## WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R								Date:	09/17/14	
Applicant:		Enbridge			0 1 .	/N 41 D A	1.00)	M D A 50		County:	Marshall	
Investigators		BJC/RAJ			_Subregio	•	or LRR):	MLRA 56		State:	MN	
Soil Unit: Landform:	I24A Talf				soal Daliafi		I Classification	:		Commis Daint	156n16w22 n1	
Slope (%):	0 - 2%		Latitude: 48.		cal Relief: Longitude:		700	Datum		Sample Point	u-156n46w33-n1	
		onditions on the site						✓ Yes	□ No	Section:		
Are Vegetation			<u> </u>	tly disturbed?	αι: (π πο, οχ <sub>ι</sub>	1	e normal circur			Township:		
Are Vegetation				roblematic?		/	✓ Yes		0001111	Range:	Dir:	
SUMMARY C			There is a second property of the second prop							1 1019		
Hydrophytic \			No					Hydric Soi	Is Present?	Yes		
Wetland Hyd	•		No		_					t Within A W	etland? <b>No</b>	
Remarks:			cated in a co	ultivated soybe	ean field. T	he veget	tation is signific				lication. The soils are	
	significantly	disturbed due to ti	illing.	•			_	•				
<b>HYDROLOG</b>	Y											
Wetland Hy	drology Ind	icators (Check all	that apply:	Minimum of or	ne primary	or two se	econdary requi	red):				
Primary:	•	iodioro (orreon air	triat apply,	iviii iii ii di di	io primary	01 1110 01	cooridary roqui	100):	Secondary:			
	A1 - Surface	Water			B11 - Salt	Crust				B6 - Surface S	Soil Cracks	
					B13 - Aqua						Vegetated Concave Surfac	Э
	A3 - Saturation B1 - Water M				C1 - Hydro C2 - Dry S					B10 - Drainage	e Patterns Rhizospheres on Living Ro	ote (tillad)
	B2 - Sedimer						spheres on Living	Roots (not till	le 🗆	C8 - Crayfish I		oto (tilica)
	B3 - Drift Dep	osits			C4 - Prese	nce of Re	duced Iron	`		C9 - Saturation	n Visible on Aerial Imagery	
	B4 - Algal Ma				C7 - Thin N		ace			D2 - Geomorp		
	B5 - Iron Dep	osits on Visible on Aerial Ima	agery	П	Other (Exp	iain)				D5 - FAC-Neu	trai Test aved Hummocks (LRR F)	
		tained Leaves	agery						_	<i>D1</i> 1103(110)	avea Hammooks (ERRY)	
Field Observ	vations:											
Surface Wate	er Present?	Yes □	Dep	oth:	(in.)			Wetlend L	Jydrology I	Drocont?	NI	
Water Table	Present?	Yes □		oth:	(in.)			vvetiana r	Hydrology I	Present?	N 	
Saturation Pr	resent?	Yes □	Dep	oth:	(in.)						_	
Describe Reco	orded Data (s	stream gauge, monit	toring well. a	erial photos, p	evious insc	ections).	if available:					
	`	stream gauge, monit			evious insp	ections),	if available:					
Describe Reco	`	stream gauge, monit rs of wetland hydro			revious insp	ections),	if available:					
	`				evious insp	ections),	if available:					
Remarks:  SOILS Profile Descri	No indicato	rs of wetland hydro	ology were o	bserved.	icator or co	onfirm the	e absence of ir					
Remarks:  SOILS Profile Descri	No indicato	rs of wetland hydro	ology were o	bserved.	icator or co	onfirm the	e absence of ir					
Remarks:  SOILS Profile Descri	No indicato	rs of wetland hydro ibe to the depth nee etion, RM=Reduced Ma	ology were o	bserved.	icator or co	onfirm the	e absence of ir ore Lining, M=Mati					
Remarks:  SOILS Profile Descri (Type: C=Concer	No indicato	rs of wetland hydro libe to the depth ned etion, RM=Reduced Ma Matrix	eded to doc atrix, CS=Cove	bserved. cument the indured/Coated Sand	icator or co Grains; Loca	onfirm the	e absence of ir ore Lining, M=Mati	rix)	Teyture		Remarks	
Remarks:  SOILS Profile Descri (Type: C=Concer	No indicato	rs of wetland hydro libe to the depth nee etion, RM=Reduced Ma  Matrix Color (Moist)	eded to doc atrix, CS=Cove	cument the indired/Coated Sand	icator or co Grains; Loca	onfirm the	e absence of ir ore Lining, M=Mati		Texture		Remarks	
Remarks:  SOILS Profile Descri (Type: C=Concer	No indicato  ption (Description, D=Depl	rs of wetland hydro ibe to the depth need etion, RM=Reduced Ma  Matrix Color (Moist)  2/1	eded to doc atrix, CS=Cove	cument the indired/Coated Sand	icator or co	onfirm the tion: PL=Pe	e absence of ir ore Lining, M=Mati es Type	Location	LFS		Remarks	
Remarks:  SOILS Profile Descri (Type: C=Concer	No indicato	rs of wetland hydro ibe to the depth need etion, RM=Reduced Ma  Matrix Color (Moist)  2/1	eded to doc atrix, CS=Cove	cument the indired/Coated Sand	icator or co	onfirm the	e absence of ir ore Lining, M=Mati	rix)			Remarks	
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Remarks:  SOILS Profile Descri (Type: C=Concer	No indicato  ption (Description, D=Depl	ibe to the depth ned etion, RM=Reduced Ma  Matrix Color (Moist)	eded to doc atrix, CS=Cove	cument the indired/Coated Sand	icator or co	onfirm the tion: PL=Pe	e absence of ir ore Lining, M=Mati es Type	Location	LFS		Remarks	
Remarks:  SOILS Profile Descri (Type: C=Concer	No indicato  ption (Description, D=Depl	ibe to the depth ned etion, RM=Reduced Ma  Matrix Color (Moist)	eded to doc atrix, CS=Cove	cument the indired/Coated Sand	icator or co	onfirm the tion: PL=Pe	e absence of ir ore Lining, M=Mati es Type	Location	LFS		Remarks	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18	No indicato  ption (Description, D=Deplementation, D=Deplementation)  Hue_10YR  Hue_10YR	matrix Color (Moist)  2/1 4/2	eded to doc etrix, CS=Cove	cument the indired/Coated Sand Color Hue_10YF	icator or co Grains; Loca (Moist)	Mottle	e absence of ir ore Lining, M=Mati es Type C	Location	LFS		Remarks	
Remarks:  SOILS Profile Descri (Type: C=Concer	No indicato  ption (Description, D=Deplementation, D=Deplementation)  Hue_10YR  Hue_10YR	matrix Color (Moist)  2/1 4/2	eded to doc etrix, CS=Cove	cument the indired/Coated Sand	icator or co Grains; Loca (Moist)	Mottle	e absence of ir ore Lining, M=Mati es Type	Location	LFS FS	ior Problemati	,	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18  NRCS Hydr	No indicato  ption (Description, D=Deplementation, D=Deplementation)  Hue_10YR  Hue_10YR	matrix Color (Moist)  2/1 4/2	eded to doc etrix, CS=Cove	cument the indicators are	icator or co Grains; Loca (Moist) 8 5/6 not presen	Mottle	e absence of ir ore Lining, M=Mati es Type C	Location	LFS FS Indicators f	or Problemation	,	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18	Ption (Description, D=Deplementation, D=Deplemen	matrix Color (Moist)  2/1 4/2  Indicators (che	eded to doc etrix, CS=Cove	cument the indicators are  S5 - Sandy F	icator or co Grains; Loca (Moist) 5/6 not presen	Mottle	e absence of ir ore Lining, M=Mati es Type C	Location	LFS FS Indicators f A9 - 1 cm M	luck (LRR I, J)	c Soils <sup>1</sup>	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18  NRCS Hydr	No indicato  ption (Description, D=Deplementation, D=Deplementation)  Hue_10YR  Hue_10YR	rs of wetland hydro libe to the depth needletion, RM=Reduced Ma  Matrix  Color (Moist)  2/1  4/2  Indicators (checking)	eded to doc etrix, CS=Cove	cument the indicators are	icator or co Grains; Loca (Moist) 5/6 not presen	Mottle %	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators f A9 - 1 cm M A16 - Coast		c Soils <sup>1</sup>	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18  NRCS Hydr	ption (Descriptration, D=Deplementation, D=Deple	matrix Color (Moist)  2/1 4/2  Indicators (checking Sulfide)	eded to doc atrix, CS=Cove	cument the indicated Sand  Color  Col	icator or co Grains; Loca (Moist) 5/6 not presen	Mottle  Mottle  stion: PL=Pe	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High F	luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depression	c Soils <sup>1</sup>	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18  NRCS Hydr	ntration, Descritation, Depoint Hue_10YR Hue_10YR Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified	matrix Color (Moist)  2/1 4/2  Indicators (checking Sulfide I Layers (LRR F)	eded to doc etrix, CS=Cove	cument the indired/Coated Sand  Color (Color	icator or co Grains; Loca (Moist) 8 5/6 not presen Redox d Matrix Mucky Miner Gleyed Matrix d Matrix	Mottle  Mottle  5  t):	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High F F18 - Reduce	luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressions ced Vertic	c Soils <sup>1</sup> (LRR F, G, H)	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18  NRCS Hydr	ption (Descriptration, D=Deplementation, D=Deple	ibe to the depth need to the d	eded to doc atrix, CS=Cove	cument the indicated Sand  Color of Col	icator or co Grains; Loca (Moist) (Moist) (Social Company) (Moist) (Moist) (Moist) (Moist) (Moist) (Moist) (Moist) (Moist) (Moist)	mottle  Mottle  %  5  t):	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduct TF2 - Red P	luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depression ed Vertic Parent Material	C Soils <sup>1</sup> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18  NRCS Hydr	ption (Descriptration, D=Deplementation, D=Deple	Indicators (check the stice in Sulfide I Layers (LRR F) ck (LRR FGH) and surface in Sulface in Surface in Surf	eded to doc atrix, CS=Cove	cument the indired/Coated Sand  Color (Color	icator or co Grains; Loca (Moist) (Social Social So	mottle  Mottle  %  5  t):	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduct TF2 - Red P TF12 - Very	luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depressions ced Vertic	C Soils <sup>1</sup> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18  NRCS Hydr	ption (Descriptration, D=Deplementation, D=Deple	Indicators (check the surface of the	eded to doc atrix, CS=Cove	cument the indired/Coated Sand  Color of Color o	icator or co Grains; Loca (Moist) (Moist) (Social Moist) (Mois	mottle  Mottle  %  5  t):	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduct TF2 - Red P TF12 - Very	luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depression ed Vertic Parent Material Shallow Dark S	C Soils <sup>1</sup> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18  NRCS Hydr	Ption (Descriptration, D=Deplementation, D=Deple	Indicators (check the control of the	eded to doc atrix, CS=Cove	cument the indired/Coated Sand  Color of Color o	icator or co Grains; Loca (Moist) (Moist) (Social Moist) (Mois	mottle  Mottle  %  5  t):	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High F F18 - Reduct TF2 - Red P TF12 - Very Other (Explain	luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depression Red Vertic Parent Material Shallow Dark S Rain in Remarks)	C Soils <sup>1</sup> (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73)  Surface	
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18	Ption (Descriptration, D=Depleter A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Depleter A12 - Thick D S1 - Sandy M S2 - 2.5 cm M S3 - 5 cm Mu	ibe to the depth need to the d	eded to doc atrix, CS=Cove	cument the indired/Coated Sand  Color of Color o	icator or co Grains; Loca (Moist) (Moist) (Social Moist) (Mois	mottle  Mottle  %  5  t):	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduct TF2 - Red P TF12 - Very Other (Explain	luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depression ced Vertic Parent Material Shallow Dark S ain in Remarks)	C Soils <sup>1</sup> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)	be present,
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18  NRCS Hydr	Ption (Descriptration, D=Deplementation, D=Deple	ibe to the depth need to the d	eded to doc atrix, CS=Cove	cument the indired/Coated Sand  Color of Color o	icator or co Grains; Loca (Moist) (Moist) (Social Moist) (Mois	mottle  Mottle  %  5  t):	e absence of ir ore Lining, M=Mati es Type C	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduct TF2 - Red P TF12 - Very Other (Explain	luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depression Red Vertic Parent Material Shallow Dark S Rain in Remarks)	C Soils <sup>1</sup> (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73)  Surface	be present,
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18  NRCS Hydr	ption (Descriptration, D=Deplementation, D=Deple	Indicators (che layers (LRR F) ck (LRR FGH) cd Below Dark Surface lucky Mineral Mucky Peat or Peat (LR F) leyed Matrix	eded to doc atrix, CS=Cove	cument the indired/Coated Sand Color of	icator or co Grains; Loca (Moist) (Social Social So	mottle  Mottle  %  5  t):	e absence of ir ore Lining, M=Mates es Type C	Location	Indicators of A9 - 1 cm MA16 - Coast S7 - Dark St F16 - High FF18 - Reduct TF2 - Red PTF12 - Very Other (Explain Indicators of hunless disturbed)	luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depression ced Vertic Parent Material Shallow Dark S ain in Remarks)	C Soils <sup>1</sup> (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73)  Surface	be present,
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18	ption (Descriptration, D=Depleter A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Depleter A12 - Thick D S1 - Sandy M S2 - 2.5 cm M S3 - 5 cm Mu S4 - Sandy G	Indicators (che layers (LRR F) ck (LRR FGH) cd Below Dark Surface lucky Mineral Mucky Peat or Peat (LR F) leyed Matrix	eded to doc atrix, CS=Cove	cument the indired/Coated Sand  Color of Color o	icator or co Grains; Loca (Moist) (Social Social So	mottle  Mottle  %  5  t):	e absence of ir ore Lining, M=Mates es Type C	Location	Indicators of A9 - 1 cm MA16 - Coast S7 - Dark St F16 - High FF18 - Reduct TF2 - Red PTF12 - Very Other (Explain Indicators of hunless disturbed)	luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depression ced Vertic Parent Material Shallow Dark S ain in Remarks)	C Soils <sup>1</sup> (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73)  Surface	be present,
Remarks:  SOILS Profile Descri (Type: C=Concer  Depth (In.) 0-16 16-18  NRCS Hydr	ption (Descriptration, D=Deplementation, D=Deple	Ibe to the depth need to the depth need to the depth need to the depth need to the determined to the depth need to the d	eded to doc eatrix, CS=Cove	cument the indired/Coated Sand  Color of Color o	icator or co Grains; Loca (Moist) (Moist) (Social Company) (Moist) (Social Company) (Moist) (M	Mottle  Mottle  %  5  t):	e absence of ir ore Lining, M=Mate es Type C C Hydric So	Location  M  Calculation  M  Calculation  M  Calculation  M  Calculation  Calculati	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduct TF2 - Red P TF12 - Very Other (Explain	luck (LRR I, J) Prairie Redox ( urface (LRR G) Plains Depression Red Vertic Parent Material Shallow Dark Stain in Remarks) Hydrophytic vegetated or problematic.	C Soils <sup>1</sup> (LRR F, G, H) Ons (LRR H, outside MLRA 72, 73)  Surface	

## WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:	L3R				Sample Point:	u-156n46w33-n1			
_					•				
VEGETATIO	` ` '	re non-native	species.)						
Tree Stratum (	Plot size: 30 ft. radius)  Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet				
1.	<u>Species Hairne</u>	<u> 70 00001</u>	<u> Dominaria</u>	<u>ma.Otatao</u>					
2.					Number of Dominant Species that are OBL, F	ACW, or FAC: 0 (A)			
3.						, , ,			
4.					Total Number of Dominant Species Acr	ross All Strata:1 (B)			
5.									
6.					Percent of Dominant Species That Are OBL, F	ACW, or FAC: <u>0.0%</u> (A/B)			
7.									
8.					Prevalence Index Worksheet				
9.					Total % Cover of: Multiply by:				
10.	Total Cayon				OBL spp. 0	0			
	Total Cover =	0			FACW spp. $0 \times 2 =$	0			
Conling/Chrub 9	Stratum (Diat aiza: 15 ft radius)				FACILIAND $0 \times 3 = $	0			
1.	Stratum (Plot size: 15 ft. radius)				IIPI spp. 90 X 5 =	450			
2.					от <u>г</u> зърг х о	430			
3.					Total <mark>90</mark> (A)	450 (B)			
4.						(-)			
5.					Prevalence Index = B/A =	5.000			
6.						<del></del>			
7.									
8.					Hydrophytic Vegetation Indicators:				
9.						Hydrophytic Vegetation			
10.					Dominance Tes				
	Total Cover = 0				Prevalence Inde				
					· · · · · · · · · · · · · · · · · · ·	Adaptations (Explain) *			
	Plot size: 5 ft. radius)		V	KII	Problem Hydro	phytic Vegetation (Explain) *			
1.	Glycine max	90	Y	NI	* Indicators of budrio soil o	and watland by dralagy must be			
2.						and wetland hydrology must be listurbed or problematic.			
3. 4.				_	Definitions of Vegetation Strata:	notarious or problematic.			
5.					Definitions of Vegetation Strata.				
6					Tree - Woody plants 3 in	(7.6cm) or more in diameter at breast			
7.					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.				
8.									
9.				-	Sapling/Shrub - Woody plants less	than 3 in. DBH, regardless of height.			
10.									
11.									
12.					<b>Herb</b> - All herbaceous (no	on-woody) plants, regardless of size.			
13.									
14.									
15.					Woody Vines - All woody vines, r	regardless of height.			
	Total Cover =	90							
111									
Woody Vine St	ratum (Plot size: 30 ft. radius)								
2.									
3.					Hydrophytic Vegetation	n Present? N			
5.					Trydrophytic vegetation				
4.									
	Total Cover =	: 0							
Remarks:	The upland sample point is dominated by he		eans.						
Additional R	Remarks:								
I									