WETLAND DETERMINATION DATA FORM Great Plains Region

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Project/Site:		L3R									Date:	09/26/14	
Applicant:		Enbridge				Subragio	n /MI DA	or I DD\	MIDAEG		County:	Pennington MN	
Investigators: BJC/RAJ Soil Unit: I69A				Subregion (MLRA or LRR):					MLRA 56		State:	IVIIN	
Landform: Talf				NWI Classification: PEMB Local Relief: LL							Sample Point:	u-153n44w3-b1	
Slope (%):	0 - 2%		Latitude: 48	8 106			-96.2904	136	Datum:	1		u 1001144W0 D1	
. ,		onditions on the site				_				□ No	Section:		
Are Vegetation		I ☑, or Hydrology				(1110, 0)		normal circum			Township:		
Are Vegetation		I □, or Hydrology	•	-			7 11 0	✓ Yes			Range:	Dir:	
SUMMARY C				p. 0.0							, togo.		
Hydrophytic \			No	0					Hydric Soil	ls Present?	No		
Wetland Hyd			No.			•					nt Within A W	etland? No	
Remarks:					s since beer	n converte	ed to upla	nd by pipeline				on have been significant	lv
		om mounding over					70. 10 0.p.10				ours regersu		.,
HYDROLOG'		om modificating over		3110111	outy muon.								
		inatara (Chaaleall	براموم مومليا	\ 1::	increase of on								
Primary:		icators (Check all	i that apply	'; iviini	imum of on	e primary	or two se	condary requi	rea):	Socondon.			
	<u>.</u> A1 - Surface	Water			П	B11 - Salt (Crust			Secondary:	B6 - Surface S	oil Cracks	
	A2 - High Wa					B13 - Aqua						Vegetated Concave Surface	
	A3 - Saturation			☐ C1 - Hydrogen Sulfide Odor ☐ ☐ C2 - Dry Season Water Table ☐							B10 - Drainage Patterns		
	B1 - Water M									C3 - Oxidized Rhizospheres on Living Roots (tilled)			
	B2 - Sedimer	•		☐ C3 - Oxidized Rhizospheres on Living Roots (not tille☐☐ C4 - Presence of Reduced Iron☐☐ C7 - Thin Muck Surface☐☐☐							C8 - Crayfish E		
	B3 - Drift Dep B4 - Algal Ma										D2 - Geomorp	No Visible on Aerial Imagery	
	B5 - Iron Dep					Other (Exp		CC .			D5 - FAC-Neut		
		on Visible on Aerial Im	nagery		_	O (2/p	,					ived Hummocks (LRR F)	
	B9 - Water-S	tained Leaves	- ,										
Field Observ	vations:												
Surface Wat	er Present?	Yes □	De	epth:		(in.)			Wetland H	lydrology	Drocont?	NI	
Water Table	Present?	Yes □	De	Depth: (in.)				Wetland Hydrology F			Present? N		
Saturation Pr	resent?	Yes □	De	epth:		(in.)						_	
Describe Rec	and ad Data /												
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No indicators of wetland hydrology were observed.													
	<u>`</u>					evious insp	ections), i	if available:					
Remarks:	<u>`</u>					evious insp	ections), i	if available:					
Remarks:	<u>`</u>					evious insp	ections), i	if available:					
Remarks:	No indicato		ology were	obse	erved.	·			dicators.)				
Remarks: SOILS Profile Descri	No indicato	rs of wetland hydro	ology were	obse	erved.	cator or co	onfirm the	absence of in					
Remarks: SOILS Profile Descri	No indicato	rs of wetland hydro ibe to the depth ne letion, RM=Reduced Ma	ology were	obse	erved.	cator or co	onfirm the	e absence of in ore Lining, M=Matr					
Remarks: SOILS Profile Descri	No indicato	rs of wetland hydro ibe to the depth ne letion, RM=Reduced Ma	eeded to do	obse	erved. ent the indicoated Sand C	cator or co Grains; Locat	onfirm the	e absence of in ore Lining, M=Matr	ix)				
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Remarks: SOILS Profile Descri (Type: C=Concer	No indicato	rs of wetland hydro ibe to the depth ne letion, RM=Reduced Ma	eeded to do	obse	erved. ent the indicoated Sand C	cator or co Grains; Locat	onfirm the	e absence of in tre Lining, M=Matr	ix)	Texture		Remarks	
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Remarks: SOILS Profile Descri (Type: C=Concer	No indicato	ibe to the depth neletion, RM=Reduced Matrix Color (Moist)	eeded to do	obse	erved. ent the indicoated Sand C	cator or co Grains; Locat	Mottle	e absence of in tre Lining, M=Matr	ix)		for Problematic		
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	No indicato iption (Description, D=Deplementation, D=Deplementation)	ibe to the depth neletion, RM=Reduced Matrix Color (Moist)	eeded to do	obsection of country of the country	ent the indicated Sand Coated Sand Color (I	cator or co Grains; Locat Moist)	Mottle	e absence of in ore Lining, M=Matr es Type	Location	Indicators f	for Problemation		
Remarks: SOILS Profile Descri (Type: C=Concer	No indicato iption (Description, D=Depleter of the property o	ibe to the depth nedetion, RM=Reduced Matrix Color (Moist) Indicators (characters)	eeded to do	obsevered/0	ent the indicated Sand Coated Sand Coated Sand Color (I	cator or co Grains; Locat Moist)	Mottle	e absence of in ore Lining, M=Matr es Type	Location	Indicators f A9 - 1 cm M	luck (LRR I, J)	: Soils ¹	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	No indicato iption (Description, D=Deplementation, D=Deplementation)	ibe to the depth neletion, RM=Reduced Matrix Color (Moist) Indicators (chapted on the letion)	eeded to do	obsevered/0	ent the indicated Sand Coated Sand Color (I	cator or co Grains; Locat Moist)	Mottle %	e absence of in ore Lining, M=Matr es Type	Location	Indicators f A9 - 1 cm M A16 - Coast		: Soils ¹	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	No indicato iption (Description, D=Depintration, D=Depintrati	ibe to the depth ne letion, RM=Reduced Marix Color (Moist) Indicators (chapted on Stice in Sulfide	eeded to do	obsevered/0	ent the indicated Sand Coated Sand Color (Incomplete Color (Incomplete Color Sandy Research Sand	cator or co Grains; Locat Moist) oot presentedox Matrix lucky Minera	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)	: Soils ¹	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	No indicato iption (Description, D=Depintration, D=Depintrati	ibe to the depth neletion, RM=Reduced Matrix Color (Moist) Indicators (chapted on Sulfide I Layers (LRR F)	eeded to do	obsevered/0	ent the indicated Sand Coated Sand Sand Sand Sand Sand Sand Sand San	cator or co Grains; Locat Moist) oot present edox Matrix lucky Minera	Mottle % tion: PL=Poi	e absence of in ore Lining, M=Matr es Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduce	luck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depressioned Vertic	: Soils ¹ LRR F, G, H)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	No indicato iption (Description, D=Depintration, D=Depintrati	ibe to the depth nedetion, RM=Reduced Matrix Color (Moist) Indicators (chapted on Stice on Sulfide of Layers (LRR F) tok (LRR FGH)	eeded to do atrix, CS=Cov	f indic	ent the indicated Sand Coated	cator or co Grains; Locat Moist) Moist) edox Matrix lucky Mineralleyed Matrix Matrix ark Surface	Mottle % tion: PL=Poi	e absence of in ore Lining, M=Matr es Type	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 Parent Material	E Soils ¹ LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	No indicato iption (Description, D=Depintration, D=Depintrati	ibe to the depth ne letion, RM=Reduced Marix Color (Moist) Indicators (characters) Sipedon Stic (Characters) Layers (LRR F) (CK (LRR FGH) (CK (LRR FGH)) Led Below Dark Surface	eeded to do atrix, CS=Cov	f indic	ent the indicated Sand Coated	cator or co Grains; Locat Moist) ot present edox Matrix lucky Minera eleyed Matrix Matrix ark Surface Dark Surface	Mottle % tion: PL=Poi	e absence of in ore Lining, M=Matr es 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 Ced Vertic Parent Material Shallow Dark S	E Soils ¹ LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	No indicato iption (Description, D=Depinitration, D=Depi	ibe to the depth ne letion, RM=Reduced Marix Color (Moist) Indicators (characters) Sipedon Stic (Characters) A Layers (LRR F) Color (LRR FGH) Color (LRR FGH) Color (LRR FGH) Color (Surface)	eeded to do atrix, CS=Cov	obsevered/0	ent the indicated Sand Coated	edox Matrix lucky Minera leyed Matrix Matrix ark Surface Dark Surfa	Mottle Mottle // // // // // // // // // /	e absence of ingre 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 LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)	
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.) NRCS Hydr	No indicato Iption (Description, D=Depinitration, D=Depi	ibe to the depth ne letion, RM=Reduced Marix Matrix Color (Moist) Indicators (characters) Sipedon Stic (Characters) Layers (LRR F) Lock (LRR FGH) Lock (LRR FGH) Lock (Below Dark Surface) Dark Surface Lucky Mineral	eeded to do atrix, CS=Covered	obsevered/0	ent the indicated Sand Coated	edox Matrix lucky Minera leyed Matrix Matrix ark Surface Dark Surfa	Mottle Mottle // // // // // // // // // /	e absence of in ore Lining, M=Matr es 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 Ced Vertic Parent Material Shallow Dark S	E Soils ¹ LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)	
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Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	No indicato Iption (Description, D=Depintration, D=Depintrati	ibe to the depth ne letion, RM=Reduced Marix Color (Moist) Indicators (characters) Sipedon Stic (Characters) Sick (LRR FGH) Sick (LRR FGH	eeded to do atrix, CS=Covered	obsevered/0	ent the indicated Sand Coated	edox Matrix lucky Minera leyed Matrix Matrix ark Surface Dark Surfa	Mottle Mottle // // // // // // // // // /	e absence of ingre Lining, M=Matres Type	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 Parent Material Shallow Dark S ain in Remarks)	ESOILS ¹ LRR F, G, H) ONS (LRR H, outside MLRA 72, 73) Surface	present,
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	No indicato Iption (Description, D=Depinitration, D=Depi	ibe to the depth ne letion, RM=Reduced Marix Color (Moist) Indicators (characters) Sipedon Stic (Characters) Sick (LRR FGH) Sick (LRR FGH	eeded to do atrix, CS=Covered	obsevered/0	ent the indicated Sand Coated	edox Matrix lucky Minera leyed Matrix Matrix ark Surface Dark Surfa	Mottle Mottle // // // // // // // // // /	e absence of ingre Lining, M=Matres Type	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduct TF2 - Red P TF12 - Very Other (Explain	Juck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depression Parent Material Shallow Dark S Ain in Remarks)	ESOILS ¹ LRR F, G, H) ONS (LRR H, outside MLRA 72, 73) Surface	present,
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	No indicato Iption (Description, D=Depinion, D=Depinion) A1- Histosol A2 - Histic Epinion A3 - Black History A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick Epinion S1 - Sandy Misconding S2 - 2.5 cm Misconding S3 - 5 cm Mu S4 - Sandy G	ibe to the depth negletion, RM=Reduced Matrix Color (Moist) Indicators (characters) Sipedon Stic (Characters) All Layers (LRR F) Cock (LRR FGH) Cock (LR	eeded to do atrix, CS=Covered	obsevered/0	ent the indicated Sand Coated Sand Coated Sand Color (Note	cator or co Grains; Locat Moist) oot present edox Matrix lucky Minera leyed Matrix Matrix ark Surface Dark Surface park Surface park Surface	Mottle Mottle // // // // // // // // // /	e absence of ingre Lining, M=Matres Type	Location	Indicators of A9 - 1 cm MA16 - Coast S7 - Dark S6 F16 - High FF18 - Reductor TF2 - Red FF12 - Very Other (Explain Indicators of Frunless disturbed)	Juck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depression Parent Material Shallow Dark S Ain in Remarks)	ESOILS ¹ LRR F, G, H) ONS (LRR H, outside MLRA 72, 73) Surface	present,
Remarks: SOILS Profile Descri (Type: C=Concer Depth (In.)	No indicato Iption (Description, D=Depinitration, D=Depi	ibe to the depth negletion, RM=Reduced Matrix Color (Moist) Indicators (characters) Sipedon Stic (Characters) All Layers (LRR F) (Characters) Color (Moist)	eeded to do atrix, CS=Covered	f indic	ent the indicated Sand Coated	cator or co Grains; Locat Moist) Moist) ot present edox Matrix lucky Minera eleyed Matrix Matrix ark Surface Dark Surface Dark Surfa epressions ains Depres	Mottle Mottle // // // // // // // // // // // // /	e absence of ingre Lining, M=Matrons S Type RA 72, 73 of LRF	Location	Indicators f A9 - 1 cm M A16 - Coast S7 - Dark Si F16 - High F F18 - Reduce TF2 - Red P TF12 - Very Other (Expla	Juck (LRR I, J) Prairie Redox (urface (LRR G) Plains Depression Parent Material Shallow Dark S ain in Remarks) hydrophytic vegetated or problematic.	ESOILS ¹ 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-153n44w3-b1
VEGETATIO	(Species identified in all uppercase a	re 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: 0 (A)
3.					`` '
4.					Total Number of Dominant Species Across All Strata: 1 (B)
5.					Total Number of Bornmant Openies / til Ottala.
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. $0 X 1 = 0$
		0			FACW spp. $0 x 2 = 0$
			FAC spp. $\frac{10}{10}$ $\times 3 = \frac{30}{10}$		
Sanling/Shrub	Stratum (Plot size: 15 ft. radius)				OBL spp. 0
	Straturi (Flot size. 13 ft. radius)				LIDL on
1.					- ΟΓ L δρρ.
2.					T (1) (2) (3)
3.					Total 40 (A) 150 (B)
4.		ļ			
5.					Prevalence Index = $B/A = 3.750$
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Rapid Test for Hydrophytic Vegetation
10.					
10.	Total Cayer				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.	Artemisia biennis	20	Υ	FACU	
2.	Panicum capillare	5	N	FAC	* Indicators of hydric soil and wetland hydrology must be
3.	Taraxacum officinale	5	N	FACU	present, unless disturbed or problematic.
4.	Plantago major	5	N	FAC	Definitions of Vegetation Strata:
5.	Cirsium arvense	5	N	FACU	Definitions of Vogetation Strata.
	Cirsium arvense		11	1 700	T-00
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.					neight (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.					1
14.					1
					Mondy Vines All woody vines regardless of height
15.					Woody Vines - All woody vines, regardless of height.
	Total Cover =	= 40			
Woody Vine St	tratum (Plot size: 30 ft. radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present? N
5.					
4.	Tatal Ossan				
	Total Cover =				
Remarks:	Bare soil accounts for approximately 60 per	cent of grou	und cover.		
Additional F	Remarks:				
Additional	Nemara.				