


# Dane County Rezone & Conditional Use Permit

<b>Application Date</b>	<b>Petition Number</b>
04/20/2017	DCPREZ-2017-11150
<b>Public Hearing Date</b>	<b>C.U.P. Number</b>
06/27/2017	

OWNER INFORMATION		AGENT INFORMATION	
OWNER NAME SUSAN K BARBER	PHONE (with Area Code)	AGENT NAME ADAM BUHALOG	PHONE (with Area Code) (608) 577-6516
BILLING ADDRESS (Number & Street) 3619 AUDREY LN		ADDRESS (Number & Street) 2300 W MILWAUKEE ST	
(City, State, Zip) STOUGHTON, WI 53589		(City, State, Zip) STOUGHTON, WI 53589	
E-MAIL ADDRESS		E-MAIL ADDRESS AMBUHALOG@GMAIL.COM	

ADDRESS/LOCATION 1		ADDRESS/LOCATION 2		ADDRESS/LOCATION 3	
ADDRESS OR LOCATION OF REZONE/CUP		ADDRESS OR LOCATION OF REZONE/CUP		ADDRESS OR LOCATION OF REZONE/CUP	
1987 BARBER DRIVE					
TOWNSHIP DUNN	SECTION 26	TOWNSHIP	SECTION	TOWNSHIP	SECTION
PARCEL NUMBERS INVOLVED		PARCEL NUMBERS INVOLVED		PARCEL NUMBERS INVOLVED	
0610-262-9910-2					

REASON FOR REZONE			CUP DESCRIPTION	
ZONING COMPLIANCE FOR FUTURE USES				
<b>FROM DISTRICT:</b>	<b>TO DISTRICT:</b>	<b>ACRES</b>	<b>DANE COUNTY CODE OF ORDINANCE SECTION</b>	<b>ACRES</b>
RE-1 Recreational District	PUD Planned Unit	1.3		
B-1 Local Business District	PUD Planned Unit	1		
R-3 Residence District	PUD Planned Unit	1.4		

<b>C.S.M REQUIRED?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>PLAT REQUIRED?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>DEED RESTRICTION REQUIRED?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>INSPECTOR'S INITIALS</b> HJH3	<b>SIGNATURE:(Owner or Agent)</b> 
Applicant Initials <u>AS</u>	Applicant Initials <u>BE</u>	Applicant Initials <u>BE</u>		<b>PRINT NAME:</b> Paul L. Schlieve
				<b>DATE:</b> 4/20/2017



DANE COUNTY  
**PLANNING & DEVELOPMENT**

Zoning Division  
Room 116, City-County Building  
210 Martin Luther King Jr. Blvd.  
Madison, Wisconsin 53703-3342  
Phone: (608) 266-4266  
Fax: (608) 267-1540

**Zoning Change Application**

Items that must be submitted with your application:

- o **Written Legal Description of the proposed Zoning Boundaries**  
Legal description of the land that is proposed to be changed. The description may be a lot in a plat, Certified Survey Map, or an exact metes and bounds description. A separate legal description is required for each zoning district proposed. The description shall include the area in acres or square feet.
- o **Scaled Drawing of the location of the proposed Zoning Boundaries**  
The drawing shall include the existing and proposed zoning boundaries of the property. All existing buildings shall be shown on the drawing. The drawing shall include the area in acres or square feet.

Owner's Name	<u>Adam and Brittany Buhalog</u>	Agent's Name	_____
Address	<u>2300 W. Milwaukee Street, Stoughton, WI 53589</u>	Address	_____
Phone	<u>(608) 577-6516</u>	Phone	_____
Email	<u>ambuhalog@gmail.com</u>	Email	_____

Town: Dunn Parcel numbers affected: 0610-262-9910-2, 0610-262-~~9982-0~~<sup>9880-0</sup>, 0610-262-~~9866-0~~<sup>570</sup>, 0610-262-9894-0

Section: 26 Property address or location: 1995 Barber Dr, Stoughton

Zoning District change: (To / From / # of acres) PUD / R3 / 2.35, PUD / B1 / 1.38

Soil classifications of area (percentages) Class I soils: \_\_\_\_\_% Class II soils: \_\_\_\_\_% Other: \_\_\_\_\_%

See attached Cardno Report.

Narrative: (reason for change, intended land use, size of farm, time schedule)

- Separation of buildings from farmland
- Creation of a residential lot
- Compliance for existing structures and/or land uses
- Other:

See attached narrative

I authorize that I am the owner or have permission to act on behalf of the owner of the property.

Submitted By: Adam M. Buhalog

Digitally signed by Adam M. Buhalog  
DN: cn=Adam M. Buhalog, o=Dane County, email=ambuhalog@gmail.com, c=US  
Date: 2017.04.20 11:12:00 -0500

Date: 04/20/2017



**NARRATIVE FOR PROPOSED PUD ON BARBER ROAD  
TOWN OF DUNN  
FOR  
A CLIMATE CONTROLLED STORAGE FACILITY  
AND  
A SINGLE FAMILY HOME**

This project is being proposed by the Applicant/Developer Adam & Brittany Buhalog, who currently reside at 2300 West Milwaukee Street in Stoughton, Wisconsin.

The entire project encompasses 3.73 acres, cumulatively, on both sides of Barber Road. The first parcel, on the West side of Barber Road, is a 2.35 acre site on which the Barber Bay Inn is situated. It is more precisely known as Parcel #0610-262-9910-2 and Parcel #0610-262-9852-0, T06N R10E Section 26, SE ¼ of the NW ¼. The second parcel, on the East side of Barber Road, consists of 1.38 acres, and is better known as Parcel #0610-262-9866-0 and Parcel #0610-262-9894-0 – otherwise known as Lots 2 & 3 of CSM #150179.

The proposed plan has two elements set forth for consideration. First, on the 2.35 acres on the West side of Barber Road on which the Barber Bay Inn is situated, the proposal is for a fully enclosed, climate controlled, self-storage facility. Second, on the East side of Barber Road, Adam and Brittany Buhalog plan on building a home between 4000 and 6000 square feet.

The current Certified Survey Map depicts the parcels on both the East and West sides of Barber road as each consisting of two individual parcels. As part of this proposal, approval will be sought for a new Certified Survey Map that consolidates the two lots on the East side of the road (#0610-262-9866-0 and #0610-262-9894-0) into a single parcel and the two parcels on the West side of the road (#0610-262-9910-2 and #061026298520) into a single parcel. The result will be one parcel on the West side of Barber Road and one parcel on the East side of Barber road.

On the West side of Barber Road the current use (Barber Bay Inn) consumes 41,210 S.F. of the lot leaving 61,447 S.F. of open space. The proposed climate controlled self-storage facility consumes 36,117 S.F. of the lot leaving 66,139 S.F. of open space. This will increase the open space of the lot by 8%. A total of 13,614 square feet of wetland will need to be rezoned out of wetland—of this 293 S.F wetland will be permanently filled. On the East side of Barber Road the proposed use is one single family home with a total impervious surface impact of 5000 S.F. on a lot that consists of 60,112.8 S.F. or

1.38 acres. This is an impervious surface impact of 8.4%. Based on the overall scope/scale of the proposed development it falls well within the typical bulk requirements found under zoning districts.

Adam and Brittany Buhalog have retained Cardno Environmental as their consultant for open space restoration. At this point in time, Cardno has proposed a multi-faceted restoration plan for all open space on both the West and East side of Barber Road. The restoration plan calls for the following: a) Mesic Pollinator; b) Sedge Meadow; c) Wet/Mesic Prairie; and, d) Wetland Edge. The Buhalogs, as a part of the PUD process, will agree to maintain the quality of the restored areas.

The proposed uses of the property will result in a reduced traffic and parking load. The proposed self-storage facility on the West side of Barber Road provides for 9 vehicular parking spaces. This represents an approximately 80% reduction in parking space and the associated traffic load as compared to the historical use of the property for the Barber Bay Inn bar and restaurant. The proposed single-family residence on the East side of Barber Road will replace the historical use of the property as a seasonal recreational vehicle / trailer park with space for approximately 12 dwelling units. The reduction of 12 transient dwelling units to one permanent dwelling unit represents a substantial reduction in both traffic and parking.

The relationship of nearby properties is somewhat limited. On the East side of Barber Road the contiguous property to the North is single family residential. To the South there are condominiums. On the West side of Barber Road there is open space to the South and residential to the North. While the proposal on the West side of Barber Road does not wholly relate to the Town Comprehensive Plan there have been a unique set of issues surrounding the 2.68 acres that the Applicant/Developer has been attempting to ameliorate to deliver a solution.

The current timeline on this development, should approvals be forthcoming, is to break ground this fall, and complete the project by mid-summer of 2018.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Adam Buhalog', written in a cursive style.

Adam Buhalog  
Applicant/Developer



## BARBER DRIVE CLIMATE CONTROLLED STORAGE

BARBER DRIVE,  
TOWN OF DUNN, WI



① Exterior View to SW  
1/8" = 1' = 0"



LOCATION MAP

**Architecture :** **Dimension IV - Madison Design Group**  
6515 Grand Teton Plaza, Suite 120, Madison, WI 53719  
p: 608.829.4444  
www.dimensionivmadison.com

**Civil Engineering:** **Quam Engineering**  
4604 Siggelkow Rd., Ste A, McFarland WI 53558  
p: (608) 838-7750  
rquam@quamengineering.com

**BUILDING DATA:**  
STORAGE OCCUPANCY: S1 Storage  
STORIES: 2  
HEIGHT: 33'-7" Max.  
AREA: 36,910sf/floor=  
73,820sf total

**RESIDENTIAL**  
HEIGHT: 27' MAX  
STORIES: 2  
AREA: 4,400GSF TOTAL

**SHEET INDEX:**  
STORAGE CONCEPT SITE PLAN  
FLOOR PLANS  
ELEVATIONS

RESIDENCE CONCEPT SITE PLAN  
RESIDENCE CONCEPT FLOOR PLANS  
RESIDENCE CONCEPT ELEVATIONS  
RESIDENCE CONCEPT 3D VIEWS

GDP SUBMITTAL

16064

20 APRIL 2017

**GO.1**

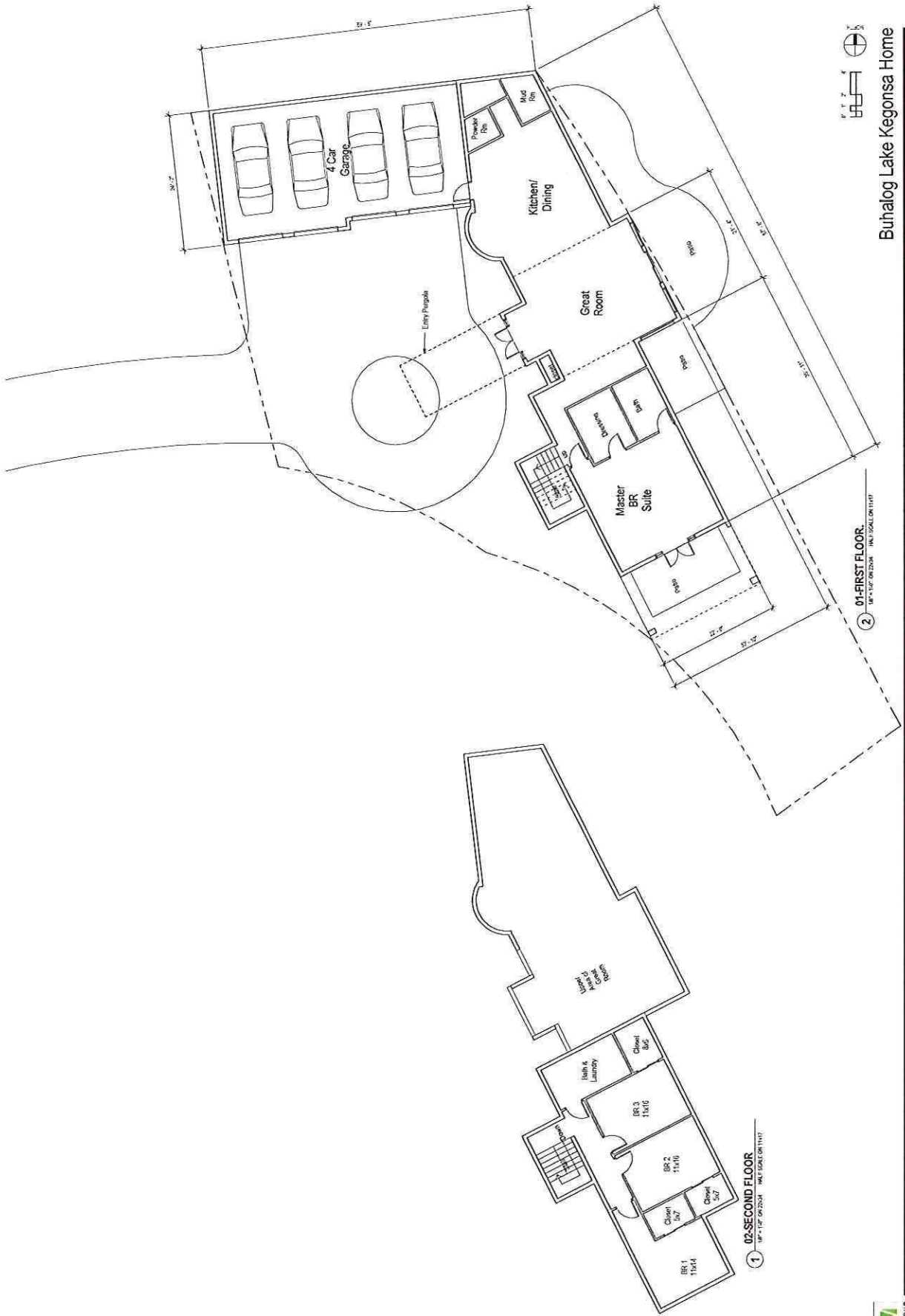


**BARBER DRIVE LAKE LOTS**  
 GENERAL DEVELOPMENT PLAN  
 PAGE 1 OF 1  
 DATED: APRIL 20, 2017

**QUAM ENGINEERING, LLC**  
 Residential and Commercial Site Design Consultants  
 www.quamengineering.com  
 4604 Siggekow Road, Suite A - McFarland, Wisconsin 53558  
 Phone (608) 838-7755, Fax (608) 838-7752

**IMPERVIOUS AREAS**  
 LOT AREA = 40143 SF  
 PRO. HOUSE = 3620 SF  
 PRO. DRIVEWAY = 2111 SF  
 PRO. PATIO/OTHER = 524 SF  
 IMPERVIOUS PERCENTAGE = 13.0%





**Buhalog Lake Kegonsa Home**

Barber Drive, Town of Dunn  
 Project Name  
 Project # 1004

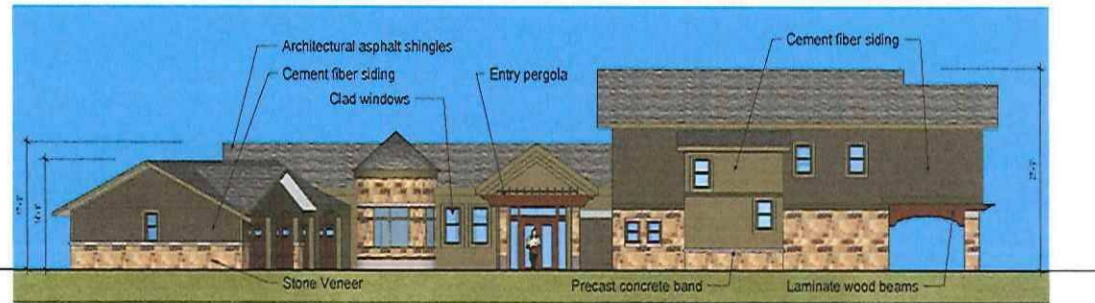


View to NW

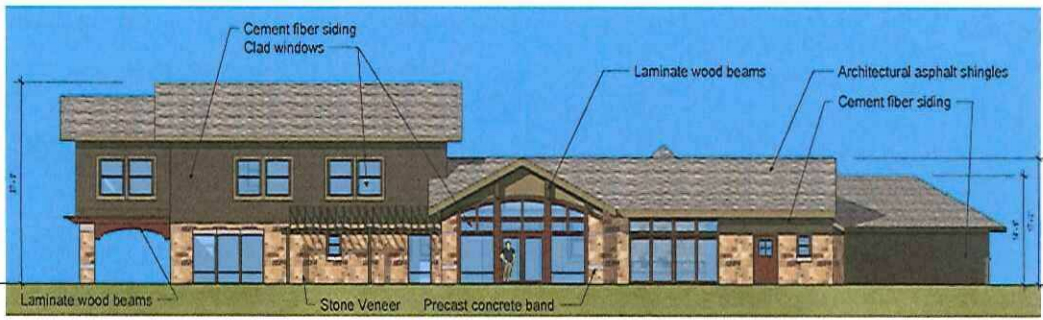


View to SE

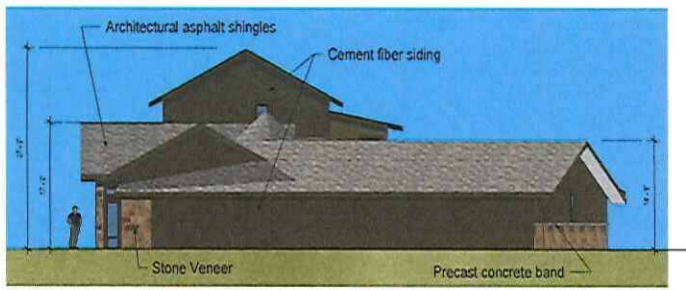




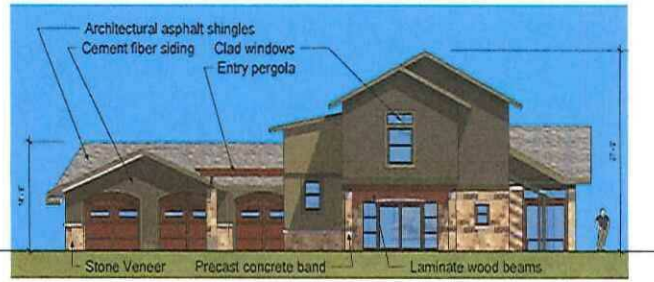
2 Elevation Front  
1/8" = 1'-0" ON 22x34 HALF SCALE ON 11x17



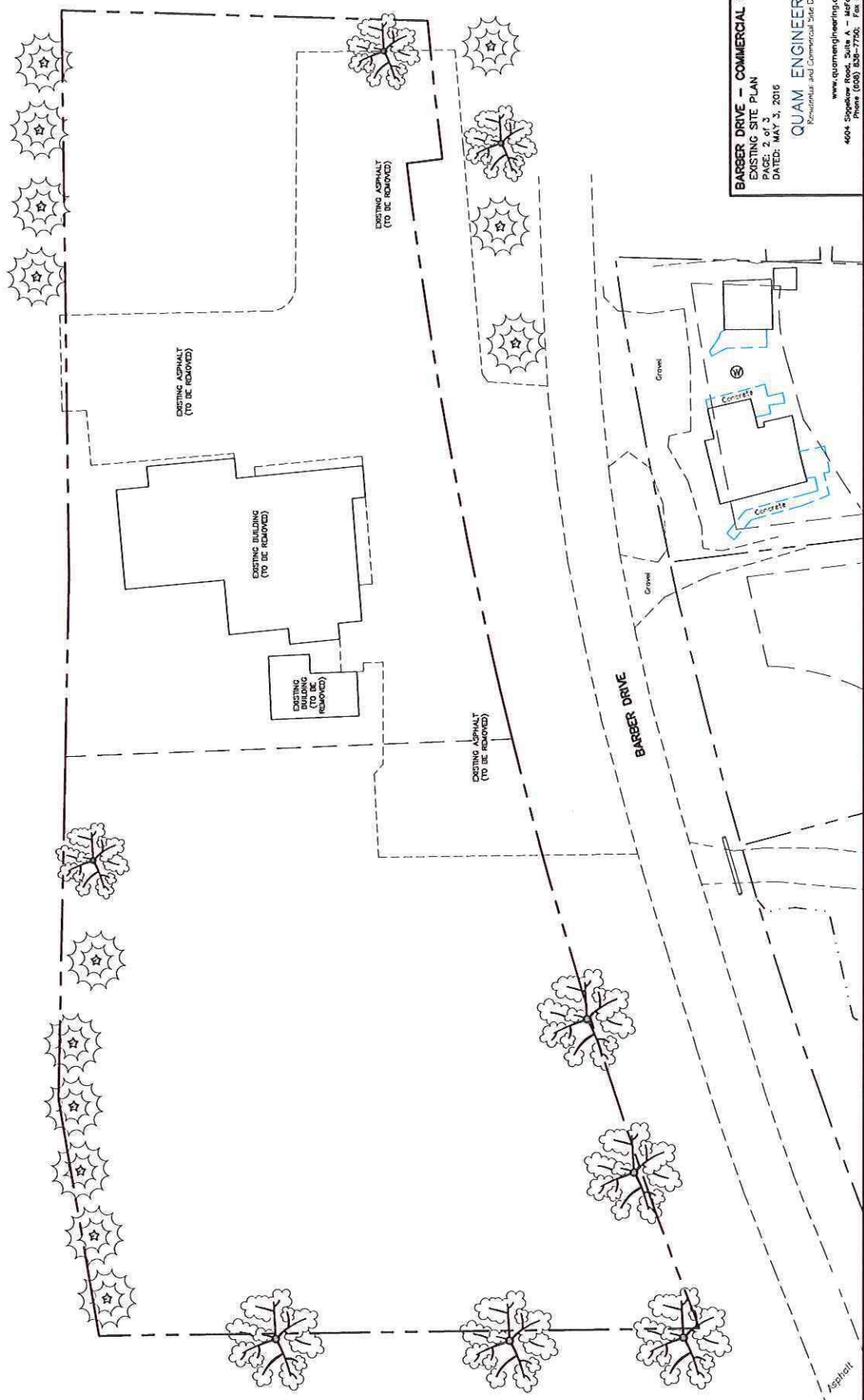
1 Elevation Lakeside  
1/8" = 1'-0" ON 22x34 HALF SCALE ON 11x17



3 Elevation North End  
1/8" = 1'-0" ON 22x34 HALF SCALE ON 11x17



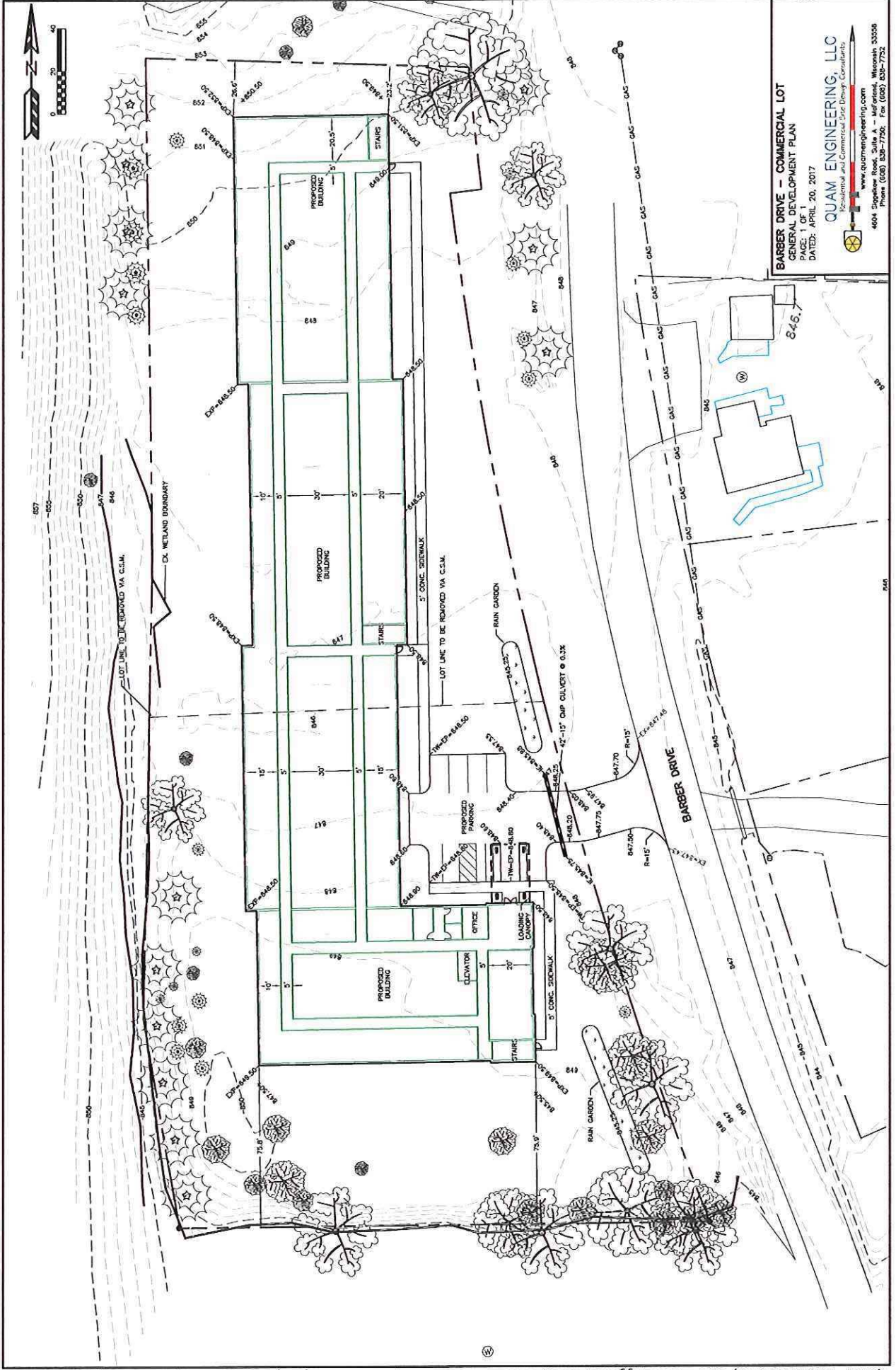
4 Elevation South End  
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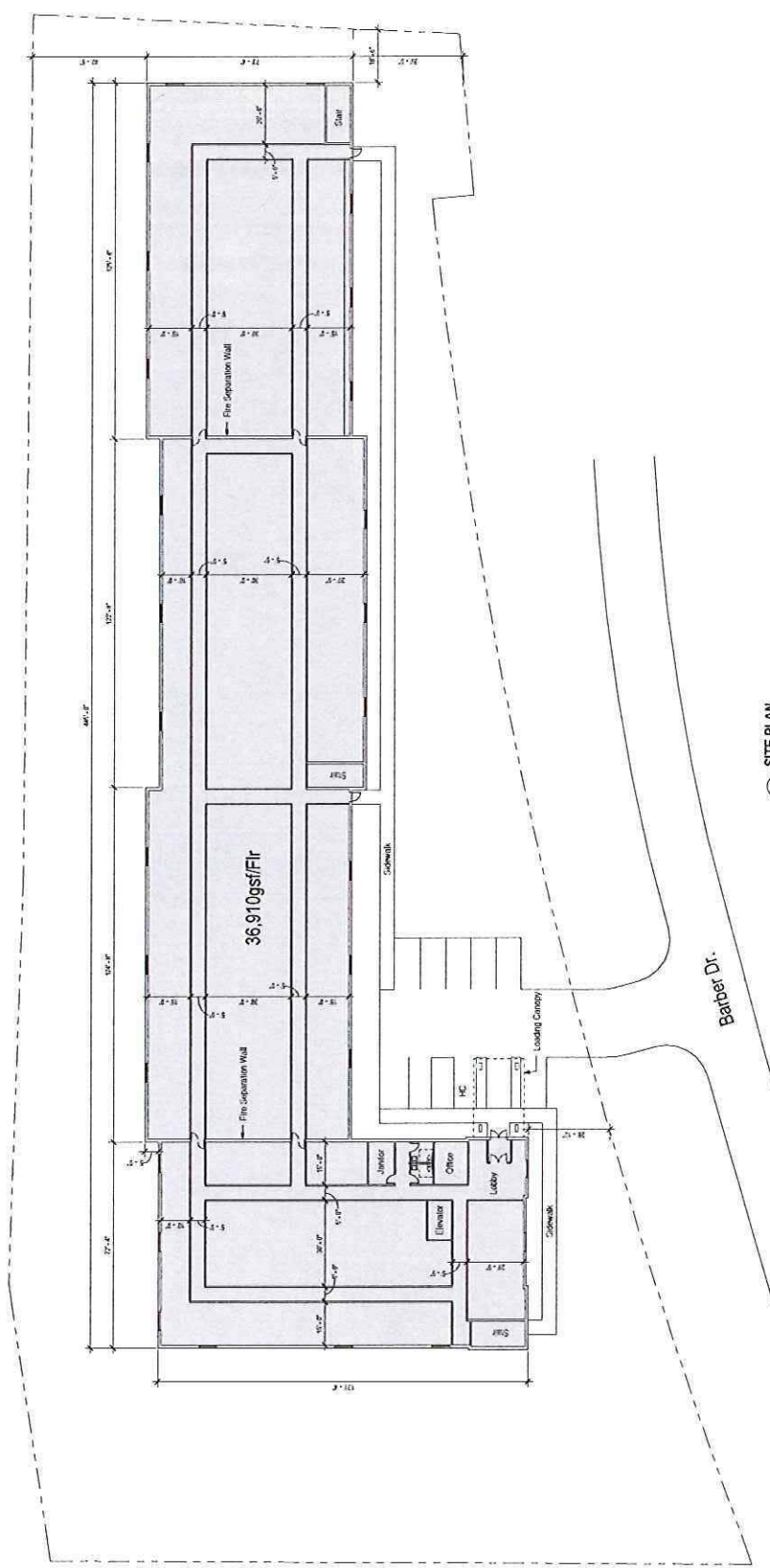
**BARBER DRIVE - COMMERCIAL LOT**  
EXISTING SITE PLAN  
PAGE: 2 of 3  
DATED: MAY 3, 2016

**QUAM ENGINEERING, LLC**  
Residential and Commercial Site Design Consultants  
www.quamengineering.com  
4604 Sigelkow Road, Suite A - McFarland, Wisconsin 53558  
Phone (608) 838-7750; Fax (608) 838-7752

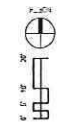




**BARBER DRIVE — COMMERCIAL LOT**  
 GENERAL DEVELOPMENT PLAN  
 DATE: APRIL 20, 2017  
 QUAM ENGINEERING, LLC  
 Residential and Commercial Site Design Consultants  
 www.quamengineering.com  
 4604 Siggelkow Road, Suite A - McFarland, Wisconsin 53558  
 Phone (608) 838-7750; Fax (608) 838-7752



1 SITE PLAN  
1" = 20'-0"



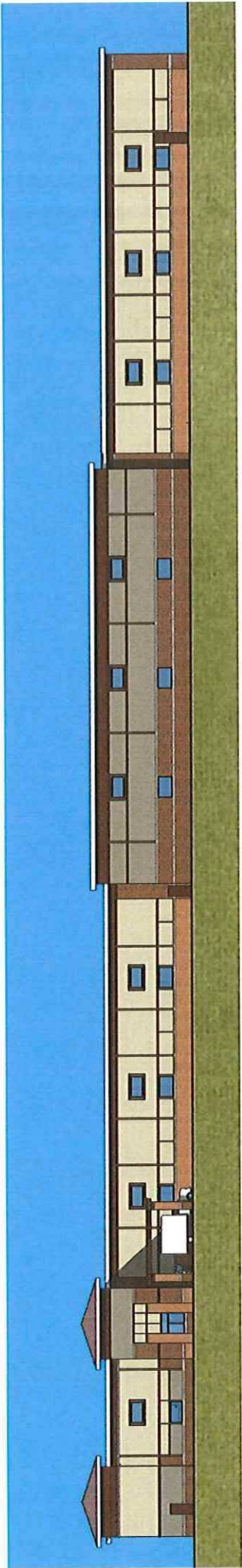
BARBER DRIVE CLIMATE CONTROLLED STORAGE

Barber Drive  
Released for the  
Market 2017  
1004

**DIMENSION** Madison Design Group

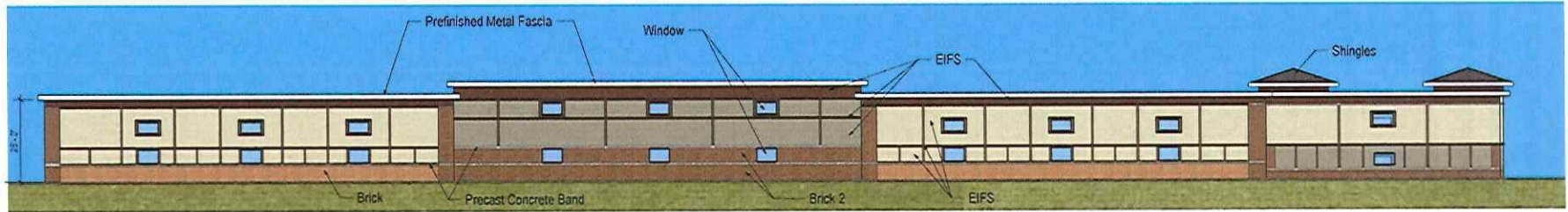
1000 S. 10th St., Suite 100  
Madison, WI 53709  
608.278.4444  
info@dimension.com



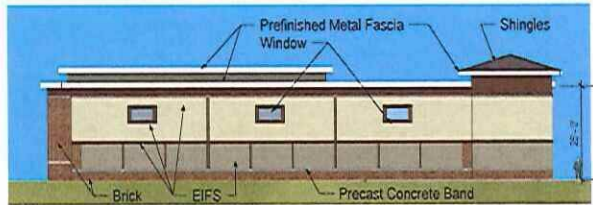




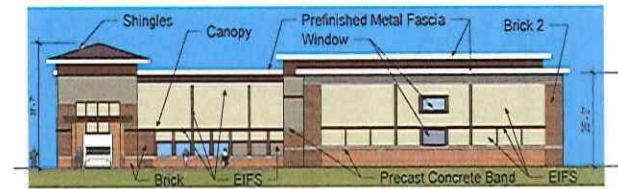




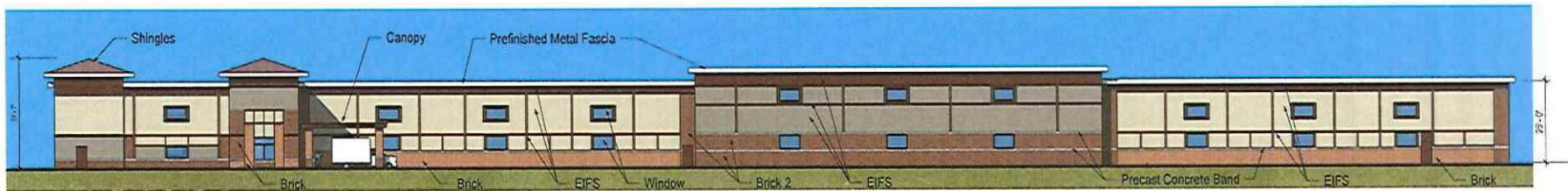
④ Elevation West (Back)  
1/8" = 1'-0"



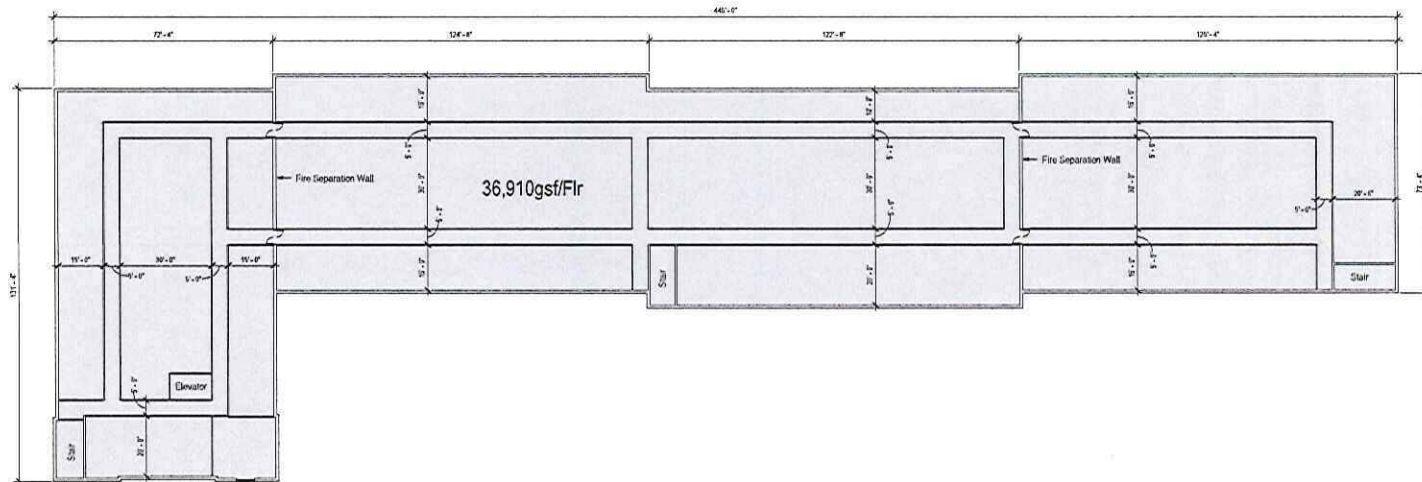
② Elevation South  
1/8" = 1'-0"



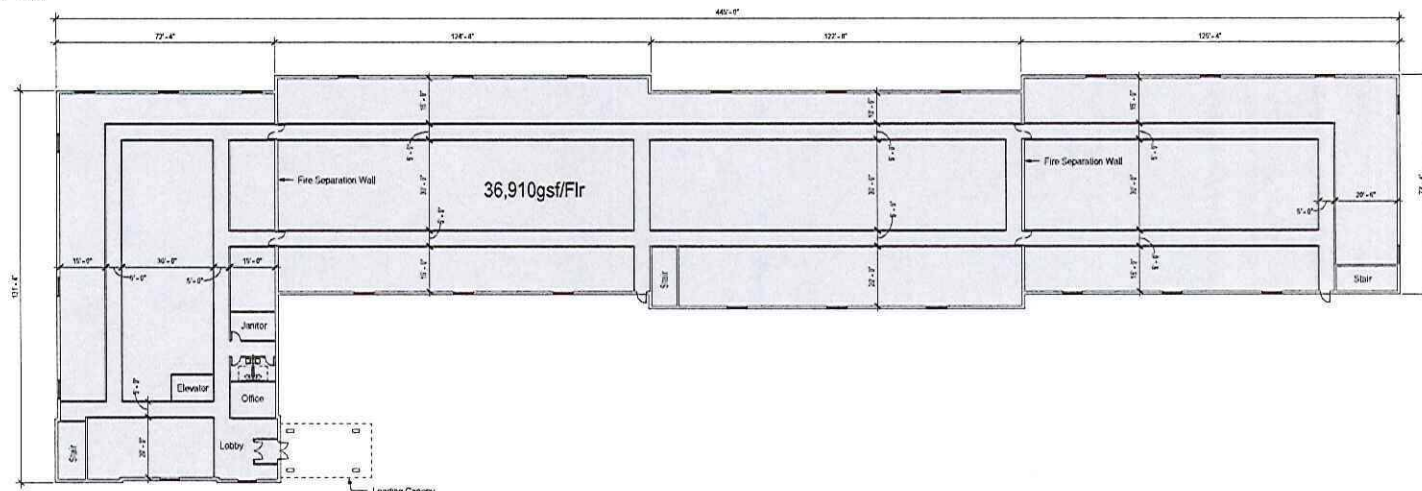
③ Elevation North  
1/8" = 1'-0"



① Elevation East (Front)  
1/8" = 1'-0"



1 02-SECOND FLOOR  
1"=30'-0"



2 01-FIRST FLOOR  
1"=30'-0"





# Wetland Delineation Report

Town of Dunn Storage Lockers

J168349900



Prepared for  
Adam Buhalog

September 9, 2016

## Contact Information

### Cardno

6140 Cottonwood Drive, Suite A  
Fitchburg, WI 53719

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Approved By:



Aaron Diehl  
Senior Consultant

## Document Information

Prepared for Adam Buhalog  
Project Name Town of Dunn Storage Lockers  
File Reference N/A  
Job Reference J168349900  
Date 9 September 2016

Version Number 1.0

Effective Date September 9, 2016

Date Approved: September 9, 2016

## Document History

Version	Effective Date	Description of Revision	Prepared by:	Reviewed by:
1.0	2016.09.09	Wetland Delineation Report v1.0	Zachary Waechter	Aaron Diehl

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- A. Wetland Determination Data Forms – Northcentral/Northeast Region
- B. Site Photographs

# 1 Introduction

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Cardno was contracted to perform a wetland delineation of the parcel located at 1973 Barber Drive, Town Dunn, Dane County, Wisconsin (Figure 1). Mr. Adam Buhalog is proposing to build a new commercial facility on the approximate 2.82-acre parcel. This parcel and associated delineation boundary are depicted in Figures 1-5. Results from this wetland delineation may impact parcel purchase, design, and permit requirements.

Based on field investigations conducted by Cardno on September 6<sup>th</sup>, 2016 and review of related resource maps, it is our professional opinion that one wetland totalling 0.61 acres (26,758.95 sq. ft.) and one waterway exist within the project area.

The wetlands identified for this report may be subject to federal regulation under the jurisdiction of the USACE, state regulation under the jurisdiction of the Wisconsin Department of Natural Resources (WDNR), and local jurisdiction under the county, town, city, or village.

This report outlines the wetland delineation investigation, methodology, and its findings as completed by Cardno staff. Team members are trained and experienced in delineation methodologies and applicable regulations.

- Zach Waechter – Senior Project Scientist – Project Manager; Lead Field Delineator: Zach has been working in the field of wetland ecology for over four years and hold Bachelors' of Science in Soil and Land Management and Resource Management from the University of Wisconsin-Stevens Point. As Senior Project Scientist, Zach conducts environmental surveys, including wetland delineation, site characterization, land cover classification, survey of the work area for environmental considerations, pre-construction threatened and endangered species surveys, invasive species mapping, and hydrologic survey of wetland mitigation sites, with an emphasis on utility (oil, electric, transportation) sectors. He writes reports for wetland delineations, wetland mitigation site monitoring, wetland mitigation site searches, and environmental impact statements.
- Will Taylor – Staff Scientist – Field Delineator: Will has been working in the field of wetland ecology and restoration for over three years and holds a Bachelor's of Science in Conservation Biology from the University of Wisconsin-Madison. He has conducted restoration and mitigation site monitoring for over three years. Currently, Will leads and assists with wetland delineations, habitat surveys, restoration projects, and report writing.
- Jameson Loesch – Senior Staff Scientist – Geospatial Manager: Jameson maintains a leading role as a GIS analyst, while also providing technical support for field work. He is responsible for the acquisition/creation, management and analysis of large datasets for both small and large multi-year projects, as well as the creation of maps and figures for many of Cardno's GIS projects. With nine years of experience in spatial data analysis, Jameson often works with project managers and clients to develop custom GIS tools, which help to standardize analysis and increase efficiency. Jameson conducts FSA Slide Reviews and also takes part in field botany efforts for wetland delineations, endangered species surveys, wetland mitigation bank monitoring, botanical inventories, as well as aid in the preparation of reports.
- Alex Cohen – GIS Technician –: Alex has several years of experience in natural resource ecology, including field work, GIS analysis, cartography, and modelling. He holds an M.S. in Computational Ecology from Purdue University and a B.S. in Biology/Psychology from Calvin



College. Currently, Alex provides GPS/GIS support, data analysis/statistical capabilities, programming expertise, aerial image analyses, and mapping services. He also performs endangered species surveys and assists in the field with wetland delineations and other surveys.

## 2 Methods and Desktop Review Results

---

### 2.1 Background Information

Sources of information were consulted to identify potential wetlands within the Project Area. These sources include:

- United States Geological Survey (USGS) Digital Elevation Topographical Map (Figure 2)
- USDA-NRCS Web Soil Survey Database for Milwaukee and Racine Counties, WI (Figure 3)
- WDNR Wisconsin Wetlands Inventory (WWI) Mapping (Figure 3)
- ESRI Basemap 2015 Aerial Photograph (Figures), Google Earth Historic Aerial Imagery
- WDNR Surface Water Data Viewer

These maps identify potential wetlands and wetland soil units. The sole use of any of these maps to make wetland determinations is not acceptable. Descriptions of findings from the review of this background information is provided in the subsections, below.

#### 2.1.1 USGS Digital Elevation Topographical Map

The contours on the topographic map were created using a USGS digital elevation model (Figure 2). The topographic map shows the Project Area general sloping to southern boundary of the project area. The Project Area slopes from 848' in the along the northern, 846' eastern, and 854' western boundary's to 844' along the southern boundary.

#### 2.1.2 Soil Survey

The NRCS soil map of the Project Area (Figure 3) identified two soil types, one of which was hydric, totalling 1.38 acres within the Project Area. These soil types are outlined in Table 2-1, below. Areas where hydric soil units exist were further investigated in the field, including collection of Data Points as deemed necessary, to provide evidence of whether or not the area displayed wetland or upland characteristics.

**Table 2-1 Mapped Soil Units within the Project Area**

Symbol	Map Unit Name	Hydric?	Acreage
Mc	Marshan Silt	No	1.44
Ho	Houghton Muck	Yes	1.38
Total			2.82

#### 2.1.3 Mapped Wetlands

The WWI map of the Project Area (Figure 3) identified the approximately 0.55 acres of wetland. The wetland, described by type, is outlined in Table 2-2, below. Areas where WWI features exist were further investigated in the field, including collection of Data Points as deemed necessary, to provide evidence on whether or not the area displayed wetland or upland characteristics.

**Table 2-2 Mapped WWI Features within the Project Area**

Symbol	Long Name	Acreage
E2Ka	Emergent/ Wet Meadow; Narrow-Leaved Persistent; Wet soil, Palustrine; Abandoned	0.55
Total		0.55



#### **2.1.4 Lake Kegonsa Water Levels**

The target maximum elevation of 843.50 feet and 100 year floodplain of 845.20 are shown on Figure 4. The polygons showing areas within at or below their respective elevations were created using data from the USGS digital elevation model. The average lake level for the past ten years (9/06/2006-9/06/2016) has been 842.97 feet. All water levels were determined using information from the Dane County Land and Water Resource Department.

#### **2.1.5 Current, Historic, and High-Resolution Aerial Imagery**

A 2015 aerial photograph, multiple years of historic imagery (2000-2015), and recent high-resolution imagery were reviewed in order to evaluate the Project Area for possible wetland signatures. Based on this imagery, one potential wetland visual signature was identified within the Project Area. This signature was field verified during the field reconnaissance.

### **2.2 Investigation Methodology**

The delineation of wetlands and other waters of the State were based on the methodology described in the Corps of Engineers Wetland Delineation Manual (Environmental Laboratory, 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region Version 2.0 (Environmental Laboratory, 2012) as required by current policy.

Prior to the field work, the background information was reviewed to establish the probability and potential location of wetlands and waterways within the Project Area. A review Project Area was conducted using multiple years of aerial imagery. Areas with potential wetland signatures were verified during the field reconnaissance.

Field surveys of the Project Area were conducted on September 6<sup>th</sup>, 2016. The site was then walked with the specific intent of determining wetland boundaries. Data Points were sampled during this time at locations within and near the wetland areas to document soil characteristics, evidence of hydrology and dominant vegetation. Soils were examined to a depth of at least 24 inches, unless a restrictive layer was encountered, to assess soil characteristics, site hydrology, and compared to mapped NRCS hydric soils.

Vegetative community boundaries were identified, mapped, and either a representative Data Point or notes on hydrology and dominant vegetation were taken within each of their limits. Identification of community boundaries followed the Key to the Wetland Plant Communities provided in Section 2 of the Wetland Plants and Plant Communities of Minnesota and Wisconsin, Version 3.1 (Eggers and Reed, 2014). Descriptions of the wetland communities encountered can be found in the results section below.

#### **2.2.1 Naming Protocol**

Mapped features such as wetlands (W-), waterways (S-), photo points (PP-), and data points (DP-) were named in consecutive order. Naming refers to labels identified on Figures X and X.

Examples:

- W-01, first delineated wetland
- S-01, first delineated waterway.
- DP-01, first data point collected.
- PP-01, first photo point and photo(s) collected.



### 2.2.2 Delineation Data Sheets

The Wetland Determination Data Forms – Northcentral Northeast Region (Great Lakes Sub-Region) that were used in the wetland delineation process are located in Appendix A. These forms are the written documentation of how representative Data Points meet or do not meet each of the wetland criteria. The nomenclature and wetland indicator status of vegetation follows the 2016 National Wetland Plant List (Lichvar et al., 2016). Soils were identified using the methods outlined in the USDA NRCS Field Indicators of Hydric Soils in the United States, Version 7.0 (USDA-NRCS 2010).

### 2.2.3 Site Photographs

Photographs of data points, wetlands, waterways, are located in Appendix B. These photographs are the visual documentation of site conditions at the time of inspection. The photographs are intended to provide representative visual samples of these features found on the site. Photo naming refers to the naming protocol, above, and the labels provided on the Delineated Wetlands and Waterways Figure (Figure 1).

### 2.2.4 Survey of Wetland Boundary

The Delineated Wetlands and Waterways Figure (Figure 1) reflects the wetland and the vegetative community type boundaries within the Project Area.

Cardno GPS surveyed all Data Point and Wetland, Waterway or Pond boundary locations. The field data collection settings within GPS units use available satellites, including two DGPS (Differential Global Positioning System) satellites, to capture location data. Using the WAAS (Wide Area Augmentation System), satellite readings may provide sub-meter accuracy (generally within 1-2 feet). Cardno's GPS units acquire multiple readings per data point to increase accuracy. Please note that while Cardno's GPS survey provides reasonably accurate spatial information regarding the wetlands delineated, it does not constitute the same accuracy as a professional land survey.

## 2.3 Recent Climatic Conditions and Precipitation Data

Recent precipitation data was compared with historic precipitation data from a 30-year dataset (1971-2000) from the nearby Stoughton, Wisconsin (#8229) weather station to determine if normal hydrologic and climatic conditions were present on-site during the delineation. When compared to the NRCS WETS Station data, the observed precipitation data from three months prior to the delineation indicated wet precipitation conditions at the time of the delineations. The antecedent precipitation analysis is provided in Table 2-3, below:

**Table 2-3 Antecedent Precipitation Analysis for the Project Area**

Month		Long-term rainfall records			Actual Rainfall	Condition: Wet, Normal, Dry	Condition Value	Month Weight Value	Product of previous 2 columns
		3 yrs. In 10 less than	normal	3 yrs. In 10 more than					
3rd Prior Month	June	2.56	3.84	4.59	5.64	Wet	3	1	3
2nd Prior Month	July	2.83	3.82	4.48	4.77	Wet	3	2	6
1st Prior Month	August	2.97	4.06	4.78	5.80	Wet	3	3	9
NOTE: if sum is:								Sum	18

6 to 9	Then prior period has been drier than normal	Antecedent Conditions	Wet
10 to 14	Then prior period has been normal		
15 to 18	Then prior period has been wetter than normal	Condition Values:	
		Dry	1
		Normal	2
		Wet	3

WETS Table WEATHER STATION LOCATION  
 Monthly Rainfall Stoughton, WI8229



## 3 Results and Discussion

---

### 3.1 General Site Conditions

Based on Cardno's field investigation and review of related resource maps, it is our professional opinion that one wetland totalling 0.61 acres (26,758.95 sq. ft.) and one waterway exist within the Project Area (Figure 1). Descriptions of these features are provided below.

### 3.2 Wetland 1 Fresh (Wet) Meadow (0.61 Acres, 26,758.95 Square Feet)

Paired data points DP-01/DP-02, DP-04/DP-05, and DP-06/DP-07 were taken at a representative boundary location of Wetland 1. This wetland was situated in a concave local relief position at the toe of a slope. Primary hydrology indicators of surface water (DP-05 & DP-07), High Water Table (DP-05 & DP-07), and Saturation (DP-01, DP-05, & DP-07) were observed within the wetland. Secondary hydrology indicators of Geomorphic Position (DP-01, DP-05, & DP-07) and FAC-Neutral Test (DP-05 & DP-07) were used to determine that wetland hydrology was present. Soil within the wetland plots met the Histic Epipedon (A2), Depleted Below Dark Surface (A12), Loamy Mucky Mineral (F1), and Depleted Matrix (F3) indicators.

A distinguishing visual characteristics that separated the wetland data point from its upland paired point was the change in dominant vegetation (DP-01/DP-02, DP-04/DP-05, and DP-06/DP-07). The wetland points were dominated by the hydrophytic tree species *Thuja occidentalis*, *Acer negundo*, and *Fraxinus pennsylvanica*. Dominate hydrophytic shrub species included *Cornus racemose* and *Rhamnus cathartica*. Dominate hydrophytic herbaceous species included *Phalaris arundinacea*, *Lemna minor*, *Typha angustifolia*, and *Setaria pumila*. Vegetation in the adjacent uplands was dominated *Acer negundo*, *Fraxinus pennsylvanica*, *Juglans nigra*, *Lonicera tatarica* in the tree and shrub strata and dominated by *Festuca rubra*, *Setaria pumila*, *Glechoma hederacea*, *Torilis japonica*, *Bromus inermis*, and *Lonicera tatarica* in the herbaceous strata.

Another distinguishing visual characteristics that separated the wetland data point from its upland paired point and change in elevation and landscape position (DP-04/DP-05, and DP-06/DP-07). Both DP-04 and DP-07 were 2-3 feet higher in elevation over a relatively short distance, 5-15 feet, when compared their respective paired wetland points. In both set of paired points the landscape position changed from concave in the wetland to convex in the upland. The change in elevation was not as drastic between DP-01 and DP-02, the change in elevation was approximately 0.5-1 feet over 15-25 feet. The landscape position changed from concave in the wetland to convex in the upland.

### 3.3 Naturally Problematic and Significant Disturbed Conditions

The Project Area did not contain areas that exhibited naturally problematic conditions.

The Project Area contained areas that exhibited significantly disturbed conditions. Data Points DP-01, DP-02, and DP-03 where taken in manicured lawn that had been recently mowed. Although the vegetation was still able to be identified it should be considered significantly disturbed. The soil in DP-04 should also be considered significantly disturbed. This soil profile was entirely gravel fill which made it impossible to examine the field indicators of hydric soils.

Although gravel fill was noted in DP-01, DP-02, DP-03, and DP-06 it should not be considered significantly disturbed. When examining the age of the site, buildings and tree (6"-10" DBH), it appears

no changes have occurred within the Project Area in decades. Google Earth historic Imagery dating back to the year 2000 was reviewed. Upon review it was concluded that no major changes have occurred within the Project Area since the year 2000.

In situations where significantly disturbed conditions existed, Cardno field delineators reviewed Section 5, Difficult Wetland Situations in the Midwest Region, of the Regional Supplement to the USACE Delineation Manual: Midwest Region, Version 2.0 (Environmental Laboratory, 2010) and used their best professional judgment to delineate the wetland boundary.

### 3.4 Waterways

Cardno determined that one waterway existed within the existing Project Area. A summary of that delineated feature is provided in Table 3-4, below. Representative photographs of these features are located in Appendix B. Note that not all waterways may be considered regulated by either the USACE, DNR, or Local jurisdictions.

**Table 3-1 Waterway Descriptions**

Waterway ID	OHWB Width (Feet)	OHWB Depth (Feet)	Water Depth (Feet)	Velocity (Feet/Second )	Substrate	Waterbody Name	Connecting Waterbody
S-01	25	4	3	0.1	Mud/Silt	Unnamed	Lake Kegonsa

### 3.5 Other Water Resources Identified

No other water resources were identified within the project area. No known waterways or stormwater features were identified within close proximity to the project area based on background information review.

There is no known previous wetland delineation mapping of the project area.

## 4 Summary and Conclusion

---

Cardno completed a wetland delineation and assessment of waters of the U.S. and State, including wetlands and waterways, for the proposed commercial facility on this 2.82 acre, parcel located in the Town of Dunn, Dane, Wisconsin.

Cardno conducted field surveys of the Project Area on September 6<sup>th</sup>, 2016. During these investigations Cardno identified the location and extent of wetlands and waterways within the Project Area. A total of one wetland totalling 0.61 acres were identified and one waterway was identified.

The wetlands identified for this report may be subject to federal regulation under the jurisdiction of the USACE, state regulation under the jurisdiction of the Wisconsin Department of Natural Resources (WDNR), and local jurisdiction under the county, town, city, or village.



## 5 Literature Cited

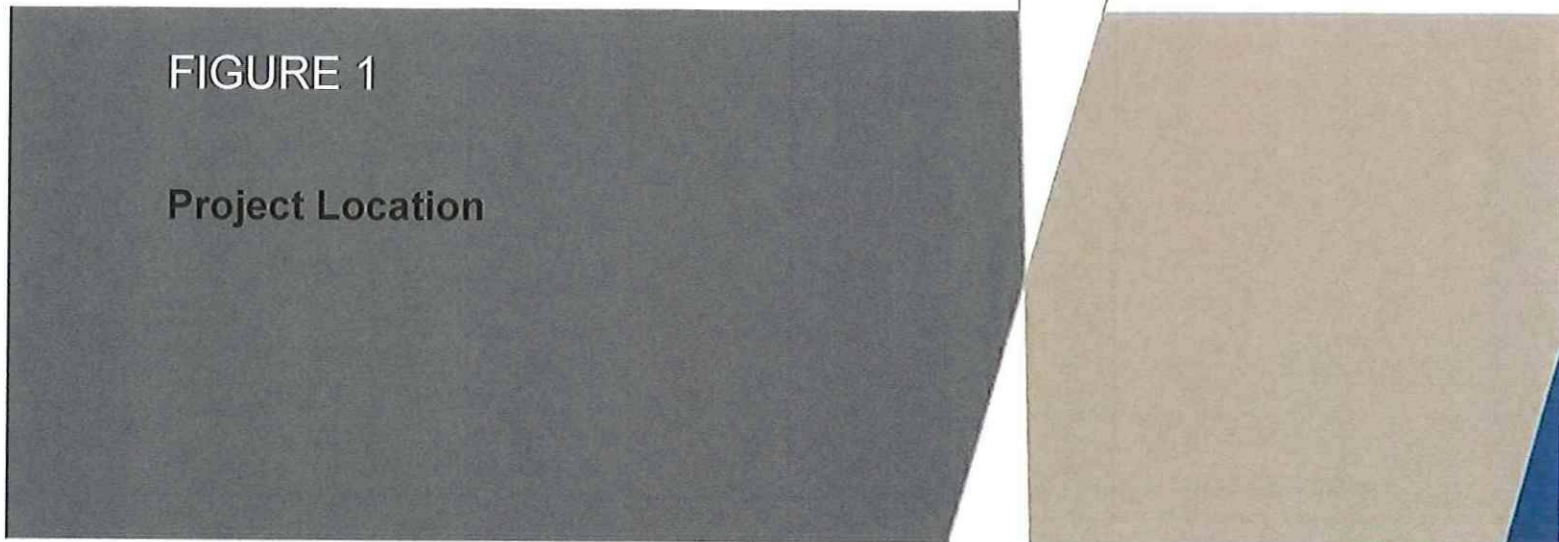
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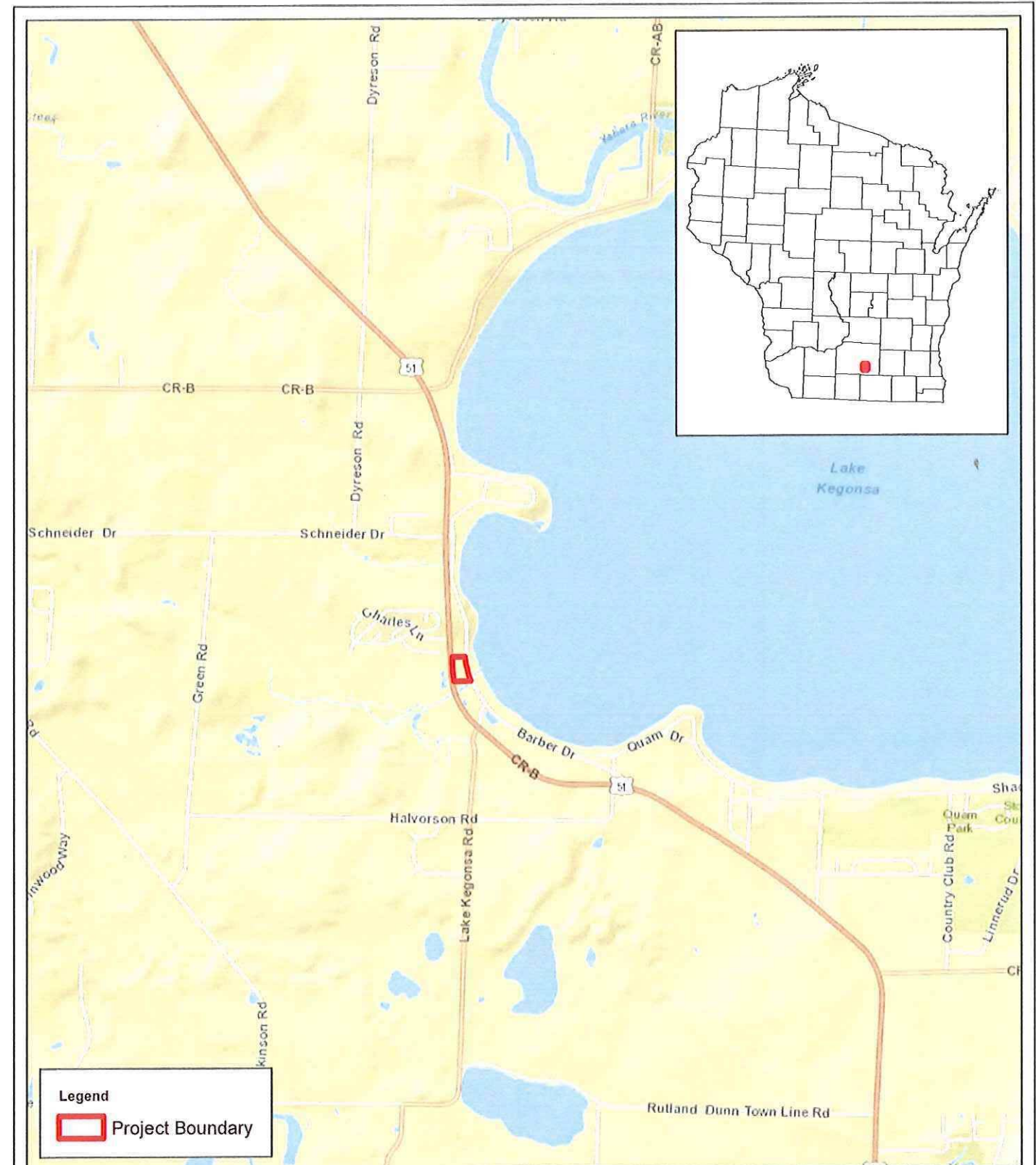
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Town of Dunn Storage Lockers

FIGURE 1


**Project Location**





**Legend**


 Project Boundary



Section: 26  
 Township: 6N  
 Range: 10E  
 Project No. J168349900

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**Location Map**  
 Town of Dunn Storage Lockers Delineation  
 Adam Buhalog  
 Dane County, Wisconsin




6140 Octonwood Dr., Suite A, Fitchburg, WI 53552 USA  
 Phone (+1) 608-651-2555 Fax (+1) 608-651-2261  
 www.cardno.net/new.com

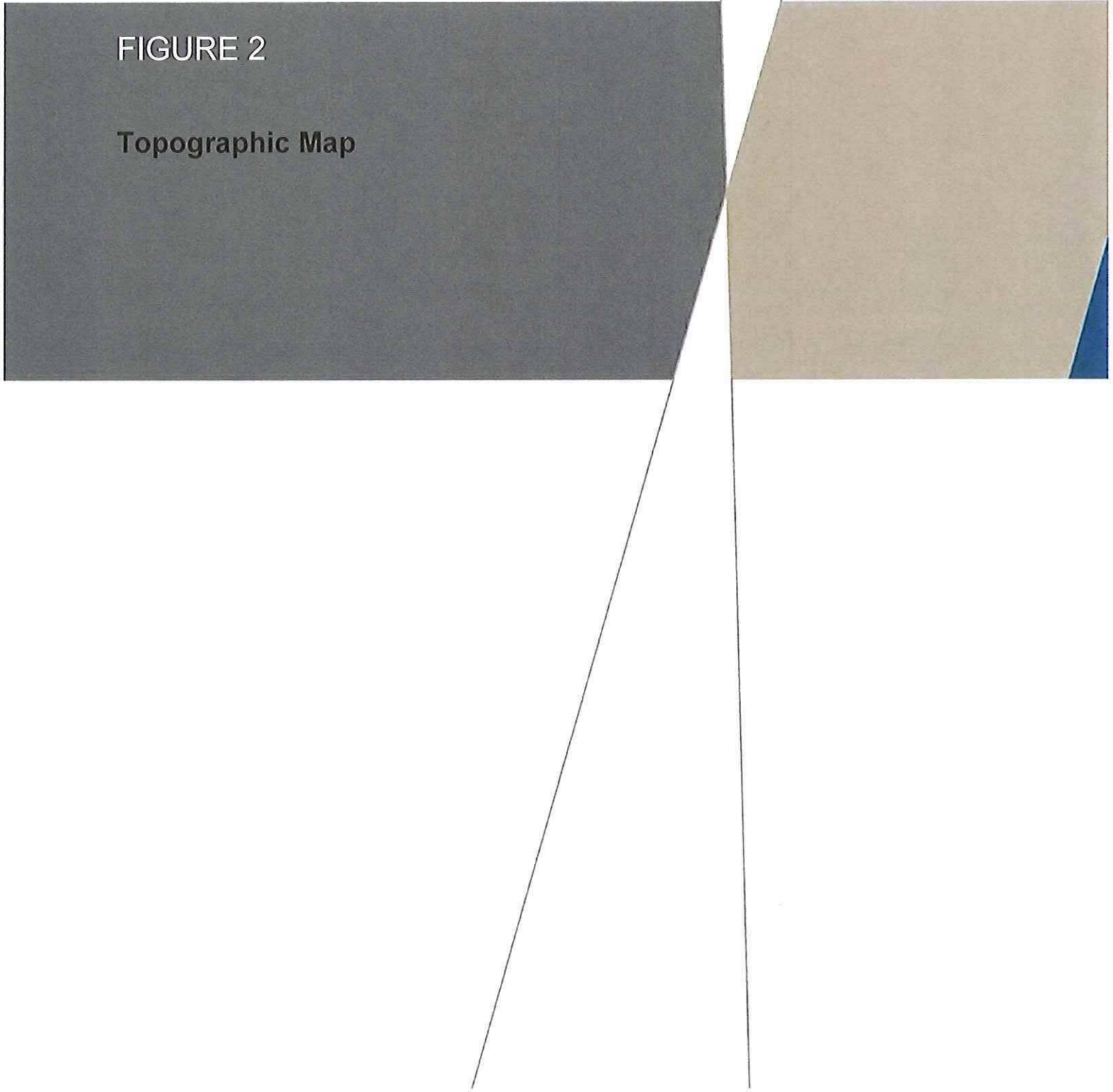
GIS Analyst: jameson.kosch



Town of Dunn Storage Lockers

**FIGURE 2**

**Topographic Map**





**Legend**

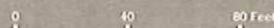
- Project Boundary
- Elevation Contours - 2 foot



Section: 26  
 Township: 6N  
 Range: 10E  
 Project No.: J168349900

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**Topographic Map**  
 Town of Dunn Storage Lockers Delineation  
 Adam Buhalog  
 Dane County, Wisconsin



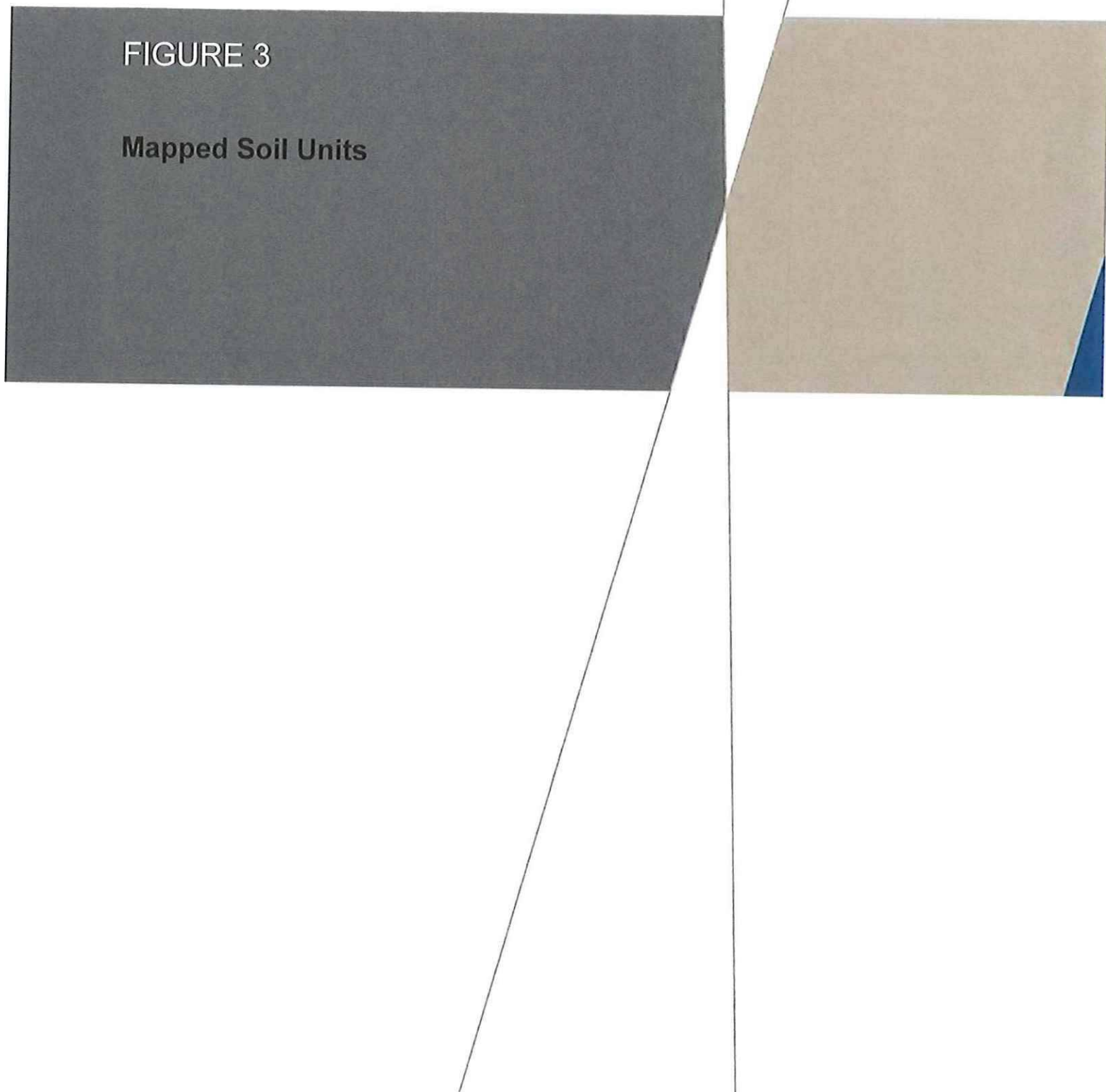
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 Phone (+1) 608-651-2555 Fax (+1) 608-651-2561  
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Town of Dunn Storage Lockers

**FIGURE 3**

**Mapped Soil Units**







**Legend**

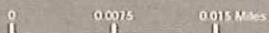
- Project Boundary
- Data Point
- Photo Point
- WDNR Mapped Waterway
- Mapped Soil Units



Section: 26  
 Township: 6N  
 Range: 10E  
 Project No. J168349900

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**Mapped Soil Units**  
 Town of Dunn Storage Lockers Delineation  
 Adam Buhalog  
 Dane County, Wisconsin

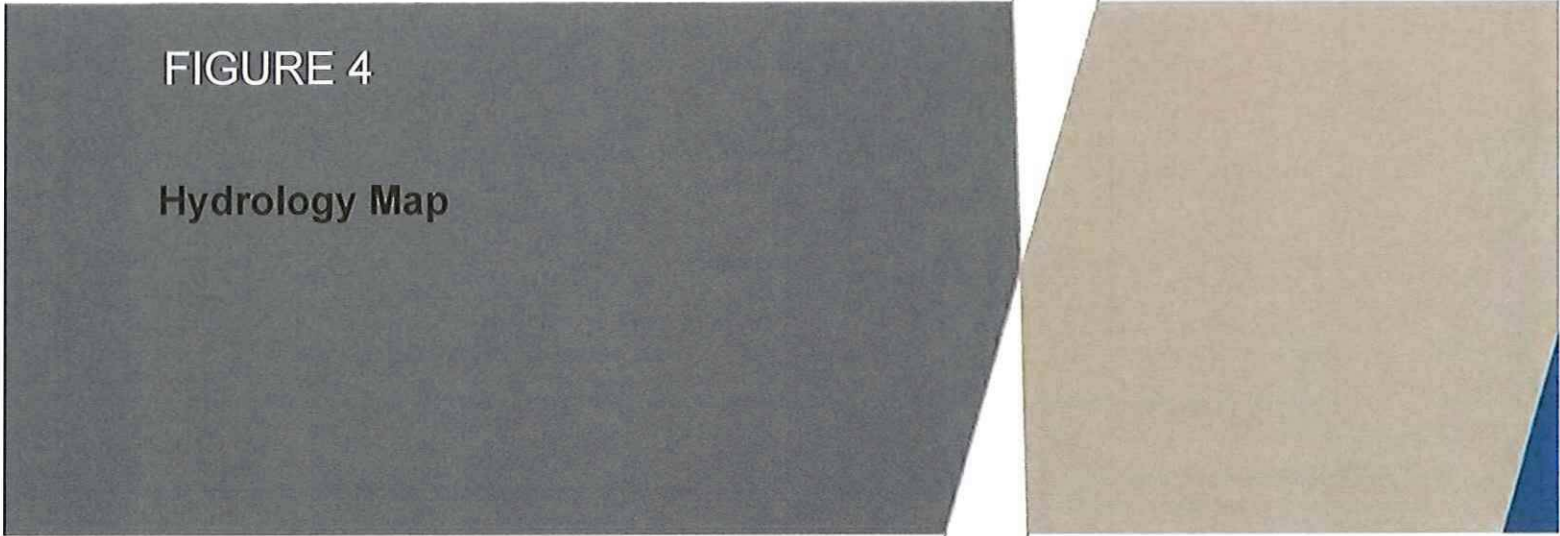


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 Phone (+1) 608-651-2555 Fax (+1) 608-651-2561  
[www.cardno.com](http://www.cardno.com)

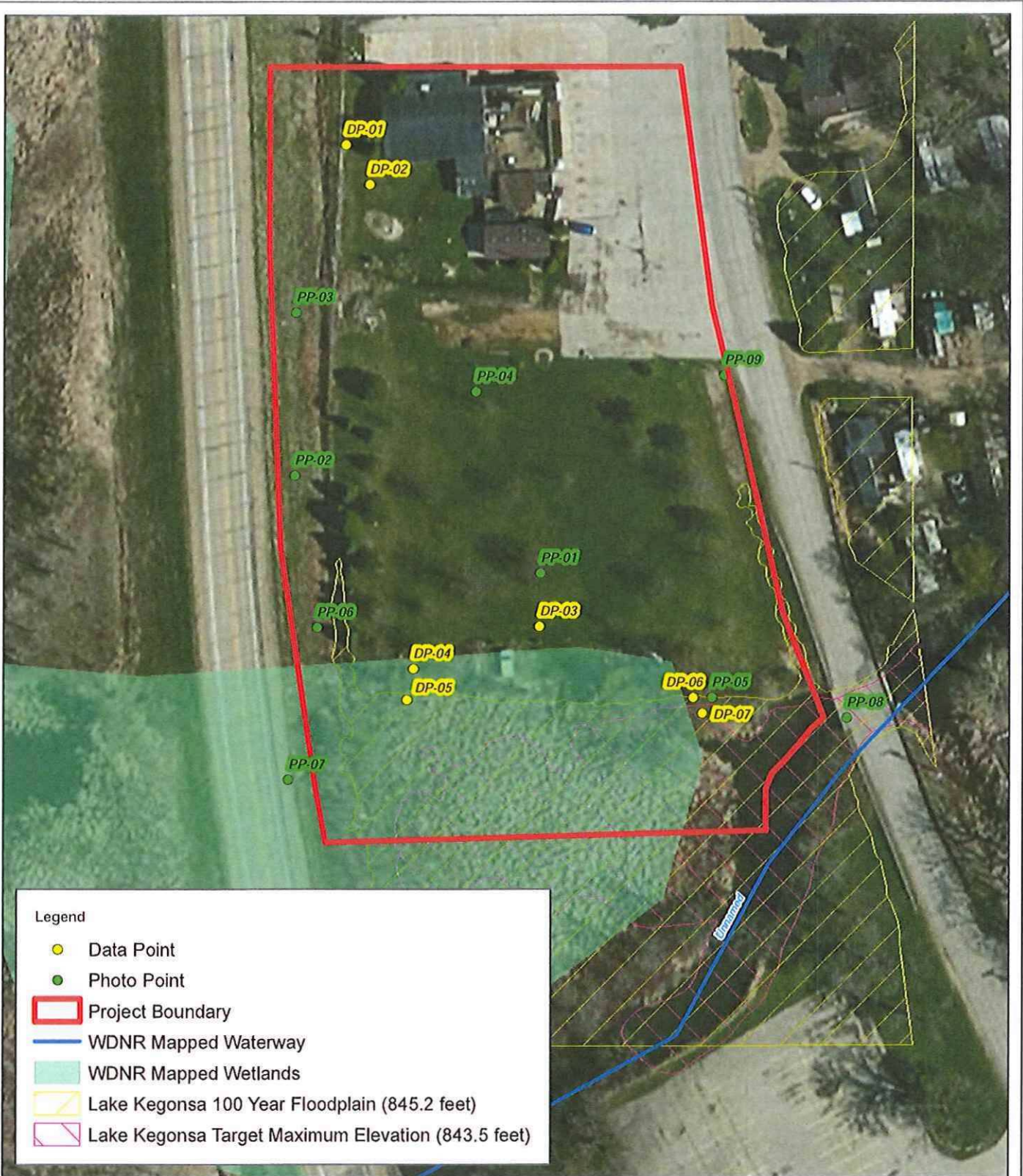
Town of Dunn Storage Lockers

**FIGURE 4**

**Hydrology Map**







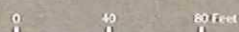
**Legend**

- Data Point
- Photo Point
- Project Boundary
- WDNR Mapped Waterway
- WDNR Mapped Wetlands
- Lake Kegonsa 100 Year Floodplain (845.2 feet)
- Lake Kegonsa Target Maximum Elevation (843.5 feet)

Section: 26  
 Township: 6N  
 Range: 10E  
 Project No. J1168349900

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**Hydrology**  
 Town of Dunn Storage Lockers Delineation  
 Adam Buhalog  
 Dane County, Wisconsin

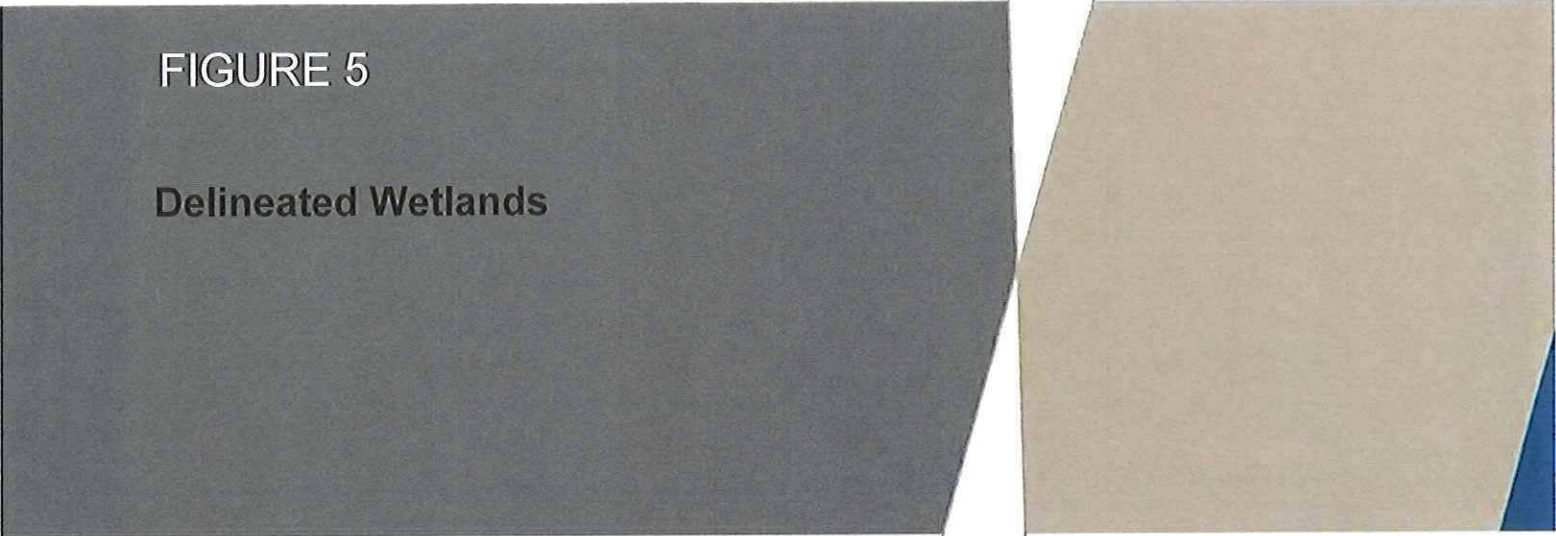


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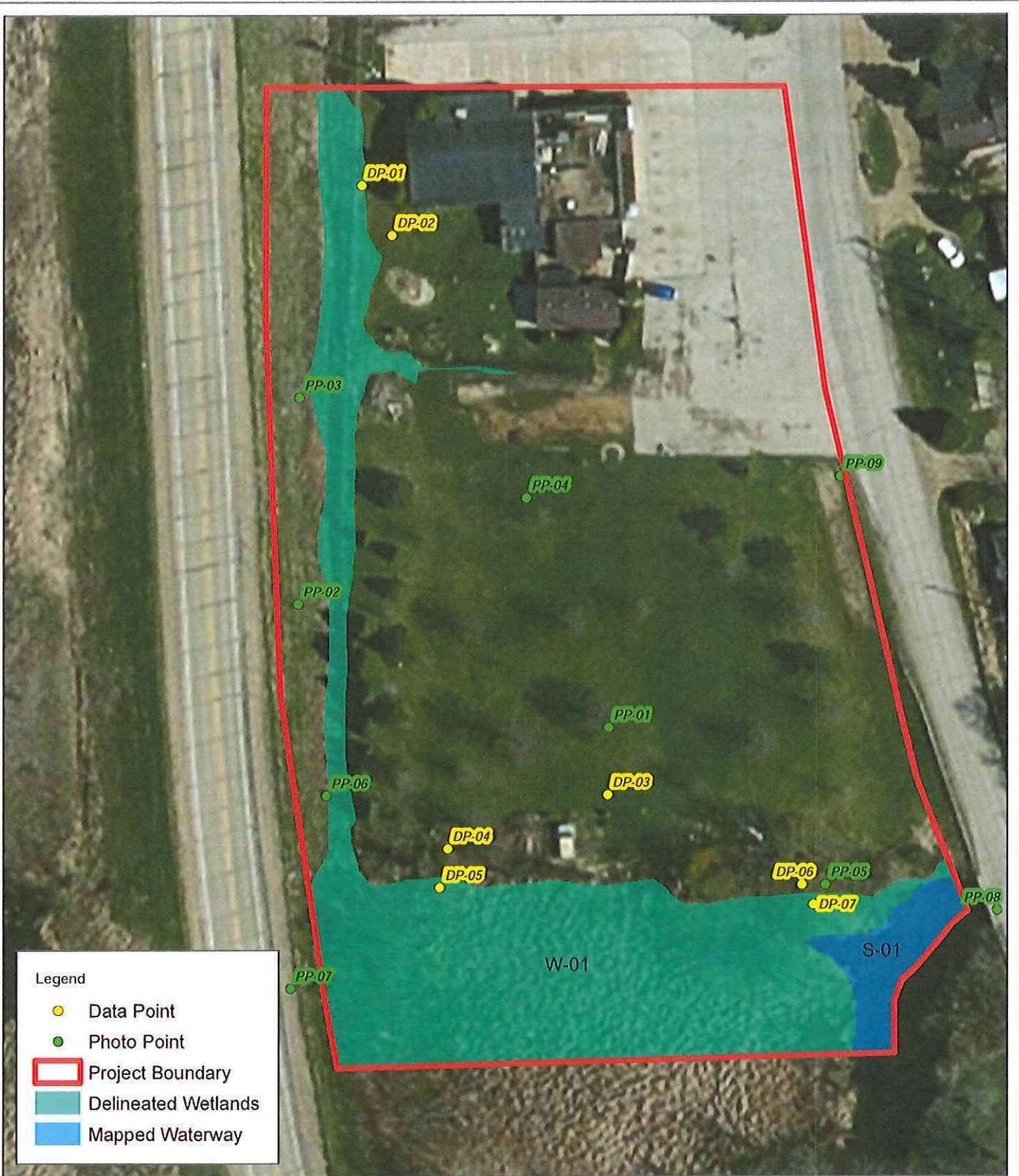
Town of Dunn Storage Lockers

**FIGURE 5**

**Delineated Wetlands**







**Legend**

- Data Point
- Photo Point
- Project Boundary
- Delineated Wetlands
- Mapped Waterway

Section: 26  
 Township: 6N  
 Range: 10E  
 Project No: J168349900

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**Delineated Wetlands**  
 Town of Dunn Storage Lockers Delineation  
 Adam Buhalog  
 Dane County, Wisconsin

0      0.0065      0.013 Miles

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 Phone (+1) 608-651-2955 Fax (+1) 608-651-2991  
[www.cardnofwa.com](http://www.cardnofwa.com)

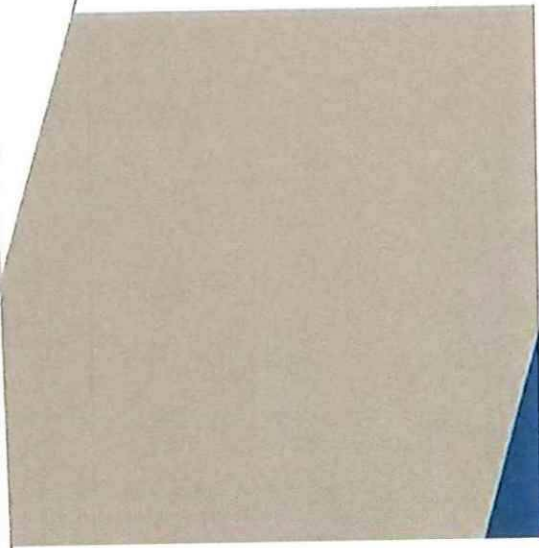
GIS Analyst: jamezsch

Town of Dunn Storage Lockers

APPENDIX

A

WETLAND DETERMINATION DATA FORMS  
NORTHCENTRAL/NORTHEAST REGION





**WETLAND DETERMINATION DATA FORM -- Northcentral Great Lakes Region**

Project/Site: Town of Dunn Storage Lockers City/County: Dunn/Dane Sampling Date: 9/6/2016  
 Applicant/Owner: Adam Buhalog State: WI Sampling Point: DP-01  
 Investigator(s): Z. Waechter Section, Township, Range: Sec 26, T6N, R10E  
 Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave  
 Slope (%): 1% Lat: 42.955040 Long: -89.280900 Datum: NAD83  
 Soil Map Unit Name: Mc - Marshan Silt Loam NWI classification: none  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes      No X (If no, explain in Remarks.)  
 Are Vegetation X, Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes      No X  
 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 <u>X</u> No <u>    </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u>    </u> If yes, optional Wetland Site ID: <u>    </u>
Hydric Soil Present?	Yes <u>X</u> No <u>    </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u>    </u>	

Remarks: (Explain alternative procedures here or in a separate report.)

WETS analysis determined that the antecedent precipitation conditions were wetter than normal. The sample point was located in a manicured lawn that had been recently mowed, although the vegetation was still able to be identified it should be considered significantly disturbed.

**HYDROLOGY**

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
<u>    </u> Surface Water (A1)	<u>    </u> Water-Stained Leaves (B9)	<u>    </u> Surface Soil Cracks (B6)
<u>    </u> High Water Table (A2)	<u>    </u> Aquatic Fauna (B13)	<u>    </u> Drainage Patterns (B10)
<u>X</u> Saturation (A3)	<u>    </u> Marl Deposits (B15)	<u>    </u> Moss Trim Lines (B16)
<u>    </u> Water Marks (B1)	<u>    </u> Hydrogen Sulfide Odor (C1)	<u>    </u> Dry-Season Water Table (C2)
<u>    </u> Sediment Deposits (B2)	<u>    </u> Oxidized Rhizospheres on Living Roots (C3)	<u>    </u> Crayfish Burrows (C8)
<u>    </u> Drift Deposits (B3)	<u>    </u> Presence of Reduced Iron (C4)	<u>    </u> Saturation Visible on Aerial Imagery (C9)
<u>    </u> Algal Mat or Crust (B4)	<u>    </u> Recent Iron Reduction in Tilled Soils (C6)	<u>X</u> Stunted or Stressed Plants (D1)
<u>    </u> Iron Deposits (B5)	<u>    </u> Thin Muck Surface (C7)	<u>    </u> Geomorphic Position (D2)
<u>    </u> Inundation Visible on Aerial Imagery (B7)	<u>    </u> Other (Explain in Remarks)	<u>    </u> Shallow Aquitard (D3)
<u>    </u> Sparsely Vegetated Concave Surface (B8)		<u>    </u> Microtopographic Relief (D4)
		<u>    </u> FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes      No X Depth (inches):       
 Water Table Present? Yes      No X Depth (inches):       
 Saturation Present? Yes X No      Depth (inches): 8"  
 (includes capillary fringe)

Wetland Hydrology Present? Yes X No     

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

**Remarks:**

The presence of 1 primary 1 secondary indicators at the sample plot provides evidence of wetland hydrology.

**VEGETATION** - Use scientific names of plants.

Sampling Point: DP-01

	Absolute % Cover	Dominant Species?	Indicator Status
<b>Tree Stratum</b> (Plot size: <u>30 ft.</u> )			
1. <u><i>Thuja occidentalis</i></u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	<u>15</u>	= Total Cover	

**Dominance Test Worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC:	<u>5</u> (A)
Total Number of Dominant Species Across All Strata	<u>7</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>71%</u> (A/B)

	Absolute % Cover	Dominant Species?	Indicator Status
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft.</u> )			
1. <u><i>Cornus racemosa</i></u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>
2. <u><i>Rhamnus cathartica</i></u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
3. <u><i>Lonicera tatarica</i></u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	<u>35</u>	= Total Cover	

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:	
OBL species <u>0</u>	x 1 =	<u>0</u>
FACW species <u>15</u>	x 2 =	<u>30</u>
FAC species <u>65</u>	x 3 =	<u>195</u>
FACU species <u>70</u>	x 4 =	<u>280</u>
UPL species <u>5</u>	x 5 =	<u>25</u>
Column Totals: <u>155</u> (A)		<u>530</u> (B)
Prevalence Index = B/A =		<u>3.42</u>

	Absolute % Cover	Dominant Species?	Indicator Status
<b>Herb Stratum</b> (Plot size: <u>5 ft.</u> )			
1. <u><i>Festuca rubra</i></u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>
2. <u><i>Setaria pumila</i></u>	<u>35</u>	<u>Yes</u>	<u>FAC</u>
3. <u><i>Taraxacum officinale</i></u>	<u>10</u>	<u>No</u>	<u>FACU</u>
4. <u><i>Plantago major</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>
5. <u><i>Glechoma hederacea</i></u>	<u>5</u>	<u>No</u>	<u>FACU</u>
6. <u><i>Daucus carota</i></u>	<u>5</u>	<u>No</u>	<u>UPL</u>
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
14. _____	_____	_____	_____
15. _____	_____	_____	_____
16. _____	_____	_____	_____
17. _____	_____	_____	_____
18. _____	_____	_____	_____
19. _____	_____	_____	_____
20. _____	_____	_____	_____
	<u>100</u>	= Total Cover	

**Hydrophytic Vegetation Indicators:**

- Rapid Test for Hydrophytic Vegetation
  - Dominance Test is >50%
  - Prevalence Index is ≤ 3.0<sup>1</sup>
  - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
  - Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

- Tree** - Woody plants 3 inches (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
- Sapling/shrub** - Woody plants less than 3 inches DBH and greater than 3.28 ft (1 m) tall.
- Herb** - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
- Woody vines** - All woody vines greater than 3.28 ft in height.

	Absolute % Cover	Dominant Species?	Indicator Status
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft.</u> )			
1. <u><i>Vitis riparia</i></u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
	<u>5</u>	= Total Cover	

**Hydrophytic Vegetation Present ?**

Yes x No \_\_\_\_\_

Remarks: (Include photo numbers here or on a separate sheet.)  
 The presence of dominate hydrophytic vegetation was determined through use of the Rapid Test, Dominance Test, and Prevalence Index. Based upon the results of those test the vegetation at the sample plot is hydrophytic.





**WETLAND DETERMINATION DATA FORM -- Northcentral Great Lakes Region**

Project/Site: Town of Dunn Storage Lockers City/County: Dunn/Dane Sampling Date: 9/6/2016  
 Applicant/Owner: Adam Buhalog State: WI Sampling Point: DP-02  
 Investigator(s): Z. Waechter Section, Township, Range: Sec 26, T6N, R10E  
 Landform (hillslope, terrace, etc.): Shoulder Local relief (concave, convex, none): convex  
 Slope (%): 1% Lat: 42.954980 Long: -89.280900 Datum: NAD83  
 Soil Map Unit Name: Mc - Marshan Silt Loam 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 , 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.) WETS analysis determined that the antecedent precipitation conditions were wetter than normal. The sample point was located in a manicured lawn that had been recently mowed, although the vegetation was still able to be identified it should be considered significantly disturbed.			

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  		
Remarks: No evidence of wetland hydrology was observed at the sample plot.		



**VEGETATION** - Use scientific names of plants.

Sampling Point: DP-02

Tree Stratum (Plot size: <u>30 ft.</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

**Dominance Test Worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC:	<u>1</u> (A)
Total Number of Dominant Species Across All Strata	<u>2</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>50%</u> (A/B)

Sapling/Shrub Stratum (Plot size: <u>15 ft.</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:	Result
OBL species <u>0</u>	x 1 =	<u>0</u>
FACW species <u>0</u>	x 2 =	<u>0</u>
FAC species <u>60</u>	x 3 =	<u>180</u>
FACU species <u>45</u>	x 4 =	<u>180</u>
UPL species <u>0</u>	x 5 =	<u>0</u>
Column Totals: <u>105</u> (A)		<u>360</u> (B)
Prevalence Index = B/A =		<u>3.43</u>

Herb Stratum (Plot size: <u>5 ft.</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Setaria pumila</u>	<u>60</u>	<u>Yes</u>	<u>FAC</u>
2. <u>Festuca rubra</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>
3. <u>Taraxacum officinale</u>	<u>5</u>	<u>No</u>	<u>FACU</u>
4. <u>Plantago major</u>	<u>5</u>	<u>No</u>	<u>FACU</u>
5. <u>Trifolium hybridum</u>	<u>5</u>	<u>No</u>	<u>FACU</u>
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
14. _____	_____	_____	_____
15. _____	_____	_____	_____
16. _____	_____	_____	_____
17. _____	_____	_____	_____
18. _____	_____	_____	_____
19. _____	_____	_____	_____
20. _____	_____	_____	_____
	<u>105</u>	= Total Cover	

**Hydrophytic Vegetation Indicators:**

- \_\_\_\_\_ Rapid Test for Hydrophytic Vegetation
  - \_\_\_\_\_ Dominance Test is >50%
  - \_\_\_\_\_ Prevalence Index is ≤ 3.0<sup>1</sup>
  - \_\_\_\_\_ Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
  - \_\_\_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

- Tree** - Woody plants 3 inches (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
- Sapling/shrub** - Woody plants less than 3 inches DBH and greater than 3.28 ft (1 m) tall.
- Herb** - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
- Woody vines** - All woody vines greater than 3.28 ft in height.

Woody Vine Stratum (Plot size: <u>30 ft.</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
	_____	= Total Cover	

**Hydrophytic Vegetation Present ?**

Yes \_\_\_\_\_ No X

Remarks: (Include photo numbers here or on a separate sheet.)  
 The presence of dominate hydrophytic vegetation was determined through use of the Rapid Test, Dominance Test, and Prevalence Index. Based upon the results of those test the vegetation at the sample plot is not hydrophytic.





**WETLAND DETERMINATION DATA FORM -- Northcentral Great Lakes Region**

Project/Site: Town of Dunn Storage Lockers City/County: Dunn/Dane Sampling Date: 9/6/2016  
 Applicant/Owner: Adam Buhalog State: WI Sampling Point: DP-03  
 Investigator(s): Z. Waechter Section, Township, Range: Sec 26, T6N, R10E  
 Landform (hillslope, terrace, etc.): Shoulder Local relief (concave, convex, none): convex  
 Slope (%): 1% Lat: 42.954270 Long: -89.280500 Datum: NAD83  
 Soil Map Unit Name: Ho - Houghton Muck NWI classification: none  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes      No X (If no, explain in Remarks.)  
 Are Vegetation X, Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes      No X  
 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 <u>X</u>	No <u>    </u>	Is the Sampled Area within a Wetland? Yes <u>    </u> No <u>X</u> If yes, optional Wetland Site ID: <u>    </u>
Hydric Soil Present?	Yes <u>    </u>	No <u>X</u>	
Wetland Hydrology Present?	Yes <u>    </u>	No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) WETS analysis determined that the antecedent precipitation conditions were wetter than normal. The sample point was located in a manicured lawn that had been recently mowed, although the vegetation was still able to be identified it should be considered significantly disturbed. According to the Army Corps of Engineers NC/NE Supplement, three parameters are required to meet jurisdictional wetland requirements. Although hydrophytic vegetation is present at the sample plot, the lack of hydric soils and wetland hydrology indicate the sample plot is none wetland.			

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<u>    </u> Surface Water (A1)	<u>    </u> Water-Stained Leaves (B9)	<u>    </u> Surface Soil Cracks (B6)
<u>    </u> High Water Table (A2)	<u>    </u> Aquatic Fauna (B13)	<u>    </u> Drainage Patterns (B10)
<u>    </u> Saturation (A3)	<u>    </u> Marl Deposits (B15)	<u>    </u> Moss Trim Lines (B16)
<u>    </u> Water Marks (B1)	<u>    </u> Hydrogen Sulfide Odor (C1)	<u>    </u> Dry-Season Water Table (C2)
<u>    </u> Sediment Deposits (B2)	<u>    </u> Oxidized Rhizospheres on Living Roots (C3)	<u>    </u> Crayfish Burrows (C8)
<u>    </u> Drift Deposits (B3)	<u>    </u> Presence of Reduced Iron (C4)	<u>    </u> Saturation Visible on Aerial Imagery (C9)
<u>    </u> Algal Mat or Crust (B4)	<u>    </u> Recent Iron Reduction in Tilled Soils (C6)	<u>    </u> Stunted or Stressed Plants (D1)
<u>    </u> Iron Deposits (B5)	<u>    </u> Thin Muck Surface (C7)	<u>    </u> Geomorphic Position (D2)
<u>    </u> Inundation Visible on Aerial Imagery (B7)	<u>    </u> Other (Explain in Remarks)	<u>    </u> Shallow Aquitard (D3)
<u>    </u> Sparsely Vegetated Concave Surface (B8)		<u>    </u> Microtopographic Relief (D4)
<b>Field Observations:</b> Surface Water Present? Yes <u>    </u> No <u>X</u> Depth (inches): <u>    </u> Water Table Present? Yes <u>    </u> No <u>X</u> Depth (inches): <u>    </u> Saturation Present? Yes <u>    </u> No <u>X</u> Depth (inches): <u>    </u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>    </u> No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  		
Remarks: No evidence of wetland hydrology was observed at the sample plot.		

**VEGETATION** - Use scientific names of plants.

Sampling Point: DP-03

	Absolute % Cover	Dominant Species?	Indicator Status
<u>Tree Stratum</u> (Plot size: <u>30 ft.</u> )			
1. <u>Fraxinus pennsylvanica</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	<u>25</u>	<u>= Total Cover</u>	

	Absolute % Cover	Dominant Species?	Indicator Status
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15 ft.</u> )			
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	_____	<u>= Total Cover</u>	

	Absolute % Cover	Dominant Species?	Indicator Status
<u>Herb Stratum</u> (Plot size: <u>5 ft.</u> )			
1. <u>Festuca rubra</u>	<u>70</u>	<u>Yes</u>	<u>FACU</u>
2. <u>Setaria pumila</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Taraxacum officinale</u>	<u>5</u>	<u>No</u>	<u>FACU</u>
4. <u>Plantago major</u>	<u>2</u>	<u>No</u>	<u>FACU</u>
5. <u>Cirsium arvense</u>	<u>2</u>	<u>No</u>	<u>FACU</u>
6. <u>Plantago lanceolata</u>	<u>2</u>	<u>No</u>	<u>FACU</u>
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
14. _____	_____	_____	_____
15. _____	_____	_____	_____
16. _____	_____	_____	_____
17. _____	_____	_____	_____
18. _____	_____	_____	_____
19. _____	_____	_____	_____
20. _____	_____	_____	_____
	<u>111</u>	<u>= Total Cover</u>	

	Absolute % Cover	Dominant Species?	Indicator Status
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> )			
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
	_____	<u>= Total Cover</u>	

**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:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>25</u>	x 2 = <u>50</u>
FAC species <u>30</u>	x 3 = <u>90</u>
FACU species <u>81</u>	x 4 = <u>324</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>136</u> (A)	<u>464</u> (B)
Prevalence Index = B/A = <u>3.41</u>	

**Hydrophytic Vegetation Indicators:**

Rapid Test for Hydrophytic Vegetation

Dominance Test is >50%

Prevalence Index is ≤ 3.0<sup>1</sup>

Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

**Tree** - Woody plants 3 inches (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/shrub** - Woody plants less than 3 inches DBH and greater than 3.28 ft (1 m) tall.

**Herb** - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody vines** - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present ?**

Yes x No \_\_\_\_\_

Remarks: (Include photo numbers here or on a separate sheet.)  
 The presence of dominate hydrophytic vegetation was determined through use of the Rapid Test, Dominance Test, and Prevalence Index. Based upon the results of those test the vegetation at the sample plot is not hydrophytic.



**SOIL**

Sampling Point: DP-03

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4"	10YR 3/2	100					Silt Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7) (LRR K, L, M)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 136, 147)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Dark Surface (S7) (LRR R, LRR M, MLRA 149B)	<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b>  Type: <u>Gravel</u>  Depth (inches): <u>4"</u>	Hydric Soil Present?      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks:  
 The soil at the sample plot does not have any field indicators of hydric soil, nor does it appear to be inundated or saturated to the surface for long periods of time during the growing season in most years.

**WETLAND DETERMINATION DATA FORM -- Northcentral Great Lakes Region**

Project/Site: Town of Dunn Storage Lockers City/County: Dunn/Dane Sampling Date: 9/6/2016  
 Applicant/Owner: Adam Buhalog State: WI Sampling Point: DP-04  
 Investigator(s): Z. Waechter Section, Township, Range: Sec 26, T6N, R10E  
 Landform (hillslope, terrace, etc.): Shoulder Local relief (concave, convex, none): convex  
 Slope (%): 10% Lat: 42.954270 Long: -89.280500 Datum: NAD83  
 Soil Map Unit Name: Ho - Houghton Muck NWI classification: E2Ka  
 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

Remarks: (Explain alternative procedures here or in a separate report.)

WETS analysis determined that the antecedent precipitation conditions were wetter than normal. The soil at the sample consisted entirely of gravel fill there the soil is significantly disturbed.

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
--	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
 No evidence of wetland hydrology was observed at the sample plot.



VEGETATION - Use scientific names of plants.

Sampling Point: DP-04

	Absolute % Cover	Dominant Species?	Indicator Status
<b>Tree Stratum</b> (Plot size: <u>30 ft.</u> )			
1. <u>Juglans nigra</u>	15	Yes	FACU
2. <u>Acer negundo</u>	15	Yes	FAC
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	<u>30</u>	= Total Cover	
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft.</u> )			
1. <u>Lonicera tatarica</u>	20	Yes	FACU
2. <u>Fraxinus pennsylvanica</u>	10	Yes	FACW
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	<u>30</u>	= Total Cover	
<b>Herb Stratum</b> (Plot size: <u>5 ft.</u> )			
1. <u>Glechoma hederacea</u>	20	Yes	FACU
2. <u>Torilis japonica</u>	10	Yes	UPL
3. <u>Bromus inermis</u>	10	Yes	UPL
4. <u>Alliaria petiolata</u>	5	No	FACU
5. <u>Acer negundo</u>	5	No	FAC
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
14. _____	_____	_____	_____
15. _____	_____	_____	_____
16. _____	_____	_____	_____
17. _____	_____	_____	_____
18. _____	_____	_____	_____
19. _____	_____	_____	_____
20. _____	_____	_____	_____
	<u>50</u>	= Total Cover	
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft.</u> )			
1. <u>Parthenocissus quinquefolia</u>	5	Yes	FACU
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
	<u>5</u>	= Total Cover	

**Dominance Test Worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC:	<u>2</u> (A)
Total Number of Dominant Species Across All Strata	<u>8</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>25%</u> (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>10</u>	x 2 = <u>20</u>
FAC species <u>20</u>	x 3 = <u>60</u>
FACU species <u>65</u>	x 4 = <u>260</u>
UPL species <u>20</u>	x 5 = <u>100</u>
Column Totals: <u>115</u> (A)	<u>440</u> (B)
Prevalence Index = B/A = <u>3.83</u>	

**Hydrophytic Vegetation Indicators:**

- Rapid Test for Hydrophytic Vegetation
  - Dominance Test is >50%
  - Prevalence Index is ≤ 3.0<sup>1</sup>
  - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
  - Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

- Tree** - Woody plants 3 inches (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
- Sapling/shrub** - Woody plants less than 3 inches DBH and greater than 3.28 ft (1 m) tall.
- Herb** - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
- Woody vines** - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present ?**

Yes \_\_\_\_\_ No X

Remarks: (Include photo numbers here or on a separate sheet.)

The presence of dominate hydrophytic vegetation was determined through use of the Rapid Test, Dominance Test, and Prevalence Index. Based upon the results of those test the vegetation at the sample plot is not hydrophytic.





**WETLAND DETERMINATION DATA FORM -- Northcentral Great Lakes Region**

Project/Site: Town of Dunn Storage Lockers City/County: Dunn/Dane Sampling Date: 9/6/2016  
 Applicant/Owner: Adam Buhalog State: WI Sampling Point: DP-05  
 Investigator(s): Z. Waechter Section, Township, Range: Sec 26, T6N, R10E  
 Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave  
 Slope (%): 0% Lat: 42.541500 Long: -89.280800 Datum: NAD83  
 Soil Map Unit Name: Ho - Houghton Muck NWI classification: E2Ka  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes      No X (If no, explain in Remarks.)  
 Are Vegetation     , Soil     , or Hydrology      significantly disturbed? Are "Normal Circumstances" present? Yes X 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 <u>X</u> No <u>    </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u>    </u> If yes, optional Wetland Site ID: <u>    </u>
Hydric Soil Present?	Yes <u>X</u> No <u>    </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u>    </u>	

Remarks: (Explain alternative procedures here or in a separate report.)  
 WETS analysis determined that the antecedent precipitation conditions were wetter than normal.

**HYDROLOGY**

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Surface Soil Cracks (B6)</u>
<u>X</u> Surface Water (A1)	<u>    </u> Water-Stained Leaves (B9)	<u>    </u> Drainage Patterns (B10)
<u>X</u> High Water Table (A2)	<u>    </u> Aquatic Fauna (B13)	<u>    </u> Moss Trim Lines (B16)
<u>X</u> Saturation (A3)	<u>    </u> Marl Deposits (B15)	<u>    </u> Dry-Season Water Table (C2)
<u>    </u> Water Marks (B1)	<u>    </u> Hydrogen Sulfide Odor (C1)	<u>    </u> Crayfish Burrows (C8)
<u>    </u> Sediment Deposits (B2)	<u>    </u> Oxidized Rhizospheres on Living Roots (C3)	<u>    </u> Saturation Visible on Aerial Imagery (C9)
<u>    </u> Drift Deposits (B3)	<u>    </u> Presence of Reduced Iron (C4)	<u>    </u> Stunted or Stressed Plants (D1)
<u>    </u> Algal Mat or Crust (B4)	<u>    </u> Recent Iron Reduction in Tilled Soils (C6)	<u>X</u> Geomorphic Position (D2)
<u>    </u> Iron Deposits (B5)	<u>    </u> Thin Muck Surface (C7)	<u>    </u> Shallow Aquitard (D3)
<u>    </u> Inundation Visible on Aerial Imagery (B7)	<u>    </u> Other (Explain in Remarks)	<u>    </u> Microtopographic Relief (D4)
<u>    </u> Sparsely Vegetated Concave Surface (B8)		<u>X</u> FAC-Neutral Test (D5)

<b>Field Observations:</b>				Wetland Hydrology Present? Yes <u>X</u> No <u>    </u>
Surface Water Present?	Yes <u>X</u> No <u>    </u>	Depth (inches):	<u>6"</u>	
Water Table Present?	Yes <u>X</u> No <u>    </u>	Depth (inches):	<u>surface</u>	
Saturation Present? (includes capillary fringe)	Yes <u>X</u> No <u>X</u>	Depth (inches):	<u>surface</u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
 The presence of 3 primary and 2 secondary indicators at the sample plot provides evidence of wetland hydrology.

**VEGETATION** - Use scientific names of plants.

Sampling Point: DP-05

	Absolute % Cover	Dominant Species?	Indicator Status
<u>Tree Stratum</u> (Plot size: <u>30 ft.</u> )			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

**Dominance Test Worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

	Absolute % Cover	Dominant Species?	Indicator Status
<u>Sapling/Shrub Stratum</u> (Plot size: <u>15 ft.</u> )			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species <u>55</u>	x 1 = <u>55</u>
FACW species <u>30</u>	x 2 = <u>60</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>85</u> (A)	<u>115</u> (B)
Prevalence Index = B/A = <u>1.35</u>	

	Absolute % Cover	Dominant Species?	Indicator Status
<u>Herb Stratum</u> (Plot size: <u>5 ft.</u> )			
1.	<u>40</u>	<u>Yes</u>	<u>OBL</u>
2.	<u>30</u>	<u>Yes</u>	<u>FACW</u>
3.	<u>10</u>	<u>No</u>	<u>OBL</u>
4.	<u>5</u>	<u>No</u>	<u>OBL</u>
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
	<u>85</u>	= Total Cover	

**Hydrophytic Vegetation Indicators:**

Rapid Test for Hydrophytic Vegetation

Dominance Test is >50%

Prevalence Index is ≤ 3.0<sup>1</sup>

Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

**Tree** - Woody plants 3 inches (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/shrub** - Woody plants less than 3 inches DBH and greater than 3.28 ft (1 m) tall.

**Herb** - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody vines** - All woody vines greater than 3.28 ft in height.

	Absolute % Cover	Dominant Species?	Indicator Status
<u>Woody Vine Stratum</u> (Plot size: <u>30 ft.</u> )			
1.			
2.			
3.			
4.			
		= Total Cover	

**Hydrophytic Vegetation Present ?** Yes x No     

Remarks: (Include photo numbers here or on a separate sheet.)  
 The presence of dominate hydrophytic vegetation was determined through use of the Rapid Test, Dominance Test, and Prevalence Index. Based upon the results of those test the vegetation at the sample plot is hydrophytic.



**SOIL**

Sampling Point: DP-05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-14"	10YR 2/2						Muck	
14-18"	10YR 3/1	95	10YR 5/8	5	C	M	Silt	
18-24"	10YR 4/1	100					Loamy Sand	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils <sup>3</sup> :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)
<input checked="" type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7) (LRR K, L, M)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 136, 147)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Dark Surface (S7) (LRR R, LRR M, MLRA 149B)	<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

<b>Restrictive Layer (if observed):</b>  Type: _____  Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input checked="" type="checkbox"/> No _____
---	--

Remarks:  
 The soil at the sample plot meets the A2 Indicator described in the NRCS publication Field Indicators of Hydric Soil in the United States - version 7.0.

**WETLAND DETERMINATION DATA FORM -- Northcentral Great Lakes Region**

Project/Site: Town of Dunn Storage Lockers City/County: Dunn/Dane Sampling Date: 9/6/2016  
 Applicant/Owner: Adam Buhalog State: WI Sampling Point: DP-06  
 Investigator(s): Z. Waechter Section, Township, Range: Sec 26, T6N, R10E  
 Landform (hillslope, terrace, etc.): Shoulder Local relief (concave, convex, none): convex  
 Slope (%): 10% Lat: 42.954170 Long: -89.280100 Datum: NAD83  
 Soil Map Unit Name: Ho - Houghton Muck 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 , 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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Remarks: (Explain alternative procedures here or in a separate report.)  
 WETS analysis determined that the antecedent precipitation conditions were wetter than normal.

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b>		<b>Secondary Indicators (minimum of two required)</b>
<b>Primary Indicators (minimum of one is required; check all that apply)</b>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b>		<b>Wetland Hydrology Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
 No evidence of wetland hydrology was observed at the sample plot.



VEGETATION - Use scientific names of plants.

Sampling Point: DP-06

	Absolute % Cover	Dominant Species?	Indicator Status
<b>Tree Stratum</b> (Plot size: <u>30 ft.</u> )			
1. <u>Fraxinus pennsylvanica</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	<u>25</u>	= Total Cover	

	Absolute % Cover	Dominant Species?	Indicator Status
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft.</u> )			
1. <u>Fraxinus pennsylvanica</u>	<u>15</u>	<u>Yes</u>	<u>FACW</u>
2. <u>Acer negundo</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>
3. <u>Lonicera tatarica</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	<u>35</u>	= Total Cover	

	Absolute % Cover	Dominant Species?	Indicator Status
<b>Herb Stratum</b> (Plot size: <u>5 ft.</u> )			
1. <u>Lonicera tatarica</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>
2. <u>Glechoma hederacea</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>
3. <u>Ribes americanum</u>	<u>10</u>	<u>No</u>	<u>FACW</u>
4. <u>Rhamnus cathartica</u>	<u>10</u>	<u>No</u>	<u>FAC</u>
5. <u>Torilis japonica</u>	<u>5</u>	<u>No</u>	<u>UPL</u>
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
13. _____	_____	_____	_____
14. _____	_____	_____	_____
15. _____	_____	_____	_____
16. _____	_____	_____	_____
17. _____	_____	_____	_____
18. _____	_____	_____	_____
19. _____	_____	_____	_____
20. _____	_____	_____	_____
	<u>55</u>	= Total Cover	

	Absolute % Cover	Dominant Species?	Indicator Status
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft.</u> )			
1. <u>Parthenocissus quinquefolia</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>
2. <u>Vitis riparia</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>
3. _____	_____	_____	_____
4. _____	_____	_____	_____
	<u>10</u>	= Total Cover	

**Dominance Test Worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC:	<u>4</u>	(A)
Total Number of Dominant Species Across All Strata	<u>8</u>	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>50%</u>	(A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:	
OBL species <u>0</u>	x 1 =	<u>0</u>
FACW species <u>50</u>	x 2 =	<u>100</u>
FAC species <u>25</u>	x 3 =	<u>75</u>
FACU species <u>45</u>	x 4 =	<u>180</u>
UPL species <u>5</u>	x 5 =	<u>25</u>
Column Totals:	<u>125</u> (A)	<u>380</u> (B)
Prevalence Index = B/A =		<u>3.04</u>

**Hydrophytic Vegetation Indicators:**

- Rapid Test for Hydrophytic Vegetation
  - Dominance Test is >50%
  - Prevalence Index is ≤ 3.0<sup>1</sup>
  - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
  - Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)
- <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

- Tree** - Woody plants 3 inches (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
- Sapling/shrub** - Woody plants less than 3 inches DBH and greater than 3.28 ft (1 m) tall.
- Herb** - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
- Woody vines** - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present ?**

Yes \_\_\_\_\_ No X

Remarks: (Include photo numbers here or on a separate sheet.)  
 The presence of dominate hydrophytic vegetation was determined through use of the Rapid Test, Dominance Test, and Prevalence Index. Based upon the results of those test the vegetation at the sample plot is not hydrophytic.

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-5"	10YR 3/3						Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, LRR M, MLRA 149B)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L, M)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Gravel  
 Depth (inches): 5"

Hydric Soil Present? Yes  No  X

Remarks:  
 The soil at the sample plot does not have any field indicators of hydric soil, nor does it appear to be inundated or saturated to the surface for long periods of time during the growing season in most years.

**WETLAND DETERMINATION DATA FORM -- Northcentral Great Lakes Region**

Project/Site: Town of Dunn Storage Lockers City/County: Dunn/Dane Sampling Date: 9/6/2016  
 Applicant/Owner: Adam Buhalog State: WI Sampling Point: DP-07  
 Investigator(s): Z. Waechler Section, Township, Range: Sec 26, T6N, R10E  
 Landform (hillslope, terrace, etc.): Toeslope Local relief (concave, convex, none): concave  
 Slope (%): 0% Lat: 42.541400 Long: -89.280100 Datum: NAD83  
 Soil Map Unit Name: Ho - Houghton Muck 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 , 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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) WETS analysis determined that the antecedent precipitation conditions were wetter than normal.	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
---	--

<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>4"</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>surface</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
 The presence of 3 primary and 2 secondary indicators at the sample plot provides evidence of wetland hydrology.



**VEGETATION** - Use scientific names of plants.

Sampling Point: DP-07

	Absolute % Cover	Dominant Species?	Indicator Status																	
<b>Tree Stratum</b> (Plot size: <u>30 ft.</u> )																				
1. <u><i>Acer negundo</i></u>	25	Yes	FAC	<b>Dominance Test Worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)																
2. <u><i>Fraxinus pennsylvanica</i></u>	10	Yes	FACW																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	35	= Total Cover		<b>Prevalence Index worksheet:</b> <table style="width:100%; border:none;"> <tr> <td style="width:50%;">Total % Cover of:</td> <td style="width:50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>29</u></td> <td>x 2 = <u>58</u></td> </tr> <tr> <td>FAC species <u>25</u></td> <td>x 3 = <u>75</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>59</u> (A)</td> <td><u>138</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>2.34</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>29</u>	x 2 = <u>58</u>	FAC species <u>25</u>	x 3 = <u>75</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>59</u> (A)	<u>138</u> (B)	Prevalence Index = B/A = <u>2.34</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>5</u>	x 1 = <u>5</u>																			
FACW species <u>29</u>	x 2 = <u>58</u>																			
FAC species <u>25</u>	x 3 = <u>75</u>																			
FACU species <u>0</u>	x 4 = <u>0</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>59</u> (A)	<u>138</u> (B)																			
Prevalence Index = B/A = <u>2.34</u>																				
<b>Sapling/Shrub Stratum</b> (Plot size: <u>15 ft.</u> )																				
1. _____																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
		= Total Cover																		
<b>Herb Stratum</b> (Plot size: <u>5 ft.</u> )																				
1. <u><i>Phalaris arundinacea</i></u>	15	Yes	FACW	<b>Hydrophytic Vegetation Indicators:</b> _____ Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤ 3.0 <sup>1</sup>  _____ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u><i>Lemna minor</i></u>	5	Yes	OBL																	
3. <u><i>Impatiens capensis</i></u>	2	No	FACW																	
4. <u><i>Fraxinus pennsylvanica</i></u>	2	No	FACW																	
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
13. _____																				
14. _____																				
15. _____																				
16. _____																				
17. _____																				
18. _____																				
19. _____																				
20. _____																				
	24	= Total Cover																		
<b>Woody Vine Stratum</b> (Plot size: <u>30 ft.</u> )																				
1. _____				<b>Hydrophytic Vegetation Present ?</b> Yes <u>x</u> No _____																
2. _____																				
3. _____																				
4. _____																				
		= Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)  
 The presence of dominate hydrophytic vegetation was determined through use of the Rapid Test, Dominance Test, and Prevalence Index. Based upon the results of those test the vegetation at the sample plot is hydrophytic.

**SOIL**

Sampling Point: DP-07

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-12"	10YR 2/2	100					Mucky Loam	
12-24"	10YR 3/1	100					Silty Clay	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR R, LRR M, MLRA 149B)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Dark Surface (S7) (LRR K, L, M)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes X No \_\_\_\_\_

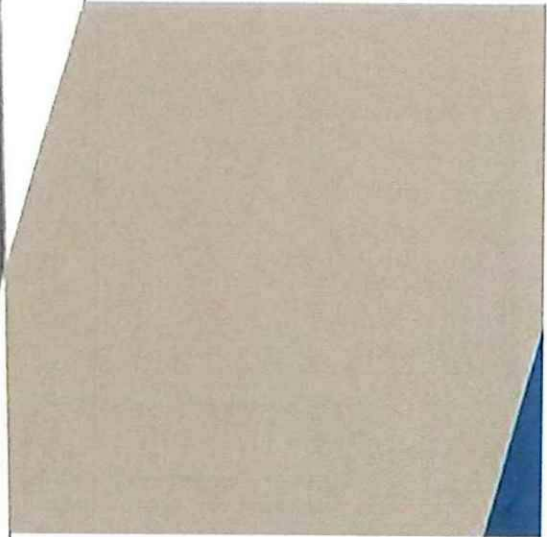
Remarks:  
 The soil at the sample plot meets the F1 Indicator described in the NRCS publication Field Indicators of Hydric Soil in the United States - version 7.0.

Town of Dunn Storage Lockers

APPENDIX

**B**

SITE PHOTOGRAPHS







Photograph DP-01; Photograph facing north.



Photograph DP-02; Photograph facing north.

Project No.  
J168352500

Site Photographs  
September 6th,  
2016

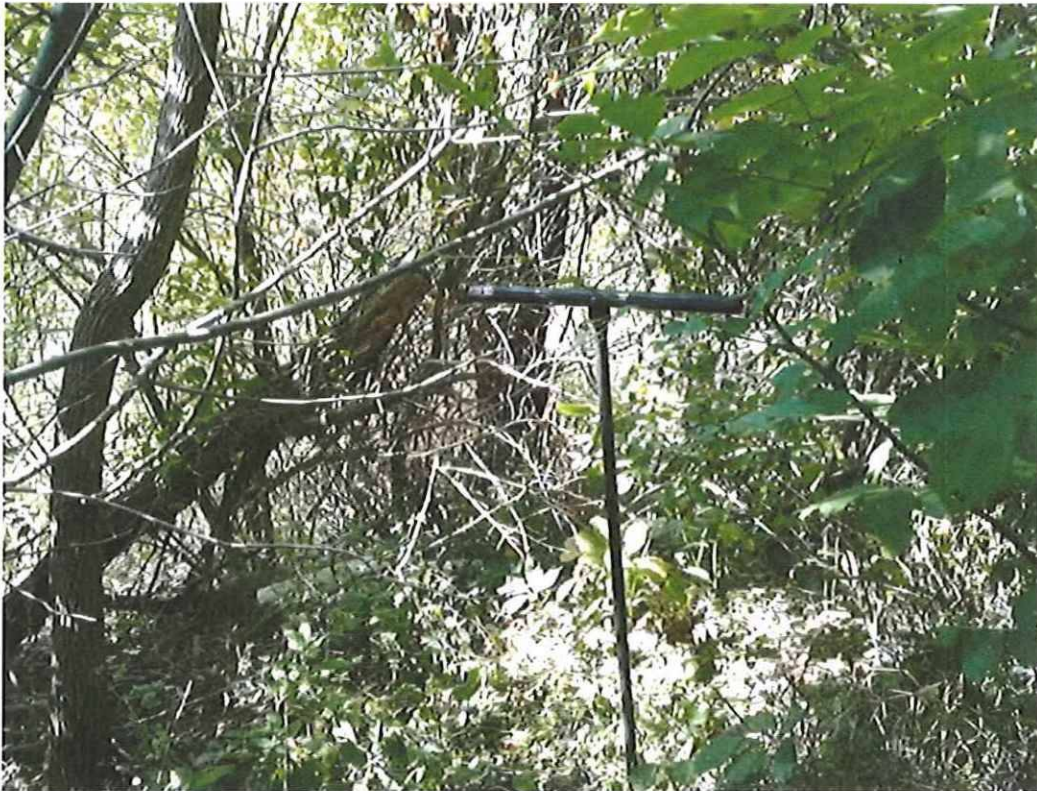
Adam Buhalog  
Town of Dunn Storage Lockers Welland Delineation  
Dane County, Wisconsin







Photograph DP-03; Photograph facing east.

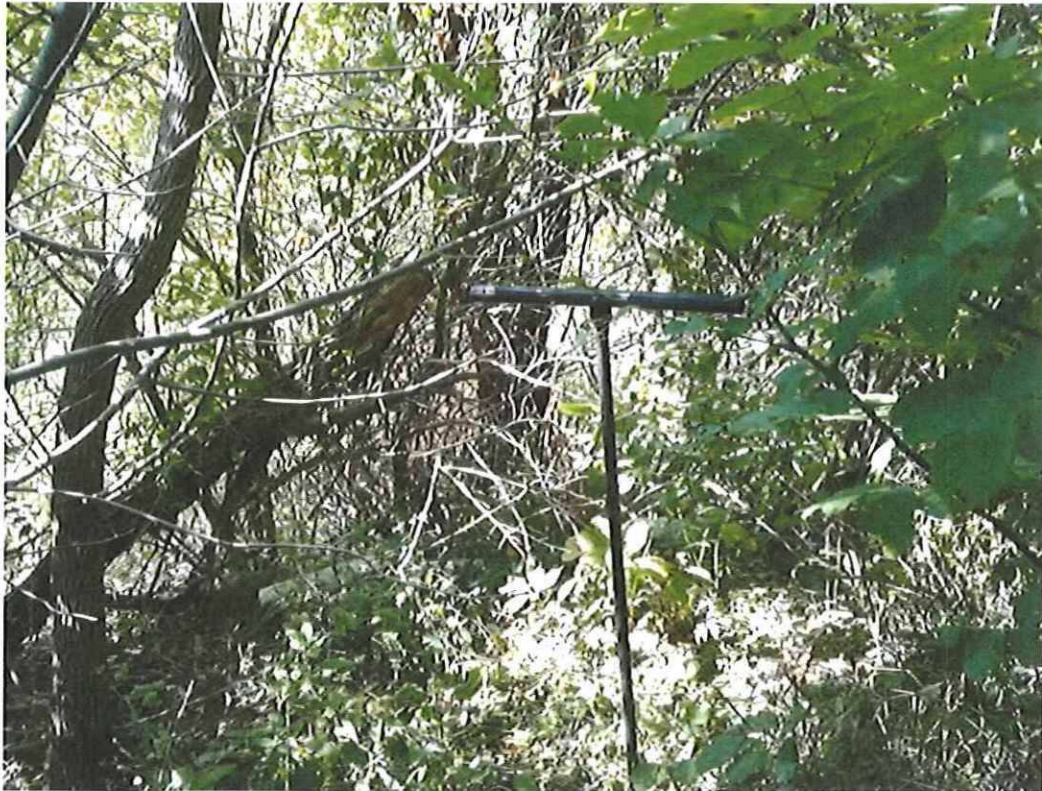


Photograph DP-04; Photograph facing southwest.



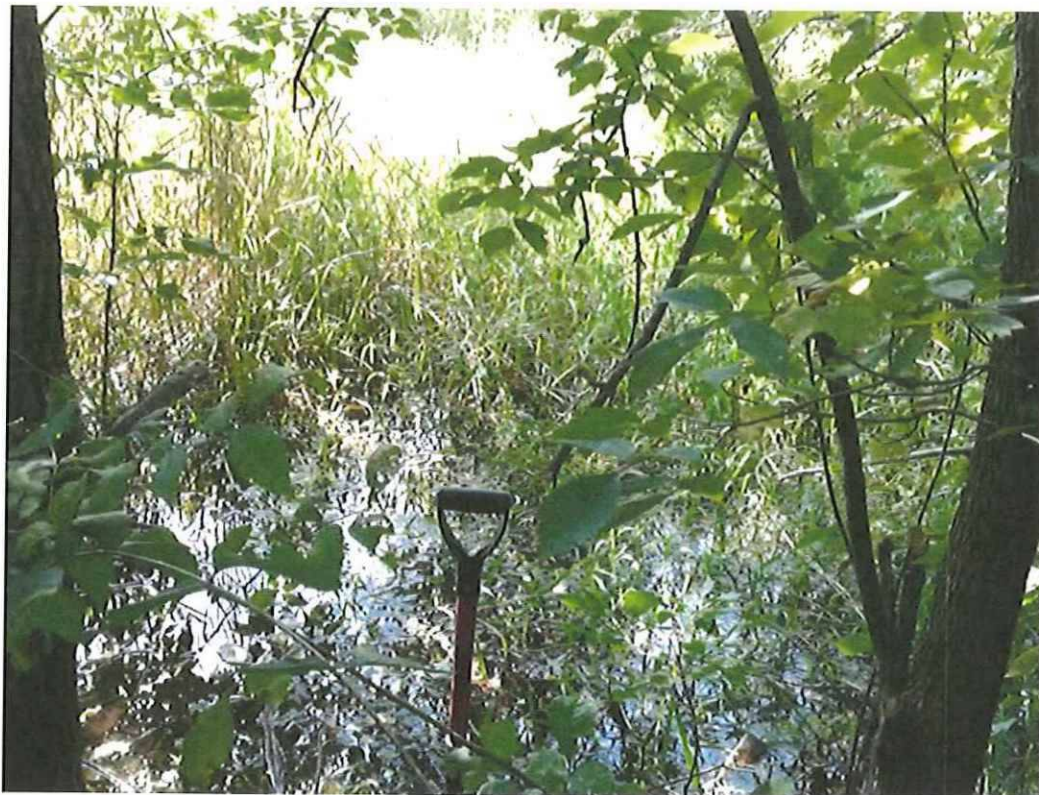


Photograph DP-05; Photograph facing south.



Photograph DP-06; Photograph facing south.





Photograph DP-07; Photograph facing south.



Photograph PP-01; Photograph facing north.





Photograph PP-01; Photograph facing east.



Photograph PP-01; Photograph facing south.

Project No.  
J168352500

Site Photographs  
September 6th,  
2016

Adam Buhalog  
Town of Dunn Storage Lockers Wetland Delineation  
Dane County, Wisconsin

 **Cardno**  
Shaping the Future





Photograph PP-02; Photograph facing northeast.



Photograph PP-02; Photograph facing southwest.

Project No.  
J168352500

Site Photographs  
September 6th,  
2016

Adam Buhalog  
Town of Dunn Storage Lockers Wetland Delineation  
Dane County, Wisconsin







Photograph PP-03; Photograph facing east.



Photograph PP-03; Photograph facing northeast.

Project No.  
J168352500

Site Photographs  
September 6th,  
2016

Adam Buhalog  
Town of Dunn Storage Lockers Wetland Delineation  
Dane County, Wisconsin







Photograph PP-03; Photograph facing southeast.



Photograph PP-04; Photograph facing northwest.

Project No.  
J168352500

Site Photographs  
September 6th,  
2016

Adam Buhalog  
Town of Dunn Storage Lockers Welland Delineation  
Dane County, Wisconsin





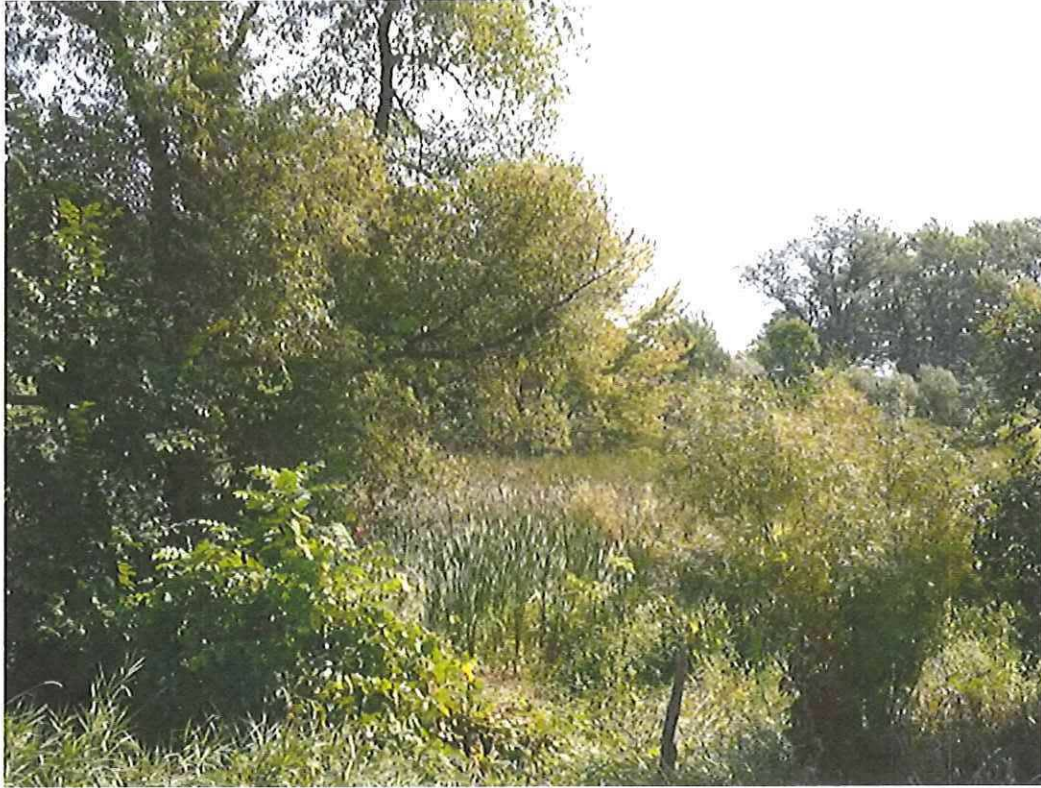


Photograph PP-05; Photograph facing south.



Photograph PP-06; Photograph facing north of W-01.





Photograph PP-07; Photograph facing west of W-01.



Photograph PP-08; Photograph facing east of W-01.





Photograph PP-09; Photograph facing south.

Project No.  
J168352500

Site Photographs  
September 6th,  
2016

Adam Buhalog  
Town of Dunn Storage Lockers Wetland Delineation  
Dane County, Wisconsin

