## WETLAND DETERMINATION DATA FORM Great Plains Region

											- ·	0=10.4.4.4
Project/Site:		L3R									Date:	07/01/14
Applicant:		Enbridge				o	(A 41 D A	1.00)			County:	Kittson
Investigators		BEH/BCS				Subregio		•	MLRA 56		State:	MN
Soil Unit:	<u>I134A</u>							Classification:				400 40 04 4
Landform:	Depression					cal Relief:					Sample Point:	w-160n49w31-a1
Slope (%):	0 - 2%		Latitude:			Longitude:			Datum:		Į.	
		nditions on the site				ar? (If no, exp			□Yes	☑ No	Section:	
Are Vegetation		☐ or Hydrology			disturbed?		Are	normal circum		esent?	Township:	
Are Vegetation		☐ or Hydrology	□tural	lly prob	lematic?			☑ Yes	□No		Range:	Dir:
SUMMARY C	OF FINDINGS	5										
Hydrophytic \	Vegetation Pr	resent?		Yes					Hydric Soil	s Present?	Yes	
Wetland Hyd	Irology Prese	nt?		Yes					Is This Sar	mpling Poin	t Within A W	etland? Yes
Remarks:	The wetland	l is a roadside dito	ch domin	ated by	reed canar	ry grass, n	arrow-le	af dock, and co	mmon spik	erush. The	ditch is surro	ounded by a paved county road
		ed sunflower field.										
HYDROLOG	Υ											
		t (Obb	1 414	. l Mi	·				I) -			
		cators (Check all	i that app	oly; Min	imum of on	e primary	or two se	econdary requir	ea):	0		
Primary:		Mator				D11 Calt	Cruct			Secondary:		Soil Crooks
₹	<ul><li>A1 - Surface Water</li><li>A2 - High Water Table</li></ul>				☐ B11 - Salt Crust ☐ B13 - Aquatic Fauna						B6 - Surface Soil Cracks   B8 - Sparsely Vegetated Concave Surface	
_ ✓	A3 - Saturatio					C1 - Hydro		e Odor			B10 - Drainage	
	B1 - Water Ma	arks				C2 - Dry Se						Rhizospheres on Living Roots (tilled)
	B2 - Sediment							pheres on Living	Roots (not till		C8 - Crayfish E	
	B3 - Drift Dep					C4 - Prese						n Visible on Aerial Imagery
	B4 - Algal Mat					C7 - Thin N		ice			D2 - Geomorp D5 - FAC-Neu	
	B5 - Iron Depo	วรแร n Visible on Aerial Im	nagery			Other (Exp	iaiii)					aved Hummocks (LRR F)
	B9 - Water-St		lagely							_	D7 - 110St-11e8	aved Hummocks (LINIX)
_												
Field Observ	vations:											
Surface Water		Voc.		Donth:	2	(in )						
				Depth:	3	(in.)			Wetland H	lydrology I	Present?	Υ
Water Table		Yes 🖸		Depth:	0	(in.)						<del>_</del>
Saturation Pr	esent?	Yes 🗹		Depth:	0	(in.)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:												
Describe Reco	orded Data (s	tream gauge, moni	itoring we	ell, aeria	al photos, pre	evious insp	ections),	if available:				
Remarks:		tream gauge, moni					ections),	if available:				
							ections),	if available:				
							ections),	if available:				
Remarks:	Standing wa		deep is	presen	it in the ditc	h.			dicators.)			
Remarks:  SOILS Profile Descri	Standing wa	ater up to 3 inches	eeded to	presen	ent the indic	h. cator or co	onfirm the	e absence of in				
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Remarks:  SOILS Profile Descri	Standing wa	ater up to 3 inches	eeded to	docum Covered/	ent the indic	h. cator or co	onfirm the	e absence of in ore Lining, M=Matri				
Remarks:  SOILS Profile Descri	Standing was	be to the depth ne	eeded to	presen	ent the indic	h. cator or co Grains; Local	onfirm the	e absence of in ore Lining, M=Matri		Texture		Remarks
Remarks:  SOILS Profile Descri (Type: C=Concer	Standing was	be to the depth ne etion, RM=Reduced Ma	eeded to	docum Covered/	ent the ditclent the indicent the indicent the indicent content of the indicent indi	h. cator or co Grains; Local	onfirm the tion: PL=Po	e absence of in ore Lining, M=Matri	x)	Texture		Remarks
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Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.)	Standing wa	be to the depth ne etion, RM=Reduced Matrix Color (Moist)	s deep is	docum Covered//	ent the indicontent the indiconted Sand Content (f	h. cator or co Grains; Local Moist)	Mottle	e absence of in ore Lining, M=Matri es Type	x)	Texture		Remarks
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.)	Standing was	be to the depth ne etion, RM=Reduced Matrix Color (Moist)	s deep is	docum Covered//	ent the ditclent the indicent the indicent the indicent content of the indicent indi	h. cator or co Grains; Local Moist)	onfirm the	e absence of in ore Lining, M=Matri	x)			
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.)	ption (Descri tration, D=Deple	be to the depth ne etion, RM=Reduced Matrix Color (Moist)	s deep is	docum Covered// %	ent the indic Coated Sand C Color (I	h. cator or co	onfirm the	e absence of in ore Lining, M=Matri es Type	Location	Indicators f	or Problematic	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.)  NRCS Hydr	ption (Descrintration, D=Deple	be to the depth ne betion, RM=Reduced Mi Matrix Color (Moist)	s deep is	docum Covered// %	ent the indic Coated Sand ( Color (I Cotor sare r	h.  cator or co Grains; Local  Moist)  oot presen	onfirm the	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M	uck (LRR I, J)	c Soils <sup>1</sup>
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.)  NRCS Hydr	ption (Descrintration, D=Deple lic Soil Field A1- Histosol A2 - Histic Ep	be to the depth ne etion, RM=Reduced Mi  Matrix Color (Moist)  Indicators (ch	s deep is	docum Covered// %	ent the indic Coated Sand ( Color (I Color (I Cators are r S5 - Sandy R S6 - Stripped	h.  cator or co Grains; Local  Moist)  not presen edox Matrix	Mottle %	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M A16 - Cost F	uck (LRR I, J) Prairie Redox (L	c Soils <sup>1</sup> LRR F, G, H)
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.)  NRCS Hydr	ption (Descrintration, D=Deple	be to the depth ne etion, RM=Reduced M:  Matrix Color (Moist)  Indicators (chairpedon etic)	s deep is	docum Covered// % e if india	ent the indicontent the indicate the	Moist)  Motor presented with the content of the con	onfirm the	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark St	uck (LRR I, J) Prairie Redox (L urface (LRR G)	<u>c Soils¹</u> .RR F, G, H)
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Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.)  NRCS Hydr	ption (Descri tration, D=Deple ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified	be to the depth ne beto the depth ne betion, RM=Reduced Mi  Matrix  Color (Moist)  Indicators (ch  ipedon titic n Sulfide Layers (LRR F)	s deep is	docum Covered// % e if indi	ent the indiccoated Sand Coated Sand Sand Sand Sand Sand Sand Sand San	Moist)  ot presen edox Matrix leyed Matrix Matrix Matrix	Mottle %  tt):	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark St F16 - High F F18 - Reduc	uck (LRR I, J) Prairie Redox (L urface (LRR G) Plains Depressioned Vertic	<u>c Soils¹</u> .RR F, G, H)
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.)  NRCS Hydr	ption (Descrintration, D=Depletration, D=Deple	be to the depth ne etion, RM=Reduced Matrix Color (Moist)  Indicators (chairpedon in Sulfide	eeded to atrix, CS=0	docum Covered// % e if indi	ent the indicontent the indicontent the indicontent the indicontent that is considered as a constant of the indicate of the in	Moist)  Moist)  Moist)  Moist)  Moist)  Moist)  Moist)  Moist)  Moist  M	Mottle % tt):	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark St F16 - High F F18 - Reduc TF2 - Red P	uck (LRR I, J) Prairie Redox (L urface (LRR G) Plains Depressioned Vertic Parent Material	c Soils <sup>1</sup> LRR F, G, H)  DNS (LRR H, outisde MLRA 72, 73)
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.)  NRCS Hydr	ption (Descrintration, D=Depletration, D=Deple	be to the depth ne etion, RM=Reduced Minimum. Matrix Color (Moist)  Indicators (chairpedon Sulfide Layers (LRR F) ck (LRR FGH) d Below Dark Surface	eeded to atrix, CS=0	docum Covered/ %  e if indi	ent the indic ent the indic Coated Sand ( Color (I Color	Moist)  Moist)  Mot presen  edox Matrix lucky Minera leyed Matrix Matrix ark Surface Dark Surface	Mottle % tt):	e absence of in ore Lining, M=Matri es Type	Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark St F16 - High F F18 - Reduc TF2 - Red P TF12 - Very	uck (LRR I, J) Prairie Redox (L urface (LRR G) Plains Depressioned Vertic	c Soils¹  LRR F, G, H)  DNS (LRR H, outisde MLRA 72, 73)  Surface
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## WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:	L3R				Sample Point:	w-160n49w31-a1
VEGETATION	(Species identified in all uppercase a	re non-native	species.)			
	Plot size: 30 ft. radius)		/			
,	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet	
1.	<u> </u>					
2.					Number of Dominant Species that are OBL,	$FACW$ or $FAC$ : 3 ( $\Delta$ )
3.					Number of Dominant Species that are OBL,	TACW, OFFAC. (A)
4.					Total Number of Dominant Species A	Across All Strata: 3 (B)
5.						
6.					Percent of Dominant Species That Are OBL,	FACW, or FAC: 100.0% (A/B)
7.						
8.					Prevalence Index Worksheet	
9.						
10.	J				OBL spp. 17 x 1 =	<u>17</u>
	Total Cover =	0	_		FACW spp. 40 x 2 =	80
					FAC spp. 0 x 3 =	0
Sapling/Shrub S	Stratum (Plot size: 15 ft. radius)				FACU spp. 15 x 4 =	60
1.	[				UPL spp. 0 x 5 =	0
2.					01 2 opp	
3.					Total <u>72</u> (A)	<u>157</u> (B)
4.						
5.					Prevalence Index = B/A =	2.181
6.					-	
7.	J					
					Hudusub dis Vasatatian Indiastan	
8.					Hydrophytic Vegetation Indicators	
9.					Rapid Test fo	or Hydrophytic Vegetation
10.					X Dominance T	est is > 50%
	Total Cover =	0			X Prevalence Ir	ndex is ≤ 3.0 *
			_			al Adaptations (Explain) *
Harb Stratum /	Plot size: 5 ft. radius)					rophytic Vegetation (Explain) *
	,	20	V	EACW	FIODIEIII FIYU	Topriyiic vegetation (Explain)
1.	Phalaris arundinacea	20	Y	FACW	* 1 - 12 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Market and the state of the sta
2.	Rumex stenophyllus	15	Υ	FACW		il and wetland hydrology must be
3.	Eleocharis palustris	15	Υ	OBL	present, unless	s disturbed or problematic.
4.	Elymus repens	10	N	FACU	Definitions of Vegetation Strata:	
5.	Poa pratensis	5	N	FACU	-	
6	Hordeum jubatum	5	N	FACW	Tree - was to start a	in. (7.6cm) or more in diameter at breast
7.			N	OBL	height (DRH) re	egardless of height.
	Typha angustifolia	2	IN	UBL		.g
8.						
9.					Sapling/Shrub - Woody plants le	ess than 3 in. DBH, regardless of height.
10.						
11.						
12.					Herh - All herbaceous	(non-woody) plants, regardless of size.
				_		-
13.				_		
14.						
15.					Woody Vines - All woody vines	, regardless of height.
	Total Cover =	72				
Moody Vino Str	atum (Plot size: 30 ft. radius)					
	atum (Flot Size. 30 ft. Faulus)					
1.				-		
2.						
3.					Hydrophytic Vegetati	on Present? Y
5.						
4.						
	Total Cover =	0				
Domarka	Total Cover =	U				
Remarks:						
Additional R	emarks:					
		ow loof dos	k and ac-	nmon on!	verueh. An accortment of unland and	vet grasses are also common throughout the
	omit is dominated by reed carrary grass, harro	Jw-ieai uoc	n, and col	mmon spik	kerush. An assortment of upland and w	ret grasses are also common throughout the
ditch.						