WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:		L3R									Date:	07/30/14
Applicant:	Enbridge										County:	Marshall
Investigators		BEH/BCS/MRK				Subregio	•	or LRR):	MLRA 56		State:	MN
Soil Unit:	I34A				La			I Classification:				
Landform:	Dip Lc 0 - 2% Latitude: 48.39822144					Longitude: -96.6995587676 Datum:					Sample Point	w-157n47w27-a1
Slope (%):		onditions on the si							<u>Datum:</u>	□ No	Section:	
Are Vegetati	• •	I ⊠, or Hydrology			-	ii : (ii no, exp		e normal circum			Township:	
Are Vegetati		I □, or Hydrology	•	•				e normal circuit ☑ Yes		556111:	Range:	Dir:
SUMMARY (- 100	- 110		range.	
Hydrophytic			Yes	S					Hydric Soil	s Present?	Yes	
Wetland Hyd	•		Yes								nt Within A W	etland? Yes
Remarks:		d is a seasonally-f	flooded basi	n domi	nated by	barnyard	grass. T	he area is a lov				
HYDROLOG									D)			
-	•••	licators (Check al	Il that apply;	Minim	um of one	e primary	or two se	econdary requir	ed):	• •		
Primary	<u>′′</u> A1 - Surface	\\/ator				B11 - Salt (Cruct			Secondary:	B6 - Surface S	Coll Cracks
	A1 - Sunace A2 - High Wa					B13 - Aqua						Vegetated Concave Surface
	A3 - Saturatio					C1 - Hydro					B10 - Drainage	
	B1 - Water M					C2 - Dry Se						Rhizospheres on Living Roots (tilled)
	B2 - Sedimer B3 - Drift Dep	•				C3 - Oxidiz C4 - Prese		spheres on Living	Roots (not till	• •	C8 - Crayfish I	Burrows n Visible on Aerial Imagery
	B4 - Algal Ma					C7 - Thin N					D2 - Geomorp	•••
	B5 - Iron Dep	osits				Other (Exp					D5 - FAC-Neu	
		on Visible on Aerial Ir	magery								D7 - Frost-Hea	aved Hummocks (LRR F)
	B9 - Water-S	tained Leaves										
Field Obser	vations											
		Vee U	De	nth.		(in)						
Surface Wat				pth:		(in.) (in.)			Wetland H	lydrology	Present?	Y
Water Table		Yes 🗆		pth:	0	(in.) (in.)						—
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: The soil is saturated at the surface, and standing water is present in other areas of the wetland.												
		<u> </u>	U									
Remarks:	The soil is	<u> </u>	U						tland.			
	The soil is	<u> </u>	U						tland.			
SOILS		saturated at the su	urface, and s	standin	g water is	s present i	in other a	areas of the we				
SOILS Profile Descr	iption (Descr	<u> </u>	eeded to do	standin cumen	g water is	s present i	in other a	areas of the we e absence of in	dicators.)			
SOILS Profile Descr	iption (Descr	saturated at the su	eeded to do	standin cumen	g water is	s present i	in other a	areas of the we e absence of in	dicators.)			
SOILS Profile Descr (Type: C=Conce	iption (Descr	ibe to the depth ne letion, RM=Reduced M Matrix	eeded to doo Matrix, CS=Cove	cumen ered/Coa	g water is t the indic ated Sand G	s present i cator or co Grains; Locat	in other a onfirm the tion: PL=Pe Mottle	areas of the we e absence of in ore Lining, M=Matri	dicators.) ^{x)}			
SOILS Profile Descr	iption (Descr ntration, D=Dep	ibe to the depth ne letion, RM=Reduced M Matrix Color (Moist)	eeded to doo Matrix, CS=Cove	cumen ⁻ ered/Coa	g water is	s present i cator or co Grains; Locat	onfirm the tion: PL=Pe	areas of the we e absence of in ore Lining, M=Matri	dicators.)	Texture		Remarks
SOILS Profile Descr (Type: C=Conce	iption (Descr ntration, D=Dep	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1	eeded to doo Matrix, CS=Cove	cumen ered/Coa	g water is t the indic ated Sand G	s present i cator or co Grains; Locat	in other a onfirm the tion: PL=Pe Mottle	areas of the we e absence of in ore Lining, M=Matri	dicators.) ^{x)}	SCL	Very fine sand	Remarks
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5	iption (Descr ntration, D=Dep Hue_10YR WP	ibe to the depth ne letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5/	eeded to doo Matrix, CS=Cove	cumen ered/Coa % 03 7	g water is t the indic ated Sand G Color (N	s present i cator or co Grains; Locat Moist)	in other a onfirm the tion: PL=Pe Mottle	areas of the we e absence of in ore Lining, M=Matri es Type	dicators.) ^{x)} Location	SCL OT	Very fine sand CaCO3	Remarks
SOILS Profile Descr (Type: C=Conce Depth (In.)	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5/ 2/1	eeded to doo Matrix, CS=Cove	cument ered/Coa % 03 7 5 Hu	g water is t the indic ated Sand G Color (N ue_2.5Y	s present i cator or co Grains; Locat Moist) 5/6	in other a ponfirm the tion: PL=Pe Mottle %	e absence of in ore Lining, M=Matri es Type C	dicators.) ^{x)} Location	SCL OT SCL		Remarks
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13	iption (Descr ntration, D=Dep Hue_10YR Hue_10YR Hue_2.5Y	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5/ 2/1 6/3	eeded to doo Matrix, CS=Cove	cument ered/Coa % 3 7 5 Hu 8 Hu	g water is t the indic ated Sand G Color (N	s present i cator or co Grains; Locat Moist)	in other a onfirm the tion: PL=Pe Mottle	areas of the we e absence of in ore Lining, M=Matri es Type	dicators.) ^{x)} Location	SCL OT SCL SCL	CaCO3	Remarks
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_10YR	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5/ 2/1 6/3 2/1	eeded to doo Matrix, CS=Cove	cument ered/Coa % 3 7 5 Hu 8 Hu 00	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR	S present i Cator or co Drains; Locat Moist) 5/6 3/4	in other a ponfirm the tion: PL=Pe Mottle % 5 2	e absence of in ore Lining, M=Matri es Type C C	dicators.) x) Location M M	SCL OT SCL SCL SCL	CaCO3 Very fine sand Very fine sand	Remarks
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 18-25	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_10YR Hue_2.5Y	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5/ 2/1 6/3 2/1 4/2	eeded to doo Matrix, CS=Cove	cument ered/Coa % 3 7 5 Hu 8 Hu 00 6 Hu	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ue_10YR	S present i cator or co Grains; Locat Moist) 5/6 3/4 5/6	in other a ponfirm the tion: PL=Pe Mottle % 5 2 4	e absence of in ore Lining, M=Matri es Type C C	dicators.) ^{x)} Location	SCL OT SCL SCL	CaCO3 Very fine sand	Remarks
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 18-25	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_10YR	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5/ 2/1 6/3 2/1 4/2	eeded to doo Matrix, CS=Cove	cument ered/Coa % 3 7 5 Hu 8 Hu 00 6 Hu	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ue_10YR	S present i cator or co Grains; Locat Moist) 5/6 3/4 5/6	in other a ponfirm the tion: PL=Pe Mottle % 5 2 4	e absence of in ore Lining, M=Matri es Type C C	dicators.) x) Location M M	SCL OT SCL SCL SCL SC	CaCO3 Very fine sand Very fine sand Very fine sand	
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 18-25	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y ric Soil Field	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5/ 2/1 6/3 2/1 4/2	eeded to doo Matrix, CS=Cove	standin cument ered/Coa % 3 7 5 Hu 8 Hu 00 6 Hu indicat	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ie_10YR cors are n	s present i cator or co Grains; Locat Moist) 5/6 3/4 5/6 ot present	in other a ponfirm the tion: PL=Pe Mottle % 5 2 4	e absence of in ore Lining, M=Matri es Type C C	dicators.) x) Location M M M	SCL OT SCL SCL SCL SC Indicators f	CaCO3 Very fine sand Very fine sand Very fine sand	
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 13-18 18-25 NRCS Hydr	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y Hue_2.5Y ric Soil Field	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5, 2/1 6/3 2/1 4/2 I Indicators (C	eeded to doo Matrix, CS=Cove	cumentered/Coarestandin	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ue_10YR cors are n - Sandy Re	s present i cator or co Grains; Locat Moist) 5/6 3/4 5/6 ot present edox	in other a ponfirm the tion: PL=Pe Mottle % 5 2 4	e absence of in ore Lining, M=Matri es Type C C	dicators.) ×) Location M M M	SCL OT SCL SCL SCL SC Indicators f A9 - 1 cm M	CaCO3 Very fine sand Very fine sand Very fine sand for Problematio fuck (LRR I, J)	<u>c Soils¹</u>
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 18-25 NRCS Hydr	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y Hue_2.5Y ric Soil Field A1- Histosol A2 - Histic Ep	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5/ 2/1 6/3 2/1 4/2 I Indicators (C	eeded to doo Matrix, CS=Cove	cumentered/Coareed/Coareed/Coareed/Coareed/Coareered/Coa	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ue_5YR ie_10YR cors are n - Sandy Re - Stripped	s present i cator or co Grains; Locat Moist) 5/6 3/4 5/6 ot present edox Matrix	in other a confirm the tion: PL=Pe Mottle %	e absence of in ore Lining, M=Matri es Type C C	dicators.) x) Location M M M	SCL OT SCL SCL SCL SC Indicators f A9 - 1 cm M A16 - Coast	CaCO3 Very fine sand Very fine sand Very fine sand Very fine sand for Problemation fuck (LRR I, J) Prairie Redox	<u>c Soils¹</u> (LRR F, G, H)
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 13-18 18-25 NRCS Hydr	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y Hue_2.5Y ric Soil Field A1- Histosol A2 - Histic Ep A3 - Black Hi	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5, 2/1 6/3 2/1 6/3 2/1 4/2 I Indicators (C	eeded to doo Matrix, CS=Cove	cumentered/Coa	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ue_5YR ie_10YR cors are n - Sandy Re - Stripped - Loamy M	s present i cator or co Grains; Locat Moist) 5/6 3/4 5/6 ot present edox Matrix ucky Minera	in other a confirm the tion: PL=Pe Mottle %	e absence of in ore Lining, M=Matri es Type C C	dicators.) x) Location M M M I	SCL OT SCL SCL SCL SC Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S	CaCO3 Very fine sand Very fine sand Very fine sand Very fine sand for Problematio fuck (LRR I, J) Prairie Redox urface (LRR G)	<u>c Soils¹</u> (LRR F, G, H)
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 18-25 NRCS Hydr	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y Hue_2.5Y ric Soil Field A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5, 2/1 6/3 2/1 6/3 2/1 4/2 I Indicators (C Dipedon stic en Sulfide d Layers (LRR F)	eeded to doo Matrix, CS=Cove	cumen ered/Coa 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ie_10YR cors are n - Sandy Re - Stripped - Loamy G - Loamy G - Depleted	s present i cator or co brains; Locat Moist) 5/6 3/4 5/6 ot present edox Matrix leyed Matrix Matrix	in other a onfirm the tion: PL=Pe Mottle % 5 2 4 t):	e absence of in ore Lining, M=Matri es Type C C	dicators.) x) Location M M M I I I I I I I I I I I I I I I I	SCL OT SCL SCL SCL SC Main and the second SC SC Main and the second SC SC SC SC SC SC SC SC SC SC SC SC SC	CaCO3 Very fine sand Very fine sand Very fine sand Very fine sand for Problemation for Problemation fuck (LRR I, J) Prairie Redox urface (LRR G) Plains Depression ced Vertic	<u>c Soils¹</u> (LRR F, G, H)
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 13-18 18-25 NRCS Hydr	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y Hue_2.5Y ric Soil Field A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A9 - 1 cm Mu	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5/ 2/1 6/3 2/1 6/3 2/1 4/2 I Indicators (cl bipedon stic on Sulfide d Layers (LRR F) uck (LRR FGH)	eeded to doo Matrix, CS=Cove	cumen ered/Coa 6 7 7 5 Hu 8 Hu 00 6 Hu indicat 00 6 Hu indicat 00 6 Hu 55 0 6 Hu 55 0 7 7 7 7 7 7 7 7 7 7 7 8 8 1 1 0 9 6 9 7 1 0 9 7 9 7 9 7 9 7 9 7 9 9 9 9 9 9 9 9 9	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ue_5YR ue_10YR ors are n - Sandy Re - Stripped - Loamy M - Loamy G - Depleted - Redox Da	s present i cator or co Grains; Locat Moist) 5/6 3/4 5/6 ot present edox Matrix leyed Matrix leyed Matrix Matrix ark Surface	in other a onfirm the tion: PL=Pe Mottle % 5 2 4 t):	e absence of in ore Lining, M=Matri es Type C C	dicators.) x) Location M M M I I I I I I I I I I I I I I I I	SCL OT SCL SCL SCL SC Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F	CaCO3 Very fine sand Very fine sand Very fine sand Very fine sand Very fine sand for Problematic fuck (LRR I, J) Plains Redox Plains Depression ced Vertic Parent Material	<u>c Soils¹</u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 13-18 18-25 NRCS Hydr	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y Hue_2.5Y ric Soil Field A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5/ 2/1 6/3 2/1 6/3 2/1 4/2 I Indicators (c bipedon stic on Sulfide d Layers (LRR F) ick (LRR FGH) ed Below Dark Surface	eeded to doo Matrix, CS=Cove	cument ered/Coat ared/Coat 3 7 3 7 3 7 3 7 3 7 3 7 3 7 3 7 3 7 13 7 13 13 14 15 16 17 18 19 10 10 10 11 11 12 13 14 15 16 17 16 17 18 19 10 10 11 12 13 14 15 16 17	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ue_5YR ue_10YR ors are n - Sandy Re - Stripped - Loamy M - Loamy G - Depleted - Redox Da - Depleted	s present i cator or co Grains; Locat Moist) 5/6 3/4 5/6 0t present edox Matrix lucky Minera leyed Matrix lucky Minera leyed Matrix ark Surface Dark Surface	in other a onfirm the tion: PL=Pe Mottle % 5 2 4 t):	e absence of in ore Lining, M=Matri es Type C C	dicators.) x) Location M M M I I I I I I I I I I I I I I I I	SCL OT SCL SCL SCL SC SC <u>Indicators f</u> A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	CaCO3 Very fine sand Very fine sand Very fine sand Very fine sand Very fine sand for Problematic fuck (LRR I, J) Plains Cepression Ced Vertic Parent Material Shallow Dark S	<u>c Soils¹</u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 13-18 18-25 NRCS Hydr	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y Hue_2.5Y Hue_2.5Y ric Soil Field A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5, 2/1 6/3 2/1 6/3 2/1 6/3 2/1 4/2 I Indicators (cl pipedon stic en Sulfide d Layers (LRR F) ick (LRR FGH) ed Below Dark Surface	eeded to doo Matrix, CS=Cove	cumen ered/Coa 6 7 7 7 7 8 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ie_10YR iors are n - Sandy Re - Stripped - Loamy G - Loamy G - Depleted - Redox Da - Redox Da	s present i cator or co brains; Locat Moist) 5/6 3/4 5/6 ot present edox Matrix leyed Matrix leyed Matrix Matrix ark Surface Dark Surfa epressions	in other a onfirm the tion: PL=Pe Mottle % 5 2 4 t): al x	e absence of in ore Lining, M=Matri es Type C C	dicators.) x) Location M M M I I I I I I I I I I I I I I I I	SCL OT SCL SCL SCL SC SC <u>Indicators f</u> A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	CaCO3 Very fine sand Very fine sand Very fine sand Very fine sand Very fine sand for Problematic fuck (LRR I, J) Plains Redox Plains Depression ced Vertic Parent Material	<u>c Soils¹</u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 13-18 18-25 NRCS Hydr	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y Hue_2.5Y ric 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	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5, 2/1 6/3 2/1 6/3 2/1 6/3 2/1 4/2 I Indicators (cl pipedon stic en Sulfide d Layers (LRR F) ick (LRR FGH) ed Below Dark Surface	eeded to doo Matrix, CS=Cove	cumen ered/Coa 6 7 7 7 7 8 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ie_10YR iors are n - Sandy Re - Stripped - Loamy G - Loamy G - Depleted - Redox Da - Redox Da	s present i cator or co brains; Locat Moist) 5/6 3/4 5/6 ot present edox Matrix leyed Matrix leyed Matrix Matrix ark Surface Dark Surfa epressions	in other a onfirm the tion: PL=Pe Mottle % 5 2 4 t): al x	e absence of in ore Lining, M=Matri es Type C C	dicators.) x) Location M M M I I I I I I I I I I I I I I I I	SCL OT SCL SCL SCL SC SC <u>Indicators f</u> A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very	CaCO3 Very fine sand Very fine sand Very fine sand Very fine sand Very fine sand for Problematic fuck (LRR I, J) Plains Cepression Ced Vertic Parent Material Shallow Dark S	<u>c Soils¹</u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 13-18 18-25 NRCS Hydr 0 0 0 0 0 0 0 0 0 0 0 0 0	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y Hue_2.5Y Hue_2.5Y ric Soil Field A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm M S3 - 5 cm Mu	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5/ 2/1 6/3 2/1 6/3 2/1 4/2 I Indicators (cl bipedon stic en Sulfide d Layers (LRR F) ick (LRR FGH) ed Below Dark Surfac Dark Surface lucky Mineral Mucky Peat or Peat (LR	eeded to doo Matrix, CS=Cove	cumen ered/Coa 6 7 7 7 7 8 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ie_10YR iors are n - Sandy Re - Stripped - Loamy G - Loamy G - Depleted - Redox Da - Redox Da	s present i cator or co brains; Locat Moist) 5/6 3/4 5/6 ot present edox Matrix leyed Matrix leyed Matrix Matrix ark Surface Dark Surfa epressions	in other a onfirm the tion: PL=Pe Mottle % 5 2 4 t): al x	e absence of in ore Lining, M=Matri es Type C C	dicators.) x) Location M M M I I I I I I I I I I I I I I I I	SCL OT SCL SCL SCL SC SC Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	CaCO3 Very fine sand Very fine sand Very fine sand Very fine sand Very fine sand for Problematic fuck (LRR I, J) Prairie Redox urface (LRR G) Plains Depression ced Vertic Parent Material Shallow Dark S ain in Remarks)	<u>c Soils¹</u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 13-18 18-25 NRCS Hydr 0 0 0 0 0 0 0 0 0 0 0 0 0	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y Hue_2.5Y Hue_2.5Y ric 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	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5/ 2/1 6/3 2/1 6/3 2/1 4/2 I Indicators (cl bipedon stic en Sulfide d Layers (LRR F) ick (LRR FGH) ed Below Dark Surfac Dark Surface lucky Mineral Mucky Peat or Peat (LR	eeded to doo Matrix, CS=Cove	cumen ered/Coa 6 7 7 7 7 8 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ie_10YR iors are n - Sandy Re - Stripped - Loamy G - Loamy G - Depleted - Redox Da - Redox Da	s present i cator or co brains; Locat Moist) 5/6 3/4 5/6 ot present edox Matrix leyed Matrix leyed Matrix Matrix ark Surface Dark Surfa epressions	in other a onfirm the tion: PL=Pe Mottle % 5 2 4 t): al x	e absence of in ore Lining, M=Matri es Type C C	dicators.) x) Location M M M I I I I I I I I I I I I I I I I	SCL OT SCL SCL SCL SC SC Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	CaCO3 Very fine sand Very fine sand Very fine sand Very fine sand Very fine sand for Problematic fuck (LRR I, J) Plains Depression ced Vertic Parent Material Shallow Dark S ain in Remarks)	<u>c Soils¹</u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 18-25 NRCS Hyde	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y Hue_2.5Y Hue_2.5Y ric 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 S4 - Sandy G	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5/ 2/1 6/3 2/1 6/3 2/1 4/2 I Indicators (cl bipedon stic en Sulfide d Layers (LRR F) ick (LRR FGH) ed Below Dark Surfac Dark Surface lucky Mineral Mucky Peat or Peat (LR	eeded to doo Matrix, CS=Cove	cumen ered/Coa 6 7 7 7 7 8 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ue_5YR ue_10YR cors are n - Sandy Re - Stripped - Loamy G - Loamy G - Depleted - Redox Da - Redox Da - Redox Da - Redox Da	s present i cator or co brains; Locat Moist) 5/6 3/4 5/6 ot present edox Matrix leyed Matrix leyed Matrix Matrix ark Surface Dark Surfa epressions	in other a onfirm the tion: PL=Pe Mottle % 5 2 4 t): al x	e absence of in ore Lining, M=Matri es Type C C	dicators.) x) Location M M M I I I I I I I I I I I I I I I I	SCL OT SCL SCL SCL SC SC Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	CaCO3 Very fine sand Very fine sand Very fine sand Very fine sand Very fine sand for Problematic fuck (LRR I, J) Prairie Redox urface (LRR G) Plains Depression ced Vertic Parent Material Shallow Dark S ain in Remarks)	<u>c Soils¹</u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 13-18 18-25 NRCS Hydr 0 0 0 0 0 0 0 0 0 0 0 0 0	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y Hue_2.5Y Hue_2.5Y ric 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 S4 - Sandy G	ibe to the depth ne letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5, 2/1 6/3 2/1 6/3 2/1 4/2 I Indicators (cl bipedon stic on Sulfide d Layers (LRR F) ick (LRR FGH) ed Below Dark Surface lucky Mineral Mucky Peat or Peat (LR icky Peat or Peat (LR icky Peat or Peat (LR icky Peat or Peat (LR	eeded to doo Matrix, CS=Cove	cumen ered/Coa 6 7 7 7 7 8 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ie_10YR iors are n - Sandy Re - Stripped - Loamy G - Loamy G - Depleted - Redox Da - Redox Da	s present i cator or co brains; Locat Moist) 5/6 3/4 5/6 ot present edox Matrix leyed Matrix leyed Matrix Matrix ark Surface Dark Surfa epressions	in other a onfirm the tion: PL=Pe Mottle % 5 2 4 t): al x	e absence of in ore Lining, M=Matri es Type C C C	dicators.) x) Location M M M I I I I I I I I I I I I I I I I	SCL OT SCL SCL SCL SC A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	CaCO3 Very fine sand Very fine sand Very fine sand Very fine sand Very fine sand for Problematic fuck (LRR I, J) Prairie Redox urface (LRR G) Plains Depression ced Vertic Parent Material Shallow Dark S ain in Remarks)	<u>c Soils¹</u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 18-25 NRCS Hydr	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y Hue_2.5Y ric Soil Field A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S2 - 2.5 cm M S3 - 5 cm Mu S4 - Sandy G	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5, 2/1 6/3 2/1 6/3 2/1 4/2 I Indicators (C Dipedon stic en Sulfide d Layers (LRR F) ack (LRR FGH) ed Below Dark Surface fucky Mineral Aucky Peat or Peat (LR bleyed Matrix	ce	cument ered/Coa 6 7 6 7 6 7 6 13 7 6 13 7 6 13 7 13 7 13 7 13 7 13 7 13 7 13 14 15 16 17 16 17 17 18 19 10 10 11 11 12 13 14 15 16 17 17 18 19 110 111 112 113 114	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ue_5YR ue_5YR ie_10YR cors are n - Sandy Re - Stripped - Loamy M - Loamy M - Loamy G - Depleted - Redox Da - Redox Da - Redox Da - Redox Da - Redox Da	s present i cator or co Grains; Locat Moist) 5/6 3/4 5/6 ot present edox Matrix leyed Matrix leyed Matrix ark Surface Dark Surface pressions ains Depres	in other a onfirm the tion: PL=Pe Mottle % 5 2 4 t): al x ce sions (ML	e absence of in ore Lining, M=Matri es Type C C C RA 72, 73 of LRR	dicators.) ×) Location M M M M H H H	SCL OT SCL SCL SCL SC Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	CaCO3 Very fine sand Very fine sand Very fine sand Very fine sand Very fine sand for Problematic fuck (LRR I, J) Plains Depression ced Vertic Parent Material Shallow Dark S ain in Remarks)	c Soils ¹ (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73) Surface
SOILS Profile Descr (Type: C=Conce Depth (In.) 0-5 5-13 13-18 18-25 NRCS Hyde	iption (Descr ntration, D=Dep Hue_10YR WP Hue_10YR Hue_2.5Y Hue_2.5Y Hue_2.5Y Hue_2.5Y ric Soil Field A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm M S3 - 5 cm Mu S4 - Sandy G r Type	ibe to the depth no letion, RM=Reduced M Matrix Color (Moist) 2/1 10YR 9.5, 2/1 6/3 2/1 6/3 2/1 4/2 I Indicators (C Dipedon stic en Sulfide d Layers (LRR F) ack (LRR FGH) ed Below Dark Surface fucky Mineral Aucky Peat or Peat (LR bleyed Matrix	ce	cument ered/Coa 6 7 6 7 6 7 6 13 7 6 13 7 6 13 7 13 7 13 7 13 7 13 7 13 7 13 14 15 16 17 16 17 17 18 19 10 10 11 11 12 13 14 15 16 17 17 18 19 110 111 112 113 114	g water is t the indicated Sand G Color (N ue_2.5Y ue_5YR ue_5YR ue_5YR ie_10YR cors are n - Sandy Re - Stripped - Loamy M - Loamy M - Loamy G - Depleted - Redox Da - Redox Da - Redox Da - Redox Da - Redox Da	s present i cator or co Grains; Locat Moist) 5/6 3/4 5/6 ot present edox Matrix leyed Matrix leyed Matrix ark Surface Dark Surface pressions ains Depres	in other a onfirm the tion: PL=Pe Mottle % 5 2 4 t): al x ce sions (ML	e absence of in ore Lining, M=Matri es Type C C C RA 72, 73 of LRR	dicators.) ×) Location M M M M H H H	SCL OT SCL SCL SCL SC Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla	CaCO3 Very fine sand Very fine sand Very fine sand Very fine sand Very fine sand for Problematic fuck (LRR I, J) Plains Depression ced Vertic Parent Material Shallow Dark S ain in Remarks)	<u>c Soils¹</u> (LRR F, G, H) ONS (LRR H, outside MLRA 72, 73)

WETLAND DETERMINATION DATA FORM Great Plains Region

Project/Site:	L3R				Sample Point: w-157n47w27-a1				
VEGETATIO		e non-native	species.)						
Tree Stratum	(Plot size: 30 ft. radius) Species Name	<u>% Cover</u>	Dominant	Ind.Status	Dominance Test Worksheet				
1.	Species Name	<u>% Cover</u>	Dominant	<u>ma.status</u>					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 1 (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: 100.0% (A/B)				
7.									
8.					Prevalence Index Worksheet				
9.					Total % Cover of: Multiply by:				
10.					$\begin{array}{c c} \hline \\ \hline \\ \hline \\ \hline \\ \\ \hline \\ \\ \hline \\ \\ \hline \\ \\ \\ \hline \\ \\ \\ \\ \hline \\$				
	Total Cover =	0			FACW spp. 0 $x 2 = 0$				
	-		_		OBL spp. 0 x 1 = 0 FACW spp. 0 x 2 = 0 FAC spp. 70 x 3 = 210				
Sapling/Shrub	Stratum (Plot size: 15 ft. radius)				FACU spp. 20 x 4 = 80				
1.					UPL spp. 10 $x 5 = 50$				
2.									
3.					Total 100 (A) 340 (B)				
4.									
5.					Prevalence Index = $B/A = 3.400$				
6.									
7.									
8.					Hydrophytic Vegetation Indicators:				
9.					Rapid Test for Hydrophytic Vegetation				
10.					X Dominance Test is > 50%				
	Total Cover =	0	_		Prevalence Index is ≤ 3.0 *				
					Morphological Adaptations (Explain) *				
	Plot size: 5 ft. radius)				Problem Hydrophytic Vegetation (Explain) *				
1.	Echinochloa crus-galli	65	Y	FAC					
2.	Setaria pumila	15	<u>N</u>	FACU					
3.	Glycine max	10	<u>N</u>	NI	present, unless disturbed or problematic.				
4.	Plantago major	5	<u>N</u>	FAC	Definitions of Vegetation Strata:				
5.	Ambrosia artemisiifolia	5	N	FACU					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.				
7.					–				
8.					Service a Very by Woody plants loss than 3 in DBH, regardless of height				
9.					Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height.				
10.					_				
11.					Herb - All herbaceous (non-woody) plants, regardless of size.				
12. 13.									
13.	1				-				
14.					Woody Vines - All woody vines, regardless of height.				
10.	Total Cover =	100							
		100	_						
Woody Vine St	ratum (Plot size: 30 ft. radius)								
2.									
3.					Hydrophytic Vegetation Present? Y				
5.									
4.									
	Total Cover =	0							
Remarks:	The wetland is dominated by barnyard grass,	-	w foxtail a	nd soybea	an as common associates.				
	, , , , , , , , , , , , , , , , , , ,								
Additional F	Remarks:								