300-3000 ITEM 3

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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January 26, 2016

Mr. Alex Damien, P.E. Project Manager City of Waukesha Department of Public Works - Engineering Division 130 Delafield Street Waukesha, WI 53188

Re: SEWRPC No. CA-737-272

OZAUKEE RACINE WALWORTH WASHINGTON WAUKESHA

Dear Mr. Damien:

This will respond to your email message of June 2, 2015, requesting that the Commission staff conduct a field inspection of a city-owned property (Tax Key: WAKC1352999) known as the "Milky Way Fill Site" where a new city park is proposed. The property is located in parts of the Southeast one-quarter of U.S. Public Land Survey Section 14, Township 6 North, Range 19 East, City of Waukesha, Waukesha County, Wisconsin. The purpose of the field inspection was to identify and stake the boundaries of any wetlands contained on the subject property.

Pursuant to your request, Commission staff identified and staked the wetland boundaries on the subject property on August 25 and 27, 2015. A copy of the wetland delineation report is attached for your reference.

Should you have any questions regarding this information, please do not hesitate to contact Mr. Christopher J. Jors, Senior Specialist-Biologist (*cjors@sewrpc.org* or 262-953-3246).

Sincerely,

Kenneth R. Yunker, P.E. Executive Director

KRY/TMS/CJJ/kmd #229961 – CA737-272 Proposed City Park at Milky Way Fill Site Letter

Enclosure (#230061)

 cc: Mr. Jason Fruth, Waukesha County Department of Parks & Land Use (w/enclosure) Ms. Geri Radermacher, Wisconsin Department of Natural Resources (w/enclosure) Mr. Neil Molstad, Wisconsin Department of Natural Resources (w/enclosure) Ms. Marie Kopka, U.S. Army Corps of Engineers (w/enclosure)

WETLAND DELINEATION REPORT

CITY OF WAUKESHA PROPOSED PARK AT FORMER MILKY WAY FILL SITE Southeast One-quarter, Section 14, T6N, R19E CITY OF WAUKESHA WAUKESHA COUNTY WISCONSIN

Prepared by: Christopher Jors Jennifer Dietl Daniel Carter Zofia Noe

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607 Waukesha, WI 53187-1607

WETLAND DELINEATION REPORT OVERVIEW

(Based upon WDNR WETLAND Delineation Confirmation Request Check List)

INTRODUCTION

- Who requested the delineation Alex Damien, P.E., City of Waukesha Department of Public Works
- Why the delineation was undertaken Proposed park site at former Milky Way fill site
- Date the field work was completed August 25 and 27, 2015
- Who conducted field work Christopher Jors, Jennifer Dietl, Daniel Carter
- Statement of Qualifications

METHODS

- Description of Methods
- Sources Reviewed
 - Topographic Map Exhibit 1
 - WDNR Surface Water Data Viewer Wisconsin Wetland Inventory (WWI) Map Exhibit 2
 - Soil Survey and Floodplain Map Exhibit 3
 - Historical Aerial Photos Exhibits 4A-4L (2015, 2010, 2007, 2005, 2000, 1995, 1990, 1980, 1970, 1963, 1950, and 1941)
 - Sanitary Sewer Service Map Exhibit 5
 - ADID Wetland Map Exhibit 6

RESULTS AND DISCUSSION

- Antecedent hydrologic condition analysis Normal
- Previous wetland delineation mapping Dave Meyer, Wetland & Waterway Consulting, LLC
- Existing environmental mapping (WWI mapping, Soil survey, etc.)
- Description of any site specific agency guidance (site meetings, etc.)
- Amount and types of wetland located within the project area
- Wetland/upland boundary explanation
- Disturbed and problematic areas encountered
- Other water resources located in the project area
- Other considerations

Wetland Delineation Map – Exhibit 7

Vegetation Survey, Wetland Delineation Data Forms, and Site Photos

- Preliminary Vegetation Survey Exhibit 8
- Wetland Determination Data Forms NE/NC Region Exhibit 9
- Site Photos **Exhibit 10**

Farm Service Agency Slide Review

- Completed wetland documentation form (NRCS form NRCS-CPA-32A) Exhibit 11
- FSA Slide Review Map Exhibit 12
- Copies or photos of slides Exhibit 13
- Copy of the draft NRCS Wetland Inventory map Exhibit 14

LITERATURE CITED

INTRODUCTION

This wetland delineation report responds to an email request from Alex Damien, P.E., City of Waukesha Department of Public Works, Engineering Division, to identify and stake the boundaries of any wetlands contained within the former Milky Way Fill site for the purpose of creating a future park. The project area is located in the Southeast one-quarter of U.S. Public Land Survey Section 14, Township 6 North, Range 19 East, City of Waukesha, Waukesha County, Wisconsin.

Statement of Qualifications

Christopher Jors, Senior Specialist-Biologist, has worked at SEWRPC since 1993, and has been part of the wetland delineation team since 1994. He received a Bachelor's degree in Conservation Aspects of Biology from the University of Wisconsin – Milwaukee in 1992. Prior to working at SEWRPC, Chris worked at the UWM Field Station at the Cedarburg Bog in Saukville, WI, where he learned methods of sampling wetland plant communities within the Bog. Chris has attended various wetland training workshops including the UW-La Crosse Basic and Advanced Wetland Delineation Workshops on August 10-15, 2015; a Wisconsin Dept. of Natural Resources Wetland Delineation & Wetland Rapid Assessment Methodology Workshop on April 23, 2014; and a U.S. Army Corps of Engineers Workshop on the Midwest Supplement to the 1987 Wetland Delineation Manual on February 3, 2009.

Jennifer Dietl, Specialist-Biologist, earned a Bachelor's degree in Biology and Environmental Science from Carroll University in 1992. She has worked at the Commission from 1992 to 1997 and from 2006 to the present conducting wetland delineations, primary environmental corridor delineations, and vegetation surveys. In between years of service at the Commission she worked for the Wisconsin Department of Transportation – Green Bay as an LTE Environmental Analysis and Review Specialist – and the Wisconsin Department of Natural Resources – Green Bay as an LTE Hydrologist. Jennifer attended a Wisconsin Dept. of Natural Resources Wetland Delineation & Wetland Rapid Assessment Methodology Workshop on April 23, 2014 and the UW-La Crosse Basic and Advanced Wetland Delineation Workshops on August 10-15, 2015.

Daniel Carter, PhD, Principal Biologist, has worked at SEWRPC since 2013. He graduated with honors from Grinnell College with a Bachelor's degree in Biology. He later received a PhD in Biology from Kansas State University. Daniel has published several plant ecology articles in peer-reviewed journals, served on the botany team for the Wisconsin Wildlife Action Plan, and co-teaches the UW-La Crosse Basic Wetland Plant Identification course. He has completed both basic and advanced wetland delineation training as well as Wisconsin Natural Heritage Inventory training. Prior to working for the Commission, Daniel served as project coordinator for a grassland restoration project overseen jointly by the United States Department of Agriculture and The Nature Conservancy and taught high school Biology.

Zofia Noe, Specialist-Biologist, earned a Bachelor's degree in Biology and Chemistry from St. Mary's College of Maryland in 2003. She earned a Master's Degree in Coastal Marine and Wetland Studies from Coastal Carolina University in 2009 and completed an Aquatic Plant Identification course in 2015. Zofia has experience in a variety of environmental assessments including water quality, aquatic plant, and upland vegetation surveys. Zofia began assisting with wetland delineations in the summer of 2013.

METHODS

Description of Methods

The wetland boundary determinations were based upon the criteria and methodologies set forth in the 1987 *Corps* of Engineers Wetlands Delineation Manual; the January, 2012, Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0); the March 4, 2015, Guidance for Submittal of Delineation Reports to the St. Paul District Army Corps of Engineers and the Wisconsin Department of Natural Resources; and the State of Wisconsin 2014 Wetland Plant List.

Specific methods used to field identify wetland boundaries included the U.S. Department of the Army Corps of Engineers Routine Onsite Determination Method – Plant Community Assessment Procedure. This procedure requires an initial identification of representative plant community types followed by a characterization of vegetation, soils, and hydrology for each type.

Sources Reviewed

Prior to conducting field work, Commission staff reviewed the following data sources: Waukesha County's topographic mapping (Exhibit 1), WDNR Surface Water Data Viewer (WWI) Map (Exhibit 2), Natural Resource Conservation Service's (NRCS) soil survey and FEMA Floodplains (Exhibit 3), Commission aerial photography (Exhibits 4A - 4L), Sanitary Sewer Service Area Map (Exhibit 5), the Advanced Identification (ADID) wetland mapping (Exhibit 6), the draft NRCS Wetland Inventory Map (Exhibit 15), and precipitation data from the NRCS "WETS" tables and the Global Historical Climatology Network (GHCN).

RESULTS AND DISCUSSION

Christopher Jors, lead investigator, Jennifer Dietl, and Dr. Daniel Carter, identified and staked the boundaries of the wetlands contained within the project area on August 25 and 27, 2015. Wetland boundaries were marked with orange wire flags and ribbon. City of Waukesha staff were responsible for surveying the wetland boundary markers.

The results of the wetland delineation field inspection for this project area are shown on Exhibit 7, which includes staked wetland boundaries, sample site numbers and locations, and plant community areas and numbers.

Antecedent Hydrologic Conditions

WETS Station: WAUKESHA, WI8937 GHCN Station: Waukesha 2.1SSW, WI US GHCND: US1WIWK0004

Climatological data and observed precipitation amounts with monthly summaries were taken from the nearest WETS and GHCN stations with relevant data.

	Month	3 yrs. In 10 less than	Normal	3 yrs. In 10 more than	Observed precip.	Condition dry, wet, normal	Condition value	Month weight value	Product of previous two columns
1st prior month	August	3.28	4.77	5.69	4.54	Normal	2	3	6
2nd prior month	July	2.82	3.83	4.49	1.79	Dry	1	2	2
3rd prior month	June	2.46	3.78	4.54	3.14	Normal	2	1	2
								sum	10
		If sum is							
6 - 9 drier than normal									
		10 - 14	normal						
15 - 18 wetter than normal			<u>-</u>						
		Conclusion Normal							

Previous Wetland Delineation Mapping

On September 27 and 28, 2007, a wetland delineation was completed by David Meyer of Wetland & Waterway Consulting, LLC. The delineation was completed at that time when residential development was being proposed.

Existing Environmental Mapping

The Waukesha County topographic map (Exhibit 1) shows that the project area contains a northwest facing slope ranging from a high elevation of approximately 890 feet above sea level in the southeastern corner of the property to a low of 838 feet in the northwest part of the property. A small creek on the northern portion of the property flows off the property in a northwesterly direction into an unnamed tributary that eventually drains into Pebble Brook. Pebble brook eventually drains into the Fox River. The small creek contained on the property is not identified on the Surface Water Data Viewer. The unnamed tributary just north of the subject property is identified as a first order stream. However, currently, WDNR does not have any information available on the unnamed tributary.

The WDNR Surface Water Data Viewer (WWI) Map (Exhibit 2) indicates forested/scrub-shrub wetlands (T3/S3K) in the northern portion and southwestern corner of the project area. A small T3K is mapped in the northcentral part of the property. Emergent wet meadows (E1K and E2K) are located in the eastern and southeastern portions of the project area. A scrub-shrub/emergent wet meadow (S3/E2K) is located in the western portion of the project area. In addition, three farmed wetlands (F0Kf) are interspersed within the project area.

Soil Name	Slope %	Drainage Class	% Soil in Project Area	Sample Sites
Brookston silt loam (BsA)	0-2	Predominantly hydric	3.4	21, 26, 27, and 28
Casco loam (CeB)	2-6	Nonhydric	27.3	2, 3, 5, 9, and 13
Colwood silt loam (Cw)	0-2	Hydric	1.7	22 and 23
Drummer silt loam, gravelly substratum (Dt)		Hydric	10.2	8, 17, 19, and 20
Fox silt loam (FsB)	2-6	Nonhydric	6.2	
Hochheim loam (HmB)	2-6	Nonhydric	0.1	
Hochheim loam (HmC2)	6-12, eroded	Nonhydric	13.5	18, 24, and 31
Hochheim loam (HmE2)	20-30	Nonhydric	3.7	29
Houghton muck (HtA)	0-2	Hydric	14.1	1, 4, 6, 7, and 10
Lamartine silt loam (LmB)	0-3	Predominantly nonhydric	2.2	25 and 30
Matherton silt loam (MmA)	1-3	Predominantly nonhydric	12.2	14, 15, and 16
Ogden muck (Oc)		Hydric	0.6	
Sebewa silt loam (Sm)	0-2	Predominantly hydric	4.9	11 and 12

The NRCS Soil Survey map (Exhibit 3) shows the following soils in the project area:

No floodplain is mapped on the subject property as shown on Exhibit 3. However, floodplain is mapped just north of the property associated with the unnamed tributary.

Historical aerial photos of the project area were reviewed back to 1941. Aerial photos for years 2015, 2010, 2005, 2000, 1995, 1990, 1980, 1970, 1963, 1950, and 1941 are attached (Exhibits 4A to 4L). This review is summarized in the table below.

CHANGES IN LAND USE OBSERVED ON AERIAL PHOTOGRAPHY FROM 1941 TO 2015

Year	
1941	The subject farmstead and surrounding lands are in agricultural production. A farmhouse and barn structure are present on the far southeastern corner of the property. The northwestern part of the property appears to be pasture with scattered trees. An excavated area (possible gravel pit) is evident in northcentral part of the property (PCA 2). Wetland (PCA 5) at west edge of property appears vegetated on this photo. Ditching of Pebble Brook and unnamed tributary north of property is evident.
1950	Trees cut down in northwest corner of property in the vicinity of PCA 1.
1963	Portions of pasture in NW part of property have been converted to row crops. Wetness signature evident in PCA 3, coming from a ditched wetland east of the property. Residence built immediately east of property
1970	Another residence built adjacent to northeast corner of property.

Year	
1980	State Highway 164/59 (Les Paul Parkway) built northwest of project area. Unnamed tributary directed through culvert under highway.
1990	Barn and farmhouse on property razed down to foundation with only a silo remaining. Much of eastern part of property now fallow. Dark soils appear saturated in farmed wetland areas associated with PCA's 1, 5, 6, 7, and 8. Church built north of project area. Significant earth moving activities and pond creation along Pebble Brook for development east of church. Wetness signatures evident for much of the farmed wetland in the project area.
1995	Residential subdivision well underway northeast of project area. Vegetated portion of wetland (PCA 8) in southwest corner of property appears to be expanding. Wetness signatures evident for much of the farmed wetland in the project area.
2000	Part of fallow lands on east part of property converted back to cropland. State Highway 164/59 (Les Paul Parkway) expanded to a 4-lane, divided highway.
2005	Wetness signatures evident for much of the farmed wetland in the project area. Subdivision built southeast of project area, including a widened Milky Way Road.
2007	Wetness signatures evident for much of the farmed wetland in the project area.
2010	Earth-moving activities visible in east central portion of project area.
2015	Earth-moving activities within project area expanded westward including creation of a detention pond with an overflow outlet. Wetness signatures evident for much of the farmed wetland in the project area. Baseball Park developed immediately west of project area.

SEWRPC's sanitary sewer service map (Exhibit 5) shows that the entire project area is contained in the planned sanitary sewer service area for the City of Waukesha and Environs.

The ADID wetland map (Exhibit 6) indicates that the forested/scrub-shrub wetland in the northern portion of the property, and the forested and farmed wetland in the southwest corner of the project area are located within a designated Primary Environmental Corridor (PEC) and have been designated as ADID wetlands under the Section 404(b)(1) Guidelines of the Clean Water Act. The remaining farmed wetlands and emergent wet meadow wetlands are not located within a PEC.

Description of any site specific agency guidance

During the initial field inspection by the Commission staff on August 25, 2015, it was noted that the filling and grading activities had been expanded westward. For that reason, it was decided that delineation of potential wetland areas within and immediately adjacent to the filled areas would be postponed until Commission staff could seek guidance from WDNR staff. Accordingly, later that day, Commission staff spoke with Ms. Maureen McBroom, WDNR Water Management Specialist. Ms. McBroom has since left the WDNR. Ms. McBroom indicated that past filling and grading activities on the site had been authorized by WDNR based upon the 2007 wetland delineation findings. However, this authorization had expired in early 2015, and WDNR required an updated wetland delineation before the City could proceed with additional filling and grading activities. Ms. McBroom indicated that the Commission staff should proceed with the wetland delineation, including identifying and staking areas which currently meet the wetland criteria on or adjacent to the fill material. The fill material was considered to be the "New Normal Circumstance" because it had been authorized.

Amount and Types of Wetlands in the Project Area

Eight wetland plant community areas (PCA) were identified and inventoried during the field inspections. A list of vascular plant species observed during the field inspection was prepared for each plant community area as well as plant community type(s), dominant plant species, disturbances, and any critical plant and animal species (Exhibit 8). The table below summarizes characteristics for each PCA.

PCA Number	Acreage	PCA Type(s)	Dominant Species	Critical Species
1	3.14	Second growth, Southern wet to wet-mesic lowland hardwoods Atypical (farmed) wetland	<u>Boehmeria cylindrica</u> False nettle <u>Cornus obliqua</u> Silky dogwood <u>Fraxinus pennsylvanica</u> Green ash <u>Glyceria striata</u> Fowl manna grass <u>Panicum dichotomiflorum</u> Knee grass <u>Rhamnus cathartica</u> Common buckthorn	None
2	0.10 0.004	Ephemeral ponds with second- growth, Southern wet to wet- mesic lowland hardwoods	<u>Salix fragilis</u> Crack willow	None
3	1.69	Shallow marsh Fresh (wet) meadow Atypical (farmed) wetland	<u>Juncus dudleyi</u> Dudley's rush <u>Scirpus atrovirens</u> Green bulrush <u>Solidago gigantea</u> Giant goldenrod <u>Typha angustifolia</u> Narrow-leaved cat-tail	None
4	0.03	Fresh (wet) meadow Shrub-carr (willow thicket)	<u>Juncus dudleyi</u> Dudley's rush <u>Salix amygdaloides</u> Peach-leaved willow <u>Scirpus atrovirens</u> Green bulrush <u>Typha angustifolia</u> Narrow-leaved cat-tail	None
5	1.00	Shallow marsh Fresh (wet) meadow Atypical (farmed) wetland	<u>Panicum capillare</u> Witch grass <u>Phalaris arundinacea</u> -Reed canary grass Typha angustifoliaNarrow-leaved cat-tail	None
6	1.23	Fresh (wet) meadow Atypical (farmed) wetland Constructed stormwater detention pond with open water	<u>Echinochloa crusgalli</u> Barnyard grass <u>Panicum capillare</u> Witch grass <u>Panicum dichotomiflorum</u> Knee grass	None
7	3.45	Hillside seeps with Fresh (wet) meadow Atypical (farmed) wetland Shrub-carr Second growth, Southern wet to wet-mesic lowland hardwoods	<u>Agrostis gigantea</u> Redtop grass <u>Equisetum hyemale</u> Scouring-rush <u>Erigeron philadelphicus</u> Marsh fleabane <u>Juncus dudleyi</u> Dudley's rush <u>Juncus torreyi</u> Torrey's rush <u>Plantago rugelii</u> Red-stalked plantain <u>Phalaris arundinacea</u> Reed canary grass <u>Salix amygdaloides</u> Peach-leaved willow <u>Scirpus atrovirens</u> Green bulrush <u>Solidago altissima</u> Tall goldenrod <u>Solidago gigantea</u> Giant goldenrod <u>Symphyotrichum puniceum</u> Red-stemmed aster <u>Typha angustifolia</u> Narrow-leaved cat-tail	None
8	0.97	Fresh (wet) meadow Atypical (farmed) wetland Second growth, Southern wet to wet-mesic lowland hardwoods	<u>Cyperus esculentus</u> —Chufa <u>Impatiens capensis</u> —Jewelweed <u>Salix amygdaloides</u> Peach-leaved willow <u>Symphyotrichum lanceolatum</u> Marsh aster	None

Wetland/Upland Boundary Explanation

Thirty-one representative sample sites were identified within the project area. The Wetland Determination Data Forms describing the findings at each sample site are attached as Exhibit 9. The locations of the sample sites are shown on Exhibit 7. The wetland boundary was determined using breaks in topography, changes in vegetation composition, visual identification of wetland hydrology, and presence of hydric soils.

Disturbed and Problematic Areas Encountered

Sample sites 1, 3, 11, 20, and 22 were determined to have "significantly disturbed" vegetation due to agricultural land management activities (managed plant community) which obscured hydrophytic plant communities. These

five sample sites were determined to be wetland due to the presence of hydric soils, wetland hydrology, and problematic hydrophytic vegetation.

Sample sites 6 and 16 were determined to have "significantly disturbed" soils due obscured hydric soil indicators. In the case of site 6, an impenetrable layer of trash was found at 6 inches deep. While none of the standard hydric soils indicators were met, the presence of 6 inches of peat at the surface led to a finding of a problematic hydric soil. This finding, combined with the presence of hydrophytic vegetation and wetland hydrology, led the Commission staff to conclude that site 6 meets the wetland criteria. At site 16, recent sedimentation from runoff has covered the soil surface. The soil profile would meet the A12 (Thick Dark Surface) indicator if not for the layer of sediment. Due to these circumstances and the presence of wetland hydrology and hydrophytic vegetation, site 16 was determined to be wetland.

Sample sites 14, 17, and 18, were all determined to have "significantly disturbed" vegetation, hydrology, and soils due to the large amount of fill material placed at these sites. In the cases of sites 14 and 17, Commission staff determined that these were not wetland samples. While site 14 met a hydrophytic vegetation indicator, hydric soils and wetland hydrology were not present. Site 17 did not meet any of the three wetland indicators. Site 18 was determined to be a wetland sample due to the presence of all three wetland parameters.

Sample site 27 was found to have "naturally problematic" soils. The soil profile just misses an A12-Thick Dark Surface indicator by one inch. Given the presence of wetland hydrology and hydrophytic vegetation, Commission staff determined it was appropriate to identify this soil as a problematic hydric soil, leading to a determination of wetland at site 27.

Finally, sample site 28 was determined to have naturally problematic vegetation due to Kentucky bluegrass (*Poa pratensis*), a FACU species, being one the dominant species in the plot. However, due to the presence of wetland hydrology and hydric soils at this sample, it was determined that it would be appropriate to identify the vegetation as problematic hydrophytic vegetation and call it a wetland sample.

Farm Service Area Slide Review

A Farm Service Area slide review was conducted for potential farmed wetland areas on the site with the results provided on Exhibit 11. A map of the areas of concern is attached as Exhibit 12. Slides of these areas from 1992 to 2013 were reviewed. Slides from years with normal precipitation have been included in this report (2006, 2004, 2003, 2002, 2000, 1998, 1997, 1996, and 1993) as shown in Exhibit 13.

Areas A, B, and D, were found to have wetness signatures in 9 out of 9 (100%) normal precipitation years and 15 out of 18 (83%) years for all slides reviewed. Area A includes part of PCA Number 5 and Sample Site 11. Area B includes part of PCA Number 6 and Sample Site 16. Area D includes part of PCA Number 8 and Sample Site 22.

Area C was found to have wetness signatures in 7 out of 9 (78%) normal precipitation years and 13 out of 18 (72%) years for all slides reviewed. Area C includes part of PCA Number 7 and Sample Sites 19 and 20.

Draft NRCS Wetland Inventory Maps

A draft NRCS wetland inventory map (Exhibit 14) was reviewed. NRCS mapped features within the project area include Wetlands (W) which coincide with PCA's 1, 2, 3, and 4 and Sample Site Numbers 1, 3, 4, 5, 6, 7, 8, 10, 17, and 18; and Prior Converted (PC) areas which coincide with PCA's 5, 6, 7, and 8 and Sample Site Numbers 11, 12, 14, 15, 16, 19, 20, 22, 23, 24, 25, and 30. According to NRCS, PC is defined as wetland converted to cropland before December 1985 and was capable of being cropped and did not meet farmed wetland hydrology.

Other Water Resources Located in the Project Area

No other water resources are located in the project area.

Other Considerations

Please be advised that no Federal or State regulatory jurisdiction determinations relative to any wetland permits or certifications are made under this report. The wetlands located within the Primary Environmental Corridor shown on Exhibit 7, including PCA Numbers 1, 2, and 8, have been designated as Advanced Delineation and Identification (ADID) wetlands under the Section 404(b)(1) Guidelines of the Clean Water Act. ADID wetlands are deemed generally unsuitable for the discharge of dredge and fill material. In addition, recent revisions of the nonagricultural performance standards set forth in Section NR 151.125 of the *Wisconsin Statutes*, requires establishment of a 75-foot impervious surface protective area to protect these "highly susceptible" wetlands. PCA 3, the western portion of PCA 5, and the eastern portion of PCA 7 would require a 50-foot protective area for the "moderately susceptible" wetland types including fresh (wet) meadow, shallow marsh, shrub-carr, and early-successional lowland hardwoods contained in these PCA's. The remainder of the wetlands on the site, including the farmed wetlands and recently filled and graded wetlands in PCA 4, 5, 6, and 7, require a 10-foot protective area due to the presence of "less susceptible" wetland. This protective area boundary is measured horizontally from the delineated wetland boundary to the closest impervious surface. The protective area requirements should be taken into consideration for any planned improvements on the subject property and it is suggested that you contact WDNR regarding approaches to meet the requirements.

LITERATURE CITED

U.S. Army Corps of Engineers, 2015, Special Public Notice: *Guidance for Submittal of Delineation Reports to the St. Paul District Corps of Engineers and the Wisconsin Department of Natural Resources*, U.S. Army Corps of Engineers, March 2015.

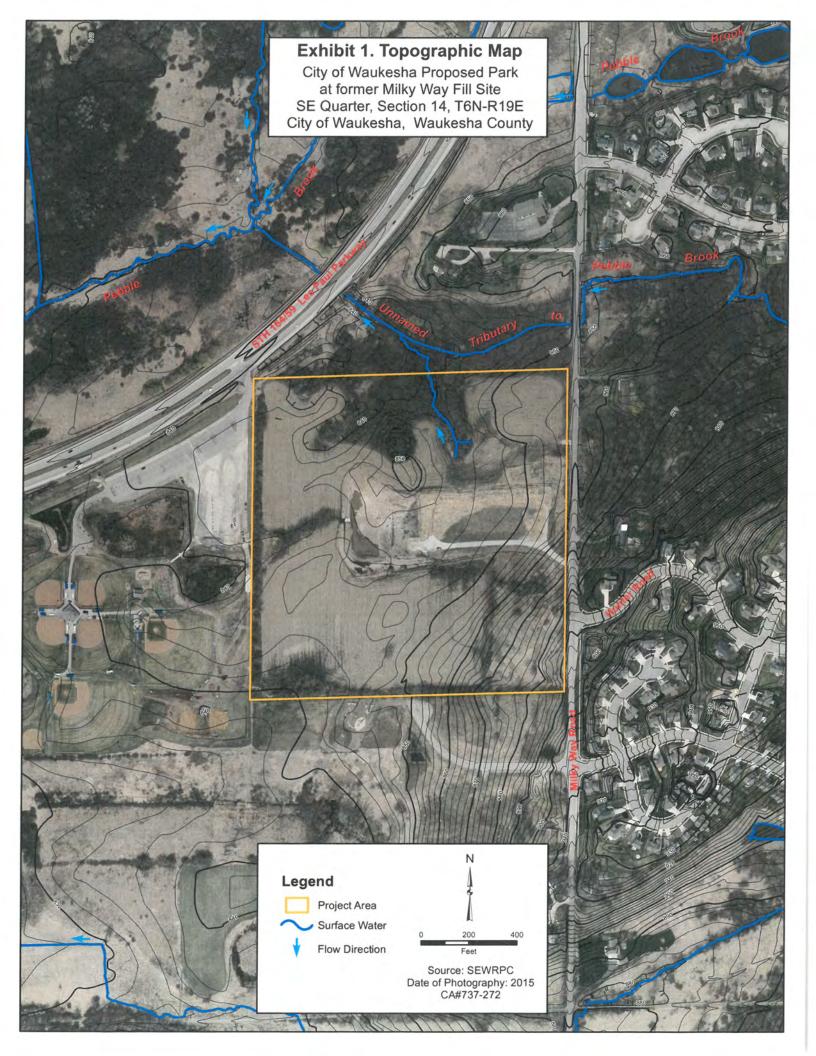
U.S. Army Corps of Engineers, 2014, State of Wisconsin Wetland Plant List

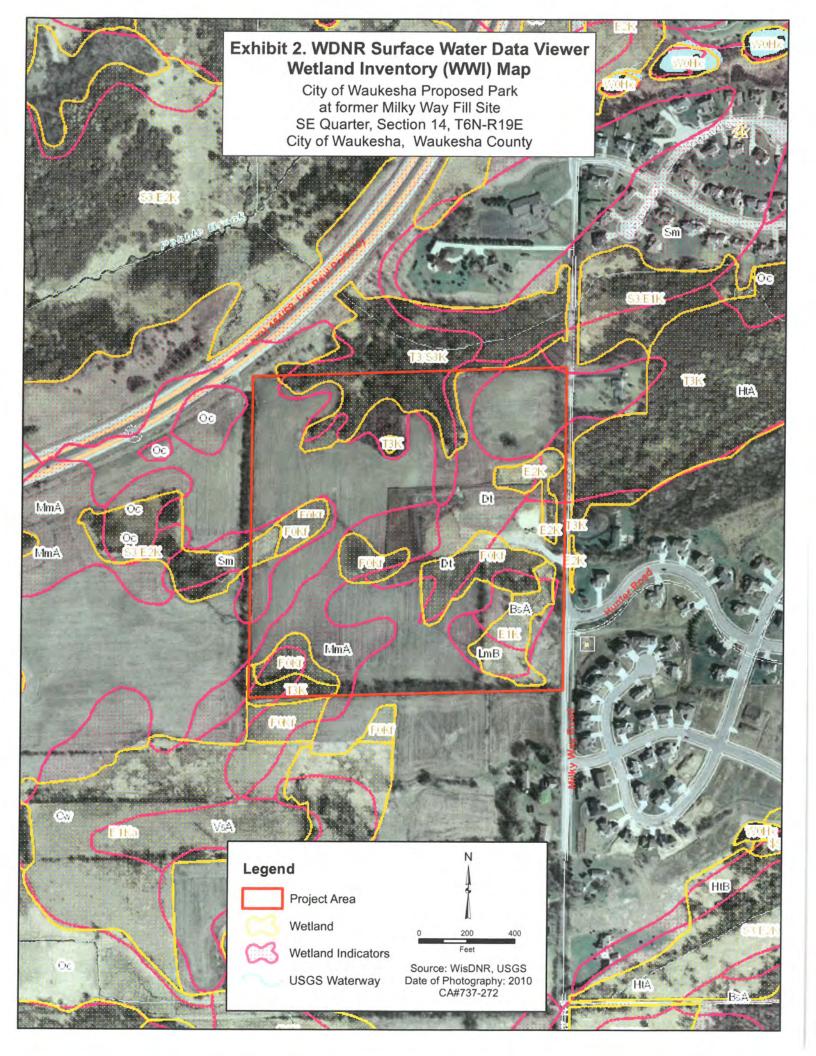
U.S. Army Corps of Engineers, 2012, *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (Version 2.0). U.S. Army Engineer Research and Development Center, January 2012.

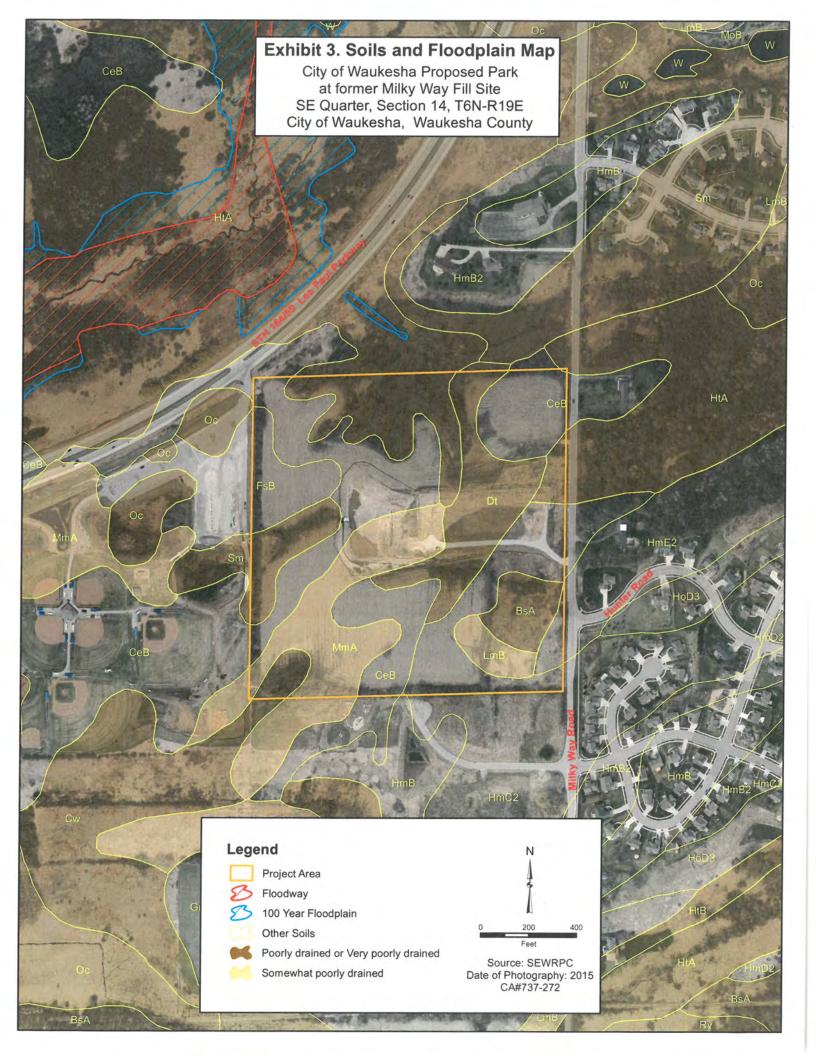
U.S. Army Corps of Engineers, 1987, U.S. Army Corps of Engineers wetlands delineation manual. Wetlands Research Program Technical Report Y-87-1.

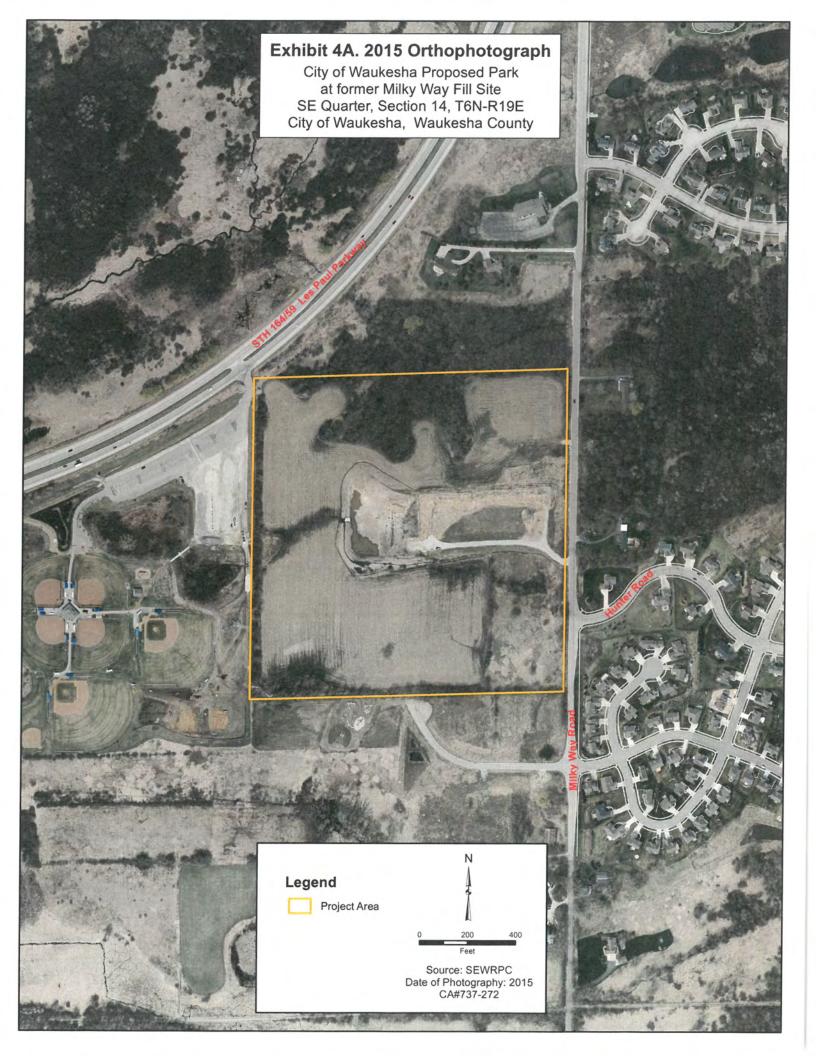
WDNR, Surface Water Data Viewer, website at http://dnrmaps.wi.gov/sl/?Viewer=SWDV

CJJ/JLD/ZN/kmd #227512 – CA737-272 City of Waukesha Proposed City Park (Former Milky Way Fill Site) 300-3000

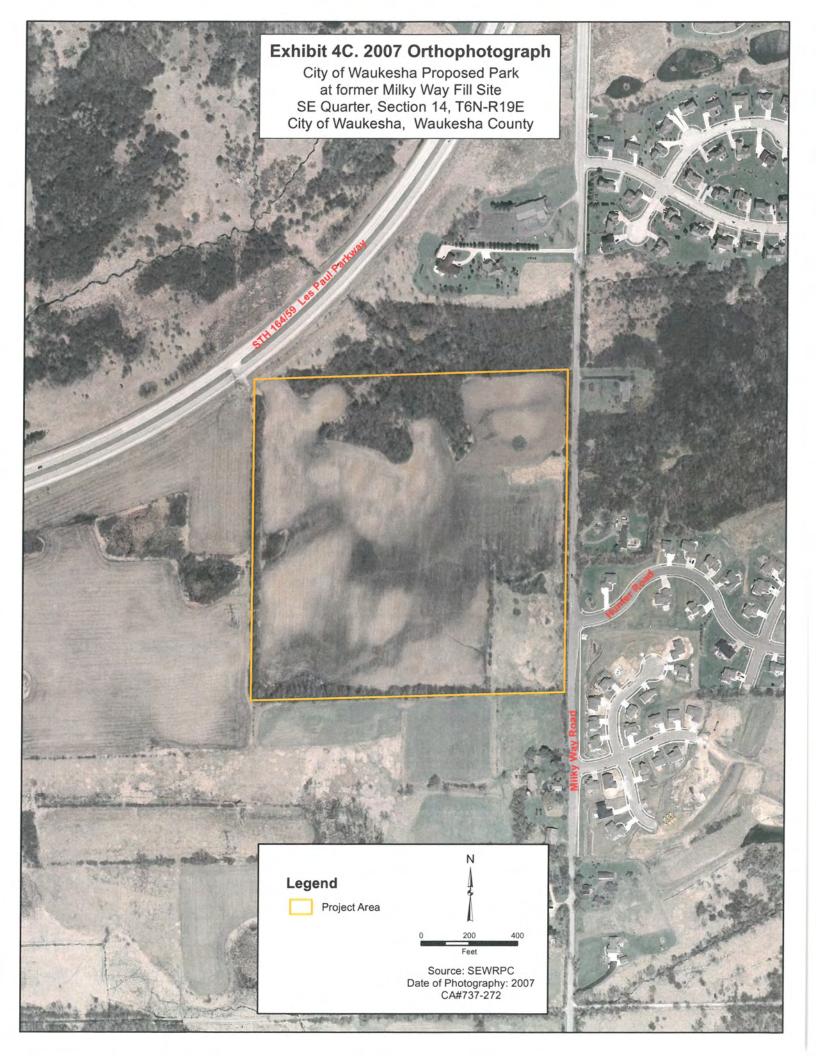


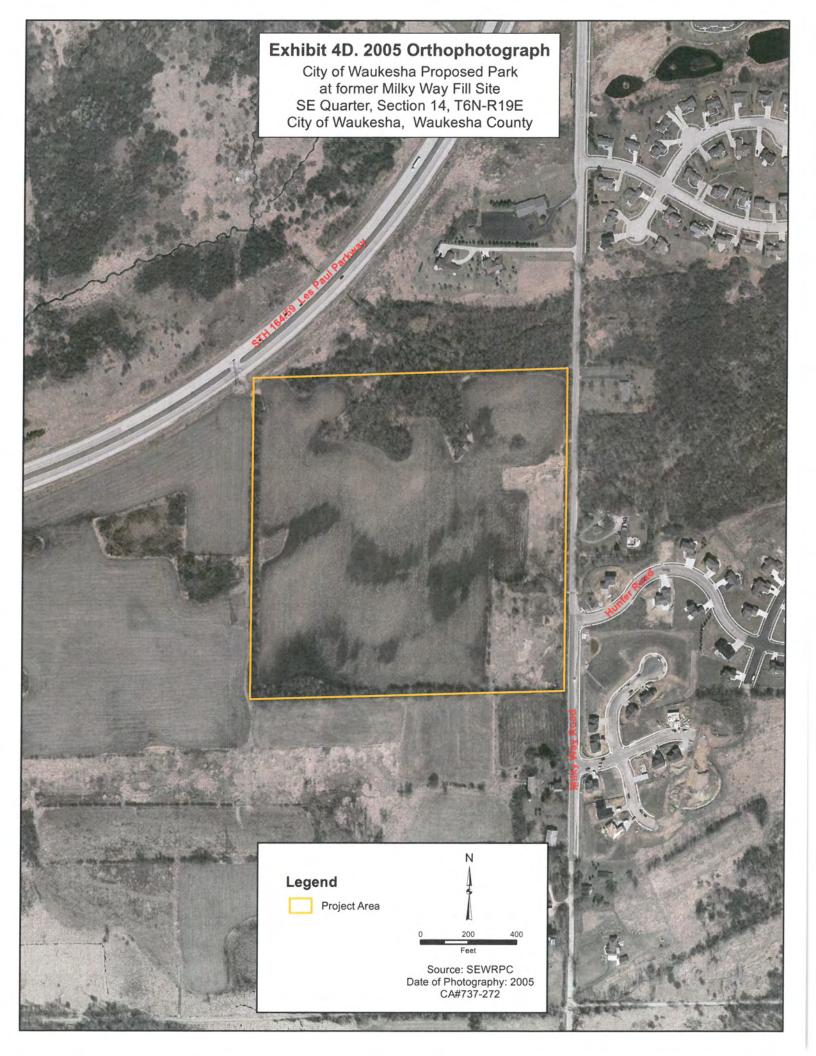


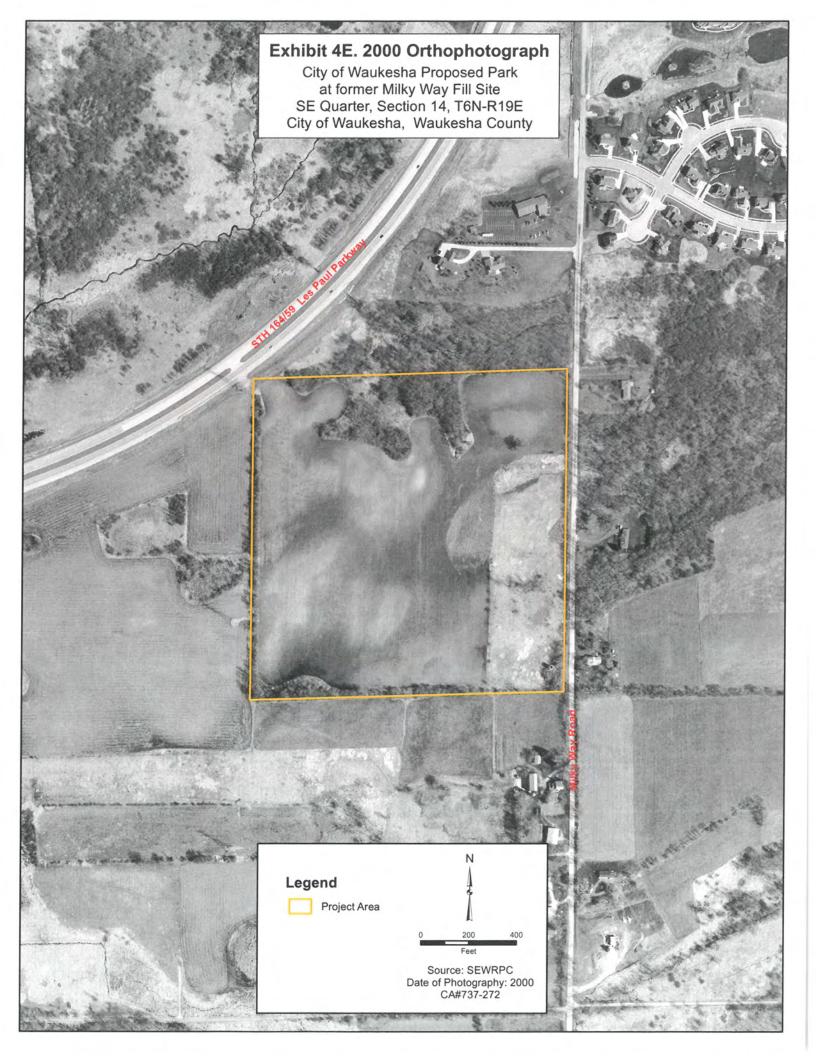


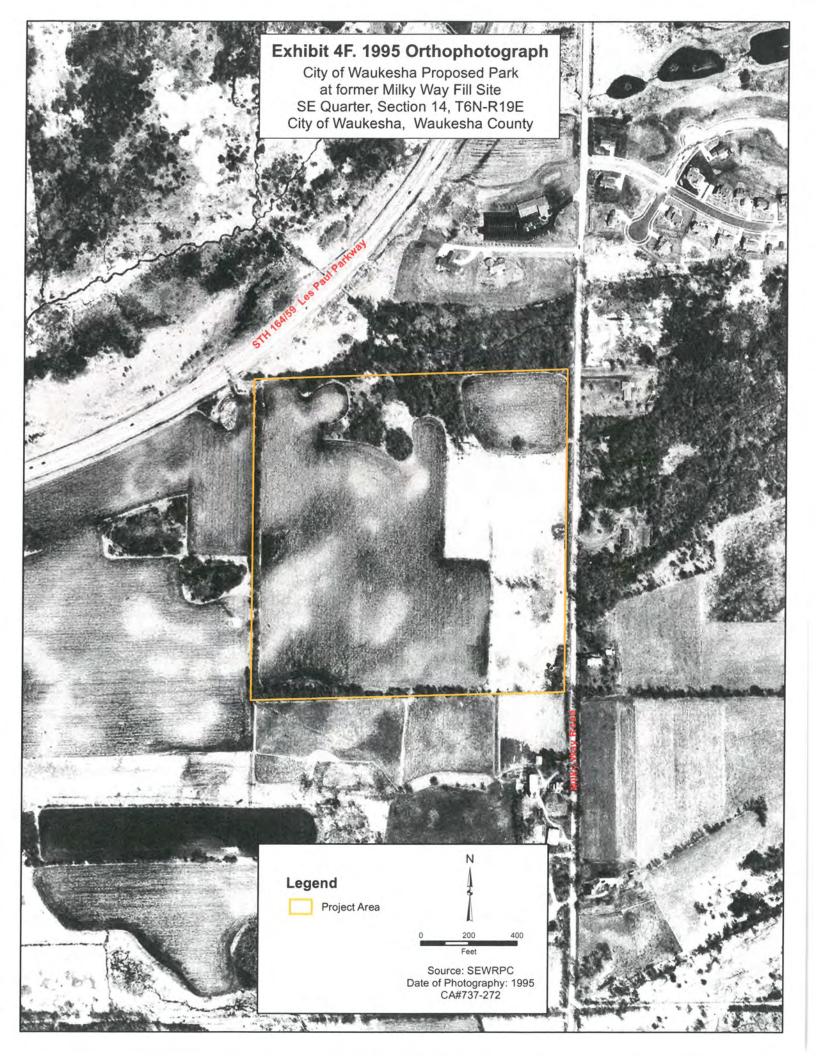


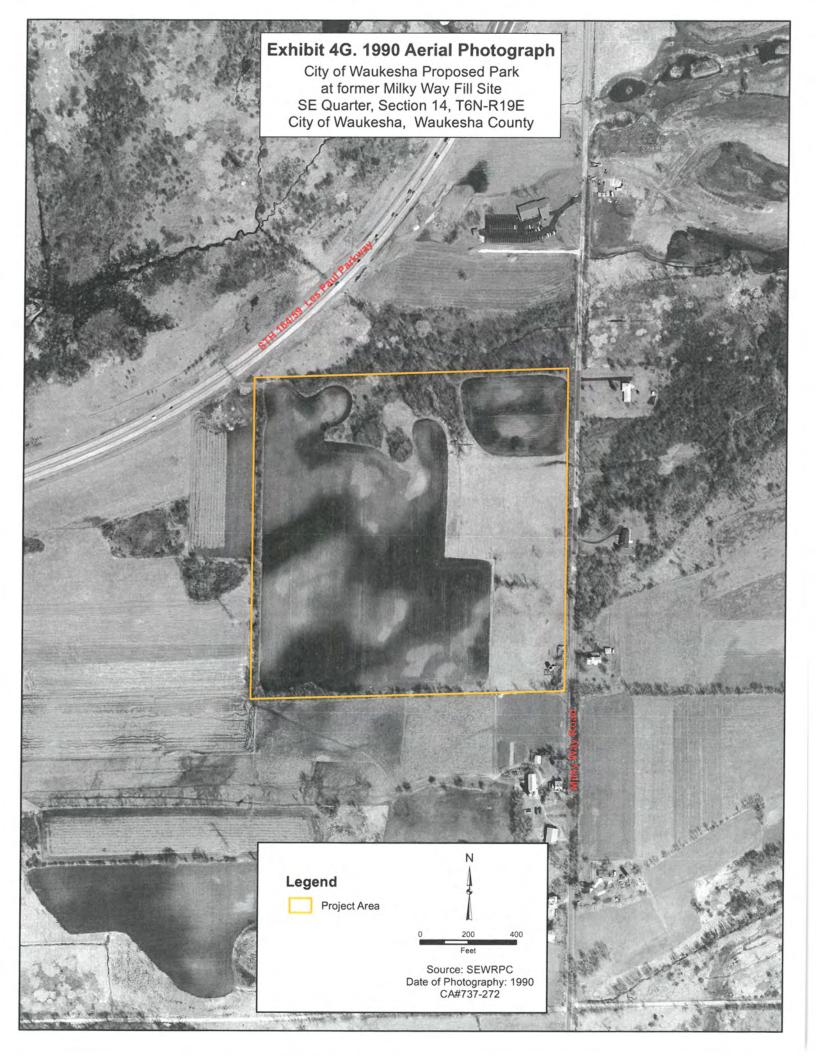


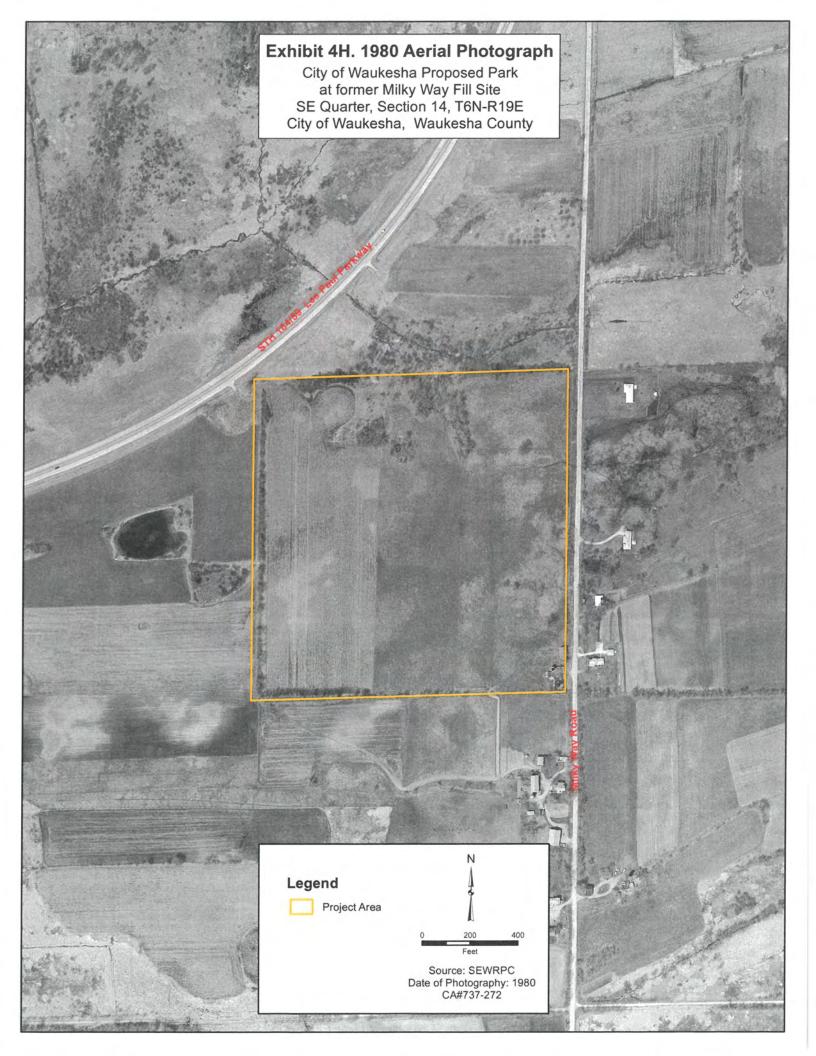




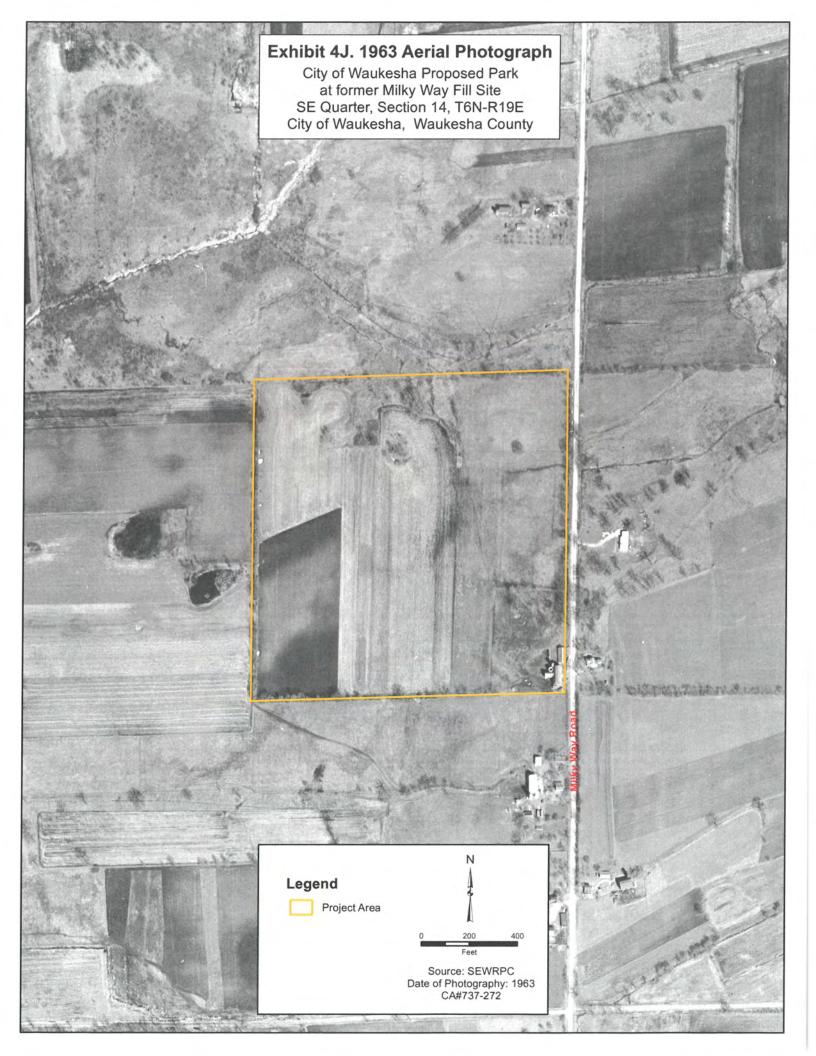


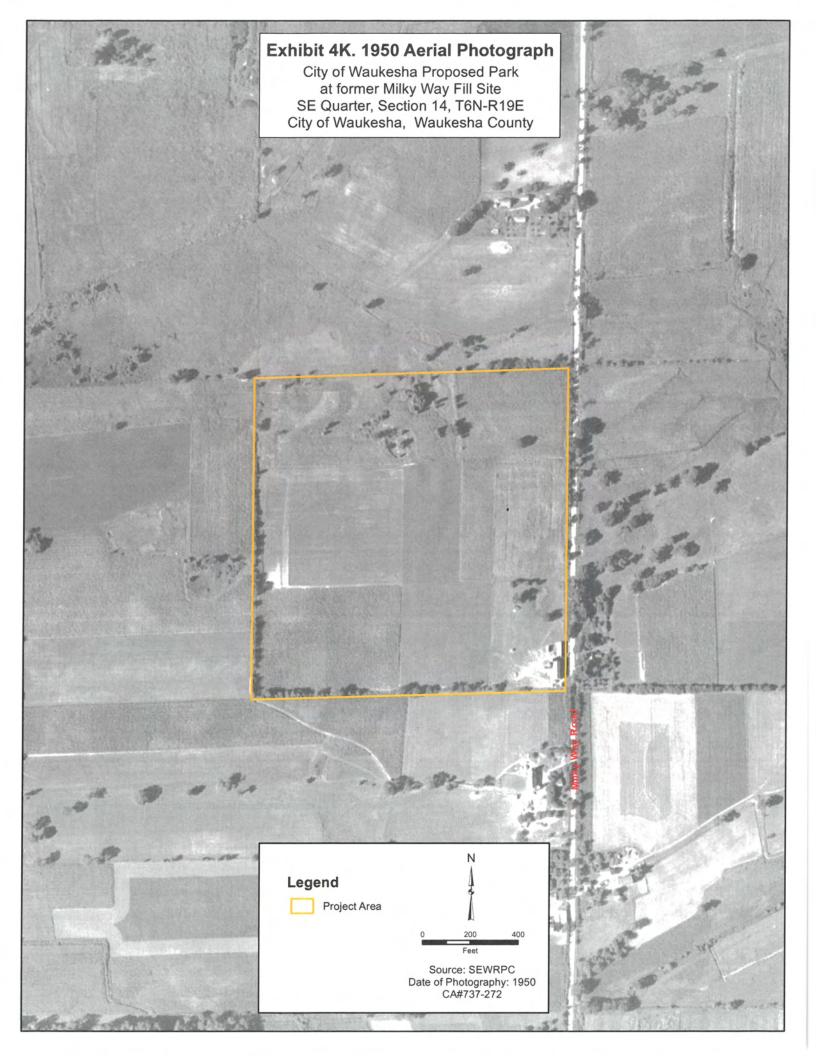












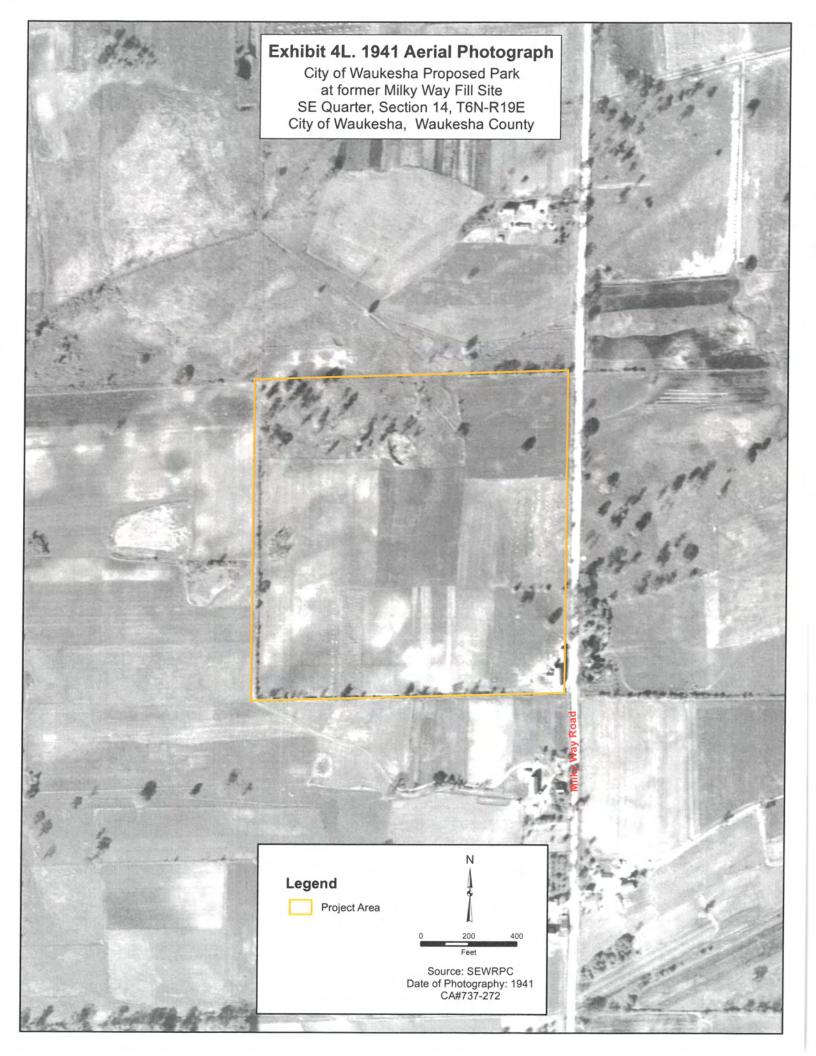


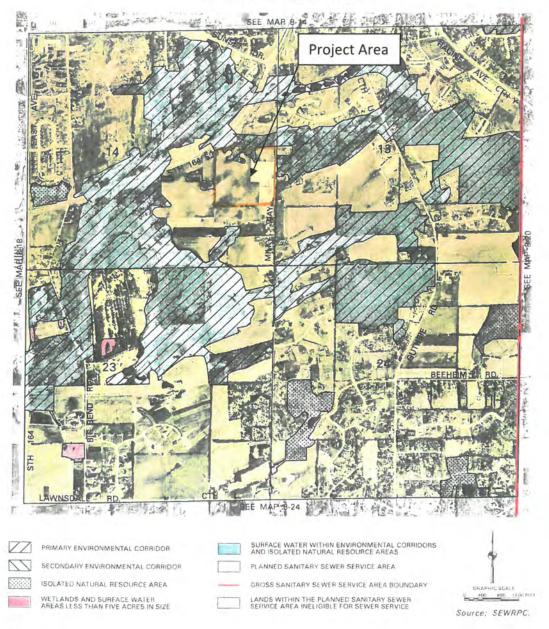
EXHIBIT 5. Sanitary Sewer Service Map

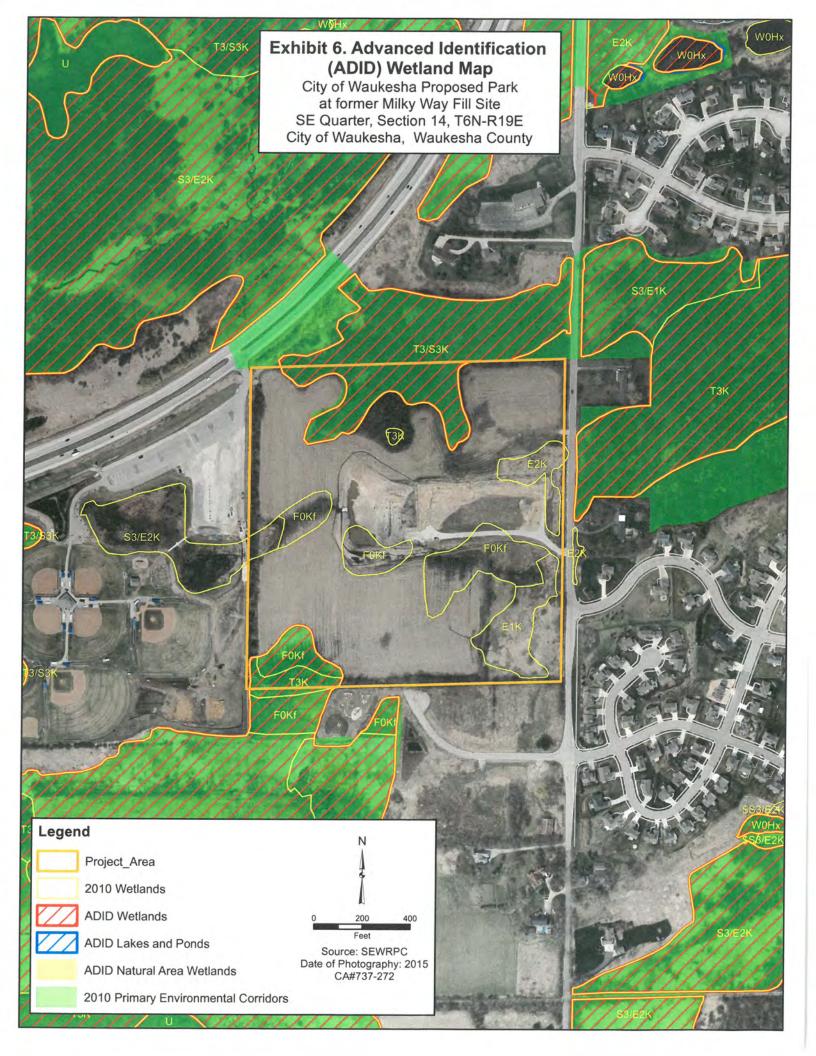
City of Waukesha Proposed Park Site (Former Milky Way Fill Site) SE Quarter Section 14, T6N-R19E City of Waukesha, Waukesha County

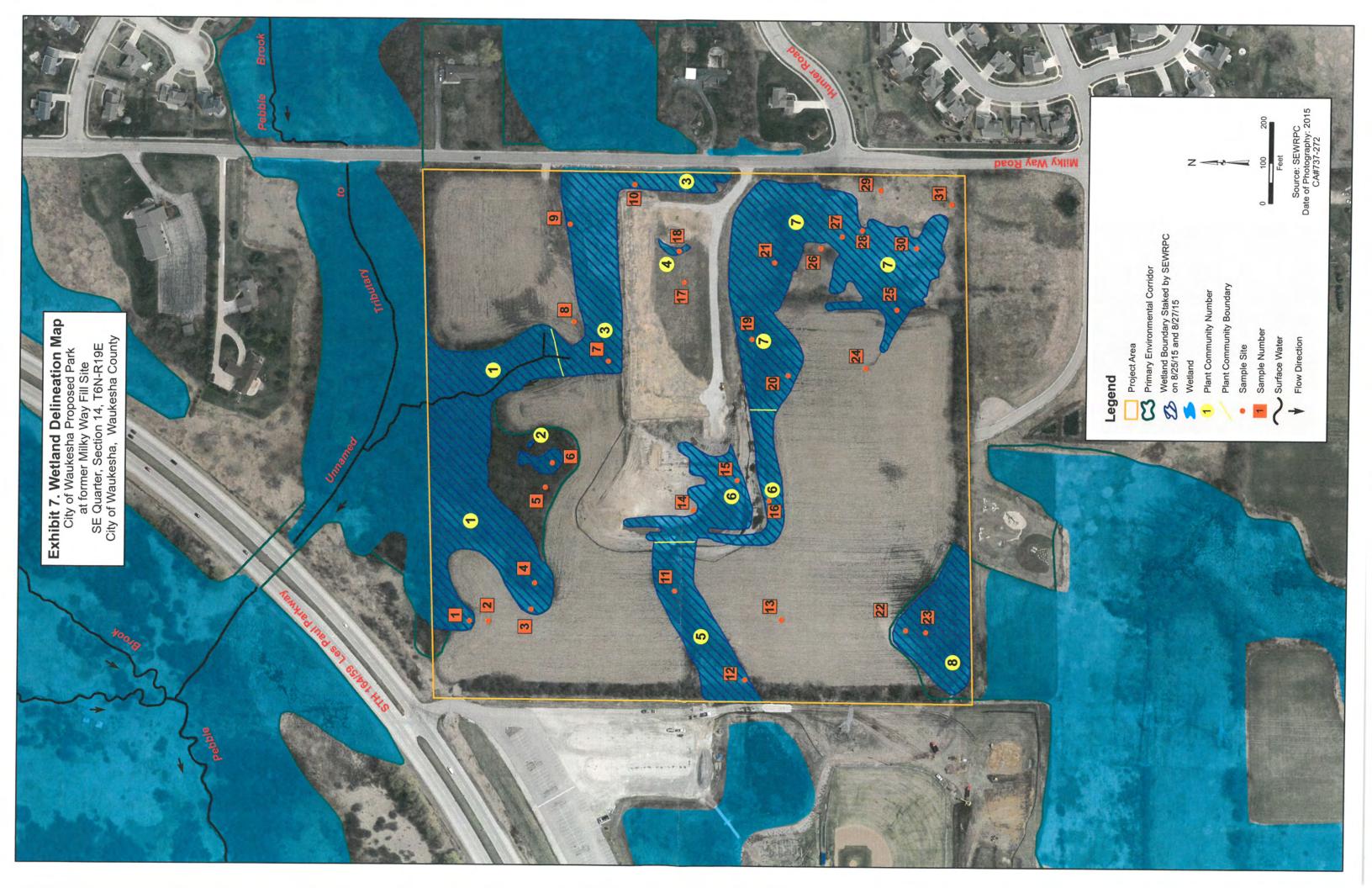
Map 8-19

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE CITY OF WAUKESHA AND ENVIRONS

> U. S. Public Land Survey Sections 13, 14, 23, and 24 Township 6 North, Range 19 East







SVY4203 CA737-272

EXHIBIT 8

PRELIMINARY VEGETATION SURVEY CITY OF WAUKESHA PROPOSED PARK AT FORMER MILKY WAY FILL SITE

- Dates: August 25 and 27, 2015
- Observers: Daniel L. Carter, Ph.D., Principle Biologist Christopher J. Jors, Senior Biologist Jennifer Dietl, Biologist Southeastern Wisconsin Regional Planning Commission
- Location: City of Waukesha in parts of the Southeast one-quarter of U.S. Public Land Survey Section 14, Township 6 North, Range 19 East, Waukesha County, Wisconsin.
- Species List: Plant Community Area (PCA) No. 1 Native Plant Species

Co-dominant plant species

Acer negundo--Boxelder Amaranthus retroflexus--Redroot pigweed Ambrosia artemisiifolia--Common ragweed Ambrosia trifida--Giant ragweed Bidens vulgata--Tall beggar-ticks Boehmeria cylindrica--False nettle Circaea canadensis--Enchanter's nightshade Chenopodium album-Lamb's quarters Clematis virginiana--Virgins bower Cornus alba--Red-osier dogwood Cornus obliqua--Silky dogwood Echinocystis lobata--Wild cucumber Epilobium coloratum--Willow-herb Eutrochium maculatum--Joe-Pye weed Fraxinus pennsylvanica--Green ash Geum aleppicum -- Yellow avens Glyceria striata--Fowl manna grass Impatiens capensis--Jewelweed Juglans nigra--Black walnut Panicum capillare--Witch grass Panicum dichotomiflorum--Knee grass Parthenocissus quinquefolia--Virginia creeper Quercus macrocarpa--Bur oak Ribes americanum--Wild black currant Salix discolor--Pussy willow Scirpus atrovirens--Green bulrush Solidago altissima -- Tall goldenrod Symphyotrichum lanceolatum--Marsh aster Symphyotrichum puniceum--Red-stemmed aster <u>Ulmus</u> <u>americana</u>--American elm Urtica dioica--Stinging nettle Veronica peregrina--Purslane speedwell

<u>Viburnum</u> <u>lentago</u>--Nannyberry PCA No. 1 Cont. - NON-Native Plant Species

Vitis riparia--Riverbank grape Xanthium strumarium -- Cocklebur Abutilon theophrasti--Velvet-leaf Alliaria petiolata--Garlic-mustard Artemisia biennis--Biennial wormwood Barbarea vulgaris--Yellow rocket Cirsium arvense--Canada thistle Daucus carota--Queen Anne's lace Glycine max--Soy-bean (planted) Morus alba--White mulberry Phalaris arundinacea--Reed canary grass Portulaca oleracea--Purslane Rhamnus cathartica--Common buckthorn Salix fragilis--Crack willow Solanum dulcamara--Deadly nightshade Sonchus arvensis--Sow thistle Taraxacum officinale--Common dandelion Typha angustifolia--Narrow-leaved cat-tail

Total number of plant species: 52 Number of alien, or non-native, plant species: 16 (31 percent)

This approximately 3.14-acre plant community area is part of a larger wetland complex and consists of second growth, Southern wet to wet-mesic lowland hardwoods with small areas of atypical (farmed) wetland along the woodland edge. Disturbances to the plant community area include siltation and sedimentation due to stormwater runoff from adjacent lands and agricultural land management activities such as plowing. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 2 - Native Plant Species

<u>Fraxinus</u> <u>pennsylvanica</u>--Green ash <u>Ulmus</u> <u>americana</u>--American elm <u>Vitis</u> <u>riparia</u>--Riverbank grape

Non-native Plant Species

<u>Rhamnus</u> <u>cathartica</u>--Common buckthorn <u>Salix</u> <u>fragilis</u>--Crack willow

Total number of plant species: 5 Number of alien, or non-native, plant species: 2 (40 percent)

These approximately 0.10 and 0.004-acre wetland plant community areas consist of ephemeral ponds with, second growth, Southern wet lowland hardwoods. Disturbances to the plant community area include dumping and filling. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 3 - Native Plant Species

Acer negundo--Boxelder Amaranthus retroflexus--Redroot pigweed Ambrosia artemisiifolia--Common ragweed Bidens vulgata--Tall beggar-ticks Carex pellita--Woolly sedge Carex vulpinoidea--Fox sedge Epilobium coloratum--Willow-herb Equisetum arvense--Common horsetail Erigeron annuus--Annual fleabane Erigeron philadelphicus--Marsh fleabane Euthamia graminifolia--Grass-leaved goldenrod Eutrochium maculatum--Joe-Pye weed Juncus dudleyi--Dudley's rush Juncus torreyi--Torrey's rush Oenothera biennis--Common evening-primrose Panicum capillare--Witch grass Panicum dichotomiflorum--Knee grass Persicaria lapathifolia--Heart's-ease Plantago rugelii--Red-stalked plantain Ranunculus pensylvanicus--Pennsylvania buttercup Ranunculus sceleratus--Cursed crowfoot Salix amygdaloides--Peach-leaved willow Schoenoplectus tabernaemontani--Soft-stemmed bulrush Scirpus atrovirens--Green bulrush Solidago altissima--Tall goldenrod Solidago gigantea--Giant goldenrod Symphyotrichum lanceolaturm--Marsh aster Symphyotrichum lateriflorum--Calico aster Symphyotrichum pilosum--Frost aster Symphyotrichum puniceum--Red-stemmed aster Typha latifolia--Broad-leaved cat-tail Veronica peregrina--Purslane speedwell Xanthium strumarium -- Cocklebur

NON-Native Plant Species

 Agrostis
 gigantea--Redtop grass

 <u>Cirsium</u>
 <u>arvense</u>--Canada thistle

 <u>Daucus</u>
 <u>carota</u>--Queen Anne's lace

 <u>Echinochloa</u>
 <u>crusgalli</u>--Barnyard grass

 <u>Phalaris</u>
 <u>arundinacea</u>--Reed canary grass

 <u>Phalaris</u>
 <u>arundinacea</u>--Reed canary grass

 <u>Plantago</u>
 <u>major</u>--Common plantain

 <u>Poa</u>
 <u>pratensis</u>--Kentucky bluegrass

 <u>Portulaca</u>
 <u>oleracea</u>--Purslane

 <u>Rumex</u>
 <u>crispus</u>--Curly dock

 <u>Salix</u>
 <u>fragilis</u>--Crack willow

 <u>Trifolium</u>
 <u>hybridum</u>--Alsike clover

 <u>Typha</u>
 <u>angustifolia</u>--Narrow-leaved cat-tail

Total number of plant species: 45

Number of alien, or non-native, plant species: 12 (27 percent)

PCA No. 3 cont.

This approximately 1.69-acre plant community area is part of a larger wetland complex and consists of shallow marsh, fresh (wet) meadow, and atypical (farmed) wetland. Disturbances to the plant community area include recent filling and grading, siltation and sedimentation due to stormwater runoff from adjacent lands, and agricultural land management activities such as plowing. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 4 - Native Plant Species

 Ambrosia
 trifida</u>--Giant ragweed

 Equisetum
 arvense</u>--Common horsetail

 Euthamia
 graminifolia</u>--Grass-leaved goldenrod

 Juncus
 dudleyi--Dudley's rush

 Juncus
 torreyi--Torrey's rush

 Salix
 amygdaloides--Peach-leaved willow

 Salix
 bebbiana--Beaked willow

 Salix
 interior--Sandbar willow

 Scirpus
 atrovirens--Green bulrush

 Solidago
 gigantea--Giant goldenrod

 Symphyotrichum
 lanceolatum--Marsh aster

 Symphyotrichum
 pilosum--Frost aster

 Symphyotrichum
 punceum--Red-stemmed aster

NON-Native Plant Species

<u>Agrostis</u> <u>gigantea</u>--Redtop grass <u>Dipsacus</u> <u>laciniatus</u>--Cut-leaved teasel <u>Elymus</u> <u>repens</u>--Quack grass <u>Plantago</u> <u>lanceolata</u>--English plantain <u>Poa</u> <u>pratensis</u>--Kentucky bluegrass <u>Sonchus</u> <u>arvensis</u>--Sow thistle <u>Trifolium</u> <u>pratense</u>--Red clover <u>Typha</u> <u>angustifolia</u>--Narrow-leaved cat-tail

Total number of plant species: 22 Number of alien, or non-native, plant species: 8 (36 percent)

This approximately 0.03-acre wetland plant community consists of fresh (wet) meadow and shrub-carr (willow thicket). Disturbances to the plant community area include recent filling and grading activities. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 5 - Native Plant Species

<u>Amaranthus retroflexus</u>--Redroot pigweed <u>Ambrosia trifida</u>--Giant ragweed <u>Asclepias incarnata</u>--Marsh milkweed <u>Mimulus ringens</u>--Monkey flower <u>Panicum capillare</u>--Witch grass <u>Ranunculus pensylvanicus</u>--Pennsylvania buttercup <u>Rorippa palustris</u>--Rough marsh cress <u>Verbena hastata</u>--Blue vervain <u>Vitis riparia</u>--Riverbank grape

NON-Native Plant Species

<u>Abutilon theophrasti</u>--Velvet-leaf <u>Echinochloa crusgalli</u>--Barnyard grass <u>Glycine max</u>--Soy-bean (planted) <u>Phalaris arundinacea</u>--Reed canary grass <u>Portulaca oleracea</u>--Purslane <u>Rumex crispus</u>--Curly dock <u>Solanum dulcamara</u>--Deadly nightshade <u>Typha angustifolia</u>--Narrow-leaved cat-tail

Total number of plant species: 17 Number of alien, or non-native, plant species: 8 (47 percent)

This approximately 1.0-acre plant community area is part of a larger wetland complex and consists of shallow marsh, fresh (wet) meadow, and atypical (farmed) wetland. Disturbances to the plant community area include siltation and sedimentation due to stormwater runoff from adjacent lands and agricultural land management activities such as plowing. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 6 - Native Plant Species

Amaranthus retroflexus--Redroot pigweed <u>Ambrosia artemisiifolia</u>--Common ragweed <u>Ambrosia trifida</u>--Giant ragweed <u>Bidens frondosa</u>--Common beggar-ticks <u>Chenopodium album</u>—Lamb's quarters <u>Euthamia graminifolia</u>--Grass-leaved goldenrod <u>Panicum capillare</u>--Witch grass <u>Panicum dichotomiflorum</u>--Knee grass <u>Persicaria lapathifolia</u>--Heart's-ease <u>Persicaria pensylvanica</u>--Pinkweed <u>Solidago altissima</u>--Tall goldenrod <u>Solidago gigantea</u>--Giant goldenrod <u>Symphyotrichum puniceum</u>--Red-stemmed aster PCA No. 6 cont. NON-Native Plant Species

Abutilontheophrasti--Velvet-leafAgrostisgigantea--Redtop grassArtemisiabiennis--Biennial wormwoodDaucuscarota--Queen Anne's laceEchinochloacrusgalli--Barnyard grassPortulacaoleracea--PurslanePuccinelliadistans--Alkali grassSetariafaberi--Giant foxtailSetariapumila--Yellow foxtailSonchusarvensis--Sow thistleTaraxacumofficinale--Common dandelionTrifoliumpratense--Red clover

Total number of plant species: 25 Number of alien, or non-native, plant species: 12 (48 percent)

This approximately 1.23-acre plant community area is part of a larger wetland complex and consists of fresh (wet) meadow and atypical (farmed) wetland with a constructed stormwater detention pond with open water. Disturbances to the plant community area include recent filling and grading activities including pond excavation, side casting of dredge spoil materials, and berm construction; siltation and sedimentation due to stormwater runoff from adjacent lands, water level changes due to ditching and draining, and agricultural land management activities such as plowing. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 7 – Native Plant Species

<u>Acer</u> <u>negundo</u>--Boxelder Ambrosia artemisiifolia--Common ragweed Ambrosia trifida--Giant ragweed Bidens vulgata--Tall beggars-ticks Carex granularis--Pale sedge Carex stipata--Common fox sedge Cornus alba--Red-osier dogwood Echinocystis lobata--Wild cucumber Epilobium coloratum--Willow-herb Equisetum hyemale--Scouring-rush Erigeron annuus--Annual fleabane Erigeron canadensis--Horseweed Erigeron philadelphicus--Marsh fleabane Erigeron strigosus--Daisy fleabane Eupatorium perfoliatum--Boneset Euthamia graminifolia--Grass-leaved goldenrod Fraxinus pennsylvanica--Green ash Geum aleppicum--Yellow avens Juncus bufonius--Toad rush Juncus dudleyi--Dudley's rush Juncus torreyi--Torrey's rush Panicum capillare--Witch grass Persicaria lapathifolia--Heart's-ease Persicaria pensylvanica-Pinkweed <u>Plantago</u> <u>rugelii</u>--Red-stalked plantain Rorippa palustris--Rough marsh cress Salix amygdaloides--Peach-leaved willow Salix bebbiana--Beaked willow Salix discolor--Pussy willow Scirpus atrovirens--Green bulrush Scirpus pendulus--Red bulrush Solidago altissima--Tall goldenrod Solidago gigantea--Giant goldenrod Symphyotrichum lanceolatum--Marsh aster Symphyotrichum lateriflorum--Calico aster Symphyotrichum novae-angliae--New England aster Symphyotrichum pilosum--Frost aster Symphyotrichum puniceum--Red-stemmed aster Typha latifolia--Broad-leaved cat-tail Verbena hastata--Blue vervain Veronica peregrina--Purslane speedwell Vitis riparia--Riverbank grape Xanthium strumarium--Cocklebur

NON-Native Plant Species

<u>Abutilon theophrasti</u>--Velvet-leaf <u>Agrostis gigantea</u>--Redtop grass <u>Artemisia biennis</u>--Biennial wormwood <u>Chenopodium glaucum</u>--Oakleaf goosefoot PCA No. 7 cont. NON-Native Plant Species

Cirsium arvense--Canada thistle Daucus carota--Queen Anne's lace Echinochloa crusgalli--Barnyard grass Elaeagnus umbellata--Autumn-olive Epilobium hirsutum--Hairy willow-herb Glycine max--Soy-bean (planted) Lythrum salicaria--Purple loosestrife Persicaria maculosa--Lady's thumb Phalaris arundinacea--Reed canary grass Plantago major--Common plantain Poa pratensis--Kentucky bluegrass Portulaca oleracea--Purslane Rhamnus cathartica--Common buckthorn Rumex crispus--Curly dock Solanum dulcamara--Deadly nightshade Sonchus arvensis--Sow thistle Taraxacum officinale--Common dandelion *Trifolium hybridum*--Alsike clover Trifolium pratense--Red clover Typha angustifolia -- Narrow-leaved cat-tail

Total number of plant species: 67 Number of alien, or non-native, plant species: 24 (36 percent)

This approximately 3.45-acre plant community area is part of a larger wetland complex and consists of a hillside seep with fresh (wet) meadow, atypical (farmed) wetland, shrub-carr, and second growth, Southern wet to wet-mesic lowland hardwoods. Disturbances to the plant community area include recent filling and grading activities, past grazing, and agricultural land management activities such as plowing. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 8 - Native Plant Species

Ambrosia trifida--Giant ragweed Apocynum cannabinum--Indian hemp Chenopodium album—Lamb's quarters Cornus alba--Red-osier dogwood Cornus obligua--Silky dogwood Cyperus esculentus--Chufa Equisetum arvense--Common horsetail Impatiens capensis--Jewelweed Panicum capillare--Witch grass Parthenocissus quinquefolia--Virginia creeper Penthorum sedoides--Ditch stonecrop Rubus occidentalis--Black raspberry Salix amygdaloides--Peach-leaved willow Salix discolor -- Pussy willow Scirpus atrovirens--Green bulrush Solidago altissima--Tall goldenrod Solidago gigantea--Giant goldenrod Symphyotrichum lanceolatum--Marsh aster Symphyotrichum puniceum--Red-stemmed aster Verbena hastata--Blue vervain Veronica peregrina--Purslane speedwell Vitis riparia--Riverbank grape

NON-Native Plant Specie

<u>Agrostis</u> <u>gigantea</u>--Redtop grass <u>Artemisia</u> <u>biennis</u>--Biennial wormwood <u>Daucus</u> <u>carota</u>--Queen Anne's lace <u>Echinochloa</u> <u>crusgalli</u>--Barnyard grass <u>Glycine</u> <u>max</u>--Soy-bean (planted) <u>Lythrum</u> <u>salicaria</u>--Purple loosestrife <u>Poa</u> <u>pratensis</u>--Kentucky bluegrass <u>Portulaca</u> <u>oleracea</u>--Purslane <u>Rhamnus</u> <u>cathartica</u>--Common buckthorn <u>Rumex</u> <u>crispus</u>--Curly dock <u>Typha</u> <u>angustifolia</u>--Narrow-leaved cat-tail

Total number of plant species: 33

Number of alien, or non-native, plant species: 11 (33 percent)

This approximately 0.97-acre wetland plant community area consists of fresh (wet) meadow, atypical (farmed) wetland, and second growth, Southern wet to wet-mesic lowland hardwoods. Disturbances to the plant community area include siltation and sedimentation due to stormwater runoff from adjacent lands and agricultural land management activities such as plowing. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

EXHIBIT 9

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	City of Waukesha/Waukesha County	Sampling Date: 08/25/2015
Applicant/Owner:	State: WI	Sampling Point: <u>1</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range: <u>T6N, R19E, SE1/4 S14</u>	
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none): Concave	Slope (%): <u>0-2</u>
Subregion (LRR or MLRA): LRR K	Lat: Long: Datum:	
Soil Map Unit Name: Houghton muck (HtA)	NWI clas	ssification: <u>None</u>
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛 No 🗌 (If no, explain in Remarks)	
Are Vegetation X_, Soil, or Hydrology significantly disturbe	d? Are "Normal Circumstances" present? Yes 🗌	No 🖂
Are Vegetation, Soil, or Hydrology naturally problematic	? (If, needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID: I	Plant Community	Area (PCA) 1
Remarks: (Explain alternative proce present because of agricultural					rcumstances" are not

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is requ	uired; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
	Marl Deposits (B15)	Dry-Season Water Table (C2)
Saturation (A3) Water marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living F	Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So	ils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Ima	agery (B7)	Microtopographic Relief (D4)
Sparsely Vegetated Concave S	urface (B8)	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes 🗌 🔥	No 🛛 Depth (inches):	
Water Table Present? Yes D	No 🛛 Depth (inches):	
Saturation Present? Yes I N (includes capillary fringe)	No Depth (inches): <u>23</u>	Wetland Hydrology Present? Yes 🛛 No 🗌
(includes capillary fringe) Describe Recorded Data (stream gauge, n	nonitoring well, aerial photos, previous inspections), if a	Wetland Hydrology Present? Yes No available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map -13), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream gauge, n	nonitoring well, aerial photos, previous inspections), if a	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, n (Exhibit 3), Aerial photographs (Exhibit 4),	nonitoring well, aerial photos, previous inspections), if a	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, n (Exhibit 3), Aerial photographs (Exhibit 4),	nonitoring well, aerial photos, previous inspections), if a	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, n (Exhibit 3), Aerial photographs (Exhibit 4),	nonitoring well, aerial photos, previous inspections), if a	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, n (Exhibit 3), Aerial photographs (Exhibit 4),	nonitoring well, aerial photos, previous inspections), if a	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, n (Exhibit 3), Aerial photographs (Exhibit 4),	nonitoring well, aerial photos, previous inspections), if a	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, n (Exhibit 3), Aerial photographs (Exhibit 4),	nonitoring well, aerial photos, previous inspections), if a	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, n (Exhibit 3), Aerial photographs (Exhibit 4),	nonitoring well, aerial photos, previous inspections), if a	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, n (Exhibit 3), Aerial photographs (Exhibit 4),	nonitoring well, aerial photos, previous inspections), if a	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, n (Exhibit 3), Aerial photographs (Exhibit 4),	nonitoring well, aerial photos, previous inspections), if a	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, n (Exhibit 3), Aerial photographs (Exhibit 4),	nonitoring well, aerial photos, previous inspections), if a	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants

/EGETATION – Use scientific names of plants.	Absolute	Dominant	Indicator			Sampling P	oint. <u>1</u>	
Tree Stratum (Plot size: <u>30' radius</u>)	<u>% Cover</u>	Species?	<u>Status</u>	Dominance Tes	st works	sheet:		
1				Number of Domina				
2				That are OBL, FA	CW, or F	AC: <u>0</u> (A)	
3				Total Number of D				
4				Species Across A	Il Strata:	<u>1</u> ((B)	
5				Percent of Domina	•			
6				That Are OBL, FA			<u>6</u> (A/B)	
7				Prevalence Index	worksh	eet:		
	<u>0</u>	= Total Cov	er	Total % Cove	er of:	M	lultiply by:	
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species	<u>0</u>	x 1 =	<u>0</u>	
1				FACW species	<u>15</u>	x 2 =	<u>30</u>	
2				FAC species	<u>0</u>	x 3 =	<u>0</u>	
3				FACU species	<u>18</u>	x 4 =	<u>72</u>	
4				UPL species	<u>80</u>	x 5 =	<u>400</u>	
5				Column Totals:	<u>113</u>	(A)	<u>502</u>	(B)
6						ex = B/A =	4.44	
7				Hydrophytic Veg			tion	
	<u>0</u>	= Total Cov	er	Dominance Te	est is >50	%		
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)		_		Prevalence In Morphological			to support	ina
1. <u>Glycine max (planted)</u>	<u>80</u>		UPL			on a separ		-
2. Panicum dichotomiflorum	<u>15</u>		FACW	Problematic I	Hydrophy	ytic Vegeta	tion ¹ (Exp	olain)
3. <u>Portulaca oleracea</u>	<u>10</u>		FACU	¹ Indicators of hyd	ric soil ar	nd wetland h	nvdroloav	must
4. Amaranthus retroflexus	<u>5</u>		<u>FACU</u>	Be present, unless				
5. <u>Chenopodium album</u>	<u>3</u>		FACU			-		
6				Definitions of Ve	getation	Strata:		
7				Tree – Woody pla	•	,		meter
8				at breast height (E	OBH), reg	ardless of h	neight	
9				Sapling/shrub –	Woody pl	ants less th	an 3in. DE	ЗH
10				and greater than 3	3.28 ft (1 ı	m) tall.		
11				Herb – All herbac	eous (nor	n-woody) pl	ants, rega	rdless
12				of size, and wood	•	371		
	<u>113</u>	= Total Cov	er	Woody vines – A	ll woody y	vines areate	er than 3.2	98 ft in
Woody Vine Stratum (Plot size: <u>30' radius</u>)				height	woody '	since greate		
1								
2								
3				Hydrophytic				
4				Vegetation	v 🗖		_	
	<u>0</u>	= Total Cov	er	Present?	Yes 🖂	No	\Box	

Remarks: (include photo number here or on a separate sheet.) Atypical (farmed) wetland. Vegetation is problematic because of agricultural land management activities (managed plant community). Indicators of hydric soils and wetland hydrology are present.

US Army Corps of Engineers

Sampling Point: 1

Profile Des	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix			Redox Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-3	10YR 2/2	100					Loam	 ו	
3-8	10YR 2/1	98	10YR 3/6	2	С	PL M	Loam		
8-16	10YR 2/1	100					Loam		
16-20	10YR 2/1	30	10YR 5/8	10	C	PL M	Clay		
10-20	10YR 4/1	60	1011 3/0	10			Ciay		
00.04							0		
20-24	10YR 5/1	70	10YR 5/8	30	C	PL M	Clay		
	Concentration, D=Deple	etion, RN	Reduced Matrix, MS	= Masked S	Sand Grains			² Location: PL=Pore L	
	I Indicators:				w Curferer (O			Indicators for Proble	
	Histosol (A1) Histic Epipedon (A2)			Walue Belo MLRA 149	w Surface (S	o) (LKK R,			10) (LRR K, L, MLRA 149B) Redox (A16) (LLR K, L, R)
	Black Histic (A3)		🗍 Thir		ace (S9) (LR I		149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) (1400)		(S7) (LRR K, L)
	Stratified Layers (A5)			my Gleyed		, , ,			w Surface (S8) (LRR K, L)
	Depleted Below Dark S			pleted Matrix				Thin Dark Surf	face (S9) (LRR K, L)
	Thick Dark Surface (A1			lox Dark Si					se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (Surface (F7)				dplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (\$ Sandy Redox (S5)	54)		lox Depress	sions (F8)			Mesic Spodic ((TA6) (MLRA 144A, 145, 149B) aterial (E21)
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LRI	R R, MLF	(A 149B)					Other (Explain	
	of Hydrophytic vegetat		etland hydrology mus	t be presen	t, unless dist	urbed or pro	oblema	itic.	
	Layer (if observed):								
Type: Depth	n (inches):							Hydric Soil Present?	Yes 🛛 No 🗌
Remarks:									
i temainto.									

WEILAND DETERMINATION DA	IA FORM – Northcentral and Northeas	t Region
Project/Site: City of Waukesha Park/Former Milky Way Fill City/County	y: <u>City of Waukesha/Waukesha County</u>	Sampling Date: 08/25/2015
Applicant/Owner:	State: WI	Sampling Point: 2
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range: T6N, R19E, SE1/4 S14	
Landform (hillslope, terrace, etc.): Hillslope	Local relief (concave, convex, none): None	Slope (%): <u>2-6</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:	
Soil Map Unit Name: Casco loam (CeB)	NWI c	lassification: <u>None</u>
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛 No 🗌 (If no, explain in Remarks)	
Are Vegetation, Soil, or Hydrology significantly disturb	ed? Are "Normal Circumstances" present? Yes [No ⊠
Are Vegetation, Soil, or Hydrology naturally problemati	ic? (If, needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing s	ampling point locations, transects, impor	ant features, etc.
Hydrophytic Vegetation Present? □Yes ⊠No Hydric Soils Present? ⊠Yes □No Wetland Hydrology Present? □Yes ⊠No	Is the Sampled Area within a Wetland?	⊠No
	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures here or in a separate report. management activities (planted crop).) "Normal Circumstances" are not present becaus	e of agricultural land

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Re	cots (C3) Saturation Visible on Aerial Imagery (C9)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Re Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	s (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes 🗌 No 🛛 Depth (inches):	
Water Table Present? Yes 🗌 No 🛛 Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes 🗌 No 🛛
Saturation Present? Yes No 🛛 Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if and the stream gauge is a stream gauge in the stream gauge.	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 2
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
				Prevalence Index worksheet:
7	<u>0</u>	= Total Cove		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				
4				FACU species x 4 =
				UPL species $x 5 = $
5				Column Totals: (A) (B)
6				Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
	<u>0</u>	= Total Cove	er	Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				□ Prevalence Index is ≤3.0 ¹
1. <u>Glycine max (planted)</u>	<u>90</u>	\boxtimes	UPL	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Panicum dichotomiflorum	<u>5</u>		FACW	□ Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5				
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>95</u>	= Total Cove	r	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3				Hydrophytic
4.				Vegetation
*	<u>0</u>	= Total Cove		Present? Yes 🗌 No 🖾
Remarks: (include photo number here or on a separate shee			·1	
	.,			

Profile De	escription: (Describe t	o the de	oth needed to docu	ment the ind	icator or cor	nfirm the a	absence of indicators.)	
Depth	 Matrix	-		Redox Feat				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	 Texture Remarks	
0-7	10YR 2/2	100	, , ,				 Loam	
7-11	10YR 2/1	100					 Loam	
11-19	2.5Y 4/2	85	10YR 5/6	15	С	PL M	Clay w/grit	
			·					
			·					
¹ Type: C=	Concentration, D=Dep	letion, RN	/I=Reduced Matrix, N	/S= Masked {	Sand Grains		² Location: PL=Pore Lining, M=Matrix	
-	il Indicators:						Indicators for Problematic Hydric Soils ³ :	
_	Histosol (A1)		□ P	olyvalue Belo		8) (LRR R,		,
	Histic Epipedon (A2)		— -	MLRA 149	,		Coast Prairie Redox (A16) (LLR K, L, R)	
	Black Histic (A3)			hin Dark Surfa				., R)
	Hydrogen Sulfide (A4) Stratified Layers (A5)			oamy Mucky I oamy Gleyed		(LRR R, L)) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L	`
	Depleted Below Dark	Surface		epleted Matrix			Thin Dark Surface (S9) (LRR K, L)	-)
	Thick Dark Surface (A			Redox Dark Su	. ,		□ Iron-Manganese Masses (F12) (LRR K,	L, R)
	Sandy Mucky Mineral	,		epleted Dark	• •		Piedmont Floodplain Soils (F19) (MLRA	
	Sandy Gleyed Matrix (Redox Depress			Mesic Spodic (TA6) (MLRA 144A, 145,	
	Sandy Redox (S5)						Red Parent Material (F21)	
	Stripped Matrix (S6)						Very Shallow Dark Surface (TF12)	
	Dark Surface (S7) (LR	KR R, MLI	KA 149B)				Other (Explain in Remarks)	
³ Indicators	of Hydrophytic vegeta	tion and v	wetland hydrology m	ust be presen	it, unless dist	urbed or pro	roblematic.	
	e Layer (if observed)			<u> </u>	-,			
	e: disintegrating dolomi	te					Hydric Soil Present? Yes 🛛 No 🗌	
· · ·	th (inches): <u>19</u>							
Remarks:								

WEILAND DEIERMIN	IATION DATA	FORM – Northcentral	and Northeast	Region
Project/Site: City of Waukesha Park/Former Milky Way	Fill City/County: Ci	ty of Waukesha/Waukesha Cour	<u>nty</u>	Sampling Date: 08/25/2015
Applicant/Owner:			ate: <u>WI</u>	Sampling Point: <u>3</u>
nvestigator(s): Daniel Carter, PhD and Jennifer Dietl; S		ction, Township, Range: <u>T6N, R</u>		
andform (hillslope, terrace, etc.): <u>Depression</u>		cal relief (concave, convex, none	,	Slope (%): <u>2-6</u>
ubregion (LRR or MLRA): <u>LRR K</u>	Lat	:: Long:	Datum:	
ioil Map Unit Name: <u>Casco Ioam (CeB)</u>	his times of veen?			assification: None
re climatic/hydrologic conditions on the site typical for t re Vegetation_X_, Soil, or Hydrology sign		Yes ⊠ No □ (If no, e Are "Normal Circumstances	xplain in Remarks) " present? Ves] No 🖂
re Vegetation, Soil, or Hydrology and the vegetation, soil, or Hydrology nat		(If, needed, explain any ans	• –	
SUMMARY OF FINDINGS – Attach site ma			,	ant features, etc.
	p showing sum			
Hydrophytic Vegetation Present?	□No	Is the Sampled Area		
, , , , , , , , , , , , , , , , , , , ,	□No	within a Wetland?	🛛 Yes	□No
Wetland Hydrology Present?	□No			
		If yes, optional Wetland Site II	D: <u>PCA 1</u>	
IYDROLOGY Wetland Hydrology Indicators:			Secondary Indic	ators (minimum of two required
Primary Indicators (minimum of one is required; check	all that apply)			
Surface Water (A1)		ed Leaves (B9)		oil Cracks (B6) Patterns (B10)
High Water Table (A2)	Aquatic Faur			
Saturation (A3)	Marl Deposit			Lines (B16)
Water marks (B1)		. ,	Drv-Seaso	Lines (B16) n Water Table (C2)
Sediment Deposits (B2)	I Hydroden Su	s (B15)		n Water Table (C2)
	; 0	s (B15) Ilfide Odor (C1)	Crayfish B	n Water Table (C2) urrows (C8)
	Oxidized Rhi	s (B15) Ilfide Odor (C1) zospheres on Living Roots (C3)	Crayfish B	n Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhi Presence of	s (B15) Ilfide Odor (C1) zospheres on Living Roots (C3) Reduced Iron (C4)	Crayfish B	n Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1)
Drift Deposits (B3) Algal Mat or Crust (B4)	Oxidized Rhi Oxidized Rhi Presence of Recent Iron F	s (B15) Ilfide Odor (C1) zospheres on Living Roots (C3) Reduced Iron (C4) Reduction in Tilled Soils (C6)	Crayfish B Crayfish B Saturation Stunted or Geomorpl	n Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) hic Position (D2)
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Oxidized Rhi Oxidized Rhi Presence of Recent Iron R Thin Muck S	s (B15) Ilfide Odor (C1) zospheres on Living Roots (C3) Reduced Iron (C4) Reduction in Tilled Soils (C6) urface (C7)	Crayfish B Crayfish B Saturation Stunted or Geomorpi Shallow Ac	n Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) hic Position (D2) quitard (D3)
Drift Deposits (B3) Algal Mat or Crust (B4)	Oxidized Rhi Oxidized Rhi Presence of Recent Iron R Thin Muck S	s (B15) Ilfide Odor (C1) zospheres on Living Roots (C3) Reduced Iron (C4) Reduction in Tilled Soils (C6)	Crayfish B Crayfish B Saturation Stunted or Geomorpl Shallow Ac Microtopog	n Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) hic Position (D2)

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-13), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)

Field Observations: Surface Water Present?

Water Table Present?

(includes capillary fringe)

Saturation Present?

Remarks:

Yes 🗌

Yes 🗌

Yes 🗌

No 🖂

No 🖂

No 🖂

Depth (inches):

Depth (inches):

Depth (inches):

Yes 🖂

No 🗌

Wetland Hydrology Present?

VEGETATION - Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>3</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 0% (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: <u>30' radius</u>)				OBL species <u>0</u> x 1 = <u>0</u>
1				FACW species <u>8</u> x 2 = <u>16</u>
2				FAC species <u>22</u> x 3 = <u>66</u>
3				FACU species $21 \times 4 = 84$
4				UPL species 83 x 5 = 415
5				Column Totals: <u>134</u> (A) <u>581</u> (B)
6				Prevalence Index = $B/A = \frac{4.33}{2}$
7				Hydrophytic Vegetation Indicators:
·· <u> </u>	0	= Total Cov		Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: <u>5' radius</u>)	_			 □ Dominance Test is >50% □ Prevalence Index is ≤3.0¹
1. <u>Glycine max (planted)</u>	<u>80</u>	\boxtimes	UPL	Morphological Adaptations ¹ (Provide supporting
2. <u>Xanthium strumarium</u>	20		FAC	data in Remarks or on a separate sheet)
3. Portulaca oleracea	8		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
	<u> </u>		FACW	¹ Indicators of hydric soil and wetland hydrology must
4. <u>Panicum dichotomiflorum</u>			FACU	Be present, unless disturbed or problematic.
5. <u>Amaranthus retroflexus</u>	<u>5</u> 5		FACU	Definitions of Vegetation Strata:
6. <u>Abutilon theophrasti</u>	<u>s</u>		FACU	
7. <u>Taraxacum officinale</u>	<u>3</u>		<u>UPL</u>	Tree – Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
8. <u>Daucus carota</u>	<u>s</u>		<u>FACW</u>	
9. <u>Artemisia biennis</u>	<u>2</u>	_		Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
10. <u>Barbarea vulgaris</u>	<u> </u>		FAC	
11		_		Herb – All herbaceous (non-woody) plants, regardless
12	13/			of size, and woody plants less than 3.28 ft tall.
	<u>134</u>	= Total Cov	/er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: <u>30' radius)</u>		_		height
1				
2				
3				Hydrophytic
4				Vegetation Present? Yes ⊠ No □
	<u>0</u>	= Total Cov		
Remarks: (include photo number here or on a separate she	et.) Atypical (rarmed) wetla	and. Vegetati	ion is problematic because of agricultural land

Remarks: (include photo number here or on a separate sheet.) Atypical (farmed) wetland. Vegetation is problematic because of agricultural land management activities (managed plant community). Indicators of hydric soils and wetland hydrology are present.

Profile Des	scription: (Describe	to the dep	oth needed to docum	ent the ind	licator or cor	nfirm the a	bsence	of indicators.)	Samping Font. <u>5</u>
Depth	Matrix			Redox Fea	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture	Remarks
0-11	10YR 2/1	100					Loam		
11-20	2.5Y 4/1	70	10YR 4/6	30	C	PL M	Clay		w/distintegrating dolomite
20-21	2.5Y 5/2	70	10YR 5/6	30	C	PL M	Sandy	/ clav	w/gravel & dist. dolomite
21-26	2.5Y 4/1	65	10YR 4/6	35	C	PL M			
21-20	2.51 4/1	00	101K 4/0				Clay		w/distintegrating dolomite
							·		
			-						
				·					
			-						
		letion, RM	I=Reduced Matrix, MS	S= Masked	Sand Grains			² Location: PL=Pore	
	I Indicators:								ematic Hydric Soils ³ :
	Histosol (A1)		Pol		w Surface (S	8) (LRR R ,	1		A10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	асе (S9) (LR I		440B)		Redox (A16) (LLR K, L, R)
	Black Histic (A3) Hydrogen Sulfide (A4)	`			Mineral (F1)				Peat or Peat (S3) (LLR K, L, R) (S7) (LRR K, L)
	Stratified Layers (A5)				Matrix (F2)	(LIXIX, L)			low Surface (S8) (LRR K, L)
	Depleted Below Darl			pleted Matri					rface (S9) (LRR K, L)
	Thick Dark Surface (A	.12)		dox Dark Sເ				Iron-Mangane	ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral				Surface (F7)				odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix	(S4)	L Re	dox Depres	sions (F8)				c (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5) Stripped Matrix (S6)							Red Parent M Very Shallow	Dark Surface (TF12)
	Dark Surface (S7) (LF	R R. MLF	RA 149B)						n in Remarks)
	2 a 0 a a co (0.) (
			vetland hydrology mus	st be presen	nt, unless dist	urbed or pr	oblemat	ic.	
Restrictive	Layer (if observed)):							
Туре:							ŀ	Hydric Soil Present	? Yes 🛛 No 🗌
	n (inches):								
Remarks:									

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	City of Waukesh	a/Waukesha County	<u>/</u>	Sampling Date: 08/25/2015
Applicant/Owner:		Stat	e: <u>WI</u>	Sampling Point: <u>4</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Townshi	ip, Range: <u>T6N, R19</u>	9 <u>E, SE1/4 S14</u>	
Landform (hillslope, terrace, etc.): Depression	Local relief (conc	ave, convex, none):	<u>Concave</u>	Slope (%): 0-2
Subregion (LRR or MLRA): <u>LRR K</u>	Lat:	Long:	Datum:	
Soil Map Unit Name: Houghton muck (HtA)			NWI clas	sification: <u>T3/S3K</u>
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🖂	No 🗌 (If no, exp	olain in Remarks)	
Are Vegetation, Soil, or Hydrology significantly disturbe	d? Are "Norn	nal Circumstances" p	present? Yes	No 🗖
Are Vegetation, Soil, or Hydrology naturally problemation	c? (If, neede	d, explain any answ	ers in Remarks.)	
SUMMARY OF FINDINGS - Attach site man showing sa	ampling point	locations tran	socts imnortar	nt features etc

JMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID: PC	<u>A 1</u>	
Remarks: (Explain alternative proce	dures here or in	a separate report.)			

HYDROLOGY

	Secondary Indicators (minimum of two required)
eck all that apply)	Surface Soil Cracks (B6)
Water-Stained Leaves (B9)	Drainage Patterns (B10)
Aquatic Fauna (B13)	Moss Trim Lines (B16)
Marl Deposits (B15)	Dry-Season Water Table (C2)
Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Oxidized Rhizospheres on Living R	coots (C3) Saturation Visible on Aerial Imagery (C9)
Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Recent Iron Reduction in Tilled Soi	ls (C6) Geomorphic Position (D2)
Thin Muck Surface (C7)	Shallow Aquitard (D3)
) Other (Explain in Remarks)	Microtopographic Relief (D4)
38)	FAC-Neutral Test (D5)
Depth (inches):	
Depth (inches):	
Depth (inches): <u>21</u>	Wetland Hydrology Present? Yes 🛛 No 🗌
	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map 13), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)
	Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks) 88) Depth (inches): Depth (inches): 21 g well, aerial photos, previous inspections), if a

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>4</u>
Tree Stratum (Plot size: <u>30' radius</u>)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1. <u>Salix X fragilis</u>	<u>50</u>	\boxtimes	FAC	Number of Dominant Species
2. <u>Fraxinus pennsylvanica</u>	<u>30</u>	\boxtimes	FACW	That are OBL, FACW, or FAC: <u>7</u> (A)
3. <u>Acer negundo</u>	<u>20</u>	\boxtimes	FAC	Total Number of Dominant
4				Species Across All Strata: <u>7</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
	<u>100</u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. Rhamnus cathartica	<u>20</u>	\boxtimes	FAC	FACW species x 2 =
2. <u>Cornus alba</u>	<u>10</u>	\boxtimes	FACW	FAC species x 3 =
3. <u>Cornus obliqua</u>	<u>5</u>		FACW	FACU species x 4 =
4				UPL species x 5 =
5	·			Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation
	<u>35</u>	= Total Cov	/er	Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				□ Prevalence Index is $\leq 3.0^{1}$
1. Impatiens capensis	<u>70</u>	\boxtimes	FACW	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Phalaris arundinacea	<u>15</u>		FACW	□ Problematic Hydrophytic Vegetation ¹ (Explain)
3. Parthenocissus quinquefolia	<u>10</u>		FACU	1 Indiastors of hydric coil and wetland hydrology must
4. Alliaria petiolata	<u>10</u>		FACU	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. <u>Circea canadensis</u>	<u>8</u>		FACU	
6. <u>Ambrosia trifida</u>	<u>5</u>		FAC	Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				
12				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	<u>118</u>	= Total Cov	/er	
Woody Vine Stratum (Plot size: <u>30' radius)</u>				Woody vines – All woody vines greater than 3.28 ft in height
1. <u>Vitis riparia</u>	<u>10</u>	\boxtimes	FAC	neight
2	_			
3				I hadrow ha dia
4.				Hydrophytic Vegetation
·	10	= Total Cov	/er	Present? Yes No
Remarks: (include photo number here or on a separate she				et-mesic lowland hardwoods.
	Ũ			

Sampling Point: 4

Sampling Point: 4

Depth	scription: (Describe f Matrix			Redox Fea					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture	Remarks
0-9	10YR 2/1	98	10YR 3/6	2	<u> </u>	PL M	Loam		
9-15	2.5Y 6/2	60	10YR 5/8	40	C	PL M	Silt lo		
15-21	10YR 3/2	50	10YR 3/6	20	C	PL M		clay loam	
13-21			1011 3/0	20			Sity		
04.00.5	10YR 2/1	30					Carad		
21-23.5	10YR 4/1	70	10YR 4/6	30	C	PL M	Sand	ly loam	w/gravel & dist. dolomite
	<u></u>		·		·		·		
							· <u> </u>		
	·		·						
			·						
								-	
	Concentration, D=Dep	letion, RN	I=Reduced Matrix	, MS= Masked	Sand Grains			² Location: PL=Pore	
-	il Indicators:		-	Doha olive D-I-	an Cumfana (O				matic Hydric Soils ³ :
	Histosol (A1) Histic Epipedon (A2)			Polyvalue Belo		o) (LKK R,		•	10) (LRR K, L, MLRA 149B) Redox (A16) (LLR K, L, R)
	Black Histic (A3)		П	Thin Dark Surf	,		149B)		reat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4))		Loamy Mucky			(1400)		(S7) (LRR K, L)
	Stratified Layers (A5)	, ,		Loamy Gleyed		,			ow Surface (S8) (LRR K, L)
	Depleted Below Dark			Depleted Mat					face (S9) (LRR K, L)
	Thick Dark Surface (A	,		Redox Dark S	• •				se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral Sandy Gleyed Matrix			Depleted Dark Redox Depres					odplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	(34)		Redux Depies	50115 (1 0)			Red Parent M	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LF	RR R, MLF	RA 149B)					Other (Explain	
31 12 1									
	of Hydrophytic vegeta e Layer (if observed)		vetiand hydrology	must be preser	it, uniess dist	urbed or pro	obiema	ITIC.	
	e gravel	•						Hydric Soil Present?	Yes 🛛 No 🗌
	h (inches): <u>23.5</u>								
Remarks:	, ,								

WETLAND DETERMINATION DA	TA FORM – Northcentral and	d Northeast I	Region
Project/Site: City of Waukesha Park/Former Milky Way Fill City/Count	y: City of Waukesha/Waukesha County		Sampling Date: 08/25/2015
Applicant/Owner:	State:	WI	Sampling Point: <u>5</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range: T6N, R19E	<u>, SE1/4 S14</u>	
Landform (hillslope, terrace, etc.): Linear hillslope	Local relief (concave, convex, none): <u>N</u>	lone	Slope (%): <u>2-6</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: D	Datum:	
Soil Map Unit Name: Casco loam (CeB)		NWI clas	sification: <u>None</u>
Are climatic/hydrologic conditions on the site typical for this time of year'	? Yes 🛛 No 🗌 (If no, expla	ain in Remarks)	
Are Vegetation, Soil, or Hydrology significantly disturb	ed? Are "Normal Circumstances" pre	esent? Yes 🛛	No 🗌
Are Vegetation, Soil, or Hydrology naturally problemation	tic? (If, needed, explain any answer	s in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing s	sampling point locations, trans	ects, importar	t features, etc.
Hydrophytic Vegetation Present? ⊠Yes □No Hydric Soils Present? □Yes ⊠No Wetland Hydrology Present? □Yes ⊠No	Is the Sampled Area within a Wetland?	🗌 Yes	⊠No
Hydric Soils Present?			⊠No

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Moss Trim Lines (B16)		
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2) Oxidized Rhizospheres on Living R	cots (C3) Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	s (C6) Geomorphic Position (D2)		
Iron Deposits (B5)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)		
Field Observations:	· · ·		
Surface Water Present? Yes 🗌 No 🛛 Depth (inches):			
Water Table Present? Yes 🗌 No 🛛 Depth (inches):			
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes 🗌 No 🖂		
Saturation Present? Yes 🗌 No 🛛 Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if and the stream gauge is a stream gauge in the stream gauge.	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-7)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-7)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-7)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-7)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-7)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-7)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-7)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-7)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-7)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-7)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		

VEGETATION - Use scientific names of plants.

	Absolute	Dominant	Indicator	Deminence Test worksheet
Tree Stratum (Plot size: <u>30' radius)</u>	<u>% Cover</u>	<u>Species?</u> ⊠	Status	Dominance Test worksheet:
. <u>Rhamnus cathartica</u>	<u>30</u> 25		FAC FACW	Number of Dominant Species That are OBL, FACW, or FAC: <u>5</u> (A)
P. Fraxinus pennsylvanica	<u>25</u>		FACW	
B. <u>Prunus serotina</u>	<u>10</u>		<u>FACU</u>	Total Number of DominantSpecies Across All Strata:5 (B)
. <u> </u>				
				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
·				Prevalence Index worksheet:
	<u>65</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
. Rhamnus cathartica	<u>70</u>	\boxtimes	FAC	FACW species x 2 =
. <u>——</u>				FAC species x 3 =
				FACU species x 4 =
·				UPL species x 5 =
				Column Totals: (A) (E
. <u> </u>				Prevalence Index = B/A =
·				Hydrophytic Vegetation Indicators:
	<u>70</u>	= Total Cov	er	 Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
<u>łerb Stratum</u> (Plot size: <u>5' radius</u>)				Prevalence Index is ≤3.0 ¹
. <u>Rhamnus cathartica</u>	<u>50</u>	\boxtimes	FAC	Morphological Adaptations ¹ (Provide supporting
. <u>Circaea canadensis</u>	<u>15</u>		FACU	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
. <u>Carex grisea</u>	<u>10</u>		<u>FAC</u>	
. Symphyotrichum lateriflorum	<u>5</u>		FAC	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
·				Definitions of Vegetation Strata:
				Trace Weeds plants 2in (7.0 ers) as more in discuss
·				Tree – Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
·		_		Sapling/shrub – Woody plants less than 3in. DBH
0				and greater than 3.28 ft (1 m) tall.
1				Herb – All herbaceous (non-woody) plants, regardles
2				of size, and woody plants less than 3.28 ft tall.
	<u>80</u>	= Total Cov	er	Woody vines – All woody vines greater than 3.28 ft in
<u>Voody Vine Stratum</u> (Plot size: <u>30' radius</u>)	_	~ 7	F 10	height
. <u>Vitis riparia</u>	<u>5</u>		FAC	
2				
B				Hydrophytic
ł				Vegetation Present? Ves ⊠ No □
	<u>5</u>	= Total Cov	er	Present? Yes 🛛 No 🗌

Profile De	scription: (Describe to	the depth	needed to doo	ument the inc	licator or cor	firm the al	bsence	of indicators.)	
Depth	Matrix			Redox Fea	itures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-8	10YR 3/2						Silt loa	am	
8-15	10YR 5/3	·					Silt loa	am	
15-22	10YR 5/4						Silt loa	am	
								-	
		·			·				
		<u> </u>							
					·				
		·							
		<u> </u>							
¹ Type: C=	Concentration, D=Deple	tion PM=R	educed Matrix	MS= Masked	Sand Grains			² Location: PL=Pore	Lipipa M=Matrix
	il Indicators:		educed Matrix,	WO-Wasked					ematic Hydric Soils ³ :
-	Histosol (A1)			Polyvalue Belo	ow Surface (S	8) (LRR R.			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 14		, .			Redox (A16) (LLR K, L, R)
	Black Histic (A3)			Thin Dark Sur			149B)		Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)			Loamy Mucky		LRR K, L)			(S7) (LRR K, L)
	Stratified Layers (A5) Depleted Below Dark S	urface (A11		Loamy Gleyed Depleted Matr					ow Surface (S8) (LRR K, L) face (S9) (LRR K, L)
	Thick Dark Surface (A12			Redox Dark S	· ·				ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (S	S1)		Depleted Dark	Surface (F7)			Piedmont Floor	odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S	54)		Redox Depres	sions (F8)				(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)							Red Parent M Verv Shallow	laterial (F21) Dark Surface (TF12)
	Stripped Matrix (S6) Dark Surface (S7) (LRF	R. MLRA	149B)					Other (Explain	
	of Hydrophytic vegetation	on and wetl	and hydrology i	must be preser	nt, unless disti	urbed or pro	oblemat	ic.	
	e Layer (if observed):								
	e: <u>rocks</u> th (inches): <u>22</u>						ŀ	Hydric Soil Present	? Yes 🗌 No 🛛
Remarks:	(inches). <u>22</u>								
rtemarto.									

WETLAND DETERMINATION DA	ATA FORM – Northc	entral and Northeas	t Region
Project/Site: City of Waukesha Park/Former Milky Way Fill City/Coun	ty: City of Waukesha/Wauke	esha County	Sampling Date: 08/25/2015
Applicant/Owner:		State: WI	Sampling Point: <u>6</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range	e: <u>T6N, R19E, SE1/4 S14</u>	
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, con	vex, none): <u>Concave</u>	Slope (%): 0-2
Subregion (LRR or MLRA): LRR K	Lat: Long: _	Datum:	
Soil Map Unit Name: Houghton muck (HtA)			assification: <u>T3K</u>
Are climatic/hydrologic conditions on the site typical for this time of year		(If no, explain in Remarks)	
Are Vegetation, Soil_X_, or Hydrology significantly disturb	bed? Are "Normal Circu	mstances" present? Yes	No 🗌
Are Vegetation, Soil, or Hydrology naturally problema	atic? (If, needed, explai	n any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	sampling point location	ons, transects, import	ant features, etc.
. •		· · ·	
Hydrophytic Vegetation Present? Xes No	Is the Sampled Are	а	
Hydric Soils Present? Yes No	within a Wetland?	🖂 Yes	□No
Wetland Hydrology Present?			
	If yes, optional Wetla	and Site ID [.] PCA 2	
Remarks: (Explain alternative procedures here or in a separate repor			d on 1941 aerial photograph
- possibly used for gravel.			a on 1041 achai photograph
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indi	cators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface S	oil Cracks (B6)
Surface Water (A1) Water-	Stained Leaves (B9)	Drainage	Patterns (B10)
	: Fauna (B13)		Lines (B16)
	eposits (B15)		on Water Table (C2)
Water marks (B1)	en Sulfide Odor (C1)	Crayfish E	Surrows (C8)
Sediment Deposits (B2)	ed Rhizospheres on Living Ro	oots (C3)	Visible on Aerial Imagery (C9)
Drift Deposits (B3)	ce of Reduced Iron (C4)	Stunted or	Stressed Plants (D1)
	Iron Reduction in Tilled Soil	s (C6) Geomorp	hic Position (D2)
	uck Surface (C7)		quitard (D3)
			,
Inundation Visible on Aerial Imagery (B7)	Explain in Remarks)		graphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		Sector FAC-Neut	tral Test (D5)
Field Observations:			
Surface Water Present? Yes Depth (inches):			
Water Table Present? Yes No Depth (inches): 4	<u>I</u>		
Saturation Present? Yes 🛛 No 🗌 Depth (inches): <u>(</u>)	Wetland Hydrology Preser	nt? Yes 🛛 No 🗌
(includes capillary fringe)		fiolana nyarology i roool	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FS	SA slide review (Exhibits 11-1	3), WETS tables (Exhibit 14)	, Draft NRCS map (Exhibit 15)
Remarks:			

I

VEGETATION - Use scientific names of plants.

				<u>-</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet:
1. <u>Salix X fragilis</u>	<u>75</u>	\boxtimes	FAC	Number of Dominant Species
2. Fraxinus pennsylvanica	<u>15</u>		FACW	That are OBL, FACW, or FAC: <u>2</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
	<u>90</u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: <u>30' radius</u>)				OBL species x 1 =
1. Fraxinus pennsylvanica	<u>10</u>	\boxtimes	FACW	FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>10</u>	= Total Cov	/er	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				□ Prevalence Index is $\leq 3.0^{1}$
1. <u>Vitis riparia</u>	<u>3</u>		<u>FAC</u>	Morphological Adaptations ¹ (Provide supporting
2. Rhamnus cathartica	<u>1</u>		FAC	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
4 5				be present, unless disturbed of problematic.
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
8				
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12		<u> </u>		of size, and woody plants less than 3.28 ft tall.
	<u>4</u>	= Total Cov	/er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)		_		height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov		Present? Yes No
Remarks: (include photo number here or on a separate shee	t.) Ephemera	al pond with s	second grow	h, Southern wet to wet-mesic lowland hardwoods.

Profile De	scription: (Describe to	the depth neede	d to docur	ment the indi	cator or con	irm the abse	nce of indicators.)	
Depth	Matrix			Redox Feat	ures			
(inches)	Color (moist)	% Colo	r (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	10YR 2/1		, ,			Pe	at	
	·	·			·	<u> </u>		
	<u> </u>					·		
		·						·
	·	·			·	<u> </u>		
		·				·		
1							2	
	Concentration, D=Deple	tion, RM=Reduce	a Matrix, M	IS= Masked S	and Grains		² Location: PL=Pore	
-	I Indicators:		— -	– .				ematic Hydric Soils ³ :
	Histosol (A1)		🗌 Po	olyvalue Belov	•) (LRR R,		10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,			Redox (A16) (LLR K, L, R)
	Black Histic (A3)					R, MLRA 149		Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)			bamy Mucky N		.RR K, L)		(S7) (LRR K, L)
	Stratified Layers (A5)		🗌 Lo	bamy Gleyed I	Matrix (F2)			low Surface (S8) (LRR K, L)
	Depleted Below Dark Su	urface (A11)	🗌 De	epleted Matrix	: (F3)		Thin Dark Su	rface (S9) (LRR K, L)
	Thick Dark Surface (A12	2)	🗌 Re	edox Dark Su	face (F6)		Iron-Mangane	ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (S	51)	🗌 De	epleted Dark S	Surface (F7)		Piedmont Flo	odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S	4)	🗌 Re	edox Depress	ions (F8)		Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)						Red Parent M	laterial (F21)
	Stripped Matrix (S6)						Very Shallow	Dark Surface (TF12)
	Dark Surface (S7) (LRR	R, MLRA 149B)						in in Remarks)
	of Hydrophytic vegetation	on and wetland hy	drology mu	ust be present	, unless distu	bed or proble	matic.	
	e Layer (if observed):							
Туре	: <u>trash</u>						Hydric Soil Present	? Yes 🛛 No 🗌
Dept	h (inches): <u>6</u>							
Remarks: S	Soil is problematic bed	cause site is a fe	ormer tras	sh dump. Lot	s of glass, p	lastic, concre	ete and rocks present	. The presence of peat
	that this is a hydric so					·	•	
		ii typo, though t			liou by init			

WETLAND DETERMINATION DAT	A FORM – Northcentral and Nort	heast Region
Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	: City of Waukesha/Waukesha County	Sampling Date: 08/25/2015
Applicant/Owner:	State: WI	Sampling Point: 7
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range: T6N, R19E, SE1/4	<u>S14</u>
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave, convex, none): None	Slope (%): 0-2
Subregion (LRR or MLRA): LRR K	Lat: Long: Datum: _	
Soil Map Unit Name: Houghton muck (HtA)		NWI classification: None
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛 No 🗌 (If no, explain in Rei	marks)
Are Vegetation, Soil, or Hydrology significantly disturbe	d? Are "Normal Circumstances" present?	Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology naturally problematic	c? (If, needed, explain any answers in Rem	arks.)
SUMMARY OF FINDINGS – Attach site map showing sa	ampling point locations, transects, in	nportant features, etc.
Hydrophytic Vegetation Present? ⊠Yes □No Hydric Soils Present? ⊠Yes □No Wetland Hydrology Present? ⊠Yes □No	Is the Sampled Area within a Wetland?	Z es □No
	If yes, optional Wetland Site ID: PCA 3	
Remarks: (Explain alternative procedures here or in a separate report.)	•	

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living	Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	s (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes 🗌 No 🛛 Depth (inches):	
Water Table Present? Yes No Depth (inches): 14	
Saturation Present? Yes No Depth (inches): 0	Wetland Hydrology Present? Yes 🖂 No 🗌
Saturation Present? Yes ⊠ No □ Depth (inches): 0 (includes capillary fringe)	
Saturation Present? Yes ⊠ No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if and the stream gauge is the stream	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ⊠ No □ Depth (inches): 0 (includes capillary fringe)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ⊠ No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if ar (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ⊠ No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if and the stream gauge is the stream	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ⊠ No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if ar (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ⊠ No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if ar (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ⊠ No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if ar (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ⊠ No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if ar (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ⊠ No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if ar (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ⊠ No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if ar (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ⊠ No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if ar (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ⊠ No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if ar (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ⊠ No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if ar (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ⊠ No Depth (inches): 0 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if ar (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants

VEGETATION – Use scientific names of plants.				Sampling Point: <u>7</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>3</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>3</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	rer	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	rer	☑ Capid rescion Hydrophydre Vegetation ☑ Dominance Test is >50%
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)				$\square Prevalence Index is \le 3.0^{1}$
1. <u>Juncus dudleyi</u>	<u>35</u>	\boxtimes	FACW	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. <u>Juncus torrevi</u>	<u>25</u>	\boxtimes	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Typha angustifolia</u>	<u>20</u>	\boxtimes	<u>OBL</u>	
4. <u>Scirpus atrovirens</u>	<u>15</u>		<u>OBL</u>	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. <u>Daucus carota</u>	<u>15</u>		<u>UPL</u>	
6. <u>Euthamia graminifolia</u>	<u>10</u>		FAC	Definitions of Vegetation Strata:
7. Phalaris arundinacea	<u>8</u>		FACW	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. <u>Bidens vulgata</u>	<u>5</u>		<u>FAC</u>	at breast height (DBH), regardless of height
9. Symphyotrichum puniceum	<u>5</u>		<u>OBL</u>	Sapling/shrub – Woody plants less than 3in. DBH
10. <u>Trifolium hybridm</u>	<u>5</u>		FACU	and greater than 3.28 ft (1 m) tall.
11. <u>Ranunculus pensylvanicus</u>	<u>3</u>		OBL	Herb – All herbaceous (non-woody) plants, regardless
12. Xanthium strumarium	<u>3</u>		FAC	of size, and woody plants less than 3.28 ft tall.
	<u>149</u>	= Total Cov	er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				
2				
3				Hydrophytic
				Vegetation
4				-

Sampling Point: 7

Profile Des	scription: (Describe to	the dep	oth needed to do	cum	ent the ind	icator or cor	nfirm the a	bsenc	e of indicators.)	
Depth	Matrix				Redox Feat	ures				
(inches)	Color (moist)	%	Color (moist		%	Type ¹	Loc ²		Texture	Remarks
0-10	10YR 2/1	98	10YR 3/6	<u>,</u>	2	C	PL M	Siltv	clay loam	
10-17	10Y 5/1	50	10YR 5/8		50	C	PL M	Clay		
17-24	2.5Y 5/2	40	10YR 4/6		60	C	PL M	Clay		
17-24	2.51 5/2	40	1011(4/0		00			Ciay		
	·				·	·				
	·				·	·				
	· ·							·	·	
	· ·									
	Concentration, D=Deple	etion, RN	I=Reduced Matrix	k, MS	= Masked S	Sand Grains			² Location: PL=Pore L	
	I Indicators:		_	р,	a veluce D. J.	0f			Indicators for Problem	
	Histosol (A1) Histic Epipedon (A2)			Poly	Value Belo MLRA 149	w Surface (S	8) (LRR R ,			10) (LRR K, L, MLRA 149B) Redox (A16) (LLR K, L, R)
	Black Histic (A3)		П	Thir		ace (S9) (LR I		149B		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)					Vineral (F1) (1400		S7) (LRR K, L)
	Stratified Layers (A5)				my Gleyed		,			w Surface (S8) (LRR K, L)
	Depleted Below Dark				leted Matrix					ace (S9) (LRR K, L)
	Thick Dark Surface (A1	,			lox Dark Si					se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (Sandy Gleyed Matrix (S				leted Dark	Surface (F7)				dplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)) +)		Neu	IOX Depiess				Red Parent Ma	
	Stripped Matrix (S6)									Dark Surface (TF12)
	Dark Surface (S7) (LRF	R R, MLF	RA 149B)						Other (Explain	
2										
	of Hydrophytic vegetati Layer (if observed):	on and v	vetland hydrology	mus	t be presen	t, unless disti	urbed or pr	oblema	atic.	
Type									Hydric Soil Present?	Yes 🛛 No 🗌
	n (inches):								nyunc son Present?	
Remarks:										

WETLAND DETERMINATION DAT	FA FORM – Northcentral an	d Northeast F	Region
Project/Site: City of Waukesha Park/Former Milky Way Fill City/County	: City of Waukesha/Waukesha County		Sampling Date: 08/25/2015
Applicant/Owner:	State	: <u>WI</u>	Sampling Point: <u>8</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range: T6N, R19	<u>E, SE1/4 S14</u>	
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave, convex, none):	None	Slope (%):
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long:	Datum:	
Soil Map Unit Name: Drummer silt loam, gravelly substratum (Dt)			NWI classification: None
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛 No 🗌 (If no, exp	lain in Remarks)	
Are Vegetation, Soil, or Hydrology significantly disturb	ed? Are "Normal Circumstances" p	resent? Yes 🗌	No 🖂
Are Vegetation, Soil, or Hydrology naturally problemati	c? (If, needed, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing s	ampling point locations, trans	ects, importan	t features, etc.
Hydrophytic Vegetation Present? □Yes ⊠No Hydric Soils Present? □Yes ⊠No Wetland Hydrology Present? □Yes ⊠No	Is the Sampled Area within a Wetland?	☐ Yes	⊠No
	If yes, optional Wetland Site ID:		
Remarks: (Explain alternative procedures here or in a separate report.) management activities (planted crop).) "Normal Circumstances" are not p	oresent because o	f agricultural land

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Moss Trim Lines (B16)		
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)		
Water marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2) Oxidized Rhizospheres on Living R	oots (C3) Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	s (C6) Geomorphic Position (D2)		
Iron Deposits (B5)	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)		
Field Observations:			
Surface Water Present? Yes 🗌 No 🖾 Depth (inches):			
Water Table Present? Yes 🗌 No 🛛 Depth (inches):			
Saturation Present? Yes 🗌 No 🛛 Depth (inches):	Wetland Hydrology Present? Yes 🗌 No 🖂		
Saturation Present? Yes No I Depth (inches): (includes capillary fringe)			
Saturation Present? Yes No Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No I Depth (inches): (includes capillary fringe)	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		
Saturation Present? Yes No Depth (inches):	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map		

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 8
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
7				Prevalence Index worksheet:
· ·	<u>0</u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				
6				、 , 、 , , , , , , , , , , , , , ,
		_		Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
	<u>0</u>	= Total Cov	er	Dominance Test is >50%
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)		5		 □ Prevalence Index is ≤3.0¹ □ Morphological Adaptations¹ (Provide supporting
1. <u>Glycine max (planted)</u>	<u>60</u>		<u>UPL</u>	data in Remarks or on a separate sheet)
2. Portulaca oleracea	<u>15</u>		<u>FACU</u>	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Chenopodium album</u>	<u>12</u>		<u>FACU</u>	¹ Indicators of hydric soil and wetland hydrology must
4. Xanthium strumarium	<u>10</u>		<u>FAC</u>	Be present, unless disturbed or problematic.
5. Panicum capillare	<u>8</u>		<u>FAC</u>	
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				
12				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	<u>105</u>	= Total Cov		
Marchy Vina Stratum (Plat aiza: 20' radius)				Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: <u>30' radius</u>)				height
1				
2				
3				Hydrophytic
4				Vegetation Present? Yes No 🛛
	<u>0</u>	= Total Cov	/er	
Remarks: (include photo number here or on a separate she	et.) Agricultur	al field.		

Sampling Point: 8

Depth							bsence	,	
Dopui	Matrix			Redox Feat	tures		_		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture	Remarks
0-6	10YR 2/2	100					Loam		
6-10	10YR 2/1	100					Clay lo	oam	
10-12	10YR 2/1	60	10YR 3/6	20	С	PL M	Clay		
	10YR 3/2	20							
12-18	5Y 5/2	60	7.5Y 4/6	40	С	PL M	Clay		
18-25	2.5Y 5/2	40	5G 5/1	20	D	PL	Clay		
			10YR 4/6	40	C	PL M			
			·						
	Concentration, D=Dep	otion PN	A-Roducod Matrix	19- Mackod 9	Sand Grains		:	² Location: PL=Pore Li	ining M-Matrix
	Indicators:			vio- iviaskeu s				ndicators for Problem	
	Histosol (A1)		D F	olyvalue Belo	w Surface (S	8) (LRR R,			0) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,				edox (A16) (LLR K, L, R)
	Black Histic (A3)			hin Dark Surfa			149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4) Stratified Layers (A5)			oamy Mucky I oamy Gleyed				Dark Surface (S	w Surface (S8) (LRR K, L)
	Depleted Below Dark	Surface (/		epleted Matrix					ace (S9) (LRR K, L)
	Thick Dark Surface (A			edox Dark Su	• •				e Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral Sandy Gleyed Matrix (epleted Dark edox Depress					dplain Soils (F19) (MLRA 149B) TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	04)		ledux Depress				Red Parent Ma	
	Stripped Matrix (S6)							Very Shallow D	ark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLI	RA 149B)					Other (Explain	in Remarks)
³ Indicators of	of Hydrophytic vegeta	tion and v	vetland hydrology m	ust be presen	t. unless dist	urbed or pr	oblemat	ic.	
	Layer (if observed)		, , , , , , , , , , , , , , , , , , , ,		,				
Туре:							ŀ	Hydric Soil Present?	Yes 🗌 No 🖾
Depth	ı (inches):								
Dama and an									
Remarks:									
Remarks:									
Remarks:									
Remarks:									
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HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check al	all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	Drainage Patterns (B10)				
High Water Table (A2)	Moss Trim Lines (B16)				
Saturation (A3)	Dry-Season Water Table (C2)				
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizospheres on Living F	Roots (C3) Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils	G (C6) Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)			
Field Observations:					
Surface Water Present? Yes 🗌 No 🖾 Dep	epth (inches):				
Water Table Present? Yes 🗌 No 🖾 Dep	epth (inches):				
Saturation Present? Yes No X Dep (includes capillary fringe)	epth (inches):	Wetland Hydrology Present? Yes 🛛 No 🗌			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-13), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)					
	(Exhibit 10), FSA slide review (Exhibits 11-1	3), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)			
(Exhibit 3), Aerial photographs (Exhibit 4), Site photos (E	(Exhibit 10), FSA slide review (Exhibits 11-1	3), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)			
(Exhibit 3), Aerial photographs (Exhibit 4), Site photos (E	(Exhibit 10), FSA slide review (Exhibits 11-1	3), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)			
(Exhibit 3), Aerial photographs (Exhibit 4), Site photos (E	(Exhibit 10), FSA slide review (Exhibits 11-1	3), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)			
(Exhibit 3), Aerial photographs (Exhibit 4), Site photos (E	(Exhibit 10), FSA slide review (Exhibits 11-1	3), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)			
(Exhibit 3), Aerial photographs (Exhibit 4), Site photos (E	(Exhibit 10), FSA slide review (Exhibits 11-1	3), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)			
(Exhibit 3), Aerial photographs (Exhibit 4), Site photos (E	(Exhibit 10), FSA slide review (Exhibits 11-1	3), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)			
(Exhibit 3), Aerial photographs (Exhibit 4), Site photos (E	(Exhibit 10), FSA slide review (Exhibits 11-1	3), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)			
(Exhibit 3), Aerial photographs (Exhibit 4), Site photos (E	(Exhibit 10), FSA slide review (Exhibits 11-1	3), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)			
(Exhibit 3), Aerial photographs (Exhibit 4), Site photos (E	(Exhibit 10), FSA slide review (Exhibits 11-1	3), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)			
(Exhibit 3), Aerial photographs (Exhibit 4), Site photos (E	(Exhibit 10), FSA slide review (Exhibits 11-1	3), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)			

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>9</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>3</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>5</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>60%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	/er	Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				□ Prevalence Index is $\leq 3.0^{1}$
1. <u>Symphyotrichum pilosum</u>	<u>25</u>	\boxtimes	FACU	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. <u>Juncus dudleyi</u>	<u>20</u>	\boxtimes	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Daucus carota</u>	<u>20</u>	\boxtimes	<u>UPL</u>	¹ Indicators of hydric soil and wetland hydrology must
4. <u>Euthamia graminifolia</u>	<u>15</u>	\boxtimes	<u>FAC</u>	Be present, unless disturbed or problematic.
5. <u>Xanthium strumarium</u>	<u>15</u>	\boxtimes	FAC	
6. <u>Oenothera biennis</u>	<u>12</u>		<u>FACU</u>	Definitions of Vegetation Strata:
7. <u>Cirsium arvense</u>	<u>6</u>		FACU	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. Erigeron philadelphicus	<u>6</u>		<u>FAC</u>	at breast height (DBH), regardless of height
9. <u>Poa pratensis</u>	<u>5</u>		FACU	Sapling/shrub – Woody plants less than 3in. DBH
10. <u>Solidago gigantea</u>	<u>5</u>		FACW	and greater than 3.28 ft (1 m) tall.
11. Symphyotrichum lateriflorum	<u>5</u>		FAC	Herb – All herbaceous (non-woody) plants, regardless
12. Epilobium coloratum	<u>3</u>		<u>OBL</u>	of size, and woody plants less than 3.28 ft tall.
	<u>147*</u>	= Total Cov	/er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov		Present? Yes No
Remarks: (include photo number here or on a separate sh	eet.) Fresh (we	et) meadow. A	Additional sp	ecies in herb stratum include: Plantago major

Remarks: (include photo number here or on a separate sheet.) Fresh (wet) meadow. Additional species in herb stratum include: Plantago major FACU 3; Erigeron annuus FACU 2; Equisetum arvense FAC 2; Symphyotrichum puniceum OBL 2; and Scirpus atrovirens OBL 1.

Sampling Point: 9

Profile Des	cription: (Describe t	o the dep	oth needed to docu	ment the ind	icator or cor	nfirm the a	bsence	of indicators.)	
Depth	Matrix			Redox Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture	Remarks
0-8	10YR 2/1.5	97	10YR 3/6	3	С	PL	Silt lo	am	
8-12	10YR 2/1	50	7.5YR 3/4	10	С	PL M	Clay I	oam	
	10YR 4/2	40					<u></u>		
12-16	10Y 5/1	95	10YR 4/6	5	С	PL M	Clay		w/ distintegrating dolomite
16-26	10Y 5/1	70	5G 5/1	15	D	PL M	Clay I	oam	
			10YR 4/6	15	С		·		
							·		
							·		
		. <u></u>			·		·		
¹ Type: C=C	Concentration, D=Dep	letion, RM	I=Reduced Matrix, N	VS= Masked S	Sand Grains			² Location: PL=Pore	Lining, M=Matrix
Hydric Soil	Indicators:		· · ·					ndicators for Proble	ematic Hydric Soils ³ :
	Histosol (A1)		D P	olyvalue Belo		8) (LRR R ,	,		10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		— -	MLRA 149	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3) Hydrogen Sulfide (A4)			hin Dark Surfa oamy Mucky N					Peat or Peat (S3) (LLR K, L, R) (S7) (LRR K, L)
	Stratified Layers (A5)			oamy Gleyed	· · /	(LIXIX IX, L)			low Surface (S8) (LRR K, L)
	Depleted Below Dark	Surface (A		epleted Matrix					rface (S9) (LRR K, L)
	Thick Dark Surface (A			Redox Dark Si					ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral			epleted Dark					odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (Sandy Redox (S5)	54)		Redox Depress	sions (F8)			Red Parent N	(TA6) (MLRA 144A, 145, 149B) Interial (E21)
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	RA 149B)						n in Remarks)
3 la ali a a ta na		tion and u		unt ha wasaan	t unless dist			4:-	
	of Hydrophytic vegeta Layer (if observed)		vetiand hydrology m	ust be presen	t, uniess dist	urbed or pr	obiema	liC.	
Type:		•						Hydric Soil Present	? Yes 🛛 No 🗌
	(inches):						ľ	nyane oon riesent	
Remarks:	<u> </u>								

WEILAND DETERMINATION DATA FORM – Northcentral and Northeast Region		
Project/Site: City of Waukesha Park/Former Milky Way Fill City/County	r: <u>City of Waukesha/Waukesha County</u>	Sampling Date: 08/25/2015
Applicant/Owner:	State: WI	Sampling Point: <u>10</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range: T6N, R19E, SE1/4 S14	
Landform (hillslope, terrace, etc.): Shallow hillslope	Local relief (concave, convex, none): Linear concave	Slope (%): 0-2
Subregion (LRR or MLRA): LRR K	Lat: Long: Datum:	
Soil Map Unit Name: Houghton muck (HtA)	NWI cla	ssification: None
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛 No 🗌 (If no, explain in Remarks)	
Are Vegetation , Soil , or Hydrology significantly disturbed	ed? Are "Normal Circumstances" present? Yes	No 🗌
Are Vegetation, Soil, or Hydrology naturally problemati	c? (If, needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.		
Hydrophytic Vegetation Present? ⊠Yes No Hydric Soils Present? ⊠Yes No Wetland Hydrology Present? ⊠Yes No	Is the Sampled Area within a Wetland?	□No
	If yes, optional Wetland Site ID: PCA 3	
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (I	39) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
U Water marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Sediment Deposits (B2)	on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	on (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	ks) Dicrotopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes 🗌 No 🛛 Depth (inches):	
Water Table Present? Yes No Depth (inches): 19	
Saturation Present? Yes No Depth (inches): <u>18</u> (includes capillary fringe)	Wetland Hydrology Present? Yes 🛛 No 🗌
	ctions), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe-	ctions), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe- (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (E	ctions), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insper (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (E	ctions), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe- (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (E	ctions), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe- (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (E	ctions), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe- (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (E	ctions), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe- (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (E	ctions), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe- (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (E	ctions), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe- (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (E	ctions), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe- (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (E	ctions), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspe- (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (E	ctions), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map

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VEGETATION – Use scientific names of plants.

EGETATION – Use scientific names of plants.				Sampling Point: <u>10</u>
Tree Stratum (Plot size: <u>30' radius)</u>	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>3</u> (A)
3				Total Number of Dominant
				Species Across All Strata: <u>5</u> (B)
5				Percent of Dominant Species
3				That Are OBL, FACW, or FAC: <u>60%</u> (A/B)
7				Prevalence Index worksheet:
··	<u>0</u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: <u>30' radius</u>)				OBL species x 1 =
				FACW species x 2 =
2				FAC species x 3 =
 3				
				FACU species x 4 =
4 5				UPL species x 5 = Column Totals: (A)
6				Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
7. <u> </u>				Rapid Test for Hydrophytic Vegetation
	<u>0</u>	= Total Cov	/er	Dominance Test is >50%
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)			54011	 □ Prevalence Index is ≤3.0¹ □ Morphological Adaptations¹ (Provide supporting
1. <u>Solidago altissima</u>	<u>35</u>		FACU	data in Remarks or on a separate sheet)
2. <u>Solidago gigantea</u>	<u>35</u>		FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Poa pratensis</u>	<u>20</u>	\boxtimes	FACU	¹ Indicators of hydric soil and wetland hydrology must
4. <u>Symphyotrichum puniceum</u>	<u>20</u>	\boxtimes	<u>OBL</u>	Be present, unless disturbed or problematic.
5. <u>Symphyotrichum lanceolatum</u>	<u>20</u>	\boxtimes	FACW	
6. Phalaris arundinacea	<u>15</u>		FACW	Definitions of Vegetation Strata:
7. <u>Carex pellita</u>	<u>10</u>		<u>OBL</u>	Tree – Woody plants 3in. (7.6 cm) or more in diameter
3. <u>Symphyotrichum lateriflorum</u>	<u>8</u>		<u>FAC</u>	at breast height (DBH), regardless of height
9. <u>Euthamia graminifolia</u>	<u>5</u>		FAC	Sapling/shrub – Woody plants less than 3in. DBH
10.				and greater than 3.28 ft (1 m) tall.
 11.				
12.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	168	= Total Cov		
Woody Vine Stratum (Plot size: 30' radius)	<u></u>			Woody vines – All woody vines greater than 3.28 ft in height
1.				
2				
 3				
<u> </u>				Hydrophytic Vegetation
4				Present? Yes ⊠ No □
	<u>0</u>	= Total Cov	/er	

Sampling Point: 10

Profile Des	cription: (Describe to	o the dep	th needed to docum	ent the indi	icator or cor	nfirm the a	bsence	e of indicators.)	
Depth	Matrix			Redox Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-15	10YR 2/1	96	7.5YR 3/4	4	<u> </u>	PL M	Silty	clay loam	
15-22	10GY 5/1	75	10YR 3/6-4/6	25	C	PL M	Clay		
15-22	1061 5/1	/5	101R 3/0-4/0	20	U	PL M	Clay		
				·					
	,								
				·					
				·					
	Concentration, D=Depl	etion, RN	=Reduced Matrix, MS	S= Masked S	Sand Grains			² Location: PL=Pore L	
-	Indicators:		—		o r	o) // == =		ndicators for Problem	-
	Histosol (A1)		Pol	•	w Surface (S	8) (LRR R,			0) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LR		149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) ((LRR K, L)		Dark Surface (57) (LRR K, L) w Surface (S8) (LRR K, L)
	Stratified Layers (A5) Depleted Below Dark S	Surface (/		amy Gleyed pleted Matrix					ace (S9) (LRR K, L)
	Thick Dark Surface (A			dox Dark Si					se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (Surface (F7)				dplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (dox Depress					TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	- /			(-)			Red Parent Ma	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	RA 149B)					Other (Explain	in Remarks)
	of Hydrophytic vegetat		etland hydrology mus	st be present	t, unless dist	urbed or pro	oblema	tic.	
	Layer (if observed):								
Туре:								Hydric Soil Present?	Yes 🛛 No 🗌
	(inches): <u>22</u>								
Remarks:									
L									

WETLAND DETERMINATION DAT	FORM – Northcentral and Northeast I	Region
Project/Site: City of Waukesha Park/Former Milky Way Fill City/County	<u>City of Waukesha/Waukesha County</u>	Sampling Date: 08/25/2015
Applicant/Owner:	State: WI	Sampling Point: <u>11</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range: T6N, R19E, SE1/4 S14	
Landform (hillslope, terrace, etc.): Drainage way	Local relief (concave, convex, none): Linear concave	Slope (%): <u>0-2</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:	
Soil Map Unit Name: Sebewa silt loam (Sm)	NWI clas	sification: <u>F0Kf</u>
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛 No 🗌 (If no, explain in Remarks)	
Are Vegetation X, Soil, or Hydrology significantly disturbe	ed? Are "Normal Circumstances" present? Yes	No 🖂
Are Vegetation, Soil, or Hydrology naturally problemati	ic? (If, needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing sa	ampling point locations, transects, importan	it features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soils Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland?	□No
	If yes, optional Wetland Site ID: PCA 5	
Remarks: (Explain alternative procedures here or in a separate report.) present because of agricultural land management activities (ma		ircumstances" are not
HYDROLOGY		

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check	all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Ro	ots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils	(C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes 🗌 No 🖾 De	epth (inches):	
Water Table Present? Yes 🗌 No 🛛 De	epth (inches):	
	epth (inches):	Wetland Hydrology Present? Yes 🛛 No 🗌
(includes capillary fringe)		
		ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map 3), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)
Remarks: FSA slide review indicates that 9 out or	f 9 (100%) normal years show signature	s of saturation.

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>11</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: $\underline{0}$ (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 0% (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species 0 x 1 = 0
1				FACW species $\underline{0}$ x 2 = $\underline{0}$
2				FAC species <u>13</u> x 3 = <u>39</u>
3				FACU species $5 \times 4 = 20$
4				UPL species $95 \times 5 = 475$
5				Column Totals: <u>113</u> (A) <u>534</u> (B)
6				Prevalence Index = $B/A = 4.73$
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	er	 Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				$\square Prevalence Index is \leq 3.0^{1}$
1. <u>Glycine max (planted)</u>	<u>95</u>	\boxtimes	UPL	Morphological Adaptations ¹ (Provide supporting
2. Panicum capillare	<u>10</u>		FAC	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
3. Amaranthus retroflexus	<u>5</u>		FACU	
4. Echinochloa crus-galli	<u>3</u>		FAC	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5				
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				
12				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	<u>113</u>	= Total Cov	er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				-
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov	er	Present? Yes No
Remarks: (include photo number here or on a separate she	eet.) Atypical (1			ion is problematic because of agricultural land

Remarks: (include photo number here or on a separate sheet.) Atypical (farmed) wetland. Vegetation is problematic because of agricultural land management activities (managed plant community). Indicators of hydric soils and wetland hydrology are present.

Profile Des	scription: (Describe to	o the dep	th needed to docum	ent the indi	cator or con	firm the a	bsence	e of indicators.)	
Depth	Matrix			Redox Feat	ures		_		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture	Remarks
0-15	10YR 2/1	100					Clay I	loam	
15-20	10YR 4/1	97	10YR 5/6	3	С	PL M	Clay		
20-26	10YR 6/1	45	10YR 6/8	35	С	PL M	Clay		
	10YR 3/1	20		·					
				·					
				·					
				· . <u></u>					
				·					
				·					
¹ Type: C=0	Concentration, D=Depl	etion. RM	Reduced Matrix. MS	S= Masked S	and Grains			² Location: PL=Pore L	ining, M=Matrix
21	I Indicators:	,						Indicators for Probler	-
	Histosol (A1)		🗌 Po		w Surface (S	8) (LRR R,		2 cm Muck (A1	0) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		_	MLRA 149					edox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LRF		149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4) Stratified Layers (A5)			amy Gleyed I	/lineral (F1) (Matrix (F2)	LRR N, L)		 Dark Surface (\$ Polyvalue Belo 	w Surface (S8) (LRR K, L)
	Depleted Below Dark S	Surface (A		pleted Matrix					ace (S9) (LRR K, L)
\square	Thick Dark Surface (A	A12)	🗌 Re	dox Dark Su	rface (F6)				e Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (pleted Dark S					dplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (Sandy Redox (S5)	54)	🗌 Re	dox Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B) terial (F21)
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	RA 149B)					Other (Explain	
2									
	of Hydrophytic vegetat Layer (if observed):		etland hydrology mu	st be present	, unless disti	urbed or pro	oblema	tic.	
Type								Hydric Soil Present?	Yes 🛛 No 🗌
	h (inches):						ľ	nyune oon riesent:	
Remarks:	· · ·								

WETLAND DETERMINATION DAT	FA FORM – Northcentral and North	theast Region
Project/Site: City of Waukesha Park/Former Milky Way Fill City/County	<u>City of Waukesha/Waukesha County</u>	Sampling Date: 08/25/2015
Applicant/Owner:	State: <u>WI</u>	Sampling Point: <u>12</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range: T6N, R19E, SE1/4	
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none): Concave	Slope (%): <u>0-2</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:	
Soil Map Unit Name: Sebewa silt loam (Sm)		NWI classification: F0Kf
Are climatic/hydrologic conditions on the site typical for this time of year?		
Are Vegetation, Soil, or Hydrology significantly disturbed		— —
Are Vegetation, Soil, or Hydrology naturally problemati	c? (If, needed, explain any answers in Rem	narks.)
SUMMARY OF FINDINGS – Attach site map showing s	ampling point locations, transects, i	mportant features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soils Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland?	∕es □No
	If yes, optional Wetland Site ID: PCA 5	
Remarks: (Explain alternative procedures here or in a separate report.))	

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Ro	oots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	s (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Dther (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes 🗌 No 🖾 Depth (inches):	
Water Table Present? Yes 🗌 No 🛛 Depth (inches):	
Water Table Present? Yes I No Depth (inches): Image: Model Control Contro Control Control Contro Control Control Control Control Control Co	Wetland Hydrology Present? Yes 🛛 No 🗌
Saturation Present? Yes No Depth (inches): 25	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): 25 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): 25 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): 25 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): 25 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): 25 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): 25 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): 25 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): 25 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): 25 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): 25 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): 25 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-1	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>12</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>2</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				
				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
6				
7	<u> </u>	□ = Total Cov		Prevalence Index worksheet:
	<u>-</u>	- 10(a) COV		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)		-		OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov		Rapid Test for Hydrophytic Vegetation
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)	-	- 10(0100)		 ☑ Dominance Test is >50% □ Prevalence Index is ≤3.0¹
	<u>70</u>	\boxtimes	FACW	☐ Morphological Adaptations ¹ (Provide supporting
1. <u>Phalaris arundinacea</u>				data in Remarks or on a separate sheet)
2. <u>Typha angustifolia</u>	<u>40</u>		<u>OBL</u>	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Asclepias incarnata</u>	<u>20</u>		<u>OBL</u>	¹ Indicators of hydric soil and wetland hydrology must
4. <u>Rumex crispus</u>	<u>10</u>		FAC	Be present, unless disturbed or problematic.
5. Ranunculus pensylvanicus	<u>3</u>		<u>OBL</u>	
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				
				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
10		<u> </u>		
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>143</u>	= Total Cov	/er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3				Hydrophytic
4.				Vegetation
	<u>0</u>	= Total Cov	/er	Present? Yes 🛛 No 🗌
Remarks: (include photo number here or on a separate sheet			· •·	1
(,	,		

Profile Des	scription: (Describe t	to the dep	th needed to docum	nent the ind	icator or cor	nfirm the a	bsence	e of indicators.)	
Depth	Matrix			Redox Feat	tures		_		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-8	10YR 2/1			·			Clay	loam	
8-16	10YR 2/1	85	10YR 3/6	10	С	PL M	Clay		
	10YR 4/2	5							
16-24	10YR 4/1	50	10YR 6/8	50	С	PL M	Clay		
24-26	10YR 5/1	60	10YR 6/8	20	C	PL M	Clay		
24-20	10YR 3/1	10	5G 5/1	10	 D		Ciay		
	101K 3/1	10	56 5/1						
		·					. <u> </u>		
							·		
							. <u> </u>		
	Concentration, D=Dep	letion, RM	=Reduced Matrix, MS	S= Masked S	Sand Grains			² Location: PL=Pore L	
	I Indicators: Histosol (A1)				w Surface (S			Indicators for Proble	matic Hydric Soils³: I0) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		L Po	MLRA 149		\mathbf{O} (LKK K,			Redox (A16) (LLR K, L, R)
	Black Histic (A3)		🗂 Thi		ace (S9) (LRI	R R. MLRA	(149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4))			Mineral (F1) (,		S7) (LRR K, L)
	Stratified Layers (A5)		🗌 Loa	amy Gleyed	Matrix (F2)			_ ,	w Surface (S8) (LRR K, L)
	Depleted Below Dark			pleted Matrix					ace (S9) (LRR K, L)
	Thick Dark Surface (dox Dark S	• •				se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral Sandy Gleyed Matrix (pleted Dark dox Depress	Surface (F7)				dplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	(04)		uox Depiesa				Red Parent Ma	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LF	RR R, MLF	RA 149B)					Other (Explain	in Remarks)
a									
	of Hydrophytic vegeta Layer (if observed)		etland hydrology mus	st be presen	it, unless disti	urbed or pr	oblema	tic.	
Type		•						Undria Cail Dracant?	
	 h (inches):							Hydric Soil Present?	Yes 🛛 No 🗌
Remarks:									
rtemanto.									

WETLAND DE	TERMINATION DAT	A FORM – Nor	thcentral an	nd Northeast F	Region
Project/Site: City of Waukesha Park/Former	Milky Way Fill City/County:	City of Waukesha/W	aukesha County	<u>′</u>	Sampling Date: 08/25/2015
Applicant/Owner:			State	e: <u>WI</u>	Sampling Point: <u>13</u>
Investigator(s): Daniel Carter, PhD and Jenn	nifer Dietl; SEWRPC	Section, Township, F	Range: <u>T6N, R19</u>	9 <u>E, SE1/4 S14</u>	
Landform (hillslope, terrace, etc.): Terrace		Local relief (concave	, convex, none):	None	Slope (%): <u>2-6</u>
Subregion (LRR or MLRA): <u>LRR K</u>		Lat: Lor	ng:	Datum:	
Soil Map Unit Name: Casco loam (CeB)				NWI class	sification: <u>None</u>
Are climatic/hydrologic conditions on the site	typical for this time of year?	Yes 🛛 No	(If no, exp	olain in Remarks)	
Are Vegetation, Soil, or Hydrolog	y significantly disturbe	ed? Are "Normal	Circumstances" p	oresent? Yes 🛛	No 🖂
Are Vegetation, Soil, or Hydrology	y naturally problematic	c? (If, needed, e	explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach	n site map showing sa	ampling point lo	cations, tran	sects, importan	t features, etc.
Hydrophytic Vegetation Present? Ye Hydric Soils Present? Ye Wetland Hydrology Present? Ye	es 🛛 No	Is the Sampled within a Wetla		🗌 Yes	⊠No
		If yes, optional	Wetland Site ID:		
Remarks: (Explain alternative procedures I	here or in a separate report.)	"Normal Circumsta	ances" are not	present because c	of agricultural land
management activities (planted crop).					

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HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living R	cots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	s (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes 🗌 No 🛛 Depth (inches):	
Water Table Present? Yes 🗌 No 🛛 Depth (inches):	
· · · /	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes 🗌 No 🛛
	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>13</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Deminant Species
6				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
				Prevalence Index worksheet:
7	<u>0</u>	□ = Total Cov	er	Total % Cover of: Multiply by:
Sanling/Shruh Stratum (Plataiza: 20' radiua)			0.	
Sapling/Shrub Stratum (Plot size: <u>30' radius</u>)				· <u> </u>
1				FACW species x 2 =
2				FAC species x 3 =
3			. <u></u>	FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	/er	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)	-		•	$\square Prevalence Index is \leq 3.0^{\circ}$
1. <u>Glycine max (planted)</u>	<u>55</u>		UPL	Morphological Adaptations ¹ (Provide supporting
	<u>15</u>		FACU	data in Remarks or on a separate sheet)
2. <u>Portulaca oleracea</u>				Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Rumex crispus</u>	<u>5</u>		FAC	¹ Indicators of hydric soil and wetland hydrology must
4. <u>Chenopodium album</u>	<u>3</u>		FACU	Be present, unless disturbed or problematic.
5. <u>Taraxacum offinale</u>	<u>1</u>		FACU	
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Senling/shout Woody plants loss than 2in DDU
10				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
11				
12				Herb – All herbaceous (non-woody) plants, regardless
12	70			of size, and woody plants less than 3.28 ft tall.
	<u>79</u>	= Total Cov	/er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: <u>30' radius</u>)		_		height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov	ver	Present? Yes No
Remarks: (include photo number here or on a separate she	et.) Agricultur	al field.		1

Profile De	scription: (Describe t	o the depth	needed to doc	ument the inc	licator or cor	nfirm the a	bsence	e of indicators.)	
Depth	Matrix			Redox Fea	itures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-9	10YR 3/3	100					Sand	y loam	
9-15	7.5YR 3/4	100						y clay	w/gravel
15-21	7.5YR 4/3	100						y loam	w/gravel
-								,	
	·				·				·
	·				·				·
	·								
	·								
	·				·		·		
					·		·		
¹ Type: C=	Concentration, D=Depl	letion RM=F	Reduced Matrix	MS= Masked	Sand Grains			² Location: PL=Pore	Lining M=Matrix
	il Indicators:		,						ematic Hydric Soils ³ :
	Histosol (A1)			Polyvalue Belo		8) (LRR R,			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		_	MLRA 14	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3)			Thin Dark Surf Loamy Mucky			149B)		Peat or Peat (S3) (LLR K, L, R) (S7) (LRR K, L)
	Hydrogen Sulfide (A4) Stratified Layers (A5)			Loamy Gleyed		LKK K, L)			ow Surface (S8) (LRR K, L)
	Depleted Below Dark S	Surface (A11		Depleted Matri					face (S9) (LRR K, L)
	Thick Dark Surface (A			Redox Dark S					ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral			Depleted Dark					odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (Sandy Redox (S5)	S4)		Redox Depres	sions (F8)			Mesic Spodic	(TA6) (MLRA 144A, 145, 149B) Interial (E21)
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLRA	149B)						n in Remarks)
31	- 6 1 1						- -	41-	
	of Hydrophytic vegetat e Layer (if observed):		and hydrology i	nust be preser	nt, uniess disti	urbed or pro	obiema	tic.	
	: <u>Stones/gravel</u>							Hydric Soil Present	? Yes 🗌 No 🖂
	h (inches): <u>21</u>							,	
Remarks:									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County	: City of Waukesh	a/Waukesha Count	ty	Sampling Date: 08/27/2015
Applicant/Owner:		Sta	ite: <u>WI</u>	Sampling Point: <u>14</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Townshi	ip, Range: <u>T6N, R1</u>	<u>9E, SE1/4 S14</u>	
Landform (hillslope, terrace, etc.): Terrace	Local relief (conc	ave, convex, none)	: <u>None</u>	Slope (%): <u>1-3</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat:	Long:	Datum:	
Soil Map Unit Name: Matherton silt loam (MmA)			NWI clas	sification: <u>None</u>
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🖂	No 🗌 (If no, ex	plain in Remarks)	
Are Vegetation X, Soil X, or Hydrology X significantly disturbed	J? Are "Norn	nal Circumstances"	present? Yes 🛛	No 🗌
Are Vegetation, Soil, or Hydrology naturally problematic	c? (If, neede	d, explain any answ	vers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠ Yes □Yes □Yes	□No ⊠ No ⊠ No	Is the Sampled Area within a Wetland?	□ Yes	⊠No
			If yes, optional Wetland Site ID:		
Remarks: (Explain alternative proce	edures here or in	a separate report.) Wh	nile all three parameters are consi	dered "significantly	disturbed" due to
recent filling and grading activitie	es, "Normal Cii	rcumstances" were de	etermined to be present due to filli	ng and grading aut	horized by WDNR.

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all t	II that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes 🗌 No 🛛 Depth	oth (inches):	
Water Table Present? Yes 🗌 No 🛛 Depth	oth (inches):	
Saturation Present? Yes No Depth (includes capillary fringe)	th (inches): Wetlan	d Hydrology Present? Yes 🗌 No 🛛
	l, aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a	l, aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Ex	l, aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Ex	l, aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Ex	l, aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Ex	l, aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Ex	l, aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Ex	l, aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Ex	l, aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Ex	l, aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Ex	l, aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Ex	l, aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants.

LOLIATION - Use scientific names of plants.	Absolute	Dominant	Indicator	Samping Fold. <u>14</u>
Tree Stratum (Plot size: <u>30' radius</u>)	<u>% Cover</u>	Species?	<u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>2</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	er	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				$\square Prevalence Index is \leq 3.0^{1}$
1. <u>Panicum capillare</u>	<u>20</u>	\boxtimes	FAC	Morphological Adaptations ¹ (Provide supporting
2. <u>Setaria pumila</u>	<u>15</u>	\boxtimes	FAC	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
3. Echinochloa crus-galli	<u>5</u>		FAC	
4. <u>Chenopodium album</u>	<u>4</u>		FACU	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. <u>Panicum dichotomiflorum</u>	<u>3</u>		FACW	
6. <u>Taraxacum offinale</u>	<u>2</u>		FACU	Definitions of Vegetation Strata:
7. <u>Puccinellia distans</u>	<u>1</u>		FACW	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Conting (church - Weady plants less than 2in DDL)
10.				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
11				
12				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
12	<u>50</u>	= Total Cov		
Weedy Vine Stratum (Plat aize: 20' radius)	<u></u>	- 10(01 000		Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: <u>30' radius</u>)				height
1		_		
2				
3				Hydrophytic Vegetation
4				Vegetation Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate	<u>0</u>	= Total Cov		

Profile Des	scription: (Describe to	the depth r	eeded to doo	cument the inc	licator or cor	firm the at	osence	of indicators.)	
Depth	Matrix			Redox Fea	itures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	-	Texture	Remarks
0-15	7.5YR 3/4		, ,				Sandy		w/rocks (fill)
	1.011(0,1				·		Carray	olay	
	·								
					·				
					· . <u></u>				
	·								
					<u> </u>				
<u> </u>					·				
¹ Type: C=0	Concentration, D=Deple	tion, RM=Re	educed Matrix.	MS= Masked	Sand Grains		2	² Location: PL=Po	re Lining, M=Matrix
	I Indicators:		,						blematic Hydric Soils ³ :
	Histosol (A1)			Polyvalue Belo		8) (LRR R,			(A10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,			Coast Prair	ie Redox (A16) (LLR K, L, R)
	Black Histic (A3)			Thin Dark Surf			149B)		y Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)			Loamy Mucky	. , ,	LRR K, L)			ce (S7) (LRR K, L)
	Stratified Layers (A5)			Loamy Gleyed					Below Surface (S8) (LRR K, L)
	Depleted Below Dark S			Depleted Matri					Surface (S9) (LRR K, L)
	Thick Dark Surface (A12			Redox Dark Si	• •				inese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (S Sandy Gleyed Matrix (S			Depleted Dark Redox Depres					loodplain Soils (F19) (MLRA 149B) dic (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	94)		Redux Depies	510115 (FO)				Material (F21)
	Stripped Matrix (S6)								w Dark Surface (TF12)
	Dark Surface (S7) (LRR	R. MLRA 1	49B)						ain in Remarks)
			,					— 、 ·	,
	of Hydrophytic vegetation	on and wetla	nd hydrology	must be preser	nt, unless distu	urbed or pro	blemati	ic.	
	e Layer (if observed):								
	: <u>rocks</u>						н	lydric Soil Prese	nt? Yes 🗌 No 🖾
	n (inches): <u>15</u>								
Remarks:									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	City of Waukesh	na/Waukesha Count	<u>y</u>	Sampling Date: 08/27/2015
Applicant/Owner:		Sta	te: <u>WI</u>	Sampling Point: <u>15</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Townshi	iip, Range: <u>T6N, R1</u>	9E, SE1/4 S14	
Landform (hillslope, terrace, etc.): Low terrace	Local relief (conc	cave, convex, none):	: <u>None</u>	Slope (%): <u>1-3</u>
Subregion (LRR or MLRA): LRR K	Lat:	Long:	Datum:	
Soil Map Unit Name: Matherton silt loam (MmA)			NWI clas	sification: <u>F0Kf</u>
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🖂	No 🗌 (If no, ex	plain in Remarks)	
Are Vegetation, Soil, or Hydrology significantly disturbe	d? Are "Norr	mal Circumstances"	present? Yes 🖂	No 🗖
Are Vegetation, Soil, or Hydrology naturally problematic	c? (If, neede	ed, explain any answ	vers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID: PC	<u>A 6</u>	
	nificantly distu	rbed" since fill materia	ile vegetation, soils, and hydrolog al is too thin to obscure indicators.	-	

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required	; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
□ Water marks (B1) ⊠ Sediment Deposits (B2) □ Drift Deposits (B3) □ Algal Mat or Crust (B4)	Oxidized Rhizospheres on Living F	Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Sol	ls (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery	(B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface	e (B8)	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes 🗌 No	Depth (inches):	
Water Table Present? Yes 🗌 No	Depth (inches):	
Saturation Present? Yes No (includes capillary fringe)	Depth (inches): <u>11</u>	Wetland Hydrology Present? Yes 🛛 No 🗌
(includes capillary fringe) Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspections), if a	Wetland Hydrology Present? Yes No Ivailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map 13), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monit (Exhibit 3), Aerial photographs (Exhibit 4), Site	oring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monit (Exhibit 3), Aerial photographs (Exhibit 4), Site	oring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monit (Exhibit 3), Aerial photographs (Exhibit 4), Site	oring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monit (Exhibit 3), Aerial photographs (Exhibit 4), Site	oring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monit (Exhibit 3), Aerial photographs (Exhibit 4), Site	oring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monit (Exhibit 3), Aerial photographs (Exhibit 4), Site	oring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monit (Exhibit 3), Aerial photographs (Exhibit 4), Site	oring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monit (Exhibit 3), Aerial photographs (Exhibit 4), Site	oring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monit (Exhibit 3), Aerial photographs (Exhibit 4), Site	oring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monit (Exhibit 3), Aerial photographs (Exhibit 4), Site	oring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>15</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>2</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	er	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				$\square \text{ Prevalence Index is } \leq 3.0^{1}$
1. <u>Panicum capillare</u>	<u>25</u>	\boxtimes	FAC	Morphological Adaptations ¹ (Provide supporting
2. <u>Echinochloa crus-galli</u>	<u>20</u>	\boxtimes	FAC	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Persicaria lapathifolia</u>	<u>7</u>		FACW	
	<u>5</u>		FACU	¹ Indicators of hydric soil and wetland hydrology must
4. <u>Chenopodium album</u>	3		FACU	Be present, unless disturbed or problematic.
5. <u>Setaria faberi</u>			<u>UPL</u>	Definitions of Vegetation Strata:
6. <u>Daucus carota</u>	<u>3</u>			
7. <u>Amaranthus retroflexus</u>	<u>1</u>		FACU	Tree – Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>64</u>	= Total Cov	er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov	er	Present? Yes No
Remarks: (include photo number here or on a separate sheet				1
	-			

Sampling Point: 15

Profile Des	scription: (Describe t	o the dep	th needed to docum	ent the ind	licator or cor	firm the al	bsence	of indicators.)	
Depth	Matrix			Redox Fea	tures		_		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-5	7.5YR 3/4	100				·	Sand	y loam	w/gravel fill
5-7	10YR 2/1	100		·	·		Clay I		<u> </u>
7-15	2.5Y 4/2	98	10YR 5/8	2	С	PL M	Clay	oum	w/gravel
7-10	2.51 4/2	90	10TK 5/6				Clay		wgraver
					·				
					·				
				·	·				
				·	·				
¹ Type: C=0	Concentration, D=Dep	letion, RM	=Reduced Matrix, MS	S= Masked \$	Sand Grains			² Location: PL=Pore I	_ining, M=Matrix
	I Indicators:	,	, .	-					matic Hydric Soils ³ :
	Histosol (A1)		D Pol		w Surface (S	8) (LRR R,			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LRI		149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) (LRR K, L)			(S7) (LRR K, L)
	Stratified Layers (A5) Depleted Below Dark \$	Surface (A		pleted Matr	Matrix (F2)				ow Surface (S8) (LRR K, L) face (S9) (LRR K, L)
	Thick Dark Surface (A			dox Dark Su					se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral				Surface (F7)				odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (🗌 Re	dox Depres	sions (F8)				(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)							Red Parent M	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	(A 149B)					Other (Explain	in Remarks)
³ Indicators	of Hydrophytic vegeta	tion and w	etland hydrology mus	st be presen	nt. unless disti	urbed or pro	oblema	tic.	
	Layer (if observed)		onalia ilgalology illa			and du or pro			
	gravel							Hydric Soil Present?	Yes 🛛 No 🗌
Dept	n (inches): <u>15</u>							-	
Remarks:									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	City of Waukesha/Waukesha County	Sampling Date: 08/27/2015
Applicant/Owner:	State: <u>WI</u>	Sampling Point: <u>16</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range: T6N, R19E, SE1/4 S14	
Landform (hillslope, terrace, etc.): Swale	Local relief (concave, convex, none): Concave	Slope (%): <u>1-3</u>
Subregion (LRR or MLRA): LRR K	Lat: Long: Datum:	
Soil Map Unit Name: Matherton silt loam (MmA)	NWI class	sification: <u>F0Kf</u>
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛 No 🗌 (If no, explain in Remarks)	
Are Vegetation, Soil_X_, or Hydrology significantly disturbed	d? Are "Normal Circumstances" present? Yes □	No 🖂
Are Vegetation, Soil, or Hydrology naturally problematic	? (If, needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID: PC	A 6	
	dicator (A12) -	,	dimentation of agricultural field rur "Normal Circumstances" are not p	,	0

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>16</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>1</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	ver	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	ver	Rapid Test for Hydrophytic Vegetation Dominance Test is >50% Demonstrate to demine <2.01
Herb Stratum (Plot size: <u>5' radius</u>)	70		EAC	 □ Prevalence Index is ≤3.0¹ □ Morphological Adaptations¹ (Provide supporting
1. <u>Echinochloa crus-galli</u>	<u>70</u>		FAC	data in Remarks or on a separate sheet)
2. <u>Agrostis gigantea</u>	<u>15</u>		FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Panicum dichotomiflorum</u>	<u>10</u>		FACW	¹ Indicators of hydric soil and wetland hydrology must
4. Bidens frondosa	<u>10</u>		FACW	Be present, unless disturbed or problematic.
5. Persicaria lapathifolia	<u>5</u>		FACW	
6. <u>Trifolium pratense</u>	<u>3</u>		FACU	Definitions of Vegetation Strata:
7. <u>Euthamia graminifolia</u>	<u>3</u>		FAC	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>116</u>	= Total Cov	/er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov	/er	Present? Yes No
Remarks: (include photo number here or on a separate sl				

Profile Des	scription: (Describe t	o the dep	oth needed to docum	ent the ind	licator or cor	nfirm the a	bsence of indicators.)	
Depth	Matrix			Redox Fea	tures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-2	10YR 3/2						Loam	sediment deposits
2-17	10YR 2/1						Loam	
17-20	2.5Y 4/1	98	10YR 4/6	2	С	PL M	Clay	
20-29	2.5Y 5/2	50	10YR 3/6-5/6	20	С	PL M	Clay	w/gravel
	10YR 2/1	15	5G 5/1	15	D	PL		
			·					
								- · -
					·			
					·			
					·			
¹ Type: C=0	Concentration, D=Dep	letion. RM	I=Reduced Matrix, MS	= Masked S	Sand Grains		² Location: PL=Pore	Lining, M=Matrix
	I Indicators:							lematic Hydric Soils ³ :
	Histosol (A1)				w Surface (S	8) (LRR R ,	2 cm Muck (/	A10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		_	MLRA 149	,			e Redox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LR			Peat or Peat (S3) (LLR K, L, R) e (S7) (LRR K, L)
	Hydrogen Sulfide (A4) Stratified Layers (A5)				Mineral (F1) (Matrix (F2)			elow Surface (S8) (LRR K, L)
	Depleted Below Dark	Surface (A		pleted Matri				Inface (S9) (LRR K, L)
	Thick Dark Surface (A			lox Dark Su	· ·		🗌 Iron-Mangan	ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral				Surface (F7)			oodplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (Sandy Redox (S5)	S4)		lox Depres	sions (F8)			c (TA6) (MLRA 144A, 145, 149B) Material (F21)
	Stripped Matrix (S6)							/ Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	RA 149B)				-	ain in Remarks)
	of Hydrophytic vegeta Layer (if observed)		vetland hydrology mus	t be presen	it, unless dist	urbed or pr	oblematic.	
	E Layer (II Observed)	•					Hudria Sail Draaan	
	n (inches):						Hydric Soil Present	? Yes 🛛 No 🗌
		n from a	gricultural field rung	off formed	a fill layer o	ver 15 inc	nes of dark soil. This soil	would meet the A12
	ent if the fill were not		-		,			
		•						

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County	City of Waukesha/Waukesha County	Sampling Date: 08/27/2015
Applicant/Owner:	State: <u>WI</u>	Sampling Point: <u>17</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range: T6N, R19E, SE1/4 S14	
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave, convex, none): None	Slope (%): <u></u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:	
Soil Map Unit Name: Drummer silt loam, gravelly substratum (Dt)		NWI classification: None
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛 No 🗌 (If no, explain in Remarks)	
Are Vegetation X, Soil X, or Hydrology X significantly disturbed	? Are "Normal Circumstances" present? Yes 🛛	No 🗌
Are Vegetation, Soil, or Hydrology naturally problemation	? (If, needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing sa	ampling point locations, transects, importa	nt features. etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	□Yes □Yes □Yes	⊠No ⊠No ⊠No	Is the Sampled Area within a Wetland?	🗌 Yes	⊠No
			If yes, optional Wetland Site ID:		
Remarks: (Explain alternative proce	edures here or ir	a separate report.) Wh	nile all three parameters (soils, ve	getation, and h	ydrology) are "significantly
disturbed" due to filling and grac	ding. "Normal (Circumstances" are pr	esent due to authorization grante	d by WDNR.	

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is require	ed; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
 Saturation (A3) Water marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) 	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living R	oots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soil	ls (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Image	ery (B7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Sur	face (B8)	FAC-Neutral Test (D5)
Field Observations:		
	Depth (inches):	
Water Table Present? Yes 🗌 No	Depth (inches):	
	,	
Saturation Present? Yes 🗌 No	Depth (inches):	Wetland Hydrology Present? Yes 🗌 No 🛛
Saturation Present? Yes I No (includes capillary fringe)	_ , ,	
Saturation Present? Yes No. (includes capillary fringe) Describe Recorded Data (stream gauge, mo.	nitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No. (includes capillary fringe) Describe Recorded Data (stream gauge, mo.	nitoring well, aerial photos, previous inspections), if a	
Saturation Present? Yes No. (includes capillary fringe) Describe Recorded Data (stream gauge, mo.	nitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, mo (Exhibit 3), Aerial photographs (Exhibit 4), S	nitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, mo (Exhibit 3), Aerial photographs (Exhibit 4), S	nitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, mo (Exhibit 3), Aerial photographs (Exhibit 4), S	nitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, mo (Exhibit 3), Aerial photographs (Exhibit 4), S	nitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, mo (Exhibit 3), Aerial photographs (Exhibit 4), S	nitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, mo (Exhibit 3), Aerial photographs (Exhibit 4), S	nitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, mo (Exhibit 3), Aerial photographs (Exhibit 4), S	nitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, mo (Exhibit 3), Aerial photographs (Exhibit 4), S	nitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, mo (Exhibit 3), Aerial photographs (Exhibit 4), S	nitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, mo (Exhibit 3), Aerial photographs (Exhibit 4), S	nitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants.

/EGETATION – Use scientific names of plants.				Sampling Point: <u>17</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
B				Total Number of Dominant
k				Species Across All Strata: <u>1</u> (B)
i				Percent of Dominant Species
				That Are OBL, FACW, or FAC: 0% (A/B)
				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
l				FACW species x 2 =
<u>. </u>				FAC species x 3 =
·				FACU species x 4 =
				UPL species x 5 =
5				Column Totals: (A) (B
)				Prevalence Index = B/A =
· ·				Hydrophytic Vegetation Indicators:
·	<u>0</u>	= Total Cov	/er	Rapid Test for Hydrophytic Vegetation
<u>lerb Stratum</u> (Plot size: <u>5' radius</u>)	-			 □ Dominance Test is >50% □ Prevalence Index is ≤3.0¹
I. <u>Plantago lanceolata</u>	<u>70</u>	\boxtimes	FACU	Morphological Adaptations ¹ (Provide supporting
2. <u>Melilotus officinalis</u>	20		FACU	data in Remarks or on a separate sheet)
B. Elymus repens	12		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
	<u>10</u>		FACU	¹ Indicators of hydric soil and wetland hydrology must
Ambrosia artemisiifolia				Be present, unless disturbed or problematic.
. <u>Taraxicum officinale</u>	<u>8</u>		FACU	Definitions of Vegetation Strata:
. <u>Cichorium intybus</u>	<u>5</u>		FACU	Demittons of Vegetation offata.
. <u>Phleum pratense</u>	<u>3</u>		<u>FACU</u>	Tree – Woody plants 3in. (7.6 cm) or more in diamete
B				at breast height (DBH), regardless of height
				Sapling/shrub – Woody plants less than 3in. DBH
0				and greater than 3.28 ft (1 m) tall.
1				Herb – All herbaceous (non-woody) plants, regardles:
2				of size, and woody plants less than 3.28 ft tall.
	<u>128</u>	= Total Cov	/er	
<u>Voody Vine Stratum</u> (Plot size: <u>30' radius</u>)				Woody vines – All woody vines greater than 3.28 ft ir height
·				
·				
 3				Li dranku tin
·· <u></u>				Hydrophytic Vegetation
	<u> </u>	= Total Cov		Present? Yes No 🛛
Remarks: (include photo number here or on a separate s				1

Sampling Point: 17

Profile Des	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix			Redox Feat	ures		_		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-6	10YR 3/2	60					Clay l	oam	fill material w/rocks
	10YR 2/1	30					oldy i		
	10YR 3/3	10							
6-20	10YR 4/2	40	5YR 4/6	25	C	PL M	Clay l	oam	fill material w/rocks
	10YR 4/3	35							
			·						
	Concentration, D=Depl	ation DM	-Reduced Matrix MC	= Maakad G	Sand Grains		:	² Location: PL=Pore I	ining M=Matrix
	Indicators:			- ividskeu S					ematic Hydric Soils ³ :
	Histosol (A1)			vvalue Belov	w Surface (S	8) (LRR R .			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,	•) (======			Redox (A16) (LLR K, L, R)
	Black Histic (A3)		🗌 Thii	n Dark Surfa	ace (S9) (LRI	R R, MLRA	149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) (LRR K, L)			(S7) (LRR K, L)
	Stratified Layers (A5)			my Gleyed					ow Surface (S8) (LRR K, L)
	Depleted Below Dark S		· · ·	pleted Matrix	· ·				face (S9) (LRR K, L)
	Thick Dark Surface (A			lox Dark Su	• •				se Masses (F12) (LRR K, L, R) odplain Soils (F19) (MLRA 149B)
	Sandy Mucky Mineral (Sandy Gleyed Matrix (lox Depress	Surface (F7)				(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	04)		ION Depicos				Red Parent M	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	RA 149B)					Other (Explain	
	of Hydrophytic vegetat		vetland hydrology mus	t be present	t, unless distu	urbed or pro	oblemat	lic.	
	Layer (if observed):								
	fill-rocks						ľ	Hydric Soil Present?	Yes 🗌 No 🖾
-	n (inches): <u>20</u>								
Remarks:									
1									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	: City of Waukesh	a/Waukesha Count	Y	Sampling Date: 08/25/2015
Applicant/Owner:		Sta	te: <u>WI</u>	Sampling Point: <u>18</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Townsh	ip, Range: T6N, R1	<u>9E, SE1/4 S14</u>	
Landform (hillslope, terrace, etc.): Depression	Local relief (conc	ave, convex, none):	<u>Concave</u>	Slope (%): <u>6-12</u>
Subregion (LRR or MLRA): LRR K	Lat:	Long:	Datum:	
Soil Map Unit Name: Hochheim Ioam (HmC2)			NWI clas	sification: None
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🖂	No 🗌 (If no, ex	plain in Remarks)	
Are Vegetation X, Soil X, or Hydrology X significantly disturbed	d? Are "Norr	nal Circumstances"	present? Yes	No 🗌
Are Vegetation, Soil, or Hydrology naturally problematic	c? (If, neede	ed, explain any answ	vers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No	
			If yes, optional Wetland Site ID: PC	A 4		
Remarks: (Explain alternative proce	edures here or in	a separate report.) Ori	ginal soils, vegetation, and hydrol	ogy have been	"significantly disturbed"	
due to extensive filling and gradi	ing. These acti	vities, which were aut	horized by WDNR, resulted in a s	mall depressio	n adjacent to a large pile.	
This small depression holds water long enough to support wetland conditions.						

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; che	eck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C	3) Saturation Visible on Aerial Imagery (C9)
Water marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7	7) Dther (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (E	38)	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes 🗌 No 🛛	Depth (inches):	
Water Table Present? Yes 🗌 No 🛛	Depth (inches):	
Saturation Present? Yes No	Depth (inches): <u>16</u> Wetlan	d Hydrology Present? Yes 🛛 No 🗌
(includes capillary fringe)		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring		Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	g well, aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map S tables (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	g well, aerial photos, previous inspections), if available: tos (Exhibit 10), FSA slide review (Exhibits 11-13), WET	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map S tables (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	g well, aerial photos, previous inspections), if available: tos (Exhibit 10), FSA slide review (Exhibits 11-13), WET	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map S tables (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	g well, aerial photos, previous inspections), if available: tos (Exhibit 10), FSA slide review (Exhibits 11-13), WET	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map S tables (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	g well, aerial photos, previous inspections), if available: tos (Exhibit 10), FSA slide review (Exhibits 11-13), WET	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map S tables (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	g well, aerial photos, previous inspections), if available: tos (Exhibit 10), FSA slide review (Exhibits 11-13), WET	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map S tables (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	g well, aerial photos, previous inspections), if available: tos (Exhibit 10), FSA slide review (Exhibits 11-13), WET	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map S tables (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	g well, aerial photos, previous inspections), if available: tos (Exhibit 10), FSA slide review (Exhibits 11-13), WET	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map S tables (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	g well, aerial photos, previous inspections), if available: tos (Exhibit 10), FSA slide review (Exhibits 11-13), WET	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map S tables (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	g well, aerial photos, previous inspections), if available: tos (Exhibit 10), FSA slide review (Exhibits 11-13), WET	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map S tables (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	g well, aerial photos, previous inspections), if available: tos (Exhibit 10), FSA slide review (Exhibits 11-13), WET	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map S tables (Exhibit 14), Draft NRCS map (Exhibit 15)

VEGETATION - Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>18</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>5</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>6</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>83%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: <u>30' radius</u>)				OBL species x 1 =
1. <u>Salix amygdaloides</u>	<u>15</u>	\boxtimes	FACW	FACW species x 2 =
2. Salix interior	<u>5</u>	\boxtimes	FACW	FAC species x 3 =
3. <u>Salix bebbiana</u>	<u>2</u>		FACW	FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>22</u>	= Total Cov	ver	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				Prevalence Index is ≤3.0 ¹
1. <u>Scirpus atrovirens</u>	<u>30</u>	\boxtimes	<u>OBL</u>	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. <u>Typha angustifolia</u>	<u>20</u>	\boxtimes	OBL	□ Problematic Hydrophytic Vegetation ¹ (Explain)
3. Symphyotrichum pilosum	<u>15</u>	\boxtimes	FACU	1 le dissione effecteire e dissedere d'hand hade le second
4. <u>Agrostis gigantea</u>	<u>15</u>	\boxtimes	FACW	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. <u>Solidago altissima</u>	<u>10</u>		FACU	
6. <u>Salix interior</u>	<u>10</u>		FACW	Definitions of Vegetation Strata:
7. <u>Juncus dudleyi</u>	<u>5</u>		FACW	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. <u>Salix amygdaloides</u>	<u>5</u>		FACW	at breast height (DBH), regardless of height
9. <u>Trifolium pratense</u>	<u>5</u>		FACU	Sapling/shrub – Woody plants less than 3in. DBH
10. <u>Plantago lanceolata</u>	<u>5</u>		FACU	and greater than 3.28 ft (1 m) tall.
11. <u>Elymus repens</u>	<u>5</u>		FACU	Herb – All herbaceous (non-woody) plants, regardless
12. Symphyotrichum lanceolatum	<u>3</u>		FACW	of size, and woody plants less than 3.28 ft tall.
	<u>134*</u>	= Total Cov	ver	We advertise All used wines product then 2.20 ft in
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov	/er	Present? Yes 🛛 No 🗌
Remarks: (include photo number here or on a separate sh	eet.) Shallow n	narsh and shi	rub-carr. *Ad	ditional species in herb stratum include: Euthamia

Remarks: (include photo number here or on a separate sheet.) Shallow marsh and shrub-carr. *Additional species in herb stratum include: Euthamia graminifolia FAC 3; Dipsacus sp. FACU 2; and Ambrosia trifida FAC 1.

Profile Des	scription: (Describe t	to the dep	oth needed to docum	ent the ind	licator or cor	firm the a	bsence	e of indicators.)	
Depth	Matrix			Redox Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-1	10YR 3/2						Clay		fill
1-16	10YR 2/1	25	7.5YR 3/4	25	С	PL M	Clay		fill w/rocks
1-10			7.511 5/4				Ciay	IUalli	III WIOCKS
	10YR 3/2	30							
	10YR 4/2	20							
16-20	10YR 4/3	100					Sand	y clay loam	fill/gravel
	Concentration D-Dar	lation D	-Doducod Matrix MC	- Mookod (Cond Croins			2 postion: DI -Dort	Lipipa M-Motrix
	Concentration, D=Dep I Indicators:		i-requiced inatrix, MS	- iviasked S	Sanu Grains			² Location: PL=Pore	Lining, M=Matrix ematic Hydric Soils ³ :
-	Histosol (A1)		🗌 Pol	vvalue Relo	w Surface (S	8) (I RR P			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149		0) (L IXIX IX,			Redox (A16) (LLR K, L, R)
	Black Histic (A3)		🗍 Thi		ace (S9) (LRI		149R)		Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)	1			Mineral (F1) ((1450)		(S7) (LRR K, L)
	Stratified Layers (A5)	,			Matrix (F2)	LININ, L/			ow Surface (S8) (LRR K, L)
	Depleted Below Dark	Surface (A		pleted Matrix				_ ,	face (S9) (LRR K, L)
	Thick Dark Surface (A				urface (F6)				ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral				Surface (F7)				odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (dox Depress					(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	(-)			(-)			Red Parent M	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LF	RR R, MLF	RA 149B)					Other (Explain	
	of Hydrophytic vegeta		vetland hydrology mus	st be presen	it, unless disti	urbed or pro	oblema	tic.	
	e Layer (if observed)	:							
	: <u></u>						l	Hydric Soil Present	? Yes 🛛 No 🗌
	n (inches):								
Remarks:									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County	: City of Waukesha/Waukesha County	Sampling Date: 08/25/2015
Applicant/Owner:	State: <u>WI</u>	Sampling Point: <u>19</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range: T6N, R19E, SE1/4 S14	
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none): Concave	Slope (%): <u></u>
Subregion (LRR or MLRA): LRR K	Lat: Long: Datum:	
Soil Map Unit Name: Drummer silt loam, gravelly substratum (Dt)		NWI classification: F0Kf
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛 No 🗌 (If no, explain in Remarks)	
Are Vegetation, Soil, or Hydrology significantly disturbed	ed? Are "Normal Circumstances" present? Yes 🖂	No 🗌
Are Vegetation, Soil, or Hydrology naturally problematic	c? (If, needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing sa	ampling point locations, transects, importan	t features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	🛛 Yes	□No
			If yes, optional Wetland Site ID: PC	A 7	
Remarks: (Explain alternative proce	dures here or in	a separate report.) Ag	ricultural field not plowed or plante	ed in 2015.	

Wetland Hydrology Indicators:	Se	condary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	<u>۵</u>	Surface Soil Cracks (B6)
Surface Water (A1)	er-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	atic Fauna (B13)	- Moss Trim Lines (B16)
Saturation (A3)	Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1)	rogen Sulfide Odor (C1)	- Crayfish Burrows (C8)
Saturation (A3) Marl Water marks (B1) Hydr Sediment Deposits (B2) Oxidi Drift Deposits (B3) Press Algal Mat or Crust (B4) Rece	ized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	ence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	ent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	er (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	\boxtimes	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes I No I Depth (inches):	:	
M_{abar} Table Descent M_{abar} M_{abar} M_{abar} M_{abar} M_{abar} M_{abar}		
Water Table Present? Yes No No Depth (inches):	·	
Saturation Present? Yes 🛛 No 🗌 Depth (inches):		logy Present? Yes 🛛 No 🗌
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	23 Wetland Hydro	••
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available: Topo m	ap (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	tos, previous inspections), if available: Topo m	ap (Exhibit 1), WWI map (Exhibit 2), Soils map
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Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	: 23 Wetland Hydro otos, previous inspections), if available: Topo m FSA slide review (Exhibits 11-13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10),	: 23 Wetland Hydro otos, previous inspections), if available: Topo m FSA slide review (Exhibits 11-13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10),	: 23 Wetland Hydro otos, previous inspections), if available: Topo m FSA slide review (Exhibits 11-13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10),	: 23 Wetland Hydro otos, previous inspections), if available: Topo m FSA slide review (Exhibits 11-13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10),	: 23 Wetland Hydro otos, previous inspections), if available: Topo m FSA slide review (Exhibits 11-13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10),	: 23 Wetland Hydro otos, previous inspections), if available: Topo m FSA slide review (Exhibits 11-13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10),	: 23 Wetland Hydro otos, previous inspections), if available: Topo m FSA slide review (Exhibits 11-13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10),	: 23 Wetland Hydro otos, previous inspections), if available: Topo m FSA slide review (Exhibits 11-13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10),	: 23 Wetland Hydro otos, previous inspections), if available: Topo m FSA slide review (Exhibits 11-13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10),	: 23 Wetland Hydro otos, previous inspections), if available: Topo m FSA slide review (Exhibits 11-13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10),	: 23 Wetland Hydro otos, previous inspections), if available: Topo m FSA slide review (Exhibits 11-13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>19</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: $\underline{4}$ (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>5</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>80%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	rer	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	er	 Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				Prevalence Index is ≤3.0 ¹
1. Erigeron philadelphicus	<u>20</u>	\boxtimes	FAC	Morphological Adaptations ¹ (Provide supporting
2. <u>Scirpus atrovirens</u>	<u>15</u>	\boxtimes	<u>OBL</u>	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Bidens vulgata</u>	<u>15</u>	\boxtimes	FAC	
4. <u>Daucus carota</u>	<u>15</u>	\boxtimes	<u>UPL</u>	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. <u>Juncus dudlevi</u>	<u>12</u>	\boxtimes	FACW	
6. <u>Typha angustifolia</u>	<u>10</u>		<u>OBL</u>	Definitions of Vegetation Strata:
7. <u>Euthamia graminifolia</u>	<u>10</u>		FAC	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. <u>Plantago major</u>	<u>10</u>		FACU	at breast height (DBH), regardless of height
9. <u>Panicum capillare</u>	<u>10</u>		FAC	Sapling/shrub – Woody plants less than 3in. DBH
10. <u>Rumex crispus</u>	<u>8</u>		FAC	and greater than 3.28 ft (1 m) tall.
11. <u>Erigeron strigosus</u>	<u>5</u>		FACU	Herb – All herbaceous (non-woody) plants, regardless
12. Trifolium pratense	<u>4</u>		FACU	of size, and woody plants less than 3.28 ft tall.
	<u>148*</u>	= Total Cov	er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov	rer	Present? Yes 🛛 No 🗌
Bomarka: (include photo number here or on a congrate she	at) Freeh (we	t) moodow in		d *Additional anagina in barb stratum include:

Remarks: (include photo number here or on a separate sheet.) Fresh (wet) meadow in a fallow field. *Additional species in herb stratum include: Artemisia biennis FACW 3; Taraxicum officinale FACU 3; Erigeron canadensis FACU 3; Epilobium coloratum OBL 3; and Symphyotrichum pilosum FACU 2.

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix			Redox Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-10	10YR 2/1	100					Clay lo		
10-16			10YR 5/6	10					
10-10	10YR 5/1	80	1018 5/0	10	C	PL M	Clay		
	10YR 2/1	10							
16-25	5GY 5/1	40	10YR 6/8	50	С	PL M	Clay		
	5G 5/1	10							
								· ·	
								·	
	Concentration D-D	lation DM	-Doducod Motrix MC	- Mookod (Sand Crains			2 ocation: DI-Dora !	ining M-Matrix
	Concentration, D=Dep I Indicators:	ieuon, RN	-Reduced Matrix, MS	- iviasked S	Sanu Grains			² Location: PL=Pore L ndicators for Probler	
-	Histosol (A1)		🗌 Pol	vvalue Relo	w Surface (S	8) (I RR P			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149		0) (L IXIX IX,			Redox (A16) (LLR K, L, R)
	Black Histic (A3)		🗍 Thi		ace (S9) (LRI	R R. MLRA	149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) (- /		S7) (LRR K, L)
	Stratified Layers (A5)		🗌 Loa	amy Gleyed	Matrix (F2)			Polyvalue Belo	w Surface (S8) (LRR K, L)
	Depleted Below Dark			pleted Matrix					ace (S9) (LRR K, L)
	Thick Dark Surface (A			dox Dark Su					se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral				Surface (F7)				dplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (Sandy Redox (S5)	S4)		dox Depress	sions (F8)			Mesic Spodic ((TA6) (MLRA 144A, 145, 149B)
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R. MLF	A 149B)					Other (Explain	
	of Hydrophytic vegeta		etland hydrology mus	st be presen	t, unless distu	urbed or pro	oblemat	ic.	
Restrictive	e Layer (if observed)								
Туре							F	Hydric Soil Present?	Yes 🛛 No 🗌
Depth	n (inches):								
Remarks:									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	City of Waukesha/Waukesha County	Sampling Date: 08/25/2015
Applicant/Owner:	State: <u>WI</u>	Sampling Point: <u>20</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range: T6N, R19E, SE1/4 S14	
Landform (hillslope, terrace, etc.): Low terrace	Local relief (concave, convex, none): Slightly concave	Slope (%): <u></u>
Subregion (LRR or MLRA): LRR K	Lat: Long: Datum:	
Soil Map Unit Name: Drummer silt loam, gravelly substratum (Dt)		NWI classification: F0Kf
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛 No 🔲 (If no, explain in Remarks)	
Are Vegetation X, Soil, or Hydrology significantly disturbed	d? Are "Normal Circumstances" present? Yes	No 🖂
Are Vegetation, Soil, or Hydrology naturally problematic	c? (If, needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID	: <u>PCA 7</u>	
Remarks: (Explain alternative proce present because of agricultural					ircumstances" are not

Wetland Hydrology Indicators:		Seco	ondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check a	all that apply)		Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)		Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)
 High Water Table (A2) Saturation (A3) Water marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) 	Marl Deposits (B15)		Dry-Season Water Table (C2)
Water marks (B1)	Hydrogen Sulfide Odor (C1)		Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Ro	oots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)		Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Se	oils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)		Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)		Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)
Field Observations:			
Surface Water Present? Yes 🗌 No 🛛 De	epth (inches):		
Water Table Present? Yes 🗌 No 🛛 De	epth (inches):		
	epth (inches):	Wetland Hydrold	ogy Present? Yes 🛛 No 🗌
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring we (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (,		
Remarks: FSA slide review indicates that 7 out of	9 (78%) normal years show signatures	s of saturation.	

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 20
Tree Stratum (Plot size: <u>30' radius</u>)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 0% (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species <u>0</u> x 1 = <u>0</u>
1				FACW species $\underline{0} \times 2 = \underline{0}$
2				FAC species $\underline{3} \times 3 = \underline{9}$
3				FACU species $5 \times 4 = 20$
4				UPL species $100 \times 5 = 500$
5				Column Totals: <u>108</u> (A) <u>529</u> (B)
6				Prevalence Index = $B/A = 4.90$
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	er	 Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				□ Prevalence Index is $\leq 3.0^{1}$
1. <u>Glycine max (planted)</u>	<u>100</u>	\boxtimes	UPL	Morphological Adaptations ¹ (Provide supporting
2. Portulaca oleracea	<u>5</u>		FACU	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
3. Panicum capillare	<u>3</u>		FAC	
4				¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5				
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Oralla de basis - Marchende la cotto a Ora-DDU
10.				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
11.				
12				Herb – All herbaceous (non-woody) plants, regardless
12.	108	= Total Cov		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: 30' radius)			01	Woody vines – All woody vines greater than 3.28 ft in
· · · · · · · · · · · · · · · · · · ·				height
1				
2 3.				
3				Hydrophytic Vegetation
4				Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sh	<u>0</u> eet) Atynical (1	= Total Cov farmed) wetla		
remaine. (include proto number nere or on a separate sit	cci.) Alypical (I		na. vegetat	ion is providinatio because of agricultural fallu

Remarks: (include photo number here or on a separate sheet.) Atypical (farmed) wetland. Vegetation is problematic because of agricultural land management activities (managed plant community). Indicators of hydric soils and wetland hydrology are present.

-	scription: (Describe 1	to the dep	orn needed to docu			ntirm the a	psence of indicators	5.)
Depth	Matrix			Redox Feat			_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8	10YR 2/1	100					Loam	
8-12	2.5Y 4/1.5	97	10YR 5/8	3	C	PL M	Clay loam	
12-17	2.5Y 4/2	95	10YR 5/8	5	С	PL M	Clay loam	
17-25	2.5Y 5/2	80	10YR 5/6	15	С	PL M	Clay	
	10YR 2/1	5						
		·						
			·					
							·	
	-							
¹ Type: C=0	Concentration, D=Dep	letion, RM	1=Reduced Matrix, M	IS= Masked S	Sand Grains		² Location: PL	=Pore Lining, M=Matrix
	I Indicators:						Indicators for	Problematic Hydric Soils ³ :
	Histosol (A1)			olyvalue Belo		8) (LRR R ,		1uck (A10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,			Prairie Redox (A16) (LLR K, L, R)
	Black Histic (A3) Hydrogen Sulfide (A4))		hin Dark Surfa bamy Mucky I				lucky Peat or Peat (S3) (LLR K, L, R) urface (S7) (LRR K, L)
	Stratified Layers (A5))		barny Mucky I		(LIXIX IX, L)		lue Below Surface (S8) (LRR K, L)
	Depleted Below Dark	C Surface		epleted Matr	• •			ark Surface (S9) (LRR K, L)
	Thick Dark Surface (A			edox Dark Su	• •			anganese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral			epleted Dark				ont Floodplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (Sandy Redox (S5)	(54)		edox Depress	SIONS (F8)			Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21)
	Stripped Matrix (S6)							hallow Dark Surface (TF12)
	Dark Surface (S7) (LF	RR R, MLF	RA 149B)					Explain in Remarks)
a								
	of Hydrophytic vegeta Layer (if observed)		vetland hydrology mi	ust be presen	t, unless dist	urbed or pr	oblematic.	
Type		•					Hydric Soil Pr	resent? Yes 🛛 No 🗌
• •	h (inches):							
Remarks:	· · · ·						1	

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	City of	Waukesha/Waukesha	County	Sampling Date: 08/27/2015
Applicant/Owner:			State: WI	Sampling Point: 21
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section	n, Township, Range: <u>Te</u>	<u> 3N, R19E, SE1/4 S1</u>	4
Landform (hillslope, terrace, etc.): Linear hillslope	Local r	elief (concave, convex,	none): <u>None</u>	Slope (%): <u>0-2</u>
Subregion (LRR or MLRA): LRR K	Lat:	Long:	Datum:	
Soil Map Unit Name: Brookston silt loam (BsA)			N	WI classification: F0Kf
Are climatic/hydrologic conditions on the site typical for this time of year?		Yes 🛛 No 🗌 (If	no, explain in Rema	arks)
Are Vegetation, Soil, or Hydrology significantly disturbe	d?	Are "Normal Circumsta	inces" present?	res 🛛 🛛 No 🗌
Are Vegetation, Soil, or Hydrology naturally problematic	c?	(If, needed, explain any	y answers in Remar	ks.)
SUMMARY OF FINDINGS – Attach site map showing sa	amplin	ng point locations	, transects, imp	portant features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	🛛 Yes	□No
			If yes, optional Wetland Site ID: PC	<u>A 7</u>	
Remarks: (Explain alternative proce	edures here or i	n a separate report.)			

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check a	all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Ro	oots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils	s (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes 🗌 No 🛛 Dep	pth (inches):	
	pth (inches):	
Saturation Present? Yes No Dep (includes capillary fringe)	pth (inches): <u>10</u>	Wetland Hydrology Present? Yes 🛛 No 🗌
	,	ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map 3), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)
Remarks:		

VEGETATION – Use scientific names of plants.

/EGETATION – Use scientific names of plants.				Sampling Point: 21
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>2</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
··	<u>0</u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: <u>30' radius</u>)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				
4 5				
6				Column Totals: (A) (B) Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
	<u>0</u>	= Total Cov	er	Dominance Test is >50%
Herb Stratum (Plot size: <u>5' radius</u>)	60		EACIA	 □ Prevalence Index is ≤3.0¹ □ Morphological Adaptations¹ (Provide supporting
1. <u>Juncus dudleyi</u>	<u>60</u>		FACW	data in Remarks or on a separate sheet)
2. <u>Euthamia graminifolia</u>	<u>30</u>		<u>FAC</u>	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Solidago altissima</u>	<u>20</u>		FACU	¹ Indicators of hydric soil and wetland hydrology must
4. <u>Solidago gigantea</u>	<u>10</u>		FACW	Be present, unless disturbed or problematic.
5. <u>Scirpus pendulus</u>	<u>10</u>		<u>OBL</u>	
6. <u>Poa pratensis</u>	<u>10</u>		FACU	Definitions of Vegetation Strata:
7. <u>Carex granularis</u>	<u>3</u>		FACW	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. <u>Geum aleppicum</u>	<u>3</u>		FAC	at breast height (DBH), regardless of height
9. <u>Symphyotrichum novae-angliae</u>	<u>2</u>		FACW	Sapling/shrub – Woody plants less than 3in. DBH
10.				and greater than 3.28 ft (1 m) tall.
11.				
12				Herb – All herbaceous (non-woody) plants, regardless
12	148	= Total Cov		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: <u>30' radius)</u>	110	- 10(a) COV	CI	Woody vines – All woody vines greater than 3.28 ft in beight
1.				height
2				
<u>~</u> 2				
J				Hydrophytic Vegetation
4				Present? Yes No
	<u>0</u>	= Total Cov	rer	

Sampling Point: 21

Profile De	scription: (Describe	to the dep	oth needed to docur	ment the ind	licator or co	nfirm the a	bsence	of indicators.)	
Depth	Matrix			Redox Fea	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-8	10YR 2/1	<u></u>					Loam	I	
8-12	2.5Y 4/1	98	10YR 3/6	2	С	PL M	Clay		
12-18	10Y 5/1	95	10YR 5/8	5	С	PL M	Clay		w/gravel
		<u></u>	-		·				
1								2	
	Concentration, D=Dep il Indicators:	oletion, RN	I=Reduced Matrix, M	IS= Masked	Sand Grains			² Location: PL=Pore	Lining, M=Matrix ematic Hydric Soils ³ :
	Histosol (A1)		□ Po	olvvalue Belo	ow Surface (S	8) (LRR R.			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149		-/ (Redox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LR				Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4			oamy Mucky oamy Gleyed	Mineral (F1)	(LRR K, L)			(S7) (LRR K, L)
	Stratified Layers (A5) Depleted Below Darl			epleted Mati					ow Surface (S8) (LRR K, L) face (S9) (LRR K, L)
	Thick Dark Surface (A			edox Dark Su	urface (F6)			Iron-Mangane	ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral				Surface (F7)				odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix Sandy Redox (S5)	(S4)		edox Depres	sions (F8)			Mesic Spodic	(TA6) (MLRA 144A, 145, 149B) laterial (E21)
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LF	RR R, MLF	₹A 149B)					Other (Explain	
³ Indicators	of Hydrophytic ycaste	tion and w	votland hydrology my	ist he preser	t unloss dist	urbod or pr	oblomo	tio	
	of Hydrophytic vegeta e Layer (if observed)			ist be preser			opieiria		
Туре								Hydric Soil Present	? Yes 🛛 No 🗌
Dept	h (inches):							-	
Remarks:									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	: City of Waukesh	na/Waukesha C	County	Sampling Date: 08/25/2015
Applicant/Owner:			State: WI	Sampling Point: 22
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Townsh	ip, Range: <u>T61</u>	N, R19E, SE1/4 S14	
Landform (hillslope, terrace, etc.): Shallow hillslope	Local relief (conc	cave, convex, n	one): Linear concave	Slope (%): 0-2
Subregion (LRR or MLRA): LRR K	Lat:	Long:	Datum:	
Soil Map Unit Name: Colwood silt loam (Cw)			NWI	classification: F0Kf
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🖂	No 🗌 (If n	no, explain in Remarks))
Are Vegetation X, Soil, or Hydrology significantly disturbed	d? Are "Norr	mal Circumstar	nces" present? Yes [No ⊠
Are Vegetation, Soil, or Hydrology naturally problematic	c? (If, neede	əd, explain any	answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID	: <u>PCA 8</u>	
Remarks: (Explain alternative proce present because of agricultural					ircumstances" are not

Wetland Hydrology Indicators:			Se	condary Indicators (minimum of two required)
Primary Indicators (minimum of or	ne is required; chec	<u>ck all that apply)</u>		Surface Soil Cracks (B6)
Surface Water (A1)		Water-Stained Leaves (B9)		Drainage Patterns (B10)
High Water Table (A2)		Aquatic Fauna (B13)		Moss Trim Lines (B16)
Saturation (A3)		Marl Deposits (B15)		– Dry-Season Water Table (C2)
Water marks (B1)		Hydrogen Sulfide Odor (C1)	\boxtimes	– Crayfish Burrows (C8)
Saturation (A3) Water marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on A	2)	Oxidized Rhizospheres on Living F	Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Presence of Reduced Iron (C4)		Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4	4)	Recent Iron Reduction in Tilled So	ils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)		Thin Muck Surface (C7)		Shallow Aquitard (D3)
Inundation Visible on A	erial Imagery (B7)	Other (Explain in Remarks)		Microtopographic Relief (D4)
Sparsely Vegetated Co	oncave Surface (B8))		FAC-Neutral Test (D5)
Field Observations:				
Surface Water Present? Yes	s 🗌 No 🖾 🛛	Depth (inches):		
Water Table Present? Yes	s 🗌 No 🖾 🛛	Depth (inches):		
	s 🗌 No 🖾 🛙	Depth (inches):	Wetland Hydro	ology Present? Yes 🛛 No 🗌
(includes capillary fringe)			-	
(includes capillary fringe) Describe Recorded Data (stream	gauge, monitoring v	well, aerial photos, previous inspections), if a	available: Topo m	ap (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream	gauge, monitoring v		available: Topo m	ap (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (Ex	gauge, monitoring v xhibit 4), Site photos	well, aerial photos, previous inspections), if a	available: Topo m -13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map ; (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (Ex	gauge, monitoring v xhibit 4), Site photos	well, aerial photos, previous inspections), if a s (Exhibit 10), FSA slide review (Exhibits 11	available: Topo m -13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map ; (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (Ex	gauge, monitoring v xhibit 4), Site photos	well, aerial photos, previous inspections), if a s (Exhibit 10), FSA slide review (Exhibits 11	available: Topo m -13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map ; (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (Ex	gauge, monitoring v xhibit 4), Site photos	well, aerial photos, previous inspections), if a s (Exhibit 10), FSA slide review (Exhibits 11	available: Topo m -13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map ; (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (Ex	gauge, monitoring v xhibit 4), Site photos	well, aerial photos, previous inspections), if a s (Exhibit 10), FSA slide review (Exhibits 11	available: Topo m -13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map ; (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (Ex	gauge, monitoring v xhibit 4), Site photos	well, aerial photos, previous inspections), if a s (Exhibit 10), FSA slide review (Exhibits 11	available: Topo m -13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map ; (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (Ex	gauge, monitoring v xhibit 4), Site photos	well, aerial photos, previous inspections), if a s (Exhibit 10), FSA slide review (Exhibits 11	available: Topo m -13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map ; (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (Ex	gauge, monitoring v xhibit 4), Site photos	well, aerial photos, previous inspections), if a s (Exhibit 10), FSA slide review (Exhibits 11	available: Topo m -13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map ; (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (Ex	gauge, monitoring v xhibit 4), Site photos	well, aerial photos, previous inspections), if a s (Exhibit 10), FSA slide review (Exhibits 11	available: Topo m -13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map ; (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (Ex	gauge, monitoring v xhibit 4), Site photos	well, aerial photos, previous inspections), if a s (Exhibit 10), FSA slide review (Exhibits 11	available: Topo m -13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map ; (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (Ex	gauge, monitoring v xhibit 4), Site photos	well, aerial photos, previous inspections), if a s (Exhibit 10), FSA slide review (Exhibits 11	available: Topo m -13), WETS tables	ap (Exhibit 1), WWI map (Exhibit 2), Soils map ; (Exhibit 14), Draft NRCS map (Exhibit 15)

VEGETATION – Use scientific names of plants

US Army Corps of Engineers

VEGETATION – Use scientific names of plants.						Sampling P	oint: <u>22</u>	
Tree Stratum (Plot size: <u>30' radius</u>)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Tes	st works	sheet:		
1				Number of Domin	ant Speci	ies		
2				That are OBL, FACW, or FAC: <u>0</u> (A)				
3				Total Number of Dominant				
4				Species Across All Strata: <u>1</u> (B)				
5				Percent of Domina	•			
6				That Are OBL, FA	CW, or F	AC: <u>0%</u>	<u>6</u> (A/B)	
7				Prevalence Index	k worksh	eet:		
	<u>0</u>	= Total Cov	er	Total % Cove	er of:	M	lultiply by:	
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species	<u>0</u>	x 1 =	<u>0</u>	
1				FACW species	<u>0</u>	x 2 =	<u>0</u>	
2				FAC species	<u>11</u>	x 3 =	<u>33</u>	
3				FACU species	<u>7</u>	x 4 =	<u>28</u>	
4				UPL species	<u>40</u>	x 5 =	<u>200</u>	
5				Column Totals:	<u>58</u>	(A)	<u>261</u>	(B)
6						lex = B/A =	<u>4.50</u>	
7				Hydrophytic Vegetation Indicators:				
	<u>0</u>	= Total Cov	er					
Herb Stratum (Plot size: 5' radius)		_		Prevalence In			la aussart	ina
1. <u>Glycine max (planted)</u>	<u>40</u>	\boxtimes	<u>UPL</u>	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)				
2. <u>Veronica peregrina</u>	<u>5</u>		<u>FAC</u>	Problematic		•	,	
3. <u>Rumex crispus</u>	<u>4</u>		<u>FAC</u>	¹ Indicators of hyd	lric soil ar	nd wetland h	vdrology	must
4. Chenopodium album	<u>4</u>		FACU	Be present, unles				
5. Portulaca oleracea	<u>3</u>		FACU			_		
6. <u>Panicum capillare</u>	<u>2</u>		FAC	Definitions of Ve	getation	Strata:		
7				Tree – Woody pla	ints 3in. (7.6 cm) or n	nore in dia	meter
8				at breast height (E	OBH), reg	ardless of h	neight	
9				Sapling/shrub –	Woody pl	lants less th	an 3in. DE	вн
10				and greater than 3	3.28 ft (1	m) tall.		
11				Herb – All herbac	eous (noi	n-woodv) al	ants. rega	rdless
12				of size, and wood	``	271	<i>,</i> 0	
	<u>58</u>	= Total Cov	er	Woody vince A	llwoody	vinos graat	or than 3.3	9 ft in
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – A height	an woody '	vines greate	∍i uid∏ J.Z	.0 11 11
1								
2								
3				Hydrophytic				
4				Vegetation			_	
	<u>0</u>	= Total Cov	er	Present?	Yes 🛛	No		
Remarks: (include photo number here or on a separate s	sheet.) Atypical (1	farmed) wetla	nd. Vegetat	ion is problematic	because	e of agricu	Itural land	b

Remarks: (include photo number here or on a separate sheet.) Atypical (farmed) wetland. Vegetation is problematic because of agricultural land management activities (managed plant community). Indicators of hydric soils and wetland hydrology are present.

Profile Des	scription: (Describe to	o the dep	th needed to docum	ent the ind	licator or cor	nfirm the a	bsenc	e of indicators.)	
Depth	Matrix			Redox Fea	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-10	10YR 2/1	100					Clay	loam	
10-14	2.5Y 4/1	98	10YR 4/6	2	С	PL M	Clay		
14-20	2.5Y 4/2	95	10YR 5/8	5	С	PL M	Clay		
20-26	2.5Y 5/2	80	10YR 6/8	15	С	PL M	Clay		w/ disintegrating dolomite
	10YR 3/1	5							
					·				
					·				
							·		
							·		
					·		·		
					·		·		
					·		·		
¹ Type: C=	Concentration, D=Depl	etion, RM	Reduced Matrix, MS	S= Masked S	Sand Grains			² Location: PL=Pore	Lining, M=Matrix
-	il Indicators:								ematic Hydric Soils ³ :
_	Histosol (A1)		Pol		w Surface (S	8) (LRR R,		,	10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2) Black Histic (A3)		П ты	MLRA 149	эв) ace (S9) (LR I		1400		Redox (A16) (LLR K, L, R) Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) ((S7) (LRR K, L)
	Stratified Layers (A5)				Matrix (F2)	,,			ow Surface (S8) (LRR K, L)
	Depleted Below Dark			pleted Matri	. ,				face (S9) (LRR K, L)
	Thick Dark Surface (A	,		dox Dark Su	• •				ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (Sandy Gleyed Matrix (dox Depres	Surface (F7)				odplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	0-1)						Red Parent M	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	(A 149B)					Other (Explain	n in Remarks)
³ Indicators	of Hydrophytic vegetat	ion and w	vetland hydrology mus	t be presen	it, unless disti	urbed or pr	oblema	atic.	
	e Layer (if observed):				,				
	:							Hydric Soil Present?	?Yes 🛛 No 🗌
-	h (inches):								
Remarks:									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	City of Wau	kesha/Waukesha	a County	Sampling Date: 08/25/2015
Applicant/Owner:			State: WI	Sampling Point: 23
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Tow	vnship, Range:]	<u>F6N, R19E, SE1/4 S</u>	<u>S14</u>
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex	, none): <u>Concave</u>	Slope (%): <u>0-2</u>
Subregion (LRR or MLRA): LRR K	Lat:	Long:	Datum:	
Soil Map Unit Name: Colwood silt loam (Cw)				NWI classification: F0Kf
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes	🛛 No 🗌 (lf no, explain in Rer	marks)
Are Vegetation, Soil, or Hydrology significantly disturbe	d? Are "	Normal Circums	tances" present?	Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology naturally problematic	c? (If, n	eeded, explain a	ny answers in Rem	arks.)
SUMMARY OF FINDINGS – Attach site map showing sa	ampling po	oint location	s, transects, in	nportant features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No			
			If yes, optional Wetland Site ID: PC/	<u> </u>				
Remarks: (Explain alternative procedures here or in a separate report.)								

Wetland Hydrology Indicators:			<u>Seco</u>	ndary Indicators (minimum of two required)
Primary Indicators (minimum of c	one is required; che	eck all that apply)	\boxtimes	Surface Soil Cracks (B6)
Surface Water (A1)		Water-Stained Leaves (B9)		Drainage Patterns (B10)
High Water Table (A2)				Moss Trim Lines (B16)
Saturation (A3)		Marl Deposits (B15)		Dry-Season Water Table (C2)
Water marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B4)		Hydrogen Sulfide Odor (C1)		Crayfish Burrows (C8)
Sediment Deposits (B	2)	Oxidized Rhizospheres on Living R	Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Presence of Reduced Iron (C4)		Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4	•)	Recent Iron Reduction in Tilled Sc	ls (C6)	Geomorphic Position (D2)
Iron Deposits (B5)		Thin Muck Surface (C7)		Shallow Aquitard (D3)
Inundation Visible on A	Aerial Imagery (B7) Other (Explain in Remarks)		Microtopographic Relief (D4)
Sparsely Vegetated C	oncave Surface (E	38)	\boxtimes	FAC-Neutral Test (D5)
Field Observations:				
Surface Water Present? Ye	es 🗌 🛛 No 🖾	Depth (inches):		
Materia Table Dave and O				
Water Table Present? Ye	es 🗌 🛛 No 🖾	Depth (inches):		
	es 🗌 No 🖾	Depth (inches):	Wetland Hydrolo	gy Present? Yes 🛛 No 🗌
Saturation Present? Ye (includes capillary fringe) Describe Recorded Data (stream	es 🗌 No 🖂 n gauge, monitoring		vailable: Topo map	(Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Ye (includes capillary fringe) Describe Recorded Data (stream	es 🗌 No 🖂 n gauge, monitoring	Depth (inches): g well, aerial photos, previous inspections), if a	vailable: Topo map	(Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Ye (includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (E	es 🗌 No 🖂 n gauge, monitoring	Depth (inches): g well, aerial photos, previous inspections), if a	vailable: Topo map	(Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Ye (includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (E	es 🗌 No 🖂 n gauge, monitoring	Depth (inches): g well, aerial photos, previous inspections), if a	vailable: Topo map	(Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Ye (includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (E	es 🗌 No 🖂 n gauge, monitoring	Depth (inches): g well, aerial photos, previous inspections), if a	vailable: Topo map	(Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Ye (includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (E	es 🗌 No 🖂 n gauge, monitoring	Depth (inches): g well, aerial photos, previous inspections), if a	vailable: Topo map	(Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Ye (includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (E	es 🗌 No 🖂 n gauge, monitoring	Depth (inches): g well, aerial photos, previous inspections), if a	vailable: Topo map	(Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Ye (includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (E	es 🗌 No 🖂 n gauge, monitoring	Depth (inches): g well, aerial photos, previous inspections), if a	vailable: Topo map	(Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Ye (includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (E	es 🗌 No 🖂 n gauge, monitoring	Depth (inches): g well, aerial photos, previous inspections), if a	vailable: Topo map	(Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Ye (includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (E	es 🗌 No 🖂 n gauge, monitoring	Depth (inches): g well, aerial photos, previous inspections), if a	vailable: Topo map	(Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Ye (includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (E	es 🗌 No 🖂 n gauge, monitoring	Depth (inches): g well, aerial photos, previous inspections), if a	vailable: Topo map	(Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Ye (includes capillary fringe) Describe Recorded Data (stream (Exhibit 3), Aerial photographs (E	es 🗌 No 🖂 n gauge, monitoring	Depth (inches): g well, aerial photos, previous inspections), if a	vailable: Topo map	(Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 23
<u>Tree Stratum</u> (Plot size: <u>30' radius</u>)	Absolute % Cover	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1. <u>Salix amygdaloides</u>	<u>60</u>	\boxtimes	FACW	Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>6</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>9</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>67%</u> (A/B)
7				Prevalence Index worksheet:
	<u>60</u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. <u>Rubus occidentalis</u>	<u>20</u>	\boxtimes	<u>UPL</u>	FACW species x 2 =
2. <u>Cornus alba</u>	<u>15</u>	\boxtimes	FACW	FAC species x 3 =
3. <u>Cornus obliqua</u>	<u>15</u>	\boxtimes	FACW	FACU species x 4 =
4. <u>Salix discolor</u>	<u>15</u>	\boxtimes	FACW	UPL species x 5 =
5. <u>Rhamnus cathartica</u>	<u>5</u>		FAC	Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>70</u>	= Total Cov	/er	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				Prevalence Index is ≤3.0 ¹
1. <u>Solidago gigantea</u>	<u>20</u>	\boxtimes	FACW	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. <u>Ambrosia trifida</u>	<u>15</u>	\boxtimes	FAC	□ Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Rubus occidentalis</u>	<u>10</u>	\boxtimes	UPL	
4. <u>Poa pratensis</u>	<u>10</u>	\boxtimes	FACU	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. <u>Typha angustifolia</u>	<u>8</u>		<u>OBL</u>	
6. <u>Equisetum arvense</u>	<u>5</u>		FAC	Definitions of Vegetation Strata:
7. <u>Solidago altissima</u>	<u>5</u>		FACU	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. Symphyotrichum puniceum	<u>3</u>		<u>OBL</u>	at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>76</u>	= Total Cov	/er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1. <u>Vitis riparia</u>	<u>4</u>		FAC	
2				
3				Hydrophytic
4				Vegetation
	<u>4</u>	= Total Cov	/er	Present? Yes 🛛 No 🗌
Remarks: (include photo number here or on a separate she	eet.) Fresh (we	et) meadow, s	shrubby thick	et, and hardwood complex.

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix			Redox Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-14	10YR 2/1						Clay	loam	
14-18	2.5Y 4/1	98	10YR 4/6	2	С	PL M	Clay		
18-24	10YR 6/1	30	10YR 6/8	70	С	PL M	Clay		
	·			·					
	·			·					
				·					
				·					
				·					
¹ Type: C=0	Concentration, D=Depl	etion, RM	=Reduced Matrix, MS	S= Masked S	Sand Grains			² Location: PL=Pore L	ining, M=Matrix
	I Indicators:	-						Indicators for Proble	matic Hydric Soils ³ :
	Histosol (A1)				w Surface (S	8) (LRR R,			0) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	B) ace (S9) (LRI		1400		Redox (A16) (LLR K, L, R) eat or Peat (S3) (LLR K, L, R)
	Black Histic (A3) Hydrogen Sulfide (A4)				Mineral (F1) (1490		S7) (LRR K, L)
	Stratified Layers (A5)			amy Gleyed		, _,			ow Surface (S8) (LRR K, L)
	Depleted Below Dark S			pleted Matrix					ace (S9) (LRR K, L)
	Thick Dark Surface (A			dox Dark Su					se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (Sandy Gleyed Matrix (dox Depress	Surface (F7)				dplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	0-1)						Red Parent Ma	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	A 149B)					Other (Explain	in Remarks)
³ Indicators	of Hydrophytic vegetat	ion and w	etland hydrology mus	st be present	t. unless disti	urbed or pro	oblema	atic.	
	E Layer (if observed):			p	.,				
Туре								Hydric Soil Present?	Yes 🛛 No 🗌
-	h (inches):								
Remarks:									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	City of	Waukesha/	Waukesł	na County	9	Sampling Date: 08/25/2015
Applicant/Owner:				State: WI	9	Sampling Point: <u>24</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section	, Township,	Range:	T6N, R19E, SE1/4	<u>S14</u>	
Landform (hillslope, terrace, etc.): Hillslope	Local re	elief (concav	e, conve	x, none): <u>None</u>	9	Slope (%): <u>6-12</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat:	Lo	ong:	Datum:		
Soil Map Unit Name: Hochheim Ioam (HmC2)					NWI classi	fication: <u>None</u>
Are climatic/hydrologic conditions on the site typical for this time of year?		Yes 🛛 🛛 N	o 🗌	(If no, explain in Re	marks)	
Are Vegetation, Soil, or Hydrology significantly disturbed	ed?	Are "Normal	I Circum	stances" present?	Yes 🖂	No 🗖
Are Vegetation, Soil, or Hydrology naturally problemation	:?	(If, needed,	explain a	any answers in Rem	arks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	□Yes □Yes □Yes	⊠No ⊠No ⊠No	Is the Sampled Area within a Wetland?	□ Yes	⊠No
			If yes, optional Wetland Site ID:		
Remarks: (Explain alternative proce management activities (planted o		a separate report.) "No	ormal Circumstances" are not pre	sent because of agr	icultural land

Wetland Hydrology Indicators:				Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one	e is required; check	k all that apply)		Surface Soil Cracks (B6)
Surface Water (A1)		Water-Stained Leaves (B9)		Drainage Patterns (B10)
High Water Table (A2)				Moss Trim Lines (B16)
Saturation (A3)		Marl Deposits (B15)		Dry-Season Water Table (C2)
Water marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)		Hydrogen Sulfide Odor (C1)		Crayfish Burrows (C8)
Sediment Deposits (B2)		Oxidized Rhizospheres on Living F	Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Presence of Reduced Iron (C4)		Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduction in Tilled So	ils (C6)	Geomorphic Position (D2)
Iron Deposits (B5)		Thin Muck Surface (C7)		Shallow Aquitard (D3)
Inundation Visible on Ae	rial Imagery (B7)	Other (Explain in Remarks)		Microtopographic Relief (D4)
Sparsely Vegetated Con	ncave Surface (B8))		FAC-Neutral Test (D5)
Field Observations:				
Surface Water Present? Yes		Depth (inches):		
Water Table Present? Yes	🗆 No 🖾 D			
		Depth (inches):		
Saturation Present? Yes (includes capillary fringe)		Depth (inches):	Wetland H	ydrology Present? Yes 🗌 No 🛛
Saturation Present?Yes(includes capillary fringe)Describe Recorded Data (stream g	auge, monitoring w	Depth (inches):	vailable: Top	ydrology Present? Yes No X oo map (Exhibit 1), WWI map (Exhibit 2), Soils map bles (Exhibit 14), Draft NRCS map (Exhibit 15)
Saturation Present?Yes(includes capillary fringe)Describe Recorded Data (stream g	auge, monitoring w	Depth (inches):	vailable: Top	o map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream g (Exhibit 3), Aerial photographs (Exh	auge, monitoring w	Depth (inches):	vailable: Top	o map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream g (Exhibit 3), Aerial photographs (Exh	auge, monitoring w	Depth (inches):	vailable: Top	o map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream g (Exhibit 3), Aerial photographs (Exh	auge, monitoring w	Depth (inches):	vailable: Top	o map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream g (Exhibit 3), Aerial photographs (Exh	auge, monitoring w	Depth (inches):	vailable: Top	o map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream g (Exhibit 3), Aerial photographs (Exh	auge, monitoring w	Depth (inches):	vailable: Top	o map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream g (Exhibit 3), Aerial photographs (Exh	auge, monitoring w	Depth (inches):	vailable: Top	o map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream g (Exhibit 3), Aerial photographs (Exh	auge, monitoring w	Depth (inches):	vailable: Top	o map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream g (Exhibit 3), Aerial photographs (Exh	auge, monitoring w	Depth (inches):	vailable: Top	o map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream g (Exhibit 3), Aerial photographs (Exh	auge, monitoring w	Depth (inches):	vailable: Top	o map (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes (includes capillary fringe) Describe Recorded Data (stream g (Exhibit 3), Aerial photographs (Exh	auge, monitoring w	Depth (inches):	vailable: Top	o map (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 24
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
7				Prevalence Index worksheet:
··	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				
				· <u> </u>
4		_		UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
7			<u> </u>	Rapid Test for Hydrophytic Vegetation
	<u>0</u>	= Total Cov	er	Dominance Test is >50%
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)		_		 □ Prevalence Index is ≤3.0¹ □ Morphological Adaptations¹ (Provide supporting
1. <u>Glycine max (planted)</u>	<u>40</u>	\boxtimes	<u>UPL</u>	data in Remarks or on a separate sheet)
2. Abutilon theophrasti	<u>5</u>		<u>FACU</u>	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Portulaca oleracea	<u>5</u>		<u>FACU</u>	¹ Indicators of hydric soil and wetland hydrology must
4. <u>Chenopodium album</u>	<u>4</u>		<u>FACU</u>	Be present, unless disturbed or problematic.
5. Panicum capillare	<u>3</u>		FAC	
6. <u>Taraxacum officinale</u>	<u>2</u>		FACU	Definitions of Vegetation Strata:
7. <u>Epilobium coloratum</u>	<u>1</u>		<u>OBL</u>	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11.				
12				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	<u>60</u>	= Total Cov	er	
Woody Vine Stratum (Plot size: <u>30' radius)</u>			01	Woody vines – All woody vines greater than 3.28 ft in
,,,,				height
1			·	
2				
3			<u> </u>	Hydrophytic
4				Vegetation Present? Yes □ No ⊠
	<u>0</u>	= Total Cov	er	
Remarks: (include photo number here or on a separate shee	et.) Agricultur	al field.		

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix			Redox Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture	Remarks
0-3	10YR 3/2	100					Loam	1	
3-13	10YR 2/1	100					Loam	1	
13-17	10YR 3/2	85					Clay	loam	
	10YR 2/1	15							
17-24	10YR 4/3	80	10YR 3/6	2	С	PL M	Clay		
	10YR 3/2	18							
	Concentration, D=Depl	etion, RN	I=Reduced Matrix,	MS= Masked S	and Grains			² Location: PL=Pore L	
-	il Indicators: Histosol (A1)			Polyvalue Belov	w Surface (S	8) (I RR P		Indicators for Proble	matic Hydric Soils": 10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149		(ERR R,			Redox (A16) (LLR K, L, R)
	Black Histic (A3)			Thin Dark Surfa		R R, MLRA	(149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)			Loamy Mucky M				Dark Surface (S7) (LRR K, L)
	Stratified Layers (A5)			Loamy Gleyed					ow Surface (S8) (LRR K, L)
	Depleted Below Dark S			Depleted Matrix	· ·				face (S9) (LRR K, L)
	Thick Dark Surface (A ² Sandy Mucky Mineral (,		Redox Dark Su Depleted Dark					se Masses (F12) (LRR K, L, R) Idplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (Redox Depress					(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	- /			(-)			Red Parent Ma	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	१A 149B)					Other (Explain	in Remarks)
³ Indicators	of Hydrophytic vegetat	ion and w	vetland hydrology r	must be present	t, unless dist	urbed or pro	oblema	tic.	
	e Layer (if observed):					•			
	:							Hydric Soil Present?	Yes 🗌 No 🖾
	h (inches):								
Remarks:									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	City of Waukesha/Waukesha County	Sampling Date: 08/25/2015
Applicant/Owner:	State: WI	Sampling Point: 25
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range: T6N, R19E, SE1/4 S14	
Landform (hillslope, terrace, etc.): Swale	Local relief (concave, convex, none): Linear concave	Slope (%): 0-3
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:	
Soil Map Unit Name: Lamartine silt loam (LmB)	NWI clas	ssification: <u>E1K</u>
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛 No 🗌 (If no, explain in Remarks)	
Are Vegetation, Soil, or Hydrology significantly disturbe	d? Are "Normal Circumstances" present? Yes ⊠	No 🗌
Are Vegetation, Soil, or Hydrology naturally problematic	c? (If, needed, explain any answers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID: PC	<u>A 7</u>	
Remarks: (Explain alternative proce	dures here or in	a separate report.)			

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Moss Trim Lines (B16)
Saturation (A3)	Dry-Season Water Table (C2)
Water marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living F	Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Stunted or Stressed Plants (D1)
Water marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living F Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Sol	ils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes 🗌 No 🖾 Depth (inches):	
Water Table Present? Yes No Depth (inches): <u>17</u>	
· · · <u>·</u>	
Saturation Present? Yes No Depth (inches): 3	Wetland Hydrology Present? Yes 🛛 No 🗌
(includes capillary fringe)	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe)	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (Exhibit 10), FSA slide review (Exhibits 11-	available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet:
1. <u>Fraxinus pennsylvanica</u>	35		FACW	Number of Dominant Species
2. <u>Salix amygdaloides</u>	<u>35</u>	\boxtimes	FACW	That are OBL, FACW, or FAC: <u>6</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>6</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
	<u>70</u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. <u>Rhamnus cathartica</u>	<u>10</u>	\boxtimes	FAC	FACW species x 2 =
2. <u>Cornus alba</u>	<u>5</u>	\boxtimes	FACW	FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>15</u>	= Total Cov	/er	 Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)				$\square Prevalence Index is \leq 3.0^{1}$
1. <u>Juncus dudleyi</u>	<u>45</u>	\boxtimes	FACW	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Erigeron philadelphicus	<u>45</u>	\boxtimes	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Veronica peregrina</u>	<u>25</u>		FAC	
4. Rumex crispus	<u>8</u>		<u>FAC</u>	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. Echinochloa crus-galli	<u>3</u>		FAC	
6. <u>Plantago major</u>	<u>3</u>		FACU	Definitions of Vegetation Strata:
7. <u>Solidago altissima</u>	<u>2</u>		FACU	Tree – Woody plants 3in. (7.6 cm) or more in diamete
8. <u>Chenopodium glaucum</u>	<u>1</u>		FACW	at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb All berbasseus (non woody) plante, regardless
12				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	<u>132</u>	= Total Cov	/er	
Woody Vine Stratum (Plot size: <u>30' radius</u>)				Woody vines – All woody vines greater than 3.28 ft in height
1				
2				
3				Hydrophytic
				Vegetation
4		= Total Cov		Present? Yes 🛛 No 🗌

Sampling Point: 25

Depth	scription: (Describe t Matrix			Redox Feat					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-4	10YR 2/1	98	10YR 3/6	2	C	PL M	Clay		
4-8	2.5Y 4/2	80	10YR 5/8	2	C	PL M	Clay		
	10YR 3/1	18					<u>- 0.01</u>		
8-12	10Y 5/1	60	10YR 5/8	40	C	PL M	Clay		
12-17	2.5Y 5/2	70	10YR 4/6	30	C	PL M		y clay	w/gravel
17-22	2.01 0/2		1011(4/0				Ound	yolay	sand? too wet to pull up
17 22			·						
			·						
	·								
			·						
¹ Type: C=	Concentration, D=Dep	letion, RM	I=Reduced Matrix,	MS= Masked S	Sand Grains			² Location: PL=Pore	Lining, M=Matrix
	il Indicators:		· · · ,					Indicators for Proble	ematic Hydric Soils ³ :
	Histosol (A1)			Polyvalue Belov		8) (LRR R,			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		_	MLRA 149	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3)			Thin Dark Surfa			149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4) Stratified Layers (A5))		₋oamy Mucky № ₋oamy Gleyed		(LRR K, L)			(S7) (LRR K, L) ow Surface (S8) (LRR K, L)
	Depleted Below Dark	Surface		Depleted Matri					face (S9) (LRR K, L)
	Thick Dark Surface (A			Redox Dark Su					se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral	(S1)		Depleted Dark	Surface (F7)			Piedmont Floor	odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix ((S4)		Redox Depress	ions (F8)				(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)							Red Parent M	
	Stripped Matrix (S6) Dark Surface (S7) (LF		2A 1/0B)					 Very Shallow Other (Explain 	Dark Surface (TF12)
		ΩR R, WILΓ	(A 145D)						lin Kelliaks)
	of Hydrophytic vegeta		vetland hydrology n	nust be present	t, unless dist	urbed or pro	oblema	tic.	
	e Layer (if observed)	:							
	e: <u>gravel</u> h (inches): <u>22</u>							Hydric Soil Present?	? Yes 🛛 No 🗌
Remarks:	ii (iiiches). <u>22</u>								
i temaina.									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	City of	f Waukesha/	Waukes	ha County		Sampling Date: 08/27/2015
Applicant/Owner:				State: WI		Sampling Point: 26
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section	n, Township,	Range:	<u>T6N, R19E, SE1/4</u>	<u>S14</u>	
Landform (hillslope, terrace, etc.): Hillslope	Local re	elief (concav	ve, conve	ex, none): <u>None</u>		Slope (%): <u>0-2</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat:	L	.ong:	Datum:		
Soil Map Unit Name: Brookston silt loam (BsA)					NWI class	sification: E1K
Are climatic/hydrologic conditions on the site typical for this time of year?		Yes 🖂 🛛 🛛	10 🗌	(If no, explain in Re	emarks)	
Are Vegetation, Soil, or Hydrology significantly disturbe	:d?	Are "Norma	al Circum	stances" present?	Yes 🖂	No 🗌
Are Vegetation, Soil, or Hydrology naturally problemation	:?	(If, needed,	explain	any answers in Ren	narks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	□Yes ⊠ Yes □Yes	⊠ No □No ⊠ No	Is the Sampled Area within a Wetland?	🗌 Yes	⊠No
			If yes, optional Wetland Site ID:		
Remarks: (Explain alternative proce	dures here or in	a separate report.)			

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; chec	ck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
 Water marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) 	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Ro	oots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils	s (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	3)	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes 🗌 No 🛛 [Depth (inches):	
Water Table Present? Yes 🗌 No 🛛	Depth (inches):	
	Depth (inches):	Wetland Hydrology Present? Yes 🗌 No 🛛
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring v	well, aerial photos, previous inspections), if av	Wetland Hydrology Present? Yes No Xetland vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map (3), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15) Soils map (2)
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring v	well, aerial photos, previous inspections), if av	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring v (Exhibit 3), Aerial photographs (Exhibit 4), Site photographs	well, aerial photos, previous inspections), if av	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring v (Exhibit 3), Aerial photographs (Exhibit 4), Site photographs	well, aerial photos, previous inspections), if av	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring v (Exhibit 3), Aerial photographs (Exhibit 4), Site photographs	well, aerial photos, previous inspections), if av	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring v (Exhibit 3), Aerial photographs (Exhibit 4), Site photographs	well, aerial photos, previous inspections), if av	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring v (Exhibit 3), Aerial photographs (Exhibit 4), Site photographs	well, aerial photos, previous inspections), if av	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring v (Exhibit 3), Aerial photographs (Exhibit 4), Site photographs	well, aerial photos, previous inspections), if av	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring v (Exhibit 3), Aerial photographs (Exhibit 4), Site photographs	well, aerial photos, previous inspections), if av	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring v (Exhibit 3), Aerial photographs (Exhibit 4), Site photographs	well, aerial photos, previous inspections), if av	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring v (Exhibit 3), Aerial photographs (Exhibit 4), Site photographs	well, aerial photos, previous inspections), if av	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring v (Exhibit 3), Aerial photographs (Exhibit 4), Site photographs	well, aerial photos, previous inspections), if av	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants.

EGETATION – Use scientific names of plants.				Sampling Point: <u>26</u>
<u>Tree Stratum</u> (Plot size: <u>30' radius)</u>	Absolute <u>% Cover</u>	Dominant <u>Species?</u>	Indicator <u>Status</u>	Dominance Test worksheet:
I. <u>Morus alba</u>	<u>10</u>	\boxtimes	<u>FACU</u>	Number of Dominant Species
. <u>Fraxinus pennsylvanica</u>	<u>5</u>	\boxtimes	FACW	That are OBL, FACW, or FAC: <u>2</u> (A)
. <u> </u>				Total Number of Dominant
·				Species Across All Strata: <u>6</u> (B)
·				Percent of Dominant Species
				That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
				Prevalence Index worksheet:
	<u>15</u>	= Total Cov	/er	Total % Cover of: Multiply by:
apling/Shrub Stratum (Plot size: <u>30' radius</u>)				OBL species x 1 =
. Zanthoxylum americanum	<u>60</u>	\boxtimes	FACU	FACW species x 2 =
. <u>Rhamnus cathartica</u>	<u>15</u>		FAC	FAC species x 3 =
. <u>Elaeagnus umbellata</u>	<u>5</u>		UPL	FACU species x 4 =
. <u>Fraxinus pennsylvanica</u>	<u>3</u>		FACW	UPL species x 5 =
·				Column Totals: (A) (E
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
	<u>83</u>	= Total Cov	er	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
lerb Stratum (Plot size: <u>5' radius</u>)	_		•	$\square Prevalence Index is \leq 3.0^{1}$
. Poa pratensis	<u>90</u>	\boxtimes	FACU	Morphological Adaptations ¹ (Provide supporting
. <u>Solidago altissima</u>	<u>20</u>		FACU	data in Remarks or on a separate sheet)
	<u>5</u>		FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
. <u>Euthamia graminifolia</u>				¹ Indicators of hydric soil and wetland hydrology must
. <u>Bromus inermis</u>	<u>3</u>		<u>UPL</u>	Be present, unless disturbed or problematic.
				Definitions of Venetation Strates
·				Definitions of Vegetation Strata:
·				Tree – Woody plants 3in. (7.6 cm) or more in diameter
. <u></u>				at breast height (DBH), regardless of height
·				Sapling/shrub – Woody plants less than 3in. DBH
0				and greater than 3.28 ft (1 m) tall.
1.				
2				Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.
	118	= Total Cov	/er	
Voody Vine Stratum (Plot size: <u>30' radius)</u>				Woody vines – All woody vines greater than 3.28 ft in height
. <u>Parthenocissus guinguefolia</u>	<u>4</u>	\boxtimes	FACU	noight
. <u>Vitis riparia</u>	<u>3</u>	\boxtimes	FAC	
<u></u> }.				Hydrophytic
 k.				Hydrophytic Vegetation
	7	= Total Cov		Present? Yes □ No ⊠
Remarks: (include photo number here or on a separate s				

Sampling Point: 26

Profile De	scription: (Describe to	o the dep	th needed f	to docu	ment the indi	cator or cor	nfirm the a	bsence	e of indicators.)	
Depth	Matrix				Redox Feat	ures				
(inches)	Color (moist)	%	Color (I	moist)	%	Type ¹	Loc ²		Texture	Remarks
0-11	10YR 2/1	100						Loan	า	
11-21	2.5Y 5/2	70	10YR 5/8		30	С	PL M	Clay		
21-24	2.5Y 6/2	70	10YR 5/8		30	С	PL M		ly clay	w/gravel
									, ,	
	·									
	·									
								· <u> </u>		
								· <u> </u>		
								· <u> </u>		
										·
¹ Type: C=	Concentration, D=Depl	etion, RM	I=Reduced I	Matrix, N	IS= Masked S	and Grains			² Location: PL=Pore	Lining, M=Matrix
-	il Indicators:									ematic Hydric Soils ³ :
	Histosol (A1)			D P	olyvalue Belov		8) (LRR R,			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)				MLRA 149 hin Dark Surfa	,		140D)		Redox (A16) (LLR K, L, R) Peat or Peat (S3) (LLR K, L, R)
	Black Histic (A3) Hydrogen Sulfide (A4)				Damy Mucky N			(1450)		(S7) (LRR K, L)
					bamy Gleyed I		(,,)			ow Surface (S8) (LRR K, L)
	Depleted Below Dark		(A11)		epleted Matrix					face (S9) (LRR K, L)
	Thick Dark Surface (A1				edox Dark Su					ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (Sandy Gleyed Matrix (epleted Dark Sedox Depress					odplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	54)			COOX Depicoo				Red Parent M	
	Stripped Matrix (S6)									Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	(A 149B)						Other (Explain	n in Remarks)
³ Indicators	of Hydrophytic vegetat	ion and v	vetland hydro	ology mi	ust be present	. unless dist	urbed or pr	oblema	tic.	
	e Layer (if observed):		,	0,		,				
	e:								Hydric Soil Present	? Yes 🛛 No 🗌
-	h (inches):									
Remarks:										

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	City of Waukesha/Waukesha County	Sampling Date: 08/27/2015
Applicant/Owner:	State: WI	Sampling Point: 27
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Township, Range: T6N, R19E, SE1/4 S14	
Landform (hillslope, terrace, etc.): Hillslope	Local relief (concave, convex, none): None	Slope (%): 0-2
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:	
Soil Map Unit Name: Brookston silt loam (BsA)	NWI	classification: E1K
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛 No 🗌 (If no, explain in Remarks	5)
Are Vegetation, Soil, or Hydrology significantly disturbe	d? Are "Normal Circumstances" present? Yes	🛛 No 🗌
Are Vegetation, Soil_X_, or Hydrology naturally problematic	? (If, needed, explain any answers in Remarks.)
		where the strength sta

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID: PC	CA 7	
		• • •	nile this soil profile just misses an logy led toa finding of a problema	· /)ark Surface indicator by

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; ch	neck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living R	coots (C3) Saturation Visible on Aerial Imagery (C9)
Sediment Deposits (B2) Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soi	ls (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B	7) Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes 🗌 No 🛛	Depth (inches):	
Water Table Present? Yes 🗌 No 🛛	Depth (inches):	
Saturation Present? Yes 🛛 No 🗌	Depth (inches): <u>11</u>	Wetland Hydrology Present? Yes 🛛 No 🗌
(includes capillary fringe)		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir	ng well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir	ng well, aerial photos, previous inspections), if a	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	ng well, aerial photos, previous inspections), if a otos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir	ng well, aerial photos, previous inspections), if a otos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	ng well, aerial photos, previous inspections), if a otos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	ng well, aerial photos, previous inspections), if a otos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	ng well, aerial photos, previous inspections), if a otos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	ng well, aerial photos, previous inspections), if a otos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	ng well, aerial photos, previous inspections), if a otos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	ng well, aerial photos, previous inspections), if a otos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	ng well, aerial photos, previous inspections), if a otos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	ng well, aerial photos, previous inspections), if a otos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	ng well, aerial photos, previous inspections), if a otos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir (Exhibit 3), Aerial photographs (Exhibit 4), Site pho	ng well, aerial photos, previous inspections), if a otos (Exhibit 10), FSA slide review (Exhibits 11-	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' radius) % 1. - 2. - 3. - 4. - 5. - 6. - 7. - Sapling/Shrub Stratum (Plot size: 30' radius)	solute <u>Cover</u> 0 <u>15</u> <u>5</u>	Dominant Species?	Indicator <u>Status</u> er	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 3 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by:
1	<u>0</u> 15	□ □ □ □ □ = Total Cov		That are OBL, FACW, or FAC: <u>2</u> (A)Total Number of Dominant Species Across All Strata: <u>3</u> (B)Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)Prevalence Index worksheet:
2	<u>15</u>	□ □ □ □ = Total Cov	 er	That are OBL, FACW, or FAC: <u>2</u> (A)Total Number of Dominant Species Across All Strata: <u>3</u> (B)Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)Prevalence Index worksheet:
3	<u>15</u>	□ □ □ □ = Total Cov	 er	Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B) Prevalence Index worksheet:
4	<u>15</u>	□ □ □ = Total Cov	 er	Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B) Prevalence Index worksheet:
5 6 7 <u>Sapling/Shrub Stratum</u> (Plot size: <u>30' radius</u>) 1. <u>Fraxinus pennsylvanica</u> 2. <u>Cornus alba</u> 3 4	<u>15</u>	□ □ = Total Cov	 er	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B) Prevalence Index worksheet:
6 7 <u>Sapling/Shrub Stratum</u> (Plot size: <u>30' radius</u>) 1. <u>Fraxinus pennsylvanica</u> 2. <u>Cornus alba</u> 3 4	<u>15</u>	☐ ☐ = Total Cov	er	That Are OBL, FACW, or FAC: 67% (A/B) Prevalence Index worksheet:
7	<u>15</u>	☐ = Total Cov	 er	Prevalence Index worksheet:
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30' radius)</u> 1. <u>Fraxinus pennsylvanica</u> 2. <u>Cornus alba</u> 3 4	<u>15</u>	= Total Cov	er	
1. <u>Fraxinus pennsylvanica</u> 2. <u>Cornus alba</u> 3 4	<u>15</u>		er	Total % Cover of: Multiply by:
1. <u>Fraxinus pennsylvanica</u> 2. <u>Cornus alba</u> 3 4		\boxtimes		
2. <u>Cornus alba</u> 3 4		\boxtimes		OBL species x 1 =
3 4	<u>5</u>		FACW	FACW species x 2 =
4		\boxtimes	FACW	FAC species x 3 =
				FACU species x 4 =
5				UPL species x 5 =
				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>20</u>	= Total Cov	er	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
<u>Herb Stratum</u> (Plot size <u>: 5' radius</u>)				$\square Prevalence Index is \leq 3.0^{1}$
	<u>90</u>	\boxtimes	FACU	Morphological Adaptations ¹ (Provide supporting
				data in Remarks or on a separate sheet)
	<u>10</u>		<u>OBL</u>	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Cirsium arvense</u>	<u>10</u>		<u>FACU</u>	¹ Indicators of hydric soil and wetland hydrology must
4. <u>Sonchus arvensis</u>	<u>8</u>		FACU	Be present, unless disturbed or problematic.
5. <u>Daucus carota</u>	<u>7</u>		<u>UPL</u>	
6. <u>Fraxinus pennsylvanica</u>	<u>4</u>		FACW	Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sanling/shuth Wardy plants loss than 2in DDU
10.				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
				Herb – All herbaceous (non-woody) plants, regardless
		<u>L.</u>		of size, and woody plants less than 3.28 ft tall.
	<u>129</u>	= Total Cov	er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: <u>30' radius</u>)				height
1				
2				
3				Hydrophytic
4			_	Vegetation
	0	= Total Cov		Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet.) Free				1

Sampling Point: 27

Profile De	scription: (Describe to	o the dep	oth needed to docum	nent the ind	licator or cor	nfirm the a	bsence	of indicators.)	
Depth	Matrix			Redox Fea	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-11	10YR 2/1	100					Loam	1	
11-13	10YR 3/1	100					Clay		
13-25	10Y 5/1	60	10YR 5/8	40	С	PL M	Clay		w/ rocks & dist. dolomite
	·			· ·					
	·						<u></u>		
	·			· ·					
					·				
	·						<u></u>		
					·				
					·		·		
	Concentration, D=Depl	etion, RN	1=Reduced Matrix, M	S= Masked	Sand Grains			² Location: PL=Pore	
-	il Indicators:	-							ematic Hydric Soils ³ :
	Histosol (A1)		D Po	-	w Surface (S	8) (LRR R ,			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,		4400		Redox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LR Mineral (F1) (Peat or Peat (S3) (LLR K, L, R) (S7) (LRR K, L)
	Hydrogen Sulfide (A4) Stratified Layers (A5)			amy Gleyed	· · /				low Surface (S8) (LRR K, L)
	Depleted Below Dark S	Surface ()		pleted Matri					face (S9) (LRR K, L)
	Thick Dark Surface (A		•	dox Dark Su	· ·				ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral				Surface (F7)				odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S4)	🗌 Re	dox Depres	sions (F8)				(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)							Red Parent M	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	RR, MLI	(A 149B)					Other (Explaining of the second se	in in Remarks)
³ Indicators	of Hydrophytic vegetat	tion and w	vetland hydrology mu	st be preser	nt, unless dist	urbed or pr	oblema	tic.	
	e Layer (if observed):			· ·		· · ·			
	:						1	Hydric Soil Present?	? Yes 🛛 No 🗌
-	h (inches):								
		-			face indicat	or by one	inch, t	he presence of hyd	drophytic vegetation and
wetland h	ydrology led toa find	ing of a	problematic hydric	soil.					
1									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	City of Waukesh	na/Waukesha Cour	nty	Sampling Date: 08/27/2015
Applicant/Owner:		St	ate: <u>WI</u>	Sampling Point: 28
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Townshi	ip, Range: <u>T6N, R</u>	<u>19E, SE1/4 S14</u>	
Landform (hillslope, terrace, etc.): Hillslope	Local relief (conc	cave, convex, none): <u>None</u>	Slope (%): <u>0-2</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat:	Long:	Datum:	
Soil Map Unit Name: Brookston silt loam (BsA)			NWI clas	sification: E1K
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🖂	No 🗌 (If no, e	explain in Remarks)	
Are Vegetation, Soil, or Hydrology significantly disturbe	d? Are "Norr	nal Circumstances	" present? Yes 🗌	No 🖂
Are Vegetation_X_, Soil, or Hydrology naturally problematic	? (If, neede	ed, explain any ans	wers in Remarks.)	
SUMMARY OF EINDINGS Attach aits man abouting or	ompling point	locationa tra	noosto importor	t faaturaa ata

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID: PC	<u>A 7</u>	
Remarks: (Explain alternative proce wetland.	edures here or in	a separate report.) Ve	getation is naturally problematic a	s it is a Poa pratens	sis-dominated

	Secondary Indicators (minimum of two required)
all that apply)	Surface Soil Cracks (B6)
Water-Stained Leaves (B9)	Drainage Patterns (B10)
Aquatic Fauna (B13)	Moss Trim Lines (B16)
Marl Deposits (B15)	Dry-Season Water Table (C2)
Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Oxidized Rhizospheres on Living Ro	Roots (C3) Saturation Visible on Aerial Imagery (C9)
Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Recent Iron Reduction in Tilled Soils	ls (C6) Geomorphic Position (D2)
Thin Muck Surface (C7)	Shallow Aquitard (D3)
Other (Explain in Remarks)	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)
epth (inches):	
epth (inches):	
epth (inches): <u>10</u>	Wetland Hydrology Present? Yes 🛛 No 🗌
,	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map 13), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)
	Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Other (Explain in Remarks)

VEGETATION - Use scientific names of plants.

Absolute Opminant Indicator Secretary Status Dominance Test worksheet: 1	VEGETATION – Use scientific names of plants.				Sampling Point: 28
2	Tree Stratum (Plot size: <u>30' radius)</u>				Dominance Test worksheet:
***	1				Number of Dominant Species
4.	2				That are OBL, FACW, or FAC: 1 (A)
1 1	3				Total Number of Dominant
5.	4				Species Across All Strata: <u>2</u> (B)
6.					Percent of Dominant Species
7. Prevalence Index worksheet: Ω = Total Cover Interview of the sector					That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
Image: Product Cover Total % Cover of: Multiputy by: Saping/Shub Stratum (Plot size: 30 radius) \$<					Prevalence Index worksheet:
1. Cornus alba 5 ⊠ FACW FACW species 6 x 2 = 12 2		<u>0</u>	= Total Cov	/er	Total % Cover of: Multiply by:
2	Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
2	1. <u>Cornus alba</u>	<u>5</u>	\boxtimes	FACW	FACW species $\underline{6}$ x 2 = $\underline{12}$
3	2				
4					
5					
6.					
T. Image: marked statum statum statum (Plot size: 5' radius) Image: marked statum status statum statu					
Equit Test for Hydrophytic VegetationHerb Stratum (Plot size: 5' radius)Rapid Test for Hydrophytic VegetationI poa pratensis90 \checkmark FACUCirsium arvense10 \square FACU3. Sonchus arvensis10 \square FACU4. Symphyotrichum lateriflorum1 \square FACU5					Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 5' radius) □		<u>5</u>	= Total Cov	/er	
1 Poa pratensis 90 ∑ FACU Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) 2. Cirsium arvense 10 ☐ FACU Definitions of Nydric soil and wetland hydrology must Be present, unless disturbed or problematic. 3. Sonchus arvensis 10 ☐ FACW Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic. 5	Herb Stratum (Plot size: 5' radius)				
2. Cirsium arvense10 \Box FACUdata in Remarks or on a separate sheet)3. Sonchus arvensis10 \Box FACUProblematic Hydrophytic Vegetation' (Explain)4. Symphyotrichum lateriflorum1 \Box FACUIndicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.5		<u>90</u>	\boxtimes	FACU	Morphological Adaptations ¹ (Provide supporting
3. Sonchus anvensis 10 □ FACU ¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic. 5				FACU	
4. Symphyotrichum lateriflorum1 \Box FACWIndicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.5			_		
S.					
6.			_		
7Tree - Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height9Sapling/shrub - Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.10and greater than 3.28 ft (1 m) tall.11Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.12141516171819101011.= Total CoverWoody vines - All woody vines greater than 3.28 ft tall.11					Definitions of Vegetation Strata:
8					Tree March alore Oir (7.0 pro) an array in diamatan
9. Sapling/shrub - Woody plants less than 3in. DBH 10. and greater than 3.28 ft (1 m) tall. 11. 12. 12. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 30' radius) 1. Woody vines - All woody vines greater than 3.28 ft in height 1. 2. 3. Yegetation 9. 0 = Total Cover Yes No No					
10. \square \square \square \square and greater than 3.28 ft (1 m) tall.11. \square \square \square \square \square \square 12. \square \square \square \square \square \square 13. \square \square \square \square \square \square 2. \square \square \square \square \square 3. \square \square \square \square \square 4. \square <					
Image:					
Image: second			_		
$\begin{array}{c} 111 & = \text{Total Cover} \\ \hline Woody \text{ Vine Stratum (Plot size: 30' radius)} \\ 1. _ \\ 2. _ \\ 3. _ \\ 4. _ \\ \hline \\ 0 & = \text{Total Cover} \end{array} \begin{array}{c} 111 & = \text{Total Cover} \\ \hline Woody \text{ vines } - \text{All woody vines greater than 3.28 ft in height} \\ \hline \\ \text{Hydrophytic} \\ \text{Vegetation} \\ \text{Present?} & \text{Yes } \square & \text{No } \square \end{array}$					
Woody Vine Stratum (Plot size: 30' radius) Woody vines greater than 3.28 ft in height 1 2 3 4 $\underline{0}$ = Total Cover Yes \boxtimes No	12	111			or size, and woody plants less than 3.28 ft tall.
1 2 3 Hydrophytic 4 Vegetation Present? Yes ⊠ No		<u>111</u>		/er	Woody vines – All woody vines greater than 3.28 ft in
2 Hydrophytic 3 Hydrophytic 4 Vegetation Present? Yes ⊠ No					height
3 Hydrophytic 4 Vegetation 0_ = Total Cover Present? Yes ⊠ No					
4 □ Vegetation <u>0</u> = Total Cover Present? Yes ⊠ No □					
<u>0</u> = Total Cover Present? Yes ⊠ No □	3				
	4				•

Remarks: (include photo number here or on a separate sheet.) Fresh (wet) meadow. Vegetation is problematic hydrophytic as it is a Poa pratensisdominated wetland. Typha angustifolia is growing upslope of the sample site. Professional judgement has been used to determine that this is a wetland based on hydric soils and wetland hydrology that is present.

Profile Des	scription: (Describe t	o the dep	th needed to docum	nent the ind	licator or cor	nfirm the a	bsence	e of indicators.)	
Depth	Matrix			Redox Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-10	10YR 2/1	100					Clay		
10-14	2.5Y 4/1	90	10YR 5/8	10	С	PL M	Clay		
14-24	10Y 5/1	50	10YR 3/6-5/6	50	C	PL M	Clay		w/gravel
							olay		
			-	·					
			·						
¹ Type: C=	Concentration, D=Dep	letion, RN	I=Reduced Matrix, M	S= Masked S	Sand Grains			² Location: PL=Pore	5
-	il Indicators:								ematic Hydric Soils ³ :
	Histosol (A1)		D Po	lyvalue Belo MLRA 149	w Surface (S	8) (LRR R,			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2) Black Histic (A3)		🗍 Th		ace (S9) (LRI		149B)		Redox (A16) (LLR K, L, R) Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) ((1408)		(S7) (LRR K, L)
	Stratified Layers (A5)			amy Gleyed					ow Surface (S8) (LRR K, L)
	Depleted Below Dark			pleted Matri					face (S9) (LRR K, L)
	Thick Dark Surface (A			dox Dark Su					ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral Sandy Gleyed Matrix (epieted Dark	Surface (F7)				odplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	<u>(</u>		dux Depress				Red Parent M	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	≀A 149B)					Other (Explain	n in Remarks)
³ Indiaatora	of Hydrophytic yccoto	tion and u	votland bydrology mu	ot ha procon	t unlogo dist	irbod or pr	oblomo	tio	
	of Hydrophytic vegeta Layer (if observed)		retiand hydrology mus	st be presen			obierna		
	:	-						Hydric Soil Present	? Yes 🛛 No 🗌
	h (inches):								
Remarks:									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	: City of Waukes	ha/Waukesha Cou	nty	Sampling Date: 08/27/2015
Applicant/Owner:		S	tate: <u>WI</u>	Sampling Point: 29
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Townsh	nip, Range: <u>T6N, F</u>	R19E, SE1/4 S14	
Landform (hillslope, terrace, etc.): Hillslope	Local relief (con	cave, convex, none	e): <u>None</u>	Slope (%): 20-30%
Subregion (LRR or MLRA): <u>LRR K</u>	Lat:	Long:	Datum:	
Soil Map Unit Name: Hochheim Ioam (HmE2)			NWI cla	assification: None
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🖂	No 🗌 (If no,	explain in Remarks)	
Are Vegetation, Soil, or Hydrology significantly disturbe	d? Are "Nor	mal Circumstance	s" present? 🛛 Yes 🖂	No 🗌
Are Vegetation, Soil, or Hydrology naturally problemation	c? (If, need	ed, explain any an	swers in Remarks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠ Yes □Yes □Yes	□No ⊠No ⊠No	Is the Sampled Area within a Wetland?	🗌 Yes	⊠No
			If yes, optional Wetland Site ID:	_	
Remarks: (Explain alternative proce	dures here or in	a separate report.)			

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is rea	quired; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living R	coots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soi	Is (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Im	nagery (B7)	Microtopographic Relief (D4)
Sparsely Vegetated Concave	Surface (B8)	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes	No 🛛 Depth (inches):	
Water Table Present? Yes	No 🛛 Depth (inches):	
Saturation Present? Yes (includes capillary fringe)	No 🛛 Depth (inches):	Wetland Hydrology Present? Yes 🗌 No 🛛
(includes capillary fringe) Describe Recorded Data (stream gauge,	monitoring well, aerial photos, previous inspections), if a	Wetland Hydrology Present? Yes No X vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map 13), WETS tables (Exhibit 14), Draft NRCS map (Exhibit 15)
(includes capillary fringe) Describe Recorded Data (stream gauge,	monitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, (Exhibit 3), Aerial photographs (Exhibit 4)	monitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, (Exhibit 3), Aerial photographs (Exhibit 4)	monitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, (Exhibit 3), Aerial photographs (Exhibit 4)	monitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, (Exhibit 3), Aerial photographs (Exhibit 4)	monitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, (Exhibit 3), Aerial photographs (Exhibit 4)	monitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, (Exhibit 3), Aerial photographs (Exhibit 4)	monitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, (Exhibit 3), Aerial photographs (Exhibit 4)	monitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, (Exhibit 3), Aerial photographs (Exhibit 4)	monitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, (Exhibit 3), Aerial photographs (Exhibit 4)	monitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, (Exhibit 3), Aerial photographs (Exhibit 4)	monitoring well, aerial photos, previous inspections), if a	vailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 29
Tree Stratum (Plot size: <u>30' radius</u>)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>2</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	er	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)				□ Prevalence Index is $\leq 3.0^{1}$
1. Phalaris arundinacea	<u>60</u>	\boxtimes	FACW	Morphological Adaptations ¹ (Provide supporting
2. Agrostis stolonifera	<u>30</u>	\boxtimes	FACW	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Cirsium arvense</u>	<u>20</u>		<u>FACU</u>	
4. <u>Sonchus arvensis</u>	<u>20</u>		FACU	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. Poa pratensis	<u>10</u>		FACU	
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				
10				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
11.				
				Herb – All herbaceous (non-woody) plants, regardless
12	140			of size, and woody plants less than 3.28 ft tall.
March Mine Other trans (Distriction 201 and there)	140	= Total Cov	ei	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: <u>30' radius</u>)				height
1				
2				
3				Hydrophytic
4				Vegetation Present? Yes ⊠ No □
	<u>0</u>	= Total Cov		
Remarks: (include photo number here or on a separate shee	et.) Upland m	eadow/old fie	Ια.	

Sampling Point: 29

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix			Redox Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-9	10YR 2/2	100					Loam		
9-12	10YR 3/2	80					Loam		w/gravel
0 12	10YR 2/2	20					Louin		wgraver
40.47							0		
12-17	10YR 3/2	50			. <u> </u>		Clay I	oam	w/gravel
	10YR 3/4	50							
17-24	7.5YR 3/3	50	_				Clay		w/gravel & dist. dolomite
	7.5YR 3/4	50							
					·				
¹ Type: C=0	Concentration, D=Deple	etion RM=	Reduced Matrix MS	S= Masked 9	Sand Grains			² Location: PL=Pore I	ining M=Matrix
	Indicators:								matic Hydric Soils ³ :
-	Histosol (A1)		🗌 Pol	yvalue Belo	w Surface (S	8) (LRR R,			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	B)				Redox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LR I		149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) (LRR K, L)			(S7) (LRR K, L)
	Stratified Layers (A5)			my Gleyed					bw Surface (S8) (LRR K, L)
	Depleted Below Dark S			oleted Matrix					face (S9) (LRR K, L)
	Thick Dark Surface (A1 Sandy Mucky Mineral (dox Dark Su	Surface (F6)				se Masses (F12) (LRR K, L, R) odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S			dox Depress					(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	.,						Red Parent Ma	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LRI	R R, MLRA	149B)					Other (Explain	in Remarks)
31 12 1									
	of Hydrophytic vegetaties Layer (if observed):		land hydrology mus	t be presen	t, unless disti	urbed or pro	oblema	liC.	
	Layer (il observeu).								
	(inches):						ľ	Hydric Soil Present?	Yes 🗌 No 🖾
Remarks:									
ixemaixs.									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	City of Wauk	esha/Waukesh	a County	Samp	ling Date: 08/25/2015
Applicant/Owner:			State: WI	Samp	ling Point: <u>30</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section, Towr	ship, Range:	T6N, R19E, SE1/4 \$	<u>S14</u>	
Landform (hillslope, terrace, etc.): Hillslope	Local relief (co	oncave, convey	k, none): <u>None</u>	Slope	(%): <u>0-3</u>
Subregion (LRR or MLRA): LRR K	Lat:	Long:	Datum:		
Soil Map Unit Name: Lamartine silt loam (LmB)				NWI classification	on: <u>E1K</u>
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛] No 🗌 ((If no, explain in Rer	marks)	
Are Vegetation, Soil, or Hydrology significantly disturbe	d? Are "N	lormal Circums	stances" present?	Yes 🖂	No 🗌
Are Vegetation, Soil, or Hydrology naturally problemation	c? (If, ne	eded, explain a	iny answers in Rem	arks.)	
SUMMARY OF FINDINGS – Attach site map showing sa	ampling po	int location	s. transects. in	nportant fea	tures. etc.

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	⊡No
			If yes, optional Wetland Site ID: PC	<u>A 7</u>	
Remarks: (Explain alternative proce	edures here or in	a separate report.)			

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check a	all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Water marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Oxidized Rhizospheres on Living Ro	ots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils	(C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes 🗌 No 🛛 De	epth (inches):	
Water Table Present? Yes 🗌 No 🛛 De	epth (inches):	
Saturation Present? Yes 🛛 No 🗌 De	epth (inches): <u>11</u>	Wetland Hydrology Present? Yes 🛛 No 🗌
(includes capillary fringe)	· · · <u>·</u>	<i></i>
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we	rell, aerial photos, previous inspections), if ava	ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we	rell, aerial photos, previous inspections), if ava	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (rell, aerial photos, previous inspections), if ava	ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we	rell, aerial photos, previous inspections), if ava	ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (rell, aerial photos, previous inspections), if ava	ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (rell, aerial photos, previous inspections), if ava	ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (rell, aerial photos, previous inspections), if ava	ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (rell, aerial photos, previous inspections), if ava	ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (rell, aerial photos, previous inspections), if ava	ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (rell, aerial photos, previous inspections), if ava	ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (rell, aerial photos, previous inspections), if ava	ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (rell, aerial photos, previous inspections), if ava	ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (rell, aerial photos, previous inspections), if ava	ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we (Exhibit 3), Aerial photographs (Exhibit 4), Site photos (rell, aerial photos, previous inspections), if ava	ailable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.					S	Sampling P	oint: <u>30</u>	
Tree Stratum (Plot size: <u>30' radius)</u>	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Tes	t works	heet:		
1				Number of Domina	nt Specie	es		
2				That are OBL, FACW, or FAC: 1 (A)				
3				Total Number of Dominant				
4				Species Across All Strata: <u>2</u> (B)				
		_		-				
5				Percent of Dominal That Are OBL, FAC			<u>%</u> (A/B)	
6							<u>///</u> (/////////////////////////////////	
7				Prevalence Index	workshe	et:		
	<u>0</u>	= Total Cov	er	Total % Cover	<u>` of:</u>		ultiply by:	
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species		x 1 =		
1				FACW species	<u>100</u>	x 2 =	<u>200</u>	
2				FAC species		x 3 =		
3				FACU species	<u>30</u>	x 4 =	<u>120</u>	
4				UPL species		x 5 =		
5				Column Totals:	130	(A)	320	(B)
6						ex = B/A = 2		()
7				Hydrophytic Vege				
··	<u>0</u>			Rapid Test for			tion	
Llarb Stratum (Diat aiza) 5' radiua)	<u>u</u>	= Total Cov	ei	Dominance Tes				
Herb Stratum (Plot size: <u>5' radius</u>)	90		FACIA	Prevalence Inc Morphological			le supporti	na
1. <u>Phalaris arundinacea</u>	<u>80</u>		FACW	data in Rer				-
2. <u>Cirsium arvense</u>	<u>30</u>	\boxtimes	FACU	Problematic Hy	drophytic	c Vegetatio	n ¹ (Explain	ר)
3. <u>Echinocystis lobata</u>	<u>20</u>		FACW	¹ Indicators of hydri	ic soil an	d wetland h	avdrology r	nuet
4				Be present, unless				nust
5								
6				Definitions of Veg	etation S	Strata:		
7				Tree – Woody plan	nte 3in (7	6 cm) or m	nore in dia	motor
8				at breast height (DI				incloi
9							-	
				Sapling/shrub – W and greater than 3.	• •		an 3in. DB	Η
10				and greater than 5.	20 11 (111	ii) tall.		
11				Herb – All herbace	ous (non	-woody) pla	ants, regar	dless
12				of size, and woody	plants le	ss than 3.2	28 ft tall.	
	<u>130</u>	= Total Cov	er	Woody vines – All	woodyyy	ines areata	or than 3.2	8 ft in
Woody Vine Stratum (Plot size: 30' radius)				height	woody v	ines greate	51 thán 5.20	0 11 11
1				-				
2								
3				Libraha a bu ti a				
4				Hydrophytic Vegetation				
4	0	= Total Cov		Present?	Yes 🖂	No [
Pomarka: (include photo number here or on a concrete ch			er					
Remarks: (include photo number here or on a separate sh	eei.) i testi (we	ny m c auow.						

Profile Des	scription: (Describe t	o the dep	th needed to docun	nent the ind	icator or con	firm the a	bsence	of indicators.)	oumping Fonte <u>oo</u>
Depth	Matrix			Redox Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-4	10YR 3/2	100					Silt lo	am	
4-23	10YR 2/2	97	7.5YR 3/4	3	С	PL M	Silty of	clay loam	
23-29	10YR 3/2	80					Clay I		
	2.5Y 3/2	20					<u> </u>		
	2.51 5/2								
			. <u></u>						
	Concentration, D=Dep	lation DN	-Doduced Metrix M	C- Maakad (Cond Croine			² Location: PL=Pore L	ining M-Matrix
	I Indicators:			S- Maskeu a	Sanu Grains			Indicators for Proble	-
-	Histosol (A1)		🗌 Pc	lyvalue Belo	w Surface (Sa	8) (LRR R,			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LRF		149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) (LRR K, L)			(S7) (LRR K, L)
	Stratified Layers (A5) Depleted Below Dark \$	Surface (A		amy Gleyed	· ,				ow Surface (S8) (LRR K, L) face (S9) (LRR K, L)
	Thick Dark Surface (A			edox Dark Su					se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral	(S1)	🗌 De	epleted Dark	Surface (F7)			Piedmont Floo	odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S4)	🗌 Re	edox Depress	sions (F8)				(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5) Stripped Matrix (S6)							Red Parent Ma	aterial (F21) Dark Surface (TF12)
	Dark Surface (S7) (LR	R R. MLF	XA 149B)					U Very Shallow I U Other (Explain	
		,	,						
	of Hydrophytic vegetat		etland hydrology mu	ist be presen	t, unless distu	urbed or pro	oblema	tic.	
	Layer (if observed)								
	: h (inches):							Hydric Soil Present?	Yes 🛛 No 🗌
Remarks:									
r tornanto.									

Project/Site: City of Waukesha Park/Former Milky Way Fill City/County:	City of	Waukesha	/Waukes	ha County		Sampling Date: 08/27/2015
Applicant/Owner:				State: WI		Sampling Point: <u>31</u>
Investigator(s): Daniel Carter, PhD and Jennifer Dietl; SEWRPC	Section	, Township	, Range:	<u>T6N, R19E, SE1/4</u>	<u>S14</u>	
Landform (hillslope, terrace, etc.): Hillslope	Local re	elief (conca	ve, conve	ex, none): <u>None</u>		Slope (%): <u>6-12</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat:	L	.ong:	Datum:		
Soil Map Unit Name: Hochheim Ioam (HmC2)					NWI class	ification: <u>E1K</u>
Are climatic/hydrologic conditions on the site typical for this time of year?		Yes 🛛 🛛 🛛	10 🗌	(If no, explain in Re	emarks)	
Are Vegetation, Soil, or Hydrology significantly disturbe	d?	Are "Norma	al Circum	stances" present?	Yes 🖂	No 🗌
Are Vegetation, Soil, or Hydrology naturally problemation	:?	(If, needed	, explain	any answers in Ren	narks.)	

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠ Yes □Yes □Yes	□No ⊠No ⊠No	Is the Sampled Area within a Wetland?	🗌 Yes	⊠No
			If yes, optional Wetland Site ID:		
Remarks: (Explain alternative proce	dures here or in	a separate report.)			

Wetland Hydrology Indicators:			Sec	ondary Indicators (minimum of two required)
Primary Indicators (minimum of one	is required; check all th	nat apply)		Surface Soil Cracks (B6)
Surface Water (A1)		Water-Stained Leaves (B9)		Drainage Patterns (B10)
High Water Table (A2)		Aquatic Fauna (B13)		Moss Trim Lines (B16)
Saturation (A3)		Marl Deposits (B15)		Dry-Season Water Table (C2)
Saturation (A3) Water marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)		Hydrogen Sulfide Odor (C1)		Crayfish Burrows (C8)
Sediment Deposits (B2)		Oxidized Rhizospheres on Living Root	ts (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Presence of Reduced Iron (C4)		Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduction in Tilled Soils (C6) 🗌	Geomorphic Position (D2)
Iron Deposits (B5)		Thin Muck Surface (C7)		Shallow Aquitard (D3)
Inundation Visible on Aer	ial Imagery (B7)	Other (Explain in Remarks)		Microtopographic Relief (D4)
Sparsely Vegetated Cond	cave Surface (B8)		\boxtimes	FAC-Neutral Test (D5)
Field Observations:				
Surface Water Present? Yes [(inches):		
Water Table Present? Yes [🗌 No 🖾 Depth ((inchoc):		
		. ,		
Saturation Present? Yes ((includes capillary fringe)			Vetland Hydrol	ogy Present? Yes 🗌 No 🖾
Saturation Present?Yes [(includes capillary fringe)Describe Recorded Data (stream gate)	No Depth ((inches): <u>23</u>	lable: Topo ma	p (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present?Yes [(includes capillary fringe)Describe Recorded Data (stream gate)	No Depth ((inches): 23 erial photos, previous inspections), if avail	lable: Topo ma	p (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ((includes capillary fringe) Describe Recorded Data (stream ga (Exhibit 3), Aerial photographs (Exh	No Depth ((inches): 23 erial photos, previous inspections), if avail	lable: Topo ma	p (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ((includes capillary fringe) Describe Recorded Data (stream ga (Exhibit 3), Aerial photographs (Exh	No Depth ((inches): 23 erial photos, previous inspections), if avail	lable: Topo ma	p (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ((includes capillary fringe) Describe Recorded Data (stream ga (Exhibit 3), Aerial photographs (Exh	No Depth ((inches): 23 erial photos, previous inspections), if avail	lable: Topo ma	p (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ((includes capillary fringe) Describe Recorded Data (stream ga (Exhibit 3), Aerial photographs (Exh	No Depth ((inches): 23 erial photos, previous inspections), if avail	lable: Topo ma	p (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ((includes capillary fringe) Describe Recorded Data (stream ga (Exhibit 3), Aerial photographs (Exh	No Depth ((inches): 23 erial photos, previous inspections), if avail	lable: Topo ma	p (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ((includes capillary fringe) Describe Recorded Data (stream ga (Exhibit 3), Aerial photographs (Exh	No Depth ((inches): 23 erial photos, previous inspections), if avail	lable: Topo ma	p (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ((includes capillary fringe) Describe Recorded Data (stream ga (Exhibit 3), Aerial photographs (Exh	No Depth ((inches): 23 erial photos, previous inspections), if avail	lable: Topo ma	p (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ((includes capillary fringe) Describe Recorded Data (stream ga (Exhibit 3), Aerial photographs (Exh	No Depth ((inches): 23 erial photos, previous inspections), if avail	lable: Topo ma	p (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ((includes capillary fringe) Describe Recorded Data (stream ga (Exhibit 3), Aerial photographs (Exh	No Depth ((inches): 23 erial photos, previous inspections), if avail	lable: Topo ma	p (Exhibit 1), WWI map (Exhibit 2), Soils map
Saturation Present? Yes ((includes capillary fringe) Describe Recorded Data (stream ga (Exhibit 3), Aerial photographs (Exh	No Depth ((inches): 23 erial photos, previous inspections), if avail	lable: Topo ma	p (Exhibit 1), WWI map (Exhibit 2), Soils map

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute	Dominant	Indicator	Dominance Test worksheet:
1. <u>Salix matsudana</u>	<u>% Cover</u> <u>40</u>	<u>Species?</u> ⊠	<u>Status</u> <u>UPL</u>	Number of Dominant Species
2. <u>Fraxinus pennsylvanica</u>	<u>10</u>		FACW	That are OBL, FACW, or FAC: $\underline{2}(A)$
3			<u></u>	Total Number of Dominant
4				Species Across All Strata: <u>3</u> (B)
+ 5				
				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)
6				Prevalence Index worksheet:
7	50			
	<u>50</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)		_		OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cove	er	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				□ Prevalence Index is ≤3.0 ¹
1. <u>Phalaris arundinacea</u>	<u>90</u>	\boxtimes	FACW	Morphological Adaptations ¹ (Provide supporting
2. Parthenocissus inserta	<u>10</u>		FACU	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
3				
4				¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
+ 5				be present, unless disturbed of problematic.
				Definitions of Vegetation Strata:
6				_
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
8				at breast height (DDF), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>100</u>	= Total Cove	er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cove	er	Present? Yes 🛛 No 🗌
Remarks: (include photo number here or on a separate sheet	.) Fresh (we			

Profile De	scription: (Describe to	o the dep	th needed to docum	ent the ind	licator or con	firm the a	bsenc	e of indicators.)	
Depth	Matrix			Redox Fea	tures		_		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture	Remarks
0-14	10YR 3/2	100					Loar	n	
14-25	10YR 4/3	50	5YR 3/4	50	С	М	Clay		w/gravel
	·								
					·				
				·	·				
	·				·		·		
					·				
	·								
17 0							·	2	
	Concentration, D=Deple il Indicators:	etion, RM	Reduced Matrix, MS	5= Masked	Sand Grains			² Location: PL=Pore Indicators for Proble	Lining, M=Matrix matic Hydric Soils ³ :
	Histosol (A1)		D Pol		w Surface (S8	B) (LRR R,		2 cm Muck (A	10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		_	MLRA 149	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LRF				Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) (I	LRR K, L)			(S7) (LRR K, L)
	Stratified Layers (A5)	f aaa ()		• •	Matrix (F2)				ow Surface (S8) (LRR K, L)
	Depleted Below Dark S Thick Dark Surface (A1			pleted Matri dox Dark Sเ					face (S9) (LRR K, L) ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (Surface (F0)				odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S			dox Depres					(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	54)			3013 (10)			Red Parent M	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LRI	R R, MLF	RA 149B)						n in Remarks)
									,
	of Hydrophytic vegetati • Layer (if observed):		etiand hydrology mus	st be preser	it, unless distu	irbed or pr	opiema	auc.	
	:							Hydric Soil Present	? Yes 🗌 No 🛛
	h (inches):							•	
Remarks:									



Photo 1. Atypical (farmed) wetland at sample point 1 representative of wetland found at sample points 3, 11, 20, 22.



Photo 2. Northwest view of agricultural field from southeast corner of field. Representative of *Glycine max* field found at sample points 2, 8, 13 and 24.



Photo 3. Second growth, Southern wet to wet-mesic lowland hardwoods with Jewelweed dominant in understory at sample point 4 in Plant Community Area 1.



Photo 4. Lowland hardwoods with buckthorn thicket at sample point 5.



Photo 5. Second growth, Southern wet to wet-mesic lowland hardwoods at sample point 6 in Plant Community Area 2.



Photo 6. Fresh (wet) meadow and shallow marsh at sample point 7 in Plant Community Area 3.



Photo 7. Fresh (wet) meadow at sample point 9 and 10.



Photo 8. Fresh (wet) meadow/shallow marsh at sample point 12 in Plant Community Area 5.



Photo 9. Old field at sample point 14.



Photo 10. Fresh (wet) meadow at sample point 15 and 16 in Plant Community Area 6.



Photo 11. Old field at sample point 17 facing east toward fill pile.



Photo 12. Shallow marsh and shrub-carr at sample point 18 in Plant Community Area 4 located at base of fill pile.



Photo 13. Fresh (wet) meadow at sample point 19 in Plant Community Area 7.



Photo 14. Fresh (wet) meadow at sample point 21.



Photo 15. Fresh (wet) meadow, shrub thicket, and hardwood complex at sample point 23 in Plant Community Area 8.



Photo 16. Fresh (wet) meadow at sample point 25.



Photo 17. Old field at sample point 26.



Photo 18. Fresh (wet) meadow at sample points 27 and 28.



Photo 19. Phalaris arundinacea in upland field at sample points 29 and 31.



Photo 20. Erosion in newly created stormwater detention pond in center of project area.



Photo 21. East view of newly created stormwater detention pond in center of project area and fill pile visible in background.

#230057

510

EXHIBIT 11 WETLAND DOCUMENTATION RECORD Remotely Sensed Data Summary

Owner/Operator: City of Waukesha County: Waukesha State: WI

Slide Reviewer: Jennifer Dietl

Date: 08/19/2015

Site Identification No. CA737-272

(Tract No. + Site No.)

Farm Service Agency (or Other) Aerial Slide Data

-

Date (Mo./Yr)	Rainfall (in) +D/N/W (Apr- June ave.	Interpretation- (codes listed in box below)				
(110.711)	=_)	A	B	, C	Da	
2013	3	CRY(3)	CRY+1	CRY 66	Cey3	
2010	3	CR Y 3 part 6 boar	+CR Y+1,3	CRY3,60	CRY-60	
uly 08	3	CRY-68? "	CRY-6d	CRY-61	CRN	
line do	2	CRY-607	CRY-Ud?	CRY-1017	CRYONNO	
une 05	1	CR7 60	CR/60	CRY66	CRY65	
the OH	2	CRY+ Ub	CR Y+60	CRY+ 66	087+66	
une 03	2	CRY-	CRY	URN	CR.Y-	
2002	2	CRY 60 (5?)	CRY 60 (5?)	CRY 62 52)	URY 62	
une ol	3	GRY 60	CRY 6d	ORY 6d	CRY 6	
ine 00	2	CRY+ be	CR-4+1	CRY 62	CRY60	
in 99	3	CRY+ Loc	UR YT Ge	CRY 60	12 Y-60	
une 98	2	CRY 6d	CRY 68	CR-Y-60	CRY-60	
ine 97	2	OR Y lod	CRY 6à	CR Y 60	DRY 6d	
Wg: 96	2	CRYF 3	UR1-3	CR 4+3	CR-1+3	
ne of		OC 6	UR ?	CR ?	CR?	
1994		CRN ba	CRN 6a	CRN ba	CRN-66	
1553	2	CR4-3	CR 4+ 3	CRN	CR- 4-62	
992	1	UCN	CRN	CKN	(RN	
	amenalipe	2/9 100%	9/9 10070	719 76%	9/9 1051	
		15/16 8370	15/18 8370	13/18 7275	15/18 833	
		- P				
Air Photo						
I FIOLO						

Y = Yes, signal indicate CR = cropped (row cro	es wetness (+ = strong, - = weak) p or tilled)	N = No wetness signature NC = not cropped (hay, pasture, idle, etc.)		
Feature 1 = water	<u>Color</u> 6a = dark green	Manipulation (year of installation) 7a = ditched	Other write explanation	
2 = mud flat	6b = light green	7b = tiled		
3 = bare spot	6c = yellow	7c = filled		
4 = drowned crop	6d = brown	7d = tree/brush removal		
5 = planted late	6e = black	8 = plowed/tilled		

Does slide/air photo data indicate the site is a wetland?

Yes No

A total of <u>0</u> years out of <u>0</u> most normal years (100%) have wet (Y) signatures.

A total of $\underline{0}$ years out of $\underline{0}$ years (0%) observed have wet (Y) signatures.







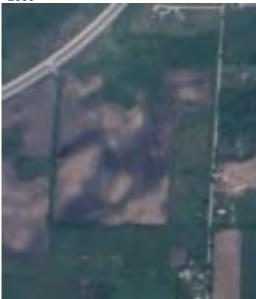
2003





2004

2000



1996



1997



1998

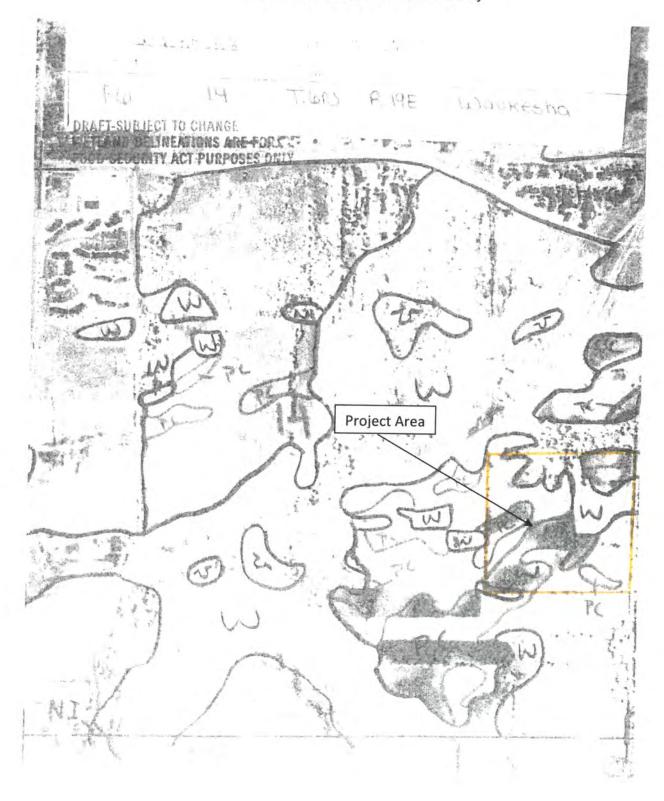
1993



DOC# 00227518

EXHIBIT 14. Draft NRCS Wetland Inventory Map

City of Waukesha Proposed Park Site (Former Milky Way Fill Site) SE Quarter Section 14, T6N-R19E City of Waukesha, Waukesha County



SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

W239 N1812 ROCKWOOD DRIVE • PO BOX 1607 • WAUKESHA, WI 53187-1607•

Serving the Countles of: KENOSHA

MILWAUKEE OZAUKEE RACINE WALWORTH WASHINGTON WAUKESHA

FAX



(262) 547-1103

TELEPHONE (262) 547-6721

December 22, 2015

Ms. Violet V. Razzo, P.E. Project Engineer Ruekert & Mielke, Inc. W233 N2080 Ridgeview Parkway Waukesha, WI 53188-1020

Re: SEWRPC No. CA-306-222

Dear Ms. Razzo:

This will respond to your letter of October 2, 2014, requesting that the Commission staff conduct a field inspection of the western portion the CTH V right-of-way between CTH C and the northern Village of Mount Pleasant limits related to proposed water main extension proposed by Racine Water and Wastewater Utilities. The project area is located in parts of U.S. Public Land Survey Sections 6 and 7, Township 3 North, Range 22 East, Village of Mount Pleasant, Racine County, Wisconsin. The purpose of the field inspection was to identify and stake the boundaries of any wetlands contained within the project area.

Pursuant to your request, Commission staff identified and staked the wetland boundaries within the project areas on September 22, 2015. A copy of the wetland delineation report is attached for your reference.

Should you have any questions regarding this information, please do not hesitate to contact Mr. Christopher J. Jors, Senior Specialist-Biologist (*cjors@sewrpc.org* or 262-953-3246).

Sincerely,

Kenneth R. Yunker, P.E. Executive Director

KRY/TMS/CJJ/kmd #229560 – CA306-222 CTH V Watermain Extension

Enclosure (#229620)

cc: Mr. Joseph Eberle, P.E., Ruekert & Mielke, Inc. (via email)
Ms. Maureen McBroom, Ruekert & Mielke, Inc. (via email)
Mr. Keith E. Haas, P.E., Racine Water & Wastewater Utility (w/enclosure)
Ms. Elaine Johnson, Wisconsin Department of Natural Resources (w/enclosure)
Ms. Marie Kopka, U.S. Army Corps of Engineers (w/enclosure)

WETLAND DELINEATION REPORT

RACINE WATER AND WASTEWATER UTILITIES PROPOSED 20-INCH TRANSMISSION MAIN Along west side of CTH V from CTH C North to Village Limits

Sections 6 and 7, T3N, R22E VILLAGE OF Mt. PLEASANT RACINE COUNTY, WISCONSIN

> Prepared by: Jennifer Dietl Christopher Jors Daniel Carter

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607 Waukesha, WI 53187-1607

WETLAND DELINEATION REPORT OVERVIEW

(Based upon WDNR WETLAND Delineation Confirmation Request Check List)

INTRODUCTION

- Who requested the delineation Violet Razo, Project Engineer, Ruekert-Mielke
- Why the delineation was undertaken Proposed 20" transmission main along west side CTH V
- Date the field work was completed September 22, 2015
- Who conducted field work Jennifer Dietl, Christopher Jors, Daniel Carter
- Statement of Qualifications

METHODS

- Description of Methods
- Sources Reviewed
 - Topographic Map Exhibit 1 (Maps 1 and 2)
 - WDNR Surface Water Data Viewer Wisconsin Wetland Invetory (WWI) Map Exhibit 2 (Maps 1 and 2)
 - Soil Survey and Floodplain Map Exhibit 3 (Maps 1 and 2)
 - Historical Aerial Photos Exhibits 4A to 4E (2015, 2010, 2005, 2000, 1995)
 - Sanitary Sewer Service Map Exhibit 5
 - Advanced Identification (ADID) Wetland Map No ADID wetlands within project area
- Description of any site specific agency guidance (site meetings, etc.) None

RESULTS AND DISCUSSION

- Antecedent hydrologic condition analysis Drier than normal
- Previous wetland delineation mapping **None**
- Existing environmental mapping (WWI mapping, Soil survey, etc.)
- Amount and types of wetland in the project area
- Wetland/upland boundary explanation
- Disturbed and problematic areas encountered
- Other water resources located in the project area
- Other Considerations

LITERATURE CITED

Wetland Delineation Map – Exhibit 6

Vegetation Survey and Wetland Delineation Data Forms

- Preliminary Vegetation Survey Exhibit 7
- Wetland Determination Data Forms MW Region Exhibit 8

Site Photos – Exhibit 9

Farm Service Agency Slide Review

- Completed wetland documentation form Exhibit 10
- FSA Slide Review Map Exhibit 11
- Copies or photos of slides if available Exhibit 12
- Draft NRCS Wetland Inventory Map Not available

INTRODUCTION

This wetland delineation report responds to Ruekert & Mielke's letter of request on behalf of the Racine Water and Wastewater Utilities to identify the boundaries of any wetlands along CTH V (centerline to 40' west of centerline) between CTH C and the northern limits of the Village of Mount Pleasant. The project area is located in U.S. Public Land Survey Sections 6 and 7, Township 3 North, Range 22 East, Village of Mount Pleasant, Racine County, Wisconsin.

Statement of Qualifications

Jennifer Dietl, Specialist-Biologist, earned a Bachelor's degree in Biology and Environmental Science from Carroll University in 1992. She has worked at the Commission from 1992 to 1997 and from 2006 to the present conducting wetland delineations, primary environmental corridor delineations, and vegetation surveys. In between years of service at the Commission she worked for the Wisconsin Department of Transportation – Green Bay as an LTE Environmental Analysis and Review Specialist – and the Wisconsin Department of Natural Resources – Green Bay as an LTE Hydrologist. Jennifer attended the UW-La Crosse Basic and Advanced Wetland Delineation Workshops on August 10-15, 2015 and a Wisconsin Dept. of Natural Resources Wetland Delineation & Wetland Rapid Assessment Methodology Workshop on April 23, 2014.

Christopher Jors, Senior Specialist-Biologist, has worked at SEWRPC since 1993, and has been part of the wetland delineation team since 1994. He received a Bachelor's degree in Conservation Aspects of Biology from the University of Wisconsin – Milwaukee in 1992. Prior to working at SEWRPC, Chris worked at the UWM Field Station at the Cedarburg Bog in Saukville, WI, where he learned methods of sampling wetland plant communities within the Bog. Chris has attended various wetland training workshops including the UW-La Crosse Basic and Advanced Wetland Delineation Workshops on August 10-15, 2015; a Wisconsin Dept. of Natural Resources Wetland Delineation & Wetland Rapid Assessment Methodology Workshop on April 23, 2014; and a U.S. Army Corps of Engineers Workshop on the Midwest Supplement to the 1987 Wetland Delineation Manual on February 3, 2009.

Daniel Carter, PhD, Senior Biologist, has worked at SEWRPC since 2013. He graduated with honors from Grinnell College with a Bachelor's degree in Biology. He later received a PhD in Biology from Kansas State University. Daniel has published several plant ecology articles in peer-reviewed journals, served on the botany team for the Wisconsin Wildlife Action Plan, and co-teaches the UW-La Crosse Basic Wetland Plant Identification course. He has completed both basic and advanced wetland delineation training as well as Wisconsin Natural Heritage Inventory training. Prior to working for the Commission, Daniel served as project coordinator for a grassland restoration project overseen jointly by the United States Department of Agriculture and The Nature Conservancy and taught high school Biology.

METHODS

Description of Methods

The wetland boundary determinations were based upon the criteria and methodologies set forth in the 1987 Corps of Engineers Wetlands Delineation Manual; the January 2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0); the March 4, 2015, Guidance for Submittal of Delineation Reports to the St. Paul District Army Corps of Engineers and the Wisconsin Department of Natural Resources; and the State of Wisconsin 2014 Wetland Plant List.

Specific methods used to field identify wetland boundaries included the U.S. Department of the Army Corps of Engineers Routine Onsite Determination Method – Plant Community Assessment Procedure. This procedure requires an initial identification of representative plant community types in the project area followed by a characterization of vegetation, soils, and hydrology for each type.

Sources Reviewed

Prior to conducting field work, Commission staff reviewed the following data sources: Racine County's topographic mapping (Exhibit 1), WDNR Surface Water Data Viewer (WWI) Mapping (Exhibit 2), Natural Resource Conservation Service's (NRCS) soil survey and FEMA Floodplains (Exhibit 3), Commission aerial photography (Exhibits 4A - 4E), Sanitary Sewer Service Map (Exhibit 5), and United States Department of Agriculture (USDA) and National Climatic Data Center (NCDC) data for antecedent and observed precipitation.

RESULTS AND DISCUSSION

Jennifer Dietl, lead investigator, Christopher Jors, and Daniel Carter, identified and staked the boundaries of the wetlands contained within the project area on September 22, 2015. Wetland boundaries were marked in the field using orange wire flags and ribbon. Ruekert & Mielke was responsible for surveying the Commission's wetland boundary markers. Sample Site locations and the centerlines of any wet roadside ditches were captured by Commission staff during the field inspection using a sub-meter GPS unit. It should be noted that the wet ditch on the north end of the project had been staked with pink flags by a private consultant prior to the Commission field inspection (see Exhibit 6 - Map 1 of 3). Ruekert & Mielke indicated that they would survey the pink flags in that area.

The results of the wetland delineation field inspection for this project area are shown on Exhibit 6, which includes sample site numbers and locations, approximate staked wetland boundaries, plant community area number and locations, as well as GPS-located wet ditches.

Antecedent Hydrologic Conditions

WETS Station: RACINE RACINE (WI6922)

Climatological data and observed precipitation amounts with monthly summaries were taken from the nearest WETS station with relevant data.

	Month	3 yrs. In 10 less than	Normal	3 yrs. In 10 more than	Observed precip.	Condition dry, wet, normal	Condition value	Month weight value	Product of previous two columns
1st prior month	Sept	1.75	3.70	4.52	3.03	Normal	2	3	6
2nd prior month	Aug	2.76	4.08	4.88	2.69	Dry	1	2	2
3rd prior month	July	2.58	3.57	4.22	2.14	Dry	1	1	1
								sum	9
		If sum is	_						
6 - 9 drier than normal									
10 - 14 normal									
15 - 18 wetter than normal									
		Conclusion	Drier than no	rmal					

Previous wetland delineation mapping – None

Existing Environmental Mapping

The Racine County topographic map (Exhibit 1) shows that the route of the project area has slight rolling topography ranging from highs of about 770 feet above sea level near the north end of the project area to lows of 736 feet at the south end. No surface waters are mapped within the project area.

The WDNR Surface Water Data Viewer (WWI) Mapping (Exhibit 2) indicates that the project route crosses one wetland complex just north of Kraut Road consisting of Emergent/wet meadow - farmed (E2Kf) and Flats/unvegetated wet soil – farmed (FOKf). No waterways are indicated within the project area on this mapping.

The NRCS Soil Survey map (Exhibit 3) shows the following soils in the project area:

Soil Name	Slope %	Drainage Class	Comments
Ashkum silty clay loam (AtA)	0-3%	Poorly drained	Sample sites: 1, 2, 4, 5, and 7
Elliot silty clay loam (EtB)	2-6%	Somewhat poorly drained	Sample site: 6
Markham silt loam (MeB)	2-6%	Well drained to moderately well drained	
Markham silt loam (MeC2)	6-12%, eroded	Well drained to moderately well drained	
Morley silt loam (MzdC2)	6-12%, eroded	Well drained to moderately well drained	
Varna silt loam (VaB)	2-6%	Well drained to moderately well drained	Sample site: 8
Wallkill silt loam (Wa)	0-2%	Very poorly drained	Sample site: 3

Historical aerial photos of the project area were reviewed back to 1995 (see table below). Aerial photos for years 2015, 2010, 2005, 2000, 1995 are attached (Exhibits 4A to 4E). This review indicated that very little has changed in land use history over that time period.

Photo year	Review of Project Area				
1995	Large network of drain tiles evident in agricultural field in northwest corner of project area. Strong wetness signatures in farmed wetland northwest of CTH V and Kraut Road.				
2000	No changes noted.				
2005	Strong wetness signatures at farmed wetlands northwest and southwest of CTH V-Kraut Road intersection.				
2010	Large area of standing water at farmed wetland northwest of CTH V-Kraut Road intersection.				
2015	Standing water northwest and southwest of CTH V-Kraut Road intersection.				

SEWRPC's sanitary sewer service area map (Exhibit 5) shows that the entire project area is located within the City of Racine and Environs planned sanitary sewer service area.

Amount and Types of Wetlands in the Project Area

Five wetland plant community areas were identified within the project area. A list of vascular plant species observed during the field inspection was prepared for each plant community area as well as plant community type(s), dominant plant species, disturbances, and any critical plant and animal species (Exhibit 7). The table below summarizes characteristics for each plant community area (PCA):

PCA Number	Acreage*	PCA Type(s)	Dominant Species	Critical Species
1	NA	Wet roadside ditch with Fresh (wet) meadow	Phalaris arundinacea-Reed canary grass	None

2	0.05	Atypical (mowed) wetland and Fresh (wet) meadow	<u>Agrostis stolonifera</u> -Creeping bentgrass <u>Phalaris</u> <u>arundinacea</u> -Reed canary grass <u>Poa pratensis</u> -Kentucky bluegrass	None
3	0.9	Atypical (farmed) wetland	Persicaria pensylvanica-Pinkweed	None
4	0.08	Atypical (farmed) wetland	Persicaria pensylvanica-Pinkweed	None
5	0.08	Atypical (farmed) wetland	Panicum dichotomiflorum-Knee grass Sonchus arvensis-Sow thistle	None

*Acreages not calculated for wet roadside ditches since the wetlands contained in them were not staked.

Wetland/Upland Boundary Explanation

Eight representative sample sites were identified within the project area. The Wetland Determination Data Forms describing the findings at each sample site are attached as Exhibit 8. The locations of the sample sites are shown in Exhibit 6. The wetland boundaries were determined using breaks in topography, changes in vegetation composition, visual identification of wetland hydrology, and presence of hydric soils.

Disturbed and Problematic Areas Encountered

Wetland sample sites 5 and 7 had significantly disturbed vegetation due to agricultural land management activities which obscured a hydrophytic plant community. Indicators of hydric soils and wetland hydrology were present at both sample sites.

Farm Service Agency Slide Review

A Farm Service Agency slide review was conducted for portions of the project area where farmed wetland was suspected. Slide review observation forms and a map of areas of concern are included as Exhibits 10 and 11. Copies of slides for normal precipitation years (2006, 2003, 1998, 1997, 1995, 1994, 1993, 1991, and 1990) have been included in the report (Exhibit 12).

Wetland sample sites 3 and 5 had wet signatures in 8 out of 9 (89%) normal precipitation years. Wetland sample site 7 had wet signatures in 5 out of 9 (55%) normal precipitation years. While sample site 6 had wet signatures in 6 out of 9 (67%) normal precipitation years, it was determined that this site did not support wetland conditions. No other wetland hydrology indicators were observed at site 6. In addition, no hydrophytes were observed at this site where Smooth brome grass (*Bromus inermis*), a Facultative Upland species, was dominant.

Other Water Resources Located in the Project Area

None

Other Considerations

Please be advised that no Federal or State regulatory jurisdiction determinations relative to any wetland permits or certifications are made under this report. The nonagricultural performance standards set forth in Section NR 151.125 of *Wisconsin Statutes* requires establishment of an impervious surface protective area measured horizontally from the delineated wetland boundary to the closest impervious surface. The protective area requirements should be taken into consideration for any planned improvements along CTH V and it is suggested that you contact WDNR regarding approaches to meet these requirements. Plant Community Area (PCA) No. 1, a wet roadside ditch, was designed for storm water conveyance purposes and is exempt from protective area performance standards. Due to the presence of less-susceptible mowed and farmed wetlands dominated by non-native species, the remainder of the wetlands within the project area require protective area setbacks between 10 and 30 feet, depending on average width measurements. PCA Numbers 2, 3, 4, and 5, require establishment of 10-foot, 20-foot, 12-foot, and 10-foot impervious surface protective areas, respectively.

LITERATURE CITED

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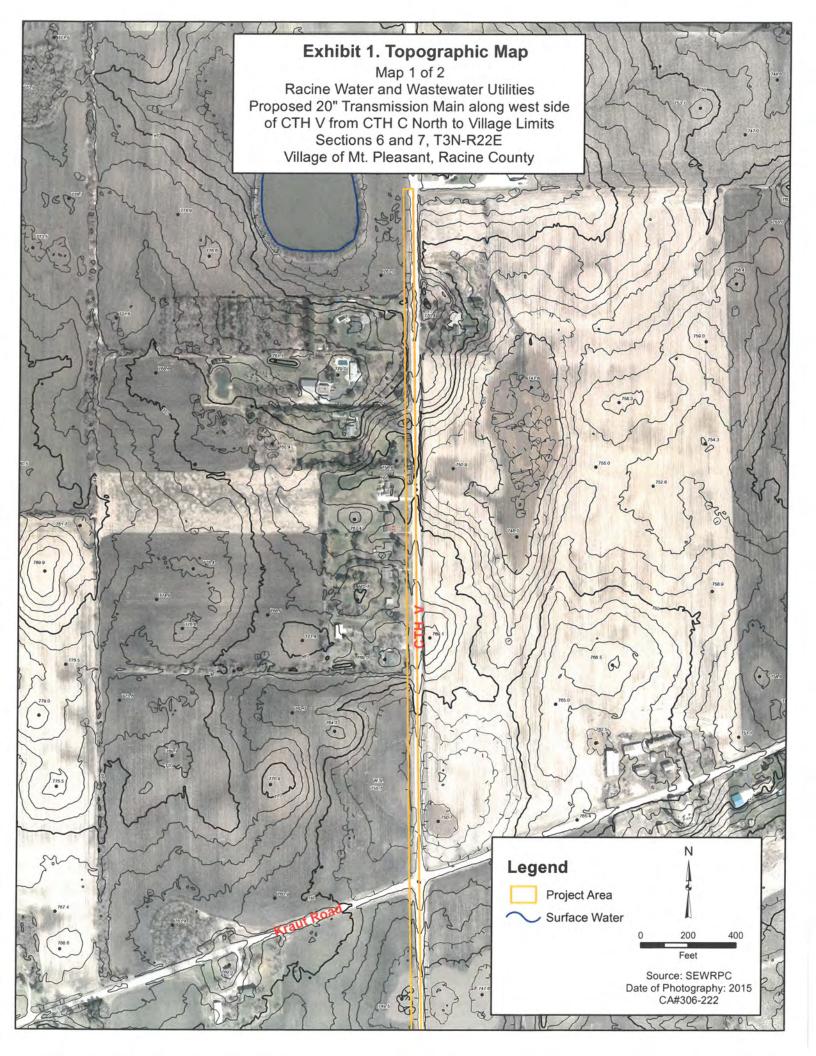
U.S. Army Corps of Engineers, 2014, State of Wisconsin Wetland Plant List

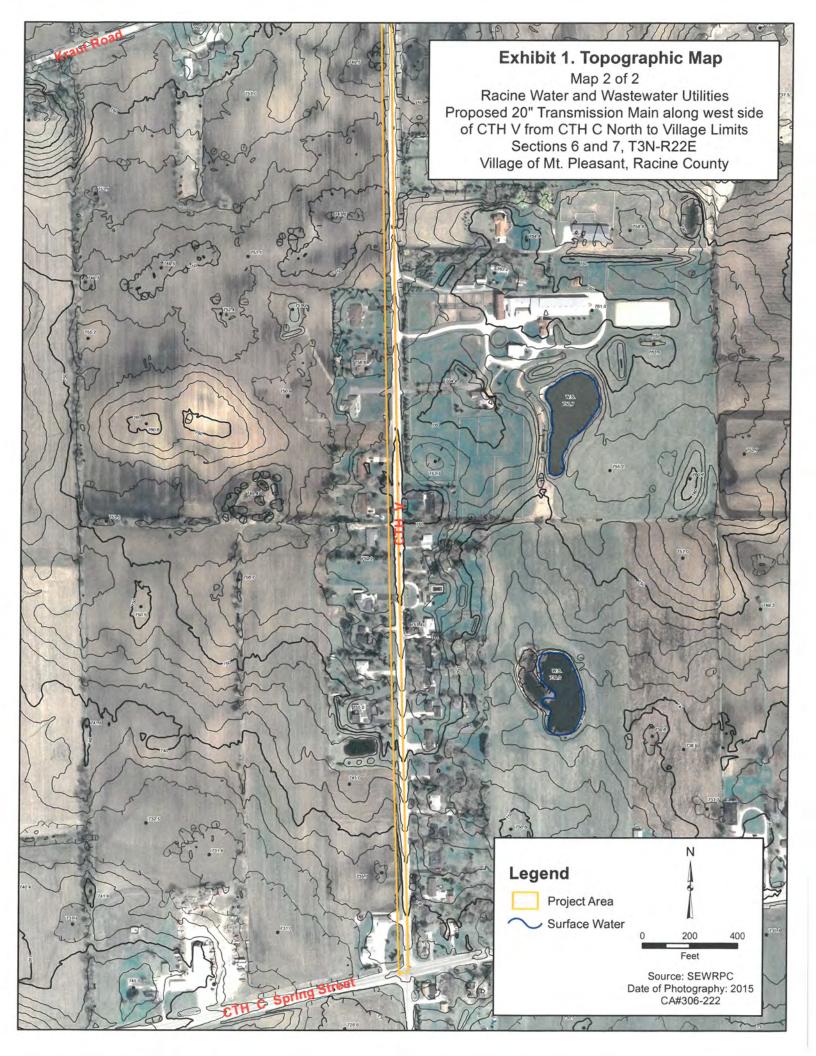
U.S. Army Corps of Engineers, 2010, *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (Version 2.0). U.S. Army Engineer Research and Development Center, August 2010.

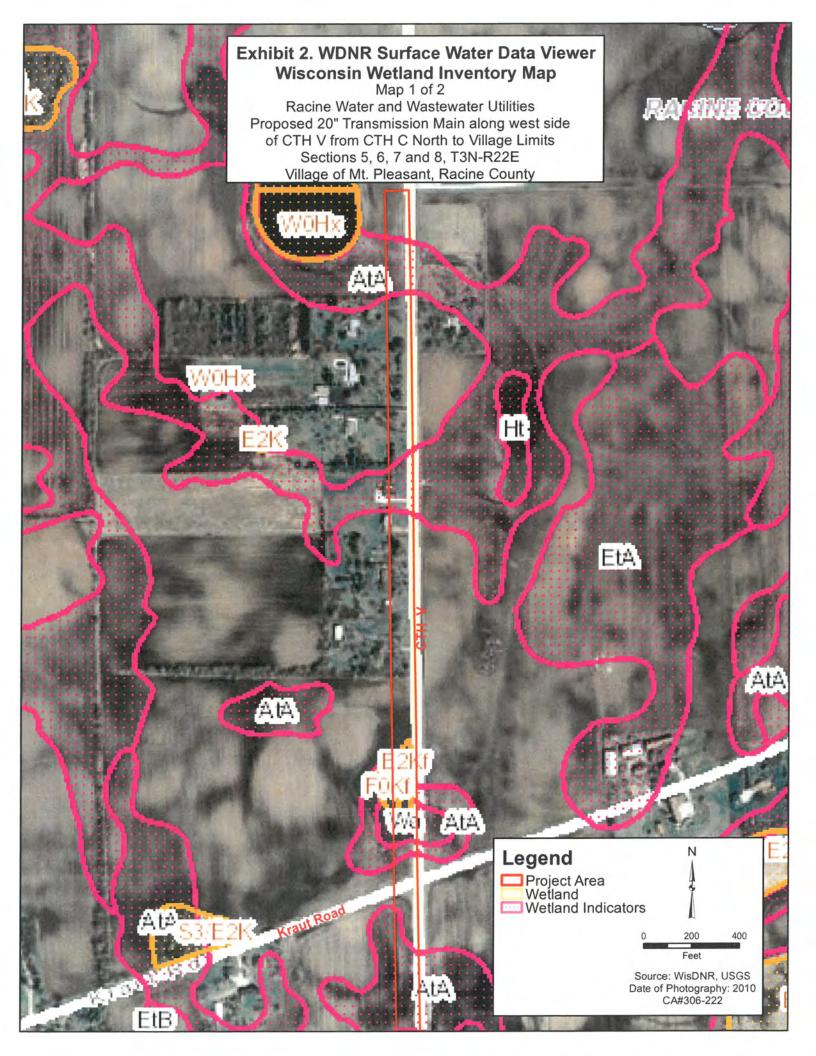
U.S. Army Corps of Engineers, 1987, U.S. Army Corps of Engineers wetlands delineation manual. Wetlands Research Program Technical Report Y-87-1.

WDNR, Surface Water Data Viewer, website at http://dnrmaps.wi.gov/sl/?Viewer=SWDV

CA306-222 Racine Water and Wastewater Utilities along CTH V (00229328).DOC 300-2000







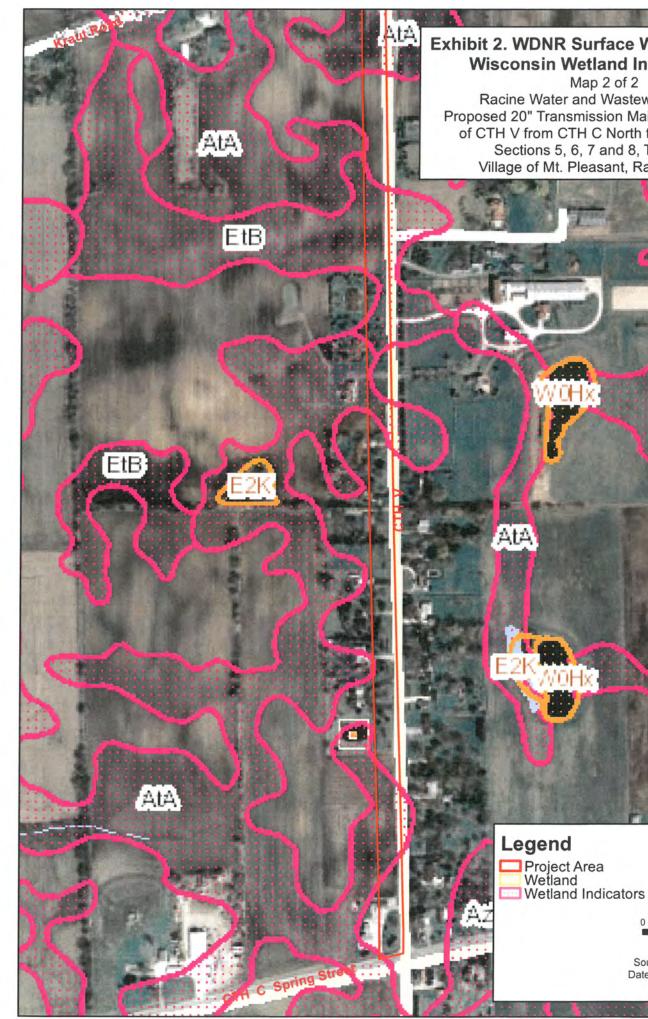


Exhibit 2. WDNR Surface Water Data Viewer Wisconsin Wetland Inventory Map

Map 2 of 2 Racine Water and Wastewater Utilities Proposed 20" Transmission Main along west side of CTH V from CTH C North to Village Limits Sections 5, 6, 7 and 8, T3N-R22E Village of Mt. Pleasant, Racine County

Ν

200 Feet Source: WisDNR, USGS Date of Photography: 2010 CA#306-222

400

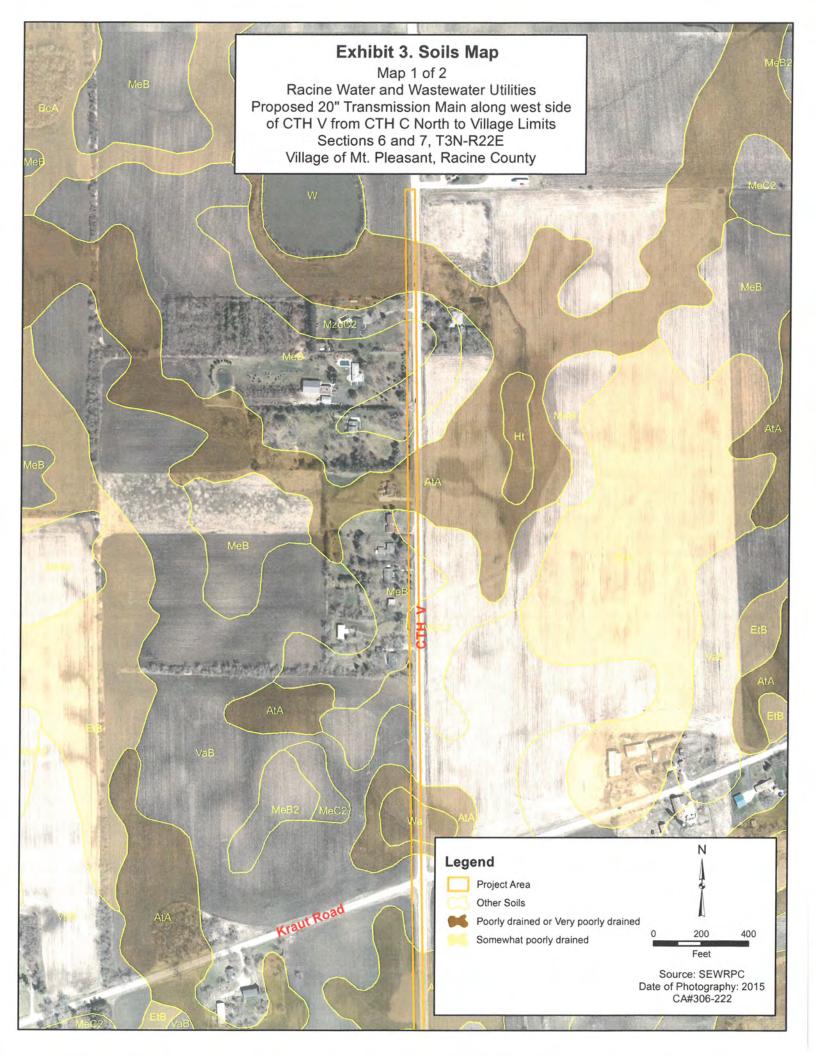




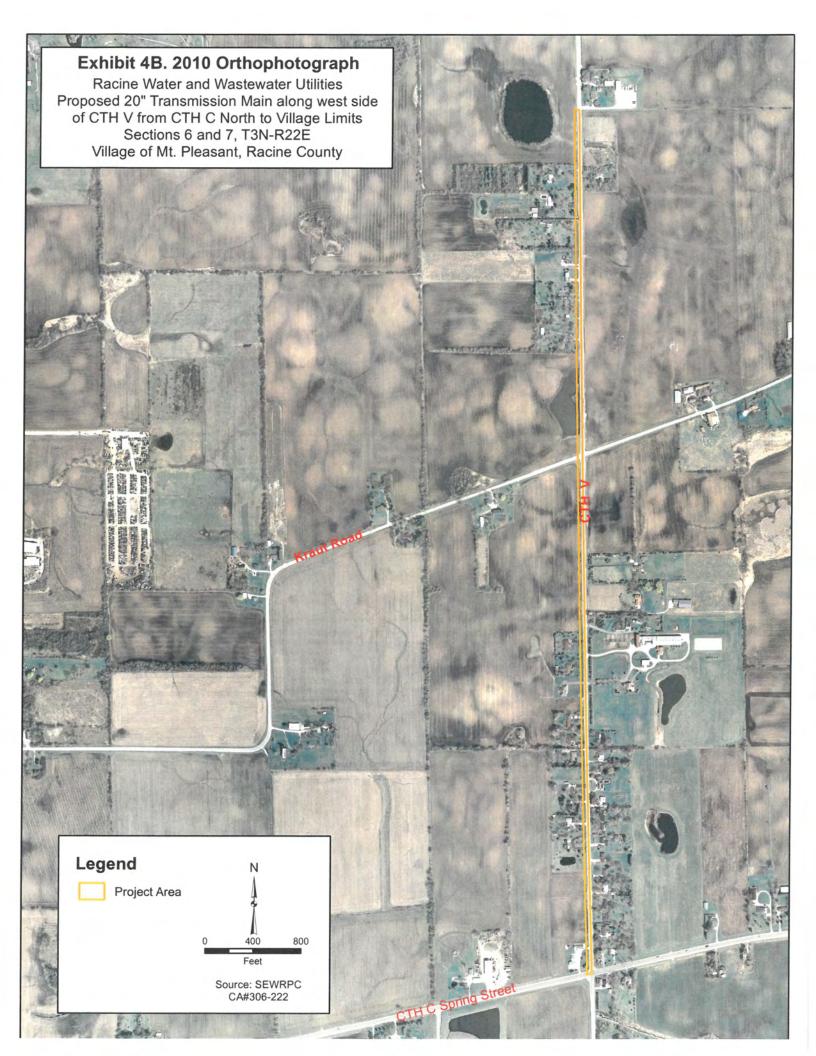
Exhibit 3. Soils Map Map 2 of 2 Racine Water and Wastewater Utilities Proposed 20" Transmission Main along west side of CTH V from CTH C North to Village Limits Sections 6 and 7, T3N-R22E Village of Mt. Pleasant, Racine County

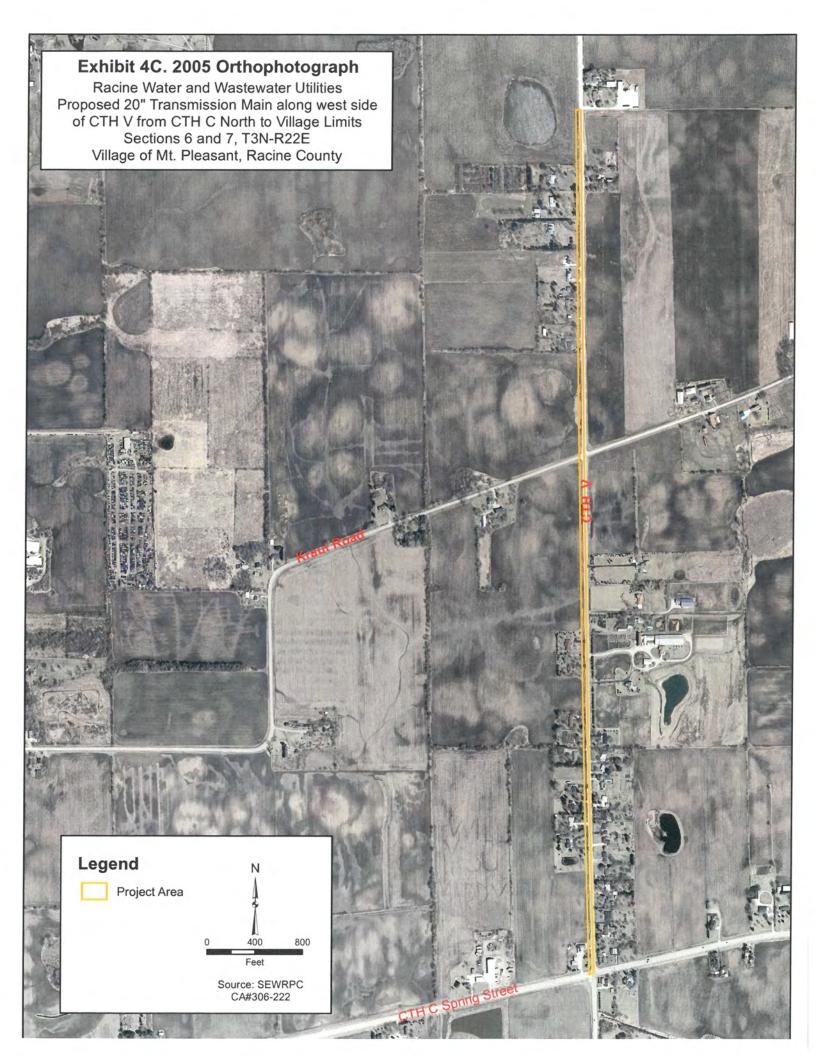
200 Feet 400

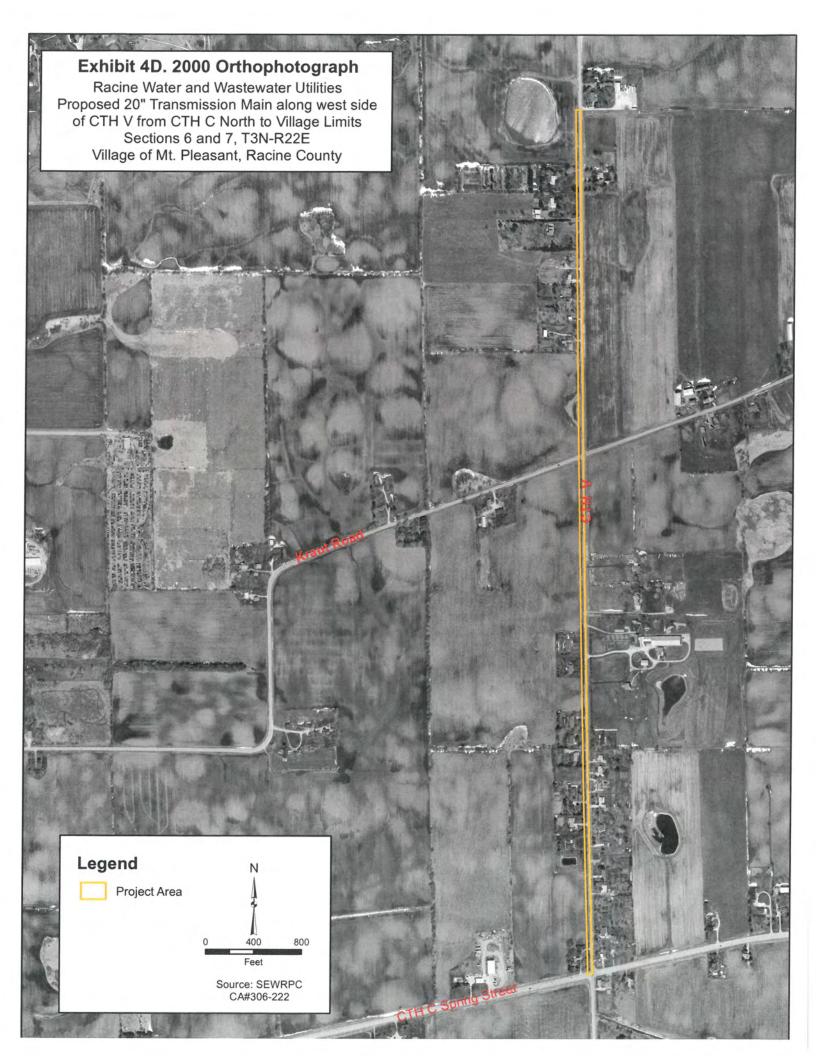
Ν

Source: SEWRPC Date of Photography: 2015 CA#306-222

Exhibit 4A. 2015 Orthophotograph Racine Water and Wastewater Utilities Proposed 20" Transmission Main along west side of CTH V from CTH C North to Village Limits Sections 6 and 7, T3N-R22E Village of Mt. Pleasant, Racine County Legend N Project Area 800 400 Feet Source: SEWRPC CA#306-222







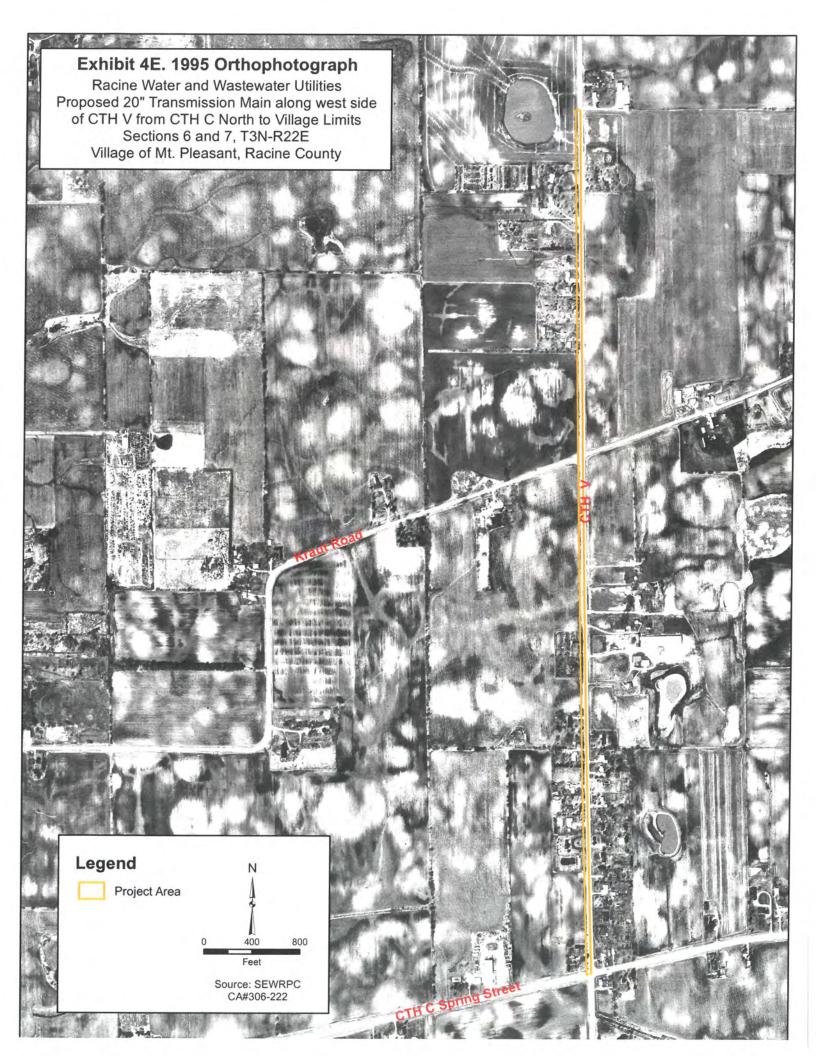
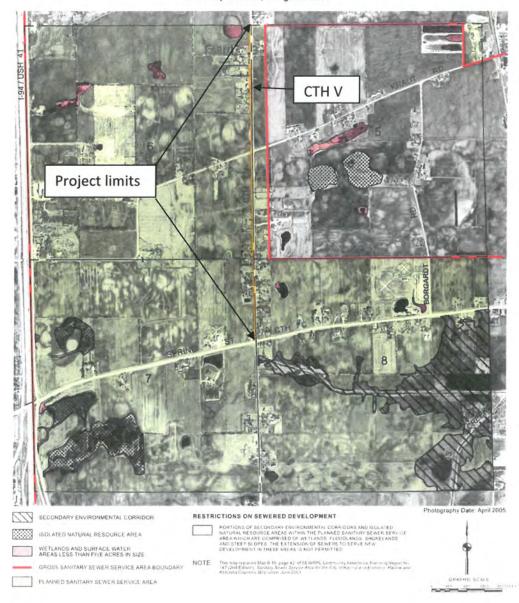


EXHIBIT 5. Sanitary Sewer Service Map Racine Water and Wastewater Utilities Proposed 20" Transmission Main along west side of CTH V from STH C North to Village Limits Sections 6 and 7, T3N, R22E Village of Caledonia, Racine County

Map 13

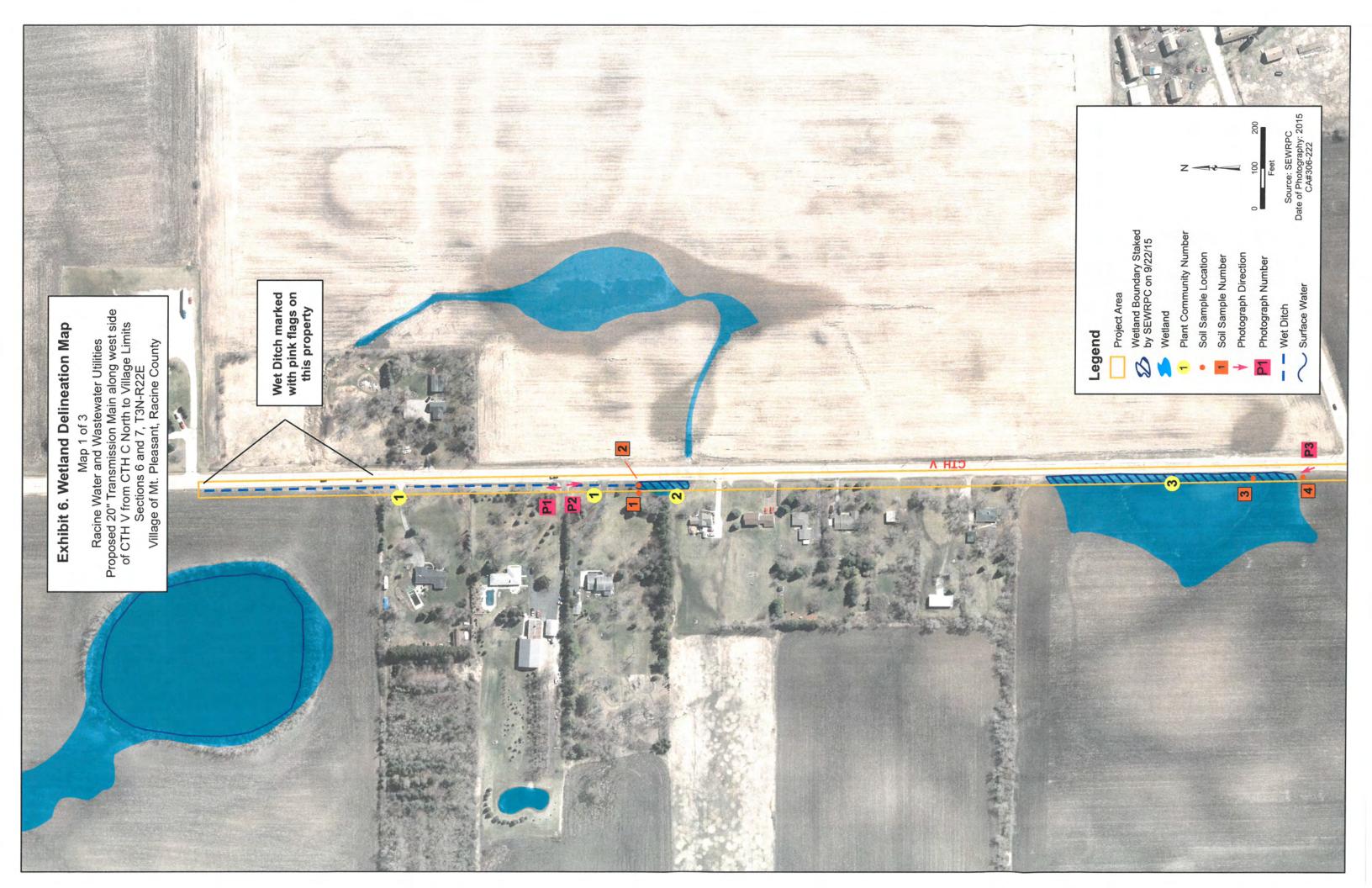
ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE CITY OF RACINE AND ENVIRONS

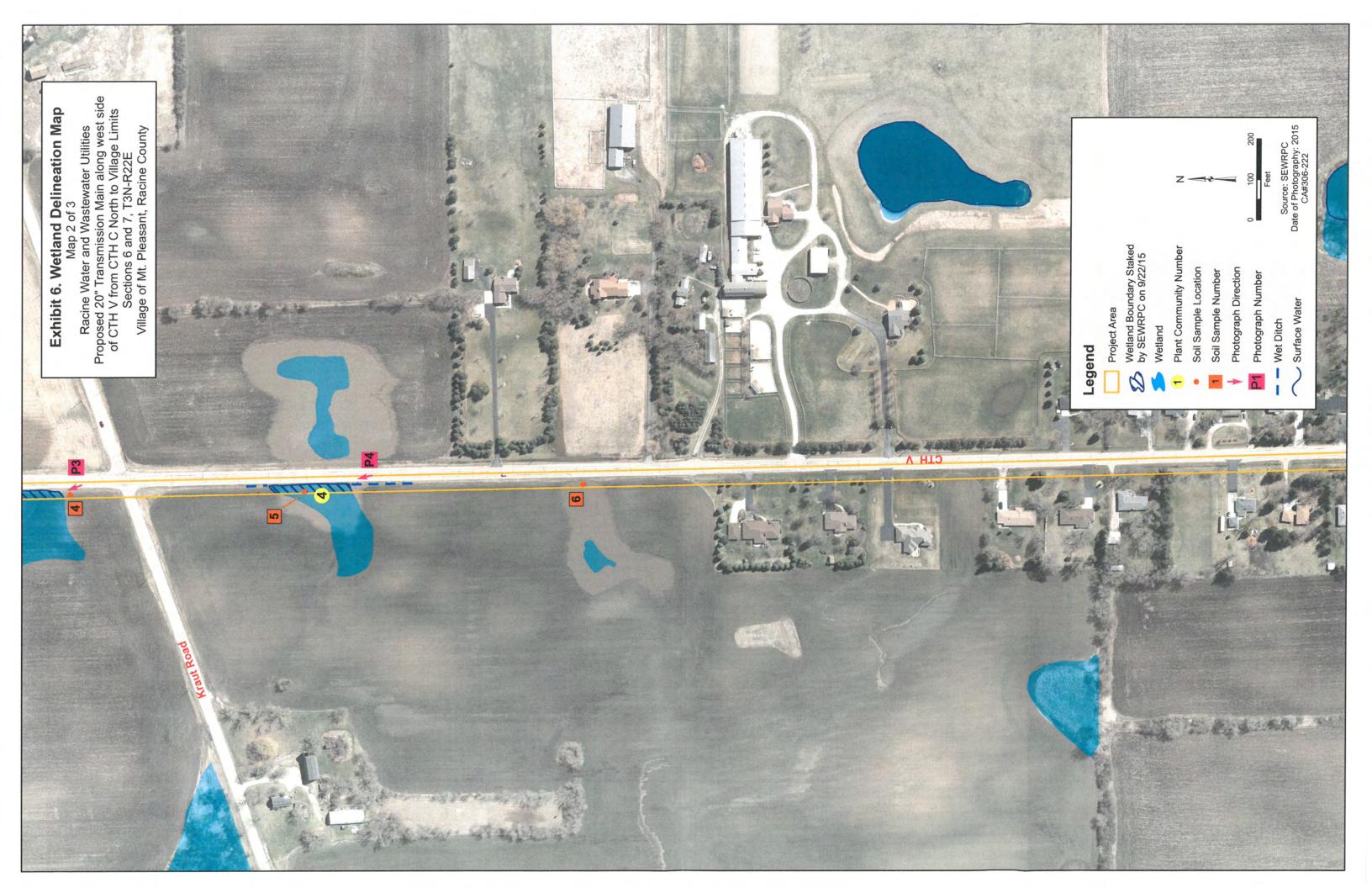
U. S. Public Land Survey Sections 5, 6, 7, and 8 Township 3 North, Range 22 East

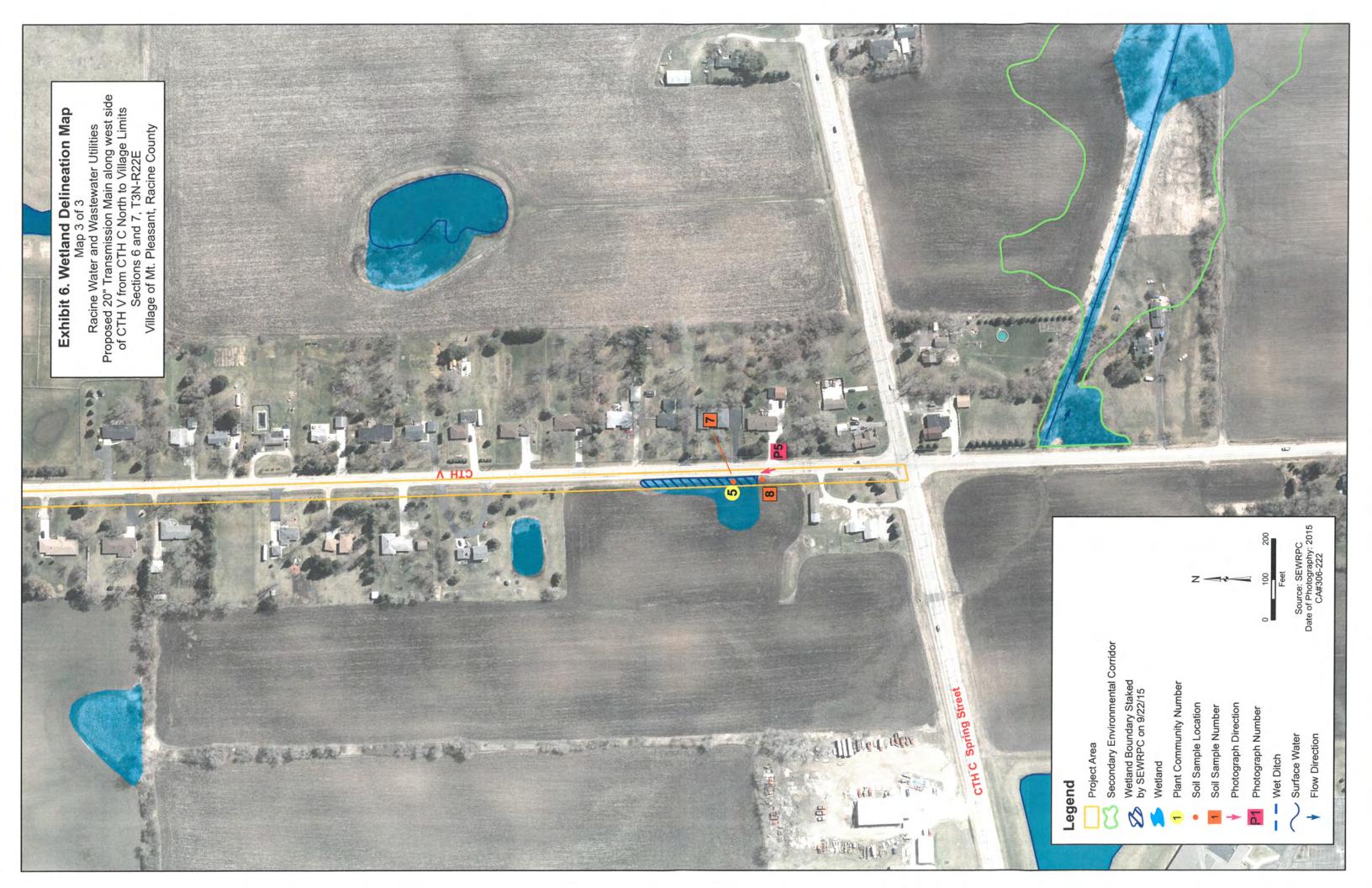


Source: SEWRPC.

17







SVY4214 CA306-222

EXHIBIT 7

PRELIMINARY VEGETATION SURVEY RACINE WATER AND WASTEWATER UTILITIES PROPOSED 20" TRANSMISSION MAIN ALONG WEST SIDE OF CTH V FROM CTH C NORTH TO VILLAGE LIMITS

Date:	September 22, 2015
Observers:	Daniel L. Carter, Ph.D., Principal Biologist Christopher J. Jors, Senior Biologist Jennifer Dietl, Biologist Southeastern Wisconsin Regional Planning Commission
Location:	Village of Mount Pleasant in parts of U.S. Public Land Survey Sections 6 and 7, Township 3 North, Range 22 East, Racine County, Wisconsin.

Species List: Plant Community Area (PCA) No. 1 - Native Species

Co-dominant species

Ambrosia artemisiifolia -- Common ragweed Ambrosia trifida--Giant ragweed Apocynum cannabinum--Indian hemp Asclepias syriaca--Common milkweed Scirpus atrovirens--Green bulrush Solidago altissima--Tall goldenrod

NON-Native Species

Agrostis stolonifera--Creeping bentgrass Amaranthus sp.--Pigweed Arctium minus-Burdock Daucus carota--Queen Anne's lace Lactuca serriola -- Prickly wild lettuce Phalaris arundinacea--Reed canary grass Poa pratensis--Kentucky bluegrass Sonchus arvensis--Sow thistle

Total number of plant species: 14 Number of alien, or non-native, plant species: 8 (57 percent)

This plant community area consists of a wet ditch with fresh (wet) meadow. Disturbances to the plant community area include mowing and water level changes due to ditching and draining. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 2 – Native Species

<u>Ambrosia</u> <u>artemisiifolia</u>--Common ragweed <u>Apocynum</u> <u>cannabinum</u>--Indian hemp <u>Prunella</u> <u>vulgaris</u>--Selfheal

NON-Native Species

Agrostisstolonifera--Creeping bentgrassGlechomahederaceaLactucaserriola-Prickly wild lettucePhalarisarundinaceaPlantagomajorCommon plantainPoapratensisTaraxacumofficinale-Common dandelion

Total number of plant species: 10 Number of alien, or non-native, plant species: 7 (70 percent)

This approximately 0.05-acre wetland plant community area consists of atypical (mowed) wetland and fresh (wet) meadow. Disturbances to the plant community area include mowing and water level changes due to ditching and draining. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 3 - Native Species

<u>Bidens</u> <u>vulgata</u>--Tall beggars-ticks <u>Persicaria</u> <u>pensylvanica</u>--Pinkweed <u>Sambucus</u> <u>nigra</u>--Elderberry

NON-Native Species

<u>Cirsium</u> <u>arvense</u>--Canada thistle <u>Echinochloa</u> <u>crusgalli</u>--Barnyard grass <u>Phalaris</u> <u>arundinacea</u>--Reed canary grass <u>Setaria</u> <u>faberi</u>--Giant foxtail <u>Solanum</u> <u>dulcamara</u>--Deadly nightshade <u>Solidago</u> <u>sempervirens</u>--Seaside goldenrod

Total number of plant species: 9 Number of alien, or non-native, plant species: 6 (67 percent)

This approximately 0.9-acre plant community area is part of a larger wetland complex and consists of atypical (farmed) wetland. Disturbances to the plant community area include siltation and sedimentation due to stormwater run-off from adjacent lands, water level changes due to ditching and draining, and agricultural land management activities such as plowing. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 4 – Native Species

<u>Persicaria</u> <u>amphibia</u>--Water smartweed <u>Persicaria</u> <u>pensylvanica</u>--Pinkweed

NON-Native Species

<u>Bromus</u> <u>inermis</u>--Smooth brome grass <u>Cirsium</u> <u>arvense</u>--Canada thistle <u>Phalaris</u> <u>arundinacea</u>--Reed canary grass

Total number of plant species: 5 Number of alien, or non-native, plant species: 3 (60 percent)

This approximately 0.08-acre plant community area is part of a larger wetland complex and consists of atypical (farmed) wetland. Disturbances to the plant community area include siltation and sedimentation due to stormwater run-off from adjacent lands, water level changes due to ditching and draining, and agricultural land management activities such as plowing and herbicide application. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 5 - Native Species

<u>Chenopodium</u> <u>album</u>--Lambs quarters <u>Panicum</u> <u>dichotomiflorum</u>--Knee grass

NON-Native Species

<u>Daucus</u> <u>carota</u>--Queen Anne's lace <u>Echinochloa</u> <u>crusgalli</u>--Barnyard grass <u>Glycine</u> <u>max</u>--Soy-bean (planted) <u>Portulaca</u> <u>oleracea</u>--Purslane <u>Puccinellia</u> <u>distans</u>--Alkali grass <u>Senecio</u> <u>vulgaris</u>--Common groundsel <u>Sonchus</u> <u>arvensis</u>--Sow thistle Taraxacum officinale--Common dandelion

Total number of plant species: 10 Number of alien, or non-native, plant species: 8 (80 percent)

This approximately 0.08-acre plant community area is part of a larger wetland complex and consists of atypical (farmed) wetland. Disturbances to the plant community area include siltation and sedimentation due to stormwater run-off from adjacent lands, and agricultural land management activities such as plowing and herbicide application. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

EXHIBIT 8 WETLAND DETERMINATION DATA FORM – Midwest Region

METERAD DETERMINATION DATATORM MINUTOR Region							
Project/Site: Racine Water & Wastewa	ater Utilities along CTH V	City/County: Village of	Mt. Pleasant	/Racine County	Sam	pling Date: 09/22/2015	
Applicant/Owner:				State: WI	Sam	pling Point: <u>1</u>	
Investigator(s): Jen Dietl and Dan Car	ter; SEWRPC	Section, Town	ship, Range:	: Section 6, T3N, R2	<u>22E</u>		
Landform (hillslope, terrace, etc.): terr	ace	Local relief (co	ncave, conv	ex, none): <u>none</u>			
Slope (%): <u>0-3%</u> Lat:	Lon	g:			Datu	m:	
Soil Map Unit Name: Ashkum silty cla	<u>y loam (AtA)</u>				NWI classificat	ion: <u>none</u>	
Are climatic/hydrologic conditions on the	ne site typical for this time of	of year? Yes 🗌	No 🛛	(If no, explain in Re	emarks)		
Are Vegetation, Soil, or H	ydrology significantly	y disturbed? Are "No	ormal Circun	nstances" present?	Yes 🖂	No 🗌	
Are Vegetation, Soil, or H	ydrology naturally pi	roblematic? (If, nee	ded, explain	any answers in Ren	narks.)		
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.							
Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	□Yes ⊠No □Yes ⊠No □Yes ⊠No		mpled Area Wetland?		Yes	⊠No	

Wetland Hydrology Present?Image: YesImage: NoRemarks: Antecedent hydrologic conditions drier than normal.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Tes	t worksł	neet:		
1				Number of Domina				
2				That are OBL, FAC	•		۹)	
3				Total Number of D	ominant			
4				Species Across All	Strata:	<u>2</u> (B)	
5				Percent of Domina	Int Species	5		
	<u>0</u>	= Total Cov	/er	That Are OBL, FA	•		<u>%</u> (A/B)	
Sapling/Shrub Stratum (Plot size: 30' radius)				Prevalence Index	workshe	et:		
1				Total % Cove	r of:	N	lultiply by:	
2				OBL species	0	x 1 =	0	
3				FACW species	0	x 2 =	0	
4				FAC species	80	x 3 =	240	
5				FACU species	30	x 4 =	120	
	<u>0</u>	= Total Cov	/er	UPL species	0	x 5 =	0	
Herb Stratum (Plot size: 5' radius)				Column Totals:	110	(A)	360	(B)
1. Poa pratensis	<u>50</u>	\boxtimes	FAC		lence Inde		<u>3.3</u>	
2. <u>Taraxacum officinale</u>	<u>30</u>	\boxtimes	FACU	Hydrophytic Vegetation Indicators:				
3. Plantago major	<u>15</u>		FAC	1 - Rapid Test	for Hydrop	ohytic Veg	etation	
4. Prunella vulgaris	<u>15</u>		FAC	2 - Dominance				
5				3 - Prevalence			oqqus edivo	rtina
6				data in Rem	narks or or	n a separa	te sheet)	•
7				5 - Problematio	Hydrophy	ytic Vegeta	ation ¹ (Expla	ain)
8								
9				¹ Indicators of hydric soil and wetland hydrology n Be present, unless disturbed or problematic.			ust	
10				Be present, unless	aisturbea	or proble	natic.	
	<u>110</u>	= Total Cov	/er					
Woody Vine Stratum (Plot size: 30' radius)				Hydrophytic				
1				Vegetation			_	
2				Present?	Yes 🗌	No	X	
	<u>0</u>	= Total Cov	/er					
Remarks: (Include photo numbers here or on a separate sheet.) Mowed lawn.								

Depth	Matrix			Redox Fea	tures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-22	10YR 2/1	100					Loam	
22-28	10YR 2/1	50	10YR 4/2	10	D	М	Clay loam	
	10YR 3/1	40						
28-34	10YR 2/1	90					Silty clay loam	
	2.5Y 4/2	5	10YR 4/6	5	С	М	Loam	
34-38	10YR 2/1	100					Loam	
	Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Thick Dark Surface (A Sandy Mucky Mineral	.12)	A11)	Depleted N Redox Dat Depleted I	eyed Matrix (F Matrix (F3) rk Surface (F6 Dark Surface pressions (F8	5) (F7)	³ Indicators of Hydr	n in Remarks) rophytic vegetation and plogy must be present,
	5 cm Mucky Peat or F	. ,					Unless disturb	bed or problematic.
Restrictiv Type	e Layer (if observed)):						
• •	 th (inches):						Hydric Soil Present	t? Yes 🗌 No 🛛

Wetland Hydrology Indicators:						
Primary Indicators (minimum of one is required; ch	heck all that apply)	Secondary Indicators (minimum of two required)				
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)				
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)				
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)				
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)				
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)					
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)					
Field Observations:						
Surface Water Present? Yes 🗌 No 🛛 De	epth (inches):					
Water Table Present? Yes 🗌 No 🛛 De	epth (inches):					
	epth (inches): 35 Wetland	Hydrology Present? Yes 🗌 No 🛛				
(includes capillary fringe)	Weitand					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map						
(Exhibit 3), and aerial photos (Exhibit 4).						
Remarks:						

WETLAND DETERMINATION DATA FORM – Midwest Region							
Project/Site: Racine Water & Wastewater Utilities along CTH	<u>HV</u> City/County: Village of M	It. Pleasant/Racine County	Sampling Date: 09/22/2015				
Applicant/Owner:		State: WI	Sampling Point: <u>2</u>				
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Townsh	hip, Range: Section 6, T3N, R22E					
Landform (hillslope, terrace, etc.): low terrace	Local relief (cond	cave, convex, none): slightly concave					
Slope (%): 0-3% Lat:	Long:		Datum:				
Soil Map Unit Name: Ashkum silty clay loam (AtA)		NWI cla	ssification: <u>none</u>				
Are climatic/hydrologic conditions on the site typical for this ti	ime of year? Yes	No 🛛 (If no, explain in Remarks)					
Are Vegetation, Soil, or Hydrology signific	cantly disturbed? Are "Nor	rmal Circumstances" present? Yes 🖂	No 🗖				
Are Vegetation, Soil, or Hydrology natura	Illy problematic? (If, neede	ed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sam	npling point locations, trans	ects, important features, etc.					

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	🛛 Yes	□No	
Remarks: Antecedent hydrologic	conditions d	lrier than normal				

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>2</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
	<u>0</u>	= Total Cov	/er	That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
Sapling/Shrub Stratum (Plot size: 30' radius)				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
	<u>0</u>	= Total Cov	/er	UPL species x 5 =
Herb Stratum (Plot size: 5' radius)				Column Totals: (A) (B)
1. <u>Agrostis stolonifera</u>	<u>50</u>	\boxtimes	FACW	Prevalence Index = B/A =
2. <u>Poa pratensis</u>	<u>30</u>	\boxtimes	FAC	Hydrophytic Vegetation Indicators:
3. <u>Prunella vulgaris</u>	<u>15</u>		FAC	1 - Rapid Test for Hydrophytic Vegetation
4. <u>Taraxacum officinale</u>	<u>10</u>		FACU	☑ 2 - Dominance Test is >50%
5. <u>Trifolium repens</u>	<u>5</u>		FACU	\square 3 - Prevalence Index is ≤3.0 ¹ \square 4 - Morphological Adaptations ¹ (Provide supporting
6				data in Remarks or on a separate sheet)
7				5 - Problematic Hydrophytic Vegetation ¹ (Explain)
8				
9				¹ Indicators of hydric soil and wetland hydrology must
10				Be present, unless disturbed or problematic.
	<u>110</u>	= Total Cov	/er	
Woody Vine Stratum (Plot size: 30' radius)				Hydrophytic
1				Vegetation
2				Present? Yes No
	<u>0</u>	= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate sheet.) Atypical (n	nowed) wetla	ınd.	

Sampling Point: 2

Depth	Matrix			Redox Fea	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	 Texture Re	marks	
)-7	10YR 2/1	100					Silty clay loam		
7-19	10YR 2/1	90					Clay loam		
	5Y 5/2	5	10YR 5/6	5	С	PL M	Clay		
9-28	10YR 4/1	50	10YR 4/6	20	С	PL M	Clay		
	10YR 2/1	30					Clay loam		
	Concentration, D=Dep	bletion, RN	M=Reduced Matrix, M	S=Masked S	Sand Grains		² Location: PL=Pore Lining, M=Matri		
-	il Indicators:			Condu Ola			Indicators for Problematic Hydric S	oils³:	
	Histosol (A1) Histic Epipedon (A2)			Sandy Gle	eyed Matrix (S	54)	Coast Prairie Redox (A16)		
Black Histic (A3)			Stripped Matrix (S6)			Iron-Manganese Masses (F12)			
	Hydrogen Sulfide (A4)			icky Mineral	(F1)	Very Shallow Dark Surface (TF12)		
	Stratified Layers (A5)	/		_ ·	eved Matrix (. ,	Other (Explain in Remarks)		
	2 cm Muck (A10)				Matrix (F3)	-)			
	Depleted Below Dark	Surface (A11)		rk Surface (F	6)			
	Thick Dark Surface (Depleted [Dark Surface	, (F7)	³ Indicators of Hydrophytic vegetation	n and	
	Sandy Mucky Mineral	(S1)		Redox Depressions (F8)			Wetland hydrology must be present,		
	5 cm Mucky Peat or F	Peat (S3)		_			Unless disturbed or problematic	,	
	e Layer (if observed)	. ,					· · ·		
Туре	:						Hydric Soil Present? Yes 🖂	No 🗌	
	h (inches):						,		

Wetland Hydrology Indicators:							
Primary Indicators (minimum of one is required;	Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required						
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)					
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)					
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)					
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C	3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)					
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)						
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)						
Field Observations:							
Surface Water Present? Yes 🗌 No 🛛 D	Depth (inches):						
Water Table Present? Yes 🗌 No 🛛 D	Depth (inches):						
	Depth (inches): 22 Wetla	and Hydrology Present? Yes 🛛 No 🗌					
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map							
(Exhibit 3), and aerial photos (Exhibit 4).							
Remarks:							

WETLAND DETERMINATION DATA FORM – Midwest Region							
Project/Site: Racine Water & Wastewater Utilities along CTH V City/Course	nty: Village of Mt. Pleasant/Racine County	Sampling Date: 09/22/2015					
Applicant/Owner:	State: WI	Sampling Point: <u>3</u>					
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 6, T3N, R22E						
Landform (hillslope, terrace, etc.): low terrace	Local relief (concave, convex, none): slightly concave						
Slope (%): 0-2% Lat: Long:		Datum:					
Soil Map Unit Name: Wallkill silt loam (Wa)	NWI clas	sification: <u>E2Kf</u>					
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🔲 No 🛛 (If no, explain in Remarks)						
Are Vegetation, Soil, or Hydrology significantly disturbed	ed? Are "Normal Circumstances" present? Yes 🖂	No 🗌					
Are Vegetation, Soil, or Hydrology naturally problemat	ic? (If, needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.							

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No	
Remarks: Antecedent hydrologic	conditions dr	ier than normal.				

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>1</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
	<u>0</u>	= Total Cov	/er	That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
Sapling/Shrub Stratum (Plot size: 30' radius)				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
	<u>0</u>	= Total Cov	/er	UPL species x 5 =
Herb Stratum (Plot size: 5' radius)				Column Totals: (A) (B)
1. <u>Persicaria pensylvanica</u>	<u>80</u>	\boxtimes	FACW	Prevalence Index = B/A =
2. <u>Solanum dulcamara</u>	<u>20</u>		FAC	Hydrophytic Vegetation Indicators:
3. <u>Bidens vulgata</u>	<u>15</u>		FACW	1 - Rapid Test for Hydrophytic Vegetation
4. <u>Cirsium arvexe</u>	<u>5</u>		FACU	Z - Dominance Test is >50% Dependence ladencia ≤0.01
5. Echinochloa crus-galli	<u>5</u>		FACW	\square 3 - Prevalence Index is ≤3.0 ¹ \square 4 - Morphological Adaptations ¹ (Provide supporting
6. <u>Setaria faberi</u>	<u>5</u>		FACU	data in Remarks or on a separate sheet)
7. Phalaris arundinacea	<u>3</u>		FACW	5 - Problematic Hydrophytic Vegetation ¹ (Explain)
8				
9				¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
10				be present, unless disturbed of problematic.
	<u>133</u>	= Total Cov	/er	
Woody Vine Stratum (Plot size: 30' radius)				Hydrophytic
1				Vegetation
2				Present? Yes No
	<u>0</u>	= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate sheet.) Fresh (we	t) meadow.		

SOIL

Sampling Point: 3

Depth Matrix Redox Features (inches) Color (moist) % Type1 Loc2 Texture Remarks 0-9 10YR 2/1 98 7.5YR 5/3 2 C PL M Clay loam		Matrix			Redox Fea	tures					
0.9 10YR 2/1 98 7.5YR 5/3 2 C PL M Clay loam 9-25 10YR 2/1 98 7.5YR 5/3 2 C PL M Loam 25-34 7.5YR 2.5/2 100 100 Muck 100 100 25-34 7.5YR 2.5/2 100 100 Muck 100 100 1'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains 2Location: PL=Pore Lining, M=Matrix Indicators: Hydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : 100 Histos (A1) Sandy Redox (S5) Indicator for Problematic Hydric Soils ³ : 100 Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) 100 100 Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) 100 100 Depleted Below Dark Surface (A11) Redox Dark Surface (F7) 3 3 Indicators of Hydrophytic vegetation and Wetland hydrology must be present, Unless disturbed or problematic. Trype:	•	epin		- 1			Loc ²	 Texture	Remarks		
9-25 10YR 2/1 98 7.5YR 5/3 2 C PL M Loam 25-34 7.5YR 2.5/2 100 Muck Muck 25-34 100 Stratified Layers (A1) Sandy Gleyed Matrix (S4) Dark Surface (S7) 2 Black Histic (A3) Dapleted Matrix (F3) Dark Surface (S7) Dark Surface (TF12) 2 2 cm Muck (A10) Depleted Matrix (F3) Other (Explain in Remarks) 3Indicators of Hydrophytic vegetation and Wetland hydrology must be present, Unless disturbed or problematic. 2 cm Muck W Mineral (S1) Redox Depressions (F8) 3Indicator	. ,		98	. ,	2	С	PL M	Clay loam			
25-34 7.5YR 2.5/2 100 Muck 25-34 7.5YR 2.5/2 100 Muck 1'Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains ² Location: PL=Pore Lining, M=Matrix Hydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : Histic Soil Indicators: Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) Histic Epipedon (A2) Sandy Redox (S5) Coast Prairie Redox (A16) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Stratified Layers (A5) Loamy Gleyed Matrix (F3) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) ³ Indicators of Hydrophytic vegetation and Wetland hydrology must be present, Unless disturbed or problematic. Type: Type: Hydric Soil Present? Yes 🗆 No		10YR 2/1	98		2	С	PL M	Loam			
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains ² Location: PL=Pore Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Gleyed Matrix (S4) Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Matrix (S6) Sandy Mucky Mineral (S1) Depleted Depressions (F8) Sandy Mucky Peat or Peat (S3) Redox Depressions (F8) Restrictive Layer (if observed): Type: Type: Hydric Soil Present? Yes No		7.5YR 2.5/2									
Hydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Straified Layers (A5) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Other (Explain in Remarks) Thick Dark Surface (A12) Depleted Dark Surface (F7) Indicators of Hydrophytic vegetation and Wetland hydrology must be present, Unless disturbed or problematic. Restrictive Layer (if observed): Type: Hydric Soil Present? Yes 🛛 No						·					
Hydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Other (Explain in Remarks) Thick Dark Surface (A12) Depleted Dark Surface (F7) Indicators of Hydrophytic vegetation and Wetland hydrology must be present, Unless disturbed or problematic. Restrictive Layer (if observed): Type: Hydric Soil Present? Yes 🛛 No											
Hydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Other (Explain in Remarks) Thick Dark Surface (A12) Depleted Dark Surface (F7) Indicators of Hydrophytic vegetation and Wetland hydrology must be present, Unless disturbed or problematic. Restrictive Layer (if observed): Type: Hydric Soil Present? Yes 🛛 No											
Hydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16) Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Other (Explain in Remarks) Thick Dark Surface (A12) Depleted Dark Surface (F7) Indicators of Hydrophytic vegetation and Wetland hydrology must be present, Unless disturbed or problematic. Restrictive Layer (if observed): Type: Hydric Soil Present? Yes 🛛 No	17	Concentration D Day	lation DA	A Deduced Metric MC	Maskad			21 agettions, DL, Dong Li	ning NA Matrix		
□ Histosol (A1) □ Sandy Gleyed Matrix (S4) □ Coast Prairie Redox (A16) □ Histic Epipedon (A2) □ Sandy Redox (S5) □ Dark Surface (S7) □ Black Histic (A3) □ Stripped Matrix (S6) □ Iron-Manganese Masses (F12) □ Hydrogen Sulfide (A4) □ Loamy Mucky Mineral (F1) □ Very Shallow Dark Surface (TF12) □ Stratified Layers (A5) □ Loamy Gleyed Matrix (F2) □ Other (Explain in Remarks) □ 2 cm Muck (A10) □ Depleted Matrix (F3) □ Other (Explain in Remarks) □ Sandy Mucky Mineral (S1) □ Redox Dark Surface (F6) 3 □ Sandy Mucky Mineral (S1) □ Redox Depressions (F8) 3 Restrictive Layer (if observed): Type: Unless disturbed or problematic. Type: Hydric Soil Present? Yes No No	71	, ,	letion, RI	I=Reduced Matrix, ME	S=Masked S	Sand Grains			0,		
□ Histic Epipedon (A2) □ Sandy Redox (S5) □ Dark Surface (S7) □ Black Histic (A3) □ Stripped Matrix (S6) □ Iron-Manganese Masses (F12) □ Hydrogen Sulfide (A4) □ Loamy Mucky Mineral (F1) □ Very Shallow Dark Surface (TF12) □ Stratified Layers (A5) □ Loamy Gleyed Matrix (F2) □ Other (Explain in Remarks) □ 2 cm Muck (A10) □ Depleted Matrix (F3) □ Other (Explain in Remarks) □ 2 cm Muck (A10) □ Depleted Dark Surface (F6) Other (Explain in Remarks) □ Thick Dark Surface (A12) □ Depleted Dark Surface (F7) 3Indicators of Hydrophytic vegetation and Wetland hydrology must be present, Unless disturbed or problematic. □ 5 cm Mucky Peat or Peat (S3) □ Restrictive Layer (if observed): Type: Type: Hydric Soil Present? Yes No No	-				Sandy Gle	wed Matrix (9	34)		-		
□ Black Histic (A3) □ Stripped Matrix (S6) □ Iron-Manganese Masses (F12) □ Hydrogen Sulfide (A4) □ Loamy Mucky Mineral (F1) □ Very Shallow Dark Surface (TF12) □ Stratified Layers (A5) □ Loamy Gleyed Matrix (F2) □ Other (Explain in Remarks) □ 2 cm Muck (A10) □ Depleted Matrix (F3) □ Other (Explain in Remarks) □ Depleted Below Dark Surface (A11) ⊠ Redox Dark Surface (F6) □ Other (Explain in Remarks) □ Thick Dark Surface (A12) □ Depleted Dark Surface (F7) ³Indicators of Hydrophytic vegetation and Wetland hydrology must be present, Unless disturbed or problematic. Restrictive Layer (if observed): Type: Hydric Soil Present? Yes ⊠ No		()									
☐ Hydrogen Sulfide (A4) ☐ Loamy Mucky Mineral (F1) ☐ Very Shallow Dark Surface (TF12) ☐ Stratified Layers (A5) ☐ Loamy Gleyed Matrix (F2) ☐ Other (Explain in Remarks) ☐ 2 cm Muck (A10) ☐ Depleted Matrix (F3) ☐ Other (Explain in Remarks) ☐ Depleted Below Dark Surface (A11) ⊠ Redox Dark Surface (F6) 3Indicators of Hydrophytic vegetation and Wetland hydrology must be present, Unless disturbed or problematic. ☐ Sandy Mucky Peat or Peat (S3) ☐ Restrictive Layer (if observed): 3Indicator Soil Present? Yes ⊠ No		••• • • •									
□ Stratified Layers (A5) □ Loamy Gleyed Matrix (F2) □ Other (Explain in Remarks) □ 2 cm Muck (A10) □ Depleted Matrix (F3) □ Other (Explain in Remarks) □ Depleted Below Dark Surface (A11) ☑ Redox Dark Surface (F6) □ □ □ Thick Dark Surface (A12) □ Depleted Dark Surface (F7) □ □ □ Sandy Mucky Mineral (S1) □ Redox Depressions (F8) □ □ □ 5 cm Mucky Peat or Peat (S3) □ Restrictive Layer (if observed): □ Type: Hydric Soil Present? Yes ☑ No □		()				· · ·	F1)				
□ 2 cm Muck (A10) □ Depleted Matrix (F3) □ Depleted Below Dark Surface (A11) ☑ Redox Dark Surface (F6) □ Thick Dark Surface (A12) □ Depleted Dark Surface (F7) □ Sandy Mucky Mineral (S1) □ Redox Depressions (F8) □ 5 cm Mucky Peat or Peat (S3) □ Restrictive Layer (if observed): Type: Type: Hydric Soil Present? Yes ☑		•••		<u> </u>		•	,		, ,		
□ Depleted Below Dark Surface (A11) ☑ Redox Dark Surface (F6) □ Thick Dark Surface (A12) □ Depleted Dark Surface (F7) □ Sandy Mucky Mineral (S1) □ Redox Depressions (F8) □ 5 cm Mucky Peat or Peat (S3) Redox Depressions (F8) Restrictive Layer (if observed): Type: Type: Hydric Soil Present? Yes ☑						•	<i>_</i>)		(Contanto)		
□ Thick Dark Surface (A12) □ Depleted Dark Surface (F7) ³Indicators of Hydrophytic vegetation and Wetland hydrology must be present, Unless disturbed or problematic. □ 5 cm Mucky Peat or Peat (S3) □ Restrictive Layer (if observed): Unless disturbed or problematic. Type: Hydric Soil Present? Yes ☑ No □		· · ·	Surface ()	A11) 🛛		. ,	F6)				
□ Sandy Mucky Mineral (S1) □ Redox Depressions (F8) Wetland hydrology must be present, Unless disturbed or problematic. ■ 5 cm Mucky Peat or Peat (S3) Unless disturbed or problematic. Restrictive Layer (if observed): Type: Hydric Soil Present? Yes ☑ No □				···) <u> </u>	_	•		2			
□ 5 cm Mucky Peat or Peat (S3) Unless disturbed or problematic. Restrictive Layer (if observed): Type: Hydric Soil Present? Yes ⊠ No	-	,		•		. ,	, i i	, ,			
Restrictive Layer (if observed): Type: Type: Hydric Soil Present? Yes 🛛 No 🗌							,				
Type: Hydric Soil Present? Yes 🛛 No 🗌								Unless disturbed	or problematic.		
		• • •	•								
Depth (inches):								Hydric Soil Present?	Yes 🖄 No 🗋		
Remarks:	· · ·	n (Inches):									

Wetland Hydrology Indicators:							
Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required)							
Surface Water (A1)	d Leaves (B9) Surface Soil Cracks (B6)						
High Water Table (A2)	a (B13) Drainage Patterns (B10)						
Saturation (A3)	Plants (B14) Dry-Season Water Table (C2)						
Water marks (B1)	fide Odor (C1) Crayfish Burrows (C8)						
Sediment Deposits (B2) Oxidized Rhi	ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3)	Reduced Iron (C4) Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	eduction in Tilled Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5)	rface (C7) FAC-Neutral Test (D5)						
Inundation Visible on Aerial Imagery (B7)	l Data (D9)						
Sparsely Vegetated Concave Surface (B8)	n in Remarks)						
Field Observations:							
Surface Water Present? Yes 🗌 No 🛛 Depth (inches):							
Water Table Present? Yes Depth (inches):							
Saturation Present? Yes No Depth (inches): 9	Wetland Hydrology Present? Yes 🛛 No 🗌						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map							
(Exhibit 3), and aerial photos (Exhibit 4).							
Remarks: FSA slide review for agricultural lands included in this sample point indicate that 8 out of 9 (89%) normal years show signatures of							
saturation.							

WETLAND DETERMINATION DATA FORM – Midwest Region								
Project/Site: Racine Water & Wastewater Utilities along CTH V City/County: Village of Mt. Pleasant/Racine County Sampling Date: 09/22/2015								
Applicant/Owner:		State: WI	Sampling Point: <u>4</u>					
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range	:: Section 6, T3N, R22E						
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, conv	vex, none): <u>none</u>						
Slope (%): 0-3% Lat:	Long:		Datum:					
Soil Map Unit Name: Ashkum silty clay loam (AtA)		NWI cla	ssification: <u>none</u>					
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🗌 No 🛛 (If no, explain in Remarks)								
Are Vegetation, Soil, or Hydrology signif	ficantly disturbed? Are "Normal Circur	mstances" present? Yes 🗌	No 🖂					
Are Vegetation, Soil, or Hydrology natur	ally problematic? (If, needed, explain	n any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.								

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	□Yes ⊠ Yes □Yes	⊠ No □No ⊠ No	Is the Sampled Area within a Wetland?	☐ Yes	⊠No		
Remarks: Antecedent hydrologic conditions drier than normal. Sample point located in an agricultural field currently planted in kale.							

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
	<u>0</u>	= Total Cov	/er	That Are OBL, FACW, or FAC: 0% (A/B)
Sapling/Shrub Stratum (Plot size: 30' radius)				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
	<u>0</u>	= Total Cov	/er	UPL species x 5 =
Herb Stratum (Plot size: 5' radius)				Column Totals: (A) (B)
1. Brassica oleracea (planted)	<u>40</u>	\boxtimes	UPL	Prevalence Index = B/A =
2. <u>Cirsium arvense</u>	<u>10</u>		FACU	Hydrophytic Vegetation Indicators:
3. Ambrosia artemisiifolia	<u>3</u>		FACU	1 - Rapid Test for Hydrophytic Vegetation
4. <u>Hibiscus trionum</u>	<u>3</u>		<u>UPL</u>	□ 2 - Dominance Test is >50%
5. Amaranthus retroflexus	<u>2</u>		FACU	\square 3 - Prevalence Index is ≤3.0 ¹ \square 4 - Morphological Adaptations ¹ (Provide supporting
6. Abutilon theophrasti	<u>1</u>		FACU	data in Remarks or on a separate sheet)
7				5 - Problematic Hydrophytic Vegetation ¹ (Explain)
8				
9				¹ Indicators of hydric soil and wetland hydrology must
10				Be present, unless disturbed or problematic.
	<u>59</u>	= Total Cov	/er	
Woody Vine Stratum (Plot size: 30' radius)				Hydrophytic
1				Vegetation
2				Present? Yes 🗌 No 🛛
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate sheet	t.) Agricultura	al field plante	d in kale.	·

SOIL

Sampling Point: 4

Depth	Matrix			Redox Fea	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
D-8	10YR 3/1	60					Clay loam		
	10YR 5/1	30							
	10YR 2/1	10							
8-25	N 1/0	98	7.5YR 2.5/3	2		PL M	Clay loam		
	Concentration, D=Dep	letion, R	M=Reduced Matrix, MS	S=Masked S	Sand Grains		² Location: PL=Pore Li		
-	il Indicators: Histosol (A1)			Sandy Cla	eyed Matrix (S	• 4)	Indicators for Problem	•	
_	Histic Epipedon (A2)			Sandy Gle	•	94)	Dark Surface (S	()	
	Black Histic (A3)			☐ Stripped Matrix (S6) ☐ Iron-Manganese Masses (F12)				,	
	Hydrogen Sulfide (A4)				icky Mineral (F1)	Very Shallow Dark Surface (TF12)		
	Stratified Layers (A5)			Loamy Gleyed Matrix (F2)			Other (Explain in Remarks)		
	2 cm Muck (A10)			Depleted N		2)		r (cinarks)	
	Depleted Below Dark	Surface (A11) 🛛		rk Surface (I	F6)			
	Thick Dark Surface (A	```		_	Dark Surface	,	31 12 7 7 11 1		
	Sandy Mucky Mineral	,		•	pressions (F8	. ,	³ Indicators of Hydroph	, 0	
	5 cm Mucky Peat or P	. ,				,	Unless disturbed	gy must be present,	
	e Layer (if observed)	. ,						or problematic.	
	: :	•					Hydric Soil Present?	Yes 🛛 No 🗌	
	h (inches):						injune son riesent:		
Remarks:									

Wetland Hydrology Indicators:								
Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required)								
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)						
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)						
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)						
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)						
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Root	s (C3) Saturation Visible on Aerial Imagery (C9)						
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)						
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)						
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)							
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)							
Field Observations:								
Surface Water Present? Yes 🗌 No 🛛 De	epth (inches):							
Water Table Present? Yes 🗌 No 🛛 De	epth (inches):							
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No (includes capillary fringe) Vetland Hydrology Present? Yes No No No								
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map (Exhibit 3), and aerial photos (Exhibit 4).								
Remarks:								

WETLAND DETERMINATION DATA FORM – Midwest Region								
Project/Site: Racine Water & Wastewater Utilities along CTH V City/County: Village of Mt. Pleasant/Racine County Sampling Date: 09/22/2015								
Applicant/Owner:	State: WI	Sampling Point: <u>5</u>						
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 6, T3N, R22E							
Landform (hillslope, terrace, etc.): low terrace	Local relief (concave, convex, none): slightly concave							
Slope (%): 0-3% Lat: Long:	_	Datum:						
Soil Map Unit Name: Ashkum silty clay loam (AtA)	NWI cla	ssification: <u>none</u>						
Are climatic/hydrologic conditions on the site typical for this time of year? Yes 🗌 No 🛛 (If no, explain in Remarks)								
Are Vegetation X, Soil , or Hydrology significantly disturbed	I? Are "Normal Circumstances" present? Yes 🗌	No 🖂						
Are Vegetation, Soil, or Hydrology naturally problema	tic? (If, needed, explain any answers in Remarks.)							
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.								

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No		Is the Sampled Area within a Wetland?	⊠ Yes	□No	
Remarks: Antecedent hydrologic	conditions	drier than normal	Distu	rbed vegetation due to agri	cultural land manageme	ent activities (he	rbicide

Remarks: Antecedent hydrologic conditions drier than normal. Disturbed vegetation due to agricultural land management activities (herbicide application).

<u>Tree Stratum</u> (Plot size: <u>30' radius</u>)	Absolute	Dominant	Indicator	
<u>·····</u> , (·······························	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
	<u>0</u>	= Total Cov	/er	That Are OBL, FACW, or FAC: 0% (A/B)
Sapling/Shrub Stratum (Plot size: 30' radius)				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
	<u>0</u>	= Total Cov	/er	UPL species x 5 =
Herb Stratum (Plot size: 5' radius)				Column Totals: (A) (B)
1. <u>Bromus inermis</u>	<u>10</u>		FACU	Prevalence Index = B/A =
2. Persicaria pensylvanica			FACW	Hydrophytic Vegetation Indicators:
3				1 - Rapid Test for Hydrophytic Vegetation
4				□ 2 - Dominance Test is >50%
5				 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting
6				data in Remarks or on a separate sheet)
7				5 - Problematic Hydrophytic Vegetation ¹ (Explain)
8				
9				¹ Indicators of hydric soil and wetland hydrology must
10				Be present, unless disturbed or problematic.
10	10	= Total Cov	/er	
Woody Vine Stratum (Plot size: <u>30' radius</u>)				
				Hydrophytic Versetation
1				Vegetation Present? Yes ⊠ No □
2				
	<u>0</u>	= Total Cov		
Remarks: (Include photo numbers here or on a separate sheet.	-	•		
was very light green in color and all of the Persicaria per	-			
land management activities (herbicide). Indicators of hyd	aric soils an	a wetland hy	arology are	e present. Atypical (farmed) wetland.

Sampling Point: 5

Depth	Matrix			Redox Fea	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
)-20	10YR 2/1	100					Clay loam		
20-28	10YR 2/1	95			·		Clay loam		
	10YR 4/2	3	10YR 4/6	2	С	PL M			
28-35	2.5Y 4/2	60	10YR 4/6	30	С	PL M	Silt loam	with gravel	
	10YR 2/1	10							
Type: C=	Concentration, D=Dep	letion, RM	/=Reduced Matrix, MS	S=Masked S	Sand Grains		² Location: PL=Pore	e Lining, M=Matrix	
lydric So	il Indicators:						Indicators for Proble	ematic Hydric Soils ³ :	
	Histosol (A1)				eyed Matrix (S	64)	Coast Prairie	· · ·	
	Histic Epipedon (A2)			Sandy Red	dox (S5)		Dark Surface	. ,	
	Black Histic (A3)			Stripped N	/latrix (S6)		🗌 Iron-Mangane	se Masses (F12)	
	Hydrogen Sulfide (A4))		Loamy Mu	icky Mineral ((F1)	Very Shallow	Dark Surface (TF12)	
	Stratified Layers (A5)			Loamy Gle	eyed Matrix (F2)	Other (Explain in Remarks)		
	2 cm Muck (A10)			Depleted I	•	,	、	,	
	Depleted Below Dark	Surface (A11)		rk Surface (F	6)			
	Thick Dark Surface (•			Dark Surface	,	31		
	Sandy Mucky Mineral			•	pressions (F8	. ,	³ Indicators of Hydrophytic vegetation and		
	, ,	· · /				,		logy must be present,	
_	5 cm Mucky Peat or P	()					Unless disturb	ed or problematic.	
	e Layer (if observed)								
туре							Hydric Soil Present	? Yes 🛛 No 🗌	
	h (inches):								

Wetland Hydrology Indicators:							
Primary Indicators (minimum of one is required; c	Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required)						
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)					
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)					
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)					
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Root	ots (C3) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils ((C6) Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)					
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)						
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)						
Field Observations:							
Surface Water Present? Yes 🗌 No 🛛 De	epth (inches):						
Water Table Present? Yes 🗌 No 🛛 De	epth (inches):						
	epth (inches): <u>7</u>	Wetland Hydrology Present? Yes 🛛 No 🗌					
(includes capillary fringe)							
	ell, aerial photos, previous inspections), if avail	ilable: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map					
(Exhibit 3), and aerial photos (Exhibit 4).							
Remarks: FSA slide review indicates that 8 out of 9 (89%) normal years show signatures of saturation.							

WETLAND DETERMINATION DATA FORM – Midwest Region								
Project/Site: Racine Water & Wastewater Utilities along CTH V City/County:	Village of Mt. Pleasant/Racine County	Sampling Date: 09/22/2015						
Applicant/Owner:	State: WI	Sampling Point: <u>6</u>						
Investigator(s): Jen Dietl and Dan Carter; SEWRPC Sec	ction, Township, Range: Section 6, T3N, R22E							
Landform (hillslope, terrace, etc.): terrace Loc	cal relief (concave, convex, none):							
Slope (%): 2-6% Lat: Long:		Datum:						
Soil Map Unit Name: Elliott silty clay loam (EtB)	NWI cla	assification: none						
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🔲 No 🛛 (If no, explain in Remarks)							
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances" present? Yes 🛛	No 🗌						
Are Vegetation, Soil, or Hydrology naturally problematic?	(If, needed, explain any answers in Remarks.)							
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.								

	Hydrophytic Vegetation Present?	□Yes	⊠No	Is the Sampled Area				
	Hydric Soils Present?	⊠Yes	□No	within a Wetland?	🗌 Yes	⊠No		
	Wetland Hydrology Present?	□Yes	⊠No					
I	Remarks: Antecedent hydrologic conditions drier than normal. Disturbed vegetation due to agricultural land management activities.							

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: 0 (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
	<u>0</u>	= Total Cov	/er	That Are OBL, FACW, or FAC: 0% (A/B)
Sapling/Shrub Stratum (Plot size: 30' radius)				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
	<u>0</u>	= Total Cov	/er	UPL species x 5 =
Herb Stratum (Plot size: 5' radius)				Column Totals: (A) (B)
1. <u>Bromus inermis</u>	<u>80</u>	\boxtimes	FACU	Prevalence Index = B/A =
2. <u>Cirsium arvense</u>	<u>15</u>		<u>FACU</u>	Hydrophytic Vegetation Indicators:
3. Abutilon theophrasti	<u>1</u>		<u>FACU</u>	1 - Rapid Test for Hydrophytic Vegetation
4				□ 2 - Dominance Test is >50%
5				□ 3 - Prevalence Index is $\leq 3.0^1$ □ 4 - Morphological Adaptations ¹ (Provide supporting
6				data in Remarks or on a separate sheet)
7				5 - Problematic Hydrophytic Vegetation ¹ (Explain)
8				
9				¹ Indicators of hydric soil and wetland hydrology must
10				Be present, unless disturbed or problematic.
	<u>96</u>	= Total Cov	/er	
Woody Vine Stratum (Plot size: 30' radius)				Hydrophytic
1				Vegetation
2				Present? Yes 🗌 No 🖾
	<u>0</u>	= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate sheet.) Edge of aç	pricultural fiel	d.	

SOIL

Sampling Point: 6

							absence of indicators.)		
Depth	Matrix			Redox Fea	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-11	10YR 2/1	100					Clay		
11-25	2.5Y 4/2	85	7.5YR 4/6	5	С	PL M	Clay		
	10YR 2/1	10			·				
			- <u> </u>						
		·			·				
							·		
¹ Type: C=	Concentration, D=Dep	letion, RM	M=Reduced Matrix, MS	=Masked S	Sand Grains		² Location: PL=Pore Lin	ing, M=Matrix	
-	il Indicators:						Indicators for Problema	•	
	Histosol (A1)			Sandy Gle	eyed Matrix (S	64)	Coast Prairie Red	ox (A16)	
	Histic Epipedon (A2)			Sandy Re	dox (S5)		Dark Surface (S7)		
	Black Histic (A3)			Stripped Matrix (S6)			Iron-Manganese Masses (F12)		
	Hydrogen Sulfide (A4))		Loamy Mu	ucky Mineral (F1)	Very Shallow Dark	< Surface (TF12)	
	Stratified Layers (A5)			Loamy Gle	eyed Matrix (I	-2)	Other (Explain in Remarks)		
	2 cm Muck (A10)				Matrix (F3)	,	<u> </u>		
	Depleted Below Darl	Surface	(A11) <u> </u>		rk Surface (F	6)			
	Thick Dark Surface (A			_	Dark Surface	,	3 le di setere ef l budrerebu		
	Sandy Mucky Mineral	,		•	pressions (F8	. ,	³ Indicators of Hydrophy Wetland hydrology	0	
	5 cm Mucky Peat or P	. ,		_		/	Unless disturbed o	•	
	e Layer (if observed)								
): 						Hydric Soil Present?	Yes 🛛 No 🗌	
Dept	h (inches):								
Remarks:									

Wetland Hydrology Indicators:							
Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required)							
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)					
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)					
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)					
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)) Saturation Visible on Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)					
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)						
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)						
Field Observations:							
Surface Water Present? Yes 🗌 No 🛛 Depth	n (inches):						
Water Table Present? Yes 🗌 No 🛛 Depth	n (inches):						
Saturation Present? Yes 🛛 No 🗌 Depth	n (inches): <u>4-11*</u> Wetlan	nd Hydrology Present? Yes 🗌 No 🛛					
(includes capillary fringe)	Weitan						
Describe Recorded Data (stream gauge, monitoring well, a	aerial photos, previous inspections), if available:	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map					
(Exhibit 3), and aerial photos (Exhibit 4).							
Remarks: *Soils saturated from 4 to 11 inches but no	ot from 11 to 25 inches. FSA slide review ir	ndicates that 6 out of 9 (67%) normal years show					
signatures of saturation.							

WETLAND DETERMINATION DATA FORM – Midwest Region								
Project/Site: Racine Water & Waste	Sampling Date: 09/22/2015							
Applicant/Owner:				State: WI		Sampling Point: <u>7</u>		
Investigator(s): Jen Dietl and Dan C	Carter; SEWRPC	Section, Townshi	ip, Range: <u>Se</u>	ection 7, T3N, R22	<u>2E</u>			
Landform (hillslope, terrace, etc.): le	ow terrace	Local relief (conc	ave, convex,	none): slightly con	ncave			
Slope (%): <u>0-3%</u> Lat	t: Long: _					Datum:		
Soil Map Unit Name: Ashkum silty of	<u>slay loam (AtA)</u>				NWI class	sification: <u>none</u>		
Are climatic/hydrologic conditions or	the site typical for this time of ye	ear? Yes 🗌	No 🛛 (If	no, explain in Ren	narks)			
Are Vegetation X, Soil , or Hy	<pre>/drology significantly distur</pre>	rbed? Are "Norr	nal Circumsta	ances" present?	Yes 🗌	No 🖂		
Are Vegetation, Soil, or	Hydrology naturally proble	ematic? (If, neede	d, explain any	y answers in Rema	arks.)			
SUMMARY OF FINDINGS – Attach site man showing sampling point locations, transacts, important features, etc.								

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No		Is the Sampled Area within a Wetland?	🛛 Yes	□No	
Remarks: Antecedent hydrologic conditions drier than normal. Disturbed vegetation due to agricultural land management activities (managed							
plant community) obscuring a hydrophytic plant community.							

Tree Stratum (Plot size: <u>30' radius</u>)	Absolute	Dominant	Indicator	
	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: 0 (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
	<u>0</u>	= Total Cov	/er	That Are OBL, FACW, or FAC: 0% (A/B)
Sapling/Shrub Stratum (Plot size: 30' radius)				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
	<u>0</u>	= Total Cov	/er	UPL species x 5 =
Herb Stratum (Plot size: 5' radius)				Column Totals: (A) (B)
1. Glycine max (planted)	<u>20</u>	\boxtimes	UPL	Prevalence Index = B/A =
2. <u>Taraxacum officinale</u>	<u>15</u>	\boxtimes	FACU	Hydrophytic Vegetation Indicators:
3. <u>Echinochloa crus-galli</u>	<u>10</u>		FACW	1 - Rapid Test for Hydrophytic Vegetation
4. Panicum capillare	<u>5</u>		FAC	2 - Dominance Test is >50%
5. Portulaca oleracea	<u>5</u>		FACU	\square 3 - Prevalence Index is ≤3.0 ¹ \square 4 - Morphological Adaptations ¹ (Provide supporting
6. <u>Chenopodium album</u>	<u>3</u>		FACU	data in Remarks or on a separate sheet)
7				5 - Problematic Hydrophytic Vegetation ¹ (Explain)
8				
9				¹ Indicators of hydric soil and wetland hydrology must
10.				Be present, unless disturbed or problematic.
	<u>58</u>	= Total Cov	/er	
Woody Vine Stratum (Plot size: 30' radius)				Hydrophytic
1				Vegetation
2				Present? Yes No
	<u>0</u>	= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate sheet.) Problemat	ic hydrophyti	c vegetatio	n present due to agricultural land management
activities (managed plant community). Indicators of hydr	ric soil and v	wetland hydro	ology area	present. Atypical (farmed) wetland.

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Sampling Point: 7

Hydric Soil Indicators: Indicators for Indicators Indicators: Indicators for	Remarks with grit with gravel with gravel		
9-18 2.5Y 5/2 40 10YR 4/6-5/6 40 C PL M Sandy clay 10YR 2/1 10 10 10 10 10 10 10 18-23 10YR 5/1 30 10YR 4/6 70 C PL M Clay 18-23 10YR 5/1 30 10YR 4/6 70 C PL M Clay 17ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains 2Location: F Hydric Soil Indicators: Indicators fo Indicators fo Coast Histosol (A1) Sandy Gleyed Matrix (S4) Coast	with gravel		
10YR 2/1 10 18-23 10YR 5/1 30 10YR 4/6 70 C PL M Clay Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains PL PL PL M Clay Clay	with gravel		
18-23 10YR 5/1 30 10YR 4/6 70 C PL M Clay 17ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains 2Location: P Hydric Soil Indicators: Indicators for Indicators for Histosol (A1) Sandy Gleyed Matrix (S4) Coast			
IType: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains ² Location: F Hydric Soil Indicators: Indicators fo Indit Indit			
Hydric Soil Indicators: Indicators for Indicators (A1) Sandy Gleyed Matrix (S4)			
Hydric Soil Indicators: Indicators for Indicators (A1) Sandy Gleyed Matrix (S4)			
Histosol (A1) Sandy Gleyed Matrix (S4) Coast	L=Pore Lining, M=Matrix		
	Problematic Hydric Soils ³ :		
	Prairie Redox (A16)		
	urface (S7)		
	anganese Masses (F12)		
	hallow Dark Surface (TF12)		
2 cm Muck (A10) Depleted Matrix (F3)			
Depleted Below Dark Surface (A11)			
Thick Dark Surface (A12) Depleted Dark Surface (F7)	of Hydrophytic vegetation and		
Sandy Mucky Mineral (S1) Redox Depressions (F8) Wetlan	d hydrology must be present,		
□ 5 cm Mucky Peat or Peat (S3) Unless	disturbed or problematic.		
Restrictive Layer (if observed):			
Type: Hydric Soil P	resent? Yes 🛛 No 🗌		
Depth (inches):			

Wetland Hydrology Indicators:						
Primary Indicators (minimum of one is required; ch	heck all that apply)	Secondary Indicators (minimum of two required)				
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)				
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)				
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)				
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots	ts (C3) Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C	C6) Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)				
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)						
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)					
Field Observations:						
Surface Water Present? Yes 🗌 No 🛛 De	epth (inches):					
Water Table Present? Yes 🛛 No 🗌 De	epth (inches): 21					
	epth (inches): <u>4</u>	Vetland Hydrology Present? Yes 🛛 No 🗌				
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map						
(Exhibit 3), and aerial photos (Exhibit 4).						
Remarks: FSA slide review indicates that 5 out of	f 9 (55%) normal years show signatures o	of saturation.				

WETLAND	DETERMINATION	DATA FORM – Midwest Re	gion
Project/Site: Racine Water & Wastewater Utilities alor	ng CTH V City/County: Vi	llage of Mt. Pleasant/Racine County	Sampling Date: 09/22/2015
Applicant/Owner:		State: <u>WI</u>	Sampling Point: 8
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section	n, Township, Range: <u>Section 7, T3N, R2</u>	2 <u>2E</u>
Landform (hillslope, terrace, etc.): terrace	Local r	elief (concave, convex, none): <u>none</u>	
Slope (%): <u>2-6%</u> Lat:	Long:		Datum:
Soil Map Unit Name: Varna silt Ioam (VaB)			NWI classification: none
Are climatic/hydrologic conditions on the site typical fo	r this time of year?	Yes 🗌 No 🛛 (If no, explain in Re	emarks)
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances" present?	Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If, needed, explain any answers in Rer	narks.)
SUMMARY OF FINDINGS – Attach site map showin	ng sampling point locatio	ns, transects, important features, etc.	

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	□Yes □Yes □Yes	⊠No ⊠No ⊠No	Is the Sampled Area within a Wetland?	🗌 Yes	⊠No
Remarks: Antecedent hydrologic	conditions drie	er than normal. Dis	turbed vegetation due to agricultur	al land managen	nent acitivities (managed
plant community).					

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
	<u>0</u>	= Total Cov	/er	That Are OBL, FACW, or FAC: 0% (A/B)
Sapling/Shrub Stratum (Plot size: 30' radius)				Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
2				OBL species x 1 =
3				FACW species x 2 =
4				FAC species x 3 =
5				FACU species x 4 =
	<u>0</u>	= Total Cov	/er	UPL species x 5 =
Herb Stratum (Plot size: 5' radius)				Column Totals: (A) (B)
1. Glycine max (planted)	<u>25</u>	\boxtimes	<u>UPL</u>	Prevalence Index = B/A =
2. <u>Taraxacum officinale</u>	<u>15</u>	\boxtimes	FACU	Hydrophytic Vegetation Indicators:
3. Panicum capillare	<u>10</u>		FAC	1 - Rapid Test for Hydrophytic Vegetation
4. <u>Sonchus arvensis</u>	<u>10</u>		<u>FACU</u>	2 - Dominance Test is >50%
5. Portulaca oleracea	<u>5</u>		<u>FACU</u>	 ☐ 3 - Prevalence Index is ≤3.0¹ ☐ 4 - Morphological Adaptations¹ (Provide supporting
6. <u>Chenopodium album</u>	<u>1</u>		<u>FACU</u>	data in Remarks or on a separate sheet)
7				5 - Problematic Hydrophytic Vegetation ¹ (Explain)
8				
9				¹ Indicators of hydric soil and wetland hydrology must
10				Be present, unless disturbed or problematic.
	<u>66</u>	= Total Cov	/er	
Woody Vine Stratum (Plot size: 30' radius)				Hydrophytic
1				Vegetation
2				Present? Yes 🗌 No 🖾
	<u>0</u>	= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate sheet.) Agricultura	al field.		

SOIL

Sampling Point: 8

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
-12	10YR 2/1	100					Loam	
2-17	2.5Y 3/2	70	10YR 4/6	10	С	PL M	Clay	with grit
	10YR 2/1	20						
7-24	2.5Y 5/2	60	10YR 4/6-5/6	30	С	PL M	Sandy clay loam	with disintegrating dolomite
	2.5Y 4/1	10						
		bletion, RN	/=Reduced Matrix, MS	=Masked S	and Grains			Pore Lining, M=Matrix
	il Indicators:			Construction				oblematic Hydric Soils ³ :
	Histosol (A1) Histic Epipedon (A2)			Sandy Gle	yed Matrix (S	54)	Dark Surfa	irie Redox (A16) ace (S7)
				Stripped Matrix (S6)			. ,	
	Hydrogen Sulfide (A4)				Loamy Mucky Mineral (F1)			
	Stratified Layers (A5)			• • • • • •			, ,	
	2 cm Muck (A10)			Depleted N	•	,	<u> </u>	,
	Depleted Below Dark	Surface (A11)	Redox Da	k Surface (F	6)		
	Thick Dark Surface (A	(12)		Depleted [Dark Surface	(F7)	³ Indicators of H	ydrophytic vegetation and
	Sandy Mucky Mineral (S1)			Redox Dep	pressions (F8	3)		drology must be present,
5 cm Mucky Peat or Peat (S3)				,	urbed or problematic.			
	e Layer (if observed)):						
	• • •					Hydric Soil Pres		
Restrictiv	e:						rigune Son Fres	ent? Yes 🗌 No 🖾

Wetland Hydrology Indicators:						
Primary Indicators (minimum of one is required	d; check all that apply)	Secondary Indicators (minimum of two required)				
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)				
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)				
Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)				
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C	3)				
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	FAC-Neutral Test (D5)				
Inundation Visible on Aerial Imagery (B7)) Gauge or Well Data (D9)					
Sparsely Vegetated Concave Surface (B	8) Other (Explain in Remarks)					
Field Observations:						
Surface Water Present? Yes 🗌 No 🛛	Depth (inches):					
Water Table Present? Yes 🗌 No 🛛	Depth (inches):					
Saturation Present? Yes 🛛 No 🗌	Depth (inches): 23 Wetla	nd Hydrology Present? Yes 🗌 No 🛛				
(includes capillary fringe)						
	well, aerial photos, previous inspections), if available	Topo map (Exhibit 1), WWI map (Exhibit 2), Soils map				
(Exhibit 3), and aerial photos (Exhibit 4).						
Remarks:						

Photo 1. North view of wet ditch (PCA 1).



Photo 3. North view of PCA 3 and sample points 3 and 4.



Photo 5. North view of PCA 5 and sample points 7 and 8.



Photo 2. South view of wet ditch (PCA 1) and PCA 2.



Photo 4. North view of PCA 4 and sample point 5.



Photo 6. Upland sample site 1, mowed lawn.



Photo 7. Wetland sample site 2, atypical (mowed) wetland.



Photo 9. Upland sample site 4, kale field.



Photo 11. Upland sample site 6, agricultural field.



Photo 8. Sample site 3, fresh (wet) meadow.



Photo 10. Wetland sample site 5, farmed wetland.



Photo 12. Wetland sample site 7, farmed wetland.



Photo 13. Upland sample site 8, agricultural field.



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EXHIBIT 10. FSA Slide Review Data WETLAND DOCUMENTATION RECORD Remotely Sensed Data Summary

Farm Service Agency (or Other) Aerial Slide Data

Owner/Operator: Racine Water & Wastewater Utilities

County: Racine

State: <u>WI</u>

Slide Reviewer: Jennifer Dietl

Date: 09/21/2015

Site Identification No. Sections 6 and 7, T3N, R22E - (Tract No. + Site No.)

Rainfall (in) Date +D/N/W (Apr-Interpretation- (codes listed in box below) (Mo./Yr) June ave.) = Area: A Sample site 3 Area: B Sample site 5 Y+ NC 1 part; CR 6d part Y+ CR 6d 2013 3 Y+ NC 1 Y+ CR 6d 2010 3 Y+ NC 1 Y+ NC 3 2008 3 Y- CR 6d Y- CR 6d 2006 2 Y NC part; CR 6b, 6d part Y- CR 6d 2005 1 Y- CR 6d, 6b Y+ CR 6d 2 June 2003 Y+ CR 1, 6d Y+ CR 6d July 2002 3 Y+ NC 1 Y+ NC 1 June 2001 3 Y+ NC 1 Y+ CR 6e 3 July 2000 Y+ CR 1, 6d Y+ CR 6e June 1999 3 2 Y+ CR 1, 6e Y CR 6d June 1998 Y+ CR 1 Y+ CR 1 July 1997 2 Y+ CR 6d Y CR 6d June 1996 3 Y NC 6a, 6d Y- CR 6d May 1995 2 N CR June 1994 2 N CR Y CR 3, 6d Y CR 3, 6d 1993 2 Y- CR 6b June 1992 1 N CR Y- CR 6b, 6d Y- CR 6d 2 June 1991 Y+ CR 3, 6d, 6e Y+ CR 3, 6d July 1990 2 **Air Photo** 2015 2 Y+ CR part 1, 6d, drift lines Y+ NC 1

Y = Yes, signal indicates wetness (+ = strong, - = weak) CR = cropped (row crop or tilled)		gnature (hay, pasture, idle, etc.)
<u>Color</u> 6a = dark green 6b = light green 6c = yellow 6d = brown 6e = black	Manipulation (year of installation) 7a = ditched 7b = tiled 7c = filled 7d = tree/brush removal 8 = plowed/tilled	Other write explanation
	b or tilled) <u>Color</u> 6a = dark green 6b = light green 6c = yellow 6d = brown	b or tilled) Color Ga = dark green Gb = light green Gc = yellow Gd = brown Manipulation (year of installation) 7a = ditched 7b = tiled 7c = filled 7d = tree/brush removal

A. Does slide/air photo data indicate the site is a wetland?B. Does slide/air photo data indicate the site is a wetland?

A. A total of <u>8</u> years out of <u>9</u> most normal years (89%) have wet (Y) signatures.

X Yes

🗌 No

B. A total of $\frac{8}{9}$ years out of $\frac{9}{9}$ most normal years (89%) have wet (Y) signatures.

A. A total of <u>18</u> years out of <u>20</u> years (90%) observed have wet (Y) signatures.

B. A total of <u>19</u> years out of <u>20</u> years (95%) observed have wet (Y) signatures.

Remotely Sensed Data Summary

 Owner/Operator:
 Frederick Family Revocable Trust
 County:
 Kenosha
 State:
 WI

Slide Reviewer: Chris Jors

Date: 10/29/2014

Site Identification No. Section 24, T2N, R21E - (Tract No. + Site No.)

Farm Service Agency (or Other) Aerial Slide Data

Date (Mo./Yr)	Rainfall (in) +D/N/W (Apr- June ave. =)	Interpretation- (codes listed in box below)		
		Area: C Sample site 6	Area: D Sample site 7	
2013	3	Y- CR 6d	Y- CR 6b	
2010	3	N CR	N CR	
2008	3	Y+ CR 6d, drift lines	Y- CR 6b	
2006	2	Y- CR 6d	Y- CR 6d	
2005	1	Y- CR 6b, 6d	Y- CR 6d	
June 2003	2	Y- CR 6b, 6d	Y- CR 6d	
July 2002	3	Y- CR 6d	Y- CR 6d	
June 2001	3	Y NC 1	N CR	
July 2000	3	Y+ CR 6b	Y- CR 6d	
June 1999	3	Y CR 6d	N CR	
June 1998	2	Y- CR 6d	N CR	
July 1997	2	Y- CR 6d	Y- CR 6d	
June 1996	3	N CR	N CR	
May 1995	2	N CR	N CR	
June 1994	2	N CR	N CR	
1993	2	Y CR 3, 6d	N CR	
June 1992	1	N CR	N CR	
June 1991	2	Y- CR 6d	Y- CR 6d	
July 1990	2	N CR	Y CR 3, 6d	
Air Photo		<u> </u>		
2015	2	Y+ NC 1	Y- NC	
Y = Yes, sign	al indicates wetness	(+ = strong, - = weak)	N = No wetness signature	

CR = cropped (row crop or tilled) **NC** = not cropped (hay, pasture, idle, etc.) <u>Color</u> Manipulation (year of installation) Feature Other 1 = water 6a = dark green 7a = ditched write explanation 2 = mud flat 6b = light green7b = tiled7c = filled 3 = bare spot 6c = yellow4 = drowned crop 6d = brown7d = tree/brush removal 5 = planted late 6e = black8 = plowed/tilled

C. Does slide/air photo data indicate the site is a wetland?

D. Does slide/air photo data indicate the site is a wetland?

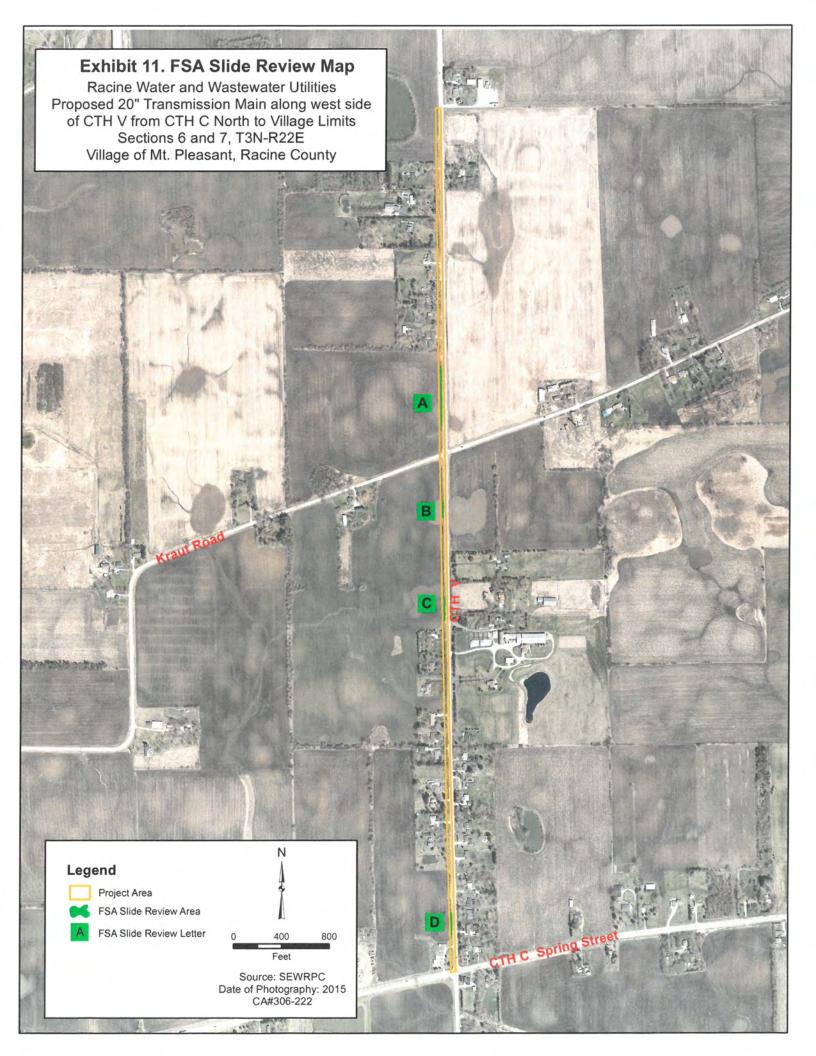
⊠ Yes □ No ⊠ Yes □ No

C. A total of $\underline{6}$ years out of $\underline{9}$ most normal years (67%) have wet (Y) signatures.

D. A total of <u>5</u> years out of <u>9</u> most normal years (55%) have wet (Y) signatures.

C. A total of <u>14</u> years out of <u>20</u> years (70%) observed have wet (Y) signatures.

D. A total of $\underline{11}$ years out of $\underline{20}$ years (55%) observed have wet (Y) signatures.



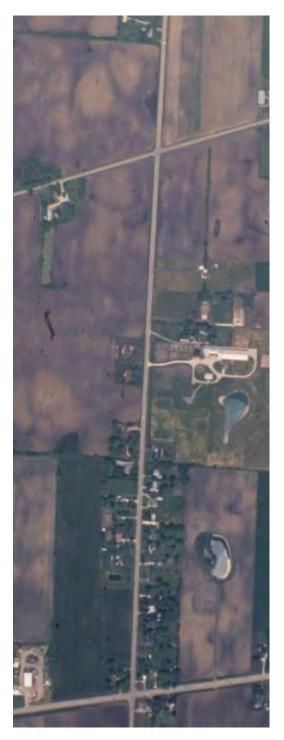
2006 NAIP Photo

2003 FSA Slide





1998 FSA Slide

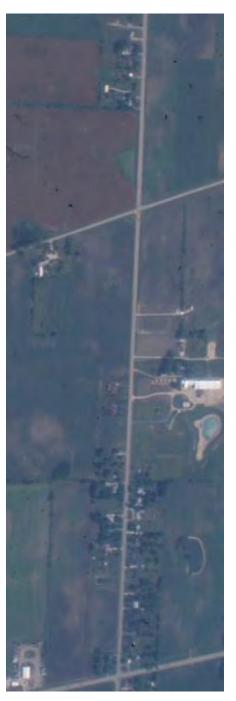


1997 FSA Slide



FSA Slide 1995

FSA Slide 1994

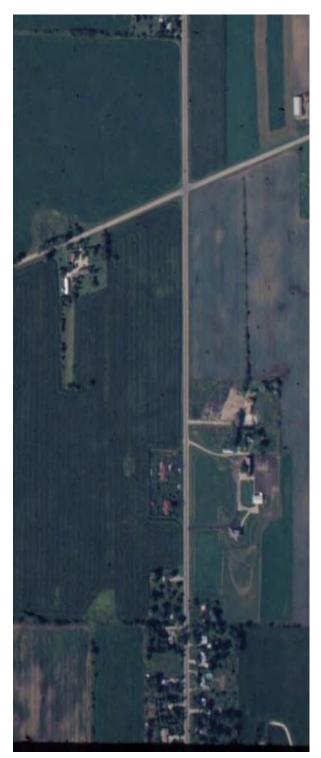




FSA Slide 1993



FSA Slide 1992 (Areas A, B, and C)



FSA Slide 1991 (Areas A, B, and C)



FSA Slide 1990 (Areas A, B, and C)



FSA Slide 1992 (Area D)



FSA Slide 1990 (Area D)

