WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R								Date:	07/28/14	
Applicant:		Enbridge								County:	Marshall	
Investigators		NTT/KRG			_Subregio	n (MLRA	or LRR):	MLRA 56		State:	MN	
Soil Unit:	I130A		NWI Classification:									
Landform:	Depression				cal Relief:					Sample Point:	w-158n48w36-a1	
Slope (%):	3 - 7%		titude: 48.4			-96.789		Datum:				
		onditions on the site ty	•		ar? (If no, ex			Yes	□ No	Section:		
Are Vegetation			•	y disturbed?		Are	e normal circum	-	esent?	Township:		
Are Vegetation			aturally pro	oblematic?				□ No		Range:	Dir:	
SUMMARY C												
Hydrophytic \	•		Yes		_				Is Present?		11 12 V	
Wetland Hyd			Yes		114 1		=			nt Within A We		
Remarks:	The wetlan	d is a wet meadow loo	cated within	n a roadside	ditch and o	dominate	d by Eleochari	s palustris a	and Phalaris	s arundinacea	l.	
HYDROLOG'	Y											
Wetland Hy	drology Ind	licators (Check all tha	at apply; M	linimum of or	ne primary	or two se	econdary requi	red):				
<u>Primary:</u>									Secondary:	•		
☑ A1 - Surface Water					B11 - Salt					B6 - Surface S		
▽	A2 - High Wa A3 - Saturation			□ B13 - Aquatic Fauna □						B8 - Sparsely Vegetated Concave SurfaceB10 - Drainage Patterns		
	B1 - Water M			□ C1 - Hydrogen Sulfide Odor □ C2 - Dry Season Water Table □ C3 - Oxidized Rhizospheres on Living Roots (not tille □ C4 - Presence of Reduced Iron □ C7 - Thin Muck Surface □ Other (Explain)							Rhizospheres on Living Roots (tilled)	
	B2 - Sedimer										Burrows	
	B3 - Drift Dep	•									n Visible on Aerial Imagery	
	B4 - Algal Ma										hic Position	
	B5 - Iron Dep		- W1 /								tral Test	
		on Visible on Aerial Image stained Leaves	ery						Ц	D7 - Frost-nea	aved Hummocks (LRR F)	
	Do Water C	tailed Ecaves										
Field Observ	vations:											
Surface Wate		Yes ☑	Depth	n: 4	(in.)							
Water Table		Yes ☑	Depti		– (iii.)			Wetland F	lydrology l	Present?	Υ	
Saturation Pr		Yes ☑	Depti		- (in.)							
		163	Бери		_ ('''')							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:												
	`				<u>.</u>		if available:					
Remarks:	`	stream gauge, monitor d has roughly four inc			<u>.</u>		if available:					
Remarks:	`				<u>.</u>		if available:					
Remarks:	The wetlan	d has roughly four inc	thes of star	nding water th	hroughout.			dicators \				
Remarks: SOILS Profile Descri	The wetlan	d has roughly four inc	ed to docu	nding water the	nroughout.	onfirm the	e absence of in					
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Remarks: SOILS Profile Descri	The wetlan	d has roughly four inc ibe to the depth need letion, RM=Reduced Matrix	ed to docu	nding water the	nroughout.	onfirm the	e absence of in ore Lining, M=Matr					
Remarks: SOILS Profile Descri (Type: C=Concer	The wetlan	d has roughly four inc ribe to the depth need letion, RM=Reduced Matrix Matrix	ed to docu	nding water the ment the indied/Coated Sand	nroughout.	onfirm the	e absence of in ore Lining, M=Matr	(x)	Texture		Remarks	
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Remarks: SOILS Profile Descri (Type: C=Concer	The wetlan	d has roughly four incoming the to the depth need letion, RM=Reduced Matrix Matrix Color (Moist)	ed to docu	ment the indi	icator or co	Mottle	e absence of in ore Lining, M=Matr es Type	(x)	Texture		Remarks	
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	The wetlan Iption (Description, D=Deportration, D=Deportration) Ic Soil Field A1- Histosol A2 - Histic Ep	d has roughly four incoming the to the depth need letion, RM=Reduced Matrix Matrix Color (Moist) I Indicators (checompleted on the color incoming the color incomi	ed to docu	ment the indicators are in S5 - Sandy R S6 - Stripped	mroughout. icator or concentration of c	Mottle %	e absence of in ore Lining, M=Matr es Type	Location	Indicators f A9 - 1 cm M A16 - Coast	luck (LRR I, J) Prairie Redox (c Soils ¹	
Remarks: SOILS Profile Descri (Type: C=Concer	The wetlan Iption (Description, D=Deportration, D=Deportration) Ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black History	d has roughly four incoming the to the depth need letion, RM=Reduced Matrix Matrix Color (Moist) I Indicators (checonipedon estic	ed to docu	ment the indicators are in S5 - Sandy R	icator or configuration of present Matrix Matrix Mucky Miner	mottle Mottle w tion: PL=Po	e absence of in ore Lining, M=Matr es Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S	luck (LRR I, J) Prairie Redox (urface (LRR G)	c Soils ¹	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	The wetlan Iption (Description, D=Dep Tration, D=Dep A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge	d has roughly four incoming the to the depth need letion, RM=Reduced Matrix Matrix Color (Moist) I Indicators (checonipedon estic	ed to docu	ment the indicators are in S5 - Sandy R S6 - Stripped F1 - Loamy R F2 - Loamy R F3 - Depleted	mroughout. icator or concentrations; Local Moist) Moist) not present the motor of the motor	mottle Mottle // // // // // // // // // // // // /	e absence of in ore Lining, M=Matr es Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S	luck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depressio	Soils ¹ (LRR F, G, H)	
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	The wetlan Iption (Description, D=Deportration, D=Deportration) A1- Histosol A2 - Histic Epolic A3 - Black Historoge A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D	d has roughly four incoming the to the depth need letion, RM=Reduced Matrix Matrix Color (Moist) I Indicators (checomic and sticted and sulfide depth Layers (LRR F) luck (LRR FGH) and Below Dark Surface Dark Surface	ed to docu k, CS=Covere	ment the indicators are in the sed/Coated Sand Color (S5 - Sandy R S6 - Stripped F1 - Loamy R F2 - Loamy R F3 - Depleted F6 - Redox D F7 - Depleted F8 - Redox D	icator or configuration of present and matrix Dark Surfaced Dark Surfaced Depressions	mottle Mottle // // // // // // // // // // // // /	e absence of inore Lining, M=Matres Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	luck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depression Parent Material	E Soils ¹ ELRR F, G, H) ONS (LRR H, outside MLRA 72, 73)	
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WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:	: L3R				Sample Point: w-158n48w36-a1				
VEGETATIO	、	e 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:(A)				
3.									
4.					Total Number of Dominant Species Across All Strata:(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 spp75				
	Total Cover =	0			OBL spp. 75				
					FAC spp. $0 x 3 = 0$				
Sapling/Shrub	Stratum (Plot size: 15 ft. radius)				FACU spp. $0 x 4 = 0$				
1.					UPL spp. $0 x 5 = 0$				
2.									
3.					Total 105 (A) 135 (B)				
4.									
5.					Prevalence Index = B/A = 1.286				
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.	Eleocharis palustris	35	Υ	OBL					
2.	Phalaris arundinacea	20	Y	FACW	* Indicators of hydric soil and wetland hydrology must be				
3.	Typha angustifolia	15	<u>.</u> N	OBL	present, unless disturbed or problematic.				
4.	Typha latifolia	15	N	OBL	Definitions of Vegetation Strata:				
5.	Rumex stenophyllus	10	N	FACW	Dominiono di Vogotation di ata.				
6	Alisma triviale	10	N	OBL	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast				
7.	Alisma uiviale	10	11	ODL	height (DBH), regardless of height.				
8.									
9.					Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.				
10.					Sapinig/Siliub - Weedy Plante less than 8 m. BBH, Tegardess of Height.				
11.					Herb - All herbaceous (non-woody) plants, regardless of size.				
12.					Telb - All herbaceous (hon-woody) plants, regardless of size.				
13.									
14.					Manada Wanga All woody vinos regardless of beight				
15.					Woody Vines - All woody vines, regardless of height.				
	Total Cover = _	105							
	tratum (Plot size: 30 ft. radius)								
1.									
2.									
3.					Hydrophytic Vegetation Present?Y				
5.									
4.									
	Total Cover =	0							
Remarks:	The wetland vegetation is dominated by Eleo	charis pal	ustris, Pha	alaris arun	dinacea, and two species of Typha.				
Additional F	Remarks:								