WETLAND DETERMINATION DATA FORM Great Plains Region

D		LOD							I D. C.	00/04/44	
Project/Site:		L3R Enhance							Date:	06/24/14 Maraball	
Applicant:		Enbridge BEH/BCS			Subragion (MI	DA or I DD).	MLRA 56		County: State:	Marshall MN	
Investigators Soil Unit:	I15A	DEH/DC3			Subregion (ML_	WI Classification			State.	IVIIN	
Landform:	Side slope				cal Relief: LL	vvi Ciassilication	-		Sample Point:	u-156n46w34-b2	
Slope (%):	0 - 2%	I atitu	ıde: 48.296		Longitude: -96.	658108333	Datum:	•		<u>u 10011+0W0+ B2</u>	
. , ,		nditions on the site typi					✓ Yes	□ No	Section:		
Are Vegetation				disturbed?	Ī	Are normal circur			Township:		
Are Vegetation			urally prob			✓ Yes			Range:	Dir:	
SUMMARY C									· ····································		
Hydrophytic \			No				Hydric Soi	Is Present?	No		
Wetland Hyd	_		No		-				t Within A W	etland? No	
Remarks:		sample point is located	l in a whea	at field, upsl	ope from an ad	acent roadside di					
	•				•						
HYDROLOG	Υ										
		icators (Check all that	annly: Mir	nimum of on	e primary or tw	secondary requi	red):				
Primary:	•	icators (Crieck all triat of	apply, will	ilitiaiti oi oii	e primary or tw	secondary requi	ieu).	Secondary:			
<u>- 1111ary.</u>	<u>·</u>	Water			B11 - Salt Crust				B6 - Surface S	Soil Cracks	
	A2 - High Wa	ter Table			B13 - Aquatic Fa	ına			B8 - Sparsely	Vegetated Concave Surface	
	A3 - Saturation				C1 - Hydrogen S				B10 - Drainage		
	B1 - Water M B2 - Sedimen				C2 - Dry Season	Water Table zospheres on Living	Poots (not till		C3 - Oxidized C8 - Crayfish E	Rhizospheres on Living Roots (ti	lled)
	B3 - Drift Dep	•			C4 - Presence of		Roots (not till	"	_	n Visible on Aerial Imagery	
	B4 - Algal Ma				C7 - Thin Muck S			_	D2 - Geomorp		
	B5 - Iron Dep	osits			Other (Explain)				D5 - FAC-Neu		
		on Visible on Aerial Imagery	1						D7 - Frost-Hea	aved Hummocks (LRR F)	
	B9 - Water-S	tained Leaves									
First 1 Ot and	- 4 *										
Field Observ					(')						
Surface Water		Yes	Depth:		_ (in.)		Wetland H	Hydrology I	Present?	N	
Water Table		Yes	Depth:		(in.)			, ,,		<u> </u>	
Saturation Pr	resent?	Yes	Depth:		(in.)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
Describe Reco	orded Data (s	stream gauge, monitoring	g well, aeria	al photos, pro	evious inspection	s), if available:					
Describe Reco	<u>`</u>	stream gauge, monitoring or secondary hydrologic				s), if available:					
	<u>`</u>					s), if available:					
Remarks:	No primary	or secondary hydrologic	cal indicat	tors were ob	served.						
Remarks: SOILS Profile Descri	No primary	or secondary hydrologic	cal indicat	tors were ob	served.	the absence of in					
Remarks: SOILS Profile Descri	No primary	or secondary hydrologic	cal indicat	tors were ob	served.	the absence of in					
Remarks: SOILS Profile Descri	No primary	or secondary hydrologic be to the depth needed etion, RM=Reduced Matrix, C	cal indicat	tors were ob	cator or confirm	the absence of in =Pore Lining, M=Mat					
Remarks: SOILS Profile Descri (Type: C=Concer	No primary	or secondary hydrological be to the depth needed etion, RM=Reduced Matrix, Comparison of the Matrix	cal indicat	nent the indi /Coated Sand	cator or confirm Grains; Location: P	the absence of in =Pore Lining, M=Mat	rix)	Toyture		Domarka	
Remarks: SOILS Profile Descri (Type: C=Concer	No primary iption (Descriptration, D=Depl	or secondary hydrological be to the depth needed etion, RM=Reduced Matrix, Color (Moist)	cal indicated to docume the control of the control	tors were ob	cator or confirm Grains; Location: P	the absence of in =Pore Lining, M=Mat		Texture		Remarks	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-18	No primary iption (Descriptration, D=Depl	be to the depth needed etion, RM=Reduced Matrix, Color (Moist)	to docum S=Covered	nent the indi /Coated Sand	cator or confirm Grains; Location: P	the absence of in =Pore Lining, M=Mat	rix)	SICL		Remarks	
Remarks: SOILS Profile Descri (Type: C=Concer	No primary iption (Descriptration, D=Depl	be to the depth needed etion, RM=Reduced Matrix, Color (Moist)	cal indicated to docume the control of the control	nent the indi /Coated Sand	cator or confirm Grains; Location: P	the absence of in =Pore Lining, M=Mat	rix)			Remarks	
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-18 18-21	No primary iption (Descriptration, D=Depl Hue_10YR Hue_10YR	or secondary hydrologic be to the depth needed etion, RM=Reduced Matrix, C Matrix Color (Moist) 2/1 4/1	to docum CS=Covered 100 100	nent the indi /Coated Sand (cator or confirm Grains; Location: P Moist) %	the absence of in =Pore Lining, M=Mat ottles Type	rix)	SICL		Remarks	
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-18 18-21 NRCS Hydr	No primary Iption (Description, D=Depl Hue_10YR Hue_10YR Hue_10YR A1- Histosol	be to the depth needed etion, RM=Reduced Matrix Color (Moist) 2/1 4/1 Indicators (check h	to docum CS=Covered % 100 100	cors were obtained the indicated Sand Color (Color (Color (S5 - Sandy R	cator or confirm Grains; Location: P M Moist) not present):	the absence of in =Pore Lining, M=Mat ottles Type	Location	SICL SCL Indicators f A9 - 1 cm M	luck (LRR I, J)	c Soils ¹	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-18 18-21 NRCS Hydr	No primary Iption (Description, D=Depl Hue_10YR Hue_10YR Hue_10YR A1- Histosol A2 - Histic Ep	be to the depth needed etion, RM=Reduced Matrix, Color (Moist) 2/1 4/1 Indicators (check has ipedon	to docum CS=Covered % 100 100	cors were obtained the individual of the individ	cator or confirm Grains; Location: P M Moist) not present): edox Matrix	the absence of in =Pore Lining, M=Mat ottles Type	Location	SICL SCL Indicators f A9 - 1 cm M A16 - Cost F	luck (LRR I, J) Prairie Redox (L	c Soils ¹	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-18 18-21 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black His	be to the depth needed etion, RM=Reduced Matrix, Color (Moist) 2/1 4/1 Indicators (check has ipedon etic)	to documed with the second sec	Color (S5 - Sandy R S6 - Stripped F1 - Loamy N	cator or confirm Grains; Location: P Moist) not present): edox Matrix Mucky Mineral	the absence of in =Pore Lining, M=Mat ottles Type	Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark Si	luck (LRR I, J) Prairie Redox (L urface (LRR G)	c Soils ¹ .RR F, G, H)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-18 18-21 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge	be to the depth needed etion, RM=Reduced Matrix, Color (Moist) 2/1 4/1 Indicators (check has ipedon stice in Sulfide	to docum S=Covered 100 100	cors were obtained the individual of the individ	cator or confirm Grains; Location: P Moist) Most) ot present): edox Matrix Mucky Mineral Gleyed Matrix	the absence of in =Pore Lining, M=Mat ottles Type	Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark S6 F16 - High F	luck (LRR I, J) Prairie Redox (L urface (LRR G) Plains Depressio	c Soils ¹	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-18 18-21 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified	or secondary hydrologic be to the depth needed etion, RM=Reduced Matrix, C Matrix Color (Moist) 2/1 4/1 Indicators (check has been stice in Sulfide Layers (LRR F)	to docum CS=Covered % 100 100	Color (S5 - Sandy R S6 - Stripped F1 - Loamy N	cator or confirm Grains; Location: P Moist) Most) Most present): edox Matrix Mucky Mineral Gleyed Matrix Matrix Matrix Matrix	the absence of in =Pore Lining, M=Mat ottles Type	Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark So F16 - High F F18 - Reduce	luck (LRR I, J) Prairie Redox (L urface (LRR G) Plains Depressio	c Soils ¹ .RR F, G, H)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) 0-18 18-21 NRCS Hydr	Hue_10YR Hue_10YR Hue_10YR Hue_10YR A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete	be to the depth needed etion, RM=Reduced Matrix, Color (Moist) 2/1 4/1 Indicators (check has been stice in Sulfide Layers (LRR F) ck (LRR FGH) and Below Dark Surface	to docum S=Covered 100 100 nere if indi	cors were obtained the individual of the individ	cator or confirm Grains; Location: P M Moist) not present): edox Matrix Mucky Mineral Gleyed Matrix I Matrix ark Surface I Dark Surface	the absence of in =Pore Lining, M=Mat ottles Type	Location	Indicators f A9 - 1 cm M A16 - Cost F S7 - Dark Si F16 - High F F18 - Reduct TF2 - Red P TF12 - Very	luck (LRR I, J) Prairie Redox (L urface (LRR G) Plains Depression ced Vertic Parent Material Shallow Dark S	c Soils ¹ LRR F, G, H) DNS (LRR H, outisde MLRA 72, 73)	
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WETLAND DETERMINATION DATA FORM

Great Plains Region

Project/Site:	L3R				Sample Point: u-156n46w34-b2
					·
VEGETATION	N (Species identified in all uppercase are	e non-native s	species.)		
Tree Stratum ((Plot size: 30 ft. radius)				T
	<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.	<u></u>				
4.					Total Number of Dominant Species Across All Strata:1(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7.	<u></u>				
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	Total Cover -				OBL spp. 0
	Total Cover =	0	_		FACVV spp. $0 \times 2 = 0$
Carling/Chrub (Otration (Diet size: 45 ft redicts)				$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Sapling/Shrub S	Stratum (Plot size: 15 ft. radius)				$\begin{array}{cccccccccccccccccccccccccccccccccccc$
2.	-				VFL spp
3.	-				Total 60 (A) 300 (B)
4.					(A)(B)
5.	-				Prevalence Index = B/A = 5.000
6.	-				- COOC
7.	 -				
8.	 				Hydrophytic Vegetation Indicators:
9.	 				Rapid Test for Hydrophytic Vegetation
10.	 				Dominance Test is > 50%
. 5-	Total Cover =	0			Prevalence Index is ≤ 3.0 *
	- · · · · · · · · · · · · · · · · · · ·		-		Morphological Adaptations (Explain) *
Herb Stratum (Plot size: 5 ft. radius)				Problem Hydrophytic Vegetation (Explain) *
1.	Triticum aestivum	55	Υ	NI	
2.	Glycine max	5	N	NI	* Indicators of hydric soil and wetland hydrology must be
3.		-		_	present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					1
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.					height (DBH), regardless of height.
8.					1
9.					Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.
10.					1
11.					1
12.					Herb - All herbaceous (non-woody) plants, regardless of size.
13.					
14.					
15.					Woody Vines - All woody vines, regardless of height.
	Total Cover = _	60	_		
	ratum (Plot size: 30 ft. radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present?N
5.					
4.	Total Cover				
Damorko	Total Cover =		-44-40d v.c	- L	
Remarks:	The sample point is dominated by planted wh	neat and sca	attered vo	olunteer so	oybeans.
<u> </u>					
Additional R	temarks:				
1					