					B6 - Surface S	Soil Cracks
A2 - High Water Table					B13 - Aqua						Vegetated Concave Surface	
□ □	A3 - Saturation B1 - Water M					C1 - Hydro C2 - Dry S					B10 - Drainag C3 - Oxidized	Rhizospheres on Living Roots (tilled)
	B2 - Sedimen					C3 - Oxidiz	zed Rhizos	spheres on Living	Roots (not till	. 🗖	C8 - Crayfish	Burrows
	B3 - Drift Dep B4 - Algal Ma					C4 - Prese					C9 - Saturatio D2 - Geomorp	n Visible on Aerial Imagery
	B5 - Iron Dep					Other (Exp		ace			D5 - FAC-Neu	
		on Visible on Aerial Im	nagery								D7 - Frost-He	aved Hummocks (LRR F)
	B9 - Water-St	tained Leaves										
Field Obser	vatione:											
	er Present?	Yes 🗆		Depth:		(in.)						
Water Table		Yes 🗆		Depth:		(in.)			Wetland H	lydrology l	Present?	Υ
Saturation P		Yes 🗹		Depth:		(in.)						-
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:												
									not be sami	oled due to	potential bur	ied utilities in the roadside ditch.
Remarks:									not be sam	pled due to	potential bur	ried utilities in the roadside ditch.
Remarks:	Soils are sa	turated to the surf	ace. The	water	table depth	is unknow	wn becau	use soils could		pled due to	potential bur	ied utilities in the roadside ditch.
Remarks: SOILS Profile Descri	Soils are sa	iturated to the surf	ace. The	water	table depth	is unknow	wn becau	use soils could e absence of ir	dicators.)	pled due to	potential bur	ied utilities in the roadside ditch.
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Remarks: SOILS Profile Descri	Soils are sa	iturated to the surf	ace. The	water	table depth	is unknow	wn becau	use soils could e absence of ir ore Lining, M=Matr	dicators.)	pled due to	potential bur	ied utilities in the roadside ditch.
Remarks: SOILS Profile Descri	Soils are sa	iturated to the surf	ace. The	water	table depth	is unknov cator or co Grains; Loca	onfirm th	use soils could e absence of ir ore Lining, M=Matr	dicators.)	pled due to	potential bur	ried utilities in the roadside ditch.
Remarks: SOILS Profile Descri	Soils are sa	turated to the surf ibe to the depth ne etion, RM=Reduced M Matrix	ace. The	docum	table depth nent the indi Coated Sand	is unknov cator or co Grains; Loca	onfirm th	use soils could e absence of ir ore Lining, M=Matr es	dicators.)		potential bur	
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Remarks: SOILS Profile Descri (Type: C=Concer	Soils are sa	turated to the surf	eeded to atrix, CS=C	docum Covered/	table depth nent the indi //Coated Sand (cator or cc Grains; Loca Moist)	onfirm th	e absence of ir ore Lining, M=Matr es Type	dicators.)		potential bur	
Remarks: SOILS Profile Descri (Type: C=Concer	Soils are sa	turated to the surf	eeded to atrix, CS=C	docum Covered/	table depth nent the indi Coated Sand	cator or cc Grains; Loca Moist)	onfirm th	use soils could e absence of ir ore Lining, M=Matr es	dicators.)	Texture		Remarks
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	Soils are sa	turated to the surf	eeded to atrix, CS=C	docum Covered/ %	table depth nent the indi //Coated Sand (Color (I cators are r S5 - Sandy R S6 - Stripped	cator or co Grains; Loca Woist) Moist) not presented ox Matrix	onfirm the	e absence of ir ore Lining, M=Matr es Type	dicators.)	Texture Indicators f A9 - 1 cm M		Remarks
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) NRCS Hydr	Soils are sa iption (Descrintration, D=Depl ric Soil Field A1- Histosol A2 - Histic Ep A3 - Black His	ibe to the depth ne etion, RM=Reduced M Matrix Color (Moist) Indicators (chairpedon etic)	eeded to atrix, CS=C	docum Covered/ %	color (I S5 - Sandy R S6 - Stripped F1 - Loamy N	cator or cc Grains; Loca Moist) Mot presented Mot presented Matrix Mucky Mineral	onfirm the tion: PL=P Mottli % https://doi.org/10.1001/10.10	e absence of ir ore Lining, M=Matr es Type	dicators.) Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark Sr	for Problemati luck (LRR I, J) Prairie Redox (I urface (LRR G)	Remarks c Soils¹ LRR F, G, H)
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	iption (Descrintration, D=Depl	ibe to the depth ne etion, RM=Reduced M. Matrix Color (Moist) Indicators (chaipedon stic in Sulfide	eeded to atrix, CS=C	docum Covered/ %	color (I	cator or co Grains; Loca Moist) Mot presented Matrix Matrix Matrix Matrix Miners Meleyed Matri	onfirm the tion: PL=P Mottli % https://doi.org/10.1001/10.10	e absence of ir ore Lining, M=Matr es Type	dicators.) Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark St F16 - High F	for Problemati luck (LRR I, J) Prairie Redox (I urface (LRR G'	Remarks Ic Soils ¹ LRR F, G, H)
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	ric Soil Field A1- Histosol A2- Histic Ep A3- Black His A4- Hydroge A5- Stratified A9-1 cm Mu A11- Deplete A12- Thick D	ibe to the depth ne etion, RM=Reduced M Matrix Color (Moist) Indicators (ch ipedon stic n Sulfide Layers (LRR F) ck (LRR FGH) dd Below Dark Surface ark Surface	eeded to eeded to eatrix, CS=C	docum Coveredate the if india	color (I Color (I Color (I Color (I S5 - Sandy R S6 - Stripped F1 - Loamy N F2 - Loamy G F3 - Depleted F6 - Redox D F7 - Depleted F8 - Redox D	dot presented Matrix Ma	onfirm the tion: PL=P Mottle % https://www.plane.com/p	e absence of ir ore Lining, M=Matr	dicators.) Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark S F16 - High F F18 - Red p TF2 - Red P TF12 - Very	For Problemati luck (LRR I, J) Prairie Redox (I urface (LRR G) Plains Depressi ed Vertic	Remarks IC Soils¹ LRR F, G, H) ONS (LRR H, outlade MLRA 72, 73) Surface
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WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:	L3R				Sample Point: w-159n49w25-c2			
VEGETATIO	(Species identified in all uppercase are	non-native	species.)					
Tree Stratum (Plot size: 30 ft. radius)							
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet			
1.								
2.					Number of Dominant Species that are OBL, FACW, or FAC:1 (A)			
3.								
4.					Total Number of Dominant Species Across All Strata: 1 (B)			
5.					`` ,			
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)			
7.								
8.					Prevalence Index Worksheet			
9.								
10.		•			OBL spp. <u>5</u> x 1 = <u>5</u>			
	Total Cover =	0	_		FACW spp. 75 x 2 = 150			
					FAC spp. 0 x 3 = 0			
	Stratum (Plot size: 15 ft. radius)				FACU spp. 20 x 4 = 80			
1.					UPL spp. 5 x 5 = 25			
2.								
3.					Total 105 (A) 260 (B)			
4.								
5.					Prevalence Index = B/A = 2.476			
6.								
7.								
8.					Hydrophytic Vegetation Indicators:			
9.					Rapid Test for Hydrophytic Vegetation			
10.	T-t-LO				X Dominance Test is > 50%			
	Total Cover =	0	_		X Prevalence Index is ≤ 3.0 *			
					Morphological Adaptations (Explain) *			
	Plot size: 5 ft. radius)				Problem Hydrophytic Vegetation (Explain) *			
1.	Spartina pectinata	60	Υ	FACW				
2.	Cirsium arvense	15	N	FACU	* Indicators of hydric soil and wetland hydrology must be			
3.	Symphyotrichum lanceolatum	15	N	FACW	present, unless disturbed or problematic.			
4.	Bromus inermis	5	N	UPL	Definitions of Vegetation Strata:			
5.	Typha angustifolia	5	N	OBL				
6	Poa pratensis	5	N	FACU	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast			
7.				-	height (DBH), regardless of height.			
8.								
9.				_	Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.			
10.				_	5-pg. 5			
11.								
					Herb - All herbaceous (non-woody) plants, regardless of size.			
12.					TIELD = / sit tierbucedus (tielt woody) plants, regardiess of size.			
13.								
14.								
15.					Woody Vines - All woody vines, regardless of height.			
	Total Cover =	105	_					
Woody Vine St	ratum (Plot size: 30 ft. radius)							
1.								
2.								
3.					Hydrophytic Vegetation Present?			
5.								
4.								
	Total Cover =	0		_				
Remarks:			ance leave	ad actor u	l vith some cattails, smooth brome, and Kentucky bluegrass creeping in.			
ixemarks.	The vegetation is dominated by praine cordgi	ass allu li	ai ice-ieave	ou asiel, V	with some calitalis, smooth brome, and Kentucky bluegrass creeping in.			
1								
Additional Remarks:								