

Wetland Delineation Report City of Muskego, Waukesha County, Wisconsin Stantec Project # 193702557

APPENDIX D
WETS ANALYSIS

WETS Analysis Worksheet

Project Name: Emerald Park Project Number: 193702557 Period of interest: July - September 2013 Waukesha, WI County:

Long-term rainfall records (from WETS table)											
		3 years in 10		3 years in 10							
	Month	less than	Normal	greater than							
1st month prior:	September	1.82	3.74	4.63							
2nd month prior:	August	3.12	4.53	5.28							
3rd month prior:	July	3.07	4.27	5.15							
		Sum =	12.54								

		Site d	letermination		
	Site	Condition	Condition**	Month	
	Rainfall (in)	Dry/Normal*/Wet	Value	Weight	Product
	1.55	Dry	1	3	3
	3.27	Normal	2	2	4
	1.54	Dry	1	1	1
Sum =	6.36			Sum*** =	8

*Normal precipitation with 30% to 70% probability of occurrence

Determination: Wet Dry Normal

***If sum is: **Condition value:

Dry = 6 to 9 then period has been drier than normal

Normal = 2 10 to 14 then period has been normal

then period has been wetter than normal Wet = 15 to 18

Monthly Data Summary Historical Precipitation data source: National Water and Climate Center

Station: WI6200, OCONOMOWOC 1 SW

Reference: Donald E.Woodward, ed. 1997. *Hydrology Tools for Wetland Determination*, Chapter 19. Engineering Field Handbook. U.S. Department of Agriculture, Natural Resources Conservation Service, Fort Worth, TX.

Monthly Data Summary

Station: WI6200, OCONOMOWOC 1 SW

Precipitaion Data source: http://weathersource.com/past-weather/official-weather

WETS Analysis Worksheet

Project Name: Emerald Park - Muskego, WI

Project Number: 193702557

Period of interest: August - October 17, 2014

County: Waukesha, WI

Long-term rainfall records (from WETS table)											
		3 years in 10		3 years in 10							
	Month	less than	Normal	greater than							
1st month prior:	October	0.87	1.44	1.74							
2nd month prior:	September	2.00	3.52	4.34							
3rd month prior:	August	3.28	4.77	5.69							
		Sum =	9.73								

Sum =

		Oile 0	leteriiiiiatioii		
	Site	Condition	Condition**	Month	
	Rainfall (in)	Dry/Normal*/Wet	Value	Weight	Product
	2.32	Wet	3	3	9
	1.22	Dry	1	2	2
	5.23	Normal	2	1	2
:	8.77			Sum*** =	13

*Normal precipitation with 30% to 70% probability of occurrence Wet Determination: Dry **Condition value: ***If sum is: Normal 6 to 9 then period has been drier than normal Dry =

Normal = 10 to 14 then period has been normal 2 Wet = 3 15 to 18 then period has been wetter than normal

Monthly Data Summary Historical Precipitation data source: National Water and Climate Center

Station: WI8937, WAUKESHA WI

Reference: Donald E.Woodward, ed. 1997. Hydrology Tools for Wetland Determination, Chapter 19. Engineering Field Handbook. U.S. Department of Agriculture, Natural Resources Conservation Service, Fort Worth, TX.

*WETS table precipitation numbers were modified for October to reflect the reduced number of days for precip data collected in the month of October, 2014. Numbers were multiplied by a factor of 0.548

Daily Data Between Two Dates WAUKESHA (WI) USC00478937

Date	Precipitation	Date	Precipitation	Date	Precipitation
	(in)		(in)		(in)
8/1/2014	0	9/1/2014	0	10/1/2014	0
8/2/2014	1	9/2/2014	0.03	10/2/2014	0.15
8/3/2014	0	9/3/2014	0	10/3/2014	0.57
8/4/2014	0.03	9/4/2014	0.2	10/4/2014	0.02
8/5/2014	1	9/5/2014	0.02	10/5/2014	0.03
8/6/2014	0	9/6/2014	0	10/6/2014	0
8/7/2014	0	9/7/2014	0	10/7/2014	0
8/8/2014	0	9/8/2014	0	10/8/2014	0
8/9/2014	0	9/9/2014	0	10/9/2014	0
8/10/2014	0	9/10/2014	0.22	10/10/2014	0
8/11/2014	0	9/11/2014	0.08	10/11/2014	0
8/12/2014	0.75	9/12/2014	0	10/12/2014	0
8/13/2014	0.18	9/13/2014	0.3	10/13/2014	0.02
8/14/2014	0	9/14/2014	0	10/14/2014	1.1
8/15/2014	0	9/15/2014	0	10/15/2014	0.3
8/16/2014	0	9/16/2014	0.07	10/16/2014	0.1
8/17/2014	0.15	9/17/2014	0	10/17/2014	0.03
8/18/2014	0	9/18/2014	0		2.32
8/19/2014	0.55	9/19/2014	0		
8/20/2014	0	9/20/2014	0.03		
8/21/2014	0	9/21/2014	0.25		
8/22/2014	0.27	9/22/2014	0.02		
8/23/2014	0	9/23/2014	0		
8/24/2014	0.72	9/24/2014	0		
8/25/2014	0	9/25/2014	0		
8/26/2014	0.2	9/26/2014	0		
8/27/2014	0.05	9/27/2014	0		
8/28/2014	0	9/28/2014	0		
8/29/2014	0	9/29/2014	0		
8/30/2014	0.03	9/30/2014	0	Midwestern Re	gional Climate Center
8/31/2014	0.3				CC Application Tools Environment
Total	5.23	Total	1.22	Generated at:	10/25/2014 5:05:46 PM CDT

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USDA Field Office Climate Data

Creation Date: 10/25/2014

Start yr. - 1971 End yr. - 2000

		Γemperatι (Degrees		Precipitation (Inches)					
		 	 		30% ch will 		avg # of days	avg total	
Month	avg daily max	avg daily min	avg	avg	less than	more than	w/.1 or more	snow fall	
January	27.5	11.4	19.5	1.48	0.87	1.79	 5	13.0	
February	32.8	16.5	24.7	1.31	0.74	1.62	4	7.9	
March	43.9	26.6	35.3	2.28	1.34	2.77	5	6.9	
April	57.0	37.5	47.3	3.53	2.46	4.20	7	2.9	
May	70.1	48.5	59.3	3.02	2.03	3.61	7	0.0	
June	80.0	58.1	69.1	3.78	2.46	4.54	7	0.0	
July	84.2	63.4	73.8	3.83	2.82	4.49	7	0.0	
August	81.5	61.8	71.7	4.77	3.28	5.69	8	0.0	
September	73.4	53.0	63.2	3.52	2.00	4.34	6	0.0	
October	61.0	41.8	51.4	2.62	1.59	3.17	5	0.1	
November	45.4	29.8	37.6	2.63	1.64	3.18	5	2.9	
December	32.6	17.8	25.2	1.87	1.13	2.26	5	9.8	
Annual					32.36	36.66	 		
Average	57.5	38.9	48.2		 	- 	 		
Average		 	 	34.64	 	 	 59 	44.9	

GROWING SEASON DATES

	Temperature							
Probability	24 F or higher	28 F or higher	32 F or higher					
	!	inning and Ending I cowing Season Lengt						
50 percent *	4/6 to 11/2 209 days	4/13 to 10/24 194 days	4/25 to 10/12 169 days					
70 percent *	4/ 3 to 11/ 5 216 days	4/ 8 to 10/29 203 days	4/20 to 10/17 179 days					

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* Percent chance of the growing season occurring between the Beginning and Ending dates.

total 1893-2014 prcp

Station: WI8937, WAUKESHA
----- Unit = inches

yr jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	annl
93M1.52	1.21	2.95	5.64	2.11	4.32	3.05	1.32	2.87	2.41	1.47	2.61	31.48
94 1.34	0.81	2.49	2.94	3.68		M1.16		M4.55	2.37	2.08		25.88
95 1.55	0.42	0.53	0.78	5.01	2.29	1.79	2.61	1.56	0.67	2.11		21.14
96 0.43	0.89	M1.82	M4.11	4.12	2.59	2.59	2.67	5.71	0.68	2.05	0.56	28.22
97 2.73	1.03	M3.28	M4.14	1.01	3.14	3.20	3.02	1.35	1.11	1.25	1.58	26.84
98 2.34	1.60	M3.24	2.05	1.92	1.54	2.81	4.08	1.55	4.10	0.98	0.50	26.71
99 0.64	0.77	1.47	M1.19	3.92	3.99	2.14	2.50	3.18	1.21	2.20	1.18	24.39
0 1.43	1.87	0.91	2.34	1.21	1.21	7.03	5.67	2.02	2.34	1.86	0.45	28.34
1M1.02	1.23	2.95	0.35	1.88	1.35	2.01	0.77	2.67	M1.00	0.58	1.49	17.30
2 0.29	1.39	1.33	1.11	5.96	4.53	8.82	0.64	3.95	1.73	2.39	2.31	34.45
3M0.48		M2.86	2.51	4.57	3.30	6.93	7.39	5.04	2.50	1.01		38.30
4M0.81	0.86		M1.97	3.70	2.07	3.17	3.70	4.33			M1.38	
5 0.86		2.50	1.49	6.71	5.69	2.77	4.33	1.44	3.19		M1.02	
6M3.54	1.23	1.61	1.69	2.08	3.47	4.29	2.40	2.84	2.36		M1.31	
7 2.15	0.11	2.20		M3.22	5.03	6.35	4.07	5.21	1.25	1.26		35.44
8 1.03		M2.61	4.24	4.86	3.11	1.08	1.85	0.81	0.82	2.03		24.79
9 2.44		0.75	6.84	2.28	2.63	0.46	3.73	3.32	0.48	2.19		29.01
10 1.48	0.46	0.13	3.92	3.81	1.57	1.34	3.27	2.58			M0.26	
11 0.29	2.50	0.42	3.08	1.80	2.78	3.30	2.33	4.78	3.58		M0.98	
12 1.36		1.38	2.26	8.24	0.92	4.93	3.11	5.05		M1.03		35.23
13 1.40 14 1.02	1.10 1.85	3.36 2.70	3.29 2.29	7.06 6.90	5.21 6.41	5.40 1.32	5.37	2.49 6.15	2.60	M0.33	M0.49	
	M1.62	1.38	0.75	7.95	3.84	2.40	1.80	10.00	0.95	MU.33		37.18 36.60
16 3.09	1.37	3.69	4.60	3.07	5.92	0.41		M6.60		M2.15		42.34
17 1.30		1.67	3.67	3.94	7.44	3.51	1.04	4.91	6.00	0.38		34.51
18 5.60	1.45	1.63	3.51	4.23	1.42	1.40	1.60	1.29	2.83	2.90		30.37
19M0.32	2.93	4.09	3.45	2.93	3.16	2.93	1.41	6.97		M2.76		36.98
20 1.53	0.38	4.71	2.30	2.12	3.58	2.17	4.23	1.75	2.17	1.86		30.55
21 0.30	0.35	2.89	5.73	2.74	1.52	1.28	6.78	9.50	5.02	1.42		40.42
22 0.22			2.66	3.80	2.64	2.54	2.73	4.79	1.53		M1.26	
23 1.92		M3.89	2.89	1.83	3.90	1.74	3.31	4.85	4.18	1.55		32.17
24 1.36	2.53	3.80	2.16	4.11	5.30	2.45	8.07	2.21	0.06	2.33		35.31
25 0.90		M1.33	2.66	1.77	3.65	3.82	2.53	5.30	3.08	1.60	1.65	29.64
26 1.16	1.95		M2.05		M3.30	2.12	1.35	4.65		M3.52		30.39
27 1.38	1.39	M2.52	4.63	3.96	2.65	3.48	0.75	4.03	5.07	M4.44	0.67	34.97
28 0.18	0.95	2.03	1.42	3.35	5.82	1.84	4.19	1.36	2.90	4.45	2.50	30.99
29 3.93	1.18	2.04	6.25	2.46	2.96	5.85	1.68	2.95	M2.71	0.58	M1.01	33.60
30 1.35	0.58	2.67	2.71	2.59	1.73	2.28	1.01	2.43	2.38	0.65	0.75	21.13
31 1.25	0.48	M1.89	1.24	2.65	2.68	1.30	2.79	4.16	3.11	4.95	0.77	27.27
32 1.94	1.00	1.67	0.21	1.16	1.82	1.80	1.86	0.53	3.50	2.65	1.38	19.52
33 0.99	1.36	2.81	2.37	8.74	3.27	4.43	2.73	3.46	1.61	1.01		33.61
34 0.50	0.65	2.21	1.49	5.60	2.26	1.75	0.66	4.23	1.75	6.47		28.45
35 1.55	1.97	1.55	3.12	2.25	3.58	2.67	3.69	1.73	1.57	3.66		28.50
36M1.32	1.19	0.47	1.19	1.82		M0.72	6.32	4.40	3.12	0.48		26.33
37 3.27	1.99	1.17	3.90	1.47	3.33	2.72	1.75	1.19	2.59	0.45		25.93
38 3.91	2.82	2.43	1.36	3.91	5.11	4.58	7.30	7.77	1.52	1.97		43.57
39 2.05		M1.52	2.71	2.35	3.87	1 50	3.56	1.30	2.53	0.38		22.50
40 1.75	1.66	1.44	2.37	5.01	7.11	1.79	6.15	0.77	1.53	2.89		33.54
41 2.53	0.56	1.90	1.33	3.75	1.92	2.66	0.91	9.20	3.15	0.88		30.05
42 1.31	0.55	1.74	0.71	4.65	4.45	3.20	3.82	5./3	M2.38	4.50	3.40	34.44

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43 2.21 44 1.33	0.68 1.94	3.18 2.40	1.58 3.23	4.86	4.28		3.29 2.35	0.51 2.16	0.91			27.93 26.42
45 0.42 46 2.63	1.23 1.64	1.42 2.81	2.86 1.40	6.09 2.24	2.80 3.61	2.58 1.10	3.75 2.00	5.97 2.67	0.75 1.78	2.94	1.06	31.87 25.87
47 3.27	0.25	1.43	3.68	6.07	4.30	2.73	3.26	4.74	2.93	3.10	1.48	37.24
48 1.52 49 2.12	1.80 2.10	3.48 1.90	2.75 1.59	3.47 3.01	2.98 5.72	2.68 4.60	0.89 1.24	1.17 1.59	0.62 1.72			26.85 27.93
50 2.59	1.10	2.68	3.77	2.09	4.74	5.68	2.14	2.81	0.65	1.00	2.83	32.08
51 1.76 52 2.17	1.87 0.93	4.02 4.22	5.00 2.09	2.68 3.50	3.18	3.37 11.41	3.13	2.68 0.90	5.68 0.12			39.68 38.00
53 1.35	1.90	1.51	3.46	2.94	2.81	4.12	4.00	2.05	0.60	0.47	1.93	27.14
54 1.30 55 0.84	1.06 1.16	1.63 1.21	3.80 3.49	2.71 2.81		7.13 M1.82	5.18 1.08		2.87 3.12			40.73 24.36
56 0.39	0.90	M2.00	3.99	4.04	2.50	6.80	3.75	0.30	0.51	1.76	1.44	28.38
57 1.06 58 0.99	0.69 0.15	1.63 0.40	2.94 1.92	4.87 2.71	5.45 1.63	1.89 1.58	2.08 4.04	M0.52 4.55	1.53 2.38			28.13 24.77
59 1.35	1.62	4.38	3.44	1.30	2.90	4.38	3.91	5.15	5.32	2.14	1.58	37.47
60 2.32 61 0.22	1.62 0.80	2.27 3.43	3.95 3.45	4.74 1.70	1.59 2.57	4.60 2.13	6.39	3.10 10.21	3.51 3.32			37.07 33.83
62 2.08	1.69	1.73	1.50	2.63	1.80	3.65	2.17	1.68	1.81	0.80	0.75	22.29
63 0.94 64 1.33	0.40 0.26	$\frac{1.99}{2.41}$	2.57 4.81	1.70 3.82	2.93 2.74	1.33 4.74	3.75 2.43		0.51 0.17			21.36 28.09
65 3.14	0.88	3.86	3.17	2.24	1.54	3.03	8.06	6.88	3.42	1.58	3.16	40.96
66 1.59 67 1.30	1.31 1.23	2.95 1.21	2.87 1.98	2.28 3.21	1.14 5.23	2.18 1.65	2.68 2.55	0.60 1.29	1.48 3.73			23.88 26.10
68 0.76	0.64	0.19	4.15	3.15	6.92	4.14	3.96	3.58	1.32	2.02	2.67	33.50
69 1.82 70 0.46	0.11	1.03 1.43	3.35 2.14	2.89 6.63	7.94 3.84		0.56 0.93	2.22 5.78	5.07 2.13			31.45 32.17
71 1.50	2.50	1.65	1.68	1.91	3.57	2.71	3.98	1.21	2.98	3.67	4.21	31.57
72 0.61 73 0.92	0.55 1.56	2.35 2.69	2.23 7.88	3.13 4.60	3.54 2.95	4.58 1.86	6.31 1.10	8.40 4.50	2.80 3.39			38.41 36.09
74 3.23	2.26	3.81	3.98	3.63	2.52	2.55	4.12	1.85	2.37	1.76	1.93	34.01
75 2.06 76 1.13	1.79 2.41	3.56 5.54	3.69 5.42	1.73 4.02	4.64 2.40	3.21 2.14	5.45 2.08	0.95 1.07	0.54 2.25			31.95 29.33
77 0.51	0.65	4.44	1.92	1.02	4.22	5.55	5.78	3.00	2.27	3.64		35.23
78 1.18 79 2.50	0.24	0.64 3.74	4.27 4.50	3.92 1.86	4.84 2.77		2.55 8.14	6.34	2.08 2.38			35.84 33.66
80 1.22	0.85	0.46	3.82	1.81	3.62	3.54	7.95	5.92	1.43	1.38		34.25
81 0.23 82 2.79	0.75	M0.43 2.03	3.27	1.37 3.11	2.67 2.62	3.02 3.60	7.43 3.04					28.50 33.43
83 0.48		M4.49		M3.80	1.76	2.46	4.34		M3.25			35.18
84 0.56 85 1.35	1.00 1.93	1.56 2.89	4.26 1.52	4.83 1.84	4.28 2.46	2.97 1.95	2.77	M2.74 4.48	5.43 M5.79			37.50 34.30
86 0.80 87	1.95 M0.00	1.63 2.31	2.19 4.09	2.38 4.23	6.30	5.18 6.19	5.16 8.17		M1.69	0.57 M1.24	0.74	36.44 34.04
88	MO.00	2.31	4.09	7.23	3.08	0.19	0.17	3.72	1.01	M1.24		34.04
89 90												
91						4.19	1.97	M5.78	M5.60	м3.07	1.47	22.08
92M0.64 93 2.15		M1.88 M1.39	2.25 6.45	M1.20 1.97	M1.87 7.33	4.24 5.64	M3.54 4.34	5.18 4.28	1.81 0.60			30.75 37.08
94 1.95	2.70		1.60	0.99	3.52	6.64	5.10	1.43	0.63	3.68	0.93	29.81
95 1.52 96 1.71	0.10 0.82	2.00 0.52	3.83 3.19	3.29 2.78	0.53 7.83	3.08 3.88	10.83	0.93 2.23	4.26 5.02			34.11 32.89
97 1.78	3.20	0.92	2.46	2.38	6.78	4.04	5.53	1.80	1.43		M1.24	
98 2.92 99 4.27	2.14 1.22	3.55 0.83	3.57 5.45	4.16 3.82	3.92 6.14	1.40 6.48	6.41 1.86	2.32	3.39 0.77			37.15 37.26
0 1.01	1.26	1.34	2.97	8.05	4.15	7.54	5.78	7.00	0.92	M2.41	M2.30	44.73
1 1.28 2 0.87	3.12 1.56	0.35 1.73	4.75 3.96	5.42 2.89	4.62 3.30	1.87 3.32	4.82 8.50	4.66 3.32	3.59 2.76		M1.30 0.69	37.32 33.63

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3 0.22 M0.11 1.49 1.35 5.67 2.22 3.33 0.51 1.90 1.64 M4.12 2.35 24.91 4 0.76 M0.72 2.84 2.31 9.44 5.11 2.02 M4.35 0.13 2.39 2.26 M1.35 33.68 5M2.33 1.57 0.69 1.03 2.86 M2.19 M2.69 1.18 M3.64 0.43 M3.23 M0.87 22.71 6 0.97 0.68 1.55 3.22 M4.63 M2.18 M3.74 4.49 M2.98 M2.89 M2.56 M2.48 32.37 7M0.97 M1.42 1.65 M3.88 2.05 4.01 M2.95 9.62 1.51 2.41 0.21 3.11 33.79 8 0.96 M2.08 2.38 5.58 2.23 10.27 4.08 1.04 4.07 2.97 1.03 4.12 40.81 9 1.05 2.11 3.89 5.51 3.39 7.31 0.87 3.67 1.82 4.98 1.80 3.53 39.93 10 0.86 0.99 0.49 3.86 3.75 11.11 9.23 1.48 2.70 1.81 1.09 0.96 38.33 11 0.85 2.26 2.69 3.38 2.44 5.29 2.98 3.16 4.27 1.49 2.59 1.59 32.99 12 1.74 0.98 3.42 2.37 5.03 0.58 3.06 2.10 2.33 4.00 0.62 3.70 29.93 13 2.71 3.84 1.64 7.57 7.24 7.29 2.29 3.54 2.38 2.73 2.85 1.09 45.17 14 1.24 1.50 1.21 4.04 5.20 5.80 3.21 5.23 1.22 M2.48
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Wetland Delineation Report City of Muskego, Waukesha County, Wisconsin Stantec Project # 193702557

APPENDIX E WETLAND DETERMINATION DATA FORMS

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

☐ Yes ☑ No

Hydric Soil Present?



☐ S3 - 5 cm Mucky Peat or Peat

No O² roots. No stress to upland grasses.

Depth: N/A

Type: N/A

Restrictive Layer

(If Observed)

Remarks:

WETLAND DETERMINATION DATA FORM Page 1 of 2 Midwest Region **Emerald Park Landfill Expansion** Project/Site: Stantec Project #: 193702557 10/14/13 Date: Applicant: **ADS** County: Waukesha Investigator #1: DP State: Wisconsin Investigator #2: MC Saylesville silt loam NWI/WWI Classification: N/A Soil Unit: Wetland ID: Adj. to W1 Landform: Local Relief: Convex Rise Sample Point: 1u Slope (%): 0-2 Latitude: N/A Longitude: N/A Datum: N/A Community ID: Upland (Ag) Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation ☑ , Soil □, or Hydrology □ significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? ☐ Yes ☑No 20 Dir: E Range: **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? ☐ Yes ☑ No Hydric Soils Present? ☐ Yes ☑ No Is This Sampling Point Within A Wetland? ■ Yes
■ No Wetland Hydrology Present? ☐ Yes ☑ No The sample plot is located in an upland agricultural field, so not normal circumstances. WETS analysis indicates antecedent moisture conditions in Remarks: the drier than normal range. **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present ☑): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C8 - Crayfish Burrows □ B1 - Water Marks ☐ C1 - Hydrogen Sulfide Odor ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ B3 - Drift Deposits ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B4 - Algal Mat or Crust ☐ D2 - Geomorphic Position ☐ C6 - Recent Iron Reduction in Tilled Soils ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☐ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ Other (Explain) ☐ B8 - Sparsely Vegetated Concave Surface **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: **Wetland Hydrology Present?** ☐ Yes ☑ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: 2007 NRC Delineation; 2009 concurrence; FSA Slides Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No evidence of wetland hydrology was observed at the sample plot. FSA slide review indicates the boundary is nearby to the northwest, but not Remarks: within this sample point. SOILS Map Unit Name: Series Drainage Class: moderately well to well Saylesville silt loam Taxonomy (Subgroup): Typic Hapludalfs Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) % Color (Moist) % Type Location 100 0 8 10YR 3/2 silt loam 1 2 8 10 10YR 4/3 100 silt loam 10 20 3 4/4 100 10YR silty clay loam ----Indicators for Problematic Soils ¹ NRCS Hydric Soil Field Indicators (check here if indicators are not present ☑): ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A16 - Coast Prairie Redox ☐ A2 - Histic Epipedon S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses ☐ A3 - Black Histic S6 - Stripped Matrix ☐ Other (Explain in Remarks) F1 - Loamy Muck Mineral ☐ A4 - Hydrogen Sulfide ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix F6 - Redox Dark Surface ☐ A11 - Depleted Below Dark Surface F7 - Depleted Dark Surface ☐ A12 - Thick Dark Surface ☐ S1 - Sandy Muck Mineral ☐ F8 - Redox Depressions



Project/Site: **Emerald Park Landfill Expansion** Wetland ID: Adj. to W1 Sample Point 1u **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 0 10. x 1 = FACW spp. 0 x 2 = ____ Total Cover = 0 FAC spp. 0 x 3 = 0

FACU spp. 100 x 4 = 400

UPL spp. 10 x 5 = 50 x 4 = 400 Sapling/Shrub Stratum (Plot size: 15 ft radius) 1. 2. 3. Total 110 (A) 4. 5. Prevalence Index = B/A = 4.0916. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * 1. MEDICAGO SATIVA 20 Ν **FACU** * Indicators of hydric soil and wetland hydrology must be TRIFOLIUM PRATENSE 10 Ν **FACU** present, unless disturbed or problematic. 3. CIRSIUM ARVENSE 5 Ν **FACU Definitions of Vegetation Strata: BROMUS INERMIS** 10 Ν **UPL** 4. **ELYMUS REPENS** 60 Υ **FACU** 5. TARAXACUM OFFICINALE 5 Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 Ν **FACU** breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. **Herb** - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 110 Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----**Hydrophytic Vegetation Present** ☐ Yes ☑ No 3. 5. ----4. --Total Cover = Dominant vegetation was determined through use of the 50/20 rule. Vegetation at the sample plot is not hydrophytic. Remarks:

Additional	Remarks:

Agricultural field currently used for hay production.

(If Observed)

Remarks:

7.0.

WETLAND DETERMINATION DATA FORM Midwest Region

Emerald Park Landfill Expansion Project/Site: Stantec Project #: 193702557 Date: 10/14/13 Applicant: **ADS** County: Waukesha Investigator #1: DP State: Wisconsin Investigator #2: MC Montgomery silty clay loam NWI/WWI Classification: T3/E2Ka Soil Unit: Wetland ID: W1 Depression Local Relief: Concave Landform: Sample Point: 1w Slope (%): 0-2 Latitude: N/A Datum: N/A Longitude: N/A Community ID: Wet Meadow Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation \square , Soil \square , or Hydrology \square significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? Yes □No 20 Dir: E Range: **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? Hydric Soils Present? ✓ Yes □ No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? ☑ Yes □ No ☑ Yes ■ No The sample plot is located in a wet meadow. WETS analysis indicates antecedent moisture conditions in the drier than normal range. Remarks: **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present \square): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ B10 - Drainage Patterns ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☑ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☑ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ Other (Explain) ☐ B8 - Sparsely Vegetated Concave Surface **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: Wetland Hydrology Present? ☑ Yes □ No Water Table Present? ☐ Yes ☑ No (in.) Depth: Saturation Present? ☐ Yes ☑ No (in.) Depth: 2007 NRC Delineation; 2009 concurrence; FSA Slides Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: The presence of 2 secondary indicators at the sample plot provides evidence of wetland hydrology. FSA slide review indicates this point is wetlands, Remarks: and that the wetlands stop where cropland begins nearby. SOILS Map Unit Name: Montgomery silty clay loam Series Drainage Class: very poorly Taxonomy (Subgroup): Vertic Endoaquolls Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Location Depth 100 0 18 10YR 2/1 silt loam 1 C 18 24 2 10YR 4/1 95 10YR 4/6 5 M silty clay ----**NRCS Hydric Soil Field Indicators** (check here if indicators are not present □): Indicators for Problematic Soils ¹ ☐ A16 - Coast Prairie Redox ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A2 - Histic Epipedon ☐ S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses S6 - Stripped Matrix ☐ Other (Explain in Remarks) ☐ A3 - Black Histic ☐ A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix F6 - Redox Dark Surface ☐ A11 - Depleted Below Dark Surface ☑ A12 - Thick Dark Surface F7 - Depleted Dark Surface ☐ S1 - Sandy Muck Mineral ☐ F8 - Redox Depressions ☐ S3 - 5 cm Mucky Peat or Peat ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic **Restrictive Layer** ☑ Yes □ No Depth: N/A Type: N/A **Hydric Soil Present?**

The soil at the sample plot meets the A12 Indicator described in the NRCS publication Field Indicators of Hydric Soil in the United States - version



Project/Site: **Emerald Park Landfill Expansion** Wetland ID: Sample Point 1w **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. 2. Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 0 10. x 1 =

 FACW spp.
 100
 x 2 =
 200

 FAC spp.
 0
 x 3 =
 0

 FACU spp.
 1
 x 4 =
 4

 UPL spp.
 0
 x 5 =
 0

 x 2 = ___ Total Cover = 0 x 4 = _____4 Sapling/Shrub Stratum (Plot size: 15 ft radius) 1. 2. 3. Total 101 (A) 4. 5. Prevalence Index = B/A = 2.0206. 7. 8. **Hydrophytic Vegetation Indicators:** 9. Yes ☐ No Rapid Test for Hydrophytic Vegetation 10. Yes ☐ No Dominance Test is > 50% Total Cover = ☐ No Prevalence Index is ≤ 3.0 * Yes ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * 1. PHALARIS ARUNDINACEA 100 **FACW** * Indicators of hydric soil and wetland hydrology must be CIRSIUM ARVENSE 2. Ν **FACU** 1 present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 101 Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----3. **Hydrophytic Vegetation Present** ☑ Yes ☐ No 5. --__ 4. --Total Cover =

Additional	Remarks:
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Remarks:

Depressional wet meadow community dominated by reed canary grasss.		

Dominant vegetation was determined through use of the 50/20 rule. Vegetation at the sample plot is hydrophytic.

Remarks:

periods of time during the growing season in most years.

WETLAND DETERMINATION DATA FORM Midwest Region

Emerald Park Landfill Expansion Project/Site: Stantec Project #: 193702557 10/14/13 Date: Applicant: **ADS** County: Waukesha Investigator #1: DP State: Wisconsin Investigator #2: MC Saylesville silt loam NWI/WWI Classification: N/A Soil Unit: Wetland ID: Adj. to W1 Local Relief: Convex Landform: Rise Sample Point: 2u Datum: N/A Slope (%): 0-2 Latitude: N/A Community ID: Upland hayfield Longitude: N/A Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation ☑ , Soil □, or Hydrology □ significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □, Soil □, or Hydrology □ naturally problematic? ☐ Yes ☑No 20 Dir: E Range: SUMMARY OF FINDINGS **Hydrophytic Vegetation Present?** ☐ Yes ☑ No Hydric Soils Present? ☐ Yes ☑ No Wetland Hydrology Present? ☐ Yes ☑ No Is This Sampling Point Within A Wetland? ■ Yes
■ No The sample plot is located in an upland hayfield, so no normal circumstances. WETS analysis indicates antecedent moisture conditions in the drier Remarks: than normal range. Possible problematic seasonal wetland. **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present ☑): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor □ B1 - Water Marks ☐ C8 - Crayfish Burrows ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ C6 - Recent Iron Reduction in Tilled Soils ☐ B4 - Algal Mat or Crust ☐ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☐ D5 - FAC-Neutral Test ☐ B7 - Inundation Visible on Aerial Imagery ☐ D9 - Gauge or Well Data ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: Wetland Hydrology Present? ☐ Yes ☑ No Water Table Present? ☐ Yes ☑ No Depth: (in.) ☐ Yes ☑ No Saturation Present? (in.) Depth: Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 2007 NRC Delineation; 2009 concurrence; FSA Slides No evidence of wetland hydrology was observed at the sample plot. Contrast with adjacent sample point in W-1, as well as non-hydric soils and non-Remarks: hydrphytic vegetation at this point provide evidence this point is not subjected to problematic seasonal wetland hydrology. SOILS Map Unit Name: Saylesville silt loam Series Drainage Class: moderately well to well Taxonomy (Subgroup): Typic Hapludalfs Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Depth Location 10YR 0 10 3/2 100 silt loam 1 10 20 2 10YR 4/3 100 silty clay loam ------NRCS Hydric Soil Field Indicators (check here if indicators are not present ☑): Indicators for Problematic Soils ¹ ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A16 - Coast Prairie Redox ☐ A2 - Histic Epipedon S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses ☐ A3 - Black Histic S6 - Stripped Matrix ☐ Other (Explain in Remarks) F1 - Loamy Muck Mineral ☐ A4 - Hydrogen Sulfide ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix ☐ A11 - Depleted Below Dark Surface F6 - Redox Dark Surface ☐ A12 - Thick Dark Surface F7 - Depleted Dark Surface ☐ F8 - Redox Depressions ☐ S1 - Sandy Muck Mineral ☐ S3 - 5 cm Mucky Peat or Peat ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic **Restrictive Layer** Depth: N/A ☐ Yes ☑ No **Hydric Soil Present?** Type: N/A (If Observed)

The soil at the sample plot does not have any field indicators of hydric soil, nor does it appear to be inundated or saturated to the surface for long



Project/Site: **Emerald Park Landfill Expansion** Wetland ID: Adj. to W1 Sample Point 2u **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 3 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 0 10. x 1 = FACW spp. 0 x 2 = ____ Total Cover = 0 FAC spp. 0 x 3 = 0

FACU spp. 100 x 4 = 400

UPL spp. 0 x 5 = 0 x 4 = 400 Sapling/Shrub Stratum (Plot size: 15 ft radius) 1. 2. 3. Total 100 (A) 4. 5. Prevalence Index = B/A = 4.0006. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * TARAXACUM OFFICINALE 1. 30 **FACU** * Indicators of hydric soil and wetland hydrology must be TRIFOLIUM PRATENSE 15 Ν **FACU** present, unless disturbed or problematic. 3. MEDICAGO SATIVA 25 Υ **FACU ELYMUS REPENS Definitions of Vegetation Strata:** 30 Υ **FACU** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 100 Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----**Hydrophytic Vegetation Present** ☐ Yes ☑ No 3. 5. ----4. --Total Cover = Dominant vegetation was determined through use of the 50/20 rule. Vegetation at the sample plot is not hydrophytic. Remarks:

Additional Remarks:			

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric Soil Present?

☑ Yes □ No.

☐ S3 - 5 cm Mucky Peat or Peat

Type: N/A

Depth: N/A

Depleted matrix begins below 12", which is the threshold for A11 and A12, so interpreted to meet both indicators.

Restrictive Layer

(If Observed)

Remarks:

WETLAND DETERMINATION DATA FORM Page 1 of 2 Midwest Region **Emerald Park Landfill Expansion** Project/Site: Stantec Project #: 193702557 Date: 10/14/13 Applicant: **ADS** County: Waukesha Investigator #1: DP State: Wisconsin Investigator #2: MC Montgomery silty clay loam NWI/WWI Classification: T3/E2Ka Soil Unit: Wetland ID: W1 Landform: Depression Local Relief: Concave Sample Point: 2w Slope (%): 0-2 Latitude: N/A Longitude: N/A Datum: N/A Community ID: Wet Meadow Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation \square , Soil \square , or Hydrology \square significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? Yes □No 20 Dir: E Range: **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? Hydric Soils Present? ✓ Yes □ No ☑ Yes □ No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? ☑ Yes □ No ☑ Yes ■ No The sample plot is located in a wet meadow. WETS analysis indicates drier than normal antecedent moisture conditions. Remarks: **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present \square): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ B10 - Drainage Patterns ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ B2 - Sediment Deposits ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☑ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☑ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: Wetland Hydrology Present? ☑ Yes □ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: 2007 NRC Delineation; 2009 concurrence; FSA Slides Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: The presence of 2 secondary indicators at the sample plot provides evidence of wetland hydrology. Remarks: SOILS Map Unit Name: Montgomery silty clay loam Series Drainage Class: very poorly Taxonomy (Subgroup): Vertic Endoaquolls Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Location Depth 10YR 100 0 12 2/1 silt loam 1 C 12 20 2 2.5Y 5/2 90 5/6 10 M 2.5Y silty clay loam ----Indicators for Problematic Soils ¹ **NRCS Hydric Soil Field Indicators** (check here if indicators are not present \square): ☐ A16 - Coast Prairie Redox ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A2 - Histic Epipedon ☐ S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses S6 - Stripped Matrix ☐ Other (Explain in Remarks) ☐ A3 - Black Histic ☐ A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix F6 - Redox Dark Surface ☑ A11 - Depleted Below Dark Surface ☑ A12 - Thick Dark Surface F7 - Depleted Dark Surface ☐ S1 - Sandy Muck Mineral ☐ F8 - Redox Depressions

2w

Sample Point



Emerald Park Landfill Expansion

WETLAND DETERMINATION DATA FORM **Midwest Region**

Wetland ID:

W1

Project/Site: (Species identified in all uppercase are non-native species.) **VEGETATION** Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 20 1. Salix nigra OBL Number of Dominant Species that are OBL, FACW, or FAC: 3 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 3 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 20 10. x 1 = FACW spp. 80 x 2 =Total Cover = 20 160 FAC spp. 0 x 3 = FACU spp. 20
UPL spp. 0 x 4 = ____ Sapling/Shrub Stratum (Plot size: 15 ft radius) 80 x = 51. 2. 3. Total 120 (A) 4. 5. Prevalence Index = B/A = 2.167 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. Yes ☐ No Rapid Test for Hydrophytic Vegetation 10. ☐ No Yes Dominance Test is > 50% Total Cover = ☐ No Yes Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA 60 **FACW** 1. * Indicators of hydric soil and wetland hydrology must be Helianthus giganteus 2. 20 **FACW** present, unless disturbed or problematic. 3. Solidago canadensis 15 Ν **FACU** CIRSIUM ARVENSE **Definitions of Vegetation Strata:** 5 Ν **FACU** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 100 Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----3. **Hydrophytic Vegetation Present** ☑ Yes ☐ No 5. --__ 4. --Total Cover = Dominant vegetation was determined through use of the 50/20 rule. Vegetation at the sample plot is hydrophytic. Remarks: **Additional Remarks:**

Restrictive Layer

(If Observed)

Remarks:

Type: N/A

WETLAND DETERMINATION DATA FORM Page 1 of 2 Midwest Region **Emerald Park Landfill Expansion** Project/Site: Stantec Project #: 193702557 10/14/13 Date: Applicant: Waukesha **ADS** County: Investigator #1: DP State: Wisconsin Investigator #2: MC Saylesville silt loam NWI/WWI Classification: N/A Soil Unit: Wetland ID: Adj. to W1 Local Relief: Convex Landform: Rise Sample Point: 3u Longitude: N/A Slope (%): Latitude: N/A Datum: N/A Community ID: Upland soybean field Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation ☑ , Soil □, or Hydrology □ significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? ☐ Yes ☑No 20 Dir: E Range: **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? Hydric Soils Present? ☐ Yes ☑ No Wetland Hydrology Present? ☐ Yes ☑ No Is This Sampling Point Within A Wetland? ■ Yes
■ No WETS analysis indicates drier than normal antecedent moisture conditions. Potential problematic seasonal wetland hydrology. Although hydrophytic Remarks: vegetation present, the lack of hydric soils and wetland hydrology indicate upland cropland. **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present ☑): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows □ B1 - Water Marks ☐ B2 - Sediment Deposits ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ C6 - Recent Iron Reduction in Tilled Soils ☐ D2 - Geomorphic Position ☐ B4 - Algal Mat or Crust ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☐ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: **Wetland Hydrology Present?** ☐ Yes ☑ No Water Table Present? ☐ Yes ☑ No (in.) Depth: Saturation Present? ☐ Yes ☑ No (in.) Depth: Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 2007 NRC Delineation; 2009 concurrence; FSA Slides Sample point 1ft higher than adjacent wetland sample plot. No evidence of wetland hydrology was observed at the sample plot. Contrasting with Remarks: adjacent W1-3w. FSA slide review indicates non-wetlands at approximately this location. SOILS Map Unit Name: Series Drainage Class: moderately well to well Saylesville silt loam Taxonomy (Subgroup): Typic Hapludalfs Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Depth Location 100 0 14 10YR 3/2 silt loam 1 10YR 4/2 50 silty clay 20 2 14 10YR 50 4/3 ------Indicators for Problematic Soils ¹ NRCS Hydric Soil Field Indicators (check here if indicators are not present ☑): ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A16 - Coast Prairie Redox ☐ A2 - Histic Epipedon ☐ F12 - Iron-Manganese Masses S5 - Sandy Redox ☐ A3 - Black Histic S6 - Stripped Matrix ☐ Other (Explain in Remarks) ☐ A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix F6 - Redox Dark Surface ☐ A11 - Depleted Below Dark Surface F7 - Depleted Dark Surface ☐ A12 - Thick Dark Surface ☐ S1 - Sandy Muck Mineral ☐ F8 - Redox Depressions ☐ S3 - 5 cm Mucky Peat or Peat ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

No O² roots. The soil at the sample plot does not have any field indicators of hydric soil, nor does it appear to be inundated or saturated to the

☐ Yes ☑ No

Hydric Soil Present?

Depth: N/A

surface for long periods of time during the growing season in most years.



Project/Site: Emerald Park Landfill Expansion Wetland ID: Adj. to W1 Sample Point 3u **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. 2. Number of Dominant Species that are OBL, FACW, or FAC: (A) 3. 4. Total Number of Dominant Species Across All Strata: 0 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: **NA** (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 0 10. x 1 =

 FACW spp.
 2
 x 2 =
 4

 FAC spp.
 0
 x 3 =
 0

 FACU spp.
 1
 x 4 =
 4

 UPL spp.
 0
 x 5 =
 0

 Total Cover = Sapling/Shrub Stratum (Plot size: 15 ft radius) 1. 2. Total _____ (A) _____ (B) 3. 4. 5. Prevalence Index = B/A = 2.667 6. 7. **Hydrophytic Vegetation Indicators:** 8. 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. ☑ No ☐ Yes Dominance Test is > 50% Total Cover = ☐ No Yes Prevalence Index is ≤ 3.0 * ☐ Yes ☐ No Morphological Adaptations (Explain) * ☐ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * TARAXACUM OFFICINALE Ν **FACU** 1. * Indicators of hydric soil and wetland hydrology must be 2. Cyperus esculentus Ν **FACW** present, unless disturbed or problematic. RHAMNUS FRANGULA 3. Ν **FACW Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. **Woody Vines** - All woody vines greater than 3.28 ft. in height. 15. Total Cover = Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----3. **Hydrophytic Vegetation Present** ☑ Yes □ No

Vegetation at the sample plot is hydrophytic based on PI because percent cover was not high enough to determine dominants via 50-20 rule.

Additional Remarks:

5.

4.

Remarks:

--

--

Soybean stubble present within the plowed agricultural field. FSA slide review indicates wetland boundary in this vicinity.

--

Total Cover =

Remarks:

hydric based on the other parameters.

WETLAND DETERMINATION DATA FORM Midwest Region

Emerald Park Landfill Expansion 10/14/13 Project/Site: Stantec Project #: 193702557 Date: Applicant: **ADS** County: Waukesha Investigator #1: DP State: Wisconsin Investigator #2: MC Saylesville silt loam NWI/WWI Classification: T3/E2Ka Soil Unit: Wetland ID: W1 Landform: Depression Local Relief: Concave Sample Point: 3w Slope (%): 0-2 Datum: N/A Community ID: Forest wetland Latitude: N/A Longitude: N/A Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation \square , Soil \square , or Hydrology \square significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? Yes □No 20 Dir: E Range: **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? Hydric Soils Present? ✓ Yes □ No Is This Sampling Point Within A Wetland?
☐ Yes ☐ No Wetland Hydrology Present? ☑ Yes □ No The sample plot is located in a forested wetland. WETS analysis indicates antecedent moisture conditions in the drier than normal range. Remarks: **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present \square): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☑ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☑ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ Other (Explain) ☐ B8 - Sparsely Vegetated Concave Surface **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: Wetland Hydrology Present? ☑ Yes □ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No O² roots. The presence of 2 secondary indicators at the sample plot provides evidence of wetland hydrology. SOILS Map Unit Name: Series Drainage Class: moderately well to well Saylesville silt loam Taxonomy (Subgroup): Typic Hapludalfs Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Location Depth 100 0 14 10YR 3/1 silt loam 1 C 14 20 2 5Y 4/1 90 10YR 4/6 10 M silty clay ----**NRCS Hydric Soil Field Indicators** (check here if indicators are not present □): Indicators for Problematic Soils ¹ ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A16 - Coast Prairie Redox ☐ A2 - Histic Epipedon S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses ☐ A3 - Black Histic S6 - Stripped Matrix ☑ Other (Explain in Remarks) П F1 - Loamy Muck Mineral ☐ A4 - Hydrogen Sulfide ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix F6 - Redox Dark Surface ☐ A11 - Depleted Below Dark Surface ☐ A12 - Thick Dark Surface F7 - Depleted Dark Surface ☐ F8 - Redox Depressions ☐ S1 - Sandy Muck Mineral ☐ S3 - 5 cm Mucky Peat or Peat ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic **Restrictive Layer** ☑ Yes □ No Type: N/A Depth: N/A **Hydric Soil Present?** (If Observed)

The soil at the sample plot does not meets the A12 Indicator because the value is 0.5 too high in the 1st horizon. However, this soil is judged to be

3w

Sample Point



Project/Site:

Emerald Park Landfill Expansion

WETLAND DETERMINATION DATA FORM Midwest Region

Wetland ID:

W1

(Species identified in all uppercase are non-native species.) **VEGETATION** Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant ROBINIA PSEUDOACACIA 30 **FACU** 1. Υ Υ Number of Dominant Species that are OBL, FACW, or FAC: 5 (A) 2. 25 OBL Salix nigra 10 3. Acer negundo Ν FAC 4. Total Number of Dominant Species Across All Strata: 9 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: **55.6%** (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. <u>25</u> 10. x 1 =FACW spp. 110 Total Cover = x 2 =65 220 FAC spp. 15 x 3 =FACU spp. 50 x 4 =Sapling/Shrub Stratum (Plot size: 15 ft radius) 200 UPL spp. 0 LONICERA X BELLA 10 **FACU** x = 51. **FACW** 2. 5 Υ Sambucus canadensis Viburnum lentago 3. **FAC** Total 200 (A) Rubus idaeus 5 **FACU** 4. 5. Prevalence Index = B/A = 2.450 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. ☐ No Yes Dominance Test is > 50% 25 Total Cover = ☐ No Yes Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA 100 **FACW** 1. * Indicators of hydric soil and wetland hydrology must be 2. present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. **Woody Vines** - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 30 ft radius) Parthenocissus quinquefolia 5 **FACU** 2. 5 Vitis riparia **FACW** 3. --**Hydrophytic Vegetation Present** ☑ Yes □ No 5. ------4. Total Cover = 10 Dominant vegetation was determined through use of the 50/20 rule. Vegetation at the sample plot is hydrophytic. Remarks:

Sample plot is located in a seasonally wet forested wetland.		

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric Soil Present?

Not a problem mollisol as mapped. No O² roots. The soil at the sample plot does not have any field indicators of hydric soil, nor does it appear to be

☐ Yes ☑ No

Restrictive Layer

(If Observed)

Remarks:

Type: N/A

WETLAND DETERMINATION DATA FORM Midwest Region

Page 1 of 2 **Emerald Park Landfill Expansion** Stantec Project #: Project/Site: 193702557 10/14/13 Date: Applicant: **ADS** County: Waukesha Investigator #1: DP State: Wisconsin Investigator #2: MC Montgomery silty clay loam NWI/WWI Classification: N/A Soil Unit: Wetland ID: Adj. to W1 Local Relief: Convex Landform: Rise Sample Point: 4u Longitude: N/A Slope (%): 0-2 Latitude: N/A Datum: N/A Community ID: Agricultural field Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation ☑ , Soil □, or Hydrology □ significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □, Soil □, or Hydrology ☑ naturally problematic? ☐ Yes ☑No 20 Dir: E Range: **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? ☐ Yes ☑ No Hydric Soils Present? ☐ Yes ☑ No ■ Yes
■ No Wetland Hydrology Present? ☐ Yes ☑ No Is This Sampling Point Within A Wetland? WETS analysis indicates drier than normal antecedent moisture conditions. The sample point was planted to soybean during the 2013 growing Remarks: season, so no normal circumstances. Potential problematic seasonal wetland hydrology. **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present ☑): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor □ B1 - Water Marks ☐ C8 - Crayfish Burrows ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ D1 - Stunted or Stressed Plants ☐ C4 - Presence of Reduced Iron ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☐ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☐ D5 - FAC-Neutral Test ☐ B7 - Inundation Visible on Aerial Imagery ☐ D9 - Gauge or Well Data ☐ Other (Explain) ☐ B8 - Sparsely Vegetated Concave Surface **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: Wetland Hydrology Present? ☐ Yes ☑ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: 2007 NRC Delineation; 2009 concurrence; FSA Slides Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Soil pit dry to > 20" No evidence of wetland hydrology was observed at the sample plot. Soils and vegetation indicate non-wetlands, so potential Remarks: problematic seasonal wetland lacking hydrology indicators judged to not be present at this point. See FSA interpretations at bottom of dataform. SOILS Map Unit Name: Montgomery silty clay loam Series Drainage Class: very poorly Taxonomy (Subgroup): Vertic Endoaquolls Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Depth Location 0 8 10YR 3/2 100 silty clay loam 1 10YR 4/3 50 silty clay 2 8 20 10YR 50 4/4 silty clay ----Indicators for Problematic Soils ¹ NRCS Hydric Soil Field Indicators (check here if indicators are not present ☑): ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A16 - Coast Prairie Redox ☐ A2 - Histic Epipedon S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses S6 - Stripped Matrix ☐ Other (Explain in Remarks) ☐ A3 - Black Histic F1 - Loamy Muck Mineral ☐ A4 - Hydrogen Sulfide ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix ☐ A11 - Depleted Below Dark Surface F6 - Redox Dark Surface F7 - Depleted Dark Surface ☐ A12 - Thick Dark Surface ☐ S1 - Sandy Muck Mineral ☐ F8 - Redox Depressions ☐ S3 - 5 cm Mucky Peat or Peat

Depth: N/A

inundated or saturated to the surface for long periods of time during the growing season in most years.



Project/Site: Emerald Park Landfill Expansion Wetland ID: Adj. to W1 Sample Point 4u

VEGETATION	(Species identified in all uppercase are non-na	tive spec	ies.)		
Tree Stratum (Plo	ot size: 30 ft radius)				
	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.					N
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					T. (1) (5) (7)
4.					Total Number of Dominant Species Across All Strata: 2 (B)
5.					Decret of Decretor (Occasion That Ass. ODI. EAGM. o. EAG
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7.					Duestal and a landar Maultala at
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	Total Cover =				OBL spp. $0 \times 1 = 0$
	Total Cover =	0			FACW spp. 1
Caralina (Charuh Cha	otium (Diet einer 45 ft redice)				FAC spp. $0 \times 3 = 0$
Sapling/Shrub Stra	atum (Plot size: 15 ft radius)				FACU spp. $\begin{array}{cccccccccccccccccccccccccccccccccccc$
2.	 				UPL spp. $0 x 5 = 0$
3.		<u></u>			Total 16 (A) 62 (B)
4.					Total 16 (A) 62 (B)
5.					Prevalence Index = B/A = 3.875
6.					Frevalence index = D/A =
7.					
8.					Hydrophytic Vegetation Indicators:
9.	 _				☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.	 _				☐ Yes ☑ No Dominance Test is > 50%
10.	Total Cover =	0			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
	Total Gover –	U			☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Plo	t size: 5 ft radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	CIRSIUM ARVENSE	10	Υ	FACU	- res - roblem riyuropnytic vegetation (Explain)
2.	TARAXACUM OFFICINALE	5	Y	FACU	* Indicators of hydric soil and wetland hydrology must be
3.	Cyperus esculentus	1	N.	FACW	present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	16			
	Total Gover	10			
Woody Vine Strati	um (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
5.					, j
4.					
•••	Total Cover =	0			
Remarks:			se of the	50/20 rul	e. Vegetation at the sample plot is not hydrophytic.
-	<u> </u>	5 - 5	3		J T J T

Additional Remarks:

Soybean stubble present. No crop stress evident. FSA slide review indicates non-wetlands by showing a boundary in this proximate location.

☑ Yes □ No

Hydric Soil Present?



Restrictive Layer

(If Observed)

Remarks:

Type: N/A

7.0.

WETLAND DETERMINATION DATA FORM Midwest Region

Page 1 of 2 **Emerald Park Landfill Expansion** Stantec Project #: Project/Site: 193702557 Date: 10/14/13 Waukesha Applicant: **ADS** County: Investigator #1: DP State: Wisconsin Investigator #2: MC Montgomery silty clay loam NWI/WWI Classification: T3/E2Ka Soil Unit: Wetland ID: W1 Depression Local Relief: Concave Landform: Sample Point: 4w 0-2 Latitude: N/A Slope (%): Longitude: N/A Datum: N/A Community ID: Shrub-carr Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation \square , Soil \square , or Hydrology \square significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? Yes □No 20 Dir: E Range: **SUMMARY OF FINDINGS Hydrophytic Vegetation Present?** Hydric Soils Present? ✓ Yes □ No ☑ Yes □ No Wetland Hydrology Present? ☑ Yes □ No Is This Sampling Point Within A Wetland? ☑ Yes ■ No Remarks: WETS analysis indicates drier than normal antecedent moisture conditions. The sample plot is located in a shrub-carr wetland. **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present \square): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ B2 - Sediment Deposits ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☑ D2 - Geomorphic Position ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☑ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: **Wetland Hydrology Present?** ☑ Yes □ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: 2007 NRC Delineation; 2009 concurrence; FSA Slides Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: The presence of 2 secondary indicators at the sample plot provides evidence of wetland hydrology. Nearby farm field non-wetland per the FSA slide Remarks: review. SOILS Map Unit Name: Montgomery silty clay loam Series Drainage Class: very poorly Taxonomy (Subgroup): Vertic Endoaquolls Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Location Depth 14 10YR 2/1 100 0 1 clay loam 14 20 2 5Y 4/2 95 5/6 5 C M 2.5Y silty clay --------**NRCS Hydric Soil Field Indicators** (check here if indicators are not present □): Indicators for Problematic Soils ¹ ☐ A16 - Coast Prairie Redox ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A2 - Histic Epipedon ☐ S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses S6 - Stripped Matrix ☐ Other (Explain in Remarks) ☐ A3 - Black Histic ☐ A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix F6 - Redox Dark Surface ☐ A11 - Depleted Below Dark Surface ☑ A12 - Thick Dark Surface F7 - Depleted Dark Surface ☐ S1 - Sandy Muck Mineral ☐ F8 - Redox Depressions ☐ S3 - 5 cm Mucky Peat or Peat ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

The soil at the sample plot meets the A12 Indicator described in the NRCS publication Field Indicators of Hydric Soil in the United States - version

Depth: N/A



Project/Site: **Emerald Park Landfill Expansion** Wetland ID: W1 Sample Point 4w **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. 2. Number of Dominant Species that are OBL, FACW, or FAC: 5 (A) 3. 4. Total Number of Dominant Species Across All Strata: 6 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 0 10. x 1 =FACW spp. 105 Total Cover = x 2 =0 210 FAC spp. 30 x 3 = FACU spp. 25
UPL spp. 10 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) 100 x 5 = Cornus racemosa 30 **FAC** 1. 2. 20 Υ Salix interior **FACW** Rubus occidentalis 10 3. Ν UPL Total 170 (A) **FACW** Cornus stolonifera 15 Ν 4. **FACW** 5. Fraxinus pennsylvanica 10 Ν Prevalence Index = B/A = FACU LONICERA X BELLA 6. Ν 20 7. Salix bebbiana **FACW** ROBINIA PSEUDOACACIA 8. 10 **Hydrophytic Vegetation Indicators: FACU** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. ☐ No Yes Dominance Test is > 50% Total Cover = 120 ☐ No Yes Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA 30 **FACW** 1. * Indicators of hydric soil and wetland hydrology must be 2. present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. **Woody Vines** - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 30 Woody Vine Stratum (Plot size: 30 ft radius) Parthenocissus quinquefolia 10 **FACU** 2. Vitis riparia 10 **FACW** 3. **Hydrophytic Vegetation Present** ☑ Yes ☐ No --5. ----__ 4. Total Cover = 20 Dominant vegetation was determined through use of the 50/20 rule. Vegetation at the sample plot is hydrophytic. Remarks:

Additional	Remarks:
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Dense shrub-carr located on the perimeter of a wet meadow community.

Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Emerald Park Landfill Expansion Project/Site: Stantec Project #: 193702557 10/14/13 Date: Waukesha Applicant: **ADS** County: Investigator #1: DP State: Wisconsin Investigator #2: MC Martinton silt loam NWI/WWI Classification: N/A Soil Unit: Wetland ID: Adj. to W1 Landform: Local Relief: Convex Rise Sample Point: 5u Longitude: N/A Community ID: Ag field Slope (%): 0-2 Latitude: N/A Datum: N/A Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation ☑ , Soil □, or Hydrology □ significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? ☐ Yes ☑No 20 Dir: E Range: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? ☐ Yes ☑ No Hydric Soils Present? ☐ Yes ☑ No Wetland Hydrology Present? ☐ Yes ☑ No Is This Sampling Point Within A Wetland? ■ Yes
■ No WETS analysis indicates conditions drier than normal. Sample point in a soybean field, so no normal circumstances. Potential problematic seasonal Remarks: wetland interpreted to be non-wetland based on soils and vegetation indicators. **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present ☑): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ B13 - Aquatic Fauna ☐ A2 - High Water Table ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows □ B1 - Water Marks ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☐ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☐ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: Wetland Hydrology Present? ☐ Yes ☑ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: 2007 NRC Delineation; 2009 concurrence; FSA Slides Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Soil pit dry to > 24". No evidence of wetland hydrology was observed at the sample plot. FSA slide review indicated the wetland boundary was in the Remarks: vicinity of sample points 5w and 5u. SOILS Map Unit Name: Martinton silt loam Series Drainage Class: somewhat poorly Taxonomy (Subgroup): Aquic Argiudolls Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Depth Location 0 20 10YR 2/1 100 silt loam 1 20 24 2 5Y 4/2 100 silty clay ----Indicators for Problematic Soils ¹ NRCS Hydric Soil Field Indicators (check here if indicators are not present ☑): ☐ A16 - Coast Prairie Redox ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses ☐ A2 - Histic Epipedon ☐ A3 - Black Histic S6 - Stripped Matrix ☐ Other (Explain in Remarks) ☐ A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix F6 - Redox Dark Surface ☐ A11 - Depleted Below Dark Surface ☐ A12 - Thick Dark Surface ☐ F7 - Depleted Dark Surface ☐ S1 - Sandy Muck Mineral ☐ F8 - Redox Depressions ☐ S3 - 5 cm Mucky Peat or Peat ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic **Restrictive Layer** Depth: N/A ☐ Yes ☑ No Type: N/A **Hydric Soil Present?** (If Observed)

2' above adjacent wetland surface. No redoximorphic features present within horizon 2. The soil at the sample plot does not have any field indicators

of hydric soil, nor does it appear to be inundated or saturated to the surface for long periods of time during the growing season in most years.

Possible problem mollisol, judged not present based on a lack of redox features in 2nd horizon and a lack of vegetation and hydrology indicators.



Project/Site: Emerald Park Landfill Expansion Wetland ID: Adj. to W1 Sample Point 5u

VEGETATION	(Species identified in all uppercase are non-na	tive spec	cies.)		
Tree Stratum (I	Plot size: 30 ft radius)		•		
	<u>Species Name</u>	% Cover	<u>Dominant</u>	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata:1 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. $0 x 1 = 0$
	Total Cover =	0			OBL spp. 0
					FAC spp. ${1}$ \times $3 = {3}$
Sapling/Shrub S	Stratum (Plot size: 15 ft radius)				FACU spp. 5 x 4 = 20
1.					UPL spp. $0 x 5 = 0$
2.					· · · <u></u>
3.					Total 6 (A) 23 (B)
4.					`` /
5.					Prevalence Index = B/A = 3.833
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					
10.					☐ Yes☑ NoRapid Test for Hydrophytic Vegetation☐ Yes☑ NoDominance Test is > 50%
10.	Total Cover =	0			-
	Total Cover –	U			
Lie de Otre Cer (F	District of Education				☐ Yes ☑ No Morphological Adaptations (Explain) *
	Plot size: 5 ft radius) TARAXACUM OFFICINALE	5	Y	FACU	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.		<u> </u>	N	FACO	* Indicators of hydric soil and wetland hydrology must be
2.	RHAMNUS CATHARTICA	I			present, unless disturbed or problematic.
3.					Definitions of Venetation Charte.
4.					Definitions of Vegetation Strata:
5.					T
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.					breast height (DBH), regardless of height.
8.					O II IOI I Wood uplants loss than 2 in DDU and proster than 2.20
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	6			
Woody Vine Str	ratum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
5.					
4.					
	Total Cover =	0			
Remarks:			ise of the	50/20 rul	e. Vegetation at the sample plot is not hydrophytic.

Additional Remarks:

Soybean stubble, sparse herb layer. No crop stress to soybean evident. FSA slide review completed and in all years, the boundary appears to be in the vicinity of this t

Emerald Park Landfill Expansion Project/Site: Stantec Project #: 193702557 Date: 10/14/13 Applicant: **ADS** County: Waukesha Investigator #1: DP State: Wisconsin Investigator #2: MC Martinton silt loam NWI/WWI Classification: T3/E2Ka Soil Unit: Wetland ID: W1 Landform: Local Relief: Concave Depression Sample Point: 5w Slope (%): Latitude: N/A Community ID: wet meadow/shrub-carr 0-2 Longitude: N/A Datum: N/A Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation \square , Soil \square , or Hydrology \square significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? Yes □No 20 Dir: E Range: **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present? ☑ Yes □ No Is This Sampling Point Within A Wetland? ☑ Yes ■ No WETS analysis indicates drier than normal antecedent moisture conditions. The sample plot is located in a wet meadow/shrub-carr. Remarks: **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present \square): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☑ D2 - Geomorphic Position ☐ C6 - Recent Iron Reduction in Tilled Soils ☑ D5 - FAC-Neutral Test ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: Wetland Hydrology Present? ☑ Yes □ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 2007 NRC Delineation; 2009 concurrence The presence of 2 secondary indicators at the sample plot provides evidence of wetland hydrology. Remarks: SOILS Map Unit Name: Martinton silt loam Series Drainage Class: somewhat poorly Taxonomy (Subgroup): Aquic Argiudolls Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Location Depth 2 0 10 10YR 3/1 98 10YR 5/6 silt loam 1 C M C 10 20 2 10YR 5/1 85 5/6 15 M 2.5Y clay loam ------**NRCS Hydric Soil Field Indicators** (check here if indicators are not present □): Indicators for Problematic Soils ¹ ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A16 - Coast Prairie Redox ☐ A2 - Histic Epipedon ☐ S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses ☐ A3 - Black Histic S6 - Stripped Matrix ☐ Other (Explain in Remarks) П ☐ A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix F6 - Redox Dark Surface ☐ A11 - Depleted Below Dark Surface ✓ ☐ A12 - Thick Dark Surface ☐ F7 - Depleted Dark Surface ☐ S1 - Sandy Muck Mineral ☐ F8 - Redox Depressions ☐ S3 - 5 cm Mucky Peat or Peat ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic **Restrictive Layer** ☑ Yes □ No. Depth: N/A Type: N/A **Hydric Soil Present?** (If Observed) The soil at the sample plot meets a F3 and F6 Indicators described in the NRCS publication Field Indicators of Hydric Soil in the United States -Remarks: version 7.0.



Project/Site: **Emerald Park Landfill Expansion** Wetland ID: Sample Point 5w (Species identified in all uppercase are non-native species.) **VEGETATION** Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name Ind.Status % Cover Dominant Quercus alba 1. 5 **FACU** Number of Dominant Species that are OBL, FACW, or FAC: 4 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 5 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 1 10. x 1 = Total Cover = 5 FACU spp. 10
UPL spp. 0 x 4 = 40 Sapling/Shrub Stratum (Plot size: 15 ft radius) 30 **FACW** x = 51. Cornus stolonifera 2. 20 Salix interior **FACW** 3. Total 168 (A) 4. 5. Prevalence Index = B/A = 2.1196. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. Yes ☐ No Dominance Test is > 50% 50 Total Cover = ☐ No Yes Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA 95 **FACW** 1. * Indicators of hydric soil and wetland hydrology must be 2. Amaranthus retroflexus 5 Ν **FACU** present, unless disturbed or problematic. **FACW** 3. Polygonum pensylvanicum Ν **Definitions of Vegetation Strata:** Bidens cernua Ν **OBL** 4. Ν **FAC** 5. Panicum capillare Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 -breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. **Herb** - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 103 Woody Vine Stratum (Plot size: 30 ft radius) 10 **FACW** Vitis riparia 1. 2. ----**Hydrophytic Vegetation Present** ☑ Yes ☐ No 3. 5. ----4. --Total Cover = 10 Dominant vegetation was determined through use of the 50/20 rule. Vegetation at the sample plot is hydrophytic. Remarks:

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Additional	Remarks:

wet meadow community on edge of shrub-carr community.	



SOILS

☐ S1 - Sandy Muck Mineral

WETLAND DETERMINATION DATA FORM Page 1 of 2 Midwest Region **Emerald Park Landfill Expansion** 10/14/13 Project/Site: Stantec Project #: 193702557 Date: Waukesha Applicant: **ADS** County: Investigator #1: DP State: Wisconsin Investigator #2: MC Martinton silt loam NWI/WWI Classification: N/A Soil Unit: Wetland ID: W1 Landform: Local Relief: Concave Depression Sample Point: 6w Slope (%): 0-2 Datum: N/A Community ID: farmed wetland Latitude: N/A Longitude: N/A Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation \square , Soil \square , or Hydrology \square significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation \square , Soil \square , or Hydrology \square naturally problematic? ☐ Yes ☑No 20 Dir: E Range: **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? Hydric Soils Present? Is This Sampling Point Within A Wetland? ☑ Yes ■ No Wetland Hydrology Present? ☑ Yes □ No WETS analysis indicates site conditions drier than normal. Farmed wetland swale that extends into soybean field, so therefore not normal Remarks: circumstances. **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present \square): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☑ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ C1 - Hydrogen Sulfide Odor ☑ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☑ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☑ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: **Wetland Hydrology Present?** ☑ Yes □ No Water Table Present? ☐ Yes ☑ No (in.) Depth: Saturation Present? ☐ Yes ☑ No (in.) Depth:

2007 NRC Delineation; 2009 concurrence; FSA Slides Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: FSA slide review at bottom of data form. The presence of 1 primary and 3 secondary indicators at the sample plot provides evidence of wetland Remarks: hydrology.

Map Unit Name: Martinton silt loam Series Drainage Class: somewhat poorly Aquic Argiudolls Taxonomy (Subgroup): Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Location Depth 100 0 14 10YR 2/1 silt 1 C 14 20 2 10YR 4/1 90 10YR 4/6 10 M silty clay loam --

	-			1						-		
										-		
NRCS Hydric S	NRCS Hydric Soil Field Indicators (check here if indicators are not present □):							Indicators	for Problem	natic Soils ¹		
	A1- Histosol				S4 - Sand	y Gleyed I	Matrix	☐ A16 - Coast Prairie Redox				
	A2 - Histic E	pipedon			S5 - Sand	y Redox		☐ F12 - Iron-Manganese Masses				
	A3 - Black H	• •	S6 - Stripped Matrix					☐ Other (Explain in Remarks)				
	A4 - Hydroge	en Sulfide			F1 - Loam	y Muck M	ineral					
	A5 - Stratifie	d Layers			F2 - Loam	y Gleyed	Matrix					
	A10 - 2 cm N	/luck			F3 - Deple	eted Matrix	X					
	A11 - Deplet	ed Below Dark Surface			F6 - Redo	x Dark Su	rface					
	A12 - Thick [F7 - Deple	eted Dark	Surface					

☐ S3 - 5 cm Mucky Peat or Peat ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic **Restrictive Layer** Depth: N/A ☑ Yes □ No Type: N/A **Hydric Soil Present?** (If Observed)

☐ F8 - Redox Depressions

The soil at the sample plot meets A12 Indicator described in the NRCS publication Field Indicators of Hydric Soil in the United States - version 7.0. Remarks:



Project/Site: Emerald Park Landfill Expansion Wetland ID: W1 Sample Point 6w

VEGETATIO	N (Species identified in all uppercase are non-na	tive spec	ies)		
	(Plot size: 30 ft radius)	uve spec	103.)		
	<u>Species Name</u>	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
3.					
4.					Total Number of Dominant Species Across All Strata: 2 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp 0
	Total Cover =	0			FACW spp. $x 2 = 160$
					FAC spp. 15 $\times 3 = 45$
Sapling/Shrub	Stratum (Plot size: 15 ft radius)				FACU spp. $\underline{\qquad}$ \times 4 = $\underline{\qquad}$ $\underline{\qquad}$
1.					UPL spp. $\underline{\qquad \qquad \qquad }$ $x = \underline{\qquad \qquad }$
2.					
3.					Total (A) 230 (B)
4.					
5.					Prevalence Index = B/A = 2.300
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☑ Yes ☐ No Rapid Test for Hydrophytic Vegetation
10.	<u></u>				☑ Yes □ No Dominance Test is > 50%
	Total Cover =	0			
					☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Plot size: 5 ft radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	PHALARIS ARUNDINACEA	60	Y	FACW	* Indicators of hydric soil and wetland hydrology must be
2.	Bidens frondosa	20	Y	FACW	present, unless disturbed or problematic.
3.	Panicum capillare	10	N	FAC	
4.	SETARIA PUMILA	5	N	FAC	Definitions of Vegetation Strata:
5.	SETARIA VIRIDIS	5	N	UPL	
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					it. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					and woody plants less than 3.20 it. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
Woody Vine St	tratum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
5.					
4.					
	Total Cover =	0			
Remarks:					

Additional Remarks:

FSA slide review does not indicate wetlands in this location with 4 out of 12 years (6 normal, 3 wet, 3 dry) having signatures. However field indicators of hydrology and soils in combination with hydrophytic vegetation provide evidence this area is wetland. No soybean production w/in this northerly-extending swale portion of W-1. Adjacent areas planted to soybean during 2013 growing season.



☐ S1 - Sandy Muck Mineral

Restrictive Layer

☐ S3 - 5 cm Mucky Peat or Peat

Type: N/A

WETLAND DETERMINATION DATA FORM Page 1 of 2 Midwest Region **Emerald Park Landfill Expansion** Stantec Project #: 193702557 Project/Site: 10/14/13 Date: Applicant: **ADS** County: Waukesha Investigator #1: DP State: Wisconsin Investigator #2: MC Montgomery silty clay loam NWI/WWI Classification: F0Kf Soil Unit: Wetland ID: Adj. to W2 Local Relief: Convex Landform: Rise Sample Point: 1u Longitude: N/A Slope (%): 0-2 Latitude: N/A Datum: N/A Community ID: Agricultural field Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation ☑ , Soil □, or Hydrology □ significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? ☐ Yes ☑No 20 Dir: E Range: SUMMARY OF FINDINGS Hydric Soils Present? Hydrophytic Vegetation Present? ☐ Yes ☑ No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? ☐ Yes ☑ No ■ Yes
■ No Soybean field, so no normal circumstances. WETS indicates drier than normal conditions. Although hydric soil is present at the sample plot, the lack Remarks: of hydrophytic vegetation and wetland hydrology indicate the sample plot is located in an upland agricultural field. **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present ☑): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ B13 - Aquatic Fauna ☐ A2 - High Water Table ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ B2 - Sediment Deposits ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ D1 - Stunted or Stressed Plants ☐ C4 - Presence of Reduced Iron ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☐ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☐ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: **Wetland Hydrology Present?** ☐ Yes ☑ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 2007 NRC Delineation; 2009 concurrence; FSA Slides Sample point located approx 2' above surface of wetland. No 0² roots. No evidence of wetland hydrology was observed at the sample plot. FSA slide Remarks: review indicates wetland boundary is nearby and that this point is outside the wetland. SOILS Map Unit Name: Montgomery silty clay loam Series Drainage Class: very poorly Taxonomy (Subgroup): Vertic Endoaquolls Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Location Depth 0 18 10YR 2/1 100 silt loam 1 18 24 2 5Y 4/1 95 10YR 5/6 5 C M clay loam ----Indicators for Problematic Soils ¹ **NRCS Hydric Soil Field Indicators** (check here if indicators are not present \square): ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A16 - Coast Prairie Redox ☐ A2 - Histic Epipedon ☐ S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses ☐ A3 - Black Histic S6 - Stripped Matrix ☐ Other (Explain in Remarks) F1 - Loamy Muck Mineral ☐ A4 - Hydrogen Sulfide ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix ☐ A11 - Depleted Below Dark Surface F6 - Redox Dark Surface ☑ A12 - Thick Dark Surface F7 - Depleted Dark Surface

(If Observed) Soybean not exhibiting response to saturated soil conditions. The soil at the sample plot meets the A12 Indicator described in the NRCS publication Remarks: Field Indicators of Hydric Soil in the United States - version 7.0.

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric Soil Present?

☑ Yes □ No

☐ F8 - Redox Depressions

Depth: N/A



Project/Site: **Emerald Park Landfill Expansion** Wetland ID: Adj. to W2 Sample Point 1u **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 3 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 0 10. x 1 = FACW spp. 0 x 2 = 0

FAC spp. 0 x 3 = 0 Total Cover = 0 FACU spp. 20
UPL spp. 0 x 4 = ______ Sapling/Shrub Stratum (Plot size: 15 ft radius) x = 51. 2. 3. Total 20 (A) 4. 5. Prevalence Index = B/A = 4.0006. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. ☑ No ☐ Yes Dominance Test is > 50% Total Cover = ☑ No ☐ Yes Prevalence Index is ≤ 3.0 * ☐ Yes □ No Morphological Adaptations (Explain) * ☐ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * 1. TRIFOLIUM PRATENSE 10 **FACU** * Indicators of hydric soil and wetland hydrology must be CHENOPODIUM ALBUM 5 **FACU** present, unless disturbed or problematic. 3. ABUTILON THEOPHRASTI 5 Υ **FACU Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 20 Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----3. **Hydrophytic Vegetation Present** ☐ Yes ☑ No 5. ------4. --Total Cover = Sparse herbaceous layer within upland soybean field. Dominant vegetation was determined through use of the 50/20 rule. Vegetation at the sample Remarks: plot is not hydrophytic.

Topography is abrupt.

Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Emerald Park Landfill Expansion Project/Site: Stantec Project #: 193702557 Date: 10/14/13 Waukesha Applicant: **ADS** County: Investigator #1: DP State: Wisconsin Investigator #2: MC NWI/WWI Classification: F0Kf Soil Unit: Ogden muck Wetland ID: W2 Depression Local Relief: Concave Landform: Sample Point: 1W 0-2 Latitude: N/A Longitude: N/A Slope (%): Datum: N/A Community ID: Shrub-carr Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation \square , Soil \square , or Hydrology \square significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? Yes □No 20 Range: Dir: E **SUMMARY OF FINDINGS Hydrophytic Vegetation Present?** Hydric Soils Present? ✓ Yes □ No ☑ Yes □ No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? ☑ Yes □ No ☑ Yes ■ No WETS analysis indicates drier than normal antecedent moisture conditions. Remarks: **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present \square): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ B2 - Sediment Deposits ☑ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☑ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☑ D5 - FAC-Neutral Test ☐ B7 - Inundation Visible on Aerial Imagery ☐ D9 - Gauge or Well Data ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: Wetland Hydrology Present? ☑ Yes □ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: 2007 NRC Delineation; 2009 concurrence; FSA Slides Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: The presence of 1 primary and 2 secondary indicators at the sample plot provides evidence of wetland hydrology. Remarks: SOILS Map Unit Name: Ogden muck Series Drainage Class: very poorly Taxonomy (Subgroup): Terric Medisaprists Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Location Depth 100 0 16 10YR 2/1 mucky loam 1 C 16 24 2 10YR 4/2 85 10YR 5/6 15 M mucky clay loam ----Indicators for Problematic Soils ¹ **NRCS Hydric Soil Field Indicators** (check here if indicators are not present \square): ☐ A16 - Coast Prairie Redox ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A2 - Histic Epipedon ☐ S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses S6 - Stripped Matrix ☐ Other (Explain in Remarks) ☐ A3 - Black Histic ☐ A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix F6 - Redox Dark Surface ☐ A11 - Depleted Below Dark Surface F7 - Depleted Dark Surface ☑ A12 - Thick Dark Surface ☐ S1 - Sandy Muck Mineral ☐ F8 - Redox Depressions ☐ S3 - 5 cm Mucky Peat or Peat ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic **Restrictive Layer** ☑ Yes □ No Depth: N/A Type: N/A **Hydric Soil Present?** (If Observed)

Black surface layer-dry (high organic carbon). Buried organic layer. The soil at the sample plot meets the A12 and F1 Indicators as described in the

NRCS publication Field Indicators of Hydric Soil in the United States - version 7.0.



Project/Site: **Emerald Park Landfill Expansion** Wetland ID: W2 Sample Point **1W VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 0 10. x 1 = FACW spp. 145 x 2 =Total Cover = 0 290 FAC spp. 15 x 3 = FACU spp. 0
UPL spp. 0 x 4 = ______ Sapling/Shrub Stratum (Plot size: 15 ft radius) 40 **FACW** x = 51. Salix bebbiana **FACW** 2. 10 Ν Salix interior 10 Populus deltoides **FAC** Total 160 (A) 4. 5. Prevalence Index = B/A = 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. Yes ☐ No Rapid Test for Hydrophytic Vegetation 10. ☐ No Yes Dominance Test is > 50% Total Cover = 60 ☐ No Prevalence Index is ≤ 3.0 * Yes ☐ Yes □ No Morphological Adaptations (Explain) * ☐ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * 1. PHALARIS ARUNDINACEA 95 **FACW** * Indicators of hydric soil and wetland hydrology must be 2. 5 Ν **FAC** Aster lanceolatus present, unless disturbed or problematic. 3. --**Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. **Herb** - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----**Hydrophytic Vegetation Present** ☑ Yes ☐ No 3. 5. ----4. --Total Cover = Dominant vegetation was determined through use of the 50/20 rule, Prevalence Index, and Rapid Test. Vegetation at the sample plot is hydrophytic. Remarks:

Additional	Remarks:

Shrub-carr community.			

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric Soil Present?

☑ Yes □ No

☐ S3 - 5 cm Mucky Peat or Peat

Type: N/A

Depth: N/A

Does not match the mapped organic soil in this location.

Restrictive Layer

(If Observed)

Remarks:

WETLAND DETERMINATION DATA FORM Page 1 of 2 Midwest Region **Emerald Park Landfill Expansion** Project/Site: Stantec Project #: 193702557 Date: 10/14/13 Applicant: **ADS** County: Waukesha Investigator #1: DP State: Wisconsin Investigator #2: MC Muskego muck NWI/WWI Classification: F0Kf Soil Unit: Wetland ID: Adj. to W2 Landform: Local Relief: Convex Rise Sample Point: 2u Slope (%): 0-2 Latitude: N/A Longitude: N/A Datum: N/A Community ID: Upland old field Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation \square , Soil \square , or Hydrology \square significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? Yes □No 20 Dir: E Range: **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? ☐ Yes ☑ No Hydric Soils Present? Is This Sampling Point Within A Wetland? ■ Yes
✓ No Wetland Hydrology Present? ☐ Yes ☑ No WETS analysis indicates drier than normal conditions. The sample plot is located on slight rise above wetland. Predominatly gueen-Anne's lace, Remarks: Kentucky bluegrass mixed with reed canary grass. **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present ☑): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☐ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☐ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: Wetland Hydrology Present? ☐ Yes ☑ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 2007 NRC Delineation; 2009 concurrence No O² roots present. No stressed vegetation within meadow. No evidence of wetland hydrology was observed at the sample plot. Remarks: SOILS Map Unit Name: Muskego muck Series Drainage Class: very poorly Taxonomy (Subgroup): Limnic Haplosaprists Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Location Depth 10YR 100 silt loam 0 8 2/1 1 8 20 2 2.5Y 5/1 90 10YR 4/6 10 C M clay ----Indicators for Problematic Soils ¹ **NRCS Hydric Soil Field Indicators** (check here if indicators are not present \square): ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A16 - Coast Prairie Redox S5 - Sandy Redox ☐ A2 - Histic Epipedon ☐ F12 - Iron-Manganese Masses ☐ A3 - Black Histic S6 - Stripped Matrix ☐ Other (Explain in Remarks) F1 - Loamy Muck Mineral ☐ A4 - Hydrogen Sulfide ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix ☑ A11 - Depleted Below Dark Surface F6 - Redox Dark Surface ☐ A12 - Thick Dark Surface F7 - Depleted Dark Surface ☐ S1 - Sandy Muck Mineral ☐ F8 - Redox Depressions



Project/Site: **Emerald Park Landfill Expansion** Wetland ID: Adj. to W2 Sample Point 2u **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. Number of Dominant Species that are OBL, FACW, or FAC: ____1__(A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 3 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 0 10. x 1 =FACW spp. 30 x 2 =Total Cover = 0 FAC spp. 20 x 3 = FACU spp. 5
UPL spp. 60 x 4 = ____ Sapling/Shrub Stratum (Plot size: 15 ft radius) x = 51. 2. 3. Total 115 (A) 4. 5. Prevalence Index = B/A = 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * 1. POA PRATENSIS 20 Ν **FAC** * Indicators of hydric soil and wetland hydrology must be PHALARIS ARUNDINACEA 30 Υ **FACW** present, unless disturbed or problematic. DAUCUS CAROTA 3. 30 Υ **UPL** TARAXACUM OFFICINALE **Definitions of Vegetation Strata:** 5 Ν **FACU** 4. **BROMUS INERMIS** 30 Υ **UPL** 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 ---breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 115 Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----3. **Hydrophytic Vegetation Present** ☐ Yes ☑ No 5. ----4. --Total Cover = Dominant vegetation was determined through use of the 50/20 rule. Vegetation at the sample plot is not hydrophytic. Remarks:

Upland old field.			



Restrictive Layer

Type: N/A

WETLAND DETERMINATION DATA FORM Page 1 of 2 Midwest Region **Emerald Park Landfill Expansion** Project/Site: 193702557 10/14/13 Stantec Project #: Date: Waukesha Applicant: **ADS** County: Investigator #1: DP State: Wisconsin Investigator #2: MC NWI/WWI Classification: Mzg Soil Unit: Ogden muck Wetland ID: W2 Depression Local Relief: Concave Landform: Sample Point: 2w 0-2 Latitude: N/A Slope (%): Longitude: N/A Datum: N/A Community ID: wet meadow Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation \square , Soil \square , or Hydrology \square significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? Yes □No 20 Dir: E Range: SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Hydric Soils Present? ✓ Yes □ No ☑ Yes □ No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? ☑ Yes □ No ☑ Yes ■ No Sample point is located in a wet meadow community. WETS analysis indicates drier than normal antecedent moisture conditions. Remarks: **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present \square): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☑ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☑ D5 - FAC-Neutral Test ☐ B7 - Inundation Visible on Aerial Imagery ☐ D9 - Gauge or Well Data ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: **Wetland Hydrology Present?** ☑ Yes □ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 2007 NRC Delineation; 2009 concurrence The presence of 2 secondary indicators at the sample plot provides evidence of wetland hydrology. Remarks: SOILS Map Unit Name: Ogden muck Series Drainage Class: very poorly Taxonomy (Subgroup): Terric Medisaprists Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Depth Location 10YR 0 16 2/1 100 1 mucky loam 16 22 2 10YR 5/1 100 clay --------**NRCS Hydric Soil Field Indicators** (check here if indicators are not present □): Indicators for Problematic Soils ¹ ☐ A16 - Coast Prairie Redox ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A2 - Histic Epipedon S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses ☐ A3 - Black Histic S6 - Stripped Matrix ☐ Other (Explain in Remarks) F1 - Loamy Muck Mineral ☐ A4 - Hydrogen Sulfide ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix ☐ A11 - Depleted Below Dark Surface F6 - Redox Dark Surface ☐ A12 - Thick Dark Surface F7 - Depleted Dark Surface ☐ F8 - Redox Depressions ☐ S1 - Sandy Muck Mineral ☐ S3 - 5 cm Mucky Peat or Peat ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

(If Observed) First horizon has mucky modifyer when wet. The soil at the sample plot meets F1 Indicator described in the NRCS publication Field Indicators of Remarks: Hydric Soil in the United States - version 7.0.

Depth: N/A

☑ Yes □ No.

Hydric Soil Present?



Project/Site: **Emerald Park Landfill Expansion** Wetland ID: W2 Sample Point **2**w **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 0 10. x 1 = Total Cover = 0 FACU spp. 0
UPL spp. 0 x 4 = ______ Sapling/Shrub Stratum (Plot size: 15 ft radius) x = 51. 2. 3. Total 85 (A) 175 (B) 4. 5. Prevalence Index = B/A = 2.0596. 7. 8. **Hydrophytic Vegetation Indicators:** 9. Yes □ No Rapid Test for Hydrophytic Vegetation 10. ☐ No Yes Dominance Test is > 50% Total Cover = ☐ No Yes Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA 40 **FACW** 1. * Indicators of hydric soil and wetland hydrology must be 2. Euthamia graminifolia 40 **FACW** present, unless disturbed or problematic. 3. Aster lanceolatus 5 Ν **FAC Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 85 Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----3. **Hydrophytic Vegetation Present** ☑ Yes ☐ No 5. ----4. --Total Cover = Dominant vegetation was determined through use of the 50/20 rule. Vegetation at the sample plot is hydrophytic. Remarks:

Additional R	emarks:
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Wet meadow community.			

WETLAND DETERMINATION DATA FORM Page 1 of 2 Midwest Region **Emerald Park Landfill Expansion** Project/Site: Stantec Project #: 193702557 10/14/13 Date: Waukesha Applicant: **ADS** County: Investigator #1: DP State: Wisconsin Investigator #2: MC Ashkum silty clay loam NWI/WWI Classification: N/A Soil Unit: Wetland ID: Adj. to W2 Landform: Terrace Local Relief: Convex Sample Point: 3u 0-2 Longitude: N/A Slope (%): Latitude: N/A Datum: N/A Community ID: Old field Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation \square , Soil \square , or Hydrology \square significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? Yes □No 20 Range: Dir: E **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? Hydric Soils Present? ☐ Yes ☑ No ☐ Yes ☑ No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? ☐ Yes ☑ No ■ Yes
■ No WETS analysis indicates drier than normal antecedent moisture conditions. The sample point located on terrace, approx 3-4' above surface of Remarks: wetland. **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present ☑): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ B13 - Aquatic Fauna ☐ A2 - High Water Table ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☐ D2 - Geomorphic Position ☐ D5 - FAC-Neutral Test ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☐ B7 - Inundation Visible on Aerial Imagery ☐ D9 - Gauge or Well Data ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: Wetland Hydrology Present? ☐ Yes ☑ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 2007 NRC Delineation; 2009 concurrence Soil pit dry to > 20". No evidence of wetland hydrology was observed at the sample plot. Remarks: SOILS Map Unit Name: Ashkum silty clay loam Series Drainage Class: poorly Taxonomy (Subgroup): Typic Endoaquolls Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Depth Location 10YR 100 0 8 2/1 1 loam 8 20 2 C 2.5Y 5/2 99 5/6 1 M 2.5Y clay loam --------Indicators for Problematic Soils ¹ NRCS Hydric Soil Field Indicators (check here if indicators are not present ☑): ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A16 - Coast Prairie Redox ☐ F12 - Iron-Manganese Masses ☐ A2 - Histic Epipedon S5 - Sandy Redox S6 - Stripped Matrix ☐ Other (Explain in Remarks) ☐ A3 - Black Histic F1 - Loamy Muck Mineral ☐ A4 - Hydrogen Sulfide ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix ☐ A11 - Depleted Below Dark Surface F6 - Redox Dark Surface F7 - Depleted Dark Surface ☐ A12 - Thick Dark Surface ☐ S1 - Sandy Muck Mineral

☐ F8 - Redox Depressions

Few redoximorphic features. Doesn't meet requirement of depleted matrix. No O² roots. The soil at the sample plot does not have any field indicators

of hydric soil, nor does it appear to be inundated or saturated to the surface for long periods of time during the growing season in most years.

Depth: N/A

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric Soil Present?

☐ Yes ☑ No

☐ S3 - 5 cm Mucky Peat or Peat

Type: N/A

Restrictive Layer

(If Observed)

Remarks:



Project/Site: **Emerald Park Landfill Expansion** Wetland ID: Adj. to W2 Sample Point 3u **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 0 10. x 1 = FACW spp. 0 x 2 = ____ Total Cover = 0 FAC spp. 0 x 3 = 0 FACU spp. 65
UPL spp. 45 x 4 = ____ Sapling/Shrub Stratum (Plot size: 15 ft radius) 260 x = 51. 2. 3. Total 110 (A) 4. 5. Prevalence Index = B/A = 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * Aster ericoides 40 **FACU** 1. * Indicators of hydric soil and wetland hydrology must be 2. MELILOTUS ALBUS 30 **UPL** present, unless disturbed or problematic. DAUCUS CAROTA 3. 15 Ν **UPL Definitions of Vegetation Strata:** SONCHUS ARVENSIS 10 Ν **FACU** 4. CIRSIUM ARVENSE 5 Ν **FACU** 5. TARAXACUM OFFICINALE 5 Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 Ν **FACU** breast height (DBH), regardless of height. 5 Ν **FACU** 7. Solidago canadensis 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 110 Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----3. **Hydrophytic Vegetation Present** ☐ Yes ☑ No 5. ----4. --Total Cover = Dominant vegetation was determined through use of the 50/20 rule. Vegetation at the sample plot is not hydrophytic. Remarks:

Topography is abrupt.		

☐ S3 - 5 cm Mucky Peat or Peat

Type: N/A

Depth: N/A

Does not match Muskego muck mapped soil characteristics of being a histosol.

Restrictive Layer

(If Observed)

Remarks:

WETLAND DETERMINATION DATA FORM Page 1 of 2 Midwest Region Project/Site: **Emerald Park Landfill Expansion** Stantec Project #: 193702557 Date: 10/14/13 Applicant: **ADS** County: Waukesha Investigator #1: DP State: Wisconsin Investigator #2: MC Muskego muck NWI/WWI Classification: F0Kf Soil Unit: Wetland ID: W2 Landform: Depression Local Relief: Concave Sample Point: 3w Slope (%): 0-2 Latitude: N/A Longitude: N/A Datum: N/A Community ID: Wet Meadow Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation \square , Soil \square , or Hydrology \square significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? Yes □No 20 Dir: E Range: **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? Hydric Soils Present? ✓ Yes □ No ☑ Yes □ No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? ☑ Yes □ No ☑ Yes ■ No The sample plot is located in a wet meadow. WETS analysis indicates drier than normal antecedent moisture conditions. Remarks: **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present \square): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B10 - Drainage Patterns ☐ B13 - Aquatic Fauna ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☑ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☑ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: Wetland Hydrology Present? ☑ Yes □ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 2007 NRC Delineation; 2009 concurrence The presence of 2 secondary indicators at the sample plot provides evidence of wetland hydrology. Remarks: SOILS Map Unit Name: Muskego muck Series Drainage Class: very poorly Taxonomy (Subgroup): Limnic Haplosaprists Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Location Depth 100 0 8 10YR 2/1 mucky loam 1 8 20 2 10YR 5/1 95 10YR 4/6 5 C M clay ------Indicators for Problematic Soils ¹ **NRCS Hydric Soil Field Indicators** (check here if indicators are not present \square): ☐ S4 - Sandy Gleyed Matrix ☐ A1- Histosol ☐ A16 - Coast Prairie Redox ☐ S5 - Sandy Redox ☐ A2 - Histic Epipedon ☐ F12 - Iron-Manganese Masses ☐ A3 - Black Histic S6 - Stripped Matrix ☐ Other (Explain in Remarks) F1 - Loamy Muck Mineral ☐ A4 - Hydrogen Sulfide ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck ☑ F3 - Depleted Matrix ☑ A11 - Depleted Below Dark Surface F6 - Redox Dark Surface ☐ F7 - Depleted Dark Surface ☐ A12 - Thick Dark Surface ☐ S1 - Sandy Muck Mineral ☐ F8 - Redox Depressions

¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Hydric Soil Present?

☑ Yes □ No.



Project/Site: **Emerald Park Landfill Expansion** Wetland ID: W2 Sample Point 3w **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status 1. 2. Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 0 10. x 1 =

 FACW spp.
 100
 x 2 =
 200

 FAC spp.
 0
 x 3 =
 0

 FACU spp.
 1
 x 4 =
 4

 UPL spp.
 0
 x 5 =
 0

 x 2 = ___ Total Cover = 0 x 4 = _____4 Sapling/Shrub Stratum (Plot size: 15 ft radius) 1. 2. 3. Total 101 (A) 4. 5. Prevalence Index = B/A = 2.0206. 7. 8. **Hydrophytic Vegetation Indicators:** 9. Yes ☐ No Rapid Test for Hydrophytic Vegetation 10. ☐ No Yes Dominance Test is > 50% Total Cover = ☐ No Yes Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * 1. PHALARIS ARUNDINACEA 100 **FACW** * Indicators of hydric soil and wetland hydrology must be CIRSIUM ARVENSE 2. Ν **FACU** 1 present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 101 Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----**Hydrophytic Vegetation Present** ☑ Yes ☐ No 3.

Additional Remarks:

5.

4.

Remarks:

--

Depressional wet meadow community dominated by reed canary grass.	

Dominant vegetation was determined through use of the 50/20 rule. Vegetation at the sample plot is hydrophytic.

__

Total Cover =

☑ Yes □ No

Hydric Soil Present?

Deep mucky loam surface horizon. The soil at the sample plot meets F1 Indicator described in the NRCS publication Field Indicators of Hydric Soil in



Restrictive Layer

(If Observed)

Remarks:

Type: N/A

the United States - version 7.0.

WETLAND DETERMINATION DATA FORM Midwest Region

Project/Site: **Emerald Park Landfill Expansion** Stantec Project #: 193702557 Date: 10/14/13 Applicant: **ADS** County: Waukesha Investigator #1: DP State: Wisconsin Investigator #2: MC Ogden muck NWI/WWI Classification: E2Ka Soil Unit: Wetland ID: W2 Landform: Depression Local Relief: Concave Sample Point: 4w 0-2 Latitude: N/A Slope (%): Longitude: N/A Datum: N/A Community ID: wet meadow Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation \square , Soil \square , or Hydrology \square significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? Yes □No 20 Dir: E Range: **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? Hydric Soils Present? ☑ Yes □ No ✓ Yes □ No Is This Sampling Point Within A Wetland? ☑ Yes ■ No Wetland Hydrology Present? ☑ Yes □ No Reed Canary grass dominated wet meadow on deep muck soils. WETS analysis indicates drier than normal antecedent moisture conditions. Remarks: **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present □): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ B10 - Drainage Patterns ☑ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☑ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☑ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: Wetland Hydrology Present? ☑ Yes □ No Water Table Present? ☐ Yes ☑ No (in.) Depth: Saturation Present? ☑ Yes □ No (in.) Depth: 2007 NRC Delineation; 2009 concurrence Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: The presence of 1 primary and 2 secondary indicators at the sample plot provides evidence of wetland hydrology. Remarks: SOILS Map Unit Name: Ogden muck Series Drainage Class: very poorly Taxonomy (Subgroup): Terric Medisaprists Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Depth Location 0 24 10YR 2/1 100 1 mucky loam ----**NRCS Hydric Soil Field Indicators** (check here if indicators are not present □): Indicators for Problematic Soils ¹ ☐ A16 - Coast Prairie Redox ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A2 - Histic Epipedon ☐ S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses ☐ A3 - Black Histic S6 - Stripped Matrix ☐ Other (Explain in Remarks) ☐ A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix ☐ A11 - Depleted Below Dark Surface F6 - Redox Dark Surface ☐ A12 - Thick Dark Surface F7 - Depleted Dark Surface ☐ S1 - Sandy Muck Mineral ☐ F8 - Redox Depressions ☐ S3 - 5 cm Mucky Peat or Peat ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Depth: N/A



Project/Site: **Emerald Park Landfill Expansion** Wetland ID: W2 Sample Point 4w **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. Number of Dominant Species that are OBL, FACW, or FAC: 3 (A) 2. 3. 4. Total Number of Dominant Species Across All Strata: 3 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 20 10. x 1 = FACW spp. 60 x 2 =Total Cover = 0 120 FAC spp. 20 x 3 = FACU spp. 0
UPL spp. 0 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) x = 51. 2. 3. Total 100 (A) 4. 5. Prevalence Index = B/A = 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. Yes ☐ No Dominance Test is > 50% Total Cover = ☐ No Yes Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * 1. PHALARIS ARUNDINACEA 60 **FACW** * Indicators of hydric soil and wetland hydrology must be 2. TYPHA ANGUSTIFOLIA 20 Υ **OBL** present, unless disturbed or problematic. **FAC** 3. 20 Υ Aster lanceolatus **Definitions of Vegetation Strata:** 4. --5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. --Total Cover = 100 Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----3. **Hydrophytic Vegetation Present** ☑ Yes ☐ No 5. --__ 4. --Total Cover = Dominant vegetation was determined through use of the 50/20 rule. Vegetation at the sample plot is hydrophytic. Remarks: **Additional Remarks:**

Stantec

Project/Site:	Emerald Pa	ark Landfill Expansion	on				Stantec Project #:	193702557		Date:	10/14/13
Applicant:	ADS									County:	Waukesha
Investigator #1:	DP			Investi	gator #2:					State:	Wisconsin
Soil Unit:	Ogden mud						/I/WWI Classification:	F0Kf		Wetland ID:	W2
Landform:	Depression				al Relief:		9			Sample Point:	
Slope (%):	0-2	<u>Latitude:</u>			ongitude:			Datum:		1	Wet Meadow
·		litions on the site typ				(If no, explain		☐ Yes ☑	No	Section:	36
		or Hydrology ☐ sign	•				Are normal circumsta	•		Township:	5N
		or Hydrology □ nat	turally pro	obiematio	C?			□No		Range:	20 Dir: E
SUMMARY OF		20040		□ Vaa	□ No			Lludria Caila I	Dragonta		□ Vee □ Ne
Hydrophytic Ve	_			☑ Yes	_			Hydric Soils I		Mithin A Motle	✓ Yes □ No
Wetland Hydrol Remarks:			nev to a	✓ Yes			etances procent Sur	<u> </u>		Within A Wetla	and? ☑ Yes ■ No oybean during the 2013
Nemaiks.			•				cedent moisture condi	•	piowed and	u planteu to sc	Dybean during the 2013
HYDROLOGY	growing see	ason. WETO analys	olo illuice	ites uner	than nor	mar ante	cedent moisture condi	itions.			
		ators (Check here if	indicato	rs are no	t present	: □):			0		
Primary	<u>:</u> A1 - Surface	Water			B9 - Wate	r-Stained	eaves		Secondary:	B6 - Surface So	ail Cracks
l	A2 - High Wa			H	B13 - Aqu					B10 - Drainage	
	A3 - Saturation				B14 - True					C2 - Dry-Season	
	B1 - Water M				C1 - Hydr					C8 - Crayfish Bu	
	B2 - Sedimer	•					spheres on Living Roots				Visible on Aerial Imagery
l	B3 - Drift Dep B4 - Algal Ma						duced Iron duction in Tilled Soils			D1 - Stunted or D2 - Geomorphi	
l H	B5 - Iron Dep				C7 - Thin					D5 - FAC-Neutr	
		on Visible on Aerial Ima	agery		D9 - Gaug						
	B8 - Sparsely	Vegetated Concave S	urface		Other (Ex	plain)					
Field Observat	tions:										
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	drology Pr	osont?	Yes □ No
Water Table Pr	esent?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	arology i i	esent:	103 🗆 110
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	ded Data (stre	eam gauge, monitorin	ng well. a	erial phot	os. previo	us inspec	tions), if available:		2007 NRC D	Delineation; 2009	concurrence; FSA slides
				p	, , ,		,,			•	•
Remarks:	The presen	ice of 1 primary and	2 secon	dary indi	icators at	the sam	ole plot provides evide	ence of wetlan	d hydrology	v FSA slide r	eview indicates
Remarks:				_	icators at	the sam	ole plot provides evide	ence of wetlan	d hydrology	y. FSA slide r	eview indicates
		ice of 1 primary and signature within this		_	icators at	the sam	ole plot provides evide	ence of wetlan	d hydrolog	y. FSA slide r	eview indicates
SOILS	consistent	signature within this		_	icators at				d hydrolog	y. FSA slide r	eview indicates
SOILS Map Unit Name	consistent s	signature within this Ogden muck	farmed	_	icators at		ole plot provides evide		d hydrolog	y. FSA slide r	eview indicates
SOILS Map Unit Name Taxonomy (Sub	consistent se:	signature within this Ogden muck Terric Medisaprists	farmed	area.		S	eries Drainage Class:	very poorly			eview indicates
SOILS Map Unit Name Taxonomy (Sub	consistent seconsistent seconsi	signature within this Ogden muck Terric Medisaprists	farmed	area.		S		very poorly =Covered/Coated Sand Gr			eview indicates Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	consistent secons secon	ogden muck Terric Medisaprists Te depth needed to document the indices	farmed	area. the absence of in	ndicators.) (Type:	S	eries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS	very poorly =Covered/Coated Sand G	rains; Location: PL=	Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	consistent secons consistent s	signature within this Ogden muck Terric Medisaprists	farmed a	the absence of in Matrix (Moist)	ndicators.) (Type:	S	eries Drainage Class:	very poorly =Covered/Coated Sand Gr			Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	consistent seconsistent seconsi	Ogden muck Terric Medisaprists Te depth needed to document the indice Horizon	cator or confirm to Color 10YR	the absence of in Matrix (Moist) 2/1	ndicators.) (Type:	C=Concentratio	eries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Color (Moist)	very poorly =Covered/Coated Sand Gr Mottles %	rains; Location: PL= Type 	Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam) silty clay loam
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Project/Site: **Emerald Park Landfill Expansion** Wetland ID: W2 Sample Point **5W VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. 2. Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 0 10. Total Cover = 0 Sapling/Shrub Stratum (Plot size: 15 ft radius) 1. 2. 3. Total 106 (A) 4. 5. Prevalence Index = B/A = 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. Yes ☐ No Dominance Test is > 50% Total Cover = ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☐ Yes ☐ No Morphological Adaptations (Explain) * ☐ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * Panicum capillare 80 **FAC** 1. * Indicators of hydric soil and wetland hydrology must be DAUCUS CAROTA 2. 5 Ν **UPL** present, unless disturbed or problematic. 3. Amaranthus retroflexus 5 Ν **FACU Definitions of Vegetation Strata:** SETARIA VIRIDIS Ν **UPL** 4. TARAXACUM OFFICINALE 5 Ν **FACU** 5. Ambrosia trifida 5 Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 Ν **FAC** breast height (DBH), regardless of height. **MELILOTUS ALBUS** Ν **UPL** 7. 1 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 106 Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----**Hydrophytic Vegetation Present** ☑ Yes ☐ No 3. 5. ----4. --Total Cover = Dominant vegetation was determined through use of the 50/20 rule; vegetation at the sample plot is hydrophytic. Remarks:

Additional Remarks:		

Page 1 of 2

WETLAND DETERMINATION DATA FORM Midwest Region

Emerald Park Landfill Expansion Project/Site: Stantec Project #: 193702557 Date: 10/14/13 Waukesha Applicant: **ADS** County: Investigator #1: DP State: Wisconsin Investigator #2: MC Ashkum silty clay loam NWI/WWI Classification: N/A Soil Unit: Wetland ID: W3 Landform: Depression Local Relief: Concave Sample Point: 1w Slope (%): 0-2 Latitude: N/A Longitude: N/A Datum: N/A Community ID: wet meadow Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation \square , Soil \square , or Hydrology \square significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? Yes □No 20 Dir: E Range: **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? Hydric Soils Present? Is This Sampling Point Within A Wetland? ☑ Yes ■ No Wetland Hydrology Present? ☑ Yes □ No Closed depression. Surrounding area is gravel access roads. WETS analysis indicates drier than normal antecedent moisture conditions. Remarks: **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present \square): Primary: Secondary: ☐ A1 - Surface Water ☑ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ B4 - Algal Mat or Crust ☑ D2 - Geomorphic Position ☐ C6 - Recent Iron Reduction in Tilled Soils ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☑ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: Wetland Hydrology Present? ☑ Yes □ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: 2007 NRC Delineation; 2009 concurrence Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: The presence of 1 primary and 2 secondary indicators at the sample plot provides evidence of wetland hydrology. Remarks: SOILS Map Unit Name: Ashkum silty clay loam Series Drainage Class: poorly Taxonomy (Subgroup): Typic Endoaquolls Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Location Depth 0 6 10YR 4/3 100 silt loam 1 6 20 2 10YR 5/1 85 10YR 5/6 15 C M silty clay loam ------**NRCS Hydric Soil Field Indicators** (check here if indicators are not present □): Indicators for Problematic Soils ¹ ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A16 - Coast Prairie Redox ☐ A2 - Histic Epipedon S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses S6 - Stripped Matrix ☐ Other (Explain in Remarks) ☐ A3 - Black Histic ☐ A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix F6 - Redox Dark Surface ☐ A11 - Depleted Below Dark Surface F7 - Depleted Dark Surface ☐ A12 - Thick Dark Surface ☐ S1 - Sandy Muck Mineral ☐ F8 - Redox Depressions ☐ S3 - 5 cm Mucky Peat or Peat ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic **Restrictive Layer** ☑ Yes □ No. Depth: N/A **Hydric Soil Present?** Type: N/A (If Observed) The soil at the sample plot meets F3 Indicator described in the NRCS publication Field Indicators of Hydric Soil in the United States - version 7.0. Remarks:



Project/Site: **Emerald Park Landfill Expansion** Wetland ID: W3 Sample Point 1w **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 1. 2. Number of Dominant Species that are OBL, FACW, or FAC: 4 (A) 3. 4. Total Number of Dominant Species Across All Strata: 4 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. <u>65</u> 10. x 1 = FACW spp. 50 x 2 =Total Cover = 0 100 FAC spp. 20 x 3 = FACU spp. 0
UPL spp. 0 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) 15 **FACW** x = 51. Salix bebbiana 2. 10 **FACW** Salix interior 3. Total 135 (A) 4. 5. Prevalence Index = B/A = 1.6676. 7. 8. **Hydrophytic Vegetation Indicators:** 9. Yes ☐ No Rapid Test for Hydrophytic Vegetation 10. ☐ No Yes Dominance Test is > 50% 25 Total Cover = ☐ No Yes Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * Calamagrostis canadensis 40 **OBL** 1. * Indicators of hydric soil and wetland hydrology must be 2. TYPHA ANGUSTIFOLIA 25 **OBL** present, unless disturbed or problematic. **FAC** 3. Aster lanceolatus 20 Ν **Definitions of Vegetation Strata:** PHALARIS ARUNDINACEA 15 **FACW** 4. Ν Euthamia graminifolia Ν **FACW** 5. 10 Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 -breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. **Herb** - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 110 Woody Vine Stratum (Plot size: 30 ft radius)

Additional Remarks:

1. 2.

3.

5.

4.

Remarks:

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No upland sample point taken as the surrounding land is gravel access roads associated with existing landfill infrastructure. Topography is abrupt.

Hydrophytic Vegetation Present ☑ Yes □ No

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Meets Rapid Test for hydrophytic vegetation, therefore hydrophytic vegetation is present.

Total Cover =

☐ Yes ☑ No

Hydric Soil Present?

Restrictive Layer

(If Observed)

Remarks:

Type: N/A

WETLAND DETERMINATION DATA FORM Midwest Region

Page 1 of 2 **Emerald Park Landfill Expansion** Project/Site: Stantec Project #: 193702557 Date: 10/14/13 Applicant: Waukesha **ADS** County: Investigator #1: DP State: Wisconsin Investigator #2: MC Muskego muck NWI/WWI Classification: F0Kf Soil Unit: Wetland ID: Adj. to W4 Landform: Local Relief: Convex Rise Sample Point: 1u Slope (%): 0-2 Latitude: N/A Longitude: N/A Datum: N/A Community ID: old field Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation \square , Soil \square , or Hydrology \square significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □ , Soil □, or Hydrology □ naturally problematic? Yes □No 20 Dir: E Range: **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? Hydric Soils Present? ☐ Yes ☑ No ☐ Yes ☑ No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? ☐ Yes ☑ No ■ Yes
■ No Infiltation basin with excavated & graded soils. Mixed soil horizons. The sample plot is located in an old field. Remarks: **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present ☑): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☐ B6 - Surface Soil Cracks ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☐ B10 - Drainage Patterns ☐ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows ☐ B1 - Water Marks ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ B3 - Drift Deposits ☐ C4 - Presence of Reduced Iron ☐ D1 - Stunted or Stressed Plants ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☐ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☐ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ B8 - Sparsely Vegetated Concave Surface ☐ Other (Explain) **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: Wetland Hydrology Present? ☐ Yes ☑ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☐ Yes ☑ No (in.) Depth: Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 2007 NRC Delineation; 2009 concurrence No O² roots present. No evidence of wetland hydrology was observed at the sample plot. Remarks: SOILS Map Unit Name: Muskego muck Series Drainage Class: very poorly Taxonomy (Subgroup): Limnic Haplosaprists Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Depth Location 100 0 6 10YR 1 4/3 clay 50 6 20 2 10YR 4/3 clay 30 10YR 5/1 --10YR 3/3 20 ----NRCS Hydric Soil Field Indicators (check here if indicators are not present ☑): Indicators for Problematic Soils ¹ ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A16 - Coast Prairie Redox ☐ A2 - Histic Epipedon ☐ S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses S6 - Stripped Matrix ☐ Other (Explain in Remarks) ☐ A3 - Black Histic ☐ A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix F6 - Redox Dark Surface ☐ A11 - Depleted Below Dark Surface ☐ A12 - Thick Dark Surface F7 - Depleted Dark Surface ☐ F8 - Redox Depressions ☐ S1 - Sandy Muck Mineral ☐ S3 - 5 cm Mucky Peat or Peat ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Depth: N/A

Depleted matrix component of horizon 2 is approx. 30%. 60% or more of chroma 2 or less is required for depleted matrix.

1u

Sample Point

Wetland ID: Adj. to W4



Emerald Park Landfill Expansion

WETLAND DETERMINATION DATA FORM **Midwest Region**

Project/Site: **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status 1. Number of Dominant Species that are OBL, FACW, or FAC: ____1__(A) 2. 3. Total Number of Dominant Species Across All Strata: 3 (B) 4. 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 0 10. x 1 = FACW spp. 5 x 2 =Total Cover = 0 10 FAC spp. 40
FACU spp. 35
UPL spp. 20 x 3 = 120 x 4 = ____ Sapling/Shrub Stratum (Plot size: 15 ft radius) 140 x = 51. 2. 3. Total 100 (A) 4. 5. Prevalence Index = B/A = 6. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. ☐ Yes ☑ No Dominance Test is > 50% Total Cover = ☐ Yes ☑ No Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * 1. POA PRATENSIS 40 **FAC** * Indicators of hydric soil and wetland hydrology must be **MELILOTUS ALBUS** 20 **UPL** present, unless disturbed or problematic. 3. MEDICAGO SATIVA 20 Υ **FACU** Solidago canadensis **Definitions of Vegetation Strata:** 15 Ν **FACU** 4. PHALARIS ARUNDINACEA 5 Ν **FACW** 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. **Herb** - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----**Hydrophytic Vegetation Present** ☐ Yes ☑ No 3. 5. ----4. --Total Cover = Dominant vegetation was determined through use of the 50/20 rule. Vegetation at the sample plot is not hydrophytic. Remarks:

Additional	Remarks:

Slight rise above wetland swale within infiltration basin.		



Drojoot/Cito:											
Project/Site:	Emerald Pa	rk Landfill Expansion	on				Stantec Project #:	193702557		Date:	10/14/13
Applicant:	ADS	•					County:	Waukesha			
Investigator #1:										State:	Wisconsin
										1	
Soil Unit:	Saylesville s	siit ioam						1. IN/A		Wetland ID:	W4
Landform:	Basin				cal Relief:		e			Sample Point:	
Slope (%):	0-2	Latitude	: N/A	L	ongitude:	N/A		Datum:	N/A	Community ID:	Wet Meadow
Are climatic/hyd	drologic condi	itions on the site ty	pical for t	this time	of year?	(If no, expla	in in remarks)	☐ Yes ☑	No	Section:	36
Are Vegetation	□. Soil □. d	or Hydrology □ sig	nificantly	disturbe	ed?		Are normal circumst	tances present	t?	Township:	5N
		or Hydrology na	,					□No		Range:	20 Dir: E
		of Hydrology - Ha	turuny pro	obiciliati	0:		□ 100			rtange.	20 Dii. L
SUMMARY OF											
Hydrophytic Ve	_			Yes				Hydric Soils			
Wetland Hydrol	logy Present?			Yes	□ No			Is This Samp	oling Point \	Within A Wetla	and? ☑ Yes ■ No
Remarks:	Sample poir	nt taken within cons	structed i	nfiltratio	n basin. C	Culvert in	let and outlet are pres	sent. WETS a	nalysis indi	cates drier tha	an normal antecedent
	moisture co	nditions. Infiltration	n/storm-v	vater bas	sin. so po	tential no	on-jurisdictional create	ed wetland.	•		
HADBOLOCA					, се ре						
HYDROLOGY											
Wetland Hydr	ology Indica	tors (Check here if	f indicato	rs are no	ot present	: □) :					
Primary	•	•			•	,			Secondary:		
	A1 - Surface V	Vater			B9 - Wate	er-Stained	Leaves			B6 - Surface So	oil Cracks
	A2 - High Wat	ter Table			B13 - Aqu	iatic Fauna	A			B10 - Drainage	Patterns
✓	A3 - Saturatio	n			B14 - True	e Aquatic I	Plants			C2 - Dry-Seaso	n Water Table
	B1 - Water Ma	arks			C1 - Hydr	ogen Sulfi	de Odor			C8 - Crayfish Bu	
	B2 - Sedimen			✓			spheres on Living Roots				Visible on Aerial Imagery
	B3 - Drift Dep				C4 - Prese	ence of Re	educed Iron			D1 - Stunted or	Stressed Plants
	B4 - Algal Ma						duction in Tilled Soils			D2 - Geomorph	
	B5 - Iron Depo				C7 - Thin				✓	D5 - FAC-Neutr	al Test
		n Visible on Aerial Ima			D9 - Gaug	•	Data				
	B8 - Sparsely	Vegetated Concave S	Surface		Other (Ex	plain)					
Field Observat	tions:										
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)						
			•		` ,			Wetland Hyd	drology Pr	esent? ☑]Yes □ No
Water Table Pr		☐ Yes ☑ No	Depth:		(in.)						
Saturation Pres	sent?	☑ Yes ☐ No	Depth:	4	(in.)						
Describe Record	ded Data (stre	am gauge, monitorii	ng well, a	erial phot	tos, previo	us insped	ctions), if available:		2007 NRC E	Delineation; 2009	oncurrence
							, , , , , , , , , , , , , , , , , , , ,			,	
Remarks:	Perched hyd	drology above clay	SOIIS III I	10112011 2	. .						
SOILS											
	e: (Saylesville silt loan	n			S	Series Drainage Class	s: moderately w	vell to well		
Map Unit Name		Saylesville silt loan	n			Ş	Series Drainage Class	s: moderately w	vell to well		
Map Unit Name Taxonomy (Sub	ogroup):	Typic Hapludalfs		the change of	ndianters) (Tunos		•			Doza Lining M-Metrin)	
Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to the	Typic Hapludalfs					Series Drainage Class	S=Covered/Coated Sand G		Pore Lining, M=Matrix)	Toyture
Map Unit Name Taxonomy (Sub Profile Descrip Top	ogroup): ption (Describe to the	Typic Hapludalfs e depth needed to document the indi	icator or confirm t	Matrix			n, D=Depletion, RM=Reduced Matrix, C	S=Covered/Coated Sand G	Frains; Location: PL=	T	Texture
Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to the	Typic Hapludalfs	icator or confirm t				•	S=Covered/Coated Sand G		Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top	ogroup): ption (Describe to the	Typic Hapludalfs e depth needed to document the indi	icator or confirm t	Matrix			n, D=Depletion, RM=Reduced Matrix, C	S=Covered/Coated Sand G	Frains; Location: PL=	T	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to the Bottom Depth 4	Typic Hapludalfs e depth needed to document the indi Horizon 1	Color 10YR	Matrix (Moist) 3/2	% 100	: C=Concentratio	n, D=Depletion, RM=Reduced Matrix, Co	S=Covered/Coated Sand G Mottles %	Type	T	(e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	ogroup): ption (Describe to the Bottom Depth 4 20	Typic Hapludalfs e depth needed to document the indi Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/2 5/1	% 100 90	: C=Concentratio	Color (Moist)	S=Covered/Coated Sand G Mottles %	Type	Location 	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to the Bottom Depth 4	Typic Hapludalfs e depth needed to document the indi Horizon 1	Color 10YR	Matrix (Moist) 3/2	% 100	: C=Concentratio	n, D=Depletion, RM=Reduced Matrix, Co	S=Covered/Coated Sand G Mottles %	Type	Location 	(e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	ogroup): ption (Describe to the Bottom Depth 4 20	Typic Hapludalfs e depth needed to document the indi Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/2 5/1	% 100 90	: C=Concentratio	Color (Moist)	S=Covered/Coated Sand G Mottles %	Type	Location 	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	Bottom Depth 4 20	Typic Hapludalfs e depth needed to document the indi Horizon 1 2	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 5/1 4/3	% 100 90 10	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, C: Color (Moist)	S=Covered/Coated Sand G Mottles %	Type	Location 	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	Bottom Depth 4 20	Typic Hapludalfs e depth needed to document the indi Horizon 1 2	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 5/1 4/3	% 100 90 10 	C=Concentratio	Color (Moist)	S=Covered/Coated Sand G Mottles %	Type	Location	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	Depth 4 20	Typic Hapludalfs e depth needed to document the indi Horizon 1 2	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 5/1 4/3 	% 100 90 10 		Color (Moist)	S=Covered/Coated Sand G Mottles %	Type	Location	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	Degroup): Describe to the Bottom Depth 4 20	Typic Hapludalfs e depth needed to document the indi Horizon 1 2	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 5/1 4/3 	% 100 90 10 		Color (Moist)	S=Covered/Coated Sand G Mottles %	Type	Location	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	Depth 4 20	Typic Hapludalfs e depth needed to document the indi Horizon 1 2	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 5/1 4/3	% 100 90 10 		Color (Moist)	S=Covered/Coated Sand G Mottles %	Type	Location	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	Depth 4 20	Typic Hapludalfs e depth needed to document the indi Horizon 1 2	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 5/1 4/3	% 100 90 10 		Color (Moist)	S=Covered/Coated Sand G Mottles %	Type	Location	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Depth 4 20	Typic Hapludalfs e depth needed to document the indi Horizon 1 2	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 		Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators	Type	Location	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc	Typic Hapludalfs e depth needed to document the indi Horizon 1 2 dicators (check he	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres		Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators	Type	Location	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc A1- Histosol A2 - Histic Ep A3 - Black His	Typic Hapludalfs depth needed to document the indi Horizon 1 2 dicators (check he ipedon stic	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres S4 - Sand S5 - Sand S6 - Stripp	c=Concentration sent □ ly Gleyed ly Redox ped Matrix	Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators	Type	Location	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc A1- Histosol A2 - Histic Ep	Typic Hapludalfs depth needed to document the indi Horizon 1 2 dicators (check he ipedon stic	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres S4 - Sand S5 - Sand	c=Concentration sent □ ly Gleyed ly Redox ped Matrix	Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators	Type	Location	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc A1- Histosol A2 - Histic Ep A3 - Black His	Typic Hapludalfs e depth needed to document the indi Horizon 1 2 dicators (check he ipedon stic in Sulfide	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres S4 - Sand S5 - Sand S6 - Stripp	c=Concentration sent □ ly Gleyed ly Redox ped Matrix ny Muck M	Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators	Type	Location	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger	Typic Hapludalfs depth needed to document the indi Horizon 1 2 dicators (check he ipedon stic in Sulfide Layers	Color 10YR 10YR 10YR	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres S4 - Sand S5 - Sand S5 - Stripp F1 - Loam F2 - Loam F3 - Deple	c=Concentration sent	Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators	Type	Location	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A10 - 2 cm Mi	Typic Hapludalfs depth needed to document the indi Horizon 1 2 dicators (check he ipedon stic in Sulfide Layers	Color 10YR 10YR 10YR ere if indic	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres S4 - Sand S5 - Sand S6 - Stripp F1 - Loam F2 - Loam	c=Concentration sent	Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators	Type	Location	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A10 - 2 cm Mi	Typic Hapludalfs depth needed to document the indi Horizon 1 2 dicators (check he ipedon stic in Sulfide Layers uck dicators Dark Surface	Color 10YR 10YR 10YR ere if indic	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres S4 - Sand S5 - Sand S5 - Stripp F1 - Loam F2 - Loam F3 - Deple	c=Concentration	Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators	Type	Location	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A10 - 2 cm Mu A11 - Deplete A12 - Thick Di S1 - Sandy Mi	Typic Hapludalfs depth needed to document the individual	Color 10YR 10YR 10YR ere if indic	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres S4 - Sand S5 - Sand S5 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo	sent	Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators	Type	Location	(e.g. clay, sand, loam) silt clay es
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A10 - 2 cm Mu A11 - Deplete A12 - Thick Di S1 - Sandy Mi	Typic Hapludalfs depth needed to document the indi Horizon 1 2 dicators (check he ipedon stic in Sulfide Layers luck depth Dark Surface ark Surface ark Surface	Color 10YR 10YR 10YR ere if indic	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres S4 - Sand S5 - Sand S5 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	sent	Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators	Type	Location	(e.g. clay, sand, loam) silt clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc A1- Histosol A2 - Histic Ep A3 - Black Hist A4 - Hydroger A5 - Stratified A10 - 2 cm Mc A11 - Deplete A12 - Thick Do S1 - Sandy Mc S3 - 5 cm Muc	Typic Hapludalfs depth needed to document the individual the individual to document the individual the individual to document the individual the indi	Color 10YR 10YR 10YR ere if indic	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres S4 - Sand S5 - Sand S5 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	sent	Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators Indicators	Type	Location	e present, unless disturbed or problematic
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A10 - 2 cm Mu A11 - Deplete A12 - Thick Di S1 - Sandy Mi	Typic Hapludalfs depth needed to document the individual the individual to document the individual the individual to document the individual the indi	Color 10YR 10YR 10YR ere if indic	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres S4 - Sand S5 - Sand S5 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	sent	Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators	Type	Location	(e.g. clay, sand, loam) silt clay es
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc A1- Histosol A2 - Histic Ep A3 - Black Hist A4 - Hydroger A5 - Stratified A10 - 2 cm Mc A11 - Deplete A12 - Thick Do S1 - Sandy Mc S3 - 5 cm Muc	Typic Hapludalfs depth needed to document the individual the individual to document the individual the individual to document the individual the indi	Color 10YR 10YR 10YR ere if indic	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres S4 - Sand S5 - Sand S5 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	sent	Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators Indicators	Type	Location	e present, unless disturbed or problematic
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc A1- Histosol A2 - Histic Ep A3 - Black Hist A4 - Hydroger A5 - Stratified A10 - 2 cm Mc A11 - Deplete A12 - Thick Do S1 - Sandy Mc S3 - 5 cm Muc	Typic Hapludalfs depth needed to document the individual the individual to document the individual the individual to document the individual the indi	Color 10YR 10YR 10YR ere if indic	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres S4 - Sand S5 - Sand S5 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	sent	Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators Indicators Indicators	Type	Location	e present, unless disturbed or problematic
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc A1- Histosol A2 - Histic Ep A3 - Black Hist A4 - Hydroger A5 - Stratified A10 - 2 cm Mc A11 - Deplete A12 - Thick Do S1 - Sandy Mc S3 - 5 cm Muc	Typic Hapludalfs depth needed to document the individual the individual to document the individual the individual to document the individual the indi	Color 10YR 10YR 10YR ere if indic	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres S4 - Sand S5 - Sand S5 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	sent	Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators Indicators Indicators	Type	Location	e present, unless disturbed or problematic
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	Bottom Depth 4 20 Soil Field Inc A1- Histosol A2 - Histic Ep A3 - Black Hist A4 - Hydroger A5 - Stratified A10 - 2 cm Mc A11 - Deplete A12 - Thick Do S1 - Sandy Mc S3 - 5 cm Muc	Typic Hapludalfs depth needed to document the individual the individual to document the individual the individual to document the individual the indi	Color 10YR 10YR 10YR ere if indic	Matrix (Moist) 3/2 5/1 4/3 cators ar	% 100 90 10 e not pres S4 - Sand S5 - Sand S5 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	sent	Color (Moist)	S=Covered/Coated Sand G Mottles % Indicators Indicators Indicators	Type	Location	e present, unless disturbed or problematic

1W

Sample Point



Emerald Park Landfill Expansion

WETLAND DETERMINATION DATA FORM **Midwest Region**

Wetland ID:

W4

Project/Site: **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) Species Name **Dominance Test Worksheet** % Cover Dominant Ind.Status 1. Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 2. 3. Total Number of Dominant Species Across All Strata: 2 (B) 4. 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: OBL spp. 0 10. x 1 = FACW spp. 100 x 2 =Total Cover = 0 200 FAC spp. 10 x 3 = FACU spp. 0
UPL spp. 0 x 4 = ______ Sapling/Shrub Stratum (Plot size: 15 ft radius) Populus deltoides **FAC** x = 51. 2. 3. Total 110 (A) 4. 5. Prevalence Index = B/A = 2.0916. 7. 8. **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation 10. ☐ No Yes Dominance Test is > 50% Total Cover = ☐ No Yes Prevalence Index is ≤ 3.0 * ☐ Yes ☑ No Morphological Adaptations (Explain) * ☑ No Herb Stratum (Plot size: 5 ft radius) ☐ Yes Problem Hydrophytic Vegetation (Explain) * 1. PHALARIS ARUNDINACEA 100 **FACW** * Indicators of hydric soil and wetland hydrology must be 2. 5 Ν **FAC** Aster lanceolatus present, unless disturbed or problematic. 3. --**Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12. -and woody plants less than 3.28 ft. tall. 13. 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 105 Woody Vine Stratum (Plot size: 30 ft radius) 1. 2. ----3. **Hydrophytic Vegetation Present** ☑ Yes ☐ No 5. ----4. --Total Cover = Dominant vegetation was determined through use of the 50/20 rule and Prevalence Index. Vegetation at the sample plot is hydrophytic. Remarks:

Sample point taken within infiltration basin	٦.		

Remarks:

WETLAND DETERMINATION DATA FORM Midwest Region

Emerald Park Landfill Expansion Project/Site: Stantec Project #: 193702557 10/14/13 Date: Applicant: **ADS** County: Waukesha Investigator #1: DP State: Wisconsin Investigator #2: MC Martinton silt loam NWI/WWI Classification: N/A Soil Unit: Wetland ID: N/A Local Relief: Concave Landform: Depression Sample Point: 5-1 Slope (%): 0-2 Latitude: N/A Longitude: N/A Datum: N/A Community ID: Cropland Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) ☐ Yes ☑ No Section: 36 Are Vegetation ☑ , Soil □, or Hydrology □ significantly disturbed? Are normal circumstances present? Township: 5N Are Vegetation □, Soil □, or Hydrology ☑ naturally problematic? ☐ Yes ☑No 20 Dir: E Range: **SUMMARY OF FINDINGS** Hydrophytic Vegetation Present? ☐ Yes ☑ No Hydric Soils Present? ☐ Yes ☑ No Wetland Hydrology Present? ☑ Yes □ No Is This Sampling Point Within A Wetland? ■ Yes
■ No WETS analysis indicates site conditions drier than normal. Depression in soybean field, crop may have been drowned out shortly after planting. Remarks: Potential problematic seasonal wetland interpreted to be non-wetland based on soils and vegetation indicators. **HYDROLOGY Wetland Hydrology Indicators** (Check here if indicators are not present \square): Primary: Secondary: ☐ A1 - Surface Water ☐ B9 - Water-Stained Leaves ☑ B6 - Surface Soil Cracks ☐ B10 - Drainage Patterns ☐ A2 - High Water Table ☐ B13 - Aquatic Fauna ☑ A3 - Saturation ☐ B14 - True Aquatic Plants ☐ C2 - Dry-Season Water Table ☐ C1 - Hydrogen Sulfide Odor ☐ C8 - Crayfish Burrows □ B1 - Water Marks ☐ C3 - Oxidized Rhizospheres on Living Roots ☐ C9 - Saturation Visible on Aerial Imagery ☐ B2 - Sediment Deposits ☐ D1 - Stunted or Stressed Plants ☐ B3 - Drift Deposits ☐ C4 - Presence of Reduced Iron ☐ B4 - Algal Mat or Crust ☐ C6 - Recent Iron Reduction in Tilled Soils ☑ D2 - Geomorphic Position ☐ B5 - Iron Deposits ☐ C7 - Thin Muck Surface ☐ D5 - FAC-Neutral Test ☐ D9 - Gauge or Well Data ☐ B7 - Inundation Visible on Aerial Imagery ☐ Other (Explain) ☐ B8 - Sparsely Vegetated Concave Surface **Field Observations:** Surface Water Present? (in.) ☐ Yes ☑ No Depth: **Wetland Hydrology Present?** ☑ Yes □ No Water Table Present? ☐ Yes ☑ No Depth: (in.) Saturation Present? ☑ Yes □ No (in.) Depth: 12 2007 NRC Delineation; 2009 concurrence; FSA Slides Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: FSA slide review remarks at bottom of data form. The A3 indicator is barely within the threshold and saturation in silty clay is often difficult to discern. Remarks: Surface soil cracks may have formed from a heavy rain event even if the depressional area drained. SOILS Map Unit Name: Martinton silt loam Series Drainage Class: somewhat poorly Taxonomy (Subgroup): Aquic Argiudolls Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Texture Top Bottom Matrix Mottles (e.g. clay, sand, loam) Depth Horizon Color (Moist) % Color (Moist) % Type Depth Location 100 0 12 10YR 3/1 silty clay loam 1 12 24 2 10YR 5/1 100 silty clay ----Indicators for Problematic Soils ¹ NRCS Hydric Soil Field Indicators (check here if indicators are not present ☑): ☐ A1- Histosol ☐ S4 - Sandy Gleyed Matrix ☐ A16 - Coast Prairie Redox ☐ A2 - Histic Epipedon ☐ S5 - Sandy Redox ☐ F12 - Iron-Manganese Masses S6 - Stripped Matrix ☐ Other (Explain in Remarks) ☐ A3 - Black Histic ☐ A4 - Hydrogen Sulfide F1 - Loamy Muck Mineral ☐ A5 - Stratified Layers F2 - Loamy Gleyed Matrix ☐ A10 - 2 cm Muck F3 - Depleted Matrix F6 - Redox Dark Surface ☐ A11 - Depleted Below Dark Surface ☐ A12 - Thick Dark Surface F7 - Depleted Dark Surface ☐ F8 - Redox Depressions ☐ S1 - Sandy Muck Mineral ☐ S3 - 5 cm Mucky Peat or Peat ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic **Restrictive Layer** ☐ Yes ☑ No Depth: 4" **Hydric Soil Present?** Type: Clay (If Observed)

Depleted matrix below 12". The soil at the sample point does not meet the A12 Indicator because the value is too high in the 1st horizon.



Project/Site: **Emerald Park Landfill Expansion** Wetland ID: N/A Sample Point 5-1

VEGETATION	(Species identified in all uppercase are non-na	itive spec	ies.)		
Tree Stratum (Pl	ot size: 30 ft radius)				
	<u>Species Name</u>	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata: 4 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp 0
	Total Cover =	0			FACW spp15
					FAC spp $x = 90$
Sapling/Shrub Str	ratum (Plot size: 15 ft radius)				FACU spp x 4 =
1.					UPL spp15
2.					
3.					Total 90 (A) 315 (B)
4.					
5.					Prevalence Index = B/A = 3.500
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					☐ Yes ☑ No Dominance Test is > 50%
	Total Cover =	0			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Plo	ot size: 5 ft radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Panicum capillare	15	Υ	FAC	* Indicators of hydric soil and watland hydrology must be
2.	CHENOPODIUM ALBUM	15	Y	FACU	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.	Ambrosia trifida	15	Y	FAC	present, unless disturbed of problematic.
4.	SETARIA VIRIDIS	15	Y	UPL	Definitions of Vegetation Strata:
5.	Echinochloa crus-galli	10	N	FACW	
6	Amaranthus retroflexus	10	N	FACU	Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.	ABUTILON THEOPHRASTI	5	N	FACU	breast height (DBH), regardless of height.
8.	Cyperus esculentus	5	N	FACW	
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	90			
Woody Vine Stra	tum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
5.					
4.				-	
	Total Cover =	0			
Remarks:	Apparently no soybean germination. Tir use of the 50/20 rule. Vegetation at the		_	-	resulted in crops being drowned out. Dominant vegetation was determined through phytic.

Additional Remarks:

This point is located in an area that was reviewed in the FSA slide review and it was noted that this depression showed a signature in only one out of the six most recent normal precipitation years (precipitation data interpreted using the 3 months prior to the crop slide photo being taken in each year).



Project/Site:		ark Landfill - Wester		sion			Stantec Project #:	193702557		Date:	10/23/14
Applicant:		Disposal Services, I	NC							County:	Waukesha
Investigator #1:				investi	gator #2:		/IOCK /I/WWI Classification:	NI/A		State:	Wisconsin
Soil Unit: Landform:	Saylesville Hill Slope	Siit ioam		Loc	al Relief:		///wwwi Classification.	IN/A		Wetland ID: Sample Point:	,
Slope (%):	2-4	Latitude:	N/A		ongitude:			Datum:	N/A		Agricultural Hay Field
		ditions on the site type					min emails)		No	Section:	36
		or Hydrology 🗆 sig					Are normal circumsta			Township:	5 N
		or Hydrology 🗆 nat					☐ Yes	⊠No		Range:	20 E
SUMMARY OF		, 0,								· ·	
Hydrophytic Veg	getation Pres	sent?		☐ Yes	■ No		-	Hydric Soils			☐ Yes ☑ No
Wetland Hydrol				□ Yes				Is This Samp	ng Point \	Within A Wetla	and? ■ Yes ■ No
Remarks:					n WETS	analysis.	Point located in an ag	gricultural field	with poter	itial hydrologic	al manipulations.
	Normal circ	cumstances assume	d not pri	esent.							
HYDROLOGY											
Wetland Hydro	ology Indica	ators (Check here if	indicato	rs are no	t present	☑):					
Primary:				_					Secondary:		
	A1 - Surface A2 - High Wa				B9 - Wate B13 - Aqu					B6 - Surface So B10 - Drainage	
	A3 - Saturation				B14 - True					C2 - Dry-Seasor	
	B1 - Water M				C1 - Hydro	ogen Sulfic	le Odor			C8 - Crayfish Bu	urrows
	B2 - Sedimer						spheres on Living Roots				Visible on Aerial Imagery
	B3 - Drift Dep				C4 - Prese		duced Iron duction in Tilled Soils			D1 - Stunted or S D2 - Geomorphi	
	B4 - Algal Ma B5 - Iron Dep				C7 - Thin					D5 - FAC-Neutra	
		on Visible on Aerial Ima	agery		D9 - Gaug				_	20 1710 110411	a. 100t
	B8 - Sparsely	y Vegetated Concave S	Surface		Other (Exp	olain in Re	marks)				
Field Observat											
Surface Water I		☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	drology Pr	esent?	Yes ☑ No
Water Table Pre		☐ Yes ☑ No	Depth:		(in.)					_	
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	ed Data (stre	eam gauge, monitorir	ng well, a	erial phot	os, previo	us inspec	tions), if available:		Annual Crop	Slide Review	
							,,				
Remarks:	No hydrolo	gy indicators were o	bserved								feet higher in elevation
	No hydrolog than adjace	•,	bserved								feet higher in elevation
SOILS	than adjace	ent wetland.				ated upla	nds in this location. C	Convex slope	with sample		feet higher in elevation
SOILS Map Unit Name	than adjace	ent wetland. Saylesville silt loam				ated upla		Convex slope	with sample		feet higher in elevation
SOILS Map Unit Name Taxonomy (Sub	than adjace	ent wetland. Saylesville silt loam Typic Hapludalfs	1	. FSA sli	des indica	ated upla	nds in this location. C	Convex slope v	with sample	e point several	feet higher in elevation
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	than adjace : group): tion (Describe to the	ent wetland. Saylesville silt loam Typic Hapludalfs	1	. FSA slid	des indica	ated upla	nds in this location. C eries Drainage Class: , D=Depletion, RM=Reduced Matrix, CS	convex slope very moderately very moderately very moderately very moderately sand G	with sample	e point several	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	than adjace : group): tion (Describe to the Bottom)	ent wetland. Saylesville silt loam Typic Hapludalfs he depth needed to document the indice	cator or confirm	. FSA slid the absence of ir	des indica	ated upla	eries Drainage Class: 1. D=Depletion, RM=Reduced Matrix, CS Rec	moderately v	well to well Grains; Location: PL=	e point several	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	than adjace group): tion (Describe to the Bottom Depth	ent wetland. Saylesville silt loam Typic Hapludalfs he depth needed to document the indice	cator or confirm Color	the absence of in Matrix (Moist)	des indica	c=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	moderately v	well to well Grains; Location: PL=	e point several Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	than adjace group): tion (Describe to the Bottom Depth 4	Saylesville silt loam Typic Hapludalfs he depth needed to document the indice Horizon	cator or confirm Color 10YR	the absence of in Matrix (Moist)	ndicators.) (Type:	C=Concentratio	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist)	moderately v	well to well rains; Location: PL= Type	Pore Lining. M=Matrix) Location	Texture (e.g. clay, sand, loam) loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	than adjace group): tion (Describe to the Bottom Depth 4 24	Saylesville silt loam Typic Hapludalfs ne depth needed to document the indie Horizon 1 2	cator or confirm Color 10YR 10YR	the absence of in Matrix (Moist) 3/2 3/2	des indica ndicators.) (Type: % 100 95	C=Concentratio	eries Drainage Class: DeDepletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/1	moderately v	well to well Srains; Location: PL= Type D	Pore Lining. M=Matrix) Location M	Texture (e.g. clay, sand, loam) loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	group): tion (Describe to to Depth 4 24	Saylesville silt loam Typic Hapludalfs ne depth needed to document the indie Horizon 1 2	cator or confirm Color 10YR 10YR	the absence of in Matrix (Moist) 3/2 3/2	des indicators.) (Type: % 100 95	C=Concentratio	eries Drainage Class: n. D=Depleton, RM=Reduced Matrix, CS Rec Color (Moist) 5/1 5/3	moderately v	well to well Prains: Location: PL= Type D C	Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, sand, loam) loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	than adjace group): tion (Describe to to Depth 4 24	Saylesville silt loam Typic Hapludalfs he depth needed to document the indis Horizon 1 2	cator or confirm Color 10YR 10YR	the absence of iri Matrix (Moist) 3/2 3/2	des indicators.) (Type: % 100 95	SC=Concentratio	eries Drainage Class: De-Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/1 5/3	moderately v	well to well Strains; Location: PL= Type C C	Pore Lining. M=Matrix) Location M M	Texture (e.g. clay, sand, loam) loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	group): tion (Describe to 10 Bottom Depth 4 24	Saylesville silt loam Typic Hapludalfs ne depth needed to document the indie Horizon 1 2	Color or confirm Color 10YR 10YR	the absence of ir Matrix (Moist) 3/2 3/2	des indicators.) (Type:	SC-Concentration 10YR 10YR	eries Drainage Class: De-Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/1 5/3	moderately v	well to well Prains: Location: PL= Type C C	Pore Lining. M=Matrix) Location M M	Texture (e.g. clay, sand, loam) loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	than adjace group): tion (Describe to to Depth 4 24	Saylesville silt loam Typic Hapludalfs he depth needed to document the indis Horizon 1 2	cator or confirm Color 10YR 10YR	the absence of iri Matrix (Moist) 3/2 3/2	des indicators.) (Type: % 100 95	SC=Concentratio	eries Drainage Class: De-Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/1 5/3	moderately v	well to well Strains; Location: PL= Type C C	Pore Lining. M=Matrix) Location M M	Texture (e.g. clay, sand, loam) loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	than adjace : group): tion (Describe to the describe to the describe to the describe to the describe to the described to the	Saylesville silt loam Typic Hapludalfs he depth needed to document the indice Horizon 1 2	Color or confirm Color 10YR 10YR	the absence of ir Matrix (Moist) 3/2 3/2	des indicators.) (Type:	SSC=Concentration	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/1 5/3	moderately v -Covered/Coated Sand G dox Features % 3 2	well to well Strains; Location: PL= Type D C	Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, sand, loam) loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	than adjace : group): tion (Describe to the describe to the describe to the describe to the describe to the described by the	Saylesville silt loam Typic Hapludalfs he depth needed to document the indis Horizon 1 2	Cator or confirm Color 10YR 10YR	the absence of ir Matrix (Moist) 3/2 3/2	% 100 95	C=Concentratio	eries Drainage Class: n. D=Depleton, RM=Reduced Matrix, CS Rec Color (Moist) 5/1 5/3	moderately v	well to well Strains; Location: PL= Type D C	Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, sand, loam) loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	than adjace : group): tion (Describe to II Bottom Depth 4 24 Soil Field In	Saylesville silt loam Typic Hapludalfs he depth needed to document the indice Horizon 1 2	Cator or confirm Color 10YR 10YR	the absence of in Matrix (Moist) 3/2 3/2 cators and	% 100 95	SSC-Concentratio	eries Drainage Class: D. DeDepletion, RM=Reduced Matrix, CS Red Color (Moist) 5/1 5/3	moderately v	well to well Frains; Location: PL= Type D C	Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, sand, loam) loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	than adjace group): tion (Describe to the Bottom Depth 4 24	Saylesville silt loam Typic Hapludalfs he depth needed to document the indie Horizon 1 2 dicators (check he	Cator or confirm Color 10YR 10YR	the absence of in Matrix (Moist) 3/2 3/2 cators aru	% 100 95 e not pres	SC-Concentratio	eries Drainage Class: D. DeDepletion, RM=Reduced Matrix, CS Red Color (Moist) 5/1 5/3	moderately v	well to well Frains; Location: PL= Type D C	Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, sand, loam) loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	than adjace group): tion (Describe to to Depth 4 24 Soil Field In A1- Histosol A3 - Black Hi	Saylesville silt loam Typic Hapludalfs he depth needed to document the indice Horizon 1 2 dicators (check he objedon stic	Cator or confirm Color 10YR 10YR	the absence of ir Matrix (Moist) 3/2 3/2	des indicators.) (Type: % 100 95 en not press \$4 - Sand \$6 - Stript \$6 - Stript	SC=Concentration 10YR 10YR sent ②) y Redox, sed Matrix	eries Drainage Class: De-Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/1 5/3	moderately v	well to well rains; Location: PL= Type D C s for Problem A16 - Coast S7 - Dark St F12 - Iron-M	Pore Lining. M=Matrix) Location M M	Texture (e.g. clay, sand, loam) loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	than adjace : group): tion (Describe to II Bottom Depth 4 24 Soil Field In A1- Histosol A2 - Histic Eg. A3 - Black Hi A4 - Hydroge	Saylesville silt loam Typic Hapludalfs he depth needed to document the indice Horizon 1 2 dicators (check here) stic en Sulfide	Cator or confirm Color 10YR 10YR	the absence of in Matrix (Moist) 3/2 3/2 cators are	% 100 95 e not press \$4 - Sand \$5 - Sand \$5 - Stripp F1 - Loam	SS C=Concentratio 10YR 10YR 10YR sent ②) geleyed I y Redox yed Matrix, yy Muck Miry	eries Drainage Class: Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/1 5/3	moderately v	well to well Type Type C C 5 for Problem A16 - Coast S7 - Dark Sq. TF12 - Ivon-M TF12 - Very	Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, sand, loam) loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	than adjace group): tion (Describe to the Bottom Depth 4 24	Saylesville silt loam Typic Hapludalfs he depth needed to document the indice Horizon 1 2 dicators (check here) sistic en Sulfide d Layers	Cator or confirm Color 10YR 10YR	the absence of in Matrix (Moist) 3/2 3/2 cators are	% 100 95 e not pres \$4 - Sand \$5 - Sand \$6 - Stript \$7 - Loam \$7 - Loam \$7 - Loam \$7 - Loam	SC=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/1 5/3 : Matrix neral Matrix	moderately v	well to well Type Type C C 5 for Problem A16 - Coast S7 - Dark Sq. TF12 - Ivon-M TF12 - Very	Pore Lining. M=Matrix) Location M M	Texture (e.g. clay, sand, loam) loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	than adjace group): tion (Describe to the described to	Saylesville silt loam Typic Hapludalfs he depth needed to document the indis Horizon 1 2 dicators (check heroipedon stic son Sulfide d Layers fluck	Color 10YR 10YR re if indic	the absence of in Matrix (Moist) 3/2 3/2 cators are	% 100 95 e not pres S4 - Sand S5 - Sand S6 - Stripp F1 - Loam F3 - Deple	SC=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/1 5/3 : //atrix	moderately v	well to well Type Type C C 5 for Problem A16 - Coast S7 - Dark Sq. TF12 - Ivon-M TF12 - Very	Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, sand, loam) loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	than adjace group): tion (Describe to the described to	Saylesville silt loam Typic Hapludalfs he depth needed to document the indie Horizon 1 2	Color 10YR 10YR re if indic	the absence of in Matrix (Moist) 3/2 3/2 cators are	% 100 95 e not pres \$4 - Sand \$5 - Sand \$6 - Stript \$7 - Loam \$7 - Loam \$7 - Loam \$7 - Loam	SC=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/1 5/3 : Matrix neral Matrix face	moderately v	well to well Type Type C C 5 for Problem A16 - Coast S7 - Dark Sq. TF12 - Ivon-M TF12 - Very	Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, sand, loam) loam silt loam silt loam
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	than adjace group): tion (Describe to the first of the	Saylesville silt loam Typic Hapludalfs he depth needed to document the indice to the i	Color 10YR 10YR re if indic	the absence of in Matrix (Moist) 3/2 3/2 cators are	% 100 95 e not pres S4 - Sand S5 - Strip F1 - Loam F2 - Loam F3 - Deple F6 - Redo	SS C=Concentratio 10YR 10YR 10YR sent ②) y Gleyed I y Redox y Redox y Muck Mi y Gleyed I datrix y Muck Mi y Gleyed I datrix y Dark Sule ted Dark settled Da	eries Drainage Class: Drainage Class: Drainage Class: Rec Color (Moist) 5/1 5/3 Matrix face Surface	moderately v	well to well Type Type C C 5 for Problem A16 - Coasts S7 - Dark St F12 - Iron-M TF12 - Very Other (Explain	Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, sand, loam) loam silt loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	than adjace group): tion (Describe to the first of the	Saylesville silt loam Typic Hapludalfs he depth needed to document the indice to the i	Color 10YR 10YR re if indic	the absence of in Matrix (Moist) 3/2 3/2 cators are	% 100 95 e not pres S4 - Sand S5 - Sand F2 - Loam F2 - Loam F3 - Deple F6 - Redo	SS C=Concentratio 10YR 10YR 10YR sent ②) y Gleyed I y Redox y Redox y Muck Mi y Gleyed I datrix y Muck Mi y Gleyed I datrix y Dark Sule ted Dark settled Da	eries Drainage Class: Drainage Class: Drainage Class: Rec Color (Moist) 5/1 5/3 Matrix face Surface	moderately v	well to well Type Type C C 5 for Problem A16 - Coast S7 - Dark St F12 - Ivan TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location M M natic Soils Prairie Redox urface anganese Masse Shallow Dark Suin in Remarks)	Texture (e.g. clay, sand, loam) loam silt loam es
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	than adjace group): tion (Describe to the state of the	Saylesville silt loam Typic Hapludalfs he depth needed to document the indice to the i	Color 10YR 10YR	the absence of in Matrix (Moist) 3/2 3/2 cators are	% 100 95 e not pres S4 - Sand S5 - Sand F2 - Loam F2 - Loam F3 - Deple F6 - Redo	SS C=Concentratio 10YR 10YR 10YR sent ②) y Gleyed I y Redox y Redox y Muck Mi y Gleyed I datrix y Muck Mi y Gleyed I datrix y Dark Sule ted Dark settled Da	eries Drainage Class: Drainage Class: Drainage Class: Rec Color (Moist) 5/1 5/3 Matrix face Surface	moderately v	well to well Type Type C C 5 for Problem A16 - Coast S7 - Dark St F12 - Ivan TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location M M natic Soils Prairie Redox urface anganese Masse Shallow Dark Suin in Remarks)	Texture (e.g. clay, sand, loam) loam silt loam silt loam es
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	than adjace group): tion (Describe to the state of the	Saylesville silt loam Typic Hapludalfs he depth needed to document the indice Horizon 1 2 dicators (check here) bipedon stic en Sulfide d Layers luck ed Below Dark Surface duck Mineral lucky Peat or Peat	Color 10YR 10YR	the absence of in Matrix (Moist) 3/2 3/2 cators are	% 100 95 e not pres S4 - Sand S5 - Sand F2 - Loam F2 - Loam F3 - Deple F6 - Redo	SS C=Concentratio 10YR 10YR 10YR sent ②) y Gleyed I y Redox y Redox y Muck Mi y Gleyed I datrix y Muck Mi y Gleyed I datrix y Dark Sule ted Dark settled Da	eries Drainage Class: Drainage Class: Drainage Class: Rec Color (Moist) 5/1 5/3 Matrix face Surface	moderately v	well to well Type Type C C 5 for Problem A16 - Coast S7 - Dark St F12 - Ivan TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location M M natic Soils Prairie Redox urface anganese Masse Shallow Dark Suin in Remarks)	Texture (e.g. clay, sand, loam) loam silt loam silt loam es
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	than adjace group): tion (Describe to the state of the	Saylesville silt loam Typic Hapludalfs he depth needed to document the indice Horizon 1 2 dicators (check here) bipedon stic en Sulfide d Layers luck ed Below Dark Surface duck Mineral lucky Peat or Peat	Color 10YR 10YR	the absence of in Matrix (Moist) 3/2 3/2 cators are	% 100 95 e not pres S4 - Sand S5 - Sand F2 - Loam F2 - Loam F3 - Deple F6 - Redo	SS C=Concentratio 10YR 10YR 10YR sent ②) y Gleyed I y Redox y Redox y Muck Mi y Gleyed I datrix y Muck Mi y Gleyed I datrix y Dark Sule ted Dark settled Da	eries Drainage Class: Drainage Class: Drainage Class: Rec Color (Moist) 5/1 5/3 Matrix face Surface	moderately v	well to well Type Type C C 5 for Problem A16 - Coast S7 - Dark St F12 - Ivan TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location M M natic Soils Prairie Redox urface anganese Masse Shallow Dark Suin in Remarks)	Texture (e.g. clay, sand, loam) loam silt loam silt loam es



Wetland ID: Adj to W1 Project/Site: Emerald Park Landfill - Western Expansion Sample Point W1-7u **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: (A) 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. x 1 = OBL spp. Total Cover = 0 FACW spp. 0 x 2 = 0 x 3 = FAC spp. 0 0 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 120 480 1. UPL spp. 0 x 5= 2 3. Total 120 (A) 480 4 5. Prevalence Index = B/A = 4.000 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ✓ No 10. ☐ Yes ✓ No Dominance Test is > 50% Total Cover = ☑ No 0 □ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * SCHEDONORUS ARUNDINACEUS **FACU** 95 1. * Indicators of hydric soil and wetland hydrology must be 2 TRIFOLIUM PRATENSE 20 Ν **FACU** present, unless disturbed or problematic. TARAXACUM OFFICINALE 3. Ν **FACU** 5 **Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 120 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☐ Yes ☑ No 4 5. Total Cover = 0 Remarks: Sample point located in a hay field, vegetation shows evidence of periodic mowing. Additional Remarks:



	A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick D \$1 - Sandy M	en Sulfide d Layers fluck ed Below Dark Surface Dark Surface fluck Mineral ucky Peat or Peat			F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	ny Gleyed eted Matri ox Dark Su eted Dark	Matrix x ırface Surface		Other (Expla	_	e present, unless disturbed or problematic Yes No
	A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick D \$1 - Sandy M	en Sulfide d Layers Muck ed Below Dark Surface Dark Surface Muck Mineral			F2 - Loam F3 - Deple F6 - Redo F7 - Deple	ny Gleyed eted Matri ox Dark Su eted Dark	Matrix x ırface Surface		Other (Expla	ain in Remarks)	
	A1- Histosol	ndicators (check her	re if indic		\$4 - Sand \$5 - Sand \$6 - Stripp	ly Gleyed ly Redox ped Matrix	, Matrix		A16 - Coast \$7 - Dark St F12 - Iron-M	langanese Mass	
18 			10YR 	5/1	95	10YR 	5/6	5	<u></u>		silty clay
8 18	18 24	2 3	10YR 10YR	4/2 5/1	95 95	10YR 10YR	5/6 5/6	5 5	C	M M	silt loam
0	8	1	10YR	3/1	95	10YR	5/6	5	С	M	silt loam
Depth	Depth	Horizon		(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)
Profile Descrip	Otion (Describe to the Bottom	ne depth needed to document the indic	ator or confirm t	he absence of i	ndicators.) (Type:	C=Concentration	on, D=Depletion, RM=Reduced Matrix,	cs=Covered/Coated Sand G	rains; Location: PL=	Pore Lining, M=Matrix)	Texture
Taxonomy (Sul	ogroup):	Typic Hapludalfs					_	_			
Map Unit Name	9:	Saylesville silt loam				5	Series Drainage Clas	s: moderately w	vell to well		
Remarks:	Depression	eam gauge, monitorin n <mark>al</mark>	ig weii, ae	eriai pnoi	os, previo	us inspec	ctions), if available:				
Surface Water Water Table Pr Saturation Pres	Present? resent? sent?	✓ Yes □ No ✓ Yes □ No ✓ Yes □ No	Depth: Depth: Depth:	0	(in.) (in.) (in.)			Wetland Hyd	drology Pr	resent? 🗸	Yes □ No
Primary	A1 - Surface A2 - High Wa A3 - Saturatic B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatic B8 - Sparsely	ater Table on Marks nt Deposits posits at or Crust	ngery		B9 - Wate B13 - Aqu B14 - True C1 - Hydn C3 - Oxidi C4 - Prese	er-Stained latic Fauna e Aquatic logen Sulfi ized Rhizo ence of Re ent Iron Re Muck Surf ge or Well	a Plants de Odor Ispheres on Living Root educed Iron Iduction in Tilled Soils face Data	s		B6 - Surface So B10 - Drainage C2 - Dry-Seaso C8 - Crayfish Bi	Patterns n Water Table urrows Visible on Aerial Imagery Stressed Plants ic Position
Remarks:	Antecedent	: moisture conditions	s normal	based o	n WETS	analysis	Point located in a s	игорру роглоп (or a wetlan	d complex.	
Wetland Hydro	logy Present	?		☑ Yes	□ No			is This Samp	Ing Point	Within A Wetla	
SUMMARY OF Hydrophytic Ve		cont?		⊐ Voc	□ No			Hydric Soils	Procent?		☑ Yes □ No
Are Vegetation	□, Soil □,	or Hydrology ☐ sign or Hydrology ☐ nati					✓ Yes	□No		Township: Range:	5 N 20 E
		ditions on the site type				(If no, expla	Are normal circum:		No.	Section:	36 5 N
Slope (%):	0-2	Latitude:		L	ongitude:	N/A		Datum:	N/A	Community ID:	
Landform:	Saylesville Depression			Loc	al Relief:		VI/WWI Classificatio	n: T3/E2Ka		Wetland ID: Sample Point:	W1 W1_7w
Soil Unit:	Eric Parker	•	NC .	Invest	igator #2:					State:	Wisconsin
Applicant: Investigator #1 Soil Unit:	Advanced !	ark Landfill - Westeri Disposal Services, II		sion			Stantec Project #	193702557		Date: County:	10/23/14 Waukesha



Project/Site:

WETLAND DETERMINATION DATA FORM **Midwest Region**

Wetland ID:

W1

Emerald Park Landfill - Western Expansion Sample Point W1-7w **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** % Cover Dominant Ind.Status Species Name Populus deltoides 10 **FAC** 2 Number of Dominant Species that are OBL, FACW, or FAC: 4 (A) 3. 4. Total Number of Dominant Species Across All Strata: 4 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. x 1 = OBL spp. x 2 = Total Cover = 10 FACW spp. 120 240 x 3 = FAC spp. 15 45 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 40 FACW 1. Salix interior UPL spp. 0 x 5= 2 3. Total 136 286 4 5. Prevalence Index = B/A = 2.103 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ✓ No 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = 40 □ No √ Yes Prevalence Index is ≤ 3.0 * ☑ No Morphological Adaptations (Explain) * ☐ Yes Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA **FACW** 45 1. * Indicators of hydric soil and wetland hydrology must be 2 35 Υ **FACW** Spartina pectinata present, unless disturbed or problematic. FAC 3. Ν Symphyotrichum lanceolatum 5 4. Ν OBL **Definitions of Vegetation Strata:** Asclepias incarnata 1 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 86 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 Total Cover = 0 Remarks: Additional Remarks:



Project/Site:		ark Landfill - Wester		sion			Stantec Project #:	193702557		Date:	10/17/14
Applicant:		Disposal Services, I	NC		40.	** ****	_			County:	Waukesha
Investigator #1:				Investi	gator #2:			NI/A		State:	Wisconsin
Soil Unit: Landform:	Ashkum sili Hill Slope	tioam		Loo	al Relief:		/I/WWI Classification:	N/A		Wetland ID: Sample Point:	,
Slope (%):	2-3	Latitude:	Ν/Δ		ongitude:			Datum:	N/A	Community ID:	
		ditions on the site ty					min(),emailss\	☑ Yes □		Section:	36
		or Hydrology sig				in the oxplan	Are normal circumsta			Township:	5 N
		or Hydrology I nat						□No		Range:	20 E
SUMMARY OF		in the state of th		4(43)						· · · · · · · · · · · · · · · · · · ·	
Hydrophytic Veg		sent?		☐ Yes	☑ No		-	Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydrol					■ No					Within A Wetla	
Remarks:		t moisture conditions	s normal	based o	n WETS	analysis.					
HYDROLOGY											
	ology Indica	ators (Check here if	indicato	rs are no	t present	(Z):					
Primary:			w) =) = ±0, =)						Secondary:		
	A1 - Surface				B9 - Wate					B6 - Surface So	
	A2 - High Wa A3 - Saturation				B13 - Aqu B14 - True					B10 - Drainage C2 - Dry-Season	
	B1 - Water M				C1 - Hydro					C8 - Crayfish Bu	
	B2 - Sedimer				C3 - Oxidi	zed Rhizo	spheres on Living Roots			C9 - Saturation	Visible on Aerial Imagery
	B3 - Drift Dep						duced Iron			D1 - Stunted or	
	B4 - Algal Ma B5 - Iron Dep				C7 - Thin		duction in Tilled Soils			D2 - Geomorphi D5 - FAC-Neutra	
		on Visible on Aerial Ima	agery		D9 - Gaug				_	20 1710 110411	a. 100t
	B8 - Sparsely	Vegetated Concave S	Surface		Other (Exp	olain in Re	marks)				
Field Observat											
Surface Water I		☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	drology Pr	esent?	Yes ☑ No
Water Table Pre		☐ Yes ☑ No	Depth:		(in.)			•			
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	ed Data (stre	eam gauge, monitorir	ng well, a	erial phot	os, previo	us inspec	tions), if available:				
							,,				
Remarks:	No hydrolog	gy indicators were o	bserved								
	No hydrolog	gy indicators were o	bserved	-		·	,, , , , , , , , , , , , , , , , , , ,				
SOILS			bserved			·					
SOILS Map Unit Name	:	Ashkum silt loam				·	eries Drainage Class:	poorly			
SOILS Map Unit Name Taxonomy (Sub	: ogroup):	Ashkum silt loam Typic Endoaquolls			ndinators) (Tuno:	S	eries Drainage Class:		Crains: Leastins: DLu	Deco Lining MaMetris	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	: group): tion (Describe to th	Ashkum silt loam Typic Endoaquolls		the absence of ir	ndicators.) (Type:	S	eries Drainage Class:	=Covered/Coated Sand G	Grains; Location: PL=	Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to the Bottom)	Ashkum silt loam Typic Endoaquolls ne depth needed to document the indi	cator or confirm t	the absence of in		S	Peries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Rec	=Covered/Coated Sand G	r	1	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to the Bottom Depth	Ashkum silt loam Typic Endoaquolls	cator or confirm t	the absence of ir Matrix (Moist)	%	S	eries Drainage Class:	=Covered/Coated Sand G	Frains; Location: PL=	Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to the Bottom Depth 13	Ashkum silt loam Typic Endoaquolls ne depth needed to document the indi Horizon 1	Color 10YR	the absence of in Matrix (Moist) 3/1	% 100	C=Concentratio	Teries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist)	=Covered/Coated Sand G	Type 	Location	(e.g. clay, sand, loam) silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to the Bottom Depth	Ashkum silt loam Typic Endoaquolls ne depth needed to document the indi	cator or confirm t	the absence of ir Matrix (Moist)	%	S C=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand G	Туре	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13	group): stion (Describe to tr Bottom Depth 13 24	Ashkum silt loam Typic Endoaquolls ne depth needed to document the indi Horizon 1 2	Color 10YR 2.5Y	the absence of in Matrix (Moist) 3/1 6/2	% 100 70	C=Concentratio	Deries Drainage Class: n. D=Depletion, RM=Reduced Matrix. CS Rec Color (Moist) 3/6	=Covered/Coated Sand G dox Features % 30	Type C	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13	group): tion (Describe to the Bottom Depth 13 24	Ashkum silt loam Typic Endoaquolls ne depth needed to document the indi Horizon 1 2	cator or confirm to Color 10YR 2.5Y	the absence of in Matrix (Moist) 3/1 6/2	% 100 70 	C=Concentratio	Deries Drainage Class: n. D=Depletion, RM=Reduced Matrix. CS Rec Color (Moist) 3/6	=Covered/Coated Sand G	Type C 	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13	group): tion (Describe to the Bottom Depth 13 24	Ashkum silt loam Typic Endoaquolls ne depth needed to document the indi Horizon 1 2	Color 10YR 2.5Y	the absence of ir Matrix (Moist) 3/1 6/2	% 100 70 	C=Concentratio	Deries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 3/6	=Covered/Coated Sand G	Type C	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13	group): tion (Describe to the Depth 13 24	Ashkum silt loam Typic Endoaquolls ne depth needed to document the indi Horizon 1 2	Color or confirm to 10 YR 2.5Y	Matrix (Moist) 3/1 6/2	% 100 70 	C=Concentratio	Deries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 3/6	-Covered/Coated Sand G	Type C	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13	group): stion (Describe to the Depth	Ashkum silt loam Typic Endoaquolls ne depth needed to document the indi Horizon 1 2	cator or confirm t Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2	% 100 70 	C=Concentratio	Recipies Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Recipies Color (Moist) 3/6	=Covered/Coated Sand G	Type C	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13	group): stion (Describe to the Depth	Ashkum silt loam Typic Endoaquolls ne depth needed to document the indi Horizon 1 2	Color Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2	% 100 70	10YR	n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 3/6	=Covered/Coated Sand G	Type C	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 NRCS Hydric S	group): stion (Describe to the Depth	Ashkum silt loam Typic Endoaquolls ne depth needed to document the indi Horizon 1 2	Color Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators ara	% 100 70	SSC-Concentratio	eries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	=Covered/Coated Sand G lox Features % 30 Indicators	Type C s for Problem	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 NRCS Hydric S	group): tion (Describe to the Bottom Depth 13 24	Ashkum silt loam Typic Endoaquolls Typic Endoaquolls Typic Endoaquolls Typic Endoaquolls Typic Endoaquolls The depth needed to document the individual of the company of th	Color Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators are	% 100 70	SS C=Concentratio	Recies Drainage Class: Recies Drainage Class:	=Covered/Coated Sand G dox Features % 30 Indicators	Type C s for Problen S7 - Dark S6	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 NRCS Hydric S	group): stion (Describe to the described of the describe	Ashkum silt loam Typic Endoaquolls Typic Endoaquolls the depth needed to document the individual of the depth needed to document the individual of the indiv	Color Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators are	% 100 70	C=Concentration 10YR sent y) y Redox, sed Matrix	Deries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 3/6 : Matrix	=Covered/Coated Sand G dox Features % 30 Indicators	Type C s for Problen A16 - Coast S7 - Dark St F12 - Iron-M	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 NRCS Hydric S	group): tion (Describe to II Bottom Depth 13 24 Soil Field In A1- Histosol A2 - Histic Eg. A3 - Black Hi A4 - Hydroge	Ashkum silt loam Typic Endoaquolls re depth needed to document the indi Horizon 1 2 dicators (check he bipedon stic in Sulfide	Color Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators are	% 100 70 en ot pres \$4 - Sand \$5 - Sand \$6 - StripF1 - Loam	SSC=Concentration 10YR sent ☑) geleyed If y Redox y Redox y Redox y Muck Mi	eries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	=Covered/Coated Sand G dox Features % 30 Indicators	Type C 5 for Problem A16 - Coast \$7 - Dark St \$7 - Dark St \$7 - Dark St \$7 - Very	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 NRCS Hydric S	group): tion (Describe to IIII) Bottom Depth 13 24 Soil Field In A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratified	Ashkum silt loam Typic Endoaquolls re depth needed to document the indi Horizon 1 2 dicators (check he oppedon stic in Sulfide di Layers	Color Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators are	% 100 70 en not press \$4 - Sand \$5 - Sand \$6 - Stripper F2 - Loam F2 - Loam	SSC=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	=Covered/Coated Sand G dox Features % 30 Indicators	Type C 5 for Problem A16 - Coast \$7 - Dark St \$7 - Dark St \$7 - Dark St \$7 - Very	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 NRCS Hydric S	group): tion (Describe to It Bottom Depth 13 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratiffec A10 - 2 cm M	Ashkum silt loam Typic Endoaquolls re depth needed to document the indi Horizon 1 2 dicators (check he oppedon stic in Sulfide di Layers	Color Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators are	% 100 70 en ot pres \$4 - Sand \$5 - Sand \$6 - StripF1 - Loam	Sent ②) y Gleyed I y Redox sed Matrix y Gleyed Matrix y Gleyed Matrix y Gleyed Matrix	deries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	=Covered/Coated Sand G dox Features % 30 Indicators	Type C 5 for Problem A16 - Coast \$7 - Dark St \$7 - Dark St \$7 - Dark St \$7 - Very	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 NRCS Hydric S	group): tion (Describe to II Bottom Depth 13 24 Soil Field In A1- Histosol A2 - Histic Eg. A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplete A12 - Thick E	Ashkum silt loam Typic Endoaquolls re depth needed to document the indi Horizon 1 2 dicators (check he bipedon stic n Sulfide d Layers luck ad Below Dark Surface bark Surface	Color Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators are	% 100 70	SS C=Concentratio 10YR 10YR Sent ②) y Gleyed I y Redox y Redox y Muck Mi y Gleyed I datrix y Muck Mi y Gleyed I datrix	eries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	=Covered/Coated Sand G dox Features % 30 Indicators	Type C 5 for Problem A16 - Coast \$7 - Dark St \$7 - Dark St \$7 - Dark St \$7 - Very	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 NRCS Hydric S	group): tion (Describe to III) Bottom Depth 13 24 Soil Field In A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplets A12 - Thick D S1 - Sandy N	Ashkum silt loam Typic Endoaquolls re depth needed to document the indi Horizon 1 2 dicators (check he oppedon stic en Sulfide d Layers luck ed Below Dark Surface luck Mineral	Color Color 10YR 2.5Y	he absence of in Matrix (Moist) 3/1 6/2	% 100 70	SS C=Concentratio 10YR 10YR Sent ②) y Gleyed I' y Redox yed Matrix yy Muck Mi yy Gleyed I' teted Matrix you Dark Sul teted Dark Sul teted Dark Sul	eries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	=Covered/Coated Sand G lox Features % 30 Indicators	Type C s for Problem A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Explain	Location M	(e.g. clay, sand, loam) silty clay loam silty clay es
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 NRCS Hydric S	group): tion (Describe to III) Bottom Depth 13 24 Soil Field In A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplets A12 - Thick D S1 - Sandy N	Ashkum silt loam Typic Endoaquolls re depth needed to document the indi Horizon 1 2 dicators (check he bipedon stic an Sulfide d Layers luck ded Below Dark Surface bark Surface fluck Mineral lucky Peat or Peat	Color Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2	% 100 70	SS C=Concentratio 10YR 10YR Sent ②) y Gleyed I' y Redox yed Matrix yy Muck Mi yy Gleyed I' teted Matrix you Dark Sul teted Dark Sul teted Dark Sul	eries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	=Covered/Coated Sand G lox Features % 30 Indicators	Type C s for Problem A16 - Coast F7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 NRCS Hydric S	group): tion (Describe to the Depth	Ashkum silt loam Typic Endoaquolls Typic Endoaquolls ne depth needed to document the indi Horizon 1 2 dicators (check he bipedon stic sn Sulfide d Layers luck ed Below Dark Surface bark Surface fluck Mineral lucky Peat or Peat	Color 10YR 2.5Y re if indic	he absence of Irr Matrix (Moist) 3/1 6/2 cators are	% 100 70	SS C=Concentration 10YR sent ② I y Redox oped Matrix y Muck Miny Muck Miny y Gleyed I teted Matrix x Dark Sureted Dark s x Depress	Recies Drainage Class: n. D=Depletion, RM=Reduced Matrix. CS Recical Color (Moist) 3/6	-Covered/Coated Sand G dox Features % 30 Indicators Indicators of hydrophy Hydric Soil	Type C s for Problen S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay loam silty clay es
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 NRCS Hydric S	group): tion (Describe to the Depth	Ashkum silt loam Typic Endoaquolls Typic Endoaquolls ne depth needed to document the indi Horizon 1 2 dicators (check he bipedon stic sn Sulfide d Layers luck ed Below Dark Surface bark Surface fluck Mineral lucky Peat or Peat	Color 10YR 2.5Y re if indic	he absence of Irr Matrix (Moist) 3/1 6/2 cators are	% 100 70	SS C=Concentration 10YR sent ② I y Redox oped Matrix y Muck Miny Muck Miny y Gleyed I teted Matrix x Dark Sureted Dark s x Depress	eries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	-Covered/Coated Sand G dox Features % 30 Indicators Indicators of hydrophy Hydric Soil	Type C s for Problen S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay loam silty clay es
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 13 NRCS Hydric S	group): tion (Describe to the Depth	Ashkum silt loam Typic Endoaquolls Typic Endoaquolls ne depth needed to document the indi Horizon 1 2 dicators (check he bipedon stic sn Sulfide d Layers luck ed Below Dark Surface bark Surface fluck Mineral lucky Peat or Peat	Color 10YR 2.5Y re if indic	he absence of Irr Matrix (Moist) 3/1 6/2 cators are	% 100 70	SS C=Concentration 10YR sent ② I y Redox oped Matrix y Muck Miny Muck Miny y Gleyed I teted Matrix x Dark Sureted Dark s x Depress	Recies Drainage Class: n. D=Depletion, RM=Reduced Matrix. CS Recical Color (Moist) 3/6	-Covered/Coated Sand G dox Features % 30 Indicators Indicators of hydrophy Hydric Soil	Type C s for Problen S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay loam silty clay es



Wetland ID: Adj to W2 Sample Point W2-4u Project/Site: Emerald Park Landfill - Western Expansion **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: (A) 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = x 2 = Total Cover = 0 FACW spp. 1 2 x 3 = FAC spp. 0 0 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 105 1. UPL spp. 10 x 5= 50 2 3. 472 Total 116 4 5. Prevalence Index = B/A = 4.069 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ✓ No 10. ☐ Yes ✓ No Dominance Test is > 50% Total Cover = ☑ No 0 □ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * POA COMPRESSA FACU 75 1. * Indicators of hydric soil and wetland hydrology must be 2 Solidago canadensis 15 Ν **FACU** present, unless disturbed or problematic. 3. DAUCUS CAROTA 10 Ν UPL TARAXACUM OFFICINALE 5 Ν **FACU Definitions of Vegetation Strata:** 4. 5. Erigeron annuus 5 Ν FACU TRIFOLIUM PRATENSE **FACU** Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 5 Ν PHALARIS ARUNDINACEA breast height (DBH), regardless of height. 7 1 Ν FACW 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. 116 Total Cover = Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☐ Yes ☑ No 4 5. Total Cover = 0 Remarks: Sample point contained typical old field vegetation. Additional Remarks:



	Emerald Pa	ark Landfill - Wester	n Expans	sion			Stantec Project #:	193702557		Date:	10/17/14
Applicant:	Advanced I	Disposal Services, I	NC .				,			County:	Waukesha
Investigator #1:				Invest	igator #2:	Melissa	Curran			State:	Wisconsin
Soil Unit:	Ogden mud				_		/I/WWI Classification:	F0Kf		Wetland ID:	Adj to W2
Landform:	Crest			Loc	cal Relief:	Convex				Sample Point:	W2-5u
Slope (%):	2-4	Latitude:	N/A	L	ongitude:	N/A		Datum:	N/A	Community ID:	Agricultural Field
Are climatic/hyd	Irologic cond	litions on the site typ	cal for t	his time	of year?	(If no, explai	min remarks)	☑ Yes □	No	Section:	36
		or Hydrology sign					Are normal circumsta	ances present	12	Township:	5 N
		or Hydrology 🗆 nat					☐ Yes	⊠No		Range:	20 E
SUMMARY OF		, 0,								Ü	
Hydrophytic Veg		sent?		□ Yes	. ☑ No			Hydric Soils	Present?		
Wetland Hydrol	•				■ No					Within A Wetla	
Remarks:	Antecedent	t moisture conditions	s normal			analysis	Point located in an ag	pricultural field	with noter	tial hydrologic	al manipulations -
rtomanto.	rockpiles p	resent near point an	d straigh	t to nort	h, potentia	ally mark	ing field tiles. Normali	circumstance			esent. FSA slides show
	consistent	non-wetland signatu	re in this	small a	gricultural	field sur	rounded by weltands.				
HYDROLOGY											
	ala ana ba di a	tana (Obaali Rusu ti	Caratterista		i ne e e e e e e e e e	-					
		ators (Check here if	indicato	s are no	present	(v):			Socondon.		
<u>Primary:</u> □	A1 - Surface	Water		П	B9 - Wate	r-Stained I	eaves		Secondary:	B6 - Surface So	il Cracks
	A2 - High Wa				B13 - Aqu					B10 - Drainage	
	A3 - Saturation				B14 - True					C2 - Dry-Season	
	B1 - Water M				C1 - Hydro					C8 - Crayfish Bu	urrows
	B2 - Sedimer						spheres on Living Roots				Visible on Aerial Imagery
	B3 - Drift Dep				C4 - Prese					D1 - Stunted or	
	B4 - Algal Ma						duction in Tilled Soils			D2 - Geomorphi	
	B5 - Iron Dep	oosits on Visible on Aerial Ima	ngory.		C7 - Thin				Ц	D5 - FAC-Neutra	ai rest
		Vegetated Concave S			Other (Exp						
		, rogotatou comoure c	uuoo		Q 0.10. (2.14)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	a.r.o,				
Field Observat	ione:										
Surface Water I		□ Vaa □ Na	Danth.		(in)						
		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes ☑ No
Water Table Pre		☐ Yes ☑ No	Depth:		(in.)						
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	ed Data (stre	eam gauge, monitorin	ng well, a	erial phot	tos, previo	us inspec	tions), if available:		Annual Crop	Slide Review	
Remarks:	No hydrolo	gy indicators were o	bserved.	Point lo	cated on	convex t	opographic lens appro	oximately 4 fee	et above su	urrounding wet	land. FSA slides
		lands in this area.									
SOILS											
Map Unit Name	:	Ogden muck				S	eries Drainage Class:	very poorly			
Taxonomy (Sub		•	3					, , , , , , , , , , , , , , , , , , ,			
		Terric Medisabrists		he absence of i	ndicators.) (Type:	C=Concentration	n, D=Depletion, RM=Reduced Matrix, CS=	=Covered/Coated Sand G	rains: Location: PL=	Pore Lining, M=Matrix)	
		Terric Medisaprists ne depth needed to document the indic	cator or confirm t								
Profile Descrip	tion (Describe to the		cator or confirm t	Matrix			Red	iox Features			Texture
Profile Descrip	Bottom	ne depth needed to document the indic		Matrix (Moist)				lox Features %	Type	Location	Texture (e.g. clay, sand, loam)
Profile Descrip Top Depth	Bottom Depth	ne depth needed to document the indic	Color	(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)
Top Depth 0	Bottom Depth	Horizon	Color 10YR	(Moist) 3/1	% 100	 10VD	Color (Moist)	% 			(e.g. clay, sand, loam) silty clay loam
Top Depth 0 6	Bottom Depth 6 18	Horizon 1 2	Color 10YR 2.5Y	(Moist) 3/1 5/2	% 100 90	10YR	Color (Moist) 4/6	% 10	 C	 M	(e.g. clay, sand, loam) silty clay loam silty clay
Profile Descrip Top Depth 0 6 18	Bottom Depth 6 18 24	Horizon 1 2 3	Color 10YR 2.5Y 2.5Y	3/1 5/2 6/2	% 100 90 80	10YR 10YR	Color (Moist) 4/6 4/6	% 10 20	 C C	 M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18	btion (Describe to the Bottom Depth 6 18 24	Horizon 1 2 3	Color 10YR 2.5Y 2.5Y	(Moist) 3/1 5/2 6/2	% 100 90 80 	10YR 10YR 	Color (Moist) 4/6 4/6	% 10 20 	 C C	 M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18	btion (Describe to the Bottom Depth 6 18 24	Horizon 1 2 3	Color 10YR 2.5Y 2.5Y	3/1 5/2 6/2	% 100 90 80	10YR 10YR 	Color (Moist) 4/6 4/6	% 10 20 	 C C	 M M 	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18	Bottom Depth 6 18 24	Horizon 1 2 3	Color 10YR 2.5Y 2.5Y	(Moist) 3/1 5/2 6/2	% 100 90 80 	10YR 10YR 	Color (Moist) 4/6 4/6	% 10 20	C C	 M M 	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18	btion (Describe to the Bottom Depth 6 18 24	Horizon 1 2 3	Color 10YR 2.5Y 2.5Y	(Moist) 3/1 5/2 6/2	% 100 90 80 	10YR 10YR 	Color (Moist) 4/6 4/6	% 10 20	C C	M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18	btion (Describe to the Bottom Depth 6 18 24	Horizon 1 2 3	Color 10YR 2.5Y 2.5Y 	(Moist) 3/1 5/2 6/2	% 100 90 80 	10YR 10YR 	Color (Moist) 4/6 4/6	% 10 20	C C	M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	Bottom Depth 6 18 24 Soil Field In	Horizon 1 2 3	Color 10YR 2.5Y 2.5Y 	(Moist) 3/1 5/2 6/2 cators are	% 100 90 80 e not pres	10YR 10YR sent	Color (Moist) 4/6 4/6 :	% 10 20 Indicators		M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	btion (Describe to 10 Bottom Depth 6 18 24 Soil Field In A1- Histosol	Horizon 1 2 3 dicators (check her	Color 10YR 2.5Y 2.5Y 	(Moist) 3/1 5/2 6/2 cators ar	% 100 90 80 e not pres \$4 - Sand	10YR 10YR sent)	Color (Moist) 4/6 4/6 :	% 10 20 Indicators		M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	btion (Describe to to to Depth	Horizon 1 2 3 dicators (check here	Color 10YR 2.5Y 2.5Y 	(Moist) 3/1 5/2 6/2 cators ar	% 100 90 80 e not pres \$4 - Sand \$5 - Sand	10YR 10YR sent) y Gleyed Ny Redox	Color (Moist) 4/6 4/6 :	% 10 20 Indicators		M M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	Bottom Depth 6 18 24 Soil Field In A1- Histosol A3 - Black Hi	Horizon 1 2 3 dicators (check here	Color 10YR 2.5Y 2.5Y 	(Moist) 3/1 5/2 6/2 cators ar	% 100 90 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp	10YR 10YR sent) y Gleyed N y Redox yed Matrix	Color (Moist) 4/6 4/6	% 10 20 Indicators	 C C for Problen A16 - Coast S7 - Dark St F12 - Iron-M	M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	btion (Describe to the Depth	Horizon 1 2 3 dicators (check here)	Color 10YR 2.5Y 2.5Y 	(Moist) 3/1 5/2 6/2 cators ar	% 100 90 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam	10YR 10YR sent	Color (Moist) 4/6 4/6	% 10 20 Indicators	C C C	M M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	Bottom Depth 6 18 24 Soil Field In A1- Histosol A3 - Black Hi	Horizon 1 2 3 dicators (check here) bipedon stic sn Sulfide d Layers	Color 10YR 2.5Y 2.5Y 	(Moist) 3/1 5/2 6/2 cators ar	% 100 90 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp	10YR 10YR sent Digital with the sent Digi	Color (Moist) 4/6 4/6 Matrix	% 10 20 Indicators	C C C	M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	btion (Describe to 10 Depth	Horizon 1 2 3 dicators (check here) bipedon stic sn Sulfide d Layers	Color 10YR 2.5Y 2.5Y 	(Moist) 3/1 5/2 6/2 cators ar	% 100 90 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam	10YR 10YR 10YR sent) y Gleyed N y Redox Ned Matrix M it y Gleyed M to teted Matrix	Color (Moist) 4/6 4/6 :: Adatrix	% 10 20 Indicators	C C C	M M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	btion (Describe to 10 Depth	Horizon 1 2 3 dicators (check here) bipedon stic en Sulfide di Layers luck ed Below Dark Surface	Color 10YR 2.5Y 2.5Y 	(Moist) 3/1 5/2 6/2 cators ar	% 100 90 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple	10YR 10YR sent) y y Redox y Muck Mi y Gleyed I y Gleyed I teld Matrix x Dark Sur	Color (Moist) 4/6 4/6	% 10 20 Indicators	C C C	M M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	btion (Describe to 10 Depth 6 18 24	Horizon 1 2 3 dicators (check here) bipedon stic an Sulfide d Layers luck ed Below Dark Surface luck Mineral	Color 10YR 2.5Y 2.5Y 	(Moist) 3/1 5/2 6/2 cators ar	% 100 90 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR 10YR 10YR	Color (Moist) 4/6 4/6	% 10 20 Indicators	C C C	M M M	(e.g. clay, sand, loam) silty clay loam silty clay clay ses
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	btion (Describe to 10 Depth 6 18 24	Horizon 1 2 3	Color 10YR 2.5Y 2.5Y 	(Moist) 3/1 5/2 6/2 cators ar	% 100 90 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR	Color (Moist) 4/6 4/6	% 10 20 Indicators	C C C	M M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	btion (Describe to 10 Depth 6 18 24	Horizon 1 2 3 dicators (check here objected by Surface duck Mineral acky Peat or Peat	Color 10YR 2.5Y 2.5Y 	(Moist) 3/1 5/2 6/2 cators ar	% 100 90 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR	Color (Moist) 4/6 4/6	% 10 20 Indicators	C C C	M M M	(e.g. clay, sand, loam) silty clay loam silty clay clay ses
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	Bottom Depth 6 18 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy M S3 - 5 cm Me	Horizon 1 2 3 dicators (check here bipedon stic en Sulfide d Layers luck ed Below Dark Surface bark Surface fluck Mineral lucky Peat or Peat	Color 10YR 2.5Y 2.5Y re if indic	(Moist) 3/1 5/2 6/2 cators ar	% 100 90 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	10YR 10YR	Color (Moist) 4/6 4/6	% 10 20 Indicators of hydrophy	C C C	M M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	Bottom Depth 6 18 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy M S3 - 5 cm Me	Horizon 1 2 3 dicators (check here objected by Surface duck Mineral acky Peat or Peat	Color 10YR 2.5Y 2.5Y re if indic	(Moist) 3/1 5/2 6/2 cators ar	% 100 90 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	10YR 10YR	Color (Moist) 4/6 4/6	% 10 20 Indicators of hydrophy	C C C	M M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	Bottom Depth 6 18 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy M S3 - 5 cm Me	Horizon 1 2 3 dicators (check here bipedon stic en Sulfide d Layers luck ed Below Dark Surface bark Surface fluck Mineral lucky Peat or Peat	Color 10YR 2.5Y 2.5Y re if indic	(Moist) 3/1 5/2 6/2 cators ar	% 100 90 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	10YR 10YR	Color (Moist) 4/6 4/6	% 10 20 Indicators of hydrophy	C C C	M M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Profile Descrip Top Depth 0 6 18 NRCS Hydric S	Bottom Depth 6 18 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy M S3 - 5 cm Me	Horizon 1 2 3 dicators (check here bipedon stic en Sulfide d Layers luck ed Below Dark Surface bark Surface fluck Mineral lucky Peat or Peat	Color 10YR 2.5Y 2.5Y re if indic	(Moist) 3/1 5/2 6/2 cators ar	% 100 90 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	10YR 10YR	Color (Moist) 4/6 4/6	% 10 20 Indicators of hydrophy	C C C	M M M	(e.g. clay, sand, loam) silty clay loam silty clay clay



Wetland ID: Adj to W2 Sample Point W2-5u Project/Site: Emerald Park Landfill - Western Expansion **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** % Cover Dominant Ind.Status Species Name 2 Number of Dominant Species that are OBL, FACW, or FAC: (A) 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = x 2 = Total Cover = 0 FACW spp. 0 0 x 3 = FAC spp. 0 0 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 18 1. UPL spp. 50 x 5= 2 3. Total 68 322 4 5. Prevalence Index = B/A = 4.735 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ✓ No 10. ☐ Yes ✓ No Dominance Test is > 50% Total Cover = ☑ No 0 □ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * UPL **GLYCINE MAX** 50 1. * Indicators of hydric soil and wetland hydrology must be 2 TARAXACUM OFFICINALE 15 **FACU** present, unless disturbed or problematic. TRIFOLIUM PRATENSE 3. Ν **FACU** 3 **Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 68 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☐ Yes ☑ No 4 5. Total Cover = 0 Remarks: Healthy soybean crop observed at this location in 2013 and 2014; this and cover estimated based on stubble. Additional Remarks:



Project/Site:		ark Landfill - Wester Disposal Services, I		sion			Stantec Project #:	193702557		Date:	10/17/14 Waykasha
Applicant: Investigator #1			NC	Invest	igator #2:	Molicea	Curron			County: State:	Waukesha Wisconsin
Soil Unit:	Ogden mud			IIIVESI	igatui #2.	NIV	/I/WWI Classification:	FNKf		4	
Landform:	Toeslope	JK .		Loc	cal Relief:			TOR		Sample Point:	
Slope (%):	1-2	Latitude:	N/A		ongitude:			Datum:	N/A		Wet Meadow
		litions on the site typ					min remails)		No	Section:	36
Are Vegetation	□, Soil □,	or Hydrology sign	nificantly	disturbe	ed?		Are normal circumsta	ances present	13	Township:	5 N
Are Vegetation	□, Soil □,	or Hydrology 🔲 nat	urally pro	oblemati	c?			□No		Range:	20 E
SUMMARY OF	FINDINGS										
Hydrophytic Ve					□ No			Hydric Soils			
Wetland Hydro					□ No			Is This Samp	ng Point	Within A Wetla	and? ✓ Yes No
Remarks:							Sample point located			soybean field	with Phalaris wet
	meadow ne	earby. Stubble provid	led evid	ence of	crop stres	s. Norme	l circumstances inten	preted to be p	resent.		
HYDROLOGY											
		itors (Check here if	indicato	rs are no	ot present	□):					
Primary		Motor			DO Wate	r Ctainad	201/02		Secondary:		oil Craaka
	A1 - Surface A2 - High Wa				B9 - Wate B13 - Agu					B6 - Surface So B10 - Drainage	
✓	A3 - Saturation	on			B14 - True	e Aquatic I	Plants			C2 - Dry-Seaso	n Water Table
	B1 - Water M									C8 - Crayfish B	urrows Visible on Aerial Imagery
	B2 - Sedimer B3 - Drift Der				C4 - Presi		spheres on Living Roots duced Iron			D1 - Stunted or	
	B4 - Algal Ma	at or Crust			C6 - Rece	nt Iron Re	duction in Tilled Soils		V	D2 - Geomorph	ic Position
	B5 - Iron Dep								✓	D5 - FAC-Neutr	ral Test
		on Visible on Aerial Ima Vegetated Concave S			D9 - Gaug Other (Ex						
	, po opa.co.,	rogolatoa concare c	411400		0 ti 101 (EA)	p.a	a.no,				
Field Observa	tions:										
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			VAV. 41			
Water Table Pr	resent?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes □ No
Saturation Pres	sent?	☑ Yes □ No	Depth:	0	(in.)						
Describe Record	ded Data (stre	eam gauge, monitorin	ng well a	erial phot	os previo	us inspec	tions) if available:		Annual Crop	Slide Review	
Remarks:											
		i snow consistent we	etiand nv	aroloav.	signature	s surroui	iding adiacent small u	ibiand ad field	l (represent	ed by this san	nple point)
rtomanto.	1 OA Sildes	snow consistent we	etiand ny	arology	signature	s surroui	iding adjacent small u	piand ag field	(represent	ed by this san	nple point).
SOILS	T OA SIIGCS	s snow consistent we	etiand ny	arology	signature	s surroui	iding adjacent small u	pland ag fleid	(represent	ed by this san	npie point).
		Ogden muck	etiand ny	drology	signature		eries Drainage Class:	•	(represent	ed by this san	nple point).
SOILS Map Unit Name Taxonomy (Sul	e: bgroup):	Ogden muck Terric Medisaprists	3			S	eries Drainage Class:	very poorly		•	nple point).
SOILS Map Unit Name Taxonomy (Sul Profile Descri	e: bgroup): ption (Describe to the	Ogden muck Terric Medisaprists	3	the absence of i	ndicators.) (Type:	S	eries Drainage Class:	very poorly =Covered/Coated Sand G		•	
SOILS Map Unit Name Taxonomy (Sul Profile Descri	e: bgroup): ption (Describe to the	Ogden muck Terric Medisaprists te depth needed to document the indice	cator or confirm t	the absence of i	ndicators.) (Type:	S	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Rec	very poorly =Covered/Coated Sand G	Srains; Location: PL=	Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth	e: bgroup): ption (Describe to the Bottom Depth	Ogden muck Terric Medisaprists te depth needed to document the indice	cator or confirm t	the absence of i Matrix (Moist)	ndicators.) (Type:	C=Concentratio	eries Drainage Class:	very poorly =Covered/Coated Sand G dox Features %	Frains; Location: PL=	•	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0	e: bgroup): ption (Describe to the Bottom Depth	Ogden muck Terric Medisaprists the depth needed to document the indice Horizon 1	Color 10YR	the absence of i Matrix (Moist) 2/1	ndicators.) (Type:	C=Concentratio	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	very poorly =Covered/Coated Sand G dox Features %	Frains; Location: PL=	Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam) muck
SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 13	bgroup): ption (Describe to the Depth 13 22	Ogden muck Terric Medisaprists te depth needed to document the indice Horizon 1 2	Color 10YR 2.5Y	the absence of i Matrix (Moist) 2/1 6/2	% 100 70	C=Concentration	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	very poorly =Covered/Coated Sand G dox Features % 30	Type	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay
SOILS Map Unit Name Taxonomy (Sui Profile Descri Top Depth 0 13	bgroup): ption (Describe to the Bottom Depth 13 22	Ogden muck Terric Medisaprists the depth needed to document the indice Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2	% 100 70	C=Concentratio	eries Drainage Class: DeDepletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	very poorly =Covered/Coated Sand G dox Features % 30	Type C	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay
SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 13	bgroup): ption (Describe to the Depth 13 22	Ogden muck Terric Medisaprists te depth needed to document the indice Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2	// // // // // // // // // // // // //	C=Concentratio	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	very poorly =Covered/Coated Sand G dox Features % 30	Type C	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay
SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 13	bgroup): ption (Describe to the Depth 13 22	Ogden muck Terric Medisaprists te depth needed to document the indice Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2	% 100 70	C=Concentratio	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	very poorly =Covered/Coated Sand G dox Features % 30	Type C	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay
SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 13	bgroup): ption (Describe to the Depth 13 22	Ogden muck Terric Medisaprists te depth needed to document the indice Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2	% 100 70	C=Concentratio	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	very poorly =Covered/Coated Sand G dox Features % 30	Type C	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay
SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 13	bgroup): ption (Describe to the Depth 13 22	Ogden muck Terric Medisaprists te depth needed to document the indice Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2	% 100 70	C=Concentratio	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	very poorly =Covered/Coated Sand G dox Features % 30	Type C	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay
SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 13	bgroup): ption (Describe to the Depth 13 22	Ogden muck Terric Medisaprists te depth needed to document the indice Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2	% 100 70		eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6	very poorly =Covered/Coated Sand G dox Features % 30	Type C	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay
SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 13 NRCS Hydric	e: bgroup): ption (Describe to the sound of	Ogden muck Terric Medisaprists te depth needed to document the indice Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2 cators ar	% 100 70 e not pres	C=Concentratio	eries Drainage Class: Rec Color (Moist) 3/6	very poorly =Covered/Coated Sand G dox Features % 30 Indicators	Type Type C	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay
SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 13 NRCS Hydric	e: bgroup): ption (Describe to the Bottom Depth 13 22 Soil Field In A1- Histosol	Ogden muck Terric Medisaprists te depth needed to document the indice Horizon 1 2 dicators (check here	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2 cators ar	% 100 70	C=Concentratio	eries Drainage Class: Rec Color (Moist) 3/6	very poorly =Covered/Coated Sand G fox Features % 30 Indicators	Type Type C	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay
SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 13 NRCS Hydric	bgroup): ption (Describe to the Depth	Ogden muck Terric Medisaprists te depth needed to document the indice Horizon 1 2 dicators (check here	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2 cators ar	% 100 70 e not pres \$4 - Sand \$5 - Sard \$6 - Stripp	C=Concentration 10YR sent	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 3/6 : Matrix	very poorly =Covered/Coated Sand G dox Features % 30 Indicators	Type C for Problem A16 - Coasts S7 - Dark St F12 - Iron-M	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay es
SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 13 NRCS Hydric	e: bgroup): ption (Describe to the state of	Ogden muck Terric Medisaprists the depth needed to document the indice Horizon 1 2 dicators (check here bipedon stic n Sulfide	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2	9% 100 70 e not pres \$4 - Sand \$5 - Sand \$6 - Stript F1 - Loarn	C=Concentratio	eries Drainage Class: Rec Color (Moist) 3/6 : Matrix neral	very poorly =Covered/Coated Sand G dox Features % 30 Indicators	Type Type C C 5 for Problem A16 - Coast \$7 - Dark \$5\text{Tion-M}\$ TF12 - Very	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay es
SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 13 NRCS Hydric	e: bgroup): ption (Describe to the sound of	Ogden muck Terric Medisaprists the depth needed to document the indice Horizon 1 2 dicators (check here pipedon stic n Sulfide Layers	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2 cators ar	% 100 70 e not pres \$4 - Sand \$5 - Sand \$6 - Strip F1 - Loam F2 - Loam	c=Concentratio	eries Drainage Class: D. D	very poorly =Covered/Coated Sand G dox Features % 30 Indicators	Type Type C C 5 for Problem A16 - Coast \$7 - Dark \$5\text{Tion-M}\$ TF12 - Very	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay es
SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 13 NRCS Hydric	e: bgroup): ption (Describe to It Bottom Depth 13 22 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M	Ogden muck Terric Medisaprists the depth needed to document the indice Horizon 1 2 dicators (check here pipedon stic n Sulfide Layers	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2 cators ar	% 100 70	10YR sent y Gleyed i y Redox oed Matrix by Muck M by Gleyed Matrix by Sleyed eted Matrix	eries Drainage Class: De Depleton, RM=Reduced Matrix, CS Red Color (Moist) 3/6	very poorly =Covered/Coated Sand G dox Features % 30 Indicators	Type Type C C 5 for Problem A16 - Coast \$7 - Dark \$5\text{Tion-M}\$ TF12 - Very	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay es
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SOILS Map Unit Name Taxonomy (Sul Profile Descrip Top Depth 0 13 NRCS Hydric	e: bgroup): ption (Describe to the second point of the second poin	Ogden muck Terric Medisaprists Horizon 1 2 dicators (check her bipedon stic n Sulfide d Layers luck dd Below Dark Surface luck Mineral locky Peat or Peat	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2 cators ar	9% 100 70 e not pres \$4 - Sand \$5 - Sand \$5 - Sand \$6 - Stript F1 - Loarr F2 - Loarr F3 - Deple F6 - Redo F7 - Deple F8 - Redo	c=Concentratio	eries Drainage Class: Rec Color (Moist) 3/6 : Matrix face Surface	very poorly =Covered/Coated Sand G dox Features % 30 Indicators	Type Type C C 5 for Problen A16 - Coast S7 - Dark S7 F12 - Iron-M TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay es
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SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 13 NRCS Hydric Restrictive Layer (If Observed)	e: bgroup): ption (Describe to the street of	Ogden muck Terric Medisaprists Horizon 1 2 dicators (check her bipedon stic n Sulfide d Layers luck dd Below Dark Surface luck Mineral locky Peat or Peat	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2 cators ar	9% 100 70 e not pres \$4 - Sand \$5 - Sand \$5 - Sand \$6 - Stript F1 - Loarr F2 - Loarr F3 - Deple F6 - Redo F7 - Deple F8 - Redo	c=Concentratio	eries Drainage Class: Rec Color (Moist) 3/6 : Matrix face Surface	very poorly =Covered/Coated Sand G dox Features % 30 Indicators Indicators of hydrophy	Type Type C C 5 for Problen A16 - Coast S7 - Dark S7 F12 - Iron-M TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay es urface
SOILS Map Unit Name Taxonomy (Sul Profile Descri Top Depth 0 13 NRCS Hydric Restrictive Layer (If Observed)	e: bgroup): ption (Describe to the street of	Ogden muck Terric Medisaprists Horizon 1 2 dicators (check her bipedon stic n Sulfide d Layers luck dd Below Dark Surface luck Mineral locky Peat or Peat	Color 10YR 2.5Y	Matrix (Moist) 2/1 6/2 cators ar	9% 100 70 e not pres \$4 - Sand \$5 - Sand \$5 - Sand \$6 - Stript F1 - Loarr F2 - Loarr F3 - Deple F6 - Redo F7 - Deple F8 - Redo	c=Concentratio	eries Drainage Class: Rec Color (Moist) 3/6 : Matrix face Surface	very poorly =Covered/Coated Sand G dox Features % 30 Indicators Indicators of hydrophy	Type Type C C 5 for Problen A16 - Coast S7 - Dark S7 F12 - Iron-M TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) muck silty clay es urface

Sample Point W2-5W



Project/Site: Emerald Park Landfill - Western Expansion

WETLAND DETERMINATION DATA FORM Midwest Region

Wetland ID:

W2

VEGETATION (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 FACW spp. 10 x 2 = 20 x 3 = 0 FAC spp. 0 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 0 1. UPL spp. 0 x 5= 2 3. Total 10 (A) 20 4 5. Prevalence Index = B/A = 2.000 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ✓ No 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 0 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA **FACW** 5 * Indicators of hydric soil and wetland hydrology must be 2 ECHINOCHLOA CRUS-GALLI 5 Υ **FACW** present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. --5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 10 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 Total Cover = 0 Remarks: Sparse vegetation and nearby soybean stubble indicate crop stress in this part of the agricultural field. Soybeans recently harvested. Nearby but outside the field, Phalaris dominates. Additional Remarks:



Project/Site:		ark Landfill - Wester		sion			Stantec Project #:	193702557		Date:	10/17/14	
Applicant:		Disposal Services, I	NC				_				Waukesha	
Investigator #1:				Investi	gator #2:			FOL			Wisconsin	
Soil Unit:	Montgomer	y silty clay		امما	al Daliafi		/I/WWI Classification:	E2Ka			W2	
Landform: Slope (%):	Hill Slope 1-2	Latitude:	NI/A		al Relief: ongitude:		;	Datum:	NI/A	Sample Point:	Wet Meadow	
		litions on the site ty					min communities)	☑ Yes ☐		Section:	36	
		or Hydrology sig				(ii lic' extrai	Are normal circumsta			Township:	5 N	
		or Hydrology 🗆 nat					☑ Yes	□No		Range:	20 E	
SUMMARY OF		or right orogy		4(-0)						range.		
Hydrophytic Ve		sent?		7 Yes	□ No			Hydric Soils	Present?		☑ Yes [□ No
Wetland Hydrol					□ No					Within A Wetla		
Remarks:	Antecedent	moisture condition	s normal				Soils significantly dist					
							4 W 3 V X W 2 S W 2 V 4	Carre Charac				
HYDROLOGY												
	ology Indica	tors (Check here if	indicator	s are no	t oresent	D.V						
Primary:		itoro (onocia ilaipiii	maicaio	3 4.5 1,6	, process	1 275			Secondary:			
	A1 - Surface				B9 - Wate					B6 - Surface So		
	A2 - High Wa				B13 - Aqu					B10 - Drainage		
	A3 - Saturation B1 - Water M				B14 - True C1 - Hydro					C2 - Dry-Seasor C8 - Crayfish Bu		
	B2 - Sedimer						spheres on Living Roots				Visible on Aerial Im	agery
	B3 - Drift Dep				C4 - Prese	ence of Re	duced Iron			D1 - Stunted or		0 ,
	B4 - Algal Ma						duction in Tilled Soils			D2 - Geomorphi		
	B5 - Iron Dep	osits on Visible on Aerial Ima	agery		C7 - Thin D9 - Gaug				✓	D5 - FAC-Neutra	al lest	
		Vegetated Concave S			Other (Exp							
		-										
Field Observat	ions:											
Surface Water I	Present?	☐ Yes ☑ No	Depth:		(in.)			\A/-4			V □ N-	
Water Table Pre	esent?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	arology Pr	esent?	Yes □ No	
Saturation Pres	ent?	☑ Yes ☐ No	Depth:	24	(in.)							
Describe Record	ed Data (stre	eam gauge, monitorir	ng well a	erial nhot	os previo	us inspec	tions) if available:					
Remarks:					-		aranasio.					
		≥tland hydrology, bi	it internre	ated to h	e met had	sed on tw	o secondary indicator	s and profess	ional judan	nent		
Remarks.	Marginal We	etland hydrology, bu	ut interpre	eted to b	e met bas	sed on tw	o secondary indicator	s and profess	ional judgn	nent.		
	Marginal we	etland hydrology, bu	ut interpre	eted to b	e met bas	sed on tw	o secondary indicator	s and profess	ional judgn	nent.		
SOILS				eted to b	e met bas		•	•	ional judgn	nent.		
SOILS Map Unit Name	:	Montgomery silty c	lay	eted to b	e met bas		o secondary indicator eries Drainage Class:	•	ional judgn	nent.		
SOILS Map Unit Name Taxonomy (Sub	egroup):	Montgomery silty c	lay			S	•	very poorly				
SOILS Map Unit Name Taxonomy (Sub	egroup):	Montgomery silty c	lay			S	eries Drainage Class:	very poorly			Texture	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	: ogroup): otion (Describe to the	Montgomery silty c	lay	he absence of ir		S	eries Drainage Class:	very poorly =Covered/Coated Sand G			Texture (e.g. clay, sand,	, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	egroup): ogroup): Bottom	Montgomery silty c Vertic Endoaquolls se depth needed to document the indi	lay	he absence of in	ndicators.) (Type:	S	eries Drainage Class: 1. D=Depletion, RM=Reduced Matrix, CS-Red	very poorly =Covered/Coated Sand G	rains; Location: PL=	Pore Lining, M=Matrix)		
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	egroup): otion (Describe to the Bottom Depth	Montgomery silty c Vertic Endoaquolls te depth needed to document the indi	cator or confirm t	he absence of in Matrix (Moist)	ndicators.) (Type:	S C=Concentration	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist)	very poorly =Covered/Coated Sand Griox Features %	rains; Location: PL=i	Pore Lining, M=Matrix) Location	(e.g. clay, sand,	ım
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	egroup): tion (Describe to the Bottom Depth 6	Montgomery silty c Vertic Endoaquolls te depth needed to document the indi Horizon	cator or confirm t	he absence of in Matrix (Moist)	ndicators.) (Type:	C=Concentration	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist) 4/4	very poorly =Covered/Coated Sand Gridox Features % 2	rains; Location: PL=	Pore Lining, M=Matrix) Location M	(e.g. clay, sand, silty clay loa	im am
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 24	Bottom Depth 6 12 24 27	Montgomery silty c Vertic Endoaquolls te depth needed to document the indi Horizon 1 2 3 4	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 3/1 3/1 2/1	% 98 100 95 100	10YR 10YR	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist) 4/4 4/4	very poorly =Covered/Coated Sand Grown Features % 2 5	rains; Location: PL= Type C C	Pore Lining, M=Matrix) Location M M	(e.g. clay, sand, silty clay loa silty clay loa silty clay loa muck	im am
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 24 NRCS Hydric S	Egroup): stion (Describe to the Bottom Depth 6 12 24 27 Soil Field In A1- Histosol A2 - Histic Ep	Montgomery silty c Vertic Endoaquolls te depth needed to document the individual of the the	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 3/1 3/1 2/1 cators are	98 100 95 100 e not press \$4 - Sand \$5 - Sand	10YR 10YR 10YR 5 gent y Gleyed N	eries Drainage Class: Red Color (Moist) 4/4 4/4	very poorly	Type C C for Problem A16 - Coast S7 - Dark St	Location M M	(e.g. clay, sand, silty clay loa silty clay loa silty clay loa silty clay loa muck	im am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 24 NRCS Hydric S	Bottom Depth 6 12 24 27 Soil Field In A1- Histosol A3 - Black Hi	Montgomery silty c Vertic Endoaquolls te depth needed to document the indi Horizon 1 2 3 4 dicators (check he oppedon stic	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 3/1 3/1 2/1 cators ar	% 98 100 95 100 en to pres \$4 - Sand \$6 - Stripts	10YR 10YR sent	eries Drainage Class: DeDepletion, RM=Reduced Matrix, CS-Red Color (Moist) 4/4 4/4 Matrix	very poorly =Covered/Coated Sand Gridox Features % 2 5 Indicators	rains; Location: PL= Type C C for Problem A16 - Coast S7 - Dark St F12 - Iron-M	Pore Lining, M=Matrix) Location M M	(e.g. clay, sand, silty clay loa silty clay loa silty clay loa muck 	im am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 24 NRCS Hydric S	Bottom Depth 6 12 24 27 Soil Field In A1- Histosol A2 - Histic Eg. A3 - Black Hi A4 - Hydroge	Montgomery silty c Vertic Endoaquolls Vertic Endoaquolls Horizon 1 2 3 4 dicators (check he bipedon stic n Sulfide	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 3/1 3/1 2/1 cators are	98 100 95 100 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam	SSC=Cancentration 10YR 10YR 10YR sent □) y Gleyed N y Redox y Redox y Muck Mix	eries Drainage Class: Red Color (Moist) 4/4 4//4 : Matrix	very poorly Covered/Coated Sand Galox Features % 2 5 Indicators	Type C C C	Location M	(e.g. clay, sand, silty clay loa silty clay loa silty clay loa muck 	im am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 24 NRCS Hydric:	Bottom Depth 6 12 24 27 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier	Montgomery silty c Vertic Endoaquolls Vertic Endoaquolls the depth needed to document the indi Horizon 1 2 3 4 dicators (check he oppedon stic n Sulfide d Layers	Color 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 3/1 3/1 2/1 cators arr	98 98 100 95 100 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam	10YR 10YR 10YR 10YR sent) y Gleyed N y Redox by Mack Min y Gleyed I was y Gleyed I was y Gleyed I was y Muck Min y Gleyed I details by Muck Min y Gleyed I was y Min	eries Drainage Class: De Depletion, RM=Reduced Matrix, CS-Red Color (Moist) 4/4 4/4 Matrix neral Matrix	very poorly Covered/Coated Sand Galox Features % 2 5 Indicators	Type C C C	Pore Lining, M=Matrix) Location M M	(e.g. clay, sand, silty clay loa silty clay loa silty clay loa muck 	im am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 24 NRCS Hydric S	group): stion (Describe to # Bottom Depth 6 12 24 27 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratiffec A10 - 2 cm M	Montgomery silty c Vertic Endoaquolls Vertic Endoaquolls the depth needed to document the indi Horizon 1 2 3 4 dicators (check he oppedon stic n Sulfide d Layers	Color 10YR 10YR 10YR 10YR re if indic	Matrix (Moist) 2/1 3/1 3/1 2/1 cators are	98 100 95 100 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam	10YR 10YR sent) y Gleyed N y Redox oed Matrix by Muck Mit y Gleyed Matrix by Muck Mit by Gleyed Matrix by Gleyed Matrix by Gleyed Matrix by Muck Mit by Muck Mit by Muck Mit by Gleyed Matrix by Muck Mit by Muck Mit by Gleyed Matrix by Muck Mit by	eries Drainage Class: Red Color (Moist) 4/4 4/4 Matrix neral Matrix	very poorly Covered/Coated Sand Galox Features % 2 5 Indicators	Type C C C	Location M	(e.g. clay, sand, silty clay loa silty clay loa silty clay loa muck 	im am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 24 NRCS Hydric S	Bottom Depth 6 12 24 27 Soil Field In A1- Histosol A2 - Histic Eq. A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E	Montgomery silty c Vertic Endoaquolls Vertic Endoaquolls edepth needed to document the indi Horizon 1 2 3 4 dicators (check he bipedon stic n Sulfide I Layers luck ed Below Dark Surface bark Surface	Color 10YR 10YR 10YR 10YR re if indic	Matrix (Moist) 2/1 3/1 3/1 2/1 cators are	98 100 95 100 en not press \$4 - Sand \$5 - Sand \$6 - Strip F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	eries Drainage Class: Red Color (Moist) 4/4 4/4 : Matrix face Surface	very poorly Covered/Coated Sand Galox Features % 2 5 Indicators	Type C C C	Location M	(e.g. clay, sand, silty clay loa silty clay loa silty clay loa muck 	im am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 24 NRCS Hydric :	Bottom Depth 6 12 24 27 Soil Field In A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplets A12 - Thick E A12 - Thick E S1 - Sandy M	Montgomery silty c Vertic Endoaquolls Vertic Endoaquolls Le depth needed to document the indi Horizon 1 2 3 4 dicators (check he bipedon stic n Sulfide d Layers luck ded Below Dark Surface luck Mineral	Color 10YR 10YR 10YR 10YR re if indic	Matrix (Moist) 2/1 3/1 3/1 2/1 cators are	98 100 95 100 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Depile F6 - Redo	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	eries Drainage Class: Red Color (Moist) 4/4 4/4 : Matrix face Surface	very poorly =Covered/Coated Sand Glox Features % 2 5 Indicators	Type C C C for Problem A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M M	(e.g. clay, sand, silty clay loa silty clay loa silty clay loa muck	am am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 24 NRCS Hydric :	Bottom Depth 6 12 24 27 Soil Field In A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplets A12 - Thick E A12 - Thick E S1 - Sandy M	Montgomery silty c Vertic Endoaquolls Vertic Endoaquolls edepth needed to document the indi Horizon 1 2 3 4 dicators (check he bipedon stic n Sulfide I Layers luck ed Below Dark Surface bark Surface	Color 10YR 10YR 10YR 10YR re if indic	Matrix (Moist) 2/1 3/1 3/1 2/1 cators are	98 100 95 100 en not press S4 - Sand S5 - Strip F1 - Loam F2 - Loam F2 - Loam F7 - Deple F6 - Redo F7 - Deple F7	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	eries Drainage Class: Red Color (Moist) 4/4 4/4 : Matrix face Surface	very poorly =Covered/Coated Sand Glox Features % 2 5 Indicators	Type C C C for Problem A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M M	(e.g. clay, sand, silty clay loa silty clay loa silty clay loa muck 	am am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 24 NRCS Hydric :	Bottom Depth 6 12 24 27 Soil Field In A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplets A12 - Thick E A12 - Thick E S1 - Sandy M	Montgomery silty c Vertic Endoaquolls Vertic Endoaquolls Le depth needed to document the indi Horizon 1 2 3 4 dicators (check he bipedon stic n Sulfide I Layers luck ad Below Dark Surface luck Mineral lcky Peat or Peat	Color 10YR 10YR 10YR 10YR re if indic	Matrix (Moist) 2/1 3/1 3/1 2/1 cators are	9% 98 100 95 100 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	eries Drainage Class: Red Color (Moist) 4/4 4/4 : Matrix face Surface	very poorly =Covered/Coated Sand Glox Features % 2 5 Indicators	Type C	Location M	(e.g. clay, sand, silty clay loa silty clay loa silty clay loa muck	am am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 24 NRCS Hydric S	Signoup): stion (Describe to III) Bottom Depth 6 12 24 27 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy M S3 - 5 cm Mu	Montgomery silty c Vertic Endoaquolls to depth needed to document the individual of	Color 10YR 10YR 10YR 10YR re if indic	Matrix (Moist) 2/1 3/1 3/1 2/1 cators are	9% 98 100 95 100 e not pres S4 - Sand S5 - Sand S6 - Stripp F1 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	10YR 10YR sent) y Gleyed N y Redox y Muck Mi y Gleyed N teled Matrix x Dark Su teled Dark S x Depress	eries Drainage Class: Red Color (Moist) 4/4 4/4 Matrix neral Matrix face Surface ions	very poorly Covered/Coated Sand Galox Features % 2 5 Indicators Indicators of hydrophy	Type C	Location M	(e.g. clay, sand, silty clay loa silty clay loa silty clay loa silty clay loa muck	am am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 24 NRCS Hydric S	Signoup): stion (Describe to III) Bottom Depth 6 12 24 27 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy M S3 - 5 cm Mu	Montgomery silty c Vertic Endoaquolls Vertic Endoaquolls Le depth needed to document the indi Horizon 1 2 3 4 dicators (check he bipedon stic n Sulfide I Layers luck ad Below Dark Surface luck Mineral lcky Peat or Peat	Color 10YR 10YR 10YR 10YR re if indic	Matrix (Moist) 2/1 3/1 3/1 2/1 cators are	9% 98 100 95 100 e not pres S4 - Sand S5 - Sand S6 - Stripp F1 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	10YR 10YR sent) y Gleyed N y Redox y Muck Mi y Gleyed N teled Matrix x Dark Su teled Dark S x Depress	eries Drainage Class: Red Color (Moist) 4/4 4/4 Matrix neral Matrix face Surface ions	very poorly Covered/Coated Sand Galox Features % 2 5 Indicators Indicators of hydrophy	Type C	Location M	(e.g. clay, sand, silty clay loa silty clay loa silty clay loa silty clay loa muck	am am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 12 24 NRCS Hydric S	Signoup): stion (Describe to III) Bottom Depth 6 12 24 27 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy M S3 - 5 cm Mu	Montgomery silty c Vertic Endoaquolls to depth needed to document the individual of	Color 10YR 10YR 10YR 10YR re if indic	Matrix (Moist) 2/1 3/1 3/1 2/1 cators are	9% 98 100 95 100 e not pres S4 - Sand S5 - Sand S6 - Stripp F1 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	10YR 10YR sent) y Gleyed N y Redox y Muck Mi y Gleyed N teled Matrix x Dark Su teled Dark S x Depress	eries Drainage Class: Red Color (Moist) 4/4 4/4 Matrix neral Matrix face Surface ions	very poorly Covered/Coated Sand Galox Features % 2 5 Indicators Indicators of hydrophy	Type C	Location M	(e.g. clay, sand, silty clay loa silty clay loa silty clay loa silty clay loa muck	am am



Project/Site: Emerald Park Landfill - Western Expansion Wetland ID: W2 Sample Point W2-6w **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. x 1 = OBL spp. x 2 = Total Cover = 0 FACW spp. 106 212 x 3 = FAC spp. 1 3 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 5 FACW 1. Salix discolor UPL spp. 0 x 5= 2 3. Total 108 (A) 219 4 5. Prevalence Index = B/A = 2.028 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ✓ Yes Rapid Test for Hydrophytic Vegetation □ No 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 5 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA **FACW** 100 1. * Indicators of hydric soil and wetland hydrology must be 2 Ν **FACW** Solidago gigantea present, unless disturbed or problematic. 3. Symphyotrichum lanceolatum Ν FAC 1 CIRSIUM ARVENSE Ν FACU **Definitions of Vegetation Strata:** 4. 1 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 103 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 5. Total Cover = 0 Remarks: Sample point is located in a low quality wet meadow community. Additional Remarks:



Project/Site:		ark Landfill - Wester		sion			Stantec Project #:	193702557		Date:	10/17/14	
Applicant:		Disposal Services, I	NC								Waukesha	
Investigator #1:				Investi	igator #2:						Wisconsin	
Soil Unit:	Muskego m	nuck					/I/WWI Classification:	F0Kf			W2	
Landform:	Backslope				al Relief:		9	5.		Sample Point:		
Slope (%):	1-2	Latitude:			ongitude:		and the second s	Datum:		,	Wet Meadow	
		litions on the site type or Hydrology □ sig				(If no, explai	Are normal circumsta	☑ Yes ☐		Section:	36	
		or Hydrology 🗀 sig or Hydrology 🗀 nat						⊞No	is.	Township: Range:	5 N 20 E	
SUMMARY OF I		or riyurology <u>in nat</u>	urally pro	opicinali			[:] Ga	LINO		Range.	20 E	
Hydrophytic Veg		cent?		7 Vec	□ No			Hydric Soils	Procent?		✓ Yes	□ No
Wetland Hydrol				☑ Ves	□ No					Nithin A Wetla		
Remarks:	WETS anal	lvsis indicates norm	al anteca				Wet meadow commun					
. tomaino.							composition of grasses					
HYDROLOGY		9, 111					3				,	
	alogy Indica	ators (Check here if	indicato	re are no	t precent	E1:						
Primary:		itors (Check here in	mulcato	is ale lic	hiesem	1-16			Secondary:			
	A1 - Surface	Water			B9 - Wate	r-Stained	_eaves			B6 - Surface So	il Cracks	
	A2 - High Wa				B13 - Aqu					B10 - Drainage		
	A3 - Saturation				B14 - True					C2 - Dry-Seasor		
	B1 - Water M B2 - Sedimer				C1 - Hydro		spheres on Living Roots			C8 - Crayfish Bu	ırrows Visible on Aerial Iı	mageny
	B3 - Drift Der				C4 - Prese					D1 - Stunted or		ilagery
	B4 - Algal Ma						duction in Tilled Soils			D2 - Geomorphi		
	B5 - Iron Dep				C7 - Thin				✓	D5 - FAC-Neutra	al Test	
		on Visible on Aerial Ima Vegetated Concave S			D9 - Gaug Other (Ex							
	po - Sparsery	vegetated Concave 3	burrace		Outer (EX	piaiii iii Ne	marks)					
Field Observat	ione:											
Surface Water F		☐ Yes ☑ No	Depth:		(in.)							
Water Table Pre		☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	drology Pr	esent? ☑	Yes □ No	
Saturation Pres		☑ Yes ☐ No	Depth:		(in.)							
					()		Cara Managaria		A	Olida Daviano		
		eam gauge, monitorir								Slide Review		
Remarks:	Standing w											
	Otananig v	vater exists in pocke	ets create	ed by vel	hicle ruts.	FSA slid	es support interpretati	ion of wetland	ls in this we	est lobe of W-2	<u>.</u>	
	Ctanang v	vater exists in pocke	ets create	ed by vel	hicle ruts.	FSA slid	es support interpretati	ion of wetland	ls in this we	est lobe of W-2	<u>.</u>	
SOILS			ets create	ed by vel	hicle ruts.				ls in this we	est lobe of W-2). -	
SOILS Map Unit Name	:	Muskego muck		ed by vel	hicle ruts.		es support interpretati eries Drainage Class:		ls in this we	est lobe of W-2). 	
SOILS Map Unit Name Taxonomy (Sub	: ogroup):	Muskego muck Limnic Haplosapris	sts			S	eries Drainage Class:	very poorly			2.	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	: group): tion (Describe to th	Muskego muck Limnic Haplosapris	sts	the absence of ir		S	eries Drainage Class:	very poorly =Covered/Coated Sand G			Texture	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to the Bottom)	Muskego muck Limnic Haplosapris ne depth needed to document the indi	sts cator or confirm t	the absence of in	ndicators.) (Type:	S	eries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS= Red	very poorly =Covered/Coated Sand G	rains; Location: PL=	Pore Lining, M=Matrix)	Texture	_
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	: group): ition (Describe to the Bottom Depth	Muskego muck Limnic Haplosapris	sts cator or confirm t	the absence of in Matrix (Moist)	ndicators.) (Type:	S	eries Drainage Class:	very poorly =Covered/Coated Sand G			Texture (e.g. clay, san	d, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to the Bottom)	Muskego muck Limnic Haplosapris ne depth needed to document the indi	sts cator or confirm t	the absence of ir Matrix (Moist) 2/1	ndicators.) (Type:	C=Concentration	eries Drainage Class: Description, RM=Reduced Matrix, CS=Red Color (Moist)	very poorly =Covered/Coated Sand G lox Features %	rains; Location: PL=	Pore Lining, M=Matrix) Location	Texture (e.g. clay, san silty clay lo	d, loam) am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	egroup): tion (Describe to tr Bottom Depth 8 14	Muskego muck Limnic Haplosapris ne depth needed to document the indi Horizon 1 2	cator or confirm to Color 10YR 5Y	the absence of in Matrix (Moist) 2/1 3/1	% 100 95	C=Concentratio	eries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS= Red Color (Moist) 4/4	very poorly =Covered/Coated Sand G lox Features % 5	rains; Location: PL= Type C	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, san silty clay lo silty cla	d, loam) am
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 14	group): tion (Describe to the Bottom Depth 8 14 20	Muskego muck Limnic Haplosapris ne depth needed to document the indi Horizon 1 2 3	cator or confirm to Color 10YR 5Y 5Y	the absence of it Matrix (Moist) 2/1 3/1 6/1	% 100 95 90	C=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS= Red Color (Moist) 4/4 4/4	very poorly	Type C C	Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, san silty clay lo silty clay clay	d, loam) am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 14	group): tion (Describe to the Bottom Depth 8 14 20	Muskego muck Limnic Haplosapris ne depth needed to document the indi Horizon 1 2 3	cator or confirm to Color 10YR 5Y 5Y	the absence of it Matrix (Moist) 2/1 3/1 6/1	% 100 95 90	C=Concentratio	eries Drainage Class: D. D=Depletion, RM=Reduced Matrix, CS= Red Color (Moist) 4/4 4/4	very poorly	Type C C	Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, san silty clay lo silty clay clay	d, loam) am
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 14	group): tion (Describe to the Bottom Depth 8 14 20	Muskego muck Limnic Haplosapris ne depth needed to document the indi Horizon 1 2 3	Color or confirm 1 Color 10YR 5Y	Matrix (Moist) 2/1 3/1 6/1	% 100 95 90	C=Concentratio	eries Drainage Class: n. D=Depletion. RM=Reduced Matrix. CS= Red Color (Moist) 4/4 4/4	very poorly	rains; Location: PL= Type C C	Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, san- silty clay lo silty clay clay	d, loam) am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 14	group): stion (Describe to the Bottom Depth 8 14 20	Muskego muck Limnic Haplosapris ne depth needed to document the indi Horizon 1 2 3	Color 10YR 5Y	Matrix (Moist) 2/1 3/1 6/1	% 100 95 90	10YR 10YR	eries Drainage Class: n. D=Depletion. RM=Reduced Matrix. CS= Red Color (Moist) 4/4 4/4	very poorly	Type C C	Pore Lining, M=Matrix) Location M M	Texture (e.g. clay, san- silty clay lo silty clay clay	d, loam) am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 14 NRCS Hydric S	group): stion (Describe to the bottom Depth 8 14 20 Soil Field In	Muskego muck Limnic Haplosapris ne depth needed to document the indi Horizon 1 2 3	Color 10YR 5Y	Matrix (Moist) 2/1 3/1 6/1 cators are	% 100 95 90	C=Concentratio	eries Drainage Class: Red Color (Moist) 4/4 4/4	very poorly =Covered/Coated Sand G lox Features % 5 10 Indicators	Type Type C C	Location M M	Texture (e.g. clay, san- silty clay lo silty clay clay	d, loam) am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 14 NRCS Hydric S	group): stion (Describe to the Bottom Depth 8 14 20	Muskego muck Limnic Haplosapris te depth needed to document the indi Horizon 1 2 3 dicators (check he	Color 10YR 5Y	Matrix (Moist) 2/1 3/1 6/1 cators are	% 100 95 90	C=Concentratio	eries Drainage Class: Red Color (Moist) 4/4 4/4	very poorly Covered/Coated Sand Goox Features % 5 10 Indicators	Type Type C C	Location M M	Texture (e.g. clay, san- silty clay lo silty clay clay	d, loam) am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 14 NRCS Hydric S	group): tion (Describe to the state of the	Muskego muck Limnic Haplosapris ne depth needed to document the indi Horizon 1 2 3 dicators (check he	Color 10YR 5Y	Matrix (Moist) 2/1 3/1 6/1 cators ar	% 100 95 90 e not pres \$4 - Sand \$6 - Stript	C=Concentratio	eries Drainage Class: De Depletion, RM=Reduced Matrix, CS= Red Color (Moist) 4/4 4/4	very poorly	Type C C for Problem A16 - Coast S7 - Dark St, F12 - Iron-M	Pore Lining, M=Matrix) Location M M natic Soils ¹ Prairie Redox urface anganese Masse	Texture (e.g. clay, sansilty clay losilty clay clay	d, loam) am
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 14 NRCS Hydric S	: group): tion (Describe to II Bottom Depth 8 14 20 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi 44 - Hydroge A5 - Stratifier	Muskego muck Limnic Haplosapris te depth needed to document the indi Horizon 1 2 3 dicators (check he objeedon stic in Sulfide di Layers	Color 10YR 5Y	Matrix (Moist) 2/1 3/1 6/1 cators arr	% 100 95 90 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam	C=Concentratio	eries Drainage Class: Red Color (Moist) 4/4 4/4 Matrix Red Carina Reduced Matrix, CS= Red	very poorly =Covered/Coated Sand G lox Features % 5 10 Indicators	Type Type C C C	Pore Lining, M=Matrix) Location M M natic Soils ¹ Prairie Redox urface anganese Masse	Texture (e.g. clay, sansilty clay losilty clay clay	d, loam) am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 14 NRCS Hydric S	group): tion (Describe to IV) Bottom Depth 8 14 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratiffec A10 - 2 cm M	Muskego muck Limnic Haplosapris e depth needed to document the indi Horizon 1 2 3 dicators (check he bipedon stic on Sulfide d Layers luck	Color 10YR 5Y re if indic	Matrix (Moist) 2/1 3/1 6/1 cators arr	% 100 95 90 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F3 - Deple	SC=Concentratio	eries Drainage Class: Red Color (Moist) 4/4 4/4 Matrix neral Matrix	very poorly =Covered/Coated Sand G lox Features % 5 10 Indicators	Type Type C C C	Location Location M M natic Soils Prairie Redox urface anganese Masse Shallow Dark St.	Texture (e.g. clay, sansilty clay losilty clay clay	d, loam) am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 14 NRCS Hydric S	group): tion (Describe to III Bottom Depth 8 14 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete	Muskego muck Limnic Haplosapris the depth needed to document the individual to the	Color 10YR 5Y re if indic	Matrix (Moist) 2/1 3/1 6/1 cators are	% 100 95 90 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo	SSC=Concentration 10YR 10YR Seent □) y Gleyed If y Redox oed Matrix y Muck Min y Muck Min y Muck Min y Gleyed If eted Matrix x Dark Su	eries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS= Red Color (Moist) 4/4 4/4	very poorly =Covered/Coated Sand G lox Features % 5 10 Indicators	Type Type C C C	Location Location M M natic Soils Prairie Redox urface anganese Masse Shallow Dark St.	Texture (e.g. clay, sansilty clay losilty clay clay	d, loam) am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 14 NRCS Hydric S	group): tion (Describe to IV) Bottom Depth 8 14 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratiffec A10 - 2 cm M	Muskego muck Limnic Haplosapris te depth needed to document the indis Horizon 1 2 3 dicators (check he bipedon stic an Sulfide d Layers luck ed Below Dark Surface bark Surface	Color 10YR 5Y re if indic	the absence of in Matrix (Moist) 2/1 3/1 6/1 cators arr	% 100 95 90 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F3 - Deple	sent) y Gleyed I y Redox obed Matrix by Muck Min y Gleyed I was a war and was a war and was a war and was a war and was a war	eries Drainage Class: Red Color (Moist) 4/4 4/4	very poorly =Covered/Coated Sand G lox Features % 5 10 Indicators	Type Type C C C	Location Location M M natic Soils Prairie Redox urface anganese Masse Shallow Dark St.	Texture (e.g. clay, sansilty clay losilty clay clay	d, loam) am
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 14 NRCS Hydric S	: group): tion (Describe to II Bottom Depth 8 14 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick E \$1 - Sandy M	Muskego muck Limnic Haplosapris te depth needed to document the indis Horizon 1 2 3 dicators (check he bipedon stic an Sulfide d Layers luck ed Below Dark Surface bark Surface	Color 10YR 5Y re if indic	the absence of in Matrix (Moist) 2/1 3/1 6/1 cators arr	% 100 95 90	sent) y Gleyed I y Redox obed Matrix by Muck Min y Gleyed I was a war and was a war and was a war and was a war and was a war	eries Drainage Class: Red Color (Moist) 4/4 4/4	very poorly **Covered/Coated Sand G lox Features % 5 10 Indicators	Type C C C for Problem A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location Location M M natic Soils ¹ Prairie Redox urface anganese Masse Shallow Dark Suin in Remarks)	Texture (e.g. clay, sansilty clay losilty clay clay	d, loam) am y
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 14 NRCS Hydric S	: group): tion (Describe to II Bottom Depth 8 14 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick E \$1 - Sandy M	Muskego muck Limnic Haplosapris te depth needed to document the indi Horizon 1 2 3 dicators (check he bipedon stic n Sulfide d Layers luck ded Below Dark Surface bark Surface fluck Mineral lucky Peat or Peat	Color 10YR 5Y re if indic	the absence of in Matrix (Moist) 2/1 3/1 6/1 cators arr	% 100 95 90	sent) y Gleyed I y Redox obed Matrix by Muck Min y Gleyed I was a war and was a war and was a war and was a war and was a war	eries Drainage Class: Red Color (Moist) 4/4 4/4	very poorly **Covered/Coated Sand G lox Features % 5 10 Indicators	Type Type C C	Location Location M M natic Soils Prairie Redox urface anganese Masse Shallow Dark Suin in Remarks)	Texture (e.g. clay, san- silty clay lo silty cla clay es	d, loam) am y
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 14 NRCS Hydric S	Bottom Depth 8 14 20 Soil Field In A1- Histosol A2 - Histic Eg. A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E \$1 - Sandy M \$3 - 5 cm Mu	Muskego muck Limnic Haplosapris te depth needed to document the indi Horizon 1 2 3 dicators (check he bipedon stic n Sulfide d Layers luck ded Below Dark Surface bark Surface fluck Mineral lucky Peat or Peat	Color 10YR 5Y re if indic	the absence of in Matrix (Moist) 2/1 3/1 6/1 cators arr	% 100 95 90 enot pres \$4 - Sand \$5 - Sand \$5 - Sarbpp F1 - Loam F2 - Loam F3 - Deple F6 - Redo	sent) y Gleyed I y Redox obed Matrix by Muck Min y Gleyed I was a war and was a war and was a war and was a war and was a war	eries Drainage Class: Red Color (Moist) 4/4 4/4	very poorly =Covered/Coated Sand G lox Features % 5 10 Indicators Indicators of hydrophy	Type Type C C	Location Location M M natic Soils Prairie Redox urface anganese Masse Shallow Dark Suin in Remarks)	Texture (e.g. clay, sam silty clay lo silty clay clay	d, loam) am y
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Sample Point W2-7w



Emerald Park Landfill - Western Expansion

Project/Site:

WETLAND DETERMINATION DATA FORM Midwest Region

Wetland ID:

W2

VEGETATION (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. x 1 = OBL spp. Total Cover = 0 FACW spp. 90 x 2 = 180 x 3 = FAC spp. 0 0 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 10 40 1. UPL spp. 0 x 5= 2 3. Total 100 220 4 5. Prevalence Index = B/A = 2.200 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ✓ Yes □ No Rapid Test for Hydrophytic Vegetation 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 0 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA **FACW** 90 1. * Indicators of hydric soil and wetland hydrology must be 2 TARAXACUM OFFICINALE 5 Ν **FACU** present, unless disturbed or problematic. TRIFOLIUM PRATENSE 3. Ν **FACU** 5 **Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 5. Total Cover = 0 Remarks: Sample point located in a low quality wet meadow community apparently being used for hay. Vegetation disturbed from recent mowing, however normal circumstances interpreted to be present.

Additional Remarks:

Sample point exhibits wetland characteristics despite recent mowing and disturbance.



Project/Site:	Emerald Pa	ark Landfill - Wester	n Expan	sion			Stantec Project #:	193702557		Date:	10/23/14
Applicant:		Disposal Services, I					-			County:	Waukesha
Investigator #1:				Investi	gator #2:	Jaron T	ylock			State:	Wisconsin
Soil Unit:	Montgomer	y silty clay loam				NV	VI/WWI Classification:	N/A		Wetland ID:	Adj to W2A
Landform:	Hill Slope				al Relief:					Sample Point:	
Slope (%):	0-2	<u>Latitude:</u>			ongitude:			Datum:		Community ID:	Agricultural Field
		litions on the site tyr				If no, expla	min remarks)	☑ Yes □		Section:	36
		or Hydrology 🗆 sigi					Are normal circumsta		13	Township:	5 N
Are Vegetation	□ , Soil □,	or Hydrology 🔲 паt	urally pro	oblematio	c?		☐ Yes	⊠No		Range:	20 E
SUMMARY OF	FINDINGS										
Hydrophytic Ve	getation Pres	sent?		☑ Yes	□ No			Hydric Soils	Present?		
Wetland Hydrol	ogy Present	?		□ Yes	■ No					Within A Wetla	
Remarks:							Point located in an ag				
	Normal circ	umstances assume	d not pre	esent F	SA slides	interpre	ied to support an uplai	nd determinat	on at this I	ocation and go	oing south.
HYDROLOGY											
Wetland Hydro	ology Indica	itors (Check here if	indicato	re are no	t present	EW					
Primary:		itora (Oncok ileje il	maicato	S ale ilo	r bresent	ы).			Secondary:		
	A1 - Surface	Water			B9 - Wate	r-Stained	Leaves			B6 - Surface So	il Cracks
	A2 - High Wa				B13 - Aqua	atic Fauna	ì			B10 - Drainage	Patterns
	A3 - Saturation				B14 - True					C2 - Dry-Seasor	
	B1 - Water M				C1 - Hydro					C8 - Crayfish Bu	
	B2 - Sedimer B3 - Drift Dep						spheres on Living Roots educed Iron			D1 - Saturation	Visible on Aerial Imagery
	B4 - Algal Ma						duction in Tilled Soils			D2 - Geomorphi	
	B5 - Iron Dep			_	C7 - Thin I					D5 - FAC-Neutra	
		on Visible on Aerial Ima			D9 - Gaug						
	B8 - Sparsely	Vegetated Concave S	urface		Other (Exp	olain in Re	emarks)				
Field Observat											
Surface Water I	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	ocont?	Yes ☑ No
Water Table Pre	esent?	☐ Yes ☑ No	Depth:		(in.)			Wettalia ily	arology i i	esent:	103 110
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	ed Data (stre	am gauge monitorin	a wall a								
				eriai bnot	os, previoi	us inspec	ctions), if available:		Annual Crop	Slide Review	
							ctions), if available:	indicated unl		Slide Review	to the south. Transect
Remarks:	No primary	hydrology indicator	s observ	ed and o	nly one s	econdar	y indicator. FSA slides		lands at this	location and	to the south. Transect
Remarks:	No primary	hydrology indicator	s observ	ed and o	nly one s	econdar			lands at this	location and	
Remarks:	No primary of points go	hydrology indicators bing NW contrast wi	s observ th this po	ed and o	nly one s	econdar ssess pr	y indicator. FSA slides imary hydrology indica	ators and elev	lands at this	location and	
Remarks: SOILS Map Unit Name	No primary of points go	hydrology indicators bing NW contrast wi Montgomery silty cl	s observ th this po ay loam	ed and o	nly one s	econdar ssess pr	y indicator. FSA slides	ators and elev	lands at this	location and	
Remarks: SOILS Map Unit Name Taxonomy (Sub	No primary of points go	hydrology indicator bing NW contrast wi Montgomery silty cl Vertic Endoaquolls	s observ th this po	ed and o	only one s at they po	econdar ssess pr	y indicator. FSA slides imary hydrology indica Series Drainage Class:	very poorly	lands at this	s location and slightly going (
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip	No primary of points go: group): tion (Describe to the	hydrology indicator bing NW contrast wi Montgomery silty cl Vertic Endoaquolls	s observ th this po	ed and o	only one s at they po	econdar ssess pr	y indicator. FSA slides imary hydrology indica Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS	very poorly =Covered/Coated Sand G	lands at this	s location and slightly going (SE.
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	No primary of points go : group): tion (Describe to the Bottom	hydrology indicator: bing NW contrast wi Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice	s observ th this po ay loam	ed and opint in the	only one s at they po	econdar ssess pr	y indicator. FSA slides rimary hydrology indica Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red	very poorly =Covered/Coated Sand G dox Features	lands at this vation rises Prains; Location: PL=	s location and slightly going s	SE. Texture
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	No primary of points go group): stion (Describe to the Depth)	hydrology indicator: bing NW contrast wi Montgomery silty cl Vertic Endoaquolls be depth needed to document the indice Horizon	s observ th this po ay loam cator or confirm to	ed and opint in the opint in th	only one s at they po	econdar ssess pr	y indicator. FSA slides rimary hydrology indica Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	very poorly **Covered/Coated Sand Gox Features** %	ands at this vation rises Grains; Location: PL=	s location and slightly going \$	Texture (e.g. clay, sand, loam)
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	No primary of points go group): tion (Describe to tr	hydrology indicator: bing NW contrast wi Montgomery silty cl Vertic Endoaquolls the depth needed to document the indice Horizon 1	s observ th this po ay loam cator or confirm to Color 10YR	the absence of in Matrix (Moist)	only one s at they po	econdarysess pr	y indicator. FSA slides rimary hydrology indica Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist)	very poorly -Covered/Coated Sand G dox Features %	ands at this ration rises Frains; Location: PL=	s location and slightly going s	Texture (e.g. clay, sand, loam) silty clay loam
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9	No primary of points go group): tion (Describe to the Depth 9 24	hydrology indicators on NW contrast with Montgomery silty of Vertic Endoaquolls to depth needed to document the indicators on the Montgon The Montgo	ay loam cater or confirm to Color 10YR 10YR	ed and objint in the absence of in Matrix (Moist) 3/1 6/1	only one s at they po dicators.) (Type: % 100 60	econdaryssess pr	y indicator. FSA slides rimary hydrology indica Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/8	very poorly	ration rises Frains; Location: PL= Type C	s location and slightly going s	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9	No primary of points go points go group): group): tion (Describe to the point of	hydrology indicators on NW contrast with Montgomery silty of Vertic Endoaquolls to depth needed to document the indicators on the silvent of	s observe the this post ay loam state or confirm to the color to the c	the absence of in Matrix (Moist) 3/1 6/1	only one s at they po dicators.) (Type: % 100 60	econdary ssess pr C=Concentration 10YR	y indicator. FSA slides rimary hydrology indica series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/8	very poorly -Covered/Coated Sand Cotox Features % 40	ration rises Frains; Location: PL= Type C	s location and slightly going s	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9	No primary of points go points go group): tion (Describe to to to Depth 9 24	hydrology indicators on North	s observe the this positive ay loam is calor or confirm to Color 10YR 10YR	ed and opint in the absence of int in the Matrix (Moist) 3/1 6/1	only one s at they po indicators.) (Type: % 100 60	econdar ssess pr S C=Concentratio	y indicator. FSA slides rimary hydrology indica series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8	very poorly	ration rises Frains; Location: PL= Type C	s location and slightly going s	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9	No primary of points go points go group): group): tion (Describe to the point of	hydrology indicators on NW contrast with Montgomery silty of Vertic Endoaquolls to depth needed to document the indicators on the silvent of	s observe the this post ay loam state or confirm to the color to the c	the absence of in Matrix (Moist) 3/1 6/1	only one s at they po dicators.) (Type: % 100 60	econdary ssess pr C=Concentration 10YR	y indicator. FSA slides rimary hydrology indica series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/8	very poorly -Covered/Coated Sand Cotox Features % 40	ration rises Frains; Location: PL= Type C	s location and slightly going s	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9	No primary of points go points go group): tion (Describe to to to Depth 9 24	hydrology indicators on North	s observe the this positive ay loam is calor or confirm to Color 10YR 10YR	ed and opint in the absence of int in the Matrix (Moist) 3/1 6/1	only one s at they po indicators.) (Type: % 100 60	econdar ssess pr S C=Concentratio	y indicator. FSA slides rimary hydrology indica series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8	very poorly	ration rises Frains; Location: PL= Type C	s location and slightly going s	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9	No primary of points go points go points go points go primary of points go p	hydrology indicators on North	s observe the this position of the thing pos	ed and opint in the opint in the observe of in Matrix (Moist) 3/1 6/1	only one set they po	econdar ssess pr S C=Concentratio	y indicator. FSA slides rimary hydrology indica series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/8	very poorly	ration rises Frains; Location: PL= Type C	s location and slightly going s	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9	No primary of points go po	hydrology indicators on North	s observe the this position of the thing pos	ed and opint in the opint in the observe of in Matrix (Moist) 3/1 6/1	only one set they po	econdar ssess pr S C=Concentratio	y indicator. FSA slides rimary hydrology indica series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/8	very poorly -Covered/Coated Sand G dox Features % 40	ration rises Frains; Location: PL= Type C	s location and slightly going s	Texture (e.g. clay, sand, loam) silty clay loam clay
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Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9 NRCS Hydric S	No primary of points go	hydrology indicators on NW contrast wing NW contrast with NW contrast value of	s observe the this position of the transfer of	ed and coint in the absence of in Matrix (Moist) 3/1 6/1 cators are	white one seat they possess the	C=Concentratio	y indicator. FSA slides imary hydrology indicator. FSA slides imary hy	very poorly =Covered/Coated Sand G dox Features % 40 Indicators	ands at this ration rises Frains; Location: PL= Type C 5 for Problen A16 - Coast	B location and slightly going slight	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9 NRCS Hydric S	No primary of points go	hydrology indicators on National Nation	s observe the this position of the transfer of	ed and coint in the absence of	% 100 60 enot pres	C=Concentration SSESS pr SC=Concentration 10YR sent	y indicator. FSA slides imary hydrology indica series Drainage Class: Rec Color (Moist) 5/8	very poorly -Covered/Coated Sand G dox Features % 40 Indicators	ration rises Frains; Location: PL= Type C 5 for Problem A16 - Coast S7 - Dark St	Blocation and slightly going slightl	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9 NRCS Hydric S	No primary of points go po	hydrology indicators on North	s observe the this position of the transfer of	the absence of in that the absence of in that the absence of in Matrix (Moist) 3/1 6/1 cators are	mily one sat they po	C=Concentration 10YR sent y Gleyed by Redox, and Matrix	y indicator. FSA slides imary hydrology indica series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/8	very poorly	ration rises Frains: Location: PL= Type C 5 for Problen A16 - Coasts F12 - Iron-M	Pore Lining. M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9 NRCS Hydric S	No primary of points go group): tion (Describe to II Bottom Depth 9 24	hydrology indicators ing NW contrast with Montgomery silty cl. Vertic Endoaquolls to document the indicators. Horizon 1 2 dicators (check here) speeds to suffice the properties of the propertie	s observe the this position of the transfer of	the absence of in that the absence of in the absence of in that the absence of in that the absence of in the abse	white they possed	c=condaryssess pr	y indicator. FSA slides imary hydrology indicator. FSA slides imary hy	very poorly **Covered/Coated Sand Glox Features** %** 40 Indicators**	Type Type C C 5 for Problen A16 - Coasts 57 - Dark St F12 - Iron-M TF12 - Very	B location and slightly going slight	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9 NRCS Hydric :	No primary of points go po	hydrology indicators on New Contrast with Montgomery silty of Vertic Endoaquolls to depth needed to document the indicators. Horizon 1 2	s observe the this position of the transfer of	he absence of in Matrix (Moist) 3/1 6/1 cators are	which will be set to the set of t	c=condary ssess pr S C=Concentratio 10YR y Gleyed by Redox by Redox by Muck Murrix by Muck Mury Gleyed by Gleyed	y indicator. FSA slides imary hydrology indicator. FSA slides imary hy	very poorly **Covered/Coated Sand Glox Features** %** 40 Indicators**	Type Type C C 5 for Problen A16 - Coasts 57 - Dark St F12 - Iron-M TF12 - Very	Pore Lining. M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9 NRCS Hydric S	No primary of points go po	hydrology indicators on Number 1 in Sulfide I Layers luck	s observe the this position of the transfer of	he absence of in that he absence of in that he absence of in that in the interval in t	while one seat they possess the	C=Concentration SSESS pr SC=Concentration 10YR seent y Gleyed i y Redox y Redox y Redox y Redox y Seed Matrix in y Gleyed deted Matrix by Gleyed deted Matrix in y Gleyed deted Matrix in y Gleyed in y Gleyed in y Gleyed deted Matrix in y Gleyed deted Matrix in y Gleyed in y Gle	y indicator. FSA slides imary hydrology indica Series Drainage Class: Rec Color (Moist) 5/8	very poorly **Covered/Coated Sand Glox Features** %** 40 Indicators**	Type Type C C 5 for Problen A16 - Coasts 57 - Dark St F12 - Iron-M TF12 - Very	B location and slightly going slight	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9 NRCS Hydric :	No primary of points go po	hydrology indicators on Suffide de Layers luck ed Below Dark Surface et al.	s observe the this position of the transfer of	the absence of in that the absence of in that the absence of in that the absence of in the absence of interest.	which will be set to the set of t	C=Concentration C=Concentration 10YR sent	y indicator. FSA slides imary hydrology indica series Drainage Class: Rec Color (Moist) 5/8	very poorly **Covered/Coated Sand Glox Features** %** 40 Indicators**	Type Type C C 5 for Problen A16 - Coasts 57 - Dark St F12 - Iron-M TF12 - Very	B location and slightly going slight	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9 NRCS Hydric S	No primary of points go po	hydrology indicators on NW contrast with Montgomery silty of Vertic Endoaquolls to depth needed to document the indicators. Horizon 1 2	s observe the this position of the transfer of	the absence of in that the absence of in the absence of in that the absence of in that the absence of in the abse	mly one sat they po	c=Concentratio	y indicator. FSA slides imary hydrology indicator. FSA slides imary hy	very poorly **Covered/Coated Sand Glox Features** %** 40 Indicators**	Type Type C C 5 for Problen A16 - Coasts 57 - Dark St F12 - Iron-M TF12 - Very	B location and slightly going slight	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9 NRCS Hydric :	No primary of points go po	hydrology indicators ing NW contrast with Montgomery silty clear vertice Endoaquolls are depth needed to document the indicators. Horizon 1 2 dicators (check here) silting in Sulfide di Layers luck and Below Dark Surface are verticators.	s observe the this position of the transfer of	the absence of in that the absence of in the absence of in that the absence of in that the absence of in the abse	while one set they po	c=Concentratio	y indicator. FSA slides imary hydrology indicator. FSA slides imary hy	very poorly	Type Type C for Problen A16 - Coast S7 - Dark St F12 - Iron-M Other (Expla	B location and slightly going slight	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9 NRCS Hydric S	No primary of points go po	hydrology indicators on NW contrast with Montgomery silty classing NW contrast NW	s observe the this position of the transfer of	the absence of in that the absence of in the absence of in that the absence of in that the absence of in the abse	while one set they po	c=Concentratio	y indicator. FSA slides imary hydrology indicator. FSA slides imary hy	very poorly	Type Type C C 5 for Problen A16 - Coast S7 - Dark S7 T12 - Very Other (Explain)	B location and slightly going slight	Texture (e.g. clay, sand, loam) silty clay loam clay es
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9 NRCS Hydric S	No primary of points go po	hydrology indicators on NW contrast with Montgomery silty of Vertic Endoaquolls to depth needed to document the indicators. Horizon 1 2 dicators (check here is to layers luck ed Below Dark Surface luck Mineral locky Peat or Peat	s observe the this positive that this positive that this positive that the positive	the absence of in that the absence of in the a	mly one sat they po	C=Concentration SSESS pr SC=Concentration 10YR seent y Gleyed I y Redox y Medox y Muck M y Gleyed I y Charlot S y Gleyed I y Gley	y indicator. FSA slides imary hydrology indica series Drainage Class: Rec Color (Moist) 5/8	very poorly -Covered/Coated Sand Gox Features	ration rises Frains; Location: PL= Type C s for Problem A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	s location and slightly going slightly	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9 NRCS Hydric S	No primary of points go po	hydrology indicators on NW contrast with Montgomery silty of Vertic Endoaquolls to depth needed to document the indicators. Horizon 1 2 dicators (check here is to layers luck ed Below Dark Surface luck Mineral locky Peat or Peat	s observe the this positive that this positive that this positive that the positive	the absence of in that the absence of in the a	mly one sat they po	C=Concentration SSESS pr SC=Concentration 10YR seent y Gleyed I y Redox y Medox y Muck M y Gleyed I y Charlot S y Gleyed I y Gley	y indicator. FSA slides imary hydrology indicator. FSA slides imary hy	very poorly -Covered/Coated Sand Gox Features	ration rises Frains; Location: PL= Type C s for Problem A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	s location and slightly going slightly	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9 NRCS Hydric S	No primary of points go po	hydrology indicators on NW contrast with Montgomery silty of Vertic Endoaquolls to depth needed to document the indicators. Horizon 1 2 dicators (check here is to layers luck ed Below Dark Surface luck Mineral locky Peat or Peat	s observe the this positive that this positive that this positive that the positive	the absence of in that the absence of in the a	mly one sat they po	C=Concentration SSESS pr SC=Concentration 10YR SEENT	y indicator. FSA slides imary hydrology indica series Drainage Class: Rec Color (Moist) 5/8	very poorly -Covered/Coated Sand Gox Features	ration rises Frains; Location: PL= Type C s for Problem A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	s location and slightly going slightly	Texture (e.g. clay, sand, loam) silty clay loam clay
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 9 NRCS Hydric S	No primary of points go po	hydrology indicators on NW contrast with Montgomery silty of Vertic Endoaquolls to depth needed to document the indicators. Horizon 1 2 dicators (check here is to layers luck ed Below Dark Surface luck Mineral locky Peat or Peat	s observe the this positive that this positive that this positive that the positive	the absence of in that the absence of in the a	mly one sat they po	C=Concentration SSESS pr SC=Concentration 10YR SEENT	y indicator. FSA slides imary hydrology indica series Drainage Class: Rec Color (Moist) 5/8	very poorly -Covered/Coated Sand Gox Features	ration rises Frains; Location: PL= Type C s for Problem A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	s location and slightly going slightly	Texture (e.g. clay, sand, loam) silty clay loam clay



Project/Site: Emerald Park Landfill - Western Expansion Wetland ID: Adj to W2A Sample Point W2-8u

VEGETATION (Species identified in all uppercase are non-native species.)

Tree Stratum (Plot size: 30 ft radius)

Tree Stratum (P	(Species identified in all uppercase are non-na lot size: 30 ft radius)	tive speci	es.)		
Tiee Stratum (i	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
3.					··
4.					Total Number of Dominant Species Across All Strata: 2 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. 10 x 2 = 20
					FAC spp. 8 x 3 = 24
	ratum (Plot size: 15 ft radius)				FACU spp. 2 x 4 = 8
1.					UPL spp. 0 x 5 = 0
2.					
3.					Total <u>20</u> (A) <u>52</u> (B)
4.					
5.					Prevalence Index = B/A = 2.600
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					✓ Yes ☐ No Dominance Test is > 50%
	Total Cover =	0			
Llank Chrahina (DI	at size. Eft redice)				☐ Yes ☑ No Morphological Adaptations (Explain) *
1.	ot size: 5 ft radius) ECHINOCHLOA CRUS-GALLI	10	Y	FACW	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
2.	Agrostis hyemalis	8	Y	FAC	* Indicators of hydric soil and wetland hydrology must be
3.	Ambrosia artemisiifolia	2	N	FACU	present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					Definitions of Togotation Stratal
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	20			
14/ 1 1/2 2:	(D) () () ()				
•	tum (Plot size: 30 ft radius)				
1.					
2.					History butter Variation Brossett CV CAL
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
<u>4.</u> 5.					
J.	Total Cover =	0			
Remarks:	Sovbean crop recently harvested and so		led: weer	ds presen	t. Had the soybean crop been present, it could potentially change the dominant
. torriarito.	species in the herb plot.	J.IO PIOW	Ju, 11000	20 prodein	a 33,33411 Grop 20011 process, it doubt potentially offunge the dominant

Additional Remarks:

Hydrophytic vegetation and hydric soils determined present, although both factors were significantly disturbed. A lack of primary hydrology indicators, contrasting with points to the north, and FSA slide interpretations supported an upland determination.



Project/Site:		ark Landfill - Wester		sion			Stantec Project #:	193702557		Date:	10/23/14
Applicant:		Disposal Services, II	NC	l=: conti		Jaron Ti	11,			County:	Waukesha
Investigator #1: Soil Unit:		y silty clay loam		Invesu	gator #2:		IOCK I/WWI Classification:	Mone		State: Wetland ID:	Wisconsin W2A
Landform:	Hill Slope	y Silty Clay Ioain		Loc	al Relief:			None		Sample Point:	
Slope (%):	1-2	Latitude:	N/A		ongitude:			Datum:	N/A		Farmed Wetland
Are climatic/hyc		itions on the site typ				If no, explai		☑ Yes □	No	Section:	36
Are Vegetation	☑ , Soil ☑,	or Hydrology 🗆 sigi	nificantly	disturbe	d?		Are normal circumsta	ances present	13	Township:	5 N
		or Hydrology 🔲 nat	urally pro	plematic	:?		☐ Yes	⊠No		Range:	20 E
SUMMARY OF											
Hydrophytic Ve				☑ Yes				Hydric Soils			
Wetland Hydrol			Name of the		□ No	and the state of	Date laurant to a con	Is This Sam	Ing Point \	Nithin A Wetla	and? ✓ Yes No
Remarks:							Point located in a rec				
		rology indicators.	tances a	Ssumed	nor prese	ent. Pon	is on transact going a	er nom mis b	Dirit indicate	e graduar upiai	nd transition based on
LIVEROLOGY	primary nyc	irology iridica.ora.									
HYDROLOGY						200					
		tors (Check here if	indicator	s are no	t present	□):			Casandanu		
<u>Primary:</u> □	A1 - Surface	Water		П	B9 - Wate	r-Stained I	eaves		Secondary:	B6 - Surface So	il Cracks
	A2 - High Wa				B13 - Aqua		caves			B10 - Drainage	
	A3 - Saturation				B14 - True					C2 - Dry-Season	
	B1 - Water M B2 - Sedimer				C1 - Hydro		le Odor spheres on Living Roots			C8 - Crayfish Bu	urrows Visible on Aerial Imagery
	B3 - Drift Dep				C4 - Prese				▽	D1 - Stunted or	Stressed Plants
	B4 - Algal Ma	t or Crust			C6 - Rece	nt Iron Re	luction in Tilled Soils			D2 - Geomorphi	
	B5 - Iron Dep				C7 - Thin I				✓	D5 - FAC-Neutra	al Test
		on Visible on Aerial Ima Vegetated Concave S			D9 - Gaug Other (Exp						
	D0 0pa.00.)	rogolatou comoure c	uuoo		0 tilo: (EA)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	name)				
Field Observat	ions:										
Surface Water I		☐ Yes ☑ No	Depth:		(in.)			VAV. 41		10 -	V
Water Table Pre	esent?	☑ Yes ☐ No	Depth:	9	(in.)			Wetland Hy	arology Pr	esent? 🗹	Yes □ No
Saturation Pres	ent?	☑ Yes □ No	Depth:	0	(in.)						
Describe Record	ed Data (stre	eam gauge, monitorin	ng well. ae	erial photo	os. previo	us inspec	tions), if available:		Annual Crop	Slide Review	
		3 3. ,									
Remarks:	FSA slides	indicates wetlands i	n this loc								-4 inches, were not
Remarks:		indicates wetlands i etween 4-7 inches,		cation. S	ome wetla	and hydro	ology appears perched				-4 inches, were not
Remarks:				cation. S	ome wetla	and hydro	ology appears perched				-4 inches, were not
				cation. S	ome wetla	and hydro	ology appears perched				-4 inches, were not
Remarks: SOILS Map Unit Name	saturated b	etween 4-7 inches,	with satu	cation. S	ome wetla	and hydro t 7 inches	ology appears perched and below.	d. Saturated			-4 inches, were not
SOILS	saturated b		with satu ay loam	cation. S	ome wetla	and hydro t 7 inches	ology appears perched	d. Saturated			-4 inches, were not
SOILS Map Unit Name Taxonomy (Sub	saturated b : : :group):	etween 4-7 inches, Montgomery silty cl Vertic Endoaquolls	with satu	cation. Seration re	ome wetla	and hydro t 7 inches	ology appears perched and below.	d. Saturated	soils occurr	ed between 0-	-4 inches, were not
SOILS Map Unit Name Taxonomy (Sub	saturated b : : :group):	etween 4-7 inches, Montgomery silty cl Vertic Endoaquolls	with satu	cation. Seration re	ome wetla	and hydro t 7 inches	ology appears percheds and below. eries Drainage Class: Debeteion, RM=Reduced Matrix CS*	d. Saturated	soils occurr	ed between 0-	-4 inches, were not Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	saturated b : group): tion (Describe to the	etween 4-7 inches, Montgomery silty cl Vertic Endoaquolls	ay loam	cation. Solution re	ome wetla	and hydro t 7 inches	ology appears percheds and below. eries Drainage Class: Debeteion, RM=Reduced Matrix CS*	d. Saturated very poorly =Covered/Coated Sand G	soils occurr	ed between 0-	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to tr Depth 12	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indic Horizon	ay loam cator or confirm to Color (cation. So tration re he absence of in Matrix (Moist) 3/1	ome wetlaturning at didicators.) (Type:	and hydro t 7 inches S C=Concentration	ology appears perchects and below. eries Drainage Class: DeDepletion, RM=Reduced Matrix, CS- Red Color (Moist)	very poorly **Covered/Coated Sand Good Features** %*	soils occurr srains; Location: PL= Type	ed between 0-	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	: group): tion (Describe to the Depth	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice	ay loam	cation. So tration re the absence of in Matrix (Moist)	ome wetla turning af	and hydro t 7 inches S	eries Drainage Class: Debeteion, RM=Reduced Matrix, CS-Red Color (Moist)	very poorly -Covered/Coated Sand Gox Features %	soils occurr	Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	group): tion (Describe to the Depth 12 24	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indic Horizon	ay loam cator or confirm to Color (ne absence of in Matrix (Moist) 3/1 5/1	ome wetlaturning at dicators.) (Type:	s C=Concentration 10YR	ology appears perchects and below. eries Drainage Class: DeDepletion, RM=Reduced Matrix, CS- Red Color (Moist)	very poorly **Covered/Coated Sand Good Features** %*	soils occurr srains; Location: PL= Type	Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam) silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	group): tion (Describe to IT Bottom Depth 12 24	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indic Horizon 1 2	ay loam Cator or confirm to 10YR 10YR	cation. Some absence of in Matrix (Moist) 3/1 5/1	ome wetlaturning at dicators.) (Type:	SC=Concentration 10YR	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist) 5/6	very poorly **Covered/Coated Sand G dox Features % 20	soils occurr srains; Location: PL= Type C	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	group): tion (Describe to the Depth 12 24	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indic Horizon 1 2	ay loam Cator or confirm to Color of 10YR 10YR	ne absence of in Matrix (Moist) 3/1 5/1	ome wetlaturning at dicators.) (Type:	s C=Concentration 10YR	eries Drainage Class: DeDepletion, RM=Reduced Matrix, CS- Red Color (Moist) 5/6	very poorly **Covered/Coated Sand Good Features** %* 20	soils occurr srains; Location: PL= Type C	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	group): tion (Describe to IT Bottom Depth 12 24	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	ay loam cator or confirm to Color 10YR 10YR	cation. Sometime absence of in Matrix (Moist) 3/1	dicators.) (Type:	sand hydret 7 inches S C=Concentration	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist) 5/6	very poorly **Covered/Coated Sand G dox Features % 20	soils occurr srains; Location: PL= Type C	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	saturated b group): tion (Describe to tr Bottom Depth 12 24	Montgomery silty cl Vertic Endoaquolls e depth needed to document the indice Horizon 1 2	ay loam Color of 10YR 10YR	he absence of in Matrix (Moist) 5/1	dicators.) (Type:	sand hydret 7 inches S C=Concentration 10YR	plogy appears perchects and below. eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS* Red Color (Moist) 5/6	very poorly Covered/Coated Sand G dox Features % 20	Soils occurr Srains; Location: PL= Type C	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12	group): tion (Describe to If Bottom Depth 12 24	Montgomery silty cl Vertic Endoaquolls Horizon 1 2	ay loam cator or confirm t Color 10YR 10YR	he absence of in Matrix (Moist) 3/1 5/1	dicators.) (Type:	C=Concentration 10YR	clogy appears perchects and below. eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS: Red Color (Moist) 5/6	very poorly Covered/Coated Sand G dox Features %	Soils occurr Strains; Location: PL= Type C	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric S	saturated b group): tion (Describe to tr Depth 12 24 Soil Field In	Montgomery silty cl Vertic Endoaquolls e depth needed to document the indice Horizon 1 2	ay loam cator or confirm t Color 10YR 10YR	he absence of in Matrix (Moist) 5/1	wetlaturning at dicators.) (Type: % 100 80	SSC=Concentration 10YR enent □)	eries Drainage Class: DeDepletion, RM=Reduced Matrix CS-Red Color (Moist) 5/6	very poorly Covered/Coated Sand G Saturated Sand G OX Features % 20 Indicators	Soils occurr Srains; Location: PL= Type C s for Problem	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric S	saturated b group): tion (Describe to # Bottom Depth 12 24 Soil Field In A1- Histosol	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check her	ay loam cator or confirm t Color 10YR 10YR	he absence of in Matrix (Moist) 3/1 5/1 cators are	wetlaturning at dicators.) (Type: % 100 80 en not press S4 - Sand:	SSC-Concentration	eries Drainage Class: DeDepletion, RM=Reduced Matrix CS-Red Color (Moist) 5/6	very poorly	rains; Location: PL= Type C 5 for Problem A16 - Coast	Pore Lining, M=Matrix) Location M prairic Soils ¹ Prairie Redox	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric S	saturated b group): tion (Describe to tr Depth 12 24 Soil Field In	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here	ay loam cator or confirm t Color 10YR 10YR	he absence of in Matrix (Moist)	wetlaturning at dicators.) (Type: % 100 80	SSC=Concentration 10YR	eries Drainage Class: DeDepletion, RM=Reduced Matrix CS-Red Color (Moist) 5/6	very poorly Covered/Coated Sand Gox Features % 20 Indicators	Soils occurr Srains; Location: PL= Type C s for Problem A16 - Coast F12 - Iron-M	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric S	saturated b group): tion (Describe to III) Bottom Depth 12 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge	Montgomery silty cl Vertic Endoaquolls Vertic Endoaquolls Horizon 1 2 dicators (check here) stic n Sulfide	ay loam cator or confirm t Color 10YR 10YR	he absence of in Matrix (Moist) 5/1	wetlaturning at dicators.) (Type: % 100 80 er not press \$4 - Sand: \$5 - Sand: \$5 - Sand: \$5 - Sand: \$1 - Loam	SSC=Concentration 10YR	eries Drainage Class: DeDepletion, RM=Reduced Matrix CS-Red Color (Moist) 5/6	very poorly Covered/Coated Sand G Oox Features % Indicators	Soils occurr Srains; Location: PL= Type C s for Problem A16 - Coast \$7 - Dark Stg T12 - Iron-M TF12 - Very	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric S	saturated b group): tion (Describe to # Bottom Depth 12 24 Soil Field In A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratified	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check her pipedon stic n Sulfide I Layers	ay loam cator or confirm t Color 10YR 10YR	he absence of in Matrix (Moist) 3/1 5/1	dicators.) (Type: % 100 80	SC-Concentration 10YR sent	eries Drainage Class: DeDepletion, RM=Reduced Matrix, CS-Red Color (Moist) 5/6 Matrix	very poorly Covered/Coated Sand G Oox Features % Indicators	Soils occurr Srains; Location: PL= Type C s for Problem A16 - Coast \$7 - Dark Stg T12 - Iron-M TF12 - Very	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric S	saturated b group): tion (Describe to it Bottom Depth 12 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here bipedon stic n Sulfide t Layers uck	ay loam cator or confirm t Color 10YR 10YR	he absence of in Matrix (Moist) 3/1 5/1	dicators.) (Type: // dicators.) (Type: // 100 // 80	SC=Concentration 10YR	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist) 5/6	very poorly Covered/Coated Sand G Oox Features % Indicators	Soils occurr Srains; Location: PL= Type C s for Problem A16 - Coast \$7 - Dark Stg T12 - Iron-M TF12 - Very	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric S	saturated b group): tion (Describe to it Bottom Depth 12 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here silved on Sulfide to Layers uck and Below Dark Surface	ay loam cator or confirm t Color 10YR 10YR	he absence of in Matrix (Moist)	dicators.) (Type: % 100 80	sand hydret 7 inches To 7 inch	eries Drainage Class: DeDepletion, RM=Reduced Matrix, CS- Red Color (Moist)	very poorly Covered/Coated Sand G Oox Features % Indicators	Soils occurr Srains; Location: PL= Type C s for Problem A16 - Coast \$7 - Dark Stg T12 - Iron-M TF12 - Very	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric :	saturated b group): tion (Describe to # Bottom Depth 12 24 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplett A12 - Thick E S1 - Sandy N	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check her bipedon stic n Sulfide I Layers uck de Below Dark Surface luck Mineral	ay loam cator or confirm t Color 10YR 10YR	he absence of in Matrix (Moist) 5/1	dicators.) (Type: % 100 80 e not press \$4 - Sand: \$5 - Sard: \$6 - Stripp F1 - Loam F2 - Loam F2 - Loam F3 - Deple F6 - Redo:	SC=Concentration 10YR 10YR 19 Gleyed N y Redvax y Muck Mi y Gleyed I y Gleyed I y Gleyed I y Gleyed I xet Dark St	eries Drainage Class: DeDepletion, RM=Reduced Matrix CS-Red Color (Moist) 5/6	very poorly	Type C 5 for Problem A16 - Coast \$7 - Dark \$\$\$ F12 - Iron-M Other (Explain)	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric S	saturated b group): tion (Describe to # Bottom Depth 12 24 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplett A12 - Thick E S1 - Sandy N	Montgomery silty cl Vertic Endoaquolls e depth needed to document the indice Horizon 1 2 dicators (check hell bipedon stic n Sulfide I Layers uck ad Below Dark Surface bark Surface	ay loam cator or confirm t Color 10YR 10YR	he absence of in Matrix (Moist) 5/1	wetlaturning at dicators.) (Type: % 100 80	SC=Concentration 10YR 10YR 19 Gleyed N y Redvax y Muck Mi y Gleyed I y Gleyed I y Gleyed I y Gleyed I xet Dark St	eries Drainage Class: DeDepletion, RM=Reduced Matrix CS-Red Color (Moist) 5/6	very poorly	Type C 5 for Problem A16 - Coast \$7 - Dark \$\$\$ F12 - Iron-M Other (Explain)	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric 3	saturated b group): tion (Describe to # Bottom Depth 12 24 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplett A12 - Thick E S1 - Sandy N	Montgomery silty cl Vertic Endoaquolls e depth needed to document the indice Horizon 1 2 dicators (check here bipedon stic n Sulfide I Layers uck and Below Dark Surface lark Surface luck Mineral cky Peat or Peat	ay loam Color 10YR 10YR re if indic	he absence of in Matrix (Moist) 3/1 5/1	wetlaturning at dicators.) (Type: % 100 80	SC=Concentration 10YR 10YR 19 Gleyed N y Redvax y Muck Mi y Gleyed I y Gleyed I y Gleyed I y Gleyed I xet Dark St	eries Drainage Class: DeDepletion, RM=Reduced Matrix CS-Red Color (Moist) 5/6	very poorly	Soils occurr Srains: Location: PL= Type C s for Problem A16 - Coast F12 - Iron-M TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric S	saturated b group): tion (Describe to it Bottom Depth 12 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1 - Deplete A12 - Thick E S1 - Sandy M S3 - 5 cm Mu	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here bipedon stic n Sulfide st Layers uck and Below Dark Surface lark Surface luck Peat or Peat	ay loam Color or confirm to 10YR 10YR re if indic	he absence of in Matrix (Moist) 3/1 5/1 eators are	dicators.) (Type: dicators.) (Type: % 100 80	sand hydret 7 inches To In	eries Drainage Class: Debepleton, RM=Reduced Matrix, CS-Red Color (Moist)	very poorly Covered/Coated Sand Gox Features % 20 Indicators Indicators of hydrophy Hydric Soil	Soils occurr Frains: Location: PL= Type C Sofor Problem A16 - Coast 57 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay es urface
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric 3	saturated b group): tion (Describe to III Bottom Depth 12 24 Soil Field In A1 - Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A10 - 2 cm M A11 - Deplete A12 - Thick S1 - Sandy S3 - 5 cm Type: Sample poi	Montgomery silty cl Vertic Endoaquolls e depth needed to document the indice Horizon 1 2 dicators (check here bipedon stic n Sulfide t Layers uck and Below Dark Surface lark Surface luck Mineral cky Peat or Peat N/A nt existed in a tilled	ay loam Color of Confirm to 10 yr R 10 yr R	he absence of in Matrix (Moist) 3/1 5/1	wetlaturning at dicators.) (Type: % 100 80	SSC=Concentration 10YR 10YR tent	eries Drainage Class: DeDepletion, RM=Reduced Matrix CS Red Color (Moist) 5/6	very poorly Covered/Coated Sand Gox Features % 20 Indicators Indicators of hydrophy Hydric Soil	Soils occurr Srains; Location: PL= Type C 5 for Problem A16 - Coast \$57 - Dark \$0 \$712 - Iron-M TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay es urface present, unless disturbed or problematic. Yes \(\) No rely was met. Likely
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 12 NRCS Hydric S	saturated b group): tion (Describe to III Bottom Depth 12 24 Soil Field In A1 - Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratifiec A10 - 2 cm M A11 - Deplete A12 - Thick S1 - Sandy S3 - 5 cm Type: Sample poi met F3 in ti	Montgomery silty cl Vertic Endoaquolls e depth needed to document the indice Horizon 1 2 dicators (check here bipedon stic n Sulfide tl Layers uck and Below Dark Surface bark Surface luck Mineral cky Peat or Peat N/A nt existed in a tilled ne past as well. And	ay loam Color of Confirm to 10 yr R 10	beation. Solution relation relations relations relations relations relations relations relations relations relations are relations.	wetlaturning at dicators.) (Type: % 100 80	SSC=Concentration 10YR	eries Drainage Class: DeDepletion, RM=Reduced Matrix CS Red Color (Moist) 5/6	very poorly Covered/Coated Sand Gox Features % 20 Indicators Indicators of hydrophy Hydric Soil of to thickening W2-8w to det	Soils occurr Srains; Location: PL= Type C 5 for Problem A16 - Coast \$57 - Dark \$0 \$712 - Iron-M TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay es urface

Sample Point W2-8w



Project/Site: Emerald Park Landfill - Western Expansion

WETLAND DETERMINATION DATA FORM Midwest Region

Wetland ID:

W2A

VEGETATION (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 FACW spp. 30 x 2 = 60 x 3 = FAC spp. 15 45 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 1. UPL spp. 0 x 5= 2 3. Total 105 4 5. Prevalence Index = B/A = 2.333 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ✓ No Rapid Test for Hydrophytic Vegetation 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 0 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * ECHINOCHLOA CRUS-GALLI **FACW** 30 * Indicators of hydric soil and wetland hydrology must be 2 Agrostis hyemalis 15 FAC present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. --5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 45 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 5. Total Cover = 0 Remarks: Sample point is located in a low quality farmed wetland, location has been greatly disturbed due to vegetation selection / removal and recent soil tilling. Concentration of annual wetland weeds greater in the part of farmed W-2 than in farmed areas outside W-2.

Additional Remarks:

Wetland primarily determined on the basis of water table depth and FSA slide review.



Are Vegetation	Advanced Eric Parker Saylesville Hill Slope 0-2 Irologic conc , Soil , Soil , FINDINGS getation Pre ogy Present	Latitude: Latitude: ditions on the site typor Hydrology Inates or Hydrology Inates sent?	N/A Dical for Dificantly Urally pro	Investi Loc L this time disturbe oblemati P Yes	ed? c? No	NV Convex N/A (If no, expla	VI/WWI Classification: mini remarks) Are normal circumsta ☐ Yes	Datum: ☑ Yes □ ances presen ☑ No Hydric Soils Is This Sam	N/A No t? Present?	Section: Township: Range: Within A Wetla	W2-9u Agricultural Field 36 5 N 20 E ☐ Yes ☑ No nd? ■ Yes ☑ No
		cumstances assume					310 34444571(51 50				
HYDROLOGY											
Primary:	A1 - Surface A2 - High Wa A3 - Saturati B1 - Water M B2 - Sedime B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundati	ater Table on larks nt Deposits posits at or Crust	gery		B9 - Wate B13 - Aqu B14 - True C1 - Hydri C3 - Oxidi C4 - Prese	er-Stained atic Fauna e Aquatic I ogen Sulfi zed Rhizo ence of Re ent Iron Re Muck Surf ge or Well	a Plants de Odor spheres on Living Roots educed Iron duction in Tilled Soils ace Data				Patterns n Water Table urrows Visible on Aerial Imagery Stressed Plants c Position
Surface Water I Water Table Pro Saturation Pres	Present? esent? ent?	☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No	Depth: Depth: Depth:		(in.) (in.) (in.)		ii aa) if aa ii ah la	Wetland Hy			Yes ☑ No
		eam gauge, monitorin					•	ando ot this as		Slide Review	and acuth
Remarks:	Passes FA	C-ineutral only base	a on nor	i-domina	ini liebrea	iker. FS	A slides indicated upla	inus at this po	omi and goi	ng west, north	and south.
SOILS											
Map Unit Name		Saylesville silt loam				S	Series Drainage Class:	moderately w	vell to well		
Taxonomy (Sub		Typic Hapludalfs									
Top	Bottom	he depth needed to document the indic	ator or confirm	the absence of in	ndicators.) (Type:	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS	Covered/Coated Sand Coated San	Grains; Location: PL=	Pore Lining, M=Matrix)	Texture
Depth	Depth	Horizon	Color	(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)
0	15	1	10YR	3/1	100					Location	silty clay loam
15	24	2	10YR	5/1	55	10YR	5/6	45	С	M	clay
NDCS Hydric		 Idicators (check her	o if indi	natora ar	o not proc	ont 🖂	 \.	Indicators	for Droblen		
, 0000000000000000000000000000000000000	A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy M	oipedon stic en Sulfide d Layers luck ed Below Dark Surface Dark Surface	o ii inul		\$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam	y Gleyed I y Redox oed Matrix y Muck M y Gleyed eted Matrix x Dark Su eted Dark	Matrix ineral Matrix C rface Surface		S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Prairie Redox urface anganese Masse Shallow Dark Su ain in Remarks)	
Restrictive Layer	Type:			Depth:	N/A			Hydric Soil			Yes ☑ No
(If Observed) Remarks:	• • • • • • • • • • • • • • • • • • • •		o but a	•		12 00 50	rizon 1 has value too				• •
romans.		atrix, on threshold b				12 43 110	nizon i nas value (00	ingii. Neaiby	Jone With	1 44-2 to east V	rere dance and nad



Project/Site: Emerald Park Landfill - Western Expansion Wetland ID: Adj to W2A Sample Point W2-9u **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 FACW spp. 5 x 2 = 10 x 3 = FAC spp. 25 75 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 1. UPL spp. 0 x 5= 2 3. Total 30 85 4 5. Prevalence Index = B/A = 2.833 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ✓ No Rapid Test for Hydrophytic Vegetation 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 0 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * Agrostis hyemalis 25 FAC * Indicators of hydric soil and wetland hydrology must be 2 ECHINOCHLOA CRUS-GALLI Ν **FACW** 5 present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. --5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 30 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No

Additional Remarks:

4. 5.

Remarks:

Hydrophytic vegetation was present, athough soils and vegetation were significantly disturbed. FSA slides indicated uplands in this vicinity and to north and south.

Vegetation was recently harvested and soils plowed, only leaving weeds. Recent soybean crop plowed under; but if cover could be estimated from

Total Cover =

stubble, it could have changed the dominants.

0



	Emorald Da	ark Landfill Maatar	n Evnon	nion			Stanton Drainet #:	102702557		Doto:	10/22/14	
Project/Site:		ark Landfill - Wester		SION			Stantec Project #:	193702557		Date:	10/23/14	
Applicant:		Disposal Services, II	NC							County:	Waukesha	
Investigator #1:				Invest	gator #2:					State:	Wisconsin	
Soil Unit:		y silty clay loam					/I/WWI Classification	n: E1K			W2A	
Landform:	Depression	l		Loc	al Relief:	Concave)			Sample Point:	W2-9w	
Slope (%):	0-2	Latitude:			ongitude:			Datum:	N/A	Community ID:	Wet Meadow	
Are climatic/hyd	drologic cond	litions on the site typ	cical for t	his time	of year?	(If no, explai	min remarks)		No	Section:	36	
Are Vegetation	□. Soil □.	or Hydrology sign	nificantly	disturbe	d?		Are normal circums	tances presen	13	Township:	5 N	
		or Hydrology 🗆 nat						□No		Range:	20 E	
SUMMARY OF		of Hydrology E flat	dicary pro	JO CITI SIGN				2.10		rtange.	20 L	
		10		- 17.5				The date O - De	B 10			
Hydrophytic Ve					□ No			Hydric Soils				
Wetland Hydrol				72100	□ No			is This Sam	ng Point	Within A Wetla	ind? <u>□ Yes □ N</u>	0
Remarks:	Antecedent	t moisture conditions	s normal	based o	n WETS	analysis.						
LIV/DD01-00V												
HYDROLOGY												
Wetland Hydr	ology Indica	ators (Check here if	indicator	s are no	t present	Fit						
Primary		(0.1100)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		PR 43-310				Secondary:			
	A1 - Surface	Water			B9 - Wate	r-Stained	_eaves			B6 - Surface So	il Cracks	
	A2 - High Wa				B13 - Aqu					B10 - Drainage		
	A3 - Saturation				B14 - True					C2 - Dry-Season		
	B1 - Water M	larks			C1 - Hydro	ogen Sulfic	de Odor			C8 - Crayfish Bu		
	B2 - Sedimer	nt Deposits			C3 - Oxidi:	zed Rhizo	spheres on Living Roots			C9 - Saturation	Visible on Aerial Imager	ry
	B3 - Drift Dep	oosits			C4 - Prese	ence of Re	duced Iron			D1 - Stunted or		
	B4 - Algal Ma	at or Crust			C6 - Rece	nt Iron Re	duction in Tilled Soils		V	D2 - Geomorphi	c Position	
	B5 - Iron Dep	osits			C7 - Thin I	Muck Surf	ace		V	D5 - FAC-Neutr	al Test	
		on Visible on Aerial Ima			D9 - Gaug							
	B8 - Sparsely	Vegetated Concave S	urface		Other (Exp	olain in Re	marks)					
Field Observat	tions:											
Surface Water		□ Voc. □ No.	Donth:		(in)							
		☐ Yes ☑ No	Depth:	•	(in.)			Wetland Hy	drology Pr	esent?	Yes □ No	
Water Table Pr		☑ Yes ☐ No	Depth:	6	(in.)			•				
Saturation Pres	ent?	☑ Yes □ No	Depth:	0	(in.)							
Describe Record	led Data (str	eam gauge, monitorin	n well a	erial nhot	os previoi	us inspec	tions) if available:					-
	(gg-,	· 9 · · · · · · , · · · ·		, р		,,					
Remarks:												
Remarks:												
Remarks.												
SOILS							·					
SOILS Map Unit Name		Montgomery silty cl				S	eries Drainage Class	s: very poorly				
SOILS Map Unit Name Taxonomy (Sub	group):	Vertic Endoaquolls					<u> </u>					
SOILS Map Unit Name Taxonomy (Sub	group):	Vertic Endoaquolls		he absence of in	ndicators.) (Type:		eries Drainage Class		Grains; Location: PL=	Pore Lining, M=Matrix)		
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to the	Vertic Endoaquolls			ndicators.) (Type:		n, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand G	Grains; Location: PL=	Pore Lining, M=Matrix)	Texture	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to the Bottom	Vertic Endoaquolls ne depth needed to document the indic	cator or confirm t	Matrix			n, D=Depletion, RM=Reduced Matrix, C	CS=Covered/Coated Sand Gedox Features		ı		im)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to the Bottom Depth	Vertic Endoaquolls ne depth needed to document the indic Horizon	cator or confirm to	Matrix (Moist)	%	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, C Re Color (Moist)	S=Covered/Coated Sand Gedox Features	Туре	Location	(e.g. clay, sand, loa	ım)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to the Bottom Depth	Vertic Endoaquolls ne depth needed to document the indic Horizon 1	Color 10YR	Matrix (Moist) 2/1	% 90	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 5/1	edox Features %	Type D	Location M	(e.g. clay, sand, loa	ım)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to the Bottom Depth	Vertic Endoaquolls ne depth needed to document the indic Horizon	cator or confirm to	Matrix (Moist)	%	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, C Re Color (Moist)	S=Covered/Coated Sand Gedox Features	Туре	Location	(e.g. clay, sand, loa	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to the Bottom Depth	Vertic Endoaquolls ne depth needed to document the indic Horizon 1	Color 10YR	Matrix (Moist) 2/1	% 90	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 5/1	edox Features %	Type D	Location M	(e.g. clay, sand, loa	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	ogroup): otion (Describe to the Bottom Depth 8	Vertic Endoaquolls ne depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/2	% 90 95	C=Concentratio	n. D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 5/1 5/6 5/6	S=Covered/Coated Sand Gedox Features % 8 8 2	Type D C C	Location M M	(e.g. clay, sand, loa silt loam silt loam silty clay loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to the Bottom Depth 8 18 24	Vertic Endoaquolls the depth needed to document the indice Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	% 90 95 90	C=Concentratio	D=Depletion, RM=Reduced Matrix, CRE Color (Moist) 5/1 5/6 5/6 5/6	edox Features 8 8 2 5 10	Type D C	Location M M M M	(e.g. clay, sand, loa silt loam silt loam	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18	ogroup): otion (Describe to II Bottom Depth 8 18 24	Vertic Endoaquolls ne depth needed to document the indice Horizon 1 2 3	Color 10YR 10YR	Matrix (Moist) 2/1 4/2	% 90 95	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CRE Color (Moist) 5/1 5/6 5/6 5/6	es-covered/Coated Sand Gedox Features % 8 2 5 10	Type D C C C	Location M M M M	(e.g. clay, sand, loa silt loam silt loam silty clay loam silty clay	(mr
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	ogroup): otion (Describe to the Bottom Depth 8 18 24	Vertic Endoaquolls the depth needed to document the indice Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	% 90 95 90	C=Concentratio	D=Depletion, RM=Reduced Matrix, CRE Color (Moist) 5/1 5/6 5/6 5/6	edox Features 8 8 2 5 10	Type D C C	Location M M M M	(e.g. clay, sand, loa silt loam silt loam silty clay loam	m)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18	ogroup): otion (Describe to II Bottom Depth 8 18 24	Vertic Endoaquolls ne depth needed to document the indice Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	% 90 95 90	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CRE Color (Moist) 5/1 5/6 5/6 5/6	es-covered/Coated Sand Gedox Features % 8 2 5 10	Type D C C C	Location M M M M	(e.g. clay, sand, loa silt loam silt loam silty clay loam silty clay	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18	ogroup): ption (Describe to II Bottom Depth 8 18 24	Vertic Endoaquolls the depth needed to document the indice Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1 	% 90 95 90 	C=Concentratio	Depletion, RM=Reduced Matrix, CRE Color (Moist) 5/1 5/6 5/6 5/6	es-covered/Coated Sand Gedox Features % 8 2 5 10	Type D C C C	Location M M M M	(e.g. clay, sand, loa silt loam silt loam silty clay loam silty clay	am)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18	pgroup): ption (Describe to the source of t	Vertic Endoaquolls ne depth needed to document the indice Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1 	90 95 90 	10YR 10YR 10YR 10YR 10YR 	n. D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 5/1 5/6 5/6 5/6 	88 2 5 10	Type D C C C	Location M M M	(e.g. clay, sand, loa silt loam silt loam silty clay loam silty clay	am)
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SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 18 NRCS Hydric	pgroup): ption (Describe to III Bottom Depth 8 18 24 Soil Field In A1- Histosol A2 - Histic Ep	Vertic Endoaquolls the depth needed to document the indice Horizon 1 2 3 dicators (check her	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	% 90 95 90 e not pres \$4 - Sand \$5 - Sand	10YR 10YR 10YR 10YR sent y Gleyed I y Redox	n. D=Depletion, RM=Reduced Matrix, C Re Color (Moist) 5/1 5/6 5/6 5/6 	SS=Covered/Coated Sand Gedox Features % 8 2 5 10 Indicators	Type D C C C s for Probler S7 - Dark S	Location M M M M natic Soils Prairie Redox	(e.g. clay, sand, loa silt loam silt loam silty clay loam silty clay 	am)
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 18 NRCS Hydric	pgroup): ption (Describe to the source of t	Vertic Endoaquolls the depth needed to document the indice Horizon 1 2 3 dicators (check here objedon stic	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	90 95 90 en not press \$4 - Sand; \$5 - Sand; \$6 - Strip\$	10YR 10YR 10YR 10YR 10YR sent	n. D=Depletion, RM=Reduced Matrix, CR6 Color (Moist) 5/1 5/6 5/6 5/6 : //atrix	SS=Covered/Coated Sand Gedox Features % 8 2 5 10 Indicators	Type D C C C s for Probler 87 - Dark S F12 - Iron-N	Location M M M M natic Soils ¹ Prairie Redox urface langanese Masse	(e.g. clay, sand, loa silt loam silt loam silty clay loam silty clay 	am)
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 18 NRCS Hydric	Bottom Depth 8 18 24 Soil Field In A1- Histosol A2 - Histic E _I A3 - Black Hi A4 - Hydroge	Vertic Endoaquolls The depth needed to document the indice Horizon 1 2 3 dicators (check here bipedon stic on Sulfide	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	90 95 90 en not press \$4 - Sand \$5 - Sand; \$6 - Stripp F1 - Loam	10YR 10YR 10YR 10YR 10YR sent y Redox y Redox y Redox y Muck Mi	n. D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 5/1 5/6 5/6 5/6	SS=Covered/Coated Sand G Edox Features % 8 2 5 10 Indicators	Type D C C C s for Problem 87 - Dark S F12 - Iron-M TF12 - Very	Location M M M M natic Soils Prairie Redox urface langanese Masse Shallow Dark St	(e.g. clay, sand, loa silt loam silt loam silty clay loam silty clay 	(max
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 18 NRCS Hydric	pgroup): ption (Describe to III Bottom Depth 8 18 24 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier	Vertic Endoaquolls the depth needed to document the indice Horizon 1 2 3 dicators (check here bipedon stic in Sulfide d Layers	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1 eators are	% 90 95 90	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Depletion, RM=Reduced Matrix, CRE Color (Moist) 5/1 5/6 5/6 5/6 : Matrix neral Matrix	SS=Covered/Coated Sand G Edox Features % 8 2 5 10 Indicators	Type D C C C s for Problem 87 - Dark S F12 - Iron-M TF12 - Very	Location M M M M natic Soils ¹ Prairie Redox urface langanese Masse	(e.g. clay, sand, loa silt loam silt loam silty clay loam silty clay 	am)
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 18 NRCS Hydric	pgroup): ption (Describe to III Describe to I	Vertic Endoaquolls The depth needed to document the indice the in	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	% 90 95 90 e not press \$4 - Sand: \$5 - Sand: \$6 - Stripp; F1 - Loam F3 - Deple	10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	n. D=Depletion, RM=Reduced Matrix. CR6 Color (Moist) 5/1 5/6 5/6 5/6	SS=Covered/Coated Sand G Edox Features % 8 2 5 10 Indicators	Type D C C C s for Problem 87 - Dark S F12 - Iron-M TF12 - Very	Location M M M M natic Soils Prairie Redox urface langanese Masse Shallow Dark St	(e.g. clay, sand, loa silt loam silt loam silty clay loam silty clay 	am)
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SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 18 NRCS Hydric	Bottom Depth 8 18 24 Soil Field In A1- Histosol A4- Hydroge A5 - Stratifier A10- 2 cm M A11 - Deplete A11 - Theplete A12 - Thick E	Vertic Endoaquolls The depth needed to document the indice Horizon 1 2 3 dicators (check here bipedon stic en Sulfide d Layers luck and Below Dark Surface bark Surface	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	90 95 90 en not pres \$4 - Sand; \$5 - Sand; \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redole F7 - Deple	10YR 10YR 10YR 10YR 10YR sent y Gleyed I y Redox y Redox y Muck Mi y Gleyed Matrix x Dark Sul eted Dark sete dark	n. D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 5/1 5/6 5/6 5/6 : Matrix neral Matrix face Surface	SS=Covered/Coated Sand G Edox Features % 8 2 5 10 Indicators	Type D C C C s for Problem 87 - Dark S F12 - Iron-M TF12 - Very	Location M M M M natic Soils Prairie Redox urface langanese Masse Shallow Dark St	(e.g. clay, sand, loa silt loam silt loam silty clay loam silty clay 	am)
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 18 NRCS Hydric	Degroup): Detion (Describe to 10 Depth 8	Vertic Endoaquolls The depth needed to document the indice Horizon 1 2 3 dicators (check here oppedon stic en Sulfide d Layers luck ed Below Dark Surface luck Mineral	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	% 90 95 90 enot press \$4 - Sand: \$5 - Sand: \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo.	10YR 10YR 10YR 10YR 10YR sent y Gleyed I y Redox y Redox y Muck Mi y Gleyed Matrix x Dark Sul eted Dark sete dark	n. D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 5/1 5/6 5/6 5/6 : Matrix neral Matrix face Surface	secovered/Coated Sand Codox Features % 8 2 5 10 Indicators	Type D C C C s for Probler A16 - Coast F12 - Iron-M TF12 - Very Other (Explain	Location M M M M	(e.g. clay, sand, loa silt loam silt loam silty clay loam silty clay 	
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 18 NRCS Hydric	Degroup): Detion (Describe to 10 Depth 8	Vertic Endoaquolls The depth needed to document the indice Horizon 1 2 3 dicators (check here bipedon stic en Sulfide d Layers luck and Below Dark Surface bark Surface	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	90 95 90 en not pres \$4 - Sand; \$5 - Sand; \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redole F7 - Deple	10YR 10YR 10YR 10YR 10YR sent y Gleyed I y Redox y Redox y Muck Mi y Gleyed Matrix x Dark Sul eted Dark sete dark	n. D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 5/1 5/6 5/6 5/6 : Matrix neral Matrix face Surface	secovered/Coated Sand Cedox Features % 8 2 5 10 Indicators	Type D C C C s for Probler A16 - Coast F12 - Iron-M TF12 - Very Other (Explain	Location M M M M	(e.g. clay, sand, loa silt loam silt loam silty clay loam silty clay 	
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 18 NRCS Hydric	Degroup): Detion (Describe to 10 Depth 8	Vertic Endoaquolls The depth needed to document the indice Horizon 1 2 3 dicators (check here objection stic en Sulfide d Layers luck ded Below Dark Surface Ourk Surface fluck Mineral luck Peat or Peat	Color 10YR 10YR 10YR re if indice	Matrix (Moist) 2/1 4/2 5/1	90 95 90 en not pres \$4 - Sand; \$5 - Sand; \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redole F7 - Deple	10YR 10YR 10YR 10YR 10YR sent y Gleyed I y Redox y Redox y Muck Mi y Gleyed Matrix x Dark Sul eted Dark sete dark	n. D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 5/1 5/6 5/6 5/6 : Matrix neral Matrix face Surface	secovered/Coated Sand Cedox Features % 8 2 5 10 Indicators	Type D C C C s for Probler A16 - Coast \$7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location M M M M natic Soils ¹ Prairie Redox urface langanese Massr Shallow Dark Stain in Remarks)	(e.g. clay, sand, loa silt loam silt loam silty clay loam silty clay 	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric Restrictive Layer (If Observed)	Bottom Depth 8 18 24 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick E S1 - Sandy M S3 - 5 cm ML	Vertic Endoaquolls The depth needed to document the indice Horizon 1 2 3 dicators (check here objection stic en Sulfide d Layers luck ded Below Dark Surface Ourk Surface fluck Mineral luck Peat or Peat	Color 10YR 10YR 10YR re if indice	Matrix (Moist) 2/1 4/2 5/1	% 90 95 90	10YR 10YR 10YR 10YR 10YR sent y Gleyed I y Redox y Redox y Muck Mi y Gleyed Matrix x Dark Sul eted Dark sete dark	n. D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 5/1 5/6 5/6 5/6 : Matrix neral Matrix face Surface	SS=Covered/Coated Sand Godox Features % 8 2 5 10 Indicators Indicators of hydrophy	Type D C C C s for Probler A16 - Coast \$7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location M M M M natic Soils ¹ Prairie Redox urface langanese Massr Shallow Dark Stain in Remarks)	(e.g. clay, sand, loa silt loam silt loam silt loam silty clay loam silty clay loam silty clay	
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 18 NRCS Hydric	Bottom Depth 8 18 24 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick E S1 - Sandy M S3 - 5 cm ML	Vertic Endoaquolls The depth needed to document the indice Horizon 1 2 3 dicators (check here objection stic en Sulfide d Layers luck ded Below Dark Surface Ourk Surface fluck Mineral luck Peat or Peat	Color 10YR 10YR 10YR re if indice	Matrix (Moist) 2/1 4/2 5/1	% 90 95 90	10YR 10YR 10YR 10YR 10YR sent y Gleyed I y Redox y Redox y Muck Mi y Gleyed Matrix x Dark Sul eted Dark sete dark	n. D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 5/1 5/6 5/6 5/6 : Matrix neral Matrix face Surface	SS=Covered/Coated Sand Godox Features % 8 2 5 10 Indicators Indicators of hydrophy	Type D C C C s for Probler A16 - Coast \$7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location M M M M natic Soils ¹ Prairie Redox urface langanese Massr Shallow Dark Stain in Remarks)	(e.g. clay, sand, loa silt loam silt loam silt loam silty clay loam silty clay loam silty clay	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 18 NRCS Hydric Restrictive Layer (If Observed)	Bottom Depth 8 18 24 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick E S1 - Sandy M S3 - 5 cm ML	Vertic Endoaquolls The depth needed to document the indice Horizon 1 2 3 dicators (check here objection stic en Sulfide d Layers luck ded Below Dark Surface Ourk Surface fluck Mineral luck Peat or Peat	Color 10YR 10YR 10YR re if indice	Matrix (Moist) 2/1 4/2 5/1	% 90 95 90	10YR 10YR 10YR 10YR 10YR sent y Gleyed I y Redox y Redox y Muck Mi y Gleyed Matrix x Dark Sul eted Dark sete dark	n. D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 5/1 5/6 5/6 5/6 : Matrix neral Matrix face Surface	SS=Covered/Coated Sand Godox Features % 8 2 5 10 Indicators Indicators of hydrophy	Type D C C C s for Probler A16 - Coast \$7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location M M M M natic Soils ¹ Prairie Redox urface langanese Massr Shallow Dark Stain in Remarks)	(e.g. clay, sand, loa silt loam silt loam silt loam silty clay loam silty clay loam silty clay	
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 18 NRCS Hydric Restrictive Layer (If Observed)	Bottom Depth 8 18 24 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick E S1 - Sandy M S3 - 5 cm ML	Vertic Endoaquolls The depth needed to document the indice Horizon 1 2 3 dicators (check here objection stic en Sulfide d Layers luck ded Below Dark Surface Ourk Surface fluck Mineral luck Peat or Peat	Color 10YR 10YR 10YR re if indice	Matrix (Moist) 2/1 4/2 5/1	% 90 95 90	10YR 10YR 10YR 10YR 10YR sent y Gleyed I y Redox y Redox y Muck Mi y Gleyed Matrix x Dark Sul eted Dark sete dark	n. D=Depletion, RM=Reduced Matrix, CRe Color (Moist) 5/1 5/6 5/6 5/6 : Matrix neral Matrix face Surface	SS=Covered/Coated Sand Godox Features % 8 2 5 10 Indicators Indicators of hydrophy	Type D C C C s for Probler A16 - Coast \$7 - Dark S F12 - Iron-N TF12 - Very Other (Expla	Location M M M M natic Soils ¹ Prairie Redox urface langanese Massr Shallow Dark Stain in Remarks)	(e.g. clay, sand, loa silt loam silt loam silt loam silty clay loam silty clay loam silty clay	



Project/Site: Emerald Park Landfill - Western Expansion Wetland ID: W2A Sample Point W2-9w **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. x 1 = OBL spp. Total Cover = 0 FACW spp. 70 x 2 = 140 x 3 = FAC spp. 7 21 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 20 80 5 FAC 1. Cornus racemosa UPL spp. 0 x 5= 0 2 3. Total 127 271 4 5. Prevalence Index = B/A = 2.134 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ✓ No Rapid Test for Hydrophytic Vegetation 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 5 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA **FACW** 65 1. * Indicators of hydric soil and wetland hydrology must be 2 20 Ν **OBL** Carex stricta present, unless disturbed or problematic. 3. 20 Ν **FACU** Solidago canadensis Ν OBL **Definitions of Vegetation Strata:** 4. Calamagrostis canadensis 5 5. 5 Ν OBL Carex lacustris **FACW** Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 Spartina pectinata 5 Ν breast height (DBH), regardless of height. 7 Cornus racemosa 2 Ν FAC 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 122 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 5. Total Cover = 0 Remarks: Nearby point outside plot to north, hydrophytic shrubs (Cornus spp. and Salix spp.) dominate. Additional Remarks:



Project/Site:	Emerald Pa	ark Landfill - Wester	n Expans	sion			Stantec Project #:	193702557		Date:	10/23/14
Applicant:		Disposal Services, I					-			County:	Waukesha
Investigator #1:				Investi	gator #2:	Jaron T	ylock			State:	Wisconsin
Soil Unit:	Montgomer	y silty clay loam				NV	VI/WWI Classification:	N/A		Wetland ID:	Adj to W2A
Landform:	Hill Slope				al Relief:					Sample Point:	
Slope (%):	5-6	<u>Latitude:</u>			ongitude:			Datum:		Community ID:	Agricultural Field
		litions on the site type				(If no, expla		☑ Yes □		Section:	36
		or Hydrology 🗆 sig					Are normal circumsti	ances presen	13	Township:	5 N
Are Vegetation	□, Soil □,	or Hydrology 🛘 nat	urally pro	oblemation	c?		☐ Yes	⊠No		Range:	20 E
SUMMARY OF	FINDINGS										
Hydrophytic Ve	getation Pres	sent?		☑ Yes	□ No			Hydric Soils	Present?		
Wetland Hydrol	logy Present	?		□ Yes	■ No					Within A Wetla	
Remarks:	Antecedent	moisture conditions	s normal	based p	n WETS	analysis.	Point located in an ag	gricultural field	with poter	itial hydrologic	al manipulations.
	Normal circ	umstances interpre	ted to no	be pres	sent.		Andrew Committee				
		-									
HYDROLOGY											
	- l lli	tana (Oh a ala luna (Profession and	armous had	1	E					
		itors (Check here if	indicato	rs are no	t present	E):			Cocondon		
Primary	A1 - Surface	Mater		П	B9 - Wate	r_Stained	Leaves		Secondary:	B6 - Surface So	il Cracke
	A2 - High Wa				B13 - Aqua					B10 - Drainage	
	A3 - Saturation				B14 - True					C2 - Dry-Season	
	B1 - Water M				C1 - Hydro					C8 - Crayfish Bu	
	B2 - Sedimer						spheres on Living Roots				Visible on Aerial Imagery
							educed Iron			D1 - Stunted or	
	B4 - Algal Ma B5 - Iron Dep				Co - Rece		duction in Tilled Soils			D2 - Geomorphi D5 - FAC-Neutra	
		on Visible on Aerial Ima	agery		D9 - Gaug				ت	DO - 1 AO-NEGUI	ai rest
		Vegetated Concave S			Other (Exp						
Field Observat	tions:										
Surface Water		☐ Yes ☑ No	Depth:		(in.)						
Water Table Pr		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes ☑ No
Saturation Pres		☐ Yes ☑ No	Depth:		(in.)						
					. ,					0::1 5 :	
Describe Record	ied Data (stre	eam gauge, monitorir	ıa weii. a	eriai bnor							
										Slide Review	
Remarks:	No primary						ite uplands at this loca	ation. Sample			eet above wetland.
	No primary							ation. Sample			eet above wetland.
SOILS		hydrology indicator	s were o			es indica	ite uplands at this loca	•			eet above wetland.
SOILS Map Unit Name);	hydrology indicator Montgomery silty cl	s were o			es indica		•			eet above wetland.
SOILS Map Unit Name Taxonomy (Sub	e: ogroup):	hydrology indicator Montgomery silty cl Vertic Endoaquolls	ay loam	bserved.	FSA slide	es indica	te uplands at this loca	very poorly	point eleva	ation several fe	eet above wetland.
SOILS Map Unit Name Taxonomy (Sub	e: ogroup): otion (Describe to the	hydrology indicator Montgomery silty cl Vertic Endoaquolls	ay loam	bserved.	FSA slide	es indica	te uplands at this loca Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS	very poorly =Covered/Coated Sand G	point eleva	ation several fe	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	e: ogroup): otion (Describe to the Bottom	hydrology indicator Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice	ay loam	bserved. the absence of in	FSA slide	es indica	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec	very poorly ==Covered/Coated Sand G	e point eleva	ation several fe	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	e: ogroup): otion (Describe to the Bottom Depth	Montgomery silty cl Vertic Endoaquolls to depth needed to document the indiv	ay loam	the absence of in Matrix (Moist)	FSA slide	es indica	Geries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist)	very poorly =Covered/Coated Sand Codox Features %	e point eleva	ation several fe	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	e: bgroup): btion (Describe to the Bottom Depth 10	Montgomery silty cl Vertic Endoaquolls the depth needed to document the individual Horizon	ay loam cator or confirm to Color 10YR	the absence of in Matrix (Moist)	rsa slide	es indica	Geries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist)	very poorly	e point eleva	Pore Lining, M=Matrix) Location	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	e: ogroup): otion (Describe to the Bottom Depth	Montgomery silty cl Vertic Endoaquolls to depth needed to document the indiv	ay loam	the absence of in Matrix (Moist)	FSA slide	es indica	Geries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist)	very poorly =Covered/Coated Sand Codox Features %	e point eleva	ation several for properties of the proper	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	e: bgroup): btion (Describe to the Bottom Depth 10	Montgomery silty cl Vertic Endoaquolls the depth needed to document the individual Horizon	ay loam cator or confirm to Color 10YR	the absence of in Matrix (Moist)	rsa slide	es indica	Geries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist)	very poorly	e point eleva	Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam) silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	e: ogroup): otion (Describe to the Bottom Depth 10 24	Montgomery silty cl Vertic Endoaquolls te depth needed to document the india Horizon 1 2	ay loam cator or confirm to Color 10YR 10YR	the absence of in Matrix (Moist) 2/1 5/1	radicators.) (Type:	es indica C=Concentratio	Geries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8	-Covered/Coated Sand Codox Features	Proint eleva	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	e: Degroup): Degroup): Bottom Depth 10 24	Montgomery silty cl Vertic Endoaquolls te depth needed to document the india Horizon 1 2	ay loam cator or confirm Color 10YR 10YR	the absence of in Matrix (Moist) 2/1 5/1	## FSA slide ## ## ## ## ## ## ## ## ## ## ## ## ##	es indica C=Concentratio	Geries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8	-Covered/Coaled Sand Color Features	Proint eleva	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	e: Degroup): Detion (Describe to the Depth 10 24	Montgomery silty cl Vertic Endoaquolls te depth needed to document the india Horizon 1 2	ay loam cator or confirm to Color 10YR 10YR	he absence of irination Matrix (Moist) 2/1 5/1	## PSA slide ##	es indica S C=Concentratio	Geries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/8	-Covered/Coated Sand Codox Features %	Proint eleva	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	e: Degroup): Detion (Describe to the Depth 10 24	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indi Horizon 1 2	ay loam cator or confirm Color 10YR 10YR	the absence of ir Matrix (Moist) 2/1 5/1	% 100 55	es indica	Geries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/8	-Covered/Coated Sand Codox Features	Proint eleva	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	e: Degroup): Degroup): Bottom Depth 10 24	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indi Horizon 1 2	ay loam cator or confirm Color 10YR 10YR	the absence of ir Matrix (Moist) 2/1 5/1	% 100 55	es indica	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/8	-Covered/Coated Sand Codox Features	Proint eleva	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 24 Soil Field In	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indi Horizon 1 2	ay loam Color 10YR 10YR	he absence of in Matrix (Moist) 2/1 5/1	% 100 55 e not pres	c=Concentratio	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8	very poorly	Proint eleva	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric	Bogroup): otion (Describe to If Bottom Depth 10 24 Soil Field In A1- Histosol	Montgomery silty of Vertic Endoaquolls to depth needed to document the individual to	ay loam Color 10YR 10YR	he absence of in Matrix (Moist) 2/1 5/1 cators are	% 100 55 e not pres S4 - Sand	C=Concentratio	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8	very poorly	Type C 5 for Problem A16 - Coast	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric	Degroup): otion (Describe to III) Bottom Depth 10 24 Soil Field In A1- Histosol A2 - Histic Ep	Montgomery silty control vertic Endoaquolls be depth needed to document the individual of the control of the co	ay loam Color 10YR 10YR	he absence of Iri	% 100 55 e not pres	C=Concentration 10YR 5eent y Gleyed I y Redox	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/8	very poorly	Type C s for Problem A16 - Coast S7 - Dark St	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric	Bogroup): pgroup): Bottom Depth 10 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge	Montgomery silty covertic Endoaquolls Horizon 1 2 dicators (check he objector) stic n Sulfide	ay loam Color 10YR 10YR	the absence of in Matrix (Moist) 2/1 5/1 cators are	% 100 55 e not pres \$4 - Sand \$5 - Sand \$5 - Sand \$6 - Stripp F1 - Loam	c=Concentratio	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8 :: Matrix	s-Covered/Coated Sand of dox Features % 45 Indicators	Type C C Grins: Location: PL=	Pore Lining, M=Matrix) Location Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified	Montgomery silty of Vertic Endoaquolls to depth needed to document the individual to	ay loam Color 10YR 10YR	he absence of in Matrix (Moist) 2/1 5/1 cators are	% 100 55 e not pres \$4 - Sand \$5 - Sand \$5 - Sand \$5 - Sand \$7 - Loam	C=Concentratio	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8 : Matrix ineral Matrix	s-Covered/Coated Sand of dox Features % 45 Indicators	Type C C Grins: Location: PL=	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	Bogroup): otion (Describe to III Bottom Depth 10 24	Montgomery silty control vertic Endoaquolls be depth needed to document the individual to the individu	ay loam Color 10YR 10YR	he absence of in Matrix (Moist) 2/1 5/1 cators are	% 100 55 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F3 - Deple	C=Concentration 10YR 10YR Seent y Gleyed i y Redox y Gleyed dy Redox	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8 Watrix ineral Matrix	s-Covered/Coated Sand of dox Features % 45 Indicators	Type C C Grins: Location: PL=	Pore Lining, M=Matrix) Location Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric	Bottom Depth 10 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A1 - Deplete A1 - Deplete	Montgomery silty control Vertic Endoaquolls are depth needed to document the individual of the th	ay loam Color 10YR 10YR	the absence of in Matrix (Moist) 2/1 5/1 cators are	% 100 55 e not pres 84 - Sand; 95 - Sand; 96 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo;	C=Concentration 10YR 10YR sy Gleyed if y Redox ped Matrix y Muck M Might y Muck M Might y Muck M Might y Constant in the control of the contr	Series Drainage Class: On, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8	s-Covered/Coated Sand of dox Features % 45 Indicators	Type C C Grins: Location: PL=	Pore Lining, M=Matrix) Location Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	Bogroup): pgroup): btion (Describe to the second point of the se	Montgomery silty covertic Endoaquolls Wertic Endoaquolls Horizon 1 2 dicators (check he bipedon stic n Sulfide I Layers luck ad Below Dark Surface bark Surface	ay loam Color 10YR 10YR	he absence of in Matrix (Moist) 2/1 5/1 cators are	% 100 55	c=Concentratio	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8 : Matrix ineral Matrix crace Surface Surface	s-Covered/Coated Sand of dox Features % 45 Indicators	Type C C Grins: Location: PL=	Pore Lining, M=Matrix) Location Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric	Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Depleth A11 - Depleth A12 - Thick E S1 - Sandy M	Montgomery silty covertic Endoaquolls Vertic Endoaquolls e depth needed to document the indi Horizon 1 2 dicators (check he bipedon stic n Sulfide d Layers luck ed Below Dark Surface luck Mineral	ay loam Color 10YR 10YR	the absence of in Matrix (Moist) 2/1 5/1 cators are	% 100 55 e not pres 84 - Sand; 95 - Sand; 96 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo;	c=Concentratio	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8 : Matrix ineral Matrix crace Surface Surface	very poorly	Type Type C for Problem A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Explain	Pore Lining, M=Matrix) Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	Scipogroup): bition (Describe to the Bottom Depth 10 24	Montgomery silty covertic Endoaquolls Wertic Endoaquolls Horizon 1 2 dicators (check he bipedon stic n Sulfide d Layers luck ad Below Dark Surface luck Mineral locky Peat or Peat	ay loam Color 10YR 10YR	he absence of in Matrix (Moist) 2/1 5/1 cators are	% 100 55 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	c=Concentratio	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8 : Matrix ineral Matrix crace Surface Surface	very poorly =Covered/Coated Sand of dox Features % 45 Indicators Indicators of hydrophysical states and the same states are states as a second state of the sa	Type Type C C 5 for Problem A16 - Coasts S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location Location M natic Soils Prairie Redox urface anganese Masse Shallow Dark Suin in Remarks)	Texture (e.g. clay, sand, loam) silty clay loam clay es urface
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric	Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Depleth A11 - Depleth A12 - Thick E S1 - Sandy M	Montgomery silty covertic Endoaquolls Wertic Endoaquolls Horizon 1 2 dicators (check he bipedon stic n Sulfide d Layers luck ad Below Dark Surface luck Mineral locky Peat or Peat	ay loam Color 10YR 10YR	he absence of in Matrix (Moist) 2/1 5/1 cators are	% 100 55	c=Concentratio	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8 : Matrix ineral Matrix crace Surface Surface	very poorly	Type Type C C 5 for Problem A16 - Coasts S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location Location M natic Soils Prairie Redox urface anganese Masse Shallow Dark Suin in Remarks)	Texture (e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric	Scipoup): ption (Describe to III) Bottom Depth 10 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy M S3 - 5 cm Mu Type:	Montgomery silty covertic Endoaquolls Wertic Endoaquolls Horizon 1 2 dicators (check he bipedon stic n Sulfide d Layers luck ad Below Dark Surface luck Mineral locky Peat or Peat	ay loam cator or confirm to the cator or cato	the absence of Iri Matrix (Moist) 2/1 5/1 cators are	## A slide state of the state o	C=Concentration 10YR 10YR Seent y Gleyed I y Redox y Muck M y Muck M y Gleyed atted Matrix x Dark Sueted Dark x Depress	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8	very poorly =Covered/Coated Sand of dox Features % 45 Indicators Indicators of hydrophysical states and the same states are states as a second state of the sa	Type Type C C 5 for Problem A16 - Coasts S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location Location M natic Soils Prairie Redox urface anganese Masse Shallow Dark Suin in Remarks)	Texture (e.g. clay, sand, loam) silty clay loam clay es urface
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric Restrictive Layer (If Observed)	Scipoup): ption (Describe to III) Bottom Depth 10 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy M S3 - 5 cm Mu Type:	Montgomery silty control Vertic Endoaquolls are depth needed to document the individual to the individ	ay loam cator or confirm to the cator or cato	the absence of Iri Matrix (Moist) 2/1 5/1 cators are	## A slide state of the state o	C=Concentration 10YR 10YR Seent y Gleyed I y Redox y Muck M y Muck M y Gleyed atted Matrix x Dark Sueted Dark x Depress	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8	very poorly =Covered/Coated Sand of dox Features % 45 Indicators Indicators of hydrophysical states and the same states are states as a second state of the sa	Type Type C C 5 for Problem A16 - Coasts S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location Location M natic Soils Prairie Redox urface anganese Masse Shallow Dark Suin in Remarks)	Texture (e.g. clay, sand, loam) silty clay loam clay es urface
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric Restrictive Layer (If Observed)	Scipoup): ption (Describe to III) Bottom Depth 10 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy M S3 - 5 cm Mu Type:	Montgomery silty control Vertic Endoaquolls are depth needed to document the individual to the individ	ay loam cator or confirm to the cator or cato	the absence of Iri Matrix (Moist) 2/1 5/1 cators are	## A slide state of the state o	C=Concentration 10YR 10YR Seent y Gleyed I y Redox y Muck M y Muck M y Gleyed atted Matrix x Dark Sueted Dark x Depress	Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8	very poorly =Covered/Coated Sand of dox Features % 45 Indicators Indicators of hydrophysical states and the same states are states as a second state of the sa	Type Type C C 5 for Problem A16 - Coasts S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Pore Lining, M=Matrix) Location Location M natic Soils Prairie Redox urface anganese Masse Shallow Dark Suin in Remarks)	Texture (e.g. clay, sand, loam) silty clay loam clay es urface



Project/Site: Emerald Park Landfill - Western Expansion Wetland ID: Adj to W2A Sample Point W2-10u **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 FACW spp. 10 x 2 = 20 x 3 = FAC spp. 5 15 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 1. UPL spp. 0 x 5= 2 3. Total 15 35 4 5. Prevalence Index = B/A = 2.333 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ✓ No Rapid Test for Hydrophytic Vegetation 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 0 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * ECHINOCHLOA CRUS-GALLI **FACW** 10 1. * Indicators of hydric soil and wetland hydrology must be 2 Agrostis hyemalis 5 FAC present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. --5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 15 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 5. Total Cover = 0

Additional Remarks:

of soybeans - potentially which would alter dominants.

Remarks:

ydrophytic vegetation and hydric soils were present, although soils and vegetation were significantly disturbed.	
	J

Soybean crop recently harvested and soils plowed, leaving only weeds. Plowing prevented adequate interpretations of crop stress and cover estimate



Project/Site:		ark Landfill - Wester		sion			Stantec Project #:	193702557		Date:	10/23/14
Applicant:		Disposal Services, I	NC							County:	Waukesha
Investigator #1				Invest	igator #2:					State:	Wisconsin
Soil Unit:		y silty clay loam				NV	/I/WWI Classification:	: E1K		Wetland ID:	W2A
Landform:	Depression	l		Loc	al Relief:	Concave)			Sample Point:	W2-10w
Slope (%):	0-2	<u>Latitude:</u>			ongitude:			Datum:		Community ID:	Wet Meadow
		litions on the site typ				If no explai		☑ Yes ☐		Section:	36
		or Hydrology 🗆 sigi					Are normal circumst	ances presen	B	Township:	5 N
Are Vegetation	□, Soil □,	or Hydrology 🔲 nat	urally pro	oblemati	c?			□No		Range:	20 E
SUMMARY OF	FINDINGS										
Hydrophytic Ve	getation Pres	sent?		7 Yes	□ No			Hydric Soils	Present?		
Wetland Hydro					□ No			Is This Sam	Ing Point	Within A Wetla	
Remarks:		moisture conditions	s normal								<u> </u>
		Sangar	112002	Se ma Charles							
HYDROLOGY											
Wetland Hydr	ology Indica	itors (Check here if	indicator	s are no	t present	(E):					
<u>Primary</u>	<u>:</u>	0.00				,			Secondary:		
	A1 - Surface				B9 - Wate					B6 - Surface So	
	A2 - High Wa				B13 - Aqu					B10 - Drainage	
	A3 - Saturation			_	B14 - True					C2 - Dry-Seaso	
							spheres on Living Roots			C8 - Crayfish B	urrows Visible on Aerial Imagery
	B3 - Sedimer				C4 - Presi					D1 - Stunted or	
lä				H			duction in Tilled Soils			D2 - Geomorph	
lä				ä						D5 - FAC-Neutr	
		on Visible on Aerial Ima	agerv		D9 - Gauc					20 1710 11000	u
		Vegetated Concave S			Other (Ex						
Field Observa	tions:										
Surface Water		☑ Yes □ No	Depth:	1	(in.)						
Water Table Pr		☑ Yes ☐ No		Ö	(in.)			Wetland Hy	drology Pr	esent? 🗵	lYes □ No
Saturation Pres			Depth:		` '						
		☑ Yes ☐ No	Depth:	0	(in.)						
Describe Record	led Data (stre	eam gauge, monitorir	ng well, ac	erial phot	os, previo	us inspec	tions), if available:				
Remarks:											
Remarks:											
Remarks:											
							·				
SOILS											
SOILS Map Unit Name		Montgomery silty cl	_			S	eries Drainage Class	: very poorly			
SOILS Map Unit Name Taxonomy (Sub	ogroup):	Vertic Endoaquolls	3				eries Drainage Class	, ,			
SOILS Map Unit Name Taxonomy (Sub	ogroup):	Vertic Endoaquolls	3	he absence of i	ndicators.) (Type:			, ,	Grains; Location: PL=	Pore Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub	ogroup):	Vertic Endoaquolls	3	the absence of i	ndicators.) (Type:		eries Drainage Class. , D=Depletion, RM=Reduced Matrix, CS	, ,	Grains; Location: PL=	Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sut Profile Descrip	ogroup): otion (Describe to the Bottom	Vertic Endoaquolls	cator or confirm t	Matrix			eries Drainage Class: , D=Depletion, RM=Reduced Matrix, CS Red	S=Covered/Coated Sand G		1	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth	ogroup): otion (Describe to the Bottom Depth	Vertic Endoaquolls le depth needed to document the indice Horizon	cator or confirm t	Matrix (Moist)	%		eries Drainage Class. , D=Depletion, RM=Reduced Matrix, CS	S=Covered/Coated Sand G	Srains; Location: PL=	Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to the Bottom Depth	Vertic Endoaquolls e depth needed to document the indic Horizon 1	Color 10YR	Matrix (Moist) 2/1	% 100	C=Concentratio	eries Drainage Class: , D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand G	Type 	Location 	(e.g. clay, sand, loam) silt loam
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8	ogroup): otion (Describe to tr Bottom Depth 8 20	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95	C=Concentratio	eries Drainage Class: DeDepletion, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand G dox Features % 15	Type C	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	ogroup): otion (Describe to the Bottom Depth 8 20	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 	C=Concentratio	eries Drainage Class: , D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand of dox Features %	Type C	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8	ogroup): otion (Describe to tr Bottom Depth 8 20	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95	C=Concentratio	eries Drainage Class: DeDepletion, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand G dox Features % 15	Type C	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	ogroup): otion (Describe to the Bottom Depth 8 20	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 	C=Concentratio	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand of dox Features %	Type C	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	ogroup): otion (Describe to the Bottom Depth 8 20	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 	C=Concentratio	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand of dox Features %	Type C	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	ogroup): Dition (Describe to the Bottom Depth 8 20	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color (10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Matrix (Moist) 2/1 4/1 	% 100 95 	C=Concentratio	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand G dox Features % 15	Type C	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8	ogroup): otion (Describe to IT Bottom Depth 8 20	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1 	% 100 95 	C=Concentratio	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand G dox Features % 15	Type C	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8	pgroup): ption (Describe to It Bottom Depth 8 20	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1 	% 100 95		eries Drainage Class. Debeleton, RM=Reduced Matrix, CS Rec Color (Moist) 5/6	S=Covered/Coated Sand G dox Features % 15	Type C	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 NRCS Hydric	ogroup): stion (Describe to It Bottom Depth 8 20 Soil Field In	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1 eators ar	% 100 95 e not pres		eries Drainage Class: Debetelon, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand of dox Features % 15 Indicators	Type C s for Problem	Location M natic Soils ¹	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 NRCS Hydric	pgroup): ption (Describe to III Bottom Depth 8 20 Soil Field In A1- Histosol	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check he	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 e not pres	10YR sent] y Gleyed	eries Drainage Class: Debetelon, RM=Reduced Matrix, CS Red Color (Moist) 5/6	s=covered/Coated Sand Codox Features % 15 Indicators	Type C s for Problen	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 NRCS Hydric	pgroup): ption (Describe to III Bottom Depth 8 20 Soil Field In A1- Histosol	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check heipipedon	Color 10YR 10YR	Matrix (Moist) 2/1 4/1 eators ar	% 100 95 e not pres	C=Concentratio	eries Drainage Class: Debetelon, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand G dox Features % 15 Indicators	Type C s for Problem A16 - Coast \$7 - Dark \$r	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 NRCS Hydric	ogroup): otion (Describe to it Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check he objector)	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 e not pres \$4 - Sand \$5 - Sand	C=Concentratio	eries Drainage Class Debeleton, RM=Reduced Matrix, CS Red Color (Moist)	S=Covered/Coated Sand G dox Features	Type C 5 for Problen A16 - Coast \$7 - Dark \$8 F12 - Iron-M	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Eç A3 - Black Hi A4 - Hydroge	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check heroipedon stic n Sulfide	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 e not pres \$4 - Sand \$6 - Stripi	C=Concentratio	eries Drainage Class , D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand G dox Features % 15 Indicators	Type C s for Problem A16 - Coast \$7 - Dark \$0 F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 NRCS Hydric	pgroup): ption (Describe to III) Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratified	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here) bipedon stic n Sulfide d Layers	Color 10YR 10YR	Matrix (Moist)	% 100 95 e not pres S4 - Sand S5 - Sand S6 - Stripp F1 - Loam F3 - Deple F3 - Deple F3 - Deple	C=Concentratio	eries Drainage Class: DeDepletion, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand G dox Features % 15 Indicators	Type C s for Problem A16 - Coast \$7 - Dark \$0 F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 NRCS Hydric	pgroup): ption (Describe to It is a second	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here) bipedon stic n Sulfide d Layers luck and Below Dark Surface	Color of Cooling to Color 10YR 10YR	Matrix (Moist)	% 100 95 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo	C=Concentratio	eries Drainage Class: D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand G dox Features % 15 Indicators	Type C s for Problem A16 - Coast \$7 - Dark \$0 F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A12 - Thick E	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here) bipedon stic n Sulfide t Layers luck de Below Dark Surface bark Surface	Color of Cooling to Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 enot pres \$4 - Sand \$6 - Stript F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	C=Concentration 10YR sent	eries Drainage Class Depleton, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand G dox Features % 15 Indicators	Type C s for Problem A16 - Coast \$7 - Dark \$0 F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 NRCS Hydric	Degroup): Describe to II Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplett A12 - Thick E S1 - Sandy M	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here) to bipedon stic n Sulfide d Layers luck and Below Dark Surface luck Mineral	Color of Cooling to Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo	C=Concentration 10YR sent	eries Drainage Class Depleton, RM=Reduced Matrix, CS Red Color (Moist) 5/6	s=covered/Coated sand of dox Features % 15 Indicators	Type C s for Problen A16 - Coast S7 - Dark St F12 - Iron-M Other (Expla	Location M	(e.g. clay, sand, loam) silt loam clay es
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 NRCS Hydric	Degroup): Describe to II Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplett A12 - Thick E S1 - Sandy M	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here) bipedon stic n Sulfide t Layers luck de Below Dark Surface bark Surface	Color of Cooling to Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 enot pres \$4 - Sand \$6 - Stript F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	C=Concentration 10YR sent	eries Drainage Class Depleton, RM=Reduced Matrix, CS Red Color (Moist) 5/6	s=covered/Coated sand of dox Features % 15 Indicators	Type C s for Problen A16 - Coast S7 - Dark St F12 - Iron-M Other (Expla	Location M	(e.g. clay, sand, loam) silt loam clay
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 NRCS Hydric	Degroup): Describe to II Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplett A12 - Thick E S1 - Sandy M	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here) bipedon stic n Sulfide d Layers luck ded Below Dark Surface bark Surface luck Mineral locky Peat or Peat	Color of Confirm to Color of C	Matrix (Moist) 2/1 4/1	% 100 95 enot pres \$4 - Sand \$6 - Stript F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	C=Concentration 10YR sent	eries Drainage Class Depleton, RM=Reduced Matrix, CS Red Color (Moist) 5/6	s=covered/Coated sand of dox Features % 15 Indicators	Type C s for Problen A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silt loam clay es
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick E A13 - Sandy M S3 - 5 cm Mu	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here) bipedon stic n Sulfide d Layers luck ded Below Dark Surface bark Surface luck Mineral locky Peat or Peat	Color of Confirm to Color of C	Matrix (Moist) 2/1 4/1	% 100 95 enot pres \$4 - Sand \$6 - Stripp F1 - Loam F2 - Loam F2 - Loam F3 - Deple F6 - Redo	C=Concentration 10YR sent	eries Drainage Class Depleton, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand G dox Features	Type C s for Problen A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silt loam clay es urface
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick E A13 - Sandy M S3 - 5 cm Mu	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here) bipedon stic n Sulfide d Layers luck ded Below Dark Surface bark Surface luck Mineral locky Peat or Peat	Color of Confirm to Color of C	Matrix (Moist) 2/1 4/1	% 100 95 enot pres \$4 - Sand \$6 - Stripp F1 - Loam F2 - Loam F2 - Loam F3 - Deple F6 - Redo	C=Concentration 10YR sent	eries Drainage Class Depleton, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand G dox Features	Type C s for Problen A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silt loam clay es urface
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 8 NRCS Hydric	Bottom Depth 8 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick E A13 - Sandy M S3 - 5 cm Mu	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here) bipedon stic n Sulfide d Layers luck ded Below Dark Surface bark Surface luck Mineral locky Peat or Peat	Color of Confirm to Color of C	Matrix (Moist) 2/1 4/1	% 100 95 enot pres \$4 - Sand \$6 - Stripp F1 - Loam F2 - Loam F2 - Loam F3 - Deple F6 - Redo	C=Concentration 10YR sent	eries Drainage Class Depleton, RM=Reduced Matrix, CS Red Color (Moist) 5/6	S=Covered/Coated Sand G dox Features	Type C s for Problen A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silt loam clay es urface



Project/Site:

WETLAND DETERMINATION DATA FORM Midwest Region

Wetland ID:

W2A

Emerald Park Landfill - Western Expansion Sample Point W2-10w **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Ind.Status Species Name % Cover Dominant Salix bebbiana 5 **FACW** 2 Number of Dominant Species that are OBL, FACW, or FAC: 5 (A) 3. 4. Total Number of Dominant Species Across All Strata: 5 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. x 1 = OBL spp. x 2 = Total Cover = FACW spp. 86 172 x 3 = FAC spp. 0 0 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 4 **FACW** 1. Salix discolor UPL spp. 0 x 5= Υ 2 Spiraea alba 2 **FACW** 3. 207 Total 121 (A) 4 5. Prevalence Index = B/A = 1.711 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ✓ Yes Rapid Test for Hydrophytic Vegetation □ No 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 6 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA **FACW** 50 1. * Indicators of hydric soil and wetland hydrology must be 2 Spartina pectinata 25 **FACW** present, unless disturbed or problematic. 3. 20 Ν **OBL** Carex stricta Ν OBL **Definitions of Vegetation Strata:** 4. Carex lacustris 15 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 110 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 5. Total Cover = 0 Remarks: Point located in portion of wetland dominated by perennial vegetation. Additional Remarks:



Project/Site: Applicant: Investigator #1: Soil Unit:	Advanced I Eric Parker Montgomer	y silty clay			igator #2:		Stantec Project #: Curran VI/WWI Classification:	193702557 N/A			10/17/14 Waukesha Wisconsin W5
Landform:	Depression				al Relief:		е			Sample Point:	
Slope (%):	1-2	<u>Latitude:</u>			ongitude:			Datum:	_	1	Wet Meadow
		litions on the site typ				If no, explai	mini remarks)		No	Section:	36
		or Hydrology 🛚 sigi					Are normal circumsta	ances presen ⊟No	B	Township:	5 N
		or Hydrology 🛚 nat	urany pro	opiemati	C/			□140		Range:	20 E
SUMMARY OF		nont?		- Vec	TI No.			Livdria Coile	Drocont?		□ Voc □ No
Hydrophytic Veg Wetland Hydrol				☑ Yes	□ No			Hydric Soils		Within A Wetla	✓ Yes □ No
Remarks:	WETS ana	lysis indicates norma		edent mo	isture con		Sample point existed	in a long nam	ow wetland		
	correspond	ing upland point wa	s laken,	upland c	onsisted	of a hay	field and is well repres	ented by W6	u.		
HYDROLOGY											
		itors (Check here if	indicato	rs are no	t present	□):					
	A1 - Surface A2 - High Wa A3 - Saturation B1 - Water M B2 - Sedime B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundation	ater Table on larks at Deposits posits at or Crust			C4 - Prese	atic Fauna e Aquatic F ogen Sulfic zed Rhizo ence of Re nt Iron Re Muck Surf e or Well	l Plants de Odor spheres on Living Roots educed Iron duction in Tilled Soils ace Data			B6 - Surface So B10 - Drainage C2 - Dry-Seaso C8 - Crayfish C9 - Saturation D1 - Stunted or D2 - Geomorphi D5 - FAC-Neutr	Patterns n Water Table urrows Visible on Aerial Imagery Stressed Plants c Position
Field Observat	ions:										
Surface Water I	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Dr	ocont?	Yes □ No
Water Table Pre	esent?	☐ Yes ☑ No	Depth:		(in.)			welland ny	urology Pr	esentr 🗹	res 🗆 NO
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	ed Data (str	eam gauge, monitorin	ng well, a	erial phot	os, previo	us inspec	tions), if available:				
Remarks:	Linear depr	essional area with s	seasonal	wetland	hydrology	y likely fr	om old end furrow, or	old shallow a	gricultural d	itch adjacent t	o agricultural field.
SOILS											
Map Unit Name	:	Montgomery silty cl	av			S	Series Drainage Class:	very poorly			
Taxonomy (Sub		Vertic Endoaquolls						- 7 7			
Profile Descrip	tion (Describe to the	ne depth needed to document the indic	cator or confirm t	he absence of i	ndicators.) (Type:	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS=	=Covered/Coated Sand G	Grains; Location: PL=	Pore Lining, M=Matrix)	
Тор	Bottom			Matrix				ox Features			Texture
Depth	Depth	Horizon		(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)
0	4	1	10YR	2/1	100						silty clay loam
4	16	2	2.5Y	5/2	90	10YR	4/4	10	С	M	silty clay
16	24	3	5Y	6/2	85	10YR	3/6	15	С	M	silty clay
						-					
, 0000000000	A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick E \$1 - Sandy M	stic n Sulfide d Layers luck ed Below Dark Surface eark Surface luck Mineral lucky Peat or Peat	re if indic		e not pres S4 - Sand S5 - Sand S6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	y Gleyed I y Redox ped Matrix y Muck M y Gleyed pted Matrix x Dark Su pted Dark Su	Matrix ineral Matrix c rface Surface ions		S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Prairie Redox urface anganese Massi Shallow Dark St ain in Remarks)	
i											



Project/Site:

WETLAND DETERMINATION DATA FORM Midwest Region

Wetland ID:

W5

Emerald Park Landfill - Western Expansion Sample Point W5-1w **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 FACW spp. 56 x 2 = 112 x 3 = FAC spp. 5 15 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. N **FACU** 1. Quercus alba UPL spp. 0 x 5= 2 Cornus alba 1 Ν **FACW** 3. Total 166 4 5. Prevalence Index = B/A = 1.766 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ✓ Yes □ No Rapid Test for Hydrophytic Vegetation 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 2 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * OBL Carex pellita 30 1. * Indicators of hydric soil and wetland hydrology must be 2 Spartina pectinata 30 **FACW** present, unless disturbed or problematic. 3. PHALARIS ARUNDINACEA Ν **FACW** 15 10 Ν **FACW Definitions of Vegetation Strata:** 4. Solidago gigantea Silphium terebinthinaceum 5 Ν FAC 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 Solidago canadensis 1 Ν **FACU** LYTHRUM SALICARIA breast height (DBH), regardless of height. 7 1 Ν OBL 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 92 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 Total Cover = 0 Remarks: Sample point is located in a low quality wet meadow community between agricultural field and an upland tree line. Additional Remarks:



Project/Site:		ırk Landfill - Weste		sion			Stantec Project #:	193702557		Date:	10/17/14
Applicant:		Disposal Services,	INC							County:	Waukesha
Investigator #1:				Invest	igator #2:					State:	Wisconsin
Soil Unit:	Montgomer	y silty clay					/I/WWI Classification:	: N/A		Wetland ID:	Betw. W2 & W6
Landform:	Hill Slope				al Relief:			5.		Sample Point:	
Slope (%):	2-4	Latitude			ongitude:		- V.V.	Datum:		1	Agricultural Field
		itions on the site ty				(If no, expla	min(nemaiks)	☑ Yes □		Section:	36
		or Hydrology 🗆 sig					Are normal circumsta		E)	Township:	5 N
		or Hydrology 🛚 na	turally pro	oblemati	c?		☐ Yes	⊠No		Range:	20 E
SUMMARY OF											
Hydrophytic Ve					☑ No			Hydric Soils			☐ Yes ☑ No
Wetland Hydrol	ogy Present	?	* U		☑ No					Within A Wetla	
Remarks:							Point located in an ag ited hay grass & legui		d with poter	itial hydrologic	al manipulations.
	Normal Circ	unistances interpre	acu to no	ne pre	sent giver	i the bia	ited hay grass a legal	me species.			
LIVEROL COV											
HYDROLOGY											
		tors (Check here if	indicator	rs are no	t present	(P):					
Primary:					DO 14/ /				Secondary:	5 0 0 1 0	".0
	A1 - Surface A2 - High Wa				B9 - Wate B13 - Aqu					B6 - Surface So B10 - Drainage	
	A3 - Saturation				B14 - True					C2 - Dry-Season	
	B1 - Water M				C1 - Hydro					C8 - Crayfish Bu	
	B2 - Sedimer				C3 - Oxidi	zed Rhizo	spheres on Living Roots			C9 - Saturation	Visible on Aerial Imagery
					C4 - Prese	ence of Re	duced Iron		_	D1 - Stunted or	
	B4 - Algal Ma	t or Crust					duction in Tilled Soils			D2 - Geomorphi	
	B5 - Iron Dep	osits on Visible on Aerial Im	ogon,		C7 - Thin D9 - Gauc				П	D5 - FAC-Neutr	al lest
		Vegetated Concave S			Other (Ex						
	Do oparoor,	rogotatoa comoarc c	Ju., 1400		Quioi (2A)	p.a	manto)				
Field Observat	ione:										
Surface Water I		☐ Yes ☑ No	Donth		(in)						
			Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes ☑ No
Water Table Pro Saturation Pres			Depth:		(in.)						
		☐ Yes ☑ No	Depth:		(in.)						
Describe Record	ed Data (stre	eam gauge, monitori	ng well, a	erial phot	os, previo	us inspec	tions), if available:		Annual Crop	Slide Review	
Remarks:	No hydrolog	gy indicators were o	bserved.	. FSA sli	des indica	ate uplan	ds at this location bety	ween W-2 and	d W-6.		
SOILS											
SOILS Map Unit Name	:	Montgomery silty c	lay			S	eries Drainage Class:	very poorly			
		Montgomery silty c				S	eries Drainage Class:	very poorly			
Map Unit Name Taxonomy (Sub	group):	Vertic Endoaquolis	3	the absence of i	ndicators.) (Type:				Grains; Location: PL=	Pore Lining, M=Matrix)	
Map Unit Name Taxonomy (Sub	group):	Vertic Endoaquolis	3	the absence of i	ndicators.) (Type:		n, D=Depletion, RM=Reduced Matrix, CS		Grains; Location: PL=	Pore Lining, M=Matrix)	Texture
Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to the Bottom	Vertic Endoaquolis	icator or confirm t		ndicators.) (Type:		n, D=Depletion, RM=Reduced Matrix, CS	=Covered/Coated Sand C	1	Pore Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top	group): otion (Describe to th	Vertic Endoaquolls e depth needed to document the ind	icator or confirm t	Matrix			n, D=Depletion, RM=Reduced Matrix, CS	=Covered/Coated Sand C	Grains; Location: PL=	I	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to the Bottom Depth	Vertic Endoaquolls e depth needed to document the ind Horizon	icator or confirm t	Matrix (Moist)	%	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	s=Covered/Coated Sand Codox Features	Туре	Location	(e.g. clay, sand, loam) silty clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to the Bottom Depth 16	Vertic Endoaquolls e depth needed to document the ind Horizon 1	Color 10YR	Matrix (Moist) 3/1	% 100	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist)	S=Covered/Coated Sand Codox Features	Type 	Location 	(e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16	group): tion (Describe to the Bottom Depth 16 24	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2	% 100 90 	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4	s=Covered/Coated Sand of dox Features % 10 10 10 10 10 10 10 10 10 10 10 10 10	Type C	Location M	(e.g. clay, sand, loam) silty clay clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16	group): tion (Describe to the Bottom Depth 16 24	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2 	% 100 90 	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4	s=covered/Coated Sand Codox Features % 10	Type C	Location M	(e.g. clay, sand, loam) silty clay clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16	ogroup): ption (Describe to tr Bottom Depth 16 24	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2 	% 100 90 	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4	s=covered/Coated Sand Codox Features % 10	Type C	Location M	(e.g. clay, sand, loam) silty clay clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16	group): stion (Describe to tr Bottom Depth 16 24	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2 	% 100 90 	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4	s=covered/Coated Sand Codox Features % 10	Type C	Location M	(e.g. clay, sand, loam) silty clay clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16	ogroup): ption (Describe to tr Bottom Depth 16 24	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2 	% 100 90 	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4	s=covered/Coated Sand Codox Features % 10	Type C	Location M	(e.g. clay, sand, loam) silty clay clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16	group): tion (Describe to II Bottom Depth 16 24	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2 	% 100 90		n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4	s-Covered/Coated Sand of dox Features % 10	Type C	Location M	(e.g. clay, sand, loam) silty clay clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric S	group): Ition (Describe to III Bottom Depth 16 24 Soil Field In	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2 cators are	% 100 90 e not pres	2.5Y	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4	s-Covered/Coated Sand of dox Features % 10 Indicators	Type C s for Problem	Location M	(e.g. clay, sand, loam) silty clay clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric S	group): stion (Describe to it Bottom Depth 16 24 Soil Field In A1- Histosol	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2 dicators (check he	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2	% 100 90 e not pres	2.5Y y Gleyed	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4	s-covered/Coated Sand of dox Features	Type C s for Problen	Location M	(e.g. clay, sand, loam) silty clay clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric S	group): stion (Describe to tr Depth 16 24 Soil Field In A1- Histosol A2 - Histic Ep	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2 dicators (check he	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2 cators ar	% 100 90 e not pres \$4 - Sand \$5 - Sand	2.5Y sent y Gleyed I y Redox	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4	s-covered/Coated Sand Codox Features % 10 10 Indicators	Type C s for Problen S7 - Dark St	Location M	(e.g. clay, sand, loam) silty clay clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric S	group): stion (Describe to It Bottom Depth 16 24 Soil Field In A1 - Histosol A3 - Black Hi	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2 dicators (check he	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2	% 100 90 e not pres	2.5Y sent y Gleyed ly Redox	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4 : Matrix	s=covered/Coated Sand Codox Features % 10 Indicators	Type C s for Problen A16 - Coast S7 - Dark St F12 - Iron-M	Location M	(e.g. clay, sand, loam) silty clay clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric :	group): stion (Describe to tr Depth 16 24 Soil Field In A1- Histosol A2 - Histic Ep	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2 dicators (check he bipedon stic n Sulfide	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2 cators ar	% 100 90 en ot pres \$4 - Sand \$5 - Sand \$6 - Stript	C=Concentration 2.5Y y Gleyed ly Redox y Redox y Redox y Muck M	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4	s-covered/Coated Sand of dox Features % 10 Indicators	Type C s for Problem A16 - Coast F7 - Dark St F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, loam) silty clay clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric S	group): stion (Describe to the first of the	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2 dicators (check he bipedon stic n Sulfide I Layers uck	Color 10YR 2.5Y ere if indic	Matrix (Moist) 3/1 5/2	% 100 90	2.5Y sent y Gleyed i y Redox oed Matrix by Muck M by Gleyed deted Matrix	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4 : Matrix neral Matrix	s-covered/Coated Sand of dox Features % 10 Indicators	Type C s for Problem A16 - Coast F7 - Dark St F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, loam) silty clay clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric S	group): stion (Describe to the first of the	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2 dicators (check he bipedon stic n Sulfide I Layers uck de Below Dark Surface	Color 10YR 2.5Y ere if indic	Matrix (Moist) 3/1 5/2	% 100 90 en not pres \$4 - Sand \$5 - Sand \$6 - Stripp \$f1 - Loam \$f2 - Loam \$f3 - Deple \$6 - Redo	2.5Y sent y Gleyed y Redox y Redox y Muck M Muck M Minus y Minu	n. D=Depletion, RM=Reduced Matrix. CS Rec Color (Moist) 5/4 : Matrix neral Matrix iface	s-covered/Coated Sand of dox Features % 10 Indicators	Type C s for Problem A16 - Coast F7 - Dark St F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, loam) silty clay clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric S	Bottom Depth 16 24 Soil Field In A1- Histoscl A2 - Histo E4 A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick D	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2 dicators (check he oppedon stric n Sulfide I Layers uck ad Below Dark Surface lark Surface	Color 10YR 2.5Y ere if indic	Matrix (Moist) 3/1 5/2 cators ar	% 100 90 en not pres \$4 - Sand \$5 - Sand \$6 - Strip \$1 - Loam \$73 - Deple \$6 - Redole \$77 - Deplo	C=Concentration 2.5Y y Gleyed y Redox y Redox y Muck M y Gleyed ded Matrix y Muck M y Gleyed ded Matrix x Dark Su eted Dark	n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4 : Matrix neral Matrix : face Surface	s-covered/Coated Sand of dox Features % 10 Indicators	Type C s for Problem A16 - Coast F7 - Dark St F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, loam) silty clay clay
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric S	stron (Describe to III) Bottom Depth 16 24 Soil Field In A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplets A12 - Thick C S1 - Sandy M	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2 dicators (check he pipedon stic n Sulfide I Layers uck dd Below Dark Surface ark Surface uck Mineral	Color 10YR 2.5Y ere if indic	Matrix (Moist) 3/1 5/2 cators ar	% 100 90 en not pres \$4 - Sand \$5 - Sand \$6 - Stripp \$f1 - Loam \$f2 - Loam \$f3 - Deple \$6 - Redo	C=Concentration 2.5Y y Gleyed y Redox y Redox y Muck M y Gleyed ded Matrix y Muck M y Gleyed ded Matrix x Dark Su eted Dark	n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4 : Matrix neral Matrix : face Surface	s-Covered/Coated Sand of dox Features	Type C s for Problen A16 - Coast \$7 - Dark St \$12 - Iron-M TF12 - Very Other (Explain	Location M	(e.g. clay, sand, loam) silty clay clay es
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric S	stron (Describe to III) Bottom Depth 16 24 Soil Field In A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplets A12 - Thick C S1 - Sandy M	Vertic Endoaquolls e depth needed to document the ind Horizon 1 2 dicators (check he oppedon stric n Sulfide I Layers uck ad Below Dark Surface lark Surface	Color 10YR 2.5Y ere if indic	Matrix (Moist) 3/1 5/2 cators ar	% 100 90 en not pres \$4 - Sand \$5 - Sand \$6 - Strip \$1 - Loam \$73 - Deple \$6 - Redole \$77 - Deplo	C=Concentration 2.5Y y Gleyed y Redox y Redox y Muck M y Gleyed ded Matrix y Muck M y Gleyed ded Matrix x Dark Su eted Dark	n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4 : Matrix neral Matrix : face Surface	s-Covered/Coated Sand of dox Features	Type C s for Problen A16 - Coast \$7 - Dark St \$12 - Iron-M TF12 - Very Other (Explain	Location M	(e.g. clay, sand, loam) silty clay clay es urface
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric S	stron (Describe to III) Bottom Depth 16 24 Soil Field In A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplets A12 - Thick C S1 - Sandy M	Horizon 1 2 dicators (check here) stic n Sulfide I Layers uck de Below Dark Surface lark Surface uck Mineral cky Peat or Peat	Color 10YR 2.5Y ere if indic	Matrix (Moist) 3/1 5/2	% 100 90 en not pres \$4 - Sand \$5 - Sand \$6 - Strip \$1 - Loam \$73 - Deple \$6 - Redole \$77 - Deplo	C=Concentration 2.5Y y Gleyed y Redox y Redox y Muck M y Gleyed ded Matrix y Muck M y Gleyed ded Matrix x Dark Su eted Dark	n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4 : Matrix neral Matrix : face Surface	s-Covered/Coated Sand of dox Features	Type C s for Problen A16 - Coast F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay clay es
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric S	group): stion (Describe to the first of the	Vertic Endoaquolise depth needed to document the ind Horizon 1 2 dicators (check here) sipedon stic n Sulfide I Layers uck and Below Dark Surface uck Mineral cky Peat or Peat N/A	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2	% 100 90	2.5Y 2.5Y seent ② y Gleyed I y Redox oed Matrix in y Gleyed atted Matrix x Dark Su eted Dark x Depress	n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4 : Matrix neral Matrix : face Surface	s=covered/Coated Sand Codox Features % 10 Indicators 1 Indicators of hydrophy	Type C s for Problen A16 - Coast F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay clay es urface
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric S	group): stion (Describe to the first of the	Horizon 1 2 dicators (check here) stic n Sulfide I Layers uck de Below Dark Surface lark Surface uck Mineral cky Peat or Peat	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2	% 100 90	2.5Y 2.5Y seent ② y Gleyed I y Redox oed Matrix in y Gleyed atted Matrix x Dark Su eted Dark x Depress	n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4 : Matrix neral Matrix : face Surface	s=covered/Coated Sand Codox Features % 10 Indicators 1 Indicators of hydrophy	Type C s for Problen A16 - Coast F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay clay es urface
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric S	group): stion (Describe to the first of the	Vertic Endoaquolise depth needed to document the ind Horizon 1 2 dicators (check here) sipedon stic n Sulfide I Layers uck and Below Dark Surface uck Mineral cky Peat or Peat N/A	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2	% 100 90	2.5Y 2.5Y seent ② y Gleyed I y Redox oed Matrix in y Gleyed atted Matrix x Dark Su eted Dark x Depress	n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4 : Matrix neral Matrix : face Surface	s=covered/Coated Sand Codox Features % 10 Indicators 1 Indicators of hydrophy	Type C s for Problen A16 - Coast F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay clay es urface
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 16 NRCS Hydric S	group): stion (Describe to the first of the	Vertic Endoaquolise depth needed to document the ind Horizon 1 2 dicators (check here) sipedon stic n Sulfide I Layers uck and Below Dark Surface uck Mineral cky Peat or Peat N/A	Color 10YR 2.5Y	Matrix (Moist) 3/1 5/2	% 100 90	2.5Y 2.5Y seent ② y Gleyed I y Redox oed Matrix in y Gleyed atted Matrix x Dark Su eted Dark x Depress	n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/4 : Matrix neral Matrix : face Surface	s=covered/Coated Sand Codox Features % 10 Indicators 1 Indicators of hydrophy	Type C s for Problen A16 - Coast F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay clay es urface



Project/Site: Emerald Park Landfill - Western Expansion Wetland ID: Betw. W2 & W6 Sample Point W6-1u

VEGETATION Tree Stratum (Plo	(Species identified in all uppercase are non-nat size: 30 ft radius)	itive spec	ies.)		
Tree otratum (Fre	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
3.					
4.					Total Number of Dominant Species Across All Strata: 2 (B)
5.					·`,
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)
7.					· · · · · · · · · · · · · · · · · · ·
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 $x 1 = 0$
	Total Cover =	0			FACW spp. 0 x 2 = 0
					FAC spp. $0 \times 3 = 0$
Sapling/Shrub Stra	atum (Plot size: 15 ft radius)				FACU spp. 105 x 4 = 420
1.					UPL spp. 0 x 5 = 0
2.					
3.					Total 105 (A) 420 (B)
4.					
5.					Prevalence Index = B/A = 4.000
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					☐ Yes ☑ No Dominance Test is > 50%
	Total Cover =	0			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Plo	t size: 5 ft radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	SCHEDONORUS PRATENSIS	50	Υ	FACU	* Indicators of hydric soil and wetland hydrology must be
2.	TRIFOLIUM PRATENSE	40	Υ	FACU	present, unless disturbed or problematic.
3.	TARAXACUM OFFICINALE	10	N	FACU	
4.	DACTYLIS GLOMERATA	5	N	FACU	Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					14. 400.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					and noody planto look than olde in tall
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	105			
	um (Plot size: 30 ft radius)				
1.					
2.					
3.			-	-	Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.					
	Total Cover =	0	, , ,	0 111	
Remarks:	Healthy upland hay field with general la	ck of <i>Ph</i>	<i>alaris</i> in	the vicinit	y.

	Additional Remarks:
ı	
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ı	
ı	
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Project/Site:		ark Landfill - Wester		sion			Stantec Project #:	193702557	•	Date:	10/17/14	
Applicant:		Disposal Services, I	NC				_			County:	Waukesha	
Investigator #1:				Investi	gator #2:			N1/A		State:	Wisconsin	
Soil Unit: Landform:		ry silty clay loam		Loc	al Daliafe		/I/WWI Classification:	N/A		Wetland ID:	W6 1w	
Slope (%):	Depression 0-2	Latitude:	NI/A		al Relief: ongitude:			Datum:	NI/A	Sample Point:	Wet Meadow	
		litions on the site ty					mino annarbo\	☑ Yes ☐	_	Section:	36	
		or Hydrology sig				(ii lio' exbisi	Are normal circumsta			Township:	5 N	
		or Hydrology 🗆 nat					☑ Yes	□No		Range:	20 E	
SUMMARY OF		or riyarology E ne.	carry pr	o lo lo li lo						range.	20 2	
Hydrophytic Ve		sent?		7 Yes	☐ No			Hydric Soils	Present?			No
Wetland Hydrol					□ No					Within A Wetla		
Remarks:	Antecedent	moisture conditions	s normal				Sample point located					
							-2.786.78.38.000 - 1811.2					
HYDROLOGY												
Wetland Hydro	ology Indica	tors (Check here if	indicato	rs are no	t present	D):						
Primary		(000	11,010010	-1,-	1,61,555				Secondary:			
	A1 - Surface				B9 - Wate					B6 - Surface So		
	A2 - High Wa A3 - Saturation				B13 - Aqu B14 - True					B10 - Drainage C2 - Dry-Seaso		
	B1 - Water M				C1 - Hydro					C8 - Crayfish B		
	B2 - Sedimer						spheres on Living Roots			C9 - Saturation	Visible on Aerial Ima	agery
	B3 - Drift Dep						duced Iron		_	D1 - Stunted or		
	B4 - Algal Ma B5 - Iron Dep				C6 - Rece C7 - Thin		duction in Tilled Soils			D2 - Geomorph D5 - FAC-Neutr		
		on Visible on Aerial Ima	agery		D9 - Gaug				ت	D3 - 1 AC-Neuti	ai iest	
		Vegetated Concave S			Other (Ex							
Field Observat	ions:											
Surface Water I	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes □ No	
Water Table Pre	esent?	☐ Yes ☑ No	Depth:		(in.)			wettand my	urology Fi	esent:	163 🗆 110	
Saturation Pres	ent?	☑ Yes □ No	Depth:	4	(in.)							
Describe Record	led Data (stre	eam gauge, monitorir	ng well, a	erial phot	os, previo	us inspec	tions), if available:					
Remarks:	Wetland is	most likely an old e	end-furro	w or an o	old shallo	w ditch a	long the edge of an ac	aricultural field	4			
			ona rano			w uitcii a	iong the edge of all ag	gricultural li c it	J.			
			ona lano		514 5114II5	w uiton a	long the edge of all ag	griculturar neit	u.			
SOILS			ona rano		ona onano	w ditcii a	ong the edge of all ag	griculturar neit	u.			
Map Unit Name		Montgomery silty cl	lay loam				eries Drainage Class:		u.			
Map Unit Name Taxonomy (Sub	group):	Montgomery silty co	lay loam			S	eries Drainage Class:	very poorly				
Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to the	Montgomery silty co	lay loam	the absence of ir		S	eries Drainage Class:	very poorly =Covered/Coated Sand G		·Pore Lining, M=Matrix)		
Map Unit Name Taxonomy (Sub Profile Descrip Top	ogroup): otion (Describe to the Bottom	Montgomery silty control Vertic Endoaquolls The depth needed to document the individuals	lay loam	the absence of in	ndicators.) (Type:	S	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS Red	very poorly =Covered/Coated Sand Glox Features	Grains; Location: PL=	1	Texture	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to the Bottom Depth	Montgomery silty of Vertic Endoaquolls to depth needed to document the individual Horizon	lay loam cator or confirm Color	the absence of in Matrix (Moist)	ndicators.) (Type:	S	eries Drainage Class:	very poorly =Covered/Coated Sand Gox Features %		Pore Lining, M=Matrix) Location	(e.g. clay, sand,	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to the Bottom Depth 4	Montgomery silty covertic Endoaquolls the depth needed to document the individual Horizon	cator or confirm Color 10YR	the absence of in Matrix (Moist)	ndicators.) (Type:	C=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist)	very poorly =Covered/Coated Sand Cotox Features %	Grains; Location: PL=	Location 	(e.g. clay, sand, silty clay loar	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	ogroup): tion (Describe to the Bottom Depth 4 22	Montgomery silty of Vertic Endoaquolls to depth needed to document the individual Horizon	cator or confirm Color 10YR 2.5Y	the absence of in Matrix (Moist) 3/1 6/2	% 100 80	C=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist) 5/4	very poorly =Covered/Coated Sand @ dox Features % 20	Grains; Location: PL=	Location M	(e.g. clay, sand, silty clay load silty clay	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	pgroup): otion (Describe to the Bottom Depth 4 22	Montgomery silty of Vertic Endoaquolls to depth needed to document the individual of the t	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2	% 100 80	C=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist) 5/4	very poorly =Covered/Coated Sand @ dox Features % 20	Srains; Location: PL= Type C	Location M	(e.g. clay, sand, silty clay loar silty clay	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	pgroup): otion (Describe to the Bottom Depth 4 22	Montgomery silty of Vertic Endoaquolls to depth needed to document the indices of the the ind	cator or confirm Color 10YR 2.5Y	the absence of it Matrix (Moist) 3/1 6/2	% 100 80	C=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist) 5/4	very poorly =Covered/Coated Sand © dox Features % 20	Grains; Location: PL=	Location M	(e.g. clay, sand, silty clay loar silty clay	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	ogroup): otion (Describe to the Bottom Depth 4 22	Montgomery silty of Vertic Endoaquolls to depth needed to document the individual of the the individu	Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2	% 100 80	C=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist) 5/4	very poorly =Covered/Coated Sand @ dox Features % 20	Grains; Location: PL=	Location M	(e.g. clay, sand, silty clay loar silty clay 	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	pgroup): ation (Describe to the Bottom Depth 4 22	Montgomery silty of Vertic Endoaquolls to depth needed to document the indices of the the ind	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2	% 100 80	C=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist) 5/4	very poorly =Covered/Coated Sand © dox Features % 20	Grains; Location: PL=	Location M	(e.g. clay, sand, silty clay loar silty clay 	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	ogroup): otion (Describe to the Bottom Depth 4 22	Montgomery silty of Vertic Endoaquolls to depth needed to document the individual of the the individu	Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2	% 100 80	C=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist) 5/4	very poorly =Covered/Coated Sand @ dox Features % 20	Grains; Location: PL=	Location M	(e.g. clay, sand, silty clay loar silty clay 	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	pgroup): ation (Describe to the Depth	Montgomery silty of Vertic Endoaquolls to depth needed to document the indicate depth needed to document the	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2	% 100 80	C=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist) 5/4	very poorly -Covered/Coated Sand Cotox Features % 20	Grains; Location: PL=	Location M	(e.g. clay, sand, silty clay loar silty clay 	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	pgroup): ation (Describe to the Depth 4 22 Soil Field In	Montgomery silty of Vertic Endoaquolls to depth needed to document the indices of the the ind	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators are	% 100 80 e not pres	C=Concentratio	eries Drainage Class: Red Color (Moist) 5/4	very poorly =Covered/Coated Sand G dox Features % 20 Indicators	Type Type C	Location M natic Soils ¹	(e.g. clay, sand, silty clay loar silty clay 	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	pgroup): tion (Describe to the Bottom Depth 4 22 Soil Field In A1- Histosol	Montgomery silty covertic Endoaquolls te depth needed to document the individual of	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators arr	% 100 80 e not pres	C=Concentratio	eries Drainage Class: Red Color (Moist) 5/4	very poorly =Covered/Coated Sand of Cook Features % 20 Indicators	Type Type C 5 for Problen A16 - Coast	Location M	(e.g. clay, sand, silty clay loar silty clay 	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	pgroup): tion (Describe to the Bottom Depth 4 22	Montgomery silty of Vertic Endoaquolls to depth needed to document the individual to	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators arr	% 100 80 	C=Concentratio	eries Drainage Class: Red Color (Moist) 5/4 Matrix	very poorly =Covered/Coated Sand of Cox Features % 20 Indicators	Type Type C s for Problem A16 - Coast S7 - Dark Sr	Location M	(e.g. clay, sand, silty clay load silty clay 	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric	pgroup): tion (Describe to the Bottom Depth 4 22	Montgomery silty of Vertic Endoaquolls to depth needed to document the individual to the depth needed to document the individual to the in	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators ar	% 100 80 e not pres	C=Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist) 5/4 : Matrix	very poorly =Covered/Coated Sand Golox Features % 20 Indicators	Type Type C C s for Problen A16 - Coast S7 - Dark S7 F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, silty clay loar silty clay	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	pgroup): ption (Describe to the Bottom Depth 4 22	Montgomery silty covertic Endoaquolls Vertic Endoaquolls te depth needed to document the individual of the individual	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators arr	% 100 80	c=Concentratio	eries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist) 5/4 : Matrix neral Matrix	very poorly =Covered/Coated Sand Golox Features % 20 Indicators	Type Type C C s for Problen A16 - Coast S7 - Dark S7 F12 - Iron-M TF12 - Very	Location M natic Soils Prairie Redox urface langanese Mass	(e.g. clay, sand, silty clay loar silty clay	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	pgroup): btion (Describe to the Depth 4 22	Montgomery silty covertic Endoaquolls Vertic Endoaquolls te depth needed to document the individual to the individual	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators are	% 100 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F3 - Deple	10YR sent y Gleyed I y Redox oed Matrix by Muck M by Gleyed Matrix by Gleyed Matrix by Gleyed Matrix by Gleyed Beted Matrix by	eries Drainage Class: De Depletion, RM=Reduced Matrix, CS-Red Color (Moist) 5/4	very poorly =Covered/Coated Sand Golox Features % 20 Indicators	Type Type C C s for Problen A16 - Coast S7 - Dark S7 F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, silty clay loar silty clay	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric 3	by composition (Describe to the Depth 4 22	Montgomery silty control Vertic Endoaquolls vertic Endoaquolls vertice Endoaquolls ver	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators are	% 100 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo	Section (Concentration (Concentratio	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS* Red Color (Moist) 5/4 : Watrix meral Matrix face	very poorly =Covered/Coated Sand Golox Features % 20 Indicators	Type Type C C s for Problen A16 - Coast S7 - Dark S7 F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, silty clay loar silty clay	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	pgroup): tion (Describe to the Depth 4 22	Montgomery silty covertic Endoaquolls Vertic Endoaquolls Le depth needed to document the individual of	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators arr	% 100 80 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp F1 - Loam F3 - Deple	c=Concentratio	eries Drainage Class: Red Color (Moist) 5/4 Matrix face Surface	very poorly =Covered/Coated Sand Golox Features % 20 Indicators	Type Type C C s for Problen A16 - Coast S7 - Dark S7 F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, silty clay loar silty clay	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	pgroup): ption (Describe to the Bottom Depth 4 22	Montgomery silty covertic Endoaquolls Vertic Endoaquolls Le depth needed to document the individual of	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators arr	% 100 80 en not press S4 - Sand S5 - Sand S6 - Stripp F1 - Loarm F2 - Loarm F2 - Loarm F7 - Deple F6 - Redo F7 - Deple F7 - Deple F7 - Deple F7 - Deple	c=Concentratio	eries Drainage Class: Red Color (Moist) 5/4 Matrix face Surface	very poorly =Cowered/Coated Sand of Oox Features % 20 Indicators	Type Type C 5 for Problen A16 - Coast S7 - Dark S1 F12 - Iron-M TF12 - Very Other (Explain	Location M	(e.g. clay, sand, silty clay loar silty clay	m
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	pgroup): ption (Describe to III Describe to I	Montgomery silty covertic Endoaquolls Vertic Endoaquolls te depth needed to document the individual of the individual	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators arr	% 100 80	c=Concentratio	eries Drainage Class: Red Color (Moist) 5/4 Matrix face Surface	very poorly =Covered/Coated Sand G lox Features % 20 Indicators Indicators of hydrophy	Type Type C C s for Problen A16 - Coast \$7 - Dark \$1 F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, silty clay loar silty clay loar	m
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	pgroup): ption (Describe to the Bottom Depth 4 22	Montgomery silty covertic Endoaquolls Vertic Endoaquolls te depth needed to document the indident of the individual	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators arr	% 100 80	c=Concentratio	eries Drainage Class: Red Color (Moist) 5/4 Matrix face Surface	very poorly =Cowered/Coated Sand of Oox Features % 20 Indicators	Type Type C C s for Problen A16 - Coast \$7 - Dark \$1 F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, silty clay loar silty clay loar	m
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	pgroup): ption (Describe to III Describe to I	Montgomery silty covertic Endoaquolls Vertic Endoaquolls te depth needed to document the indident of the individual	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators arr	% 100 80	c=Concentratio	eries Drainage Class: Red Color (Moist) 5/4 Matrix face Surface	very poorly =Covered/Coated Sand G lox Features % 20 Indicators Indicators of hydrophy	Type Type C C s for Problen A16 - Coast \$7 - Dark \$1 F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, silty clay loar silty clay loar	m
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	pgroup): ption (Describe to III Describe to I	Montgomery silty covertic Endoaquolls Vertic Endoaquolls te depth needed to document the indident of the individual	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators arr	% 100 80	c=Concentratio	eries Drainage Class: Red Color (Moist) 5/4 Matrix face Surface	very poorly =Covered/Coated Sand G lox Features % 20 Indicators Indicators of hydrophy	Type Type C C s for Problen A16 - Coast \$7 - Dark \$1 F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, silty clay loar silty clay loar	m
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S	pgroup): ption (Describe to III Describe to I	Montgomery silty covertic Endoaquolls Vertic Endoaquolls te depth needed to document the indident of the individual	cator or confirm Color 10YR 2.5Y	Matrix (Moist) 3/1 6/2 cators arr	% 100 80	c=Concentratio	eries Drainage Class: Red Color (Moist) 5/4 Matrix face Surface	very poorly =Covered/Coated Sand G lox Features % 20 Indicators Indicators of hydrophy	Type Type C C s for Problen A16 - Coast \$7 - Dark \$1 F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, silty clay loar silty clay loar	m



Project/Site: Emerald Park Landfill - Western Expansion Wetland ID: W6 Sample Point W6-1w **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** % Cover Dominant Ind.Status Species Name 2 Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. x 1 = OBL spp. x 2 = Total Cover = 0 FACW spp. 91 182 x 3 = FAC spp. 0 0 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 0 FACW 1. Cornus alba 1 Ν UPL spp. 0 x 5= 2 3. Total 111 (A) 202 4 5. Prevalence Index = B/A = 1.820 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ✓ Yes Rapid Test for Hydrophytic Vegetation □ No 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA **FACW** 60 1. * Indicators of hydric soil and wetland hydrology must be 2 Spartina pectinata 25 Υ **FACW** present, unless disturbed or problematic. 3. Ν **OBL** Carex pellita 15 Oxypolis rigidior Ν OBL **Definitions of Vegetation Strata:** 4. 5 5. Helianthus grosseserratus 5 Ν FACW Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 110 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 5. Total Cover = 0 Remarks: Sample point is located in a narrow wet meadow between an agricultural field and an upland tree line. Additional Remarks:



Are Vegetation Are Vegetation SUMMARY OF Hydrophytic Veg Wetland Hydrol Remarks:	Advanced I Eric Parker Martinton s Hill Slope 2-4 drologic cond , Soil , , , Soil , , FINDINGS getation Present' Antecedent	Latitude: Latitude: ditions on the site typ or Hydrology sign or Hydrology natu sent?	N/A N/A Dical for the street of the street	Loc Lthis time disturbe bolemati	ed? c?	NV Convex N/A (If no, expla	VI/WWI Classification	Datum: □ Yes □ tances present □ No Hydric Soils	No Present?	Section: Township: Range:	W7-1u Agricultural Field 36 5 N 20 E ☐ Yes ☑ No and? ■ Yes ☑ No
HYDROLOGY											
Wetland Hydro	A1 - Surface of A2 - High Wa A3 - Saturatic B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatic B8 - Sparsely	ater Table on farks nt Deposits posits at or Crust	gery		B9 - Wate B13 - Aqu B14 - True C1 - Hydro C3 - Oxidi C4 - Prese C6 - Rece C7 - Thin	er-Stained latic Fauna e Aquatic I logen Sulfic ized Rhizo ence of Re ent Iron Re Muck Surf ge or Well	Plants de Odor spheres on Living Roots duced Iron duction in Tilled Soils ace Data			E6 - Surface So E10 - Drainage C2 - Dry-Seasin C8 - Crayfish Bi C9 - Saturation D1 - Stunted or D2 - Geomorphi D5 - FAC-Neutr	Patterns n Water Table urrows Visible on Aerial Imagery Stressed Plants ic Position
Field Observat Surface Water Water Table Pro Saturation Pres	Present? resent? sent?	☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No	Depth: Depth: Depth:		(in.) (in.) (in.)			Wetland Hyd			Yes ☑ No
Remarks:		eam gauge, monitorin gy indicators were ol					nds at this location, s	signatures cons		o Slide Review ne east.	
SOILS Map Unit Name		Martinton silt loam					eries Drainage Class	· comowhat no	oorly		
Taxonomy (Sub		Aquic Argiudolls					elles Dialilage Class	s. somewhat po	JOHY		
										(Doro Lining M=Matrix)	
I Profile Descrip	JLION (Describe to the		ator or confirm t	the absence of i	ndicators) (Type:	C=Concentratio	n D=Depletion RM=Reduced Matrix CS	S=Covered/Coated Sand G	rains: Location: PL =		
	Bottom (Describe to the		ator or confirm t	the absence of i		C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS		rains; Location: PL=	-rore ciriling, ivi–iviatrix)	Texture
Top Depth						C=Concentratio		S=Covered/Coated Sand G dox Features %	Type	Location	
Тор	Bottom	he depth needed to document the indic		Matrix		C=Concentratio	Red	dox Features	1	1	
Top Depth	Bottom Depth	he depth needed to document the indic	Color	Matrix (Moist)	%		Color (Moist)	dox Features %	Туре	Location	(e.g. clay, sand, loam)
Top Depth 0	Bottom Depth	ne depth needed to document the indic Horizon 1	Color 10YR	Matrix (Moist) 3/1	% 100		Color (Moist)	dox Features %	Type 	Location 	(e.g. clay, sand, loam) silty clay loam
Top Depth 0 9	Bottom Depth 9 16	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 4/3	% 100 98	 10YR	Color (Moist) 3/4	dox Features % 2	Type C	Location M	(e.g. clay, sand, loam) silty clay loam silty clay
Top Depth 0 9 16	Bottom Depth 9 16 24	Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 4/3 5/2	% 100 98 90	 10YR 10YR	Color (Moist) 3/4 4/6	% 2 10	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Top	Bottom Depth 9 16 24	Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 4/3 5/2	% 100 98 90 	 10YR 10YR	Color (Moist) 3/4 4/6	% 2 10	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Top	Bottom Depth 9 16 24	Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 3/1 4/3 5/2	% 100 98 90 	 10YR 10YR	Color (Moist) 3/4 4/6	% 2 10	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Top Depth 0 9 16	Bottom Depth 9 16 24	Horizon 1 2 3	Color 10YR 10YR 10YR 	Matrix (Moist) 3/1 4/3 5/2 	% 100 98 90 	 10YR 10YR 	Rec Color (Moist) 3/4 4/6	dox Features	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay clay
Top Depth 0 9 16 NRCS Hydric :	Bottom Depth 9 16 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy M	Horizon 1 2 3	Color 10YR 10YR 10YR 	Matrix (Moist) 3/1 4/3 5/2 cators ar	% 100 98 90 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp £1 - Loam £2 - Loam £3 - Deple £6 - Redo	10YR 10YR 10YR	Rec Color (Moist) 3/4 4/6 : Matrix ineral Matrix cface Surface	dox Features	Type C C sfor Problem A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Explain	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay clay es
Top Depth 0 9 16 NRCS Hydric :	Bottom Depth 9 16 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy M	Horizon 1 2 3	Color 10YR 10YR 10YR 	Matrix (Moist) 3/1 4/3 5/2 cators ar	% 100 98 90 e not pres \$4 - Sand \$5 - Sand \$6 - Stripp £1 - Loam £2 - Loam £3 - Deple £6 - Redo £7 - Deple £8 - Redo	10YR 10YR 10YR	Rec Color (Moist) 3/4 4/6 : Matrix ineral Matrix cface Surface	dox Features	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam silty clay clay es

Sample Point W7-1u

Wetland ID: Adj to W7



Project/Site: Emerald Park Landfill - Western Expansion

WETLAND DETERMINATION DATA FORM Midwest Region

VEGETATION (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 FACW spp. 0 x 2 = 0 x 3 = FAC spp. 0 0 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 1. UPL spp. 40 x 5= 2 3. Total (A) 200 4 5. Prevalence Index = B/A = 5.000 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ✓ No 10. ☐ Yes ✓ No Dominance Test is > 50% Total Cover = ☑ No 0 □ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * GLYCINE MÁX UPL 40 1. * Indicators of hydric soil and wetland hydrology must be 2 present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 40 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☐ Yes ☑ No 4 5. Total Cover = 0 Remarks: In ag. field. Healthy soy bean crop recently harvested, but stubble present as no plowing occurred. Glycine cover estimated based on stubble. No weeds observed in herb plot. Additional Remarks:



Project/Site:		ark Landfill - Wester		sion			Stantec Project #:	193702557	1	Date:	10/17/14
Applicant:		Disposal Services, II	NC							County:	Waukesha
Investigator #1:	Eric Parker	•		Invest	igator #2:					State:	Wisconsin
Soil Unit:	Martinton s	ilt loam				NV	VI/WWI Classification:	None		Wetland ID:	W7
Landform:	Hill Slope			Loc	al Relief:	Concav	е			Sample Point:	W7-1w
Slope (%):	0-1	Latitude:	N/A	L	ongitude:	N/A		Datum:	N/A	Community ID:	Farmed Wetland
Are climatic/hyd	drologic cond	ditions on the site typ	ical for t	this time	of year?	(If no, expla	min remarks)	☑ Yes □	No	Section:	36
		or Hydrology sign					Are normal circumsta	ances presen	13	Township:	5 N
		or Hydrology nat					☐ Yes	⊠No		Range:	20 E
SUMMARY OF		, , , ,		40.020.94						3	
Hydrophytic Ve		sent?		7 Yes	□ No			Hydric Soils	Present?		☑ Yes □ No
Wetland Hydrol	•				□ No					Within A Wetla	
Remarks:			nnmal				Point located in an ag	nricultural field	with noter	ntial hydrologic	al manipulations
rtemarks.		cumstances assume			11 11213	analysis	. Folia located in array	gricultura neit	with poter	itiai riyarologic	ai mampulations.
	Normal Circ	unistances assume	d nor pre	SOULL							
HYDROLOGY											
Wetland Hydro	ology Indica	ators (Check here if	indicato	rs are no	t present	E):					
Primary		(1)	0.19.169.116	2 20 2 30 1	VEX 53-230	,			Secondary:		
	A1 - Surface				B9 - Wate	r-Stained	Leaves			B6 - Surface So	
	A2 - High Wa				B13 - Aqu					B10 - Drainage	
	A3 - Saturation				B14 - True					C2 - Dry-Season	
					C1 - Hydr					C8 - Crayfish Bu	
	B2 - Sedimer B3 - Drift Dep						spheres on Living Roots educed Iron			D1 - Saturation	Visible on Aerial Imagery
				H			duction in Tilled Soils			D2 - Geomorphi	
				ä						D5 - FAC-Neutra	
		on Visible on Aerial Ima	igery		D9 - Gaud				_		
		y Vegetated Concave S			Other (Ex	plain in Re	emarks)				
Field Observat	ions:										
Surface Water I	Present?	☑ Yes □ No	Depth:	0.5	(in.)						
Water Table Pre		☑ Yes ☐ No	Depth:		(in.)			Wetland Hy	drology Pr	esent? ☑	Yes □ No
Saturation Pres		☑ Yes ☐ No	Depth:		(in.)						
			Бериі.	U	(1111.)						
		14 1									
		eam gauge, monitorin								Slide Review	
Remarks:	Primary and	d secondary wetland					ctions), if available: hydrology. FSA slide:	s indicate wet			ures (crop stress,
Remarks:	Primary and							s indicate wet			ures (crop stress,
Remarks: SOILS	Primary and saturation,	d secondary wetland and inundation).				wetland	hydrology. FSA slide:		lands via re		ures (crop stress,
Remarks: SOILS Map Unit Name	Primary and saturation,	d secondary wetland and inundation). Martinton silt loam				wetland			lands via re		ures (crop stress,
Remarks: SOILS Map Unit Name Taxonomy (Sub	Primary and saturation, set or	d secondary wetland and inundation). Martinton silt loam Aquic Argiudolls	d indicate	ors provi	de strong	wetland	hydrology. FSA slide: Series Drainage Class:	somewhat po	clands via re	ecurring signat	ures (crop stress,
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Sample Point W7-1w



Project/Site: Emerald Park Landfill - Western Expansion

WETLAND DETERMINATION DATA FORM Midwest Region

Wetland ID:

W7

VEGETATION (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 4 (A) 3. 4. Total Number of Dominant Species Across All Strata: 4 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 FACW spp. 0 x 2 = 0 x 3 = FAC spp. __ 6 18 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 1. UPL spp. 0 x 5= 2 3. Total 33 (A) 51 (B) 4 5. Prevalence Index = B/A = 1.545 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. Rapid Test for Hydrophytic Vegetation ☐ Yes ✓ No 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 0 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * TYPHA ANGUSTIFOLIA OBL 15 1. * Indicators of hydric soil and wetland hydrology must be 2 5 **OBL** Rorippa palustris present, unless disturbed or problematic. 3. OBL Ranunculus sceleratus 5 PLANTAGO MAJOR 5 FAC **Definitions of Vegetation Strata:** 4. TRIFOLIUM PRATENSE Ν FACU 5. Amaranthus retroflexus **FACU** Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 1 Ν breast height (DBH), regardless of height. 7 Panicum capillare 1 Ν FAC 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 33 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 Total Cover = 0 Remarks: Sample point is located in a farmed wetland, dominated by bare soil on perimeter due to crop stress. Adjacent portions of field have recently harvested soybean stubble interpreted to be healthy. Additional Remarks:



	Emorald Da	ark Landfill Master	n Evnon	oion			Stantec Project #:	193702557		Date:	10/23/14
Project/Site:		ark Landfill - Wester		SIOH			Stanted Project #.	193/0255/			
Applicant:		Disposal Services, II	NC							County:	Waukesha
Investigator #1:				Investi	igator #2:					State:	Wisconsin
Soil Unit:		y silty clay loam					VI/WWI Classification:	N/A			
Landform:	Hill Slope			Loc	al Relief:	Convex				Sample Point:	W8-1u
Slope (%):	0-2	Latitude:			ongitude:			Datum:	N/A	Community ID:	Agricultural Field
Are climatic/hyd	rologic conc	litions on the site typ	ical for	this time	of year?	(If no, expla	minnemarks)	☑ Yes □	No	Section:	36
		or Hydrology 🗆 sign					Are normal circumsta	ances present	12	Township:	5 N
		or Hydrology I nat					☐ Yes	⊠No		Range:	20 E
SUMMARY OF	EINIDINGS	of Trydrology 12 has	Circuity Pi	objeti i del						rtange.	20 L
		10		- 17.5	- 100			Physica Calle	B 10		
Hydrophytic Ve	•			☑ Yes				Hydric Soils			
Wetland Hydrol					■ No					Within A Wetla	
Remarks:	Antecedent	moisture conditions	normal	based o	n WETS	analysis	Point located in an ag	gricultural field	with poter	ntial hydrologic	al manipulations.
	Normal circ	umstances assume	d not pre	esent F	SA slides	indicate	uplands.				
LIVEROLOCY											
HYDROLOGY											
		itors (Check here if	indicato	rs are no	t present	E):					
<u>Primary</u>									Secondary:		
	A1 - Surface				B9 - Wate					B6 - Surface So	
	A2 - High Wa				B13 - Aqu					B10 - Drainage	
	A3 - Saturation				B14 - True					C2 - Dry-Seaso	
	B1 - Water M				C1 - Hydro					C8 - Crayfish Bu	
							spheres on Living Roots				Visible on Aerial Imagery
	B3 - Drift Dep						educed Iron			D1 - Stunted or	
	B4 - Algal Ma			_			duction in Tilled Soils			D2 - Geomorphi	
			aor.		-				⊻	D5 - FAC-Neutr	ai rest
		on Visible on Aerial Ima Vegetated Concave S			D9 - Gaug Other (Ex						
	bo - Sparsery	vegetated Concave 3	urrace	П	Outlet (EX	Jiaiii iii re	marks)				
Field Observat											
Surface Water I	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Dr	ocent?	Yes ☑ No
Water Table Pr	esent?	☐ Yes ☑ No	Depth:		(in.)			welland ny	urology Pr	esent? \Box	res 🗹 No
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
					()						
		eam gauge, monitorin					ctions), if available:		Annual Crop	Slide Review	
Remarks:								ation and goi	ng south ar	nd east, and fie	eld review also includes
Remarks:		hydrology indicators ope. Couldn't interp						ation and goi	ng south ar	nd east, and fie	eld review also includes
								cation and goi	ng south ar	nd east, and fie	eld review also includes
SOILS	a convex sl	ope. Couldn't interp	oret crop	stress d		ent plowi	ng.		ng south ar	nd east, and fie	eld review also includes
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	a convex si group): tion (Describe to the Bottom Depth 8 24	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here	ay loam cator or confirm Color 10YR 10YR	stress d the absence of life Matrix (Moist) 2/1 6/1 cators are	we to reconditional distance of the second s	C=Concentration 10YR	ng. Series Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist) 5/6	very poorly -Covered/Coated Sand G dox Features % 40 Indicators	Type C s for Problem A16 - Coast S7 - Dark St	Location Location M	Texture (e.g. clay, sand, loam) silty clay loam clay
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SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	segroup): stion (Describe to III) Bottom Depth 8 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy N S3 - 5 cm Mu Type:	Montgomery silty cl Vertic Endoaquolls Le depth needed to document the indic Horizon 1 2 dicators (check her bipedon stic n Sulfide d Layers luck ded Below Dark Surface luck Mineral locky Peat or Peat	ay loam Color 10YR 10YR re if indic	the absence of in Matrix (Moist) 2/1 6/1 cators are	we to reconditional metal with the control of the c	C=Concentration 10YR 10YR Sent	ng. Series Drainage Class: n, D-Depletion, RM-Reduced Matrix, CS Red Color (Moist) 5/6	very poorly =Cowered/Coated Sand G OX Features % 40 Indicators Indicators of hydrophy	Type Type C C 5 for Problen A16 - Coast S7 - Dark S7 TF12 - Iron-M TF12 - Very Other (Explain)	Location Location M	Texture (e.g. clay, sand, loam) silty clay loam clay es urface
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	segroup): stion (Describe to III) Bottom Depth 8 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy N S3 - 5 cm Mu Type:	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here bipedon stic n Sulfide d Layers luck ed Below Dark Surface luck Mineral luck Mineral luck Peat or Peat	ay loam Color 10YR 10YR re if indic	the absence of in Matrix (Moist) 2/1 6/1 cators are	we to reconditional metal with the control of the c	C=Concentration 10YR 10YR Sent	ng. Series Drainage Class: n, D-Depletion, RM-Reduced Matrix, CS Red Color (Moist) 5/6	very poorly =Cowered/Coated Sand G OX Features % 40 Indicators Indicators of hydrophy	Type Type C C 5 for Problen A16 - Coast S7 - Dark S7 TF12 - Iron-M TF12 - Very Other (Explain)	Location Location M	Texture (e.g. clay, sand, loam) silty clay loam clay es urface
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 8 NRCS Hydric	segroup): stion (Describe to III) Bottom Depth 8 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy N S3 - 5 cm Mu Type:	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here bipedon stic n Sulfide d Layers luck ed Below Dark Surface luck Mineral luck Mineral luck Peat or Peat	ay loam Color 10YR 10YR re if indic	the absence of in Matrix (Moist) 2/1 6/1 cators are	we to reconditional metal with the control of the c	C=Concentration 10YR 10YR Sent	ng. Series Drainage Class: n, D-Depletion, RM-Reduced Matrix, CS Red Color (Moist) 5/6	very poorly =Cowered/Coated Sand G OX Features % 40 Indicators Indicators of hydrophy	Type Type C C 5 for Problen A16 - Coast S7 - Dark S7 TF12 - Iron-M TF12 - Very Other (Explain)	Location Location M	Texture (e.g. clay, sand, loam) silty clay loam clay es urface



Wetland ID: Adj to W8 Sample Point W8-1u Project/Site: Emerald Park Landfill - Western Expansion **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 FACW spp. 15 x 2 = 30 x 3 = FAC spp. 20 60 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 1. UPL spp. 0 x 5= 2 3. Total 35 90 4 5. Prevalence Index = B/A = 2.571 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ✓ No Rapid Test for Hydrophytic Vegetation 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 0 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * Agrostis hyemalis 20 FAC * Indicators of hydric soil and wetland hydrology must be 2 ECHINOCHLOA CRUS-GALLI Υ **FACW** 15 present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. --5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 35 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 Total Cover = 0 Remarks: Soybean crop recently harvested and soils plowed, leaving only weeds. Could not include Glycine cover because stubble was not interpretive (cover

Additional Remarks:

or crop stress) due to plowing.

Hydrophytic vegetation and hydric soils were present, although both soils and vegetation were disturbed. A lack of primary hydrology indicators and a lack of consistent signatures in the FSA slides was interpreted to be uplands.



Project/Site:	Emerald Pa	ark Landfill - Wester	n Expans	sion			Stantec Project #:	193702557		Date:	10/23/14
Applicant:		Disposal Services, I	NC				-			County:	Waukesha
Investigator #1:				Investi	gator #2:	Jaron Ty	/lock			State:	Wisconsin
Soil Unit:		y silty clay loam				NV	/I/WWI Classification:	F0Kf			W8
Landform:	Depression				al Relief:		e			Sample Point:	
Slope (%):	1-2	<u>Latitude:</u>			ongitude:			Datum:		1	Farmed Wetland
		itions on the site tyr				(If no, explai		☑ Yes ☑		Section:	36
		or Hydrology 🗆 sig					Are normal circumstr		ES.	Township:	5 N
		or Hydrology 🛭 nat	urally pro	pplematic	:7		☐ Yes	⊠No		Range:	20 E
SUMMARY OF											
Hydrophytic Ve					□ No			Hydric Soils			☑ Yes ☑ No
Wetland Hydrol	ogy Present	? 	Haustool		□ No		torred and the Manual	Is This Samp	ng Point \	Within A Wetla	and? Yes ■ No
Remarks:							Itural activity. Normal	circumstance	sinterprete	ed to be not me	et at this location
	because of	recent use for agric	cultural ci	rop and	resence	or annua	weed species				
HYDROLOGY											
Wetland Hydro	ology Indica	itors (Check here if	indicator	s are no	t present	E):					
Primary:		0000000	0.00.00.00.00.00.00.00.00.00.00.00.00.0	T 20 4 1991	MEX. 13-33-3	7-			Secondary:		
	A1 - Surface				B9 - Wate					B6 - Surface So	
	A2 - High Wa				B13 - Aqu					B10 - Drainage	
	A3 - Saturation B1 - Water M				B14 - True C1 - Hydro					C2 - Dry-Seasor C8 - Crayfish Bu	n water rable
	B2 - Sedimer						spheres on Living Roots				Visible on Aerial Imagery
	-						duced Iron			D1 - Stunted or	
	B4 - Algal Ma						duction in Tilled Soils			D2 - Geomorphi	
	B5 - Iron Dep				C7 - Thin				✓	D5 - FAC-Neutra	al Test
		on Visible on Aerial Ima Vegetated Concave S			D9 - Gaug Other (Exp						
	Do - Sparsery	vegetated Concave S	uriace		Other (LX)	Jiaiii iii iXe	marks)				
Field Observat	ione:										
			Donath	0.5	(im)						
Surface Water I		☑ Yes ☐ No	Depth:		(in.)			Wetland Hyd	drology Pr	esent? 🗹	Yes □ No
Water Table Pro		☑ Yes ☐ No	Depth:	10	(in.)						
Saturation Pres		☑ Yes ☐ No	Depth:	0	(in.)						
Describe Record		eam gauge, monitorir			os, previo	us inspec	tions), if available:		Annual Crop	Slide Review	
Remarks:	EQA clidos	the attendance of the court of the									
ixemaiks.	FOA Silues	indicate wetlands a	t this loca	ation.							
ixemaiks.	FOA Silues	indicate wetlands a	t this loca	ation.							
Nemarks.	FOA Silues	indicate wetlands a	t this loca	ation.							
	FOA Sildes	indicate wetlands a	t this loca	ation.							
SOILS				ation.		S	eries Drainage Class:	very poorly			
SOILS Map Unit Name	:	Montgomery silty cl	lay loam	ation.		S	eries Drainage Class:	very poorly			
SOILS Map Unit Name Taxonomy (Sub	: ogroup):	Montgomery silty cl Vertic Endoaquolls	lay loam		ndicators) (Type:				Strains: Location: PL=	Pore Lining M≡Matrix\	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	: ogroup): otion (Describe to the	Montgomery silty cl Vertic Endoaquolls	lay loam	he absence of in	ndicators.) (Type:		n, D=Depletion, RM=Reduced Matrix, CS	=Covered/Coated Sand G	Frains; Location: PL=	Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	: ogroup): tion (Describe to the Bottom	Montgomery silty cl Vertic Endoaquolls e depth needed to document the indic	lay loam	he absence of in			n, D=Depletion, RM=Reduced Matrix, CS	=Covered/Coated Sand G	1	T	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to the Bottom Depth	Montgomery silty cl Vertic Endoaquolls de depth needed to document the indik Horizon	lay loam Secutor or confirm to	he absence of ir Matrix (Moist)	%	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand G	Туре	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to the Bottom Depth 6	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1	cator or confirm to	he absence of in Matrix (Moist) 2/1	% 100	C=Concentration	n, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	e=Covered/Coated Sand G	Type 	Location 	(e.g. clay, sand, loam) silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to the Depth 6 22	Montgomery silty cl Vertic Endoaquolls e depth needed to document the indice Horizon 1 2	cator or confirm to Color 10YR 10YR	he absence of ir Matrix (Moist) 2/1 4/2	% 100 95	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6	=Covered/Coated Sand G dox Features % 5	Type C	Location M	(e.g. clay, sand, loam) silty clay loam clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22	group): tion (Describe to If Bottom Depth 6 22 24	Montgomery silty cl Vertic Endoaquolls e depth needed to document the indice Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	% 100 95 90	C=Concentratio 10YR 10YR	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	=Covered/Coated Sand G dox Features % 5 10	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22	group): tion (Describe to II Bottom Depth 6 22 24	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indix Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	% 100 95 90 	C=Concentratio	n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	-Covered/Coated Sand G dox Features % 5 10	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22	group): tion (Describe to II Bottom Depth 6 22 24	Montgomery silty cl Vertic Endoaquolls e depth needed to document the india Horizon 1 2 3	cator or confirm t Color or 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	% 100 95 90	C=Concentratio	n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	-Covered/Coated Sand G	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22	group): tion (Describe to the Depth 6 22 24	Montgomery silty cl Vertic Endoaquolls e depth needed to document the india Horizon 1 2 3	cator or confirm t Color of 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	% 100 95 90 	C=Concentratio	n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	-Covered/Coated Sand G	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22	group): tion (Describe to If Bottom Depth 6 22 24	Montgomery silty cl Vertic Endoaquolls e depth needed to document the indic Horizon 1 2 3	cator or confirm t Color or 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	% 100 95 90 	C=Concentratio 10YR 10YR	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	Covered/Coated Sand G	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22	group): stion (Describe to the Depth 6 22 24	Montgomery silty cl Vertic Endoaquolls Vertic Endoaquolls te depth needed to document the india Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	% 100 95 90 		n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	Covered/Coated Sand G	Type C C	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22 NRCS Hydric S	group): tion (Describe to II Bottom Depth 6 22 24 Soil Field In	Montgomery silty cl Vertic Endoaquolls e depth needed to document the indic Horizon 1 2 3	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1 cators are	% 100 95 90	10YR 10YR sent	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	Covered/Coated Sand G dox Features % 5 10 Indicators	Type C C s for Problem	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22 NRCS Hydric S	Egroup): Intion (Describe to It of the state of the stat	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 3 dicators (check he	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1	% 100 95 90	10YR 10YR sent) y Gleyed	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	covered/Coated Sand Good Features % 5 10 Indicators	Type C C 5 for Problen A16 - Coast	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22 NRCS Hydric S	Egroup): Stion (Describe to III) Bottom Depth 6 22 24 Soil Field In A1- Histosol A2 - Histic Ep	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 3 dicators (check heispipedon	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1 cators are	% 100 95 90 e not pres \$4 - Sand \$5 - Sand		n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6 : Matrix	Covered/Coated Sand Gox Features % 5 10 Indicators	Type C C s for Problem A16 - Coast \$7 - Dark \$6	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22 NRCS Hydric :	group): tion (Describe to If Bottom Depth 6 22 24 Soil Field In A1- Histosol A2 - Histic Er A3 - Black Hi	Montgomery silty cl Vertic Endoaquolls Vertic Endoaquolls Horizon 1 2 3 dicators (check heropipedon stic	Color 10YR 10YR 10YR	he absence of ir Matrix (Moist) 2/1 4/2 5/1 cators are	% 100 95 90 en not pres \$4 - Sand \$6 - Stript	10YR 10YR sent) y Gleyed I y Redox ed Matrix	n. D=Depletion, RM=Reduced Matrix. CS Rec Color (Moist) 5/6 5/6	-covered/Coated Sand G dox Features % 5 10 Indicators	Type C C 5 for Problen A16 - Coast \$7 - Dark \$K\$ F12 - Iron-M	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22 NRCS Hydric S	Egroup): Stion (Describe to III) Bottom Depth 6 22 24 Soil Field In A1- Histosol A2 - Histic Ep	Montgomery silty cl Vertic Endoaquolls e depth needed to document the indice Horizon 1 2 3 dicators (check here bipedon stic n Sulfide	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1 cators are	% 100 95 90 e not pres \$4 - Sand \$5 - Sand	C=Concentratio	n, D=Depletion, RM=Reduced Matrix. CS Rec Color (Moist) 5/6 5/6 : Matrix	-covered/Coated Sand G dox Features % 5 10 Indicators	Type C C C 5 for Problen A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22 NRCS Hydric S	group): stion (Describe to If Depth 6 22 24	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 3 dicators (check here) to be depth needed to document the indice to document	Color 10YR 10YR 10YR	Matrix (Moist) 2/1 4/2 5/1 cators are	% 100 95 90 enot pres \$4 - Sand \$6 - Stripp F1 - Loam	10YR 10YR	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6 : Matrix neral Matrix	-covered/Coated Sand G dox Features % 5 10 Indicators	Type C C C 5 for Problen A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22 NRCS Hydric S	group): tion (Describe to It of the Control of the	Montgomery silty cl Vertic Endoaquolls Vertic Endoaquolls Horizon 1 2 3 dicators (check he bipedon stic n Sulfide tl Layers uck ad Below Dark Surface	cator or confirm to co	he absence of ir Matrix (Moist) 2/1 4/2 5/1 eators are	% 100 95 90	C=Concentratio	n. D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6 : Matrix neral Matrix : face	-covered/Coated Sand G dox Features % 5 10 Indicators	Type C C C 5 for Problen A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22 NRCS Hydric S	group): stion (Describe to the following part of the following pa	Montgomery silty cl Vertic Endoaquolls Vertic Endoaquolls Horizon 1 2 3 dicators (check here) bipedon stic n Sulfide I Layers uck ad Below Dark Surface lark Surface	cator or confirm to co	Matrix (Moist) 2/1 4/2 5/1 ators ar	% 100 95 90 e not pres \$4 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	C-Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	-covered/Coated Sand G dox Features % 5 10 Indicators	Type C C sfor Problen A16 - Coast F12 - Iron-M TF12 - Very	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22 NRCS Hydric S	group): stion (Describe to It of Depth 6 22 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy N	Montgomery silty cl Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 3 dicators (check here) stic n Sulfide I Layers uck ad Below Dark Surface layer Surface	cator or confirm to co	Matrix (Moist) 2/1 4/2 5/1 ators ar	% 100 95 90	C-Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	-Covered/Coated Sand Gox Features %	Type C C 5 for Problen A16 - Coast \$7 - Dark \$t F12 - Iron-M Other (Expla	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay ses
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22 NRCS Hydric S	group): stion (Describe to It of Depth 6 22 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy N	Montgomery silty cl Vertic Endoaquolls Vertic Endoaquolls Horizon 1 2 3 dicators (check here) bipedon stic n Sulfide I Layers uck ad Below Dark Surface lark Surface	cator or confirm to co	Matrix (Moist) 2/1 4/2 5/1 ators ar	% 100 95 90 e not pres \$4 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	C-Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	-Covered/Coated Sand Gox Features %	Type C C 5 for Problen A16 - Coast \$7 - Dark \$t F12 - Iron-M Other (Expla	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22 NRCS Hydric 3	group): stion (Describe to It of Depth 6 22 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplete A12 - Thick E S1 - Sandy N	Montgomery silty cl Vertic Endoaquolls Vertic Endoaquolls Horizon 1 2 3 dicators (check here) bipedon stic n Sulfide I Layers uck ad Below Dark Surface bark Surface luck Mineral cky Peat or Peat	Color 10YR 10YR 10YR re if indicates	he absence of ir Matrix (Moist) 2/1 4/2 5/1 ators are	% 100 95 90 e not pres \$4 - Sand \$6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	C-Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	-Covered/Coated Sand Gox Features %	Type C C C 5 for Problen A16 - Coast \$57 - Dark \$12 - Iron-M TF12 - Very Other (Expla	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay ses
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22 NRCS Hydric 3	Bottom Depth 6 22 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy M S3 - 5 cm Mu	Montgomery silty cl Vertic Endoaquolls e depth needed to document the indice Horizon 1 2 3 dicators (check here) silice in Sulfide et al. Layers uck ed Below Dark Surface lark Surface luck Mineral cky Peat or Peat	Color of Confirm to 10 M Color of 10 M 1	he absence of ir Matrix (Moist) 2/1 4/2 5/1 cators are	% 100 95 90 e not pres \$4 - Sand \$6 - Stript F1 - Loam F2 - Loam F2 - Loam F3 - Deple 66 - Redo F7 - Deple F8 - Redo	C-Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	-Covered/Coated Sand Gox Features % 5 10 Indicators Indicators of hydrophy	Type C C C 5 for Problen A16 - Coast \$57 - Dark \$12 - Iron-M TF12 - Very Other (Expla	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22 NRCS Hydric 3	Bottom Depth 6 22 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy M S3 - 5 cm Mu	Montgomery silty cl Vertic Endoaquolls Vertic Endoaquolls Horizon 1 2 3 dicators (check here) bipedon stic n Sulfide I Layers uck ad Below Dark Surface bark Surface luck Mineral cky Peat or Peat	Color of Confirm to 10 M Color of 10 M 1	he absence of ir Matrix (Moist) 2/1 4/2 5/1 cators are	% 100 95 90 e not pres \$4 - Sand \$6 - Stript F1 - Loam F2 - Loam F2 - Loam F3 - Deple 66 - Redo F7 - Deple F8 - Redo	C-Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	-Covered/Coated Sand Gox Features % 5 10 Indicators Indicators of hydrophy	Type C C C 5 for Problen A16 - Coast \$57 - Dark \$12 - Iron-M TF12 - Very Other (Expla	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 22 NRCS Hydric 3	Bottom Depth 6 22 24 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy M S3 - 5 cm Mu	Montgomery silty cl Vertic Endoaquolls e depth needed to document the indice Horizon 1 2 3 dicators (check here) silice in Sulfide et al. Layers uck ed Below Dark Surface lark Surface luck Mineral cky Peat or Peat	Color of Confirm to 10 M Color of 10 M 1	he absence of ir Matrix (Moist) 2/1 4/2 5/1 cators are	% 100 95 90 e not pres \$4 - Sand \$6 - Stript F1 - Loam F2 - Loam F2 - Loam F3 - Deple 66 - Redo F7 - Deple F8 - Redo	C-Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/6 5/6	-Covered/Coated Sand Gox Features % 5 10 Indicators Indicators of hydrophy	Type C C C 5 for Problen A16 - Coast \$57 - Dark \$12 - Iron-M TF12 - Very Other (Expla	Location M M	(e.g. clay, sand, loam) silty clay loam clay clay

Sample Point W8-1w



Emerald Park Landfill - Western Expansion

Project/Site:

WETLAND DETERMINATION DATA FORM Midwest Region

Wetland ID:

W8

VEGETATION (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. x 1 = OBL spp. x 2 = Total Cover = 0 FACW spp. 30 60 x 3 = FAC spp. _ 15 45 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 1. UPL spp. 0 x 5= 2 3. Total 105 4 5. Prevalence Index = B/A = 2.333 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ✓ No 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 0 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * ECHINOCHLOA CRUS-GALLI 30 **FACW** 1. * Indicators of hydric soil and wetland hydrology must be 2 Agrostis hyemalis 15 Υ FAC present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. --5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 45 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 5. Total Cover = 0 Remarks: Sample point is located in a low quality farmed wetland. Location disturbed due to recent cropping and plowing, only annual weeds present.

Additional Remarks

, and the state of
Wetland primarily determined on the basis of water table depth and FSA slide review.



Project/Site:											
	Emerald Pa	ark Landfill - Wester	n Expan	sion			Stantec Project #:	193702557		Date:	10/23/14
Applicant:	Advanced	Disposal Services, I	NC							County:	Waukesha
Investigator #1:	Eric Parker	• '		Invest	igator #2:	Jaron T	vlock			State:	Wisconsin
Soil Unit:		ry silty clay loam					VI/WWI Classification:	N/A		Wetland ID:	Adi to W9
Landform:	Hill Slope	iy omy olay loam		Loc	al Relief:					Sample Point:	.,
Slope (%):	1-2	Latitude:	NI/A		ongitude:			Datum:	NI/A		Agricultural Field
Are elimentic/bus		ditions on the site ty					Wine will	☑ Yes □			•
						(If no, expla				Section:	36
		or Hydrology 🗆 sig					Are normal circumsta	A CONTRACTOR OF THE PROPERTY O	R	Township:	5 N
		or Hydrology 🗆 nat	turally pro	oblemati	c?	_	☐ Yes	⊠No		Range:	20 E
SUMMARY OF	FINDINGS										
Hydrophytic Ve	getation Pre	sent?		7 Yes	□ No			Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydrol					■ No					Within A Wetla	
Remarks:			e normal				Point located in an ag				
ixcilialiks.	Anteceden	t moisture conditions	5 HOITING	Delber L	III VALID	analysis	Polit, located in an ag	gircultura nen	i. Nominai c	illournstances	not present.
HYDROLOGY											
Wotland Hydr	ology Indio	ators (Check here if	indicato	re are ar	t aracant	E40					
		ators (Check here if	indicato	is are no	present	ы):			Cocondon		
Primary	A1 - Surface	Motor			B9 - Wate	r Ctainad	Lagyan		Secondary:		oil Crooks
	A2 - High Wa				B13 - Aqu					B6 - Surface So B10 - Drainage	
	A3 - Saturation				B14 - True					C2 - Dry-Season	
l					C1 - Hydro					C8 - Crayfish Bu	
l							spheres on Living Roots				Visible on Aerial Imagery
	B3 - Drift De						educed Iron			D1 - Stunted or	
l				П			duction in Tilled Soils			D2 - Geomorphi	
l	- 0			ä						D5 - FAC-Neutr	
		on Visible on Aerial Ima	agery		D9 - Gauc				_		
		y Vegetated Concave S			Other (Ex						
		-									
Field Observat	tions:										
Surface Water			Donath		(in)						
		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes ☑ No
Water Table Pr		☑ Yes □ No	Depth:		(in.)			•	0,		
Saturation Pres	sent?	☑ Yes □ No	Depth:	27	(in.)						
Describe Record	led Data (str	eam gauge, monitorir	ng well a	erial nhot	os previo	us inspec	tions) if available:		Annual Cror	Slide Review	
Remarks:							W9-1w. FSA slides in	adiaata uulaaa			fland to CM
Remarks.	NO primary	welland hydrology i	inuicators	s presen	i, coniras	ung with	W9-TW. FSA SIIUES II	nuicate upiant	יטו פוויו ווו פג	cation and wet	land to Sw.
SOILS											
Map Unit Name	:	Montgomery silty cl	lay loam			S	Series Drainage Class:	very poorly			
Taxonomy (Sub	ogroup):	Vertic Endoaquolls	2								
				the absence of i	ndicators.) (Type:	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS	S=Covered/Coated Sand G	Grains; Location: PL=	Pore Lining, M=Matrix)	
Ton					ndicators.) (Type:	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS		Grains; Location: PL=	Pore Lining, M=Matrix)	Texture
Top	Bottom	he depth needed to document the indi	icator or confirm t	Matrix		C=Concentratio	Red	dox Features		1	Texture
Depth	Bottom Depth	he depth needed to document the indi	Color	Matrix (Moist)	%		Color (Moist)	dox Features %	Туре	Location	(e.g. clay, sand, loam)
Depth 0	Bottom Depth 14	he depth needed to document the indi Horizon	Color 10YR	Matrix (Moist) 3/1	% 100		Color (Moist)	dox Features % 	Type 	Location	
Depth	Bottom Depth	he depth needed to document the indi	Color	Matrix (Moist)	%		Color (Moist)	dox Features %	Туре	Location	(e.g. clay, sand, loam)
Depth 0	Bottom Depth 14	he depth needed to document the indi Horizon	Color 10YR	Matrix (Moist) 3/1	% 100		Color (Moist)	dox Features % 	Type 	Location	(e.g. clay, sand, loam) silty clay loam
Depth 0 14	Bottom Depth 14 26	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 5/4	% 100 65	 10YR 	Color (Moist) 5/6	% 35	Type C 	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14 	Bottom Depth 14 26	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 5/4 	% 100 65 	 10YR 	Color (Moist) 5/6	% 35	Type C	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14	Bottom Depth 14 26	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 5/4 	% 100 65 	 10YR 	Red Color (Moist) 5/6 	% 35	Type C	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14 	Bottom Depth 14 26	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 5/4 	% 100 65 	 10YR 	Color (Moist) 5/6	% 35	Type C	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14	Bottom Depth 14 26	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 5/4 	% 100 65 	 10YR 	Red Color (Moist) 5/6 	% 35	Type C	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14	Bottom Depth 14 26	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 5/4 	% 100 65 	 10YR 	Red Color (Moist) 5/6 	dox Features	Type C	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14	Bottom Depth 14 26	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 5/4 	% 100 65 	 10YR 	Red Color (Moist) 5/6 	dox Features	Type C	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14 NRCS Hydric	Bottom Depth 14 26 Soil Field In	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 5/4 cators ar	% 100 65 e not pres		Red Color (Moist) 5/6 	dox Features	Type C s for Problem	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14 NRCS Hydric	Bottom Depth 14 26 Soil Field In A1- Histosol	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 5/4	% 100 65 e not pres	10YR sent y Gleyed	Red Color (Moist) 5/6 	dox Features	Type C 5 for Problem	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14 NRCS Hydric	Bottom Depth 14 26 Soil Field In A1- Histosol A2 - Histic E	Horizon 1 2 ndicators (check he	Color 10YR 10YR	Matrix (Moist) 3/1 5/4 cators ar	% 100 65 e not pres \$4 - Sand \$5 - Sand	10YR	Red Color (Moist) 5/6	dox Features	Type C 5 for Problem A16 - Coast S7 - Dark Sr	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14 NRCS Hydric	Bottom Depth 14 26 Soil Field In A1- Histosol A2 - Histic E, A3 - Black Hi	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 5/4 cators ar	% 100 65 enot pres \$4 - Sand \$6 - Stript \$6 - Stript	10YR y Gleyed y Redox	Red Color (Moist) 5/6	dox Features	Type C 5 for Problen A16 - Coast S7 - Dark St F12 - Iron-M	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14 NRCS Hydric	Bottom Depth 14 26 Soil Field In A1- Histosol A2 - Histic E1 A3 - Black Hi A4 - Hydroge	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 5/4	% 100 65 e not pres \$4 - Sand \$5 - Sand \$6 - Stripg F1 - Loam	10YR y Gleyed iy Redox y Redox oed Matrix y Muck M	Red Color (Moist) 5/6 Watrix	dox Features	Type C 5 for Problem A16 - Coast S7 - Dark S0 F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14	Bottom Depth 14 26 Soil Field In A1- Histosol A2 - Histic E, A3 - Black Hi A4 - Hydroge A5 - Stratifier	Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 3/1 5/4 cators ar	% 100 65 e not pres \$4 - Sand \$5 - Sand \$6 - Strip \$f - Loam \$f	10YR sent y Gleyed y Redox yed Matrix y Muck M y Gleyed wo yed yed yed yed yed yed yed yed	Red Color (Moist) 5/6 Watrix	dox Features	Type C 5 for Problem A16 - Coast S7 - Dark S0 F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14 NRCS Hydric	Bottom Depth 14 26 Soil Field In A1- Histosol A2 - Histic E A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M	Horizon 1 2	Color Color 10YR 10YR	Matrix (Moist) 3/1 5/4	% 100 65 e not pres \$4 - Sand \$5 - Sand \$6 - Stript F1 - Loam F3 - Deple	10YR sent y Gleyed I y Redox y Redox y Redox y Redox det Matrix in y Gleyed deted Matrix in y Gleyed beted Matrix	Red Color (Moist) 5/6	dox Features	Type C 5 for Problem A16 - Coast S7 - Dark S0 F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14 NRCS Hydric	Bottom Depth 14 26 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifiee A10 - 2 cm M A11 - Deplete	Horizon 1 2 Idicators (check he pipedon istic en Sulfide d Layers luck ed Below Dark Surface	Color Color 10YR 10YR	Matrix (Moist) 3/1 5/4	% 100 65 e not pres \$4 - Sand \$5 - Sand \$6 - Stript \$1 - Loam \$2 - Loam \$3 - Redo	10YR sent y Gleyed y Redox y Redox y Redox y Muck M Might Muck M Might	Red Color (Moist) 5/6	dox Features	Type C 5 for Problem A16 - Coast S7 - Dark S0 F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14 NRCS Hydric	Bottom Depth 14 26 Soil Field In A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydroge A5 - Stratifie A10 - 2 cm M A11 - Deplet A12 - Thick I	Horizon 1 2	Color Color 10YR 10YR	Matrix (Moist) 3/1 5/4 cators ar	% 100 65 enot pres \$4 - Sand \$5 - Sand \$6 - Strip \$1 - Loam \$7 - Deple \$6 - Redo \$7 - Deple	10YR	Red Color (Moist) 5/6	dox Features	Type C 5 for Problem A16 - Coast S7 - Dark S0 F12 - Iron-M TF12 - Very	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14	Bottom Depth 14 26 Soil Field In A1- Histosol A2 - Histic E1 A3- Black Hi A4- Hydroge A5- Stratifier A10 - 2 cm M A11 - Deplet A12 - Thick E S1 - Sandy M	Horizon 1 2	Color Color 10YR 10YR	Matrix (Moist) 3/1 5/4 cators ar	% 100 65 e not pres \$4 - Sand \$5 - Sand \$6 - Stript \$1 - Loam \$2 - Loam \$3 - Redo	10YR	Red Color (Moist) 5/6	dox Features	Type C 5 for Problem A16 - Coast S7 - Dark S0 F12 - Iron-M TF12 - Very Other (Explain	Location M	(e.g. clay, sand, loam) silty clay loam clay
Depth 0 14	Bottom Depth 14 26 Soil Field In A1- Histosol A2 - Histic El A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm M A11 - Deplet A12 - Thick E S1 - Sandy M S3 - 5 cm M	Horizon 1 2	Color Color 10YR 10YR	Matrix (Moist) 3/1 5/4 cators ar	% 100 65 e not pres \$4 - Sand \$6 - Stript F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR	Red Color (Moist) 5/6	dox Features % 35 Indicators Indicators of hydrophy	Type C s for Problen A16 - Coast F7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay loam clay es surface
Depth 0 14	Bottom Depth 14 26 Soil Field In A1- Histosol A2 - Histic E1 A3- Black Hi A4- Hydroge A5- Stratifier A10 - 2 cm M A11 - Deplet A12 - Thick E S1 - Sandy M	Horizon 1 2	Color Color 10YR 10YR	Matrix (Moist) 3/1 5/4 cators ar	% 100 65 enot pres \$4 - Sand \$5 - Sand \$6 - Strip \$1 - Loam \$7 - Deple \$6 - Redo \$7 - Deple	10YR	Red Color (Moist) 5/6	dox Features	Type C s for Problen A16 - Coast F7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay loam clay es
Depth 0 14 NRCS Hydric NRCS Hydric	Bottom Depth 14 26 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplet A12 - Thick E S1 - Sandy M S3 - 5 cm Mt	Horizon 1 2	Color 10YR 10YR re if indic	Matrix (Moist) 3/1 5/4 cators ar	% 100 65 e not pres \$4 - Sand \$6 - Stript F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR	Red Color (Moist) 5/6	dox Features % 35 Indicators Indicators of hydrophy	Type C s for Problen A16 - Coast F7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay loam clay es urface
Depth 0 14 NRCS Hydric	Bottom Depth 14 26 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplet A12 - Thick E S1 - Sandy M S3 - 5 cm Mt	Horizon 1 2	Color 10YR 10YR re if indic	Matrix (Moist) 3/1 5/4 cators ar	% 100 65 e not pres \$4 - Sand \$6 - Stript F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR	Red Color (Moist) 5/6	dox Features % 35 Indicators Indicators of hydrophy	Type C s for Problen A16 - Coast F7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay loam clay es urface
Depth 0 14 NRCS Hydric NRCS Hydric	Bottom Depth 14 26 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplet A12 - Thick E S1 - Sandy M S3 - 5 cm Mt	Horizon 1 2	Color 10YR 10YR re if indic	Matrix (Moist) 3/1 5/4 cators ar	% 100 65 e not pres \$4 - Sand \$6 - Stript F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR	Red Color (Moist) 5/6	dox Features % 35 Indicators Indicators of hydrophy	Type C s for Problen A16 - Coast F7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay loam clay es urface
Depth 0 14 NRCS Hydric NRCS Hydric	Bottom Depth 14 26 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A10 - 2 cm M A11 - Deplet A12 - Thick E S1 - Sandy M S3 - 5 cm Mt	Horizon 1 2	Color 10YR 10YR re if indic	Matrix (Moist) 3/1 5/4 cators ar	% 100 65 e not pres \$4 - Sand \$6 - Stript F1 - Loam F2 - Loam F3 - Deple F6 - Redo	10YR	Red Color (Moist) 5/6	dox Features % 35 Indicators Indicators of hydrophy	Type C s for Problen A16 - Coast F7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silty clay loam clay es urface



Wetland ID: Adj to W9 Project/Site: Emerald Park Landfill - Western Expansion Sample Point W9-1u **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 FACW spp. 20 x 2 = 40 x 3 = FAC spp. 0 0 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 0 1. UPL spp. 0 x 5= 2 3. Total 20 (A) 40 4 5. 2.000 Prevalence Index = B/A = 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes ✓ No Rapid Test for Hydrophytic Vegetation 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 0 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * ECHINOCHLOA CRUS-GALLI **FACW** 20 1. * Indicators of hydric soil and wetland hydrology must be 2 present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8 Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 20 Woody Vine Stratum (Plot size: 30 ft radius)

Additional Remarks:

1.

2.

4. 5.

Remarks:

Hydrophytic vegetation present; soils and vegetation significantly disturbed. Upland determination was primarily based on a observed water table depths along a transect and FSA slides lacking consistent signature.

--

Hydrophytic Vegetation Present ☑ Yes ☐ No

--

0

Soybean crop recently harvested and soils plowed, leaving only annual weeds.

Total Cover =



		ark Landfill - Wester		sion			Stantec Project #:	193702557		Date:	10/23/14
Applicant:		Disposal Services, I	NC							County:	Waukesha
Investigator #1:				Investi	gator #2:			E01/6		State:	Wisconsin
Soil Unit:		ry silty clay loam			-1 D-1:-6		/I/WWI Classification:	F0Kt			W9
Landform:	Depression		NI/A		al Relief:		•	Detum	NI/A	Sample Point:	
Slope (%):	0-2	Latitude: litions on the site type			ongitude:		wise and the last	Datum: ☑ Yes □			Farmed Wetland
		or Hydrology 🗆 sig				п по, ехрып	Are normal circumsta			Section:	36 5 N
		or Hydrology 🗀 signor Hydrology					☐ Yes	⊠No		Township: Range:	5 N 20 E
SUMMARY OF I		or Hydrology Li flat	urally pro	bleman			_ 100	E NO		Range:	20 E
Hydrophytic Vec		cent?		7 Vec	□ No			Hydric Soils	Precent?		☑ Yes □ No
Wetland Hydrolo					□ No					Within A Wetla	
Remarks:	WETS anal	! lveie indicates anter	entent m			ara in the					Normal circumstances
remains.							nual weed species with			ctively latiticu.	. Normal circumstances
	interpreted	to not be present in	as to pion	ming and	dominad	on or am	mai weed species will	ii sparse cove	o1.		
HVDDOL OOV											
HYDROLOGY											
		itors (Check here if	indicator	s are no	t present	II):					
Primary:		10/2422			DO 14/-4-	. Ctained I			Secondary:	DC Curfoss Co	il Canalia
	A1 - Surface A2 - High Wa				B9 - Wate B13 - Aqua					B6 - Surface So B10 - Drainage	
	A3 - Saturation				B14 - True					C2 - Dry-Season	
	B1 - Water M				C1 - Hydro					C8 - Crayfish Bu	ırrows
	B2 - Sedimer						spheres on Living Roots		V	C9 - Saturation	Visible on Aerial Imagery
	B3 - Drift Dep				C4 - Prese					D1 - Stunted or	
	B4 - Algal Ma						duction in Tilled Soils			D2 - Geomorphi	
	B5 - Iron Dep	osits on Visible on Aerial Ima	agon/		C7 - Thin I D9 - Gaug				V	D5 - FAC-Neutra	ai iest
		Vegetated Concave S			Other (Exp						
	20 0,0000,			_	· · · · · · · · · · · · · · · · · · ·		,				
Field Observati	ions:										
Surface Water F		☐ Yes ☑ No	Depth:		(in.)						
		☑ Yes ☐ No	Depth:	16	(in.)			Wetland Hy	drology Pr	esent? 🗹	Yes □ No
	esent!				. ,						
Water Table Pre	ont?	☑ Voc □ No	Danth:		/in \						
Saturation Prese		☑ Yes ☐ No	Depth:	5	(in.)						
Saturation Prese	ed Data (stre	eam gauge, monitorir	ng well, ac	erial phot	os, previo				Annual Crop	Slide Review	
Saturation Prese	ed Data (stre		ng well, ac	erial phot	os, previo				Annual Crop	Slide Review	
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Saturation Press Describe Record Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	ed Data (stre FSA slides : group): tion (Describe to It Bottom	eam gauge, monitorir indicate wetlands a Montgomery silty cl Vertic Endoaquolls to depth needed to document the indicate and silvers and silvers and silvers are depth needed to document the indicate and silvers	ng well, act this local	erial photo ation and the absence of in Matrix	os, previor	Ket mostl S C=Concentration	y going south. eries Drainage Class: .D=Depletion, RM=Reduced Matrix, CS Rec	=Covered/Coated Sand G	· · · · · · · · · · · · · · · · · · ·	Pore Lining, M=Matrix)	Texture (e.g. clay, sand, loam)
Saturation Press Describe Record Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ed Data (stre FSA slides : group): tion (Describe to the Bottom Depth	eam gauge, monitorir indicate wetlands a Montgomery silty cl Vertic Endoaquolls to depth needed to document the indication.	ay loam	erial phote ation and the absence of in Matrix (Moist)	os, previor l in a poc	S C=Concentration	y going south. eries Drainage Class:	=Covered/Coated Sand G	Srains; Location: PL=	Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam)
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Sample Point W9-1w



Project/Site: Emerald Park Landfill - Western Expansion

WETLAND DETERMINATION DATA FORM Midwest Region

Wetland ID:

W9

VEGETATION (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) 3. 4. Total Number of Dominant Species Across All Strata: 1 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 FACW spp. 15 x 2 = 30 x 3 = FAC spp. 2 6 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 1. UPL spp. 0 x 5= 2 3. Total 17 (A) 36 (B) 4 5. Prevalence Index = B/A = 2.118 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ✓ Yes Rapid Test for Hydrophytic Vegetation □ No 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 0 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * ECHINOCHLOA CRUS-GALLI **FACW** 15 1. * Indicators of hydric soil and wetland hydrology must be 2 Agrostis hyemalis 2 Ν FAC present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. --5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 17 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 Total Cover = 0 Remarks: Sample point is located in a farmed wetland. Recent plowing limited evaluation of vegetation; approximately 90% of soil surface consisted of bare Additional Remarks:



Applicant: Investigator #1: Soil Unit: Landform: Slope (%):	Advanced I Eric Parker Montgomer Hill Slope 5-6	ry silty clay Latitude:	NC .	Investi Loc	igator #2: cal Relief: ongitude:	NV Convex N/A	/I/WWI Classification:	Datum:	_	4	W10-1u Agricultural Field
Are Vegetation	☑, Soil ☑,	ditions on the site type or Hydrology sign or Hydrology natu	nificantly	disturbe	ed7	(If no, expla	Are normal circumstr		No 13	Section: Township: Range:	36 5 N 20 E
SUMMARY OF		, 3,	100							. 9.	
Hydrophytic Ve		sent?		☑ Yes	□ No			Hydric Soils			
Wetland Hydrol					□ No			Is This Samp	Ing Point	Within A Wetla	and? ■ Yes ■ No
Remarks:		t moisture conditions cumstances assume			n WETS	analysis.	Point located in an ag	gricultural field	with poter	ntial hydrologic	cal manipulations.
HYDROLOGY		1 (0)	Secretary and	arches of his	4	- FEE (1)			_		
Primary.	A1 - Surface A2 - High Wa A3 - Saturatic B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatic B8 - Sparsely	ater Table on larks nt Deposits posits at or Crust	agery		B9 - Wate B13 - Aqua B14 - True C1 - Hydro C3 - Oxidi C4 - Prese C6 - Rece	er-Stained latic Fauna e Aquatic I logen Sulfi lized Rhizo ence of Re ent Iron Re Muck Surf ge or Well	Plants de Odor spheres on Living Roots duced Iron duction in Tilled Soils ace Data			B6 - Surface So B10 - Drainage C2 - Dry-Seaso C8 - Crayfish Bu	Patterns n Water Table urrows Visible on Aerial Imagery Stressed Plants ic Position
Surface Water Water Table Pro Saturation Pres	Present? resent? sent?	☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No	Depth: Depth:		(in.) (in.) (in.)	··a inenac	tions) if available:	Wetland Hyd			l Yes ☑ No
		eam gauge, monitorin							Annual Crop	Slide Review	
Remarks:	FSA silues	indicated uplands at	t this loca	ation an	d to the so	outneasi					
SOILS											
SOILS Map Unit Name	NI.	Montaomery silty cla	av			S	eries Drainage Class:	verv poorly			
Map Unit Name Taxonomy (Sub		Montgomery silty cla				S	eries Drainage Class:	very poorly			
Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to th	Vertic Endoaquolls	i	ne absence of in	ndicators.) (Type:		n, D=Depletion, RM=Reduced Matrix, CS	=Covered/Coated Sand G	rains; Location: PL=	Pore Lining, M=Matrix)	
Map Unit Name Taxonomy (Sub Profile Descrip Top	ogroup): otion (Describe to the Bottom	Vertic Endoaquolls he depth needed to document the indica	cator or confirm to	Matrix			n, D=Depletion, RM=Reduced Matrix, CS	=Covered/Coated Sand G		1	Texture
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to the Bottom Depth	Vertic Endoaquolls he depth needed to document the indice Horizon	cator or confirm the	Matrix (Moist)	%	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist)	=Covered/Coated Sand G	Туре	Location	(e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to the Bottom Depth 11	Vertic Endoaquolls he depth needed to document the indice Horizon 1	Color (Matrix (Moist) 3/1	% 100	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist)	=Covered/Coated Sand G	Type 	Location	(e.g. clay, sand, loam) silty clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 11	pgroup): Dtion (Describe to the Bottom Depth 11 24	Vertic Endoaquolls ne depth needed to document the indic Horizon 1 2	cator or confirm the	Matrix (Moist)	% 100 70	C=Concentratio	n. D=Depletion, RM=Reduced Matrix. CS Rec Color (Moist) 5/8	=Covered/Coated Sand G dox Features % 30	Type C	Location M	(e.g. clay, sand, loam) silty clay loam sandy clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 11	ogroup): otion (Describe to the Bottom Depth 11 24	Vertic Endoaquolls ne depth needed to document the indice Horizon 1 2	Color (10YR 10YR	Matrix (Moist) 3/1 5/1	% 100 70 	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8	=Covered/Coated Sand G dox Features % 30	Type C 	Location M	(e.g. clay, sand, loam) silty clay loam sandy clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 11	pgroup): Dtion (Describe to the Bottom Depth 11 24	Vertic Endoaquolls ne depth needed to document the indic Horizon 1 2	Color (Matrix (Moist) 3/1 5/1	% 100 70	C=Concentratio	n. D=Depletion, RM=Reduced Matrix. CS Rec Color (Moist) 5/8	=Covered/Coated Sand G dox Features % 30	Type C	Location M	(e.g. clay, sand, loam) silty clay loam sandy clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 11	ogroup): otion (Describe to the Bottom Depth 11 24	Vertic Endoaquolls ne depth needed to document the indice Horizon 1 2	Color (10YR 10YR	Matrix (Moist) 3/1 5/1 	% 100 70 	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8	Covered/Coated Sand G	Type C	Location M	(e.g. clay, sand, loam) silty clay loam sandy clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 11	ogroup): otion (Describe to tr. Bottom Depth 11 24	Vertic Endoaquolls ne depth needed to document the indice Horizon 1 2	Color (10YR 10YR	Matrix (Moist) 3/1 5/1 	% 100 70 	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8	-Covered/Coated Sand G	Type C	Location M	(e.g. clay, sand, loam) silty clay loam sandy clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 11	ogroup): otion (Describe to tr Bottom Depth 11 24	Vertic Endoaquolls he depth needed to document the indicate the depth needed to document the indicate the depth needed to document the indicate the	Color (10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/1 	% 100 70 	10YR	n, D=Depletion, RM=Reduced Matrix, CS Rec Color (Moist) 5/8	Covered/Coated Sand G	Type C	Location M	(e.g. clay, sand, loam) silty clay loam sandy clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 11 NRCS Hydric:	Soil Field In A1- Histosol A2 - Histic Ep A3 - Stratified A10 - 2 cm M A11 - Deplet A11 - Deplet A11 - Deplet A12 - Thick D S1 - Sandy M	Vertic Endoaquolls The depth needed to document the indication Horizon 1 2 dicators (check her objecton stic en Sulfide d Layers fluck ed Below Dark Surface over Surface over Surface over Surface	Color (10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	Matrix (Moist) 3/1 5/1 cators are	% 100 70 	C=Concentration 10YR y Gleyed ly Redox y Redox y Muck M y Gleyed datrix y Muck M y Gleyed datrix x Dark Su eted Dark	n. D=Depletion, RM=Reduced Matrix. CS Rec Color (Moist) 5/8 : Matrix neral Matrix : face Surface	-Covered/Coated Sand G	Type C	Location M	(e.g. clay, sand, loam) silty clay loam sandy clay loam
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 11 NRCS Hydric:	Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratific A1 - Deplete A12 - Thick E S1 - Sandy M S3 - 5 cm Mu Type:	Vertic Endoaquolls he depth needed to document the indic Horizon 1 2 dicators (check her bipedon istic en Sulfide d Layers luck ed Below Dark Surface Juck Mineral icky Peat or Peat	Color (10YR 10YR	Matrix (Moist) 3/1 5/1	% 100 70 e not pres \$4 - Sand; \$5 - Sand; \$6 - Stripp £1 - Loam £2 - Loam £3 - Deple £6 - Redo; £7 - Deple £8 - Redo;	10YR	n. D=Depletion, RM=Reduced Matrix. CS Rec Color (Moist) 5/8 : Watrix neral Matrix sface Surface sions	-Covered/Coated Sand G	Type C	Location M	(e.g. clay, sand, loam) silty clay loam sandy clay loam es



Project/Site: Emerald Park Landfill - Western Expansion Wetland ID: Adj to W10 Sample Point W10-1u

VEGETATION Tree Stratum (Pl	(Species identified in all uppercase are non-na ot size: 30 ft radius)	tive spec	ies.)		
()	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)
3.					
4.				-	Total Number of Dominant Species Across All Strata:(B)
5.				-	
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp. 15 x 2 = 30
					FAC spp. 5 x 3 = 15
	ratum (Plot size: 15 ft radius)				FACU spp. 0 x 4 = 0
1. 2.					UPL spp 0
3.					Total 20 (A) 45 (B)
4.					10tai <u>20 (</u> A) <u>45 (</u> B)
5.					Prevalence Index = B/A = 2.250
6.					Trevalcies index = B/A = 2.200
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					✓ Yes ☐ No Dominance Test is > 50%
	Total Cover =	0			✓ Yes ☐ No Prevalence Index is ≤ 3.0 *
		_			☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Plo	ot size: 5 ft radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	ECHINOCHLOA CRUS-GALLI	15	Υ	FACW	
2.	Agrostis hyemalis	5	Υ	FAC	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.				-	present, unless distarbed of problematic.
4.				-	Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					Herb - All herbaceous (non-woody) plants, regardless of size,
12.					and woody plants less than 3.28 ft. tall.
13.					
14.					Woody Vines - All woody vines greater than 3.28 ft. in height.
15.	Total Cavar -				Woody Villes - All Woody Villes greater than 5.25 ft. in Holgin.
	Total Cover =	20			
Woody Vine Stra	tum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					,
5.					
-	Total Cover =	0			
Remarks:			ed leavi	na only w	eeds. Cover for soybeans not able to be interpreted due to recent plowing.

Additional Remarks:

Hydrophytic vegetation and hydric soils were present, although both soils and vegetation were significantly disturbed. FSA crop slides interpreted to support uplands at this location and going out from W-10.



Investigator #1: Soil Unit:	Montgomer	y silty clay loam			igator #2:	NV	VI/WWI Classifica	tion: E1Ha			Wisconsin W10
Landform:	Depression		N1/A		al Relief:		9	Б.	N1/A	Sample Point:	
Slope (%):	0-2	Latitude: litions on the site type			ongitude:		Andrews Control	Datum ☑ Yes L	I: N/A J No	Section:	Wet Meadow 36
		or Hydrology sign				(ii lio' evbia	Are normal circu			Township:	5 N
		or Hydrology I nat								Range:	20 E
SUMMARY OF	FINDINGS	, 0,									
Hydrophytic Ve					□ No			Hydric Soils			
Wetland Hydrol					□ No			Is This Sam	Ipling Point	Within A Wetla	and? <u>■ Yes ■ No</u>
Remarks:	Antecedent	moisture conditions	normal	based o	n WEIS	analysis					
HYDROLOGY											
		itors (Check here if	indicator	rs are no	t present	(E):					
<u>Primary</u> □	<u>:</u> A1 - Surface '	Water		П	B9 - Wate	r-Stained	Leaves		Secondary:	B6 - Surface So	il Cracks
	A2 - High Wa				B13 - Aqu					B10 - Drainage	
	A3 - Saturation B1 - Water M				B14 - True C1 - Hydro					C2 - Dry-Season C8 - Crayfish Bu	
							spheres on Living Ro	ots			Visible on Aerial Imagery
					C4 - Prese	ence of Re	duced Iron			D1 - Stunted or	Stressed Plants
	B4 - Algal Ma B5 - Iron Dep			H			duction in Tilled Soils ace	3		D2 - Geomorphi D5 - FAC-Neutra	
	B7 - Inundation	on Visible on Aerial Ima			D9 - Gaug	ge or Well	Data		_		
	B8 - Sparsely	Vegetated Concave S	urface		Other (Exp	plain in Re	emarks)				
Field Observat	tions:										
Surface Water		☐ Yes ☑ No	Depth:		(in.)			W 41 111			V
Water Table Pr	esent?	☑ Yes ☐ No	Depth:	6	(in.)			wetiand Hy	ydrology Pr	esent? 🗹	Yes □ No
Saturation Pres	ent?	☑ Yes ☐ No	Depth:	0	(in.)						
Describe Record	led Data (stre	eam gauge, monitorin	g well, a	erial phot	os, previo	us inspec	tions), if available:				
Remarks:											
Remarks.							•				
Remarks.						•					
SOILS		Mantagananyailtyal	ov loom				Parios Prainage Cl				
SOILS Map Unit Name		Montgomery silty cl				S	eries Drainage Cl	ass: very poorly			
SOILS Map Unit Name Taxonomy (Sub	ogroup):	Vertic Endoaquolls		the absence of it	ndicators.) (Type:			,, ,	Grains; Location: PL	ePore Lining, M≡Matrix)	
SOILS Map Unit Name Taxonomy (Sub	ogroup):			the absence of in	ndicators.) (Type:			,, ,		Pore Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to the	Vertic Endoaquolls	ator or confirm t		ndicators.) (Type:			trix, CS=Covered/Coated Sand		Pore Lining, M=Matrix)	(e.g. clay, sand, loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to the Bottom Depth 10	Vertic Endoaquolls be depth needed to document the indic Horizon 1	Color 10YR	Matrix (Moist) 2/1	% 100	C=Concentratio	n, D=Depletion, RM=Reduced Ma Color (Moist)	trix, CS=Covered/Coated Sand Redox Features %	Type 	Location	(e.g. clay, sand, loam silt loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): ption (Describe to the Bottom Depth 10 20	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95	C=Concentratio	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6	rix, CS=Covered/Coated Sand Redox Features % 5	Type C	Location M	(e.g. clay, sand, loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to the Depth 10 20	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 	C=Concentratio	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6	trix. CS=Covered/Coated Sand Redox Features % 5	Type C	Location M	(e.g. clay, sand, loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10	ogroup): ption (Describe to the Bottom Depth 10 20	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95	C=Concentratio	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6	trix. CS=Covered/Coated Sand Redox Features % 5	Type C	Location M	(e.g. clay, sand, loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to the Depth 10 20	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 	C=Concentratio	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6	trix. CS=Covered/Coated Sand Redox Features % 5	Type C	Location M	(e.g. clay, sand, loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): Dition (Describe to tr Bottom Depth 10 20	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1 	% 100 95 	C=Concentratio	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6	trix, CS=Covered/Coated Sand Redox Features % 5	Type C	Location M	(e.g. clay, sand, loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): Detion (Describe to tr Bottom Depth 10 20	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1 	% 100 95 	C=Concentratio	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6	trix, CS=Covered/Coated Sand Redox Features % 5	Type C	Location M	(e.g. clay, sand, loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	ogroup): ption (Describe to the Bottom Depth 10 20 Soil Field In	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2	Color 10YR 10YR	Matrix (Moist) 2/1 4/1 eators are	% 100 95 e not pres	C=Concentration	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6	trix, CS=Covered/Coated Sand Redox Features % 5 Indicator	Type C rs for Problem	Location M	(e.g. clay, sand, loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	ogroup): otion (Describe to tr. Bottom Depth 10 20 Soil Field In A1- Histosol	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check her	Color 10YR 10YR	Matrix (Moist) 2/1 4/1 cators are	% 100 95 e not pres	10YR sent y Gleyed	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6	trix. CS=Covered/Coated Sand Redox Features % 5 Indicator	Type C	Location M	(e.g. clay, sand, loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	ogroup): Dition (Describe to tr. Bottom Depth 10 20 Soil Field In A1- Histosol A2 - Histic Ep	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 e not pres \$4 - Sand \$6 - Strip \$6 - Strip	C=Concentration 10YR y Gleyed y Redox	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6 Watrix	trix, CS=Covered/Coated Sand Redox Features % 5 Indicator	Type C s for Probler \$7 - Dark S \$7 - Dark S	Location M natic Soils ¹ Prairie Redox urface langanese Masse	(e.g. clay, sand, loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to the Depth of th	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here bipedon stic n Sulfide	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 e not pres \$4 - Sand \$5 - Sand \$6 - Strip F1 - Loam	C=Concentration 10YR y Gleyed ly Redox y Redox y Redox y Muck M	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6 Watrix	trix, CS=Covered/Coated Sand Redox Features % Indicator	Type C A16 - Coast \$7 - Dark \$S \$7 - Dark \$S \$7 - Uron-N TF12 - Very	Location M	(e.g. clay, sand, loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	Degroup): Detion (Describe to tr. Depth	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here bipedon stic n Sulfide d Layers	Color 10YR 10YR	Matrix (Moist) 2/1 4/1 cators and	% 100 95 e not pres \$4 - Sand \$5 - Stripp F1 - Loam F2 - Loam	10YR y Gleyed y Redox y Redox y Muck M Mary Sleyed by Nuck M Mary Sleyed Way Gleyed Way Gleyed	n, D=Depietion, RM=Reduced Ma Color (Moist) 4/6 :: Matrix	trix, CS=Covered/Coated Sand Redox Features % Indicator	Type C A16 - Coast \$7 - Dark \$S \$7 - Dark \$S \$7 - Uron-N TF12 - Very	Location M natic Soils ¹ Prairie Redox urface langanese Masse	(e.g. clay, sand, loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	Degroup): Detion (Describe to It Depth	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here bipedon stic n Sulfide d Layers luck ad Below Dark Surface	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 e not pres \$4 - Sand \$5 - Sand \$6 - Stript F1 - Loam F2 - Loam F3 - Deplé	10YR	n. D=Depletion, RM=Reduced Ma Color (Moist) 4/6 Watrix Inneral Matrix Crface	trix, CS=Covered/Coated Sand Redox Features % Indicator	Type C A16 - Coast \$7 - Dark \$S \$7 - Dark \$S \$7 - Uron-N TF12 - Very	Location M	(e.g. clay, sand, loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to It Depth	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here bipedon stic n Sulfide d Layers luck ad Below Dark Surface bark Surface	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 enot pres \$4 - Sand \$5 - Sand \$6 - Strip F1 - Loam F2 - Loam F3 - Deple F6 - Redo	C=Concentration 10YR y Gleyed I y Redox y Redox y Redox word Matrix by Muck M my Gleyed deleyed deleyed deleyed deleyed by San	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6 Watrix ineral Matrix (rface Surface	trix, CS=Covered/Coated Sand Redox Features % Indicator	Type C A16 - Coast \$7 - Dark \$S \$7 - Dark \$S \$7 - Uron-N TF12 - Very	Location M	(e.g. clay, sand, loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	Degroup): Detion (Describe to tr. Depth	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here bipedon stic n Sulfide d Layers luck ad Below Dark Surface bark Surface	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 e not pres \$4 - Sand \$5 - Sand \$6 - Stript F1 - Loam F2 - Loam F3 - Deplé	C=Concentration 10YR y Gleyed I y Redox y Redox y Redox word Matrix by Muck M my Gleyed deleyed deleyed deleyed deleyed by San	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6 Watrix ineral Matrix (rface Surface	trix. CS=Covered/Coated Sand Redox Features % 5 Indicator	Type C A16 - Coast \$7 - Dark \$ \$ \$72 - Iron-N TF12 - Very Other (Explain)	Location M	(e.g. clay, sand, loam silt loam silty clay loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric Restrictive Layer	Degroup): Detion (Describe to tr. Depth	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here to pipedon stic n Sulfide d Layers luck ded Below Dark Surface luck Mineral luck Peat or Peat	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 enot pres \$4 - Sand \$5 - Sand \$6 - Strip F1 - Loam F2 - Loam F3 - Deple F6 - Redo	C=Concentration 10YR y Gleyed I y Redox y Redox y Redox word Matrix by Muck M my Gleyed deleyed deleyed deleyed deleyed by San	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6 Watrix ineral Matrix (rface Surface	trix. CS=Covered/Coated Sand Redox Features % 5 Indicator	Type C S for Probler A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Explain)	Location M	(e.g. clay, sand, loam silt loam silty clay loam es
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric NRCS Hydric Restrictive Layer (If Observed)	Degroup): Ition (Describe to It) Bottom Depth 10 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm A11 - Deplete A12 - Thick D S1 - Sandy M S3 - 5 cm Mu	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here to pipedon stic n Sulfide d Layers luck ded Below Dark Surface luck Mineral luck Peat or Peat	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 enot pres \$4 - Sand \$6 - Stript F1 - Loam F2 - Loam F3 - Deple F6 - Redo	C=Concentration 10YR y Gleyed I y Redox y Redox y Redox word Matrix by Muck M my Gleyed deleyed deleyed deleyed deleyed by San	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6 Watrix ineral Matrix (rface Surface	trix, CS=Covered/Coated Sand Redox Features % 5 Indicator ¹ Indicators of hydrop	Type C S for Probler A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Explain)	Location M	(e.g. clay, sand, loam silt loam silty clay loam es urface
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric Restrictive Layer	Degroup): Ition (Describe to It) Bottom Depth 10 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm A11 - Deplete A12 - Thick D S1 - Sandy M S3 - 5 cm Mu	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here to pipedon stic n Sulfide d Layers luck ded Below Dark Surface luck Mineral luck Peat or Peat	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 enot pres \$4 - Sand \$6 - Stript F1 - Loam F2 - Loam F3 - Deple F6 - Redo	C=Concentration 10YR y Gleyed I y Redox y Redox y Redox word Matrix by Muck M my Gleyed deleyed deleyed deleyed deleyed by San	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6 Watrix ineral Matrix (rface Surface	trix, CS=Covered/Coated Sand Redox Features % 5 Indicator ¹ Indicators of hydrop	Type C S for Probler A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Explain)	Location M	(e.g. clay, sand, loam silt loam silty clay loam es urface
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric NRCS Hydric Restrictive Layer (If Observed)	Degroup): Ition (Describe to It) Bottom Depth 10 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm A11 - Deplete A12 - Thick D S1 - Sandy M S3 - 5 cm Mu	Vertic Endoaquolls te depth needed to document the indice Horizon 1 2 dicators (check here to pipedon stic n Sulfide d Layers luck ded Below Dark Surface luck Mineral luck Peat or Peat	Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95 enot pres \$4 - Sand \$6 - Stript F1 - Loam F2 - Loam F3 - Deple F6 - Redo	C=Concentration 10YR y Gleyed I y Redox y Redox y Redox word Matrix by Muck M my Gleyed deleyed deleyed deleyed deleyed by San	n, D=Depletion, RM=Reduced Ma Color (Moist) 4/6 Watrix ineral Matrix (rface Surface	trix, CS=Covered/Coated Sand Redox Features % 5 Indicator ¹ Indicators of hydrop	Type C S for Probler A16 - Coast S7 - Dark S F12 - Iron-N TF12 - Very Other (Explain)	Location M	(e.g. clay, sand, loam silt loam silty clay loam es urface



Project/Site:

WETLAND DETERMINATION DATA FORM **Midwest Region**

Wetland ID:

W10

Emerald Park Landfill - Western Expansion Sample Point W10-1w **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** % Cover Dominant Ind.Status Species Name Populus tremuloides **FAC** 15 2 Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) 3. 4. Total Number of Dominant Species Across All Strata: 2 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. x 1 = OBL spp. x 2 = Total Cover = 15 FACW spp. 100 200 x 3 = FAC spp. 15 45 x 4 = Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. 0 1. UPL spp. 0 x 5= 0 2 3. 245 Total 115 4 5. Prevalence Index = B/A = 2.130 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ✓ No 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = □ No 0 √ Yes Prevalence Index is ≤ 3.0 * ☑ No ☐ Yes Morphological Adaptations (Explain) * Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA **FACW** 100 1. * Indicators of hydric soil and wetland hydrology must be 2 present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. 5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 100 Woody Vine Stratum (Plot size: 30 ft radius) 1. ----2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 5. Total Cover = 0 Remarks: Point is in disturbed wet meadow adjacent to a patch of woods. Additional Remarks:



Project/Site:	Emerald Pa	ark Landfill - Wester	n Evnan	sion			Stantec Project #:	193702557		Date:	10/23/14
Applicant:		Disposal Services, I		31011			Otanico i roject #.	190702007		County:	Waukesha
Investigator #1:			INC	Invest	igator #2:	Jaron T	vlock			State:	Wisconsin
Soil Unit:		ry silty clay loam		IIIVESI	igatoi #2.		VI/WWI Classification:	None		Wetland ID:	
Landform:	Hill Slope	ly Silly Clay IDaili		Loc	cal Relief:			None		Sample Point:	,
Slope (%):	•	Latituda	NI/A					Datum	NI/A		
	0-2	Latitude:			ongitude:		Andrew walk is	Datum: ☑ Yes □	No		Agricultural Field
		ditions on the site type				(If no, expla	Are normal circumst			Section:	36
		or Hydrology 🗆 sigi					The second secon	and the second s	13	Township:	5 N
Are Vegetation	\Box , Soil \Box ,	or Hydrology 🔲 nat	urally pr	oplemati	CY	_	☐ Yes	⊠No		Range:	20 E
SUMMARY OF											
Hydrophytic Ve	•			☑ Yes				Hydric Soils			
Wetland Hydrol					₽ No					Within A Wetla	
Remarks:					IN WETS	analysis	Point located in an ag	gricultural field	with poter	ntial hydrologic	al manipulations.
	Normal circ	cumstances assume	d not pri	esent							
HYDROLOGY											
	a la ava la ali a a	Anna (Obrada la	Profession and a	LECTROLIC NO.	Harrison A. St. 4	- E-C-					
Wetland Hydro		ators (Check here if	indicato	rs are no	ot present	E):			Cd		
	A1 - Surface	Water		П	B9 - Wate	r Stained	Leaves		Secondary:	B6 - Surface So	il Cracke
	A2 - High Wa				B13 - Aqu					B10 - Drainage	
	A3 - Saturation				B14 - True					C2 - Dry-Seaso	
	B1 - Water M				C1 - Hydr	ogen Sulfi	de Odor			C8 - Crayfish Bi	urrows
	B2 - Sedimer	nt Deposits			C3 - Oxidi	zed Rhizo	spheres on Living Roots			C9 - Saturation	Visible on Aerial Imagery
							educed Iron			D1 - Stunted or	
	B4 - Algal Ma			_			duction in Tilled Soils			D2 - Geomorph	
					_				V	D5 - FAC-Neutr	al lest
		on Visible on Aerial Ima Vegetated Concave S			D9 - Gaug Other (Ex						
	Do - Sparsery	y vegetated Concave S	uriace		Other (LX	piaiii iii ixe	siliaiks)				
Field Observat	ione										
			ъ		/: \						
Surface Water		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes ☑ No
Water Table Pr		☐ Yes ☑ No	Depth:		(in.)			-	O,		
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	led Data (stre	eam gauge, monitorin	ng well, a	erial phot	tos, previo	us insped	ctions), if available:		Annual Crop	Slide Review	
Remarks:	No primary	hydrology indicators	s observ	ed. FSA	slides inc	dicate up	lands at this location a	and going sou	th and east	t.	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, 9,						99			
SOILS											
Map Unit Name	•	Montgomery silty cl	av Ioam				Series Drainage Class:	very poorly			
Taxonomy (Sub		Vertic Endoaquolls					once Brainage elace.	vory poorry			
				the absence of i	ndicators) (Type:	C=Concentratio	on, D=Depletion, RM=Reduced Matrix, CS	=Covered/Costed Sand G	Praine: Location: DI =	Pore Lining M=Matrix)	
Top	Bottom	ne depart needed to document the indic	Cator or commin	Matrix		C-COICCITIAN		dox Features	oranio, Eddation. I E-	i ore cirring, wi-wiadix)	Texture
Depth		Horizon	Color	(Moist)	%		Color (Moist)	%	Туре	Location	(e.g. clay, sand, loam)
	Depth		1		100		1 '				
0	8	1	10YR	3/1							silty clay loam
8	24	2	10YR	6/1	75	10YR	5/8	25	С	M	silty clay loam
		-									
						-					
		-									
NRCS Hydric	Soil Field In	idicators (check he	re if indi	nators ar	e not nres	ent 🗆).	Indicators	for Problen	natic Soile 1	
	A1- Histosol	idicators (check he	i e ii iiiui		\$4 - Sand					Prairie Redox	
l		ninedon			\$5 - Sand		iviatiix		S7 - Dark Si		
					S6 - Strip		1			langanese Mass	es
	A4 - Hydroge				F1 - Loan					Shallow Dark Su	
					F2 - Loan				Other (Expla	ain in Remarks)	
	A10 - 2 cm N	luck		✓	F3 - Deple	eted Matrix	×				
✓	A11 - Deplete	ed Below Dark Surface			F6 - Redo	x Dark Su	rface				
	\$1 - Sandy M				F8 - Redo	x Depress	sions	1			
Pastwisting Layer	აა - ა cm Mu	icky Peat or Peat						indicators of hydrophy	ytic vegetation and v	vetland hydrology must be	e present, unless disturbed or problematic.
Restrictive Layer (If Observed)	Type:	N/A		Depth:	N/A			Hydric Soil	Present?	V	Yes □ No
Remarks:	Sample noi	int location was rece	ently ploy	wed Soil	s were dr	v through	hout				
i tomanto.											
	Sample poi	int location was rece	only pion			y unougi	nout.				
	Sample poi	introcation was rece	only plot	wou. con		y unougi	lout.				
	Sample poi	int location was reco	only pion			y unougi	lout.				



Project/Site: Emerald Park Landfill - Western Expansion Wetland ID: Adj to W11 Sample Point W11-1u

VEGETATION	(Species identified in all uppercase are non-na	tive spec	ies.)		
Tree Stratum (Pl	ot size: 30 ft radius)				
	<u>Species Name</u>		Dominant	Ind.Status	Dominance Test Worksheet
1.					Number of Descipant Opering that are ORL FACING as FAC.
2. 3.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
					Total Number of Descinant Consists Assess All Charter (D)
4. 5.					Total Number of Dominant Species Across All Strata:(B)
6.					Percent of Deminant Species That Are ORL FACIAL or FAC: 100.0% (A/P)
7.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
10.	Total Cover =	0			FACW spp. 15 x 2 = 30
	Total Cover	Ü			FAC spp. 3 x 3 = 9
Sanling/Shruh St	ratum (Plot size: 15 ft radius)				FACU spp. 0 x 4 = 0
1.					UPL spp. 0 x 5 = 0
2.					· · · · · · · · · · · · · · · · · · ·
3.					Total 18 (A) 39 (B)
4.					(,(,
5.					Prevalence Index = B/A = 2.167
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					✓ Yes ☐ No Rapid Test for Hydrophytic Vegetation
10.					☑ Yes ☐ No Dominance Test is > 50%
	Total Cover =	0			
					☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Pl	ot size: 5 ft radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	ECHINOCHLOA CRUS-GALLI	15	Υ	FACW	* Indicators of hydric cail and watland hydrology must be
2.	Agrostis hyemalis	3	N	FAC	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.					
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					,
14.					All weeds vises greater than 2.20 ft in height
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	18			
Woody Vine Stra	tum (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					, , , ,
5.					
	Total Cover =	0			
Remarks:	Vegetation was recently harvested and	soils plo	owed, lea	ving only	annual weeds.

Additional Remarks:

Hydrophytic vegetation and hydric soils present, although both soils and vegetation were significantly disturbed.



Are Vegetation Are Vegetation SUMMARY OF I Hydrophytic Veg Wetland Hydrolo	Advanced I Eric Parker Montgomer Depression 0-2 Irologic cond Soil , Soil , FINDINGS getation Presegy Present	ry silty clay loam Latitude: Latitude: ditions on the site typ or Hydrology I sigr or Hydrology I natu sent?	N/A lical for t lificantly urally pro	Investi Loc Linis time disturbe oblemati Yes Yes	ed? c? No	NV Concave N/A (If no, explai	VI/WWI Classification: e mininemalks) Are normal circumsta ⊡ Yes	Datum: ☑ Yes □ ances presen □No Hydric Soils	N/A No l? Present?	Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range:	Shrub Carr 36 5 N 20 E ☑ Yes ☐ No
Remarks:	Antecedent	t moisture conditions	normai	pased o	n WEIS	anaiysis.					
HYDROLOGY											
Primary:	A1 - Surface A2 - High Wa A3 - Saturatio B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatio	ater Table on larks nt Deposits posits at or Crust	gery		B9 - Wate B13 - Aqu B14 - True C1 - Hydri C3 - Oxidi C4 - Prese	er-Stained atic Fauna e Aquatic F ogen Sulfic zed Rhizo ence of Re ent Iron Re Muck Surf ge or Well	l Plants de Odor spheres on Living Roots ducted Iron duction in Tilled Soils ace Data			B6 - Surface So B10 - Drainage C2 - Dry-Seasor C8 - Crayfish Bu C9 - Saturation D1 - Stunted or D2 - Geomorphi D5 - FAC-Neutra	Patterns n Water Table nrows Visible on Aerial Imagery Stressed Plants c Position
Field Observati Surface Water F Water Table Pre Saturation Prese	Present? esent? ent?	Yes INO Yes INO Yes INO	Depth: Depth: Depth:		(in.) (in.) (in.)			Wetland Hy	drology Pr	esent? ☑	Yes □ No
		eam gauge, monitorin			os, previo	us inspec	tions), if available:				
Remarks:	Riparian to	waterway outside pr	oject are	ea limits							
SOILS											
Map Unit Name		Montgomery silty cla	ay loam			S	Series Drainage Class:	very poorly			
Taxonomy (Sub	 	Vertic Endoaquolls									
		ne depth needed to document the indica	ator or confirm t		ndicators.) (Type:	C=Concentratio	n, D=Depletion, RM=Reduced Matrix, CS=		Grains; Location: PL=	Pore Lining, M=Matrix)	Texture
Top	Bottom	Horizon	Color	Matrix (Moist)	%		Color (Moist)	lox Features %	Tuno	Location	(e.g. clay, sand, loam)
Depth 0	Depth 10	Horizon 1	10YR	(IVIOIST) 2/1	100		Color (Worst)	70 	Type 	Location 	silty clay loam
10	24	2	10YR	4/2	95	10YR	5/8	5	C	M	clay
			101K	4/2		101K					ciay
											-
	A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A10 - 2 cm M A11 - Deplete A12 - Thick D S1 - Sandy M S3 - 5 cm Mu	stic en Sulfide d Layers luck ed Below Dark Surface Dark Surface luck Mineral ucky Peat or Peat			S4 - Sand S5 - Sand S6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	y Gleyed I y Redox ped Matrix y Muck M y Gleyed eted Matrix x Dark Su eted Dark	Matrix ineral Matrix c rface Surface	1 Indicators of hydrophy	\$7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Prairie Redox urface anganese Masse Shallow Dark Su ini in Remarks)	rface
(If Observed)	Type:	N/A		Depth:	N/A			Hydric Soil	Present?	V	Yes □ No
Remarks:											

Sample Point W11-1w

Wetland ID:

W11



Emerald Park Landfill - Western Expansion

Project/Site:

WETLAND DETERMINATION DATA FORM Midwest Region

VEGETATION (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) **Dominance Test Worksheet** Species Name % Cover Dominant Ind.Status 2 Number of Dominant Species that are OBL, FACW, or FAC: 5 (A) 3. 4. Total Number of Dominant Species Across All Strata: 5 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. Prevalence Index Worksheet 8. 9. Total % Cover of: Multiply by: 10. x 1 = OBL spp. x 2 = Total Cover = 0 FACW spp. 127 254 x 3 = FAC spp. 20 60 Sapling/Shrub Stratum (Plot size: 15 ft radius)

1. RHAMNUS CATHARTICA x 4 = FACU spp. 15 FAC UPL spp. 0 x 5= FACW 2 Cornus alba 10 3. Cornus obliqua 10 **FACW** Total 314 Ν FAC 4 Cornus racemosa 5 5. Prevalence Index = B/A = 2.136 6. 7 8 **Hydrophytic Vegetation Indicators:** 9. ☐ Yes Rapid Test for Hydrophytic Vegetation ✓ No 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = 40 □ No √ Yes Prevalence Index is ≤ 3.0 * ☑ No Morphological Adaptations (Explain) * ☐ Yes Herb Stratum (Plot size: 5 ft radius) ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * PHALARIS ARUNDINACEA **FACW** 100 1. * Indicators of hydric soil and wetland hydrology must be 2 Cornus alba 2 Ν **FACW** present, unless disturbed or problematic. 3. **Definitions of Vegetation Strata:** 4. --5. Tree - Woody plants 3 in. (7.6cm) or more in diameter at 6 breast height (DBH), regardless of height. 7 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. Total Cover = 102 Woody Vine Stratum (Plot size: 30 ft radius) Vitis riparia 5 **FACW** 1. 2. 3. Hydrophytic Vegetation Present ☑ Yes ☐ No 4 Total Cover = Remarks: Additional Remarks:



Project/Site:	Emerald Pa	ark Landfill - Wester	n Expans	sion			Stantec Project #:	193702557		Date:	10/23/14	
Applicant:	Advanced Disposal Services, INC									County:	Waukesha	
Investigator #1:	•			Investigator #2: Jaron Tylock						State:	Wisconsin	
Soil Unit:	Montgomery silty clay loam					NWI/WWI Classification: T3/E2Ka				Wetland ID:	Adj to W11	
Landform:	Hill Slope			Loc	al Relief:	Convex				Sample Point:	W11-2u	
Slope (%):	4-6	Latitude:	N/A	L	ongitude:	N/A		Datum:	N/A		Upland Thicket	
		ditions on the site ty					min centalks)		No	Section:	36	
		or Hydrology sig				(in) to Leaving the	Are normal circumsta			Township:	5 N	
		or Hydrology I nat					The second secon	□No		Range:	20 E	
		or riyurology Li nat	urally pix	Discillan	• 1	,	15 100	LINO		Range.	20 E	
SUMMARY OF		10		- 17.	- 100			Physical Callet	10			
Hydrophytic Ve				☑ Yes	□ No			Hydric Soils		A ()	✓ Yes □ No	
Wetland Hydrol					□ No					Within A Wetla		
Remarks:			s normal	based o	n WETS	analysis.	Sample point is locat	ed in an uplan	id thicket, v	which appeared	d to be well drained	
	throughout											
HYDROLOGY												
	alamı badias	stars (Chaple bross	College and	armout had		EV						
		ators (Check here if	indicato	s are no	t present	₩):			Secondary:			
<u>Primary:</u> ☐ A1 - Surface Water					B9 - Wate	r Stainad I	Logyon			B6 - Surface So	il Cracke	
	A2 - High Wa				B13 - Aqu					B10 - Drainage		
	A3 - Saturation				B14 - True							
	B1 - Water M				C1 - Hydro			☐ C2 - Dry-Season Water Table ☐ C8 - Crayfish Burrows				
	B2 - Sedimer	nt Deposits					spheres on Living Roots				Visible on Aerial Imagery	
	B3 - Drift Dep	oosits			C4 - Prese	ence of Re	duced Iron			D1 - Stunted or		
	B4 - Algal Ma						duction in Tilled Soils					
	B5 - Iron Dep				C7 - Thin					D5 - FAC-Neutra	al Test	
		on Visible on Aerial Ima			D9 - Gaug							
	B8 - Sparsely	y Vegetated Concave S	surface	Ш	Other (Exp	plain in Re	marks)					
Field Observat												
Surface Water I	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	trology Pr	ocont2	Yes ☑ No	
Water Table Pre	esent?	☐ Yes ☑ No	Depth:		(in.)			wetiand my	arology Fi	esent:	162 M MO	
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)							
Describe Becord	od Data (etr		- 111 - 111 ()									
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:												
				erial phot	os, previo	us inspec	tions), if available:					
Remarks:		eam gauge, monitorir gy indicators observ		erial phot	os, previo	us inspec	tions), if available:					
Remarks:				erial phot	os, previo	us inspec	tions), if available:					
Remarks: SOILS	No hydrolog	gy indicators observ	/ed.	erial phot	os, previo							
Remarks: SOILS Map Unit Name	No hydrolog	gy indicators observ Montgomery silty cl	/ed. lay loam	erial phot	os, previo		tions), if available:	very poorly				
Remarks: SOILS Map Unit Name Taxonomy (Sub	No hydrologics: group):	gy indicators observ Montgomery silty cl Vertic Endoaquolls	lay loam			S	eries Drainage Class:	<i>y</i> , <i>y</i>				
Remarks: SOILS Map Unit Name Taxonomy (Sub	No hydrologics: group):	gy indicators observ Montgomery silty cl Vertic Endoaquolls	lay loam			S		<i>y</i> , <i>y</i>	rains; Location:PL=	Pore Lining, M=Matrix)		
Remarks: SOILS Map Unit Name Taxonomy (Sub	No hydrologics: group):	gy indicators observ Montgomery silty cl Vertic Endoaquolls	lay loam			S	eries Drainage Class:	<i>y</i> , <i>y</i>	rains; Location: PL=	Pore Lining, M=Matrix)	Texture	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	No hydrological street of the	gy indicators observed. Montgomery silty control of the control o	lay loam	the absence of in	ndicators.) (Type:	S	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS [*] Red	=Covered/Coated Sand G		1		
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	No hydrological street of the	Montgomery silty control by the depth needed to document the individuals. Horizon	lay loam S cator or confirm t	the absence of in Matrix (Moist)	ndicators.) (Type:	S C=Concentration	eries Drainage Class:	=Covered/Coated Sand G	rains: Location: PL=	Pore Lining, M=Matrix) Location	(e.g. clay, sand, loam)	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	No hydrological section (Describe to the Depth 10	Montgomery silty cl Vertic Endoaquolls he depth needed to document the india Horizon	lay loam cator or confirm t Color 10YR	the absence of in Matrix (Moist)	mdicators.) (Type:	S C=Concentration	deries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS- Red Color (Moist)	=Covered/Coated Sand G	Type 	Location	(e.g. clay, sand, loam) silt loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	Signoup): tion (Describe to to to Depth 10 24	Montgomery silty content of the individual of th	lay loam S cator or confirm to Color 10YR 10YR	he absence of ir Matrix (Moist) 2/1 4/1	% 100 95	C=Concentration	eries Drainage Class: n. D=Depletion, RM=Reduced Matrix, CS* Red Color (Moist) 5/8	=Covered/Coated Sand G	Type C	Location M	(e.g. clay, sand, loam) silt loam clay loam	
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Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	Signoup): group): tion (Describe to II Bottom Depth 10 24	Montgomery silty control Vertic Endoaquolls Horizon 1 2	lay loam Seator or confirm t Color 10YR 10YR	Matrix (Moist) 2/1 4/1	% 100 95		eries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS: Red Color (Moist) 5/8	=Covered/Coated Sand Grown Features % 5	Type C	Location M	(e.g. clay, sand, loam) silt loam clay loam	
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Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	No hydrological Section (Describe to the Depth 10 24 Soil Field In A1- Histosol A2 - Histic Ep	Montgomery silty control Vertic Endoaquolls Montgomery silty control Vertic Endoaquolls Morizon 1 2 dicators (check he pipedon	lay loam Seator or confirm t Color 10YR 10YR	Matrix (Moist) 2/1 4/1 cators are	% 100 95 e not pres S4 - Sand S5 - Sand	SSC=Concentration 10YR seent y Gleyed N	Reries Drainage Class: Red Color (Moist) 5/8		Type C for Problem A16 - Coast S7 - Dark Su	Location M	(e.g. clay, sand, loam) silt loam clay loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	Soil Field In A1 - Histosol A3 - Black Hi	Montgomery silty content of the individual of th	lay loam Seator or confirm t Color 10YR 10YR	Matrix (Moist) 2/1 4/1 cators ar	% 100 95 s not press \$4 - Sand \$6 - Stript	C=Concentration 10YR Sent □) y Gleyed N y Redox yed Matrix	Red Color (Moist) 5/8	=Covered/Coated Sand Grown Features % 5 Indicators	Type C for Problen A16 - Coast S7 - Dark St F12 - Iron-M	Location M	(e.g. clay, sand, loam) silt loam clay loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S	Soil Field In A1- Histosol A2 - Histic Eq. A3- Black His A4 - Hydroge	Montgomery silty control Vertic Endoaquolls Montgomery silty control Vertic Endoaquolls Horizon 1 2 dicators (check here) stic an Sulfide	lay loam Seator or confirm t Color 10YR 10YR	Matrix (Moist) 2/1 4/1 cators are	% 100 95	C=Concentration 10YR 10YR Sept1 □) y Gleyed N y Redox oed Matrix, sy Muck Mix yy Mix yy Muck Mix yy Mix yy Mix yy Muck Mix yy Mix	Peries Drainage Class: Red Color (Moist) 5/8	=Covered/Coated Sand Grox Features %	Type C for Problem A16 - Coast S7 - Dark Su F12 - Iron-M	Location M	(e.g. clay, sand, loam) silt loam clay loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier	Montgomery silty control Vertic Endoaquolls the depth needed to document the indicators Horizon 1 2 dicators (check he doing to be still be	lay loam Seator or confirm t Color 10YR 10YR	Matrix (Moist) 2/1 4/1 cators are	% 100 95 en not pres \$4 - Sand \$5 - Sand \$6 - StripF 1 - Loam \$72 - Loam \$72 - Loam \$73 - Loam \$73 - Loam \$74 - Loam \$74 - Loam \$75 -	C=Concentration 10YR Sent) y Gleyed N y Redox y Redox d Matrix by Muck Min y Gleyed I by Muck Min y Gleyed I by Gleyed I by Muck Min y Gleyed I by Much Min y Gleyed I by Min y Gle	eries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS: Red Color (Moist) 5/8 :: Matrix	=Covered/Coated Sand Grox Features %	Type C for Problem A16 - Coast S7 - Dark Su F12 - Iron-M	Location M	(e.g. clay, sand, loam) silt loam clay loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	No hydrologic group): stion (Describe to the first part of the fi	Montgomery silty control Vertic Endoaquolls Montgomery silty control Vertic Endoaquolls Horizon 1 2 dicators (check here) pipedon stic stic control Sulfide d Layers luck	lay loam Scalor or confirm t Color 10YR 10YR re if indic	he absence of in Matrix (Moist) 2/1 4/1 cators are	% 100 95	SS C=Concentration 10YR sent y Gleyed N y Redox oed Matrix ny Gleyed Matrix ny Gleyed Matrix	Reries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS-Red Color (Moist) 5/8 Watrix ineral Matrix	=Covered/Coated Sand Grox Features %	Type C for Problem A16 - Coast S7 - Dark Su F12 - Iron-M	Location M	(e.g. clay, sand, loam) silt loam clay loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	No hydrologic group): stion (Describe to the first part of the fi	Montgomery silty control Vertic Endoaquolls Montgomery silty control Vertic Endoaquolls Horizon 1 2	lay loam Scalor or confirm t Color 10YR 10YR re if indic	Matrix (Moist) 2/1 4/1 cators are	% 100 95	SS C=Concentration 10YR y Gleyed N y Redox oed Matrix ny Muck Mi ny Muck	Reries Drainage Class: Red Color (Moist) 5/8	=Covered/Coated Sand Grox Features %	Type C for Problem A16 - Coast S7 - Dark Su F12 - Iron-M	Location M	(e.g. clay, sand, loam) silt loam clay loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric :	Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm N A11 - Deplete A12 - Thick E S1 - Sandy N	Montgomery silty control Vertic Endoaquolls Montgomery silty control Vertic Endoaquolls Horizon 1 2 dicators (check he objected on still be stil	lay loam Scalor or confirm t Color 10YR 10YR re if indic	he absence of in Matrix (Moist) 2/1 4/1 cators are	% 100 95	C=Concentration 10YR 10YR y Gleyded N y Redox oed Matrix ny Muck Miny Gleyded Idatrix ny Gleyded Idatrix ny Carlo Sulletted Matrix up August Dark Sulletted Dark Sullet	ieries Drainage Class: n, D=Depletion, RM=Reduced Matrix, CS: Red Color (Moist) 5/8 : Matrix ineral Matrix crace Surface Surface	=Covered/Coated Sand Grox Features %	Type C for Problem A16 - Coast S7 - Dark Su F12 - Iron-M	Location M	(e.g. clay, sand, loam) silt loam clay loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric :	Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm N A11 - Deplete A12 - Thick E S1 - Sandy N	Montgomery silty control Vertic Endoaquolls Montgomery silty control Vertic Endoaquolls Horizon 1 2 dicators (check here) biglicators (check here) biglicators (check here) control Sulfide do Layers luck end Below Dark Surface bark Surface	lay loam Scalor or confirm t Color 10YR 10YR re if indic	he absence of in Matrix (Moist) 2/1 4/1 cators are	% 100 95	C=Concentration 10YR 10YR y Gleyded N y Redox oed Matrix ny Muck Miny Gleyded Idatrix ny Gleyded Idatrix ny Carlo Sulletted Matrix up August Dark Sulletted Dark Sullet	Peries Drainage Class: In, D=Depletion, RM=Reduced Matrix, CS: Red Color (Moist) 5/8	=Covered/Coated Sand Gotox Features % 5 Indicators	Type C for Problem A16 - Coast S7 - Dark Su F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silt loam clay loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric :	Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier A10 - 2 cm N A11 - Deplete A12 - Thick E S1 - Sandy N	Montgomery silty control Vertic Endoaquolls Montgomery silty control Vertic Endoaquolls Horizon 1 2	lay loam Scalor or confirm t Color 10YR 10YR re if indic	he absence of in Matrix (Moist) 2/1 4/1 cators are	% 100 95	C=Concentration 10YR 10YR y Gleyded N y Redox oed Matrix ny Muck Miny Gleyded Idatrix ny Gleyded Idatrix ny Carlo Sulletted Matrix up and Sulletted Matrix	Peries Drainage Class: In, D=Depletion, RM=Reduced Matrix, CS: Red Color (Moist) 5/8	=Covered/Coated Sand Gotox Features % 5 Indicators	Type C for Problem A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silt loam clay loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	Soil Field In A1 - Hydroge A2 - Histic E A3 - Black Hi A4 - Hydroge A11 - Deplete A12 - Thick E S1 - Sandy M S3 - 5 cm Mu	Montgomery silty content of the individual of th	lay loam Scalor or confirm t Color 10YR 10YR re if indic	Matrix (Moist) 2/1 4/1 cators are	% 100 95	C=Concentration 10YR 10YR y Gleyded N y Redox oed Matrix ny Muck Miny Gleyded Idatrix ny Gleyded Idatrix ny Carlo Sulletted Matrix up and Sulletted Matrix	Peries Drainage Class: In, D=Depletion, RM=Reduced Matrix, CS: Red Color (Moist) 5/8	=Covered/Coated Sand Gotox Features % 5 Indicators Indicators of hydrophy	Type C for Problem A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silt loam clay loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	Soil Field In A1 - Hydroge A2 - Histic E A3 - Black Hi A4 - Hydroge A11 - Deplete A12 - Thick E S1 - Sandy M S3 - 5 cm Mu	Montgomery silty control Vertic Endoaquolls Montgomery silty control Vertic Endoaquolls Horizon 1 2	lay loam Scalor or confirm t Color 10YR 10YR re if indic	Matrix (Moist) 2/1 4/1 cators are	% 100 95	C=Concentration 10YR 10YR y Gleyded N y Redox oed Matrix ny Muck Miny Gleyded Idatrix ny Gleyded Idatrix ny Carlo Sulletted Matrix up and Sulletted Matrix	Peries Drainage Class: In, D=Depletion, RM=Reduced Matrix, CS: Red Color (Moist) 5/8	=Covered/Coated Sand Gotox Features % 5 Indicators Indicators of hydrophy	Type C for Problem A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silt loam clay loam	
Remarks: SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	Soil Field In A1 - Hydroge A2 - Histic E A3 - Black Hi A4 - Hydroge A11 - Deplete A12 - Thick E S1 - Sandy M S3 - 5 cm Mu	Montgomery silty content of the individual of th	lay loam Scalor or confirm t Color 10YR 10YR re if indic	Matrix (Moist) 2/1 4/1 cators are	% 100 95	C=Concentration 10YR 10YR y Gleyded N y Redox oed Matrix ny Muck Miny Gleyded Idatrix ny Gleyded Idatrix ny Carlo Sulletted Matrix up and Sulletted Matrix	Peries Drainage Class: In, D=Depletion, RM=Reduced Matrix, CS: Red Color (Moist) 5/8	=Covered/Coated Sand Gotox Features % 5 Indicators Indicators of hydrophy	Type C for Problem A16 - Coast S7 - Dark St F12 - Iron-M TF12 - Very Other (Expla	Location M	(e.g. clay, sand, loam) silt loam clay loam	



Project/Site: Emerald Park Landfill - Western Expansion Wetland ID: Adj to W11 Sample Point W11-2u

VEGETATION	(Species identified in all uppercase are non-na	tive spec	ies.)		
Tree Stratum (Plo	ot size: 30 ft radius)				
	Species Name		Dominant	Ind.Status	Dominance Test Worksheet
1.	RHAMNUS CATHARTICA	30	Y	FAC	
2.	Acer negundo	15	Y	FAC	Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata: 6 (B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)
7.					
8.					Prevalence Index Worksheet
9.				-	Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	45			FACW spp. 34 x 2 = 68
					FAC spp. $80 x 3 = 240$
	atum (Plot size: 15 ft radius)	00		E40	FACU spp. 20 x 4 = 80
1.	Cornus racemosa	20	Y	FAC	UPL spp. 4 x 5 = 20
2.	LONICERA X BELLA	20	Y	FACU	T. I. 100 (1)
3.	RHAMNUS CATHARTICA	15	N	FAC	Total 138 (A) 408 (B)
4.	Cornus alba	10	N	FACW	B 1 11 BH 2005
5.	Salix interior	10	N	FACW	Prevalence Index = B/A = 2.957
6.	Ribes americanum	2	N	FACW	
7.	Rubus occidentalis	1	N	UPL	
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					✓ Yes ☐ No Dominance Test is > 50%
	Total Cover =	78			
					☐ Yes ☑ No Morphological Adaptations (Explain) *
	ot size: 5 ft radius)	40		EA 0\A/	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Ribes americanum	10	Y	FACW	* Indicators of hydric soil and wetland hydrology must be
2.	Rubus occidentalis	2	Y	UPL	present, unless disturbed or problematic.
3.	Symphyotrichum lateriflorum		N	FACW	D. Finitions of Vancture Office
4.					Definitions of Vegetation Strata:
5. 6					Troo
7.					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7. 8.	 				Stock Holgin (SELT), togulation of Holgin
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
9. 10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
15.	Total Cover =	15			Woody Villes 2 week, man great warm and a series
	rotal Cover =	10			
Woody Vine Strat	um (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					Trydrophydd Togolddoll 1 1636 ill 163 110
5.					
J	Total Cover =	0			
Remarks:	Vegetation dominated by weedy invasiv		and shrul	bs commo	only found in disturbed upland thickets.

Additional Remarks:

Hydrophytic vegetation and hydric soils present, although due to the invasive nature of the plants and a lack of wetland hydrology indicators, the sample point was determined to be upland.