WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R								Date:	09/17/14
Applicant:		Enbridge			0	/A 41 D A				County:	Pennington
Investigators		MRK/OTG			_Subregio	n (MLRA	,	MLRA 56		State:	MN
Soil Unit:	I9A Din				sal Daliafu		Classification	i:			w 454m44w22 k4
Landform: Slope (%):	Dip 0 - 2%		Latitude: 48.1		cal Relief:	-96.3148	221667	Datum		Sample Point:	w-154n44w33-k1
. ,		onditions on the site						Datum ✓ Yes	□ No	Section:	
Are Vegetation		□, or Hydrology			αι: (ππο, εχ	T	normal circur			Township:	
Are Vegetation		□, or Hydrology	•			Aic	✓ Yes		CSCIII:	Range:	Dir:
SUMMARY C			-accuracy pr	obiomatio:			_ 100	- 140		rango.	<i>D</i>
Hydrophytic \			Yes					Hydric So	ils Present?	Yes	
Wetland Hyd	•		Yes		_					nt Within A We	etland? Yes
Remarks:		d sample point is a		v dominated b	y woolly se	edge and	white panicle				
						Ü					
HYDROLOG	Υ										
Wetland Hy	drology Ind	icators (Check all	I that apply: N	Jinimum of or	ne primary	or two sec	condary requi	ired)•			
Primary:		ioatoro (orrook arr	i triat apply, i		io primary	or two oot	coridary roqui	100).	Secondary:		
	A1 - Surface	Water			B11 - Salt (Crust				B6 - Surface S	oil Cracks
	A2 - High Wa				B13 - Aqua						/egetated Concave Surface
	A3 - Saturation B1 - Water M				C1 - Hydro C2 - Dry Se					B10 - Drainage	e Patterns Rhizospheres on Living Roots (tilled)
	B2 - Sedimer						pheres on Living	Roots (not til	lle 🗆	C8 - Crayfish E	
	B3 - Drift Dep	•			C4 - Prese	nce of Red	uced Iron	•		C9 - Saturation	Nisible on Aerial Imagery
	B4 - Algal Ma				C7 - Thin N		ce		\Box	D2 - Geomorpl	
	B5 - Iron Dep	osits on Visible on Aerial Im	nagery		Other (Exp	lain)				D5 - FAC-Neut	ral Test ved Hummocks (LRR F)
		tained Leaves	lagery							D1 - 11031-1168	ived Fidiliffocks (LIXIX I)
Field Observ	vations:										
Surface Wate	er Present?	Yes □	Dept	th:	(in.)			\Motlond I	Usalva la ass	Dracent?	V
Water Table	Present?	Yes □	-	th:	(in.)			wetiand i	Hydrology	Present?	Υ
Saturation Pr	resent?	Yes □	Dept	th:	_ (in.)						_
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
I Describe Reco	orded Data(s	stream gauge, moni	itoring well, a	erial photos, pr	evious insp	ections). it	f available:				
	<u> </u>										
Remarks:	<u> </u>	stream gauge, moni d sample point is lo									
	<u> </u>										
Remarks: SOILS Profile Descri	The wetland	d sample point is lo	ocated in a d	ip and suppor	ts hydroph	ytic veget	tation. absence of in				
Remarks: SOILS Profile Descri	The wetland	d sample point is lo	ocated in a d	ip and suppor	ts hydroph	ytic veget	tation. absence of in				
Remarks: SOILS Profile Descri	The wetland	d sample point is look ibe to the depth ne	ocated in a d	ip and suppor	ts hydroph	ytic veget onfirm the	tation. absence of ing the Lining, M=Mat				
Remarks: SOILS Profile Descri (Type: C=Concer	The wetland	d sample point is look ibe to the depth need to the depth need to the depth need to make th	eeded to docu	ip and suppor	icator or co	ytic veget onfirm the tion: PL=Por	tation. absence of index in the control of the con	rix)	Toyturo		Pomarks
Remarks: SOILS Profile Descri (Type: C=Concer	The wetland	ibe to the depth ne etion, RM=Reduced Ma Matrix Color (Moist)	eeded to docu atrix, CS=Cover	ip and suppor	icator or co	ytic veget onfirm the	tation. absence of ing the Lining, M=Mat				Remarks
Remarks: SOILS Profile Descri (Type: C=Concer	The wetland ption (Description, D=Dep	ibe to the depth ne etion, RM=Reduced Matrix Color (Moist)	eeded to docu atrix, CS=Cover	ument the ind ed/Coated Sand Color (icator or co	ytic veget onfirm the tion: PL=Por	tation. absence of interpretation in the content of the content o	rix)	SICL		Remarks
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-15	The wetland ption (Description, D=Deplementation, D=Deplementation) Hue_10YR Hue_2.5Y	ibe to the depth ne etion, RM=Reduced Matrix Color (Moist) 2/1 6/2	eeded to docu atrix, CS=Cover	ument the ind	icator or co Grains; Locat	onfirm the	absence of ingreast transfer in the contract of the contract o	Location	SICL SIC		Remarks
Remarks: SOILS Profile Descri (Type: C=Concer	The wetland ption (Description, D=Dep	ibe to the depth ne etion, RM=Reduced Matrix Color (Moist)	eeded to docu atrix, CS=Cover	ument the ind	icator or co Grains; Locat	ytic veget onfirm the tion: PL=Por	tation. absence of interpretation in the content of the content o	rix)	SICL		Remarks
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-15 15-20 NRCS Hydr	The wetland ption (Description, D=Depleteration, D=Depleteration) Hue_10YR Hue_2.5Y Hue_2.5Y	Matrix Color (Moist) 2/1 6/2 6/4	eeded to docuatrix, CS=Cover	color (D Hue_10YR	icator or co Grains; Locat (Moist)	ytic veget onfirm the tion: PL=Por	absence of ingre Lining, M=Mates Type C	Location	SICL SIC SIC	or Problematic	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-15 15-20	The wetland ption (Description, D=Depintration, D=Depintratio	Matrix Color (Moist) 2/1 6/2 6/4 Indicators (ch	eeded to docuatrix, CS=Cover	ument the ind ed/Coated Sand Color (0) Hue_10YR andicators are	icator or co Grains; Locat (Moist) (6/8) not present	ytic veget onfirm the tion: PL=Por	absence of ingre Lining, M=Mates Type C	Location	SICL SIC SIC SIC	luck (LRR I, J)	: Soils ¹
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-15 15-20 NRCS Hydr	The wetland ption (Description, D=Depleteration, D=Depleteration) Hue_10YR Hue_2.5Y Hue_2.5Y	Matrix Color (Moist) 2/1 6/2 6/4 Indicators (ch	eeded to docuatrix, CS=Cover	color (D Hue_10YR	icator or co Grains; Local (Moist) (6/8) not present	ytic veget onfirm the tion: PL=Por Mottles 10 t):	absence of ingre Lining, M=Mates Type C	Location	SICL SIC SIC SIC Indicators 1 A9 - 1 cm M A16 - Coast		: Soils ¹
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-15 15-20 NRCS Hydr	The wetland ption (Description, D=Depintration, D=Depintratio	Matrix Color (Moist) 2/1 6/2 6/4 Indicators (chain)	ceded to docu atrix, CS=Cover	color (OD) Hue_10YR S5 - Sandy R S6 - Stripped F1 - Loamy R F2 - Loamy C	icator or co Grains; Local Moist) 6/8 not present	ytic veget onfirm the tion: PL=Por Mottle: 10 t):	absence of ingre Lining, M=Mates Type C	Location	SICL SIC SIC SIC Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F	luck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depressio	: Soils ¹
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-15 15-20 NRCS Hydr	The wetland ption (Description, D=Depintration, D=Depintratio	ibe to the depth neetion, RM=Reduced Matrix Color (Moist) 2/1 6/2 6/4 Indicators (chappedon stic in Sulfide il Layers (LRR F) ick (LRR FGH)	eeded to doct atrix, CS=Cover	color (OD) Hue_10YR S6 - Stripped F1 - Loamy N F2 - Loamy N F3 - Depleted F6 - Redox D	icator or co Grains; Local (Moist) (Moist) (Moist) (Moist) (Moist) (Moist) (Moist) (Moist) (Moist) (Moist)	ytic veget onfirm the tion: PL=Por Mottles 10 t):	absence of ingre Lining, M=Mates Type C	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduct TF2 - Red F	luck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depression ced Vertic Parent Material	E Soils ¹ LRR F, G, H) DNS (LRR H, outside MLRA 72, 73)
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-9 9-15 15-20 NRCS Hydr	The wetland ption (Description, D=Depintration, D=Depintratio	ibe to the depth neetion, RM=Reduced Matrix Color (Moist) 2/1 6/2 6/4 Indicators (chain and a stice on Sulfide on Sulf	eeded to doct atrix, CS=Cover	color (OD) Hue_10YR Hue_10YR S5 - Sandy R S6 - Stripped F1 - Loamy R F2 - Loamy R F3 - Depleted F6 - Redox R F7 - Deplete	icator or co Grains; Local Moist) 6/8 6/8 Addrix Mucky Minera Gleyed Matrix Mucky Minera d Matrix Dark Surface d Dark Surface	ytic veget onfirm the tion: PL=Por Mottles 10 t):	absence of ingre Lining, M=Mates Type C	Location	SICL SIC SIC SIC Indicators 1 A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	luck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depression ed Vertic Parent Material Shallow Dark S	E Soils ¹ LRR F, G, H) DNS (LRR H, outside MLRA 72, 73)
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WETLAND DETERMINATION DATA FORM

Great Plains Region

Project/Site:	L3R				Sample Point: w-154n44w33-k1					
					<u> </u>					
VEGETATIO	N (Species identified in all uppercase a	are non-native	e 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: 2 (A)					
3.										
4.					Total Number of Dominant Species Across All Strata: 2 (B)					
5.										
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)					
7.	<u></u>				(742)					
8.	<u></u>				Prevalence Index Worksheet					
9.					Total % Cover of: Multiply by:					
10.	Total Cavar				OBL spp. 55					
	Total Cover	= 0	FACW spp. $\frac{35}{2}$ \times $2 = \frac{70}{2}$							
					FAC spp. 15					
	Stratum (Plot size: 15 ft. radius)	_			FACU spp. $5 x 4 = 20$					
1.					UPL spp. $0 x 5 = 0$					
2.										
3.					Total 110 (A) 190 (B)					
4.										
5.					Prevalence Index = B/A = 1.727					
6.										
7.										
8.					Hydrophytic Vegetation Indicators:					
9.					Rapid Test for Hydrophytic Vegetation					
10.					X Dominance Test is > 50%					
10.	_lTotal Cover	= 0			X Prevalence Index is ≤ 3.0 *					
	Total Cover									
					Morphological Adaptations (Explain) *					
	Plot size: 5 ft. radius)			0.01	Problem Hydrophytic Vegetation (Explain) *					
1.	Carex pellita	50	Y	OBL						
2.	Symphyotrichum lanceolatum	30	Υ	FACW	* Indicators of hydric soil and wetland hydrology must be					
3.	Apocynum cannabinum	15	N	FAC	present, unless disturbed or problematic.					
4.	Cirsium arvense	5	N	FACU	Definitions of Vegetation Strata:					
5.	Mentha spicata	5	N	FACW						
6	Lycopus americanus	5	N	OBL	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.										
11.										
12.					Herb - All herbaceous (non-woody) plants, regardless of size.					
]			rierb - 7 in Horbacocas (Horr Hoosa)/ plants, regardoss of oizs.					
13.	<u> </u>									
14.	<u> </u>				Manada Mina - All woody vince recording of bright					
15.					Woody Vines - All woody vines, regardless of height.					
	Total Cover	= 110								
Woody Vine St	ratum (Plot size: 30 ft. radius)									
1.										
2.										
3.					Hydrophytic Vegetation Present? Y					
5.										
4.										
	Total Cover	= 0								
Remarks:	The wetland sample point is dominated by		e and white	e panicled	laster					
rtomanto.	The welland dample point is dominated by	woony soag	c and wint	o parnoloc						
Additional Remarks:										