

WA025 overview looking west.



Wetland Sample Point WA025A.



Non-wetland sample point WA025B.



WETLAND DETERMINA		dwest Region	4/00/0000
Applicent/Ourport Howard Solar	State: Minnegate	ty Sampling Date:	4/29/2020
Applicant/Owner: Hayward Solar LLC	State: Minnesota	Bango: T102	
Londform (hillolong torrage ata):			Nono
Slope (%): 1 Lat: 43° 38' 36 21"		e, convex, none).	WGS84
Soil Man Linit Name: Klossner muck	LONGN\\/I_CI		NA
Are climatic/hydrologic conditions of the site typical for this tin	ne of the year? V (If	no evolain in remarks)	
Are vegetation X soil or hydrology	significantly disturbed?		
Are vegetation soil or hydrology	naturally problematic?	Are "normal circu	present? No
SUMMARY OF FINDINGS		(If needed, explain any an	swers in remarks.)
Hydrophytic vegetation present? Y			
Hydric soil present? Y	Is the sampled area wit	hin a wetland?	Y
Indicators of wetland hydrology present? Y	If yes, optional wetland	site ID:	
VEGETATION Use scientific names of plants	е героп.)		
Absolu	ite Dominant Indicator	Dominance Test Worksh	eet
<u>Tree Stratum</u> (Plot size: ) % Cov	ver Species Staus	Number of Dominant Speci	es
1		that are OBL, FACW, or FA	C: 0 (A)
2		Total Number of Domina	nt
3		Species Across all Strat	a: <u>0</u> (B)
4 5		Percent of Dominant Specie	es C: 0.00% (A/B)
	= Total Cover		С. <u>0.00 %</u> (А/В)
Sapling/Shrub stratum (Plot size: )		Prevalence Index Works	heet
		Total % Cover of:	
2		OBL species 0 x	1 = 0
3		FACW species 0 x	2 = 0
4		FAC species 0 x	3 = 0
<u> </u>	= Total Cover	IPI species 0 x	4 = 0 5 = 0
Herb stratum (Plot size: )		Column totals 0 (/	A) 0 (B)
1		Prevalence Index = $B/A =$	, <u> </u>
2			
3		Hydrophytic Vegetation	Indicators:
4		Rapid test for hydroph	ytic vegetation
5		Dominance test is >50	)%
0 7			5.0
8		supporting data in Re	ons" (provide marks or on a
9		separate sheet)	
100	= Total Cover	Problematic hydrophy X (explain)	tic vegetation*
Woody vine stratum (Plot size:)		*Indicators of hydric soil and w	etland hydrology must be
2		Present, unless disturn	ed or problematic
	= Total Cover	vegetation present? Y	
Remarks: (Include photo numbers here or on a separate choo	at)	· <u> </u>	—
Soybeans	r.)		

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the a	bsence of indicators.)
Depth	<u>Matrix</u>		Red	dox Feat	ures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-12	10YR 2/1	100					Loam	
12-20	5Y 5/2	98	10YR 4/6	2	С	PI	Clav	
12 20	01 0/2	00	1011(4/0	-	- U		oldy	
*Type: C = (	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	k, MS = N	lasked S	Sand Grains. **L	_ocation: PL = Pore Lining, M = Matr
Hydric So	oil Indicators:						Indicators for	Problematic Hydric Soils:
His	tisol (A1)		Sar	ndy Gleye	ed Matrix	(S4)	Coast Prai	rie Redox (A16) ( <b>LRR K, L, R</b> )
His	tic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark Surfa	ace (S7) ( <b>LRR K, L)</b>
Bla	ck Histic (A3)		Stri	pped Ma	trix (S6)		Iron-Mang	anese Masses (F12) (LRR K, L, R)
Hyo	drogen Sulfide (A4	4)	Loa	my Mucł	ky Minera	al (F1)	Very Shall	ow Dark Surface (TF12)
Stra	atified Layers (A5	)	Loa	my Gley	ed Matrix	x (F2)	Other (exp	lain in remarks)
2 c	m Muck (A10)		Dep	pleted Ma	atrix (F3)			
Dep	oleted Below Dark	c Surface	e (A11) Red	lox Dark	Surface	(F6)		
X Thi	ck Dark Surface (	A12)	Dep	leted Da	ark Surfa	ce (F7)	*Indicators of	of hydrophytic vegetation and weltan
Sar	ndy Mucky Minera	al (S1)	Rec	lox Depr	essions	(F8)	hydrology i	must be present, unless disturbed or
5 c	m Mucky Peat or	Peat (S3	)					problematic
Postrictivo	Lavor (if obsorv	od).				1		
		eu).					Hydric soil r	vrosont? V
Type. Donth (inch					-		riyunc son p	
Deptil (illeni	=5).				-			
Remarks:								
HYDROL	DGY							
Wetland Hy	drology Indicato	ors:						
Primary Indi	<u>cators (minimum</u>	of one is	required; check	all that a	<u>pply)</u>		<u>Seconda</u>	ary Indicators (minimum of two requi
Surface	Water (A1)			Aquatic	Fauna (B	13)	<u>X</u> Si	urface Soil Cracks (B6)
High Wa	ater Table (A2)			True Aq	uatic Plai	nts (B14)		rainage Patterns (B10)
Saturati	on (A3)			Hydroge	en Sulfide	Odor (C	1)Di	ry-Season Water Table (C2)
Water N	larks (B1)			Oxidized	d Rhizosp	heres on	Living Roots Ci	rayfish Burrows (C8)
Drift Dou	The Deposits $(B2)$			(US) Brocono	o of Pod	upod Iron		aturation Visible on Aerial Imagery (Ce
	ot or Crust (B4)			Present	lron Podu	uceu iron		comorphic Position (D2)
	actor Crust (D4)			(C6)	ITOITINEUL			AC-Neutral Test (D5)
Inundati	on Visible on Aeria	al Imagen	(B7)	Thin Mu	ck Surfac	e (C7)		
Sparsel	/ Vegetated Conce	ave Surfa	ce (B8)	Gauge o	or Well D	ata (D9)		
Water-S	tained Leaves (B9	)		Other (F	xplain in	Remarks	;)	
Field Ober	vations:	/				. ternanta	·/ I	
Surface wat	er present?	Vec	No	x	Denth (i	inches).		
Water table	nresent?	Yes	No		Depth (i	inches)		Indicators of wetland
Saturation n	resent?	Yes	No	- <u>X</u>	Depth (i	inches)		hydrology present? Y
(includes ca	pillary fringe)							,
	orded data (stro	am daula	a monitoring wall	aprial n	hotos n	rovious	nspections) if availa	able:
Describe 16		anı yauye	, monitoring well	, a <del>c</del> πaι μ	ποιοs, ρ		napecuonaj, il avalla	
Remarks:								

WEILAND DEIERMINA Project/Site: Hayward Solar C	TION DATA FORM - Midwest Region
Applicant/Owner: Hayward Solar LLC	State: Minnesota Sampling Point: WA033B
Investigator(s): Apryl Jennrich	Section Township Range: T102 R20W S13
Landform (hillslope, terrace, etc.): Plain	Local relief (concave, convex, none): None
Slope (%): 1   at: 43° 38' 36 36"	Long: -93° 10' 46 67" Datum: WGS84
Soil Map Unit Name: Klossner muck	NWI Classification: NA
Are climatic/bydrologic conditions of the site typical for this tim	ne of the year? Y (If no explain in remarks)
Are vegetation X soil or hydrology	significantly disturbed?
Are vegetation soil or hydrology	Are normal circumstances
SUMMARY OF FINDINGS	(If needed, explain any answers in remarks.)
Hydrophytic vegetation present? N	
Hydric soil present? N	Is the sampled area within a wetland? N
Indicators of wetland hydrology present? N	If yes, optional wetland site ID:
Remarks: (Explain alternative procedures here or in a separat	e report.)
VEOLITATION Ose scientific names of plants.	to Dominant Indicator Dominance Test Worksheet
Tree Stratum (Plot size: ) % Cov	er Species Staus Number of Dominant Species
1	that are OBL, FACW, or FAC: 0 (A)
2	Total Number of Dominant
3	Species Across all Strata: 0 (B)
4	Percent of Dominant Species
5	that are OBL, FACW, or FAC:(A/B)
Capling/Shrub stratum (Dist size:	= I otal Cover
	Total % Cover of
2	OBL species 0 x 1 = 0
3	$\frac{1}{1} = \frac{1}{1} = \frac{1}$
4	FAC species 0 x 3 = 0
5	FACU species 0 x 4 = 0
0	= Total Cover UPL species 0 x 5 = 0
Herb stratum (Plot size:)	Column totals 0 (A) 0 (B)
1	Prevalence Index = B/A =
2	
4	Rapid test for hydrophytic vegetation
5	Dominance test is >50%
6	Prevalence index is ≤3.0*
7	Morphogical adaptations* (provide
8	supporting data in Remarks or on a separate sheet)
100	Problematic hydrophytic vegetation*     End Cover     (explain)
Woody vine stratum (Plot size:)	*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
2	Hydrophytic
0	= Total Cover vegetation
	present? N
Remarks: (Include photo numbers here or on a separate shee soybeans	t)

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm	the absenc	e of indicators.)
Depth Matrix Redox Features									
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Textu	ire	Remarks
0-18	10YR 2/1	100	. , ,				Loam		
10.00	0.5% 5/0	100					Clay		
10-20	2.51 5/2						Ciay		
*Type: C = 0	Concentration, D :	= Depleti	on, RM = Reduce	ed Matrix	, MS = N	lasked S	and Grains.	**Locatio	n: PL = Pore Lining, M = Matrix
Hydric So	il Indicators:		·				Indicators	s for Proble	ematic Hydric Soils:
Hist	tisol (A1)		Sar	dy Gleve	ed Matrix	(S4)	Coast	t Prairie Red	dox (A16) ( <b>LRR K, L, R</b> )
Hist	tic Epipedon (A2)		Sar	dv Redo	ox (S5)	( )	Dark	Surface (S7	(LRR K. L)
Blac	ck Histic (A3)		Stri	pped Ma	trix (S6)		Iron-N	<i>M</i> anganese	Masses (F12) (LRR K, L, R)
Hvc	drogen Sulfide (A4	4)		mv Mucł	kv Minera	al (F1)	Verv	Shallow Dar	rk Surface (TF12)
Stra	atified Lavers (A5)	)	Loa	mv Glev	ed Matrix	(F2)	Other	(explain in	remarks)
2 cr	m Muck (A10)	/	Der	bleted Ma	atrix (F3)	. (/		(0)400000	
	leted Below Dark	Surface	(A11) Rec	lox Dark	Surface	(F6)			
	ck Dark Surface (	A12)	Der	leted Da	ark Surfa	(FC) ce (F7)	*Indica	tore of hydr	ophytic vegetation and weltand
Sar	dy Mucky Minera	(S1)		lov Denr		(F8)	hydrol	loav must b	e present unless disturbed or
5 cr	m Mucky Peat or	Peat (S3	) <u> </u>		03310113 (	(10)	nyaroi	logy must be	problematic
	In Mucky 1 Cat Of		)			-			problemate
Restrictive	Layer (if observe	ed):							
Туре:					-		Hydric s	soil presen	t? <u>N</u>
Depth (inche	es):				-				
Remarks:									
HYDROLO	DGY								
Wetland Hy	drology Indicato	ors:							
Primary Indi	cators (minimum	of one is	required: check	all that a	(vlaa		Sec	condarv Indi	icators (minimum of two required)
Surface	Water (A1)		•	Aquatic	Fauna (B	13)		Surface S	Soil Cracks (B6)
High Wa	ater Table (A2)			True Aa	uatic Plar	nts (B14)	_	Drainage	Patterns (B10)
Saturatio	on (A3)			Hydroge	n Sulfide	Odor (C	1) —	Dry-Seas	son Water Table (C2)
Water M	larks (B1)			Oxidized	l Rhizosp	heres on	Living Roots	Crayfish	Burrows (C8)
Sedimer	nt Deposits (B2)			(C3)				Saturatio	n Visible on Aerial Imagery (C9)
Drift Dep	posits (B3)			Presenc	e of Redu	uced Iron	(C4)	Stunted of	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)			Recent I	ron Redu	iction in T	illed Soils	Geomorp	phic Position (D2)
Iron Dep	osits (B5)			(C6)				FAC-Neu	ıtral Test (D5)
Inundatio	on Visible on Aeria	al Imager	/ (B7)	Thin Mu	ck Surfac	e (C7)			
Sparsely	Vegetated Conca	ave Surfa	ce (B8)	Gauge c	or Well Da	ata (D9)			
Water-S	tained Leaves (B9	)		Other (E	xplain in	Remarks	)		
Field Obser	vations:								
Surface wat	er present?	Yes	No	Х	Depth (i	nches):			
Water table	present?	Yes	No	Х	Depth (i	nches):		Ind	licators of wetland
Saturation p	resent?	Yes	No	Х	Depth (i	nches):		hy	vdrology present? N
(includes ca	pillary fringe)								
Describe red	corded data (strea	am gauge	e, monitoring well	, aerial p	hotos, p	revious i	nspections), if a	available:	
Remarks:									



WA033 overview looking southwest.



Wetland Sample Point WA033A.



Non-wetland sample point WA033B.



100

0

200

☐ Feet

N

TETRA TECH

WETLAND DETERMIN		dwest Region
Applicant/Ourser Hayward Solar	City/County: Freedom Cou	Ity Sampling Date: 4/30/2020
Applicant/Owner: Hayward Solar LLC	State: Minnesot	
Londform (hillolong, torrage, etc.):	Section, Township,	
Slope (%): 1 Lot: 42° 20' 22 04"		04" Dotum: WCS84
Soil Man Linit Name: Eicliden Joam	LONGSTT 55	assification: NA
Are climatic/hydrologic conditions of the site typical for this t	me of the year? V (I	f no evoluin in remarks)
Are vegetation soil or hydrology	significantly disturbed?	
Are vegetation soil or hydrology	naturally problematic?	Are normal circumstances present? Yes
SUMMARY OF FINDINGS		(If needed, explain any answers in remarks.)
Hydrophytic vegetation present? Y		
Hydric soil present? Y	Is the sampled area wi	thin a wetland? Y
Indicators of wetland hydrology present? Y	If yes, optional wetland	site ID:
VEGETATION Lise scientific names of plants	ate report.)	
Absr	lute Dominant Indicator	Dominance Test Worksheet
<u>Tree Stratum</u> (Plot size: ) % Co	over Species Staus	Number of Dominant Species
1		that are OBL, FACW, or FAC: 1 (A)
2		Total Number of Dominant
3		Species Across all Strata: 1 (B)
5		Percent of Dominant Species
<u></u>	= Total Cover	
Sapling/Shrub stratum (Plot size: )		Prevalence Index Worksheet
1		Total % Cover of:
2		OBL species 0 x 1 = 0
3		FACW species $90 \times 2 = 180$
4		FAC species $0 \times 3 = 0$
	= Total Cover	$\frac{1}{1} \text{ Pl species } 0 \text{ x} 5 = 0$
Herb stratum (Plot size: )		Column totals 90 (A) 180 (B)
1 Phalaris arundinacea 9	) Y FACW	Prevalence Index = $B/A = 2.00$
2		
3		Hydrophytic Vegetation Indicators:
4		Rapid test for hydrophytic vegetation
5		X Dominance test is $>50\%$
7		A Prevalence index is ≤3.0
8		Morphogical adaptations" (provide supporting data in Remarks or on a
9		separate sheet)
109	) = Total Cover	Problematic hydrophytic vegetation* (explain)
Woody vine stratum (Plot size:)		*Indicators of hydric soil and wetland hydrology must be
2		Hydrophytic
(	= Total Cover	vegetation present? Y
Remarks: (Include photo numbers here or on a separate she	pet)	

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the ab	sence of indicators.)
Depth	Matrix		Re	dox Feat	ures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-20	10YR 2/1	100	· · · ·				Silt loam	
20-30	2 5V 3/1	100					Clav	
20-00	2.01 0/1	07		0		DI	Olay	
30-34	5Y 5/2	97	10YR 4/6	3	C	PL	Clay	
34-37	5Y 5/2	75	10YR 4/6	25	С	PL/M	Sandy clay	
*Type: C = 0	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	k, MS = N	/lasked S	and Grains. **Lo	ocation: PL = Pore Lining, M = Matrix
Hydric So	oil Indicators:						Indicators for F	Problematic Hydric Soils:
His	tisol (A1)		Sar	ndy Gleye	ed Matrix	(S4)	Coast Prairi	e Redox (A16) ( <b>LRR K, L, R</b> )
His	tic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark Surfac	e (S7) ( <b>LRR K, L)</b>
Bla	ck Histic (A3)		Stri	pped Ma	trix (S6)		Iron-Manga	nese Masses (F12) ( <b>LRR K, L, R</b> )
Hyo	drogen Sulfide (A	4)	Loa	my Mucl	ky Minera	al (F1)	Very Shallo	w Dark Surface (TF12)
Stra	atified Layers (A5	)	Loa	imy Gley	ed Matrix	x (F2)	Other (expla	ain in remarks)
2 ci	m Muck (A10)		Dep	pleted Ma	atrix (F3)			
De	pleted Below Dark	c Surface	(A11) Red	dox Dark	Surface	(F6)		
X Thi	ck Dark Surface (	A12)	Der	pleted Da	ark Surfa	ce (F7)	*Indicators of	hydrophytic vegetation and weltand
Sar	ndy Mucky Minera	al (S1)	Rec	dox Depr	essions	(F8)	hvdroloav m	ust be present. unless disturbed or
5 c	m Mucky Peat or	Peat (S3	)			( - )		problematic
De stal stires	, Leven (if also and	· · /	/			1		1
Restrictive	Layer (If observe	ea):					l hadala a all un	
Type:					-		Hydric soll pr	esent? Y
Depth (inche	es):				-			
Remarks:								
HYDROL	DGY							
Wetland Hy	drology Indicato	ors:						
Primarv Indi	cators (minimum	of one is	required: check	all that a	(vlaa		Secondar	v Indicators (minimum of two required
Surface	Water (A1)			Aquatic	Fauna (B	(13)	Sur	face Soil Cracks (B6)
High Wa	ater Table (A2)			True Aa	uatic Plar	nts (B14)	Dra	inage Patterns (B10)
Saturati	on (A3)			Hydroge	en Sulfide	Odor (Ć	1) Dry	-Season Water Table (C2)
Water M	larks (B1)			Oxidized	d Rhizosp	heres on	Living Roots Cra	yfish Burrows (C8)
Sedime	nt Deposits (B2)			(C3)			Sat	uration Visible on Aerial Imagery (C9)
Drift De	posits (B3)			Presenc	e of Redu	uced Iron	(C4) Stu	nted or Stressed Plants (D1)
Algal Ma	at or Crust (B4)			Recent I	Iron Redu	uction in T	illed Soils X Geo	omorphic Position (D2)
Iron Dep	osits (B5)			(C6)			X FAG	C-Neutral Test (D5)
Inundati	on Visible on Aeria	al Imager	/ (B7)	Thin Mu	ck Surfac	ce (C7)		
Sparsel	Vegetated Conca	ave Surfa	ce (B8)	Gauge o	or Well Da	ata (D9)		
Water-S	tained Leaves (B9	))		Other (E	Explain in	Remarks	)	
Field Obse	vations:							
Surface wat	er present?	Yes	No		Depth (i	inches):		
Water table	present?	Yes	X No	-	Depth (i	inches):	34	Indicators of wetland
Saturation p	resent?	Yes	No		Depth (i	inches):		hydrology present? Y
(includes ca	pillary fringe)			·	-			
Describe re	corded data (strea	am gauge	e, monitoring wel	, aerial p	photos, p	revious ir	nspections), if availab	le:
_	<b>x</b>	5 5	5		, E.		. ,,	
Remarks:								
1								

WETLAND DE	ETERMINATI		FORM - Mid	west Region	4/20/2020
Project/Site: Hayward Solar	City/	County: FI	Aires a sta	Sampling Date:	4/30/2020
Applicant/Owner: Hayward Solar LLC		State:	Minnesota	Sampling Point:	WA039B
Investigator(s): Apryl Jennrich		Sectio	n, Townsnip, R	ange: 110.	2N R20W S11
Landform (nillslope, terrace, etc.): $D_{i}$				convex, none):	
Siope (%): 1 Lat: 43°39	32.83°	Long:	-93° 11° 55.04	Latum:	VVGS84
Soli Map Unit Name:	al far this times	£ 41- a a O	NVVI Clas		NA
Are climatic/nydrologic conditions of the site typic	al for this time o	of the year?	Y (IT N	o, explain in remarks)	
Are vegetation, soli, of h	vdrology	significantiy	ablemetie?	Are "normal cir	cumstances"
SUMMARY OF FINDINGS	ydrology	naturaliy pr	obiematic?	(If needed, explain any	answers in remarks.)
Hydrophytic vegetation present?	Y				
Hydric soil present?	N	Is the sam	pled area with	in a wetland?	<u>N</u>
Indicators of wetland hydrology present?	Y	lf yes, opt	ional wetland s	ite ID:	
Remarks: (Explain alternative procedures here or	in a separate re	eport.)			
VEGETATION Use scientific names of p	Diants.	Densinent	les ell'a set a m	Dominance Test Worl	rshoot
Tree Stratum (Plot size:	) % Cover	Species	Staus	Number of Dominant Sp	ecies
	/	·	t	hat are OBL, FACW, or	FAC: 2 (A)
2				Total Number of Dom	inant
3				Species Across all S	trata: <u>2</u> (B)
4				Percent of Dominant Sp	
5		- Total Cava	<sup>ti</sup>	hat are OBL, FACW, or	FAC: <u>100.00%</u> (A/B)
Sanling/Shrub stratum (Plot size:	)		- Fi	Prevalence Index Wo	rksheet
1	)		-	Total % Cover of:	KSHEEL
2			(	OBL species 0	x 1 = 0
3			I	FACW species 10	x 2 = 20
4				FAC species 0	x 3 = 0
5				FACU species 2	x 4 = 8
	<u> </u>	= Total Cover	-	UPL species 0	x 5 = 0
Herb stratum (Plot size:	)				(A) <u>28</u> (B)
1 Urtica dioica	5	Y	FACW	Prevalence Index = B/A	A = <u>2.33</u>
2 Echinocystis lobata		<u> </u>	FACIU	Hydronhytic Vegetati	on Indicators:
4				X Rapid test for hydro	ophytic vegetation
5			-	X Dominance test is	>50%
6				X Prevalence index is	s ≤3.0*
7				Morphogical adapta	ations* (provide
8				supporting data in l	Remarks or on a
9			-	separate sheet)	
10	12	= Total Cove	_	Problematic hydrop (explain)	ohytic vegetation*
<u>Woody vine stratum</u> (Plot size: 1	)			*Indicators of hydric soil an present, unless dis	nd wetland hydrology must be turbed or problematic
2				Hydrophytic	
	0	= Total Cover	-	present?	Y
Remarks: (Include photo numbers here or on a se	eparate sheet)				

Profile Des	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth Matrix Redox Features									
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks	
0-22	10YR 2/1	100					Silt loam		
22-32	2.5Y.3/1	100					Clav		
22-02	2.51 5/1	100					Clay		
32-30	2.51 4/1	100					Clay		
36-37	2.5Y 5/2	100					clay	Saturated	
* <b>T</b>							++1		
Type: $C = Concentration, D = Depletion, KN = Reduced Matrix, MS = Masked Sand Grains.  A concentration: PL = Pore Lining, M = Matrix Hydric Soil Indicators for Problematic Hydric Soiler$									
Hydric Soil Indicators: Indicators for Problematic Hydric Soils: Histisol (A1) Sandy Cleved Matrix (S4) Coast Brainia Boday (A46) (LPD K LP)									
Hist	tisol (A1)		Sar	idy Gleye	ed Matrix	(S4)		(A16) (LRR K, L, R)	
Hist	Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) (LRR K, L)								
Bla	Black Histic (A3) Stripped Matrix (S6) Iron-Manganese Masses (F12) (LRR K, L, R)								
Hyc	trogen Sulfide (A	1)	Loa	my Mucł	ky Minera	al (⊢1)	Very Shallow	/ Dark Surface (TF12)	
Stra	atified Layers (A5	)	Loa	my Gley	ed Matrix	k (F2)	Other (explai	n in remarks)	
2 cr	m Muck (A10)	<b>•</b> •		Dieted Ma	atrix (F3)				
	bleted Below Dark	Surface	e (A11) Rec	lox Dark	Surface	(F6)			
Thick Dark Surface (A12) Depleted Dark Surface (F7) *Indicators of hydrophytic vegetation and weltand									
Sandy Mucky Mineral (S1) Redox Depressions (F8) hydrology must be present, unless disturbed or									
5 cm Mucky Peat or Peat (S3) problematic									
Restrictive	Layer (if observe	ed):							
Type:							Hydric soil pre	esent? N	
Depth (inche	es):				•				
Remarks:					•				
HYDROLO	OGY								
Wetland Hy	drology Indicato	ors:							
Primary Indi	cators (minimum	of one is	required: check	all that a	(vlaa		Secondary	Indicators (minimum of two required)	
Surface	Water (A1)	01 0110 10		Aquatic	<del>re:11</del> Fauna (B	13)	Surfa	ace Soil Cracks (B6)	
High Wa	ater Table (A2)		<u> </u>	True Aa	uatic Plar	nts (B14)	Drai	nage Patterns (B10)	
Saturatio	on (A3)			Hydroge	n Sulfide	Odor (C	)Dry-3	Season Water Table (C2)	
Water M	larks (B1)			Oxidized	l Rhizosp	heres on	Living Roots Cray	fish Burrows (C8)	
Sedimer	nt Deposits (B2)			(C3)			Satu	ration Visible on Aerial Imagery (C9)	
Drift Dep	posits (B3)			Presenc	e of Redu	uced Iron	(C4) Stun	ted or Stressed Plants (D1)	
Algal Ma	at or Crust (B4)			Recent I	ron Redu	iction in T	illed Soils X Geo	morphic Position (D2)	
Iron Dep	oosits (B5)			(C6)			X FAC	-Neutral Test (D5)	
Inundati	on Visible on Aeria	al Imager	y (B7)	Thin Mu	ck Surfac	e (C7)			
Sparsely	Vegetated Conca	ave Surfa	ce (B8)	Gauge o	or Well Da	ata (D9)			
Water-S	tained Leaves (B9	)		Other (E	xplain in	Remarks	)		
Field Obser	vations:								
Surface wat	er present?	Yes	No	Х	Depth (i	nches):			
Water table	present?	Yes	X No		Depth (i	nches):	36	Indicators of wetland	
Saturation p	resent?	Yes	X No		Depth (i	nches):	36	hydrology present? Y	
(includes ca	pillary fringe)								
Describe red	corded data (strea	am gauge	e, monitoring well	, aerial p	hotos, p	revious ir	nspections), if available	e:	
D									
Remarks:									



WA039 overview looking north.



Wetland Sample Point WA039A.



Non-wetland sample point WA039B.



☐ Feet

TETRA TECH

WETLAND DE	ETERMINATIO	ON DATA	FORM - Mid	dwest Region	
Project/Site: Hayward Solar	City/0	County: F	Freeborn Coun	ty Sampling D	Date: 4/30/2020
Applicant/Owner: Hayward Solar LLC	State:	Minnesota	Sampling P	oint: WA045A	
Investigator(s): Apryl Jennrich		Section	on, Township,	Range:	T102N R20W S11
Landform (hillslope, terrace, etc.):	Swale	Local	relief (concave	e, convex, none):	Concave
Slope (%): 1 Lat: 43° 39'	4.19"	Long:	-93° 12' 1.8	3" Datum:	WGS84
Soil Map Unit Name: Klos	ssner muck		NWI Cla	assification:	N/A
Are climatic/hydrologic conditions of the site typic	al for this time o	f the year?	Y (If	no, explain in rema	arks)
Are vegetation X, soil , or h	vdrology	significant	ly disturbed?	Are "norn	nal circumstances"
Are vegetation soil or h	vdroloav	naturally p	roblematic?	Ale nom	present? No
	,			(If needed, explai	n any answers in remarks.)
Hydrophytic vegetation present?	Y				, ,
Hydric soil present?	Y	Is the san	npled area wit	hin a wetland?	Y
Indicators of wetland hydrology present?	Y	lf ves. op	• tional wetland	site ID:	
	<u> </u>				
Remarks: (Explain alternative procedures here or	in a separate re	eport.)			
VEGETATION Use scientific names of p	olants.				
	Absolute	Dominant	Indicator	Dominance Test	Worksheet
<u>Iree Stratum</u> (Plot size:	) % Cover	Species	Staus	Number of Domina	ant Species
2					W, of FAC: <u>U</u> (A)
3				I otal Number o Species Acros	t Dominant s all Strata: 0 (B)
4				Percent of Domina	ant Species
5				that are OBL, FAC	W, or FAC: 0.00% (A/B)
	0	= Total Cove	er		、
Sapling/Shrub stratum (Plot size:	)			Prevalence Inde	x Worksheet
1				Total % Cover of:	
2				OBL species	0 x 1 = 0
3				FACW species	0 x 2 = 0
4				FAC species	$\frac{0}{0} \times 3 = 0$
<u> </u>		= Total Cove			0 x 4 = 0
Herb stratum (Plot size:	)		51	Column totals	$\frac{0}{0}$ (A) $\frac{0}{0}$ (B)
1	/			Prevalence Index	$= B/\Delta =$
2				T Tevalence muex	
3				Hydrophytic Vec	etation Indicators:
4				Rapid test for	hydrophytic vegetation
5				Dominance te	est is >50%
6				Prevalence in	ndex is ≤3.0*
7				Morphogical a	adaptations* (provide
8				supporting da	ata in Remarks or on a
9				separate sne	et)
	0	= Total Cove	er	X (explain)	hydropnytic vegetation*
Woody vine stratum (Plot size:	)			*Indicators of hydric	soil and wetland hydrology must be
1				Present, uni	ess disturbed or problematic
2 <u></u>		- Total Cov		vegetation	
	0		51	present?	Y
Remarks: (Include photo numbers here or on a se	eparate sheet)				
recently tilled; 100% bare ground	. ,				

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the abs	sence of indicators.)
Depth	Matrix		Red	dox Feat	ures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-16	10YR 2/1	100					Silt loam	
16-24	2 5Y 4/1	80	10YR 5/6	20	C	PL/M	Clav	
10-24	2.01 4/1	00	1011( 3/0	20	0	1 L/1VI	Cidy	
*Type: C = 0	Concentration, D :	= Depleti	on, RM = Reduce	ed Matrix	k, MS = N	/lasked S	and Grains. **Loc	cation: PL = Pore Lining, M = Matrix
Hydric So	oil Indicators:						Indicators for Pr	roblematic Hydric Soils:
His	tisol (A1)		Sar	dy Gleye	ed Matrix	(S4)	Coast Prairie	e Redox (A16) ( <b>LRR K, L, R</b> )
His	tic Epipedon (A2)		Sar	idy Redo	ox (S5)		Dark Surface	e (S7) ( <b>LRR K, L)</b>
Bla	ck Histic (A3)		Stri	pped Ma	trix (S6)		Iron-Mangan	ese Masses (F12) ( <b>LRR K, L, R</b> )
Hyo	drogen Sulfide (A4	4)	Loa	my Mucl	ky Minera	al (F1)	Very Shallow	/ Dark Surface (TF12)
Stra	atified Layers (A5	)	Loa	my Gley	ed Matrix	x (F2)	Other (explai	n in remarks)
2 c	m Muck (A10)		Dep	leted Ma	atrix (F3)			
De	pleted Below Dark	Surface	(A11) Red	lox Dark	Surface	(F6)		
X Thi	ck Dark Surface (	A12)	Dep	leted Da	ark Surfa	ce (F7)	*Indicators of I	hydrophytic vegetation and weltand
Sar	ndy Mucky Minera	l (S1)	Rec	lox Depr	essions	(F8)	hydrology mu	ist be present, unless disturbed or
5 c	m Mucky Peat or	, Peat (S3	)	•		· · /	, ,,	problematic
	lover (if cheery	, ,	,			r		
Tuno	Layer (II Observe	eu):					Uudria aail pra	acant2 V
Type.	20):				-		Hyunc son pre	
Deptil (Inch	=5).				-			
Remarks:								
HYDROL	DGY							
Wetland Hy	drology Indicato	ors:						
Primary Ind	cators (minimum	of one is	required; check	all that a	pply)		Secondary	Indicators (minimum of two required
Surface	Water (A1)			Aquatic	Fauna (B	13)	Surfa	ace Soil Cracks (B6)
High Wa	ater Table (A2)			True Aq	uatic Plai	nts (B14)	Draii	nage Patterns (B10)
Saturati	on (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-	Season Water Table (C2)
Water N	larks (B1)			Oxidized	d Rhizosp	heres on	Living Roots Cray	fish Burrows (C8)
Sedime	nt Deposits (B2)			(C3)			X Satu	ration Visible on Aerial Imagery (C9)
Drift De	posits (B3)			Presenc	e of Red	uced Iron	(C4) Stun	ted or Stressed Plants (D1)
Algal Ma	at or Crust (B4)			Recent I	Iron Redu	iction in T	illed Soils X Geor	morphic Position (D2)
	osits (B5)	l Imeas-	(P7)	(UD)	مار ۲۰۰۰		FAC	-Neutral Lest (D5)
Sparach		i imager	(D/)		CK Surfac	xe (U7)		
Sparsel	r vegetated Conca	ve Suria		Other (	vvell Da Svolain in	ala (D9) Romarka	)	
		)				Remarks	)	
Field Obse	vations:	Var	Na	v	Donth (	nohoc);		
Water table	resent?	Vec		<u>~</u>	Depth (	inches):	[	Indicators of wetland
Saturation n	present?	Ver		<u> </u>	Depth (	inches)	[	hydrology present? V
(includes ca	pillary fringe)	103		~	- Depui (i	nones).	———— I	
Docoribo	pordod doto (otro	macus	monitoring	oorial -	botco -		anactions) if available	0.
Describe re-	corded data (strea	im gauge	e, monitoring weil	, aenai p	photos, p	revious ir	ispections), if available	e.
Remarks:								
I								

WETLAND	DETERMINATI	ON DAT	A FORM - M	idwest R	egion	
Project/Site: Hayward Solar	City/	County:	Freeborn Cou	unty Sa	ampling Date:	4/30/2020
Applicant/Owner: Hayward Solar LLC		State	e: Minnesot	ta Sa	ampling Point:	WA045B
Investigator(s): Apryl Jennrich		Sec	tion, Township	, Range:	T102	N R20W S11
Landform (hillslope, terrace, etc.):	Plain	Loca	al relief (conca	ve, convex	, none):	None
Slope (%): 1 Lat: 43° 3	39' 4.51"	Long:	-93° 12' 1.	.85"	Datum:	WGS84
Soil Map Unit Name: K	lossner muck	°	NWI C	Classificatio	on:	NA
Are climatic/hydrologic conditions of the site ty	pical for this time o	of the year	? Y (	lf no, expla	ain in remarks)	
Are vegetation X , soil , or	hydrology	significa	ntly disturbed?		Are "normal circ	umstances"
Are vegetation , soil , or	hydrology	naturally	problematic?			present? No
SUMMARY OF FINDINGS	, ,	,		(If need	ed, explain any a	answers in remarks.)
Hydrophytic vegetation present?	N					
Hydric soil present?	N	Is the sa	ampled area w	vithin a we	tland?	Ν
Indicators of wetland hydrology present?	N	lf yes, o	optional wetland	d site ID:		
		, ()		-		
Remarks: (Explain alternative procedures here	or in a separate re	eport.)				
VEGETATION Use scientific names of	f plants.					-
	Absolute	Dominar	nt Indicator	Domina	Ince Test Work	sheet
<u>Iree Stratum</u> (Plot size:	_) % Cover	Species	s Staus	Number	of Dominant Spe	cies
2					JBL, FACW, OFF	AC. <u>0</u> (A)
3				Spec	ies Across all Str	rata: 0 (B)
4				Percent	of Dominant Spe	cies (- )
5				that are 0	OBL, FACW, or F	AC: 0.00% (A/B)
	0	= Total Co	over			
Sapling/Shrub stratum (Plot size:	)			Prevale	nce Index Worl	ksheet
1				Total %	Cover of:	
2				OBL spe	ecies 0	x = 0
3				FACW s	species 0	$x^2 = 0$
4				FAC Spe	necies 0	x = 0
	0	= Total Co	ver		cies 0	x = 0
Herb stratum (Plot size:	)			Column	totals 0	(A) 0 (B)
1				Prevaler	nce Index = B/A	=
2						
3				Hydrop	hytic Vegetatio	n Indicators:
4				Rap	id test for hydro	phytic vegetation
5				Don	ninance test is >	50%
6				Prev	valence index is	≤3.0*
/				Mor	phogical adapta	tions* (provide
0				sup	porting data in R arate sheet)	emarks or on a
10				Brok	alate sheet)	ovtic vegetation*
	0	= Total Co	ver	(exp	olain)	lylic vegetation
Woody vine stratum (Plot size:	)	-		*Indicato	, ors of hydric soil and	wetland bydrology must be
1				F	present, unless distu	urbed or problematic
2				Hyd	Irophytic	
	0	= Total Co	over	veg	etation	
				pres		N
Remarks: (Include photo numbers here or on a	separate sheet)					
tilled -100% bare ground						

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the abse	nce of indicators.)
Depth	<u>Matrix</u>		Re	dox Feat	ures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-15	10YR 2/1	100					Silt loam	
15-18	2,5Y 4/1	99	10YR 4/6	1	С	PI	Clav	
18.04	2.57 4/1	75	10VP 5/6	25			Clay	
18-24	2.51 4/1	75	1018 3/0	25	U U	PL/IVI	Clay	
+ <b>T</b> 0						<u> </u>		
*Type: C = 0	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	k, MS = N	lasked S	and Grains. **Loca	tion: PL = Pore Lining, M = Matrix
Hydric So	oil Indicators:					( <b>a</b> 1)	Indicators for Pro	blematic Hydric Soils:
His	tisol (A1)		Sar	ndy Gley	ed Matrix	(S4)	Coast Prairie F	Redox (A16) ( <b>LRR K, L, R</b> )
His	tic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark Surface (	S7) (LRR K, L)
Bla	ck Histic (A3)		Stri	pped Ma	atrix (S6)			se Masses (F12) (LRR K, L, R)
Hyd	drogen Sulfide (A	4)	Loa	imy Muc	ky Miner	al (F1)	Very Shallow [	Dark Surface (TF12)
Stra	atified Layers (A5	)	Loa	imy Gley	ed Matrix	x (F2)	Other (explain	in remarks)
2 ci	m Muck (A10)			pleted Ma	atrix (F3)	(===)		
	bleted Below Dark	< Surface	e (A11)Red	lox Dark	Surface	(F6)		
	ck Dark Surface (	A12)		bleted Da	ark Surfa	ce (⊢7)	*Indicators of hy	drophytic vegetation and weltand
Sar	ndy Mucky Minera	al (S1)	Rec	dox Depr	ressions	(F8)	hydrology mus	t be present, unless disturbed or
5 c	m Mucky Peat or	Peat (S3	)					problematic
Restrictive	Layer (if observe	ed):						
Туре:							Hydric soil pres	ent? N
Depth (inche	es):				-			
Demerica								
HYDROL	OGY							
Wetland Hy	drology Indicato	ors:						
Primary Indi	cators (minimum	of one is	required: check	all that a	nolv)		Secondary I	ndicators (minimum of two required)
Surface	Water (A1)			Aquatic	Fauna (B	(13)	Surfac	e Soil Cracks (B6)
High Wa	ater Table (A2)			True Aa	uatic Pla	nts (B14)	Draina	ge Patterns (B10)
Saturati	on (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Se	eason Water Table (C2)
Water M	larks (B1)			Oxidized	d Rhizosp	heres on	Living Roots Crayfis	sh Burrows (C8)
Sedime	nt Deposits (B2)			(C3)			Satura	tion Visible on Aerial Imagery (C9)
Drift De	posits (B3)			Presenc	e of Red	uced Iron	(C4) Stunte	d or Stressed Plants (D1)
Algal Ma	at or Crust (B4)			Recent	Iron Redu	uction in T	illed Soils Geom	orphic Position (D2)
Iron Dep	oosits (B5)			(C6)			FAC-N	leutral Test (D5)
Inundati	on Visible on Aeria	al Imager	y (B7)	Thin Mu	ick Surfac	ce (C7)		
Sparsel	Vegetated Conca	ave Surfa	ce (B8)	Gauge	or Well Da	ata (D9)		
Water-S	tained Leaves (B9	9)		Other (E	Explain in	Remarks	)	
Field Obser	vations:							
Surface wat	er present?	Yes	No	Х	Depth (i	inches):	I	
Water table	present?	Yes	No	X	Depth (i	inches):	'	ndicators of wetland
Saturation p	resent?	Yes	No	X	_Depth (i	inches):		hydrology present? N
(Includes ca	pillary fringe)							
Describe re	corded data (strea	am gauge	e, monitoring wel	l, aerial p	ohotos, p	revious i	nspections), if available:	
Remarks:								



WA045 overview looking southeast.



Wetland Sample Point WA045A.



Non-wetland sample point WA045B.



Intermediate Depression

200

☐ Feet

100

0

TŁ

TETRA TECH

J

T102N R20W S13

T102N R20W S

WETLAND DETERMI		Freeborn Count	west Region	
Applicant/Owner: Howward Solar LLC	City/County.	Minnesete	<u>y</u> Sampling Date	. 4/30/2020
Applicant/Owner. Hayward Solar LLC		etion Township		
Landform (billolono, torrago, etc.):		cuon, rownship, r		
Slope (%): 1 Let: 42° 28' 50 22"			, convex, none)	WCS94
Soil Man Linit Name: Wascousta mucky	LONG.	-93 12 0.1		WG304
Are climatic/bydrologic conditions of the site typical for this	time of the yea	r2 V (lf	solication.	)
Are venetation X soil or bydrology	signific:	antly disturbed?		·/
Are vegetation soil or hydrology	naturall	v problematic?	Are "normal o	present? No
SUMMARY OF FINDINGS		y problemate.	(If needed, explain ar	y answers in remarks.)
Hydrophytic vegetation present? Y				
Hydric soil present? Y	Is the s	ampled area wit	hin a wetland?	Y
Indicators of wetland hydrology present? Y	lf yes,	optional wetland	site ID:	
Remarks: (Explain alternative procedures here or in a sepa	arate report.)			
VEGETATION Use scientific flames of plants.	aduta Damina	nt Indiactor	Dominance Test Wo	orksheet
Tree Stratum (Plot size: ) %	Cover Specie	s Staus	Number of Dominant S	Snecies
1			that are OBL, FACW, o	or FAC: 0 (A)
2			Total Number of Do	minant
3			Species Across all	Strata: 0 (B)
4			Percent of Dominant S	Species
5	0 = Total C		Inal are OBL, FACW, o	or FAC: 0.00% (A/B)
Sapling/Shrub stratum (Plot size: )			Prevalence Index W	orksheet
1			Total % Cover of:	
2			OBL species 0	x 1 = 0
3			FACW species 0	x 2 = 0
4			FAC species 0	x 3 = 0
5	0 = Total C		IPL species 0	x 4 = 0
Herb stratum (Plot size: )		over	Column totals 0	(A) = 0 (B)
1			Prevalence Index = $F$	A =
2				
3			Hydrophytic Vegeta	tion Indicators:
4			Rapid test for hyd	drophytic vegetation
5			Dominance test i	s >50%
6			Prevalence index	: is ≤3.0*
			Morphogical ada	otations* (provide
9			separate sheet)	Remarks of on a
10			Problematic hydr	ophytic vegetation*
Weedy vine stratum (Plot size:	0 = Total C	over	X (explain)	
1			*Indicators of hydric soil present, unless o	and wetland hydrology must be listurbed or problematic
2			Hydrophytic	
	0 = Total C	over	present?	Y
Remarks: (Include photo numbers here or on a separate since since since a	heet)	· · · · · ·		

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)						
Depth Matrix Redox Features									-					
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture		Remarks					
0-12	10YR 2/1	100					Silt loam							
12.24	EV 4/1	70		20	6	Ы	Clay							
12-24	514/1	70	1018 3/0	30	C	PL	Clay							
*Type: C = 0	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	, MS = N	/lasked S	and Grains.	**Location:	PL = Pore Lining, M = Matrix					
Hvdric Sc	oil Indicators:	•			,		Indicators f	or Problen	natic Hvdric Soils:					
His	tisol (A1)		Sar	dv Gleve	ed Matrix	(S4)	Coast P	rairie Redo	x (A16) (LRR K. L. R)					
His	tic Epipedon (A2)		Sar	dv Redo	ox (S5)	- ( )	Dark Su	rface (S7)	(LRR K. L)					
Bla	ck Histic (A3)		Stri	pped Ma	r(s6)		Iron-Ma	nganese M	asses (F12) ( <b>LRR K. L. R</b> )					
	trogen Sulfide (A	1)	Loa	my Mucl	kv Miner:	al (F1)	Verv Sh	allow Dark	Surface (TE12)					
Stra	atified Lavers (A5	+) )	Loa	my Glev	ed Matrix	x (F2)	Other (e	anow Dank Avalain in re	marks)					
	m Muck ( $\Delta 10$ )	/	Der	leted Ma	atrix (F3)	x (1 Z)	01101 (0	,,,piairi iri ia						
	heted Below Dark	Surface	$(\Delta 11) = Bec$	lov Dark	Surface	(E6)								
	ck Dark Surface (				ouriace	(10) ce (E7)	*Indiaatar	a of budrow	butio verstation and waltand					
	ody Mucky Minera	A12)		lov Depr			hydrolog	s of nyarop	procept, uplace disturbed or					
	m Mucky Post or	Doot (62		iox Debi	65510115	(10)	nyurolog	ly must be	roblematic					
5 CI	IT MUCKY FEAL OF	real (33	)					pi	oblematic					
Restrictive	Layer (if observe	ed):												
Туре:					_		Hydric soi	il present?	Y					
Depth (inche	es):				_									
Remarks:					_									
r tomanto.														
HIDROLO														
Wetland Hy	drology Indicato	ors:												
Primary Indi	<u>cators (minimum</u>	of one is	required; check	all that a	pply)		Secor	ndary Indica	ators (minimum of two required)					
Surface	Water (A1)			Aquatic	Fauna (B	13)		Surface So	oil Cracks (B6)					
High Wa	ater Table (A2)			True Aq	uatic Plar	nts (B14)		Drainage P	Patterns (B10)					
Saturatio	on (A3)			Hydroge	en Sulfide	Odor (C	1)	Dry-Seaso	n Water Table (C2)					
Water N	larks (B1)			Oxidized	d Rhizosp	heres on	Living Roots	Crayfish Bu	urrows (C8)					
Sedimer	nt Deposits (B2)			(C3)			X	Saturation	Visible on Aerial Imagery (C9)					
Drift Dep	posits (B3)			Presenc	e of Redu	uced Iron	(C4)	Stunted or	Stressed Plants (D1)					
Algal Ma	at or Crust (B4)			Recent	Iron Redu	uction in T	Filled Soils X	Geomorphi	ic Position (D2)					
Iron Dep	oosits (B5)			(C6)				FAC-Neutra	al Test (D5)					
Inundati	on Visible on Aeria	al Imager	y (B7)	Thin Mu	ck Surfac	ce (C7)								
Sparsely	Vegetated Conca	ave Surfa	ce (B8)	Gauge c	or Well Da	ata (D9)								
Water-S	tained Leaves (B9	))		Other (E	Explain in	Remarks	.)							
Field Obser	vations:			-										
Surface wat	er present?	Yes	No	X	Depth (i	inches):								
Water table	present?	Yes	No	Х	Depth (i	inches):		Indic	ators of wetland					
Saturation p	resent?	Yes	No	Х	_Depth (i	inches):		hyd	rology present? Y					
(includes ca	pillary fringe)													
Describe rea	corded data (strea	am gauge	e, monitoring well	, aerial p	ohotos, p	revious i	nspections), if ava	ailable:						
		-			-									
Remarks:														
weedy v	eg													
I														

WETLAND DETERMINA	TION DATA FORM - N	idwest Region	
Project/Site: Hayward Solar C	ity/County: Freeborn Co	Inty Sampling Date: 4/30/2020	
Applicant/Owner: Hayward Solar LLC	State: Minnesc	ta Sampling Point: WA046B	
Investigator(s): Apryl Jennrich	Section, Township	, Range: 1102N R20W S11	
Landform (hillslope, terrace, etc.): Plain		ve, convex, none): None	
Slope (%): 1 Lat: 43° 38' 58.83"	Long: -93° 12' 6	.09" Datum: WGS84	
Soli Map Unit Name: Wascousta mucky silt			
Are climatic/nydrologic conditions of the site typical for this tim	e of the year? Y	it no, explain in remarks)	
Are vegetation X, soil , or hydrology	significantly disturbed?	Are "normal circumstances"	
SUMMARY OF FINDINGS		(If needed, explain any answers in remark	, (s.)
Hydrophytic vegetation present? N			
Hydric soil present? N	Is the sampled area v	vithin a wetland? N	
Indicators of wetland hydrology present? N	If yes, optional wetlar	d site ID:	
Remarks: (Explain alternative procedures here or in a separate VEGETATION Use scientific names of plants	e report.)		
Absolu	te Dominant Indicator	Dominance Test Worksheet	
Tree Stratum (Plot size: ) % Cov	er Species Staus	Number of Dominant Species	
1		that are OBL, FACW, or FAC: 0 (	(A)
2		Total Number of Dominant	(2)
		Species Across all Strata: 0 (	(B)
5		that are OBL_EACW_or EAC*0.00% (	(A/B)
<u> </u>	= Total Cover		(,,,,,,)
Sapling/Shrub stratum (Plot size: )		Prevalence Index Worksheet	
1		Total % Cover of:	
2		OBL species 0 x 1 = 0	
3		FACW species $0 \times 2 = 0$	
4 		FAC species $0 \times 3 = 0$	
<u> </u>	= Total Cover	$\frac{1}{100} = \frac{1}{100} = \frac{1}$	
Herb stratum (Plot size: )		Column totals $0$ (A) $0$ (	(B)
1		Prevalence Index = B/A =	. ,
2			
3		Hydrophytic Vegetation Indicators:	
4		Rapid test for hydrophytic vegetation	
5		Dominance test is >50%	
6 7			
8		Morphogical adaptations* (provide	
9		separate sheet)	
100	= Total Cover	Problematic hydrophytic vegetation* (explain)	
Woody vine stratum (Plot size:)	_	*Indicators of hydric soil and wetland hydrology m present, unless disturbed or problematic	iust be
2		Hydrophytic	
0	= Total Cover	vegetation present? N	
Remarks: (Include photo numbers here or on a separate shee Recently tilled, 100% bare ground	t)		

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	tor or confirm the abs	ence of indicators.)
Depth (Inches)	<u>Matrix</u>	0/	Red Color (moint)	<u>ov Feat</u>	ures Turne*	1 **	Taytura	Demerke
(inches)		%	Color (moist)	%	туре	LOC	Texture	Remarks
0-12	10YR 2/1	100					Silt loam	
12-24	2.5Y 4/1	99	10YR 5/6	1	С	PL	Clay	
*Type: C = 0	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	, MS = N	/lasked S	Sand Grains. **Loc	ation: PL = Pore Lining, M = Matrix
Hydric So	oil Indicators:						Indicators for Pr	oblematic Hydric Soils:
His	tisol (A1)		Sar	ndy Gley	ed Matrix	(S4)	Coast Prairie	Redox (A16) ( <b>LRR K, L, R</b> )
His	tic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark Surface	(S7) ( <b>LRR K, L)</b>
Bla	ck Histic (A3)		Stri	pped Ma	trix (S6)		Iron-Mangane	ese Masses (F12) ( <b>LRR K, L, R</b> )
Hyo	drogen Sulfide (A4	4)	Loa	my Muc	ky Minera	al (F1)	Very Shallow	Dark Surface (TF12)
Str	atified Layers (A5	)	Loa	my Gley	ed Matriz	x (F2)	Other (explain	n in remarks)
2 c	m Muck (A10)		Dep	pleted Ma	atrix (F3)			
De	pleted Below Dark	Surface	e (A11) Rec	lox Dark	Surface	(F6)		
Thi	ck Dark Surface (	A12)	Dep	pleted Da	ark Surfa	ce (F7)	*Indicators of h	ydrophytic vegetation and weltand
Sa	ndy Mucky Minera	al (S1)	Rec	lox Depr	essions	(F8)	hydrology mu	st be present, unless disturbed or
5 c	m Mucky Peat or	Peat (S3	)					problematic
Restrictive	Layer (if observe	ed):						
Туре:							Hydric soil pre	sent? N
Depth (inch	es):				-			
Domorko	_				-			
HYDROL	OGY							
Wetland Hy	drology Indicato	ors:						
Primary Ind	<u>icators (minimum</u>	of one is	required; check	all that a	pply)		<u>Secondary</u>	Indicators (minimum of two required
Surface	Water (A1)			Aquatic	Fauna (B	313)	Surfa	ace Soil Cracks (B6)
High Wa	ater Table (A2)			True Aq	uatic Plai	nts (B14)	Drair	nage Patterns (B10)
Saturati	on (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-8	Season Water Table (C2)
Water N	/larks (B1)			Oxidized	d Rhizosp	heres on	Living Roots Cray	tish Burrows (C8)
Sealme	nt Deposits (B2)			(U3)	o of Pod	upod Iron	Satur	ration Visible on Aerial Imagery (C9)
	pusits (B3) at ar Crust (B4)			Recent	ron Redu	uced from	Filled Soils Geor	norphic Position (D2)
Iron Der	nosits (B5)			(C6)	II UII I Neut		FAC.	Neutral Test (D5)
Inundati	on Visible on Aeria	al Imager	v (B7)	Thin Mu	ck Surfac	ce (C7)		
Sparsel	y Vegetated Conca	ave Surfa	ce (B8)	Gauge	or Well Da	ata (D9)		
Water-S	Stained Leaves (B9	))		Other (E	Explain in	Remarks	;)	
Field Obse	rvations:			•				
Surface wat	er present?	Yes	No	х	Depth (i	inches):		
Water table	present?	Yes	No	Х	Depth (i	inches):		Indicators of wetland
Saturation p	present?	Yes	No	X	Depth (i	inches):		hydrology present? N
(includes ca	pillary fringe)							
Describe re	corded data (strea	am gauge	e, monitoring well	, aerial p	ohotos, p	revious i	nspections), if available	2:
Demerker								
Remarks:								



WA046 overview looking south.



Wetland Sample Point WA046A.



Non-wetland sample point WA046B.



Intermediate

200

100

Intermediate Depression

300

400

□ Feet

. T102N R20W S13

T102N R20W S

WETLAND DETERMINATI								
Project/Site: Hayward Solar City/	County: Freedorn County Sampling Date:							
Applicant/Owner: Hayward Solar LLC	State: Millinesota Sampling Point: WA047A							
Landform (hillslope, terrace, etc.):								
Slope (%): 1 Lat: /3° 38' 58 03"	Long:							
Soil Man Unit Name: Klossner muck								
Are climatic/hydrologic conditions of the site typical for this time of	of the year? V (If no explain in remarks)							
Are vegetation X soil or hydrology	significantly disturbed?							
Are vegetation soil or hydrology	naturally problematic? Are normal circumstances							
SUMMARY OF FINDINGS	(If needed, explain any answers in remarks.)							
Hydrophytic vegetation present? Y								
Hydric soil present? Y	Is the sampled area within a wetland?							
Indicators of wetland hydrology present? Y	If yes, optional wetland site ID:							
Remarks: (Explain alternative procedures here or in a separate report.)								
VEGETATION Use scientific names of plants.	Dominance Test Worksheet							
Tree Stratum (Plot size: ) % Cover	Species Staus Number of Dominant Species							
1 ,	that are OBL, FACW, or FAC: 0 (A)							
2	Total Number of Dominant							
3	Species Across all Strata: 0 (B)							
	Percent of Dominant Species							
<u> </u>	= Total Cover							
Sapling/Shrub stratum (Plot size:	Prevalence Index Worksheet							
1	Total % Cover of:							
2	OBL species 0 x 1 = 0							
3	FACW species 0 x 2 = 0							
4	FAC species $0 \times 3 = 0$							
5	FACU species $0 \times 4 = 0$							
U	= Total Cover UPL species $0 \times 5 = 0$ Column totals $0$ (A) $0$ (B)							
	$\frac{1}{2} = \frac{1}{2} = \frac{1}$							
2								
3	Hydrophytic Vegetation Indicators:							
4	Rapid test for hydrophytic vegetation							
5	Dominance test is >50%							
6	Prevalence index is ≤3.0*							
/	Morphogical adaptations* (provide							
9	supporting data in Remarks or on a separate sheet)							
10	Problematic hydrophytic vegetation*							
	= Total Cover X (explain)							
1)	*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic							
2	Hydrophytic							
0	= Total Cover vegetation present? Y							
Remarks: (Include photo numbers here or on a separate sheet) Recently tilled - 100% bared ground								

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm	n the absend	e of indicators.)
Depth	<u>Matrix</u>		Rec	lox Feat	ures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Text	ure	Remarks
0-12	10YR 2/1	100					Clay		
12-18	10YR 2/1	60	2.5Y 5/1	25	D	М	Clay		
			5GV 4/1	15		M	Clay		Clov
10.01	501444		JGT 4/1	10			Ciay		Gley
18-21	5GY 4/1	80	10YR 5/6	20	C	PL	Clay		Gley
21-25	5Y 4/2	97	10YR 5/6	3	С	PL	Clay		
*Type: C = (	Concentration D	- Doploti	ion PM - Peduce	d Matrix		laskod S	and Grains	**Locatio	n: PL – Pore Lining M – Matrix
Hydric Sc	il Indicatore:	- Depieli			, wio – n	laskeu C	Indicato		matic Hydric Soils:
	tisol (A1)		San	dy Clev	od Matrix	(54)	Con	st Proirie Po	
His	tis Eninedon (A2)			dy Bodo		(04)	Coa		
	nc Epipedon (A2) ek Histic (A3)		San	aped Ma	(33)			Mandanese	Masses (F12) (IRR K I R)
	trogen Sulfide (A)	1)		my Muc	ky Minor	al (E1)		(Shallow Da	rk Surface (TE12)
Stra	atified Lavers (A5	+ <i>)</i> \	Loa	my Glev	ng Matri	ar (F2)			remarks)
2 011	m Muck ( $\Delta 10$ )	)		leted M	atrix (F3)	~ (i Z)			Ternarks)
2 ci	leted Relow Dark	Surface	Δ11) Dep	lov Dark	Surface	(F6)			
X Thi	ck Dark Surface (	A12)	Der	leted Dank	ark Surfa	(F7)	*India	ators of bydr	ophytic vogetation and weltand
Sar	ndv Mucky Minera	(S1)	Bec	lox Denr	ressions	(F8)	hvdr	alors of fiyur	e present unless disturbed or
5 ci	n Mucky Peat or	Peat (S3			00010110	(10)	nyar	ology must b	problematic
			)			r			P
Restrictive	Layer (if observe	ed):							
Type:					-		Hydric	soil presen	t? <u>Y</u>
Depth (inche	es):				-				
Remarks:									
HYDROL	DGY								
Wetland Hy	drology Indicato	ors:							
Primarv Indi	cators (minimum	of one is	required: check	all that a	(vlaa		Se	econdarv Ind	icators (minimum of two required
Surface	Water (A1)		i	Aquatic	Fauna (B	(13)		Surface :	Soil Cracks (B6)
High Wa	ater Table (A2)			True Aq	uatic Pla	nts (B14)	-	Drainage	Patterns (B10)
Saturatio	on (A3)			Hydroge	en Sulfide	Odor (Ć	1) -	Dry-Seas	son Water Table (C2)
Water N	larks (B1)			Oxidized	d Rhizosp	heres on	Living Roots	Crayfish	Burrows (C8)
Sedimer	nt Deposits (B2)			(C3)			-	X Saturatio	n Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)			Presenc	e of Red	uced Iron	(C4)	Stunted	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)			Recent	Iron Redu	iction in T	illed Soils	X Geomorp	ohic Position (D2)
Iron Dep	osits (B5)		(22)	(C6)		()	-	FAC-Neu	utral Test (D5)
Inundati	on Visible on Aeria	al Imager	y (B7)	Thin Mu	ck Surfac	ce (C7)			
Sparsely	/ Vegetated Conca	ave Surfa	ce (B8)	Gauge of	or Well Da	ata (D9) Demonito	<b>`</b>		
Water-S	tained Leaves (B9	)		Other (E	xplain in	Remarks	)		
Field Obser	vations:				ь <i></i>	· · · · ·			
Surface wat	er present?	Yes	No	<u> </u>	Depth (i	inches):			liestere of watter d
vvater table	present?	Yes	NO	X	Depth (i	incnes):		Inc	icators of wetland
Saturation p	nesent?	res	NO	X		ncnes):		ny	ruiology present? Y
					1				
Describe red	corded data (strea	am gaug	e, monitoring well	, aerial p	photos, p	revious i	nspections), if	available:	
Remarks:									
Normal No.									

WETLAND DETERMINATI	DN DATA FORM - Midwest Reg	gion anling Data: 1/0/1000						
Project/Site: Hayward Solar City,	County: Freeborn County Sam	apling Date: 1/0/1900						
Applicant/Owner: Hayward Solar LLC	State: Minnesota Sam							
Londform (hillolone, torrace, etc.):								
Slope (%): 1 Lat: 43° 38' 58 66"								
Soil Man Unit Name: Klossner muck	NWI Classification	NA						
Are climatic/hydrologic conditions of the site typical for this time	f the year? Y (If no explain	in remarks)						
Are vegetation X soil or hydrology	significantly disturbed?							
Are vegetation, soil, or hydrology	naturally problematic?	present? No						
SUMMARY OF FINDINGS	(If needed	, explain any answers in remarks.)						
Hydrophytic vegetation present? N								
Hydric soil present? N	Is the sampled area within a wetla	and? N						
Indicators of wetland hydrology present? N	If yes, optional wetland site ID:							
Remarks: (Explain alternative procedures here or in a separate report.)								
VEGETATION Use scientific names of plants.								
Absolute	Dominant Indicator Dominand	ce Test Worksheet						
<u>Tree Stratum</u> (Plot size:) % Cover	Species Staus Number of	Dominant Species						
2		in the set of the set						
3	Total No.	s Across all Strata: 0 (B)						
4	Percent of	Dominant Species						
5	that are OB	L, FACW, or FAC: 0.00% (A/B)						
0	= Total Cover							
Sapling/Shrub stratum (Plot size:)	Prevalence Total % C	ce Index Worksheet						
2		$\frac{1}{1000} = 0  x = 0$						
3	FACW spe	ecies $0 \times 2 = 0$						
4	FAC speci	ies $0 \times 3 = 0$						
5	FACU spe	cies 0 x 4 = 0						
0	= Total Cover UPL speci	$\begin{array}{c} \text{es}  0  x  5 =  0 \\ \hline \end{array} $						
Herb stratum (Plot size:)	Column to	tals $0$ (A) $0$ (B)						
1		e Index = B/A =						
3	Hydrophy	tic Vegetation Indicators:						
4	Rapid	test for hydrophytic vegetation						
5	Domin	nance test is >50%						
6	Preval	lence index is ≤3.0*						
7	Morph	ogical adaptations* (provide						
8	suppo	rting data in Remarks or on a						
9 10	separa	ale sneel)						
0	= Total Cover (expla	in)						
<u>Woody vine stratum</u> (Plot size:) 1	*Indicators pre:	of hydric soil and wetland hydrology must be sent, unless disturbed or problematic						
2	Hydro	ophytic						
0	= Total Cover vegeta	ation nt? <u>N</u>						
Remarks: (Include photo numbers here or on a separate sheet) Recently tilled - 100% bare ground	1							

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the abs	ence of indicators.)
Uepth	Color (moint)	0/_	Color (maint)	uox ⊢eat ∞	ures Typo*	1 00**	Texture	Demarka
(incries)		70		70	i ype			rtemarks
0-16	10YR 2/1	100					Silt loam	
16-25	5Y 4/2	99	10YR 4/6	<1	С	PL	Clay	
*Type: C =	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	k, MS = N	/lasked S	Sand Grains. **Loca	ation: PL = Pore Lining, M = Matrix
Hydric So	bil Indicators:					( <b>a</b> 1)	Indicators for Pro	oblematic Hydric Soils:
His	tisol (A1)		Sar	idy Gley	ed Matrix	(S4)		Redox (A16) (LRR K, L, R)
His	tic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark Surface	(S7) (LRR K, L)
Bla	ck Histic (A3)	•	Stri	pped Ma	atrix (S6)			
Hyo	drogen Sulfide (A4	+)	Loa	my Muc	ky Miner od Matri	al (F1)	Very Shallow	Dark Surface (TF12)
	m Muck (A10)	)		Inty Gley	ed Matrix	X (FZ)		i in remarks)
2 C	ni Wuck (ATU)	Surface			auix (F3) Surfaca	(F6)		
	ck Dark Surface (	A12)		oleted Dark	ark Surfa	(F7)	*Indicators of h	vdrophytic vogetation and woltand
Sa	ndv Mucky Minera	(S1)	Bec	lox Depr	essions	(F8)	hydrology mus	st be present unless disturbed or
5 c	m Muckv Peat or	Peat (S3				()	nyarology mat	problematic
	Lever (if cheery	(	/			1		I
Cupo:	Layer (If observe	ea):					Uudria aail prov	ant2 N
ype: Jonth (inch	oo);				-		Hydric soli pres	
Jeptil (Illeli					-			
HYDROL	OGY							
Vetland Hy	drology Indicato	ors:						
Primary Ind	icators (minimum	of one is	required; check	all that a	ipply)		Secondary	Indicators (minimum of two require
Surface	Water (A1)			Aquatic	Fauna (E	313)	Surfa	ce Soil Cracks (B6)
High W	ater Table (A2)			True Aq	uatic Pla	nts (B14)	Drain	age Patterns (B10)
Saturati	on (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-S	eason Water Table (C2)
Water N	/larks (B1)			Oxidized	d Rhizosp	heres on	Living Roots Crayf	Ish Burrows (C8)
Drift Do	ni Deposits (B2)			$\frac{(U3)}{Propond}$		ucod Iron	(C4) Satur	ation Visible on Aerial Imagery (C9)
Algal M	at or Crust (B4)			Recent	Iron Redi	uction in 1	Filled Soils Geon	norphic Position (D2)
Iron Dei	posits (B5)			(C6)	non neut		FAC-	Neutral Test (D5)
Inundat	ion Visible on Aeria	l Imager	y (B7)	Thin Mu	ick Surfac	ce (C7)		
Sparsel	y Vegetated Conca	ive Surfa	ce (B8)	Gauge o	or Well Da	ata (D9)		
Water-S	Stained Leaves (B9	)		Other (E	Explain in	Remarks	;)	
ield Obse	rvations:							
Surface wat	er present?	Yes	No	Х	Depth (	inches):		
Nater table	present?	Yes	No	Х	Depth (	inches):		Indicators of wetland
Saturation p	oresent?	Yes	No	X	_Depth (	inches):		nydrology present? N
includes ca	ipiliary ininge)							
Describe re	corded data (strea	am gauge	e, monitoring well	, aerial p	photos, p	revious i	nspections), if available	c .
Remarks								



WA047 overview looking west.



Wetland Sample Point WA047A.



Non-wetland sample point WA047B.


## WA054

WETLAND DETERMINAT	ION DATA FORM - Midwest R	legion
Project/Site: Hayward Solar City	County: Freeborn County Sa	ampling Date: 4/30/2020
Applicant/Owner: Hayward Solar LLC	State: Minnesota Sa	
Londform (hillolone terrace etc.):		
Slope (%): 1   at: /3° 38' 10.68"	Long:	Datum: WGS84
Soil Man Unit Name: Dassel mucky loam	NWI Classificatio	
Are climatic/bydrologic conditions of the site typical for this time	of the year? Y (If no expla	
Are vegetation X soil or hydrology	significantly disturbed?	
Are vegetation, soil, or hydrology	naturally problematic?	present? No
SUMMARY OF FINDINGS	(If need	ed, explain any answers in remarks.)
Hydrophytic vegetation present? Y		
Hydric soil present? Y	Is the sampled area within a we	tland? Y
Indicators of wetland hydrology present? Y	If yes, optional wetland site ID:	
Remarks: (Explain alternative procedures here or in a separate	report.)	
VEGETATION Ose scientific frames of plants.	Dominant Indiactor Domina	nce Test Worksheet
<u>Tree Stratum</u> (Plot size: ) % Cover	Species Staus Number	of Dominant Species
1	that are 0	DBL, FACW, or FAC: 0 (A)
2	Total	Number of Dominant
	Spec	ies Across all Strata: 0 (B)
4 5	Percent	of Dominant Species
	= Total Cover	(AB)
Sapling/Shrub stratum (Plot size: )	Prevale	nce Index Worksheet
	Total %	Cover of:
2	OBL spe	ecies <u>0</u> x 1 = <u>0</u>
3	FACW s	species $0 \times 2 = 0$
4 5		pecies $0 \times 4 = 0$
<u> </u>	= Total Cover UPL spe	$\frac{1}{2}$
Herb stratum (Plot size: )	Column	totals 0 (A) 0 (B)
1	Prevaler	nce Index = B/A =
2		
3	Hydrop	hytic Vegetation Indicators:
4	Rap	id test for hydrophytic vegetation
5	Don	ninance test is >50%
8		
8		progical adaptations" (provide
9	sepa	arate sheet)
100	= Total Cover X (exp	blematic hydrophytic vegetation* blain)
Woody vine stratum (Plot size:)	- *Indicato	ors of hydric soil and wetland hydrology must be
2	Hyd	rophytic
0	= Total Cover veg	etation sent? Y
Remarks: (Include photo numbers here or on a separate sheet)	P. •	
100% bare ground - recently tilled		

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the	e absence of	indicators.)
Depth	Matrix		Re	dox Feat	ures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture		Remarks
0-12	10YR 2/1	100					Silty clay		
12-20	5Y 5/2	95	10YR 4/6	5	С	PL	Clay		
20-25	5Y 5/2	80	10YR 4/6	20	С	PL/M	Sandy clay		
	0.0.2				<u> </u>	,			
*Type: C = (	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	, MS = N	/lasked S	and Grains.	**Location: Pl	L = Pore Lining, M = Matrix
Hydric So	il Indicators:						Indicators for	or Problema	tic Hydric Soils:
His	tisol (A1)		Sar	ndy Gley	ed Matrix	(S4)	Coast Pr	rairie Redox (	A16) ( <b>LRR K, L, R</b> )
His	tic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark Su	rface (S7) ( <b>L</b> l	RR K, L)
Bla	ck Histic (A3)		Stri	pped Ma	trix (S6)		Iron-Mar	nganese Mas	ses (F12) ( <b>LRR K, L, R</b> )
Hyo	Irogen Sulfide (A	4)	Loa	my Muc	ky Minera	al (F1)	Very Sha	allow Dark Sເ	urface (TF12)
Stra	atified Layers (A5	)	Loa	imy Gley	ed Matrix	x (F2)	Other (e	xplain in rem	arks)
2 ci	m Muck (A10)	0.1		pleted Ma	atrix (F3)				
	bleted Below Dark	(Surface	(A11)Rec	lox Dark	Surface	(F6)			
	ck Dark Surface (	A12)			ark Surta	Ce (F7)	*Indicators	s of hydrophy	tic vegetation and weltand
Sar	ndy Mucky Minera	al (51) Deet (82	, <u> </u>	lox Depr	essions	(F8)	nyarolog	y must be pre	esent, unless disturbed or
5 C	п миску Реаг ог	Pear (53	)					proc	nemalic
Restrictive	Layer (if observe	ed):							
Туре:					-		Hydric soi	I present?	Y
Depth (inche	es):				-				
Remarks:									
HYDROL	DGY								
Wetland Hy	drology Indicato	ors:							
Primary Indi	<u>cators (minimum</u>	of one is	required; check	all that a	pply)		Secor	ndary Indicato	ors (minimum of two required
Surface	Water (A1)			Aquatic	Fauna (B	813)		Surface Soil (	Cracks (B6)
High Wa	ater Table (A2)			True Aq	uatic Plai	nts (B14)		Drainage Pat	terns (B10)
Saturation	on (A3)			Hydroge	en Sulfide	Odor (C	1) 	Dry-Season V	Vater Table (C2)
vvater iv	Iarks (B1)				d Rhizosp	neres on		Crayfish Burro	DWS (C8)
Drift Dei	(B2)				e of Red	uced Iron	(C4)	Stunted or St	ressed Plants (D1)
Algal Ma	at or Crust (B4)			Recent	Iron Redi	uction in T	Tilled Soils X	Geomorphic I	Position (D2)
Iron Der	osits (B5)			(C6)	lion riout			FAC-Neutral	Test (D5)
Inundati	on Visible on Aeria	al Imager	/ (B7)	Thin Mu	ck Surfac	ce (C7)			
Sparsel	/ Vegetated Conca	ave Surfa	ce (B8)	Gauge	or Well Da	ata (D9)			
Water-S	tained Leaves (B9	))		Other (E	Explain in	Remarks	)		
Field Obse	vations:			-					
Surface wat	er present?	Yes	No	Х	Depth (i	inches):			
Water table	present?	Yes	No	Х	Depth (i	inches):		Indicat	ors of wetland
Saturation p	resent?	Yes	No	Х	Depth (i	inches):		hydro	logy present? Y
(includes ca	pillary fringe)								
Describe re	corded data (strea	am gauge	e, monitoring wel	l, aerial p	ohotos, p	revious ir	nspections), if ava	ilable:	
Domorto									
Remarks:									

WETLAND DETERMINA		IIdwest Region	4/30/2020
Annlicant/Owner: Hayward Solar LLC	State: Minnesc	ta Sampling Date.	4/30/2020
Investigator(s): Anryl lennrich	Section Townshir	D Range: T102	N R20W S13
Landform (hillslope terrace etc.):	l ocal relief (conca	ve convex none).	None
Slope (%): 1 Lat: 43° 38' 11 09"	long: -93° 11' 1	8.93" Datum:	WGS84
Soil Map Unit Name: Dassel mucky loar			NA
Are climatic/hydrologic conditions of the site typical for this tin	ne of the year? Y	(If no, explain in remarks)	
Are vegetation X . soil . or hydrology	significantly disturbed?	Are "normal circ	umstances"
Are vegetation , soil , or hydrology	naturally problematic?	Ale normal circ	present? No
SUMMARY OF FINDINGS		(If needed, explain any a	inswers in remarks.)
Hydrophytic vegetation present? N			
Hydric soil present? Y	Is the sampled area v	vithin a wetland?	N
Indicators of wetland hydrology present? N	If yes, optional wetlar	nd site ID:	
Remarks: (Explain alternative procedures here or in a separat	e report.)		
VEGETATION Use scientific names of plants.			•
Absolu	te Dominant Indicator	Dominance Test Works	sheet
1 (Plot size) % Cov	el opecies olaus	Number of Dominant Spectrum that are OBL_EACW_or E	cies AC <sup>.</sup> 0 (A)
2		Total Number of Domin	ant
3		Species Across all Str	ata: 0 (B)
4		Percent of Dominant Spe	cies
5		that are OBL, FACW, or F	AC: 0.00% (A/B)
	= Total Cover	Durana la dan Mari	
<u>Sapling/Snrub stratum</u> (Plot size:)		Total % Cover of:	sneet
2		OBL species 0	x 1 = 0
3		FACW species 0	x 2 = 0
4		FAC species 0	x 3 = 0
5		FACU species 0	x 4 = 0
	= Total Cover	UPL species 0	x 5 = 0
Herb stratum (Plot size:)		Column totals 0	(A) <u> </u>
1		Prevalence Index = B/A	=
3		Hydrophytic Vegetation	n Indicators:
4		Rapid test for hydror	phytic vegetation
5		Dominance test is >	50%
6		Prevalence index is	≤3.0*
7		Morphogical adaptat	ions* (provide
8		supporting data in R	emarks or on a
9		Separate sneet)	outio vogotation*
Woody vine stratum (Plot size: )	= Total Cover	(explain)	
1		*Indicators of hydric soil and present, unless distu	wetland hydrology must be rbed or problematic
2		Hydrophytic	
0	= Total Cover	vegetation present?	J
Remarks: (Include photo numbers here or on a separate shee	et)	<u> </u>	
100% bare groud - recently tilled			

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm th	ne absence o	f indicators.)
Depth	Matrix		Red	dox Feat	ures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	9	Remarks
0-19	10YR 2/1	100					Clay loam		
19-21	2.5Y 4/1	98	10YR 4/6	2	С	PL	Clay		
21-28	5Y 5/2	95	10YR 4/6	5	С	PI	Clav		
21-20	01 0/2		1011( 4/0	0	Ŭ		Oldy		
*Turne: C = (	Concentration D	I – Donloti	ion DM - Doduor	d Motrix	/ MS = N	l Jookod S	and Craina	**Legation: D	l - Doro Lipipa M - Motrix
Type. C = C	il Indicators:	- Depiet			(, IVIO – IV	laskeu 3	Indicators	for Brobloms	
	fisol (A1)		Sar		od Matrix	(\$1)			
	tisol (AT)					((34)	Coast r		$\mathbf{PP} \mathbf{K} \mathbf{I}$
	H = H = H = H = H = H = H = H = H = H =			nnod Ma	(30)		Iron-Ma		Sees (F12) (IRR K I R)
	CK HISUC (AS)	4)			unx (SO) ku Minor	ol (E1)		anganese was	r r r r r r r r r r r r r r r r r r r
	tified Lavore (A5	4) \	Loa		ky Matri	ai (Fi) v (E2)	Very Si	allow Dark S	ullace (IFIZ)
	m Muck (A10)	)	L0a		otriv (E2)	X (FZ)			lai ks)
2 Ci	IT MUCK (ATU)	Surface		leteu Ma	Surface	(E6)			
	bleled Below Dall	( Surface ( A 1 2 )				(F0)	*I. P. 1	<u>(</u> )	
	dy Mucky Minor	AIZ)					^Indicato	rs of nyaroph	ytic vegetation and weitand
5 ai	n Mucky Miller	al (ST) Doot (S2			essions	(го)	nyarolog	gy must be pr	blematic
50	II MUCKY Pear of	Peat (53	<i>)</i> )					pro	biematic
Restrictive	Layer (if observ	ed):							
Туре:					_		Hydric so	oil present?	<u>Y</u>
Depth (inche	es):				_				
Remarks:									
HYDROL	DGY								
Wetland Hy	drology Indicate	ors:							
Primary Indi	cators (minimum	of one is	required; check	all that a	ipply)		Seco	ndary Indicat	ors (minimum of two required
Surface	Water (A1)			Aquatic	Fauna (E	313)		Surface Soil	Cracks (B6)
High Wa	ter Table (A2)			True Aq	uatic Pla	nts (B14)		Drainage Pat	tterns (B10)
Saturati	on (A3)			Hydroge	en Sulfide	odor (C	1)	Dry-Season	Water Table (C2)
Water M	larks (B1)			Oxidized	d Rhizosp	heres on	Living Roots	Crayfish Bur	rows (C8)
Sedime	nt Deposits (B2)			(C3)				Saturation Vi	sible on Aerial Imagery (C9)
Drift De	oosits (B3)			Presenc	e of Red	uced Iron	(C4)	Stunted or S	tressed Plants (D1)
Algal Ma	at or Crust (B4)			Recent	Iron Redu	uction in T	illed Soils	Geomorphic	Position (D2)
Iron Dep	osits (B5)		(DZ)	(C6)		(07)		FAC-Neutral	Test (D5)
		ai imager	y (B7)		ICK Surfac	ce (C7)			
Sparser	vegetated Conca	ave Suria	се (В8)	Gauge (	or vveli Da Tvolcin in	ata (D9) Domorko	<b>\</b>		
water-s	tained Leaves (Ds	)			zxpiain in	Remarks	)	•	
Field Obser	vations:	M		v	Decite (				
Surface wat	er present?	Yes	No	<u>X</u>	Depth (	inches):		Indiaa	tere of wotlend
vvaler table	present?	res		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Depth (	inches):		Indica	lors of welland
Jaturation p	nesent?	res	INO	~		ncnes):		nyard	
					1			<u> </u>	
Describe re	corded data (strea	am gaug	e, monitoring well	, aerial p	photos, p	revious li	ispections), if av	allable:	
Remarke:									
Komarka.									



WA054 overview looking east.



Wetland Sample Point WA054A.



Non-wetland sample point WA054B.



WETLAND DETERMIN	ATION DATA FORM - Midwest Region
Project/Site: Hayward Solar 0	City/County: Freeborn County Sampling Date: 4/27/2020
Applicant/Owner: Hayward Solar LLC	State: Minnesota Sampling Point: NWA004A
Investigator(s): Apryl Jennrich	Section, Township, Range: T102N R20W S13
Landform (hillslope, terrace, etc.): Plain	Local relief (concave, convex, none): None
Slope (%): 1 Lat: 43° 38' 10.48"	Long: -93° 10' 28.96" Datum: WGS84
Soil Map Unit Name: Klossner muck	NWI Classification: NA
Are climatic/hydrologic conditions of the site typical for this tir	me of the year? Y (If no, explain in remarks)
Are vegetation X , soil , or hydrology	significantly disturbed? Are "normal circumstances"
Are vegetation , soil , or hydrology	naturally problematic? present? No
SUMMARY OF FINDINGS	(If needed, explain any answers in remarks.)
Hydrophytic vegetation present? N	
Hydric soil present? Y	Is the sampled area within a wetland? N
Indicators of wetland hydrology present? N	If yes, optional wetland site ID:
VEGETATION Use scientific names of plants.	te report.)
Absol	ute Dominant Indicator Dominance Test Worksheet
<u>Tree Stratum</u> (Plot size:) % Cor 1	ver Species Staus Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
2	Total Number of Dominant  Species Across all Strata: 0 (B)
4	Percent of Dominant Species
5	that are OBL, FACW, or FAC: 0.00% (A/B)
0	= Total Cover
Sapling/Shrub stratum (Plot size:)	Prevalence Index Worksheet
1	Total % Cover of:
2	
3	
5	$\frac{1}{1} = \frac{1}{1} = \frac{1}$
0	= Total Cover UPL species 0 x 5 = 0
Herb stratum (Plot size: )	Column totals 0 (A) 0 (B)
1	Prevalence Index = B/A =
3	Hydrophytic Vegetation Indicators:
4	Rapid test for hydrophytic vegetation
5	Dominance test is >50%
6	Prevalence index is ≤3.0*
7	Morphogical adaptations* (provide
8 9	supporting data in Remarks or on a separate sheet)
	Problematic hydrophytic vegetation*     End Cover     (explain)
Woody vine stratum (Plot size:)	*Indicators of hydric soil and wetland hydrology must be present. unless disturbed or problematic
2	Hydrophytic
0	= Total Cover vegetation present? N
Pomorke: (Include photo numbers here as an a constant	ot)
Corn stubble	=()

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the abs	sence of indicators.)
Uepth (Inches)	Color (moist)	0/2	Color (moist)	<u>40x Fear</u>	<u>ures</u> Type*	1 00**	Texture	Pemarks
		70		70	туре			Remarks
0-16	10YR 2/1	100			-		Silt loam	
16-26	5Y 5/2	96	10YR 4/6	4	С	PL	Silty clay	
Type: C =	Concentration, D	= Depleti	on, RM = Reduc	ed Matrix	k, MS = N	/lasked S	Sand Grains. **Loc	cation: PL = Pore Lining, M = Matrix
Hydric So	oil Indicators:		_				Indicators for P	roblematic Hydric Soils:
His	tisol (A1)		Sar	ndy Gley	ed Matrix	(S4)	Coast Prairie	e Redox (A16) ( <b>LRR K, L, R</b> )
His	tic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark Surface	e (S7) (LRR K, L)
Bla	ck Histic (A3)		Stri	pped Ma	atrix (S6)		Iron-Mangan	ese Masses (F12) (LRR K, L, R)
Hye	drogen Sulfide (A	4)	Loa	my Muc	ky Miner	al (F1)	Very Shallow	/ Dark Surface (TF12)
Stra	atified Layers (A5	)	Loa	my Gley	ed Matrix	x (F2)	Other (explai	n in remarks)
2 c	m Muck (A10)	0.01		Dieted Ma	atrix (F3)			
	pleted Below Dark		e (A11) Red	dox Dark	Surface	(F6)		
<u> </u>	ck Dark Surface (	A12)		Dieted Da	ark Surfa	Ce (F7)	*Indicators of I	hydrophytic vegetation and weltand
Sai	ndy Mucky Minera	11 (S1) De et (C2	, <u> </u>	lox Depr	essions	(F8)	hydrology mu	ist be present, unless disturbed or
<u> </u>	m Mucky Peat or	Peat (S3	)					problematic
Restrictive	Layer (if observe	ed):						
Гуре:					_		Hydric soil pre	esent? Y
Depth (inch	es):				_			
HYDROL	OGY							
Vetland Hy	drology Indicato	ors:						
۔ Primarv Ind	icators (minimum	of one is	required: check	all that a	(vlaa		Secondary	Indicators (minimum of two require
Surface	Water (A1)		roquirou, encon	Aquatic	Fauna (B	313)	Surfa	ace Soil Cracks (B6)
High Wa	ater Table (A2)			True Aa	uatic Pla	nts (B14)	Drai	nage Patterns (B10)
Saturati	on (A3)			Hydroge	en Sulfide	Odor (Ć	1) Dry-	Season Water Table (C2)
Water N	larks (B1)			Oxidized	d Rhizosp	heres on	Living Roots Cray	fish Burrows (C8)
Sedime	nt Deposits (B2)			(C3)			Satu	ration Visible on Aerial Imagery (C9)
Drift De	posits (B3)			Presenc	e of Red	uced Iron	(C4) Stun	ted or Stressed Plants (D1)
Algal Ma	at or Crust (B4)			Recent	Iron Redu	uction in 7	Filled Soils Geo	morphic Position (D2)
Iron Dep	posits (B5)		(2-2)	(C6)		()	FAC	-Neutral Test (D5)
Inundati	on Visible on Aeria	al Imager	y (B7)	Thin Mu	ick Surfac	ce (C7)		
Sparse	y Vegetated Conca	ave Surfa	ce (B8)	Gauge	or Well Da	ata (D9)	<b>`</b>	
Water-S	stained Leaves (B9	)		Other (E	xplain in	Remarks	5)	
Field Obse	rvations:			Ň				
Surface wat	er present?	Yes	No No	<u>X</u>	Depth (	inches):		Indiantary of wotland
valer table	present?	res Vec			Depth (	inches):		hydrology present?
includes ca	nillary fringe)	165		^		mones).		
					- h - t			
Describe re	corded data (strea	am gauge	e, monitoring wel	i, aerial p	onotos, p	revious i	nspections), it availabl	e:
Remarks:								



NWA004 overview looking southwest.

WETLAN	D DETERMINATI	ON DAT	A FORM - M	idwest Re	egion	
Project/Site: Hayward Sola	City	/County:	Freeborn Cou	inty Sa	mpling Date:	4/28/2020
Applicant/Owner: Hayward Solar LLC		State	: Minnesot	ta Sa	mpling Point:	NWA017A
Investigator(s): Apryl Jennrich		Sec	tion, Township	, Range:	T102	N R20W S13
Landform (hillslope, terrace, etc.):	Plain	Loca	al relief (conca	ve, convex,	none):	None
Slope (%): 1 Lat: 43	° 37' 50.44"	Long:	-93° 10' 23	3.08" E	Datum:	WGS84
Soil Map Unit Name:	Canisteo clay loam		NWI C	lassification	ייי	NA
Are climatic/hydrologic conditions of the site	typical for this time	of the year	? Y (	lf no, explai	n in remarks)	
Are vegetation X , soil	or hydrology	significar	ntly disturbed?	Δ	Are "normal circ	umstances"
Are vegetation, soil	or hydrology	naturally	problematic?	,		present? No
SUMMARY OF FINDINGS		-		(If neede	d, explain any a	inswers in remarks.)
Hydrophytic vegetation present?	Ν					
Hydric soil present?	N	Is the sa	mpled area w	vithin a wet	land?	Ν
Indicators of wetland hydrology present	N	If yes, o	ptional wetland	d site ID:		
			'			
Remarks: (Explain alternative procedures he	re or in a separate r	eport.)				
VEGETATION Use scientific name	s of plants.					
	Absolute	Dominan	t Indicator	Dominar	nce Test Works	sheet
Tree Stratum (Plot size:	) % Cover	Species	Staus	Number o	f Dominant Spe	cies
2				that are O	BL, FACW, of F	AC: 0 (A)
3				l otal N Specie	es Across all Str	nant ata: 0 (B)
4				Percent o	f Dominant Spe	
5		·		that are O	BL, FACW, or F	AC: 0.00% (A/B)
	0	= Total Co	ver			、
Sapling/Shrub stratum (Plot size:	)	-		Prevalen	ice Index Work	sheet
1		<u></u>		Total % C	Cover of:	
2				OBL spe	cies 0	x 1 = 0
3				FACW sp	pecies 0	x = 0
4 				FAC spec	cles <u> </u>	$x_3 = 0$
		= Total Co				x = 0
Herb stratum (Plot size:	)	- 10tal 00	VCI	Column t	otals 0	(A) = 0 (B)
1	/			Prevalen	ce Index = $B/A$	=
2				Trovalori		
3				Hydroph	ytic Vegetatio	n Indicators:
4		·		Rapio	d test for hydro	phytic vegetation
5				Domi	inance test is >	50%
6				Preva	alence index is	≤3.0*
7				Morp	hogical adaptat	ions* (provide
8				supp	orting data in R	emarks or on a
9				sepa	rate sneet)	
10		= Total Co		Probl (expl	iematic nydropr ain)	ivtic vegetation <sup>*</sup>
Woody vine stratum (Plot size:	)	- 10tal 00	VCI	(0,p)	() () () () () () () () () () () () () (	
1	/			*Indicator	s of hydric soil and esent, unless distu	wetland hydrology must be rbed or problematic
2		·		Hydr	ophytic	
	0	= Total Co	ver	vege	tation	
				pres	ent?	۱ <u> </u>
Remarks: (Include photo numbers here or o	n a separate sheet)					
Corn stubble and ragweed						

Depth (Inches) 0-16			-					•
(Inches) 0-16	Matrix		Re	dox Feat	ures			
0-16	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
10.00	10YR 2/1	100					Silt loam	
16-20	10YR 2/1	99	10YR 5/6	1	С	PL	Sandy clay	
20-25	2.5Y.3/1	99	10YR 5/6	1	C	PI	Sandy clay	
25.28	2.57 4/2	100	101110,0		Ű		Sand	
20-20	2.51 4/2	100			0		Canalysis	
28-33	2.51 4/2	95	10YR 5/6	5	U U	PL	Sandy clay	with trace gravei
*Type: C =	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	, MS = N	lasked S	and Grains. **Loca	tion: PL = Pore Lining, M = Matrix
Hydric S	oil Indicators:						Indicators for Pro	blematic Hydric Soils:
His	stisol (A1)		Sar	ndy Gleye	ed Matrix	: (S4)	Coast Prairie	Redox (A16) ( <b>LRR K, L, R</b> )
His	stic Epipedon (A2)	)	Sar	ndy Redo	ox (S5)		Dark Surface	(S7) ( <b>LRR K, L)</b>
Bla	ack Histic (A3)		Stri	pped Ma	trix (S6)		Iron-Mangane	se Masses (F12) ( <b>LRR K, L, R</b> )
Hy	drogen Sulfide (A	4)	Loa	my Mucl	ky Minera	al (F1)	Very Shallow	Dark Surface (TF12)
Str	atified Layers (A5	)	Loa	my Gley	ed Matrix	(⊦2)	Other (explain	in remarks)
2 c	m Muck (A10)	0		Dieted Ma	atrix (F3)	(50)		
	pleted Below Darl	K Surface	(A11) Red	lox Dark	Surface	(F6) aa (E7)	<b>.</b>	
	ick Dark Surface (	AIZ)		dox Dopr	ark Suria		*Indicators of hy	/drophytic vegetation and weltand
5 c	m Mucky Peat or	II (01) Deat (93		lox Debi	65510115 (	(го)	nyurology mus	problematic
		1 eat (00	)					problematio
Restrictive	Layer (if observ	ed):						
Type:	<b>`</b>				-		Hydric soil pres	ent? <u>N</u>
Depth (inch	ies):				-			
HYDROL	OGY							
Wetland H	vdrology Indicate	nrs:						
Primary Ind	licators (minimum	of one is	required check	all that a	nnlv)			
<u>Filliary III0</u> Surface	Water (A1)		required, check		<u>ppiy)</u>		Secondary	ndiantara (minimum of two required)
Juinace	ater Table (A2)			angue	Fauna (B	13)	<u>Secondary</u>	Indicators (minimum of two required)
High VV	ion (A3)			Aquatic	Fauna (B uatic Plar	13) nts (B14)	Secondary Surfac	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10)
High W Saturat	· · · /			True Aq Hydroge	Fauna (B uatic Plar n Sulfide	13) nts (B14) Odor (C <sup>2</sup>	Secondary Surfac Draina I) Dry-S	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2)
Saturat	Marks (B1)		=	True Aq Hydroge Oxidized	Fauna (B uatic Plar n Sulfide I Rhizosp	13) nts (B14) Odor (C <sup>2</sup> heres on	Secondary Surface Draina I) Dry-S Living Roots Crayfi	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8)
High W Saturat Water M Sedime	Marks (B1) ent Deposits (B2)		=	Aquatic True Aq Hydroge Oxidized (C3)	Fauna (B uatic Plar n Sulfide I Rhizosp	13) hts (B14) Odor (C <sup>2</sup> heres on	Secondary Surface Draina I) Dry-S Living Roots Crayfi Satura	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9)
High W Saturat Water M Sedime Drift De	Marks (B1) ent Deposits (B2) eposits (B3)			Aquatic True Aq Hydroge Oxidized (C3) Presenc	Fauna (B uatic Plar n Sulfide I Rhizosp e of Redu	13) hts (B14) Odor (C <sup>2</sup> heres on uced Iron	Secondary Surface Draina I) Dry-S Living Roots Crayfi Satura (C4) X Stunte	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1)
High W Saturat Water M Sedime Drift De Algal M	Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4)			Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I	Fauna (B uatic Plar n Sulfide I Rhizosp e of Redu iron Redu	13) nts (B14) Odor (C <sup>2</sup> heres on uced Iron uction in T	Secondary Surfac Draina I) Dry-S Living Roots Crayfi Satura (C4) X Stunte illed Soils Geom	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) forphic Position (D2)
High W Saturat Water N Sedime Drift De Algal M Iron De	Marks (B1) ent Deposits (B2) posits (B3) at or Crust (B4) posits (B5)			Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6)	Fauna (B uatic Plar n Sulfide Rhizosp e of Redu ron Redu	13) hts (B14) Odor (C <sup>2</sup> heres on uced Iron uction in T	I) Surfact Draina Living Roots Crayfi (C4) X Stunte FAC-I	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) iorphic Position (D2) Neutral Test (D5)
High W Saturat Water N Sedime Drift De Algal M Iron De Inundat	Marks (B1) ent Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria	al Imagery	(B7)	Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu	Fauna (B uatic Plar on Sulfide d Rhizosp e of Redu ron Redu ck Surfac	13) odor (C <sup>2</sup> heres on uced Iron uction in T ee (C7)	Secondary Surfac Draina Dry-S Living Roots Crayfi (C4) X Sturfac (C4) X Sturfac FAC-I	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) iorphic Position (D2) Neutral Test (D5)
High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse	Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria ly Vegetated Conce Stained Leaves (BS	al Imagery ave Surfa	(B7) (B8)	Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge C	Fauna (B uatic Plar n Sulfide d Rhizosp e of Redu ron Redu ck Surfac or Well Da	13) nts (B14) Odor (C <sup>2</sup> heres on uced Iron action in T re (C7) ata (D9) Remarks	Secondary Surface Draina I) Dry-S Living Roots Crayfi Satura (C4) X Stunte Tilled Soils Geom FAC-I	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
High W Saturat Water M Sedime Drift De Algal M Iron De Inundat Sparsel Water-S	Marks (B1) ent Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria ly Vegetated Conce Stained Leaves (B9	al Imager <u>y</u> ave Surfac	/ (B7)	Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E	Fauna (B uatic Plar n Sulfide l Rhizosp e of Redu ron Redu ck Surfac or Well Da	13) Odor (C <sup>2</sup> heres on uced Iron uction in T ee (C7) ata (D9) Remarks	Secondary Surfac Draina I) Dry-S Living Roots Crayfi Satura (C4) X Stunte iilled Soils Geom FAC-1	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparsel Water-S Field Obse	Marks (B1) ent Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria ly Vegetated Conce Stained Leaves (BS <b>rvations:</b> ter present?	al Imagery ave Surfac )) Yes	(B7) (B7) (B8)	Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E	Fauna (B uatic Plar in Sulfide I Rhizosp e of Redu ron Redu ck Surfac or Well Da Explain in	13) odor (C <sup>2</sup> heres on uced Iron uction in T e (C7) ata (D9) Remarks nches);	Secondary Surfac Draina I) Dry-S Living Roots Crayfi Satura (C4) X Stunte FAC-1	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) torphic Position (D2) Neutral Test (D5)
High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparsel Water-S Field Obse Surface wa Water table	Marks (B1) ent Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria ly Vegetated Conce Stained Leaves (B5 <b>rvations:</b> ter present?	al Imagery ave Surfac 9) Yes Yes	/ (B7) >e (B8) No No	Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E	Fauna (B uatic Plar n Sulfide I Rhizosp e of Redu ron Redu ck Surfac or Well Da xplain in Depth (i	13) odor (C <sup>2</sup> heres on uced Iron iction in T ice (C7) ata (D9) Remarks nches): nches):	Secondary Surfac Draina Dry-S Living Roots (C4) X Stunte FAC-I )	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) iorphic Position (D2) Neutral Test (D5)
High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparsel Water-S <b>Field Obse</b> Surface wa Water table Saturation	Marks (B1) ent Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria ly Vegetated Conca Stained Leaves (B5 <b>rvations:</b> ter present? present?	al Imagery ave Surfac )) Yes Yes Yes	/ (B7) :e (B8) 	Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E X X X	Fauna (B uatic Plar n Sulfide Rhizosp e of Redu ron Redu ck Surfac or Well Da ixplain in Depth (i Depth (i	13) hts (B14) Odor (C <sup>2</sup> heres on uced Iron iction in T ice (C7) ata (D9) Remarks nches): nches): nches):	Secondary Surfac Draina Dry-S Living Roots Crayfi (C4) X Stunte Tilled Soils Geom FAC-I	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) iorphic Position (D2) Neutral Test (D5)
High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparsel Water-S Field Obse Surface wa Water table Saturation J (includes ca	Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria by Vegetated Conce Stained Leaves (B5) <b>rvations:</b> ter present? e present? present? apillary fringe)	al Imagery ave Surfac )) Yes Yes Yes	/ (B7) :e (B8) 	Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E X X X	Fauna (B uatic Plar on Sulfide d Rhizosp e of Redu ron Redu ck Surfac or Well Da ixplain in Depth (i Depth (i	13) hts (B14) Odor (C' heres on uced Iron action in T e (C7) ata (D9) Remarks nches): nches): nches):	Secondary Surfac Draina Dry-S Living Roots Crayfi Satura (C4) X Stunta iilled Soils Geom FAC-I	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparsel Water-S Field Obse Surface wa Water table Saturation J (includes ca Describe re	Marks (B1) ant Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria ly Vegetated Conce Stained Leaves (B5 <b>rvations:</b> ter present? present? present? apillary fringe) ecorded data (stre	al Imagery ave Surfac )) Yes Yes Yes Yes	/ (B7) >e (B8) No No No No No	Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E X X X	Fauna (B uatic Plar n Sulfide d Rhizosp e of Redu ron Redu ck Surfac or Well Da ixplain in Depth (i Depth (i Depth (i	13) hts (B14) Odor (C' heres on uced Iron action in T e (C7) ata (D9) Remarks nches): nches): nches): revious ir	Secondary Surfac Draina Dry-S Living Roots Crayfi Satura (C4) X Stunte illed Soils Geom FAC-I	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)
High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparsel Water-S Field Obse Surface wa Water table Saturation p (includes ca Describe re	Marks (B1) ent Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria ly Vegetated Conca Stained Leaves (B5 <b>rvations:</b> ter present? present? present? apillary fringe) corded data (stre	al Imagery ave Surfac )) Yes Yes Yes am gauge	/ (B7) ce (B8) No No No No No	Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E X X X	Fauna (B uatic Plar in Sulfide I Rhizosp e of Redu ron Redu ck Surfac or Well Da ixplain in Depth (i Depth (i bootos, plantice)	13) odor (C <sup>2</sup> heres on uced Iron uction in T ee (C7) ata (D9) Remarks nches): nches): nches): revious ir	Secondary Surfac Draina Dry-S Living Roots Crayfi Satura (C4) X Stunte FAC-1 )	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) torphic Position (D2) Neutral Test (D5)
High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparsel Water-S Field Obse Surface wa Water table Saturation µ (includes ca Describe re	Marks (B1) ent Deposits (B2) oposits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria y Vegetated Conce Stained Leaves (B5 rvations: ter present? opresent? opresent? apillary fringe) corded data (stree	al Imagery ave Surfac 9) Yes Yes Yes am gauge	/ (B7) ce (B8) No No No No No	Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E X X	Fauna (B uatic Plar n Sulfide l Rhizosp e of Redu ron Redu ck Surfac or Well Da xplain in Depth (i Depth (i	13) hts (B14) Odor (C <sup>2</sup> heres on uced Iron iction in T ice (C7) ata (D9) Remarks nches): nches): nches): revious ir	Secondary Surfact Draina Dry-S Living Roots Crayfi Satura (C4) X Stunte FAC-I )	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) iorphic Position (D2) Neutral Test (D5)
High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparsel Water-S Field Obse Surface wa Water table Saturation p (includes ca Describe re	Marks (B1) ent Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria y Vegetated Conce Stained Leaves (B5 <b>rvations:</b> ter present? present? present? present? apillary fringe) ecorded data (stree	al Imagery ave Surfac )) Yes Yes Yes am gauge	/ (B7) ce (B8) No No No No	Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E X X X	Fauna (B uatic Plar n Sulfide l Rhizosp e of Redu ron Redu ck Surfac or Well Da ixplain in Depth (i Depth (i	13) hts (B14) Odor (C <sup>2</sup> heres on uced Iron totion in T ata (D9) Remarks nches): nches): nches): revious ir	Secondary Surfac Draina Dry-S Living Roots Crayfi Satura (C4) X Stunte FAC-I )	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) iorphic Position (D2) Neutral Test (D5)
High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparsel Water-S Field Obse Surface wa Water table Saturation I (includes ca Describe re	Marks (B1) ent Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria y Vegetated Conca Stained Leaves (B5 <b>rvations:</b> ter present? present? present? apillary fringe) ecorded data (stree	al Imagery ave Surfac )) Yes Yes Yes am gauge	/ (B7) 2e (B8) No No No No 3, monitoring wel	Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E X X X	Fauna (B uatic Plar on Sulfide d Rhizosp e of Redu ron Redu ck Surfac or Well Da ixplain in Depth (i Depth (i boots, pu	13) hts (B14) Odor (C' heres on uced Iron action in T e (C7) ata (D9) Remarks nches): nches): nches): revious ir	Secondary Surfact Draina Dry-S Living Roots Crayfi (C4) X Sturta (C4) X Sturta Geom FAC-I )	Indicators (minimum of two required) the Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) iorphic Position (D2) Neutral Test (D5) Indicators of wetland hydrology present? N
High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparsel Water-S Field Obse Surface wa Water table Saturation p (includes ca Describe re	Marks (B1) ent Deposits (B2) eposits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria ly Vegetated Conce Stained Leaves (B5 <b>rvations:</b> ter present? e present? e present? apillary fringe) ecorded data (stree	al Imagery ave Surfac )) Yes Yes Yes am gauge	/ (B7) ce (B8) No No No No	Aqualic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E X X X	Fauna (B uatic Plar on Sulfide d Rhizosp e of Redu ron Redu ck Surfac or Well Da ixplain in Depth (i Depth (i Depth (i	13) hts (B14) Odor (C' heres on uced Iron action in T e (C7) ata (D9) Remarks nches): nches): nches): revious ir	Secondary Surfac Draina Dry-S Living Roots Crayfi Satura (C4) X Stunte FAC-T )	Indicators (minimum of two required) ce Soil Cracks (B6) age Patterns (B10) eason Water Table (C2) sh Burrows (C8) ation Visible on Aerial Imagery (C9) ed or Stressed Plants (D1) orphic Position (D2) Neutral Test (D5)



NWA017 overview looking northwest.

WETLAND	DETERMINATI	ON DATA FORM - N	lidwest Region	
Project/Site: Hayward Solar	City/	County: Freeborn Co	unty Sampling Date	4/28/2020
Applicant/Owner: Hayward Solar LLC		State: Minneso	ota Sampling Poin	t: NWA018A
Investigator(s): Apryl Jennrich		Section, Townshi	p, Range: T	102N R20W S13
Landform (hillslope, terrace, etc.):	Plain	Local relief (conca	ave, convex, none):	None
Slope (%): 2 Lat: 43° 3	7' 51.85"	 Long: -93° 10' 2	3.19" Datum:	WGS84
Soil Map Unit Name: Gle	encoe clay loam	NWI (	Classification:	NA
Are climatic/hydrologic conditions of the site ty	pical for this time of	of the year? Y	(If no, explain in remarks	3)
Are vegetation X , soil , or	hydrology	significantly disturbed?	Are "normal	, circumstances"
Are vegetation , soil , or	hydrology	naturally problematic?	Are norman	present? No
SUMMARY OF FINDINGS	, , , , , , , , , , , , , , , , , , , ,		(If needed, explain a	ny answers in remarks.)
Hydrophytic vegetation present?	Ν			• · ·
Hydric soil present?	N	Is the sampled area v	vithin a wetland?	Ν
Indicators of wetland hydrology present?	Y	If ves. optional wetlar	nd site ID:	
	· · ·			
Remarks: (Explain alternative procedures here	or in a separate re	eport.)		
VEGETATION Use scientific names of	of plants.			
	Absolute	Dominant Indicator	Dominance Test Wo	orksheet
Tree Stratum (Plot size:	) % Cover	Species Staus	Number of Dominant S	Species
1		·	that are OBL, FACW, o	or FAC: 0 (A)
3		·	Total Number of Do	ominant Strata: 0 (B)
4		·	Porcent of Dominant 9	
5		·	that are OBL, FACW,	or FAC: 0.00% (A/B)
	0	= Total Cover		(```)
Sapling/Shrub stratum (Plot size:	)		Prevalence Index W	/orksheet
1			Total % Cover of:	
2			OBL species 0	x 1 =0
3			FACW species 0	x 2 = 0
4		·	FAC species 0	$x^{3} = 0$
5		- Total Covor	FACU species 0	x 4 = 0
Herb stratum (Plot size:	)		Column totals	(A) = 0 (B)
1	/		Brovelence Index - E	
2		·		
3		·	Hvdrophytic Vegeta	tion Indicators:
4		· ·	Rapid test for hy	drophytic vegetation
5		·	Dominance test i	is >50%
6			Prevalence index	c is ≤3.0*
7			Morphogical ada	ptations* (provide
8			supporting data i	n Remarks or on a
9		·	separate sheet)	
10		- Total Cover	Problematic hydr	ophytic vegetation*
Woody vine stratum (Plot size <sup>,</sup>	)			
1	/		*Indicators of hydric soil present, unless	and wetland hydrology must be disturbed or problematic
2		·	Hydrophytic	
	0	= Total Cover	vegetation	
			present?	<u>N</u>
Remarks: (Include photo numbers here or on a	separate sheet)			
Corn stubble and ragweed				

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the abs	ence of indicators.)
Depth	<u>Matrix</u>		Rec	dox Feat	ures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-12	10YR 2/1	100					Clay loam	
12-19	10YR 2/1	100					Clay	
19-22	2.5Y 3/1	100				1	Clav	
22-27	2.5V 5/2	00	10VR 1/6	1	C	PI	Clay	
22-21	2.01 0/2	33	1011( 4/0	1	0		Cidy	
*Type: C = 0	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	, MS = N	/lasked S	and Grains. **Loc	ation: PL = Pore Lining, M = Matrix
Hydric So	il Indicators:						Indicators for Pr	oblematic Hydric Soils:
His	tisol (A1)		San	dy Gleye	ed Matrix	(S4)	Coast Prairie	Redox (A16) ( <b>LRR K, L, R</b> )
His	tic Epipedon (A2)		San	dy Redo	ox (S5)		Dark Surface	(S7) ( <b>LRR K, L)</b>
Bla	ck Histic (A3)		Stri	pped Ma	trix (S6)		Iron-Mangane	ese Masses (F12) ( <b>LRR K, L, R</b> )
Нус	drogen Sulfide (A	4)	Loa	my Mucł	ky Minera	al (F1)	Very Shallow	Dark Surface (TF12)
Stra	atified Layers (A5	)	Loa	my Gley	ed Matrix	x (F2)	Other (explain	n in remarks)
2 ci	m Muck (A10)			leted Ma	atrix (F3)	()		
Dep 	bleted Below Dark	(Surface	(A11)Rec	lox Dark	Surface	(F6)		
	ck Dark Surface (	A12)	Dep	leted Da	ark Surta		*Indicators of h	hydrophytic vegetation and weltand
Sar	ndy Mucky Minera	al (51) Deet (82	, <u> </u>	lox Depr	essions	(F8)	nyarology mu	st be present, unless disturbed or
5 Cl	п миску Реагог	Pear (55	)					problematic
Restrictive	Layer (if observe	ed):						
Type:					-		Hydric soil pre	sent? N
Depth (inche	es):							
Remarks:								
HYDROL	DGY							
Wetland Hy	drology Indicate	ors:						
Primary Indi	<u>cators (minimum</u>	of one is	required; check	all that a	pply)		Secondary	Indicators (minimum of two required
Surface	Water (A1)			Aquatic	Fauna (B	13)	Surfa	ace Soil Cracks (B6)
High Wa	ater Table (A2)			True Aq	uatic Plar	nts (B14)	Drair	nage Patterns (B10)
Saturatio	on (A3)			Hydroge	n Sulfide	Odor (C	1) Dry-S	Season Water Table (C2)
Water N	larks (B1)			Oxidized	l Rhizosp	heres on	Living Roots Cray	fish Burrows (C8)
Sedimer	nt Deposits (B2)			(C3) Dracana	a of Dod	upped Iron	X Satu	ration Visible on Aerial Imagery (C9)
	osiis (B3)			Presenc Recent I	ron Redu	ucea iron	(C4) X Stun	norphic Position (D2)
Iron Der	acordination (B5)			(C6)	IONINEUL		FAC.	Neutral Test (D5)
Inundati	on Visible on Aeria	al Imager	/ (B7)	Thin Mu	ck Surfac	ce (C7)		
Sparsel	Vegetated Conca	ave Surfa	ce (B8)	Gauge c	or Well Da	ata (D9)		
Water-S	tained Leaves (B9	))		Other (E	xplain in	Remarks	)	
Field Obser	vations:							
Surface wat	er present?	Yes	No	Х	Depth (i	inches):		
Water table	present?	Yes	No	Х	Depth (i	inches):		Indicators of wetland
Saturation p	resent?	Yes	No	Х	Depth (i	inches):		hydrology present? Y
(includes ca	pillary fringe)							
Describe ree	corded data (strea	am gauge	e, monitoring well	, aerial p	hotos, p	revious i	nspections), if available	9:
Domortori								
Remarks:								



NWA018 overview looking north.

WETLAND D	DETERMINATIO	ON DATA	FORM - Mi	idwest	Region	
Project/Site: Hayward Solar	City/	County:	Freeborn Cou	nty	Sampling Da	te: 4/28/2020
Applicant/Owner: Hayward Solar LLC		State:	Minnesot	a	Sampling Poi	nt: NWA020A
Investigator(s): Apryl Jennrich		Sect	ion, Township,	, Range:	-	T102N R20W S13
Landform (hillslope, terrace, etc.): Bro	ad depression	Loca	l relief (concav	ve, conve	ex, none):	Concave
Slope (%): 2 Lat: 43° 37	" 56.68"	Long:	-93° 10' 21	.74"	Datum:	WGS84
Soil Map Unit Name: Mar	rshan silt loam		NWI C	lassificat	tion:	NA
Are climatic/hydrologic conditions of the site typ	ical for this time o	f the year?	Y (I	f no, exp	lain in remar	ks)
Are vegetation X , soil , or	hydrology	significan	tly disturbed?		Are "norma	l circumstances"
Are vegetation, soil, or	hydrology	naturally	problematic?			present? No
SUMMARY OF FINDINGS				(If nee	ded, explain	any answers in remarks.)
Hydrophytic vegetation present?	N					
Hydric soil present?	Y	Is the sa	mpled area wi	ithin a w	vetland?	N
Indicators of wetland hydrology present?	Ν	lf yes, o	ptional wetland	d site ID:		
Remarks: (Explain alternative procedures here of VEGETATION Use scientific names of	or in a separate re	eport.)				
	Absolute	Dominant	Indicator	Domir	nance Test V	/orksheet
Tree Stratum (Plot size:	) % Cover	Species	Staus	Numbe	er of Dominant	Species
1				that are	e OBL, FACW	, or FAC: 0 (A)
2				Tota	al Number of [	Dominant
3				Spe	ecies Across a	all Strata: 0 (B)
4				Percer	nt of Dominant	Species
5		<b>T</b> ( ) O		that are	e OBL, FACW	, or FAC: 0.00% (A/B)
Sapling/Shrub stratum         (Plot size:           1	)   			Preval Total 9 OBL s FACW FAC s FACU UPL s Colum	lence Index         % Cover of:         pecies         / species         pecies         pecies         pecies         in totals	Worksheet         0       x 1 =       0         0       x 2 =       0         0       x 3 =       0         0       x 4 =       0         0       x 5 =       0         0       (A)       0       (B)
1				Preval	ence Index =	B/A =
2 3 4 5 6				Hydro Ra Do Pr	phytic Vege apid test for h ominance tes revalence inde	tation Indicators: ydrophytic vegetation t is >50% ex is ≤3.0*
/ 8				Mo	orphogical ad	aptations* (provide in Remarks or on a
9			<u> </u>	se	parate sheet	)
10			- <u> </u>	Pr	oblematic hy	drophytic vegetation*
	0	= Total Cov	er	(e:	xplain)	
<u>Woody vine stratum</u> (Plot size:	)			*Indica	ators of hydric so present, unles	il and wetland hydrology must be s disturbed or problematic
۷	0	= Total Cov	rer	ve pr	egetation resent?	<u>N</u>
Remarks: (Include photo numbers here or on a Corn stubble from previous year does	separate sheet) s not appear str	essed.				

(Inches) 0-20				Red	dox Feat	ures					
0-20	Color (moist)	%	Color (I	moist)	%	Type*	Loc**	Texture		Remarks	
0 20	10YR 2/1	100	- (	,				Silty clay			
20-26	10VR 3/1	97		2 1/6	3	C	PI	Clay			
20-20	0.5% 5/0	97	1011	X 4/0	3			Clay			
20-30	2.51 5/2	98		x 4/0	2		PL DI (14				
30-37	2.5Y 5/2	85	10YR	R 4/6	15	С	PL/M	Sandy clay			
Hydric Soi Hydric Soi Histi Histi Blac Hydri Stra 2 cn Dep X Thic	il Indicators: isol (A1) ic Epipedon (A2) k Histic (A3) rogen Sulfide (A4 tified Layers (A5 n Muck (A10) leted Below Dark k Dark Surface ( dy Mucky Minera	4) ) ( Surface A12) II (S1) Dest (S2	- - - - - - - - - - - - - - - - - - -	Sar Sar Stri Loa Dep Rec Dep Rec	ndy Gleye ndy Redo pped Ma my Mucl my Gley pleted Ma dox Dark pleted Da dox Depr	ed Matrix ox (S5) ttrix (S6) ky Minera ed Matrix atrix (F3) Surface ark Surfa essions (	al (F1) (F2) (F6) (F6) (F8)	Indicators f Coast F Dark Su Iron-Ma Very Sh Other (e *Indicator hydrolog	rs of hydro	matic Hydric Soils: ox (A16) (LRR K, L, R) ) (LRR K, L) Masses (F12) (LRR K, I k Surface (TF12) remarks) phytic vegetation and w present, unless disturb problematic	-, R) reltance
5 cm estrictive I ype: epth (inche emarks:	n Mucky Peat or Layer (if observe is):	ed):				-		Hydric so	il present	? <u>Y</u>	
Salu 5 cm 5 cm ype: pepth (inche cemarks: IYDROLC Vetland Hyd vimary Indic Surface V High Wat Saturatio Water Ma Sedimen	n Mucky Peat or Layer (if observe as): DGY drology Indicato cators (minimum Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2)	ors: of one is	, required;	; check :	all that a Aquatic True Aq Hydroge Oxidizeo (C3)	<u>pply)</u> Fauna (B uatic Plar en Sulfide d Rhizosp	13) hts (B14) Odor (C1 heres on	Hydric so	ndary India Surface S Drainage Dry-Sease Crayfish E Saturatior	<b>?</b> Y <u>cators (minimum of two</u> ioil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Image	requii
Sann 5 cm 5 cm ype: pepth (inche cemarks: IYDROLC Vetland Hyd Vetland Hyd Vetland Hyd Saturatio Water Ma Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Inundatic Sparsely Water-St	n Mucky Peat or Layer (if observer is): DGY drology Indicato cators (minimum Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aeria Vegetated Conca iained Leaves (B9	al Imagery ave Surface)	, required; γ (B7) ce (B8)	; check :	all that a Aquatic True Aq Hydroge Oxidized (C3) Presenc (C6) Thin Mu Gauge c Other (E	pply) Fauna (B uatic Plar n Sulfide d Rhizosp d Rhizosp iron Redu iron Redu ck Surfac or Well Da	13) hts (B14) Odor (C1 heres on uced Iron uction in T ata (D9) Remarks	Hydric so	ndary India Surface S Drainage Dry-Sease Crayfish E Saturatior Stunted o Geomorpl FAC-Neut	<b>?</b> Y <u>cators (minimum of two</u> ioil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imagel r Stressed Plants (D1) hic Position (D2) tral Test (D5)	requir y (C9)
sam 5 cm 5 cm septh (inche emarks: iema	n Mucky Peat or Layer (if observer as): DGY drology Indicator cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concatar catined Leaves (B9) vations: ar present?	ed): ors: of one is al Imagery ave Surfact ) Vec	, <u>required;</u> γ (Β7) ce (Β8)		all that a Aquatic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E	pply) Fauna (B uatic Plar en Sulfide d Rhizosp e of Redu Iron Redu ck Surfac or Well Da Explain in	13) hts (B14) Odor (C1 heres on uced Iron uction in T ce (C7) ata (D9) Remarks	Hydric so	Il present	P Y	requii
sam 5 cm 5 cm estrictive I ype: epth (inche emarks: IYDROLC /etland Hyd /etland Hyd /etland Hyd Saturatio Water Ma Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely Water-St ield Obser urface wate /ater table	n Mucky Peat or Layer (if observer as): DGY drology Indicator cators (minimum Water (A1) ter Table (A2) on (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aeria Vegetated Conca cained Leaves (B9 vations: er present? present?	al Imagery ave Surfaction Yes	, <u>required;</u> γ (B7) ce (B8)	; check ;	all that a Aquatic True Aq Hydroge Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E X	pply) Fauna (B uatic Plar en Sulfide d Rhizosp d Rhizosp e of Redu ron Redu ck Surfac or Well Da ixplain in	13) hts (B14) Odor (C1 heres on uced Iron uced Iron iction in T ice (C7) ata (D9) Remarks nches): nches):	Hydric so	il present il present ndary India Surface S Drainage Dry-Seasa Crayfish E Saturatior Stunted o Geomorpl FAC-Neut	Y Cators (minimum of two foil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) to Visible on Aerial Images r Stressed Plants (D1) hic Position (D2) tral Test (D5) Acators of wetland	<u>requi</u>
Same Same Same Same Same Same Same S	n Mucky Peat or Layer (if observe as): DGY drology Indicato cators (minimum Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aeria Vegetated Conca cained Leaves (B9 vations: er present? present?	al Imagery ave Surfac ) Yes Yes Yes	, required; / (B7) ce (B8)	; check :	all that a Aquatic True Aq Hydroge Oxidized (C3) Presenc (C6) Thin Mu Gauge c Other (E X X	pply) Fauna (B uatic Plar en Sulfide d Rhizosp d Rhizosp ce of Redu ron Redu ck Surfac or Well Da Explain in Depth (i Depth (i	13) hts (B14) Odor (C1 heres on uced Iron uced Iron uced Iron ata (D9) Remarks nches): nches): nches):	Hydric so           Seco           )           Living Roots           (C4)           X           illed Soils           )           30	ndary India Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorpl FAC-Neut	? Y cators (minimum of two soil Cracks (B6) Patterns (B10) on Water Table (C2) Burrows (C8) n Visible on Aerial Imager r Stressed Plants (D1) hic Position (D2) tral Test (D5) ficators of wetland drology present?	y (C9)



NWA020 overview looking northeast.

			idwest Region	4/00/0000
Project/Site: Hayward Solar	City/County:	Freeborn Cou	nty Sampling Dat	ie: 4/29/2020
Applicant/Owner: Hayward Solar LLC		ale: winneso		
Landform (billelong, terrange, etc.):	c	section, Township		
Slope (%): 2 Lat: 43° 37' 56 68"			74" Datum:	WCS84
Soil Man Linit Name: Madelin silty clay	Long.	-93 10 21		NA
Are climatic/hydrologic conditions of the site typical for this	time of the ve	$\overline{ar^2} \vee ($	If no, evolain in remark	
Are vegetation X soil or hydrology	signifi	cantly disturbed?		:
Are vegetation soil or hydrology	natura	ally problematic?	Are norma	present? No
SUMMARY OF FINDINGS		ing problemade.	(If needed, explain a	any answers in remarks.)
Hydrophytic vegetation present? N				
Hydric soil present? N	Is the	sampled area w	ithin a wetland?	<u> </u>
Indicators of wetland hydrology present? N	If yes	s, optional wetlan	d site ID:	
VEGETATION Use scientific names of plants.	rate report.)			
Abs	olute Domir	ant Indicator	Dominance Test W	/orksheet
Tree Stratum (Plot size:) % C	Cover Spec	ies Staus	Number of Dominant	Species
1			that are OBL, FACW	, or FAC: 0 (A)
2		·	Total Number of D	Dominant
3			Species Across a	III Strata: 0 (B)
5			that are OBL. FACW	Species or FAC: 0.00% (A/B)
	0 = Total	Cover		()
Sapling/Shrub stratum (Plot size: )			Prevalence Index	Worksheet
1			Total % Cover of:	
2		·	OBL species	$\frac{0}{2} \times 1 = 0$
3				$\frac{0}{0}$ x 2 = 0
5			FACU species	$\frac{0}{0} \times 4 = 0$
	0 = Total	Cover	UPL species	$\frac{1}{0} x 5 = 0$
Herb stratum (Plot size: )			Column totals	0 (A) 0 (B)
1			Prevalence Index =	B/A =
2				
3		·	Hydrophytic Vege	ation Indicators:
4			Rapid test for h	ydrophytic vegetation
6			Prevalence inde	ns >50 /₀ ex is ≤3 0*
7			Morphogical ad	antations* (provide
8			supporting data	in Remarks or on a
9			separate sheet	)
10	0 = Total	Cover	Problematic hyd (explain)	drophytic vegetation*
<u>Woody vine stratum</u> (Plot size:)			*Indicators of hydric so present, unless	oil and wetland hydrology must be s disturbed or problematic
2			Hydrophytic	
	0 = Total	Cover	vegetation present?	<u>N</u>
Remarks: (Include photo numbers here or on a separate sh Corn stubble and ragweed.	leet)			

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm th	e absence o	of indicators.)
Depth	Depth <u>Matrix</u> (nebce) Color (moint) % Color (moint) %								
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	)	Remarks
0-12	10YR 2/1	100					Silty clay		
12-22	2.5Y 3/1	100					Clay		
22-28	2.5Y 4/1	100					Clav		
							- ,		
*Type: C = (	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	, MS = N	lasked S	and Grains.	**Location: F	PL = Pore Lining, M = Matrix
Hydric So	oil Indicators:						Indicators f	for Problema	atic Hydric Soils:
His	tisol (A1)		San	dy Gleye	ed Matrix	: (S4)	Coast P	Prairie Redox	(A16) ( <b>LRR K, L, R</b> )
His	tic Epipedon (A2)		San	dy Redo	x (S5)		Dark Su	urface (S7) ( <b>L</b>	_RR K, L)
Bla	ck Histic (A3)		Stri	pped Ma	trix (S6)		Iron-Ma	inganese Ma	sses (F12) ( <b>LRR K, L, R</b> )
Hyo	drogen Sulfide (A4	4)	Loa	my Mucł	ky Minera	al (F1)	Very Sh	allow Dark S	Surface (TF12)
Stra	atified Layers (A5	)	Loa	my Gley	ed Matrix	k (F2)	Other (e	explain in ren	narks)
2 ci	m Muck (A10)		Dep	leted Ma	atrix (F3)				
Dep	pleted Below Dark	(Surface	e (A11)Rec	lox Dark	Surface	(F6)			
Thi	ck Dark Surface (	A12)	Dep	leted Da	ark Surfa	ce (F7)	*Indicator	rs of hydroph	ytic vegetation and weltand
Sar	ndy Mucky Minera	al (S1)	、Rec	lox Depr	essions (	(F8)	hydrolog	gy must be pi	resent, unless disturbed or
5 ci	m Mucky Peat or	Peat (S3	)					pro	blematic
Restrictive	Layer (if observe	ed):							
Туре:							Hydric so	il present?	<u>N</u>
Depth (inche	es):								
Remarks:									
HYDROL	DGY								
Wetland Hy	drology Indicate	ors:							
Primary Indi	<u>cators (minimum</u>	of one is	required; check	all that a	<u>pply)</u>		Seco	ndary Indicat	ors (minimum of two required)
Surface	Water (A1)			Aquatic	Fauna (B	13)		Surface Soil	Cracks (B6)
High Wa	ater Table (A2)			True Aq	uatic Plar	nts (B14)		Drainage Pa	tterns (B10)
Saturati	on (A3)			Hydroge	n Sulfide	Odor (C	1)	Dry-Season	Water Table (C2)
Water N	larks (B1)			Oxidized	l Rhizosp	heres on	Living Roots	Crayfish Bur	rows (C8)
Sedimei	nt Deposits (B2)			(C3) Dracana	a of Dod	and Iron		Saturation V	Isible on Aerial Imagery (C9)
	or Crust (B4)			Presenc Recent I	ron Redu	uction in T			Position (D2)
Iron Der	acordination (B5)			(C6)	ION Neur			EAC-Neutral	Test $(D5)$
Inundati	on Visible on Aeria	al Imager	/ (B7)	Thin Mu	ck Surfac	e (C7)		-	
Sparsel	Vegetated Conca	ave Surfa	ce (B8)	Gauge c	or Well Da	ata (D9)			
Water-S	tained Leaves (B9	))		Other (E	xplain in	Remarks	)		
Field Obse	vations:								
Surface wat	er present?	Yes	No	Х	Depth (i	nches):			
Water table	present?	Yes	No	Х	Depth (i	nches):		Indica	tors of wetland
Saturation p	resent?	Yes	No	Х	Depth (i	nches):		hydro	ology present? N
(includes ca	pillary fringe)								
Describe re	corded data (strea	am gauge	e, monitoring well	, aerial p	hotos, p	revious i	nspections), if ava	ailable:	
Domorkov									
Remarks:									



NWA022 overview looking northeast.

Project/Site: Haward Solar	Citv/C	OUNTV: F	FORM - MIC	Iwest Region	e. <u>4/29/2020</u>
Applicant/Owner: Hayward Solar LLC		State:	Minnesota	Sampling Poir	nt: NWA023A
Investigator(s): Aprvl Jennrich		Sectio	n. Township.	Range: 1	102N R20W S13
Landform (hillslope, terrace, etc.): Plain		Local r	elief (concave	. convex. none):	None
Slope (%): 1 Lat: 43° 37' 50.72"		Long:	-93° 10' 33.6	53" Datum:	WGS84
Soil Map Unit Name: Madelin silty cla	lay loam	Ŭ	NWI Cla	assification:	NA
Are climatic/hydrologic conditions of the site typical for the	nis time of	the year?	Y (If	no, explain in remark	s)
Are vegetation X , soil , or hydrology	у	significantly	y disturbed?	Are "normal	circumstances"
Are vegetation , soil , or hydrology	у	naturally pr	oblematic?		present? No
SUMMARY OF FINDINGS				(If needed, explain a	any answers in remarks.)
Hydrophytic vegetation present? N					
Hydric soil present? N		Is the sam	pled area wit	hin a wetland?	N
Indicators of wetland hydrology present? Y		lf yes, opt	ional wetland	site ID:	
Remarks: (Explain alternative procedures here or in a se	eparate rep	port.)			
VEGETATION Use scientific names of plants					
	Absolute	Dominant	Indicator	Dominance Test W	orksheet
Tree Stratum (Plot size:) %	% Cover	Species	Staus	Number of Dominant	Species
1				that are OBL, FACW,	or FAC: 0 (A)
2				Total Number of D	ominant
3				Species Across a	Il Strata: 0 (B)
5				that are OBL. FACW.	or FAC: 0.00% (A/B)
	0 =	Total Cove	r	,,	
Sapling/Shrub stratum (Plot size: )			F	Prevalence Index V	Vorksheet
1				Total % Cover of:	
2				OBL species	0 x 1 = 0
3				FACW species	y = 0
5				FACU species	$\frac{3}{2} \times 4 = 0$
	0 =	Total Cove	r	UPL species	0 x 5 = 0
Herb stratum (Plot size:)				Column totals	0 (A) 0 (B)
1				Prevalence Index =	B/A =
2					
3				Hydrophytic Veget	ation Indicators:
4				Dominance test	is >50%
6				Prevalence inde	ex is ≤3.0*
7				Morphogical ada	aptations* (provide
8				supporting data	in Remarks or on a
9				separate sheet)	
	0 =	Total Cove	r	Problematic hyc (explain)	Irophytic vegetation*
<u>Woody vine stratum</u> (Plot size:) 1				*Indicators of hydric so present, unless	il and wetland hydrology must be disturbed or problematic
2		Tatal O		nyarophytic vegetation	
	0 =	I OTAL COVE	Γ	present?	<u>N</u>
Remarks: (Include photo numbers here or on a separate Corn stubble	sheet)				

Opport         Matrix         Endox Features           (include)         Color (moist)         %         Type'         Loc''         Texture         Remarks           0-18         10YR 21         100         Image: Color (moist)         %         Type'         City         Image: Color (moist)         %         Type'         City         Image: Color (moist)         %         Type: Color (moist)         %         Typ	Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the a	bsence of indicators.)
(Inches)         Color (moist)         %         Type*         Loc*         Texture         Remarks           0-18         017R 2/1         100         1         <	Depth	Matrix		Red	dox Featu	ures			
0-18       10 YR 2:1       100	(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
18-23       2.5Y 3/1       100       Image: constraints of the second	0-18	10YR 2/1	100					Clav	
0.13.2       2.57 4/1       100       0.07	18-23	2 5V 3/1	100					Clay	
25-36       2.51*471       10.0       Image: Sandy baay       With flade strain graver         Type: C = Concentration. D = Depletion. RM = Reduced Matrix. MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matrix         Type: C = Concentration. D = Depletion. RM = Reduced Matrix. (MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matrix         Type: C = Concentration. D = Depletion. RM = Reduced Matrix. (S4)       Coast Praine Redox (A16) (LRR K, L, R)         Histic Explandon (A2)       Sandy Gieyed Matrix. (S4)       Coast Praine Redox (A16) (LRR K, L, R)         Histic Explandon (A2)       Sandy Gieyed Matrix. (S4)       Coast Praine Redox (A16) (LRR K, L, R)         Depleted Dark Surface (F3)       Loarny Mucky Mineral (F1)       Other (Applain in remarks)         D opplated Below Dark Surface (A11)       Redox Dark Surface (F7)       Indicators of hydrophytic vegetation and weltand hydrology must be present. (Iness disturbed or problematal:         Restrictive Layers (If Observed):       Type:       Hydric soil present?       M         Restrictive Layers (If Observed):       Applatif Fauna (B13)       Secondary Indicators (Ininimum of one is required: check all that apply1       Secondary Indicators (Ininimum of one area incelling)       Secondary Indicators (Ininimum of none is required: check all that apply1       Secondary Indicators (Ininimum of none is required: check all that apply1       Secondary Indicators (Ininimum of none is required: check all that apply1       Secondary Indicators	10-20	2.01 0/1	100						
Type: C = Concentration. D = Depletion. RM = Reduced Matrix, MS = Masked Sand Grains.       "Locator: PL = Pore Lining. M = Matrix Type: C = Concentration. D = Depletion. RM = Reduced Matrix, MS = Masked Sand Grains.       "Locator: PL = Pore Lining. M = Matrix Type: C = Concentration. D = Depletion. RM = Reduced Matrix, (S) Histop Experiod (A1)         Yufric Soil Indicators:       Indicators for Problematic Hydric Soils: Histop Experiod (A2)       Sandy Redux (S)       Coast Prairie Redux (D1) (LRR K, L, R)         Histop Experiod (A2)       Sandy Redux (S)       Indicators for Problematic Hydric Soils: Coast Prairie Redux (D1) (LRR K, L, R)       Dark Surface (7) (LRR K, L, R)         Black Histic (A3)       Lamy Glayed Matrix (F2)       Other (explain in remarks)         Depleted Below Dark Surface (A11)       Depleted Dark Surface (F7)       "Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic         Restrictive Layer (if observed):       Period Dark Surface (T1)       Redox Dark Surface (F7)       "Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic         Metric Layer (if observed):       Period Dark Surface (F7)       "Indicators (minimum of two required)         Mark Redux (M11)       Aquatic Fauna (B13)       Surface Soil Carcors         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Carcors         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Carcors         Surfac	23-38	2.51 4/1	100					Sandy clay	with trace small gravel
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matrix         Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matrix         Type: C = Concentration, D = Depletion, RM = Reduced Matrix, (SA)       Indicators for Problematic Redux (19) (LRR K, L, R)         Histic Epipedion (A2)       Simped Matrix (S0)       Onest Surface (S7) (LRR K, L, R)         Histic Epipedion (A2)       Simped Matrix (S0)       Onest Surface (S7) (LRR K, L, R)         Histic Explored on (A2)       Depleted Matrix (S0)       Onest Surface (S7) (LRR K, L, R)         Surface (A10)       Depleted Matrix (S1)       Onest Surface (S7)       Very Shallow Dark Surface (S7)         Surface (A10)       Depleted Dark Surface (S1)       Depleted Dark Surface (S1)       *undextrates (S1)         Surface (Freis)       Redox Depressions (F8)       *undextrates (S1)       *undextrates (S1)         Popeliet Dark Surface (S1)       Redox Depressions (F8)       *undextrates (S1)       Depleted Dark Surface (S1)         Papelint Checks!       Matrix (S1)       Surface Surface (S1)       Depleted Dark Surface (S1)       Depleted Dark Surface (S1)         Popelint Deposite (S1)       Matrix (S2)       Presence (S1)       Surface Surface (S1)       Depleted Dark Surface (S1)       Depleted Dark Surface (S1)       Depleted									
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matrix         Type: C = Concentration, D = Depletion, RM = Reduced Matrix, (S4)       Indicators (Troblematic Hydric Solie:         Histiso (A1)       Sandy Redox (S5)       Casa Praire Redox (A10) (LRR K, L, R)         Back Histis (A3)       Sindp Redox (S5)       Dark Surface (S7) (LRR K, L, R)         Depleted Layers (A5)       Loamy Gleyed Matrix (F3)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F7)       *Indicators of hydrophytic wegletation and weltand hydrology must be present.         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       *Indicators of hydrophytic wegletation and weltand hydrology must be present.         Restrictive Layer (if Observed):       Problematic       *Mydric soli present?       N         Restrictive Layer (if Observed):       Aquatic Plana (B13)       Surface Soli Cracks (B8)       Diariage Pattators (Ininimum of two required)         Surface Water (A1)       Aquatic Plana (B13)       Surface Soli Cracks (B8)       Diariage Pattators (D1)       Surface Soli Cracks (B8)       Diariage Pattators (D1)       Surface Soli Cracks (B1)       Diariage Pattators (D1)       Diariage Pattators (D2)       Caylif B1 angery (C9)       Surface So									
Type: C = Concentration. D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matrix.         Hydro: Soil Indicators:       Indicators for Problematic Hydric Soils:       Indicators for Problematic Hydric Soils:         Histo: Epipedon (A2)       Sandy Gleved Matrix (S4)       Coast Prainte Redox (A10) (LRR K, L, R)         Biack Histic (A3)       Sinpped Matrix (S6)       Indicators for Problematic Redox (A10) (LRR K, L, R)         Biack Histic (A3)       Sinpped Matrix (S6)       Inon-Manganese Masses (F12) (LRR K, L, R)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Inon-Manganese Masses (F12) (LRR K, L, R)         Statified Layers (A5)       Learny Gleved Matrix (F2)       Other (explain in remarks)         Statified Layers (A5)       Redox Depressions (F8)       "Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic         Restrictive Layer (if observed):       Type.       Hydric soil present?       M         Deph (inches):       Redox Depressions (F8)       Surface Water (A1)       Sourd Water (A1)       Sourd Water (A1)         Surface Water (A1)       Aquatic Pana (B13)       X Surface Soil Cracks (B6)       Drainage Patterns (B10)       Drainage Patterns (C1)									
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix, Mydrc Solls:         Type: C = Concentration, D = Depletion, RM = Reduced Matrix, (S4)         Histiso Expledion (A2)         Histiso Expledion (A2)         Histiso Expledion (A2)         Black Histis (A3)         Hydre (A3)         Black Histis (A3)         Black Histis (A3)         Black Histis (A3)         Depleted Below Dark Surface (A11)         Depleted Below Dark Surface (A12)         Sandy Redux Dark Surface (F7)         Popleted Histis (F4)         Surface Water (A1)         Auguate Fauna Redux Dark (B13)         Type:         Popleted Matrix (B1)         Surface Water (A1)         Auguate Fauna Redux Dark Surface (F7)         Saturation (A3)         Hydre Soil Presence of Reduced Iron									
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       "Location: PL = Pore Lining, M = Matrix         Hydro: Soil Indicators:       Indicators for Problematic Hydro: Soils:         Histio: Epipedion (A2)       Sandy Gleyed Matrix (SA)         Black Histic (A3)       Stripped Matrix (SB)         Hydrogen Sulfide Layers (A5)       Loamy Mucky Mineral (F1)         Depleted Below Dark Surface (A11)       Redox Dark Surface (FF1)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)         Depleted Below Dark Surface (A12)       Depleted Matrix (F3)         Sandy Mucky Mineral (S1)       Redox Dark Surface (FF1)         *Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic         Type:									
Type: C = Concentration, D = Depletion, NM = Reduced Matrix, KS = Masked Stands, Tructation (LP = Port Lining, M = Matrix, TS)         Hydric Soil Indicators:         Histiso (A1)         Histiso (A2)         Black Histic (A2)         Black Histic (A3)         Stripped Matrix (S4)         Depletion (A2)         Stripped Matrix (S4)         Depletion (A2)         Stripped Matrix (S5)         Depletion (A2)         Stripped Matrix (S6)         Depletion Suffice (A4)         Depletion Below Dark Surface (A12)         Sandy Mucky Mineral (S1)         Depletion Below Dark Surface (A12)         Sandy Mucky Mineral (S1)         Depletion (robesrved):         Type:         Primary Indicators (Midicators:         Primary Indicators (Midicators (Minimum of one is required; check all that apply)         Surface Water (A1)         Startace (A2)         Startace (A3)         Provesting Startace (C1)         Startace (Minimum of one is required; check all that apply)         Secondary Indicators (minimum of two required)         Secondary Indicators (Minimum of two required)         Yater Marks (B1)       Coxider Rition Rites Pheres OLING Roots         Secondary Indicators (B1)       Craylish Burrows (C3)	***							++1	
Hydrogen Sulfidicators:       Indicators for Problematic Hydro Solits:         Histic Epipedion (A2)       Sandy Redox (S5)         Black-Histic (A3)       Stripped Matrix (S4)         Histic Epipedion (A2)       Sandy Redox (S5)         Histic (A3)       Stripped Matrix (S4)         Stripped Matrix (S6)       Loarny Gleyed Matrix (S7)         Depieted Delox Dark Surface (A12)       Depleted Matrix (S7)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         *Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic         Popt (inches):       N         Popt (inches):       N         Remarks:       Hydrogen Sulfide Odor (C1)         Matriace Water (A1)       Aquatic Plana (B13)         Surface Vater (A1)       Case filtragenees on Living Roots         Surface Vater (A1)       Case filtragenees on Living Roots         Surface Vater (A1)       Case filtragenees on Living Roots	$^{\text{r}}$ Type: C = C	Concentration, D	= Depleti	on, RIVI = Reduce	ed Matrix	, MS = N	lasked S	and Grains. **L	ocation: PL = Pore Lining, M = Matrix
Isitsbol (A1)       Sandy Geleyed Matrix (S4)       Coast Praine Pecko (A10) (LRR K, L, R)         Hists Cippedon (A2)       Sandy Redox (S5)       Loamy Mukey Mierar (IS)       Iron-Manganese Masses (F12) (LRR K, L, R)         Hydrogen Sulfide (A4)       Loamy Mukey Mierar (IF)       Ton-Manganese (TF12)       Other (explain in remarks)         Depleted Below Dark Surface (A12)       Depleted Dark Surface (A12)       Depleted Dark Surface (A12)       Other (explain in remarks)         Sandy Mucky Mierar (IS1)       Redox Depressions (F8)       'Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic         Restrictive Layer (If observed):       Type:       Hydric soil present?       N         Surface Water (A1)       Aquatic Fauna (B13)       X Surface Soil Cracks (B6)       Y         Surface Water (A1)       Aquatic Fauna (B13)       X Surface Soil Cracks (B6)       Dirage Patterns (F10)         Surface Water (A1)       Aquatic Pauna (B13)       X Surface Soil Cracks (B6)       Dirage Patterns (F10)         Surface Water (A1)       Aquatic Pauna (B13)       X Surface Soil Cracks (B6)       Dirage Patterns (F10)         Surface Water (A1)       Aquatic Pauna (B13)       X Surface Soil Cracks (B6)       Dirage Patterns (F10)         Surface Water (A1)       Aquatic Pauna (B13)       X Surface Soil Cracks (B6)       Dirage Patterns (F10) </td <td>Hydric Sc</td> <td>bil indicators:</td> <td></td> <td>0</td> <td></td> <td></td> <td>(04)</td> <td>Indicators for</td> <td>Problematic Hydric Solls:</td>	Hydric Sc	bil indicators:		0			(04)	Indicators for	Problematic Hydric Solls:
Histo Epipedion (A2)       Safety Redox (S3)       Dark Suitace (S1) (LRR K, L, R)         Black Histic (A3)       Loamy Mucky Minral (F1)       Very Shallow Dark Surface (TF12)       Other (explain in remarks)         2 cm Muck (A10)       Depleted Matrix (F2)       Other (explain in remarks)       Other (explain in remarks)         3 sandy Mucky Mineral (S1)       Depleted Matrix (S3)       Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic         Type:       Bedriver (average)       Hydric soil present?       N         Type:       Problematic       Secondary Indicators (minimum of two required)         Surface Valuer (A1)       Aquatic Fauna (B13)       Surface Valuer Table (A2)       Surface Valuer Table (A2)         Surface Valuer (A1)       Aquatic Fauna (B13)       Surface Valuer Table (A2)       Druk Aguatic Fauna (B13)       Drainage Patterns (B10)         Surface Valuer (A1)       Oxidized Ritzopheres on Living Roots       Caraythe Burrows (C8)       Caraythe Burrows (C8)         Saturation (X3)       Presence of Reduced Iron (C1)       Recent Iron Reduction In Tilled Solis       Geomorphic Position (D2)       FAC-Neutral Test (D5)         Iron Deposits (B2)       Ci3       Carayte or Well Data (D9)       Sturation Visible on Aerial Imagery (C9)       Sturation Visible on Aerial Imagery (B7)       Sturation Suitace or Well Data (D9)		(ISOI (A1)		San	idy Gleye	ed Matrix	(54)		rie Redox (A16) (LRR K, L, R)
Bidor Histo (x3)       Stipper Matrix (50)       Internatingation wasses (F12) (LKK K, E, K)         Bydrogen Sutified Layers (A5)       Loamy Mukky (Mineral (F1))       Very Shallow Dark Surface (TF12)         Charles (A4)       Depleted Markx (F2)       Other (explain in remarks)         Depleted Bolow Dark Surface (A12)       Depleted Markx (F2)       Other (explain in remarks)         Thick Dark Surface (A12)       Depleted Markx (F2)       Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic         Restrictive Layer (if observed):       Type:       Hydric soil present?       N         Pythology Indicators:       Primarks:       Problematic       Secondary Indicators (minimum of two required)         Surface Water (A1)       Aquatic Fauna (B13)       X Surface Soil Cracks (B6)       Drainage Patterns (B10)         Surface Water (A1)       Oxidized Phicophenes on Lining Roots       Craylish Burrows (C3)       Saturation (A3)         Water Marks (B1)       Oxidized Phicophenes on Lining Roots       Craylish Burrows (C3)       Saturation (V2)         Secondary Indicators (minimum of one is required: check all that apply)       Saturation (C4)       Saturation (C2)         Water Marks (B1)       Oxidized Phicophenes on Lining Roots       Craylish Burrows (C3)       Saturation (V2)         Sediment Deposts (B2)       (C3)       Craylish B		lic Epipedon (A2)		San	iay Reao	X (S5)		Dark Surfa	Ce(S7)(LKKK, L)
Hydrogen Sulfide (A4)		CK HISTIC (A3)	•	Stri	pped Ma	trix (S6)			
Stratilied Layers (AS)	Hyc	Irogen Sulfide (A4	+) \	Loa	my Much	(y Minera	al (F1)		bw Dark Surface (TF12)
2 cm Nuck (N)       Depleted Balaw Dark Surface (A1)         Bedy Ed Belaw Dark Surface (A12)       Depleted Dark Surface (Ff)         Sandy Mucky Mierael (S1)       Depleted Dark Surface (F7)         Sedim Mucky Peat or Peat (S3)       Peaterstand Stream (F6)         Restrictive Layer (if observed):       r/discontinue of the stream (S1)         Type:       Depleted Mark Surface (F7)         N       Peaterstand Stream (S1)         Restrictive Layer (if observed):       N         Type:       Peaterstand Stream (S1)         Bepth (inches):       N         Remarks:       Secondary Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required)         Saturation (A3)       Aquatic Flama (B13)       X Surface Soil Cracks (B6)         Hyper Deposits (B1)       Oxidized Rhizospheres on Lining Roots       Saturation Visible on Aerial Imagery (C9)         Sediment Deposits (B3)       Presence of Reduced Iron (C4)       Saturation (Position (D2)         Thin Muck Surface (C7)       Thin Muck Surface (C7)       Saturation Position (D2)         Sparsely Vegetade Concave Surface (B8)       Gauge or Weil Data (D8)       F4C-Neutral Test (D5)         Mada More Concave Surface (B8)       Gauge or Weil Data (D8)       F4C-Neutral Test (D5) <td< td=""><td></td><td>atified Layers (A5</td><td>)</td><td>Loa</td><td>my Gley</td><td></td><td>(FZ)</td><td></td><td>lain in remarks)</td></td<>		atified Layers (A5	)	Loa	my Gley		(FZ)		lain in remarks)
Depleted below Dark Sufface (A12)       Depleted Dark Sufface (F7)       *Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic         Sandy Mucky Mineral (S1)       Bedex Depressions (F8)       *Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic         Restrictive Layer (if observed):		n Muck (ATU)	Curfood			Surface	(56)		
		Neled Below Dark			lox Dark	Surface	(F0) 00 (E7)	*I. I'. (	Charles the Charles of Charles and the charles
		dy Mucky Minora	A 12)					"Indicators o	of hydrophytic vegetation and weitand
		n Mucky Peat or	11 (31) Deat (83		lox Depi	25510115 (	(го)	nyurology n	nust be present, unless disturbed of
Restrictive Layer (if observed):       Type:		II MUCKY Feat Of	real (55	)			-		problematic
Type:	Restrictive	Layer (if observe	ed):						
Depth (inches):	Туре:							Hydric soil p	resent? N
Remarks:         HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)         Secondary Indicators (minimum of two required)         Sufface Water (A1)       Aquatic Fauna (B13)       X Surface Soii Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       X Stunted or Stressed Plants (D1)         Agal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Inon Deposits (B5)       (C6)       Gauge or Well Data (D9)       FAC-Neutral Test (D5)         Water Table present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         Sutrace water present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         Sutrace mesent??       Yes       No <td< td=""><td>Depth (inche</td><td>es):</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Depth (inche	es):							
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)         Surface Water (A1)       Aquatic Fauna (B13)       X. Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B5)       (C6)       Saturation Visible on Aerial Imagery (B7)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       FAC-Neutral Test (D5)         Field Observations:       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         Sufface water present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         Cincludes capillary fringe)       Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks: </td <td>Remarks:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Remarks:								
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)         Surface Water (A1)       Aquatic Fauna (B13)       X Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrovs (C8)         Sediment Deposits (B2)       (C3)       Saturation visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       X Sturted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)         Surface water present?       Yes       No       X       Depth (inches):         Surface water present?       Yes       No       X       Depth (inches):         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>									
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)         Surface Water (A1)       Aquatic Fauna (B13)       X Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Saturation N(C4)       X Sturded or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       FAC-Neutral Test (D5)         Starate value avers (B9)       Other (Explain in Remarks)       Indicators of wetland hydrology present?         Field Observations:       X       Depth (inches):       Indicators of wetland hydrology present?         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology	HYDROLO	DGY							
Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required)         Surface Water (A1)       Aquatic Fauna (B13)       X Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (C9)         Afgal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)         Field Observations:       No       X Depth (inches):         Saturation present?       Yes       No         No       X Depth (inches):       Indicators of wetland hydrology present?         Saturation present?       Yes       No       X Depth (inches):         Cincludes capillary fringe)       Depth (inches):       Indicators of wetland hydrology present?         Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Wetland Hy	drology Indicato	ors:						
Surface Water (A1)       Aquatic Fauna (B13)       X       Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       X Stunted or Stressed Plants (D1)         Adgal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)         Gauge or Well Data (D9)       Other (Explain in Remarks)       Field Observations:       Indicators of wetland hydrology present?         Surface water present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?         Saturation present?       Yes       No       X       Depth (inches):       Ye         Includes capillary fringe)       Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:   <	Primary Indi	cators (minimum	of one is	required; check	all that a	(ylqq		Seconda	arv Indicators (minimum of two required)
High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Inon Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicators of wetland         Field Observations:       No       X       Depth (inches):         Water table present?       Yes       No       X       Depth (inches):         Water table present?       Yes       No       X       Depth (inches):       Indicators of wetland         Saturation present?       Yes       No       X       Depth (inches):       Yd         Cincludes capillary fringe)       Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Surface	Water (A1)		• • •	Aquatic	Fauna (B	13)	X Su	Irface Soil Cracks (B6)
Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       X Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)         Gauge or Well Data (D9)       Other (Explain in Remarks)       Field Observations:       Indicators of wetland Nydrology present?         Surface water present?       Yes       No       X       Depth (inches):       Indicators of wetland Nydrology present?         Saturation present?       Yes       No       X       Depth (inches):       Y         Cincludes capillary fringe)       No       X       Depth (inches):       Y         Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	High Wa	ter Table (A2)			True Aq	uatic Plar	, nts (B14)	Dra	ainage Patterns (B10)
Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B3)       (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       X Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicators of wetland hydrology present?         Field Observations:       Surface water present?       Yes       No         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         Gincludes capillary fringe)       Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Saturatio	on (A3)			Hydroge	n Sulfide	Odor (C	1) Dr	y-Season Water Table (C2)
Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       X Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Field Observations:         Surface water present?       Yes       No       X       Depth (inches):         Saturation present?       Yes       No       X       Depth (inches):         Gaige application present?       Yes       No       X       Depth (inches):         Cincludes capillary fringe)       No       X       Depth (inches):       Indicators of wetland hydrology present?         Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Water N	larks (B1)			Oxidized	l Rhizosp	heres on	Living Roots Cra	ayfish Burrows (C8)
Drift Deposits (B3)       Presence of Reduced Iron (C4)       X Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicators of wetland hydrology present?         Surface water present?       Yes       No       X Depth (inches):         Saturation present?       Yes       No       X Depth (inches):         (includes capillary fringe)       No       X Depth (inches):       Indicators of wetland hydrology present?         Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Sedimer	nt Deposits (B2)			(C3)			Sa	turation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)         Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)         Field Observations:       Surface water present?         Yes       No       X       Depth (inches):         Water table present?       Yes       No       X       Depth (inches):         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?         Mater table present?       Yes       No       X       Depth (inches):       Y         Saturation present?       Yes       No       X       Depth (inches):       Y         Obscribe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Drift Dep	posits (B3)			Presenc	e of Redu	uced Iron	(C4) <u>X</u> Stu	unted or Stressed Plants (D1)
Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)         Field Observations:       Surface water present?       Yes         Surface water present?       Yes       No       X         Depth (inches):       Indicators of wetland hydrology present?       Y         Saturation present?       Yes       No       X         Depth (inches):       Indicators of wetland hydrology present?       Y         Cincludes capillary fringe)       Depth (inches):       Y         Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Algal Ma	at or Crust (B4)			Recent I	ron Redu	iction in T	illed Soils Ge	eomorphic Position (D2)
Indidation Visible on Aerial Intagely (B7)       Inin Midck Sunace (C7)         Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)         Field Observations:       Surface water present?       Yes         Surface water present?       Yes       No       X         Water table present?       Yes       No       X         Saturation present?       Yes       No       X         Includes capillary fringe)       Depth (inches):       Indicators of wetland hydrology present?         Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Iron Dep	iosits (B5) an Misible an Asric	Ilmogon	(DZ)	(C6)	ale Cumfa a	a (07)	FA	C-Neutral Test (D5)
Sparsely vegetated concave surface (bb)       Gauge of Wein Data (b9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)         Field Observations:       Surface water present?       Yes         Surface water present?       Yes       No       X       Depth (inches):         Water table present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         (includes capillary fringe)       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Sparcol		a mager	(D7)			e(C7)		
Field Observations:       Surface water present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Yes         Water table present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         (includes capillary fringe)       No       X       Depth (onches):       Y       Y         Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Water-S	tained Leaves (B0			Other (E	volain in	ala (D9) Romarks	)	
Field Observations:         Surface water present?       Yes       No       X       Depth (inches):       Indicators of wetland         Water table present?       Yes       No       X       Depth (inches):       Indicators of wetland         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         (includes capillary fringe)       No       X       Depth (inches):       Indicators of wetland         Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Water-3		)			хріант ін	I CIII di KS	)	
Surface water present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         (includes capillary fringe)       Depth (inches):       Indicators of wetland hydrology present?       Y         Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Field Obser	Vations:	Vaa	No	v	Donth (i	nohoo);		
Saturation present?       Yes       No       X       Depth (inches):       hydrology present?       Y         (includes capillary fringe)       Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Water table	nresent?	Vee		<u> </u>	Depth (i	nchee).		Indicators of wetland
(includes capillary fringe) Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Saturation n	resent?	Yes	No	$\frac{1}{x}$	Depth (i	nches)		hydrology present? V
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	(includes ca	pillary fringe)	100					————	
Remarks:	Describe roo	orded data (stro	am daud	e monitoring well	aerial n	hotos n		spections) if availa	ble <sup>.</sup>
Remarks:	Describered		ani yauyo	e, monitoring wei	, aenai p	110105, pi	levious ii		טוס.
	Remarks:								



NWA023 overview looking southwest.

WETLAND DETERMINA	ATION DATA FORM - N	Idwest Region				
Applicant/Owner: Hawward Solar LLC	State: Minnes	ta Sampling Date. 4/29/2020				
	State. Winnest					
Landform (billelone terrace etc.):						
Slope (%): 1 Lat: 43° 37' 52 38"		8.00" Datum: WGS84				
Soll Man Unit Name:	LONG93_10_3					
Are elimetic/hydrologic conditions of the site typical for this tin	n of the year? V					
Are vegetation X soil or bydrology	significantly disturbed					
	significantly disturbed	Are "normal circumstances"				
SUMMARY OF FINDINGS		(If needed, explain any answers in remarks.)				
Hydrophytic vegetation present? N						
Hydric soil present? N	Is the sampled area v	Is the sampled area within a wetland? N				
Indicators of wetland hydrology present? Y	If yes, optional wetland site ID:					
Remarks: (Explain alternative procedures here or in a separative procedure procedures here or in a separative procedures here or in a separative procedures here or in a separative procedure procedures here or in a separative procedure procedure procedure procedures here or in a separative procedure p	ie report.)					
	ite Dominant Indicator	Dominance Test Worksheet				
<u>Tree Stratum</u> (Plot size: ) % Cov	ver Species Staus	Number of Dominant Species				
1		that are OBL, FACW, or FAC: 0 (A)				
2		Total Number of Dominant				
3		Species Across all Strata: 0 (B)				
4		Percent of Dominant Species				
5	- Total Cover	that are OBL, FACW, of FAC: $0.00\%$ (A/B)				
Sapling/Shrub stratum (Plot size:		Prevalence Index Worksheet				
1		Total % Cover of:				
2		OBL species 0 x 1 = 0				
3		FACW species 0 x 2 = 0				
4		FAC species $0 \times 3 = 0$				
5		FACU species $0 \times 4 = 0$				
U Horb stratum (Plot size:	= Iotal Cover	$\begin{array}{c c} UPL \text{ species} & 0 & x \text{ 5 = } & 0 \\ Column totals & 0 & (A) & 0 & (P) \end{array}$				
		$\frac{1}{2} = \frac{1}{2} = \frac{1}$				
2		Prevalence index = B/A =				
3		Hydrophytic Vegetation Indicators:				
4		Rapid test for hydrophytic vegetation				
5		Dominance test is >50%				
6		Prevalence index is ≤3.0*				
7		Morphogical adaptations* (provide				
8 9		supporting data in Remarks or on a separate sheet)				
10		Problematic hydrophytic vegetation*				
0	= Total Cover	(explain)				
Woody vine stratum         (Plot size:)           1		*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic				
2		Hydrophytic				
0	= Total Cover	vegetation				
Remarks: (Include photo numbers here or on a separate shee Barnyard grass	21)					

Depth			e depiñ neede		ment the	s maioai	or or commune abser	
	Matrix		<u>R</u>	edox Feat	ures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-17	10YR 2/1	100					Silt loam	
17-23	10YR 2/1	70	2.5Y 3/2	30	С	PL	Loam	
23.26	2.57 1/1	100	2.0.0,2		<u> </u>		Sandy clay	
23-20	2.51 4/1	100		40	0			
26-30	2.5Y 4/1	90	10YR 4/6	10	C	PL	Sandy clay	
*Type: C =	Concentration D:	= Denleti	on RM = Redu	ced Matrix	MS = M	lasked S	and Grains **Locati	on: PL = Pore Lining M = Matrix
Hydric So	oil Indicators:	- Depieu			., 1010 – 10	naskeu o	Indicators for Proh	lematic Hydric Soils:
His	tisol (A1)		s	andv Gleve	-d Matrix	(S4)	Coast Prairie R	P dox (A16) (I RR K I R)
His	tic Epipedon (A2)		<u> </u>	andy Redo	x (S5)	(01)	Dark Surface (S	7) (LRR K. L)
Bla	ck Histic (A3)			tripped Ma	f(00)		Iron-Manganese	e Masses (F12) ( <b>LRR K. L. R</b> )
	drogen Sulfide (A4	4)	<u> </u>	namy Mucl	kv Minera	al (F1)	Very Shallow D	ark Surface (TE12)
Str	atified Lavers (A5	)	L	oamv Glev	ed Matrix	x (F2)	Other (explain in	remarks)
2 c	m Muck (A10)	,	D	epleted Ma	atrix (F3)	( )		,
De	pleted Below Dark	c Surface	(A11) R	edox Dark	Surface	(F6)		
Thi	ck Dark Surface (	A12)	`´´ <u></u> D	epleted Da	ark Surfa	ce (F7)	*Indicators of hvo	rophytic vegetation and weltand
Sa	ndy Mucky Minera	al (S1)	R	edox Depr	essions (	(F8)	hydrology must	be present, unless disturbed or
5 c	m Mucky Peat or	Peat (S3	)	-				problematic
Restrictive	Laver (if observ	ed).				1		
Type <sup>.</sup>		cuj.					Hydric soil prese	nt? N
Depth (inch	es).				•			
Boptii (iiioii								
Remarks:								
	0.0)/							
HIDROL	UGY							
Wetland Hy	drology Indicate	ors:						
Primary Ind	icators (minimum	of one is	required; chec	<u>k all that a</u>	<u>pply)</u>		Secondary In	dicators (minimum of two required)
Surface	Water (A1)			Aquatic	Fauna (B	13)	X Surface	
High Wa	ater Table (A2)			True Aq	uatic Plar			Soil Cracks (B6)
Saturati	on (A3)			Hydroge	n Sultido	nts (B14)	Drainag	Soil Cracks (B6) e Patterns (B10)
	larks (BT)					odor (C	1) Drainag Dry-Sea	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2)
- Sodimo	nt Donooito (P2)			Oxidized	l Rhizosp	odor (C oheres on	1) Drainag Dry-Sea Living Roots Crayfisl	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) a Burrows (C8)
Sedime	nt Deposits (B2)		_	Oxidized (C3)	Rhizosp	odor (C <sup>2</sup> oheres on	1) Drainag Dry-Sea Living Roots Crayfish Saturat	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) h Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1)
Sedime Drift De	nt Deposits (B2) posits (B3) at or Crust (B4)			Oxidized (C3) Presenc	e of Redu	odor (C <sup>2</sup> odor (C <sup>2</sup> oheres on uced Iron	1) Drainag Dry-Sea Living Roots Crayfisl Saturat (C4) X Stunted Tilled Soils X Geomo	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) a Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) robic Position (D2)
Sedime Drift De Algal Ma	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		=	Oxidized (C3) Presenc Recent I (C6)	e of Redu ron Redu	odor (B14) Odor (C <sup>2</sup> oheres on uced Iron uction in T	1) Drainag Dry-Sea Living Roots Crayfisl Saturat (C4) X Stunted Tilled Soils X Geomo	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) autral Test (D5)
Sedime Drift De Algal Ma Iron De Inundati	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria	al Imager		Oxidized (C3) Presenc Recent I (C6) Thin Mu	e of Redu ron Redu ck Surfac	odor (C <sup>2</sup> odor (C <sup>2</sup> wheres on uced Iron uction in T ce (C7)	1) Drainag Dry-Sea Living Roots Crayfisl Saturat (C4) X Stunted Tilled Soils X Geomo	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) o Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)
Sedime Drift De Algal Ma Iron Dep Inundati	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria y Vegetated Conca	al Imager	/ (B7)	Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge d	e of Redu ron Redu ck Surfac	odor (C <sup>2</sup> oheres on uced Iron uction in T ce (C7) ata (D9)	1) Drainag Dry-Sea Living Roots Crayfish (C4) X Stunted Tilled Soils X Geomo	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)
Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Water-S	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria y Vegetated Conca Stained Leaves (B9	al Imager ave Surfa	/ (B7) ce (B8)	Oxidized (C3) Presenc (C6) Thin Mu Gauge o Other (E	e of Redu ron Redu ck Surfac or Well Da	odor (C <sup>2</sup> oheres on uced Iron uction in T ce (C7) ata (D9) Remarks	1) Drainag Dry-Sea Living Roots Crayfish (C4) X Stunted Tilled Soils X Geomo FAC-Ne	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)
Sedime Drift De Algal Ma Iron De Inundati Sparsel Water-S Field Obse	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria y Vegetated Conca Stained Leaves (B9 rvations:	al Imager ave Surfa	/ (B7) ce (B8)	Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge d Other (E	d Rhizosp e of Redu ron Redu ck Surfac or Well Da Explain in	nts (B14) Odor (C' pheres on ucced Iron uction in T ce (C7) ata (D9) Remarks	1) Drainag Dry-Sea Living Roots Crayfisl Saturat (C4) X Stunted Tilled Soils X Geomo FAC-Ne	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)
Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Water-S Field Obse Surface wat	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria y Vegetated Conca Stained Leaves (B9 <b>rvations:</b> ter present?	al Imager ave Surfa )) Yes	/ (B7) ce (B8)	Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E	e of Redu ron Redu ck Surfac or Well Da xplain in	nts (B14) Odor (C <sup>2</sup> wheres on ucced Iron uction in T ce (C7) ata (D9) Remarks	1) Drainag Dry-Sea Living Roots Crayfisl Saturat (C4) X Stunted Tilled Soils X Geomo FAC-Ne	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)
Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Water-S Field Obse Surface wat Water table	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria y Vegetated Conca Stained Leaves (B9 rvations: ter present? present?	al Imager ave Surfa )) Yes Yes	/ (B7) ce (B8) 	Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E	d Rhizosp e of Redu ron Redu ck Surfac or Well Da ixplain in Depth (i Depth (i	odor (C <sup>2</sup> oheres on uced Iron uction in T ce (C7) ata (D9) Remarks inches):	1) Drainag Dry-Sea Living Roots Crayfisl Saturat (C4) X Stunted Tilled Soils X Geomo FAC-Ne	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) o Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5)
Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Water-S Field Obse Surface wat Water table Saturation p	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aeria y Vegetated Conca stained Leaves (B9 <b>rvations:</b> ter present? present?	al Imager ave Surfa )) Yes Yes Yes Yes	/ (B7) ce (B8) X X No X No	Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E	d Rhizosp e of Redu ron Redu ck Surfac or Well Da Explain in Depth (i Depth (i	odor (C <sup>2</sup> ) odor (C <sup>2</sup> ) oheres on uced Iron uction in T ce (C7) ata (D9) Remarks inches): inches): inches):	1) Drainag Dry-Sea Living Roots Crayfisl Saturat (C4) X Stunted Tilled Soils X Geomo FAC-Ne ) 26 In	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5) dicators of wetland ydrology present? Y
Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Water-S Field Obse Surface wat Water table Saturation p (includes ca	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria y Vegetated Conca Stained Leaves (B9 <b>rvations:</b> ter present? present? present? apillary fringe)	al Imager ave Surfa )) Yes Yes Yes Yes	/ (B7) ce (B8) X No X No X No	Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E	d Rhizosp e of Redu ron Redu ck Surfac or Well Da ixplain in Depth (i Depth (i	nts (B14) Odor (C oheres on uced Iron uction in T ce (C7) ata (D9) Remarks inches): inches):	1) Drainag Dry-Sea Living Roots Crayfisl Saturat (C4) X Stunted Tilled Soils X Geomo FAC-Ne ) 26 In	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5) dicators of wetland ydrology present? Y
Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Water-S Field Obse Surface wat Water table Saturation p (includes ca Describe re	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria y Vegetated Conca Stained Leaves (B9 <b>rvations:</b> present? present? present? apillary fringe) corded data (streat	al Imagery ave Surfa )) Yes Yes Yes Yes	/ (B7) ce (B8) X No X No e, monitoring w	Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E X 	d Rhizosp e of Redu ron Redu ck Surfac or Well Da ixplain in Depth (i Depth (i Depth (i	nts (B14) Odor (C <sup>2</sup> wheres on uced Iron uction in T ee (C7) ata (D9) Remarks inches): inches): inches): revious in	) Drainag Dry-Sea Crayfisl Saturat (C4) X Stunted Tilled Soils X Geomo FAC-Ne ) 26 In pspections), if available:	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) phic Position (D2) eutral Test (D5) dicators of wetland ydrology present? Y
Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Water-S <b>Field Obse</b> Surface wat Water table Saturation p (includes ca Describe re	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria y Vegetated Conca Stained Leaves (B9 <b>rvations:</b> present? present? poresent? poresent? poresent? poresent? poresent? poresent? corded data (streat	al Imager ave Surfa )) Yes Yes Yes am gauge	/ (B7) ce (B8) X No X No x No	Oxidized (C3) Presenc (C6) Thin Mu Gauge c Other (E X 	d Rhizosp e of Redu ron Redu ck Surfac or Well Da ixplain in Depth (i Depth (i Depth (i	nts (B14) Odor (C' wheres on uced Iron uction in T æ (C7) ata (D9) Remarks inches): inches): inches): revious in	1) Drainag Dry-Sea Living Roots Crayfisl Saturat (C4) X Stunted Tilled Soils X Geomo FAC-Ne ) 26 In 26 In spections), if available:	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5) dicators of wetland ydrology present? Y
Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Water-S Field Obse Surface wat Water table Saturation p (includes ca Describe re	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aeria y Vegetated Conca Stained Leaves (B9 <b>rvations:</b> ter present? present? present? apillary fringe) corded data (streat	al Imager ave Surfa )) Yes Yes Yes am gauge	/ (B7) ce (B8) X No X No x No	Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E X 	d Rhizosp e of Redu ron Redu ck Surfac or Well Da xplain in Depth (i Depth (i bhotos, pl	nts (B14) Odor (C' pheres on uced Iron uction in T ce (C7) ata (D9) Remarks inches): inches): revious in	1) Drainag Drainag Dry-Sea Crayfisl Saturat (C4) X Stunted Tilled Soils X Geomo FAC-Ne ) 26 In pspections), if available:	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5) dicators of wetland ydrology present? Y
Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Water-S Field Obse Surface wat Water table Saturation p (includes ca Describe re	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aeria y Vegetated Conca Stained Leaves (B9 <b>rvations:</b> present? present? present? present? poresent? poresent? poresent? poresent?	al Imager ave Surfa )) Yes Yes Yes am gauge	/ (B7) ce (B8) X No X No x No	Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E X ell, aerial p	e of Redu Iron Redu ck Surfac or Well Da Explain in Depth (i Depth (i	nts (B14) Odor (C <sup>2</sup> oheres on uced Iron uction in T ee (C7) ata (D9) Remarks inches): inches): inches): revious in	1) Drainag Dry-Sea Living Roots Crayfisl Saturat (C4) X Stunted Tilled Soils X Geomo FAC-Ne ) 26 In pspections), if available:	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) sutral Test (D5) dicators of wetland ydrology present? Y
Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Water-S <b>Field Obse</b> Surface wat Water table Saturation p (includes ca Describe re	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aeria y Vegetated Conca Stained Leaves (B9 <b>rvations:</b> present? present? present? present? poresent? porded data (streated)	al Imager ave Surfa )) Yes Yes Yes am gauge	/ (B7) ce (B8) X No X No No No No No	Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E	d Rhizosp e of Redu ron Redu ck Surfac or Well Da ixplain in Depth (i Depth (i Depth (i	nts (B14) Odor (C <sup>2</sup> wheres on uced Iron uction in T ce (C7) ata (D9) Remarks inches): inches): inches): revious in	1) Drainag Dry-Sea Crayfisl Saturat (C4) X Stunted Tilled Soils X Geomo FAC-Ne ) 26 In pspections), if available:	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5) dicators of wetland ydrology present? Y
Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Water-S <b>Field Obse</b> Surface wat Water table Saturation p (includes ca Describe re	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aeria y Vegetated Conca Stained Leaves (B9 <b>rvations:</b> present? present? present? present? pillary fringe) corded data (streat	al Imager ave Surfa )) Yes Yes Yes	/ (B7) ce (B8) X No X No e, monitoring w	Oxidized (C3) Presenc Recent I (C6) Thin Mu Gauge c Other (E	d Rhizosp e of Redu ron Redu ck Surfac or Well Da ixplain in Depth (i Depth (i Depth (i	nts (B14) Odor (C <sup>2</sup> wheres on action in T action in T action in T action (D9) Remarks inches): inches): revious in	1) Drainag Dry-Sea Living Roots Crayfisl Saturat (C4) X Stunted Tilled Soils X Geomo FAC-Ne ) 26 In 26 In mspections), if available:	Soil Cracks (B6) e Patterns (B10) ason Water Table (C2) n Burrows (C8) on Visible on Aerial Imagery (C9) or Stressed Plants (D1) rphic Position (D2) eutral Test (D5) dicators of wetland ydrology present? Y



NWA024A overview looking west.
WETLAND DETERMINAT	ION DATA FORM - Midwest Region
Project/Site: Hayward Solar City	//County: Freeborn County Sampling Date: 4/29/2020
Applicant/Owner: Hayward Solar LLC	State: Minnesota Sampling Point: NWA024B
Investigator(s): Apryl Jennrich	Section, Township, Range: T102N R20W S13
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none): Concave
Slope (%): 1 Lat: 43° 37' 51.41"	Long:93° 10' 38.39"Datum:WGS84
Soli Map Unit Name: Madella silty clay loan	
Are climatic/nydrologic conditions of the site typical for this time	of the year? Y (If no, explain in remarks)
	Are "normal circumstances"
SUMMARY OF FINDINGS	(If needed, explain any answers in remarks.)
Hydrophytic vegetation present? N	
Hydric soil present? N	Is the sampled area within a wetland?
Indicators of wetland hydrology present? Y	If yes, optional wetland site ID:
Remarks: (Explain alternative procedures here or in a separate	report.)
Abcolute	Dominant Indicator Dominance Test Worksheet
Tree Stratum (Plot size: ) % Cover	Species Staus Number of Dominant Species
1	that are OBL, FACW, or FAC: 0 (A)
2	Total Number of Dominant
3	Species Across all Strata: (B)
4	Percent of Dominant Species
	= Total Cover
Sapling/Shrub stratum (Plot size: )	Prevalence Index Worksheet
	Total % Cover of:
2	OBL species         0         x 1 =         0
3	FACW species 0 x 2 = 0
4	$- \underbrace{\qquad}_{\text{FAC species}} \underbrace{\qquad}_{\text{VA 3}} \underbrace{}_{\text{VA 3}} \underbrace{\\_{\text{VA 3}} \underbrace{}_{\text{VA 3}} \right\\_{\text{VA $
	= Total Cover UPI species $0 \times 5 = 0$
Herb stratum (Plot size: )	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
1	Prevalence Index = B/A =
2	
3	Hydrophytic Vegetation Indicators:
4	Rapid test for hydrophytic vegetation
5	
7	
8	Morphogical adaptations (provide supporting data in Remarks or on a
9	separate sheet)
100	Problematic hydrophytic vegetation*       = Total Cover     (explain)
<u>Woody vine stratum</u> (Plot size:) 1	*Indicators of hydric soil and wetland hydrology must b present, unless disturbed or problematic
2	Hydrophytic
0	= Total Cover vegetation present? N
Remarks: (Include photo numbers here or on a separate sheet) Barnyard grass	

Profile Des	cription: (Descr	ibe to th	e depth n	eeded	to docu	ment the	e indicat	or or confirm the	absence	of indicators.)
Depth	Matrix			Rec	dox Feat	ures				
(Inches)	Color (moist)	%	Color (n	noist)	%	Type*	Loc**	Texture		Remarks
0-18	10YR 2/1	100						Silt loam		
18-22	2.5Y.3/2	100						Sandy clay		
10-22	2.01 0/2	05		110	-	0				
22-26	2.54 5/3	95	10YR	4/6	5	C	PL	Sandy clay		
26-28	2.5Y 5/3	95	10YR	4/6	5	С	PL	Sand		Saturated
*Type: C = 0	Concentration, D	= Depleti	on, RM =	Reduce	ed Matrix	a, MS = №	lasked S	and Grains.	*Location	: PL = Pore Lining, M = Matrix
Hydric Sc	oil Indicators:							Indicators for	or Probler	natic Hydric Soils:
His	tisol (A1)			San	idy Gleye	ed Matrix	: (S4)	Coast Pr	airie Redo	ox (A16) ( <b>LRR K, L, R</b> )
His	tic Epipedon (A2)			Sar	idy Redo	ox (S5)		Dark Sur	face (S7)	(LRR K, L)
Bla	ck Histic (A3)			Stri	pped Ma	trix (S6)		Iron-Man	iganese N	lasses (F12) ( <b>LRR K, L, R</b> )
Hyd	drogen Sulfide (A	4)		Loa	my Mucl	ky Minera	al (F1)	Very Sha	allow Dark	Surface (TF12)
Stra	atified Layers (À5	)		Loa	my Glev	ed Matrix	k (F2)	Other (ex	xplain in re	emarks)
2 ci	m Muck (A10)		_	Dep	leted Ma	atrix (F3)	. ,			
Dep	pleted Below Dark	c Surface	(A11)	Rec	lox Dark	Surface	(F6)			
	ck Dark Surface (	A12)	· / _	Dep	leted Da	ark Surfa	ce (F7)	*Indicators	s of hydroi	ohytic vegetation and weltand
Sar	ndy Mucky Minera	al (S1)		Rec	lox Depr	essions (	(F8)	hvdrology	v must be	present. unless disturbed or
5 ci	m Mucky Peat or	Peat (S3	) –			·	/		,p	roblematic
			/				1		1	
Restrictive	Layer (If observe	ea):								
Type:						-		Hydric soil	present	? <u>N</u>
Depth (inche	es):					-				
Remarks:										
HYDROL	DGY									
Wetland Hy	drology Indicate	ors:								
Primary Indi	cators (minimum	of one is	required;	check	all that a	pply)		Secon	dary Indic	ators (minimum of two required
Surface	Water (A1)				Aquatic	Fauna (B	13)	X	Surface So	pil Cracks (B6)
High Wa	ater Table (A2)				True Aq	uatic Plar	nts (B14)		Drainage F	Patterns (B10)
Saturatio	on (A3)				Hydroge	n Sulfide	Odor (C	1)1	Dry-Seaso	n Water Table (C2)
Water M	larks (B1)				Oxidized	l Rhizosp	heres on	Living Roots	Crayfish B	urrows (C8)
Sedimer	nt Deposits (B2)				(C3)			<u> </u>	Saturation	Visible on Aerial Imagery (C9)
Drift Dep	posits (B3)				Presenc	e of Redu	uced Iron	(C4) X 3	Stunted or	Stressed Plants (D1)
X Algal Ma	at or Crust (B4)				Recent I	ron Redu	iction in T	illed Soils X	Geomorph	ic Position (D2)
Iron Dep	oosits (B5)				(C6)				FAC-Neuti	ral Test (D5)
Inundati	on Visible on Aeria	al Imager	/ (B7)		Thin Mu	ck Surfac	e (C7)			
Sparsely	Vegetated Conca	ave Surfa	ce (B8)		Gauge c	or Well Da	ata (D9)			
Water-S	tained Leaves (B9	)			Other (E	xplain in	Remarks	)		
Field Obser	vations:									
Surface wat	er present?	Yes		No	Х	Depth (i	nches):			
Water table	present?	Yes		No	Х	Depth (i	nches):		Indie	cators of wetland
Saturation p	resent?	Yes	X	No		Depth (i	nches):	26	hyd	Irology present? Y
(includes ca	pillary fringe)									
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:										
Remarks:					-					



NWA024B overview looking south.

WETLAND DETERMINA		idwest Region	
Project/Site: Hayward Solar C	City/County: Freeborn Col	Inty Sampling Date: 4/29/2020	
Applicant/Owner: Hayward Solar LLC	State: Minnesc	ta Sampling Point: NWA024C	
Investigator(s): Apryl Jennrich	Section, Township	, Range: 1102N R20W S13	
Landform (hillslope, terrace, etc.): Depression	Local relief (conca	ve, convex, none): None	
Slope (%): 1 Lat: 43° 37' 51.32"	Long: -93° 10' 38	3.10" Datum: WGS84	
Soil Map Unit Name: Madelia silty clay lo			
Are climatic/hydrologic conditions of the site typical for this tin	ne of the year? Y (	If no, explain in remarks)	
Are vegetation X, soil , or hydrology	significantly disturbed?	Are "normal circumstances"	
SUMMARY OF FINDINGS	naturally problematic?	present? <u>No</u> (If needed, explain any answers in remarks.	s.)
Hydrophytic vegetation present? N			
Hydric soil present? N	Is the sampled area w	rithin a wetland? N	
Indicators of wetland hydrology present? Y	If yes, optional wetlan	d site ID:	
Remarks: (Explain alternative procedures here or in a separat	te report.)		
VEGETATION Use scientific names of plants.		Dominance Test Workshoot	
Tree Stratum (Plot size: ) % Cov	ver Species Staus	Number of Dominant Species	
1 (************************************	,	that are OBL, FACW, or FAC: 0 (A	)
2		Total Number of Dominant	-
3		Species Across all Strata: 0 (B	3)
4		Percent of Dominant Species	
5	- Total Cavar	that are OBL, FACW, or FAC: 0.00% (A	√В)
Sapling/Shrub stratum (Plot size:	= Total Cover	Provalence Index Worksheet	
1		Total % Cover of:	
2		OBL species $0 \times 1 = 0$	
3		FACW species $0 \times 2 = 0$	
4		FAC species $0 \times 3 = 0$	
5		FACU species $0 \times 4 = 0$	
	= Total Cover	UPL species $0 \times 5 = 0$	
Herb stratum (Plot size:)			5)
1		Prevalence Index = B/A =	
3		Hydrophytic Vegetation Indicators:	
4		Rapid test for hydrophytic vegetation	
5		Dominance test is >50%	
6		Prevalence index is ≤3.0*	
7		Morphogical adaptations* (provide	
8 9		supporting data in Remarks or on a separate sheet)	
10		Problematic hydrophytic vegetation*	
0	= Total Cover	(explain)	
Woody vine stratum         (Plot size:)           1		*Indicators of hydric soil and wetland hydrology mus present, unless disturbed or problematic	st be
2		Hydrophytic	
0	= Total Cover	vegetation	
Demontos (la dude a bata ana bata da			
Remarks: (Include photo numbers here or on a separate shee Barnyard grass	et)		

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the ab	osence of indicators.)	
Depth	Matrix		Rec	dox Feat	ures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks	
0-18	10YR 2/1	100					Silt loam		
18-26	2 5V 1/1	100					Sandy clay	Trace gravel	
10-20	2.01 4/1	100					Galidy Clay		
± <b>T</b> 0 (		<b>.</b>							
*Type: C = C	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	α, MS = Ν	lasked S	and Grains. **Lo	ocation: PL = Pore Lining, M = Matrix	
Hydric Sc	oil Indicators:		0			(04)	Indicators for H	Problematic Hydric Soils:	
			San	idy Gleye	ed Matrix	(54)		le Redox (A16) ( <b>LRR K, L, R</b> )	
HIST	tic Epipedon (A2)		San	ay Read	X (85)		Dark Surfac	$\mathcal{E}(\mathcal{S}^{\prime}) (\mathbf{LKK} \mathbf{K}, \mathbf{L})$	
	CK HISTIC (A3)	•	Stri	pped Ma	trix (S6)			$\frac{1}{12} \left( \frac{1}{12} \right) \left( \frac{1}{12} \right) \left( \frac{1}{12} \right)$	
Hyc	Irogen Sulfide (A4	+)	Loa	my Muci	ky Minera	al (⊢1)	Very Shallo	w Dark Surface (TF12)	
	Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (explain in remarks)								
	n Muck (A10)	. O			atrix (F3)				
			(A11)Rec	IOX Dark	Surrace	(F6)			
	ck Dark Surface (	AIZ)					^Indicators of	hydrophytic vegetation and weltand	
	m Musky Doot or	II (31) Deet (82		lox Depr	essions	(ГО)	nydrology m	problematic	
5 Cl	п миску Реагог	Peal (55	)					problematic	
Restrictive	Layer (if observe	ed):							
Туре:							Hydric soil pr	resent? N	
Depth (inche	es):								
Remarks:									
HYDROLO	DGY								
Wetland Hv	drology Indicato	ors:							
Primary Indi	cators (minimum	of one is	required: check :	all that a	nnlv)		Secondar	v Indicators (minimum of two required)	
<u>Surface</u>	Water (Δ1)			Aquatic	Fauna (B	(13)	X Sur	face Soil Cracks (B6)	
High Wa	ater Table (A2)				uatic Plar	nts (B14)		ainage Patterns (B10)	
Saturatio	on (A3)			Hvdroge	n Sulfide	Odor (C	1)Drv	-Season Water Table (C2)	
Water M	larks (B1)			Oxidized	Rhizosp	heres on	Living Roots Cra	avfish Burrows (C8)	
Sedimer	nt Deposits (B2)			(C3)			Sat	turation Visible on Aerial Imagery (C9)	
Drift Dep	posits (B3)			Presenc	e of Redu	uced Iron	(C4) X Stu	inted or Stressed Plants (D1)	
X Algal Ma	at or Crust (B4)			Recent I	ron Redu	uction in T	illed Soils X Geo	omorphic Position (D2)	
Iron Dep	osits (B5)			(C6)			FAG	C-Neutral Test (D5)	
Inundati	on Visible on Aeria	I Imagery	/ (B7)	Thin Mu	ck Surfac	ce (C7)			
Sparsely	Vegetated Conca	ve Surfa	ce (B8)	Gauge c	or Well Da	ata (D9)			
Water-S	tained Leaves (B9	)		Other (E	xplain in	Remarks	)		
Field Obser	vations:								
Surface wat	er present?	Yes	No	Х	Depth (i	inches):			
Water table	present?	Yes	No	Х	Depth (i	inches):		Indicators of wetland	
Saturation p	resent?	Yes	No	Х	Depth (i	inches):		hydrology present? Y	
(includes capillary fringe)									
Describe red	Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:								
Demotive:									
Remarks:									



NWA024C overview looking south.

WEILAND DETERMINAT	ION DATA FORM - Midwest Region
Applicant/Owner: Hayward Solar LLC	State: Minnesota Sampling Point: NWA0264
Investigator(s): Annul lennrich	Section Township Range: T102N R20W S13
Landform (hillslope terrace etc.):	Local relief (concave, convex, none). None
Slope (%): 1 Lat: 43° 38' 25 24"	Long: -93° 10' 31 70" Datum: WGS84
Soil Man Linit Name: Klossner muck	
Are climatic/hydrologic conditions of the site typical for this time	of the year? V (If no explain in remarks)
Are vegetation X soil or hydrology	significantly disturbed?
Are vegetation, soil, or hydrology	Are "normal circumstances"
SUMMARY OF FINDINGS	(If needed, explain any answers in remarks.)
Hydrophytic vegetation present? N	
Hydric soil present? N	Is the sampled area within a wetland? N
Indicators of wetland hydrology present? N	If yes, optional wetland site ID:
VEGETATION Use scientific names of plants.	report.)
Absolute	Dominant Indicator Dominance Test Worksheet
Tree Stratum (Plot size: ) % Cover	Species Staus Number of Dominant Species
1	that are OBL, FACW, or FAC: 0 (A)
2	Total Number of Dominant
3	Species Across all Strata: (B)
4	Percent of Dominant Species
	= Total Cover
Sapling/Shrub stratum (Plot size:	Prevalence Index Worksheet
1	Total % Cover of:
2	OBL species 0 x 1 = 0
3	FACW species 0 x 2 = 0
4	FAC species 0 x 3 = 0
5	FACU species $0 \times 4 = 0$
U Herb stratum (Plot size:	$ \begin{array}{c} - 1 \text{ otal Cover} \\ \hline \\ Column totals \\ \hline \\ \end{array} \begin{array}{c} 0 \\ (A) \\ \hline \\ \end{array} \begin{array}{c} 0 \\ (B) \\ \hline \\ \end{array} $
	$\frac{1}{2} = \frac{1}{2} = \frac{1}$
2	
3	Hydrophytic Vegetation Indicators:
4	Rapid test for hydrophytic vegetation
5	Dominance test is >50%
6	Prevalence index is ≤3.0*
7	Morphogical adaptations* (provide
8 9	supporting data in Remarks or on a separate sheet)
10	Problematic hydrophytic vegetation*
Woody vine stratum (Plot size:)	*Indicators of hydric soil and wetland hydrology must be
	present, unless disturbed or problematic
2 <u> </u>	= Total Cover vegetation
	present? N
Remarks: (Include photo numbers here or on a separate sheet) Corn stubble	

<b>Profile Des</b>	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the abser	nce of indicators.)
Depth	Matrix		Red	dox Feat	ures			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-16	10YR 2/1	100					Silt loam	
16-18	2.5Y 3/1	100					Clay loam	
18-26	5Y 4/1	99	10YR 4/6	<1	С	PL	Clay	
26-28	5Y 4/1	99	10YR 4/6	<1	С	PI	Sandy clay	1
20 20	01 1/1							
*Type: C = 0	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	k, MS = N	/lasked S	and Grains. **Locat	ion: PL = Pore Lining, M = Matrix
Hydric So	oil Indicators:						Indicators for Prot	plematic Hydric Soils:
His	tisol (A1)		Sar	ndy Gley	ed Matrix	(S4)	Coast Prairie R	edox (A16) ( <b>LRR K, L, R</b> )
His	tic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark Surface (S	67) ( <b>LRR K, L)</b>
Bla	ck Histic (A3)		Stri	pped Ma	trix (S6)			e Masses (F12) (LRR K, L, R)
Hyo	drogen Sulfide (A4	4)	Loa	my Muc	ky Minera	al (⊢1)	Very Shallow D	ark Surface (TF12)
	m Muck (A10)	)		Iny Gley	ed Main	X (FZ)		n remarks)
2 C	ni Muck (ATU)			lov Dark	Surface	(F6)		
	ck Dark Surface (	( Ourlace (A12)	Der	oleted Dark	ark Surfa	(F7)	*Indicators of hy	trankytic vegetation and weltand
Sar	ndv Mucky Minera	al (S1)	Bec	lox Depr	ressions	(F8)	hydrology must	be present unless disturbed or
5 c	m Muckv Peat or	Peat (S3		ion Bobi		(10)	nyarology maor	problematic
		<u>, ,</u>	,			1		•
	Layer (II Observe	eu).					Hydric soil prose	Int? N
Denth (inch	oc).				-		riyunc son prese	
Deptil (men					-			
HYDROL	OGY							
Wetland Hy	drology Indicate	ors:						
Primary Ind	icators (minimum	of one is	required; check	<u>all that a</u>	pply)		Secondary Ir	dicators (minimum of two required
Surface	Water (A1)			Aquatic	Fauna (B	13)	X Surface	e Soil Cracks (B6)
High Wa	ater Table (A2)			True Aq	uatic Plar	nts (B14)	Draina	ge Patterns (B10)
Saturati	on (A3)			Hydroge	en Sulfide	Odor (C	1) Dry-Se	ason Water Table (C2)
Water N	larks (B1)				d Rhizosp	heres on	Living Roots Crayfis	h Burrows (C8)
Drift De	(B2)			Presenc	e of Redu	uced Iron	(C4) Stunted	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)			Recent	Iron Redu	uction in T	Tilled Soils Geomo	rights Position (D2)
Iron Dep	posits (B5)			(C6)			FAC-N	eutral Test (D5)
Inundati	on Visible on Aeria	al Imager	y (B7)	Thin Mu	ck Surfac	ce (C7)		
Sparsel	y Vegetated Conca	ave Surfa	ce (B8)	Gauge of	or Well Da	ata (D9)		
Water-S	Stained Leaves (B9	9)		Other (E	Explain in	Remarks	)	
Field Obse	rvations:							
Surface wat	er present?	Yes	No	<u>X</u>	Depth (i	inches):		
Water table	present?	Yes	No	<u> </u>	Depth (i	inches):	Ir	ndicators of wetland
Saturation p	present?	res		X		incnes):	'	iydrology present? N
Describer .	porded data (-the		monitorio	o cri-l	hoter	rov <i>ice</i> :- :	apportions) if an it-blue	
Describe re	corded data (strea	am gaug	e, monitoring well	, aeriai p	onotos, p	revious li	nspections), if available:	
Remarks:								



NWA026A overview looking west.

WETLAND I	DETERMINATI	ON DATA FORM - M	idwest Region				
Project/Site: Hayward Solar	City/	County: Freeborn Cou	unty Sampling Date:	4/29/2020			
Applicant/Owner: Hayward Solar LLC		State: Minneso	ta Sampling Point:	NWA027A			
Investigator(s): Apryl Jennrich		Section, Township	, Range: T10	2N R20W S13			
Landform (hillslope, terrace, etc.):	Plain	Local relief (conca	ve, convex, none):	Concave			
Slope (%): 1 Lat: 43° 38	3' 33.41"	 Long: -93° 10' 28	3.14" Datum:	WGS84			
Soil Map Unit Name: K	ossner muck	NWI C	Classification:	NA			
Are climatic/hydrologic conditions of the site typ	ical for this time o	of the year? Y (	If no, explain in remarks)				
Are vegetation X , soil , or	hydrology	significantly disturbed?	Are "normal ci	rcumstances"			
Are vegetation , soil , or	hydrology	naturally problematic? present? N					
SUMMARY OF FINDINGS			(If needed, explain any	answers in remarks.)			
Hydrophytic vegetation present?	Ν						
Hydric soil present?	N	Is the sampled area w	vithin a wetland?	Ν			
Indicators of wetland hydrology present?	N	If yes, optional wetlan	d site ID:				
Remarks: (Explain alternative procedures here	or in a separate re	eport.)					
VEGETATION Use scientific names o	f nlants						
	Absolute	Dominant Indicator	Dominance Test Wor	ksheet			
<u>Tree Stratum</u> (Plot size:1	) % Cover	Species Staus	Number of Dominant Sp that are OBL, FACW, or	ecies FAC: 0 (A)			
2			Total Number of Dom	ninant			
3			Species Across all S				
5			that are OBL. FACW. or	FAC: 0.00% (A/B)			
	0	= Total Cover	- , - ,	()			
Sapling/Shrub stratum (Plot size:	)		Prevalence Index Wo	rksheet			
1			Total % Cover of:				
2			OBL species 0	x 1 =0			
3			FACW species 0	x 2 = 0			
4			FAC species 0	$x^{3} = 0$			
5		- Total Cover	FACU species 0	x 4 = 0			
Herb stratum (Plot size:	)		Column totals 0	(A) = 0 (B)			
1	/		Prevalence Index = B/A	<u> </u>			
2			Hydrophytic Vegetati	on Indicators:			
4			Rapid test for hvdr	ophytic vegetation			
5			Dominance test is	>50%			
6			Prevalence index is	s ≤3.0*			
7			Morphogical adapt	ations* (provide			
8 9			supporting data in separate sheet)	Remarks or on a			
10		- Total Cover	Problematic hydror	phytic vegetation*			
Woody vine stratum (Plot size:	)		*Indicators of hydric soil ar	nd wetland hydrology must be			
1			present, unless dis	sturbed or problematic			
²		- Total Cover	vegetation				
	U		present?	Ν			
Remarks: (Include photo numbers here or on a Corn stubble	separate sheet)		· —				

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm t	the absend	e of indicators.)
Depth	Matrix		Red	dox Featu	ures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Textu	re	Remarks
0-12	10YR 2/1	100					Loam		
12.20	2 EV E/2	100					Sond		
12-20	2.51 5/5	100					Sanu		
*Type: C = 0	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	, MS = N	lasked S	and Grains.	**Locatio	n: PL = Pore Lining, M = Matrix
Hydric So	il Indicators:						Indicators	s for Proble	ematic Hydric Soils:
Hist	tisol (A1)		Sar	dy Gleye	ed Matrix	: (S4)	Coast	Prairie Red	dox (A16) ( <b>LRR K, L, R</b> )
Hist	tic Epipedon (A2)		Sar	idy Redo	x (S5)	. ,	Dark S	Surface (S7	(LRR K, L)
Bla	ck Histic (A3)		Stri	pped Ma	trix (S6)		Iron-M	langanese	Masses (F12) (LRR K, L, R)
Hvo	Irogen Sulfide (A	4)	Loa	my Mucł	v Minera	al (F1)	Very S	Shallow Dai	rk Surface (TF12)
Stra	Stratified Lavers (A5) Loamy Gleved Matrix (F2) Other (explain in remarks)								
2 cr	2 cm Muck (A10) Depleted Matrix (F3)								
Der	leted Below Dark	Surface	e (A11) Red	lox Dark	Surface	(F6)			
	ck Dark Surface (	A12)		leted Da	irk Surfa	ce (F7)	*Indicat	ors of hydr	ophytic vegetation and weltand
Sar	ndv Muckv Minera	, l (S1)	Rec	lox Depr	essions	(F8)	hvdrol	oav must b	e present, unless disturbed or
5 cr	m Muckv Peat or	, Peat (S3	)			/	·· <b>··</b>	- 57	problematic
De stristisse	, 	· -//-	,			1			
Restrictive	Layer (If observe	ea):					l lu aluita a		10 N
Type:	\.						Hydric s	son presen	t? <u>N</u>
Depth (Inche	es):				i				
Remarks:									
HYDROLO	DGY								
Wetland Hy	drology Indicate	ors:							
Primary Indi	cators (minimum	of one is	required; check	all that a	pply)		Sec	ondary Ind	icators (minimum of two required)
Surface	Water (A1)		•	Aquatic	Fauna (B	13)		Surface S	Soil Cracks (B6)
High Wa	ater Table (A2)			True Aq	uatic Plar	, nts (B14)		Drainage	Patterns (B10)
Saturatio	on (A3)			Hydroge	n Sulfide	Odor (Ć	1) —	Dry-Seas	son Water Table (C2)
Water N	larks (B1)			Oxidized	l Rhizosp	heres on	Living Roots	Crayfish	Burrows (C8)
Sedimer	nt Deposits (B2)			(C3)				Saturatio	n Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)			Presenc	e of Redu	uced Iron	(C4)	Stunted of	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)			Recent I	ron Redu	iction in T	illed Soils	Geomorp	phic Position (D2)
Iron Dep	osits (B5)			(C6)			_	FAC-Neu	ıtral Test (D5)
Inundati	on Visible on Aeria	al Imager	y (B7)	Thin Mu	ck Surfac	e (C7)			
Sparsely	Vegetated Conca	ave Surfa	ce (B8)	Gauge o	r Well Da	ata (D9)			
Water-S	tained Leaves (B9	)		Other (E	xplain in	Remarks	)		
Field Obser	vations:								
Surface wat	er present?	Yes	No	X	Depth (i	nches):			
Water table	present?	Yes	No	X	Depth (i	nches):		Ind	licators of wetland
Saturation p	resent?	Yes	No	Х	Depth (i	nches):		hy	vdrology present? N
(includes ca	(includes capillary fringe)								
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									
Demode									
Remarks:	Kemarks:								



NWA027A overview looking west.

WETLAND D	DETERMINATI	ON DATA FORM - M	idwest Region				
Project/Site: Hayward Solar	City/	County: Freeborn Cou	inty Sampling Date:	4/29/2020			
Applicant/Owner: Hayward Solar LLC		State: Minneso	ta Sampling Point:	NWA028A			
Investigator(s): Apryl Jennrich		Section, Township	, Range: T102	2N R20W S13			
Landform (hillslope, terrace, etc.):	Plain	Local relief (conca	ve, convex, none):	Concave			
Slope (%): 1 Lat: 43° 38	3' 28.60"	 Long: -93° 10' 18	3.26" Datum:	WGS84			
Soil Map Unit Name: KI	ossner muck	NWI C	Classification:	NA			
Are climatic/hydrologic conditions of the site typ	ical for this time o	of the year? Y (	If no, explain in remarks)				
Are vegetation X , soil , or	hydrology	significantly disturbed?	Are "normal cir	cumstances"			
Are vegetation , soil , or	hydrology	naturally problematic? present? No					
SUMMARY OF FINDINGS			(If needed, explain any	answers in remarks.)			
Hydrophytic vegetation present?	Ν						
Hydric soil present?	N	Is the sampled area w	vithin a wetland?	Ν			
Indicators of wetland hydrology present?	N	If yes, optional wetlan	d site ID:				
Remarks: (Explain alternative procedures here	or in a separate re	eport.)					
VEGETATION Use scientific names of	plants.						
	Absolute	Dominant Indicator	Dominance Test Work	sheet			
<u>Tree Stratum</u> (Plot size: 1	) % Cover	Species Staus	Number of Dominant Spe that are OBL, FACW, or I	ecies FAC: 0 (A)			
2			Total Number of Dom Species Across all St	inant rata: 0 (B)			
4			Porcent of Dominant Spo				
5			that are OBL, FACW, or I	AC: 0.00% (A/B)			
	0	= Total Cover		、			
Sapling/Shrub stratum (Plot size:	)		Prevalence Index Wor	ksheet			
1			Total % Cover of:				
2			OBL species 0	x 1 =0			
3			FACW species 0	$x^2 = 0$			
4			FAC species 0	$x^{3} = 0$			
5		- Total Cover	FACU species 0	x 4 = 0			
Herb stratum (Plot size:	)		Column totals 0	(A) = 0 (B)			
1	,		Prevalence Index = $B/A$	(=) 			
2							
3			Hydrophytic Vegetatio	on Indicators:			
4			Rapid test for hydro	phytic vegetation			
5			Dominance test is >	>50%			
6			Prevalence index is	≤3.0*			
7			Morphogical adapta	ations* (provide			
8 9			supporting data in F separate sheet)	Remarks or on a			
10			Problematic hydrop	hytic vegetation*			
	0	= Total Cover	(explain)				
<u>Woody vine stratum</u> (Plot size: 1	)		*Indicators of hydric soil an present, unless dist	d wetland hydrology must be urbed or problematic			
2			Hydrophytic				
	0	= Total Cover	vegetation	N			
			present?				
Remarks: (Include photo numbers here or on a Corn stubble	separate sheet)						

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm t	the absend	e of indicators.)
Depth	Matrix		Red	dox Featu	ures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Textu	re	Remarks
0-12	10YR 2/1	100					Loam		
12.20	2 EV E/2	100					Sond		
12-20	2.51 5/5	100					Sanu		
*Type: C = 0	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	, MS = N	lasked S	and Grains.	**Locatio	n: PL = Pore Lining, M = Matrix
Hydric So	il Indicators:						Indicators	s for Proble	ematic Hydric Soils:
Hist	tisol (A1)		Sar	dy Gleye	ed Matrix	: (S4)	Coast	Prairie Red	dox (A16) ( <b>LRR K, L, R</b> )
Hist	tic Epipedon (A2)		Sar	idy Redo	x (S5)	. ,	Dark S	Surface (S7	(LRR K, L)
Bla	ck Histic (A3)		Stri	pped Ma	trix (S6)		Iron-M	langanese	Masses (F12) (LRR K, L, R)
Hvo	Irogen Sulfide (A	4)	Loa	my Mucł	v Minera	al (F1)	Very S	Shallow Dai	rk Surface (TF12)
Stra	Stratified Lavers (A5) Loamy Gleved Matrix (F2) Other (explain in remarks)								
2 cr	2 cm Muck (A10) Depleted Matrix (F3)								
Der	leted Below Dark	Surface	e (A11) Rec	lox Dark	Surface	(F6)			
	ck Dark Surface (	A12)		leted Da	irk Surfa	ce (F7)	*Indicat	ors of hydr	ophytic vegetation and weltand
Sar	ndv Muckv Minera	, l (S1)	Rec	lox Depr	essions	(F8)	hvdrol	oav must b	e present, unless disturbed or
5 cr	m Muckv Peat or	, Peat (S3	)			/	·· <b>··</b>	- 57	problematic
De stristisse	, 	· -//-	,			1			
Restrictive	Layer (If observe	ea):					l lu aluita a		10 N
Type:	\.						Hydric s	son presen	t? <u>N</u>
Depth (Inche	es):				i				
Remarks:									
HYDROLO	DGY								
Wetland Hy	drology Indicate	ors:							
Primary Indi	cators (minimum	of one is	required; check	all that a	pply)		Sec	ondary Ind	icators (minimum of two required)
Surface	Water (A1)		•	Aquatic	Fauna (B	13)		Surface S	Soil Cracks (B6)
High Wa	ater Table (A2)			True Aq	uatic Plar	, nts (B14)		Drainage	Patterns (B10)
Saturatio	on (A3)			Hydroge	n Sulfide	Odor (Ć	1) —	Dry-Seas	son Water Table (C2)
Water N	larks (B1)			Oxidized	l Rhizosp	heres on	Living Roots	Crayfish	Burrows (C8)
Sedimer	nt Deposits (B2)			(C3)				Saturatio	n Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)			Presenc	e of Redu	uced Iron	(C4)	Stunted of	or Stressed Plants (D1)
Algal Ma	at or Crust (B4)			Recent I	ron Redu	iction in T	illed Soils	Geomorp	phic Position (D2)
Iron Dep	osits (B5)			(C6)			_	FAC-Neu	ıtral Test (D5)
Inundati	on Visible on Aeria	al Imager	y (B7)	Thin Mu	ck Surfac	ce (C7)			
Sparsely	Vegetated Conca	ave Surfa	ce (B8)	Gauge o	r Well Da	ata (D9)			
Water-S	tained Leaves (B9	)		Other (E	xplain in	Remarks	)		
Field Obser	vations:								
Surface wat	er present?	Yes	No	X	Depth (i	nches):			
Water table	present?	Yes	No	X	Depth (i	nches):		Ind	licators of wetland
Saturation p	resent?	Yes	No	Х	Depth (i	nches):		hy	vdrology present? N
(includes ca	(includes capillary fringe)								
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									
Demode									
Remarks:	Kemarks:								



NWA028A overview looking northwest.

WEILAND DEIER Project/Site: Hawward Solar	MINATIC	DN DATA		tv Sampling Date	Δ· <u>Δ/2</u> Ω/2020
Applicant/Owner: Hayward Solar LLC		State	Minnesota	Sampling Poin	t: NWA029A
Investigator(s): Apryl Jennrich		Sectio	n. Township.	Range: T	102N R20W S13
Landform (hillslope, terrace, etc.): Plain	1	Local I	elief (concave	e. convex. none):	None
Slope (%): 1 Lat: 43° 38' 25.92"	'	Long:	-93° 10' 19.0	63" Datum:	WGS84
Soil Map Unit Name: Dassel much	kv loam		NWI Cla	assification:	NA
Are climatic/hydrologic conditions of the site typical for t	this time of	the vear?	Y (If	no. explain in remark	s)
Are vegetation X , soil , or hydrolog	qv	significantl	v disturbed?	Δre "normal	, circumstances"
Are vegetation , soil , or hydrolog	gy	naturally p	oblematic?		present? No
SUMMARY OF FINDINGS				(If needed, explain a	ny answers in remarks.)
Hydrophytic vegetation present? N					
Hydric soil present? N		Is the sam	pled area wit	hin a wetland?	N
Indicators of wetland hydrology present? N		If yes, opt	ional wetland	site ID:	
Remarks: (Explain alternative procedures here or in a se	eparate re	port.)			
		, ,			
VEGETATION Use scientific names of plants	3.				
	Absolute	Dominant	Indicator	Dominance Test W	orksheet
Tree Stratum (Plot size: )	% Cover	Species	Staus	Number of Dominant	Species
1				that are OBL, FACW,	or FAC: 0 (A)
2				Total Number of D	ominant
3				Species Across al	I Strata: 0 (B)
4				Percent of Dominant	Species or FAC: 0.00% (A/B)
	0 =	Total Cove			
			ľ	Prevalence Index W	/orksheet
1				Total % Cover of:	
2				OBL species 0	x 1 = 0
3				FACW species 0	x = 0
4				FAC species 0	$x^{3} = 0$
	0 =	Total Cove	r	IPI species	$x_{5} = 0$
Herb stratum (Plot size: )				Column totals	(A) = 0 (B)
1				Prevalence Index = I	()() B/A =
2					
3				Hydrophytic Vegeta	ation Indicators:
4				Rapid test for hy	drophytic vegetation
5				Dominance test	is >50%
6 					X IS ≤3.0 <sup>*</sup>
8				Morphogical ada	iptations* (provide
9				separate sheet)	
10				Problematic hyd	rophytic vegetation*
	0 =	Total Cove	r	(explain)	
Woody vine stratum         (Plot size:)           1        )				*Indicators of hydric soil present, unless	and wetland hydrology must be disturbed or problematic
2				Hydrophytic	
	0 =	Total Cove	r	present?	N
Remarks: (Include photo numbers here or on a separate Corn stubble	e sheet)				

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the	e absence	e of indicators.)
Depth	<u>Matrix</u>		Red	dox Feat	ures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture		Remarks
0-8	10YR 2/1	100					Sandy loam		
8-16	2.5Y 5/3	100					Sand		
16-20	2.5Y 5/3	100					Sand		with gravel
20-23	2 5Y 5/3	100					Sand		5
20 20	2.01 0/0	100					Cana		
*Type: C = 0	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	, MS = N	/lasked S	and Grains.	**Location	: PL = Pore Lining, M = Matrix
Hydric Sc	il Indicators:						Indicators f	or Proble	matic Hydric Soils:
His	tisol (A1)		Sar	ndy Gleye	ed Matrix	(S4)	Coast P	rairie Red	ox (A16) ( <b>LRR K, L, R</b> )
His	tic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark Su	irface (S7)	(LRR K, L)
Bla	ck Histic (A3)		Stri	pped Ma	trix (S6)		Iron-Mai	nganese N	/lasses (F12) ( <b>LRR K, L, R</b> )
Hyd	drogen Sulfide (A4	4)	Loa	my Mucl	ky Minera	al (F1)	Very Sh	allow Darl	< Surface (TF12)
Stra	atified Layers (A5	)	Loa	my Gley	ed Matri	x (F2)	Other (e	explain in r	emarks)
2 ci	m Muck (A10)		Dep	pleted Ma	atrix (F3)				
Dep	pleted Below Dark	Surface	e (A11) Rec	lox Dark	Surface	(F6)			
Thi	ck Dark Surface (	A12)	Dep	pleted Da	ark Surfa	ce (F7)	*Indicator	s of hydro	phytic vegetation and weltand
Sar	ndy Mucky Minera	l (S1)		lox Depr	essions	(F8)	hydrolog	y must be	present, unless disturbed or
5 ci	m Mucky Peat or	Peat (S3	)					k	problematic
Restrictive	Layer (if observe	ed):							
Туре:					_		Hydric soi	il present	? <u>N</u>
Depth (inche	es):				-				
Remarks:					_				
HYDROL	OGY								
Wetland Hy	drology Indicato	ors:							
Primary Indi	<u>cators (minimum</u>	of one is	required; check	<u>all that a</u>	pply)		Secor	ndary India	cators (minimum of two required
Surface	Water (A1)			Aquatic	Fauna (B	13)		Surface S	oil Cracks (B6)
High Wa	ater Table (A2)			True Aq	uatic Plai	nts (B14)		Drainage	Patterns (B10)
Saturatio	on (A3)			Hydroge	en Sulfide	Odor (C	1)	Dry-Seaso	on Water Table (C2)
Water M	larks (B1)			Oxidized	d Rhizosp	heres on	Living Roots	Crayfish E	Burrows (C8)
Sedimer	nt Deposits (B2)			(C3)	o of Dod	upped Iron	(C4)	Saturation	Visible on Aerial Imagery (C9)
	DUSILS (D3)			Presenc	lron Podu	uced from	(C4) Filled Seils	Goomorph	Dic Position (D2)
	(B5)			(C6)	II UII INEUL			EAC-Neut	ral Test (D5)
Inundati	on Visible on Aeria	l Imager	/ (B7)	Thin Mu	ck Surfac	ce (C7)		-	
Sparsel	/ Vegetated Conca	ive Surfa	ce (B8)	Gauge o	or Well Da	ata (D9)			
Water-S	tained Leaves (B9	)	· · ·	Other (E	xplain in	Remarks	)		
Field Obser	vations:			-					
Surface wat	er present?	Yes	No	х	Depth (i	inches):			
Water table	present?	Yes	No	X	Depth (i	inches):		Indi	cators of wetland
Saturation p	resent?	Yes	No	X	Depth (i	inches):		hyo	drology present? N
(includes ca	pillary fringe)								
Describe ree	corded data (strea	am gauge	e, monitoring well	, aerial p	ohotos, p	revious i	nspections), if ava	ailable:	
Domorto									
Remarks:									



NWA029A overview looking east.

WETLAND	DETERMINATI	ON DAT	A FORM - M	idwest Regior	n
Project/Site: Hayward Solar	City/	County:	Freeborn Cou	nty Samplin	g Date: 4/29/2020
Applicant/Owner: Hayward Solar LLC		State	: Minnesot	ta Sampling	g Point: NWA030A
Investigator(s): Apryl Jennrich		Sec	tion, Township	, Range:	T102N R20W S13
Landform (hillslope, terrace, etc.):	Plain	Loca	al relief (concav	/e, convex, none)	): None
Slope (%): 1 Lat: 43° 3	3' 22.10"	Long:	-93° 10' 16	.79" Datum	WGS84
Soil Map Unit Name: Das	sel mucky loam	-	NWI C	lassification:	NA
Are climatic/hydrologic conditions of the site typ	ical for this time o	of the year	? Y (I	If no, explain in re	emarks)
Are vegetation X , soil , or	hydrology	significa	ntly disturbed?	Are "n	ormal circumstances"
Are vegetation , soil , or	hydrology	naturally	problematic?	740 11	present? No
SUMMARY OF FINDINGS		-		(If needed, exp	plain any answers in remarks.)
Hydrophytic vegetation present?	Ν				
Hydric soil present?	N	Is the sa	ampled area w	ithin a wetland?	Р N
Indicators of wetland hydrology present?	N	lf yes, o	optional wetland	d site ID:	
Demonstrative (Eventsian alternative mass alternative		, , , , , , , , , , , , , , , , , , ,	•		
Remarks: (Explain alternative procedures here	or in a separate re	eport.)			
VEGETATION Use scientific names o	f plants.				
	Absolute	Dominan	Indicator	Dominance To	est Worksheet
<u>Iree Stratum</u> (Plot size:	) % Cover	Species	Staus	Number of Dom	hinant Species
2					ACW, OF FAC. 0 (A)
3				Species Acr	ross all Strata: 0 (B)
4				Percent of Dom	pinant Species
5				that are OBL, F	ACW, or FAC: 0.00% (A/B)
	0	= Total Co	ver		
Sapling/Shrub stratum (Plot size:	)			Prevalence In	dex Worksheet
1				Total % Cover	of:
2				OBL species	$0 \times 1 = 0$
3				FACW species	$s = 0 = x^2 = 0$
4				FAC species	$\frac{0}{0} \times 4 = 0$
	0	= Total Co	ver	UPL species	$\frac{0}{0} \times 5 = 0$
Herb stratum (Plot size:	)			Column totals	0 (A) 0 (B)
1				Prevalence Inc	dex = B/A =
2					
3				Hydrophytic \	/egetation Indicators:
4				Rapid test	for hydrophytic vegetation
5				Dominance	e test is >50%
6				Prevalence	e index is ≤3.0*
/				Morphogic	al adaptations* (provide
o				supporting	data in Remarks or on a
				Separate s	ic hydrophytic ycgotation*
	0	= Total Co	ver	(explain)	
Woody vine stratum (Plot size:	)			*Indicators of by	drie soil and wetland bydrology must be
1				present,	unless disturbed or problematic
2				Hydrophy	tic
	0	= Total Co	ver	vegetation	n
				present?	
Remarks: (Include photo numbers here or on a	separate sheet)				
Corn stubble					

(Inclus)       Color (moist)       %       Color (moist)       %       Type*       Lea**       Texture       Remarks         0-12       10YR 21       100       Image: color (moist)       %       Type*       Lea**       Lea***       Lea***       Lea***       Lea***       Lea***       Lea***       Lea***       Lea****       Lea****       Lea****       Lea****       Lea****       Lea****       Lea*****       Lea*****       Lea************************************	Depth	Matrix		Re	dox Feat	ures				
0-12       10YR 2/1       100       Ion       Ion         12.22       2.5Y 6/3       100       Ion       Ion       Ion         "Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       "Location: PL = Pore Lining, M = Matrix         "Hydro Soli Indicators:       Indicators for Problematic Hydro Solis:         Histisc (A1)       Sandy Beaver (S5)       Ion         Histisc (A3)       Strated Karks (S6)       Ion         Hydro Soli Indicators:       Ion       Ion         Hydro Soli Indicators:       Ion       Ion         Hydro Soli Indicators:       Ion       Ion         Back Histic (A3)       Strated Karks (F2)       Other (explain in remarks)         Depleted Bark Surface (F1)       Depleted Dark Surface (F1)       There Soli Indicators (T12)         Sandy Mukey Mineral (S1)       Depleted Dark Surface (F1)       Indicators of hydrophylic vegetation and wetlan hydrology inus to present.         Restrictive Layer (If observed):       Type:       Indicators (S1)       Indicators (S1)         Surface Water Table (A2)       True Aquate Flaana (B13)       Surface Water Table (A2)       Ion         Surface Water Table (A2)       True Aquate Plants (B14)       Drah Surface Soli Cracks (B3)       Ion         Surface Water Table (A2)       Cocadex	(Inches)	Color (moist)	%	Color (moist)	<u>%</u>	Tvpe*	Loc**	Textur	e	Remarks
0.12       2.57 (63)       100       Image: Construction of the second	0-12	10YR 2/1	100	- ( )				Loam		
1222       2.51 0.0       100	10.00	2.57.6/2	100					Sond		
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matked Sand Grains.         Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matked Sand Srains.         Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matked Sand Srains.         Type: C = Concentration, D = Depletion, RM = Reduced Matrix, (S6)	12-22	2.51 0/5	100					Sanu		
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matrix         Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matrix         Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matrix         Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matrix         Histisc (A)										
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains,										
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       "Location: PL = Pare Lining, M = Matrix (Sa)         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils:       Coast Praine Redox (A16) (LRR K, L, R)         Histic Epipedon (A2)       Sandy Gleyed Matrix (Sa)       Dark Surface (S7) (LRR K, L, R)         Back Histic (A3)       Stripped Matrix (Sa)       Dark Surface (S7) (LRR K, L, R)         Histic (A4)       Learny Gleyed Matrix (Sa)       Dark Surface (S7) (Duer (explain in remarks)         Depleted Layers (A10)       Depleted Matrix (F3)       Other (explain in remarks)         Depleted Dark Surface (F7)       "Indicators of hydrophytic vegetation and veltan hydrology must be present, unless disturbed on problematic         Redox Dark Surface (F7)       Thick Dark Surface (A11)       Redox Dark Surface (F7)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       "Indicators of hydrophytic vegetation and veltan hydrology must be present, unless disturbed on problematic         Retrictive Layer (if observed):       Yupert soil present?       N         Speph (inches):										
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Send Grains.       **Location: PL = Pore Lining, M = Matrix         Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Send Grains.       **Location: PL = Pore Lining, M = Matrix         Histis (A1)										
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matrix Fydric Soil Indicators in Problematic Hydric Soils:         Type: C = Concentration, (A1)       Sandy Redux (S5)       Indicators in Problematic Hydric Soils:         Histisol (A1)       Sandy Redux (S5)       Dark Surface (S7) (LRR K, L, R)         Black Histisol (A3)       Stripped Matrix (S6)       Ion Manganese Masses (F12) (LRR K, L, R)         Dark Surface (S7)       Loamy Gleyed Matrix (S6)       Ion Manganese Masses (F12) (LRR K, L, R)         Depleted Layers (A5)       Loamy Gleyed Matrix (F3)       Peleded Matrix (F3)         Depleted Barb Surface (A1)       Depleted Matrix (F3)       "Indicators of hydrophylic vegatation and wetlan hydrology must be present, unless disturbed or problematic         Sandy Mucky Mineral (S1)       Peleted Dark Surface (F7)       "Indicators of hydrophylic vegatation and wetlan hydrology indicators:         Propertion (inches):       Inchest Surface (A12)       Peleted Dark Surface (A13)       Problematic Hydrology indicators:         Surface Soil Gracks (B1)       Ondicate Analy Mucky Mineral (S1)       Aquatic Plants (B13)       Problematic Hydrology indicators:         Ympe:       Water Marks (S1)       Coast Present?       N       Secondary Indicators (minimum of two requires indicators (minimum of two requires indicators (B1)         Surface Soil Gracks (S1)       Ondized Rhiticopphereso n Livin										
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matrix         Hydric Soli Indicators:       Indicators for Problematic Hydric Solis:       Indicators for Problematic Hydric Solis:         Histic Epipedion (A2)       Sandy Redox (S5)       Dark Surface (S7) (LRR K, L, R)         Black Histic (A3)       Stripped Matrix (S6)       Iron-Manganese Masses (F12) (LRR K, L, R)         Stratified Layers (A5)       Loarny Mucky Mineral (F1)       Very Shallow Dark Surface (T12)         Oppleted Below Dark Surface (A11)       Redox Dark Surface (F6)       *Indicators of hydrophytic vegetation and weltan hydrology must be present, unless disturbed or problematic         Startified Layers (If observed):       Pepleted Matrix (F2)       *Indicators of hydrophytic vegetation and weltan hydrology must be present, unless disturbed or problematic         Startified Relow Care (A12)       Redox Dark Surface (F1)       *Indicators of hydrophytic vegetation and weltan hydrology must be present, unless disturbed or problematic         Wetland Hydrology Indicators:       ************************************										
Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       "Location: PL = Porte Lining, M = Matrix         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils:       Location: PL = Porte Lining, M = Matrix         Histise (A1)       Sandy Redox (S5)       Coast Praire Redox (A16) (LRR K, L, R)         Black Histic (A3)       Stripped Matrix (S6)       Dark Surface (S7) (LRR K, L, R)         Black Histic (A3)       Learwy Kleyde Matrix (S6)       Uror-Manganese Masses (F12) (LRR K, L, R)         Depleted Below Dark Surface (A10)       Depleted Matrix (S7)       Other (explain in remarks)         Depleted Below Dark Surface (A12)       Depleted Matrix (S1)       "Indicators of hydrophytic vegetation and weltan hydrology must be present, unless disturbed or problematic         Redox Dark Surface (A12)       Depleted Dark Surface (F6)       "Indicators of hydrophytic vegetation and weltan hydrology Indicators:         "Yper:       Hydric soil present?       N         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         Hydriver Matrix (B1)       Draitage Patterns (B10)       Draitage Patterns (B10)         Surface Water (A1)       Aquatic Pants (B14)       Draitage Patterns (B10)         Surface Water (A1)       Oxidized Rhizospheres on Living Roots       Carafin Burrow (B2)         Sediment Deposits (B2)       (C3)       Presence of										
Hydric Soli Indicators:       indicators for Problematic Hydric Solis:         Histic Epipedon (A2)       Sandy Redox (S5)         Brack Histic (A3)       Stripped Matrix (S4)         Brack Histic (A3)       Stripped Matrix (S6)         Stratified Layers (A5)       Loamy Mucky Mineral (F1)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Depleted Dark Surface (A12)       Depleted Matrix (F2)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)         Sorm Mucky Peat or Peat (S3)       Persence (F6)         Popleted Hydrology Indicators:       ''indicators of hydrophytic vegetation and weltan hydrology must be present, unless disturbed on problematic         Ypre:	Type: C = 0	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	κ, MS = Ν	/lasked S	and Grains.	**Location	: PL = Pore Lining, M = Matrix
Hists Dipedon (A2)       Sandy Gleyed Matrix (S4)       Coast Praine Redox (A15) (LRR K, L, R)         Hists Dipedon (A2)       Sandy Redox (S5)       Dark Surface (S7) (LRR K, L)         Hydrogen Sulfide (A4)       Learny Mucky Mineral (F1)       Very Shallow Dark Surface (F12) (LRR K, L, R)         Depleted Solf (A4)       Learny Mucky Mineral (F2)       Other (explain in remarks)         Depleted Below Dark Surface (A12)       Depleted Matrix (F2)       Other (explain in remarks)         Sandy Redox (S5)       Learny Mucky Mineral (F1)       "Indicators of hydrophytic vegetation and welfan hydrology must be present, unless disturbed or problematic         Sandy Redox Peat (S1)       Redox Depressions (F8)       "Indicators of hydrophytic vegetation and welfan hydrology must be present, unless disturbed or problematic         Setricitive Layer (if observed):       True Aquatic Plants (B14)       Surface Soil Cracks (B6)         Strate Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         Startiation (A3)       Hydrogen Sufface Odr (C1)       Dup sease Water Table (A2)         Water Marks (B1)       Oxidized Rhizosphares on Living Roots       Crayfish Burrow (C8)         Starting Undicators (B2)       (C3)       Freesnee of Reduced Iron (C4)       Surface Soil Cracks (B6)         Mater Marks (B1)       Oxidized Rhizosphares on Living Roots       Crayfish Burrows (C8)       Surface (C7)	Hydric So	oil Indicators:					( <b>a</b> 1)	Indicators	for Proble	matic Hydric Soils:
Histic Explored on (A2)       Sandy Redox (S5)       Dark Surface (S7) (LRR K, L, R)         Black Histic (A3)       Stripped Matrix (S6)       Ionn-Manganese Masses (F12) (LRR K, L, R)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (explain in remarks)         2 cm Muck (A10)       Depleted Matrix (F2)       Other (explain in remarks)         2 stratified Layers (A5)       Depleted Matrix (F2)       Other (explain in remarks)         Stratified Layers (A5)       Depleted Matrix (F2)       Other (explain in remarks)         Stratified Layers (A12)       Depleted Dark Surface (F7)       Indicators of hydrophytic vegetation and weltar hydrology must be present, unless disturbed on problematic         Sestrictive Layer (If observed):       Frype:       Hydric soil present?       N         Surface Water (A11)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)       Drainage Patterns (B10)         Surface Water (A11)       Aquatic Panta (B13)       Surface Soil Cracks (B6)       Drainage Patterns (B10)         Sturation (A3)       Hydrogen Sulfde Cdor (C1)       Dry-Season Water Table (C2)       Suntation Visible on Aerial Imagery (C2)         Mater Mark (B1)       Codideed Rhizospheres on Living Robes       Caryfins Burrows (C3)       Saturation Visible on Aerial Imagery (B7)         Sectiment Deposits (B3)       Preseence of Reduced Iron (C4)       Saturation Visible on A	His	tisol (A1)		Sar	ndy Gley	ed Matrix	(S4)	Coast	Prairie Red	ox (A16) ( <b>LRR K, L, R</b> )
Black Histic (A3)       Stripped Matrix (S6)       Infon-Manganese Masses (F12) (LKK K, L, K)         Stratified Layers (A5)       Loarmy Mucky Mineral (F1)       Other (explain in remarks)         Depleted Below Dark Surface (A12)       Depleted Matrix (F3)       Other (explain in remarks)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       'Indicators of hydrophytic vegetation and weltar hydrology must be present, unless disturbed or problematic         Restrictive Layer (if observed):       Fype:       N	His	tic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark S	Surface (S7)	
Hydrogen Sullide (A)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (T12)         2 cm Muck (A10)       Depleted Matrix (F3)       Other (explain in remarks)         2 cm Muck (A10)       Depleted Matrix (F3)       Indicators of hydrophylic vegetation and weltar         3 Sandy Mucky Mineral (S1)       Redox Dark Surface (F7)       'Indicators of hydrophylic vegetation and weltar         5 cm Mucky Peat or Peat (S3)       Redox Depressions (F8)       'Indicators of hydrophylic vegetation and weltar         Ypp:	Bla	ck Histic (A3)		Stri	pped Ma	itrix (S6)		Iron-M	anganese N	lasses (F12) ( <b>LRR K, L, R</b> )
Stratified Layers (A5)      Clarmy Gleyed Matrix (F2)      Other (explain in remarks)	Hyo	drogen Sulfide (A	4)	Loa	my Muc	ky Miner	al (F1)	Very S	Shallow Dark	Surface (TF12)
2 cm Muck (10)	Stra	atified Layers (A5	)	Loa	my Gley	ed Matrix	x (F2)	Other	(explain in r	emarks)
Lepleted Below Dark Surface (A12)       Depleted Dark Surface (F3)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         *Indicators of hydrophytic vegetation and weltan hydrology must be present, unless disturbed or problematic         Restrictive Layer (if observed):       Hydric soil present?         Marky Team       Mucky Peat or Peat (S3)         Restrictive Layer (if observed):       Hydric soil present?         Marky Team       Mucky Peat or Peat (S3)         Primary Indicators:       Mucky Peat or Peat (S3)         **marks:       Secondary Indicators:         **marks (B1)       Aquatic Fauna (B13)         Surface Water (A11)       Aquatic Piants (B14)         Hydrogen Suffice Odor (C1)       Dry-Season Water Table (C2)         Saturation (A3)       Hydrogen Suffice Odor (C1)         Saturation (A3)       Presence of Reduced Iron (C4)         Sediment Deposits (B3)       Presence of Reduced Iron (C4)         Sparsely Vegetated Concewe Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)         Field Observations:       No       X         Surface water (Present?       Yes         No       X       Depth (inches): <t< td=""><td>2 c</td><td>m Muck (A10)</td><td>0.1</td><td></td><td>pleted Ma</td><td>atrix (F3)</td><td></td><td></td><td></td><td></td></t<>	2 c	m Muck (A10)	0.1		pleted Ma	atrix (F3)				
Inick Dark Surface (A12)       Depleted Dark Surface (F)       *Indicators of hydrophytic vegetation and wettar hydrology must be present, unless disturbed or problematic         Restrictive Layer (if observed):		bleted Below Dark	(Surface	e (A11)Rec	dox Dark	Surface	(F6)			
	I hi	ck Dark Surface (	A12)	Dep	bleted Da	ark Surfa		*Indicate	ors of hydro	phytic vegetation and weltand
	Sar	ndy Mucky Minera	al (S1)	、	dox Depr	essions	(F8)	hydrold	bgy must be	present, unless disturbed or
Restrictive Layer (if observed):         Type:	5 C	m Mucky Peat or	Peat (S3	)					p	problematic
Type:	Restrictive	Layer (if observ	ed):							
Depth (inches):	Туре:							Hydric s	oil present	? N
Remarks:         HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (ininimum of one is required; check all that apply)       Secondary Indicators (minimum of two requi         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Craryfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (CE         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Sturted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       FAC-Neutral Test (D5)         Surface water present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes <td>Depth (inch</td> <td>es):</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td>	Depth (inch	es):				-				
HYDROLOGY         Methand Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required: check all that apply)         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxid/zed Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (C2)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Saturation present?         Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)       Mater Astained Leaves (B9)       Other (Explain in Remarks)         Field Observations:       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes       No       X </th <th>Remarks:</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	Remarks:									
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required; check all that apply)         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Presence of Reduced Iron (C4)       Stunted on Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)       FAC-Neutral Test (D5)         Innucation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicators of wetland hydrology present?       N         Surface water present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Surface water present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N										
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required; Surface Water (A1)										
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two requ         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Saturation Visible on Aerial Imagery (C2)         Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (C2)         Into Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)         Gauge or Well Data (D9)       Other (Explain in Remarks)       Fleid Observations:         Surface water present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes										
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two requ         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (C5)         Drift Deposits (B5)       (C6)       Sturface (C7)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicators of wetland hydrology present?         Field Observations:       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Mater table present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes </th <th></th>										
Watand Hydrology indicators: <ul> <li>Primary Indicators:</li> <li>Primary Indicators (minimum of one is required; check all that apply)</li> <li>Surface Water (A1)</li> <li>Aquatic Fauna (B13)</li> <li>High Water Table (A2)</li> <li>True Aquatic Plants (B14)</li> <li>Burface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Surface Soil Cracks (B6)</li> <li>Drainage Patterns (B10)</li> <li>Sediment Deposits (B2)</li> <li>C(3)</li> <li>Dift Deposits (B3)</li> <li>Presence of Reduced Iron (C4)</li> <li>Algal Mat or Crust (B4)</li> <li>Recent Iron Reduction in Tilled Soils</li> <li>(C6)</li> <li>FAC-Neutral Test (D5)</li> <li>Inudation Visible on Aerial Imagery (B7)</li> <li>Thin Muck Surface (C7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> <li>Gauge or Well Data (D9)</li> <li>Water rable present?</li> <li>Yes</li> <li>No</li> <li>X Depth (inches):</li> <li>Indicators of wetland hydrology present?</li> <li>No</li> <li>X Depth (inches):</li> <li>Indicators of wetland hydrology present?</li> <li>No</li> </ul> Saturation present?       Yes       No       X Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes       No       X Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes       No       X Depth (inches):       Indicators of wetland hydrology prese	HYDROL	JGY								
Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required; check all that apply)         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (C2)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Inon Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)         Surface water present?       Yes       No       X       Depth (inches):         Water table present?       Yes       No       X       Depth (inches):         Saturation present?       Yes       No       X       Depth (inches):         Water table present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology pre	Wetland Hy	drology Indicato	ors:							
Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (C5)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)         Surface water present?       Yes       No       X       Depth (inches):         Sufface soillary fringe)       Other (Explain in Remarks)       Indicators of wetland hydrology present?       N         Obscribe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Primary Ind	cators (minimum	of one is	required; check	all that a	pply)		Sec	ondary Indic	ators (minimum of two require
High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (C5)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Gauge or Well Data (D9)         Water table present?       Yes       No       X       Depth (inches):         Surface water present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes       No       X       Depth (inches):       N       N         Cincludes capillary fringe)       Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Surface	Water (A1)			Aquatic	Fauna (B	313)		Surface S	oil Cracks (B6)
Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (C5)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicators of wetland         Field Observations:       No       X       Depth (inches):         Surface water present?       Yes       No       X       Depth (inches):         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         Alguar table present?       Yes       No       X       Depth (inches):       No       No         Saturation present?       Yes       No       X       Depth (inches):       No       No         Cincludes capillary fringe)       Describe recorded data (stream gauge, monitoring well, ae	High Wa	ater Table (A2)			True Aq	uatic Plai	nts (B14)		Drainage	Patterns (B10)
Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Field Observations:         Surface water present?       Yes       No       X       Depth (inches):         Water table present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?         Saturation present?       Yes       No       X       Depth (inches):       No         Mater table present?       Yes       No       X       Depth (inches):       No         Concluse capillary fringe)       Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Saturati	on (A3)			Hydroge	en Sulfide	e Odor (C´	1)	Dry-Seaso	on Water Table (C2)
Sediment Deposits (B2)       (C3)       Saturation Visible on Aenal Imagery (Cs)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicators of wetland hydrology present?       No         Sturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Obscribe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       Remarks:	Water N	larks (B1)			Oxidized	d Rhizosp	pheres on	Living Roots	Crayfish B	Surrows (C8)
Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)       Other (Explain in Remarks)         Field Observations:       Surface water present?       Yes       No         Surface water present?       Yes       No       X       Depth (inches):         Water table present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes       No       X       Depth (inches):       N       N         Cincludes capillary fringe)       Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Sedime	nt Deposits (B2)			(C3) -			(CA)		Visible on Aerial Imagery (C9)
Alga Mator Ordet (B4)       Recent for Reduction in Third Solis       Geoind phile Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Field Observations:         Surface water present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Cincludes capillary fringe)       Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:		DUSILS (D3)				ron Redu	uced from	(C4)		Silessed Plants (DT)
Initial Deposits (bb)       Initial Test (bb)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)         Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)         Field Observations:       Surface water present?       Yes         Surface water present?       Yes       No       X         Saturation present?       Yes       No       X         Saturation present?       Yes       No       X         Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes       No       X         Depth (inches):       Indicators of wetland hydrology present?       N         Cincludes capillary fringe)       No       X       Depth (inches):       N         Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:         Remarks:       Remarks:       Remarks:       Remarks:		at of Crust (D4)			(C6)	Iron Real			Geomorph	ral Tost (D5)
Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)         Field Observations:       Surface water present?       Yes         Surface water present?       Yes       No       X       Depth (inches):         Water table present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?         Saturation present?       Yes       No       X       Depth (inches):       hydrology present?       N         Cincludes capillary fringe)       Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Inundati	on Visible on Aeria	al Imagen	(B7)	Thin Mu	ck Surfac	ce (C7)			Tai Test (D5)
Water-Stained Leaves (B9)       Other (Explain in Remarks)         Field Observations:       Surface water present?       Yes       No       X       Depth (inches):       Indicators of wetland         Water table present?       Yes       No       X       Depth (inches):       Indicators of wetland         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         Concludes capillary fringe)       Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:         Remarks:       Remarks:       Remarks:	Sparsel	Vegetated Conca	ave Surfa	ce (B8)	Gauge o	or Well Da	ata (D9)			
Field Observations:       No       X       Depth (inches):       Indicators of wetland         Surface water present?       Yes       No       X       Depth (inches):       Indicators of wetland         Water table present?       Yes       No       X       Depth (inches):       Indicators of wetland         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         (includes capillary fringe)       No       X       Depth (inches): recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:         Remarks:       Remarks:	Water-S	tained Leaves (B9	))		Other (E	Explain in	Remarks	)		
Surface water present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?         Water table present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         (includes capillary fringe)       No       X       Depth (onches):       Indicators of wetland hydrology present?       N         Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Field Obso	vations:	,					,		
Water table present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Saturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         (includes capillary fringe)       No       X       Depth (inches):       Indicators of wetland hydrology present?       N         Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       Remarks:	Surface wat	er present?	Yes	No	x	Denth (i	inches) <sup>.</sup>			
Saturation present?       Yes       No       X       Depth (inches):       hydrology present?       N         (includes capillary fringe)       No       X       Depth (inches):       hydrology present?       N         Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:         Remarks:	Water table	present?	Yes	No	- <u>x</u>	Depth (i	inches)		Indi	cators of wetland
(includes capillary fringe) Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	Saturation c	resent?	Yes	No		Depth (i	inches):		hvo	rology present? N
Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	(includes ca	pillary fringe)					,.			
Remarks:	Describe re	orded data (stree	am daude	e monitoring well	aerial r	hotos n	revioue in	spections) if a	vailahle	
Remarks:	Describe re	שיושבע עמומ (אוופט	an yauye	s, monitoring well	i, aciidi þ	ποιοs, ρ	I SVIOUS II		valiaDIC.	
Remarks:										
	Remarks:									



NWA030A overview looking east.

WETLA	ND DETERMINATI	ON DATA FO	ORM - Midwes	t Region	
Project/Site: Hayward So	ar City	County: Fre	eborn County	Sampling Date:	4/29/2020
Applicant/Owner: Hayward Solar LLC		State:	Minnesota	Sampling Point:	NWA031A
Investigator(s): Apryl Jennrich		Section,	, Township, Range	e: T102	N R20W S13
Landform (hillslope, terrace, etc.):	Plain	Local rel	lief (concave, conv	vex, none):	None
Slope (%): 1 Lat:	13° 38' 24.67"	Long: ·	-93° 10' 14.21"	Datum:	WGS84
Soil Map Unit Name:	Dassel mucky loam		NWI Classific	ation:	NA
Are climatic/hydrologic conditions of the si	te typical for this time of	of the year?	Y (If no, e)	xplain in remarks)	
Are vegetation X , soil	, or hydrology	significantly of	disturbed?	Are "normal circ	umstances"
Are vegetation , soil	, or hydrology	naturally prob	blematic?		present? No
SUMMARY OF FINDINGS	· · · ·		(lf ne	eded, explain any a	answers in remarks.)
Hydrophytic vegetation present?	Ν				
Hydric soil present?	N	Is the sampl	led area within a	wetland?	Ν
Indicators of wetland hydrology preser	nt? N	If yes, optio	nal wetland site I	D:	
Remarks: (Explain alternative procedures	here or in a separate r	eport.)			
VEGETATION Use scientific nam	es of plants.				-
	Absolute	Dominant I	Indicator Dom	inance Test Works	sheet
<u>Iree Stratum</u> (Plot size:	) % Cover	Species	Staus Numb	ber of Dominant Spe	cies
2		·			AC. <u> </u>
3		·	IC	pecies Across all Str	rata: 0 (B)
4			Perce	ent of Dominant Spe	cies
5		·	that a	re OBL, FACW, or F	AC: 0.00% (A/B)
	0	= Total Cover			
Sapling/Shrub stratum (Plot size:	)		Prev	alence Index Work	sheet
1		<u> </u>	Total	I % Cover of:	
2			OBL	species 0	x = 0
3		·		W species 0	$x^2 = 0$
4		·	FAC		x = 0
°	0	= Total Cover		species 0	x = 0
Herb stratum (Plot size:	)		Colu	mn totals 0	(A) 0 (B)
1			Prev	alence Index = B/A	=
2		·			
3			Hydr	ophytic Vegetatio	n Indicators:
4			F	Rapid test for hydro	phytic vegetation
5			[	Dominance test is >	50%
6			F	Prevalence index is	≤3.0*
/			M	Morphogical adaptat	tions* (provide
8		·		supporting data in R	emarks or on a
				Problematic bydroph	outio vogotation*
···	0	= Total Cover		explain)	
Woody vine stratum (Plot size:	)			icators of hydric coil and	watland bydralagy must be
1	,		indi	present, unless distu	irbed or problematic
2				Hydrophytic	
	0	= Total Cover	\	/egetation	
			1		N
Remarks: (Include photo numbers here or	on a separate sheet)				
Corn stubble					

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the	absence of indicators.)	
Depth	Matrix	<u> </u>	Rec	dox Feat	ures				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks	
0-12	10YR 2/1	100					Loam		
12-22	2.5Y 5/3	100					Sand	trace gravel	
*Type: C = (	Concentration, D	= Depleti	on, RM = Reduce	ed Matrix	. MS = N	Asked S	and Grains. *'	Location: PL = Pore Lining, M	= Matrix
Hvdric So	oil Indicators:		,		,		Indicators fo	r Problematic Hydric Soils:	
His	tisol (A1)		Sar	ndv Gleve	ed Matrix	(S4)	Coast Pra	airie Redox (A16) ( <b>LRR K. L. R</b>	2)
His	tic Epipedon (A2)		Sar	ndv Redo	ox (S5)	( )	Dark Sur	ace (S7) (LRR K, L)	,
Bla	ck Histic (A3)		Stri	, pped Ma	trix (S6)		Iron-Man	ganese Masses (F12) (LRR K,	L, R)
	drogen Sulfide (A4	4)	Loa	mv Mucl	kv Minera	al (F1)	Verv Sha	llow Dark Surface (TF12)	. ,
Stra	atified Lavers (A5	)	Loa	mv Glev	ed Matrix	x (F2)	Other (ex	plain in remarks)	
<u> </u>	m Muck (A10)	,	Der	pleted Ma	atrix (F3)	( )		, ,	
De	oleted Below Dark	Surface	e (A11) Rec	lox Dark	Surface	(F6)			
	ck Dark Surface (	A12)	Dep	pleted Da	ark Surfa	ce (F7)	*Indicators	of hydrophytic vegetation and	weltand
Sar	ndy Mucky Minera	, al (S1)	Rec	lox Depr	essions	(F8)	hvdrology	must be present. unless distu	rbed or
5 c	m Mucky Peat or	Peat (S3	s)	•		· · /	, ,,	problematic	
	lover (if cheery	<u>,</u>	,			r			
	Layer (II Observe	eu):					Uudria aail	procent?	
Type. Danth (inch					-		Hydric Soli	present? N	
Deptil (illeli					-				
HYDROL	OGY								
Wetland Hy	drology Indicate	ors:							
Primary Ind	icators (minimum	of one is	required; check	all that a	pply)		Second	lary Indicators (minimum of tw	o require
Surface	Water (A1)			Aquatic	Fauna (B	(13)		Surface Soil Cracks (B6)	
High Wa	ater Table (A2)			True Aq	uatic Plai	nts (B14)		Drainage Patterns (B10)	
Saturati	on (A3)			Hydroge	en Sulfide	Odor (C	1) <u> </u>	Dry-Season Water Table (C2)	
Water M	larks (B1)			Oxidized	d Rhizosp	heres on	Living Roots 0	Crayfish Burrows (C8)	
Sedime	nt Deposits (B2)			(C3)				Saturation Visible on Aerial Imag	ery (C9)
Drift De	posits (B3)			Presenc	e of Red	uced Iron	(C4)	Stunted or Stressed Plants (D1)	
Algal Ma	at or Crust (B4)			Recent	Iron Redu	uction in T	Tilled Soils	Geomorphic Position (D2)	
Iron Dep	posits (B5)	. I I		(C6)			F	AC-Neutral Test (D5)	
Inundati	on visible on Aeria	ai imager	y (B7)		CK Surfac	ce (C7)			
Sparsel	y vegetated Conca			Gauge C	or vveil Da	ala (D9) Pomorko	۱		
vvaler-S	orameu Leaves (B9	')		Other (E	xpiain in	Remarks	·)		
Field Obse	rvations:	V	N1-	v	Darth (	nah c=)			
Surface Wat	er present?	res			Depth (	inches):	I	Indicators of wotland	
Saturation n	present?	res Vee		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Depth (	inches):		hydrology present?	N
(includes ca	nosent:	165		^		non <del>es</del> ).			11
Describ	porded data (-t.		monitorio	00	hotor	rov <i>icu</i> -	apportiona) if and	able	
Describe re	corded data (strea	am gauge	e, monitoring well	, aeriai p	onotos, p	revious li	nspections), it avai	able:	
Remarks:									



NWA031A overview looking east.

Project/Site: Hayward Solar	City/County: Freeborn Cou	Idwest Region
Applicant/Owner: Hayward Solar LLC	State:Minneso	ra Sampling Point: NWA032A
Investigator(s): Apryl Jennrich	Section, Township	Range: T102N R20W S13
Landform (hillslope, terrace, etc.): Plain	Local relief (conca	ve. convex. none): None
Slope (%): 1 Lat: 43° 38' 24.67"	Long: -93° 10' 14	.21" Datum: WGS84
Soil Map Unit Name: Kossner mu	uck NWI C	lassification: NA
Are climatic/hydrologic conditions of the site typical for thi	is time of the vear? Y (	f no. explain in remarks)
Are vegetation X, soil , or hydrology	significantly disturbed?	Are "normal circumstances"
Are vegetation , soil , or hydrology	naturally problematic?	present? No
SUMMARY OF FINDINGS		(If needed, explain any answers in remarks.)
Hydrophytic vegetation present? N		
Hydric soil present? N	Is the sampled area w	ithin a wetland? N
Indicators of wetland hydrology present? N	If yes, optional wetlan	d site ID:
Remarks: (Explain alternative procedures here or in a sep	parate report.)	
	. ,	
<b>VEGETATION</b> Use scientific names of plants.		
At	bsolute Dominant Indicator	Dominance Test Worksheet
Tree Stratum (Plot size:) %	Cover Species Staus	Number of Dominant Species
1		that are OBL, FACW, or FAC: 0 (A)
2		Total Number of Dominant
3		Species Across all Strata: 0 (B)
5		Percent of Dominant Species that are OBL_EACW_or EAC: 0.00% (A/B)
· —	0 = Total Cover	
Sapling/Shrub stratum (Plot size: )		Prevalence Index Worksheet
1		Total % Cover of:
2		OBL species 0 x 1 = 0
3		FACW species $0 \times 2 = 0$
4		FAC species $0 \times 3 = 0$
	0 = Total Cover	UPL species $0 \times 5 = 0$
Herb stratum (Plot size: )		Column totals $0$ (A) $0$ (B)
		Prevalence Index = B/A =
2		
3		Hydrophytic Vegetation Indicators:
4		Rapid test for hydrophytic vegetation
5		Dominance test is >50%
6		Prevalence index is ≤3.0^
8		Morphogical adaptations* (provide
9		separate sheet)
10		Problematic hydrophytic vegetation*
	0 = Total Cover	(explain)
Woody vine stratum         (Plot size:)           1        )		*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
2		Hydrophytic
	0 = Total Cover	present? N
Remarks: (Include photo numbers here or on a separate s Corn stubble	sheet)	

Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ment the	e indicat	or or confirm the	absence of indicators.)
Depth	Matrix	0/	Red	dox Feat	ures	1 **	T to	
(Inches)	Color (moist)	%	Color (moist)	%	i ype*	LOC <sup>**</sup>	l exture	Remarks
0-12	10YR 2/1	100					Loam	
12-20	2.5Y 5/3	100					Sand	
*Type: C = 0	Concentration, D	= Depleti	ion, RM = Reduce	ed Matrix	k, MS = N	/lasked S	and Grains. **	Location: PL = Pore Lining, M = Mat
Hydric So	oil Indicators:						Indicators for	Problematic Hydric Soils:
His	tisol (A1)		Sar	ndy Gley	ed Matrix	(S4)	Coast Pra	iirie Redox (A16) ( <b>LRR K, L, R</b> )
His	tic Epipedon (A2)		Sar	ndy Redo	ox (S5)		Dark Surfa	ace (S7) ( <b>LRR K, L)</b>
Bla	ck Histic (A3)		Stri	pped Ma	atrix (S6)		Iron-Mang	ganese Masses (F12) (LRR K, L, R)
Hyo	drogen Sulfide (A4	4)	Loa	my Muc	ky Miner	al (F1)	Very Shal	low Dark Surface (TF12)
Stra	atified Layers (A5	)	Loa	my Gley	ed Matri	x (F2)	Other (exp	plain in remarks)
2 c	m Muck (A10)	0.1		pleted Ma	atrıx (F3)			
	bleted Below Dark	(Surface	e (A11) Rec	lox Dark	Surface	(F6)		
I hi	ck Dark Surface (	A12)	Dep	bleted Da	ark Surfa	ce (F7)	*Indicators	of hydrophytic vegetation and weltar
Sar	ndy Mucky Minera	al (S1) Deet (S2	., <u> </u>	lox Depr	essions	(F8)	hydrology	must be present, unless disturbed o
<u> </u>	m Mucky Peat or	Peat (53	)					problematic
Restrictive	Layer (if observe	ed):						
Туре:					_		Hydric soil	present? N
Depth (inch	es):				_			
	JG I drology Indicate	vre:						
		лз. of one in	required, check	all that a	mml ()		O	
Primary Ind		of one is	<u>s requirea; cneck</u>	<u>all that a</u>	ippiy) Fauna (F	10)	Second	lary indicators (minimum of two requ
Surface	vvater (A1)				Fauna (E	513) etc (P14)	s	Purrace Soll Cracks (B6)
Saturati	(A2)			Hydroae	n Sulfide	Odor(C)	1) <u> </u>	nainage Fallenis (DTU) hv-Season Water Table (C2)
Water N	larks (B1)			Oxidized	d Rhizosr	heres on	Living Roots	cravfish Burrows (C8)
Sedime	nt Deposits (B2)			(C3)			S	aturation Visible on Aerial Imagery (C
Drift De	posits (B3)			Presenc	e of Red	uced Iron	(C4) S	tunted or Stressed Plants (D1)
Algal Ma	at or Crust (B4)			Recent	Iron Redu	uction in T	Tilled Soils G	Geomorphic Position (D2)
Iron Dep	oosits (B5)			(C6)			F	AC-Neutral Test (D5)
Inundati	on Visible on Aeria	al Imager	y (B7)	Thin Mu	ick Surfac	ce (C7)		
Sparsel	y Vegetated Conca	ave Surfa	ce (B8)	Gauge o	or Well D	ata (D9)		
Water-S	tained Leaves (B9	)		Other (E	xplain in	Remarks	)	
Field Obse	rvations:	-			_			
Surface wat	er present?	Yes	No	X	Depth (	inches):		
Water table	present?	Yes	No	<u> </u>	Depth (	inches):		Indicators of wetland
Saturation p	nesent?	res	NO	~		inches):		nyarology present? N
					1			
Describe re	corded data (strea	am gaug	e, monitoring well	, aerial p	onotos, p	revious ii	nspections), if availa	adie:
Remarks:								
rtomanto.								



NWA032A overview looking southwest.
## NWA034

WETLAND DETERMINA		idwest Region	4/20/2020
Project/Site: Hayward Solar C	Ity/County: Freedorn Col	to Sampling Date:	4/29/2020
Applicant/Owner: Hayward Solar LLC	State: Minneso		VVAU34A
Londform (billoop, torrace, etc.):			v 511
Slope (%): 1 Lat: 43° 30' 8.42"		2 20" Dotum: W/	
Soil Man Unit Name: Klossner muck	LongNW1 (	Lassification NA	5504
Are climatic/hydrologic conditions of the site typical for this tim	e of the year? Y	If no, explain in remarks)	
Are vegetation X soil or hydrology	significantly disturbed?	Are "nermel sizeumeter	
Are vegetation, soil, or hydrology	naturally problematic?	Are normal circumstan	ent? No
SUMMARY OF FINDINGS		(If needed, explain any answers	in remarks.)
Hydrophytic vegetation present? N			
Hydric soil present? N	Is the sampled area w	vithin a wetland? N	
Indicators of wetland hydrology present? N	If yes, optional wetlan	d site ID:	_
Remarks: (Explain alternative procedures here or in a separate	e report.)		
	. ,		
VEGETATION Use scientific names of plants.			
Absolu	te Dominant Indicator	Dominance Test Worksheet	
<u>Tree Stratum</u> (Plot size:) % Cov	er Species Staus	Number of Dominant Species	
1 <u>1</u>		that are OBL, FACW, or FAC:	0 (A)
3		Total Number of Dominant Species Across all Strata	0 (B)
4		Percent of Dominant Species	<u> </u>
5		that are OBL, FACW, or FAC:	0.00% (A/B)
0	= Total Cover		
Sapling/Shrub stratum (Plot size:)		Prevalence Index Worksheet	
1 <u>1</u>		Total % Cover of:	0
2		OBL species 0 x 1 = EACW species 0 x 2 = CW speci	
4		FAC species $0 \times 2 =$	0
5		FACU species 0 x 4 =	0
0	= Total Cover	UPL species 0 x 5 =	0
Herb stratum (Plot size:)		Column totals 0 (A)	0 (B)
1		Prevalence Index = B/A =	
2			
3		Rapid test for hydrophytic v	ators:
5		Dominance test is >50%	egetation
6		Prevalence index is ≤3.0*	
7		Morphogical adaptations* (	provide
8		supporting data in Remarks	s or on a
9		separate sheet)	
	= Total Cover	Problematic hydrophytic ve (explain)	getation*
<u>Woody vine stratum</u> (Plot size:) 1		*Indicators of hydric soil and wetland present, unless disturbed or p	hydrology must be problematic
2		Hydrophytic	
0	= Total Cover	present? N	
Remarks: (Include photo numbers here or on a separate shee Soybean stubble, recently tilled	t)		

## SOIL

Depth (Inches)         Matrix Color (moist)         Redox Features Color (moist)         Type*         Loc**         Texture           0-12         10YR 2/1         100          Silt loam            12-17         2.5Y 5/2         99         10YR 4/6         1         C         PL         Silt loam           17-20         2.5Y 5/2         70         10YR 4/6         30         C         PL         Silt loam           20-23         2.5Y 5/2         70         10YR 4/6         30         C         PL         Sandy clay	
(Inches)         Color (moist)         %         Color (moist)         %         Type*         Loc**         Texture           0-12         10YR 2/1         100          Silt loam            12-17         2.5Y 5/2         99         10YR 4/6         1         C         PL         Silt loam           17-20         2.5Y 5/2         70         10YR 4/6         30         C         PL         Silt loam           20-23         2.5Y 5/2         70         10YR 4/6         30         C         PL         Sandy clay	<b>–</b> .
0-12         10YR 2/1         100         Silt loam           12-17         2.5Y 5/2         99         10YR 4/6         1         C         PL         Silt loam           17-20         2.5Y 5/2         70         10YR 4/6         30         C         PL         Silt loam           20-23         2.5Y 5/2         70         10YR 4/6         30         C         PL         Silt loam	Remarks
12-17         2.5Y 5/2         99         10YR 4/6         1         C         PL         Silt loam           17-20         2.5Y 5/2         70         10YR 4/6         30         C         PL         Silt loam           20-23         2.5Y 5/2         70         10YR 4/6         30         C         PL         Silt loam	
17-20         2.5Y 5/2         70         10YR 4/6         30         C         PL         Silt loam           20-23         2.5Y 5/2         70         10YR 4/6         30         C         PL         Sandy clay	
20-23         2.5Y 5/2         70         10YR 4/6         30         C         PL         Sint loan	
20-23 2.5Y 5/2 70 10YR 4/6 30 C PL Sandy clay	
*Turne: C = Concentration D = Depletion PM = Reduced Matrix MS = Macked Sand Craine **Leastion: PI	– Poro Lining, M – Motrix
Hydric Soil Indicators:	
Histisol (A1) Sandy Gleved Matrix (S4) Coast Proirie Redox (	
Histic Eninedon (A2) Sandy Bedex (S5) Dark Surface (S7) (L	$\mathbf{P} \mathbf{K} \mathbf{I}$
Black Histic (A3)	Ses $(F12)$ $(IRR K   R)$
Hydrogon Sulfido (A4)	$rf_{200}$ (TE12)
Stratified Lavers (A5)	anace (1F1Z)
2 cm Muck (A10) Depleted Matrix (F2)	
Depleted Relow Dark Surface (A11) Redox Dark Surface (E6)	
Thick Dark Surface (A12) Depleted Dark Surface (F7) * Indicators of hydrophy	tic vocatation and waltand
Sandy Mucky Mineral (S1) Beday Depressions (E8)	
5 cm Mucky Milleral (S1) Nedox Depressions (10) Nydrology must be pre	lematic
	ionatio
Restrictive Layer (if observed):	
Type: Hydric soil present?	<u>N</u>
Depth (inches):	
Remarks:	
Wetland Hydrology Indicators:	
Wetland Hydrology Indicators:           Primary Indicators (minimum of one is required; check all that apply)         Secondary Indicator	ors (minimum of two required
Wetland Hydrology Indicators:         Surface Water (A1)         Surface Soil (B13)         Surface Soil (B13)	o <mark>rs (minimum of two required</mark> Cracks (B6)
Wetland Hydrology Indicators:       Secondary Indicator         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicator         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (Check all that apply)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt	o <u>rs (minimum of two required</u> Cracks (B6) erns (B10)
Wetland Hydrology Indicators:       Secondary Indicator         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicator         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil C         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season W	<u>rrs (minimum of two required</u> Cracks (B6) erns (B10) Vater Table (C2)
Wetland Hydrology Indicators:       Secondary Indicator         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicator         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil C         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season W         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burror	ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8)
Wetland Hydrology Indicators:       Secondary Indicators         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil C         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season V         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burro         Sediment Deposits (B2)       (C3)       Saturation Vis	ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9)
Wetland Hydrology Indicators:       Secondary Indicators         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (Caural Control Contrecontrol Contrel Control Control Control Control Contrec	ors (minimum of two required Cracks (B6) eerns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1)
Wetland Hydrology Indicators:       Secondary Indicators         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (Caural Control Contrecontrol Contrel Control Control Control Control Contre	ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (Caural Caura)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season V         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burro         Sediment Deposits (B2)       (C3)       Saturation Vis         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Str         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic F         Iron Deposits (B5)       (C6)       FAC-Neutral	ors (minimum of two required Cracks (B6) Jerns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Fest (D5)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (Conditional conditional conditis conditinated condited conditional conditional conditional condi	ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (Conditional conditional conditis conditis conditis conditional conditional conditional conditis	ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (Caural Caura)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season V         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burro         Sediment Deposits (B2)       (C3)       Saturation Visi         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Str         Algal Mat or Crust (B4)       (C6)       FAC-Neutral T         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       FAC-Neutral T         Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)       Other (Explain in Remarks)	ors (minimum of two required Cracks (B6) eerns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
Wetland Hydrology Indicators:       Secondary Indicators         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (Caural Caura)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season V         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burro         Sediment Deposits (B2)       (C3)       Saturation Vis         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Str         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic F         Iron Deposits (B5)       (C6)       FAC-Neutral T         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       FAC-Neutral T         Water-Stained Leaves (B9)       Other (Explain in Remarks)       E	ors (minimum of two required Cracks (B6) eerns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil ( Drainage Patt         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season V         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burro         Sediment Deposits (B2)       (C3)       Saturation Vis         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Str         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geemorphic F         Iron Deposits (B5)       (C6)       FAC-Neutral T         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       FAC-Neutral T         Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)       Other (Explain in Remarks)         Field Observations:       Yes       No       X       Depth (inches):         Water state present?       Yes       No       X       Depth (inches):       In the field of the state of t	ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (Caural Plants)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season V         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burro         Sediment Deposits (B2)       (C3)       Saturation Vis         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Str         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic F         Iron Deposits (B5)       (C6)       FAC-Neutral T         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicate         Field Observations:       Yes       No       X       Depth (inches):       Indicate         Water table present?       Yes       No       X       Depth (inches):       Indicate	ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
Wetland Hydrology Indicators:       Secondary Indicators         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (Caural Caura)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season V         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burra         Sediment Deposits (B2)       (C3)       Saturation Vis         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Str         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic F         Iron Deposits (B5)       (C6)       FAC-Neutral T         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Field Observations:       Indicate (C7)         Surface water present?       Yes       No       X       Depth (inches):       Indicate (C4)         Saturation present?       Yes       No       X       Depth (inches):       Indicate (C4)	ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (Caural Caura)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season V         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burra         Sediment Deposits (B2)       (C3)       Saturation Vis         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Str         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic F         Iron Deposits (B5)       (C6)       FAC-Neutral T         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)         Gauge or Well Data (D9)       Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicator Mydrol         Field Observations:       Yes       No       X       Depth (inches):       Indicator hydrol         Surface water present?       Yes       No       X       Depth (inches):       Indicator hydrol         Guided capillary fringe)       Yes       No       X       Depth (inches): <td< td=""><td>ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)</td></td<>	ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (Check all that apply)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season V         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrd         Sediment Deposits (B2)       (C3)       Saturation Vis         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Sti         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic F         Inon Deposits (B5)       (C6)       FAC-Neutral T         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicate hydrol         Field Observations:       No       X       Depth (inches):       Indicate hydrol         Saturation present?       Yes       No       X       Depth (inches):       Indicate hydrol         Gincludes capillary fringe)       Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if av	ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
Wetland Hydrology Indicators:       Secondary Indicator         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicator         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (C)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season V         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrd         Sediment Deposits (B2)      (C3)       Saturation Vis         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Str         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic F         Iron Deposits (B5)      (C6)       FAC-Neutral T         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicate hydrol         Field Observations:       No       X       Depth (inches):       Indicate hydrol         Saturation present?       Yes       No       X       Depth (inches):       Indicate hydrol         Gincludes capillary fringe)       Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspection	ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (Cause Colspan="2">Surface Soil (Cause Colspan="2">Cause Colspan="2">Surface Soil (Cause Colspan="2")         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season V         Water Marks (B1)       Cause (C3)       Saturation Vice (C3)       Saturation Vice (C3)       Saturation Vice (C4)       Stunted or Str         Algal Mat or Crust (B4)       Instance (B8)       Cauge or Well Data (D9)       Gauge or Well Data (D9)       Saturation Vice (C3)       Saturati	ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (C1)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season V         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burror         Sediment Deposits (B2)       (C3)       Saturation Vis         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Str         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic F         Iron Deposits (B5)       (C6)       FAC-Neutral       FAC-Neutral         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicator         Field Observations:       No       X       Depth (inches):       Indicator         Saturation present?       Yes       No       X       Depth (inches):       hydrol         Cincludes capillary fringe)       Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (C1)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season V         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burro         Sediment Deposits (B2)       (C3)       Saturation Vis         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Str         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic F         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water table present?       Yes       No       X       Depth (inches):       Indicate         Saturation present?       Yes       No       X       Depth (inches):       Indicate         Mater table present?       Yes       No       X       Depth (inches):       Indicate         Mater Staturation present?       Yes       No       X       Depth (inches):       Indicate         Mater able present?	ors (minimum of two required Cracks (B6) terns (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Secondary Indicators         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil (C)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patt         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season V         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burro         Sediment Deposits (B2)       (C3)       Saturation Vis         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Str         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic F         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       FAC-Neutral <sup>-1</sup> Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)       Field Observations:       Indicator         Surface water present?       Yes       No       X       Depth (inches):       Indicator         Saturation present?       Yes       No       X       Depth (inches):       Indicator         Mater Staturation present?       Yes       No       X       Depth (inches):       hydrol         Mater Staturation present?       Yes       No       X       Depth (inc	ors (minimum of two required Cracks (B6) terms (B10) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) Test (D5)



NWA034A overview looking west.

## NWA041

WE	ETLAND DETERMINATION	ON DATA F	ORM - Midwes	st Region	
Project/Site: Haywa	ard Solar City/	County: Fre	eeborn County	Sampling Date:	4/30/2020
Applicant/Owner: Hayward Solar	LLC	State:	Minnesota	Sampling Point:	NWA041A
Investigator(s): Apryl Jennrich		Section	, Township, Rang	e: T102	N R20W S11
Landform (hillslope, terrace, etc.):	Weak depression	Local re	lief (concave, con	vex, none):	Concave
Slope (%): 1 Lat:	43° 39' 21.15"	Long:	-93° 11' 56.40"	Datum:	WGS84
Soil Map Unit Name:	Klossner muck		NWI Classific	cation:	NA
Are climatic/hydrologic conditions of	the site typical for this time o	of the year?	Y (If no, e	xplain in remarks)	
Are vegetation X, soil	, or hydrology	significantly	disturbed?	Are "normal circ	umstances"
SUMMARY OF FINDINGS	, or hydrology	naturally pro	blematic? (If n	eeded, explain any a	present? <u>No</u> answers in remarks.)
Hydrophytic vegetation present?	? <u>N</u>				
Hydric soil present?	Ν	Is the samp	led area within a	wetland?	N
Indicators of wetland hydrology	present? Y	If yes, optic	onal wetland site I	D:	
Remarks: (Explain alternative proce	dures here or in a separate re	eport.)			
	names or plants.	Daminant		ninance Test Work	shoot
Tree Stratum (Plot size:	Absolute ) % Cover	Dominant Species	Staus Num	her of Dominant Spe	cies
1	/	I	that a	are OBL, FACW, or F	AC: 0 (A)
2			Т	otal Number of Domi	nant
3				Species Across all Str	ata: 0 (B)
4			Perc	ent of Dominant Spe	cies
5			that a	are OBL, FACW, or F	AC: 0.00% (A/B)
Sonling/Shrub stratum (Plot size:	\ <u> </u>	= Total Cover	Bro	alanca Indax Warl	rchaat
1	)		Tota	Work Work	Sheet
2			OBL	species 0	x 1 = 0
3			FAC	W species 0	x 2 = 0
4			FAC	species 0	x 3 = 0
5			FAC	U species 0	x 4 =
	<u> </u>	= Total Cover	UPL	species 0	x 5 = 0
Herb stratum (Piot size:	)		Coll	Imn totais 0	(A) <u> </u>
1			Prev	alence Index = B/A	=
3			Hvd	rophytic Vegetatio	n Indicators:
4				Rapid test for hvdro	phytic vegetation
5				Dominance test is >	50%
6			[	Prevalence index is	≤3.0*
7				Morphogical adapta	tions* (provide
8				supporting data in R	emarks or on a
9			[	separate sheet)	
	0	= Total Cover		eroblematic hydropi (explain)	nytic vegetation*
<u>Woody vine stratum</u> (Plot size: 1	)		*Inc	licators of hydric soil and present, unless distu	wetland hydrology must be irbed or problematic
2				Hydrophytic	
	0	= Total Cover		present?	١
Remarks: (Include photo numbers h 100% bare ground, recently	ere or on a separate sheet) / planted.				

## SOIL

Unches         Color (moist)         %         Type*         Loc.**         Texture         Remarks           00-10         10YR 2/1         100         Sitilion         Sitilion         Sitilion           10-18         5Y 4/1         99         10YR 4/6         1         C         PL         Clay	•	Matrix		Re	dox Feat	ures			
0-10         10/R 2/1         100	(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
10-16       5Y 4/1       99       10YR 4/6       1       C       PL       Clay         18-24       5Y 4/1       99       10YR 4/6       1       C       PL       Sandy clay         24-30       5Y 4/1       70       10YR 4/6       30       C       PL/M       Clay	0-10	10YR 2/1	100					Silt loam	
18-24       5Y 4/1       99       10YR 4/6       1       C       PL       Sandy clay         24-30       5Y 4/1       70       10YR 4/6       30       C       PL/M       Clay         yee. C = Concentration. D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       "Location: PL = Pore Lining, M = Nat         Hydric Soil       Indicators:       Indicators:       Indicators:       Indicators:         Histisc Epipeion (A2)       Sandy Redox (S5)       Dark Surface (S7) (LRR K, L)       Cosst Prairs Redox (A16) (LRR A, L, R)         Black Hists (A3)       Stripped Matrix (S4)       Coarry Shallow Dark Surface (S7) (LRR K, L)       Cosst Prairs Redox (A16) (LRR A, L, R)         Brack Husts (A3)       Stripped Matrix (S5)       Coarry Macky Mareal (F1)       Very Shallow Dark Surface (S7) (LRR K, L)         Torck Dark Surface (A11)       Redox Dark Surface (F6)       "Indicators of hydrophytic vegetation and welta         Sandy Mucky Mineral (S1)       Belefeld Dark Surface (G7)       "Indicators (minimum of two rego         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       "Indicators (minimum of two rego         Sandy Mucky Mineral (S1)       Redox Dark Surface (G7)       Surface Soil Cracks (B6)         Timek Layer (Hobserved):       True Aquatic Flants (B13)       Surface Soil Cracks (B6)         Surface Water (A1)	10-18	5Y 4/1	99	10YR 4/6	1	С	PL	Clay	
24-30       5Y 4/1       70       10YR 4/6       30       C       PLM       Clay         ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Mathematical Sandy Gleyed Matrix (S4)       Indicators for Problematic Hydric Soils:         Histisci (A1)       Sandy Redox (S5)       Indicators for Problematic Redox (A16) (LRR K, L, R)         Histisci (A1)       Sandy Redox (S5)       Dark Surface (S7) (LRR K, L, R)         Hydric Soil Indicators:       Indicators for Problematic Redox (A16) (LRR K, L, R)         Hydric Soil Indicators:       Indicators for Problematic Site (S1)         Hydric Soil Indicators:       Coast Paritien Redox (A16)         Hydric Soil Indicators:       Indicators of hydrophytic vegetation and wella         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       'Indicators of hydrophytic vegetation and wella         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       'Hydric soil present?       N         split (inches):	18-24	5Y 4/1	99	10YR 4/6	1	С	PL	Sandy clay	
Control       Contred       Control       Control	24-30	5Y 4/1	70	10YR 4/6	30	С	PL/M	Clav	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Mail         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils:         Histiso (A1)       Sandy Redox (S5)         Black Histic (A3)       Stripped Matrix (S4)         Dark Surface (S7) (LRR K, L, R)       Dark Surface (S7) (LRR K, L, R)         Black Histic (A3)       Stripped Matrix (S6)         Depleted Matrix (S6)       Dopieted Matrix (F2)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)         Depleted Below Dark Surface (A12)       Depleted Matrix (F3)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       *Indicators of hydrophytic vegetation and welta hydrology must be present, unless disturbed c problematic         psti (inches):       marks:       Hydrology must be present, unless disturbed c problematic         Surface S01 (Minum of one is required: check all that apply)       Secondary Indicators (minimum of two required induce present check all that apply)         Surface S01       Corast F12       Surface S01         Surface S01       Coraster S01       Surface S01         Surface S01       Coraster S01       Surface S01         Surface S01       Coraster S01       Surface S01         Sur								<b>y</b>	
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Mat Mydric Soil Indicators: Indicators for Problematic Hydric Soils: Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3)         Histic Epipedon (A2)       Sandy Redox (S5)         Histic Epipedon (A2)       Sandy Redox (S5)         Histic Epipedon (A2)       Sandy Redox (S5)         Dark Surface (S7)       Urarbace (S7) (LRR K, L, R)         Black Histic (A3)       Examy Mucky Mineral (F1)         Depleted Matrix (F3)       Depleted Matrix (F3)         Redox Dark Surface (F7)       "Indicators of hydrophytic vegetation and welta hydrology must be present; unless disturbed to problematic         Sandy Mucky Mineral (S1)       Redox Dark Surface (F7)       "Indicators of hydrophytic vegetation and welta hydrology must be present; unless disturbed to problematic         strictive Layer (if observed): pre: 									
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       "Location: PL = Pore Lining, M = Mathyrite Soits:         Histis Coil Indicators:       Indicators for Problematic Hydric Soits:       Coast Prairie Redox (A16) (LRR K, L, R)         Histis C (A1)       Sandy Redox (S5)       Dark Surface (S7) (LRR K, L, R)         Black Histic (A3)       Stripped Matrix (S6)       Dark Surface (F12) (LRR K, L, R)         Black Histic (A3)       Depleted Matrix (F2)       Other (explain in remarks)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       "Indicators of hydrophytic vegetation and welta hydrology must be present, unless disturbed or problematic         Strictive Layer (If Observed):       Redox Depressions (F8)       "Indicators (minimum of two required: check all that apply)         Surface Water (A1)       Aquatic Pants (B13)       Drainage Patterns (B10)         Surface Water (A1)       Aquatic Pants (B13)       Drainage Patterns (B10)         Surface Soit Cracks (B3)       Ouddead Rhizospheres on Living Roots       Crayline Marker (C1)         Surface Soit (B2)       (C3)       Presence of Reduced Iron (C4)       Surface Soit Cracks (B6)         Surface Soit (B2)       (C6)       Presence of Reduced Iron (C4)       Surface Soit Cracks (B6)         Orbit posits (B3)       Presence of Reduced Iron (C4)       Surface Soit Cracks (B6)       Surface Soit Cracks (C5)									
yp: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       **Location: PL = Pore Lining, M = Matrix         Hydric Soil Indicators:       Indicators for Problematic Hydric Soils:       Coast Praine Redox (Afb) (LRR K, L, R)         Histic [Papedon (A2)       Sandy Redox (S5)       Dark Surface (S7) (LRR K, L, R)         Hydrice Soil Indicators:       Coast Praine Redox (Afb) (LRR K, L, R)         Hydrice Soil Indicators:       Coast Praine Redox (Afb) (LRR K, L, R)         Hydrice Soil Indicators:       Depleted Matrix (F2)       Dark Surface (T12)         2 cm Muck (A10)       Depleted Matrix (F3)       Tindicators of hydrophytic vegetation and wella hydrology must be present, uness disturbed of problematic         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       *Indicators (minimum of two requises disturbed of problematic         Startice Layer (if observed):       Hydric soil present?       N         emarks:       Mydrology Indicators:       Mydrogen Suiface (G1)         High Water Table (A2)       True Aquatic Plants (B1)       Drainage Patterns (B10)         Sturtace Water (A1)       Aquatic Fauna (B13)       Drainage Patterns (B10)       Drainage Patterns (B10)         Sturtace Water (A1)       CrayIsh Burrows (C2)       CaryIsh Burrows (C2)       Saturation Water Table (C2)         Ortif Deposits (B2)       C(C3)       Drainage Patterns (B10)       Drai									
ype: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains.       "'Location: PL = Pore Lining, M = Matrix         Hydric Soil Indicators:       Indicators for Problematic Hydric Soil:       Indicators for Problematic Hydric Soil:         Histis (A1)       Sandy Geyed Matrix (S4)       Coast Praire Redox (A16) (LRR K, L, R)         Black Histic (A3)       Stripped Matrix (S6)       Dark Surface (S7) (LRR K, L, R)         Stratified Layers (A5)       Loarny Gleyed Matrix (S6)       Other (explain in remarks)         Depleted Below Dark Surface (A11)       Depleted Dark Surface (F6)       "Indicators of hydrophytic vegetation and welta hydrology must be present, unless disturbed c problematic         startific Layers (If Observed):       mpth (inches):       N       N         problematic       For Mucky Peet or Peet (S3)       Secondary Indicators (minimum of two required: check all that apply)         Startictive Layer (If Observed):       Phydric Soil Gracks (B6)       Dark Surface (C1)         Prosence of Reduced Iron (C1)       Aquatic Fauna (B13)       Darks Surface (S1)         Startaer (A1)       Aquatic Fauna (B13)       Darks Surface (C1)         Startaer (A1)       Aquatic Fauna (B13)       Darks Surface (S1)         Startaer (A1)       Aquatic Fauna (B13)       Darks Surface (C1)         Startee Water (A1)       Recent Iron Reduced Iron (C1)       Darks Surface (C2) <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
Hydric Soil Indicators:       Indicators for Problematic Hydric Soils:         Histic Epipedon (A2)       Sandy Redox (S5)         Black Histic (A3)       Stripped Matrix (S6)         Hydrog Sulfide (A4)       Loamy Mucky Mineral (F1)         Very Strattified Layers (A5)       Loamy Mucky Mineral (F1)         Depleted Matrix (F2)       Other (explain in remarks)         Thick Dark Surface (A12)       Depleted Matrix (F2)         Depleted Matrix (F3)       Perpleted Selow Dark Surface (A11)         Redox Dark Surface (F6)       Thick Dark Surface (A12)         Thick Dark Surface (A12)       Depleted Matrix (F3)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)         Thick Dark Surface (A12)       Depleted Matrix (F3)         Strictive Layer (If Observed):       Hydrology must be present, unless disturbed c problematic         Thick Dark Surface (A12)       Aquatic Fauna (B13)         Hydrology Indicators:       Surface Soil Cracks (86)         Imary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required; Soil Cracks (B1)         Surface Water (A1)       Aquatic Fauna (B13)       Darkase Soil Cracks (B6)         Surface (B1)       Oxidace All Rizospheres on Living Roots       Crafish Burrow (C8)         Saturation (K3)       Presence of Reduced Iron (C4)       <	ype: C = 0	Concentration, D	= Depleti	on, RM = Reduc	ed Matrix	k, MS = N	/lasked S	and Grains. **Loc	ation: PL = Pore Lining, M = Mati
Histis (A1)       Sandy Gleyed Matrix (S4)       Coast Praire Redox (A16) (LRR K, L, R)         Histis (A1)       Sandy Redox (S5)       Dark Surface (S7) (LRR K, L)         Hydrogen Suffade (A4)       Loarny Mucky Mineral (F1)       Very Shallow Dark Surface (TF12)         Depleted Below Dark Surface (A11)       Depleted Matrix (F2)       Other (explain in remarks)         Depleted Below Dark Surface (A12)       Depleted Matrix (F3)       "Indicators of hydrophytic vegetation and welta hydrology must be present, unless disturbed c problematic         Sandy Mucky Mineral (S1)       Redox Dark Surface (F7)       "Indicators of hydrophytic vegetation and welta hydrology must be present, unless disturbed c problematic         strictive Layer (if observed):       ************************************	Hydric So	oil Indicators:		_			( <b>-</b> 1)	Indicators for Pr	oblematic Hydric Soils:
Histic Eppedon (A2)       Sandy Kedox (S5)       Dark Surface (S7) (LKR K, L)         Black Histic (A3)       Stripped Matrix (S6)       Iorn-Manganese Masses (F12) (LRR K, L, R)         Yery Shallow Dark Surface (A11)       Depieted Matrix (F2)       Other (explain in remarks)         2 cm Muck (A10)       Depieted Matrix (F3)       Other (explain in remarks)         3 andy Mucky Mineral (S1)       Depieted Dark Surface (F7)       Indicators of hydrophytic vegetation and welta sandy Mucky Mineral (S1)         5 cm Muck (Paet or Peat (S3)       Redox Depressions (F8)       Indicators of hydrophytic vegetation and welta problematic astrictive Layer (if observed):         per       per       Per       Hydric soil present?       N         amarks:       Matrix (S1)       Aquatic Fauna (B13)       Secondary Indicators (minimum of two requestrictive approximates (S1)         Surface Water (A1)       Aquatic Fauna (B13)       Drainage Patterns (B10)       Drainage Patterns (B10)         Surface Water (A1)       Aquatic Fauna (B13)       Drainage Patterns (B10)       Drainage Patterns (B10)         Sediment Deposits (B2)       (C3)       Craylish Burrows (C3)       Saturation Visible on Aerial Imagery (C1)         Agal Mat or Cust (B4)       Recent Inon Reduction in Tilled Sols       Saturation Visible on Aerial Imagery (C2)       Saturation Visible on Aerial Imagery (C2)         Indicators (B3) <t< td=""><td>His</td><td>tisol (A1)</td><td></td><td>Sa</td><td>ndy Gley</td><td>ed Matrix</td><td>(S4)</td><td>Coast Prairie</td><td>Redox (A16) (<b>LRR K, L, R</b>)</td></t<>	His	tisol (A1)		Sa	ndy Gley	ed Matrix	(S4)	Coast Prairie	Redox (A16) ( <b>LRR K, L, R</b> )
Black Histic (A3)       Stripped Matrix (S5)       Indiversity and the set of P2 (LKK K, F, K)         Hydrogen Sulfide (A4)       Loarmy Mucky Mineral (F1)       Other (explain in remarks)         2 cm Muck (A10)       Depleted Matrix (F3)       Depleted Matrix (F3)         Depleted Below Dark Surface (A12)       Depleted Dark Surface (F7)       *Indicators of hydrophytic vegetation and wella Sandy Mucky Mineral (S1)         Sandy Mucky Mineral (S1)       Redox Depressions (F8)       *Indicators of hydrophytic vegetation and wella sturbace (F7)         strictive Layer (if observed):       problematic       problematic         petit (inches):       marks:       Mydroigy must be present; miss disturbed of problematic         Surface Water (A1)       Aquatic Fauna (B13)       Secondary Indicators (minimum of two requestion (minimum of two requestion (G1))         Surface Water (A1)       Aquatic Plants (B14)       Drainage Patterns (B10)         Surface Water (A1)       Oxidiace Rhizospheres on Living Roots       Craylins Burrows (C3)         Water Marks (B1)       Oxidiace Rhizospheres on Living Roots       Craylins Burrows (C3)         Sediment Deposits (B2)       (C3)       Presence of Reduced Iron (C4)       Sunted or Stressed Plants (D1)         Aquati Fauna (R1)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)       FAC-Neutral Test (D5)         Innunation Visible on Aeria	His	tic Epipedon (A2)	)	Sa	ndy Redo	ox (S5)		Dark Surface	(S7) (LRR K, L)
Hydrogen Suitice (A4)       Loamy Mucky Mineral (F1)       Very Shatilde (1+12)         Strattled Layers (A5)       Loamy Mucky Mineral (F1)       Other (explain in remarks)         Depleted Below Dark Surface (A11)       Redox Dark Surface (F6)       Indicators of hydrophytic vegetation and welta hydrology must be present, unless disturbed of problematic         Strattled Layers (A12)       Depleted Dark Surface (F7)       Indicators of hydrophytic vegetation and welta hydrology must be present, unless disturbed of problematic         Strictive Layer (If observed):	Bla	ck Histic (A3)	•	Str	ipped Ma	itrix (S6)			Ese Masses (F12) (LRR K, L, R)
Statulited Layers (A6)	Hyo	drogen Sulfide (A	4)	Lo	amy Muc	ky Minera	al (F1)	Very Shallow	Dark Surface (TF12)
		alilieu Layers (Ab m Muck (A10)	)	LO:	arriy Gley	ed Main	X (FZ)		in remarks)
	2 C	ni Muck (A10)	k Surface		dox Dark	Surface	(E6)		
Sandy Mucky Mineral (S1)		ck Dark Surface (			nleted Dark	ark Surfa	(F7)	*Indicators of h	wdraphytic vagatation and walter
	Sa	ndv Mucky Minera	al (S1)		dox Depr	ressions	(F8)	hydrology mu	st be present unless disturbed of
	5 c	m Mucky Peat or	Peat (S3	)			(10)	nyarology ma	problematic
Hydric soil present?       N         PypRoLOGY       Hydric soil present?       N         marks:       Minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required; check all that apply)         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Dr3-Season Water Table (C2)         Surface Water (A1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Saturation (A3)       Hydrogen Sulface Or (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B3)       Presence of Reduced Iron (C4)       Stuntation Visible on Aerial Imagery (C         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Saturation Visible on Aerial Imagery (B7)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sarsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicators of wetland hydrology present?       Y         eld Observations:       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         ustartischip present?       Yes       No <td< td=""><td></td><td>Lever (if choore</td><td>(</td><td>/</td><td></td><td></td><td>1</td><td></td><td>•</td></td<>		Lever (if choore	(	/			1		•
pth.       Injust Soli present?       N         pth (inches):	estrictive	Layer (if observ	ea):					Hydria soil pro	sont2 N
yprin (incres):	pe. Inth (inch	oo);				-		nyunc son pres	
YDROLOGY         stland Hydrology Indicators:         mary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required; check all that apply)         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Suffac Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       X Saturation Visible on Aerial Imagery (C         Ohft Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       X Geomorphic Position (D2)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicators of wetland hydrology present?       Y         Itart table present?       Yes       No       X Depth (inches):       Indicators of wetland hydrology present?       Y         cludes capillary fringe)       No       X Depth (inches):       Indicators of wetland hydrology present?       Y	marke.						1		
YDROLOGY         etland Hydrology Indicators:         imary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required; check all that apply)         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       Yresence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Positin (D2)       FAC-Neutral Test (D5)         Inon Deposits (B5)       (C6)       FAC-Neutral Test (D5)       FAC-Neutral Test (D5)         Indicators of wetland (D9)       Other (Explain in Remarks)       Indicators of wetland hydrology present?       Y         eld Observations:       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         eld observations:       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         eld observations:       No       X       Depth (inches):       Indicators of wetland h									
etland Hydrology Indicators: <ul> <li>imary Indicators (minimum of one is required; check all that apply)</li> <li>Surface Water (A1)</li> <li>Aquatic Fauna (B13)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Driv Deposits (B2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturet on Visible on Aerial Imagery (C1)</li> <li>Algal Mat or Crust (B4)</li> <li>Recent Iron Reduction in Tilled Soils</li> <li>(C6)</li> <li>Thin Muck Surface (C7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> <li>Gauge or Well Data (D9)</li> <li>Water Table present?</li> <li>Yes</li> <li>No</li> <li>X</li> <li>Depth (inches):</li> <li>Indicators of wetland hydrology present?</li> <li>Yes</li> <li>No</li> <li>X</li> <li>Depth (inches):</li> <li>Indicators of wetland hydrology present?</li> <li>Yes</li> <li>No</li> <li>X</li> <li>Depth (inches):</li> <li>Indicators of wetland hydrology present?</li> <li>Yes</li> <li>No</li> <li>X</li> <li>Depth (inches):</li> <li>Indicators of wetland hydrology present?</li> <li>Yes</li> <li>No</li> <li>X</li> <li>Depth (inches):</li> <li>Indicators of wetland hydrology present?</li> <li>Yes</li> <li>No</li> <li>X</li> <li>Depth (inches):</li> <li>Indicators of wetland hydrology present?</li> <li>Y</li> <li>Secribe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:</li> </ul>	YDROL	OGY							
imary Indicators (minimum of one is required; check all that apply)       Secondary Indicators (minimum of two required; check all that apply)         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       X Saturation Visible on Aerial Imagery (C         Ino Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       X Geomorphic Position (D2)         Inon Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)         Gauge or Well Data (D9)       Water-Stained Leaves (B9)       Other (Explain in Remarks)         eld Observations:       Indicators of wetland hydrology present?       Y         ater table present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         Icludes capillary fringe)       Scribe recorded data (stream gauge, monitoring well, aerial	etland Hy	drology Indicate	ors:						
Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       X Saturation Visible on Aerial Imagery (C         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       X Geomorphic Position (D2)         Innudation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicators of wetland tyration present?       Yes         Itract water present?       Yes       No       X       Depth (inches):       Indicators of wetland tyration present?         wide capillary fringe)       Yes       No       X       Depth (inches):       Yes         scribe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Yes       Yes	imary Ind	icators (minimum	of one is	required; check	all that a	pply)		<u>Secondary</u>	Indicators (minimum of two requ
High Water Table (A2)       True Aquatic Plants (B14)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Dry-Season Water Table (C2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       X Saturation Visible on Aerial Imagery (C         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       X Geomorphic Position (D2)         Inon Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Saturation State (D5)         Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)       Veter (Explain in Remarks)         eld Observations:       No       X       Depth (inches):       Indicators of wetland hydrology present?         rfrace water present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?         scribe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       marks:	_Surface	Water (A1)				Fauna (B	313)	Surfa	
Statuation (x5)       Thydrogen Suince Cool (C1)       Difyseason water rable (c2)         Water Marks (B1)       Oxidized Rhizospheres on Living Roots       Crayfish Burrows (C8)         Sediment Deposits (B2)       (C3)       X Saturation Visible on Aerial Imagery (C         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)       FAC-Neutral Test (D5)         Water-Stained Leaves (B9)       Other (Explain in Remarks)       Indicators of wetland hydrology present?         etar table present?       Yes       No       X       Depth (inches):         cludes capillary fringe)       No       X       Depth (inches):       Indicators of wetland hydrology present?         escribe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       emarks:	High Wa	ater Table (A2) $(A3)$			I rue Aq	uatic Plar		<u> </u>	ce Soil Cracks (B6)
Sediment Deposits (B2)      (C3)         Dift Deposits (B3)      (Presence of Reduced Iron (C4)         Algal Mat or Crust (B4)      (C6)         Iron Deposits (B5)      (C6)         Inundation Visible on Aerial Imagery (B7)	-Water N	Marks (B1)			IIVUIUUE		nts (B14) Odor (C1	Drain	ice Soil Cracks (B6) lage Patterns (B10)
Drift Deposits (B3)       Presence of Reduced Iron (C4)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils         Iron Deposits (B5)       (C6)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)         Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)         eld Observations:       Yes         Inface water present?       Yes         No       X         Attraction present?       Yes         No       X         Depth (inches):       Indicators of wetland hydrology present?         Yes       No         X       Depth (inches):         cludes capillary fringe)       Yes         escribe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	water it					1 Rhizosn	nts (B14) Odor (C1 oberes on	Drain	ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8)
Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils       X Geomorphic Position (D2)         Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)         eld Observations:       No       X       Depth (inches):         inface water present?       Yes       No       X       Depth (inches):         ater table present?       Yes       No       X       Depth (inches):         inducators of wetland hydrology present?       Yes       Yes       Yes         icludes capillary fringe)       No       X       Depth (inches):       Yes         escribe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       emarks:	Sedime	nt Deposits (B2)			Oxidized	d Rhizosp	nts (B14) 9 Odor (C1 9 oheres on	) Drain Dry-S Living Roots Crayl X Satu	ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9
Iron Deposits (B5)       (C6)       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)       Other (Explain in Remarks)         Water-Stained Leaves (B9)       Other (Explain in Remarks)         eld Observations:       Indicators of wetland thread threa	Sedime Drift De	nt Deposits (B2) posits (B3)			Oxidized (C3) Presence	d Rhizosp	nts (B14) Odor (C1 oheres on uced Iron	) Drain Dry-S Living Roots Cray X Satur (C4) Stunt	ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 ted or Stressed Plants (D1)
Inundation Visible on Aerial Imagery (B7)       Thin Muck Surface (C7)         Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)         eld Observations:       Indicators of wetland time time time time time time time time	Sedime Drift De Algal Ma	nt Deposits (B2) posits (B3) at or Crust (B4)			Oxidized (C3) Presend Recent	d Rhizosp e of Redu Iron Redu	nts (B14) Odor (C1 oheres on uced Iron uction in T	) Drain Dry-S Living Roots Crayl (C4) X Satur (C4) Stunt illed Soils X Geor	ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 red or Stressed Plants (D1) norphic Position (D2)
Sparsely Vegetated Concave Surface (B8)       Gauge or Well Data (D9)         Water-Stained Leaves (B9)       Other (Explain in Remarks)         eld Observations:       Indicators of wetland         Inface water present?       Yes       No       X       Depth (inches):       Indicators of wetland         ater table present?       Yes       No       X       Depth (inches):       Indicators of wetland         ater table present?       Yes       No       X       Depth (inches):       Indicators of wetland         ater table present?       Yes       No       X       Depth (inches):       Indicators of wetland         ater table present?       Yes       No       X       Depth (inches):       Indicators of wetland         ater table present?       Yes       No       X       Depth (inches):       Indicators of wetland         ater table present?       Yes       No       X       Depth (inches):       Indicators of wetland         actual capillary fringe)       No       X       Depth (inches):       Yes       Yes         escribe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       emarks:       emarks:	Sedime Drift De Algal Ma Iron De	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		=	Oxidized (C3) Presend Recent (C6)	d Rhizosp e of Redu Iron Redu	nts (B14) Odor (C1 oheres on uced Iron uction in T	) Drain Dry-S Living Roots Crayl (C4) X Satur (Illed Soils X Geor FAC-	ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 red or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
Water-Stained Leaves (B9)       Other (Explain in Remarks)         eld Observations:       Indicators of wetland         urface water present?       Yes       No       X       Depth (inches):       Indicators of wetland         aturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         aturation present?       Yes       No       X       Depth (inches):       Present?         acturation present?       Yes       No       X       Depth (inches):       Present?       Yes         acturation present?       Yes       No       Xes       Present?       Yes       Yes         acturation present?       Yes       No       Xes       Present?       Yes       Yes <td>Sedime Drift De Algal Ma Iron Dep Inundati</td> <td>nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria</td> <td>al Imagery</td> <td>/ (B7)</td> <td>Oxidized (C3) Presend Recent (C6) Thin Mu</td> <td>d Rhizosp e of Redu Iron Redu ck Surfac</td> <td>nts (B14) e Odor (C1 oheres on uced Iron uction in T ce (C7)</td> <td>) Drain Dry-S Living Roots Cray (C4) X Satur (C4) Sturt illed Soils X Geor FAC-</td> <td>ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 ted or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)</td>	Sedime Drift De Algal Ma Iron Dep Inundati	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria	al Imagery	/ (B7)	Oxidized (C3) Presend Recent (C6) Thin Mu	d Rhizosp e of Redu Iron Redu ck Surfac	nts (B14) e Odor (C1 oheres on uced Iron uction in T ce (C7)	) Drain Dry-S Living Roots Cray (C4) X Satur (C4) Sturt illed Soils X Geor FAC-	ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 ted or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
eld Observations:       Indicators of wetland         urface water present?       Yes       No       X       Depth (inches):       Indicators of wetland         aturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         aturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         aturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         acturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         acturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         acturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         acturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         acturation present?       Yes       No       X       Depth (inches):       Indicators of wetland         actuation present?       Yes       Yes       Yes       Yes       Yes         actuation present?       Yes       Yes       Yes       Yes       Yes         actuation present       Yes	Sedime Drift De Algal Ma Iron Dep Inundati Sparsel	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Conca	al Imagery ave Surfa	/ (B7)	Oxidized (C3) Presend Recent (C6) Thin Mu Gauge d	d Rhizosp e of Redu Iron Redu ck Surfac pr Well Da	nts (B14) odor (C1 oheres on uced Iron uction in T ce (C7) ata (D9)	) Drain Dry-S Living Roots Cray (C4) X Satur (C4) Stunt illed Soils X Geor FAC-	ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 red or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
Inface water present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?         aturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         acturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         acturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         acturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         acturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         acturation present?       Yes       No       X       Depth (inches):       Indicators of wetland hydrology present?       Y         acturation present?       Yes       Yes       Yes       Yes       Yes         acturation present?       Yes       Yes       Yes       Yes       Yes         acturation present?       Yes       Yes       Yes       Yes       Yes       Yes         acturation present?       Yes       Yes       Yes	Sedime Drift De Algal Ma Iron De Inundati Sparsel Water-S	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Conca Stained Leaves (B9	al Imagery ave Surfa	/ (B7)	Oxidized (C3) Presend (C6) Thin Mu Gauge o Other (E	d Rhizosp ce of Redu Iron Redu ck Surfac or Well Da Explain in	nts (B14) dor (C1 oheres on uced Iron uction in T ce (C7) ata (D9) Remarks	) Drain Dry-5 Living Roots Cray (C4) Stunt illed Soils X Geor FAC-	ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 red or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
ater table present?       Yes       No       X       Depth (inches):       Indicators of weitand hydrology present?       Y         aturation present?       Yes       No       X       Depth (inches):       hydrology present?       Y         includes capillary fringe)       escribe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Sedime Drift De Algal Ma Iron De Inundati Sparsel Water-S eld Obse	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Conca stained Leaves (B9 rvations:	al Imagery ave Surfa 9)	/ (B7)	Oxidized (C3) Presenc Recent (C6) Thin Mu Gauge c Other (E	d Rhizosp ee of Redu Iron Redu ck Surfac or Well Da Explain in	nts (B14) dor (C1 oheres on uced Iron uction in T ce (C7) ata (D9) Remarks	) Drain Dry-S Living Roots Crayl (C4) Stunt illed Soils X Geor FAC-	ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 ed or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
excludes capillary fringe)	Sedime Drift De Algal Ma Iron De Inundati Sparsel Water-S eld Obse	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Conca stained Leaves (B9 rvations: er present?	al Imagery ave Surfac )) Yes	/ (B7) ce (B8)	Oxidized (C3) Presend Recent (C6) Thin Mu Gauge o Other (E	d Rhizosp ee of Redu Iron Redu ck Surfac or Well Da Explain in	nts (B14) dor (C1 oheres on uced Iron uction in T ce (C7) ata (D9) Remarks inches):	) Drain Dry-S Living Roots Crayl (C4) Stunt illed Soils X Geor FAC-	ice Soil Cracks (B6) lage Patterns (B10) Season Water Table (C2) fish Burrows (C8) ration Visible on Aerial Imagery (C9 red or Stressed Plants (D1) norphic Position (D2) Neutral Test (D5)
escribe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Sedime Drift De Algal Ma Iron De Inundati Sparsel Water-S eld Obse urface wat ater table	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Conca Stained Leaves (B9 rvations: er present? present?	al Imagery ave Surfac 9) Yes Yes	/ (B7) ce (B8)	Oxidized (C3) Presend (C6) Thin Mu Gauge o Other (E	d Rhizosp ce of Redu Iron Redu ck Surfac or Well Da Explain in Depth (i Depth (i	nts (B14) Odor (C1 oheres on uced Iron uction in T ce (C7) ata (D9) Remarks inches): inches):	) Drain Dry-S Living Roots Cray (C4) Stunt illed Soils X Geor FAC-	Indicators of wetland
escribe recorded data (stream gauge, monitoring well, aerial protos, previous inspections), if available:	Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Water-S ield Obse urface wat /ater table aturation p	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Conca stained Leaves (B9 <b>rvations:</b> rer present? present? present? present?	al Imagery ave Surfac )) Yes Yes Yes	/ (B7) ce (B8) No No No	Oxidized (C3) Presend (C6) Thin Mu Gauge d Other (E X X X	d Rhizosp ee of Redu Iron Redu ck Surfac or Well Da Explain in Depth (i Depth (i	nts (B14) Odor (C1 oheres on uced Iron uction in T ce (C7) ata (D9) Remarks inches): inches): inches):	) Drain Dry-S Living Roots Cray (C4) Stunt illed Soils X Geor FAC-	Indicators of wetland hydrology present? Y
emarks:	Sedime Drift De Algal Ma Iron De Inundati Sparsel Water-S <b>ield Obse</b> urface wat /ater table aturation p ncludes ca	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Conca stained Leaves (B9 <b>rvations:</b> present? present? present? pillary fringe)	al Imagery ave Surfa )) Yes Yes Yes	/ (B7) ce (B8) No No No	Oxidized (C3) Presend (C6) Thin Mu Gauge d Other (E X X X	d Rhizosp e of Redu Iron Redu ck Surfac or Well Da Explain in Depth (i Depth (i	nts (B14) Odor (C1 oheres on uced Iron uction in T ce (C7) ata (D9) Remarks inches): inches): inches):	Drain Dry-S Living Roots (C4) (C4) Stunt illed Soils X Geor FAC-	Indicators of wetland hydrology present?
emarks:	Sedime Drift De Algal Ma Iron De Inundati Sparsel Water-S eld Obse urface wat 'ater table aturation p ncludes ca escribe re	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Conca stained Leaves (B9 <b>rvations:</b> present? present? present? pillary fringe) corded data (streat	al Imagery ave Surfac )) Yes Yes Yes am gauge	/ (B7) ce (B8) No No No No	Oxidized (C3) Presend (C6) Thin Mu Gauge o Other (E X X X	d Rhizosp ce of Redu Iron Redu ck Surfac or Well Da Explain in Depth (i Depth (i Depth (i	nts (B14) Odor (C1 oheres on uced Iron uction in T ce (C7) ata (D9) Remarks inches): inches): inches): revious ir	Drain Dry-S Living Roots (C4) (C4) Stunt (C4) Stunt (C4) FAC- )	Indicators of wetland hydrology present? Y
	Sedime Drift De Algal M: Iron De Inundati Sparsel Water-S eld Obse urface wat ater table aturation p cludes ca	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Conca stained Leaves (B9 <b>rvations:</b> er present? present? present? upillary fringe) corded data (streat	al Imagen ave Surfac )) Yes Yes Yes am gauge	/ (B7) ce (B8) No No No No No	Oxidized (C3) Presend (C6) Thin Mu Gauge o Other (E X X X	d Rhizosp ce of Redu Iron Redu ck Surfac or Well Da Explain in Depth (i Depth (i Depth (i bohotos, p	nts (B14) dor (C1 oheres on uced Iron uction in T ce (C7) ata (D9) Remarks inches): inches): inches): revious ir	Drain Dry-5 Living Roots Cray (C4) Stund (C4) Stund illed Soils X Geor FAC-	Indicators of wetland hydrology present? Y
	Sedime Drift De Algal M: Iron De Inundati Sparsel Water-S eld Obse urface wat 'ater table aturation p cludes ca escribe re	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Conca stained Leaves (B9 <b>rvations:</b> present? present? present? pillary fringe) corded data (streat	al Imagery ave Surfac )) Yes Yes Yes am gauge	/ (B7) ce (B8) No No No e, monitoring we	Oxidized (C3) Presend (C6) Thin Mu Gauge o Other (E X X I, aerial p	d Rhizosp ee of Redu Iron Redu ck Surfac or Well Da Explain in Depth (i Depth (i Depth (i	nts (B14) Odor (C1 oheres on uced Iron uction in T ce (C7) ata (D9) Remarks inches): inches): revious ir	Drain Dry-S Living Roots (C4) (C4) Stunt illed Soils FAC- )	Indicators of wetland hydrology present?
	Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Water-S eld Obse urface wat ater table aturation p icludes ca escribe re	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Conca stained Leaves (B9 <b>rvations:</b> present? present? present? present? pillary fringe) corded data (streat	al Imagery ave Surfac )) Yes Yes Yes am gauge	/ (B7) ce (B8) No No No No	Oxidized (C3) Presend (C6) Thin Mu Gauge d Other (E X X	d Rhizosp ee of Redu Iron Redu ck Surfac or Well Da Explain in Depth (i Depth (i Depth (i	nts (B14) Odor (C1 oheres on uced Iron uction in T ce (C7) ata (D9) Remarks inches): inches): revious ir	Drain Dry-S Living Roots (C4) (C4) Stunt illed Soils X Geor FAC- )	Indicators of wetland hydrology present? Y
	Sedime Drift De Algal Ma Iron De Inundati Sparsel Water-S eld Obse urface wat ater table aturation p acludes ca escribe re	nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Conca stained Leaves (B9 <b>rvations:</b> present? present? present? pillary fringe) corded data (streat	al Imagery ave Surfac ) Yes Yes Yes am gauge	/ (B7) ce (B8) No No No e, monitoring we	Oxidized (C3) Presend (C6) Thin Mu Gauge d Other (E X X X	d Rhizosp e of Redu Iron Redu ck Surfac or Well Da Explain in Depth (i Depth (i	nts (B14) Odor (C1 oheres on uced Iron uction in T ce (C7) ata (D9) Remarks inches): inches): inches): revious ir	Drain Dry-S Living Roots (C4) (C4) Stunt illed Soils Stunt FAC- )	Indicators of wetland hydrology present? Y