## WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R								Date: 09/13/14		
Applicant: Enbridge							County: Pennington					
	Investigators: RAJ/BEH/MRK				Subregio	n (MLRA	State: MN					
Soil Unit:	IGp						I Classification:					
Landform:	Dip				ocal Relief:					Sample Point: w-154n44w31-c1		
Slope (%):	0 - 2%		Latitude: 48.		Longitude:			Datum:				
		nditions on the site							□ No	Section:		
Are Vegetati		☑, or Hydrology	•	•	•	Are	e normal circum	nstances pr	esent?	Township:		
Are Vegetati		, ,	□aturally p	roblematic?			✓ Yes	□ No		Range: Dir:		
	OF FINDINGS											
Hydrophytic Vegetation Present?										Present? Yes		
, 0,				ls This Sampling Point Within A Wetland? Yes								
Remarks:	A shallow m	arsh dominated by	y softstem b	ulrush, reed	canary gras	s, hybrid	l cattail and a m	nix of grami	noids. The	area appears to be a resurfaced gravel pit,		
	based on th	e soils and local la	indscape.									
<b>HYDROLOG</b>	Υ											
Wetland Hy	drology Indi	cators (Check all	that apply:	Minimum of c	ne primary	or two se	econdary requir	red):				
Primary		Caron (Cricon Cin			, , , , , , , , , , , , , , , , , , ,				Secondary:			
					B11 - Salt	Crust	B6 - Surface Soil Cracks					
✓	<u> </u>									B8 - Sparsely Vegetated Concave Surface		
☑	A3 - Saturatio				,					B10 - Drainage Patterns		
	B1 - Water Ma B2 - Sediment						⊔ I4 □	C3 - Oxidized Rhizospheres on Living Roots (tilled) C8 - Crayfish Burrows				
	B3 - Drift Dep	•					`	C9 - Saturation Visible on Aerial Imagery				
	B4 - Algal Mat				C7 - Thin N				✓	D2 - Geomorphic Position		
	B5 - Iron Depo				I Other (Exp	lain)				D5 - FAC-Neutral Test		
		n Visible on Aerial Ima	agery							D7 - Frost-Heaved Hummocks (LRR F)		
	B9 - Water-St	ained Leaves										
Field Obser												
Field Obser		V	Dan	41	(in )							
Surface Wat		Yes	Dep		(in.)			Wetland H	Hydrology	Present? Y		
Water Table		Yes ☑	Dep		_ (in.)					<del></del>		
Saturation P	resent?	Yes ☑	Dep	th: 0-7	(in.)							
Describe Rec	<u> </u>	tream gauge, monit		<u> </u>								
Describe Rec Remarks:	The soils ar	e saturated to the	surface at th	ne sample po	int, but are	unsatura	ated below 7 inc		is a clay lay	yer that restricts downward water flow. There		
Remarks:	The soils ar		surface at th	ne sample po	int, but are	unsatura	ated below 7 inc		is a clay lay	yer that restricts downward water flow. There		
Remarks:	The soils ar	e saturated to the surface water in mic	surface at the crodepression	ne sample po ons. Indicato	int, but are rs of wetlan	unsatura d hydrol	ated below 7 incomes ogy are present	t.	is a clay lay	yer that restricts downward water flow. There		
Remarks:  SOILS Profile Descr	The soils ar is shallow so	e saturated to the surface water in mic	surface at the crodepression depression depr	ne sample poons. Indicato ument the ind	int, but are rs of wetlan	unsatura d hydrolo onfirm th	ated below 7 incomes ogy are presented absence of in	t. dicators.)	is a clay lay	yer that restricts downward water flow. There		
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Remarks:  SOILS Profile Descr (Type: C=Concer	The soils ar is shallow so	e saturated to the surface water in mic be to the depth new etion, RM=Reduced Ma	surface at the crodepression eded to documents, CS=Covernments	ne sample poons. Indicato ument the indicated/Coated Sand	int, but are rs of wetlan dicator or co	unsatura d hydrolo onfirm the tion: PL=P	e absence of incore Lining, M=Matr	dicators.)		yer that restricts downward water flow. There  Remarks		
Remarks:  SOILS Profile Descr (Type: C=Conce	The soils are is shallow so iption (Descrintration, D=Deple	e saturated to the surface water in mice be to the depth necession, RM=Reduced Marking Matrix Color (Moist)	surface at the crodepression eded to documents, CS=Cove	ne sample poons. Indicato ument the indired/Coated Sand	int, but are rs of wetlan	unsatura d hydrolo onfirm the tion: PL=P	ated below 7 incomes of incomes o	t. dicators.)	Texture	Remarks		
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Remarks:  SOILS Profile Descr (Type: C=Concer  Depth (In.) 0-7 7-10 10-21	The soils are is shallow so iption (Descrintration, D=Depleted Hue_10YR Gley1 Hue_10YR Gley1 Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black History A4 - Hydroger A5 - Stratified A9 - 1 cm Muc A11 - Deplete A12 - Thick D S1 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic A11 - Sandy Mic S2 - 2.5 cm Mic S2	e saturated to the surface water in mide be to the depth need be to the	surface at the crodepression eded to documents, CS=Covered for the covered for	ne sample poons. Indicato ument the indired/Coated Sand  Color Under Coated Sand Color Under Coated Sand Color Under Coated Sand Color Under Coated Sand Color Under Coated Sand Color Under Coated Sand Color Under Color Und	int, but are rs of wetland dicator or condicator or condic	msatural description: PL=Property Mottle with the second s	e absence of in ore Lining, M=Matr	Location  M M M M  M  IIIIIIIIIIIIIIIIIIIIIIII	Texture  MMI  C  SCL  SCL  SCL  SCL  SCL  SCL  SCL	Remarks the mineral component is sandy clay loam; this layer is probably organic streaks  for Problematic Soils¹ Muck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) Plains Depressions (LRR H, outside MLRA 72, 73) ced Vertic Parent Material y Shallow Dark Surface ain in Remarks)		
Remarks:  SOILS Profile Descr (Type: C=Concel  Depth (In.) 0-7 7-10 10-21	The soils are is shallow substitution (Description (Description, D=Deplete A1- Hue_10YR Gley1  Hue_10YR Gley1  Hue_10YR  A1- Histosol A2 - Histic Ep A3 - Black History A4 - Hydroger A5 - Stratified A9 - 1 cm Muc A11 - Deplete A12 - Thick Do S1 - Sandy Muc S2 - 2.5 cm Muc S3 - 5 cm Muc	e saturated to the surface water in mide be to the depth need be to the	eded to doc eatrix, CS=Cove	ne sample poons. Indicato ument the indired/Coated Sand Color Under Gley1 Gley1 Gley1 Hue_10Y Gley1 Hue_10Y ndicators are S5 - Sandy S6 - Strippe F1 - Loamy F2 - Loamy F2 - Loamy F3 - Deplete F6 - Redox F7 - Deplete F8 - Redox F16 - High	int, but are rs of wetland dicator or condicator or condicator or condicator.  (Moist)  R 5/4 3/N 4/5G2 R 2/1 Inot present Redox and Matrix Mucky Mineral Gleyed Matrix Dark Surface and Dark Surface and Dark Surface and Dark Surface and Depressions Plains Depressions	msatural d hydrole on firm the tion: PL=P Mottle % 10 15 1 5 t):	e absence of in ore Lining, M=Matr	Location  M M M M  M  IIIIIIIIIIIIIIIIIIIIIIII	Texture  MMI  C  SCL  SCL  SCL  SCL  SCL  SCL  SCL	Remarks  the mineral component is sandy clay loam; this layer is probably  organic streaks  for Problematic Soils¹ Muck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) Plains Depressions (LRR H, outside MLRA 72, 73) ced Vertic Parent Material y Shallow Dark Surface ain in Remarks)  hydrophytic vegetation and wetland hydrology must be present,		
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## WETLAND DETERMINATION DATA FORM

**Great Plains Region** 

Project/Site	: L3R				Sample Point: w-154n44w31-c1				
VEGETATIO		non-native	species.)						
Tree Stratum	(Plot size: 30 ft. radius)								
_	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet				
1.									
2.					Number of Dominant Species that are OBL, FACW, or FAC:4(A)				
3.									
4.					Total Number of Dominant Species Across All Strata:4(B)				
5.									
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)				
7.									
8.					Prevalence Index Worksheet				
9.					Total % Cover of: Multiply by:				
10.					OBL spp. $_{-70}$ $\times 1 = _{-70}$				
	Total Cover =	0			OBL spp. 70				
					FAC spp. $0   x   3 = 0$				
Sapling/Shrub	Stratum (Plot size: 15 ft. radius)				FACU spp. $\underline{}$ $\times$ 4 = $\underline{}$				
1.					UPL spp.				
2.									
3.					Total 116 (A) 162 (B)				
4.									
5.					Prevalence Index = B/A =				
6.									
7.									
8.					Hydrophytic Vegetation Indicators:				
9.					Rapid Test for Hydrophytic Vegetation				
10.					X Dominance Test is > 50%				
	Total Cover =	0			X Prevalence Index is ≤ 3.0 *				
					Morphological Adaptations (Explain) *				
Herb Stratum (	(Plot size: 5 ft. radius)				Problem Hydrophytic Vegetation (Explain) *				
1.	Juncus nodosus	30	Υ	OBL					
2.	Agrostis gigantea	20	Υ	FACW	* Indicators of hydric soil and wetland hydrology must be				
3.	Schoenoplectus tabernaemontani	20	Y	OBL	present, unless disturbed or problematic.				
4.	Phalaris arundinacea	20	Y	FACW	Definitions of Vegetation Strata:				
5.	Typha X glauca	10	N	OBL					
6	Eleocharis palustris	5	N	OBL	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast				
7.	Scirpus pallidus	<u>5</u>	N	OBL	height (DBH), regardless of height.				
8.	Juncus dudleyi	3	N	FACW					
9.	Carex vulpinoidea	3	N	FACW	Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.				
10.	Carex vulpiriolidea		11	TAOVV	Supinig/Onitab				
11.									
12.					Herb - All herbaceous (non-woody) plants, regardless of size.				
13.					TIGIN - T				
13.									
15.					Woody Vines - All woody vines, regardless of height.				
10.	Total Carran	440			VVOCUY VIIIES - All Woody VIIIos, Togardioss of Holgitt.				
	Total Cover = _	116	<del>_</del>						
\\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	trations (Distance CO from all 1)								
	tratum (Plot size: 30 ft. radius)								
1.									
2.					Underskrift Variation Brazer (C. V				
3.					Hydrophytic Vegetation Present?Y				
5.									
4.	T : 10								
Da	Total Cover =	<u> </u>	ا با بامرسا	dal == 0 - 9					
Remarks:	A snallow marsh community dominated by so	ottstem bul	ırusn, nybı	ria cattail,	and a mix of wetland graminoids. Hydrophytic vegetation is present.				
Additional Remarks:									