

LAND DEVELOPMENT APPLICATION

APPLICANT_TR	StorAge	40		TELEPH	HONE 920	2075572565
MAILING ADDRESS	(Street)	-LN	(City)	DT (S	NH State)	54228 (Zip)
	pan TR STO	rAge LLC		TELEP	HONE 920	7552765
MAILING ADDRESS_2	17 BA-ken Li (Street)	3	(City)	<u>ī</u> (S	NE State)	59228 (Zip)
	Comprehensive Pla Site/Architectural P Subdivision Plat or Zoning District Cha	lan Approval CSM Review Inge		Conditiona Annexatior Variance/B Other	n Request loard of Appe	als
STATUS OF APPLICANT	: <u>×</u> Owr	ierAg	jent E	Buyer	Other	
PROJECT LOCATION_2	005 HAW	PhomeAve	TYPE OF ST	TRUCTURE		
PRESENT ZONING			REQUEST	ED ZONING_		
PROPOSED LAND USE						
PARCEL #			AC	REAGE		
LEGAL DESCRIPTION						
N	OTE: Attach a one-	page written de	escription of you	ur proposal c	or request.	

The undersigned certifies that he/she has familiarized himself/herself with the state and local codes and procedures pertaining to this application. The undersigned further hereby certifies that the information contained in this application is true and correct.

Signed	Property Owner)	DateS-6-25
Fee Rec	uired	Schedule
\$ 350	Comprehensive Plan Amendment	Application Submittal Date
\$ t/b/d \$ t/b/d	Site/Architectural Plan Approval (Listed in Sec 1-2-1) CSM Review (\$10 lot/\$30 min)	Date Fee(s) Paid
\$ 350 \$ 350	Subdivision Plat (fee to be determined) Zoning District Change Conditional Use	Plan(s) Submittal Date
\$ t/b/d \$ 350 \$ t/b/d	Annexation Request (State Processing Fees Apply) Variance/Board of Appeals Other	Plan Comm Appearance
\$		PLANS & FEE RECEIVED BY

11/22/16, 03/25/13, 01/01/06, 12/16/20 Land Development Application.docx

TR Storage L.L.C. 2005 Hawthorne Ave, Two Rivers, WI

7721 Hwy 147, Two Rivers, WI 8834 Hwy 147, Two Rivers, WI 8832 Hwy 147, Two Rivers, WI 54241 7755-2565

Attn: Adam Taylor, City of Two Rivers

We have hired the DNR for wet land identification and there conclusion was this property is not a wetland and hired an architect for building plans. We are proposing building 2 buildings. 1st building will be identical and parallel to the existing building built 3-4 years ago. It is approx 40 x 181, 36 unit storage building. The 2nd building will be on the east side one sided with garage doors facing west, there are currently 2 buildings there that are to be removed by Dave Schmidt Company L.L.C. and disposed of at landfill or cement recycling.

Thank You

TR Storage L.L.C. Tara & **R**yan Ross



CONDITIONAL USE PERMIT City of Two Rivers

DOC# 1244578

Permit No. 2021-07

Before the City Council of the City of Two Rivers, Manitowoc County, Wisconsin, regarding the premises at 2005 Hawthorne Avenue in the City of Two Rivers, Manitowoc County, State of Wisconsin, further described as:

See "Exhibit A" Attached

E3457	465 1	



STATE OF WI - MTWC CO KRISTI TUESBURG REG/DEEDS RECEIVED FOR RECORD 11/29/2021 3:01:21 PM

Inspections Department

City of Two Rivers PO Box 87 Two Rivers, WI 54241-0087

Parcel ID Numbers:

053-202-101-050.01 053-202-101-070.07

Zoning Classification of the Premises is: B-2 Business District/Conditional Use for a Self-Storage Facility. Mailing Address of the Premises is: T.R. Storage, LLC, c/o Ryan Ross, 247 Baker Lane, Mishicot, WI 54228

WHEREAS, the Zoning Code and Zoning District Map of the above named municipality, pursuant to State Statute, state that the premises may not be used for the purpose hereinafter described but that upon petition such use may be approved by the municipality as a Conditional Use in particular circumstances as defined by the standards in the Zoning Ordinance; and

Petition therefore having been made, and public hearing held thereon, and the City Council of the City of Two Rivers having determined that by reason of the particular nature, character and circumstances of the proposed use, and of the specific and contemporary conditions, permit of such use upon the terms and conditions hereinafter prescribed would be consistent with the requirements of the Zoning Ordinance.

Now, therefore, it is permitted, subject to compliance with the terms and conditions hereinafter stated, that the Premises may be used for the purpose of establishing a self-storage facility.

Permitted by action of the City Council of the City of Two Rivers on November 1, 2021.

Original filed in the office of the City Clerk of the City of Two Rivers, Wisconsin

The Conditions of this Permit are:

- 1. This Permit shall become effective upon the execution and recording by the Owner of the Premises as acceptance hereof.
- This Permit shall be void unless proper application, pursuant to the Building and Zoning Codes of this Municipality, for appropriate Building and Zoning Use Permits in conformity to this Permit, is made within twelve (12) months of the date hereof.
- This Permit is subject to amendment and termination in accordance with the provisions of the Zoning Code of this Municipality.
 Construction and operation of the use permitted shall be in strict conformity to the approved Site and Architectural Plans filed in
- connection with the Petition for this Permit and such plans are incorporated herein by reference as if set forth in detail herein.
 Any substantial change or expansion of the facilities permitted by the initial issuance of this Permit would require approval by the
- Plan Commission and City Council as an amendment to this Permit.
 This Permit is granted to Ryan Ross, d/b/a T.R. Storage, LLC and shall not lapse upon a change in ownership. The land use described herein may continue upon a change in ownership provided all operations are continued in strict accordance with this permit.
- 7. This permit shall lapse should the land use described herein cease for more than twelve (12) months.
- 8. Any conditions of this Permit which would normally be the responsibility of the owner or tenant of the premises shall be made part of the tenant's lease by the owner, which lease shall contain provisions for posting of the pertinent conditions to notify tenants and employees thereof as may be necessary to carry out the conditions.
- 9. Conditions of Operations:
 - a. Self-storage units may be rented or leased only for the storage of household or personal goods, vehicles, recreational vehicles, boats, business supplies or contractor supplies.
 - b. No sales, service, repair, fabrication or manufacturing activities are permitted in the storage units.
 - c. No animal, livestock, rabbits, fowl or poultry of any kind shall be raised, bred or kept in any unit.
 - d. No noxious, offensive, boisterous or illegal activity shall be carried on or conducted in any unit, nor shall anything be done therein, either willfully or negligently, which may or become and annoyance or a public nuisance.
 - e. There shall be no outdoor operations or storage.
 - f. No hazardous substances or materials as defined by federal, state or local laws shall be brought upon, kept or used in, on or about a unit, except for small quantities of gasoline or motor oil necessary for motor vehicles.
 - g. The building shall comply with applicable Building and Fire Codes and safety requirements.
 - h. Signage in accord with the City's Sign Code.



SIGNĂTURES OF PROPERTY OWNER(S) AND PERMITEE(S):

As Owner on the Subject Property, I accept and understand the above described conditions.

Printed Name: Ryan W. Ross, member, T.R. Storage, LLC

STATE OF WISCONSIN MANITOWOC COUNTY 8th Personally came before me this day of l who executed the foregoing instrument and acknowledge the same

Printed Name: Vicky L. Berg

Notary Public, Manitowoc County, Wisconsin My commission expires: 05/08/2025

...... S P

As permittee of the Subject Property, I accept and understand the above described conditions:

Printed Mame: Ryan W. Ross, member, T.R. Storage, LLC

STATE OF WISCONSIN MANITOWOC COUNTY

day of November Personally came before me this orn 2021, the above named Ryan W. Ross known to be the person who executed the foregoing instrument and acknowledge the same.

Printed Name: Vicky L. Berg

Notary Public, Manitowoc County, Wisconsin My commission expires: 05/08/2025

SIGNATURES - CITY OF TWO RIVERS

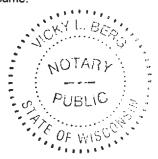
Jamie Jackson, City Clerk STATE OF WISCONSIN

MANITOWOC COUNTY Personally came before me this 1st day of November, 2021, the above named Jamie Jackson and Adam Wachowski known to be the persons who executed the foregoing instrument and acknowledge the same.

Printed Name: Vicky L. Berg

Notary Public, Manitowoc County, Wisconsin My commission expires: 05/08/25

HIS INSTRUMENT WAS DRAFTED BY: ICky L. Berg, Zoning Administrator





Adam Wachowski, Council President

2021, the above named Ryan W. Ross known to be the person



pg 427

3457

CITY OF TWO RIVERS CONDITIONAL USE PERMIT 2021-07

Exhibit A

Parcel 1 (2005 Hawthorne Avenue)

That part of the NE1/4 of the NE1/4 of Section 2, Township 19 North, Range 24 East, lying on the Northeasterly side of the so-called Town Line Road (CTH "D"), and contained within the following boundaries:

Commencing at the point of intersection of the center line of said Town Line Road (CTH "D") and the North City limit line of the City of Two Rivers; measure thence North 33° 10' West a distance of 300.1 feet; thence North 40°18' West a distance of 332.27 feet; the point thus reached is the real starting point. From this real starting point measure North 49° 27' West a distance of 154.6 feet, thence North 58° 53' West a distance of 99.85 feet, thence North 34° 16' East a distance of 948 feet to a point in the North line of said Section 2; thence Easterly along said North line a distance of 493.7 feet to the Northeast corner of said Section 2, a distance of 688 feet; thence South 73° 19' West a distance of 867.2 feet back to the real starting point, excepting therefrom that portion thereof described in that certain Deed recorded in Volume 269 of Deeds on Page 544, Register's of Deed's Office, Manitowoc, Wisconsin

Parcel ID Number: 053-202-101-050.01

-and-

Parcel 2 (vacant lot)

Part of the NE1/4 of the NE1/4 of Section 2, Township 19 North, Range 24 East, as described in Volume 245 of Deeds, Page 336, Manitowoc County, Wisconsin, Records, described as commencing at the intersection of the North City limits of the City of Two Rivers (as it existed in July 1949) and the centerline of Town Line Road (CTH "D"); thence along the centerline of said road North 35° 42' West 280.2 feet; thence continuing along said road centerline North 42° 20' West 335.2 feet; thence continuing along said road centerline North 51° 26' West 154.8 feet; thence continuing along said road centerline North 60° 55' West 99.5 feet; thence North 31° 55' East 30 feet to the point of beginning; thence North 31° 55' East 194.7 feet; thence South 89° West 127 feet; thence South 1° 0' East 150 feet; thence South 60° 55' East 20 feet to the point of beginning

Parcel ID Number: 053-202-101-070.07

Said parcels contains ± 4.427 acres of land.

CONDITIONAL USE				
PERMIT				
City of Two Rivers				

Document Number

Permit No. 2025-02

Before the City Council of the City of Two Rivers, Manitowoc County, Wisconsin, regarding the premises at <u>2005</u> Hawthorne Avenue in the City of Two Rivers, Manitowoc County, State of Wisconsin, further described as:

NE 1/4 NE 1/4 S2 T19N R24E PARCEL DESC V 262 P 517 EXC V 269 P 544

Inspections Department City of Two Rivers PO Box 87 Two Rivers, WI 54241-0087

Parcel ID Number: 053-202-101-050.01

Zoning Classification of the Premises is: B-2 Business District/Conditional Use for Self-Storage Facilities. Mailing Address of the Premises Operator: TR Storage LLC, c/o Ryan Ross, 247 Baker Lane, Mishicot, WI, 54228

WHEREAS, the Zoning Code and Zoning District Map of the above named municipality, pursuant to State Statute, state that the premises may not be used for the purpose hereinafter described but that upon petition such use may be approved by the municipality as a Conditional Use in particular circumstances as defined by the standards in the Zoning Ordinance; and

Petition therefore having been made, and public hearing held thereon, and the City Council of the City of Two Rivers having determined that by reason of the nature, character and circumstances of the proposed use, and of the specific and contemporary conditions, permit of such use upon the terms and conditions hereinafter prescribed would be consistent with the requirements of the Zoning Ordinance.

Now, therefore, it is permitted, subject to compliance with the terms and conditions hereinafter stated, that the Premises may be used for the purpose of establishing self-storage facilities.

Permitted by action of the City Council of the City of Two Rivers on June 2, 2025. Original filed in the office of the City Clerk of the City of Two Rivers, Wisconsin

The Conditions of this Permit are:

- 1. This Permit shall become effective upon the execution and recording by the Owner of the Premises as acceptance hereof.
- 2. This Permit shall be void unless proper application, pursuant to the Building and Zoning Codes of this Municipality, for appropriate Building and Zoning Use Permits in conformity to this Permit, is made within twelve (12) months of the date hereof.
- 3. This Permit is subject to amendment and termination in accordance with the provisions of the Zoning Code of this Municipality.
- 4. Construction and operation of the use permitted shall be in strict conformity to the approved Site and Architectural Plans filed in connection with the Petition for this Permit and such plans are incorporated herein by reference as if set forth in detail herein.
- 5. Any substantial change or expansion of the facilities permitted by the initial issuance of this Permit would require approval by the Plan Commission and City Council as an amendment to this Permit.
- 6. This Permit is granted to Ryan Ross, d/b/a T.R. Storage, LLC and shall not lapse upon a change in ownership. The land use described herein may continue upon a change in ownership provided all operations are continued in strict accordance with this permit.
- 7. This permit shall lapse should the land use described herein cease for more than twelve (12) months.
- 8. Any conditions of this Permit which would normally be the responsibility of the owner or tenant of the premises shall be made part of the tenant's lease by the owner, which lease shall contain provisions for posting of the pertinent conditions to notify tenants and employees thereof as may be necessary to carry out the conditions.
- 9. Conditions of Operations:
 - a. Self-storage units may be rented or leased only for the storage of household or personal goods, vehicles, recreational vehicles, boats, business supplies or contractor supplies.

- b. No sales, service, repair, fabrication or manufacturing activities are permitted in the storage units.
- c. No animal, livestock, rabbits, fowl or poultry of any kind shall be raised, bred or kept in any unit.
- d. No noxious, offensive, boisterous or illegal activity shall be carried on or conducted in any unit, nor shall anything be done therein, either willfully or negligently, which may or become and annoyance or a public nuisance.
- e. There shall be no outdoor operations or storage.
- f. No hazardous substances or materials as defined by federal, state or local laws shall be brought upon, kept or used in, on or about a unit, except for small quantities of gasoline or motor oil necessary for motor vehicles.
- g. The building shall comply with applicable Building and Fire Codes and safety requirements.
- h. Signage in accord with the City's Sign Code.

SIGNATURES OF PROPERTY OWNER(S) AND PERMITEE(S):

As Owner(s) of the Subject Property, I/we accept and understand the above-described conditions.

Printed Name:	Printed Name:
STATE OF WISCONSIN MANITOWOC COUNTY	
Personally came before me thisday	<pre>/ of, 2025, the above named rson(s) who executed the foregoing instrument and acknowledge the</pre>
and to be the per same.	son(s) who executed the foregoing instrument and acknowledge the
Notary Public	
Printed Name	sonsin
County, Wisc My commission expires:	.0115111
SIGNATURES - CITY OF TWO RIVERS	
Greg Buckley, City Manager	Amanda Baryenbruch, City Clerk
STATE OF WISCONSIN MANITOWOC COUNTY	
Personally, came before me thisday of2 person(s) who executed the foregoing instrument an	2025, the above-named Greg Buckley and Amanda Baryenbruch known to be t nd acknowledge the same.
Printed Name:	

Notary Public, Manitowoc County, Wisconsin My commission expires: _____



PUBLIC WORKS Engineering Division 1717 E. Park Street P.O. BOX 87 Two Rivers, WI 54241-0087



Memorandum

Department of Public Works

Date:	May 12,	2025

To: Adam Taylor, Zoning Administrator Greg Buckley, City Manager

From: Matthew Heckenlaible, City Engineer

Re: May 12, 2025, Plan Commission Agenda Item Discussion Memorandum

<u>3A.</u> Modification to the westly property line of 7063 Tannery Road. The extra land is from the adjutant property controlled by Claredon Hills Development (Terrance P. Fox) and being attached to the property controlled by Angela Leurquin and Jason Kakuk.

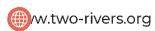
This property line modification would not have any negative impacts as it relates to future engineering, right-of-way concerns, or future sewer service.

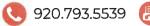
No objection to granting this Extraterritorial Certified Survey Map.

<u>3B.</u> Creation of two lots from the 14 acre parent (Cayemberg) parcel north of 'Lucy Lane'. Lucy Lane is an unimproved roadway and the County's GIS along with other documentation shows that it has been granted as a public right-of-way to the City of Two Rivers. Therefore, these parcels abut up to public right-of-way.

There have been a few variations of this certified survey that have been routed to the city all pertaining to where the east-west property line near the southwest corner of proposed Lot 1 due to the existing garage. As shown the existing garage not only encroaches into the building setback but also across the property line which also happens to be the municipal boundary between the City and the Town. Once of the CSM's shifted the property line down into the City, but by doing so, would also have changed the municipal boundary, as such, Manitowoc County would not allow that version of the CSM to be approved.

As such, those property lines are fixed and the garage will be an existing non-conforming use / encroachment, potentially subject to future restrictions with regards to significant repairs and/or replacement.





920.793.5537





PUBLIC WORKS **Engineering Division** 1717 E. Park Street



P.O. BOX 87 Two Rivers, WI 54241-0087

This proposed two lot Extraterritorial Certified Survey Map would not have any negative impacts as it relates to future engineering, right-of-way concerns, or future sewer service.

No objection to granting this Extraterritorial Certified Survey Map.

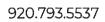
No immediate objection to amending the Conditional Use Permit to allow for the **3C**. addition of a second mini-storage unit building north of the existing mini-storage unit building.

The site and architectural plan review for 2005 Hawthorne Avenue I do however **3D**. take issue with. Per the WDNR surface water data viewer did show that there was the potential of wetland susceptible soils north of the existing mini-storage unit building. WDNR did perform a site investigation and provided a letter stating that no wetlands were present and the site was and is documented clear of wetlands as shown in the documentation within the agenda packet.

It should be noted that the site does have the requirement of needing an onsite storm water management pond / facility which is shown on site plan sheet A1.1. and is labeled "existing pond".

From Manitowoc County's GIS 2023 Aerial Photography, shows the pond and small amounts of rubbish / debris scattered near the southwesterly edge of the existing pond.



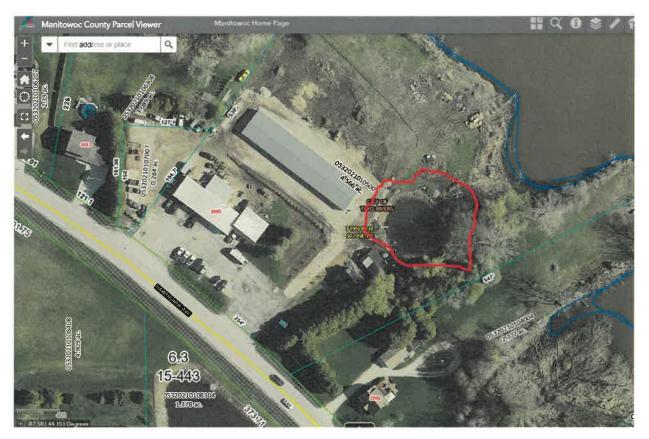






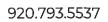


1717 E. Park Street P.O. BOX 87 Two Rivers, WI 54241-0087



Switching to the "National Base Map Imagery" on Manitowoc County's GIS webpage, shows that the existing pond is being filled in by 1/3 to close to $\frac{1}{2}$ of the facility being impacted.

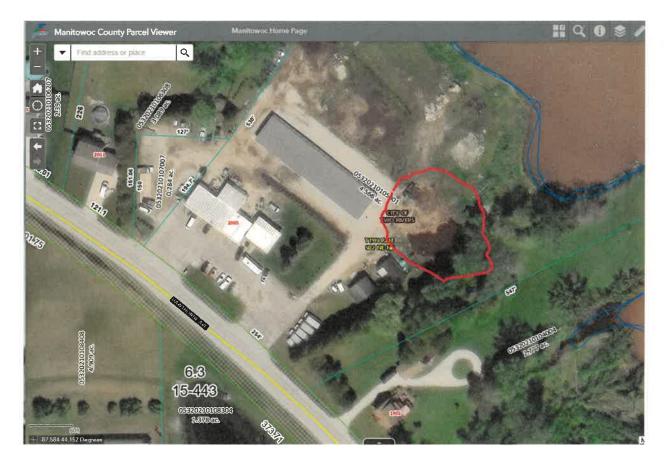








1717 E. Park Street P.O. BOX 87 Two Rivers, WI 54241-0087

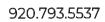


This is also shown within Photograph #8 of the WDNR's wetland site investigation.

It should also be noted that within Photograph #1 of WDNR's wetland site investigation, that a green house has been erected north of where the proposed 2nd mini-storage unit is to be constructed.

Approval of the Site and Architectural plans should be contingent upon the stormwater facility either be constructed and vegetated to original plan requirements and then protected from contaminated runoff (sediment) or an alternative stormwater plan be submitted to Two Rivers Engineering for review and approval prior to any building permits being issued.





Tony Evers, Governor Karen Hyun, Ph.D., Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



May 5, 2025

Attn: Ryan ross 2005 Hawthorne Ave Two rivers, WI 54241 WIC-NE-2024-36-04348

RE: Wetland Identification Report for a 0.921-acre Project Review Area, located in NE 1/4, NE 1/4, Section 02, Township 19 North, Range 24 East, City of Two Rivers, Manitowoc County

Dear Ryan Ross:

On April 23, 2025, the Wisconsin Department of Natural Resources (WDNR) staff Wetland Identification Specialist Emily Hack conducted a wetland identification review at the above-mentioned. According to the request form you sent us, the reason for the wetland identification was to identify any wetlands located in the project area in which you are hoping to conduct future construction.

Approximate wetland boundaries were identified following 1987 Wetland Delineation Manual and applicable regional supplement guidelines. Wetlands are defined by the 1987 Wetland Delineation Manual as areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. If any wetland areas were detected, their approximate boundaries were sketched onto an aerial photograph (see attached map).

Methods used to detect the presence of wetlands within the project area involved on-site and off-site techniques, including a review of antecedent hydrologic conditions, recent and historical aerial photography, Wisconsin Wetland Inventory (WWI) mapping, NRCS Soil Survey mapping, USGS Topographic surveys, LiDAR and contour mapping, and on-site observations.

Based on the data analyzed for the off-site review, as well as the field conditions observed during the field review, **no wetlands** are located in the project review area. The shoreline of the West Twin River is located approximately 110 feet north and east of the project review area. There is an offsite pond located approximately 20 feet east of the project review area associated with state general permit # GP-NE-2009-36-03869.

The wetland/upland boundaries depicted on the associated field sketch are approximate only and may not be suitable for design purposes, set-back, or permit requirements. A wetland delineation conducted on your property by a qualified wetland delineator may be required if a state wetland permit application is required for your project. Prior to conducting any activities in or around wetlands, we recommend you contact the appropriate staff from DNR Waterways Program, the U.S. Army Corps of Engineers, which may require a federal permit to work in wetlands, and relevant local government zoning authorities to ensure your project meets local floodplain and shoreland zoning ordinance requirements.

If you have any questions, please contact me at (608) 228-4037 or Emily.Hack@wisconsin.gov.

Sincerely,

Emily Hack Wetland Identification Specialist PWS #3048



Enclosed:

Wetland Identification Service Field Investigation Map Project Location Figure WWI Mapping NWI Map Lidar Mapping Soil Survey Mapping Antecedent Precipitation Analysis – WETS Table USACE Wetland Determination Data Forms Site Visit Photographs

Email CC:

Jennifer Hubert, USACE Project Manager Kathleen Kramasz, WDNR Water Management Specialist City of Two Rivers Planning and Zoning Department Tim Ryan, Manitowoc County Land Division/Rezoning/Parks Director

WDNR Wetland Identification Service Area Map



5/5/2025, 5:39:46 PM

Point layer

• Upland Data Plots: DP-1U, DP-2U

Polygon layer

Review Area Boundary

Wisconsin Wetland Inventory Polygon Layer (stereo-pair mapping) - Wetland Class Areas WT Wisconsin Wetland Inventory NWI WTM Ext Dynamic L16 - Wetland Class Points

County Boundaries

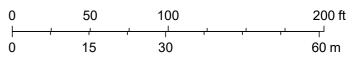
Wetland too small to delineate Major Roads

- State Highway
- Municipal Boundary
- State Boundary
- City or Village

Note: The wetland boundaries depicted on this map are an approximation of the boundaries that have been flagged on-site. A professional survey or wetland delineation should be completed if a survey-grade representation of the wetland boundaries is necessary.

Excavated pond







WDNR Wetland Identification Service Area Map



5/6/2025, 3:59:33 PM

Point layer

Upland Data Plots: DP-1U, DP-2U

Polygon layer

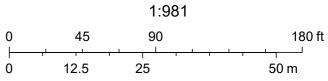
Review Area Boundary

WT Wisconsin Wetland Inventory NWI WTM Ext Dynamic L16 - Wetland Class Points

Excavated pond

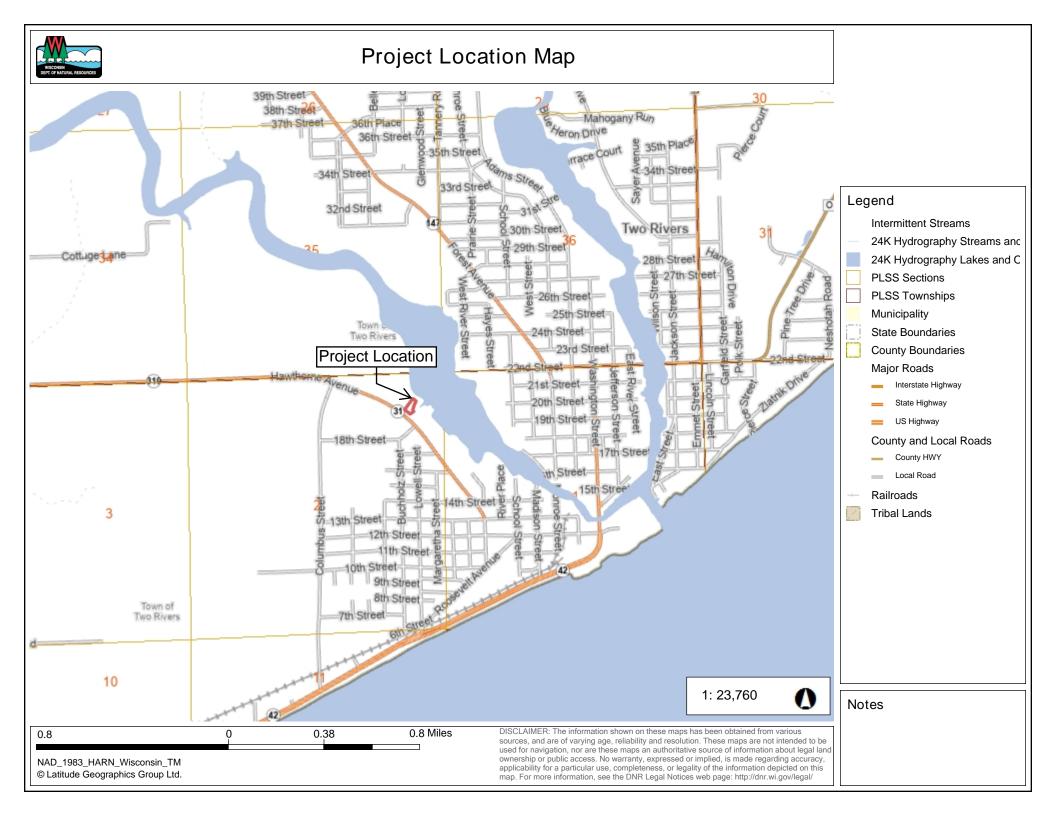
Wetland too small to delineate World Imagery Low Resolution 15m Imagery High Resolution 60cm Imagery High Resolution 30cm Imagery Citations

Note: The wetland boundaries depicted on this map are an approximation of the boundaries that have been flagged on-site. A professional survey or wetland delineation should be completed if a survey-grade representation of the wetland boundaries is necessary.

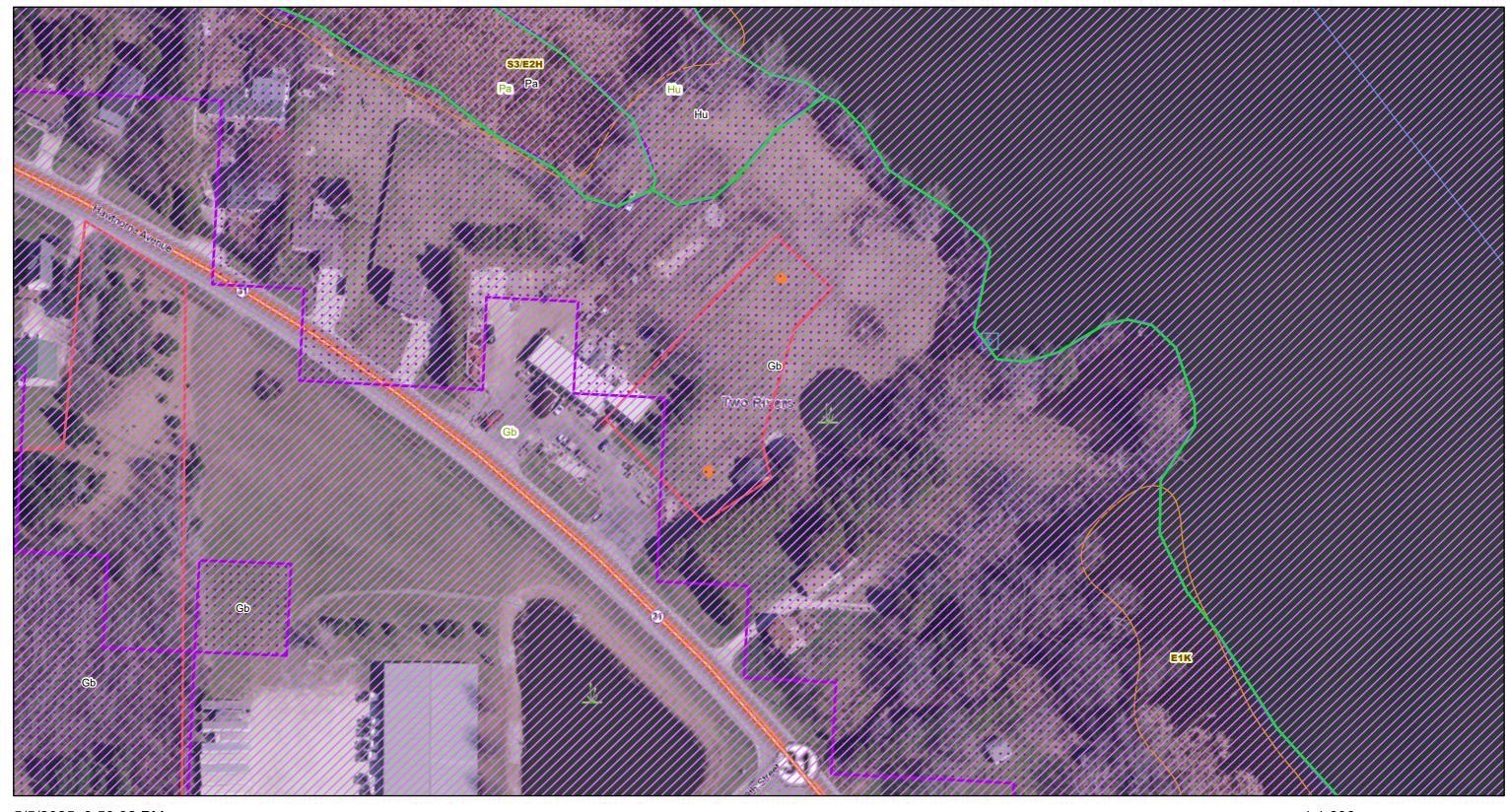




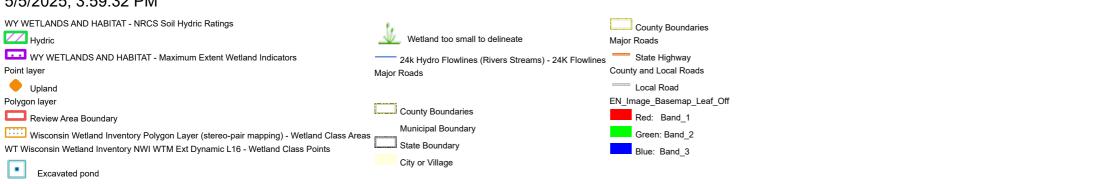
Maxar, Microsoft, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

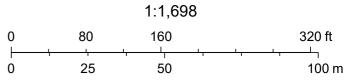


Wisconsin Wetland Inventory Map



5/5/2025, 3:59:32 PM









U.S. Fish and Wildlife Service **National Wetlands Inventory**

NWI



Wetlands

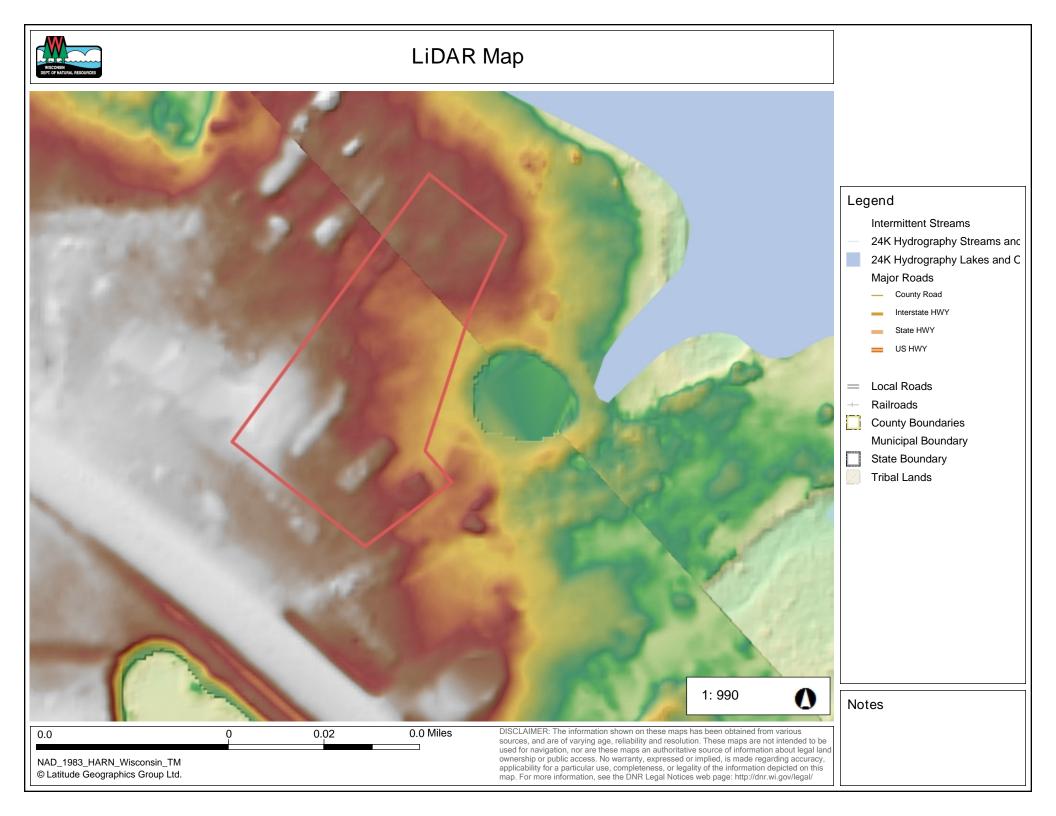
- Estuarine and Marine Wetland

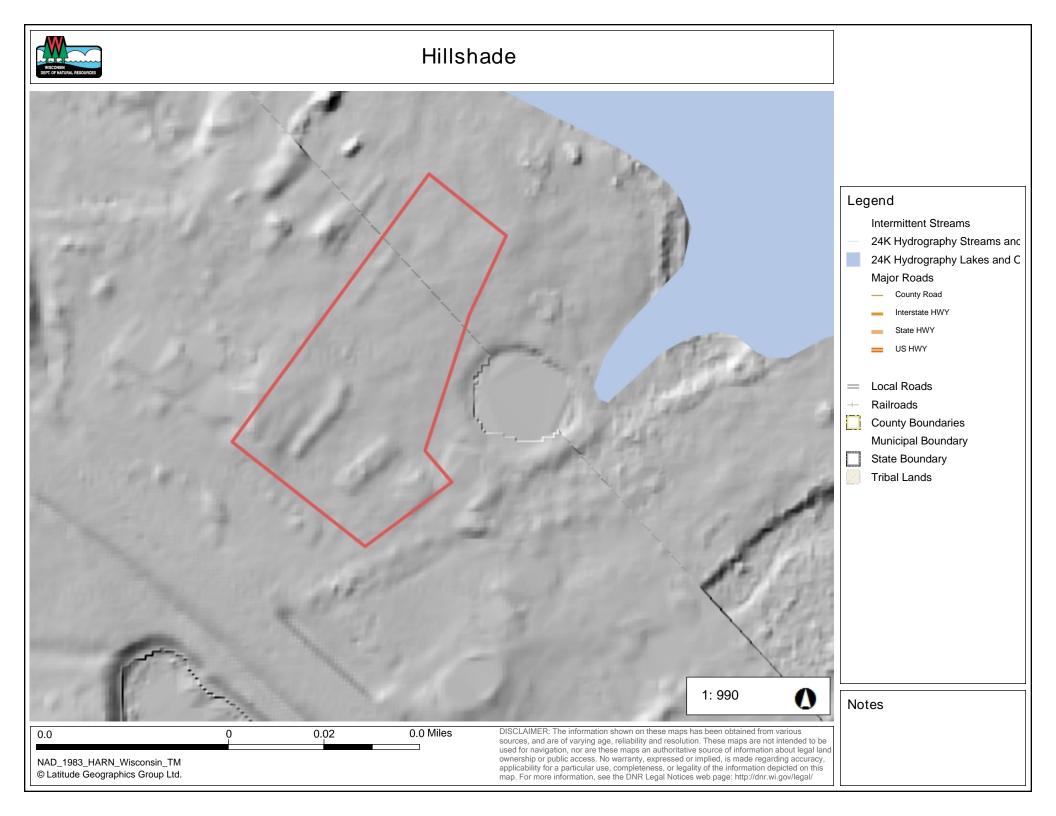
Estuarine and Marine Deepwater

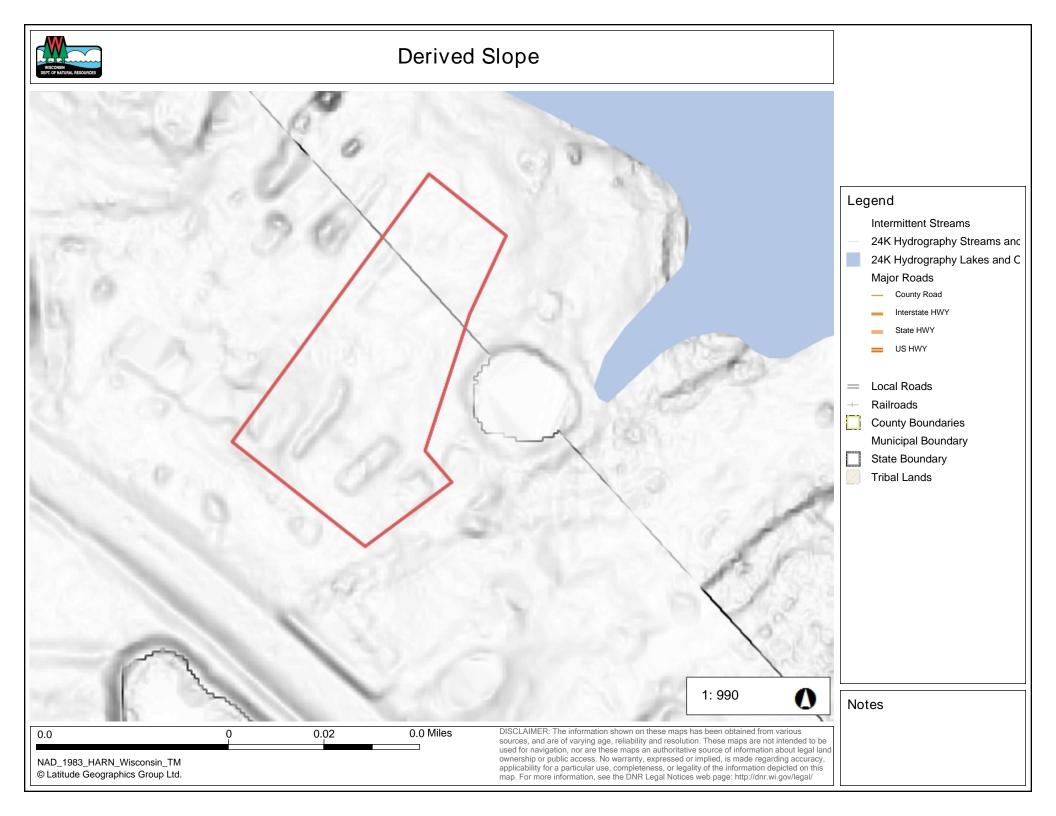
Freshwater Pond

Freshwater Forested/Shrub Wetland

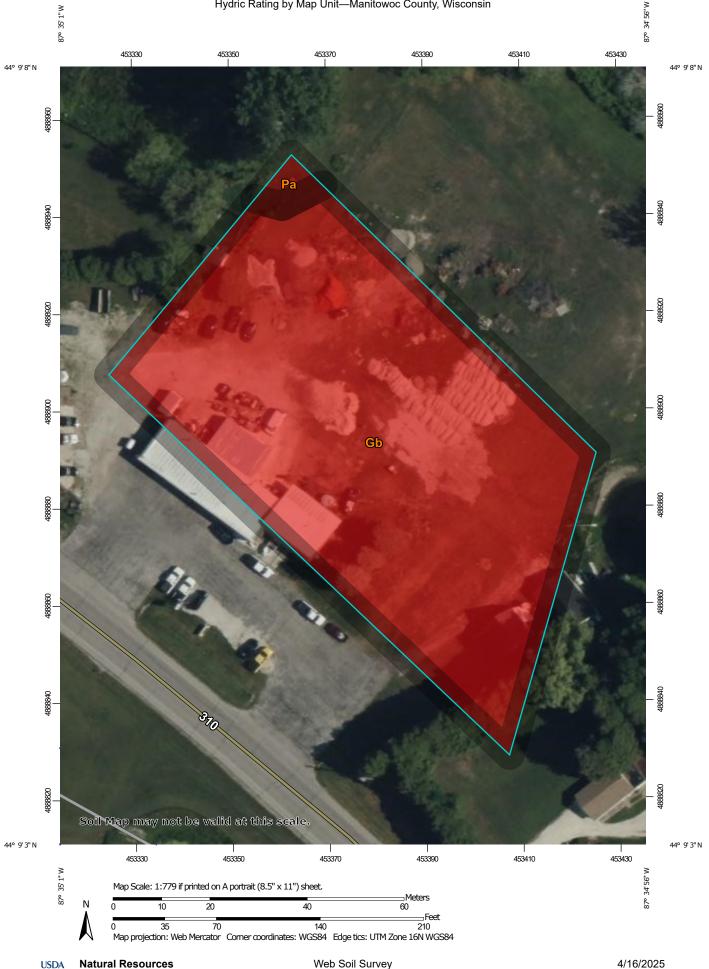
Lake Other Riverine be used in accordance with the layer metadata found on the Wetlands Mapper web site.



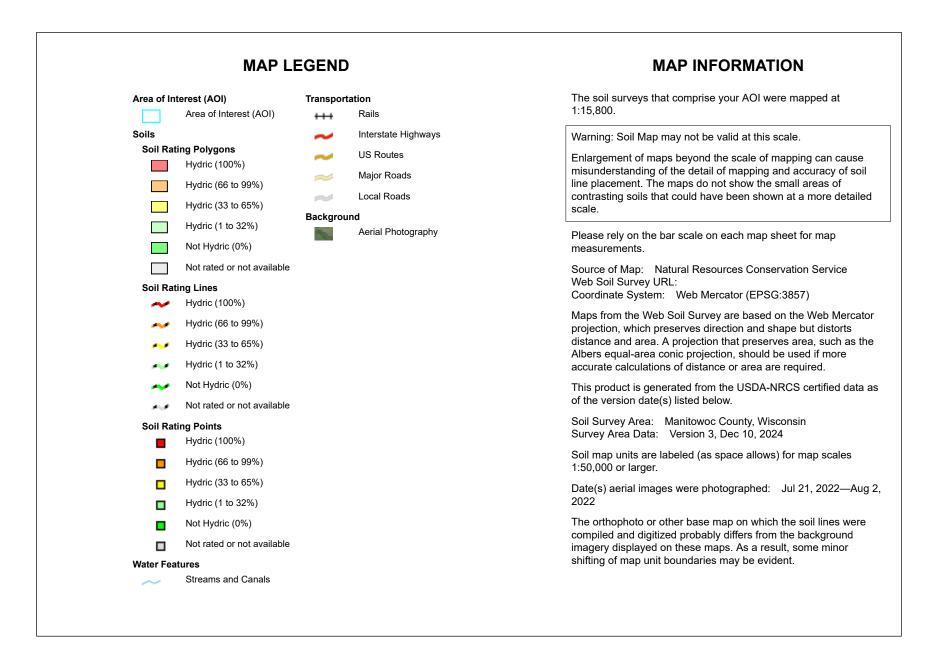




Hydric Rating by Map Unit-Manitowoc County, Wisconsin



Web Soil Survey National Cooperative Soil Survey



Hydric Rating by Map Unit

Map unit symbol Map unit name		Rating	Acres in AOI	Percent of AOI	
Gb	Granby fine sandy loam	100	1.4	98.8%	
Ра	Palms muck, 0 to 2 percent slopes	100	0.0	1.2%	
Totals for Area of Intere	st	1.5	100.0%		

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States. Federal Register. September 18, 2002. Hydric soils of the United States. Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present Component Percent Cutoff: None Specified Tie-break Rule: Lower



Hydric Soil List - All Components

This table lists the map unit components and their hydric status in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2). Definitions for the codes are as follows:

- 1. All Histels except for Folistels, and Histosols except for Folists.
- 2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;
- 3. Soils that are frequently ponded for long or very long duration during the growing season.
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;
- 4. Map unit components that are frequently flooded for long duration or very long duration during the growing season that:
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;

Hydric Condition: Food Security Act information regarding the ability to grow a commodity crop without removing woody vegetation or manipulating hydrology.

References:

- Federal Register. July 13, 1994. Changes in hydric soils of the United States.Federal Register. Doc. 2012-4733 Filed 2-28-12. February, 28, 2012. Hydric soils of the United States.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.
- Vasilas, L.M., G.W. Hurt, and C.V. Noble, editors. Version 7.0, 2010. Field indicators of hydric soils in the United States.

Report—Hydric Soil List - All Components

Hydric Soil List - All Components–WI071-Manitowoc County, Wisconsin									
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Iric Hydric criteria met				
Gb: Granby fine sandy loam	Granby	100	Drainageways on outwash plains,depressions on outwash plains	Yes 2,3					
Pa: Palms muck, 0 to 2 percent slopes	Palms-Muck	75-95	Interdrumlins	Yes	1,3				
	Houghton-Muck	3-15	Depressions	Yes	2,3				
	Adrian	2-10	Interdrumlins	Yes	1,3				

Data Source Information

Soil Survey Area: Manitowoc County, Wisconsin Survey Area Data: Version 3, Dec 10, 2024

NRCS Engineering Field Handbook Chapter 19										
Date	4/23/2025	Landowner/Project	Ryan Ross							
Weather Station	Two Rivers	State	WI							
County	Manitowoc	Growing Season	4/7 to 11/11							
Photo/obs Date	4/23/2025	Soil Name	Granby Fine Sandy Loam							

NRCS method - Rainfall Documentation Worksheet Hydrology Tools for Wetland Determination
NRCS Engineering Field Handbook Chapter 19

shaded cells are locked or calculated	Long-term rainfall statistics (from WETS table or State Climatology Office)							
		30%	30%		Condition		Month	Product of
		chance	chance		Dry, Wet,	Condition	Weight	Previous 2
	Month	<	>	Precip	Normal	Value	Value	Columns
1st Prior Month*	April	2.47	3.97	0.95	D	1	3	3
2nd Prior Month*	March	1.37	2.86	4.02	W	3	2	6
3rd Prior Month*	February	1.00	1.87	1.35	Ν	2	1	2
	*compared to photo/observation date					Sum	11	
	Note: If sum	is						,
	6 - 9	prior perio	od has bee	n drier		Condition va	alue:	
		than norm	nal			Dry=1		
	10 - 14	prior peri	od has bee	n normal		Normal =2 Wet =3		
	15 - 18	prior peri	od has bee	n wetter				
		than norm	nal					
					-		_	
Conclusions:	pri	or period	has been	normal				

WETS Station: TWO RIVERS, WI

Requested years: 2005 - 2025

Month	Avg Max Temp	Avg Min Temp	Avg Mean Temp	Avg Precip	30% chance precip less than	30% chance precip more than	Avg number days precip 0. 10 or more	Avg Snowfall	
Jan	27.2	14.0	20.6	1.59	0.87	1.94	5	11.7	
Feb	28.8	13.6	21.2	1.55	1.00	1.87	4	14.7	
Mar	38.4	24.4	31.4	2.35	1.37	2.86	5	6.2	
Apr	48.1	34.9	41.5	3.38	2.47	3.97	7	-	
May	58.8	44.5	51.6	3.49	2.47	4.14	7	0.0	
Jun	69.6	54.3	61.9	4.31	2.96	5.14	7	-	
Jul	76.1	60.6	68.4	3.81	2.67	4.52	6	-	
Aug	76.0	60.8	68.4	3.36	2.30	4.01	6	-	
Sep	68.9	53.8	61.4	2.22	1.37	2.69	6	-	
Oct	56.5	42.7	49.6	3.14	2.34	3.68	7	-	
Nov	43.5	30.8	37.2	2.11	1.27	2.56	4	2.3	
Dec	32.7	20.4	26.5	2.05	1.34	2.46	5	11.4	
Annual:					31.11	35.37			
Average	52.0	37.9	45.0	-	-	-	-	-	
Total	-	-	-	33.36			69	-	

GROWING SEASON DATES

Years with missing data:	24 deg =	28 deg =	32 deg =
	1	1	1
Years with no occurrence:	24 deg =	28 deg =	32 deg =
	0	0	0
Data years used:	24 deg =	28 deg =	32 deg =
	20	20	20
Probability	24 F or	28 F or	32 F or
	higher	higher	higher
50 percent *	4/1 to 11/	4/11 to	4/27 to
	17: 230	11/6: 209	10/25:
	days	days	181 days
70 percent *	3/29 to	4/7 to	4/23 to
	11/21:	11/11:	10/29:
	237 days	218 days	189 days

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

STATS TABLE - total	

precipitation (inches)													
Yr	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annl
1950										M0. 11	0.89	M0. 95	1.95
1951	1.45	M0.89							M0. 98	4. 87	2.35	2.17	12. 71
1952	2.57	0.94	3.33	2.13	2.29	2.15	8.88	2.88	0. 33	0. 07	2.36	1.08	29. 01
1953	0.73	3.15	1.25	M3.43	1.56	4.02	1.59	3.33	1. 23	0. 45	0.63	1.53	22. 90
1954	0.66	1.03	0.99	5.64	3.32	4.65	2.76	1.41	5. 02	4. 89	0.99	1.35	32. 71
1955	0.55	1.23	1.20	3.08	2.32	2.93	3.88	0.68	1. 19	2. 94	M0. 70	M0. 07	20. 77
1956	0.41	0.47	2.91	1.81	3.59	1.58	4.94	M3.48	M1. 68	0. 49	2.65	1.22	25. 23
1957	0.42	0.39	1.10	2.27	4.33	2.04	3.33	2.67	1. 09	1. 57	3.77	1.99	24. 97
1958	0.54	0.23	0.78	2.44	1.01	2.41	2.84	4.05	3.	2.	2.15	0.14	22.

									65	65			89
1959	1.06	2.71	3.36	2.86	4.12	1.96	5.27	4.49	4. 32	5. 15	2.17	3.70	41 1
1960	1.52	M0.08	M0.99	3.09	5.51	M1.89	5.09	3.98	3. 92	2. 67	1.83	0.09	30 60
1961	0.33	1.02	3.50	2.03	1.10	5.90	3.62	2.79	4. 97	3. 46	3.49	1.27	33 48
1962	1.70	2.25	1.05	2.49	1.49	3.59	2.04	3.57	2. 66	2. 43	2.05	0.62	25 94
1963	0.89	0.72	2.65	1.55	3.02	1.77	3.79	2.06	2. 18	0. 37	1.63	1.07	21 70
1964	1.01	0.24	2.08	3.64	4.05	0.35	4.64	2.55	3. 99	0. 39	1.49	1.36	2! 7
1965	1.78	1.11	3.36	4.01	2.20	2.75	1.70	4.26	6. 91	2. 10	1.94	2.41	34 5
1966	1.40	2.97	2.65	1.54	2.04	1.23	3.78	2.70	0. 76	0. 59	1.92	2.35	23 9
1967	1.90	1.92	1.20	3.77	2.10	4.90	1.47	1.14	1. 60	4. 11	1.82	1.51	2 4
1968	1.19	0.60	0.56	4.10	3.05	6.38	0.98	1.33	2. 42	0. 73	1.21	3.78	20 3
1969	2.61	0.01	1.44	3.11	1.96	5.49	3.57	0.23	2. 01	3. 66	0.80	1.17	20 0
1970	0.67	0.20	1.17	1.47	4.83	1.00	2.02	1.30	6. 17	2. 58	3.21	1.83	2 4
1971	1.40	2.95	1.96	1.28	1.53	1.92	2.23	2.19	1. 95	2. 07	3.15	4.52	2 [.] 1
1972	0.42	0.72	2.20	3.05	2.42	2.25	4.46	5.50	4. 10	2. 83	0.87	2.79	3 6
1973	1.95	1.67	1.89	4.10	6.68	2.31	1.11	3.66	3. 05	3. 57	1.30	3.38	3 6
1974	2.71	1.52	2.05	2.78	3.22	4.13	1.67	2.63	1. 41	1. 42	1.85	2.06	2 4
1975	1.89	2.08	3.77	1.84	2.92	3.25	1.19	10.74	1. 36	0. 24	2.44	1.24	3: 9
1976	2.23	1.62	5.97	3.55	3.24	1.32	2.34	0.93	0. 85	2. 03	0.33	0.40	2- 8
1977	0.69	0.92	5.79	2.44	0.81	3.05	2.23	3.36	3. 19	1. 74	2.66	2.36	2 2
1978	1.74	0.37	0.36	3.29	4.77	3.58	3.57	1.71	6. 74	3. 65	2.42	2.26	3- 4
1979	3.21	1.46	5.36	3.10	2.20	1.90	1.22	2.85	0. 15	2. 36	1.89	1.33	2 [.] 0
1980	1.26	0.70	0.92	3.59	2.25	4.47	2.62	8.29	3. 27	1. 94	1.08	M1. 47	3 8
1981	0.10	2.46	0.47	3.46	0.76	2.94	1.25	4.82	5. 47	1. 86	1.34	1.26	2 1
1982	3.13	0.14	2.08	2.13	4.14	1.85	2.89	3.42	1. 58	2. 13		3.10	2 5
1983	0.98	1.87	2.66	2.96	4.75	2.23	3.27	3.43	4. 38	1. 93	2.66	2.00	3:
1984	0.81	1.33	1.67	3.14	3.30	4.12	2.90	3.70	5. 16	4. 24	2.94	1.46	3- 7
1985	1.44	2.37	2.76	2.77	1.18	1.50	3.68	3.50	3. 49	3. 84	7.01	2.18	3 7
1986	0.77	1.85	1.60	2.25	1.69	5.03	5.82	2.45	11. 29	1. 85	0.83	0.49	3 9
1987	1.19	0.28	1.97	2.32	2.61	1.82	2.43	3.96	4. 81	1. 70	2.81	2.95	2
1988	1.91	0.68	0.72	2.60	0.35	0.85	1.88	2.66	3. 97	3. 18	3.60	1.06	2: 4
1989	0.41	0.73	3.26	0.83	4.42	0.88	2.73	1.33	1. 04	3. 18	1.19	0.65	2 6
1990	1.65	0.82	3.92	1.85	4.04	5.83	2.27	3.15	6. 24	2. 80	2.73	1.49	3
1991	0.48	0.45	2.82	2.93	3.04	1.59	6.02	2.43	1. 82	5. 60	2.42	2.07	3 6
1992	0.86	1.54	2.13	3.52	1.35	1.76	4.15	3.04	4.	1.	4.98	2.47	32

1000				4.00	0.01	7.00	0.00	0.50	84	42			06
1993	2.29	1.21	1.47	4.92	3.01	7.33	3.83	2.50	M3. 88	1. 55		0.54	34. 83
1994	2.41	2.88	1.30	5.12	1.06	2.43	3.75	4.22	2. 87	0. 92	1.94	0.71	29. 61
1995	0.89	0.52	1.43	2.61	2.48	0.38	1.98	5.44	1. 42	3. 63	2.91	1.43	25. 12
1996	2.73	0.97	1.14	3.11	1.23	8.61	2.20	1.46	1. 45	2. 19	0.82	1.42	27. 33
1997	2.58	2.01	2.17	1.85	2.45	4.07	1.64	3.66	1. 28	1. 17	0.37	0.83	24. 08
1998	3.12	1.07	4.95	2.65	1.99	4.73	1.52	5.67	1. 83	2. 58	2.20	0.38	32. 69
1999	M0.90	0.35	0.48	2.88	5.41	5.31	4.44	2.25	2. 41	1. 07	0.71	1.31	27. 52
2000	1.71	1.96	0.91	2.33	5.74	2.09	4.95	3.54	3. 49	1. 33	2.25	2.94	33. 24
2001	0.33	1.82	0.58	3.64	5.00	3.14	1.25	6.50	3. 73	2. 05	1.43	1.22	30. 69
2002	1.33	1.02	2.52	3.85	3.28	5.43	0.85	3.47	1. 76	3. 51	0.94	0.77	28. 73
2003	0.61	0.59	2.16	2.35	4.04	2.50	4.09	1.02	2. 03	1. 26	4.13	1.41	26. 19
2004	1.54	1.61	3.36	2.27	7.70	3.30	2.68	2.02	0. 38	2. 57	2.32	2.38	32. 13
2005	2.41	1.43	M0.92	0.85	M2.11	1.54	3.01	3.38	M1. 55	1. 47	M4. 40	0.58	23. 65
2006	2.20	1.32	2.10	M2.60	6.29	1.93	M6.11	1.59	3.	2.		2.05	34.
2007	1.63	1.98	4.60	2.26	2.54	1.57	3.52	4.54	20 1.	79 3. 21	0.44	2.00	23 29.
2008	2.59	2.68	0.60	5.52	1.11	9.07	3.86	1.00	18 1.	1.	1.37	4.26	47 35.
2009	0.61	M2.14	2.22	3.61	3.62	1.67	1.28	4.89	59 2.	99 5.	1.41	3.06	64 32.
2010	0.67	1.11	0.36	3.94	2.96	7.00	5.54	1.74	67 2.	22 1.	0.79	2.32	40 31.
2011	1.91	1.67	3.29	5.62	2.15	6.35	2.41	1.20	98 3.	63 1.	3.75	1.15	04 33.
2012	1.52	0.68	2.67	3.17	5.25	M3.10	4.39	4.18	06 0.	39 4.	0.55	2.71	95 33.
2013	2.32	3.53	2.16	4.25	2.22	5.08	2.32	1.45	67 2.	18 4.	5.30	1.35	07 36.
2014	1.21	0.80	1.11	5.57	3.95	5.64	1.75	2.69	50 2.	12 4.	1.95	0.93	60 32.
2015	0.43	0.56	0.68	2.71	3.79	3.66	1.43	3.78	39 4.	90 1.	3.55	5.07	89 31.
2016	1.21	0.75	4.00	1.89	1.60	3.95	6.71	3.00	23 3.	99 3.	1.63	2.16	88 33.
2017	2.95	1.45	2.82	4.72	3.61	7.88	3.53	3.17	86 0.	00 3.	1.28	1.44	76 37.
2018	1.99	1.19	0.74	4.00	4.03	5.29	4.71	6.09	91 1.	30 3.	1.10	1.15	06 35.
2019	2.84	2.94	1.57	4.03	4.20	4.36	2.37	4.31	70 5.	50 5.	2.47	3.47	49 43.
2020	1.79	0.92	3.76	2.16	5.59	3.88	6.55	2.61	32 2.	15 4.		0.49	03 37.
2021	1.21	1.08	1.07	1.20	4.23	2.85	7.85	8.66	32 0.	37 2.		1.89	06 34.
2021	0.22					3.98			67	82		1.85	57
		0.81	5.17	2.52	3.11		3.65	3.08	2. 40	1. 15			30. 65
2023	1.40	3.82	3.28	3.39	0.97	1.85	2.46	2.52	0. 71	3. 54		1.74	26. 47
2024	2.15	0.44	2.23	3.52	6.51	5.64	2.67	3.36	0. 51	3. 11	2.96	1.25	34. 35
2025 Notes: Data missing in any month have an "M" flag. A "T"	0.06	1.35	4.02	M0.95									6.38

month have an "M" flag. A "T"

indicates a trace of precipitation. Data missing for all days in a month or year is blank. Creation date: 2025-05-05

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Northcentral an See ERDC/EL TR-12-1; the proponent agency is C	
Project/Site: TR Storage 2024-04348	City/County: Two Rivers/Manitowoc Sampling Date: 04/23/25
Applicant/Owner: Ryan Ross	State: WI Sampling Point: DP-1U
Investigator(s): E. Hack	Section, Township, Range: <u>2, T19N, R24E</u>
Landform (hillside, terrace, etc.): shoreline terrace Local	relief (concave, convex, none): none Slope %: 1
Subregion (LRR or MLRA): LRR K Lat: 44.152011	° Long: <u>-87.582471°</u> Datum: <u>WGS 84</u>
Soil Map Unit Name: Granby Fine Sandy Loam	NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation X , Soil , or Hydrology significantly distu	Irbed? Are "Normal Circumstances" present? Yes No X
Are Vegetation, Soil, or Hydrology naturally problem	
	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X Remarks: (Explain alternative procedures here or in a separate report.)	Is the Sampled Area within a Wetland? Yes No _X If yes, optional Wetland Site ID:
No wetland criteria observed. Partially disturbed area with vegetation mai	ntained and historic fill material in the subsurface.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves	Surface Soil Cracks (B6) (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor	(C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres	
Drift Deposits (B3)Presence of Reduced I	
Algal Mat or Crust (B4) Recent Iron Reduction	
Iron Deposits (B5) Thin Muck Surface (C7 Inundation Visible on Aerial Imagery (B7) Other (Explain in Rema	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
	·
Water Table Present? Yes No X Depth (inches)	:
Saturation Present? Yes No X Depth (inches)	Wetland Hydrology Present? Yes <u>No X</u>
(includes capillary fringe)	revieus increatione) if eveilet les
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p Per the WETS table for Manitowoc County, the preceding three months le conditions.	
Remarks: No wetland hydrology indicators observed.	

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VEGETATION – Use scientific names of plants.

Sampling Point: DP-1U

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species
2.				That Are OBL, FACW, or FAC: 0 (A)
3				Total Number of Dominant
4				Species Across All Strata: 4 (B)
5				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
7.				Prevalence Index worksheet:
		=Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size:15)				OBL species 0 x 1 = 0
1				FACW species 0 x 2 = 0
2.				FAC species $0 \times 3 = 0$
3.				FACU species 6 x 4 = 24
4.				UPL species 2 x 5 = 10
5.	·			Column Totals: 8 (A) 34 (B)
6				Prevalence Index = $B/A = 4.25$
7.			·	Hydrophytic Vegetation Indicators:
···		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
<u>Herb Stratum</u> (Plot size: 5)				2 - Dominance Test is >50%
1. Taraxacum officinale	2	Yes	FACU	$3 - Prevalence Index is < 3.0^{1}$
2. Daucus carota	2	Yes	UPL	4 - Morphological Adaptations ¹ (Provide supporting
		Yes	FACU	data in Remarks or on a separate sheet)
A. Erigeron canadensis	2	Yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
5.		163	FACO	
6				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7				Definitions of Vegetation Strata:
8				-
				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
9				
11.				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
12.				
12.	8 =	=Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:)	0			
· · · · · · · · · · · · · · · · · · ·				Woody vines – All woody vines greater than 3.28 ft in boight
1				height.
2				Hydrophytic
3.				Vegetation
4			·	Present? Yes <u>No X</u>
		=Total Cover		
Remarks: (Include photo numbers here or on a sepal 92 percent bare earth or fill material. No hydrophytic v	,	itaria observer	ı	
92 percent bare earth or nit material. No hydrophytic t	regetation ch		i.	

SOIL

(inches)	Matrix Color (moist)	%	Color (moist)	x Featur %	Type ¹	Loc ²	To	xture		Remar	ke
· / /				/0	Туре						
0 - 12	10YR 2/1	100					Loamy	y/Clayey	1	Fopsoil fine Sa	andy loam
12 - 18	10YR 7/3	98	10YR 5/4	2	С	М	Loamy	y/Clayey	F	ill or broken u	ıp bedrock
	ncentration, D=Depl	etion RM	-Reduced Matrix		ked San	Graine		² Location: PL	-Pore	Lining M-Ma	triv
Hydric Soil I				10-11183	skeu Gant	d Orains.		Indicators fo			
Histosol (A1) Dark Surface (S7)) (LRR K, L, N	
	ipedon (A2)		Polyvalue Belo		ce (S8) (LRR R,	•		• •		(LRR K, L, R)
Black His			MLRA 1498		. , .				e Below Surface (S8) (LRR K, L)		
Hydroger	n Sulfide (A4)		Thin Dark Sur	face (S9) (LRR R	, MLRA [,]	149B)	Thin Dark	Surfac	e (S9) (LRR I	K, L)
	Layers (A5)		High Chroma	-					-) (LRR K, L, R)
	Below Dark Surface	e (A11)	Loamy Mucky			R K, L)					9) (MLRA 149B)
	rk Surface (A12)		Loamy Gleyed		(F2)						tside MLRA 145)
	odic (A17)		Depleted Matr		-6)		•			rk Surface (F2	22)
•	A 144A, 145, 149B) osulfide (A18)		Redox Dark Si Depleted Dark	`	'		•		piain in	Remarks)	
	ucky Mineral (S1)		Redox Depres		` '						
	eyed Matrix (S4)		Marl (F10) (LR		0)			³ Indicat	tors of h	nydrophytic ve	aetation and
	edox (S5)		Red Parent Ma		21) (MLF	RA 145)				rology must b	-
Stripped	Matrix (S6)				, ,			unles	s distu	rbed or proble	matic.
Restrictive L	ayer (if observed):										
Туре:	Roc	k									
Depth (in	ches):	18					Hydrid	c Soil Presen	t?	Yes	<u>No X</u>
Remarks:											
Rock resistar	nce @ 18 inches bgs	. No hydr	ic soil indicators ob	served.	Data colle	ected wit	h John De	eere Drive Aug	ger.		

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Northcentral and North See ERDC/EL TR-12-1; the proponent agency is CECW-C	-	OMB Control #: 0710-0024, Exp: 9/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
Project/Site: TR Storage 2024-04348 City/Cou	nty: Two Rivers	/Manitowoc Sampling Date: 04/23/25
Applicant/Owner: Ryan Ross	-	State: WI Sampling Point: DP-2U
	Section Towns	hip, Range: 2, T19N, R24E
		one): <u>none</u> Slope %: 0
	Long: <u>-87</u>	
Soil Map Unit Name: Granby Fine Sandy Loam		NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X	No (If no, explain in Remarks.)
Are Vegetation X , Soil , or Hydrology significantly disturbed?	Are "Normal (Circumstances" present? Yes No _ X
Are Vegetation, Soil, or Hydrologynaturally problematic?	(If needed, ex	plain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling p	oint locatio	ns, transects, important features, etc.
Hydric Soil Present? Yes No X within	Sampled Area a Wetland? optional Wetlan	Yes No _X d Site ID:
No wetland criteria observed. Data collected in maintained lawn area.		
HYDROLOGY		
Wetland Hydrology Indicators:	Se	condary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)		Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)		Moss Trim Lines (B16)
Saturation (A3)Marl Deposits (B15)		Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)		Crayfish Burrows (C8)
Sediment Deposits (B2)Oxidized Rhizospheres on Living	Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4)		Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Second Se	bils (C6)	Geomorphic Position (D2) Shallow Aquitard (D3)
Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)		Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No X Depth (inches):		
Water Table Present? Yes No X Depth (inches):		
Saturation Present? Yes No X Depth (inches):	Wetland H	ydrology Present? Yes No X
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous ins Per the WETS table for Manitowoc County, the preceding three months leading up t conditions.	. ,	
Remarks:		
No wetland hydrology indicators observed.		

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VEGETATION – Use scientific names of plants.

Sampling Point: DP-2U

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That Are OBL, FACW, or FAC: 0 (A)
3				Total Number of Dominant
4				Species Across All Strata: 1 (B)
5.				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: 0.0% (A/B)
7.				Prevalence Index worksheet:
		=Total Cover	·	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15)				OBL species 0 $x 1 = 0$
1,				FACW species $0 x 2 = 0$
2.				FAC species $0 \times 3 = 0$
				FACU species $100 \times 4 = 400$
3				$\frac{1}{100} \frac{1}{100} \frac{1}$
5.				
				Column Totals: 100 (A) 400 (B) Prevalence Index = $B/A = 4.00$
6.				
7				Hydrophytic Vegetation Indicators:
		=Total Cover		1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5)				2 - Dominance Test is >50%
1. <u>Poa pratensis</u>	95	Yes	FACU	3 - Prevalence Index is ≤3.0 ¹
2. <u>Hypochaeris radicata</u>	3	No	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
3. <u>Fragaria virginiana</u>	2	No	FACU	
4				Problematic Hydrophytic Vegetation ¹ (Explain)
5				¹ Indicators of hydric soil and wetland hydrology must
6				be present, unless disturbed or problematic.
7				Definitions of Vegetation Strata:
8				Tree – Woody plants 3 in. (7.6 cm) or more in
9				diameter at breast height (DBH), regardless of height.
10				Sapling/shrub – Woody plants less than 3 in. DBH
11				and greater than or equal to 3.28 ft (1 m) tall.
12				Herb – All herbaceous (non-woody) plants, regardless
	100	=Total Cover		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:)				Woody vines – All woody vines greater than 3.28 ft in
1				height.
2.				
3.				Hydrophytic
4.				Vegetation Present? Yes No X
		=Total Cover		
Remarks: (Include photo numbers here or on a sepa				1
No hydrophytic vegetation criteria observed.				

	Color (moist)	%	Color (moist)	k Featur %	Type ¹	Loc ²	Texture	Rema	rks
0 - 12	10YR 2/2	100					Loamy/Clayey	Sandy L	.oam
12 - 24	10YR 4/3	100					Loamy/Clayey	Sandy L	
								,	
		·							
		<u> </u>							
	ncentration, D=Dep	letion, RM	=Reduced Matrix, N	IS=Mas	ked Sano	d Grains.	² Location: PL=Po		
Hydric Soil Ir Histosol (Dark Surface (S7)			Indicators for Pro	blematic Hydr 10) (LRR K, L, I	
	pedon (A2)		Polyvalue Belo	'	ce (S8) (LRR R,		eat or Peat (S3	
Black His					. , .	,		ow Surface (S8)	
Hydrogen	Sulfide (A4)		Thin Dark Surf	ace (S9) (LRR R	, MLRA 1	149B) Thin Dark Sur	face (S9) (LRR	K, L)
Stratified	Layers (A5)		High Chroma S	Sands (S	611) (LRI	R K, L)	Iron-Mangane	se Masses (F12	2) (LRR K, L, R)
Depleted	Below Dark Surface	e (A11)	Loamy Mucky	Mineral	(F1) (LR	R K, L)	Piedmont Floo	odplain Soils (F1	19) (MLRA 149B
Thick Dar	k Surface (A12)		Loamy Gleyed	Matrix (F2)		Red Parent M	aterial (F21) (οι	utside MLRA 14
	odic (A17)		Depleted Matri					Dark Surface (F	22)
	A 144A, 145, 149B)		Redox Dark Su	`	,		Other (Explain	i in Remarks)	
	osulfide (A18)		Depleted Dark		()				
	ucky Mineral (S1)		Redox Depress		8)		3	.	
	eyed Matrix (S4)		Marl (F10) (LR					of hydrophytic ve	-
Sandy Re Stripped I	edox (S5) Matrix (S6)		Red Parent Ma	iterial (F	21) (MLF	RA 145)		ydrology must b sturbed or proble	•
	ayer (if observed):								
Туре:									
Donth (in	ches):						Hydric Soil Present?	Yes	<u>No X</u>

Site Photographs April 23, 2025 #2024-04348



Photograph 1: View facing northwest towards the project review area and DP-1U location.



Photograph 2: General view of Data Plot – 1 Upland (DP-1U) location.



Photograph 3: General view of DP-1U soil pit and rock encountered at 18 inches below ground surface.



Photograph 4: Facing west towards DP-1U location.



Photograph 5: General view of Data Plot – 2 Upland (DP-2U) soil profile. Pit dug with John Deere Drive Auger.



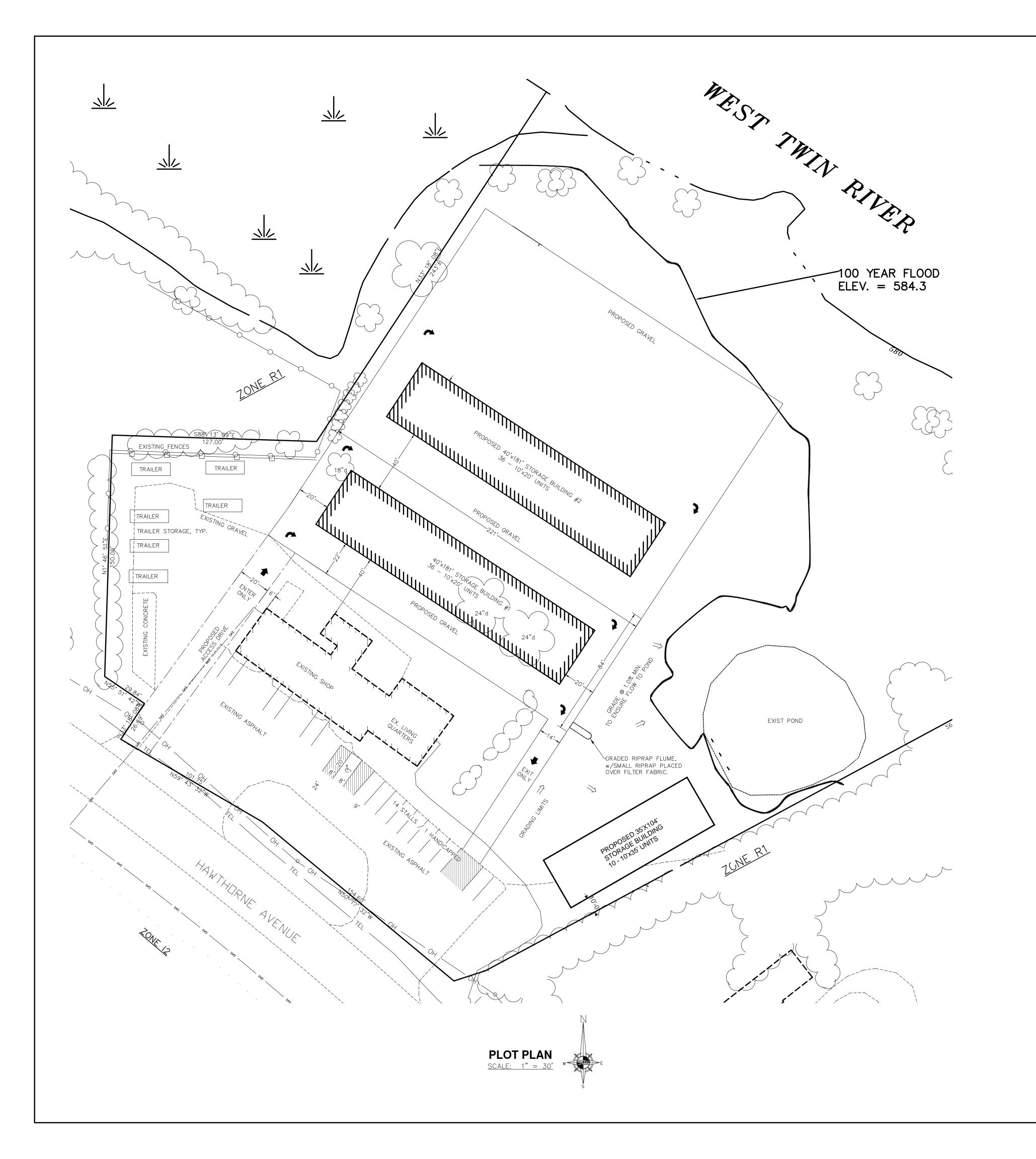
Photograph 6: Facing northeast towards the West Twin River shoreline and spoil piles.



Photograph 7: Facing northeast towards West Twin River shoreline located approximately 110 feet north/east of the project review area.



Photograph 8: Facing south/southwest towards offsite pond associated with state general permit # GP-NE-2009-36-03869.



<u>a. snow loads</u> Ground Snow Load, Pg = 35 psf Exposure Factor, Ce = 1.0 Thermal Factor, Ct = 1.2 Unheated Importance Factor, I = 1.0 Slope Factor, Cs = 1.0 pf = 0.7*1.0*1.2*1.0*35 = 29.4 psf balanced snow <u>b. wind loads</u> V3s = 115 MPH (ult), 90 MPH (asd) Exposure = C Mean h = 11' (<60' and < least horizontal dimension) theta = 4° < 30° USE SIMPLIFIED PROVISIONS FOR WIND DESIGN MAX HORIZ WIND LOAD = 19.5 PSF MAX UPLIFT WIND LOAD = 18.6 PSF <u>C. SEISMIC LOADS</u> Use Group – I Importance Factor, le = 1.0 Site Class = D Short Period Response, Sds < 0.15g 1 Second Response, Sd1 < 0.04g Seismic Design Category = A STRUCTURAL NOTES SOIL BEARING 2,000 PSF PRESUMED (SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL, CLAYEY GRAVEL) IF ACTUAL CONDITIONS DIFFER FROM ABOVE, CONTACT ENGINEER. SLABS AND EXPOSED CONCRETE – 4000 PSI MIN. IN 28 DAYS, w/ FIBERMESH REBAR – ASTM A615, GR 60, DETAILING, FABRICATION, AND INSTALLATION PER ACI. CONCRETE

> SPRUCE-PINE-FIR #2 OR BETTER UNLESS NOTED OTHERWISE WOOD TO BE PRESSURE TREATED IF IN CONTACT WITH CONCRETE OR MOISTURE

LUMBER

1. ALL WORK SHALL COMPLY WITH ALL STATE AND LOCAL CODES 2. CLASS OF CONSTRUCTION - TYPE VB - COMBUSTIBLE CONSTRUCTION 3. BUILDING OCCUPANCY – S1 – MODERATE HAZARD STORAGE

DESIGN LOADS

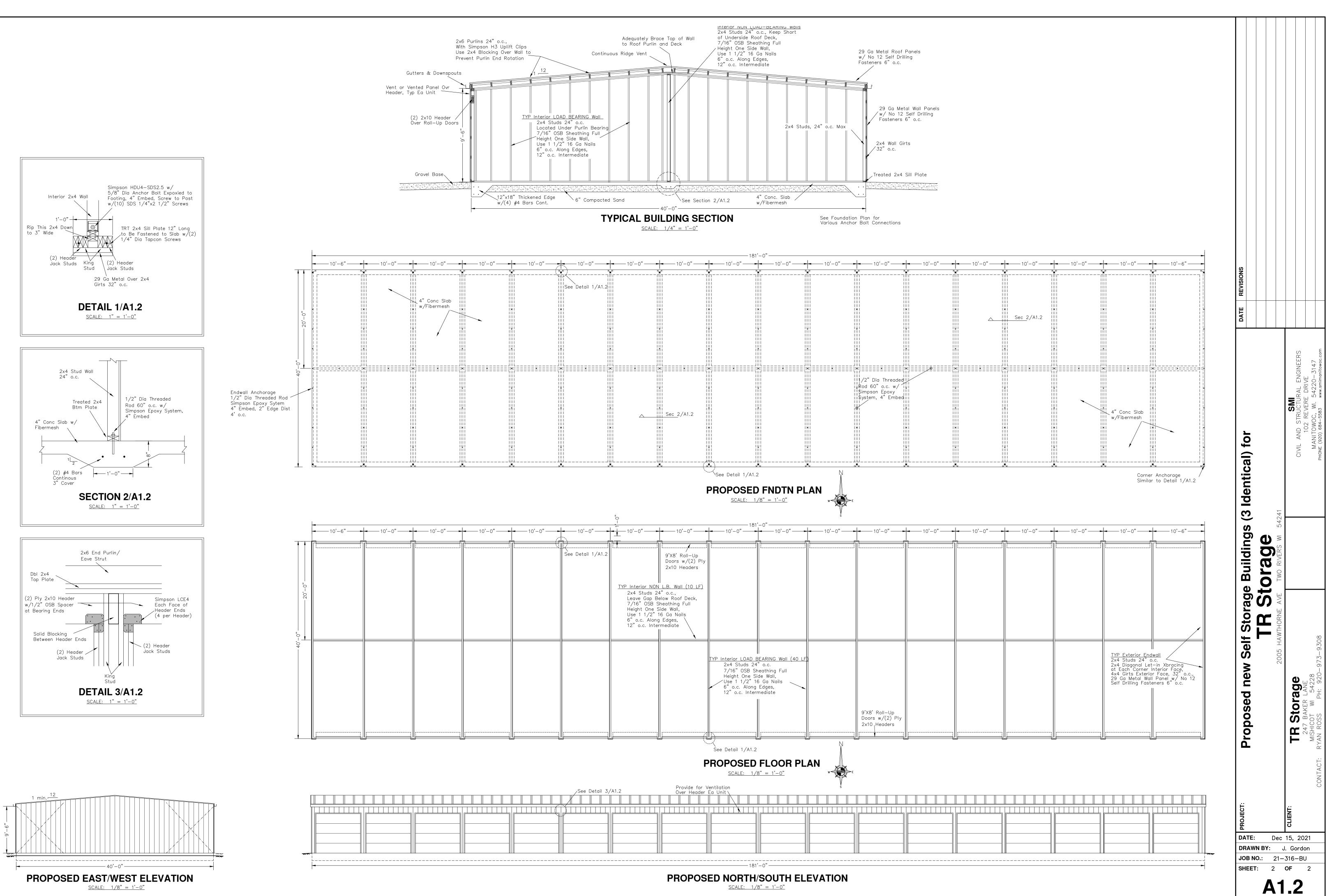
GENERAL PROJECT NOTES

INDEX OF SHEETS

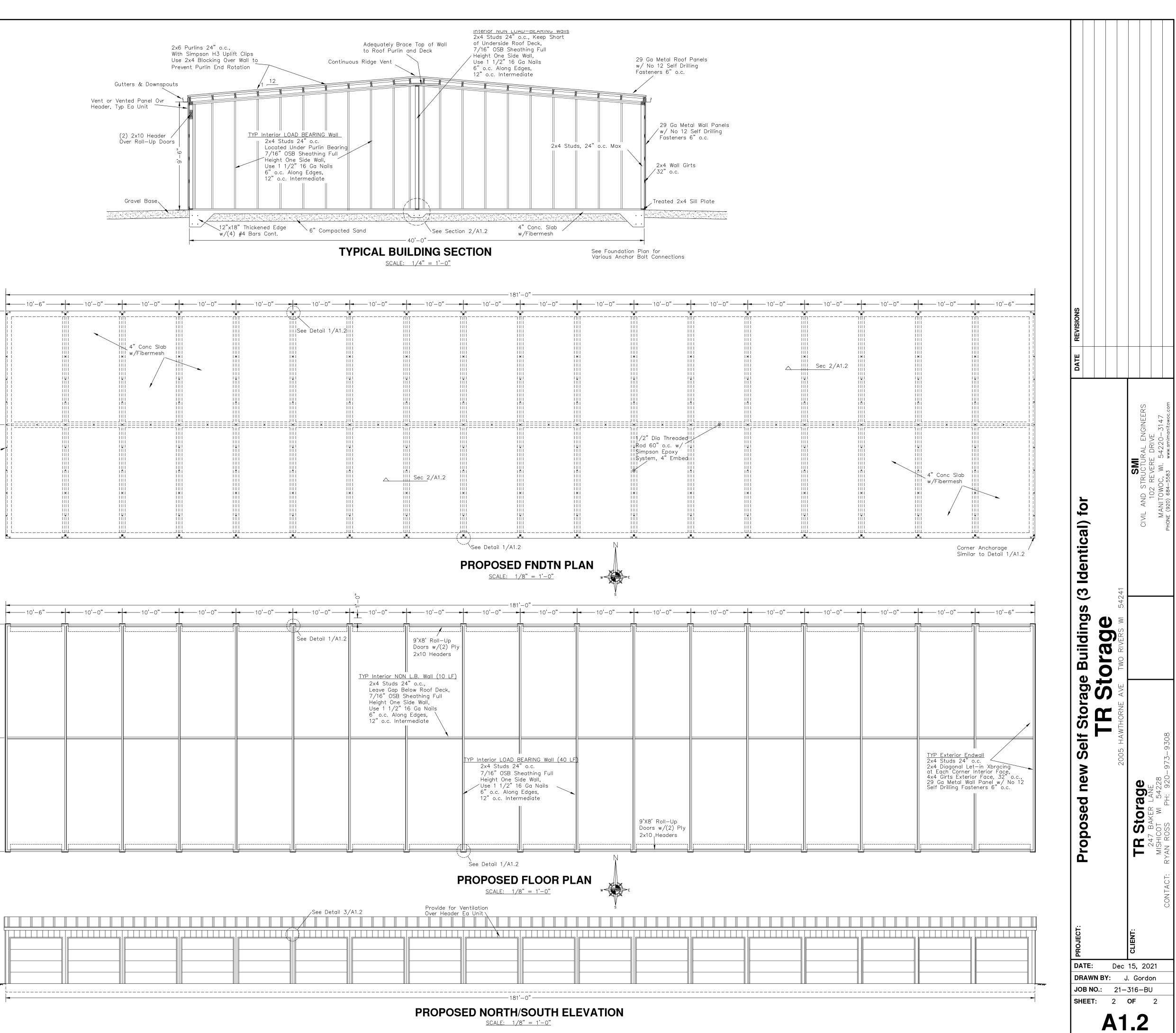
PROJECT/STRUCTURAL NOTES

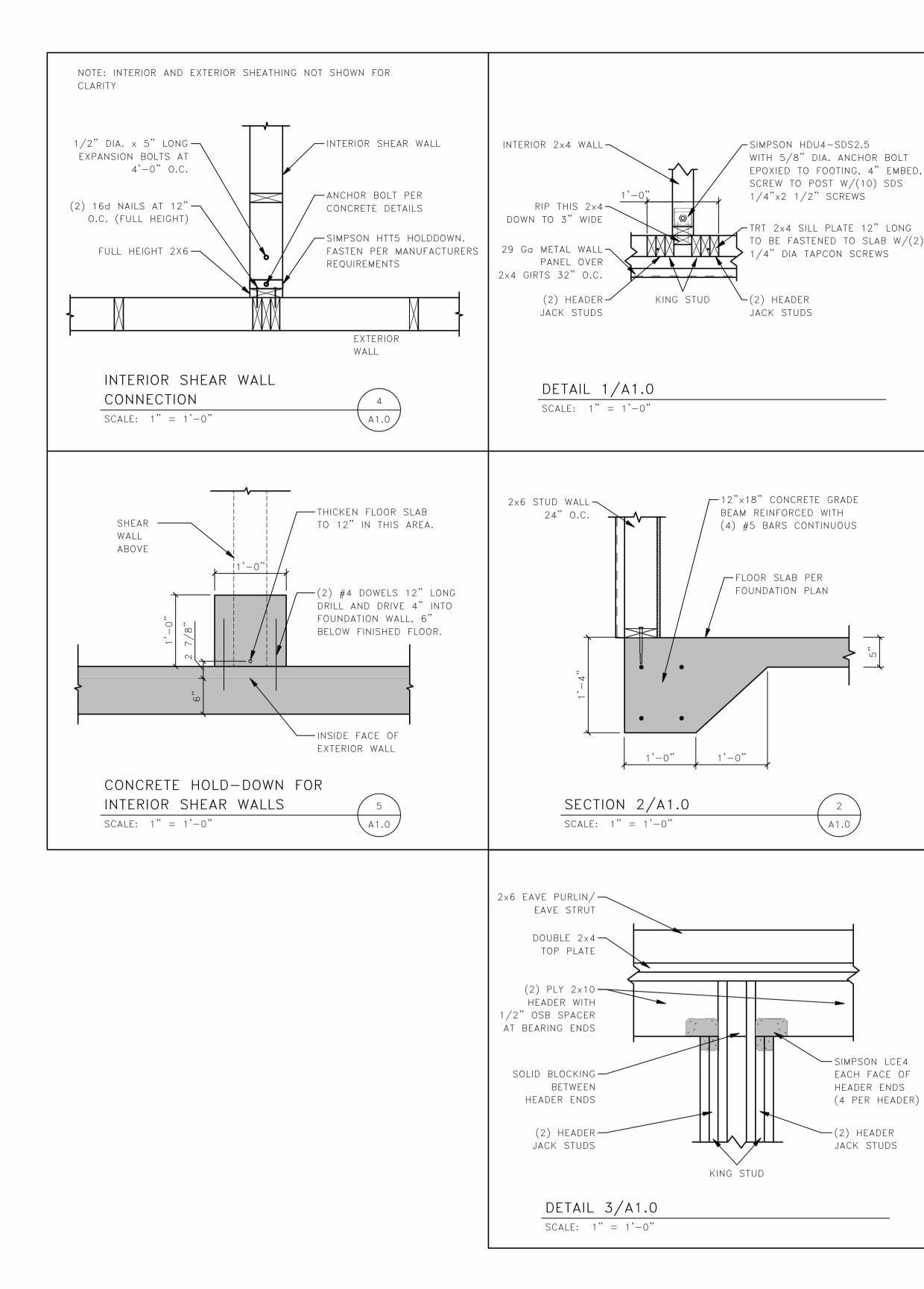
SHEET A1.1

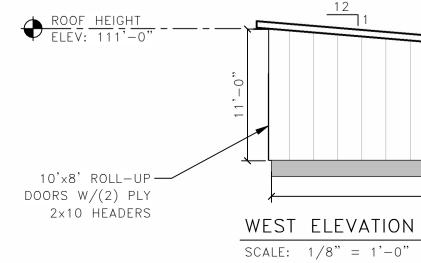
DATE REVISIONS							
Buildings (3 Identical) for		TR Storage	2005 HAWTHORNE AVE TWO RIVERS WI 54241	_			
Ect: Dronced new Salf Storade Ruildings /3			2005 HAWTHORNE AVE			MISHICOT WI 54228	CONTACT: RYAN ROSS PH: 920-973-9308
	AW B N(:	 1		1		

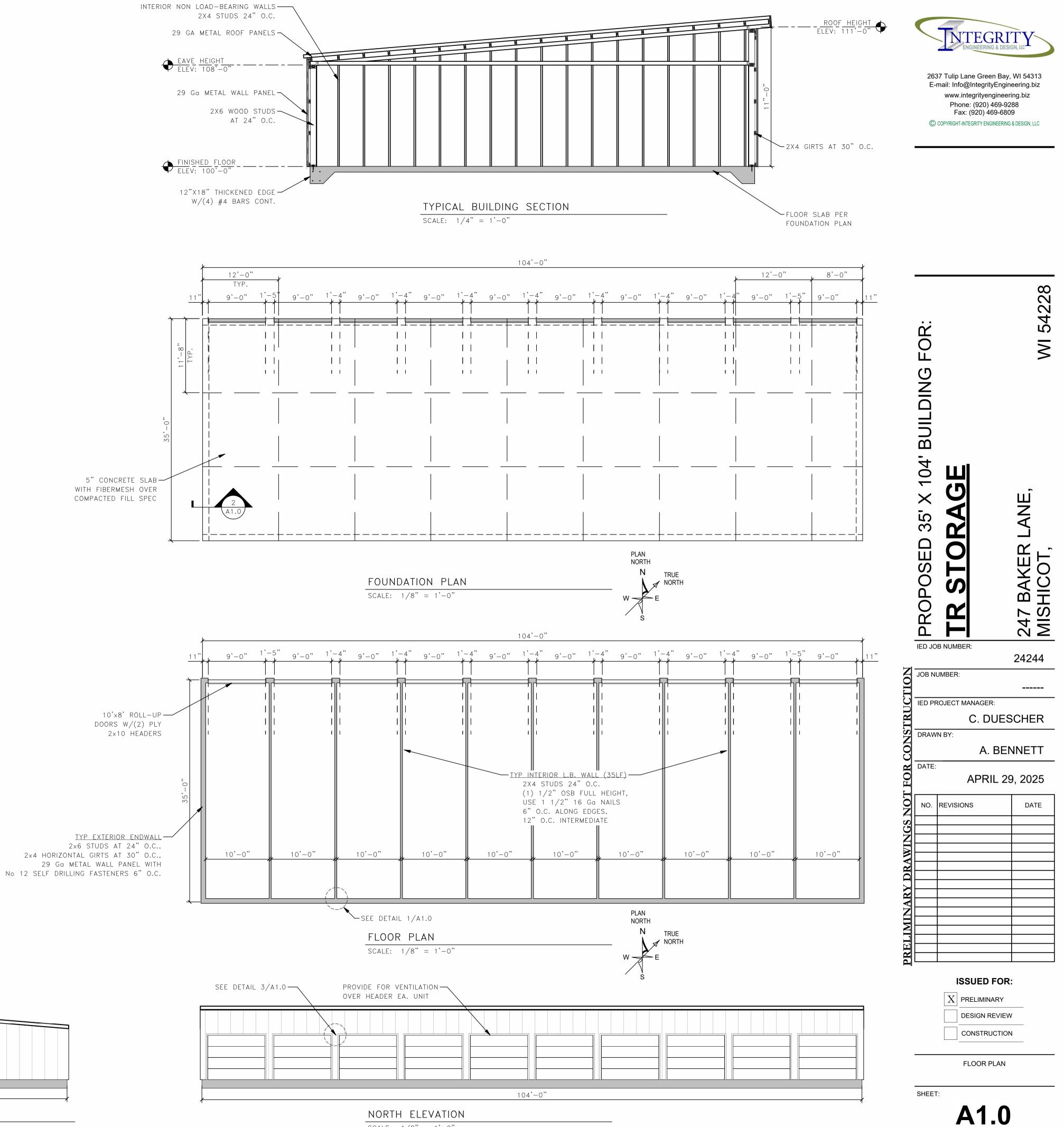












NORTH ELEVATION SCALE: 1/8" = 1'-0"

35'-0"