## WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R								Date:	08/13/14	
Applicant:		Enbridge			0 1 1	/A 41 D		1415450		County:	Marshall	
Investigators		MRK/BEH			_Subregio	`	A or LRR):	MLRA 56		State:	MN	
Soil Unit:	I33A				I D - I' - (		I Classification	າ:			450: 40: 47 -4	•
Landform:	Talf		Latituda, 10		ocal Relief		004E2222	Detus		Sample Point	<u>u-156n46w17-a1</u>	
Slope (%):	0 - 2%	anditions on the cit	Latitude: 48.				90453333	Datum: ☑ Yes		Castian		
		onditions on the site			al ! (If no, ex	1	·		□ No	Section:		
Are Vegetati	•	□, or Hydrology	•	•		Ar	e normal circur	-	esent?	Township:	D:	
Are Vegetati SUMMARY	•	□, or Hydrology	□aturally p	iobiematic?				□ No		Range:	Dir:	
Hydrophytic			No					Hydric Sci	Is Present?	Voc		
	drology Prese		No No		_					it Within A W	etland? <b>No</b>	
Remarks:		sample point is lo		ultivated caybo	oon field be	otwoon o	o county dirt roc				elianu: NO	
itemarks.	THE upland	sample point is to	cated in a ct	iilivaled Soybe	an neu be	stween a	a county unt roa	au anu a sea	asorially-1100	ded basiii.		
HYDROLOG	·V											
							_					
_		icators (Check all	I that apply; I	Minimum of o	ne primary	or two s	secondary requ	ired):				
Primary		Matan			D44 Cal4	0			Secondary:		Dail Ora alsa	
	A1 - Surface A2 - High Wa				B11 - Salt B13 - Aqua		a			B6 - Surface S	Soll Cracks Vegetated Concave S	Surface
	A3 - Saturation				C1 - Hydro					B10 - Drainag		diface
	B1 - Water M				C2 - Dry S						Rhizospheres on Livir	ng Roots (tilled)
	B2 - Sedimer	•					spheres on Living	g Roots (not till	le 🗆	C8 - Crayfish		
	B3 - Drift Dep						educed Iron				n Visible on Aerial Ima	agery
	B4 - Algal Ma B5 - Iron Dep				C7 - Thin I Other (Exp		ace			D2 - Geomorp D5 - FAC-Neu		
		on Visible on Aerial Im	nagery		Other (Exp	Jiaii i)					aved Hummocks (LRF	R F)
		tained Leaves	.a.go.y						_	2	(2	,
Field Obser	vations:											
Surface Wat	ter Present?	Yes □	Dep	th:	(in.)			\Matlamal I	la columnia de casa d	D	N.I.	
Water Table	Present?	Yes □	Dep	th:	– (in.)			wetiana r	Hydrology I	Present?	N	
Saturation P	resent?	Yes □	Dep	th:	(in.)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:												
Describe Rec	corded Data (s	stream gauge moni	itoring well a	erial photos in	evious inst	nections)	if available:					
	<u> </u>				<u> </u>	pections)	, if available:					
Describe Rec Remarks:	<u> </u>	stream gauge, moni or secondary hydr			<u> </u>	pections)	, if available:					
Remarks:	<u> </u>				<u> </u>	pections)	, if available:					
Remarks:	No primary	or secondary hydr	rological indi	cators were o	bserved.			ndicators.)				
Remarks:  SOILS Profile Descr	No primary		rological indi	cators were o	bserved.	onfirm th	ne absence of i					
Remarks:  SOILS Profile Descr	No primary	or secondary hydr	rological indi	cators were o	bserved.	onfirm th	ne absence of i					
Remarks:  SOILS Profile Descr	No primary	or secondary hydr	rological indi	cators were o	bserved.	onfirm th	ne absence of in Pore Lining, M=Mat					
Remarks:  SOILS Profile Descr	No primary	or secondary hydr ibe to the depth ne etion, RM=Reduced M	rological indi	ument the ind	bserved.	onfirm th	ne absence of in Pore Lining, M=Mat		Texture		Remarks	
Remarks:  SOILS Profile Descr (Type: C=Conce	No primary	or secondary hydrological be to the depth neetion, RM=Reduced Matrix Color (Moist)	rological indi eeded to doc atrix, CS=Cove	ument the ind	icator or co	onfirm thation: PL=F	ne absence of in Pore Lining, M=Mat	trix)	Texture		Remarks	
Remarks:  SOILS Profile Descr (Type: C=Conce	No primary	or secondary hydrological be to the depth neetion, RM=Reduced Matrix Color (Moist)	eeded to doc atrix, CS=Cove	ument the ind	icator or congrains; Local	onfirm thation: PL=F	ne absence of in Pore Lining, M=Mat	trix)			Remarks	
Remarks:  SOILS Profile Descr (Type: C=Conce	No primary ription (Descrentration, D=Dep	or secondary hydrological ibe to the depth neetion, RM=Reduced Matrix  Color (Moist)  2/1	eeded to doc atrix, CS=Cove	ument the indred/Coated Sand	icator or congrains; Local	onfirm thation: PL=F	ne absence of in Pore Lining, M=Mat les Type	Location	SCL		Remarks	
Remarks:  SOILS Profile Descr (Type: C=Conce	No primary ription (Descrentration, D=Dep	or secondary hydrological ibe to the depth neetion, RM=Reduced Matrix  Color (Moist)  2/1	eeded to doc atrix, CS=Cove	ument the indred/Coated Sand	icator or congrains; Local	onfirm thation: PL=F	ne absence of in Pore Lining, M=Mat les Type	Location	SCL		Remarks	
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Remarks:  SOILS Profile Descr (Type: C=Conce)  Depth (In.) 0-13 13-21	No primary  ription (Descrentration, D=Deplementation, D=Deplementation)  Hue_10YR  Hue_2.5Y	or secondary hydrological between the depth neetion, RM=Reduced Matrix  Color (Moist)  2/1 5/1	eeded to doc atrix, CS=Cove	ument the indred/Coated Sand Color Hue_10YF	icator or configurations; Locations; Locatio	onfirm thation: PL=F	ne absence of in Pore Lining, M=Matel Ies Type	Location	SCL		Remarks	
Remarks:  SOILS Profile Descr (Type: C=Conce)  Depth (In.) 0-13 13-21	No primary ription (Descrentration, D=Dep	or secondary hydrological between the depth neetion, RM=Reduced Matrix  Color (Moist)  2/1 5/1	eeded to doc atrix, CS=Cove	ument the indred/Coated Sand	icator or configurations; Locations; Locatio	onfirm thation: PL=F	ne absence of in Pore Lining, M=Mat les Type	Location	SCL C	or Problemati		
Remarks:  SOILS Profile Descr (Type: C=Conce	No primary  ription (Descrentration, D=Dep	or secondary hydrological between the depth neetion, RM=Reduced Matrix  Color (Moist)  2/1 5/1	eeded to doc atrix, CS=Cove	ument the indicators were of the control of the con	icator or configurations; Locator or configurati	onfirm thation: PL=F	ne absence of in Pore Lining, M=Matel Ies Type	Location  M	SCL C	or Problemati	c Soils <sup>1</sup>	
Remarks:  SOILS Profile Descr (Type: C=Conce)  Depth (In.) 0-13 13-21	No primary  ription (Descrentration, D=Deplementation, D=Deplementation)  Hue_10YR  Hue_2.5Y	or secondary hydrological betto the depth neetion, RM=Reduced Matrix  Color (Moist)  2/1  5/1  Indicators (ch	eeded to doc atrix, CS=Cove	ument the indred/Coated Sand Color Hue_10YF	icator or configuration of preserved.  State of the configuration of the	onfirm thation: PL=F	ne absence of in Pore Lining, M=Matel Ies Type	Location	SCL C Indicators f A9 - 1 cm M	luck (LRR I, J)	c Soils <sup>1</sup>	
Remarks:  SOILS Profile Descr (Type: C=Conce)  Depth (In.) 0-13 13-21  NRCS Hydr	Hue_10YR Hue_2.5Y  A1- Histosol A2 - Histic Ep A3 - Black History	or secondary hydrological between the depth neetion, RM=Reduced Matrix  Color (Moist)  2/1  5/1  Indicators (chappedonestic	eeded to doc atrix, CS=Cove	cators were of the indicators are  S5 - Sandy F S6 - Stripped F1 - Loamy	icator or control of Grains; Local (Moist)  R 5/6  not preser Redox d Matrix Mucky Miner	onfirm thation: PL=P  Mottl % 5	ne absence of in Pore Lining, M=Matel Ies Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St	luck (LRR I, J) Prairie Redox urface (LRR G)	<b>c Soils<sup>1</sup></b> (LRR F, G, H)	
Remarks:  SOILS Profile Descr (Type: C=Conce	Hue_10YR Hue_2.5Y  A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge	or secondary hydrological hydrologica	eeded to doc atrix, CS=Cove	cators were of the indicators are  S5 - Sandy F S6 - Stripped F1 - Loamy F2 - Loamy	icator or configuration of configuration	onfirm thation: PL=P  Mottl % 5	ne absence of in Pore Lining, M=Matel Ies Type	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 Depressi	<b>c Soils</b> <sup>1</sup> (LRR F, G, H)	73)
Remarks:  SOILS Profile Descr (Type: C=Conce	Hue_10YR Hue_2.5Y  A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified	or secondary hydrological secondary hydrologi	eeded to doc atrix, CS=Cove	cators were of the control of the co	icator or configuration of configuration	onfirm the ation: PL=F  Mottl % 5  ation: 5	ne absence of in Pore Lining, M=Matel Ies Type	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 Depressi ed Vertic	<b>c Soils<sup>1</sup></b> (LRR F, G, H)	73)
Remarks:  SOILS Profile Descr (Type: C=Conce	Hue_10YR Hue_2.5Y  Tic Soil Field  A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A9 - 1 cm Mu	or secondary hydrological secondary hydrologi	eeded to doc atrix, CS=Cove	cators were of the indicators are  S5 - Sandy F S6 - Stripped F1 - Loamy F2 - Loamy F3 - Deplete F6 - Redox I	icator or congrains; Local  (Moist)  8 5/6  not preser  Redox d Matrix Mucky Miner Gleyed Matrix Dark Surface	onfirm the stion: PL=F  Mottl % 5  nt):	ne absence of in Pore Lining, M=Matel Ies Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High F F18 - Reduct TF2 - Red P	luck (LRR I, J) Prairie Redox urface (LRR G) Plains Depressi ed Vertic Parent Material	c Soils <sup>1</sup> (LRR F, G, H) Ons (LRR H, outside MLRA 72,	73)
Remarks:  SOILS Profile Descr (Type: C=Conce	Hue_10YR Hue_2.5Y  Tic Soil Field  A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete	or secondary hydrological secondary hydrologi	eeded to doc atrix, CS=Cove	cators were of the control of the co	icator or configuration of configuration	onfirm the ation: PL=F  Mottl % 5  ation: State of the ation of the at	ne absence of in Pore Lining, M=Matel Ies Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High F F18 - Reduct TF2 - Red P TF12 - Very	luck (LRR I, J) Prairie Redox urface (LRR G) Plains Depressi ed Vertic Parent Material Shallow Dark	c Soils <sup>1</sup> (LRR F, G, H) ons (LRR H, outside MLRA 72,	73)
Remarks:  SOILS Profile Descr (Type: C=Conce	Hue_10YR Hue_2.5Y  Tic Soil Field  A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A9 - 1 cm Mu	or secondary hydrological between the depth neetion, RM=Reduced Matrix  Color (Moist)  2/1  5/1  Indicators (chapted on Sulfide I Layers (LRR F) ck (LRR FGH) ed Below Dark Surface Park Surface	eeded to doc atrix, CS=Cove	cators were of the control of the co	icator or configurations; Local  (Moist)  (Moist)  7 5/6  Redox 6 Matrix Mucky Miner Gleyed Matrix Dark Surface d Dark Surface Depressions	onfirm the ation: PL=F  Mottl % 5  ation: State of the ation of the at	ne absence of in Pore Lining, M=Matel Ies Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High F F18 - Reduct TF2 - Red P TF12 - Very	luck (LRR I, J) Prairie Redox urface (LRR G) Plains Depressi ed Vertic Parent Material	c Soils <sup>1</sup> (LRR F, G, H) ons (LRR H, outside MLRA 72,	73)
Remarks:  SOILS Profile Descr (Type: C=Conce	Hue_10YR Hue_2.5Y  Hue_2.5Y  A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick E S1 - Sandy M S2 - 2.5 cm M	or secondary hydrological secondary hydrologi	rological indi eeded to doc atrix, CS=Cove  // 10 99 neck here if i	cators were of the control of the co	icator or configurations; Local  (Moist)  (Moist	onfirm the ation: PL=F  Mottl % 5  ation: State of the ation of the at	ne absence of in Pore Lining, M=Mate	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark St F16 - High F F18 - Reduct TF2 - Red P TF12 - Very	luck (LRR I, J) Prairie Redox urface (LRR G) Plains Depressi ed Vertic Parent Material Shallow Dark	c Soils <sup>1</sup> (LRR F, G, H) ons (LRR H, outside MLRA 72,	73)
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Remarks:  SOILS Profile Descr (Type: C=Conce	Hue_10YR Hue_2.5Y  Hue_2.5Y  A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick E S1 - Sandy M S2 - 2.5 cm M	or secondary hydrometric ibe to the depth neetion, RM=Reduced Minimum Matrix  Color (Moist)  2/1  5/1  Indicators (characteristic in Sulfide in Layers (LRR F) ck (LRR FGH) cd Below Dark Surface in S	rological indi eeded to doc atrix, CS=Cove  // 10 99 neck here if i	cators were of the control of the co	icator or configurations; Local  (Moist)  (Moist	onfirm the ation: PL=F  Mottl % 5  ation: State of the ation of the at	ne absence of in Pore Lining, M=Mate	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 Depressi ed Vertic Parent Material Shallow Dark ( ain in Remarks)	c Soils <sup>1</sup> (LRR F, G, H) Ons (LRR H, outside MLRA 72,	
Remarks:  SOILS Profile Descr (Type: C=Conce	Hue_10YR Hue_2.5Y  Tic Soil Field  A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm M S3 - 5 cm Mu	or secondary hydrometric ibe to the depth neetion, RM=Reduced Minimum Matrix  Color (Moist)  2/1  5/1  Indicators (characteristic in Sulfide in Layers (LRR F) ck (LRR FGH) cd Below Dark Surface in S	rological indi eeded to doc atrix, CS=Cove  // 10 99 neck here if i	cators were of the control of the co	icator or configurations; Local  (Moist)  (Moist	onfirm the ation: PL=F  Mottl % 5  ation: State of the ation of the at	ne absence of in Pore Lining, M=Mate	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 Depressi ed Vertic Parent Material Shallow Dark S ain in Remarks)	c Soils <sup>1</sup> (LRR F, G, H) Ons (LRR H, outside MLRA 72,	
Remarks:  SOILS Profile Descr (Type: C=Conce	Hue_10YR Hue_2.5Y  Hue_2.5Y  A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick E S1 - Sandy M S2 - 2.5 cm M S3 - 5 cm Mu S4 - Sandy G	or secondary hydrological secondary hydrologi	rological indi eeded to doc atrix, CS=Cove  // 10 99 neck here if i	cators were of the control of the co	icator or congrains; Local  (Moist)  (M	onfirm the ation: PL=F  Mottl % 5  ation: State of the ation of the at	ne absence of in Pore Lining, M=Material Material Materia	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 Depressi ed Vertic Parent Material Shallow Dark S ain in Remarks)	c Soils <sup>1</sup> (LRR F, G, H) Ons (LRR H, outside MLRA 72,	
Remarks:  SOILS Profile Descr (Type: C=Conce	Hue_10YR Hue_2.5Y  Tic Soil Field  A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick E S1 - Sandy M S2 - 2.5 cm M S3 - 5 cm Mu S4 - Sandy G  Type:	or secondary hydrological secondary hydrologi	eeded to doc atrix, CS=Cove	cators were of the control of the co	icator or congrains; Local  (Moist)  (M	onfirm the stion: PL=F  Mottl % 5  ation: PL=F  Mottl % stion: PL=F	ne absence of incore Lining, M=Material Material Res  C  C  LRA 72, 73 of LR  Hydric Sc	Location  M  R H)	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 Depressi ed Vertic Parent Material Shallow Dark ( ain in Remarks) hydrophytic vegeta ed or problematic.	c Soils <sup>1</sup> (LRR F, G, H) Ons (LRR H, outside MLRA 72, Surface )	

## WETLAND DETERMINATION DATA FORM

**Great Plains Region** 

Project/Site:	L3R			Sample Point: u-156n46w17-a1
				•
VEGETATIO		re non-native species.)		
Tree Stratum (	(Plot size: 30 ft. radius)			
	<u>Species Name</u>	% Cover Dominant	t 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: 1 (B)
5.				
6.				Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
7.				
8.				Prevalence Index Worksheet
9.				Total % Cover of: Multiply by:
10.				OBL spp. $0   x   1 = 0$
	Total Cover =	=		FACW spp 0
				OBL spp.   O
Sapling/Shrub	Stratum (Plot size: 15 ft. radius)			FACU spp. $0   x   4 = 0$
1.				UPL spp80
2.				
3.				Total <u>80</u> (A) <u>400</u> (B)
4.				
5.				Prevalence Index = B/A = 5.000
6.				
7.				
8.				Hydrophytic Vegetation Indicators:
9.				Rapid Test for Hydrophytic Vegetation
10.				Dominance Test is > 50%
	Total Cover =	0		Prevalence Index is ≤ 3.0 *
				Morphological Adaptations (Explain) *
Herb Stratum (	Plot size: 5 ft. radius)			Problem Hydrophytic Vegetation (Explain) *
1.	Glycine max	80 Y	NI	
2.				* Indicators of hydric soil and wetland hydrology must be
3.				present, unless disturbed or problematic.
4.				Definitions of Vegetation Strata:
5.				
6				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.
13.				-
14.				-
15.				Woody Vines - All woody vines, regardless of height.
10.	Total Cover =	= 80		
	Total Cover =			
Woody Vine St	ratum (Plot size: 30 ft. radius)			
1	Tatum (Flot Size. 30 ft. Tadius)			
2.				
3.				Hydrophytic Vegetation Present? N
5.				inyarophytic vegetation i resent:
4.				
4.	Total Cover =	: 0		
Remarks:	The upland sample point is dominated by so			
Nemarks.	The upland sample point is dominated by so	rybeans.		
	Name and an			
Additional R	kemarks:			