



FRANKLIN CITY HALL CHAMBERS
9229 W. LOOMIS ROAD
FRANKLIN, WISCONSIN

PLAN COMMISSION MEETING AGENDA
Thursday, July 17, 2025 at 6:00 P.M.

A. Call to Order and Roll Call

B. Approval of Minutes

Approval of the regular meeting of June 19, 2025.

C. Public Hearing Business Matters.

1. **Minor site plans review standards in Planned Development District (PDD) No. 7, Major PDD Amendment.** The City of Franklin proposes to amend the text of the Planned Development District No. 7 Ordinance to streamline the site plan approval process in the Franklin Industrial Park (PDD No. 7) by allowing and adding standards for administrative review of minor site plans by Department of City Development staff exclusively.
2. **CarGet LLC, Conditional Use.** Request to approve a resolution imposing conditions and restrictions for a Conditional Use for CarGet LLC, a used car sales and major automotive repair facility upon property located at the Northwest Corner of Forest Home Avenue and Rawson Avenue (TKN 748 9990 000).
3. **Franklin High School, Natural Resource Special Exception.** Natural Resource Special Exception (NRSE) for proposed impacts and disturbance of approximately 0.65 acres of wetland, 2.11 acres of wetland buffer, 1.41 acres of wetland setback, and 8.18 acres of woodland to allow for the construction of a building addition, a concession building, parking lot and drive additions, tennis courts, and soccer field at Franklin High School located at 8222 South 51st Street (Tax Key No. 807 9999 001).

D. Citizen comment period. Citizens may comment upon the Business Matter items set forth on this Meeting Agenda.

E. Business Matters

1. **ROC Ventures LLC, Site Plan Amendment.** Request to allow two container structures as concession stands at Franklin Field Stadium located at 7035 S Ballpark Drive.
2. **CARMA Laboratories Inc., Sign Review.** Request for a second monument sign on the 76th St. frontage of Carma Labs located at 9410 S. 76th St.

F. Adjournment

The YouTube channel "City of Franklin WI" will live stream the Plan Commission meeting so the public can watch and listen to it at <https://www.youtube.com/c/CityofFranklinWIGov>. Any questions on this agenda may be directed to the Department of City Development's office at 414-425-4024, Monday through Friday, 8 AM – 4:30 PM.

*Supporting documentation and details of these agenda items are available at City Hall during regular business hours.

**Notice is given that a majority of the Common Council may attend this meeting to gather information about an agenda item over which they have decision-making responsibility. This may constitute a meeting of the Common Council per *State ex rel. Badke v. Greendale Village Board*, even though the Common Council will not take formal action at this meeting.

[Note: Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information, contact the City Clerk's office at 414- 425-7500.]

REMINDERS: Next Regular Plan Commission Meeting: August 7, 2025.

City of Franklin
Plan Commission Meeting
June 19, 2025
Minutes

unapproved

A. Call to Order and Roll Call

Mayor John Nelson called the June 19, 2025 Plan Commission meeting to order at 6:00 p.m. in the Council Chambers at Franklin City Hall, 9229 West Loomis Road, Franklin, Wisconsin.

Present were Mayor John Nelson, Alderman Nabil Salous and Commissioners Kevin Haley, Patrick Leon and Michael Shawgo. Excused was Commissioner Rebecca Specht and Alderwoman Courtney Day. Also present were City Attorney Jesse Wesolowski, Planning Manager Regulo Martinez-Montilva and Director of Administration Kelly Hersh.

B. Approval of Minutes – Regular Meeting of June 5, 2025.

Commissioner Haley moved and Commissioner Shawgo seconded a motion to approve the June 5, 2025 meeting minutes. On voice vote, all voted ‘aye’; motion carried (4-0-2).

C. Public Hearing Business Matters

- 1. Minor site plans review standards in Planned Development District (PDD) No. 7, Major PDD Amendment.** The City of Franklin proposes to amend the text of the Planned Development District No. 7 Ordinance to streamline the site plan approval process in the Franklin Industrial Park (PDD No. 7) by allowing and adding standards for administrative review of minor site plans by Department of City Development staff.

Tabled to the July 17, 2025 meeting.

- D. Citizen comment period.** Citizens may comment upon the Business Matter items set forth on this meeting agenda.

The citizen comment period opened at 6:02 p.m. and closed at 6:02 p.m.

E. Business Matters

- 1. Rosen Automotive, Temporary Use Amendment.** Request to change dates for a tent auto sale event, August 13th through the 16th upon property located at 7016 S Ballpark Drive.

Planning Manager Martinez-Montilva presented the Temporary Use Amendment request.

Commissioner Leon moved and Commissioner Haley seconded motion to adopt a resolution to amend resolution No. 2025-016 to change dates of a Temporary Use for Rosen Automotive tent sale upon property located at 7016 S. Ballpark Drive. On voice vote, all voted ‘aye’; motion carried (4-0-2).

F. Adjournment

Commissioner Leon moved and Commissioner Haley seconded to adjourn the meeting at 6:04 pm. On voice vote, all voted ‘aye’; motion carried (4-0-2).



REPORT TO THE PLAN COMMISSION

Meeting of July 17th, 2025

Major Amendment to Planned Development District No. 7

RECOMMENDATION: City Development Staff recommends approval of Option 2 of this Planned Development District amendment to allow for administrative review of minor site plan amendments in the Franklin Industrial Park

Project Name:	Administrative review for Minor Site Plans in the Franklin Industrial Park
Location:	Franklin Industrial Park (Planned Development District No. 7)
Applicant:	City of Franklin, City Development Department
Zoning:	Planned Development District No. 7
2025 Comprehensive Plan:	Commercial
Action Requested:	Recommendation to the Common Council for approval of this Major Amendment to Planned Development District No. 7.
Planner:	Luke Hamill, Associate Planner

In order to streamline the minor site plan approval process in the Franklin Industrial Park, City Development Department staff is proposing an ordinance to allow for administrative review of Minor Site Plan Amendments by this department, without the prerequisite of an additional review and approval by the Economic Development Commission (EDC).

The current review and approval process for a minor amendment to site plans in the Franklin Industrial Park is as follows:

- Review by City Development staff of a Site Plan Amendment application, and approval by the EDC in a regular meeting.

Currently, the Unified Development Ordinance allows for administrative approval for Minor Site Plan Amendments for non-PDD zoning. The current UDO defines a minor site plan amendment as follows:

Any minor amendment is an amendment(s) which is supported by an application request due to a reasonable and bona fide change in circumstances occurring since the prior approval, and which does not: i) significantly alter the character, functionality, safety, or appearance of the development; ii) result in a significant decrease in the amount or quality of the approved amenities; iii) result in significant changes in architectural styles, colors or building materials that are inconsistent with the approved Site Plan; iv) result in changes to such items as a phasing plan or developer control, that substantially impact the development or development in the area; or v) result in any amendment that would modify any aspect or portion of an adopted Site Plan for which a specific condition was retained or added from input at a public hearing or other public input of record by the Plan Commission and/or the Common Council.

This definition is vague and does not give any sort of statistical definition for what is a Minor Site Plan Amendment and what is a major Site Plan Amendment.

However, even that vague definition is not in the current PDD 7 ordinances and there is no mention of a Minor Site Plan Amendment. Any slight change to a lot within PDD 7 requires the submittal of a Site Plan application that needs to be reviewed by EDC, which only meets once a month, which can delay very minor projects that do not significantly alter the use or architectural styles of a property and is an inefficient use of EDC members and staffs time. Therefore, City Development Staff is recommending that standards for Minor Site Plan Amendments that is approved by staff within PDD 7 be enacted. City Development Staff has brought two options for the Plan Commission to consider:

Option 1: Approve an Ordinance that enacts Minor Site Plan Amendments with the current language of the UDO, which is provided earlier in the document. City Development Staff does not recommend this option, as the definitions are vague and there is gray area on which is a Major Site Plan and which is a Minor Site Plan Amendment.

Option 2: This option would be to approve an ordinance that would enact the definitions for Minor Site Plan Amendments that are currently proposed within the Draft UDO, which is part of the larger UDO rewrite project. The definitions are as follows:

Major Amendment. A major amendment is an amendment which results in one of the following:

- 1. A change of five (5) percent or more of the structures' floor area.**
- 2. An increase in the off-street parking located on site.**

Minor Amendment. A Minor Site Plan amendment is any change that does not qualify as a major site plan amendment per Section above.

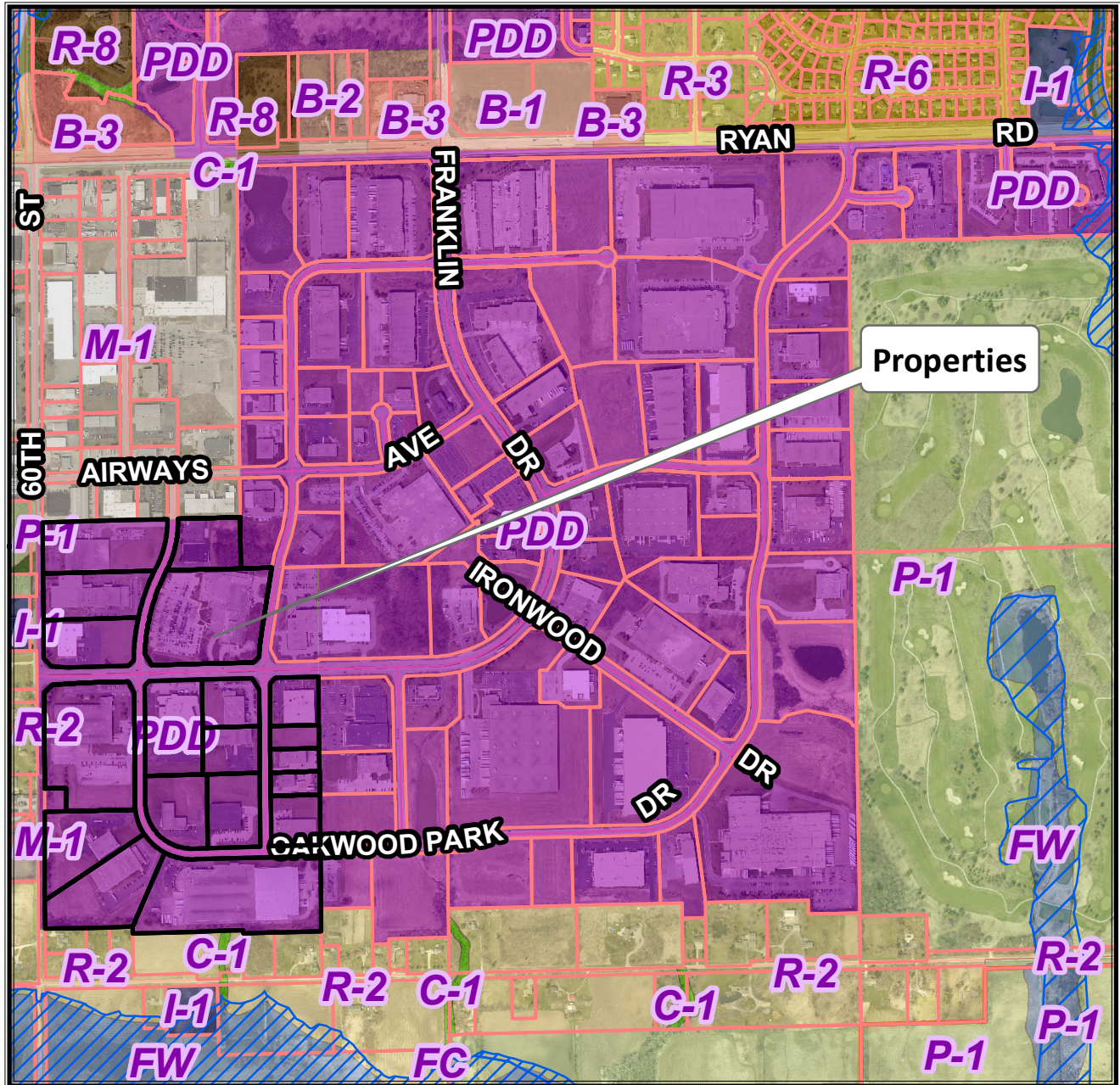
This would make a Minor Amendment any changes to a site that is 1) less than 5 percent change in a structures area, and 2) no increase in off-street parking.

This gives a much more concrete and less vague definition of what is a Minor Site Plan than Option 1. City Development Staff recommends Option 2 be adopted.

RECOMMENDATION

A motion to determine the proposed amendment to Planned Development District No. 7 to be a major amendment.

A motion to recommend approval of Option 2 of this Planned Development District Amendment.



Planning Department
(414) 425-4024

0 600 1,200 2,400 Feet

This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.



ORDINANCE NO. 2025-_____

AN ORDINANCE TO AMEND PLANNED DEVELOPMENT DISTRICT NO. 7
AS IT PERTAINS TO THE APPROVAL OF MINOR SITE PLAN AMENDMENTS
BY DEPARTMENT OF CITY DEVELOPMENT STAFF

WHEREAS, §15-3.0412 of the Unified Development Ordinance provides for and regulates Planned Development District No. 7 (Franklin Industrial Park), same having been created by Ordinance No. 85-0864 and later amended by Ordinance No. 2015-2196; and

WHEREAS, said Planned Development District having previously been part of the Zoning Ordinance No. 221, as Section 13.10, same having later been incorporated into the City of Franklin Unified Development Ordinance as Section 15-3.0412, as it is currently codified; and

WHEREAS, Subsection (3) of Planned Development District No. 07 provides that No building or improvement shall be erected, placed or altered on any lot in the Planned Development District No. 7 until the plans for such buildings or improvement, including site plan, landscape plan, and building plan and specifications have been approved by the Industrial Development Commission (now Economic Development Commission; “EDC”); and

WHEREAS, the Unified Development Ordinance Section 15-7.0107 requires a Minor Site Plan Amendment for any reasonable and bona fide change in circumstances occurring since the prior approval, and which does not: i) significantly alter the character, functionality, safety, or appearance of the development; ii) result in a significant decrease in the amount or quality of the approved amenities; iii) result in significant changes in architectural styles, colors or building materials that are inconsistent with the approved Site Plan; iv) result in changes to such items as a phasing plan or developer control, that substantially impact the development or development in the area; or v) result in any amendment that would modify any aspect or portion of an adopted Site Plan for which a specific condition was retained or added from input at a public hearing or other public input of record by the Plan Commission and/or the Common Council. in the City of Franklin, and Ordinance No. 85-0864 requires approval by the EDC as a prerequisite to site plan approvals in the Franklin Business Park; and

WHEREAS, the EDC having reviewed the site plan approvals administered pursuant to Planned Development District No. 7 and the administrative process established by the Unified Development Ordinance whereby minor site plan amendments are issued as an administrative function of the Planning Manager or the Department of City Development for all minor site plans within the City and having determined that the efficient administration of the Franklin Business Park would be further served by the

approval of minor site plan amendments by the Department of City Development in the Franklin Business Park; and

WHEREAS, the subject petition was before the Economic Development Commission on the 23rd day of January, 2025, the Commission having recommended approval thereof to the Common Council; and

WHEREAS, a public hearing was held before the City of Franklin Plan Commission on the 23rd day of January, 2025, and the Plan Commission having reviewed the proposed amendment to Planned Development District No. 7 after hearing the public and having made its recommendations to the Common Council.

NOW, THEREFORE, the Mayor and Common Council of the City of Franklin, Wisconsin, do ordain as follows:

SECTION 1: § 15-3.0423(3), entitled "Submission of Plans", of the Unified Development Ordinance of the City of Franklin, be and the same is hereby amended to read as follows *[note: deletions appear in strike-through text; additions appear in underlined text; unchanged text is not highlighted]*:

No building or improvement shall be erected, placed or altered on any lot in the Planned Development District No. 7 until the plans for such buildings or improvement, including site plan, landscape plan, and building plan and specifications have been approved by the ~~Industrial~~ Economic Development Commission; and excepting that the review and approval of Minor Site Plan Amendments, herein defined as 1) A change of less than 5% of the structures' floor area, and 2) no increase in the off-street parking located on site; shall be carried out by the City of Franklin Department of City Development, pursuant to Unified Development Ordinance §15-7.0107. Said Commission, shall review and approve, approve conditionally, or disapprove such major site plans with respect to conformity with these and other applicable enactments of the City, and with respect to harmony of external design and land use as it affects property within and adjacent to Planned Development District No. 7. Said Department of City Development, shall review and approve, approve conditionally, or disapprove such minor site plan amendments with respect to conformity with these and other applicable enactments of the City, and with respect to harmony of external design and land use as it affects property within and adjacent to Planned Development District No. 7. Failure of the aforesaid Commission or Department of City Development to act upon such building or improvement plans within 60 days after submission to the City of Franklin, City Clerk, shall be deemed to constitute approval of such plans.

SECTION 2: The terms and provisions of this ordinance are severable. Should any term or provision of this ordinance be found to be invalid by a court of competent jurisdiction, the remaining terms and provisions shall remain in full force and effect.

SECTION 3: All ordinances and parts of ordinances in contravention to this ordinance are hereby repealed.

SECTION 4: This ordinance shall take effect and be in force from and after its passage and publication.

Introduced at a regular meeting of the Common Council of the City of Franklin this 4th day of February, 2025.

Passed and adopted at a regular meeting of the Common Council of the City of Franklin this 4th day of February, 2025.

APPROVED:

John R. Nelson, Mayor

ATTEST:

Shirley J. Roberts, City Clerk

AYES ___ NOES ___ ABSENT ___



CITY OF FRANKLIN
REPORT TO THE PLAN COMMISSION

Item C.2.

Meeting of July 17, 2025

Conditional Use

RECOMMENDATION: City Development staff recommends approval of this conditional use request for a used car sales and automotive repair facility, under Vehicle Related Uses Titles “Auto Sales/Rental and Service” & “Major Automotive Repair”, which is a conditional use in the B-G General Business District.

Project name:	CarGet LLC, Conditional Use
Property Owner:	Fellin, James J & Roseann Revocable Living Trust
Applicant:	CarGet LLC
Agent:	Emad Nadi, PE, ETN Engineering
Property Address/TKN:	0 W Forest Home Avenue (NW Corner of Rawson and Forest Home) / 748 9990 000
Aldermanic District:	District 6
Zoning District:	B-G – General Business District
Staff Planner:	Luke Hamill, Associate Planner
Application number:	PPZ25-0118

INTRODUCTION:

Conditional Use request to allow for a used car sales and automotive repair facility under Vehicle Related Use Titles “Vehicle Sales/Rental and Service” & “Major Automotive Repair” , which is considered a conditional use in the B-G General Business District.

PROJECT ANALYSIS:

Vehicle Sales and Major Automotive Repair requires a conditional use permit in the B-G Zoning District. The applicant will need full Site Plan approval, and the attached plans are a concept. This application is only for approval of the use of the property.

The definitions for the above use titles are defined in the Unified Development Ordinance as follows:

Auto Sales/Rental and Service:

An open area, other than a street, used for the display or sale of new or used automobiles for sale or rental, and where no minor repair work is done such as the incidental repair of automobiles to be displayed and sold on the premises.

Automotive Repair, Major:

Engine rebuilding or major reconditioning of worn or damaged motor vehicles or trailers; collision service, including body frame or fender straightening or repair; and painting of vehicles

There is also Minor Automotive Repair, which is a permitted use within the B-G district. To exemplify the difference between Major and Minor Auto Repair, the definition for minor repair is below:

Automotive Repair, Minor:

Incidental repairs, replacement of parts, and motor service to automobiles but not including any operations specified under Automotive Repair, Major.

In the new Unified Development Ordinance, Auto Sales/Rental and Service and Major Automotive Repair have specific standards for their uses. The applicant will need to comply with these standards and their Site Plan Application review will include these standards as part of the Site Plan Approval.

The applicant is proposing hours of operation from Monday through Saturday, from 9:00 AM to 7:00 PM. There will be two employees for the service area, and two employees for the car sales section of the business.

General standards for Special Uses (§15-3.0701)

Summary of Standard	Staff's Finding
1. <i>Ordinance and Comprehensive Master Plan purposes and intent.</i>	The proposed used car sales and auto repair facility is consistent with the comprehensive plan as this site is designated as commercial in the future land use map of the <i>City of Franklin 2025 Comprehensive Master Plan</i> .
2. <i>No Undue Adverse Impact.</i>	<p>City Development staff does not anticipate “undue adverse impact” to adjacent properties as the specific use requirements for car sales and automotive repair in the UDO requires specific mitigation, such as proper drainage, containment of runoff, location of service bays, repair activities being within an enclosed building, and storage of vehicles to be repaired stored in the building or an enclosed screened yard.</p> <p>However, the applicant will need to show that the development will abide by these specific use standards with a Site Plan Application to city staff.</p>
3. <i>Compatibility with Surrounding Development.</i>	This site is zoned B-G, General Business District. The zoning to the North is undeveloped land that is owned by Milwaukee County and zoned B-G. The property to the west is also zoned B-G and currently occupied by a legal services company. The property to the east, across Forest Home Avenue is also zoned B-G and currently undeveloped. The property to the northeast is zoned LI – Limited Industrial and is used for outdoor storage. The property to the south across Rawson Avenue is zoned P – Parks District. The Engineering Department of the City of Franklin did not have any issues concerning the parks property and the proposed use.

Summary of Standard	Staff's Finding
	<p>There is residential homes to the southeast of the property, with the closest residential structure being approximately 232 feet away from the closest property line. There is dense evergreen plantings between this structure and the subject property. There is also residential zoning to the northwest, past the legal services company's property, with the closest home being 200 feet away from the property. <i>Staff recommends that when the applicant submits their landscape plan, that they place most of their plantings between the residential areas and the property.</i> This will help mitigate noise and light from the residential areas. In staff's opinion, the proposed auto sales is compatible with the use and development of surrounding properties.</p>
<p>4. Adequate Public Facilities.</p>	<p>The proposed development has access to water facilities from Forest Home Avenue and Sanitary Sewer Facilities from both Rawson and Forest Home. The applicant is also proposing a stormwater detention pond in the northwest corner of the property.</p>
<p>5. Adequate Circulation.</p>	<p>The applicant will need to obtain permits for access to Rawson Avenue from Milwaukee County. The applicant is not proposing access to Forest Home Avenue as the access would need to go through wetlands, which are a protected natural resource. The current concept site plan seems to have adequate circulation in the property. However, the applicant will also need a full Site Plan approval, showing adequate circulation and proper drive widths.</p>
<p>6. No Destruction of Significant Features.</p>	<p>There is currently wetland on the northeast side of the property. The current concept site plan shows that the improvements to the property will be outside of the wetland and wetland buffer areas.</p>
<p>7. Compliance with Standards.</p>	<p>The proposed development and concept site plan complies with the standards of the B-G District. The applicant will need a full Site Plan application to determine that it meets all of the General Development Standards in the City of Franklin, such as off-street parking, landscaping, lighting, building height, etc.</p>

SITE COMPLIANCE

A site visit was conducted as part of the City Development Staff's review. No site compliance issues were found.

STAFF RECOMMENDATION

City Development staff recommends approval of this Conditional Use request for a Used Car Sales and Automotive Repair Facility, under UDO Use Titles “Auto Sales/Rental and Service” and “Major Automotive Repair”, which is a Conditional Use in the B-G, General Business District, subject to the conditions in the draft resolution.

STATE OF WISCONSIN

CITY OF FRANKLIN

MILWAUKEE COUNTY

RESOLUTION NO. 2025-_____

A RESOLUTION IMPOSING CONDITIONS AND RESTRICTIONS
FOR THE APPROVAL OF A CONDITIONAL USE FOR A VEHICLE SALES AND MAJOR
AUTOMOTIVE REPAIR USE UPON PROPERTY LOCATED
AT 0 W FOREST HOME AVENUE (TAX KEY NO. 748 9990 000,
(FELLIN JAMES J. & ROSEANN – REVOCABLE LIVING TRUST, PROPERTY OWNER)
(CARGET LLC, APPLICANT)

WHEREAS, CarGet LLC, having petitioned the City of Franklin for the approval of a Conditional Use within the B-G General Business District under Vehicle Related Use Titles “Auto Sales/Rental and Service” and “Major Automotive Repair”, to operate a used car sales and automotive repair facility with proposed hours of operation Monday through Saturday, from 9:00 a.m. to 7:00 p.m., located at 0 W Forest Home Avenue, bearing Tax Key No. 748-9990-000, more particularly described as follows:

ALL THAT PART OF THE SOUTH ½ OF SECTION 6, TOWNSHIP 5 NORTH, RANGE 21 EAST, IN THE CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN, DESCRIBED AS FOLLOWS, TO-WIT: COMMENCING AT A POINT ON THE SOUTH LINE OF SAID SECTION 6, WHICH POINT IS 25 FEET WEST OF THE SOUTHEAST CORNER OF THE SOUTHWEST ¼ OF SAID SECTION 6: RUNNING THEN N.2°18’45”W., PARALLEL TO THE NORTH AND SOUTH ¼ SECTION LINE OF SAID SECTION 6, 350.89 FEET TO A POINT; THENCE S.89°56’E., 1075.9 FEET TO A POINT; THENCE S.2°18’45”E., PARALLEL TO THE WEST LINE OF THE SOUTHEAST ¼ OF SAID SECTION 6, 349.68 FEET TO A POINT ON THE SOUTH LINE OF SAID SECTION; THENCE WEST ON THE SOUTH LINE OF SAID SECTION 6, 1075.9 FEET TO THE PLACE OF BEGINNING, EXCEPTING THAT PART LYING EAST OF THE WEST LINE OF WEST FOREST HOME AVENUE AND EXCEPTING THE SOUTH 60 FEET FOR WEST RAWSON AVENUE.

WHEREAS, such petition having been duly referred to the Plan Commission of the City of Franklin for a public hearing, pursuant to the requirements of §15-9-06E. of the Unified Development Ordinance, and a public hearing having been held before the Plan Commission on the 17th day of July, 2025, and the Plan Commission thereafter having determined to recommend that the proposed Conditional Use be approved, subject to certain conditions, and the Plan Commission further finding that the proposed Conditional Use upon such conditions, pursuant to §15-9-06H of the Unified Development Ordinance, will be in harmony with the purposes of the Unified Development Ordinance and the Comprehensive Master Plan; that it will not have an undue adverse impact upon adjoining property; that it will not interfere with the development of neighboring property; that it will be served adequately by essential public facilities and services;

that it will not cause undue traffic congestion; and that it will not result in damage to property of significant importance to nature, history or the like; and

WHEREAS, the Common Council having received such Plan Commission recommendation and also having found that the proposed Conditional Use, subject to conditions, meets the standards set forth under §15-9-06H of the Unified Development Ordinance.

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and Common Council of the City of Franklin, Wisconsin, that the petition of CarGet LLC., for the approval of a Conditional Use for the property particularly described in the preamble to this Resolution, be and the same is hereby approved, subject to the following conditions and restrictions:

1. That this Conditional Use is approved only for the use of the subject property by CarGet LLC., successors and assigns, as a used car sales and major automotive repair facility, which shall be developed in substantial compliance with, and operated and maintained by CarGet LLC., pursuant to the application materials City file-stamped June 11, 2025.
2. That this Conditional Use is only for the use of the property and a full Site Plan Review will need to be approved prior to construction. Site Plan must comply with §15-4-09A and C of the Unified Development Ordinance as it pertains to the Auto Sales/Rental and Service & Major Automotive Repair Use Standards.
3. CarGet LLC., successors and assigns, shall pay to the City of Franklin the amount of all development compliance, inspection and review fees incurred by the City of Franklin, including fees of consults to the City of Franklin, for the CarGet LLC used car sales and major automotive repair facility, within 30 days of invoice for same. Any violation of this provision shall be a violation of the Unified Development Ordinance, and subject to §15-9-14 thereof and §1-19 of the Municipal Code, the general penalties and remedies provisions, as amended from time to time.
4. The approval granted hereunder is conditional upon CarGet LLC and the used car sales and major automotive repair use for the property located at 0 W Forest Home Avenue: (i) being in compliance with all applicable governmental laws, statutes, rules, codes, orders and ordinances; and (ii) obtaining all other governmental approvals, permits, licenses and the like, required for and applicable to the project to be developed and as presented for this approval.
5. All signage shall comply with the requirements of §15-6 of the Unified Development Ordinance and must receive a Sign Permit from the City Development Department prior to installation.

BE IT FURTHER RESOLVED, that in the event CarGet LLC, successors or assigns, or any owner of the subject property, does not comply with one or any of the conditions and restrictions of this Conditional Use Resolution, following a ten (10) day notice to cure, and failure to comply within such time period, the Common Council, upon notice and hearing, may revoke the Conditional Use permission granted under this Resolution.

BE IT FURTHER RESOLVED, that any violation of any term, condition or restriction of this Resolution is hereby deemed to be, and therefore shall be, a violation of the Unified Development Ordinance, and pursuant to §15-9-14 thereof and §1-19 of the Municipal Code, the penalty for such violation shall be a forfeiture of no more than \$2,500.00, or such other maximum amount and together with such other costs and terms as may be specified therein from time to time. Each day that such violation continues shall be a separate violation. Failure of the City to enforce any such violation shall not be a waiver of that or any other violation.

BE IT FURTHER RESOLVED, that this Resolution shall be construed to be such Conditional Use Permit as is contemplated by §15-9-06 of the Unified Development Ordinance.

BE IT FURTHER RESOLVED, pursuant to §15-9-06J. of the Unified Development Ordinance, that the Conditional Use permission granted under this Resolution shall be null and void upon the expiration of two years from the date of adoption of this Resolution, unless the Conditional Use has been established by way of the issuance of an occupancy permit for such use.

BE IT FINALLY RESOLVED, that the City Clerk be and is hereby directed to obtain the recording of a certified copy of this Resolution in the Office of the Register of Deeds for Milwaukee County, Wisconsin.

Introduced at a regular meeting of the Common Council of the City of Franklin this 5th day of August, 2025.

Passed and adopted at a regular meeting of the Common Council of the City of Franklin this 5th day of August, 2025.

APPROVED:

John R. Nelson, Mayor

ATTEST:

Shirley J. Roberts, City Clerk

AYES _____ NOES _____ ABSENT _____

Date: June 27, 2025
To: Emad Nadi, ETN Engineering
From: Department of City Development. Luke Hamill, Associate Planner.
RE: Staff Comments, 0 W Forest Home Avenue / 748 9990 000

Please be advised that city staff has reviewed the above application received on June 11th, 2025, for a proposed Conditional Use for a Used Car Sales and Major Automotive Repair Use on lot located at 0 W Forest Home Avenue / 748 9990 000. The following comments are for your review and consideration.

Planning Department

Your application is scheduled for a public hearing and recommendation at the July 17th Plan Commission Meeting and the August 5th Common Council Meeting for Final Approval.

Please provide 12 copies of your application materials to the Department of City Development by Monday, July 7th at 4:30 PM.

1. Is the proposed Major Automotive Repair only for servicing cars traded in for the used car sales use? Or will exterior clients send their car in to be serviced? If the former, the Conditional Use for Major Automotive Repair is not needed since the Auto Sales use is called Auto Sales and Service.
2. Attached to the email sending these comments, is the new Unified Development Ordinance. Please take note of section 15-4-09A and C, as there are additional standards for Auto Sales and Major Automotive Repair. These standards will be required as part of the Site Plan review.

Engineering Department Comments

Engineering has no comment on the Special Use
Please submit full civil plans for Engineering Review
Fill out application for SWMP
Plat of Survey
ROW permit required from Milwaukee County for service connections

Fire Department Comments

1. Follow all relevant WI DSPS and IBC code requirements for fire protection systems for given occupancy, use, and construction types.
2. Fire Extinguisher placement as per NFPA 10.

3. Fire Department Connection (FDC), and hydrant placement and density must be acceptable to AHJ.
4. At no time may any Hazardous, Combustible, or Flammable Materials exceed allowable quantities .
5. Master Key set required for placement in Knox Box.
6. Permitting and submittal instructions for fire protection system review and inspection can be found at: <https://www.franklinwi.gov/Departments/Fire.htm>

Planning Department
9229 West Loomis Road
Franklin, Wisconsin 53132
(414) 425-4024
franklinwi.gov



APPLICATION DATE: _____

STAMP DATE: _____ city use only

COMMON COUNCIL REVIEW APPLICATION

PROJECT INFORMATION [print legibly]

APPLICANT [FULL LEGAL NAMES]		APPLICANT IS REPRESENTED BY [CONTACT PERSON]	
NAME:	Sarath Mahanti	NAME:	Emad Nadi
COMPANY:	CARGET L.L.C	COMPANY:	ETN Engineering
MAILING ADDRESS:	1963 Cheshire Dr.	MAILING ADDRESS:	2504 W Bridge St
CITY/STATE:	Union Grove, WI	ZIP:	53182
CITY/STATE:	Milwaukee	ZIP:	53221
PHONE:	414-737 7888	PHONE:	414-324 4129
EMAIL ADDRESS:	info@carget.us	EMAIL ADDRESS:	emadnadi@etnengineering.com

PROJECT PROPERTY INFORMATION

PROPERTY ADDRESS:	Forest Home & Rawson Ave NW	TAX KEY NUMBER:	748-9990-000
PROPERTY OWNER:	Sarath Mahanti	PHONE:	414-737 7888
MAILING ADDRESS:	1963 Cheshire Dr.	EMAIL ADDRESS:	info@carget.us
CITY/STATE:	Union Grove, WI	ZIP:	53182
DATE OF COMPLETION:	office use only		

APPLICATION TYPE

Please check the application type that you are applying for

- ☐ Concept Review ☐ Comprehensive Master Plan Amendment ☐ Planned Development District ☐ Rezoning
☒ Special Use / Special Use Amendment ☐ Unified Development Ordinance Text Amendment

Most requests require Plan Commission review and Common Council approval.
Applicant is responsible for providing Plan Commission resubmittal materials up to 11 copies pending staff request and comments.

SIGNATURES

The applicant and property owner(s) hereby certify that: (1) all statements and other information submitted as part of this application are true and correct to the best of applicant's and property owner(s)' knowledge; (2) the applicant and property owner(s) has/have read and understand all information in this application; and (3) the applicant and property owner(s) agree that any approvals based on representations made by them in this Application and its submittal, and any subsequently issued building permits or other type of permits, may be revoked without notice if there is a breach of such representation(s) or any condition(s) of approval. By execution of this application, the property owner(s) authorize the City of Franklin and/or its agents to enter upon the subject property(ies) between the hours of 7:00 a.m. and 7:00 p.m. daily for the purpose of inspection while the application is under review. The property owner(s) grant this authorization even if the property has been posted against trespassing pursuant to Wis. Stat. §943.13.

(The applicant's signature must be from a Managing Member if the business is an LLC, or from the President or Vice President if the business is a corporation. A signed applicant's authorization letter may be provided in lieu of the applicant's signature below, and a signed property owner's authorization letter may be provided in lieu of the property owner's signature[s] below. If more than one, all of the owners of the property must sign this Application).

- ☐ I, the applicant, certify that I have read the following page detailing the requirements for plan commission and common council approval and submittals and understand that incomplete applications and submittals cannot be reviewed.

PROPERTY OWNER SIGNATURE:	<i>M. Sarath</i>	APPLICANT SIGNATURE:	<i>Emad Nadi</i>	05/19/2025
NAME & TITLE:	SARATH MAHANTI	DATE:	05/19/2025	
PROPERTY OWNER SIGNATURE:		APPLICANT REPRESENTATIVE SIGNATURE:		
NAME & TITLE:		DATE:		

Legal Description

All that part of the South $\frac{1}{2}$ of Section 6, Township 5 North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin, described as follows, to-wit: Commencing at a point on the South line of said Section 6, which point is 25 feet west of the southeast corner of the Southwest $\frac{1}{4}$ of said Section 6: running then N.2°18'45"W., parallel to the north and south $\frac{1}{4}$ Section line of said Section 6, 350.89 feet to a point; thence S.89°56'E., 1075.9 feet to a point; thence S.2°18'45"E., parallel to the west line of the Southeast $\frac{1}{4}$ of said Section 6, 349.68 feet to a point on the South line of said Section; thence west on the south line of said Section 6, 1075.9 feet to the place of beginning, excepting that part lying east of the west line of West Forest Home Avenue and excepting the South 60 feet for West Rawson Avenue.



ARCHITECTURAL . STRUCTURAL . CIVIL ENGINEERING

emadnadi@etnengineering.com

Milwaukee WI 53221

414. 324.4129

Monday, May 19, 2025

PROJECT NARRATIVE

Proposed Used Car Dealership and Auto Repair Facility

Location: Intersection of W Rawson Avenue and W Forest Home Avenue, Franklin, WI (No Address Assigned)

Tax ID : 7489990000

Parcel Size: 2.44 Acres

Overview:

The applicant proposes the development of a new used car dealership and auto repair facility on a currently vacant 2.44-acre parcel located at the northeast corner of W Rawson Avenue and W Forest Home Avenue in the City of Franklin, Wisconsin. The site is currently undeveloped and consists entirely of grass-covered land with no existing structures.

The proposed development will activate this underutilized property with a professionally designed commercial facility that aligns with the City's Comprehensive Master Plan and the zoning district's intent for quality commercial and automotive-related uses.

Operational Plan Summary

1. **Hours and Days of Operation:**
 - a. Monday through Saturday: **9:00 AM to 7:00 PM**
 - b. **Closed on Sundays**
2. **Number of Employees:**
 - a. **Sales Area:** 2 employees
 - b. **Auto Repair Area:** 2 employees
3. **Vehicle Delivery Schedule:**
 - a. Vehicle deliveries will occur periodically throughout the week.
 - b. Each delivery will typically include **2 vehicles**.
4. **Parts Delivery Frequency:**
 - a. Parts will be delivered **daily**, based on service volume and repair needs.

Building and Site Design:

The proposed facility will consist of a **single-story masonry building** measuring **70 feet by 70 feet (4,900 square feet)** with a maximum building height of **21 feet**. The building will accommodate both the used car sales office and a 4-bay auto repair service area. Durable and attractive building materials will be used, including **brick veneer, stone, and fiber cement panels**, to ensure the structure complements the surrounding development and maintains architectural quality.

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Milwaukee WI 53221

414. 324.4129

Site Improvements and Layout:

A total of **0.85 acres** of the parcel will be paved to support customer, employee, and vehicle display areas. The parking and circulation plan includes:

- **14 standard parking stalls** designated for customers and employees
- **60 display spaces** for used vehicle inventory
- Clearly defined ingress and egress points designed to promote efficient on-site circulation and minimize impact on surrounding roads

All display and customer parking will occur on paved, striped surfaces, and no dismantling or outdoor repair activity will occur on site.

Stormwater Management:

A **stormwater detention pond** is proposed on site and will be designed in compliance with **Wisconsin Department of Natural Resources (WDNR)** and **Milwaukee Metropolitan Sewerage District (MMSD) Chapter 13** standards. This facility will manage stormwater runoff to ensure proper drainage and environmental protection.

Public Utilities and Services:

The development will be fully connected to public utilities, including municipal water, sanitary sewer, and electric service. The site will also be served by local police, fire, and refuse collection services. No extraordinary demand on public services is anticipated.

Landscaping and Screening:

Per City requirements, a professional landscaping plan will be provided and will include parking lot islands, perimeter plantings, and screening where necessary to buffer views of the display area from adjacent roadways and properties. The design will include native and ornamental plantings that enhance the site's appearance and function.

Zoning and Use Justification:

The proposed use—automotive sales and repair—is compatible with the site's zoning designation and surrounding land use context. The development will serve a public need for vehicle-related services, contribute to local employment and tax base, and improve the current visual condition of a vacant parcel. All operational impacts will be mitigated through thoughtful site design and compliance with zoning code requirements and special use conditions.

Yours sincerely,

Emad Nadi, PE

(414).324.4129

emadnadi@etnengineering.com

Special Use Standards – Response Statement

Project: Proposed Used Car Dealership and Auto Repair Facility – TARGET AT W RAWSON AVE AND W FORESTHOME

TAX ID : 7489990000

Location: City of Franklin, Wisconsin

Site Size: 2.44 acres (vacant, grass)

SECTION 15-3.0701 — GENERAL STANDARDS FOR SPECIAL USES

1. Ordinance and Comprehensive Master Plan Purposes and Intent

The proposed used car dealership and auto repair facility is consistent with the City's zoning ordinance and comprehensive plan by promoting compatible commercial development, economic activity, and the productive use of a currently vacant parcel. The project contributes to the commercial vitality of the area while maintaining aesthetic and environmental standards consistent with the City's long-term planning goals.

2. No Undue Adverse Impact

The project is designed to avoid any substantial or undue adverse impact on neighboring properties. The site is currently vacant and the development introduces a professionally designed building with quality materials, limited height (21 ft), and attractive landscaping. All lighting, noise, and operational impacts will comply with City requirements to preserve the character and comfort of the surrounding area.

3. No Interference with Surrounding Development

The layout and operations of the proposed development will be arranged to function harmoniously with surrounding properties. The site will include clear access, defined customer and display parking areas, and professional landscaping. The single-story structure will not dominate nearby land uses, and screening measures will minimize visual and operational impacts.

4. Adequate Public Facilities

The site will be fully served by public facilities, including municipal water and sewer. Fire, police, and sanitation services are available to the site and will be coordinated with the appropriate City departments. A stormwater detention pond designed in accordance with Wisconsin DNR and MMSD Chapter 13 standards is included to manage runoff and protect public infrastructure.

5. No Traffic Congestion

Ingress and egress will be designed to accommodate the volume and turning movements expected from staff, customers, and display inventory transport. With 14 designated parking spaces and internal circulation for 60 display vehicles, traffic congestion will be minimized. The site's design avoids conflict with residential areas and supports safe traffic flow.

6. No Destruction of Significant Features

The 2.44-acre site is currently an open grassy area with no documented natural, scenic, or historic features of significance. The project does not impact wetlands or protected lands and will incorporate erosion control and sustainable drainage features per local and state regulations.

7. Compliance with Standards

The project will comply with all applicable zoning district regulations, including those pertaining to landscaping, building design, stormwater management, and parking. Any deviations, if required, will be addressed through the special use and site plan review process with full cooperation from the applicant.

SECTION 15-3.0701(B) — SPECIAL STANDARDS FOR SPECIFIC USES

The proposed automotive use complies with the applicable special standards outlined for vehicle sales and repair, including building placement, vehicle storage, and separation from incompatible uses. All outdoor vehicle display and storage will be confined to paved, screened, and designated areas. No outside dismantling or part storage will occur.

SECTION 15-3.0701(C) — CONSIDERATIONS

1. Public Benefit

The project will bring commercial services to the area, enhance tax revenue, and create employment opportunities. It activates a currently vacant site with a well-planned and permanent commercial development that supports the community's service and economic needs.

2. Alternative Locations

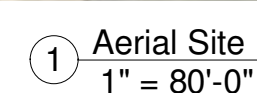
While similar developments could occur elsewhere, this site offers the necessary space, access, and zoning compatibility without disrupting residential uses. The parcel is ideally situated for a moderate-scale automotive use with appropriate buffers.

3. Mitigation of Adverse Impacts

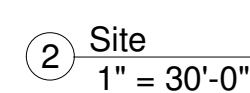
The project includes buffering, landscaping, screening, and stormwater management to mitigate visual and operational impacts. The masonry structure, material selection, and building scale are designed to be attractive and compatible with surrounding development.

4. Establishment of Precedent of Incompatible Uses

The proposed use is compatible with surrounding zoning and does not establish a precedent for inappropriate or high-intensity uses. The site plan and operational controls ensure the development aligns with the area's intended commercial character.

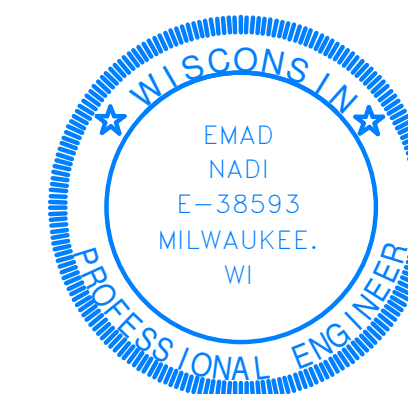


PARCEL AREA : APPROX. 2.44 ACRES
BUILDING: MASONRY AND BRICK : 70' X 70'
PARKING AREA : 0.85 ACRE
PARKING STALLS : 14
ADA PARKING STALLS : 3
SALES VEHICLES DISPLAY : 60



RAWSON AUTO NEW

SCALE
VARIES



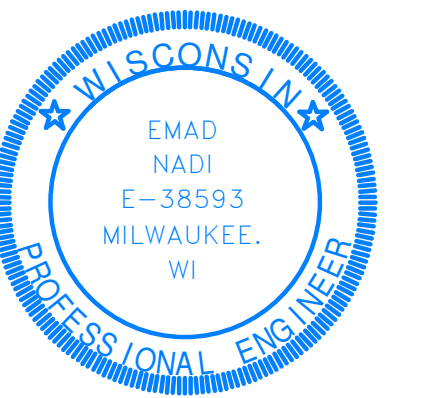
SITE PLAN

A 100.1



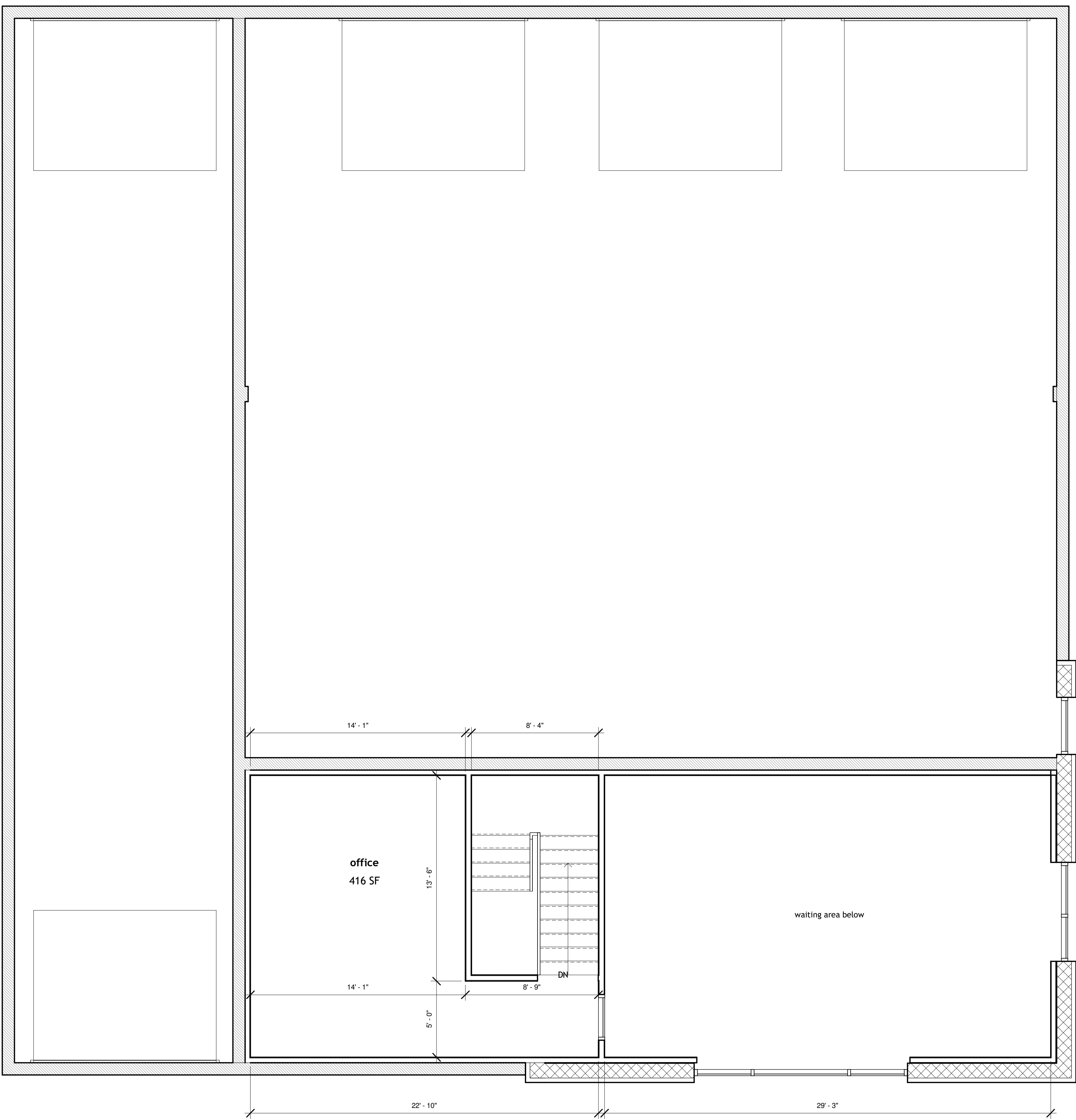
**RAWSON AUTO
NEW**
RAWSON AVE AT FOREST HOME

SCALE
VARIES



FLOOR LAYOUT

A101.1



① SECOND FLOOR - OFFICE
1/4" = 1'-0"

RAWSON AUTO
NEW
RAWSON AVE AT FOREST HOME

SCALE
VARIES

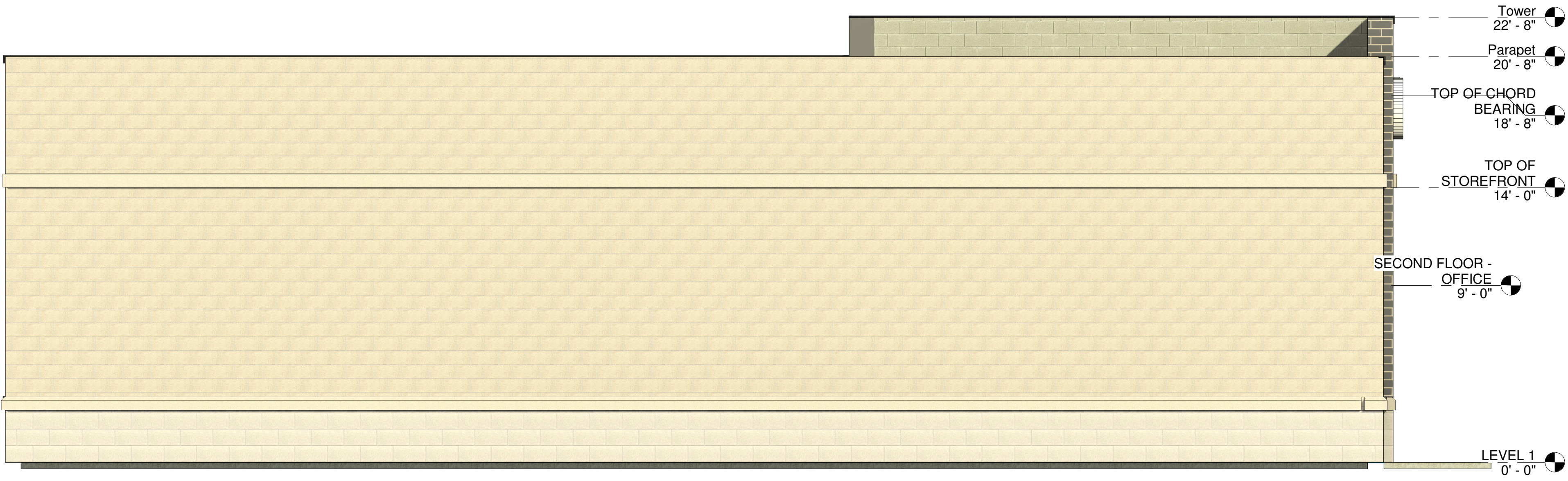


SECOND LEVEL

A101.2



① South
1/4" = 1'-0"



② West
1/4" = 1'-0"

RAWSON AUTO
NEW
RAWSON AVE AT FOREST HOME

SCALE
VARIES

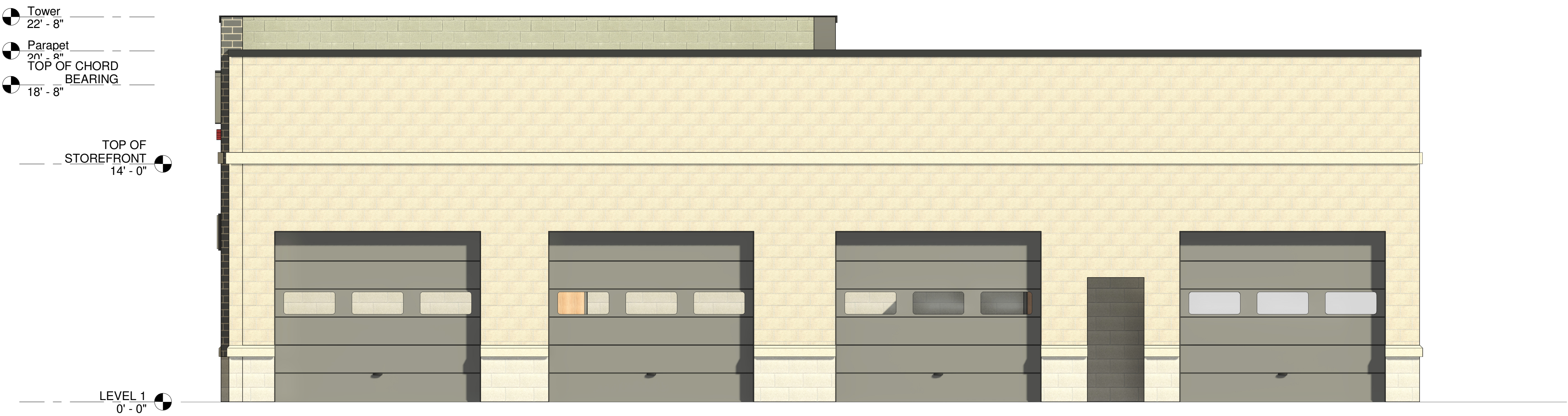


ELEVATIONS

A102.0



① East
1/4" = 1'-0"



② North
1/4" = 1'-0"

RAWSON AUTO
NEW
RAWSON AVE AT FOREST HOME

SCALE
VARIES

WISCONSIN
EMAD
NADI
E-38593
MILWAUKEE,
WI
PROFESSIONAL ENGINEER

ELEVATIONS



CITY OF FRANKLIN



REPORT TO THE PARKS COMMISSION

Meeting of July 14, 2025

Natural Resource Special Exception

RECOMMENDATION: Department of City Development Staff recommends approval of the Natural Resource Special Exception request for property located at 8222 S. 51st Street, subject to the conditions listed in the attached draft Standards, Findings and Decision form.

Project Name:	Franklin Public Schools Natural Resource Special Exception
Project Location:	8222 South 51 st Street (Tax Key No. 807 9999 001)
Property Owner:	Franklin High School Franklin School District #5
Applicant:	Andrew Chromy, Franklin Public Schools
Agent:	Jesse Becker, Point of Beginning
Current Zoning:	I-1 Institutional District, FW Floodway District, and C-1 Conservancy District
2025 Comprehensive Plan:	Institutional and Areas of Natural Resource Features
Applicant's Action Requested:	Recommendation to the Common Council for approval of the Natural Resource Special Exception Application
Planner:	Nick Fuchs, Planning Associate

Project Description/Analysis:

At the June 9, 2025 meeting, the Parks Commission tabled the Natural Resource Special Exception Application related to a proposed building expansion and site improvements upon property located at 8222 S. 51st Street.

The June 9th Staff Report is attached for review.

Following that meeting, the applicant has resubmitted applications under the current UDO. The applicant has also provided additional information such as a detailed project narrative, an updated Question and Answer Form consistent with the new UDO, and an updated mitigation plan addressing submittal requirements outlined in Section 15-7-03.

Note the applicant revised the wetland mitigation plan to move the compensation area to the Hilltop Lane property. The compensation plan includes mitigating the wetland and wetland buffer impacts at a 1.5 to 1 ratio and the woodland area at a 0.75 ratio as required by the UDO.

The applicant has also noted that it is anticipated the northernmost wetlands (Wetland 1 & 2) will be determined to be artificial by the WDNR. The School District's consultant also expects

Wetland 5 to qualify for the non-federal exemption due to heavy buckthorn infestation and presence of many dead ash trees.

The School District anticipates final determinations of artificial wetland exemptions in three weeks and the non-federal exemptions in about six weeks. It should be noted that the mitigation plan is based on none of the wetlands being exempted.

Recommendation:

Per Section 15-9-08B.2.a. of the Unified Development Ordinance (UDO), the applicant shall have the burden of proof to present evidence sufficient to support a Natural Resource Special Exception (NRSE) request. The applicant has presented evidence for the request by answering the questions and addressing the statements that are part of the Natural Resource Special Exception (NRSE) application. The applicant's responses to the application's questions and statements are attached for review as well as a project description and associated maps and information for review and consideration.

Department of City Development Staff recommends approval of the Natural Resource Special Exception request for property located at 8222 South 51st Street, subject to the conditions listed in the attached draft Standards, Findings and Decision form.



CITY OF FRANKLIN



REPORT TO THE PARKS COMMISSION

Meeting of June 9, 2025

Natural Resource Special Exception

RECOMMENDATION: Department of City Development Staff recommends approval of the Natural Resource Special Exception request for property located at 8222 S. 51st Street, subject to the conditions listed in the attached draft Standards, Findings and Decision form.

Project Name:	Franklin Public Schools Natural Resource Special Exception
Project Location:	8222 South 51 st Street (Tax Key No. 807 9999 001)
Property Owner:	Franklin High School Franklin School District #5
Applicant:	Andrew Chromy, Franklin Public Schools
Agent:	Jesse Becker, Point of Beginning
Current Zoning:	I-1 Institutional District, FW Floodway District, and C-1 Conservancy District
2025 Comprehensive Plan:	Institutional and Areas of Natural Resource Features
Applicant's Action Requested:	Recommendation to the Common Council for approval of the Natural Resource Special Exception Application
Planner:	Nick Fuchs, Planning Associate

Introduction:

The applicant filed a Natural Resource Special Exception Application for a proposed building expansion and site improvements upon property located at 8222 S. 51st Street.

The preliminary site plan provided includes building modifications and a building addition on the north side of the high school. The site plan also includes several site modifications, including parking lot and drive additions, tennis courts, concession building, a soccer field, and a driveway connection to West High View Drive.

A portion of the building addition and much of the site improvements encroach into an existing conservation easement. The conservation easement was approved via Resolution No. 2013-6902 and recorded in 2014. The conservation includes protection of mature and young woodlands, stream and shore buffer, wetlands, and wetland buffers. The proposed site improvements will eliminate woodland areas onsite as well as wetlands and associated wetland buffers and wetland setbacks. The floodplain, stream and shore buffer will not be disturbed.

On May 20th and May 22nd, the applicant presented conceptual plans to the Common Council and Plan Commission, respectively.

Pursuant to Section 15-10.0208 of the UDO, all requests for a Natural Resource Special Exception shall be provided to the Plan Commission for its review and recommendation.

Project Description:

Woodlands

The site contains approximately 16.21 acres of woodland of which 8.18 acres will be removed.

The applicant is proposing onsite and offsite mitigation to compensate for the woodland impacts. The version of the UDO applicable at the time of this application submittal recommends that mitigation include the planting of 1.25 acres of new woodland/forest for every one acre, or portion thereof, of disturbed woodland/forest. This ordinance also states that mitigation shall consist of the number of plants noted below per every one acre of mitigated area. The applicant's proposed mitigation area is 7.72 acres, which requires the total number of plantings listed below in bold. The applicant is proposing many of the same species of those trees that are being removed.

- 10 canopy trees, minimum 4-inch caliper*: **78**
- 25 canopy trees, minimum 2.5-inch caliper*: **193**
- 100 canopy trees, minimum 5-foot high whips: **772**
- 35 understory trees, minimum 5-foot high whips: **271**
- 30 shrubs, minimum 12 inches high: **232**

*Note: Four-inch caliper canopy trees may be substituted with twelve-foot high evergreen trees; 2.5-inch caliper canopy trees may be substituted with six-foot high evergreen trees.

Note the mitigation area is slightly larger than initially anticipated. The applicant is proposing to increase the number of plantings currently shown on the plans to meet the quantities noted above.

The applicant, however, is not proposing the mitigation area at the 1.25 to 1 standard. Rather, the applicant is requesting that the City allow mitigation at the ratio of the newly adopted zoning ordinance. The new compensation/restoration ratio is 0.75. The new ordinance also requires a 30-foot woodland buffer. The applicant is including that acreage as part of the proposed mitigation. With 10.29 acres being disturbed, an area of 7.72 acres is required for mitigation.

It should be noted that the newly adopted zoning ordinance states that mitigation represent an equal to or greater value in promoting the health and integrity of the City's forest resources relative to the resources impacted by the project.

For consideration, the survey of existing trees provided by the applicant includes 683 trees with a DBH over 8-inches within 6 different wooded areas onsite. Below is a summary of trees being removed based on DBH within all areas. The applicant's summary includes a breakdown of trees within each area of the site and includes tree species.

- Trees over 8" DBH: 371
- Trees over 10" DBH: 138
- Trees over 12" DBH: 73
- Trees over 14" DBH: 39
- Trees over 16" DBH: 33
- Trees over 18" DBH: 16
- Trees over 20" DBH: 4
- Trees over 22" DBH: 3
- Trees over 24" DBH: 1
- Trees over 26" DBH: 2
- Trees over 28" DBH: 1
- Trees over 30" DBH: 2
- **TOTAL: 683**

Two mitigation areas have been identified onsite. One is located at the northwest corner of the property and has an area of 2.07 acres. The other, smaller area, is directly to the south, abutting S. 51st Street and has an area of 0.42-acres. This equals 2.49 acres of onsite mitigation.

The Franklin Public Schools also owns a 21.292-acre property located along W. Hilltop Lane, bearing Tax Key No, 885 9995 003. This property will contain two mitigation areas as well. One, 4.11-acre area located along W. Hilltop Lane will be designated for mitigation as well as a 1.0-acre area at the southeast corner of the property. This provides an additional 5.11 acres of mitigation land, totaling 7.6 acres. Again, the applicant intends to increase mitigation areas to meet the 7.72 acres required at the 0.75 ratio.

Wetlands

The site contains a total of 5.58-acres of wetland and 6.46-acres of wetland buffer.

The applicant is proposing to fill 0.65-acres of wetland, which will impact 2.01-acres of wetland buffer. 1.41-acres of wetland setback will also be eliminated.

The Unified Development Ordinance requires wetland and wetland buffer mitigation at a ratio of 1.5 to 1. The plans provided by the applicant shows an onsite wetland mitigation area of 0.975 acres, which complies with this ratio. The resulting 30-foot wetland buffer area is 2.513 acres, which is a wetland buffer mitigation ratio of about 1.2 to 1.

Recommendation:

Per Section 15-10.0208 of the Unified Development Ordinance (UDO), the applicant shall have the burden of proof to present evidence sufficient to support a Natural Resource Special Exception (NRSE) request. The applicant has presented evidence for the request by answering the questions and addressing the statements that are part of the Natural Resource Special Exception (NRSE) application. The applicant's responses to the application's questions and statements are attached for review as well as a project description and associated maps and information for review and consideration.

Department of City Development Staff recommends approval of the Natural Resource Special Exception request for property located at 8222 South 51st Street, subject to the conditions listed in the attached draft Standards, Findings and Decision form.

Standards, Findings and Decision
of the City of Franklin Plan Commission upon the Application of the Franklin High
School/Franklin School District #5, property owner, for a Special Exception to Certain
Natural Resource Provisions of the City of Franklin
Unified Development Ordinance

Whereas, Andrew Chromy of the Franklin Public Schools, applicant, having filed an application dated May 4, 2025, for a Special Exception pursuant to Section 15-9.0110 of the City of Franklin Unified Development Ordinance pertaining to the granting of Special Exceptions to Wetland, Wetland Buffer, Wetland Setback and Woodland Provisions; and Improvements or Enhancements to a Natural Resource Features; a copy of said application being annexed hereto and incorporated herein as Exhibit A; and

Whereas, the application having been reviewed by the City of Franklin Parks Commission and the Commission having made its recommendation upon the application, a copy of said recommendation dated June 9, 2025 being annexed hereto and incorporated herein as Exhibit B; and

Whereas, following a public hearing before the City of Franklin Plan Commission, the Plan Commission having reviewed the application and having made its recommendation thereon as set forth upon the report of the City of Franklin Planning Department, a copy of said report dated _____, 2025 being annexed hereto and incorporated herein as Exhibit C; and

Whereas, the property which is the subject of the application for a Special Exception is located at 8222 South 51st Street, zoned I-1 Institutional District, FW Floodway District, and C-1 Conservancy District and such property is more particularly described upon Exhibit D annexed hereto and incorporated herein; and

Whereas, Section 15-9-08 of the City of Franklin Unified Development Ordinance pertaining to the granting of Special Exceptions to Wetland, Wetland Buffer, Wetland Setback and Woodland Provisions,-provides in part: “Upon recommendation by Staff and the Environmental Commission, the Plan Commission may grant a Special Exception to the provisions of this Article in accordance with the procedures in this Section.”

Now, Therefore, the Plan Commission makes the following findings pursuant to Section 15-9-08B. of the Unified Development Ordinance upon the application for a Special Exception dated May 4, 2024, by Andrew Chromy of the Franklin Public Schools, applicant, pursuant to the City of Franklin Unified Development Ordinance, the proceedings heretofore had and the recitals and matters incorporated as set forth above, recognizing the applicant as having the burden of proof to present evidence sufficient to support the following findings and that such findings be made by not less than four members of the Plan Commission in order to grant such Special Exception.

1. Criteria for Approval. A Special Exception may be granted only upon a finding by the Plan Commission:

- a. That the condition(s) giving rise to the request for a Special Exception were not self-imposed by the applicant (this subsection (i) does not apply to an application to improve or enhance a natural resource feature);

The conditions giving rise to this request were not self-imposed. When the Franklin High School (FHS) property was originally purchased and later constructed in the 1960s, the natural resource requirements imposed now by the City of Franklin did not exist. The school district at the time reasonably believed that they would have the ability to develop this land as needed to meet the growing needs of students of the Franklin Community. Preventing the local school district from utilizing the remaining land located east of the high school is unreasonably burdensome.

The High View Drive stub road located east of FHS, which was constructed around 1995 and ties directly into the high school property, shows that the undeveloped land located east of the high school was meant to be developed, in order for this roadway connection to be made.

Special note should be made regarding the conservation easement that the school district signed in 2014. Conservation easements are meant to be permanent but can be modified if there is a substantial reason, such as public interest, community benefit, changed conditions, or unforeseen circumstances. In 2014, school district staff may have thought that the next reasonable step for the school district would be to construct a new school. However, the recent Franklin Forward long-range facility planning initiative, through community outreach and population studies, has determined that the Franklin Community does not currently need or want a second high school. Therefore, modifying the current conservation easement to allow for development on the land east of the high school makes the most sense for the community as a whole, as it allows the school district to address its needs without the financial and social costs of splitting the community through the creation of a second high school.

and

- b. Compliance with the strict provisions of this Article will:

- i. Be unreasonably burdensome to the applicant and that there are no reasonable practicable alternatives; or,
- ii. Unreasonably and negatively impact upon the applicant's use of the property and that there are no reasonable practicable alternatives; and
- iii. The Special Exception, including the specific compensation measures in the Natural Resource Protection Plan and physical

modifications to the site to protect other Natural Resources, including any conditions imposed under this Section will:

1. Enhance the overall character of the resulting development in a manner consistent with the planned character of the area and site; and City of Franklin Article 9. Administrative Standards and Procedures Unified Development Ordinance 20 Unified Development Ordinance, City of Franklin, Wisconsin
2. Not effectively undermine the ability to apply or enforce the requirement with respect to other properties; and
3. Be in harmony with the general purpose and intent of the provisions of this Article; and
4. Incorporate sufficient monitoring, conditions, and financial sureties to ensure preservation and enhancement of Protected Areas and compensation areas; and
5. Preserve or enhance the quality of the natural resources affected.

When the high school property was originally purchased and later built in the 1960s, the natural resource requirements imposed now by the City of Franklin did not exist. The school district at the time reasonably believed that they would have the ability to develop this land as needed to meet the growing needs of students of the Franklin Community. Preventing the District from utilizing the remaining land located east of the high school is unreasonably burdensome. Construction of a new high school would be substantially more expensive than the currently proposed project and may run into similar natural resources concerns.

FHS has existed on this property since the 1960s. The proposed site improvements and expansion of the existing facility are consistent with the current land use and the overall character of the surrounding neighborhood. Since the school has existed on this property for 60 plus years and has very unique responsibilities to the Franklin community, approval of this NRSE will not under undermine the city's ability to apply or enforce natural resources requirements with respect to other properties.

The proposed development and wetland/woodland mitigation areas shall be in harmony with the intent of the UDO Natural Protection Guidance Document. The UDO allows for natural resource special exceptions to allow for community driven needs such as this project.

The proposed mitigation plan incorporates sufficient monitoring, conditions, and financial sureties to ensure preservation and enhancement of Protected Areas and compensation areas. Proposed mitigation areas shall be constructed in accordance with City requirements and guidelines with measures taken to prevent the spread of invasive species such as buckthorn and reed canary grass, resulting in enhanced natural resources for the community.

The proposed development will avoid impact to the existing environmental corridor on the north side of the school property which contains an existing waterway, woodlands, wetlands, and floodplain area.

- c. Review Criteria. In making its recommendation, the Plan Commission shall consider factors such as:

- i. The impact on physical characteristics of the property, including but not limited to, relative placement of improvements thereon with respect to property boundaries or otherwise applicable setbacks;

The current high school property already has a fair amount of development, with undeveloped areas lying to north and east of the current facilities. The area to north is quite likely undevelopable, as there is a myriad number of environmental concerns – wetlands, woodlands, floodplains, two minor waterways, an environmental corridor, etc.

The only realistically developable land, substantial enough in size to host the proposed improvements, lies east of the current high school facility. This area is wooded with three small, isolated wetland areas and a series of drainage swales which have been delineated as wetland. The cost of building a new high school would be excessive, so it is in the community's best interest to further develop the current FHS property to allow for referendum approved improvements for the high school facility.

- ii. Any exceptional, extraordinary, or unusual circumstance or conditions applying to the lot or parcel, structure, use, or intended use that do not apply generally to other properties or uses in the same district;

An exceptional amount of land is needed to construct and maintain a high school facility, given the needs for school buildings, athletic fields, student drop-off and pickup areas, parking, and community events. Given that the district's long-term planning and community

feedback indicates that there is no current need or community desire for a second high school, it only makes sense that the needed facility improvements occur at the current high school property.

- iii. The proposed degree of noncompliance with the requirement of this Article to be allowed by the Special Exception;

Per the newly approved UDO, woodland and nonfederal jurisdiction wetland disturbance with compensatory mitigation is allowed without a special exception. Offsite compensation requires approval of a special exception.

- iv. The project's proximity to and character of surrounding property;

The proposed building and site improvements will match the character of the existing high school facility. The proposed building will be aesthetically pleasing modern construction. Substantial landscaping is proposed to enhance the beauty of the proposed development, in accordance with local requirements.

Locating schools near residential homes offers numerous benefits, including improved student safety, reduced transportation costs, and increased opportunities for walking or biking. It strengthens community ties, boosts attendance and punctuality, and allows for greater parental involvement. Proximity also supports neighborhood development, promotes environmental sustainability, and ensures more equitable access to education for all families.

- v. Purpose of the zoning district of the area in which property is located and neighboring area; and

The purpose of the institutional zoning district in which this property is located is to allow for the development of institutional facilities to educate the youth of the City of Franklin. This proposed development aligns with this purpose.

Furthermore, locating school development near residential centers offers numerous benefits, including improved student safety, reduced transportation costs, and increased opportunities for walking or biking. It strengthens community ties and allows for greater parental involvement. Proximity also supports neighborhood development and promotes environmental sustainability through improved access.

- vi. Any potential for negative effects upon adjoining property from the Special Exception if authorized.

As mentioned above, schools should generally be located near residential properties. The proposed development has been designed with substantial landscape buffer and the proposed tennis courts have been shifted away from neighboring residences as much as possible to minimize any negative impact upon adjoining properties.

Erosion control measures are proposed in accordance with WDNR technical standards to protect local waterways from construction sediment throughout the duration of construction. Additionally, a new wet detention pond and adjustments to an existing wet detention pond are also proposed in accordance with WDNR Technical Standard 1001 to provide long-term stormwater rate control and treatment of stormwater discharge from the proposed development, protecting local waterways post-construction. Furthermore, new wetland area will be constructed as required by state and local mitigation requirements.

Decision

Upon the above findings and all of the files and proceedings heretofore had upon the subject application, the Plan Commission hereby grants a Special Exception for such relief as is described within Exhibit C, upon the conditions:

- 1) that the natural resource features areas upon the property to be developed and the off-site mitigation areas upon property located along W. Hilltop Lane bearing Tax Key No. 885 9995 003 be protected by a perpetual conservation easement to be approved by the Common Council prior to any development within the areas for which the Special Exception is granted prior to the issuance of any Occupancy Permits;*
- 2) that the applicant obtain all other necessary approval(s) from all other applicable governmental agencies prior to any development within the areas for which the Special Exception is granted;*
- 3) that all development within the areas for which the Special Exception is granted shall proceed pursuant to and be governed by the approved Natural Resource Protection Plan and all other applicable plans for Andrew Chromy of the Franklin Public Schools, applicant, and all other applicable provisions of the Unified Development Ordinance.*
- 4) that the applicant restore any temporarily disturbed wetland buffer and wetland setback to the standards of UDO §15-4.0102I for wetland setback and UDO §15-4.0103B5 for wetland buffer.*
- 5) that the City Forester review and approve the proposed species of trees within the woodland mitigation areas.*

- 6) *that the applicant shall provide a financial guarantee as required by Section 15-7-04B. and 15-7-04F.2., subject to City Attorney review and approval.*
- 7) *that that woodland mitigation areas shall survive at least two growing seasons, or shall be replaced.*
- 8) *that Planning Staff shall review and approve a multi-year wetland mitigation and maintenance plans, prior to any development within the areas for which the Special Exception is granted.*
- 9) *the applicant shall provide demarcation as required by Section 15-7-04D., subject to approval of the Planning Department.*
- 10) *that the duration of this grant of Special Exception is permanent.*

Introduced at a regular meeting of the Plan Commission of the City of Franklin this ____ day of _____, 2025.

Passed and adopted at a regular meeting of the Plan Commission of the City of Franklin this ____ day of _____, 2025.

APPROVED:

John R. Nelson, Mayor

ATTEST:

Shirley J. Roberts, City Clerk

AYES _____ NOES _____ ABSENT _____



Franklin High School Building Addition and Site Improvements
City of Franklin NRSE Application | 7/2/2025
Project Narrative

Project Introduction:

The FPS School Board, through an extensive master planning and community survey/feedback process voted on and approved the following ballot referendum question:

Shall the Franklin Public School District, Milwaukee County, Wisconsin be authorized to issue pursuant to Chapter 67 of the Wisconsin Statutes, general obligation bonds in an amount not to exceed \$145,000,000 for the public purpose of paying the cost of a school facility improvement project consisting of: Americans with Disabilities Act compliance updates, capital maintenance, building systems, safety, security and site improvements at the Elementary Schools and Franklin High School; construction of additions and renovations at Franklin High School, including for technical education space improvements, classroom and special education areas, science lab improvements, new indoor physical education spaces and a field house, a pool, and tennis courts; and acquisition of furnishings, fixtures and equipment?

This ballot measure was approved by the Franklin Community on Tuesday, November 5, 2024. The proposed project must be constructed in accordance with this ballot referendum; therefore, the proposed high school facility updates and expansion must occur on the current FHS site. Therefore, Franklin Public Schools seeks approval of the proposed construction project, designed in accordance with the community approved referendum.

Franklin Public Schools (FPS) seeks a Natural Resource Special Exception for planned impacts to the woodlands, wetlands, and wetland buffers east of the existing Franklin High School (FHS) property, as part of the upcoming FHS building additions and site improvements construction project that was approved by referendum. Offsite mitigation is proposed due to the lack of remaining space on the High School property.

Proposed Facility Improvements:

The proposed FHS improvements include the demolition of approximately 70,000 sf of the existing Franklin High School building, portions of which were originally built in the 1960s, and replacing it with a new approximately 192,000 sf building addition. Proposed site improvements include new tennis court areas, athletic field areas, parking lot areas, paved driveways, sidewalks, stormwater management, and a concessions building. These community approved enhancements will improve onsite offerings for FHS students and help maintain a high level of instruction and co-curricular options for all students. A description of each of the proposed improvements follows, with commentary on the possibility of scope reduction to reduce natural resource impact.

Building Addition

The new building addition includes a new fieldhouse, technical education areas, classroom and special education areas, science lab improvements, and a new pool house. All of these improvements were explicitly named in the referendum and therefore are mandated to be constructed by the approved ballot measure. Additional floors could be added to the proposed building addition to limit natural resource impact. However, construction of a taller building presents safety and accessibility concerns. Evacuation of students during emergencies, e.g. fires and tornados becomes more challenging as the number of building stories increases. Limited mobility students will also need to change floors more often, increasing the need for elevators, substantially reducing their quality of life moving from classroom to classroom. Additionally, the financial cost of adding additional floors to the proposed building to reduce the footprint would be very substantial and is not accounted for in the referendum budget.

Constructing a soccer field on top of the proposed fieldhouse roof in lieu of the proposed natural grass field on the southeast corner of the site may be technically feasible. However, the cost of doing so would be substantial and very likely would exceed the currently

approved referendum bonding. Furthermore, this field would be less accessible for the community generally and more challenging to access from an handicap access standpoint.

High View Drive Connection

A new connection from the school facility to High View Drive is proposed. The area immediately adjacent to this connection point is wooded, so woodland clearing is required to make this connection. This connection point is vital for safety purposes to ensure that the school can be accessed by the police and fire department if 51st Street were to become blocked or damaged during an emergency. Looking at historical aerial imagery, High View Drive was stubbed towards the school back when the subdivision was first built, back in 1995 – clearly the intent at the time was this connection to eventually be tied into the High School site.

Tennis Facility

10 new tennis courts are proposed, along with an associated parking lot, plaza, and concessions/restroom building. New tennis courts were explicitly named in the referendum and therefore are mandated to be constructed by the approved ballot measure. Additionally, please note tennis courts were explicitly established as desired by the local community during the Franklin Forward April 2024 community survey. FPS has determined that 10 courts are minimum needed to meet the needs of the school's tennis team. Note these courts will also be available for community use on weekends and off-days. The proposed restroom/concessions building is required to provide restroom access for tennis players and fans. The number of proposed parking stalls could be reduced, but this would limit on-site parking for tennis and school events, potentially leading to parents or students parking on local streets, which is undesirable by neighbors.

Soccer Field

A new soccer field is proposed on the southeast corner of the property. While not explicitly addressed in the ballot measure, the new soccer field, proposed at the southeast corner of the property, is needed to make up for the loss of an existing soccer field that will be removed to make room for the proposed building addition. Eliminating this field or reducing its size could help reduce natural resource impact, but please note that natural grass fields are tough to maintain and very limited on the total hours of use they can sustain without turning to mud, not to mention scheduling conflicts when different activities happen at the same time. The district has operated with 4 fields at the FHS site for the last 10 years, and reducing this back down to 3 fields is likely not a sustainable option. Earlier in the project, an option to reduce the size of the soccer field to a partial field was discussed to decrease impact to Wetland 5. However, please note that Wetland 5 consists primarily of a buckthorn thicket with dead ash. Therefore, this wetland is likely to be considered low-quality with limited functional value due to the ongoing invasive species infestation. The district believes that a full-size soccer field will best meet the needs of its students.

Staff Parking Lot

An expanded staff parking lot is proposed directly east of the existing high school facility. While not explicitly addressed in the ballot measure, expanded parking has been promised to the community in multiple community handouts and meetings. The added staff parking at the back of the building will open more room in the front of the building for student use and moving staff parking to the back of the building combined with the new access drive to High View Drive will reduce the number of vehicles using 51st Street.

Access Drives / Sidewalks

A number of proposed drives and sidewalks are proposed to increase site accessibility and safe operation. Notably, the drive connection to High View Drive is very desirable from a safety standpoint, as it allows emergency vehicles to access the school site from a street other than 51st Street, in case of emergency. Furthermore, the proposed fire lane along the east side of the school is needed to ensure a fire truck can access the backside of the school.

Constructability

Logistically, the construction team needs a temporary construction laydown area for storage of construction materials and equipment, as well as to locate a couple construction trailers in order to safely construct the proposed building and site improvements. The best location and realistically the only good location for this construction laydown area is the wooded area south of the proposed High View Drive connection. Other areas of the school site are either located within the proposed building footprint or will be needed for students and faculty use while construction is ongoing during the 2026-2029 school years.

Natural Resource Disturbance

Both wetland and woodland impact are anticipated as a result of the proposed project.

Woodland

A tree survey of the planned disturbance area was completed on April 32, 2025 by Kimberly Destree, Consulting Forester, of Quast Forestry Consulting LLC. In this report, the woodlands located on the parcel were described as Central Hardwoods timber, consisting of a mixture of mid-shade tolerant to shade intolerant species including oak, hickory, elms, black cherry, red maple, ash, basswood, hackberry and sugar maple.

Basswood is the most common tree species, making up 56% of the total trees tallied. Shagbark hickory is the next most commonly occurring species being 16% of all trees tallied and American elm is another 11%. Associated species include sugar maple, white oak, bur oak, black cherry and black walnut. All ash trees on this property are dead because of Emerald Ash Borer infestation. Dead trees were not tallied.

Invasive plants such as buckthorn and honeysuckle are prevalent in areas. Buckthorn and honeysuckle are non-native invasive shrubs introduced from Europe that invade the understory of native woodlands, aggressively seeding in and creating a shrub layer that prohibits native perennials, shrubs and trees from becoming established. Phragmites are an invasive grass that occupies wetlands. Phragmites were also noted along the stretches of wetland on the northern portion of the site.

In total, 683 healthy trees were located within the limits of the tree survey. All trees being at least 8" in diameter at breast height (DBH) (4.5' above the ground) were recorded by tree species and tree diameter. See the tree survey for more information.

Wetland

A wetland delineation of the planned disturbance area was completed on May 2 and May 9, 2025 by Chad Fradette, a Wisconsin Department of Natural Resources (WDNR) Professionally Assured Wetland Delineator with assistance from Shyann Banker, Sara Marcinkus, and Ashley Poehls, of Evergreen Consultants, LLC. Five distinct wetland areas were delineated and are described as follows:

- Wetland 1 is 0.230-acres of wet meadow with cattails a few trees and some brush within an excavated storm ditch. Part of the drainage ditch is located between athletic fields. The wetland continues beyond the study area to the north.
- Wetland 2 is 0.137-acres of ruderal shrub swamp in an excavated drainage ditch around an athletic field. The wetland continues beyond the study area to the north.
- Wetland 3 is 0.049-acres of a ruderal shrub swamp within a small closed depression in a basswood forest. A running trail passes along the side of the wetland. The wetland is entirely within the study area.
- Wetland 4 is 0.156-acres of ruderal shrub swamp within a small closed depression in a buckthorn thicket. A running trail bisects the wetland. The wetland is entirely within the study area.
- Wetland 5 is 0.249-acres of ruderal shrub swamp within a small closed depression in a buckthorn thicket with dead ash. The wetland extends beyond the study area slightly to the east.

Natural Resource Compensation

To compensate for the loss of wetlands and woodlands, mitigation areas are proposed as follows:

Natural Resource Mitigation Area Requirements			
Existing Natural Resource Type	Total Area of Resource Impact	Req. Mitigation Ratio	Total Mitigation Req.
Woodlands	10.16 ac. (442,418 sf.)	0.75	7.62 ac. (331,814 sf.)
Wetlands	0.64 ac. (28,005 sf.)	1.5	0.96 ac. (42,008 sf.)
Wetland Buffers	1.98 ac. (86,223 sf.)	1.5	2.97 ac. (129,335 sf.)

The objective of the proposed mitigation plan is to compensate for the loss of the existing woodlands and wetlands per the proposed project scope through the restoration and creation of new woodland and wetland habitats within the Franklin High School property and the Hilltop Lane property.

Woodland

More specifically, the goals of the woodland restoration and creation are to:

- 1) Allow the establishment of native woodland species to replace what is being removed
- 2) Expand and enhance existing woodlands within both properties through the use of native species

3) Promote removal/control of existing non-native species observed

Approximately 7.60 acres of woodland restoration is proposed, with four individual mitigation areas. Woodland mitigation areas 1 & 2 are proposed at the northwest corner of the Franklin High School property. Area 1 includes 2.07 acres of woodland mitigation area and area 2 includes 0.42 acres of mitigation area. Both areas 1 & 2 will expand the existing woodland area running along the northern side of the Franklin High School property. Woodland mitigation areas 3 & 4 are located at the off-site Hilltop property with area 3 located along the north side and area 4 located in the southeast corner. Both of these woodland areas will expand upon existing woodland areas. Area 3 includes 4.11 acres of woodland mitigation area and area 4 includes 1.0 acre of mitigation area. Proposed woodland mitigation areas are comprised of existing agricultural areas, mowed lawn areas, and shrub/meadow areas.

Utilizing the consulting forester's tree survey, the selected tree and shrub species in the proposed woodland restoration plan were selected to match the existing conditions of the existing high school woodland, which primarily consist of Central Hardwood Forest. Invasive species such as buckthorn will be eradicated within the woodland mitigation areas throughout the three-year maintenance period utilizing the best available methods, minimizing their spread into the mitigation areas and therefore helping to improve the overall quality of Franklin's natural resources.

In total, the new woodland areas will consist of 7.62 acres of mitigation area. In total, (78) 4" caliper canopy trees, (191) 2.5" caliper canopy trees, (762) 5' tall canopy tree whips, (229) 5' tall understory tree whips, and (229) 12" tall shrubs will be planted within the proposed mitigation areas.

Wetland

Wetland mitigation is proposed at the Hilltop property to minimize disruptions to the existing wetlands, floodplain, and environmental corridor at the existing Franklin High School site. Note that the Hilltop property is located within the same Ryan Creek-Root River watershed as the high school site, so the proposed wetland mitigation area will maintain hydrologic and habitat benefits for the overall watershed.

The proposed wetland mitigation will occur through grading of the existing Hilltop Lane property, creating a shallow isolated area where stormwater runoff will collect and pond following storm events, mimicking a natural depression. Wetland tolerant trees and shrubs will be planted in this area in accordance with the proposed mitigation planting plan, and two different wet-tolerant wetland seed mixes will be utilized to promote native plant growth. Invasive species such as buckthorn and reed canary grass will be eradicated within the woodland mitigation areas throughout the three-year maintenance period utilizing the best available methods, minimizing their spread into the mitigation areas and therefore helping to improve the overall quality of Franklin's natural resources.

Ryan Road Property (Second High School)

In 2020, the district purchased 220 acres of land in the south area of Franklin for future district growth. This purchase from the Archdiocese came about as an opportunity for the District to secure land for future needs as a single contiguous and versatile property that was centrally located. The thought at the time was to secure land for needs such as replacing existing elementary building(s), a possible second middle school depending on community growth or an additional high school.

As part of Franklin Forward work, the district reviewed past survey data where the community was asked about the feasibility of adding a second high school. The results from the survey leaned in favor of not adding a second high school. In addition, based on the most recent population studies from MD Roffers, the Franklin community is not in need of a second high school through 2040. Based off this determination, the School Board opted to proceed with improvements to the current FHS facility in lieu of constructing a second high school at the Ryan Road site. Notably, the Ryan Road site also contains natural resources that would likely need to be modified if a new high school or other large facility was constructed at the site.

Hill Top Lane (Possible Roadway Connection)

Notably, following the 6-9-2025 Parks Community meeting, City staff asked the School District about the feasibility of redesigning the Hilltop Lane compensation area to allow for a future road connection through the parcel to connect to Hilltop Lane.

Given that the parcel is currently roughly 75% woodland, and that the remaining open area is planned to be used for mitigation, the school district feels that the parcel cannot be designed to have a road go through it.

Conclusion

The proposed woodland and wetland mitigation areas are intended to replace, expand, and enhance the overall quality of natural resources within the City of Franklin and the Root River watershed. In addition to ecological benefits, the project will provide a net positive impact to the Franklin community through the development of new and expanded educational facilities, supporting both environmental stewardship and educational advancement.

Natural Resource Special Exception (NRSE)

Question and Answer Form

Date:

Property Owner:

Property Address:

SECTION 15-9-08.d NRSE REVIEW CRITERIA

The applicant shall have the burden of proof to present evidence sufficient to support the findings required.

Criteria for Approval. A Special Exception may be granted only upon a finding by the Plan Commission:

- i. That the condition(s) giving rise to the request for a Special Exception were not self-imposed by the applicant (this subsection (i) does not apply to an application to improve or enhance a natural resource feature).

Applicant Response:

- ii. Compliance with the strict provisions of this Article will:

- a. Be unreasonably burdensome to the applicant and that there are no reasonable practicable alternatives; or,
- b. Unreasonably and negatively impact upon the applicant's use of the property and that there are no reasonable practicable alternatives; and
- c. The Special Exception, including the specific compensation measures in the Natural Resource Protection Plan and physical modifications to the site to protect other Natural Resources, including any conditions imposed under this Section will:
 - i. Enhance the overall character of the resulting development in a manner consistent with the planned character of the area and site; and
 - ii. Not effectively undermine the ability to apply or enforce the requirement with respect to other properties; and

- iii. Be in harmony with the general purpose and intent of the provisions of this Article; and
- iv. Incorporate sufficient monitoring, conditions, and financial sureties to ensure preservation and enhancement of Protected Areas and compensation areas; and
- v. Preserve or enhance the quality of the natural resources affected.

Applicant Response:

In making its recommendation, the Plan Commission shall consider factors such as:

- i. The impact on physical characteristics of the property, including but not limited to, relative placement of improvements thereon with respect to property boundaries or otherwise applicable setbacks;

Applicant Response:

- ii. Any exceptional, extraordinary, or unusual circumstance or conditions applying to the lot or parcel, structure, use, or intended use that do not apply generally to other properties or uses in the same district;

Applicant Response:

- iii. The proposed degree of noncompliance with the requirement of this Article to be allowed by the Special Exception;

Applicant Response:

- iv. The project's proximity to and character of surrounding property;

Applicant Response:

- v. Purpose of the zoning district of the area in which property is located and neighboring area;

Applicant Response:

- vi. Any potential for negative effects upon adjoining property from the Special Exception if authorized.

Applicant Response:

Criteria for Approval.

A Special Exception may be granted only upon a finding by the Plan Commission:

- i. That the condition(s) giving rise to the request for a Special Exception were not self-imposed by the applicant:

The conditions giving rise to this request were not self-imposed. When the Franklin High School (FHS) property was originally purchased and later constructed in the 1960s, the natural resource requirements imposed now by the City of Franklin did not exist. The school district at the time reasonably believed that they would have the ability to develop this land as needed to meet the growing needs of students of the Franklin Community. Preventing the local school district from utilizing the remaining land located east of the high school is unreasonably burdensome.

The High View Drive stub road located east of FHS, which was constructed around 1995 and ties directly into the high school property, shows that the undeveloped land located east of the high school was meant to be developed, in order for this roadway connection to be made.

Special note should be made regarding the conservation easement that the school district signed in 2014. Conservation easements are meant to be permanent but can be modified if there is a substantial reason, such as public interest, community benefit, changed conditions, or unforeseen circumstances. In 2014, school district staff may have thought that the next reasonable step for the school district would be to construct a new school. However, the recent Franklin Forward long-range facility planning initiative, through community outreach and population studies, has determined that the Franklin Community does not currently need or want a second high school. Therefore, modifying the current conservation easement to allow for development on the land east of the high school makes the most sense for the community as a whole, as it allows the school district to address its needs without the financial and social costs of splitting the community through the creation of a second high school.

- i) Compliance with the strict provisions of this Article will:
- a) Be unreasonably burdensome to the applicant and that there are no reasonable practicable alternatives; or,
 - b) Unreasonably and negatively impact upon the applicant's use of the property and that there are no reasonable practicable alternatives; and
 - c) The Special Exception, including the specific compensation measures in the Natural Resource Protection Plan and physical modifications to the site to protect other Natural Resources, including any conditions imposed under this Section will:
 - i) Enhance the overall character of the resulting development in a manner consistent with the planned character of the area and site; and
 - ii) Not effectively undermine the ability to apply or enforce the requirement with respect to other properties; and
 - iii) Be in harmony with the general purpose and intent of the provisions of this Article; and
 - iv) Incorporate sufficient monitoring, conditions, and financial sureties to ensure preservation and enhancement of Protected Areas and compensation areas; and
 - v) Preserve or enhance the quality of the natural resources affected.

When the high school property was originally purchased and later built in the 1960s, the natural resource requirements imposed now by the City of Franklin did not exist. The school district at the time reasonably believed that they would have the ability to develop this land as needed to meet the

growing needs of students of the Franklin Community. Preventing the District from utilizing the remaining land located east of the high school is unreasonably burdensome. Construction of a new high school would be substantially more expensive than the currently proposed project and may run into similar natural resources concerns.

FHS has existed on this property since the 1960s. The proposed site improvements and expansion of the existing facility are consistent with the current land use and the overall character of the surrounding neighborhood. Since the school has existed on this property for 60 plus years and has very unique responsibilities to the Franklin community, approval of this NRSE will not undermine the city's ability to apply or enforce natural resources requirements with respect to other properties.

The proposed development and wetland/woodland mitigation areas shall be in harmony with the intent of the UDO Natural Protection Guidance Document. The UDO allows for natural resource special exceptions to allow for community driven needs such as this project.

The proposed mitigation plan incorporates sufficient monitoring, conditions, and financial sureties to ensure preservation and enhancement of Protected Areas and compensation areas. Proposed mitigation areas shall be constructed in accordance with City requirements and guidelines with measures taken to prevent the spread of invasive species such as buckthorn and reed canary grass, resulting in enhanced natural resources for the community.

The proposed development will avoid impact to the existing environmental corridor on the north side of the school property which contains an existing waterway, woodlands, wetlands, and floodplain area.

In making its recommendation, the Plan Commission shall consider factors such as:

i. The impact on physical characteristics of the property, including but not limited to, relative placement of improvements thereon with respect to property boundaries or otherwise applicable setbacks;

The current high school property already has a fair amount of development, with undeveloped areas lying to north and east of the current facilities. The area to north is quite likely undevelopable, as there is a myriad number of environmental concerns – wetlands, woodlands, floodplains, two minor waterways, an environmental corridor, etc.

The only realistically developable land, substantial enough in size to host the proposed improvements, lies east of the current high school facility. This area is wooded with three small, isolated wetland areas and a series of drainage swales which have been delineated as wetland. The cost of building a new high school would be excessive, so it is in the community's best interest to further develop the current FHS property to allow for referendum approved improvements for the high school facility.

ii. Any exceptional, extraordinary, or unusual circumstance or conditions applying to the lot or parcel, structure, use, or intended use that do not apply generally to other properties or uses in the same district;

An exceptional amount of land is needed to construct and maintain a high school facility, given the needs for school buildings, athletic fields, student drop-off and pickup areas, parking, and community events. Given that the district's long-term planning and community feedback indicates that there is no current need or community desire for a second high school, it only makes sense that the needed facility

improvements occur at the current high school property.

iii. The proposed degree of noncompliance with the requirement of this Article to be allowed by the Special Exception;

Per the newly approved UDO, woodland and nonfederal jurisdiction wetland disturbance with compensatory mitigation is allowed without a special exception. Offsite compensation requires approval of a special exception.

iv. The project's proximity to and character of surrounding property;

The proposed building and site improvements will match the character of the existing high school facility. The proposed building will be aesthetically pleasing modern construction. Substantial landscaping is proposed to enhance the beauty of the proposed development, in accordance with local requirements.

Locating schools near residential homes offers numerous benefits, including improved student safety, reduced transportation costs, and increased opportunities for walking or biking. It strengthens community ties, boosts attendance and punctuality, and allows for greater parental involvement. Proximity also supports neighborhood development, promotes environmental sustainability, and ensures more equitable access to education for all families.

v. Purpose of the zoning district of the area in which property is located and neighboring area;

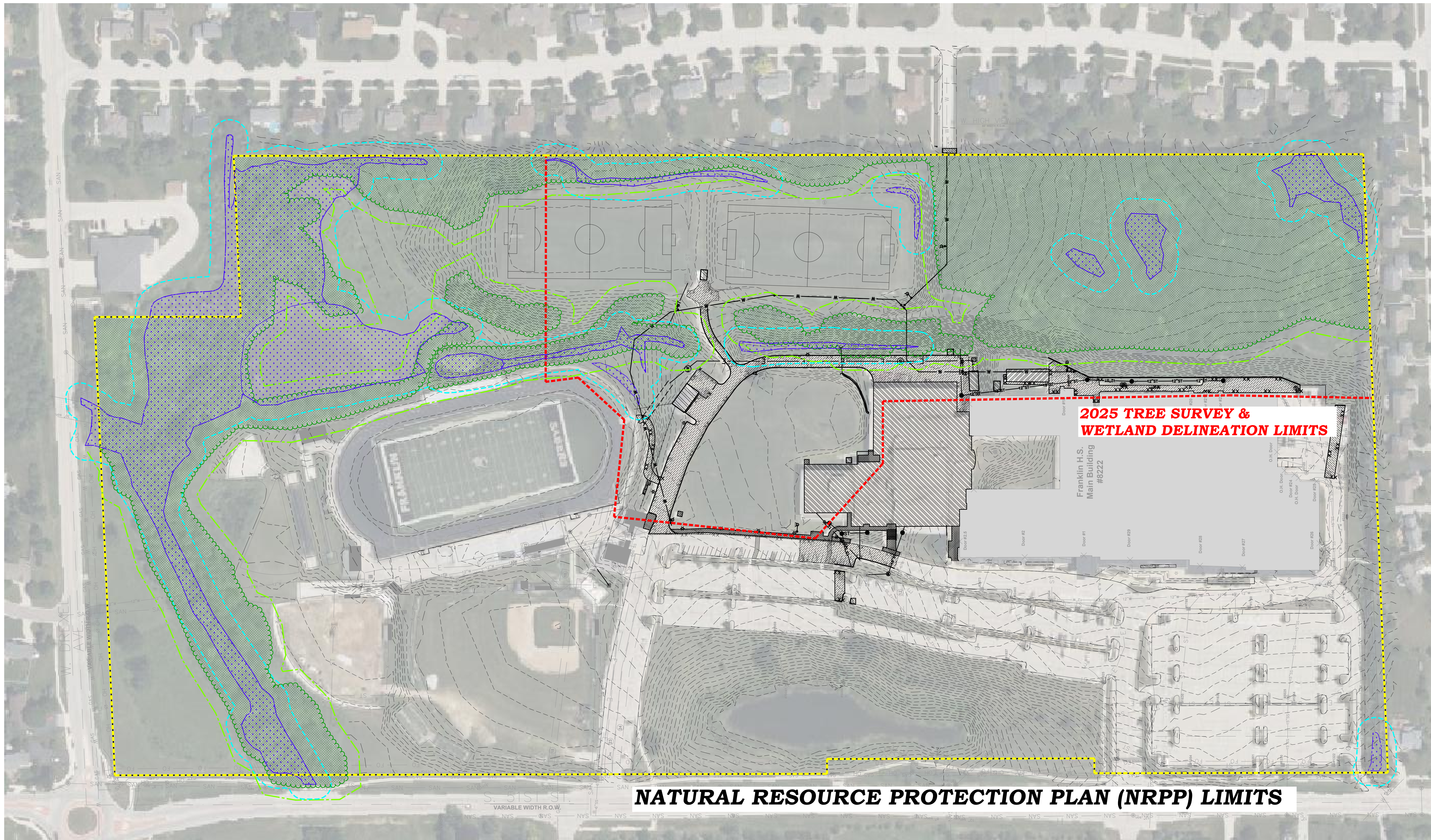
The purpose of the institutional zoning district in which this property is located is to allow for the development of institutional facilities to educate the youth of the City of Franklin. This proposed development aligns with this purpose.

Furthermore, locating school development near residential centers offers numerous benefits, including improved student safety, reduced transportation costs, and increased opportunities for walking or biking. It strengthens community ties and allows for greater parental involvement. Proximity also supports neighborhood development and promotes environmental sustainability through improved access.

vi. Any potential for negative effects upon adjoining property from the Special Exception if authorized.

As mentioned above, schools should generally be located near residential properties. The proposed development has been designed with substantial landscape buffer and the proposed tennis courts have been shifted away from neighboring residences as much as possible to minimize any negative impact upon adjoining properties.

Erosion control measures are proposed in accordance with WDNR technical standards to protect local waterways from construction sediment throughout the duration of construction. Additionally, a new wet detention pond and adjustments to an existing wet detention pond are also proposed in accordance with WDNR Technical Standard 1001 to provide long-term stormwater rate control and treatment of stormwater discharge from the proposed development, protecting local waterways post-construction. Furthermore, new wetland area will be constructed as required by state and local mitigation requirements.



NATURAL RESOURCE PROTECTION PLAN (NRPP) LIMITS

2025 TREE SURVEY & WETLAND DELINEATION LIMITS

Franklin H.S.
Main Building
#8222

LEGEND:

- EXISTING WOODLAND
- EXISTING WOODLAND BUFFER
- EXISTING WETLAND
- WETLAND BUFFER

CONTACT INFORMATION

DEVELOPER:
FRANKLIN PUBLIC SCHOOLS
8255 WEST FOREST HILL AVE
FRANKLIN, WI 53132
414-529-8220

PLAN PREPARER:
JESSE BECKER, P.E.
POINT OF BEGINNING, INC.
4941 KIRSCHLING COURT
STEVENS POINT, WI 54481
715-344-9999

SITE STATISTICS

SITE AREA:
3,106,789 SF = 71.32206 ACRES

TOTAL SITE WOODLAND AREA:
706,226 SF = 16.21 ACRES

TOTAL SITE WETLAND AREA:
242,912 SF = 5.58 ACRES

TOTAL SITE WETLAND BUFFER AREA:
281,186 SF = 6.46 ACRES

GENERAL NOTES

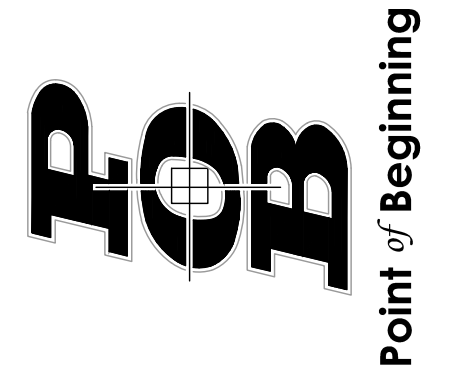
- THIS NATURAL RESOURCE PROTECTION PLAN, AS WELL AS THE ASSOCIATED MITIGATION PLAN AND DRAFT CONSERVATION EASEMENT EXHIBIT HAVE BEEN DEVELOPED IN ACCORDANCE WITH UPCOMING CITY OF FRANKLIN UNIFIED DEVELOPMENT ORDINANCE (UDO) CHANGES.
- STEEP SLOPES WILL NO LONGER BE CONSIDERED A NATURAL RESOURCES WITH THE UPCOMING CHANGES TO FRANKLIN'S UNIFIED DEVELOPMENT ORDINANCE. THEREFORE, STEEP SLOPE LOCATIONS ARE NOT SHOWN ON THIS NRPP.
- WETLANDS LOCATED WITHIN THE INDICATED "2025 TREE SURVEY & WETLAND DELINEATION LIMITS" WERE LOCATED BY ASSURED DELINEATOR CHAD FRADETTE WITH EVERGREEN CONSULTANTS.
- WETLANDS LOCATED OUTSIDE THE INDICATED "2025 TREE SURVEY & WETLAND DELINEATION LIMITS" WERE LOCATED PER GIS DATA FROM THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES'S "SURFACE WATER DATA VIEWER". THESE WETLANDS ARE LOCATED OUTSIDE OF THE PLANNED DISTURBANCE LIMITS FOR THE PROPOSED PROJECT.
- NOTE THAT WETLANDS LOCATED WITHIN THE "2025 TREE SURVEY & WETLAND DELINEATION LIMITS" HAVE BEEN CONFIRMED FINAL BY EVERGREEN CONSULTANTS, BUT THE WETLAND DELINEATION REPORT IS STILL A WORK IN PROGRESS AS OF 6/1/2025. THE FINAL WETLAND DELINEATION REPORT WILL BE PROVIDED TO THE CITY OF FRANKLIN WHEN AVAILABLE.

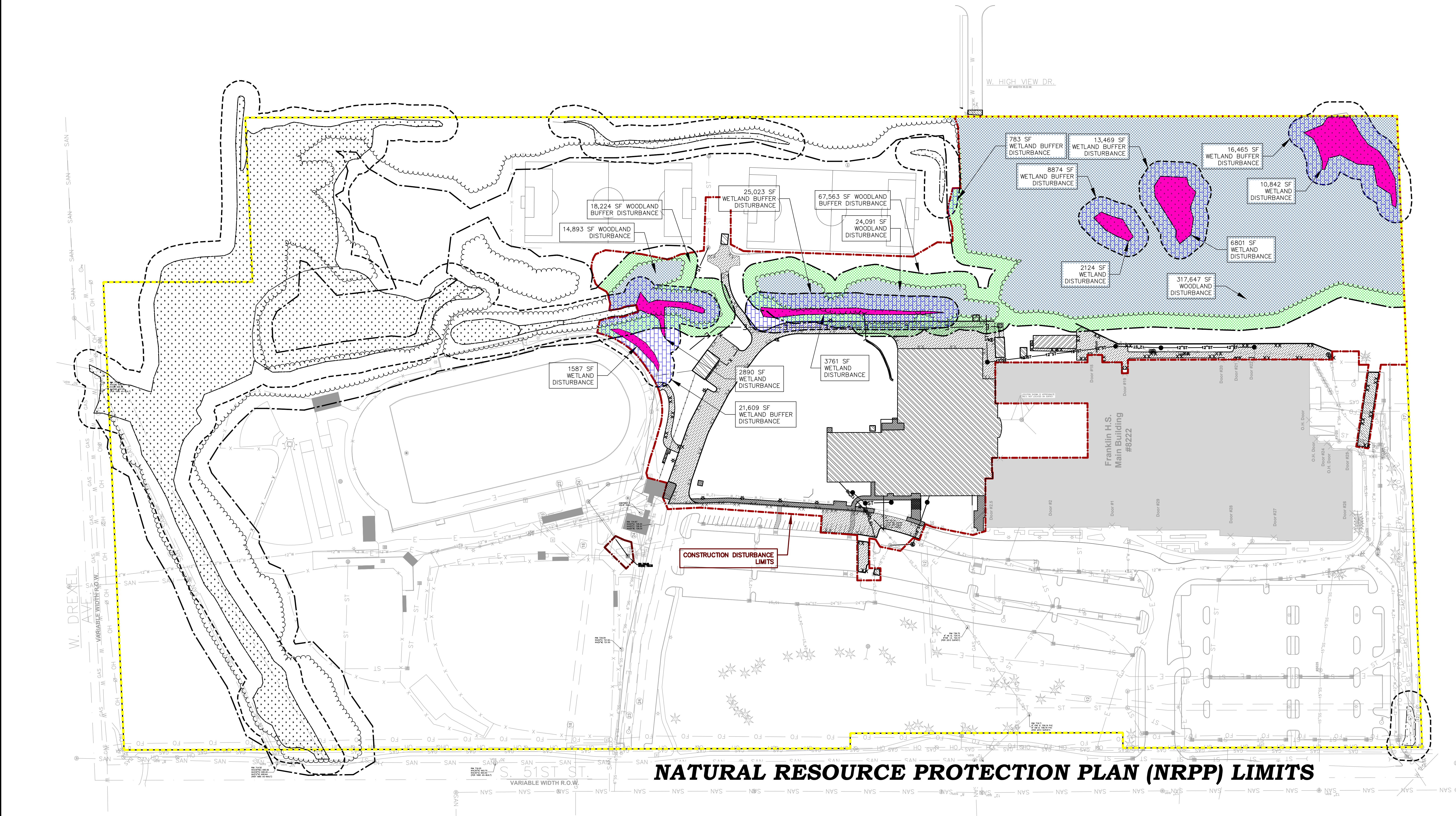
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06-02-2025	WETLAND REVISIONS
06-30-2025	RESUBMITTAL
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DRAWN: JB	
DATE: 5/5/2025	
PROJECT NO.: 25.0022	

**EXISTING CONDITIONS
PLAN**

**FRANKLIN HIGH SCHOOL
BUILDING + SITE IMPROVEMENTS
CITY OF FRANKLIN**

Civil Engineering
Land Surveying
Landscape Architecture
4941 Kirschling Court
Stevens Point, WI 54481
715.344.9999 (PH) 715.344.9922 (FX)





NATURAL RESOURCE PROTECTION PLAN (NRPP) LIMITS

LEGEND:

EXISTING WOODLANDS	
EXISTING WOODLAND BUFFER	
EXISTING WETLANDS	
EXISTING WETLAND BUFFER	
PROPOSED WOODLAND DISTURBANCE	
PROPOSED WETLAND DISTURBANCE	
PROPOSED WOODLAND BUFFER DISTURBANCE	
PROPOSED WETLAND BUFFER STURBANCE	
PROPOSED CONSTRUCTION LIMITS	

NATURAL RESOURCE DISTURBANCE

WOODLAND DISTURBED AREA	=	356,631 SF	=	8.19 ACRES
WOODLAND BUFFER DISTURBED AREA	=	85,787 SF	=	1.97 ACRES
WETLAND DISTURBED AREA	=	28,005 SF	=	0.64 ACRES
WETLAND BUFFER DISTURBED AREA	=	86,223 SF	=	1.98 ACRES

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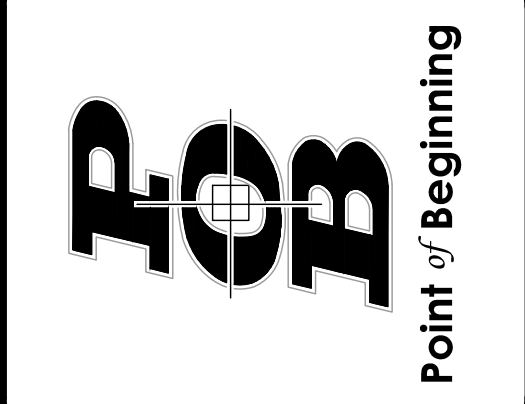
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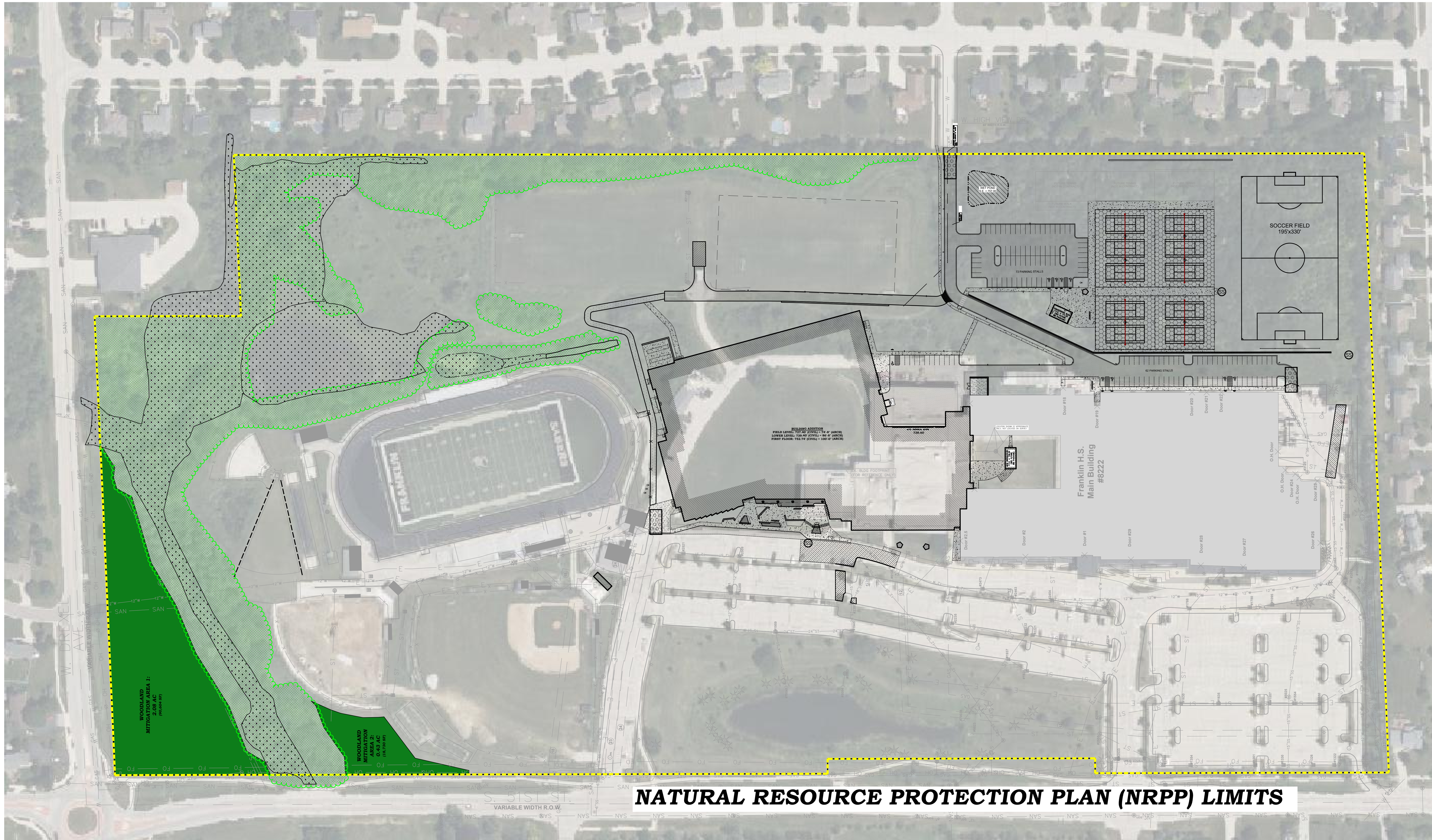
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**PROPOSED
CONSTRUCTION
DISTURBANCE**

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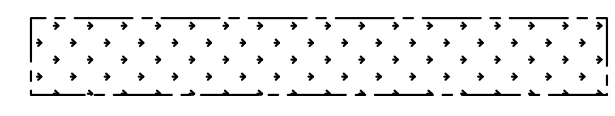
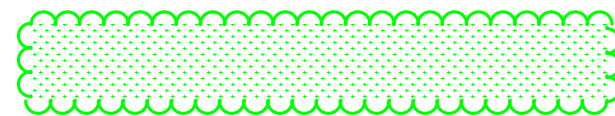
LEGEND:

UNDISTURBED WOODLAND

PROPOSED WOODLAND BUFFER

UNDISTURBED WETLAND

PROPOSED WOODLAND MITIGATION AREA



GENERAL NOTES

1. THE PROPOSED SITE IMPROVEMENTS SHOWN ON THIS DOCUMENT ARE CONCEPTUAL ONLY AND WILL BE SUBJECT TO CHANGE PRIOR TO CONSTRUCTION.

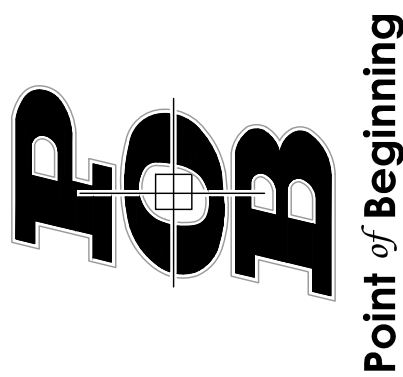


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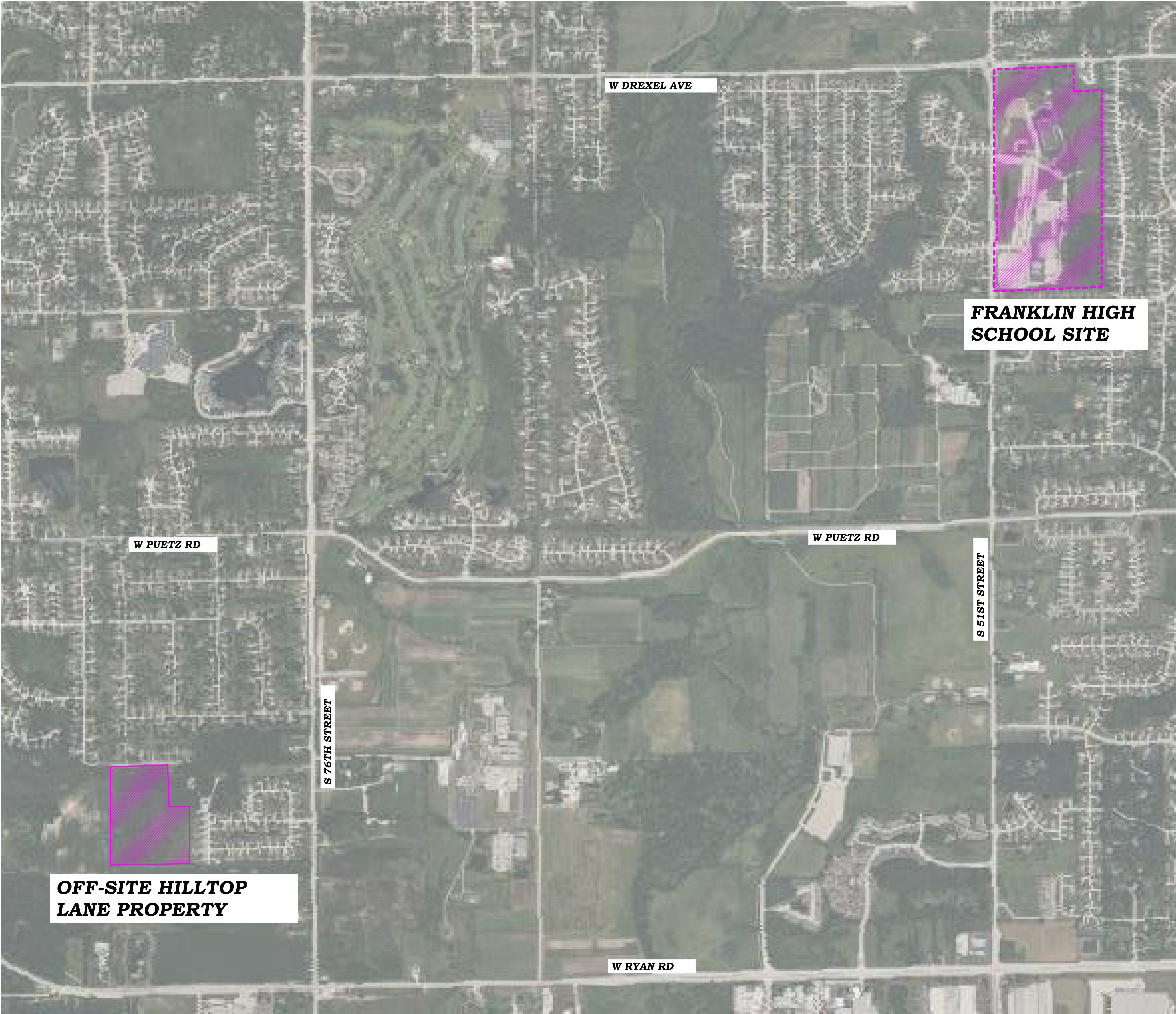
**PROPOSED FINAL
CONDITIONS**

**FRANKLIN HIGH SCHOOL
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CITY OF FRANKLIN**

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Stevens Point, WI 54481
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Point of Beginning



MITIGATION REQUIREMENTS:

REQUIRED COMPENSATION RATIO:

WOODLAND COMPENSATION: 0.75 RESTORATION RATIO REQUIRED FOR WOODLAND RESOURCE TYPES.

WETLAND COMPENSATION: 1.5 RESTORATION RATIO REQUIRED FOR FEDERAL JURISDICTION WETLAND RESOURCE TYPES.

WETLAND BUFFER COMPENSATION: 1.5 RESTORATION RATIO REQUIRED FOR FEDERAL JURISDICTION WETLAND BUFFER RESOURCE TYPE.

TOTAL WOODLAND REMOVAL: 10.16 ACRES

TOTAL WOODLAND COMPENSATION: 10.16 X 0.75 = 7.62 ACRES

TOTAL WETLAND REMOVAL: 0.64 ACRES

TOTAL WETLAND COMPENSATION: 0.64 X 1.5 = 0.96 ACRES

TOTAL WETLAND BUFFER REMOVAL: 1.98 ACRES

TOTAL WETLAND BUFFER COMPENSATION: 1.98 X 1.50 = 2.97 ACRES

PROPOSED:

WOODLAND COMPENSATION: 7.62 ACRES OF WOODLAND COMPENSATION AREA PROPOSED BROKEN OUT INTO 4 MITIGATION AREAS. MITIGATION AREAS 1 & 2 ARE LOCATED ON THE FRANKLIN HIGH SCHOOL SITE. MITIGATION AREAS 3 & 4 ARE LOCATED AT THE OFFSITE HILLTOP LANE PROPERTY.

WOODLAND MITIGATION AREA 1: 2.08 ACRES

WOODLAND MITIGATION AREA 2: 0.43 ACRES

WOODLAND MITIGATION AREA 3: 4.11 ACRES

WOODLAND MITIGATION AREA 4: 1.00 ACRES

WETLAND COMPENSATION: 0.96 ACRES OF COMPENSATION AREA PROPOSED. WETLAND MITIGATION AREA IS LOCATED ON THE OFF-SITE HILLTOP LANE PROPERTY.

WETLAND MITIGATION AREA: 0.975 ACRES

WETLAND BUFFER COMPENSATION: 2.97 ACRES OF COMPENSATION AREA PROPOSED. WETLAND BUFFER MITIGATION AREA IS LOCATED ON THE OFF-SITE HILLTOP LANE PROPERTY.

WOODLAND MITIGATION PLANTING REQUIREMENT: THE FOLLOWING PLANTS SHALL BE PLANTED PER 1 ACRE OF MITIGATION AREA:

- 10 CANOPY TREES AT 4" MIN. CALIPER
- 25 CANOPY TREES AT 2.5" MIN. CALIPER
- 100 CANOPY TREES AT 5FT HIGH WHIPS
- 35 UNDERSTORY TREES AT 5FT HIGH WHIPS
- 30 SHRUBS AT MINIMUM 12" HEIGHT

PROPOSED:

4" CAL. CANOPY TREES: 78 TREES

2.5" CAL. CANOPY TREES: 191 TREES

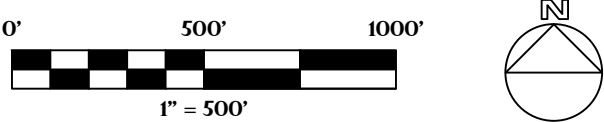
5FT HIGH CANOPY TREE WHIPS: 762 TREES

5FT HIGH UNDERSTORY TREE WHIPS: 268 TREES

12" HIGH SHRUBS: 229 SHRUBS

OVERALL MITIGATION PLANTING SCHEDULE:

CANOPY TREES SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
AS	ACER SACCHARUM	SUGAR MAPLE	4" CAL. 2-1/2" CAL. 5'T WHIPS	75'T X 50'W 75'T X 50'W 75'T X 50'W	12 25 96
AU	ACER UEGUNDO	BOX ELDER	4" CAL. 2-1/2" CAL. 5'T WHIPS	50'T X 50'W 50'T X 50'W 50'T X 50'W	10 27 95
CC	CELTIS OCCIDENTALIS	HACKBERRY	4" CAL. 2-1/2" CAL. 5'T WHIPS	60'T X 60'W 60'T X 60'W 60'T X 60'W	11 28 95
CO	CARYA OVATA	SHAGBARK HICKORY	4" CAL. 2-1/2" CAL. 5'T WHIPS	80'T X 50'W 80'T X 50'W 80'T X 50'W	11 25 96
JN	JUGLAUS NIGRA	BLACK WALNUT	4" CAL. 2-1/2" CAL. 5'T WHIPS	75'T X 50'W 75'T X 50'W 75'T X 50'W	24 19 94
PD	POPULUS DELTOIDES	COTTONWOOD	4" CAL. 2-1/2" CAL. 5'T WHIPS	100'T X 75'W 100'T X 75'W 100'T X 75'W	7 18 94
QA	QUERCUS ALBA	WHITE OAK	4" CAL. 2-1/2" CAL. 5'T WHIPS	100'T X 80'W 100'T X 80'W 100'T X 80'W	10 27 95
TA	TILIA AMERICANA	AMERICAN BASSWOOD	4" CAL. 2-1/2" CAL. 5'T WHIPS	80'T X 60'W 80'T X 60'W 80'T X 60'W	10 22 97
UNDERSTORY TREES SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
AL	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY	5'T WHIPS	25'T X 25'W	68
CA	CORNUS ALTERNIFOLIA	PAGODA DOGWOOD	5'T WHIPS	25'T X 30'W	68
MR	MORUS RUBRA	RED MULBERRY	5'T WHIPS	70'T X 50'W	65
OV	OSTRYA VIRGINIANA	IRONWOOD	5'T WHIPS	40'T X 40'W	67
SHRUBS SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
CD	CEPHAALANTHUS OCCIDENTALIS	COMMON BUTTONBUSH	12'T	15'T X 10'W	27
CL	CORNUS ALBA	RED OSIER	12'T	10'T X 10'W	27
CM	CORYLUS AMERICANA	AMERICAN HAZELNUT	12'T	15'T X 10'W	30
HV	HAMAMELIS VIRGINIANA	AMERICAN WITCH HAZEL	12'T	20'T X 10'W	30
PV	PRUNUS VIRGINIANA	CHOKE CHERRY	12'T	30'T X 20'W	27
SD	SALIX DISCOLOR	PUSSY WILLOW	12'T	20'T X 10'W	29
VA	VACCINIUM ANGUSTIFOLIUM	LOWBUSH BLUEBERRY	12'T	2'T X 2'W	27
VL	VIBURNUM LENTAGO	NANNY BERRY	12'T	20'T X10'W	32

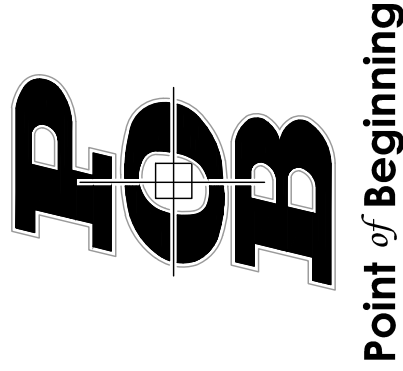


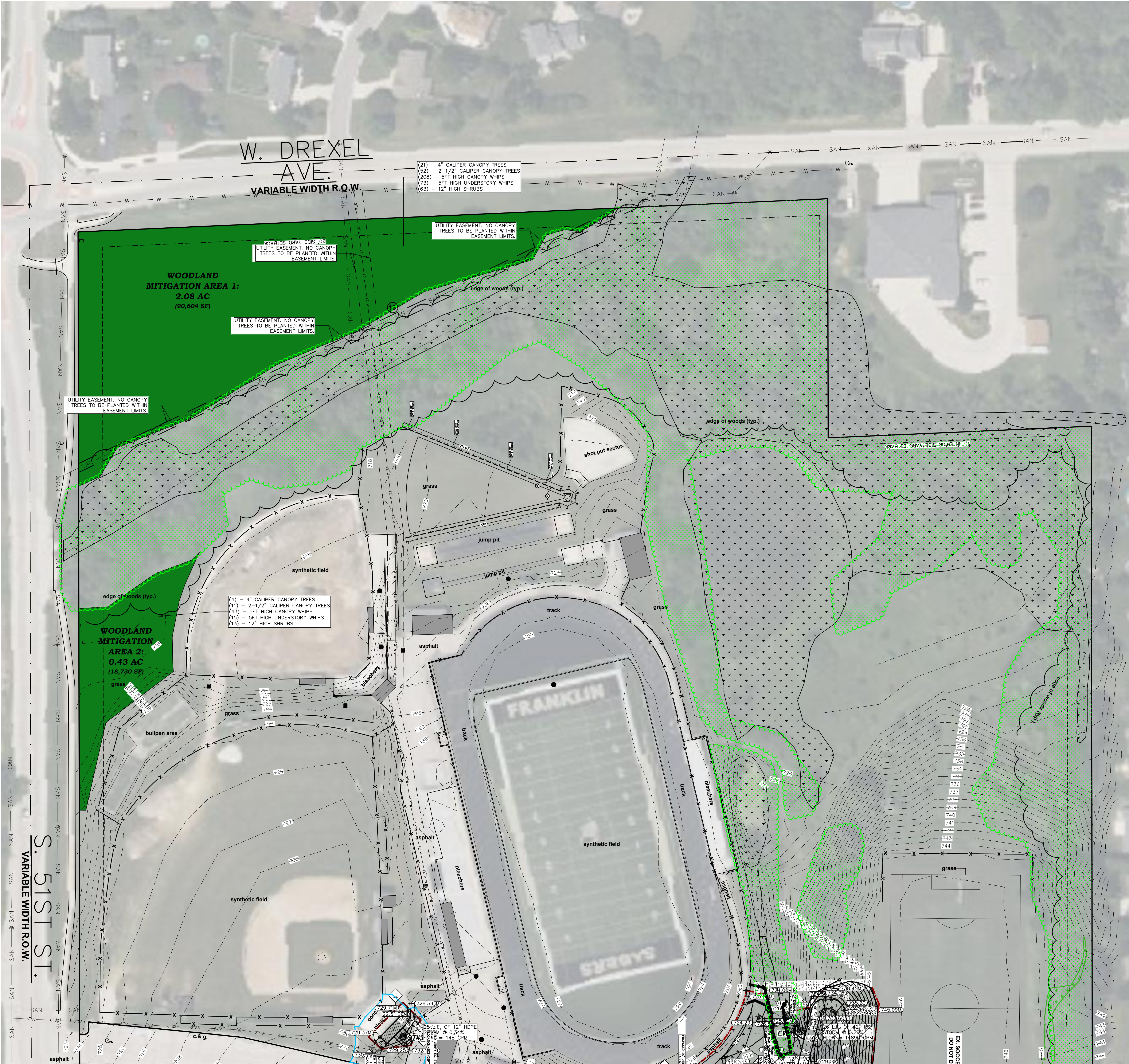
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MITIGATION PLAN 1

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CITY OF FRANKLIN

Civil Engineering
Land Surveying
Landscape Architecture
4941 Kirschling Court
Stevens Point, WI 54481
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LEGEND:

PROPOSED WOODLAND MITIGATION AREA

MITIGATION AREA (1) PLANTING SCHEDULE:

CANOPY TREES SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
AS	ACER SACCHARUM	SUGAR MAPLE	4" CAL. 2-1/2" CAL. 5" T WHIPS	75" T X 50" W 75" T X 50" W 75" T X 50" W	3 7 26
AU	ACER UEGUNDO	BOX ELDER	4" CAL. 2-1/2" CAL. 5" T WHIPS	50" T X 50" W 50" T X 50" W 50" T X 50" W	3 6 26
CC	CELTIS OCCIDENTALIS	HACKBERRY	4" CAL. 2-1/2" CAL. 5" T WHIPS	60" T X 60" W 60" T X 60" W 60" T X 60" W	2 7 26
CO	CARYA OVATA	SHAGBARK HICKORY	4" CAL. 2-1/2" CAL. 5" T WHIPS	80" T X 50" W 80" T X 50" W 80" T X 50" W	3 7 26
JN	JUGLAUS NIGRA	BLACK WALNUT	4" CAL. 2-1/2" CAL. 5" T WHIPS	75" T X 50" W 75" T X 50" W 75" T X 50" W	2 6 26
PD	POPULUS DELTOIDES	COTTONWOOD	4" CAL. 2-1/2" CAL. 5" T WHIPS	100" T X 75" W 100" T X 75" W 100" T X 75" W	2 6 26
QA	QUERCUS ALBA	WHITE OAK	4" CAL. 2-1/2" CAL. 5" T WHIPS	100" T X 80" W 100" T X 80" W 100" T X 80" W	3 6 26
TA	TILIA AMERICANA	AMERICAN BASSWOOD	4" CAL. 2-1/2" CAL. 5" T WHIPS	80" T X 60" W 80" T X 60" W 80" T X 60" W	3 7 26

UNDERSTORY TREES SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
AL	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY	5" T WHIPS	25" T X 25" W	19
CA	CORNUS ALTERNIFOLIA	PAGODA DOGWOOD	5" T WHIPS	25" T X 30" W	18
MR	MORUS RUBRA	RED MULBERRY	5" T WHIPS	70" T X 50" W	18
OV	OSTRYA VIRGINIANA	IRONWOOD	5" T WHIPS	40" T X 40" W	18

SHRUBS SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
CD	CEPHALANTHUS OCCIDENTALIS	COMMON BUTTONBUSH	12" T	15" T X 10" W	8
CL	CORNUS ALBA	RED OSIER	12" T	10" T X 10" W	8
CM	CORYLUS AMERICANA	AMERICAN HAZELNUT	12" T	15" T X 10" W	8
HV	HAMAMELIS VIRGINIANA	AMERICAN WITCH HAZEL	12" T	20" T X 10" W	8
PV	PRUNUS VIRGINIANA	CHOKE CHERRY	12" T	30" T X 20" W	8
SD	SALIX DISCOLOR	PUSSY WILLOW	12" T	20" T X 10" W	8
VA	VACCINIUM ANGUSTIFOLIUM	LOWBUSH BLUEBERRY	12" T	2" T X 2" W	7
VL	VIBURNUM LENTAGO	NANNY BERRY	12" T	20" T X 10" W	8

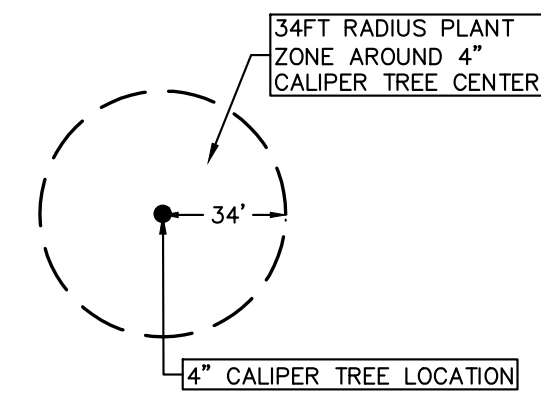
MITIGATION AREA (2) PLANTING SCHEDULE:

CANOPY TREES SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
AS	ACER SACCHARUM	SUGAR MAPLE	4" CAL. 5" T WHIPS	75" T X 50" W 75" T X 50" W	2 5
AU	ACER UEGUNDO	BOX ELDER	5" T WHIPS 2-1/2" CAL.	50" T X 50" W 50" T X 50" W	5 3
CC	CELTIS OCCIDENTALIS	HACKBERRY	4" CAL. 2-1/2" CAL. 5" T WHIPS	60" T X 60" W 60" T X 60" W 60" T X 60" W	2 3 5
CO	CARYA OVATA	SHAGBARK HICKORY	5" T WHIPS	80" T X 50" W	6
JN	JUGLAUS NIGRA	BLACK WALNUT	5" T WHIPS	75" T X 50" W	5
PD	POPULUS DELTOIDES	COTTONWOOD	5" T WHIPS	100" T X 75" W	5
QA	QUERCUS ALBA	WHITE OAK	5" T WHIPS 2-1/2" CAL.	100" T X 80" W 100" T X 80" W	6 3
TA	TILIA AMERICANA	AMERICAN BASSWOOD	2-1/2" CAL. 5" T WHIPS	80" T X 60" W 80" T X 60" W	2 6

UNDERSTORY TREES SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
AL	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY	5" T WHIPS	25" T X 25" W	4
CA	CORNUS ALTERNIFOLIA	PAGODA DOGWOOD	5" T WHIPS	25" T X 30" W	4
MR	MORUS RUBRA	RED MULBERRY	5" T WHIPS	70" T X 50" W	3
OV	OSTRYA VIRGINIANA	IRONWOOD	5" T WHIPS	40" T X 40" W	4

SHRUBS SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
CM	CORYLUS AMERICANA	AMERICAN HAZELNUT	12" T	15" T X 10" W	3
HV	HAMAMELIS VIRGINIANA	AMERICAN WITCH HAZEL	12" T	20" T X 10" W	3
SD	SALIX DISCOLOR	PUSSY WILLOW	12" T	20" T X 10" W	3
VL	VIBURNUM LENTAGO	NANNY BERRY	12" T	20" T X 10" W	4

TREE PLANTING DISTRIBUTION:



PLANTING METHOD:
4" CALIPER TREES TO BE EVENLY PLANTED
THROUGHOUT MITIGATION AREA APPROXIMATELY
68FT ON CENTER, WITHIN A 34FT RADIUS
PLANTING ZONE. EACH 4" CALIPER TREE PLANT
ZONE TO CONTAIN THE FOLLOWING APPROXIMATE
DISTRIBUTION OF PLANTS:

- (2-3) 2 1/2" CALIPER TREES
- (10) 5FT HIGH CANOPY WHIPS
- (3-4) 5FT HIGH UNDERSTORY WHIPS
- (3) 12" HIGH SHRUBS

NOTE: ALL PLANT QUANTITIES SPECIFIED FOR
EACH AREA TO BE UTILIZED AND PLANTED.

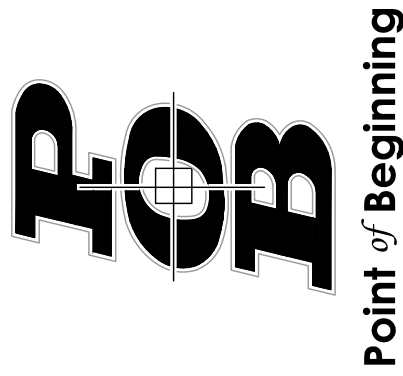
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MITIGATION PLAN 2

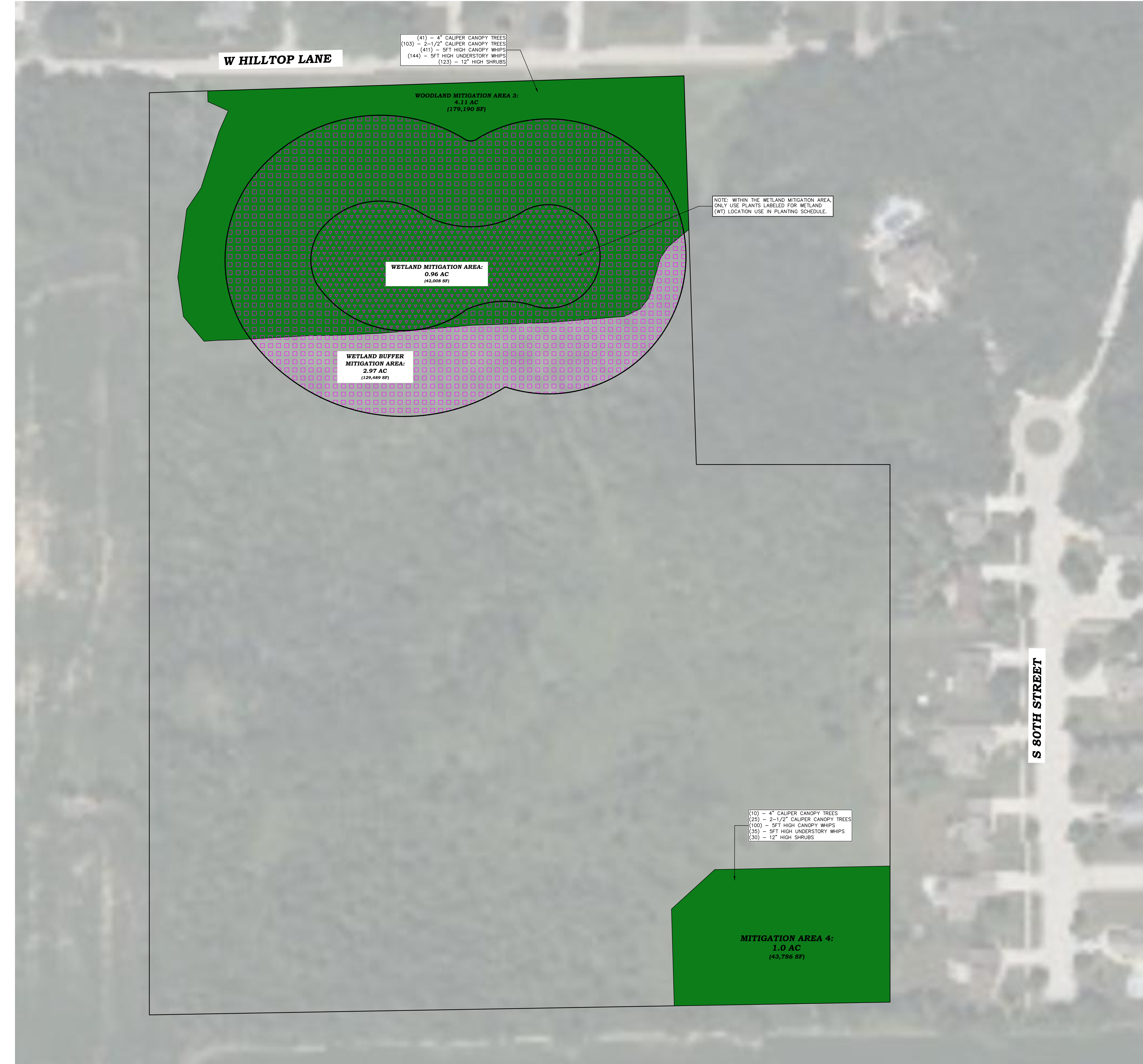
FRANKLIN HIGH SCHOOL
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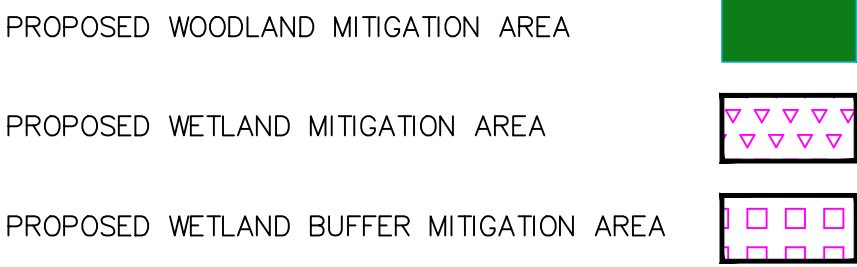


FRANKLIN HIGH SCHOOL SITE





LEGEND:



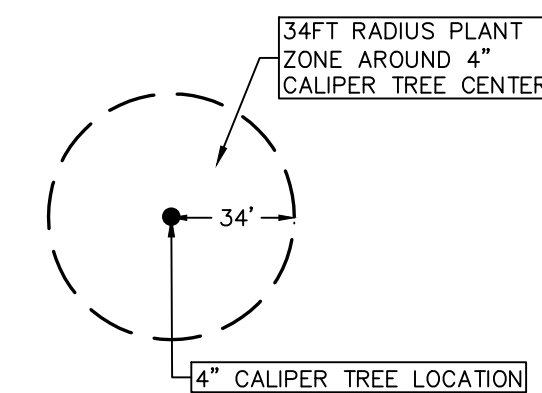
MITIGATION AREA (3) PLANTING SCHEDULE:

CANOPY TREES SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY	LOCATION
AS	ACER SACCHARUM	SUGAR MAPLE	4" CAL 2-1/2" CAL 5'T WHIPS	75'T X 50'W 75'T X 50'W 75'T X 50'W	5 13 52	WD
AU	ACER UEGUNDO	BOX ELDER	4" CAL 2-1/2" CAL 5'T WHIPS	50'T X 50'W 50'T X 50'W 50'T X 50'W	5 13 51	WD/WT
CC	CELTIS OCCIDENTALIS	HACKBERRY	4" CAL 2-1/2" CAL 5'T WHIPS	60'T X 60'W 60'T X 60'W 60'T X 60'W	5 13 52	WD
CO	CARYA OVATA	SHAGBARK HICKORY	4" CAL 2-1/2" CAL 5'T WHIPS	80'T X 50'W 80'T X 50'W 80'T X 50'W	6 13 51	WD
JN	JUGLAUS NIGRA	BLACK WALNUT	4" CAL 2-1/2" CAL 5'T WHIPS	75'T X 50'W 75'T X 50'W 75'T X 50'W	5 13 51	WD
PD	POPULUS DELTOIDES	COTTONWOOD	4" CAL 2-1/2" CAL 5'T WHIPS	100'T X 75'W 100'T X 75'W 100'T X 75'W	5 12 51	WD/WT
QA	QUERCUS ALBA (NOTE: USE QUERCUS BICOLOR/SWAMP WHITE OAK IN WETLAND AREAS)	WHITE OAK	4" CAL 2-1/2" CAL 5'T WHIPS	100'T X 80'W 100'T X 80'W 100'T X 80'W	5 13 51	WD/WT
TA	TILIA AMERICANA	AMERICAN BASSWOOD	4" CAL 2-1/2" CAL 5'T WHIPS	80'T X 60'W 80'T X 60'W 80'T X 60'W	5 13 52	WD
UNDERSTORY TREES SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY	LOCATION
AL	AMELANCHIER LAEVS	ALLEGHENY SERVICEBERRY	5'T WHIPS	25'T X 25'W	36	WD/WT
CA	CORNUS ALTERNIFOLIA	PAGODA DOGWOOD	5'T WHIPS	25'T X 30'W	36	WD/WT
MR	MORUS RUBRA	RED MULBERRY	5'T WHIPS	70'T X 50'W	36	WD
OV	OSTRYA VIRGINIANA	IRONWOOD	5'T WHIPS	40'T X 40'W	36	WD
SHRUBS SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY	LOCATION
CD	CEPAHALANTHUS OCCIDENTALIS	COMMON BUTTONBUSH	12'T	15'T X 10'W	15	WD/WT
CL	CORNUS ALBA	RED OSIER	12'T	10'T X 10'W	15	WD/WT
CM	CORYLUS AMERICANA	AMERICAN HAZELNUT	12'T	15'T X 10'W	15	WD
HV	HAMAMELIS VIRGINIANA	AMERICAN WITCH HAZEL	12'T	20'T X 10'W	15	WD/WT
PV	PRUNUS VIRGINIANA	CHOKE CHERRY	12'T	30'T X 20'W	16	WD
SD	SALIX DISCOLOR	PUSSY WILLOW	12'T	20'T X 10'W	15	WD/WT
VA	VACCINIUM ANGUSTIFOLIUM	LOWBUSH BLUEBERRY	12'T	2'T X 2'W	16	WD
VL	VIURNUM LENTAGO	NANNY BERRY	12'T	20'T X10'W	16	WD/WT

MITIGATION AREA (4) PLANTING SCHEDULE:

CANOPY TREES SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
AS	ACER SACCHARUM	SUGAR MAPLE	4" CAL 2-1/2" CAL 5'T WHIPS	75'T X 50'W 75'T X 50'W 75'T X 50'W	2 5 13
AU	ACER UEGUNDO	BOX ELDER	4" CAL 2-1/2" CAL 5'T WHIPS	50'T X 50'W 50'T X 50'W 50'T X 50'W	2 5 13
CC	CELTIS OCCIDENTALIS	HACKBERRY	4" CAL 2-1/2" CAL 5'T WHIPS	60'T X 60'W 60'T X 60'W 60'T X 60'W	2 5 12
CO	CARYA OVATA	SHAGBARK HICKORY	4" CAL 2-1/2" CAL 5'T WHIPS	80'T X 50'W 80'T X 50'W 80'T X 50'W	2 5 13
JN	JUGLAUS NIGRA	BLACK WALNUT	5'T WHIPS	75'T X 50'W	12
PD	POPULUS DELTOIDES	COTTONWOOD	5'T WHIPS	100'T X 75'W	12
QA	QUERCUS ALBA	WHITE OAK	4" CAL 2-1/2" CAL 5'T WHIPS	100'T X 80'W 100'T X 80'W 100'T X 80'W	2 5 12
TA	TILIA AMERICANA	AMERICAN BASSWOOD	4" CAL 5'T WHIPS	80'T X 60'W 80'T X 60'W	2 13
UNDERSTORY TREES SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
AL	AMELANCHIER LAEVS	ALLEGHENY SERVICEBERRY	5'T WHIPS	25'T X 25'W	9
CA	CORNUS ALTERNIFOLIA	PAGODA DOGWOOD	5'T WHIPS	25'T X 30'W	9
MR	MORUS RUBRA	RED MULBERRY	5'T WHIPS	70'T X 50'W	8
OV	OSTRYA VIRGINIANA	IRONWOOD	5'T WHIPS	40'T X 40'W	9
SHRUBS SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
CD	CEPAHALANTHUS OCCIDENTALIS	COMMON BUTTONBUSH	12'T	15'T X 10'W	4
CL	CORNUS ALBA	RED OSIER	12'T	10'T X 10'W	4
CM	CORYLUS AMERICANA	AMERICAN HAZELNUT	12'T	15'T X 10'W	4
HV	HAMAMELIS VIRGINIANA	AMERICAN WITCH HAZEL	12'T	20'T X 10'W	4
PV	PRUNUS VIRGINIANA	CHOKE CHERRY	12'T	30'T X 20'W	3
SD	SALIX DISCOLOR	PUSSY WILLOW	12'T	20'T X 10'W	3
VA	VACCINIUM ANGUSTIFOLIUM	LOWBUSH BLUEBERRY	12'T	2'T X 2'W	4
VL	VIURNUM LENTAGO	NANNY BERRY	12'T	20'T X10'W	4

TREE PLANTING DISTRIBUTION:



PLANTING METHOD:
4" CALIPER TREES TO BE EVENLY PLANTED THROUGHOUT MITIGATION AREA APPROXIMATELY 68FT ON CENTER WITHIN A 34FT RADIUS PLANTING ZONE. EACH 4" CALIPER TREE PLANT ZONE TO CONTAIN THE FOLLOWING APPROXIMATE DISTRIBUTION OF PLANTS:

- (2-3) 2 1/2" CALIPER TREES
(10) 5FT HIGH CANOPY WHIPS
(3-4) 5FT HIGH UNDERSTORY WHIPS
(3) 12" HIGH SHRUBS

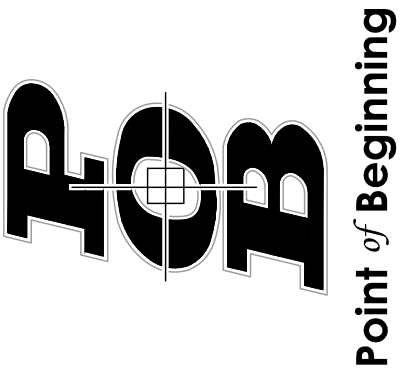
NOTE: ALL PLANT QUANTITIES SPECIFIED FOR EACH AREA TO BE UTILIZED AND PLANTED.

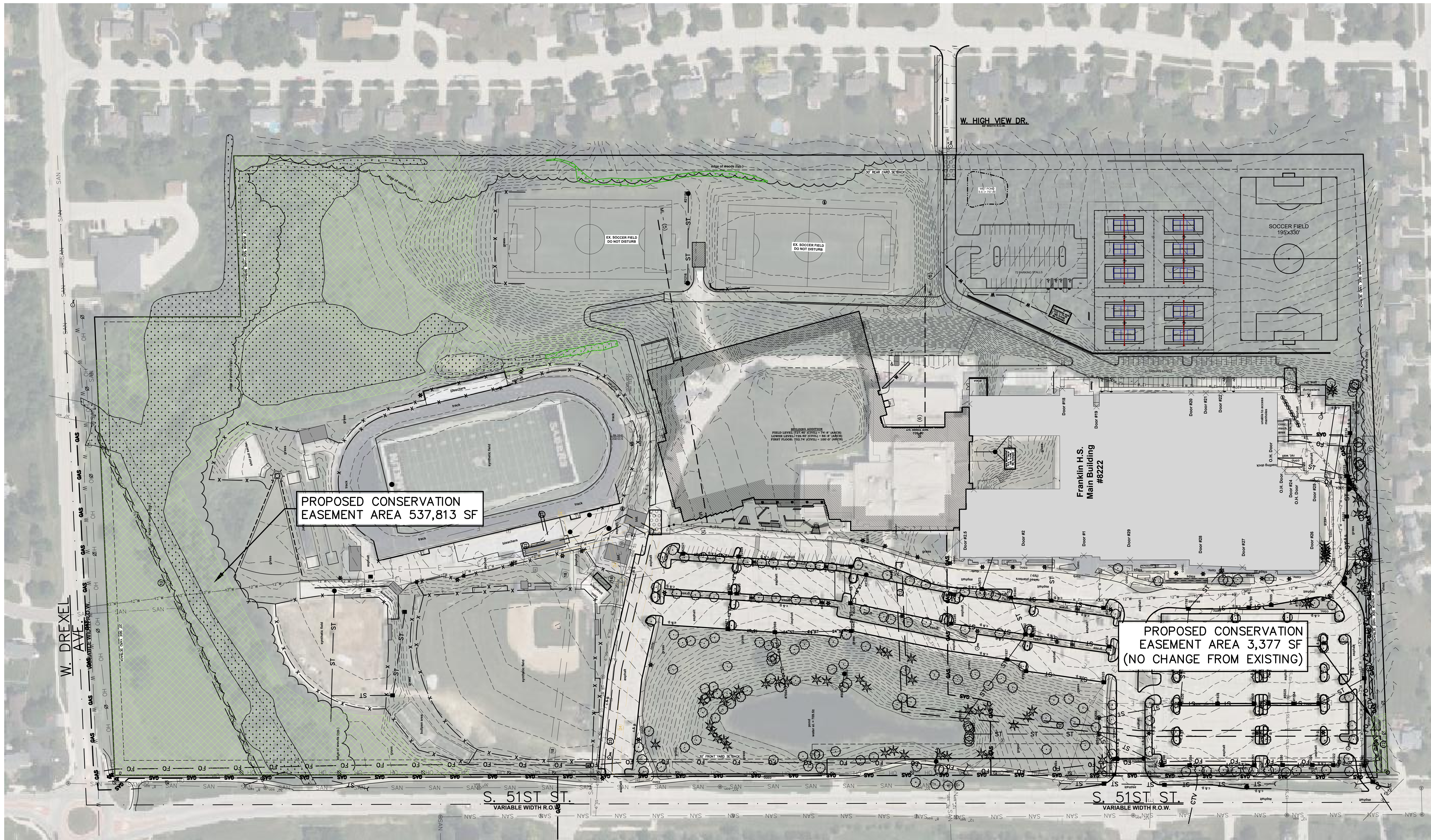
REVISIONS	
06-02-2025 06-30-2025	WETLAND REVISIONS RESUBMITTAL
CHECKED:	JB
DRAWN:	JB
DATE	5/5/2025
PROJECT NO.	25.0022

MITIGATION PLAN 3

FRANKLIN HIGH SCHOOL
BUILDING + SITE IMPROVEMTNS
CITY OF FRANKLIN

Civil Engineering
Land Surveying
Landscape Architecture
4941 Kirschling Court
Stevens Point, WI 54481
715.344.9999 (PH) 715.344.9922 (FX)





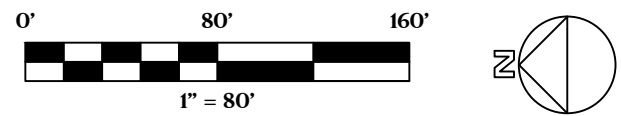
LEGEND:

PROPOSED CONSERVATION EASEMENT



GENERAL NOTES

1. THE PROPOSED SITE IMPROVEMENTS SHOWN ON THIS DOCUMENT ARE CONCEPTUAL ONLY AND WILL BE SUBJECT TO CHANGE PRIOR TO CONSTRUCTION.

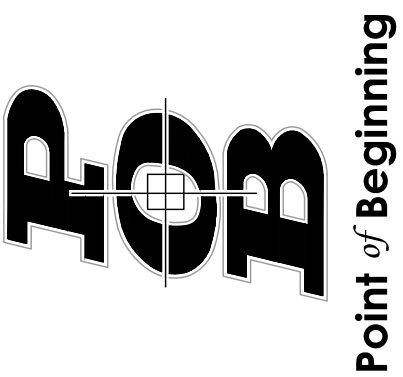


REVISIONS	
06-02-2025	WETLAND REVISIONS
06-30-2025	RESUBMITTAL
CHECKED: JB	
DRAWN: JB	
DATE: 5/5/2025	
PROJECT NO. 25.0022	

**CONSERVATION
EASEMENT EXHIBIT - 1**

**FRANKLIN HIGH SCHOOL
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Civil Engineering
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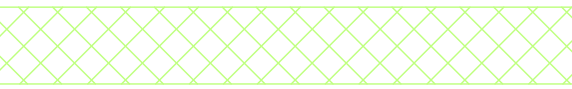


PROPOSED CONSERVATION
EASEMENT AREA 223,067 SF

PROPOSED CONSERVATION
EASEMENT AREA 43,786 SF

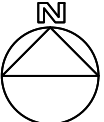
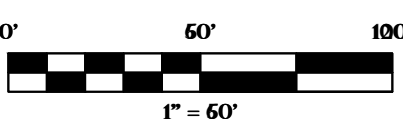
LEGEND:

PROPOSED CONSERVATION EASEMENT



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OFFSITE HILLTOP LANE PROPERTY

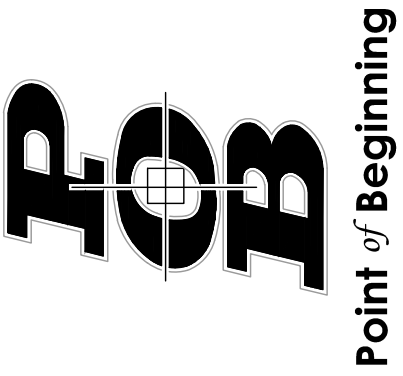


REVISIONS	
06-02-2025	WETLAND REVISIONS
06-30-2025	RESUBMITTAL
CHECKED:	JB
DRAWN:	JB
DATE	5/5/2025
PROJECT NO.	25.0022

**CONSERVATION
EASEMENT EXHIBIT - 2**

**FRANKLIN HIGH SCHOOL
BUILDING + SITE IMPROVEMENTS
CITY OF FRANKLIN**

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Point of Beginning



Quast Forestry Consulting LLC
Kimberly Destree, Consulting Forester
1773 Creek View Dr., N. Fond du Lac, WI 54937
Phone: 920-860-0374
E:mail: kquastforestry@charter.net



City of Franklin, Milwaukee County

Franklin Public Schools – 8222 S. 51st St., Franklin, WI

Woodlot Assessment Results

On April 21, 2025, 14 acres of woodland, tree lines and open grassland owned by Franklin Public Schools were assessed within the City of Franklin, Milwaukee County, located at 8222 S. 51st St. The following is a summary of field observations.

GENERAL OVERVIEW:

The species mixture within this woodlot is referred to as a Central Hardwoods timber type. This is an upland timber type located south of the tension zone and consisting of a mixture of mid-shade tolerant to shade intolerant species including oak, hickory, elms, black cherry, red maple, ash, basswood, hackberry and sugar maple. Though not all the species representative of this timber type are found in this woodland, most are.

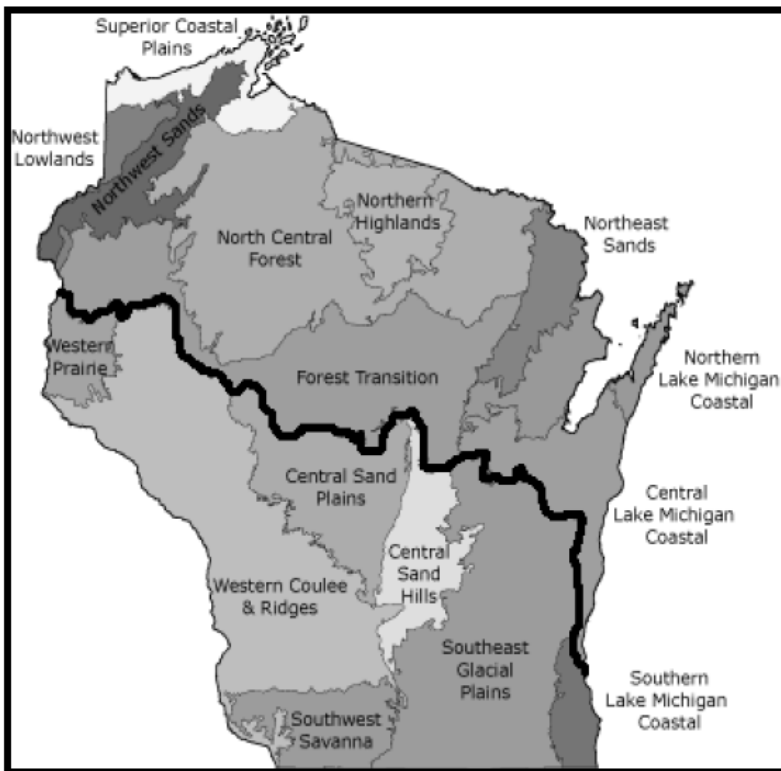


Figure 1: Dark line is the tension zone. Central hardwoods occur south of this line.

Basswood is the most common tree species, making up 56% of the total trees tallied. Shagbark hickory is the next most commonly occurring species being 16% of all trees tallied and American elm is another 11%. Associated species include sugar maple, white oak, bur oak, black cherry and black walnut. A small pocket of aspen was also found in the northeast corner of Area 3.

All ash throughout this property are dead because of Emerald Ash Borer infestation. Dead trees were not tallied.

Along the east and west tree lines are narrow wetlands whereby wet site species such as willow, box elder and cottonwood were noted. Some of these species are also found in upland areas.

This property has several age classes of trees. Larger diameter hickory and oak originated in the early 1900's. The site was likely pastured in the past. A secondary age class of trees emerged in the 1980's, this is the dominant size class of 6-10" trees most prevalent in Areas 3, 4 and the west

side of 5. When reviewing historical aerial photos, it appears the east side of Areas 5 and 6 may have been mowed until the 1990's, after which trees and brush began to fill in.

Invasive plants such as buckthorn and honeysuckle are prevalent in areas. Buckthorn and honeysuckle are non-native invasive shrubs introduced from Europe that invade the understory of native woodlands, aggressively seeding in and creating a shrub layer that prohibits native perennials, shrubs and trees to become established. Phragmites is an invasive grass that occupies wetlands. Phragmites was noted in areas 1 and 2 along the stretches of wetland.

A **Mature Woodland** is defined as: An area or stand of trees whose total combined canopy covers an area of one acre or more and at least 50% of which is composed of canopies of trees having a diameter at breast height (DBH) of at least 10 inches; or any grove consisting of eight or more individual trees having a DBH of at least 12 inches whose combined canopies cover at least 50% of the area encompassed by the grove. However, no trees planted and grown for commercial purposes should be considered a mature woodland.

A **Young Woodland** is defined as: An area or stand of trees whose total combined canopy covers an area of 0.50 acres or more and at least 50% of which is composed of canopies of trees having a diameter at breast height (DBH) of at least three inches. However, no trees planted and grown for commercial purposes shall be considered a young woodland.

Patches of Areas 4 and 5 would fall under Mature Woodland, though most of this property qualifies as a Young Woodland.

DATA COLLECTION SPECIFICATIONS:

- All trees being at least 8" in diameter at breast height (DBH) (4.5' above the ground) were recorded by tree species and tree diameter. In addition, observations were made on the overall timber and vegetative condition.
- Many clump basswood are present in addition to other clump trees. A clump is when multiple stems emerge from the same base. In forestry applications, if the clump splits below 4.5' above the ground, each stem is considered a separate tree. If the clump splits above 4.5' above the ground, the tree is singular. This application was used in data collection and individual tree counts reflect this system.
- Diameters are recorded in even numbers. If the DBH of the tree ranged between 7.0-8.9", the tree is tallied as an 8" tree. If the diameter range was 9.0-10.9", the tree was tallied as a 10" tree and so on.
- Trees included within the tally were marked with a blue dot. Every 5th tree was marked with a number. Should it be necessary to track individual trees within the tally in the future, the general location of those trees can be found from the recorded number.
- Tree number groupings were lumped based on obvious site delineations. These areas and a brief description of ground conditions are found below.
- The south and east boundaries of the work unit are residential development with some encroachment occurring onto school property. The best property line evidence available was used to determine whether a tree was considered on public school property or private. Fencelines and survey markers were the best on the ground evidence of property boundary location. Where these delineations were not present, gps technology was used to estimate where the approximate property boundary lay, and trees were tallied accordingly.

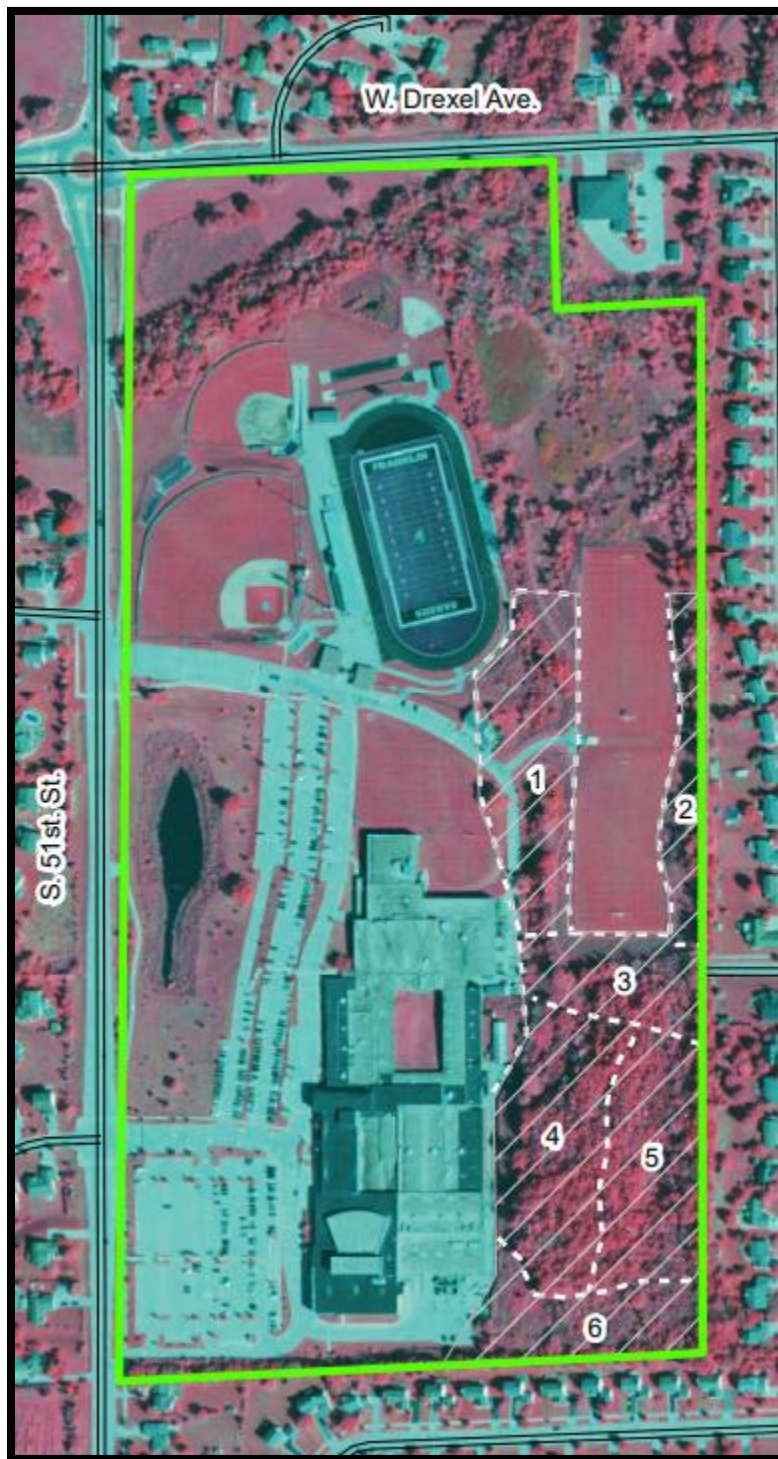


Figure 2: Map of Area locations and approximate delineation lines.

The following is a breakdown of the tree species and diameters found within this woodlot by Area:

Area 1 (Tree #605-631) : This unit is the west tree line. A drainage ditch runs north to south through the unit and clumps of both willow and box elder can be found along the ditch. Upland species such as white oak, basswood and red cedar are found atop the hill and along the west facing sidehill. One large oak found west of the school ground access road was included within the tally.

Area 1	8	10	12	14	16	18	20	22	24	26	28	30	TOTALS
White Oak (<i>quercus alba</i>):	0	0	0	0	0	0	0	0	0	0	1	1	2
Basswood (<i>tilia americana</i>):	1	2	1	1	0	0	0	0	0	0	0	0	5
Red Cedar (<i>juniperus virginiana</i>):	1	0	1	0	0	0	0	0	0	0	0	0	2
Willow (<i>salix</i>):	2	5	2	1	2	1	0	0	0	0	0	0	13
Box Elder (<i>acer negundo</i>):	3	0	0	0	1	1	0	0	0	0	0	1	6
TOTALS:	7	7	4	2	3	2	0	0	0	0	1	2	28

Area 2 (#632 to end): Area 2 contains the east tree line. A drainage ditch runs north to south through this area and is bordered by mostly wetland grass and brush. East of the ditch the terrain rises and trees switch to a mix of upland species such as basswood, sugar maple and oak.

The east edge of this unit is residential development with some personal encroachment occurring. Several lots appear to include a small strip of woodland. Fenceline and lot line evidence were not immediately available along this line under all circumstances.

Tally trees were marked in blue paint on the far north end, then marking ceased due to lack of property boundary evidence and to avoid potentially painting privately owned trees. All trees determined to be owned by the public school system, using the best property boundary evidence available, were tallied.

Area 2	8	10	12	14	16	18	20	22	24	26	28	30	TOTALS
Cottonwood (<i>populus deltoides</i>):	0	0	1	0	0	0	0	0	0	0	0	0	1
Basswood (<i>tilia americana</i>):	11	7	4	3	0	0	0	0	0	0	0	0	25
Box Elder (<i>acer negundo</i>):	0	1	0	0	0	0	0	0	0	0	0	0	1
Sugar Maple (<i>acer saccharum</i>):	6	4	0	0	0	0	0	0	0	0	0	0	10
Shagbark Hickory (<i>carya ovata</i>):	2	2	1	0	0	0	0	0	0	0	0	0	5
Bur oak (<i>quercus macrocarpa</i>):	1	0	0	0	2	0	0	0	0	0	0	0	3
American elm (<i>ulmus americana</i>):	1	0	0	0	0	0	0	0	0	0	0	0	1
White Oak (<i>quercus alba</i>):	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTALS:	21	15	6	3	2	0	0	0	0	0	0	0	47

Area 3 (#507-604): This area is located north of the east-west trail and stretches to both the east and west boundaries of the study unit. Basswood is the dominant species with a small aspen pocket on the east end. White spruce were border trees located along the west side.

Area 3	8	10	12	14	16	18	20	22	24	26	28	30	TOTALS
Basswood (<i>tilia americana</i>):	43	12	4	1	0	0	0	0	0	0	0	0	60
American elm (<i>ulmus americana</i>):	3	3	0	0	0	1	1	0	0	0	0	0	8
Shagbark Hickory (<i>carya ovata</i>):	3	0	2	3	2	0	0	0	0	0	0	0	10
White Spruce (<i>picea glauca</i>):	1	0	2	0	1	0	0	0	0	0	0	0	4
Black Walnut (<i>juglans nigra</i>):	0	1	0	0	0	0	0	0	0	0	0	0	1
Box Elder (<i>acer negundo</i>):	7	0	1	1	1	0	1	0	0	0	0	0	11
Quaking Aspen (<i>populus tremuloides</i>):	4	3	0	1	0	0	0	0	0	0	0	0	8
TOTALS:	61	19	9	6	4	1	2	0	0	0	0	0	102

Area 4 (#86-319): Area 4 is the most heavily stocked unit and is bordered to the south, east and north by trail. This area has abundant small diameter basswood that barely meet the 8” size class. Many borderline trees were excluded from tally. Only those trees with blue dots were included within the tree tally.

Area 4	8	10	12	14	16	18	20	22	24	26	28	30	TOTALS
Basswood (<i>tilia americana</i>):	104	25	9	3	1	0	0	0	0	0	0	0	142
American elm (<i>ulmus americana</i>):	6	7	3	1	1	0	0	0	0	0	0	0	18
Shagbark Hickory (<i>carya ovata</i>):	7	6	10	13	12	8	2	1	0	0	0		59
Box Elder (<i>acer negundo</i>):	0	1	0	0	0	0	0	0	0	0	0	0	1
Cottonwood (<i>populus deltoides</i>):	1	0	0	0	0	0	0	0	0	0	0	0	1
Sugar Maple (<i>acer saccharum</i>):	9	1	0	0	0	0	0	0	0	0	0	0	10
White Oak (<i>quercus alba</i>):	1	0	0	0	0	0	0	0	0	1	0	0	2
Black Cherry (<i>prunus serotina</i>):	1	0	0	0	0	0	0	0	0	0	0	0	1
TOTALS:	129	40	22	17	14	8	2	1	0	1	0	0	234

Area 5 (#320-506): Area 5 is bordered to the south, west and north by the trail. The east line is residential development. The east half of this area has abundant brush with scattered trees, many being dead ash.

Area 5	8	10	12	14	16	18	20	22	24	26	28	30	TOTALS
Basswood (<i>tilia americana</i>):	63	23	10	3	2	0	0	1	0	0	0	0	102
American elm (<i>ulmus americana</i>):	25	11	6	0	0	0	0	0	0	0	0	0	42
Shagbark Hickory (<i>carya ovata</i>):	19	3	3	0	6	4	0	1	0	0	0	0	36
Black Walnut (<i>juglans nigra</i>):	1	0	1	2	0	0	0	0	0	0	0	0	4
Sugar Maple (<i>acer saccharum</i>):	2	0	0	0	0	0	0	0	0	0	0	0	2
Bur oak (<i>quercus macrocarpa</i>):	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTALS:	110	38	20	5	8	4	0	2	0	0	0	0	187

Area 6 (#1-85): This unit is located south of the south trail and runs up to residential development to the south. Conifers were generally located along the south boundary in the southwest corner. Centrally, this area consisted of brush and grass. The best property line evidence available was used to determine whether trees fell on public land. The south line was more identifiable than the east line.

Area 6	8	10	12	14	16	18	20	22	24	26	28	30	TOTALS
Basswood (<i>tilia americana</i>):	31	10	4	3	2	0	0	0	1	1	0	0	52
American elm (<i>ulmus americana</i>):	3	0	1	0	0	1	0	0	0	0	0	0	5
Shagbark Hickory (<i>carya ovata</i>):	1	0	0	0	0	0	0	0	0	0	0	0	1
White Spruce (<i>picea glauca</i>):	1	3	1	0	0	0	0	0	0	0	0	0	5
Red Pine (<i>pinus resinosa</i>):	0	0	3	3	0	0	0	0	0	0	0	0	6
Black Walnut (<i>juglans nigra</i>):	3	6	3	0	0	0	0	0	0	0	0	0	12
Box Elder (<i>acer negundo</i>):	1	0	0	0	0	0	0	0	0	0	0	0	1
Plum (<i>prunus domestica</i>):	1	0	0	0	0	0	0	0	0	0	0	0	1
Willow (<i>salix</i>):	2	0	0	0	0	0	0	0	0	0	0	0	2
TOTALS:	43	19	12	6	2	1	0	0	1	1	0	0	85



PO Box 680 • Pulaski, WI 54162

Phone: 920.615.0019 • Website: www.evergreenwis.com

Franklin High School

Professionally Assured Wetland Delineation Report

Project Number: MIL25-040-01

Property Address: 8222 S 51st Street, City of Franklin, Milwaukee County, Wisconsin

Part of Parcel ID: 8079999001

May 9, 2025



Report Request by



Point of Beginning

4941 Kirschling Court

Stevens Point, Wisconsin 54481



PO Box 680 • Pulaski, WI 54162

Phone: 920.615.0019 • Website: www.evergreenwis.com

Field Work Certification:

Chad M Fradette, EP, Chemist, Wetland Scientist
Wisconsin DNR Professional Assured Wetland Delineator
Lead Wetland Delineator
(920) 615-0019 chad@evergreenwis.com

Shyann P Banker, Environmental Scientist
Wisconsin DNR Professional Assured Wetland Delineator
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Ashley Poehls, Biologist
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April 1, 2025

Chad M Fradette, EP
Evergreen Consultants LLC
1138 State Highway 32
P.O. Box 680
Pulaski, WI 54162

Subject: 2025 Assured Wetland Delineator Confirmation

Dear Chad Fradette:

This letter provides Wisconsin Department of Natural Resources (WDNR) confirmation for the wetland delineations you conduct during the 2025 growing season. You and your clients will not need to wait for the WDNR to review your wetland delineations before moving forward with project planning. This will help expedite the review process for WDNR's wetland regulatory program. Your name and contact information will continue to be listed on our website at: <http://dnr.wi.gov/topic/wetlands/assurance.html>.

In the instance where a municipality may require a letter of confirmation for your work prior to moving forward in the local regulatory process, this letter shall serve as that confirmation. Although your wetland delineations do not require WDNR field review, inclusion of a Wetland Delineation Report is required for projects needing State authorized wetland, waterway and/or storm water permit approvals.

To comply with Chapter 23.321, State Statutes, please supply the department with a polygon shapefile of the wetland boundaries delineated within the project area. Please do not include data such as parcel boundaries, project limits, wetland graphic representation symbols, etc. If internal upland polygons are found within a wetland polygon, then please label as UPLAND. The shapefile should utilize a State Plane Projection and be overlain onto recent aerial photography. If a different projection system is used, please indicate in which system the data are projected. In the correspondence sent with the shapefile, please supply a brief description of each wetland's plant community (eg: wet meadow, floodplain forest, etc.). Please send these data to Calvin Lawrence (608-266-0756 or email at calvin.lawrence@wisconsin.gov).

If you or any client has a question regarding your status in the Wetland Delineation Professional Assurance Program, contact me by email at kara.brooks@wisconsin.gov or phone at 414-308-6780. Thank you for all your hard work and best wishes for the upcoming field season.

Sincerely,

Kara Brooks
Wetland Identification Coordinator
Bureau of Watershed Management



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Appendices

- Appendix A – Figures and Site Maps
- Appendix B – Site Photographs
- Appendix C – Original Survey Map and Notes
- Appendix D – Historic Aerial Photographs
- Appendix E – NRCS County Soil Survey Report
- Appendix F – Precipitation Information
- Appendix G – Wetland Determination Data Sheets



Introduction

Evergreen was retained by Point of Beginning to perform a professionally assured wetland delineation. The property is located at 8222 S 51st Street, City of Franklin, Milwaukee County, Wisconsin. The study area is approximately 21.62 acres in size and is in part of the West ½ of the Northeast ¼ of Section 14, Township 05 North, Range 21 East, City of Franklin, Milwaukee County, Wisconsin. Site Maps can be found in Appendix A.

The wetland delineation was conducted on May 2 and 9, 2025, by Chad Fradette, a Wisconsin Department of Natural Resources (WDNR) Professionally Assured Wetland Delineator with assistance from Shyann Banker, Sara Marcinkus, and Ashley Poehls. The delineation was conducted for school facility expansion. The study area consists of sports complexes, school buildings and roads, and a shrub/scrub forested area. The school was constructed in the 1960s. Expansion in 1975 led to the creation of drainage ditches that today contain wetlands. In 2015, an additional athletic field expansion led to the creation of additional ditches that contain wetland today. The woodland area of the site was partially disturbed in the past, but has been left fallow for decades.

The WDNR Wisconsin Wetland Inventory (WWI) Map was reviewed and indicates the presence of scrub/shrub and emergent wetlands in the northwest ¼ of the study area, forested wetlands in the northeast ¼, and small forested wetlands within the south half of the study area. The WWI wetland indicator soils layer was also reviewed and indicates the absence of indicator soils within the study area. The study area is mapped as having Predominantly Non-Hydric soils. Indicator soils are soils which are commonly found in wetlands or have inclusions of soils that are commonly found in wetlands. The WDNR Surface Water Data Viewer (SWDV) was also reviewed and indicates the absence of waterways within the study area, but an unnamed Order 3 stream is located to the northwest of the site and unnamed Order 1 streams located to the northeast and southwest of the site.

Five wetlands were delineated during the site visit. The Wetland Data Sheets classify the wetland according to the Cowardin classification system¹.

Wetland ID	Wetland Description ²	Cowardin Classification ³	*Surface Water Connections	*NR151 Protective Area	Acreage On-site
Wetland 1	Ruderal Wet Meadow and Marsh in a storm treatment ditch/swale	PEM1Bx	Potential connection via ditching	Less susceptible, 10 feet	10,026 sf 0.230 acres

¹ Federal Geographic Data Committee. 2013. Classification of wetlands and deepwater habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, DC.

² WI Department of Natural Resources, *Natural Heritage Conservation Key to Wetland Natural Communities*, Version 1.3, 4/8/2022

³ Federal Geographic Data Committee. 2013. Classification of wetlands and deepwater habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, DC.



Wetland 2	Ruderal wet meadow, Shrub Swamp in a storm treatment ditch/swale	PEM1Bx PSS1/5Bx	Potential connection via ditching	Less susceptible, 10 feet	5,973 sf 0.137 acres
Wetland 3	Ruderal Shrub Swamp	PSS1B	Isolated wetland	Moderately susceptible, 50 feet	2,124 sf 0.049 acres
Wetland 4	Ruderal Shrub Swamp	PSS1B	Isolated wetland	Moderately susceptible, 50 feet	6,801 sf 0.156 acres
Wetland 5	Ruderal Shrub Swamp	PSS1B	Isolated wetland	Moderately susceptible, 50 feet	10,841 sf 0.249 acres
<i>*These are based on professional opinion. Local zoning ordinances may have additional restrictions. US Army Corps of Engineers has authority for determining federal jurisdiction of wetlands and waterways.</i>					0.821 ac

An antecedent precipitation evaluation was conducted for the three months prior to the site visit. It was determined climatic conditions were normal at the time of the site visit during the wet season. The antecedent precipitation evaluation, WETS data and Palmer Drought Index reports for the area at the time of the site visit are included in Appendix F.

The areas identified as wetland were identified based on transitions from wetland to upland vegetation, hydrology indicators and hydric soil indicators, or lack thereof, in wetland areas versus upland areas, topographical position and best professional judgment. See Appendix A for the Wetland Determination Map. Wetland data sheets are included in Appendix G.

Personnel

Mr. Fradette is an Environmental Professional, Analytical Chemist, WDNR Professionally Assured Wetland Delineator and has over twenty years of experience working on public and private infrastructure, community development, and industrial projects throughout the entire Midwest and Northeast, including Wisconsin. His expertise is in completing wetland delineations, reports, permit applications, exemptions, compliance cases, compensatory wetland mitigation plans, endangered species assessments, and floristic habitat assessments. Mr. Fradette is professionally trained and experienced in the practice of wetland delineation.

Mrs. Shyann Banker, Environmental Scientist and WDNR Professionally Assured Wetland Delineator and has nine years of experience conducting wetland delineations for utility, municipal, residential, and industrial projects in Wisconsin. Her expertise is in completing wetland delineations, reports, and exemption applications.

Ms. Ashley Poehls, Biologist, has two years of professional experience in working on utility, municipal, residential, and industrial projects in Wisconsin.



Methodology

Available topographic maps, survey maps, WWI and NWI maps, County Soil Survey maps, wetland indicator and hydric soil maps and all available aerial photos were reviewed prior to visiting the property to identify potential wetland areas. These figures are included in Appendix A.

Antecedent precipitation information was evaluated through use of available local WETS data for the three months prior to the delineation to determine if conditions were within normal, wetter than normal or drier than normal at the time of the site visit. The Antecedent Precipitation Evaluation, WETS Data and the Palmer Drought Index reports are included in Appendix F.

Aerial images on cultivated or previously cultivated sites were reviewed for wet signatures following the Minnesota Board of Water and Soil Resources (BWSR) and St Paul District Corps of Engineers *Guidance for Offsite Hydrology/Wetland Determinations*.⁴

Examination of vegetation, soils, and hydrology, as outlined in the Corps of Engineers Wetlands Delineation Manual⁵ and the Northcentral and Northeast Regional Supplement⁶, were used to characterize, and determine wetland boundaries. The Natural Resources Conservation Service (NRCS) Field Indicators of Hydric Soils in the United States Guide⁷ was also utilized to help identify hydric soils at the site and the Wetland Training Institute field guide⁸. All available information including transitions in vegetation, soils and hydrology, review of aerial photos, antecedent precipitation analysis, topographic position, along with best professional judgment was applied.

Sample transects were established in a representative wetland to upland transition zone. The transects were comprised of two or more sample points located along a line running perpendicular to the wetland edge, with at least one point in obvious wetland and one point in obvious upland. A field data form was completed for each of the upland and wetland sample points. The sample locations were also located with a GPS and are indicated on Wetland Delineation Map within Appendix A. Field data forms are included in Appendix G.

Wetland classification was performed according to Cowardin Classification. Vegetation was identified using suitable keys (Eggers⁹; Chadde¹⁰) and a plant's hydrophytic status was determined using the most recent Northcentral and Northeast Region – National Wetland Plant List¹¹. Wetland boundaries were

⁴ USACE, MN Board of Water & Soil Resources, *Guidance for Offsite Hydrology/Wetland Determinations*, 2016

⁵ USACE, Waterways Experiment Station, Wetlands Research Program Technical Report Y-87-1

⁶ *Regional Supplement to the 1987 Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Regions*, 2012

⁷ USDA, Natural Resources Conservation Service (NRCS), *Field Indicators of Hydric Soils in the United States, Guide for Identifying and delineating Hydric Soils*, Version 9.0, 2024

⁸ Wetland Training Institute, Inc., *2013 Pocket Guide to Hydric Soil Field Indicators*, Wetland Training Institute, Inc., Glenwood, NM, 2013

⁹ Eggers, Steve D., and Reed, Donald M., *U.S. Army Corps of Engineers, St. Paul District, Wetland Plants and Plant Communities of Minnesota & Wisconsin*, Version 3.2, July 2015

¹⁰ Chadde, Steve W., *Wetland Plants of Wisconsin, Second Edition*, Steve Chadde, United States, 2013

¹¹ U.S. Army Corps of Engineers. (2023). 2022 National Wetland Plant List, version 3.6. U.S. Army Engineer Research and Development Center, Vicksburg, MS. <http://wetland-plants.usace.army.mil/>



determined based on the comprehensive wetland delineation method as defined in the Corps of Engineers Wetlands Delineation Manual and the Northcentral and Northeast Regional Supplement.

Mapping

The Wetland boundaries and Wetland edges were flagged with pink “Wetland Delineation” flags and/or ribbon. Boundary and sample plot locations were located with a Leica Zeno GG04 Global Positioning System (GPS) with sub-inch accuracy and are shown on the Wetland Delineation Map, located in Appendix A, Site Maps.

Results

Off Site Analysis

Land Use

Aerial photographs from 1937 through 2024 were reviewed. The study area was mostly forested with cleared cropland in the northwest corner. The 1951 aerial photograph shows some clearing within the center of the site. The 1963 photograph shows grading within the north and west portions of the site with a school building constructed to the west of the site. The Historic Aerial Photographs are in Appendix D.¹²

¹³ ¹⁴



1937 Aerial photograph

¹² Milwaukee County, GIS, *aerial photographs, topography*, Milwaukee County, WI

¹³ USDA, FSA, Service Center, *FSA Slides for years 1981 through 2002*. Milwaukee County, WI

¹⁴ University of Wisconsin, *Wisconsin Historic Aerial Image Finder*, 2025



1951 Aerial Photograph



1963 Aerial Photograph



1975 Aerial Photograph



2015 Aerial Photograph



Original Land and Bordner Surveys

The Original Survey shows the Site within the West ½ of the Northeast ¼ of Section 14. The Original Survey Notes describe the vegetation in this area as sugar maple, white ash, basswood, red oak, white oak, and ironwood.¹⁵ The Original Survey Map and Original Survey Notes are in Appendix C.

No Bordner Survey is available for Milwaukee County¹⁶.

Topography

The topography at the Site ranges from an elevation of 780 feet down to 731 feet. The topography of the Site slopes down towards the Northwest corner of the study area.¹⁷ The Topographic Map is in Appendix A.

Precipitation

An antecedent precipitation evaluation was conducted for the three months prior to the site visit. Precipitation data from the Milwaukee Mitchell Airport WETS station indicates climatic conditions were normal at the time of the site visit during the wet season. The drought index indicated a mild drought. The Palmer Drought Index also indicates conditions were normal (Mid-Range, -1.99 to +1.99) for this location at the time of the site visit. Based on evaluation of both sources of data, it was determined climatic conditions were normal at the time of the site visit. The antecedent precipitation evaluation, WETS data and Palmer Drought Index reports for the area at the time of the site visit are included in Appendix F.

Wetland Mapping

The WDNR Wisconsin Wetland Inventory (WWI) Map was reviewed and indicates the presence of scrub/shrub and emergent wetlands in the northwest ¼ of the study area, forested wetlands in the northeast ¼, and small forested wetlands within the south half of the study area.¹⁸ The WWI wetland indicator soils layer was also reviewed and indicates the absence of indicator soils within the study area. The study area is mapped as having Predominantly Non-Hydric soils. Indicator soils are soils which are commonly found in wetlands or have inclusions of soils that are commonly found in wetlands. The WDNR Surface Water Data Viewer (SWDV) was also reviewed and indicates the absence of waterways within the study area, but an unnamed Order 3 stream is located to the northwest of the site and unnamed Order 1 streams located to the northeast and southwest of the site.

The NWI Map was reviewed and indicates a small emergent wetland within the northwest ¼ of the study area.¹⁹ The WWI, SWDV, and NWI Maps are in Appendix A.

¹⁵ Board of Commissioners of Public Lands, *Wisconsin Public Land Survey Records: Original Field Notes and Plat Maps*, Madison, Wisconsin, 2025

¹⁶ University of Wisconsin Digital Collections Center, *Wisconsin Land Economic Inventory Maps (Bordner Survey)*, Madison, WI, 2025

¹⁷ Milwaukee County GIS

¹⁸ WDNR, *Surface Water Data LiDAR Viewer*, 2025

¹⁹ U.S. Fish and Wildlife Service, National Wetlands Inventory, Wetlands Mapper, 2025



Mapped Soils

The NRCS Web Soil Survey indicates the presence of the following soil types²⁰:

Report—Hydric Rating by Map Unit (WI)

Hydric Rating by Map Unit (WI)—Milwaukee County, Wisconsin				
Map Unit Symbol	Map Unit Name	Hydric Percent of Map Unit	Hydric Category	Landform Hydric Minor Components
BIA	Blount silt loam, 1 to 3 percent slopes	10	WI Predominantly Nonhydric	Depressions
Cv	Clayey land	10	WI Predominantly Nonhydric	Depressions
OzaB	Ozaukee silt loam, 2 to 6 percent slopes	6	WI Predominantly Nonhydric	Ground moraines

NRCS County Soil Survey Report is in Appendix E.

²⁰ USDA, NRCS, *Web Soil Survey*, 2025



Field Investigation

Five wetlands were identified and delineated within the Study Area. Wetland determination data sheets (Appendix G) were completed at 12 sample points that were representative of the wetland and upland conditions near the boundary and where potential wetlands may be present based on the desktop review and field reconnaissance. Appendix B provides photographs, typically at the sample point locations of the wetlands and adjacent uplands. The wetland boundary and sample point locations are shown on Wetland Delineation Map within Appendix A and the wetlands are summarized in Table 1 and detailed in the following section.

Wetland 1

Wetland 1 is 0.230-acres of wet meadow with cattails a few trees and some brush within an excavated storm ditch. Part of the drainage ditch is located between athletic fields. The wetland continues beyond the study area to the north.

All three wetland parameters were met. The wetland boundary followed a well-defined topographic break and change in vegetation, hydric soil, and wetland hydrology indicators.

Dominant vegetation observed included black willow (*Salix nigra*, OBL), common buckthorn (*Rhamnus cathartica*, FAC), silky dogwood (*Cornus amomum*, FACW), sandbar willow (*Salix interior*, FACW), reed canary grass (*Phalaris arundinacea*, FACW), and hybrid cattail (*Typha x glauca*, OBL).

Depleted Below Dark Surface (A11) and Redox Dark Surface (F6) hydric soil indicators were observed.

The primary wetland hydrology indicators that were observed included Surface Water (A1), High Water Table (A2), Saturation (A3), and Presence of Reduced Iron (C4). The secondary indicators that were observed include Saturation Visible on Aerial Images (C9), Geomorphic Position (D2), and a Positive FAC-Neutral Test (D5). Surface water was present with a depth of 1 inch. The water table was observed at the soil surface to a depth of 6 inches from the soil surface and the soil was saturated at the soil surface to a depth of 6 inches in depth from the soil surface.



View of drainage ditch within Wetland 1.



View of drainage ditch within Wetland 1.



Wetland 2

Wetland 2 is 0.137-acres of ruderal shrub swamp in an excavated drainage ditch around an athletic field. The wetland continues beyond the study area to the north.

All three wetland parameters were met. The wetland boundary followed a well-defined topographic break and change in vegetation, hydric soil, and wetland hydrology indicators.

Dominant vegetation observed included sandbar willow (*Salix interior*, FACW), woolly sedge (*Carex pellita*, OBL), common horsetail (*Equisetum arvense*, FAC) meadow willow (*Salix petiolaris*, OBL), common reed (*Phragmites australis*, FACW), and orange jewelweed (*Impatiens capensis*, FACW).

Depleted Matrix (F3) hydric soil indicator and Red Parent Material (F21) indicator for problematic hydric soils were observed.

The primary wetland hydrology indicators that were observed included Surface Water (A1) and Inundation Visible on Aerial Imagery (B7). The secondary indicators that were observed include Geomorphic Position (D2) and a Positive FAC-Neutral Test (D5). Surface water was present with a depth of 0-3 inches.



View of *Phragmites* infestation within Wetland 2.



Wetland 3

Wetland 3 is 0.049-acres of a ruderal shrub swamp within a small closed depression in a basswood forest. A running trail passes along the side of the wetland. The wetland is entirely within the study area.

The wetland boundary was determined by probing soils to determine where redox features started. The wetland vegetation changed from basswood forest in the uplands to buckthorn in the wetland to areas of surface water. The wetland boundary was marked near the toe slope of the depression. All three wetland parameters were met.

Dominant vegetation observed included basswood (*Tilia americana*, FACU), silky dogwood (*Cornus amomum*, FACW), common buckthorn (*Rhamnus cathartica*, FAC), and woolly sedge (*Carex pellita*, OBL).

Redox Dark Surface (F6) and Redox Depressions (F8) hydric soil indicators were observed.

The primary wetland hydrology indicators that were observed included Surface Water (A1), Inundation Visible on Aerial Imagery (B7), Water-Stained Leaves B9), and Aquatic Fauna (B13). The secondary indicators that were observed include Geomorphic Position (D2) and a Positive FAC-Neutral Test (D5). Surface water was present with a depth of 1-5 inches.



View of basswood forest within Wetland 3.

Wetland 4

Wetland 4 is 0.156-acres of ruderal shrub swamp within a small closed depression in a buckthorn thicket. A running trail bisects the wetland. The wetland is entirely within the study area.

The wetland boundary was marked near the toe slope of the depression. All three wetland parameters were met. The vegetation changed from basswood forest with oaks to light elm forest with a heavy buckthorn infestation in the wetlands.

Dominant vegetation observed included American elm (*Ulmus americana*, FACW), basswood (*Tilia americana*, FACU), common buckthorn (*Rhamnus cathartica*, FAC), and brome-like sedge (*Carex bromoides*, FACW).

Depleted Below Dark Surface (A11), Depleted Matrix (F3), and Redox Dark Surface (F6) hydric soil indicators were observed.

The primary wetland hydrology indicators that were observed included Surface Water (A1), Sparsely Vegetated Concave Surface (B8), and Water-Stained Leaves (B9). The secondary indicators that were observed include Geomorphic Position (D2) and a Positive FAC-Neutral Test (D5). Surface water was present with a depth of 1-3 inches.



View of buckthorn infested forest within Wetland 4.

Wetland 5

Wetland 5 is 0.249-acres of ruderal shrub swamp within a small closed depression in a buckthorn thicket with dead ash. The wetland extends beyond the study area slightly to the east.

The wetland boundary was marked near the toe slope of the depression. All three wetland parameters were met. The vegetation in the area changed from basswood forest to a heavy infestation of buckthorn with small areas of surface water and moss.

Dominant vegetation observed included common buckthorn (*Rhamnus cathartica*, FAC) and upright sedge (*Carex stricta*, OBL).

Redox Dark Surface (F6) and Redox Depressions (F8) hydric soil indicators were observed.

The primary wetland hydrology indicators that were observed included Surface Water (A1), High Water Table (A2), Saturation (A3), and Sparsely Vegetated Concave Surface (B8). The secondary indicators that were observed include Geomorphic Position (D2) and a Positive FAC-Neutral Test (D5). Surface water was present with a depth of 1-4 inches. The water table was observed at a depth of 9 inches from the soil surface and saturation was present at the soil surface to a depth of 9 inches.



View of buckthorn thicket with dead ash trees within Wetland 5.

Uplands

Uplands within the study area consist of parking lots/roads, sports complexes, woodlands, basswood forest, brushy woodland remnants, and grassy areas.



View of woodland.



View of basswood forest.



View of brushy woodland remnant.



View of grassy area between athletic fields.



Conclusion

This report is limited to the identification and delineation of wetlands within the Delineation Area as shown on Figure 1, Appendix A. Other regulated environmental resources that result in land use restrictions may be present (e.g. navigable waterways, floodplains, cultural resources, and threatened or endangered species).

Wetlands

Investigation of the area determined that wetlands exist as shown on the attached figures and Wetland Delineation Map.

Table 1. Summary of Wetlands Identified within the Study Area

Wetland ID	Wetland Description ²¹	Cowardin Classification ²²	*Surface Water Connections	*NR151 Protective Area	Acreage On-site
Wetland 1	Ruderal Wet Meadow and Marsh in a storm treatment ditch/swale	PEM1Bx	Potential connection via ditching	Less susceptible, 10 feet	10,026 sf 0.230 acres
Wetland 2	Ruderal wet meadow, Shrub Swamp in a storm treatment ditch/swale	PEM1Bx PSS1/5Bx	Potential connection via ditching	Less susceptible, 10 feet	5,973 sf 0.137 acres
Wetland 3	Ruderal Shrub Swamp	PSS1B	Isolated wetland	Moderately susceptible, 50 feet	2,124 sf 0.049 acres
Wetland 4	Ruderal Shrub Swamp	PSS1B	Isolated wetland	Moderately susceptible, 50 feet	6,801 sf 0.156 acres
Wetland 5	Ruderal Shrub Swamp	PSS1B	Isolated wetland	Moderately susceptible, 50 feet	10,841 sf 0.249 acres
*These are based on professional opinion. Local zoning ordinances may have additional restrictions. US Army Corps of Engineers has authority for determining federal jurisdiction of wetlands and waterways.					0.821 ac

The wetlands identified for this report may be subject to federal regulation under the jurisdiction of the U.S. Army Corps of Engineers, state regulation under the jurisdiction of Wisconsin DNR, and local jurisdiction under Milwaukee County, and the City of Franklin.

²¹ WI Department of Natural Resources, *Natural Heritage Conservation Key to Wetland Natural Communities*, Version 1.3, 4/8/2022

²² Federal Geographic Data Committee. 2013. Classification of wetlands and deepwater habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, DC.



Protective Areas

WI Admin. Code²³ requires that impervious surfaces shall be kept out of the “protective area” to the maximum extent practicable. Protective area is an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface.

Protective area does not include any area of land adjacent to any stream enclosed within a pipe or culvert, such that runoff cannot enter the enclosure at this location.

- a. For outstanding resource waters and exceptional resource waters, and for wetlands in areas of special natural resource interest as specified in s. [NR 103.04](#), 75 feet.
- b. For perennial and intermittent streams identified on a United States geological survey 7.5-minute series topographic map, or a county soil survey map, whichever is more current, 50 feet.
- c. For lakes, 50 feet.
- d. For highly susceptible wetlands, 50 feet. Highly susceptible wetlands include the following types: fens, sedge meadows, bogs, low prairies, conifer swamps, shrub swamps, other forested wetlands, fresh wet meadows, shallow marshes, deep marshes and seasonally flooded basins.
- e. For less susceptible wetlands, 10% of the average wetland width, but no less than 10 feet nor more than 30 feet. Less susceptible wetlands include degraded wetlands dominated by invasive species such as reed canary grass.

Protective Areas do not apply to the following:

1. Redevelopment post-construction sites.
2. In-fill development areas less than 5 acres.
3. Structures that cross or access surface waters such as boat landings, bridges and culverts.
4. Structures constructed in accordance with s. [59.692 \(1v\)](#), Stats.
5. Post-construction sites from which runoff does not enter the surface water, except to the extent that vegetative ground cover is necessary to maintain bank stability.
6. Wetlands that have been completely filled in accordance with all applicable state and federal regulations.

Authority to apply wetland and waterway protective areas under NR 151 lies with the WDNR. Some local zoning authorities and regional planning organizations may have adopted protective areas as setbacks as part of their zoning codes or may have additional land use restrictions within or adjacent to wetlands.

²³ Wisconsin Administrative Code, NR 151.245



Concurrence and Certification

If wetlands are proposed to be impacted a Section 404 Letter of Permission Authorization will need to be obtained from USACE and according to Section 281.36, Wisconsin Statutes and NR 299 and NR 103, Wisconsin Administrative Code a permit from the WDNR would be necessary.

For wetlands to be confirmed as exempt from state regulatory authority an exemption determination application must be submitted to the DNR Wetland ID Program whose staff makes the final decision.

Chad M Fradette is a WDNR Professionally Assured Wetland Delineator and WDNR concurrence is granted for five years unless site conditions are significantly altered.



Plant Identification References

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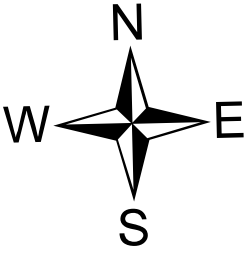
Appendix A:

Figures and Site Maps

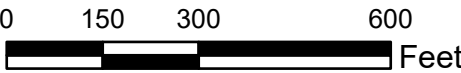


Legend
Site Boundary

Franklin High School
Site Location Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI



Project: MIL25-040-01





Legend

- Site Boundary
- WDNR Protective Area
- Wetland Line
- Wetland
- Culvert

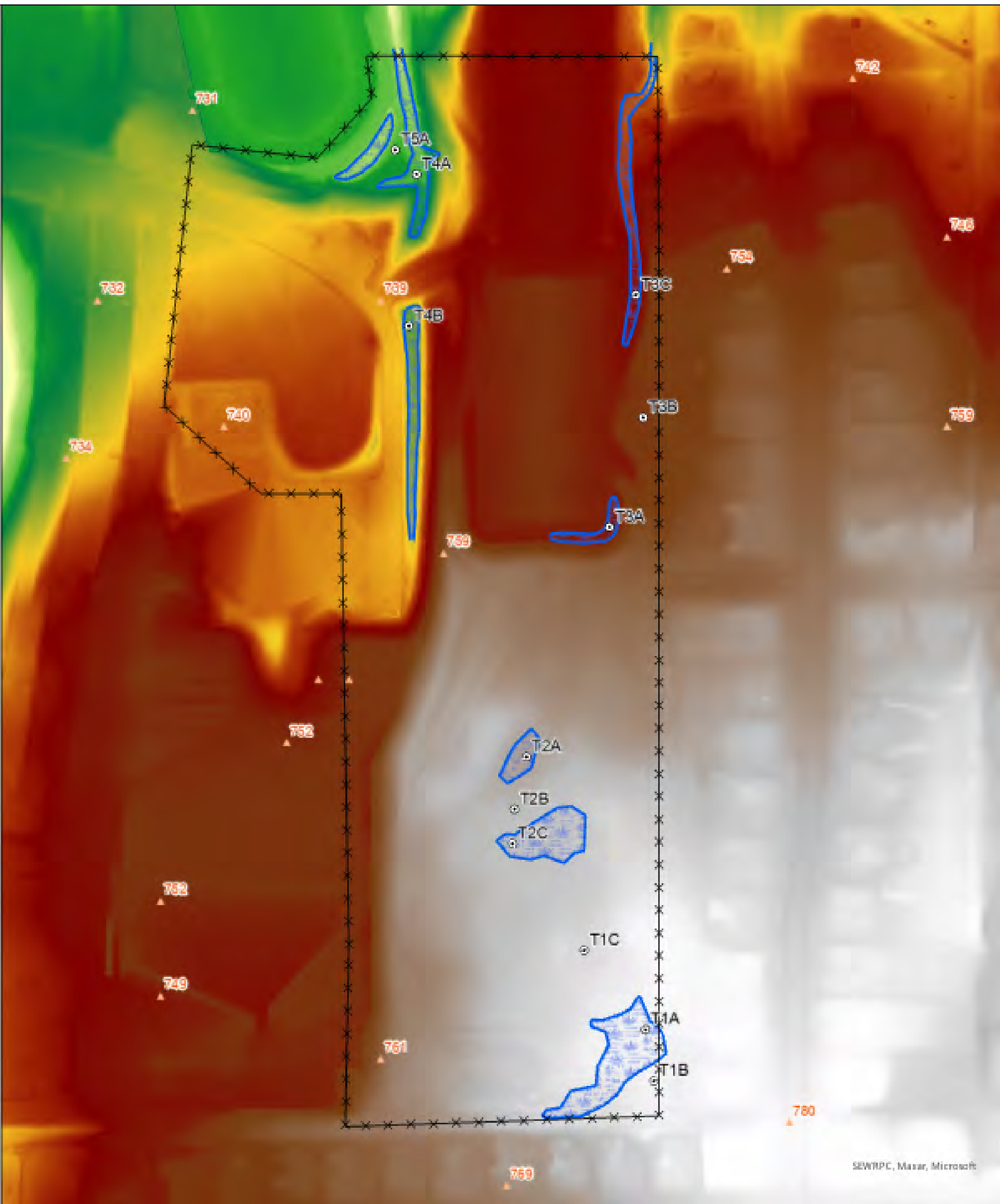
Franklin High School Wetland Delineation Map with WDNR Protective Areas 8222 S 51st Street City of Franklin Milwaukee County, WI



Wetland Delineation was conducted by
Chad Fradette, EP, Chem,
WDNR Professionally Assured Wetland Delineator
with assistance from
Shyann Banker, Environmental Scientist
WDNR Professionally Assured Wetland Delineator

Project: MIL25-040-01

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Feet



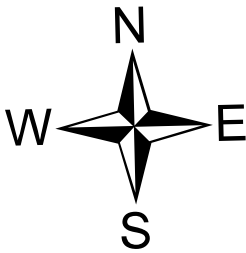
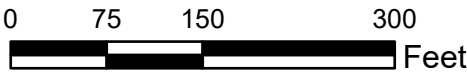
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- Site Boundary
- Wetland Line
- Wetland
- Sample Point

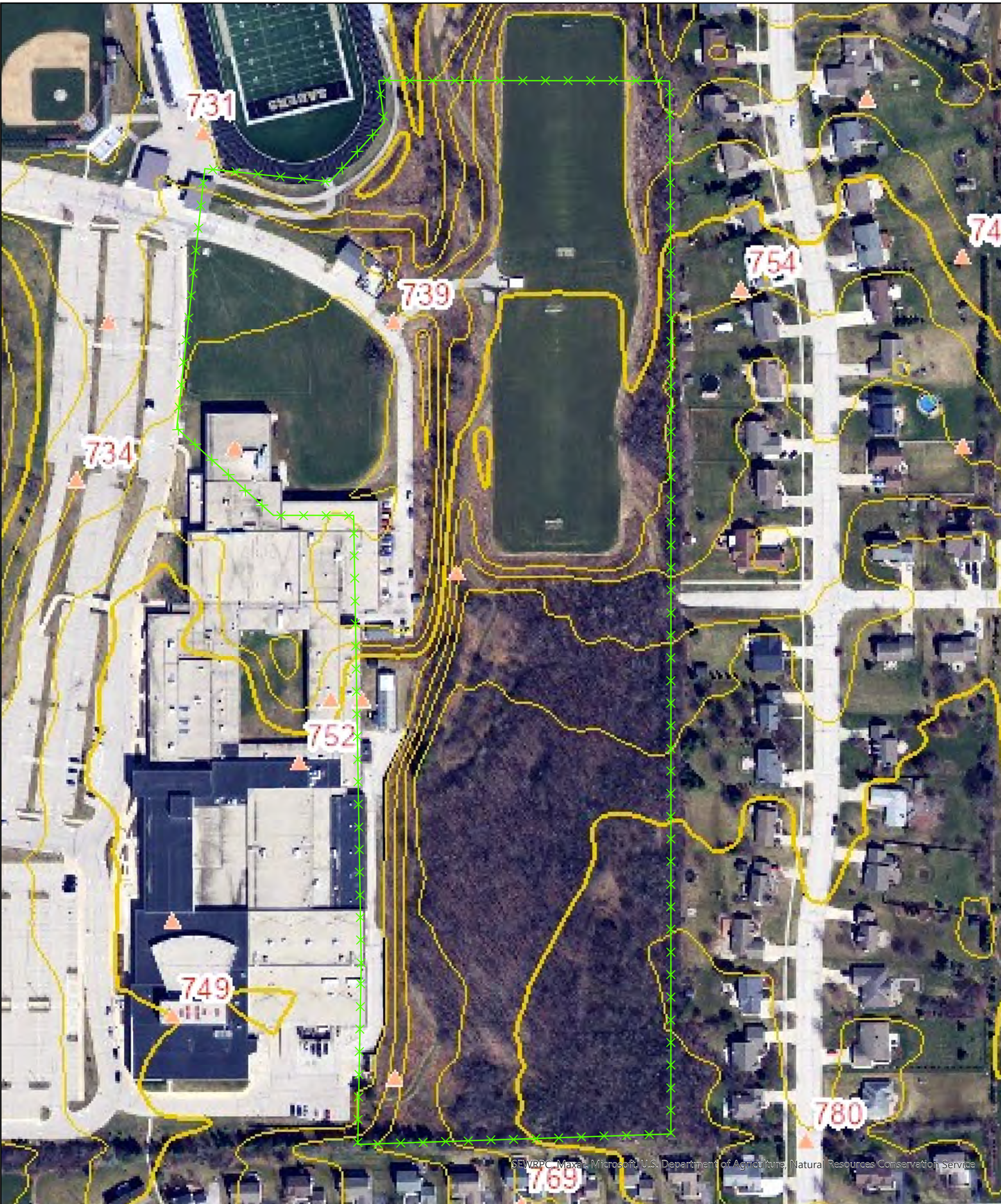
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Chad Fradette, EP, Chem,
WDNR Professionally Assured Wetland Delineator
with assistance from
Shyann Banker, Environmental Scientist
WDNR Professionally Assured Wetland Delineator

Franklin High School
WDNR LiDAR Viewer Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI

Project: MIL25-040-01

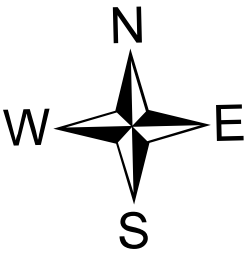
The logo for Evergreen consultants LLC, featuring a stylized tree with green and yellow leaves and the company name in a green, sans-serif font.

evergreen
consultants LLC
PO Box 680 Pulaski, WI 54162
Phone: 920.615.0019 • Website: www.evergreenwis.com

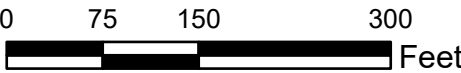


Legend
✕✕ Site Boundary

Franklin High School
Topographic Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI



Project: MIL25-040-01



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PO Box 680 Pulaski, WI 54162
Phone: 920.615.0019 • Website: www.evergreenwis.com

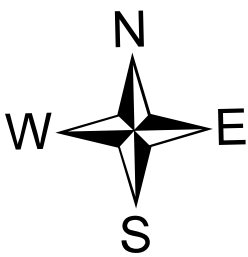


SEWRPC, Maxar, Microsoft, U.S. Department of Agriculture, Natural Resources Conservation Service

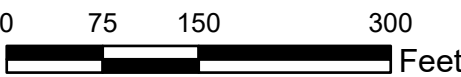
Legend

- Site Boundary
- USDA Wetspots
- Maximum Extent Wetland Indicators
- Wisconsin Wetland Inventory
- Wetland Points

Franklin High School
Wisconsin Wetland Inventory Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI



Project: MIL25-040-01



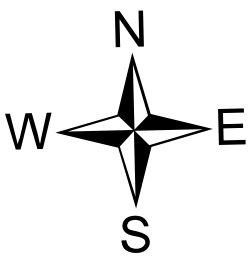
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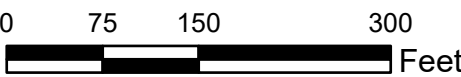
SEWRPC, Maxar, Microsoft, U.S. Department of Agriculture, Natural Resources Conservation Service

Franklin High School
National Wetland Inventory Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI

- Legend
- Site Boundary
 - NWI Wetlands



Project: MIL25-040-01

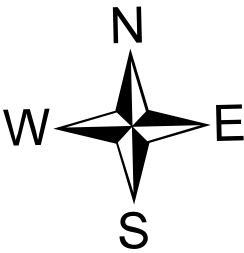




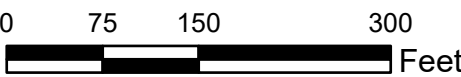
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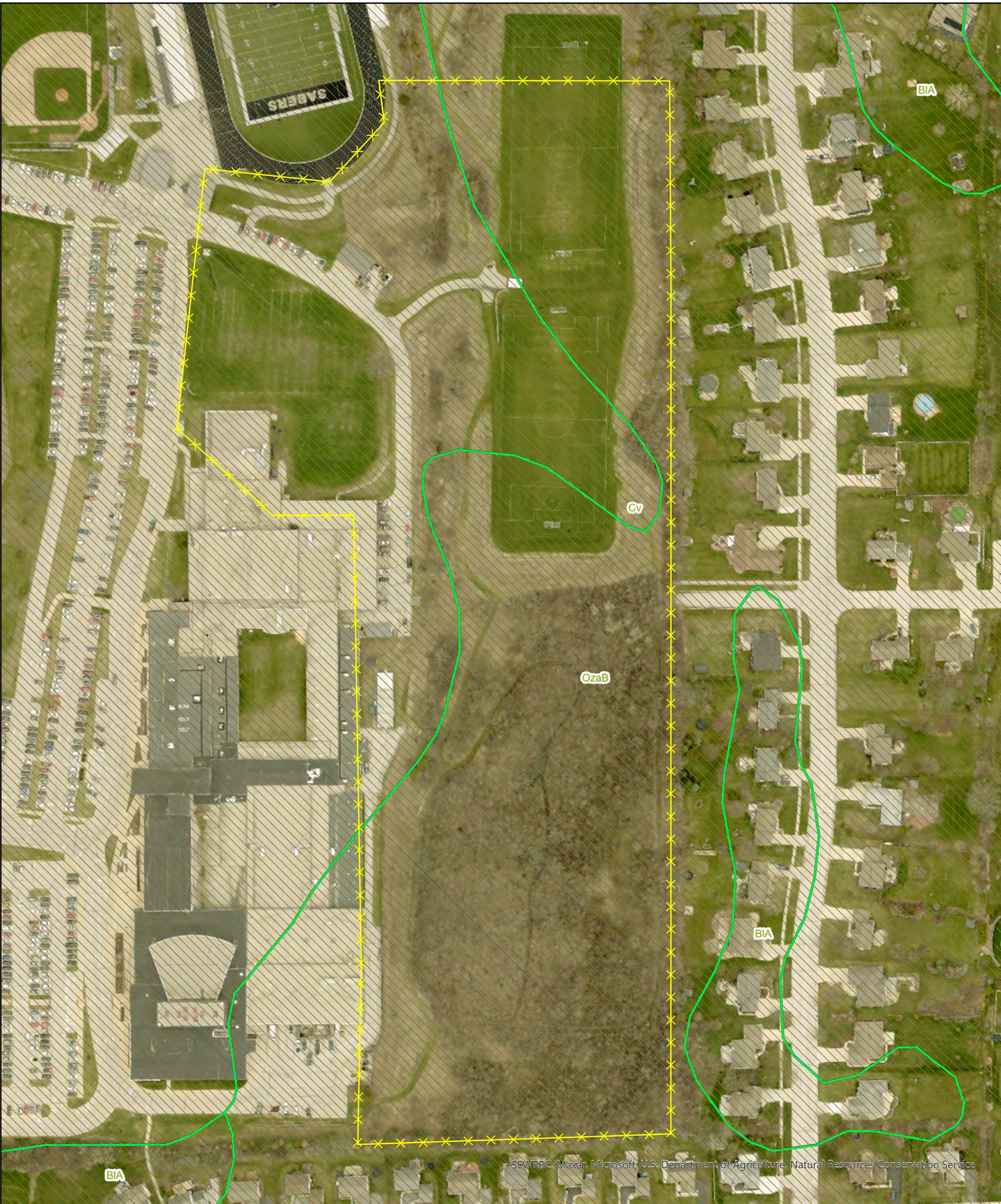
- Site Boundary
- USA Soils Map Units

Franklin High School
NRCS Soil Survey Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI



Project: MIL25-040-01

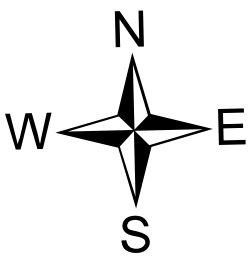




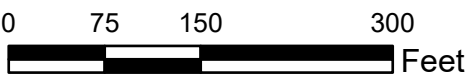
Legend

- ✂ Site Boundary
- Hydric Rating
 - Hydric
 - Predominantly Hydric
 - Partially Hydric
 - Predominantly Non-Hydric

Franklin High School
NRCS Soil Hydric Ratings Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI



Project: MIL25-040-01



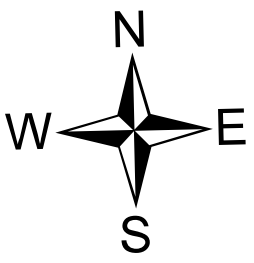


U.S. Department of Agriculture, Natural Resources Conservation Service, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Copyright:© 2013 National Geographic Society, i-cubed

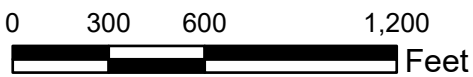
Legend

 Site Boundary

Franklin High School
USGS Topographic Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI



Project: MIL25-040-01



Appendix B:

Site Pictures



Standing near T1A within Wetland 5.



Standing near T1B adjacent to Wetland 5.



Standing near T1C.



Standing near T1C.



Standing near T2A within Wetland 3.



Standing near T2A within Wetland 3.



Standing near T2B between Wetlands 3 and 4.



Standing near T2B between Wetlands 3 and 4.



Standing near T2C within Wetland 4.



Standing near T3A facing southwest within Wetland 2.



Standing near T3A facing north within Wetland 2.



Standing near T3B.



Standing near T3C facing north within Wetland 2.



Standing near T3C facing south within Wetland 2.



Standing near T4A within Wetland 1.



Standing near T4A within Wetland 1.



Standing near T4A within Wetland 1.



Standing near T4B facing south within Wetland 1.



Standing near T5A adjacent to Wetland 1.



Standing near T5A adjacent to Wetland 1.

Appendix C:

Original Survey Map and Notes




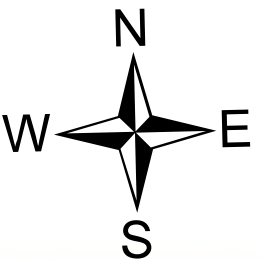
Legend

 Site Boundary

Franklin High School
Original Survey Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI

Project: MIL25-040-01

0 350 700 1,400
 Feet



PO Box 680 Pulaski, WI 54162

Phone: 920.615.0019 • Website: www.evergreenwis.com

T. 5, R. 21 E. 4th. Mer.

North between Sections 13 & 14

6.35 Sugar 8

14.00 Run Cr. N. N. W.

32.32 Sugar 5

40.00 Set $\frac{1}{4}$ Sec. post in run Cr. N. E.

W. Oak 8 S. 40 E. 19

W. Oak 8 N. 24 W. 34

54.59 Lynn 14

69.33 Sugar 10

80.00 Set Post cor. to Sec. 11. 12. 13 & 14

R. Oak 14 S. 48 E. 11

W. " 36 N. 63 W. 18

Land rolling good 2^d. rate -
 Timber, W. R. Oak, Sugar, Lynn,
 Ironwood &c.

Appendix D:

Historic Aerial Photographs



1937 Milwaukee County



1951 Milwaukee County



1956 Milwaukee County



1963 Milwaukee County



1967 Milwaukee County



1970 Milwaukee County



1975 Milwaukee County



1980 FSA



1981 FSA



1982 FSA



1983 FSA



1984 FSA



1985 FSA



1986 FSA



1987 FSA



1988 FSA



1989 FSA



1990 FSA



1991 FSA



1992 FSA



1993 FSA



1994 FSA



1995 FSA



1996 FSA



1997 FSA



1998 FSA



1999 FSA



2000 FSA



2001 FSA



2002 FSA



2004 Maxar Technologies



2005 Google Earth



2006 Maxar Technologies



2007 Maxar Technologies



2008 USDA



2010 Google Earth



2011 Google Earth



2013 Milwaukee County



2014 Google Earth



2015 Google Earth



2017 Maxar Technologies



2018 Google Earth



2019 Google Earth



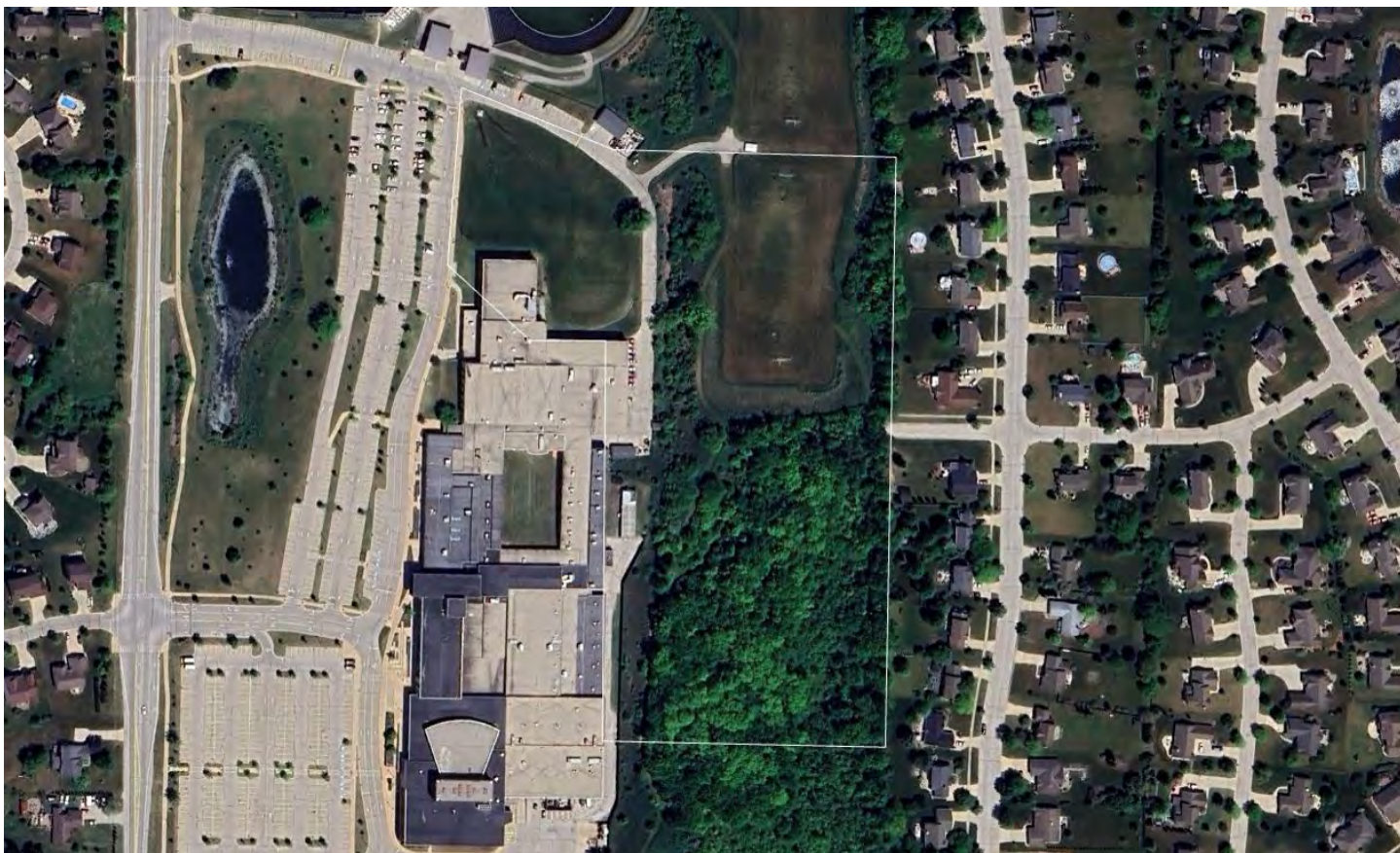
2020 Airbus



2021 Google Earth



2022 Maxar Technologies



2023 Airbus



2024 Airbus

Appendix E:

NRCS County Soil Survey Report

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

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

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 25, 2022—Aug 24, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BIA	Blount silt loam, 1 to 3 percent slopes	2.1	5.7%
Cv	Clayey land	15.9	44.3%
OzaB	Ozaukee silt loam, 2 to 6 percent slopes	17.9	49.9%
Totals for Area of Interest		35.8	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Milwaukee County, Wisconsin

BIA—Blount silt loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: g92m
Elevation: 670 to 1,100 feet
Mean annual precipitation: 28 to 36 inches
Mean annual air temperature: 37 to 55 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Blount and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blount

Setting

Landform: Moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loess over calcareous clayey till

Typical profile

Ap,E - 0 to 8 inches: silt loam
BA,2Bt1,2BC - 8 to 34 inches: silty clay loam
2C - 34 to 60 inches: silty clay loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.57 in/hr)
Depth to water table: About 6 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: F110XY012IL - Moist Glacial Drift Upland Forest
Forage suitability group: Mod AWC, high water table (G095BY004WI)
Other vegetative classification: Mod AWC, high water table (G095BY004WI)
Hydric soil rating: No

Minor Components

Ashkum

Percent of map unit: 10 percent

Landform: Depressions

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow

Hydric soil rating: Yes

Cv—Clayey land

Map Unit Setting

National map unit symbol: g936

Elevation: 670 to 1,100 feet

Mean annual precipitation: 28 to 36 inches

Mean annual air temperature: 37 to 55 degrees F

Frost-free period: 135 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Clayey land and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Clayey Land

Setting

Parent material: Clayey mine spoil or earthy fill

Typical profile

H1 - 0 to 10 inches: clay loam

Properties and qualities

Slope: 1 to 12 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 12 to 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components

Ashkum

Percent of map unit: 10 percent

Landform: Depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Concave

Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow

Hydric soil rating: Yes

OzaB—Ozaukee silt loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: 2sn0b

Elevation: 640 to 890 feet

Mean annual precipitation: 31 to 40 inches

Mean annual air temperature: 46 to 51 degrees F

Frost-free period: 135 to 190 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Ozaukee and similar soils: 93 percent

Minor components: 7 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ozaukee

Setting

Landform: Ground moraines, end moraines

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Loess over wisconsinan age silty and clayey till

Typical profile

Ap - 0 to 6 inches: silt loam

E - 6 to 8 inches: silt loam

Bt1 - 8 to 12 inches: silty clay loam

2Bt2 - 12 to 36 inches: silty clay

2BCt - 36 to 39 inches: silty clay loam

2Cd - 39 to 60 inches: silty clay loam

Properties and qualities

Slope: 2 to 6 percent

Depth to restrictive feature: 24 to 45 inches to densic material

Drainage class: Moderately well drained

Runoff class: Medium

Custom Soil Resource Report

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 24 to 42 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 35 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 5.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C

Ecological site: F110XY012IL - Moist Glacial Drift Upland Forest

Forage suitability group: Mod AWC, adequately drained with limitations
(G095BY006WI)

Other vegetative classification: Mod AWC, adequately drained with limitations
(G095BY006WI)

Hydric soil rating: No

Minor Components

Pewamo, drained

Percent of map unit: 3 percent

Landform: Drainageways on ground moraines, depressions on ground moraines

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave, linear

Across-slope shape: Concave

Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow

Hydric soil rating: Yes

Ashkum, drained

Percent of map unit: 3 percent

Landform: Ground moraines, end moraines

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Concave

Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow

Hydric soil rating: Yes

Urban land

Percent of map unit: 1 percent

Landform: Ground moraines

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Soil Information for All Uses

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Land Classifications

This folder contains a collection of tabular reports that present a variety of soil groupings. The reports (tables) include all selected map units and components for each map unit. Land classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Hydric Rating by Map Unit (WI)

This Hydric Soil Category rating indicates the components of map units that meet the criteria for hydric soils. Map units are composed of one or more major soil components or soil types that generally make up 20 percent or more of the map unit and are listed in the map unit name, and they may also have one or more minor contrasting soil components that generally make up less than 20 percent of the map unit. Each major and minor map unit component that meets the hydric criteria is rated **hydric**. The map unit class ratings based on the hydric components present are: WI Hydric, WI Predominantly Hydric, WI Partially Hydric, WI Predominantly Nonhydric, and WI Nonhydric. The report also shows the total representative percentage of each map unit that the hydric components comprise.

"WI Hydric" means that all major and minor components listed for a given map unit are rated as being hydric. *"WI Predominantly Hydric"* means that all major components listed for a given map unit are rated as hydric, and at least one contrasting minor component is not rated hydric. *"WI Partially Hydric"* means that at least one major component listed for a given map unit is rated as hydric, and at

least one other major component is not rated hydric. *"WI Predominantly Nonhydric"* means that no major component listed for a given map unit is rated as hydric, and at least one contrasting minor component is rated hydric. *"WI Nonhydric"* means no major or minor components for the map unit are rated hydric. The assumption is that the map unit is nonhydric even if none of the components within the map unit have been rated.

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.

If soils are wet enough for a long enough period of time to be considered hydric, they typically 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" (Vasilas, Hurt, and Noble, 2010).

The NTCHS has developed criteria to identify those soil properties unique to hydric soils (Federal Register, 2012). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria use selected soil properties that are described in "Field Indicators of Hydric Soils in the United States" (Vasilas, Hurt, and Noble, 2010), "Soil Taxonomy" (Soil Survey Staff, 1999), "Keys to Soil Taxonomy" (Soil Survey Staff, 2010), and the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

The criteria for hydric soils are represented by codes, for example, 2 or 3. 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.

Custom Soil Resource Report

Federal Register. 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 Rating by Map Unit (WI)

Hydric Rating by Map Unit (WI)—Milwaukee County, Wisconsin				
Map Unit Symbol	Map Unit Name	Hydric Percent of Map Unit	Hydric Category	Landform Hydric Minor Components
BIA	Blount silt loam, 1 to 3 percent slopes	10	WI Predominantly Nonhydric	Depressions
Cv	Clayey land	10	WI Predominantly Nonhydric	Depressions
OzaB	Ozaukee silt loam, 2 to 6 percent slopes	6	WI Predominantly Nonhydric	Ground moraines

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,

Custom Soil Resource Report

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, 2006) and in the "Soil Survey Manual" (Soil Survey Division 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.

Custom Soil Resource Report

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—WI079-Milwaukee County, Wisconsin					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
BIA: Blount silt loam, 1 to 3 percent slopes	Blount	90	Moraines	No	—
	Ashkum	10	Depressions	Yes	2,3
Cv: Clayey land	Clayey land	90	—	No	—
	Ashkum	10	Depressions	Yes	2
OzaB: Ozaukee silt loam, 2 to 6 percent slopes	Ozaukee	88-100	Ground moraines,end moraines	No	—
	Pewamo-Drained	0-7	Drainageways on ground moraines,depressions on ground moraines	Yes	2
	Ashkum-Drained	0-7	Ground moraines,end moraines	Yes	2
	Urban land	0-5	Ground moraines	No	—

Hydric Soils

This table lists the map unit components that are rated as hydric soils 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, 2006) and in the "Soil Survey Manual" (Soil Survey Division 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;

Custom Soil Resource Report

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

References:

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. September 18, 2002. Hydric soils of the United States.

Federal Register. July 13, 1994. Changes in 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.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service.

U.S. Department of Agriculture Handbook 18.

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

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.

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

Report—Hydric Soils

Hydric Soils—Milwaukee County, Wisconsin				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
BIA—Blount silt loam, 1 to 3 percent slopes				
	Ashkum	10	Depressions	2, 3
Cv—Clayey land				
	Ashkum	10	Depressions	2
OzaB—Ozaukee silt loam, 2 to 6 percent slopes				
	Pewamo, drained	3	Drainageways on ground moraines, depressions on ground moraines	2
	Ashkum, drained	3	Ground moraines, end moraines	2

Taxonomic Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999 and 2003). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those

observations or from laboratory measurements. This table shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Alfisols.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Udalfs (*Ud*, meaning humid, plus *alfs*, from Alfisols).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Hapludalfs (*Hapl*, meaning minimal horizonation, plus *udalfs*, the suborder of the Alfisols that has a udic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *Typic* identifies the subgroup that typifies the great group. An example is Typic Hapludalfs.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-loamy, mixed, active, mesic Typic Hapludalfs.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile.

References:

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. (The soils in a given survey area may have been classified according to earlier editions of this publication.)

Report—Taxonomic Classification of the Soils

[An asterisk by the soil name indicates a taxadjunct to the series]

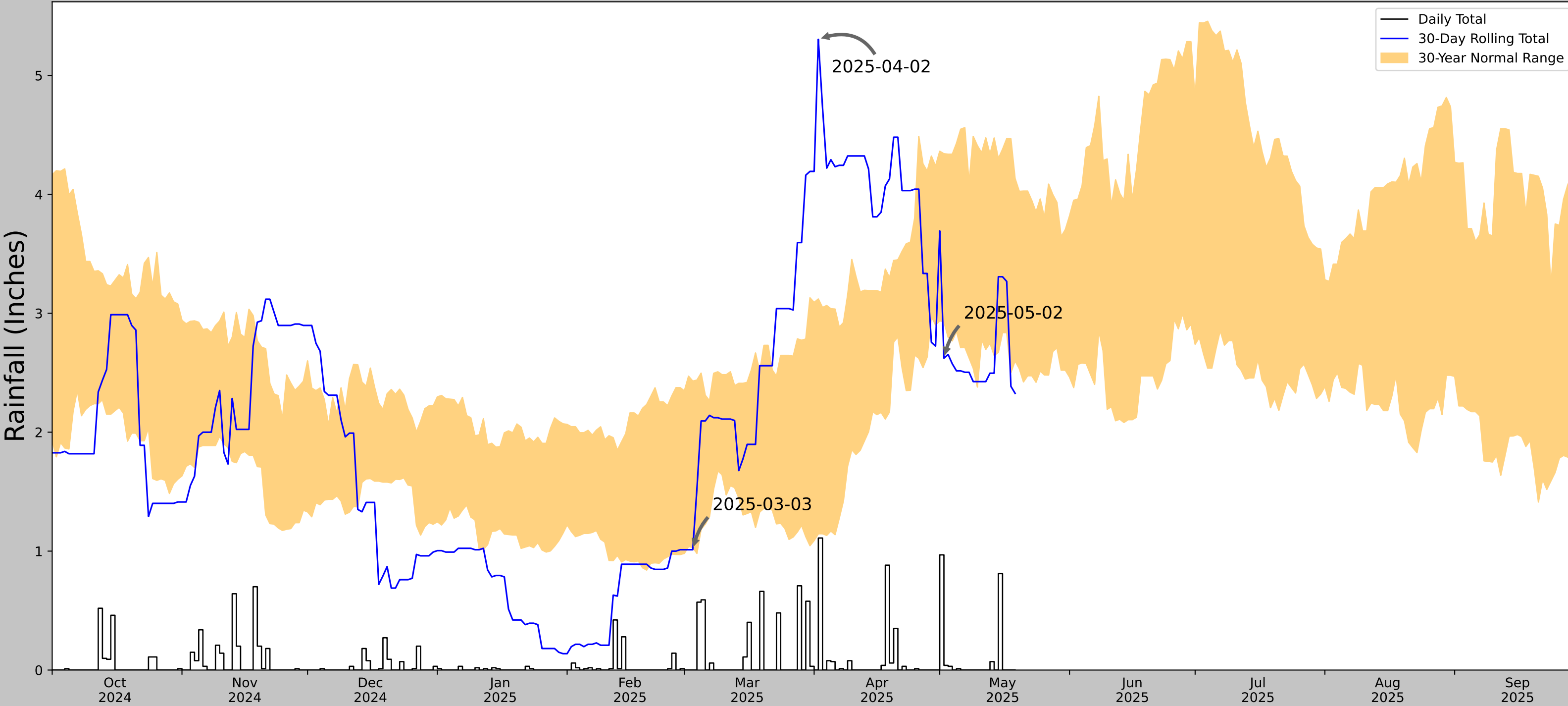
Custom Soil Resource Report

Taxonomic Classification of the Soils—Milwaukee County, Wisconsin	
Soil name	Family or higher taxonomic classification
Ashkum	
Ashkum	Fine, mixed, superactive, mesic Typic Endoaquolls
Ashkum	Mesic
Blount	Fine, illitic, mesic Aeris Epiaqualfs
Clayey land	Mixed
Ozaukee	Fine, illitic, mesic Oxyaquic Hapludalfs
Pewamo	Fine, mixed, active, mesic Typic Argiaquolls
Urban land	

Appendix F:

Precipitation Information

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	42.89589, -87.9761
Observation Date	2025-05-02
Elevation (ft)	771.457
Drought Index (PDSI)	Mild drought (2025-04)
WebWIMP H ₂ O Balance	Wet Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-05-02	2.928347	4.341339	2.622047	Dry	1	3	3
2025-04-02	1.146063	3.120473	5.30315	Wet	3	2	6
2025-03-03	1.030315	2.429921	1.011811	Dry	1	1	1
Result							Normal Conditions - 10

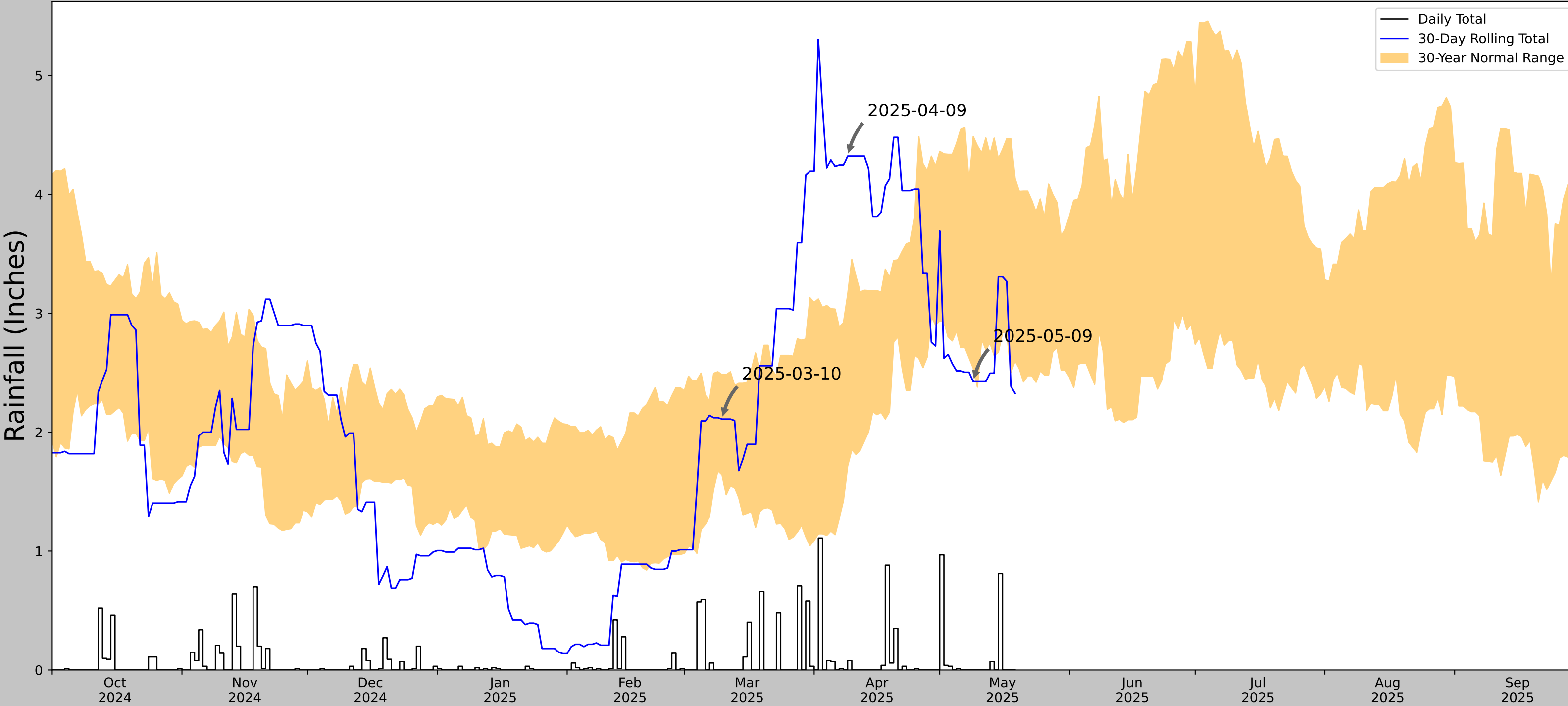


Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
MILWAUKEE MITCHELL AP	42.955, -87.9044	666.995	5.462	104.462	3.029	11353	90

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	42.89589, -87.9761
Observation Date	2025-05-09
Elevation (ft)	771.457
Drought Index (PDSI)	Mild drought (2025-04)
WebWIMP H ₂ O Balance	Wet Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-05-09	2.537402	4.487008	2.425197	Dry	1	3	3
2025-04-09	1.715354	3.153543	4.322835	Wet	3	2	6
2025-03-10	1.64252	2.483465	2.110236	Normal	2	1	2
Result							Normal Conditions - 11



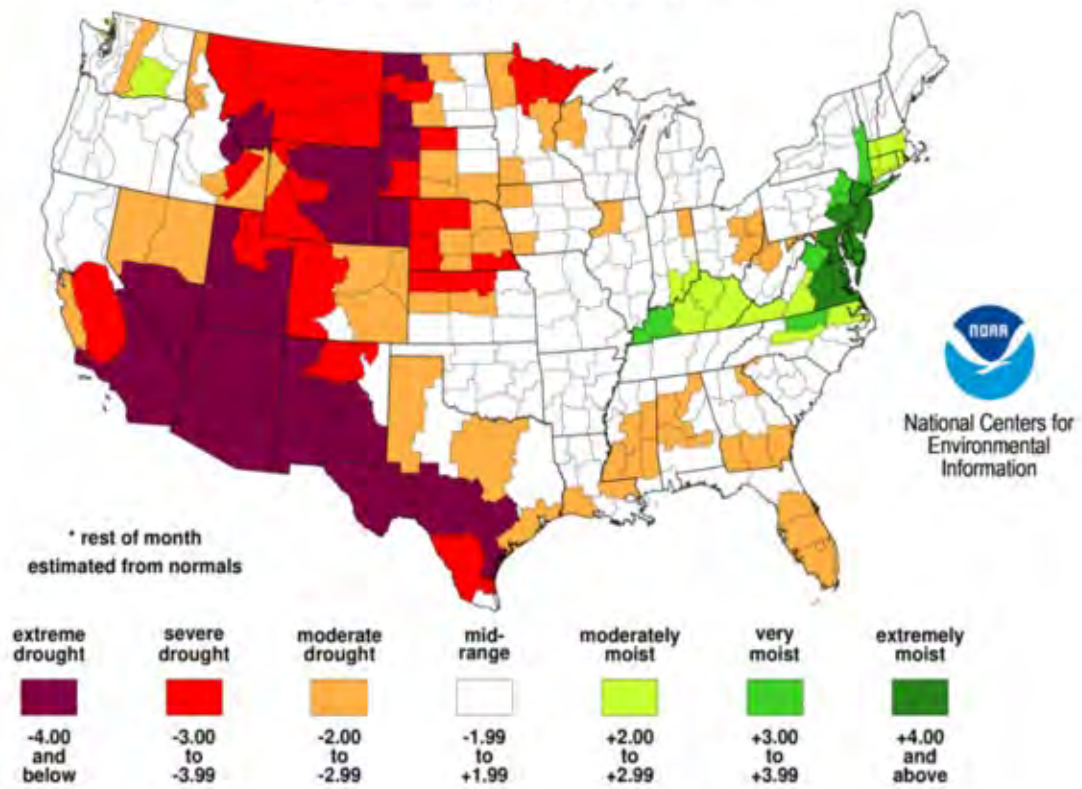
Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
MILWAUKEE MITCHELL AP	42.955, -87.9044	666.995	5.462	104.462	3.028	11353	90

Palmer Hydrological Drought Index Long-Term (Hydrological) Conditions

May 2025: through May 3 2025*



Sources: National Oceanic & Atmospheric Administration, Palmer Hydrological Drought Index

Appendix G:

Wetland Determination Data Forms

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

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.)

Hydrophytic Vegetation 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"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			

Sample plot is in a buckthorn thicket with dead ash.

Tree Stratum	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rhamnus cathartica</u>		<u>5</u>	<u>✓</u>	<u>FAC</u>
2. _____				
3. _____				
4. _____				
5. _____				
		<u>5</u>	=Total Cover	

Sapling/Shrub Stratum	(Plot size: <u>15 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rhamnus cathartica</u>		<u>60</u>	<u>✓</u>	<u>FAC</u>
2. _____				
3. _____				
4. _____				
5. _____				
		<u>60</u>	=Total Cover	

Herb Stratum	(Plot size: <u>5 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Carex stricta</u>		<u>3</u>		<u>OBL</u>
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
		<u>3</u>	=Total Cover	

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

Two hydrophytic vegetation indicators present.

SOIL

Sampling Point: T1A

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 ¹	Loc ²		
0 - 12	7.5YR 3/2	93	7.5YR 4/4	7	C	M	Silty Clay Loam	
12 - 24	7.5YR 3/3	70	7.5YR 4/6	30	C	M		
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1) ☐ Sandy Gleyed Matrix (S4)
☐ Histic Epipedon (A2) ☐ Sandy Redox (S5)
☐ Black Histic (A3) ☐ Stripped Matrix (S6)
☐ Hydrogen Sulfide (A4) ☐ Dark Surface (S7)
☐ Stratified Layers (A5) ☐ Loamy Mucky Mineral (F1)
☐ 2 cm Muck (A10) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☒ Redox Dark Surface (F6)
☐ Iron Monosulfide (A18) ☐ Depleted Dark Surface (F7)
☐ Sandy Mucky Mineral (S1) ☒ Redox Depressions (F8)
☐ 5 cm Mucky Peat or Peat (S3)

Indicators for Problematic Hydric Soils³:

- ☐ Iron-Manganese Masses (F12)
☐ Red Parent Material (F21) Very
☐ Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present?Yes ☒ No ☐

Remarks:

Hydric soil indicators F6 and F8 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☒ Surface Water (A1) ☐ Water-Stained Leaves (B9)
☒ High Water Table (A2) ☐ Aquatic Fauna (B13)
☒ Saturation (A3) ☐ True Aquatic Plants (B14)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck Surface (C7)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Gauge or Well Data (D9)
☒ Sparsely Vegetated Concave Surface (B8) ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 1-4
 Water Table Present? Yes ☒ No ☐ Depth (inches): 9
 Saturation Present? Yes ☒ No ☐ Depth (inches): 0-9
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

Hydrology is met with four primary and two secondary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: T1A

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata:
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
	<u>5</u> =Total Cover			
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
	<u>60</u> =Total Cover			
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
	<u>3</u> =Total Cover			
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	_____ =Total Cover			

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

Two hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: MI25-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-02
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T1B
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex
Slope (%): 1-2 Lat: 42.8944842 Long: -87.9754088 Datum: WGS 84
Soil Map Unit Name: Ozaukee silt loam 2-6% slopes 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 ☒ No ☐
Hydric Soil Present? Yes ☐ No ☒
Wetland Hydrology Present? Yes ☐ No ☒

Is the Sampled Area
within a Wetland? Yes ☐ No ☒

Remarks:

Sample plot is in a woodland. The wetland boundary was marked near the toe slope of the depression.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Tilia americana</u>		<u>70</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
2. <u>Rhamnus cathartica</u>		<u>25</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
3. <u>Carya ovata</u>		<u>2</u>		<u>FACU</u>
4. _____				
5. _____				
		<u>97</u>	=Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15 ft r</u>)			
1. <u>Rhamnus cathartica</u>		<u>80</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
2. _____				
3. _____				
4. _____				
5. _____				
		<u>80</u>	=Total Cover	
Herb Stratum	(Plot size: <u>5 ft r</u>)			
1. <u>Rhamnus cathartica</u>		<u>2</u>		<u>FAC</u>
2. <u>Prunus virginiana</u>		<u>1</u>		<u>FACU</u>
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
		<u>3</u>	=Total Cover	
Woody Vine Stratum	(Plot size: <u>30 ft r</u>)			
1. _____				
2. _____				
			=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: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.66 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>107</u>	x 3 = <u>321</u>
FACU species <u>73</u>	x 4 = <u>292</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>180</u> (A)	<u>613</u> (B)
Prevalence Index = B/A = <u>3.40</u>	

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

One hydrophytic vegetation indicator present.

SOIL

Sampling Point: T1B

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 ¹	Loc ²		
0 - 6	10YR 3/2	100					Silty Clay Loam	
6 - 8	7.5YR 3/2	95					Silty Clay Loam	
6 - 8	10YR 3/4	5					Silty Clay	subsoil mixed in
8 - 24	10YR 3/4	95	7.5YR 4/6	5	C	M	Silty Clay Loam	
-								
-								

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

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Red Parent Material (F21) Very
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Shallow Dark Surface (F22)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stratified Layers (A5)	
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Iron Monosulfide (A18)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

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

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

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:			
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"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

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

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

No hydrology indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T1B**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
97		=Total Cover		
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
80		=Total Cover		
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
3		=Total Cover		
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____		=Total Cover		

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

One hydrophytic vegetation indicator present.

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

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

Remarks:

Sample plot is within a basswood forest with some tree fall depressions.

<u>Tree Stratum</u>	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Tilia americana</u>		<u>30</u>	<u>✓</u>	<u>FACU</u>
2. <u>Carya ovata</u>		<u>5</u>		<u>FACU</u>
3. <u>Rhamnus cathartica</u>		<u>5</u>		<u>FAC</u>
4. <u>Ulmus americana</u>		<u>3</u>		<u>FACW</u>
5.		<u> </u>	<u> </u>	<u> </u>
		<u>43</u>	=Total Cover	

<u>Sapling/Shrub Stratum</u>	(Plot size: <u>15 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rhamnus cathartica</u>		<u>30</u>	<u>✓</u>	<u>FAC</u>
2. <u>Tilia americana</u>		<u>10</u>	<u>✓</u>	<u>FACU</u>
3. <u>Lonicera X bella</u>		<u>5</u>		<u>FACU</u>
4.		<u> </u>	<u> </u>	<u> </u>
5.		<u> </u>	<u> </u>	<u> </u>
		<u>45</u>	=Total Cover	

<u>Herb Stratum</u>	(Plot size: <u>5 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Fragaria virginiana</u>		<u>5</u>	<u>✓</u>	<u>FACU</u>
2. <u>Rhamnus cathartica</u>		<u>5</u>	<u>✓</u>	<u>FAC</u>
3.		<u> </u>	<u> </u>	<u> </u>
4.		<u> </u>	<u> </u>	<u> </u>
5.		<u> </u>	<u> </u>	<u> </u>
6.		<u> </u>	<u> </u>	<u> </u>
7.		<u> </u>	<u> </u>	<u> </u>
8.		<u> </u>	<u> </u>	<u> </u>
9.		<u> </u>	<u> </u>	<u> </u>
10.		<u> </u>	<u> </u>	<u> </u>
		<u>10</u>	=Total Cover	

<u>Woody Vine Stratum</u>	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.		<u> </u>	<u> </u>	<u> </u>
2.		<u> </u>	<u> </u>	<u> </u>
		<u> </u>	=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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>3</u>	x 2 = <u>6</u>
FAC species <u>40</u>	x 3 = <u>120</u>
FACU species <u>55</u>	x 4 = <u>220</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>98</u> (A)	<u>346</u> (B)
Prevalence Index = B/A = <u>3.53</u>	

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0¹
- 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation¹ (Explain) _____

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

Hydrophytic Vegetation Present? Yes No

Yes No ✓

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

No hydrophytic vegetation indicators present.

SOIL

Sampling Point: T1C

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 ¹	Loc ²		
0 - 8	7.5YR 3/2	100					Silty Clay Loam	
8 - 24	10YR 3/4	95	7.5YR 4/6	5	C	M	Silty Clay Loam	
-								
-								
-								
-								

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Iron-Manganese Masses (F12)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21) Very	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Shallow Dark Surface (F22)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)		
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)			

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

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

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:			
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 checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations:				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____		
Water Table Present?	Yes <input checked="" type="checkbox"/> No _____	Depth (inches): 10		
Saturation Present?	Yes <input checked="" type="checkbox"/> No _____	Depth (inches): 8		
(includes capillary fringe)				

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

Hydrology is met with two primary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T1C**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
43 =Total Cover				
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
45 =Total Cover				
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
10 =Total Cover				
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ =Total Cover				

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

No hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: MII25-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-02
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T2A
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Closed Depression Local relief (concave, convex, none): Concave
Slope (%): 0-2 Lat: 42.8958842 Long: -87.9760962 Datum: WGS 84
Soil Map Unit Name: Ozaukee silt loam 2-6% slopes NWI classification: None, WWI-forested

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"/>	Is the Sampled Area within a Wetland? 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"/>	

Remarks:
Sample plot is in a small depression in a basswood forest with a running trail through the side of the wetland. Wetland boundary marked near the toeslope of the depression.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Tilia americana</u>		<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
2. <u>Ulmus americana</u>		<u>2</u>		<u>FACW</u>
3. _____				
4. _____				
5. _____				
		<u>12</u>	=Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15 ft r</u>)			
1. <u>Cornus amomum</u>		<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
2. <u>Rhamnus cathartica</u>		<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
3. _____				
4. _____				
5. _____				
		<u>20</u>	=Total Cover	
Herb Stratum	(Plot size: <u>5 ft r</u>)			
1. <u>Carex pellita</u>		<u>10</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
		<u>10</u>	=Total Cover	
Woody Vine Stratum	(Plot size: <u>30 ft r</u>)			
1. _____				
2. _____				
			=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 75.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>10</u>	x 1 = <u>10</u>
FACW species <u>12</u>	x 2 = <u>24</u>
FAC species <u>10</u>	x 3 = <u>30</u>
FACU species <u>10</u>	x 4 = <u>40</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>42</u> (A)	<u>104</u> (B)
Prevalence Index = B/A = <u>2.47</u>	

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: (Include photo numbers here or on a separate sheet.)
Two hydrophytic vegetation indicators present.

SOIL

Sampling Point: T2A

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 ¹	Loc ²		
0 - 6	10YR 2/2	93	7.5YR 3/4	7	C	M	Silty Clay Loam	
6 - 15	7.5YR 3/1	90	7.5YR 3/4	10	C	M	Silty Clay Loam	
15 - 24	7.5YR 4/6	80	7.5YR 4/	20	D	M	Silty Clay	
-								
-								
-								

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

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Red Parent Material (F21) Very
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Shallow Dark Surface (F22)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stratified Layers (A5)	
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Iron Monosulfide (A18)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	
<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Matrix (F3)	
<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Dark Surface (F7)	
<input checked="" type="checkbox"/> Redox Depressions (F8)	

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

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

Remarks:

Hydric soil indicators F6 and F8 present.

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 1-5 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 checked="" type="checkbox"/> No <input type="checkbox"/>
---	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

Hydrology is met with four primary and two secondary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: T2A

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
<u>12</u> =Total Cover				
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
<u>20</u> =Total Cover				
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
<u>10</u> =Total Cover				
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ =Total Cover				

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

Two hydrophytic vegetation indicators present.

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

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

Sample plot is in a basswood woodland on a rise between wet depressions.

No hydrophytic vegetation indicators present.

SOIL

Sampling Point: T2B

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 ¹	Loc ²		
0 - 6	10YR 3/2	100					Silty Clay Loam	
6 - 12	7.5YR 4/3	95	7.5YR 4/6	5	C	M		
12 - 24	10YR 4/3	70	7.5YR 4/6	30	C	M	Silty Clay	
-								
-								
-								

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Iron-Manganese Masses (F12)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21) Very	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Shallow Dark Surface (F22)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)		
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)			

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

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

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:			
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"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

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

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

No hydrology indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T2B**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
85 =Total Cover				
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
65 =Total Cover				
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
18 =Total Cover				
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ =Total Cover				

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

No hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-10-16; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: MI125-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-02
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T2C
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Closed Depression Local relief (concave, convex, none): Concave
Slope (%): 0-2 Lat: 42.8955202 Long: -87.9761839 Datum: WGS 84
Soil Map Unit Name: Ozaukee silt loam 2-6% slopes 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"/>
---	--

Remarks:
Sample plot is within a depression in a woodland infested with buckthorn. A trail bisects the wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>) 1. <u>Ulmus americana</u> Absolute % Cover <u>15</u> Dominant Species? <input checked="" type="checkbox"/> Indicator Status <u>FACW</u> 2. <u>Tilia americana</u> Absolute % Cover <u>5</u> Dominant Species? <input checked="" type="checkbox"/> Indicator Status <u>FACU</u> 3. _____ 4. _____ 5. _____ _____ =Total Cover <u>20</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</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>75.00</u> (A/B)	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>) 1. <u>Rhamnus cathartica</u> Absolute % Cover <u>15</u> Dominant Species? <input checked="" type="checkbox"/> Indicator Status <u>FAC</u> 2. _____ 3. _____ 4. _____ 5. _____ _____ =Total Cover <u>15</u>		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>15</u> x 3 = <u>45</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>45</u> (A) <u>115</u> (B) Prevalence Index = B/A = <u>2.55</u>
Herb Stratum (Plot size: <u>5 ft r</u>) 1. <u>Carex bromoides</u> Absolute % Cover <u>10</u> Dominant Species? <input checked="" type="checkbox"/> Indicator Status <u>FACW</u> 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ _____ =Total Cover <u>10</u>		
Woody Vine Stratum (Plot size: <u>30 ft r</u>) 1. _____ 2. _____ _____ =Total Cover _____	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	

Remarks: (Include photo numbers here or on a separate sheet.)
Two hydrophytic vegetation indicators present.

SOIL

Sampling Point: T2C

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 ¹	Loc ²		
0 - 8	7.5YR 3/1	98	7.5YR 3/4	2	C	M	Silty Clay Loam	
8 - 14	7.5YR 4/2	90	7.5YR 4/6	10	D	M	Silty Clay	
14 - 24	7.5YR 4/3	60	7.5YR 4/6	40	C	M	Silty Clay	
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- | | |
|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Iron Monosulfide (A18) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | |

Indicators for Problematic Hydric Soils³:

- ☐ Iron-Manganese Masses (F12)
☐ Red Parent Material (F21) Very
☐ Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present?Yes ☒ No ☐

Remarks:

Hydric soil indicators A11, F3, and F6 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|---|---|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input checked="" 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"/> True Aquatic Plants (B14) |
| <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"/> Gauge or Well Data (D9) |
| <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches): 1-3
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 ☒ No ☐

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

Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

Hydrology is met with three primary and two secondary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: T2C

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata:
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
	<u>20</u>	=Total Cover		
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
	<u>15</u>	=Total Cover		
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
	<u>10</u>	=Total Cover		
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
	_____	=Total Cover		

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

Two hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: MII25-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-09
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T3A
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Ditch Local relief (concave, convex, none): Concave
Slope (%): 0-1 Lat: 42.8968538 Long: -87.9755673 Datum: WGS 84
Soil Map Unit Name: Ozaukee silt loam 2-6% slopes 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"/>	Is the Sampled Area within a Wetland? 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"/>	

Remarks:

Sample plot is in an excavated drainage ditch around athletic field. The field and drainage ditches were constructed in 2015.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
			=Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15x50 ft</u>)			
1.	<u>Salix interior</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
2.	<u>Salix petiolaris</u>	<u>5</u>		<u>OBL</u>
3.				
4.				
5.				
		<u>35</u>	=Total Cover	
Herb Stratum	(Plot size: <u>5 ft r</u>)			
1.	<u>Carex pellita</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
2.	<u>Equisetum arvense</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
		<u>10</u>	=Total Cover	
Woody Vine Stratum	(Plot size: <u>30 ft r</u>)			
1.				
2.				
			=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>10</u>	x 1 = <u>10</u>
FACW species <u>30</u>	x 2 = <u>60</u>
FAC species <u>5</u>	x 3 = <u>15</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>45</u> (A)	<u>85</u> (B)

Prevalence Index = B/A = 1.88

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

☒ 3 - Prevalence Index is ≤3.0¹

☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

Two hydrophytic vegetation indicators present.

SOIL

Sampling Point: T3A

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 ¹	Loc ²		
0 - 24	7.5YR 4/3	90	7.5YR 4/6	10	C	M	Silty Clay	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Iron Monosulfide (A18) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | |

Indicators for Problematic Hydric Soils³:

- ☐ Iron-Manganese Masses (F12)
☒ Red Parent Material (F21) Very
☐ Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present?Yes ☒ No ☐

Remarks:

Hydric soil indicator F21 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|---|---|
| <input checked="" 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"/> True Aquatic Plants (B14) |
| <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 checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches): 0-3
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 ☒ No ☐

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

Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

Hydrology is met with two primary and two secondary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T3A**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
			=Total Cover	
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
			=Total Cover	

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

Two hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-10-16; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>MI125-040-01 Franklin High School</u>	City/County: <u>Franklin/Milwaukee</u>	Sampling Date: <u>2025-05-09</u>
Applicant/Owner: <u>Point of Beginning</u>	State: <u>Wisconsin</u>	Sampling Point: <u>T3B</u>
Investigator(s): <u>Chad M Fradette, Sara Marcinkus</u>	Section, Township, Range: <u>Section 14, T05N, R21E</u>	
Landform (hillside, terrace, etc.): <u>Hillslope</u>	Local relief (concave, convex, none): <u>Convex</u>	
Slope (%): <u>1-3</u>	Lat: <u>42.8973222</u>	Long: <u>-87.9753692</u>
	Datum: <u>WGS 84</u>	
Soil Map Unit Name: <u>Ozaukee silt loam 2-6% slopes</u>	NWI classification: <u>None, WWI-forested</u>	

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? 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"/>
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:

Sample plot is in a brushy area, woodland remnant.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	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>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)
1. <u>Tilia americana</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	
2. <u>Quercus macrocarpa</u>	<u>5</u>		<u>FAC</u>	
3. _____				
4. _____				
5. _____				
<u>55</u> =Total Cover				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>56</u> x 3 = <u>168</u> FACU species <u>77</u> x 4 = <u>308</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>133</u> (A) <u>476</u> (B) Prevalence Index = B/A = <u>3.57</u>
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)				
1. <u>Rhamnus cathartica</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
2. <u>Ribes cynosbati</u>	<u>1</u>		<u>FAC</u>	
3. _____				
4. _____				
<u>51</u> =Total Cover				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>5 ft r</u>)				
1. <u>Erythronium rostratum</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	
2. <u>Trillium recurvatum</u>	<u>2</u>		<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
<u>27</u> =Total Cover				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
1. _____				
2. _____				
<u> </u> =Total Cover				

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

No hydrophytic vegetation indicators present.

SOIL

Sampling Point: T3B

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 ¹	Loc ²		
0 - 8	10YR 2/2	100					Silty Clay Loam	
8 - 16	7.5YR 4/3	90	7.5YR 4/4	10	C	M	Silty Clay	
16 - 24	10YR 4/4	100					Silty Clay	
-								
-								
-								

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Iron-Manganese Masses (F12)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21) Very	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Shallow Dark Surface (F22)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)		
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)			

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

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

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:			
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"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

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

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

No hydrology indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T3B**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata:
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
	55	=Total Cover		
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
	51	=Total Cover		
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
	27	=Total Cover		
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		=Total Cover		

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

No hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: MII25-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-09
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T3C
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Ditch Local relief (concave, convex, none): Concave
Slope (%): 0-1 Lat: 42.8978479 Long: -87.9753934 Datum: WGS 84
Soil Map Unit Name: Ozaukee silt loam 2-6% slopes 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 ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☒ No ☐

Is the Sampled Area
within a Wetland? Yes ☒ No ☐

Remarks:

Sample plot is in an excavated drainage ditch around athletic field. The drainage ditches were constructed in 2015.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15x50 ft</u>)			
1.	<u>Salix petiolaris</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
2.				
3.				
4.				
5.				
		<u>5</u>	=Total Cover	
Herb Stratum	(Plot size: <u>5 ft r</u>)			
1.	<u>Phragmites australis</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
2.	<u>Impatiens capensis</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
		<u>15</u>	=Total Cover	
Woody Vine Stratum	(Plot size: <u>30 ft r</u>)			
1.				
2.				
			=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>5</u>	x 1 = <u>5</u>
FACW species <u>15</u>	x 2 = <u>30</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>20</u> (A)	<u>35</u> (B)

Prevalence Index = B/A = 1.75

Hydrophytic Vegetation Indicators:

- ☒ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☒ 3 - Prevalence Index is ≤3.0¹
- ☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

Three hydrophytic vegetation indicators present.

SOIL

Sampling Point: T3C

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 ¹	Loc ²		
0 - 8	10YR 4/2	95	7.5YR 4/6	5	C	M	Silty Clay Loam	
8 - 24	10YR 3/2	50					Silty Clay	
8 - 24	7.5YR 4/3	40	7.5YR 4/6	10	C	M	Silty Clay Loam	
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1) ☐ Sandy Gleyed Matrix (S4)
☐ Histic Epipedon (A2) ☐ Sandy Redox (S5)
☐ Black Histic (A3) ☐ Stripped Matrix (S6)
☐ Hydrogen Sulfide (A4) ☐ Dark Surface (S7)
☐ Stratified Layers (A5) ☐ Loamy Mucky Mineral (F1)
☐ 2 cm Muck (A10) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☒ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Iron Monosulfide (A18) ☐ Depleted Dark Surface (F7)
☐ Sandy Mucky Mineral (S1) ☐ Redox Depressions (F8)
☐ 5 cm Mucky Peat or Peat (S3)

Indicators for Problematic Hydric Soils³:

- ☐ Iron-Manganese Masses (F12)
☐ Red Parent Material (F21) Very
☐ Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Hydric soil indicator F3 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☒ Surface Water (A1) ☐ Water-Stained Leaves (B9)
☐ High Water Table (A2) ☐ Aquatic Fauna (B13)
☐ Saturation (A3) ☐ True Aquatic Plants (B14)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck Surface (C7)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Gauge or Well Data (D9)
☐ Sparsely Vegetated Concave Surface (B8) ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 0-1
 Water Table Present? Yes ☐ No ☒ Depth (inches): _____
 Saturation Present? Yes ☐ No ☒ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

Hydrology is met with one primary and two secondary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T3C**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
			=Total Cover	
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
			=Total Cover	

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

Three hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: MI125-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-09
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T4A
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Ditch Local relief (concave, convex, none): Concave
Slope (%): 0-2 Lat: 42.8983906 Long: -87.9766597 Datum: WGS 84
Soil Map Unit Name: Clayey land NWI classification: None, WWI-shrub/emergent

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☒ No ☐

Is the Sampled Area
within a Wetland? Yes ☒ No ☐

Remarks:

Sample plot is in a wet meadow with a few trees and brush, part of a drainage ditch between athletic fields. The drainage ditches were constructed in 1975.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Salix nigra</u>		<u>15</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
2. _____		_____	_____	_____
3. _____		_____	_____	_____
4. _____		_____	_____	_____
5. _____		_____	_____	_____
		<u>15</u> =Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15 ft r</u>)			
1. <u>Rhamnus cathartica</u>		<u>15</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
2. <u>Cornus amomum</u>		<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
3. <u>Salix interior</u>		<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
4. <u>Salix bebbiana</u>		<u>5</u>		<u>FACW</u>
5. _____		_____	_____	_____
		<u>40</u> =Total Cover		
Herb Stratum	(Plot size: <u>5 ft r</u>)			
1. <u>Phalaris arundinacea</u>		<u>40</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
2. <u>Poa pratensis</u>		<u>10</u>		<u>FAC</u>
3. <u>Typha X glauca</u>		<u>10</u>		<u>OBL</u>
4. <u>Equisetum arvense</u>		<u>5</u>		<u>FAC</u>
5. _____		_____	_____	_____
6. _____		_____	_____	_____
7. _____		_____	_____	_____
8. _____		_____	_____	_____
9. _____		_____	_____	_____
10. _____		_____	_____	_____
		<u>65</u> =Total Cover		
Woody Vine Stratum	(Plot size: <u>30 ft r</u>)			
1. _____		_____	_____	_____
2. _____		_____	_____	_____
		_____ =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>25</u>	x 1 = <u>25</u>
FACW species <u>65</u>	x 2 = <u>130</u>
FAC species <u>30</u>	x 3 = <u>90</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>120</u> (A)	<u>245</u> (B)

Prevalence Index = B/A = 2.04

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

☒ 3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

Two hydrophytic vegetation indicators present.

SOIL

Sampling Point: T4A

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 ¹	Loc ²		
0 - 12	10YR 2/2	95	7.5YR 4/6	5	C	M	Silty Clay Loam	
12 - 24	10YR 4/2	90	7.5YR 3/4	10	C	M	Silty Clay	
-								
-								
-								
-								

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Iron-Manganese Masses (F12)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21) Very	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Shallow Dark Surface (F22)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)		
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)			

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

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

Hydric soil indicators A11 and F6 present.

HYDROLOGY

Wetland Hydrology Indicators:			
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 checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 6 Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0-6 (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:
 Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

surface water adjacent, flowing water. Hydrology is met with two primary and three secondary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T4A**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
15 =Total Cover				
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
40 =Total Cover				
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
65 =Total Cover				
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ =Total Cover				

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

Two hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: MII25-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-09
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T4B
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Ditch Local relief (concave, convex, none): Concave
Slope (%): 0-1 Lat: 42.8977345 Long: -87.9767295 Datum: WGS 84
Soil Map Unit Name: Clayey land NWI classification: PEM1C, WWI-shrub/emergent

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☒ No ☐

Is the Sampled Area
within a Wetland? Yes ☒ No ☐

Remarks:

Sample plot is in an excavated storm ditch. The drainage ditch network was constructed in 1975.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15 ft r</u>)			
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Herb Stratum	(Plot size: <u>5 ft r</u>)			
1.	<u>Typha X glauca</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
		<u>30</u> =Total Cover		
Woody Vine Stratum	(Plot size: <u>30 ft r</u>)			
1.				
2.				
		=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>30</u>	x 1 = <u>30</u>
FACW species <u>0</u>	x 2 = <u>0</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>30</u> (A)	<u>30</u> (B)

Prevalence Index = B/A = 1.00

Hydrophytic Vegetation Indicators:

- ☒ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☒ 3 - Prevalence Index is ≤3.0¹
- ☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

Three hydrophytic vegetation indicators present.

SOIL

Sampling Point: T4B

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 ¹	Loc ²		
0 - 12	10YR 2/2	95	7.5YR 4/6	5	RM	M	Silty Clay Loam	
12 - 24	10YR 4/2	95	7.5YR 4/6	5	RM	M	Silty Clay Loam	
-								
-								
-								
-								

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21) Very
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Shallow Dark Surface (F22)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)		

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

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

Remarks:

Hydric soil indicators A11 and F6 present.

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input checked="" type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 1 Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0 Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0 (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:
 Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

Hydrology is met with four primary and three secondary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T4B**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
			30 =Total Cover	
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
			=Total Cover	

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

Three hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-10-16; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: MII25-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-09
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T5A
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex
Slope (%): 1-4 Lat: 42.8984916 Long: -87.9767772 Datum: WGS 84
Soil Map Unit Name: Clayey land 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"/>
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:
Sample plot is on a grassy hill slope between two excavated ditches. The area was graded in 1975.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ =Total Cover	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>50.00</u> (A/B)	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ =Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>40</u> x 3 = <u>120</u> FACU species <u>25</u> x 4 = <u>100</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>65</u> (A) <u>220</u> (B) Prevalence Index = B/A = <u>3.38</u>
Herb Stratum (Plot size: <u>5 ft r</u>) 1. <u>Poa pratensis</u> 40 <input checked="" type="checkbox"/> FAC 2. <u>Glechoma hederacea</u> 15 <input checked="" type="checkbox"/> FACU 3. <u>Solidago canadensis</u> 10 FACU 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ 65 =Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft r</u>) 1. _____ 2. _____ _____ =Total Cover	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	

Remarks: (Include photo numbers here or on a separate sheet.)
No hydrophytic vegetation indicators present.

SOIL

Sampling Point: T5A

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 ¹	Loc ²		
0 - 13	10YR 3/2	100					Silty Clay Loam	
13 - 24	10YR 4/4	100					Silty Clay	
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1) ☐ Sandy Gleyed Matrix (S4)
☐ Histic Epipedon (A2) ☐ Sandy Redox (S5)
☐ Black Histic (A3) ☐ Stripped Matrix (S6)
☐ Hydrogen Sulfide (A4) ☐ Dark Surface (S7)
☐ Stratified Layers (A5) ☐ Loamy Mucky Mineral (F1)
☐ 2 cm Muck (A10) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Iron Monosulfide (A18) ☐ Depleted Dark Surface (F7)
☐ Sandy Mucky Mineral (S1) ☐ Redox Depressions (F8)
☐ 5 cm Mucky Peat or Peat (S3)

Indicators for Problematic Hydric Soils³:

- ☐ Iron-Manganese Masses (F12)
☐ Red Parent Material (F21) Very
☐ Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9)
☐ High Water Table (A2) ☐ Aquatic Fauna (B13)
☐ Saturation (A3) ☐ True Aquatic Plants (B14)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck Surface (C7)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Gauge or Well Data (D9)
☐ Sparsely Vegetated Concave Surface (B8) ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
 Water Table Present? Yes _____ No ☒ Depth (inches): _____
 Saturation Present? Yes _____ No ☒ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

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

Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

No hydrology indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T5A**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
			65 =Total Cover	
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
			=Total Cover	

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

No hydrophytic vegetation indicators present.

Natural Resource Woodland & Wetland Mitigation Plan

For:

Franklin HS 2024 Referendum Project

PREPARED BY:



**4941 KIRSCHLING COURT
STEVENS POINT, WI 54481
(715) 344-9999 ■ (715) 344-9922**

Project Number: 25.0022

Located in:

**City of Franklin
Milwaukee County, Wisconsin**

Dated:

July 1st, 2025

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Franklin HS 2024 Referendum Project
City of Franklin, Wisconsin

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- A. Site Location Maps
- B. Hydrological Soil Map
- C. Tree Survey Report
- D. Wetland Delineation Report
- E. Proposed Wetland Grading Plan
- F. Proposed Seed Mixes

Attachments

- A. Proposed NRPP & Mitigation Plan Set

1.0 INTRODUCTION & GENERAL INFORMATION

1.1 Project Introduction

Point of Beginning, Inc. has been retained by Plunkett Raysich Architects (PRA) to develop a natural resource management mitigation plan per City of Franklin's Unified Development Ordinance Article (7) for the proposed Franklin HS 2024 Referendum Project. The project site is located in the West Half of the Northeast 1/4, Section 14, Town 5 North, Range 21 East, City of Franklin, Milwaukee County, Wisconsin.

Project Contacts:

Designation	Name	Address	Phone Number
Land Owner & Developer <i>Franklin Public Schools</i>	Andrew Chromy	8255 West Forest Hill Ave, Franklin, WI 53132	(414) 529-8220

1.2 Project Description

The proposed project consists of developing new building additions to the existing school building, new exterior athletic facilities, new drives, and parking. Water and sewer services will be installed and connect the proposed building to public utilities. Additionally, the site will be graded for storm water management best management practices.

The proposed referendum project and corresponding construction activities will impact 10.13 acres (441,263 sq.ft.) of protected woodlands and 0.64 acres (28,005 sq.ft.) of protected wetlands within the north central and northeast corner of the Franklin High School site. To compensate for the woodlands, woodland buffer, wetlands, and wetland buffer loss and to comply with the City of Franklin Unified Development Ordinance, a mitigation and restoration plan has been developed. The proposed mitigation plan includes sections identifying current conditions, proposed design features, performance standards, mitigation management and monitoring, and scheduling.

Additionally, tree survey and wetland delineation reports have been conducted for the site.

1.3 Project Requirements

The City of Franklin Unified Development Ordinance Article 7 Table 15-7-03 requires that woodland loss be compensated at a ratio of 0.75 per square foot of impacted woodland and wetland loss be compensated at a ratio of 1.5 per square foot of impacted wetland. Additionally, wetland buffer area loss is to be compensated at a ratio of 1.5 per square foot of impacted wetland buffer area. See below table for natural resource mitigation area requirement calculations.

Natural Resource Mitigation Area Requirements			
Existing Natural Resource Type	Total Area of Resource Impact	Req. Mitigation Ratio	Total Mitigation Req.
Woodlands	10.16 ac. (442,418 sf.)	0.75	7.62 ac. (331,814 sf.)
Wetlands	0.64 ac. (28,005 sf.)	1.5	0.96 ac. (42,008 sf.)
Wetland Buffers	1.98 ac. (86,223 sf.)	1.5	2.97 ac. (129,335 sf.)

1.4 Mitigation Site Location

Due to existing natural resource features, existing development and proposed development at the project site, two mitigation property locations are being proposed. Woodland mitigation areas are being proposed at the Franklin High School site. Additionally, woodland, wetland, and wetland buffer off-site mitigation area is being proposed at the Hilltop Lane property owned by the Franklin School District. The off-site mitigation site is located at parcel number 8859995003. See Mitigation Site Location Map in **Appendix A**.

2.0 EXISTING CONDITIONS

2.1 Mitigation Site Description

The proposed mitigation sites include the Franklin High School property and an off-site property located along Hilltop Lane. The Franklin High School property includes existing woodland and wetland areas. The woodland species mixture within the woodlot is referred to as a Central Hardwoods timber type. This is an upland timber type and consisting of a mixture of mid-shade tolerant to shade intolerant species including oak, hickory, elms, black cherry, red maple, ash, basswood, hackberry and sugar maple. Though not all the species representative of this woodland type are found in this woodland, most are. According to the tree survey, basswood is the most common tree species, making up 56% of the total trees tallied. Shagbark hickory is the next most commonly occurring species being 16% of all trees tallied and American elm is another 11%. Associated species include sugar maple, white oak, bur oak, black cherry and black walnut. A small pocket of aspen was also found in the northeast corner. All ash throughout this property are dead because of Emerald Ash Borer infestation. Along wetlands wet site species such as willow, box elder and cottonwood were noted. Some of these species are also found in upland areas.

Additionally, there are 5 wetland areas, as delineated by Professionally Assured Wetland Delineator Chad Fradette with Evergreen Consultants. The northernmost wetland areas (Wetlands 1 & 2) consist of manmade drainage swales. Wetlands 3 and 4, located near the center of the proposed development, are isolated ruderal shrub swamps containing both native species and invasive buckthorn. Wetland 5 is an isolated ruderal shrub swamp containing primarily invasive buckthorn and dead ash trees.

Wetland 1 is 0.230-acres of wet meadow with cattails, a few trees and some brush within an excavated storm ditch. Part of the drainage ditch is located between athletic fields. The wetland continues beyond the study area to the north. Wetland 2 is 0.137-acres of ruderal shrub swamp in an excavated drainage ditch around an athletic field. The wetland continues beyond the study area to the north. Wetland 3 is 0.049-acres of a ruderal shrub swamp within a small, closed depression in a basswood forest. A running trail passes along the side of the wetland. The wetland is entirely within the study area. Wetland 4 is 0.156-acres of ruderal shrub swamp within a small, closed depression in a buckthorn thicket. A running trail bisects the wetland. The wetland is entirely within the study area. Wetland 5 is 0.249-acres of ruderal shrub swamp within a small, closed depression in a buckthorn thicket with dead ash. The wetland extends beyond the study area slightly to the east. Existing conditions reports can be found in **Appendix C & D**.

2.2 Existing Non-Native Species

According to the tree and wetland surveys conducted, non-native species were found to be present. Within the woodland area buckthorn, honeysuckle and phragmites were found in areas. The tree survey noted phragmites along stretches of the wetlands. Additionally, the wetland delineation made note of the presence of buckthorn and phragmites in several areas.

3.0 PROPOSED DESIGN FEATURES

3.1 Goals & Objectives

The objective of this mitigation plan is to compensate for the loss and damage to the existing woodlands and wetlands per the proposed project scope through the restoration and creation of new woodland and wetland habitats within the Franklin High School property and the Hilltop Lane property. More specifically, the goals of the woodland restoration and creation are to:

- 1) allow the establishment of native woodland species to replace what is being removed and
- 2) expand and enhance existing protected natural resource woodlands within both properties through the use of native species and
- 3) promote removal/control of existing non-native species observed.

The goals of the wetland restoration and creation are to:

- 1) create suitable hydrologic conditions that will support wetland vegetation and
- 2) allow the establishment of native wetland species and
- 3) promote removal/control of existing non-native species observed.

3.2 Woodland Restoration

Approximately 7.62 acres of woodland restoration are being proposed broken out into four mitigation areas. Woodland mitigation areas 1 & 2 are being proposed for the Franklin High School property at the northwest corner. Area 1 includes 2.08 acres of woodland mitigation area and area 2 includes 0.43 acres of mitigation area. Both areas 1 & 2 will expand the existing woodland area running along the western side of the Franklin High School property which is part of the secondary environmental corridor.

Woodland mitigation areas 3 & 4 are located at the off-site Hilltop property with area 3 located along the north side and area 4 located in the southeast corner. Area 3 includes 4.11 acres of woodland mitigation area and area 4 includes 1.0 acre of mitigation area.

Proposed woodland mitigation areas are comprised of existing agricultural areas, mowed lawn areas, and shrub/meadow areas. Woodland mitigation area 1 includes both mowed lawn and shrub/meadow areas, area 2 includes mowed lawn, area 3 is currently agricultural area, and area 4 is shrub/meadow area.

To prepare the site for species planting, a combination of hand installation and machine work is being proposed. The agricultural and mowed lawn areas should be disk trenched to reduce soil compaction, improve aeration of soil to improve survival and growth of young trees. Cultivation should improve rooting depth and crop stability. Any existing native tree species present within the woodland mitigation areas is to be left in place and cultivated around. Timing of soil cultivation should be undertaken during drier periods of the season for spring, summer or fall. Cultivation should be avoided during very wet weather conditions, this can increase erosion, water run-off and damage soil structure. Additionally, cultivation should be avoided during very dry or drought conditions. Sites with potential weed problems should be cultivated in autumn to minimize colonization prior to tree planting. Cultivated areas should be left at least 2 months before planting to allow cultivation areas to settle.

Several non-native species were identified at the Franklin High School site including buckthorn, reed canary grass and giant reed canary grass. Due to the ability of these non-native species to spread prolifically and prevalence in nearby areas, management activities prior to native seeding/planting should be aimed at eradicating them from the woodland mitigation area to mitigate further invasion. Several approaches will be used to reduce non-native species cover and to promote native plant establishment. Depending on the timing of the site preparation during the growing season, it may be beneficial to apply glyphosate herbicide once prior to site preparation preferably at the first sign of emergence of new plants in spring. This will also ease the planting process by reducing the existing vegetative mat. Herbicide should be applied at an appropriate rate as specified on the label.

After the cultivation has been performed, a full season of herbicide application is essential to reducing the cover of non-native species. The spraying schedule will be dependent on the timing of the cultivation, but a full season of herbicide application is typically two to three spraying events. Glyphosate herbicide should be used and applied at a rate as specified on the label. Ideally the first application will occur in late spring after plant emergence but before seed heads form. The second application should be applied as necessary in mid-summer on any re-sprouted, missed, or newly emerged plants. Lastly the third application will occur in early fall, several weeks prior to planting the woodland area. If cultivation occurs in mid-summer, then the first application should be immediately following the disking of soil or the first sign of the emergence of new plants.

After cultivation area has been treated with herbicide for one full growing season, oats (*avena sativa*) will be seeded at a rate of 64 lbs. per acre as a cover crop to limit erosion and weed growth and to increase shade on the soil surface. The area should be seeded several weeks following the last herbicide application.

Fall planting should occur from November 1 to January 1. Fall planting is preferable but if the schedule does not allow, then the area should be seeded as early as possible in spring between March 1 and June 1. Tree planting shall take place in fall or early spring when trees are dormant with species appropriate in establishing a central hardwood timber woodland community. Bareroot plants are susceptible to root damage when planting, critical factors are dryness and frost damage. Trees should not be planted in snowy or hard frost conditions and roots should remain covered to prevent drying. To protect plants from wildlife spiral guards and stock fencing should be utilized as a deterrent to small mammals and protect young trees from wildlife grazing after planting is completed. See **Attachment A** for planting details.

3.3 Wetland Restoration

Approximately 0.96 acres of wetland restoration and 2.97 acres of wetland buffer area are proposed within the Hilltop Lane site. Wetland mitigation is proposed at the Hilltop property to minimize disruptions to the existing wetlands, floodplain, and environmental corridor at the existing Franklin High School site. Note that the Hilltop property is located within the same Ryan Creek-Root River watershed as the high school site, maintaining hydrologic and habitat benefits within the same watershed.

Hydrological enhancement of the proposed wetland mitigation area will be obtained through shallow grading. The shallow grading will be an essential component of restoration and designed to increase the duration and frequency of soil saturation and to diversify the hydrology and topography of the site.

The shallow grading is designed based on analysis of soils, topography and vegetation on-site. Soils within the site are mapped primarily as Ashkum silty clay loam, which are classified as hydrologic class "D" and "C," Blount silt loam, which are classified as hydrologic class "D" and "C", and Ozaukee silt loam, which is classified as hydrologic class "C", respectively. Because of the clay content of the soil, wide-track, low-impact excavation equipment should be used to avoid possible compaction of soils. Approximately 6-18 inches of soil will be removed from the designated wetland area. Sub-surface soils are projected to possess texture and structure conducive to successful restoration and establishment of native wetland communities. See **Appendix B** for Soil Map.

Shallow grading will occur per the proposed grading/seeding plan. More soil will be removed from the center portion of the grading area with embankments gradually sloped to the edges to provide a transitional zone from shallow marsh to wet/sedge meadow within the wetland area itself and a transitional zone from wetland to upland along the margins of grading. Approximately 18 inches of soil material will be removed from the central portion of the wetland and gradually sloped to the removal of 12 inches of soil and then to 6 inches along the margins. The grading is projected to result in increased soil saturation duration and frequency in the wetland area and seasonal inundation in the central portion of the wetland area, creating a hydrologic condition to support native wet/sedge meadow and shallow marsh communities. These conditions will allow for the establishment and persistence of diverse wetland species. Excavated soil will be deposited either on-site or disposed of off-site in a legal manner. See **Appendix E** for wetland grading plan.

After the wetland grading has been performed, a full season of herbicide application is essential to reducing the cover of non-native species. The spraying schedule will be dependent on the timing of the wetland grading, but a full season of herbicide application is typically two to three spraying events. Glyphosate herbicide should be used and applied at a rate as specified on the label. Ideally the first application will occur in late spring after plant emergence but before seed heads form. The second application should be applied as necessary in mid-summer on any re-sprouted, missed, or newly emerged plants. Lastly the third application will occur in early fall, several weeks prior to seeding/planting of wetland area. If grading occurs in mid-summer, then the first application should be immediately following excavation or the first sign of emergence of new plants.

After the grading area has been treated with herbicide for one growing season. A shallow marsh/sedge meadow seed mix comprised of aggressive native species will be applied at a rate of 226 live seeds per square foot within the central portion of the graded area where the 18 inches of soil was removed. A wet/sedge meadow seed mix comprised of aggressive native species will be applied at a rate of 270 live

seeds per square foot within the outer margins of the graded area in which 6-12 inches of soil was removed. Oats (*avena sativa*) will be seeded at a rate of 64 lbs. per acre in both seeding areas as a cover crop to limit erosion and weed growth and to increase shade on the soil surface. The area should be seeded several weeks following the last herbicide application. Fall planting should occur from November 1 to January 1. Fall planting is preferable but if the schedule does not allow, then the area should be seeded as early as possible in spring between March 1 and June 1. See **Attachment A and Appendix F** for planting details.

4.0 POST-DEVELOPMENT PERFORMANCE STANDARDS

4.1 Post-Development Wetland Delineation

The area proposed for wetland restoration/creation shall meet wetland criteria as established in the 1987 Wetland Delineation Manual and will be delineated 3 years following the completion of construction and restoration activities. The total area of established wetlands in the wetland delineation restoration area will be calculated and reported in the annual monitoring report. As the City of Franklin mandates, a ratio of 1.5 acres of wetland improved/created to 1 acre of wetland impacted, shall be considered successful from a wetland delineation standpoint if the size of the wetland is maintained at 0.96 acres.

Additionally, the total area of established woodland area will be calculated and reported in the annual monitoring report. As the City of Franklin mandates, a ration of 0.75 acres of woodlands improved/created to 1 acre of woodland impacted, shall be considered successful if the area of woodland is maintained at 7.60 acres.

4.2 Native Species Establishment

The relative cover within the restored/created wetland and woodland areas by non-native invasive species shall not exceed 40% at the end of the three-year monitoring period including but not limited to buckthorn (*Rhamnus cathartica*), reed canary grass (*Phalaris arundinacea*), cattails (*Typha* spp.), giant reed grass (*Phragmites australis*) and purple loosestrife (*Lythrum salicaria*).

4.3 Native Species Community Characteristics

Vegetative cover shall exceed 70% at the end of the three-year monitoring period and at least two plant communities shall be present in the wetland mitigation area including wet meadow/sedge meadow and shallow marsh. Additionally, 70% of tree species observed shall be part of the central hardwood timber plant community. This number takes into account the potential for seasonal to semi-permanent inundation in the lowest portion of the mitigation area.

4.4 Mitigation Quality Assessment

A floristic quality assessment will be conducted during each monitoring period within the wetland and woodland mitigation areas. Both the floristic quality index and the mean coefficient will be calculated. The mean of the restored/created wetland community 3 years following construction completion must be maintained at or exceed the mean calculated during the first growing season following construction completion.

5.0 MANGEMENT & MONITORING PLAN

5.1 Mitigation Monitoring Plan

A qualified wetland and woodland ecologist will monitor construction activities to ensure that the restoration plan is followed. In addition, post-construction monitoring will be conducted 3 times per year for the first three years following the completion of construction activities. Results of the post-construction monitoring events will be written in an annual report, to be submitted to the City of Franklin.

Additionally, a qualified wetland and woodland ecologist will assist with coordinating the implementation and will provide constructive oversight during the construction phase of the project. Proper measures will be taken to ensure the following:

- Proposed grading is per plan details
- Potential hydrology issues are identified and resolved early during the construction phase
- Potential erosion and sediment issues are identified and resolved in a timely manner
- Adequate weed control is obtained prior to installing seed/plant material
- All seed material and plant material is properly installed
- Proper soil conditions are obtained and any issues identified and resolved in a timely manner.

In post-construction monitoring, the mitigation area will be monitored for proper establishment during the first three growing seasons. Monitoring will occur three times per growing season and results shall be summarized in an annual report. Monitoring activities may include the following:

- Documentation of construction inspection activities and as-built conditions for the first growing season
- Assessment of conformance to plans for the first growing season
- Ground photographs from fixed points to illustrate changes in plant growth and hydrology
- List of observed plant species present
- Floristic quality assessment of present plant communities
- Vegetation cover type map
- Description of the hydrologic conditions
- Evaluation of progress regarding achievement of each performance standard
- Identification of problems and corresponding corrective maintenance and/or remedial management actions as needed to improve performance toward achievement of goals and objectives.

5.2 Mitigation Maintenance & Management Plan

A qualified ecologist will assist in the development of adaptive management strategies to address lack of progress toward project goals, if any are identified. The persistence and growth of non-native species including but not limited to buckthorn (*Rhamnus cathartica*), reed canary grass (*Phalaris arundinacea*), cattails (*Typha* spp.), giant reed grass (*Phragmites australis*) and purple loosestrife (*Lythrum salicaria*) will be monitored in the restoration areas. If needed, continued management plans may be developed. A long-term adaptive management plan will be developed using data collected during the first three years of monitoring.

5.3 Short-term and Long-term Management Plan

Several techniques will be utilized to ensure that performance standards are met during the first three growing seasons within wetland areas. Mowing combined with herbicide treatment during the first few growing seasons will be important as it can significantly reduce weed production and promote native species establishment when conducted during appropriate periods of the growing season. Burning is an alternative management strategy that also results in reduced weed production however it is unlikely that enough vegetation will be produced to fuel an effective fire and more importantly fire should not be used in newly seeded/planted sites until species have reached reproductive maturity or approximately two to three years. Mowing is also an effective restoration tool when done during the establishment period of seeded/planted species and can help promote germination of native species effectively allowing more sunlight to filter to the ground. Herbicide spot treatments will be conducted utilizing a combination of grass-specific herbicide and a general glyphosate herbicide where appropriate. Vantage is a grass-specific herbicide that can be used to reduce invasive species without affecting native forbs. This will likely be used in areas affected with reed canary grass or in other areas dominated by non-native invasive species. In areas with dense invasive species infestations the herbicide Rodeo may be utilized and reseeding/planting of required in treated areas.

Additionally, mowing combined with herbicide treatment during the first few growing seasons will be important as it can significantly reduce weed production and promote native species establishment when

conducted during appropriate periods of the growing season within the woodland areas. Herbicide spot treatments will be conducted utilizing a combination of grass-specific herbicide and a general glyphosate herbicide where appropriate. Vantage is a grass-specific herbicide that can be used to reduce invasive species without affecting native forbs. This will likely be used in areas affected with reed canary grass or in other areas dominated by non-native invasive species. In areas with dense invasive species infestations the herbicide Rodeo may be utilized and reseeding/planting of required in treated areas.

The long-term adaptive management plan will be developed following the first three years of post-construction monitoring. During post-construction monitoring, problems will be identified as they occur and management activities will address these problems as needed based on conformance to performance standards. Various methods may be used in long-management such as herbicide application, controlled burning, mowing, reseeding/planting and erosion control as needed.

5.4 Long-term Site Protection

Unaffected wetlands, wetland buffers, and woodland areas on the properties will all be protected in perpetuity by conservation easement. The application assumes that the mitigation sites will develop to the performance standards and qualify as a natural resource.

6.0 MITIGATION SCHEDULE

6.1 General Schedule Outline

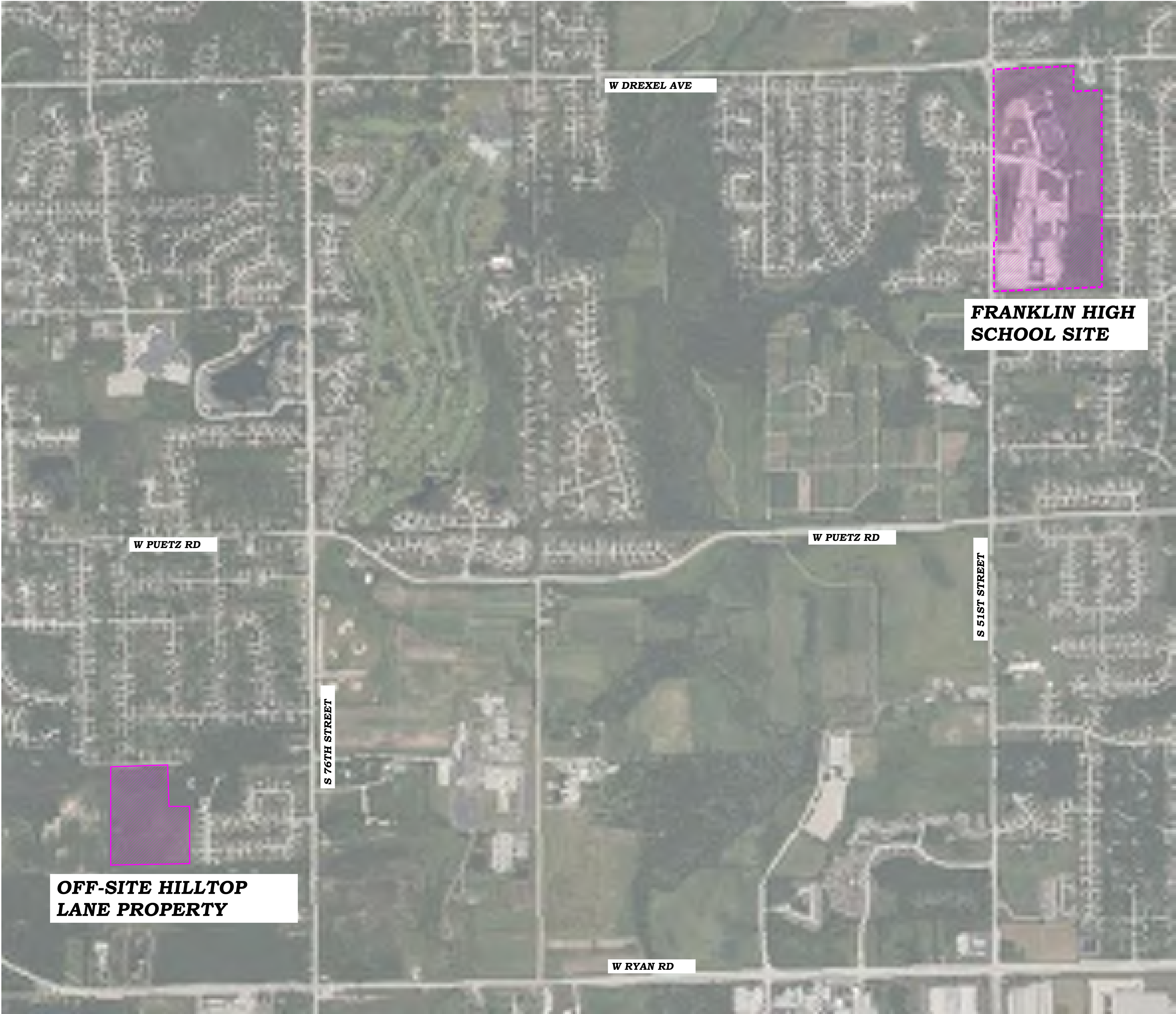
The proposed mitigation activities will begin following approval by the City of Franklin and following substantial completion of the proposed building addition and site improvements to the Franklin High School property or as determined by the City of Franklin. The following table outlines a schedule for the proposed mitigation construction, management, and monitoring activities over a four-year period including the construction year and three-year monitoring seasons. The schedule assumes that approval will be granted by summer of 2025 and mitigation work will begin in 2027. Mitigation construction may begin before 2027 if desired but all plantings are to be installed fall of 2027 or prior to the completion of the Frankling High School construction activities.

Year	Management Implementation	Notes
0 yr	<ul style="list-style-type: none"> - Grading of Wetland (2027) - Cultivation of woodland areas - Herbicide application three times per year for spring, summer and fall of 2027 - Native plant seeding/planting in fall of 2027 	* Herbicide to be applied to restoration areas prior to grading, cultivation, and planting activities
1 yr	<ul style="list-style-type: none"> - Spot herbicide application three times per year for spring, summer and fall of 2028 - 1-2 mowing sessions per season where possible in summer and fall - Reseeding and/or planting as necessary in fall 2028 - Treatment of any pests or diseases observed 	<ul style="list-style-type: none"> *Vantage and/or Rodeo herbicide used where necessary. *Mowing to be utilized low-impact equipment to avoid compaction. *Native seed/planting will be spread where necessary, depending on herbicide use and native plant establishment

2 yr	<ul style="list-style-type: none"> - Spot herbicide application two to three times per year in summer and fall and late spring, if necessary, in 2029 - 1 mowing session where possible in summer or fall - 1 burn if feasible in spring (wetland only) - Reseeding and/or planting as necessary in spring or late fall or 2029 - Treatment of any pests or diseases observed. - Thinning and pruning for trees as needed 	<p>*See year one notes</p> <p>*Burning to be utilized only of sufficient fuel accumulation and vegetation establishment are observed.</p>
3 yr	<ul style="list-style-type: none"> -Spot herbicide application two times per year in early summer and fall of 2030 -1 mowing session where possible in summer or fall -Reseeding and/or planting as necessary in spring or late fall of 2030 - Thinning and pruning of trees as needed 	<p>*See year one notes</p>

APPENDIX A

Site Location Map



MITIGATION REQUIREMENTS:

REQUIRED COMPENSATION RATIO:	
WOODLAND COMPENSATION:	0.75 RESTORATION RATIO REQUIRED FOR WOODLAND RESOURCE TYPES.
WETLAND COMPENSATION:	1.5 RESTORATION RATIO REQUIRED FOR FEDERAL JURISDICTION WETLAND RESOURCE TYPES.
WETLAND BUFFER COMPENSATION:	1.5 RESTORATION RATIO REQUIRED FOR FEDERAL JURISDICTION WETLAND BUFFER RESOURCE TYPE.
TOTAL WOODLAND REMOVAL: 10.16 ACRES TOTAL WOODLAND COMPENSATION: 10.16 X 0.75 = 7.62 ACRES TOTAL WETLAND REMOVAL: 0.64 ACRES TOTAL WETLAND COMPENSATION: 0.64 X 1.5 = 0.96 ACRES TOTAL WETLAND BUFFER REMOVAL: 1.98 ACRES TOTAL WETLAND BUFFER COMPENSATION: 1.98 X 1.50 = 2.97 ACRES	
PROPOSED:	
WOODLAND COMPENSATION: 7.62 ACRES OF WOODLAND COMPENSATION AREA PROPOSED. BROKEN OUT INTO 4 MITIGATION AREAS. MITIGATION AREAS 1 & 2 ARE LOCATED ON THE FRANKLIN HIGH SCHOOL SITE. MITIGATION AREAS 3 & 4 ARE LOCATED AT THE OFFSITE HILLTOP LANE PROPERTY.	
WOODLAND MITIGATION AREA 1: 2.08 ACRES WOODLAND MITIGATION AREA 2: 0.43 ACRES WOODLAND MITIGATION AREA 3: 4.11 ACRES WOODLAND MITIGATION AREA 4: 1.00 ACRES	
WETLAND COMPENSATION: 0.96 ACRES OF COMPENSATION AREA PROPOSED. WETLAND MITIGATION AREA IS LOCATED ON THE OFF-SITE HILLTOP LANE PROPERTY.	
WETLAND MITIGATION AREA: 0.975 ACRES	
WETLAND BUFFER COMPENSATION: 2.97 ACRES OF COMPENSATION AREA PROPOSED. WETLAND BUFFER MITIGATION AREA IS LOCATED ON THE OFF-SITE HILLTOP LANE PROPERTY.	
WOODLAND MITIGATION PLANTING REQUIREMENT: THE FOLLOWING PLANTS SHALL BE PLANTED PER 1 ACRE OF MITIGATION AREA:	
- 10 CANOPY TREES AT 4" MIN. CALIPER - 25 CANOPY TREES AT 2.5" MIN. CALIPER - 100 CANOPY TREES AT 5FT HIGH WHIPS - 35 UNDERSTORY TREES AT 5FT HIGH WHIPS - 30 SHRUBS AT MINIMUM 12" HEIGHT	
PROPOSED:	
4" CAL. CANOPY TREES: 78 TREES 2.5" CAL. CANOPY TREES: 191 TREES 5FT HIGH CANOPY TREE WHIPS: 762 TREES 5FT HIGH UNDERSTORY TREE WHIPS: 268 TREES 12" HIGH SHRUBS: 229 SHRUBS	

OVERALL MITIGATION PLANTING SCHEDULE:

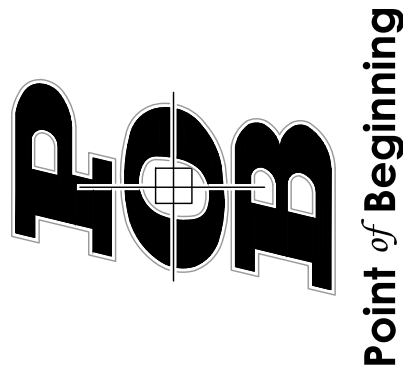
CANOPY TREES SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
AS	ACER SACCHARIUM	SUGAR MAPLE	4" CAL. 2-1/2" CAL. 5T WHIPS	75T X 50W 75T X 50W 75T X 50W	12 25 96
AU	ACER UEGUNDO	BOX ELDER	4" CAL. 2-1/2" CAL. 5T WHIPS	50T X 50W 50T X 50W 50T X 50W	10 27 95
CC	CELTIS OCCIDENTALIS	HACKBERRY	4" CAL. 2-1/2" CAL. 5T WHIPS	60T X 60W 60T X 60W 60T X 60W	11 28 95
CO	CARYA OVATA	SHAGBARK HICKORY	4" CAL. 2-1/2" CAL. 5T WHIPS	80T X 50W 80T X 50W 80T X 50W	11 25 96
JN	JUGLAUS NIGRA	BLACK WALNUT	4" CAL. 2-1/2" CAL. 5T WHIPS	75T X 50W 75T X 50W 75T X 50W	24 19 94
PD	POPULUS DELTOIDES	COTTONWOOD	4" CAL. 2-1/2" CAL. 5T WHIPS	100T X 75W 100T X 75W 100T X 75W	7 18 94
QA	QUERCUS ALBA	WHITE OAK	4" CAL. 2-1/2" CAL. 5T WHIPS	100T X 80W 100T X 80W 100T X 80W	10 27 95
TA	TILIA AMERICANA	AMERICAN BASSWOOD	4" CAL. 2-1/2" CAL. 5T WHIPS	80T X 60W 80T X 60W 80T X 60W	10 22 97
UNDERSTORY TREES SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
AL	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY	5T WHIPS	25T X 25W	68
CA	CORNUS ALTERNIFOLIA	PAGODA DOGWOOD	5T WHIPS	25T X 30W	68
MR	MORUS RUBRA	RED MULBERRY	5T WHIPS	70T X 50W	65
OV	OSTRYA VIRGINIANA	IRONWOOD	5T WHIPS	40T X 40W	67
SHRUBS SYMBOLS	BOTANICAL NAME	COMMON NAME	INSTALLATION SIZE	SIZE AT MATURITY	QUANTITY
CD	CEPHALANTHUS OCCIDENTALIS	COMMON BUTTONBUSH	12T	15T X 10W	27
CL	CORNUS ALBA	RED OSIER	12T	10T X 10W	27
CM	CORYLUS AMERICANA	AMERICAN HAZELNUT	12T	15T X 10W	30
HV	HAMAMELIS VIRGINIANA	AMERICAN WITCH HAZEL	12T	20T X 10W	30
PV	PRUNUS VIRGINIANA	CHOKE CHERRY	12T	30T X 20W	27
SD	SALIX DISCOLOR	PUSSY WILLOW	12T	20T X 10W	29
VA	VACCINIUM ANGUSTIFOLIUM	LOWBUSH BLUEBERRY	12T	2T X 2W	27
VL	VIBURNUM LENTAGO	NANNY BERRY	12T	20T X10W	32

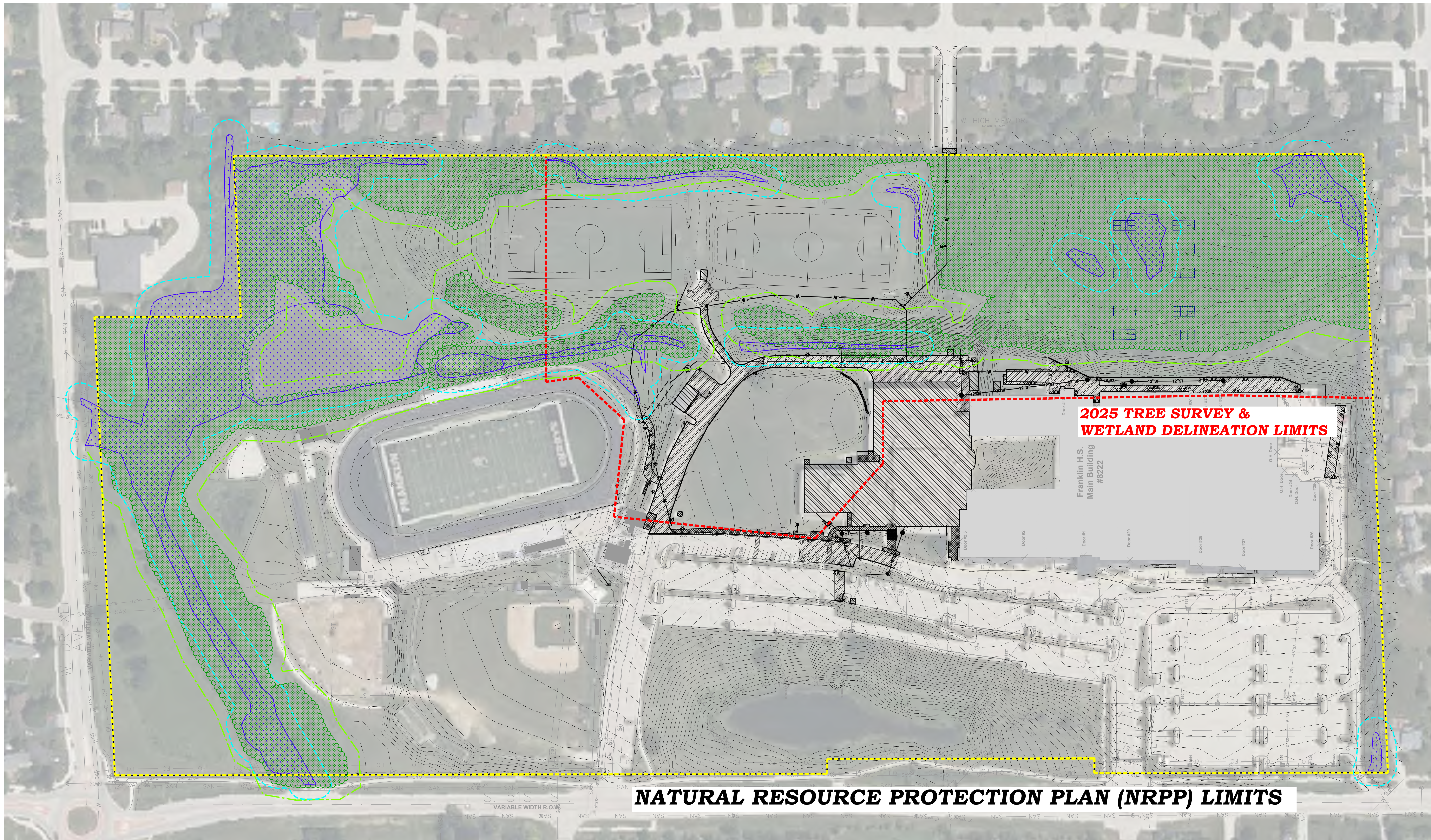
REVISIONS	
06-02-2025 06-30-2025	WETLAND REVISIONS RESUBMITTAL
CHECKED:	JB
DRAWN:	JB
DATE	5/5/2025
PROJECT NO.	25.0022

MITIGATION PLAN 1

FRANKLIN HIGH SCHOOL
BUILDING + SITE IMPROVEMTNS
CITY OF FRANKLIN

Civil Engineering
Land Surveying
Landscape Architecture
4941 Kirschling Court
Stevens Point, WI 54481
715.344.9999 (PH) 715.344.9922 (FX)





NATURAL RESOURCE PROTECTION PLAN (NRPP) LIMITS

2025 TREE SURVEY & WETLAND DELINEATION LIMITS

Franklin H.S.
Main Building
#8222

LEGEND:

- EXISTING WOODLAND
- EXISTING WOODLAND BUFFER
- EXISTING WETLAND
- WETLAND BUFFER

CONTACT INFORMATION

DEVELOPER:
FRANKLIN PUBLIC SCHOOLS
8255 WEST FOREST HILL AVE
FRANKLIN, WI 53132
414-529-8220

PLAN PREPARER:
JESSE BECKER, P.E.
POINT OF BEGINNING, INC.
4941 KIRSCHLING COURT
STEVENS POINT, WI 54481
715-344-9999

SITE STATISTICS

SITE AREA:
3,106,789 SF = 71.32206 ACRES

TOTAL SITE WOODLAND AREA:
706,226 SF = 16.21 ACRES

TOTAL SITE WETLAND AREA:
242,912 SF = 5.58 ACRES

TOTAL SITE WETLAND BUFFER AREA:
281,186 SF = 6.46 ACRES

GENERAL NOTES

1. THIS NATURAL RESOURCE PROTECTION PLAN, AS WELL AS THE ASSOCIATED MITIGATION PLAN AND DRAFT CONSERVATION EASEMENT EXHIBIT HAVE BEEN DEVELOPED IN ACCORDANCE WITH UPCOMING CITY OF FRANKLIN UNIFIED DEVELOPMENT ORDINANCE (UDO) CHANGES.
2. STEEP SLOPES WILL NO LONGER BE CONSIDERED A NATURAL RESOURCES WITH THE UPCOMING CHANGES TO FRANKLIN'S UNIFIED DEVELOPMENT ORDINANCE. THEREFORE, STEEP SLOPE LOCATIONS ARE NOT SHOWN ON THIS NRPP.
3. WETLANDS LOCATED WITHIN THE INDICATED "2025 TREE SURVEY & WETLAND DELINEATION LIMITS" WERE LOCATED BY ASSURED DELINEATOR CHAD FRADETTE WITH EVERGREEN CONSULTANTS.
4. WETLANDS LOCATED OUTSIDE THE INDICATED "2025 TREE SURVEY & WETLAND DELINEATION LIMITS" WERE LOCATED PER GIS DATA FROM THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES'S "SURFACE WATER DATA VIEWER". THESE WETLANDS ARE LOCATED OUTSIDE OF THE PLANNED DISTURBANCE LIMITS FOR THE PROPOSED PROJECT.
5. NOTE THAT WETLANDS LOCATED WITHIN THE "2025 TREE SURVEY & WETLAND DELINEATION LIMITS" HAVE BEEN CONFIRMED FINAL BY EVERGREEN CONSULTANTS, BUT THE WETLAND DELINEATION REPORT IS STILL A WORK IN PROGRESS AS OF 6/1/2025. THE FINAL WETLAND DELINEATION REPORT WILL BE PROVIDED TO THE CITY OF FRANKLIN WHEN AVAILABLE.

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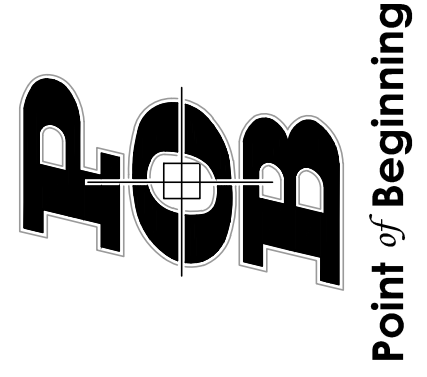
© 2025 POINT OF BEGINNING, INC.

REVISIONS	
06-02-2025	WETLAND REVISIONS
06-30-2025	RESUBMITTAL
CHECKED:	JB
DRAWN:	JB
DATE	5/5/2025
PROJECT NO.	25.0022

**EXISTING CONDITIONS
PLAN**

**FRANKLIN HIGH SCHOOL
BUILDING + SITE IMPROVEMENTS
CITY OF FRANKLIN**

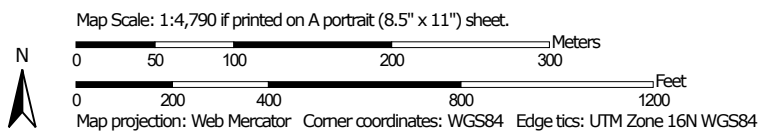
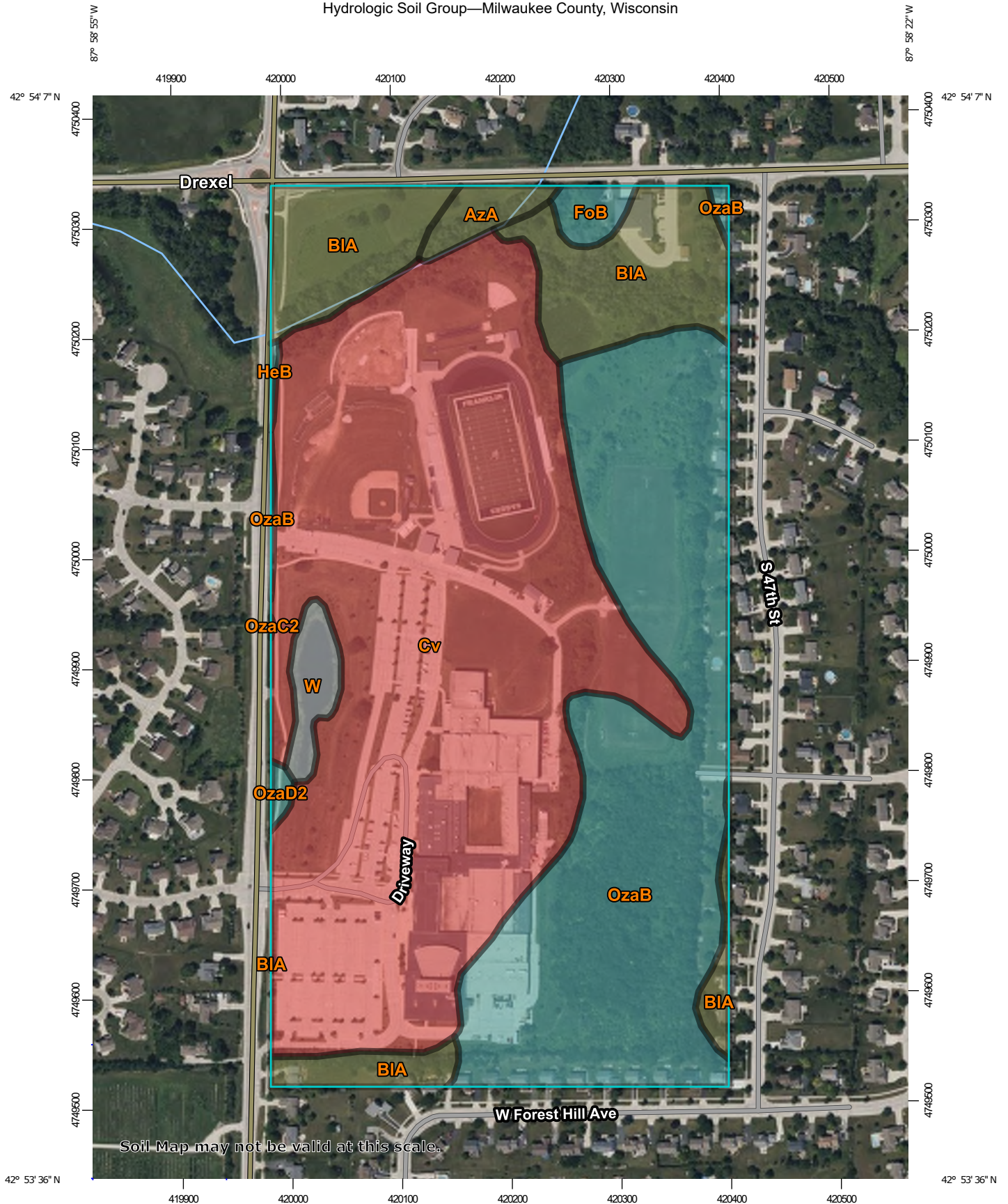
Civil Engineering
Land Surveying
Landscape Architecture
4941 Kirschling Court
Stevens Point, WI 54481
715.344.9999 (PH) 715.344.9922 (FX)



APPENDIX B

Hydrological Soil Map

Hydrologic Soil Group—Milwaukee County, Wisconsin



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

5/7/2025
Page 1 of 4

MAP LEGEND

Area of Interest (AOI)









 Area of Interest (AOI)

Soils

Soil Rating Polygons





 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points






 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available


Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

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

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 25, 2022—Aug 24, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AzA	Aztalan loam, 0 to 2 percent slopes	C/D	1.1	1.3%
BIA	Blount silt loam, 1 to 3 percent slopes	C/D	11.2	13.2%
Cv	Clayey land	D	44.5	52.5%
FoB	Fox loam, 2 to 6 percent slopes	C	0.8	0.9%
HeB	Hebron loam, 2 to 6 percent slopes	C	0.1	0.1%
OzaB	Ozaukee silt loam, 2 to 6 percent slopes	C	25.6	30.2%
OzaC2	Ozaukee silt loam, 6 to 12 percent slopes, eroded	C	0.0	0.0%
OzaD2	Ozaukee silt loam, 12 to 20 percent slopes, eroded	C	0.2	0.3%
W	Water		1.3	1.5%
Totals for Area of Interest			84.8	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Hydrologic Soil Group—Milwaukee County, Wisconsin



MAP LEGEND

Area of Interest (AOI)









 Area of Interest (AOI)

Soils

Soil Rating Polygons





 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points






 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

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

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 25, 2022—Aug 24, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AsA	Ashkum silty clay loam, 0 to 2 percent slopes	C/D	4.0	18.5%
BIA	Blount silt loam, 1 to 3 percent slopes	C/D	14.5	66.8%
OzaB	Ozaukee silt loam, 2 to 6 percent slopes	C	1.5	7.1%
OzaC2	Ozaukee silt loam, 6 to 12 percent slopes, eroded	C	1.7	7.6%
Totals for Area of Interest			21.8	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX C

Existing Tree Survey Report



Quast Forestry Consulting LLC
Kimberly Destree, Consulting Forester
1773 Creek View Dr., N. Fond du Lac, WI 54937
Phone: 920-860-0374
E:mail: kquastforestry@charter.net



City of Franklin, Milwaukee County

Franklin Public Schools – 8222 S. 51st St., Franklin, WI

Woodlot Assessment Results

On April 21, 2025, 14 acres of woodland, tree lines and open grassland owned by Franklin Public Schools were assessed within the City of Franklin, Milwaukee County, located at 8222 S. 51st St. The following is a summary of field observations.

GENERAL OVERVIEW:

The species mixture within this woodlot is referred to as a Central Hardwoods timber type. This is an upland timber type located south of the tension zone and consisting of a mixture of mid-shade tolerant to shade intolerant species including oak, hickory, elms, black cherry, red maple, ash, basswood, hackberry and sugar maple. Though not all the species representative of this timber type are found in this woodland, most are.

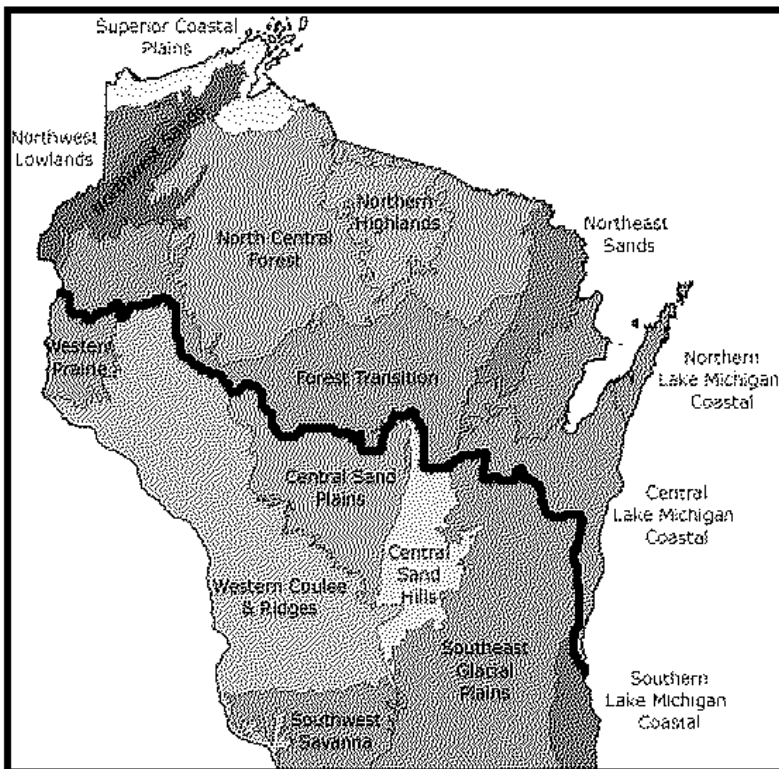


Figure 1: Dark line is the tension zone. Central hardwoods occur south of this line.

Basswood is the most common tree species, making up 56% of the total trees tallied. Shagbark hickory is the next most commonly occurring species being 16% of all trees tallied and American elm is another 11%. Associated species include sugar maple, white oak, bur oak, black cherry and black walnut. A small pocket of aspen was also found in the northeast corner of Area 3.

All ash throughout this property are dead because of Emerald Ash Borer infestation. Dead trees were not tallied.

Along the east and west tree lines are narrow wetlands whereby wet site species such as willow, box elder and cottonwood were noted. Some of these species are also found in upland areas.

This property has several age classes of trees. Larger diameter hickory and oak originated in the early 1900's. The site was likely pastured in the past. A secondary age class of trees emerged in the 1980's, this is the dominant size class of 6-10" trees most prevalent in Areas 3, 4 and the west

side of 5. When reviewing historical aerial photos, it appears the east side of Areas 5 and 6 may have been mowed until the 1990's, after which trees and brush began to fill in.

Invasive plants such as buckthorn and honeysuckle are prevalent in areas. Buckthorn and honeysuckle are non-native invasive shrubs introduced from Europe that invade the understory of native woodlands, aggressively seeding in and creating a shrub layer that prohibits native perennials, shrubs and trees to become established. Phragmites is an invasive grass that occupies wetlands. Phragmites was noted in areas 1 and 2 along the stretches of wetland.

A **Mature Woodland** is defined as: An area or stand of trees whose total combined canopy covers an area of one acre or more and at least 50% of which is composed of canopies of trees having a diameter at breast height (DBH) of at least 10 inches; or any grove consisting of eight or more individual trees having a DBH of at least 12 inches whose combined canopies cover at least 50% of the area encompassed by the grove. However, no trees planted and grown for commercial purposes should be considered a mature woodland.

A **Young Woodland** is defined as: An area or stand of trees whose total combined canopy covers an area of 0.50 acres or more and at least 50% of which is composed of canopies of trees having a diameter at breast height (DBH) of at least three inches. However, no trees planted and grown for commercial purposes shall be considered a young woodland.

Patches of Areas 4 and 5 would fall under Mature Woodland, though most of this property qualifies as a Young Woodland.

DATA COLLECTION SPECIFICATIONS:

- All trees being at least 8" in diameter at breast height (DBH) (4.5' above the ground) were recorded by tree species and tree diameter. In addition, observations were made on the overall timber and vegetative condition.
- Many clump basswood are present in addition to other clump trees. A clump is when multiple stems emerge from the same base. In forestry applications, if the clump splits below 4.5' above the ground, each stem is considered a separate tree. If the clump splits above 4.5' above the ground, the tree is singular. This application was used in data collection and individual tree counts reflect this system.
- Diameters are recorded in even numbers. If the DBH of the tree ranged between 7.0-8.9", the tree is tallied as an 8" tree. If the diameter range was 9.0-10.9", the tree was tallied as a 10" tree and so on.
- Trees included within the tally were marked with a blue dot. Every 5th tree was marked with a number. Should it be necessary to track individual trees within the tally in the future, the general location of those trees can be found from the recorded number.
- Tree number groupings were lumped based on obvious site delineations. These areas and a brief description of ground conditions are found below.
- The south and east boundaries of the work unit are residential development with some encroachment occurring onto school property. The best property line evidence available was used to determine whether a tree was considered on public school property or private. Fencelines and survey markers were the best on the ground evidence of property boundary location. Where these delineations were not present, gps technology was used to estimate where the approximate property boundary lay, and trees were tallied accordingly.

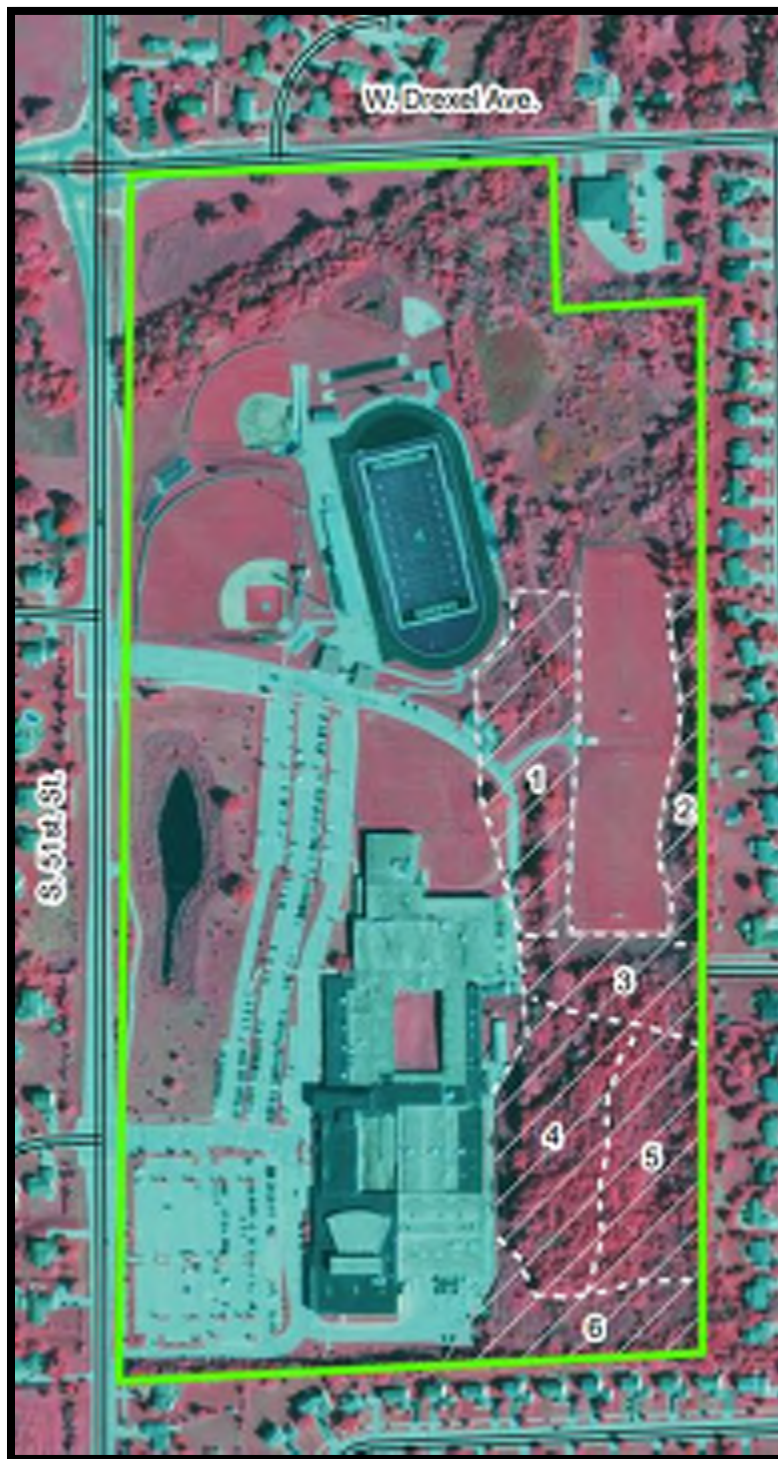


Figure 2: Map of Area locations and approximate delineation lines.

Area 3 (#507-604): This area is located north of the east-west trail and stretches to both the east and west boundaries of the study unit. Basswood is the dominant species with a small aspen pocket on the east end. White spruce were border trees located along the west side.

Area 3	8	10	12	14	16	18	20	22	24	26	28	30	TOTALS
Basswood (<i>tilia americana</i>):	43	12	4	1	0	0	0	0	0	0	0	0	60
American elm (<i>ulmus americana</i>):	3	3	0	0	0	1	1	0	0	0	0	0	8
Shagbark Hickory (<i>carya ovata</i>):	3	0	2	3	2	0	0	0	0	0	0	0	10
White Spruce (<i>picea glauca</i>):	1	0	2	0	1	0	0	0	0	0	0	0	4
Black Walnut (<i>juglans nigra</i>):	0	1	0	0	0	0	0	0	0	0	0	0	1
Box Elder (<i>acer negundo</i>):	7	0	1	1	1	0	1	0	0	0	0	0	11
Quaking Aspen (<i>populus tremuloides</i>):	4	3	0	1	0	0	0	0	0	0	0	0	8
TOTALS:	61	19	9	6	4	1	2	0	0	0	0	0	102

Area 4 (#86-319): Area 4 is the most heavily stocked unit and is bordered to the south, east and north by trail. This area has abundant small diameter basswood that barely meet the 8” size class. Many borderline trees were excluded from tally. Only those trees with blue dots were included within the tree tally.

Area 4	8	10	12	14	16	18	20	22	24	26	28	30	TOTALS
Basswood (<i>tilia americana</i>):	104	25	9	3	1	0	0	0	0	0	0	0	142
American elm (<i>ulmus americana</i>):	6	7	3	1	1	0	0	0	0	0	0	0	18
Shagbark Hickory (<i>carya ovata</i>):	7	6	10	13	12	8	2	1	0	0	0		59
Box Elder (<i>acer negundo</i>):	0	1	0	0	0	0	0	0	0	0	0	0	1
Cottonwood (<i>populus deltoides</i>):	1	0	0	0	0	0	0	0	0	0	0	0	1
Sugar Maple (<i>acer saccharum</i>):	9	1	0	0	0	0	0	0	0	0	0	0	10
White Oak (<i>quercus alba</i>):	1	0	0	0	0	0	0	0	0	1	0	0	2
Black Cherry (<i>prunus serotina</i>):	1	0	0	0	0	0	0	0	0	0	0	0	1
TOTALS:	129	40	22	17	14	8	2	1	0	1	0	0	234

Area 5 (#320-506): Area 5 is bordered to the south, west and north by the trail. The east line is residential development. The east half of this area has abundant brush with scattered trees, many being dead ash.

Area 5	8	10	12	14	16	18	20	22	24	26	28	30	TOTALS
Basswood (<i>tilia americana</i>):	63	23	10	3	2	0	0	1	0	0	0	0	102
American elm (<i>ulmus americana</i>):	25	11	6	0	0	0	0	0	0	0	0	0	42
Shagbark Hickory (<i>carya ovata</i>):	19	3	3	0	6	4	0	1	0	0	0	0	36
Black Walnut (<i>juglans nigra</i>):	1	0	1	2	0	0	0	0	0	0	0	0	4
Sugar Maple (<i>acer saccharum</i>):	2	0	0	0	0	0	0	0	0	0	0	0	2
Bur oak (<i>quercus macrocarpa</i>):	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTALS:	110	38	20	5	8	4	0	2	0	0	0	0	187

Area 6 (#1-85): This unit is located south of the south trail and runs up to residential development to the south. Conifers were generally located along the south boundary in the southwest corner. Centrally, this area consisted of brush and grass. The best property line evidence available was used to determine whether trees fell on public land. The south line was more identifiable than the east line.

Area 6	8	10	12	14	16	18	20	22	24	26	28	30	TOTALS
Basswood (<i>tilia americana</i>):	31	10	4	3	2	0	0	0	1	1	0	0	52
American elm (<i>ulmus americana</i>):	3	0	1	0	0	1	0	0	0	0	0	0	5
Shagbark Hickory (<i>carya ovata</i>):	1	0	0	0	0	0	0	0	0	0	0	0	1
White Spruce (<i>picea glauca</i>):	1	3	1	0	0	0	0	0	0	0	0	0	5
Red Pine (<i>pinus resinosa</i>):	0	0	3	3	0	0	0	0	0	0	0	0	6
Black Walnut (<i>juglans nigra</i>):	3	6	3	0	0	0	0	0	0	0	0	0	12
Box Elder (<i>acer negundo</i>):	1	0	0	0	0	0	0	0	0	0	0	0	1
Plum (<i>prunus domestica</i>):	1	0	0	0	0	0	0	0	0	0	0	0	1
Willow (<i>salix</i>):	2	0	0	0	0	0	0	0	0	0	0	0	2
TOTALS:	43	19	12	6	2	1	0	0	1	1	0	0	85

APPENDIX D

Wetland Delineation Report



PO Box 680 • Pulaski, WI 54162

Phone: 920.615.0019 • Website: www.evergreenwis.com

Franklin High School

Professionally Assured Wetland Delineation Report

Project Number: MIL25-040-01

Property Address: 8222 S 51st Street, City of Franklin, Milwaukee County, Wisconsin

Part of Parcel ID: 8079999001

May 9, 2025



Report Request by



Point of Beginning

4941 Kirschling Court

Stevens Point, Wisconsin 54481



PO Box 680 • Pulaski, WI 54162

Phone: 920.615.0019 • Website: www.evergreenwis.com

Field Work Certification:

Chad M Fradette, EP, Chemist, Wetland Scientist
Wisconsin DNR Professional Assured Wetland Delineator
Lead Wetland Delineator
(920) 615-0019 chad@evergreenwis.com

Shyann P Banker, Environmental Scientist
Wisconsin DNR Professional Assured Wetland Delineator
shyann@evergreenwis.com

Ashley Poehls, Biologist
ashley@evergreenwis.com



April 1, 2025

Chad M Fradette, EP
Evergreen Consultants LLC
1138 State Highway 32
P.O. Box 680
Pulaski, WI 54162

Subject: 2025 Assured Wetland Delineator Confirmation

Dear Chad Fradette:

This letter provides Wisconsin Department of Natural Resources (WDNR) confirmation for the wetland delineations you conduct during the 2025 growing season. You and your clients will not need to wait for the WDNR to review your wetland delineations before moving forward with project planning. This will help expedite the review process for WDNR's wetland regulatory program. Your name and contact information will continue to be listed on our website at: <http://dnr.wi.gov/topic/wetlands/assurance.html>.

In the instance where a municipality may require a letter of confirmation for your work prior to moving forward in the local regulatory process, this letter shall serve as that confirmation. Although your wetland delineations do not require WDNR field review, inclusion of a Wetland Delineation Report is required for projects needing State authorized wetland, waterway and/or storm water permit approvals.

To comply with Chapter 23.321, State Statutes, please supply the department with a polygon shapefile of the wetland boundaries delineated within the project area. Please do not include data such as parcel boundaries, project limits, wetland graphic representation symbols, etc. If internal upland polygons are found within a wetland polygon, then please label as UPLAND. The shapefile should utilize a State Plane Projection and be overlain onto recent aerial photography. If a different projection system is used, please indicate in which system the data are projected. In the correspondence sent with the shapefile, please supply a brief description of each wetland's plant community (eg: wet meadow, floodplain forest, etc.). Please send these data to Calvin Lawrence (608-266-0756 or email at calvin.lawrence@wisconsin.gov).

If you or any client has a question regarding your status in the Wetland Delineation Professional Assurance Program, contact me by email at kara.brooks@wisconsin.gov or phone at 414-308-6780. Thank you for all your hard work and best wishes for the upcoming field season.

Sincerely,

Kara Brooks
Wetland Identification Coordinator
Bureau of Watershed Management



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- Appendix A – Figures and Site Maps
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- Appendix C – Original Survey Map and Notes
- Appendix D – Historic Aerial Photographs
- Appendix E – NRCS County Soil Survey Report
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Introduction

Evergreen was retained by Point of Beginning to perform a professionally assured wetland delineation. The property is located at 8222 S 51st Street, City of Franklin, Milwaukee County, Wisconsin. The study area is approximately 21.62 acres in size and is in part of the West ½ of the Northeast ¼ of Section 14, Township 05 North, Range 21 East, City of Franklin, Milwaukee County, Wisconsin. Site Maps can be found in Appendix A.

The wetland delineation was conducted on May 2 and 9, 2025, by Chad Fradette, a Wisconsin Department of Natural Resources (WDNR) Professionally Assured Wetland Delineator with assistance from Shyann Banker, Sara Marcinkus, and Ashley Poehls. The delineation was conducted for school facility expansion. The study area consists of sports complexes, school buildings and roads, and a shrub/scrub forested area. The school was constructed in the 1960s. Expansion in 1975 led to the creation of drainage ditches that today contain wetlands. In 2015, an additional athletic field expansion led to the creation of additional ditches that contain wetland today. The woodland area of the site was partially disturbed in the past, but has been left fallow for decades.

The WDNR Wisconsin Wetland Inventory (WWI) Map was reviewed and indicates the presence of scrub/shrub and emergent wetlands in the northwest ¼ of the study area, forested wetlands in the northeast ¼, and small forested wetlands within the south half of the study area. The WWI wetland indicator soils layer was also reviewed and indicates the absence of indicator soils within the study area. The study area is mapped as having Predominantly Non-Hydric soils. Indicator soils are soils which are commonly found in wetlands or have inclusions of soils that are commonly found in wetlands. The WDNR Surface Water Data Viewer (SWDV) was also reviewed and indicates the absence of waterways within the study area, but an unnamed Order 3 stream is located to the northwest of the site and unnamed Order 1 streams located to the northeast and southwest of the site.

Five wetlands were delineated during the site visit. The Wetland Data Sheets classify the wetland according to the Cowardin classification system¹.

Wetland ID	Wetland Description ²	Cowardin Classification ³	*Surface Water Connections	*NR151 Protective Area	Acreage On-site
Wetland 1	Ruderal Wet Meadow and Marsh in a storm treatment ditch/swale	PEM1Bx	Potential connection via ditching	Less susceptible, 10 feet	10,026 sf 0.230 acres

¹ Federal Geographic Data Committee. 2013. Classification of wetlands and deepwater habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, DC.

² WI Department of Natural Resources, *Natural Heritage Conservation Key to Wetland Natural Communities*, Version 1.3, 4/8/2022

³ Federal Geographic Data Committee. 2013. Classification of wetlands and deepwater habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, DC.



Wetland 2	Ruderal wet meadow, Shrub Swamp in a storm treatment ditch/swale	PEM1Bx PSS1/5Bx	Potential connection via ditching	Less susceptible, 10 feet	5,973 sf 0.137 acres
Wetland 3	Ruderal Shrub Swamp	PSS1B	Isolated wetland	Moderately susceptible, 50 feet	2,124 sf 0.049 acres
Wetland 4	Ruderal Shrub Swamp	PSS1B	Isolated wetland	Moderately susceptible, 50 feet	6,801 sf 0.156 acres
Wetland 5	Ruderal Shrub Swamp	PSS1B	Isolated wetland	Moderately susceptible, 50 feet	10,841 sf 0.249 acres
*These are based on professional opinion. Local zoning ordinances may have additional restrictions. US Army Corps of Engineers has authority for determining federal jurisdiction of wetlands and waterways.					0.821 ac

An antecedent precipitation evaluation was conducted for the three months prior to the site visit. It was determined climatic conditions were normal at the time of the site visit during the wet season. The antecedent precipitation evaluation, WETS data and Palmer Drought Index reports for the area at the time of the site visit are included in Appendix F.

The areas identified as wetland were identified based on transitions from wetland to upland vegetation, hydrology indicators and hydric soil indicators, or lack thereof, in wetland areas versus upland areas, topographical position and best professional judgment. See Appendix A for the Wetland Determination Map. Wetland data sheets are included in Appendix G.

Personnel

Mr. Fradette is an Environmental Professional, Analytical Chemist, WDNR Professionally Assured Wetland Delineator and has over twenty years of experience working on public and private infrastructure, community development, and industrial projects throughout the entire Midwest and Northeast, including Wisconsin. His expertise is in completing wetland delineations, reports, permit applications, exemptions, compliance cases, compensatory wetland mitigation plans, endangered species assessments, and floristic habitat assessments. Mr. Fradette is professionally trained and experienced in the practice of wetland delineation.

Mrs. Shyann Banker, Environmental Scientist and WDNR Professionally Assured Wetland Delineator and has nine years of experience conducting wetland delineations for utility, municipal, residential, and industrial projects in Wisconsin. Her expertise is in completing wetland delineations, reports, and exemption applications.

Ms. Ashley Poehls, Biologist, has two years of professional experience in working on utility, municipal, residential, and industrial projects in Wisconsin.



Methodology

Available topographic maps, survey maps, WWI and NWI maps, County Soil Survey maps, wetland indicator and hydric soil maps and all available aerial photos were reviewed prior to visiting the property to identify potential wetland areas. These figures are included in Appendix A.

Antecedent precipitation information was evaluated through use of available local WETS data for the three months prior to the delineation to determine if conditions were within normal, wetter than normal or drier than normal at the time of the site visit. The Antecedent Precipitation Evaluation, WETS Data and the Palmer Drought Index reports are included in Appendix F.

Aerial images on cultivated or previously cultivated sites were reviewed for wet signatures following the Minnesota Board of Water and Soil Resources (BWSR) and St Paul District Corps of Engineers *Guidance for Offsite Hydrology/Wetland Determinations*.⁴

Examination of vegetation, soils, and hydrology, as outlined in the Corps of Engineers Wetlands Delineation Manual⁵ and the Northcentral and Northeast Regional Supplement⁶, were used to characterize, and determine wetland boundaries. The Natural Resources Conservation Service (NRCS) Field Indicators of Hydric Soils in the United States Guide⁷ was also utilized to help identify hydric soils at the site and the Wetland Training Institute field guide⁸. All available information including transitions in vegetation, soils and hydrology, review of aerial photos, antecedent precipitation analysis, topographic position, along with best professional judgment was applied.

Sample transects were established in a representative wetland to upland transition zone. The transects were comprised of two or more sample points located along a line running perpendicular to the wetland edge, with at least one point in obvious wetland and one point in obvious upland. A field data form was completed for each of the upland and wetland sample points. The sample locations were also located with a GPS and are indicated on Wetland Delineation Map within Appendix A. Field data forms are included in Appendix G.

Wetland classification was performed according to Cowardin Classification. Vegetation was identified using suitable keys (Eggers⁹; Chadde¹⁰) and a plant's hydrophytic status was determined using the most recent Northcentral and Northeast Region – National Wetland Plant List¹¹. Wetland boundaries were

⁴ USACE, MN Board of Water & Soil Resources, *Guidance for Offsite Hydrology/Wetland Determinations*, 2016

⁵ USACE, Waterways Experiment Station, Wetlands Research Program Technical Report Y-87-1

⁶ *Regional Supplement to the 1987 Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Regions*, 2012

⁷ USDA, Natural Resources Conservation Service (NRCS), *Field Indicators of Hydric Soils in the United States, Guide for Identifying and delineating Hydric Soils*, Version 9.0, 2024

⁸ Wetland Training Institute, Inc., *2013 Pocket Guide to Hydric Soil Field Indicators*, Wetland Training Institute, Inc., Glenwood, NM, 2013

⁹ Eggers, Steve D., and Reed, Donald M., *U.S. Army Corps of Engineers, St. Paul District, Wetland Plants and Plant Communities of Minnesota & Wisconsin*, Version 3.2, July 2015

¹⁰ Chadde, Steve W., *Wetland Plants of Wisconsin, Second Edition*, Steve Chadde, United States, 2013

¹¹ U.S. Army Corps of Engineers. (2023). 2022 National Wetland Plant List, version 3.6. U.S. Army Engineer Research and Development Center, Vicksburg, MS. <http://wetland-plants.usace.army.mil/>



determined based on the comprehensive wetland delineation method as defined in the Corps of Engineers Wetlands Delineation Manual and the Northcentral and Northeast Regional Supplement.

Mapping

The Wetland boundaries and Wetland edges were flagged with pink “Wetland Delineation” flags and/or ribbon. Boundary and sample plot locations were located with a Leica Zeno GG04 Global Positioning System (GPS) with sub-inch accuracy and are shown on the Wetland Delineation Map, located in Appendix A, Site Maps.

Results

Off Site Analysis

Land Use

Aerial photographs from 1937 through 2024 were reviewed. The study area was mostly forested with cleared cropland in the northwest corner. The 1951 aerial photograph shows some clearing within the center of the site. The 1963 photograph shows grading within the north and west portions of the site with a school building constructed to the west of the site. The Historic Aerial Photographs are in Appendix D.¹²

¹³ ¹⁴

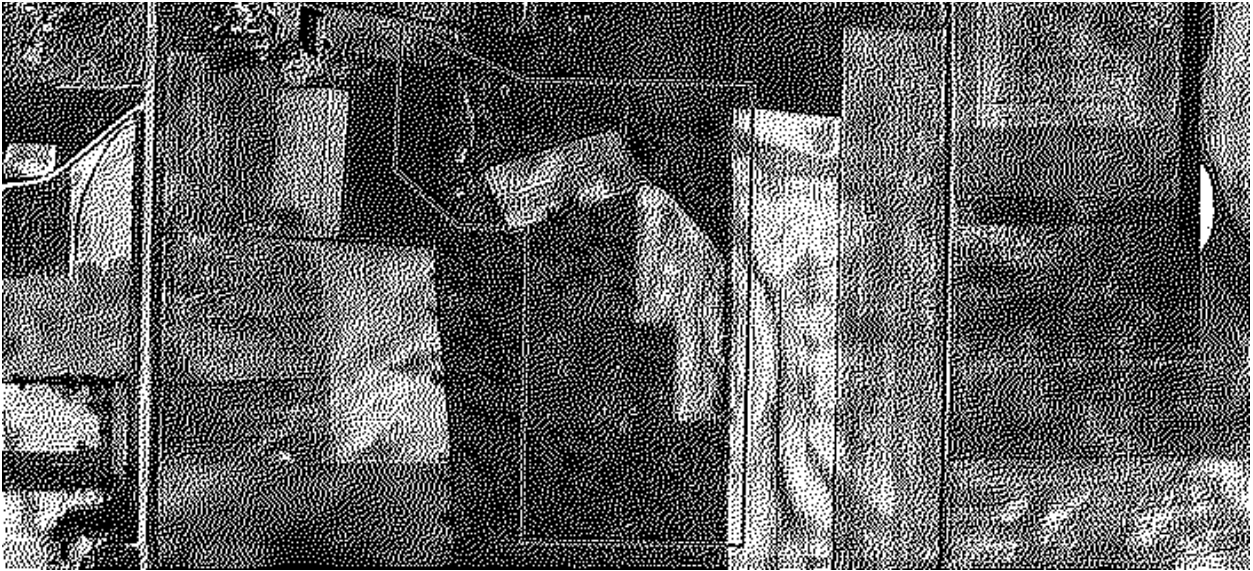


1937 Aerial photograph

¹² Milwaukee County, GIS, *aerial photographs, topography*, Milwaukee County, WI

¹³ USDA, FSA, Service Center, *FSA Slides for years 1981 through 2002*. Milwaukee County, WI

¹⁴ University of Wisconsin, *Wisconsin Historic Aerial Image Finder*, 2025



1951 Aerial Photograph



1963 Aerial Photograph



1975 Aerial Photograph



2015 Aerial Photograph



Original Land and Bordner Surveys

The Original Survey shows the Site within the West ½ of the Northeast ¼ of Section 14. The Original Survey Notes describe the vegetation in this area as sugar maple, white ash, basswood, red oak, white oak, and ironwood.¹⁵ The Original Survey Map and Original Survey Notes are in Appendix C.

No Bordner Survey is available for Milwaukee County¹⁶.

Topography

The topography at the Site ranges from an elevation of 780 feet down to 731 feet. The topography of the Site slopes down towards the Northwest corner of the study area.¹⁷ The Topographic Map is in Appendix A.

Precipitation

An antecedent precipitation evaluation was conducted for the three months prior to the site visit. Precipitation data from the Milwaukee Mitchell Airport WETS station indicates climatic conditions were normal at the time of the site visit during the wet season. The drought index indicated a mild drought. The Palmer Drought Index also indicates conditions were normal (Mid-Range, -1.99 to +1.99) for this location at the time of the site visit. Based on evaluation of both sources of data, it was determined climatic conditions were normal at the time of the site visit. The antecedent precipitation evaluation, WETS data and Palmer Drought Index reports for the area at the time of the site visit are included in Appendix F.

Wetland Mapping

The WDNR Wisconsin Wetland Inventory (WWI) Map was reviewed and indicates the presence of scrub/shrub and emergent wetlands in the northwest ¼ of the study area, forested wetlands in the northeast ¼, and small forested wetlands within the south half of the study area.¹⁸ The WWI wetland indicator soils layer was also reviewed and indicates the absence of indicator soils within the study area. The study area is mapped as having Predominantly Non-Hydric soils. Indicator soils are soils which are commonly found in wetlands or have inclusions of soils that are commonly found in wetlands. The WDNR Surface Water Data Viewer (SWDV) was also reviewed and indicates the absence of waterways within the study area, but an unnamed Order 3 stream is located to the northwest of the site and unnamed Order 1 streams located to the northeast and southwest of the site.

The NWI Map was reviewed and indicates a small emergent wetland within the northwest ¼ of the study area.¹⁹ The WWI, SWDV, and NWI Maps are in Appendix A.

¹⁵ Board of Commissioners of Public Lands, *Wisconsin Public Land Survey Records: Original Field Notes and Plat Maps*, Madison, Wisconsin, 2025

¹⁶ University of Wisconsin Digital Collections Center, *Wisconsin Land Economic Inventory Maps (Bordner Survey)*, Madison, WI, 2025

¹⁷ Milwaukee County GIS

¹⁸ WDNR, *Surface Water Data LiDAR Viewer*, 2025

¹⁹ U.S. Fish and Wildlife Service, National Wetlands Inventory, Wetlands Mapper, 2025



Mapped Soils

The NRCS Web Soil Survey indicates the presence of the following soil types²⁰:

Report—Hydric Rating by Map Unit (WI)

Hydric Rating by Map Unit (WI)—Milwaukee County, Wisconsin				
Map Unit Symbol	Map Unit Name	Hydric Percent of Map Unit	Hydric Category	Landform Hydric Minor Components
BIA	Blount silt loam, 1 to 3 percent slopes	10	WI Predominantly Nonhydric	Depressions
Cv	Clayey land	10	WI Predominantly Nonhydric	Depressions
OzaB	Ozaukee silt loam, 2 to 6 percent slopes	6	WI Predominantly Nonhydric	Ground moraines

NRCS County Soil Survey Report is in Appendix E.

²⁰ USDA, NRCS, *Web Soil Survey*, 2025



Field Investigation

Five wetlands were identified and delineated within the Study Area. Wetland determination data sheets (Appendix G) were completed at 12 sample points that were representative of the wetland and upland conditions near the boundary and where potential wetlands may be present based on the desktop review and field reconnaissance. Appendix B provides photographs, typically at the sample point locations of the wetlands and adjacent uplands. The wetland boundary and sample point locations are shown on Wetland Delineation Map within Appendix A and the wetlands are summarized in Table 1 and detailed in the following section.

Wetland 1

Wetland 1 is 0.230-acres of wet meadow with cattails a few trees and some brush within an excavated storm ditch. Part of the drainage ditch is located between athletic fields. The wetland continues beyond the study area to the north.

All three wetland parameters were met. The wetland boundary followed a well-defined topographic break and change in vegetation, hydric soil, and wetland hydrology indicators.

Dominant vegetation observed included black willow (*Salix nigra*, OBL), common buckthorn (*Rhamnus cathartica*, FAC), silky dogwood (*Cornus amomum*, FACW), sandbar willow (*Salix interior*, FACW), reed canary grass (*Phalaris arundinacea*, FACW), and hybrid cattail (*Typha x glauca*, OBL).

Depleted Below Dark Surface (A11) and Redox Dark Surface (F6) hydric soil indicators were observed.

The primary wetland hydrology indicators that were observed included Surface Water (A1), High Water Table (A2), Saturation (A3), and Presence of Reduced Iron (C4). The secondary indicators that were observed include Saturation Visible on Aerial Images (C9), Geomorphic Position (D2), and a Positive FAC-Neutral Test (D5). Surface water was present with a depth of 1 inch. The water table was observed at the soil surface to a depth of 6 inches from the soil surface and the soil was saturated at the soil surface to a depth of 6 inches in depth from the soil surface.



View of drainage ditch within Wetland 1.



View of drainage ditch within Wetland 1.



Wetland 2

Wetland 2 is 0.137-acres of ruderal shrub swamp in an excavated drainage ditch around an athletic field. The wetland continues beyond the study area to the north.

All three wetland parameters were met. The wetland boundary followed a well-defined topographic break and change in vegetation, hydric soil, and wetland hydrology indicators.

Dominant vegetation observed included sandbar willow (*Salix interior*, FACW), woolly sedge (*Carex pellita*, OBL), common horsetail (*Equisetum arvense*, FAC) meadow willow (*Salix petiolaris*, OBL), common reed (*Phragmites australis*, FACW), and orange jewelweed (*Impatiens capensis*, FACW).

Depleted Matrix (F3) hydric soil indicator and Red Parent Material (F21) indicator for problematic hydric soils were observed.

The primary wetland hydrology indicators that were observed included Surface Water (A1) and Inundation Visible on Aerial Imagery (B7). The secondary indicators that were observed include Geomorphic Position (D2) and a Positive FAC-Neutral Test (D5). Surface water was present with a depth of 0-3 inches.



View of *Phragmites* infestation within Wetland 2.



Wetland 3

Wetland 3 is 0.049-acres of a ruderal shrub swamp within a small closed depression in a basswood forest. A running trail passes along the side of the wetland. The wetland is entirely within the study area.

The wetland boundary was determined by probing soils to determine where redox features started. The wetland vegetation changed from basswood forest in the uplands to buckthorn in the wetland to areas of surface water. The wetland boundary was marked near the toe slope of the depression. All three wetland parameters were met.

Dominant vegetation observed included basswood (*Tilia americana*, FACU), silky dogwood (*Cornus amomum*, FACW), common buckthorn (*Rhamnus cathartica*, FAC), and woolly sedge (*Carex pellita*, OBL).

Redox Dark Surface (F6) and Redox Depressions (F8) hydric soil indicators were observed.

The primary wetland hydrology indicators that were observed included Surface Water (A1), Inundation Visible on Aerial Imagery (B7), Water-Stained Leaves B9), and Aquatic Fauna (B13). The secondary indicators that were observed include Geomorphic Position (D2) and a Positive FAC-Neutral Test (D5). Surface water was present with a depth of 1-5 inches.



View of basswood forest within Wetland 3.

Wetland 4

Wetland 4 is 0.156-acres of ruderal shrub swamp within a small closed depression in a buckthorn thicket. A running trail bisects the wetland. The wetland is entirely within the study area.

The wetland boundary was marked near the toe slope of the depression. All three wetland parameters were met. The vegetation changed from basswood forest with oaks to light elm forest with a heavy buckthorn infestation in the wetlands.

Dominant vegetation observed included American elm (*Ulmus americana*, FACW), basswood (*Tilia americana*, FACU), common buckthorn (*Rhamnus cathartica*, FAC), and brome-like sedge (*Carex bromoides*, FACW).

Depleted Below Dark Surface (A11), Depleted Matrix (F3), and Redox Dark Surface (F6) hydric soil indicators were observed.

The primary wetland hydrology indicators that were observed included Surface Water (A1), Sparsely Vegetated Concave Surface (B8), and Water-Stained Leaves (B9). The secondary indicators that were observed include Geomorphic Position (D2) and a Positive FAC-Neutral Test (D5). Surface water was present with a depth of 1-3 inches.



View of buckthorn infested forest within Wetland 4.



Wetland 5

Wetland 5 is 0.249-acres of ruderal shrub swamp within a small closed depression in a buckthorn thicket with dead ash. The wetland extends beyond the study area slightly to the east.

The wetland boundary was marked near the toe slope of the depression. All three wetland parameters were met. The vegetation in the area changed from basswood forest to a heavy infestation of buckthorn with small areas of surface water and moss.

Dominant vegetation observed included common buckthorn (*Rhamnus cathartica*, FAC) and upright sedge (*Carex stricta*, OBL).

Redox Dark Surface (F6) and Redox Depressions (F8) hydric soil indicators were observed.

The primary wetland hydrology indicators that were observed included Surface Water (A1), High Water Table (A2), Saturation (A3), and Sparsely Vegetated Concave Surface (B8). The secondary indicators that were observed include Geomorphic Position (D2) and a Positive FAC-Neutral Test (D5). Surface water was present with a depth of 1-4 inches. The water table was observed at a depth of 9 inches from the soil surface and saturation was present at the soil surface to a depth of 9 inches.



View of buckthorn thicket with dead ash trees within Wetland 5.

Uplands

Uplands within the study area consist of parking lots/roads, sports complexes, woodlands, basswood forest, brushy woodland remnants, and grassy areas.



View of woodland.



View of basswood forest.



View of brushy woodland remnant.



View of grassy area between athletic fields.



Conclusion

This report is limited to the identification and delineation of wetlands within the Delineation Area as shown on Figure 1, Appendix A. Other regulated environmental resources that result in land use restrictions may be present (e.g. navigable waterways, floodplains, cultural resources, and threatened or endangered species).

Wetlands

Investigation of the area determined that wetlands exist as shown on the attached figures and Wetland Delineation Map.

Table 1. Summary of Wetlands Identified within the Study Area

Wetland ID	Wetland Description ²¹	Cowardin Classification ²²	*Surface Water Connections	*NR151 Protective Area	Acreage On-site
Wetland 1	Ruderal Wet Meadow and Marsh in a storm treatment ditch/swale	PEM1Bx	Potential connection via ditching	Less susceptible, 10 feet	10,026 sf 0.230 acres
Wetland 2	Ruderal wet meadow, Shrub Swamp in a storm treatment ditch/swale	PEM1Bx PSS1/5Bx	Potential connection via ditching	Less susceptible, 10 feet	5,973 sf 0.137 acres
Wetland 3	Ruderal Shrub Swamp	PSS1B	Isolated wetland	Moderately susceptible, 50 feet	2,124 sf 0.049 acres
Wetland 4	Ruderal Shrub Swamp	PSS1B	Isolated wetland	Moderately susceptible, 50 feet	6,801 sf 0.156 acres
Wetland 5	Ruderal Shrub Swamp	PSS1B	Isolated wetland	Moderately susceptible, 50 feet	10,841 sf 0.249 acres
*These are based on professional opinion. Local zoning ordinances may have additional restrictions. US Army Corps of Engineers has authority for determining federal jurisdiction of wetlands and waterways.					0.821 ac

The wetlands identified for this report may be subject to federal regulation under the jurisdiction of the U.S. Army Corps of Engineers, state regulation under the jurisdiction of Wisconsin DNR, and local jurisdiction under Milwaukee County, and the City of Franklin.

²¹ WI Department of Natural Resources, *Natural Heritage Conservation Key to Wetland Natural Communities*, Version 1.3, 4/8/2022

²² Federal Geographic Data Committee. 2013. Classification of wetlands and deepwater habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, DC.



Protective Areas

WI Admin. Code²³ requires that impervious surfaces shall be kept out of the “protective area” to the maximum extent practicable. Protective area is an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface.

Protective area does not include any area of land adjacent to any stream enclosed within a pipe or culvert, such that runoff cannot enter the enclosure at this location.

- a.** For outstanding resource waters and exceptional resource waters, and for wetlands in areas of special natural resource interest as specified in s. [NR 103.04](#), 75 feet.
- b.** For perennial and intermittent streams identified on a United States geological survey 7.5-minute series topographic map, or a county soil survey map, whichever is more current, 50 feet.
- c.** For lakes, 50 feet.
- d.** For highly susceptible wetlands, 50 feet. Highly susceptible wetlands include the following types: fens, sedge meadows, bogs, low prairies, conifer swamps, shrub swamps, other forested wetlands, fresh wet meadows, shallow marshes, deep marshes and seasonally flooded basins.
- e.** For less susceptible wetlands, 10% of the average wetland width, but no less than 10 feet nor more than 30 feet. Less susceptible wetlands include degraded wetlands dominated by invasive species such as reed canary grass.

Protective Areas do not apply to the following:

- 1. Redevelopment post-construction sites.
- 2. In-fill development areas less than 5 acres.
- 3. Structures that cross or access surface waters such as boat landings, bridges and culverts.
- 4. Structures constructed in accordance with s. [59.692 \(1v\)](#), Stats.
- 5. Post-construction sites from which runoff does not enter the surface water, except to the extent that vegetative ground cover is necessary to maintain bank stability.
- 6. Wetlands that have been completely filled in accordance with all applicable state and federal regulations.

Authority to apply wetland and waterway protective areas under NR 151 lies with the WDNR. Some local zoning authorities and regional planning organizations may have adopted protective areas as setbacks as part of their zoning codes or may have additional land use restrictions within or adjacent to wetlands.

²³ Wisconsin Administrative Code, NR 151.245



Concurrence and Certification

If wetlands are proposed to be impacted a Section 404 Letter of Permission Authorization will need to be obtained from USACE and according to Section 281.36, Wisconsin Statutes and NR 299 and NR 103, Wisconsin Administrative Code a permit from the WDNR would be necessary.

For wetlands to be confirmed as exempt from state regulatory authority an exemption determination application must be submitted to the DNR Wetland ID Program whose staff makes the final decision.

Chad M Fradette is a WDNR Professionally Assured Wetland Delineator and WDNR concurrence is granted for five years unless site conditions are significantly altered.



Plant Identification References

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Vascular Plants of Northeastern United States and Adjacent Canada, The New York Botanical Garden, 1998

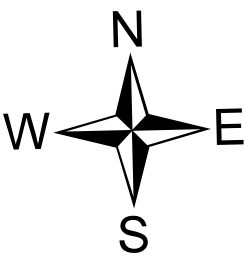
Appendix A:

Figures and Site Maps

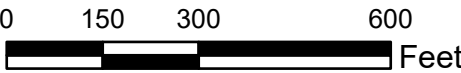


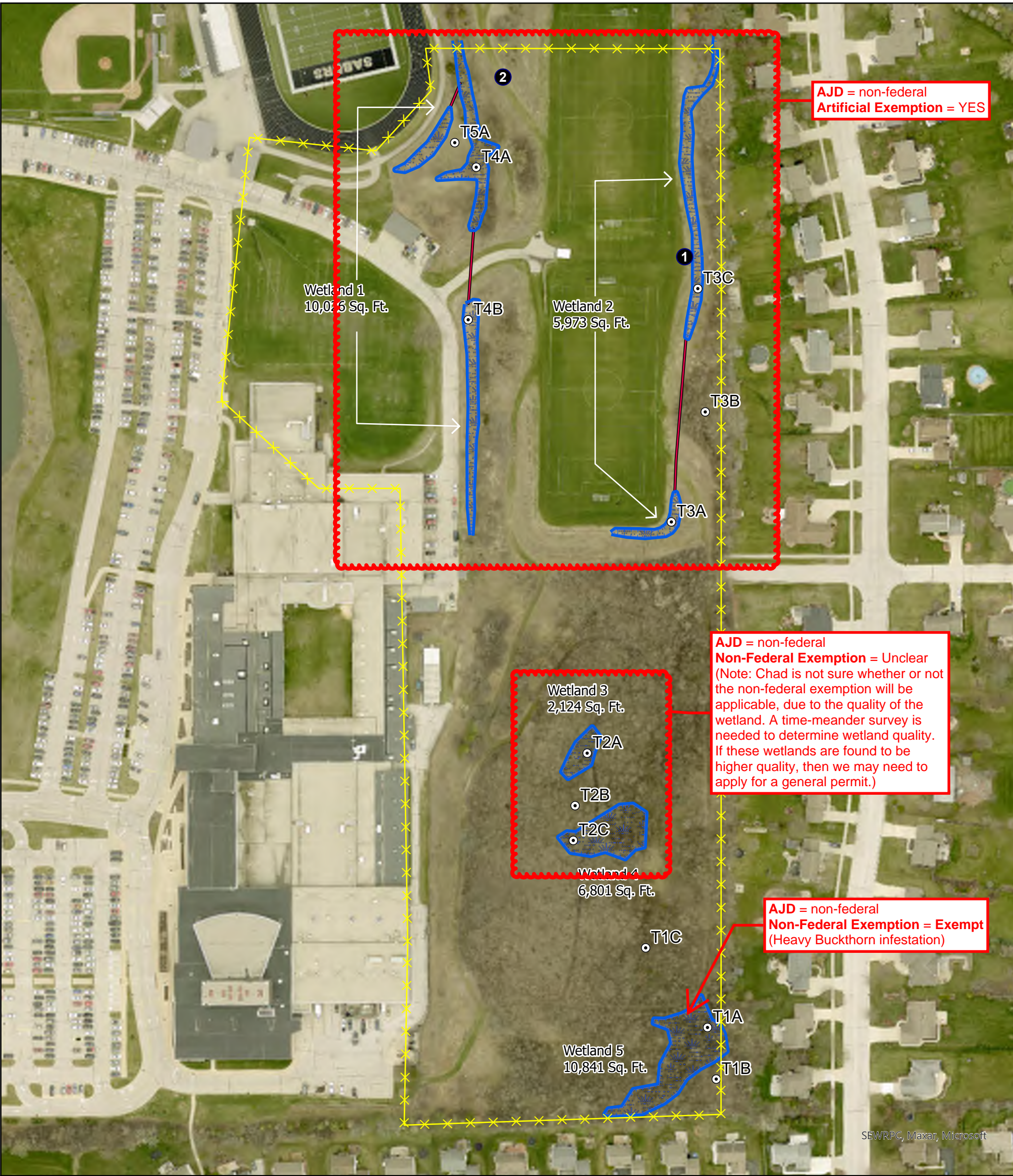
Legend
Site Boundary

Franklin High School
Site Location Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI



Project: MIL25-040-01

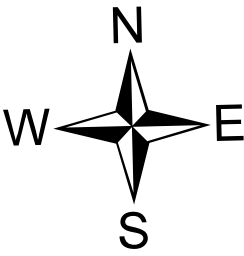




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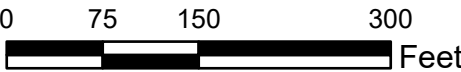
- Site Boundary
- Sample Point
- Picture Location
- Wetland Line
- Wetland
- Culvert

Franklin High School
Wetland Delineation Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI



Wetland Delineation was conducted by
Chad Fradette, EP, Chem,
WDNR Professionally Assured Wetland Delineator
with assistance from
Shyann Banker, Environmental Scientist
WDNR Professionally Assured Wetland Delineator

Project: MIL25-040-01





Legend

- Site Boundary
- WDNR Protective Area
- Wetland Line
- Wetland
- Culvert

Franklin High School Wetland Delineation Map with WDNR Protective Areas 8222 S 51st Street City of Franklin Milwaukee County, WI

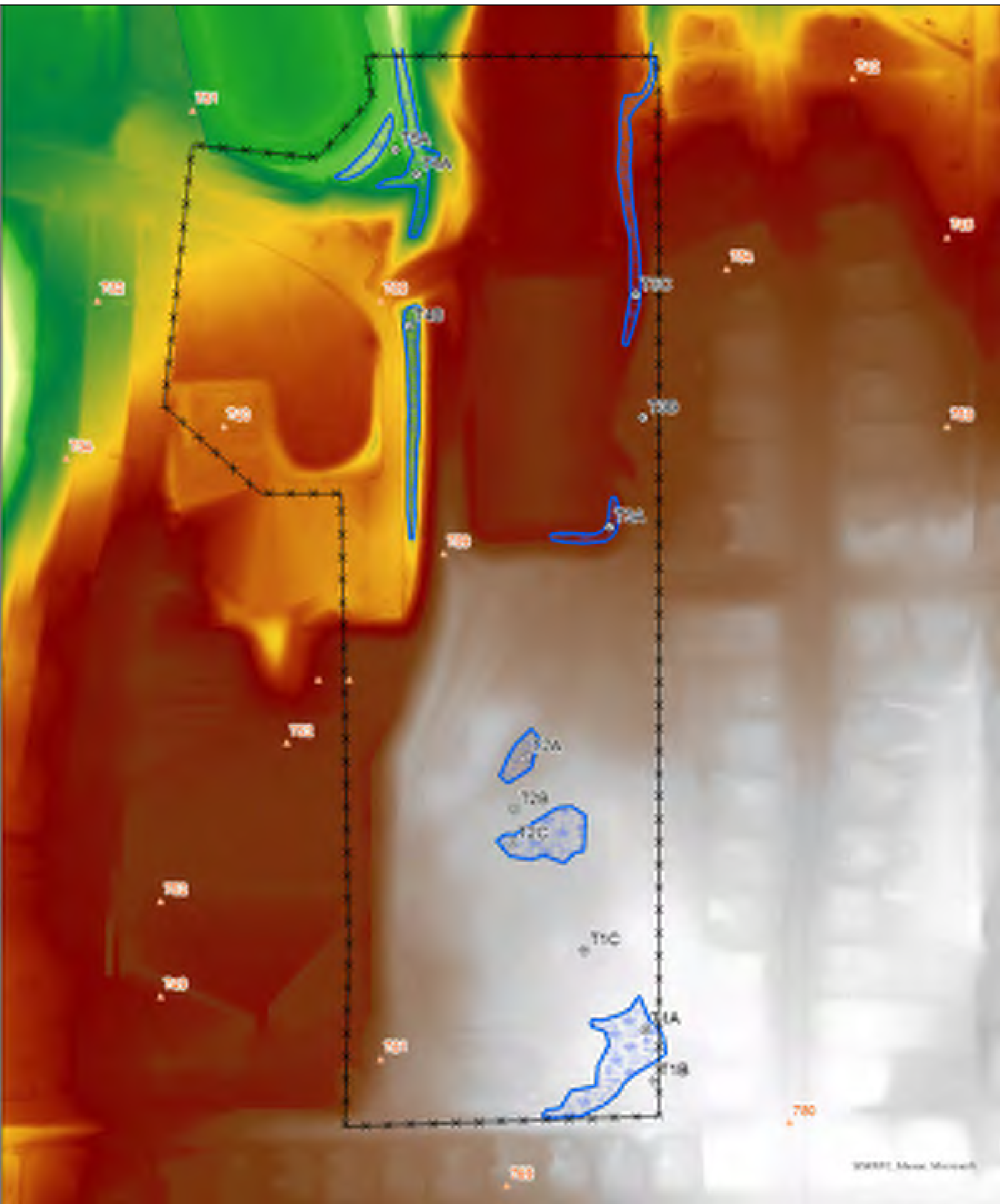


Wetland Delineation was conducted by
Chad Fradette, EP, Chem,
WDNR Professionally Assured Wetland Delineator
with assistance from
Shyann Banker, Environmental Scientist
WDNR Professionally Assured Wetland Delineator

Project: MIL25-040-01

0 75 150 300
Feet

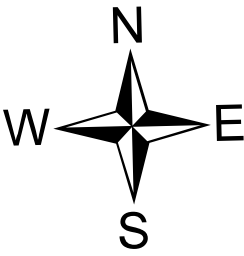

evergreen
consultants LLC
PO Box 680 Pulaski, WI 54162
Phone: 920.615.0019 • Website: www.evergreenwis.com



Legend

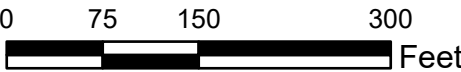
- Site Boundary
- Wetland Line
- Wetland
- Sample Point

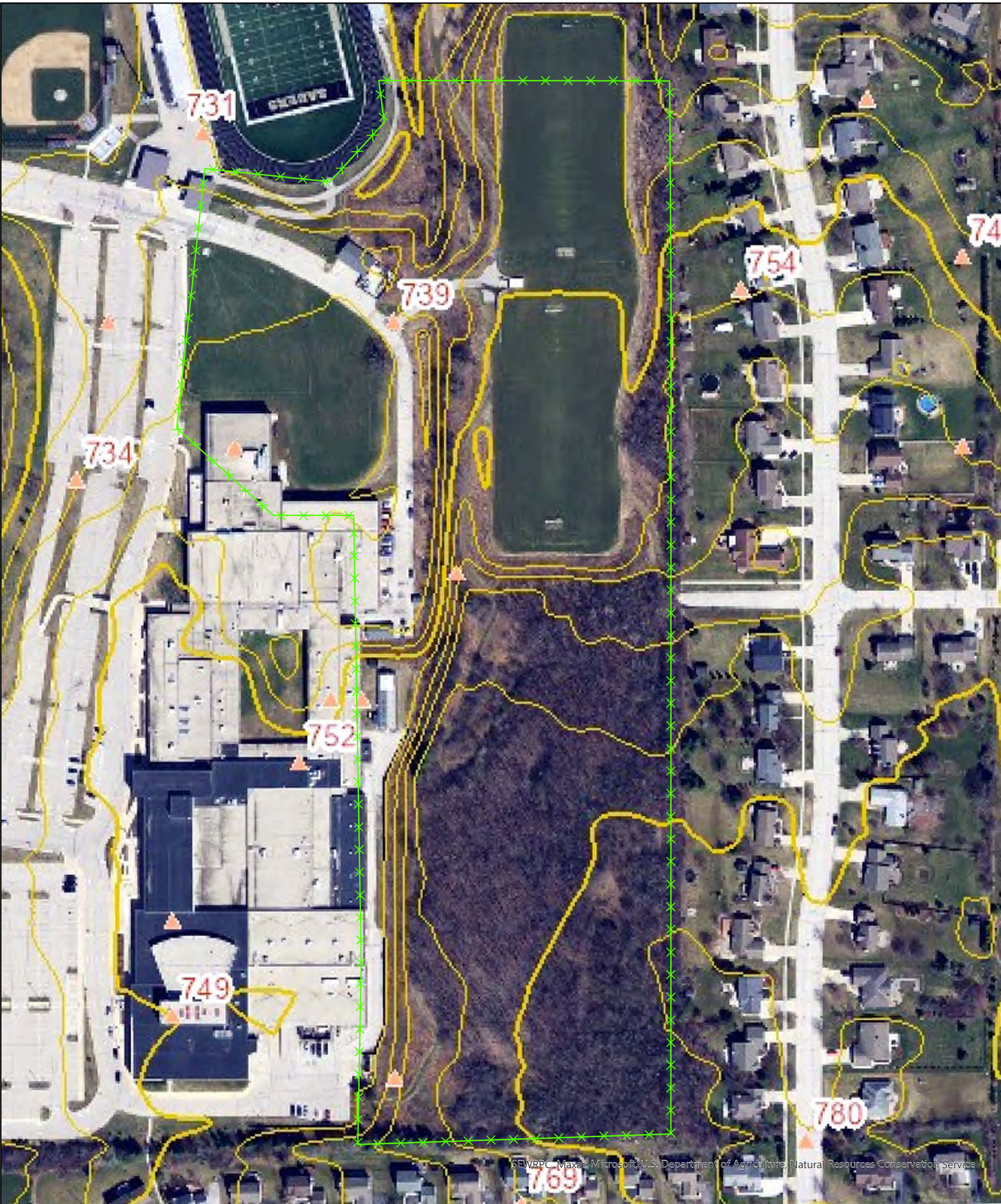
Franklin High School
WDNR LiDAR Viewer Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI



Wetland Delineation was conducted by
Chad Fradette, EP, Chem,
WDNR Professionally Assured Wetland Delineator
with assistance from
Shyann Banker, Environmental Scientist
WDNR Professionally Assured Wetland Delineator

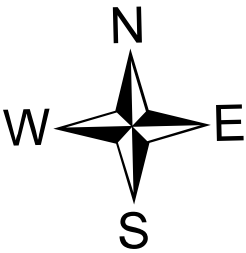
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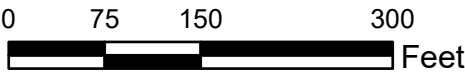


Legend
✕✕ Site Boundary

Franklin High School
Topographic Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI



Project: MIL25-040-01



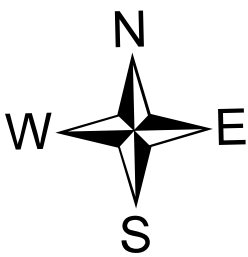


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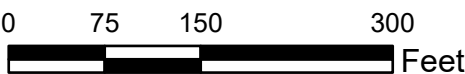
Legend

- Site Boundary
- USDA Wetspots
- Maximum Extent Wetland Indicators
- Wisconsin Wetland Inventory
- Wetland Points

Franklin High School
Wisconsin Wetland Inventory Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI



Project: MIL25-040-01

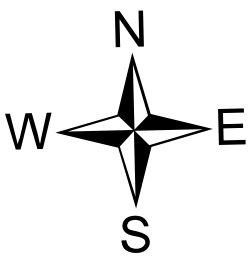




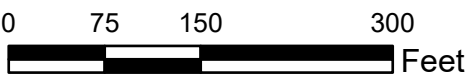
SEWRPC, Maxar, Microsoft, U.S. Department of Agriculture, Natural Resources Conservation Service

Franklin High School
National Wetland Inventory Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI

- Legend
- Site Boundary
 - NWI Wetlands





Project: MIL25-040-01

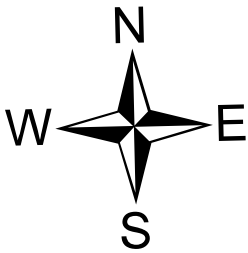




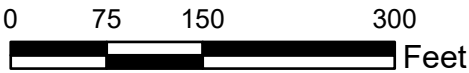
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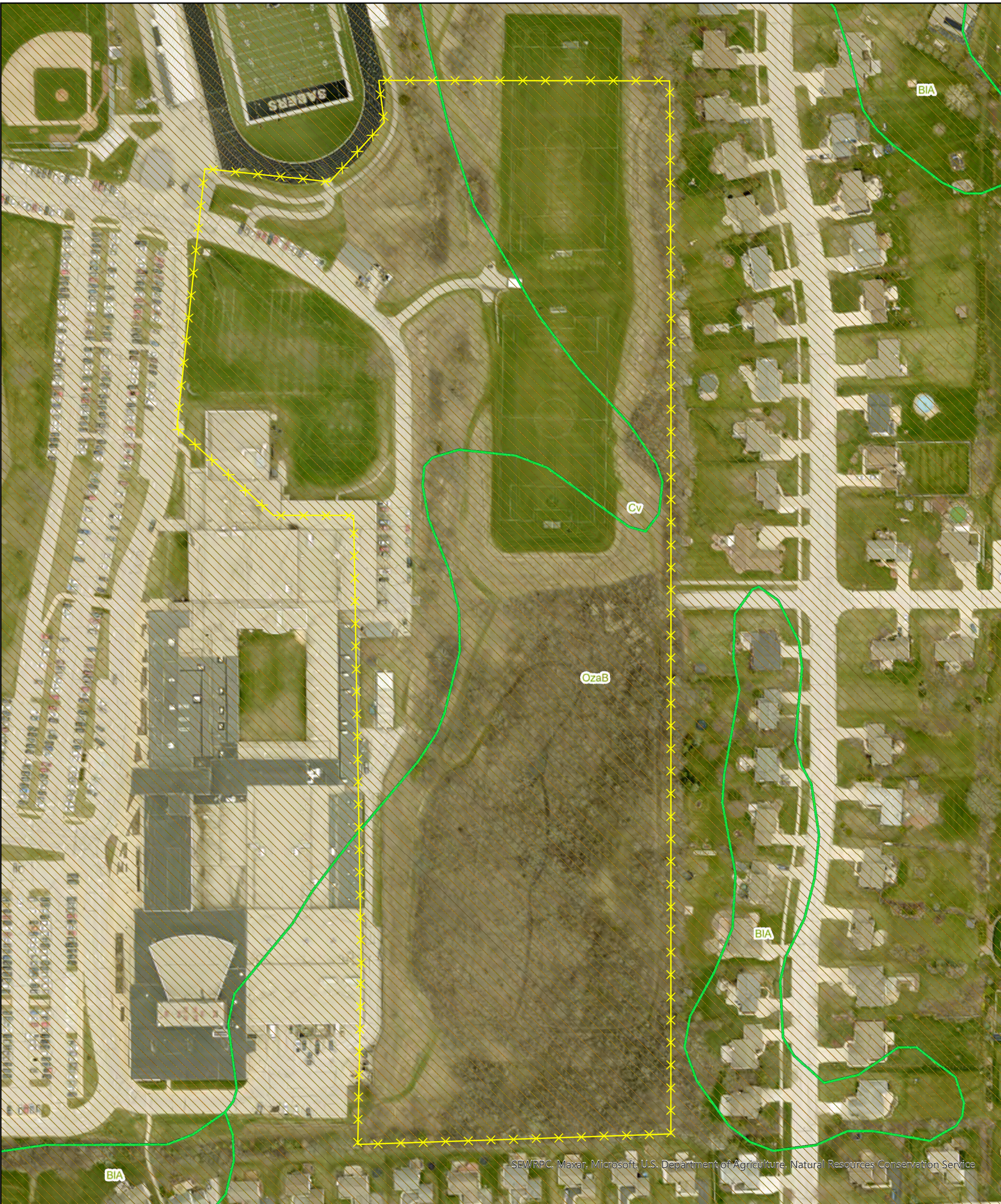
-  Site Boundary
-  USA Soils Map Units

Franklin High School
NRCS Soil Survey Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI








Project: MIL25-040-01



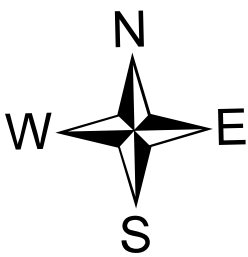


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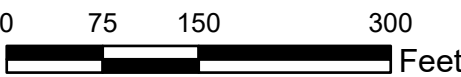
Legend

-  Site Boundary
- Hydric Rating**
-  Hydric
-  Predominantly Hydric
-  Partially Hydric
-  Predominantly Non-Hydric

**Franklin High School
NRCS Soil Hydric Ratings Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI**



Project: MIL25-040-01

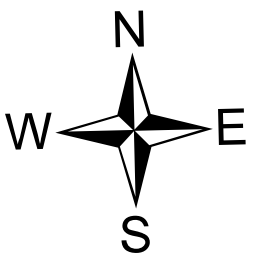




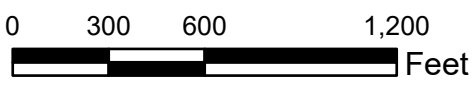
Legend

 Site Boundary

Franklin High School
USGS Topographic Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI



Project: MIL25-040-01



Appendix B:

Site Pictures



Standing near T1A within Wetland 5.



Standing near T1B adjacent to Wetland 5.



Standing near T1C.



Standing near T1C.



Standing near T2A within Wetland 3.



Standing near T2A within Wetland 3.



Standing near T2B between Wetlands 3 and 4.



Standing near T2B between Wetlands 3 and 4.



Standing near T2C within Wetland 4.



Standing near T3A facing southwest within Wetland 2.



Standing near T3A facing north within Wetland 2.



Standing near T3B.



Standing near T3C facing north within Wetland 2.



Standing near T3C facing south within Wetland 2.



Standing near T4A within Wetland 1.



Standing near T4A within Wetland 1.



Standing near T4A within Wetland 1.



Standing near T4B facing south within Wetland 1.



Standing near T5A adjacent to Wetland 1.



Standing near T5A adjacent to Wetland 1.

Appendix C:

Original Survey Map and Notes




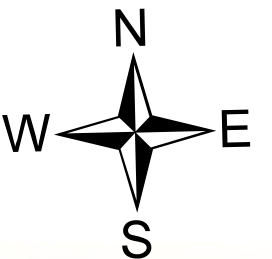
Legend

 Site Boundary

Franklin High School
Original Survey Map
8222 S 51st Street
City of Franklin
Milwaukee County, WI

Project: MIL25-040-01

0 350 700 1,400
 Feet



T. 5, R. 21 E. 4th. Mer.

North between Sections 13 & 14

6.35 Sugar 8

14.00 Run Cr. N. N. W.

32.32 Sugar 5

40.00 Set $\frac{1}{4}$ sec. post in run Cr. N. E.

W. Oak 8 S. 40 E. 19

W. Oak 8 N. 24 W. 34

54.59 Lynn 14

69.33 Sugar 10

80.00 Set Post cor. to Sec. 11-12-13 & 14

R. Oak 14 S. 48 E. 11

W. " 36 N. 63 W. 16

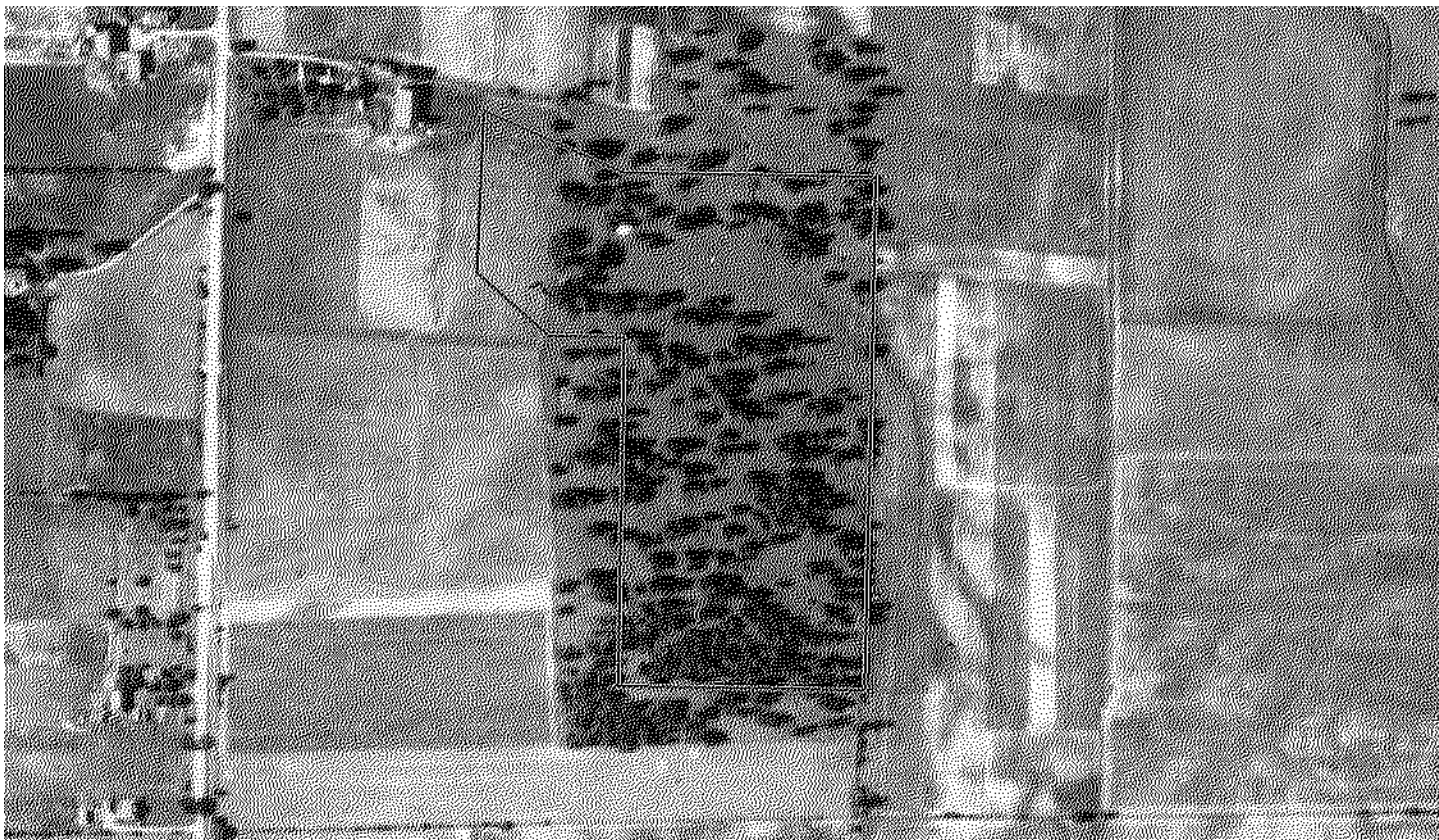
Land rolling good 2^d. rate -

Timber, W. R. Oak, Sugar, Lynn,

Ironwood &c.

Appendix D:

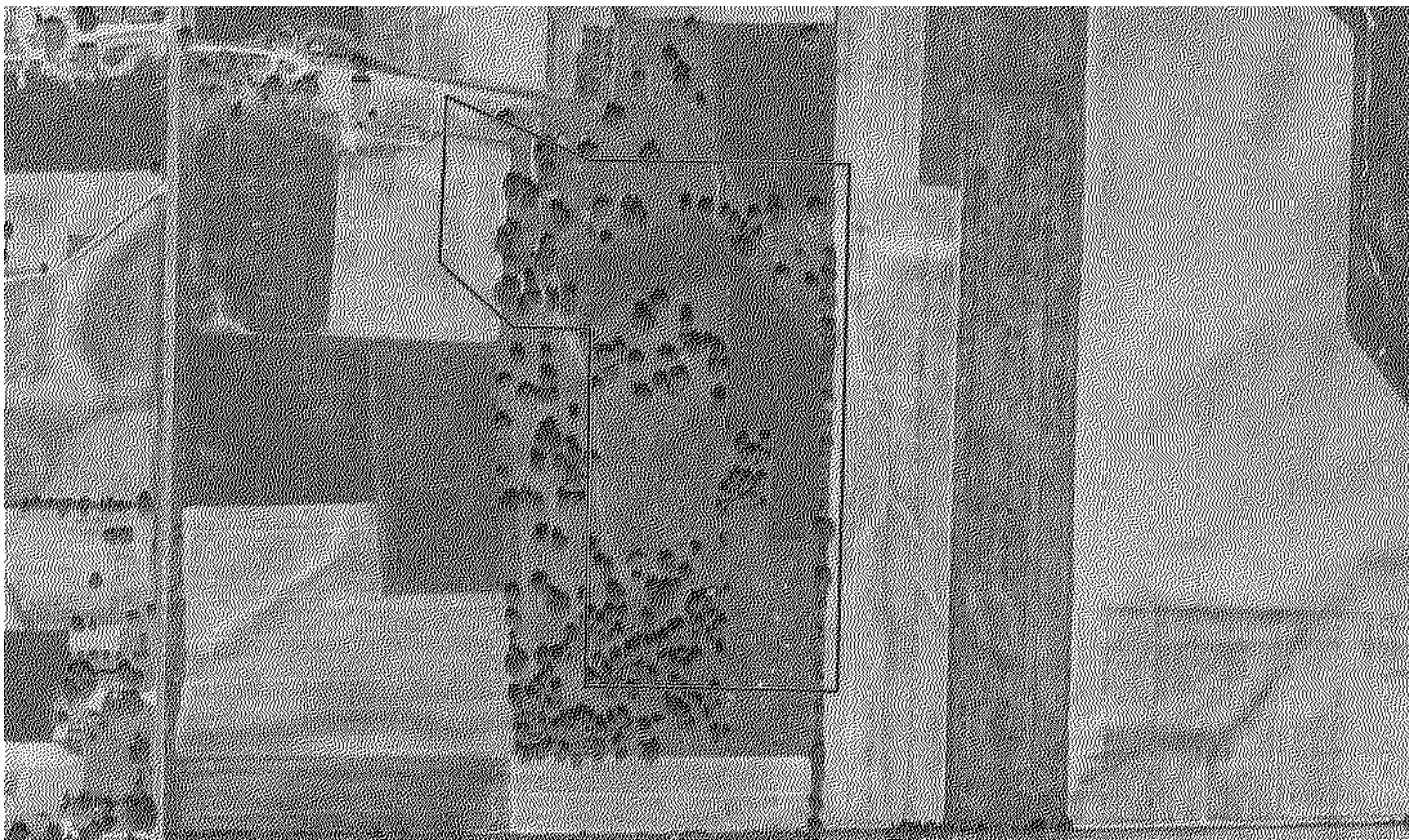
Historic Aerial Photographs



1937 Milwaukee County



1951 Milwaukee County



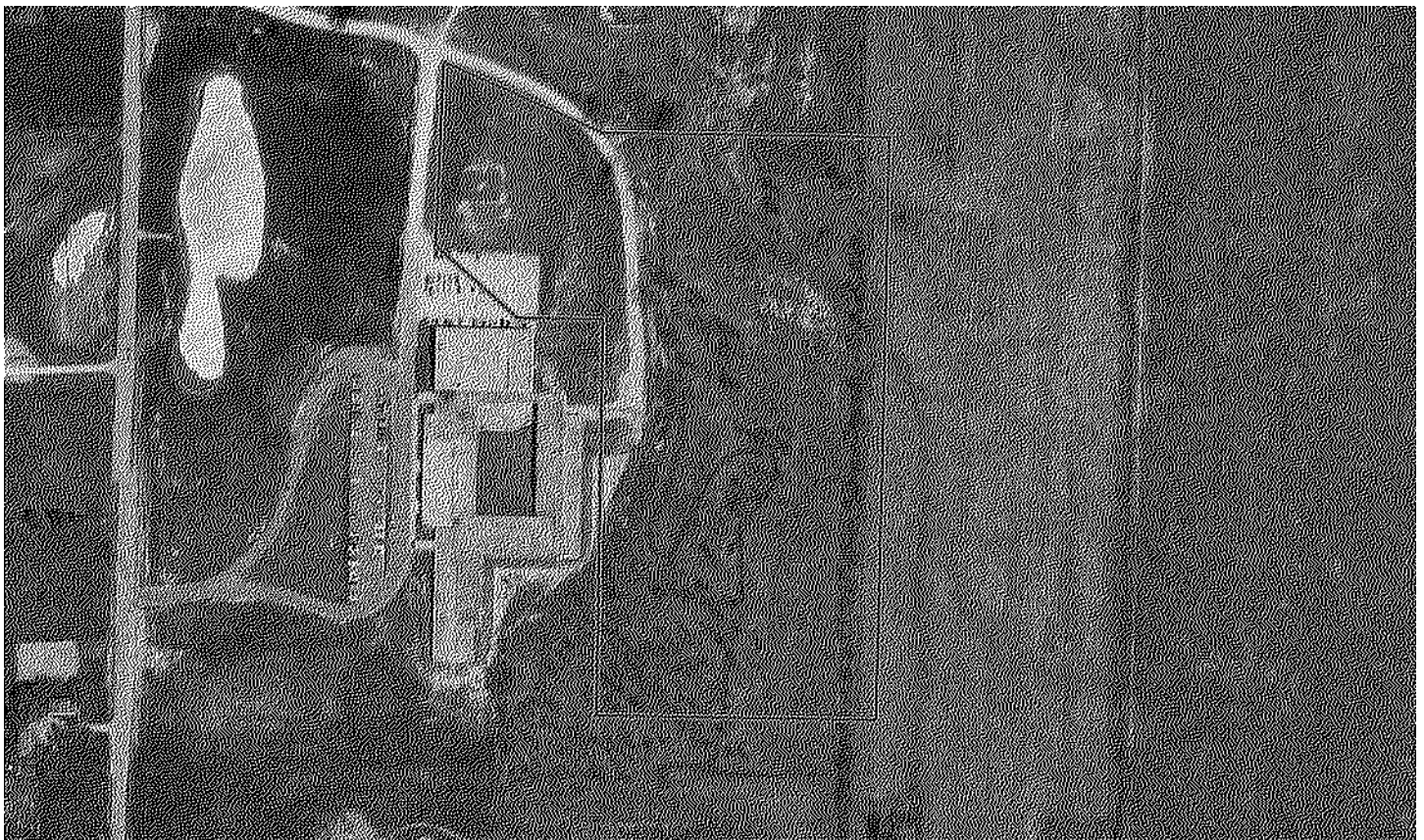
1956 Milwaukee County



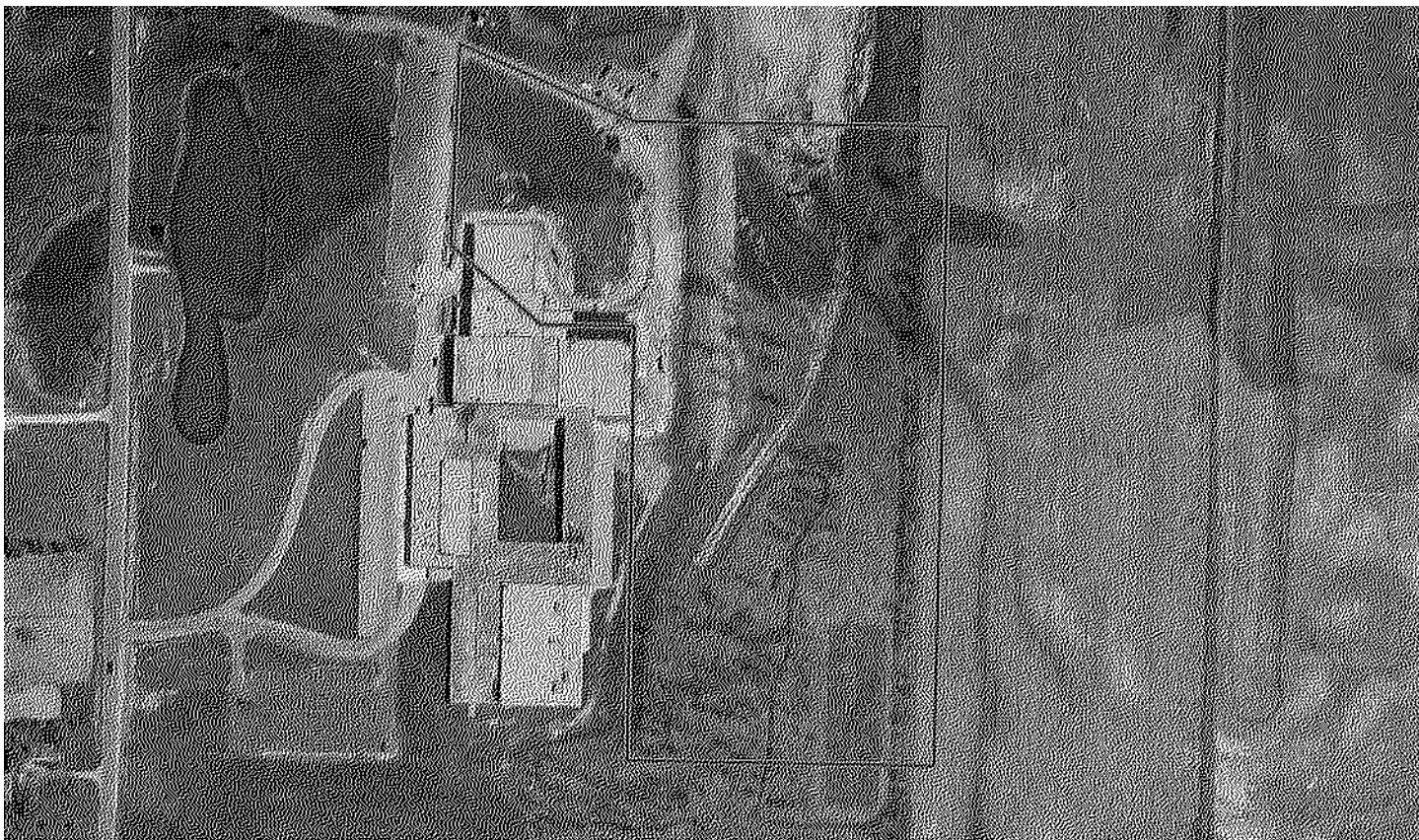
1963 Milwaukee County



1967 Milwaukee County



1970 Milwaukee County



1975 Milwaukee County



1980 FSA



1981 FSA



1982 FSA



1983 FSA



1984 FSA



1985 FSA



1986 FSA



1987 FSA



1988 FSA



1989 FSA



1990 FSA



1991 FSA



1992 FSA



1993 FSA



1994 FSA



1995 FSA



1996 FSA



1997 FSA



1998 FSA



1999 FSA



2000 FSA



2001 FSA



2002 FSA



2004 Maxar Technologies



2005 Google Earth



2006 Maxar Technologies



2007 Maxar Technologies



2008 USDA



2010 Google Earth



2011 Google Earth



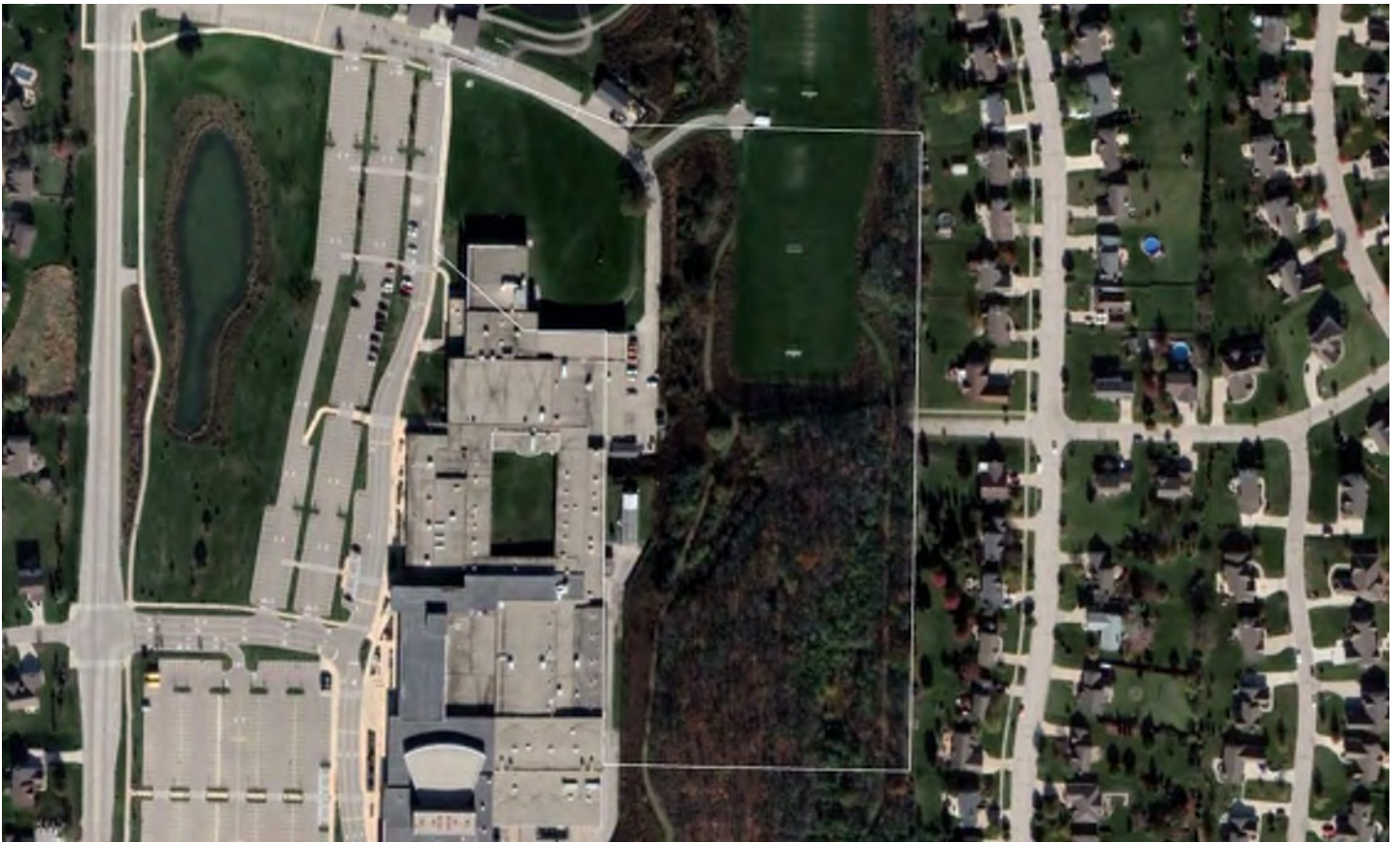
2013 Milwaukee County



2014 Google Earth



2015 Google Earth



2017 Maxar Technologies



2018 Google Earth



2019 Google Earth



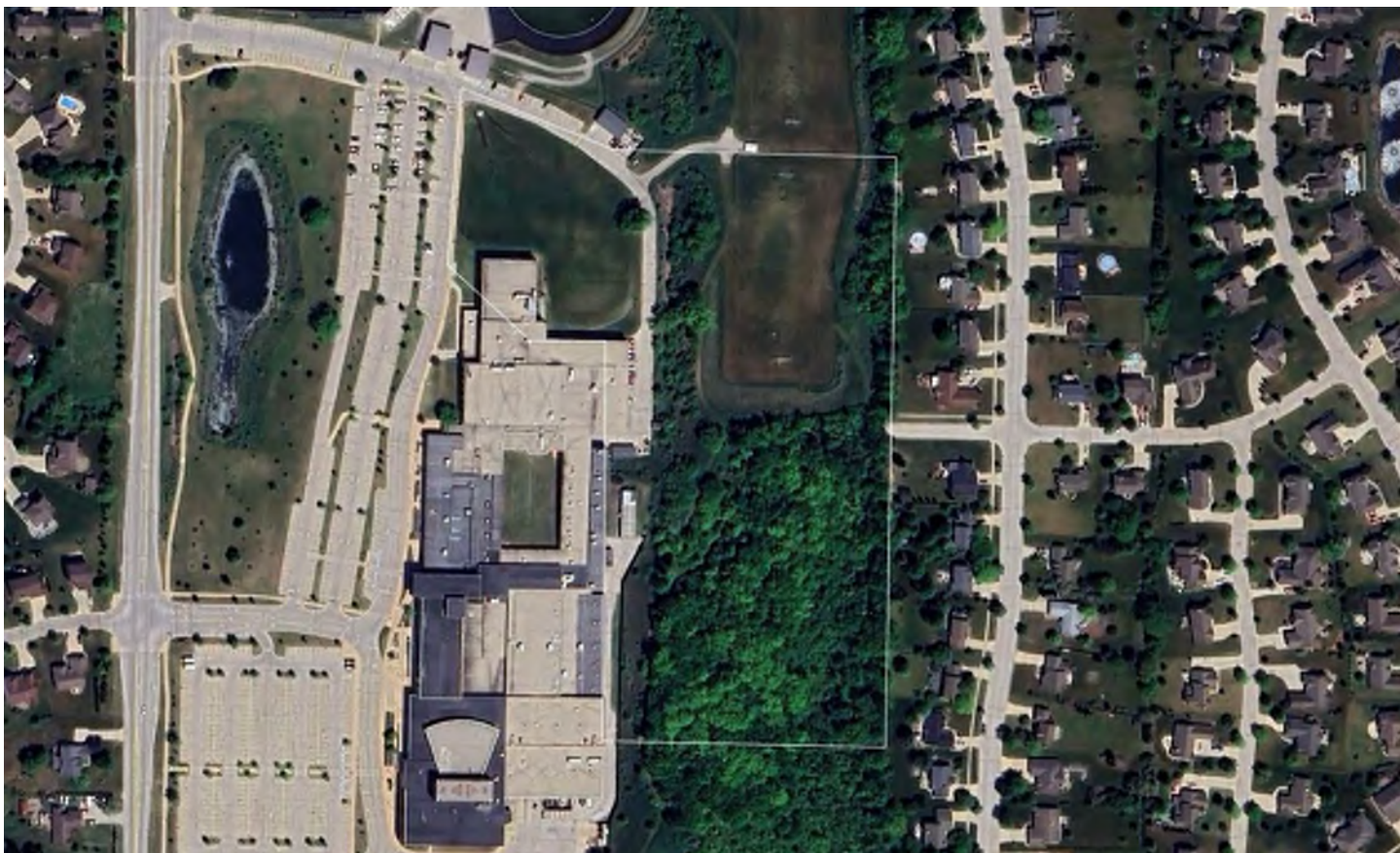
2020 Airbus



2021 Google Earth



2022 Maxar Technologies



2023 Airbus



2024 Airbus

Appendix E:

NRCS County Soil Survey Report

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)


Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit


 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot


 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry


 Miscellaneous Water


 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole


 Slide or Slip

 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals


Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

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

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 25, 2022—Aug 24, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BIA	Blount silt loam, 1 to 3 percent slopes	2.1	5.7%
Cv	Clayey land	15.9	44.3%
OzaB	Ozaukee silt loam, 2 to 6 percent slopes	17.9	49.9%
Totals for Area of Interest		35.8	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Milwaukee County, Wisconsin

BIA—Blount silt loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: g92m
Elevation: 670 to 1,100 feet
Mean annual precipitation: 28 to 36 inches
Mean annual air temperature: 37 to 55 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Blount and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blount

Setting

Landform: Moraines
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loess over calcareous clayey till

Typical profile

Ap,E - 0 to 8 inches: silt loam
BA,2Bt1,2BC - 8 to 34 inches: silty clay loam
2C - 34 to 60 inches: silty clay loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.57 in/hr)
Depth to water table: About 6 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Ecological site: F110XY012IL - Moist Glacial Drift Upland Forest
Forage suitability group: Mod AWC, high water table (G095BY004WI)
Other vegetative classification: Mod AWC, high water table (G095BY004WI)
Hydric soil rating: No

Minor Components

Ashkum

Percent of map unit: 10 percent

Landform: Depressions

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow

Hydric soil rating: Yes

Cv—Clayey land

Map Unit Setting

National map unit symbol: g936

Elevation: 670 to 1,100 feet

Mean annual precipitation: 28 to 36 inches

Mean annual air temperature: 37 to 55 degrees F

Frost-free period: 135 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Clayey land and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Clayey Land

Setting

Parent material: Clayey mine spoil or earthy fill

Typical profile

H1 - 0 to 10 inches: clay loam

Properties and qualities

Slope: 1 to 12 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 12 to 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components

Ashkum

Percent of map unit: 10 percent

Landform: Depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Concave

Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow

Hydric soil rating: Yes

OzaB—Ozaukee silt loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: 2sn0b

Elevation: 640 to 890 feet

Mean annual precipitation: 31 to 40 inches

Mean annual air temperature: 46 to 51 degrees F

Frost-free period: 135 to 190 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Ozaukee and similar soils: 93 percent

Minor components: 7 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ozaukee

Setting

Landform: Ground moraines, end moraines

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Loess over wisconsinan age silty and clayey till

Typical profile

Ap - 0 to 6 inches: silt loam

E - 6 to 8 inches: silt loam

Bt1 - 8 to 12 inches: silty clay loam

2Bt2 - 12 to 36 inches: silty clay

2BCt - 36 to 39 inches: silty clay loam

2Cd - 39 to 60 inches: silty clay loam

Properties and qualities

Slope: 2 to 6 percent

Depth to restrictive feature: 24 to 45 inches to densic material

Drainage class: Moderately well drained

Runoff class: Medium

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Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 24 to 42 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 35 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 5.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C

Ecological site: F110XY012IL - Moist Glacial Drift Upland Forest

Forage suitability group: Mod AWC, adequately drained with limitations
(G095BY006WI)

Other vegetative classification: Mod AWC, adequately drained with limitations
(G095BY006WI)

Hydric soil rating: No

Minor Components

Pewamo, drained

Percent of map unit: 3 percent

Landform: Drainageways on ground moraines, depressions on ground moraines

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave, linear

Across-slope shape: Concave

Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow

Hydric soil rating: Yes

Ashkum, drained

Percent of map unit: 3 percent

Landform: Ground moraines, end moraines

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Concave

Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow

Hydric soil rating: Yes

Urban land

Percent of map unit: 1 percent

Landform: Ground moraines

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Soil Information for All Uses

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Land Classifications

This folder contains a collection of tabular reports that present a variety of soil groupings. The reports (tables) include all selected map units and components for each map unit. Land classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Hydric Rating by Map Unit (WI)

This Hydric Soil Category rating indicates the components of map units that meet the criteria for hydric soils. Map units are composed of one or more major soil components or soil types that generally make up 20 percent or more of the map unit and are listed in the map unit name, and they may also have one or more minor contrasting soil components that generally make up less than 20 percent of the map unit. Each major and minor map unit component that meets the hydric criteria is rated **hydric**. The map unit class ratings based on the hydric components present are: WI Hydric, WI Predominantly Hydric, WI Partially Hydric, WI Predominantly Nonhydric, and WI Nonhydric. The report also shows the total representative percentage of each map unit that the hydric components comprise.

"WI Hydric" means that all major and minor components listed for a given map unit are rated as being hydric. *"WI Predominantly Hydric"* means that all major components listed for a given map unit are rated as hydric, and at least one contrasting minor component is not rated hydric. *"WI Partially Hydric"* means that at least one major component listed for a given map unit is rated as hydric, and at

least one other major component is not rated hydric. *"WI Predominantly Nonhydric"* means that no major component listed for a given map unit is rated as hydric, and at least one contrasting minor component is rated hydric. *"WI Nonhydric"* means no major or minor components for the map unit are rated hydric. The assumption is that the map unit is nonhydric even if none of the components within the map unit have been rated.

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.

If soils are wet enough for a long enough period of time to be considered hydric, they typically 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" (Vasilas, Hurt, and Noble, 2010).

The NTCHS has developed criteria to identify those soil properties unique to hydric soils (Federal Register, 2012). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria use selected soil properties that are described in "Field Indicators of Hydric Soils in the United States" (Vasilas, Hurt, and Noble, 2010), "Soil Taxonomy" (Soil Survey Staff, 1999), "Keys to Soil Taxonomy" (Soil Survey Staff, 2010), and the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

The criteria for hydric soils are represented by codes, for example, 2 or 3. 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.

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Federal Register. 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 Rating by Map Unit (WI)

Hydric Rating by Map Unit (WI)—Milwaukee County, Wisconsin				
Map Unit Symbol	Map Unit Name	Hydric Percent of Map Unit	Hydric Category	Landform Hydric Minor Components
BIA	Blount silt loam, 1 to 3 percent slopes	10	WI Predominantly Nonhydric	Depressions
Cv	Clayey land	10	WI Predominantly Nonhydric	Depressions
OzaB	Ozaukee silt loam, 2 to 6 percent slopes	6	WI Predominantly Nonhydric	Ground moraines

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,

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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, 2006) and in the "Soil Survey Manual" (Soil Survey Division 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.

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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—WI079-Milwaukee County, Wisconsin					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
BIA: Blount silt loam, 1 to 3 percent slopes	Blount	90	Moraines	No	—
	Ashkum	10	Depressions	Yes	2,3
Cv: Clayey land	Clayey land	90	—	No	—
	Ashkum	10	Depressions	Yes	2
OzaB: Ozaukee silt loam, 2 to 6 percent slopes	Ozaukee	88-100	Ground moraines,end moraines	No	—
	Pewamo-Drained	0-7	Drainageways on ground moraines,depressions on ground moraines	Yes	2
	Ashkum-Drained	0-7	Ground moraines,end moraines	Yes	2
	Urban land	0-5	Ground moraines	No	—

Hydric Soils

This table lists the map unit components that are rated as hydric soils 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, 2006) and in the "Soil Survey Manual" (Soil Survey Division 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;

Custom Soil Resource Report

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

References:

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

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Federal Register. July 13, 1994. Changes in 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.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service.

U.S. Department of Agriculture Handbook 18.

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

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.

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

Report—Hydric Soils

Hydric Soils—Milwaukee County, Wisconsin				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
BIA—Blount silt loam, 1 to 3 percent slopes				
	Ashkum	10	Depressions	2, 3
Cv—Clayey land				
	Ashkum	10	Depressions	2
OzaB—Ozaukee silt loam, 2 to 6 percent slopes				
	Pewamo, drained	3	Drainageways on ground moraines, depressions on ground moraines	2
	Ashkum, drained	3	Ground moraines, end moraines	2

Taxonomic Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999 and 2003). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those

observations or from laboratory measurements. This table shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Alfisols.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Udalfs (*Ud*, meaning humid, plus *alfs*, from Alfisols).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Hapludalfs (*Hapl*, meaning minimal horizonation, plus *udalfs*, the suborder of the Alfisols that has a udic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *Typic* identifies the subgroup that typifies the great group. An example is Typic Hapludalfs.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-loamy, mixed, active, mesic Typic Hapludalfs.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile.

References:

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. (The soils in a given survey area may have been classified according to earlier editions of this publication.)

Report—Taxonomic Classification of the Soils

[An asterisk by the soil name indicates a taxadjunct to the series]

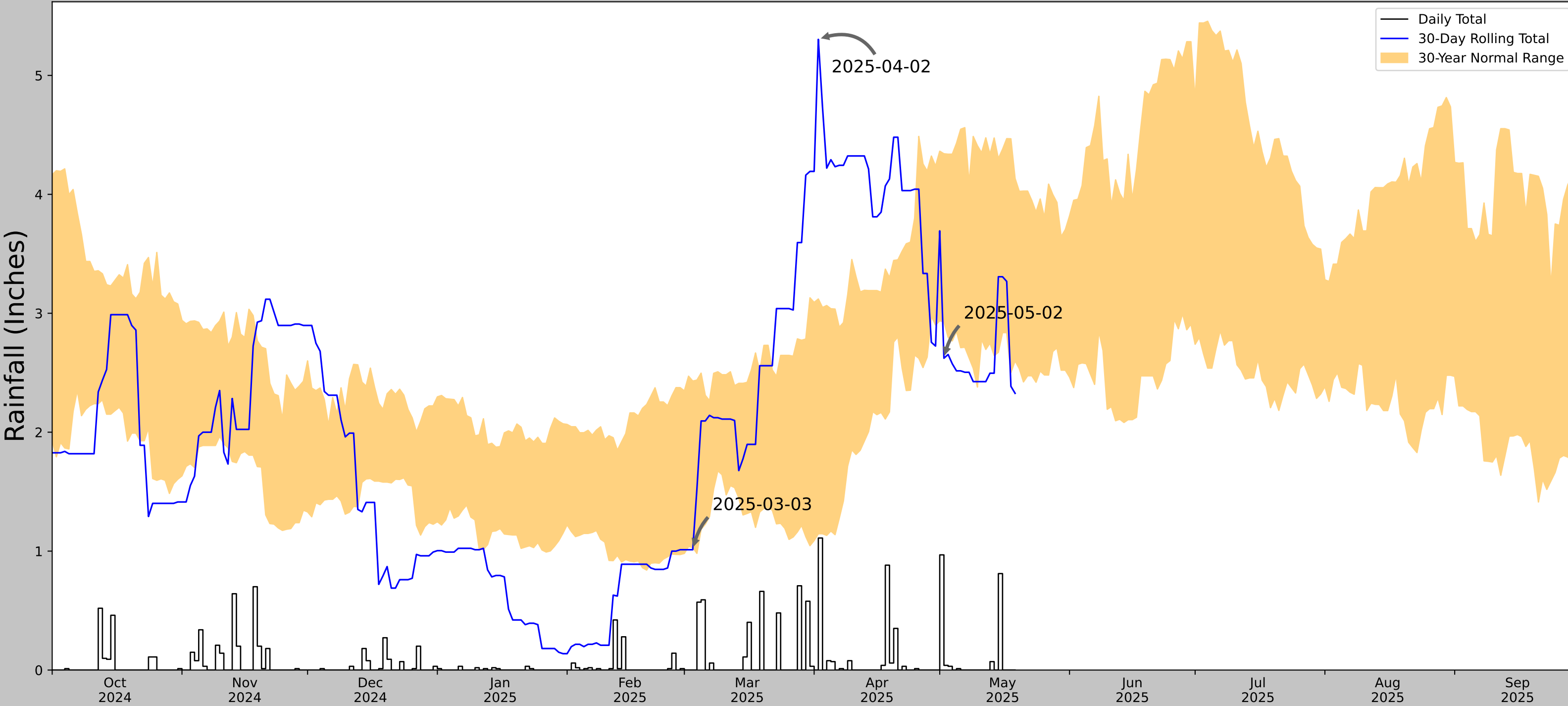
Custom Soil Resource Report

Taxonomic Classification of the Soils—Milwaukee County, Wisconsin	
Soil name	Family or higher taxonomic classification
Ashkum	
Ashkum	Fine, mixed, superactive, mesic Typic Endoaquolls
Ashkum	Mesic
Blount	Fine, illitic, mesic Aeris Epiaqualfs
Clayey land	Mixed
Ozaukee	Fine, illitic, mesic Oxyaquic Hapludalfs
Pewamo	Fine, mixed, active, mesic Typic Argiaquolls
Urban land	

Appendix F:

Precipitation Information

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	42.89589, -87.9761
Observation Date	2025-05-02
Elevation (ft)	771.457
Drought Index (PDSI)	Mild drought (2025-04)
WebWIMP H ₂ O Balance	Wet Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-05-02	2.928347	4.341339	2.622047	Dry	1	3	3
2025-04-02	1.146063	3.120473	5.30315	Wet	3	2	6
2025-03-03	1.030315	2.429921	1.011811	Dry	1	1	1
Result							Normal Conditions - 10

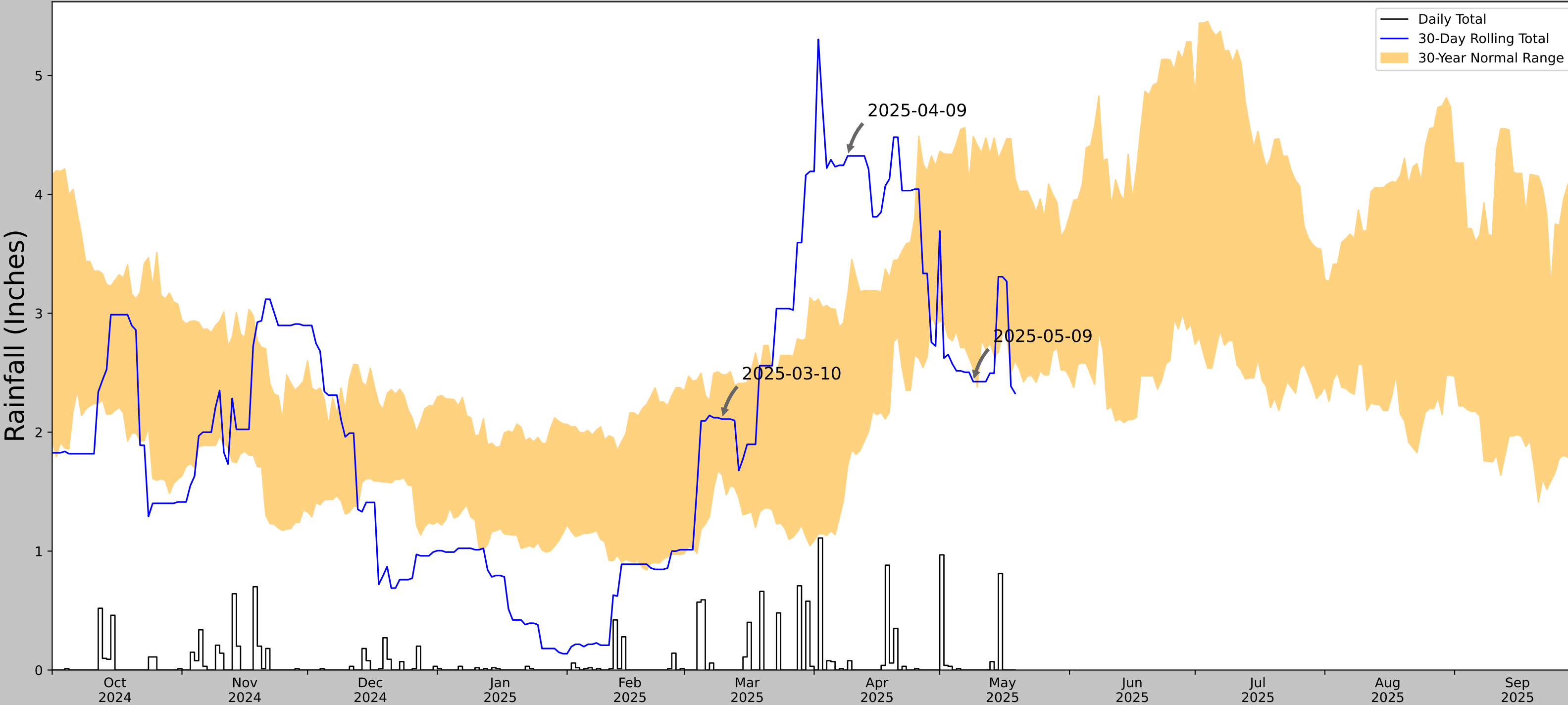


Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
MILWAUKEE MITCHELL AP	42.955, -87.9044	666.995	5.462	104.462	3.029	11353	90

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	42.89589, -87.9761
Observation Date	2025-05-09
Elevation (ft)	771.457
Drought Index (PDSI)	Mild drought (2025-04)
WebWIMP H ₂ O Balance	Wet Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-05-09	2.537402	4.487008	2.425197	Dry	1	3	3
2025-04-09	1.715354	3.153543	4.322835	Wet	3	2	6
2025-03-10	1.64252	2.483465	2.110236	Normal	2	1	2
Result							Normal Conditions - 11



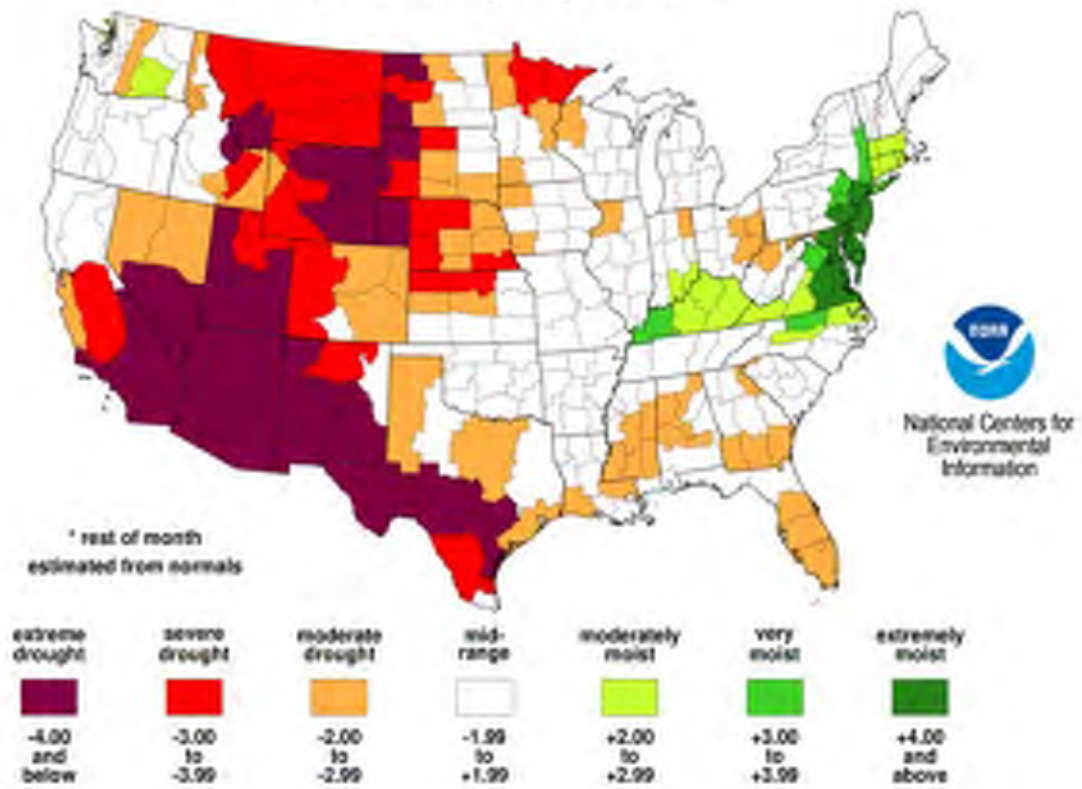
Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
MILWAUKEE MITCHELL AP	42.955, -87.9044	666.995	5.462	104.462	3.028	11353	90

Palmer Hydrological Drought Index Long-Term (Hydrological) Conditions

May 2025: through May 3 2025*



Sources: National Oceanic & Atmospheric Administration, Palmer Hydrological Drought Index

Appendix G:

Wetland Determination Data Forms

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-10-16; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: MII25-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-02
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T1A
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Closed Depression Local relief (concave, convex, none): Concave
Slope (%): 0-1 Lat: 42.8947139 Long: -87.975435 Datum: WGS 84
Soil Map Unit Name: Ozaukee silt loam, 2-6% slopes NWI classification: None, WWI-forested

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"/>	Is the Sampled Area within a Wetland? 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"/>	

Remarks:
Sample plot is in a buckthorn thicket with dead ash.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>) 1. <u>Rhamnus cathartica</u> Absolute % Cover <u>5</u> Dominant Species? <input checked="" type="checkbox"/> Indicator Status <u>FAC</u> 2. _____ 3. _____ 4. _____ 5. _____ <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>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)	
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>) 1. <u>Rhamnus cathartica</u> Absolute % Cover <u>60</u> Dominant Species? <input checked="" type="checkbox"/> Indicator Status <u>FAC</u> 2. _____ 3. _____ 4. _____ 5. _____ <u>60</u> =Total Cover		Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>3</u> x 1 = <u>3</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>65</u> x 3 = <u>195</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>68</u> (A) <u>198</u> (B) Prevalence Index = B/A = <u>2.91</u>
Herb Stratum (Plot size: <u>5 ft r</u>) 1. <u>Carex stricta</u> Absolute % Cover <u>3</u> Dominant Species? <input type="checkbox"/> Indicator Status <u>OBL</u> 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ <u>3</u> =Total Cover		
Woody Vine Stratum (Plot size: <u>30 ft r</u>) 1. _____ 2. _____ _____ =Total Cover	Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Remarks: (Include photo numbers here or on a separate sheet.)
Two hydrophytic vegetation indicators present.

SOIL

Sampling Point: T1A

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 ¹	Loc ²		
0 - 12	7.5YR 3/2	93	7.5YR 4/4	7	C	M	Silty Clay Loam	
12 - 24	7.5YR 3/3	70	7.5YR 4/6	30	C	M		
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1) ☐ Sandy Gleyed Matrix (S4)
☐ Histic Epipedon (A2) ☐ Sandy Redox (S5)
☐ Black Histic (A3) ☐ Stripped Matrix (S6)
☐ Hydrogen Sulfide (A4) ☐ Dark Surface (S7)
☐ Stratified Layers (A5) ☐ Loamy Mucky Mineral (F1)
☐ 2 cm Muck (A10) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☒ Redox Dark Surface (F6)
☐ Iron Monosulfide (A18) ☐ Depleted Dark Surface (F7)
☐ Sandy Mucky Mineral (S1) ☒ Redox Depressions (F8)
☐ 5 cm Mucky Peat or Peat (S3)

Indicators for Problematic Hydric Soils³:

- ☐ Iron-Manganese Masses (F12)
☐ Red Parent Material (F21) Very
☐ Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present?Yes ☒ No ☐

Remarks:

Hydric soil indicators F6 and F8 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☒ Surface Water (A1) ☐ Water-Stained Leaves (B9)
☒ High Water Table (A2) ☐ Aquatic Fauna (B13)
☒ Saturation (A3) ☐ True Aquatic Plants (B14)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck Surface (C7)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Gauge or Well Data (D9)
☒ Sparsely Vegetated Concave Surface (B8) ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 1-4
 Water Table Present? Yes ☒ No ☐ Depth (inches): 9
 Saturation Present? Yes ☒ No ☐ Depth (inches): 0-9
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

Hydrology is met with four primary and two secondary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: T1A

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
5 =Total Cover				
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
60 =Total Cover				
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
3 =Total Cover				
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ =Total Cover				

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

Two hydrophytic vegetation indicators present.

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

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.)

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology 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"/>
---	--

Sample plot is in a woodland. The wetland boundary was marked near the toe slope of the depression.

Tree Stratum	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Tilia americana</u>		<u>70</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
2. <u>Rhamnus cathartica</u>		<u>25</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
3. <u>Carya ovata</u>		<u>2</u>		<u>FACU</u>
4. _____		_____		_____
5. _____		_____		_____
		<u>97</u>	=Total Cover	

Sapling/Shrub Stratum	(Plot size: <u>15 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rhamnus cathartica</u>		<u>80</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
2. _____		_____		_____
3. _____		_____		_____
4. _____		_____		_____
5. _____		_____		_____
		<u>80</u>	=Total Cover	

Herb Stratum	(Plot size: <u>5 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rhamnus cathartica</u>		<u>2</u>		<u>FAC</u>
2. <u>Prunus virginiana</u>		<u>1</u>		<u>FACU</u>
3. _____		_____		_____
4. _____		_____		_____
5. _____		_____		_____
6. _____		_____		_____
7. _____		_____		_____
8. _____		_____		_____
9. _____		_____		_____
10. _____		_____		_____
		<u>3</u>	=Total Cover	

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

One hydrophytic vegetation indicator present.

SOIL

Sampling Point: T1B

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 ¹	Loc ²		
0 - 6	10YR 3/2	100					Silty Clay Loam	
6 - 8	7.5YR 3/2	95					Silty Clay Loam	
6 - 8	10YR 3/4	5					Silty Clay	subsoil mixed in
8 - 24	10YR 3/4	95	7.5YR 4/6	5	C	M	Silty Clay Loam	
-								
-								

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

Hydric Soil Indicators:	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Red Parent Material (F21) Very
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Shallow Dark Surface (F22)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stratified Layers (A5)	
<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	
<input type="checkbox"/> Thick Dark Surface (A12)	
<input type="checkbox"/> Iron Monosulfide (A18)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)	

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

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

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:			
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"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

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

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

No hydrology indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T1B**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
97		=Total Cover		
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
80		=Total Cover		
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
3		=Total Cover		
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____		=Total Cover		

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

One hydrophytic vegetation indicator present.

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

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.)

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
--	--

Sample plot is within a basswood forest with some tree fall depressions.

Tree Stratum		Absolute % Cover	Dominant Species?	Indicator Status
(Plot size: 30 ft r)				
1.	<u>Tilia americana</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>
2.	<u>Carya ovata</u>	<u>5</u>		<u>FACU</u>
3.	<u>Rhamnus cathartica</u>	<u>5</u>		<u>FAC</u>
4.	<u>Ulmus americana</u>	<u>3</u>		<u>FACW</u>
5.				
		<u>43</u>	=Total Cover	
Sapling/Shrub Stratum		Absolute % Cover	Dominant Species?	Indicator Status
(Plot size: 15 ft r)				
1.	<u>Rhamnus cathartica</u>	<u>30</u>	<u>✓</u>	<u>FAC</u>
2.	<u>Tilia americana</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>
3.	<u>Lonicera X bella</u>	<u>5</u>		<u>FACU</u>
4.				
5.				
		<u>45</u>	=Total Cover	
Herb Stratum		Absolute % Cover	Dominant Species?	Indicator Status
(Plot size: 5 ft r)				
1.	<u>Fragaria virginiana</u>	<u>5</u>	<u>✓</u>	<u>FACU</u>
2.	<u>Rhamnus cathartica</u>	<u>5</u>	<u>✓</u>	<u>FAC</u>
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
		<u>10</u>	=Total Cover	
Woody Vine Stratum		Absolute % Cover	Dominant Species?	Indicator Status
(Plot size: 30 ft r)				
1.				
2.				
			=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: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>3</u>	x 2 = <u>6</u>
FAC species <u>40</u>	x 3 = <u>120</u>
FACU species <u>55</u>	x 4 = <u>220</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>98</u> (A)	<u>346</u> (B)
Prevalence Index = B/A = <u>3.53</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

 2 - Dominance Test is >50%

 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present?

Yes	No
<u> </u>	<u> </u> ✓

No hydrophytic vegetation indicators present.

SOIL

Sampling Point: T1C

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 ¹	Loc ²		
0 - 8	7.5YR 3/2	100					Silty Clay Loam	
8 - 24	10YR 3/4	95	7.5YR 4/6	5	C	M	Silty Clay Loam	
-								
-								
-								
-								

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21) Very
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Shallow Dark Surface (F22)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)		

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

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

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:			
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 checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations:				Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____		
Water Table Present?	Yes <input checked="" type="checkbox"/> No _____	Depth (inches): 10		
Saturation Present?	Yes <input checked="" type="checkbox"/> No _____	Depth (inches): 8		
(includes capillary fringe)				

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

Hydrology is met with two primary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T1C**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
43 =Total Cover				
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
45 =Total Cover				
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
10 =Total Cover				
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ =Total Cover				

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

No hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: MII25-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-02
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T2A
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Closed Depression Local relief (concave, convex, none): Concave
Slope (%): 0-2 Lat: 42.8958842 Long: -87.9760962 Datum: WGS 84
Soil Map Unit Name: Ozaukee silt loam 2-6% slopes NWI classification: None, WWI-forested

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☒ No ☐

Is the Sampled Area
within a Wetland? Yes ☒ No ☐

Remarks:

Sample plot is in a small depression in a basswood forest with a running trail through the side of the wetland. Wetland boundary marked near the toeslope of the depression.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Tilia americana</u>		<u>10</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
2. <u>Ulmus americana</u>		<u>2</u>		<u>FACW</u>
3. _____				
4. _____				
5. _____				
		<u>12</u>	=Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15 ft r</u>)			
1. <u>Cornus amomum</u>		<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
2. <u>Rhamnus cathartica</u>		<u>10</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
3. _____				
4. _____				
5. _____				
		<u>20</u>	=Total Cover	
Herb Stratum	(Plot size: <u>5 ft r</u>)			
1. <u>Carex pellita</u>		<u>10</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
		<u>10</u>	=Total Cover	
Woody Vine Stratum	(Plot size: <u>30 ft r</u>)			
1. _____				
2. _____				
			=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That
Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species
Across All Strata: 4 (B)
Percent of Dominant Species That
Are OBL, FACW, or FAC: 75.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>10</u>	x 1 = <u>10</u>
FACW species <u>12</u>	x 2 = <u>24</u>
FAC species <u>10</u>	x 3 = <u>30</u>
FACU species <u>10</u>	x 4 = <u>40</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>42</u> (A)	<u>104</u> (B)
Prevalence Index = B/A = <u>2.47</u>	

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting
data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must
be present, unless disturbed or problematic.

**Hydrophytic
Vegetation
Present?**

Yes ☒ No ☐

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

Two hydrophytic vegetation indicators present.

SOIL

Sampling Point: T2A

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 ¹	Loc ²		
0 - 6	10YR 2/2	93	7.5YR 3/4	7	C	M	Silty Clay Loam	
6 - 15	7.5YR 3/1	90	7.5YR 3/4	10	C	M	Silty Clay Loam	
15 - 24	7.5YR 4/6	80	7.5YR 4/	20	D	M	Silty Clay	
-								
-								
-								

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21) Very
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Shallow Dark Surface (F22)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)		

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

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

Hydric soil indicators F6 and F8 present.

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 1-5 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 checked="" type="checkbox"/> No <input type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

Hydrology is met with four primary and two secondary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: T2A

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
<u>12</u> =Total Cover				
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
<u>20</u> =Total Cover				
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
<u>10</u> =Total Cover				
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ =Total Cover				

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

Two hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-10-16; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: MII25-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-02
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T2B
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex
Slope (%): 1-2 Lat: 42.8956561 Long: -87.9761626 Datum: WGS 84
Soil Map Unit Name: Ozaukee silt loam 2-6% slopes 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"/>
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:
Sample plot is in a basswood woodland on a rise between wet depressions.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>) 1. <u>Tilia americana</u> Absolute % Cover <u>80</u> Dominant Species? <input checked="" type="checkbox"/> Indicator Status <u>FACU</u> 2. <u>Ulmus americana</u> Absolute % Cover <u>5</u> Dominant Species? <input type="checkbox"/> Indicator Status <u>FACW</u> 3. _____ Absolute % Cover _____ Dominant Species? <input type="checkbox"/> Indicator Status _____ 4. _____ Absolute % Cover _____ Dominant Species? <input type="checkbox"/> Indicator Status _____ 5. _____ Absolute % Cover _____ Dominant Species? <input type="checkbox"/> Indicator Status _____ _____ <u>85</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>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>) 1. <u>Rhamnus cathartica</u> Absolute % Cover <u>60</u> Dominant Species? <input checked="" type="checkbox"/> Indicator Status <u>FAC</u> 2. <u>Tilia americana</u> Absolute % Cover <u>5</u> Dominant Species? <input type="checkbox"/> Indicator Status <u>FACU</u> 3. _____ Absolute % Cover _____ Dominant Species? <input type="checkbox"/> Indicator Status _____ 4. _____ Absolute % Cover _____ Dominant Species? <input type="checkbox"/> Indicator Status _____ 5. _____ Absolute % Cover _____ Dominant Species? <input type="checkbox"/> Indicator Status _____ _____ <u>65</u> =Total Cover	
Herb Stratum (Plot size: <u>5 ft r</u>) 1. <u>Carex pensylvanica</u> Absolute % Cover <u>10</u> Dominant Species? <input checked="" type="checkbox"/> Indicator Status <u>UPL</u> 2. <u>Rhamnus cathartica</u> Absolute % Cover <u>5</u> Dominant Species? <input checked="" type="checkbox"/> Indicator Status <u>FAC</u> 3. <u>Prunus virginiana</u> Absolute % Cover <u>2</u> Dominant Species? <input type="checkbox"/> Indicator Status <u>FACU</u> 4. <u>Trillium recurvatum</u> Absolute % Cover <u>1</u> Dominant Species? <input type="checkbox"/> Indicator Status <u>FACU</u> 5. _____ Absolute % Cover _____ Dominant Species? <input type="checkbox"/> Indicator Status _____ 6. _____ Absolute % Cover _____ Dominant Species? <input type="checkbox"/> Indicator Status _____ 7. _____ Absolute % Cover _____ Dominant Species? <input type="checkbox"/> Indicator Status _____ 8. _____ Absolute % Cover _____ Dominant Species? <input type="checkbox"/> Indicator Status _____ 9. _____ Absolute % Cover _____ Dominant Species? <input type="checkbox"/> Indicator Status _____ 10. _____ Absolute % Cover _____ Dominant Species? <input type="checkbox"/> Indicator Status _____ _____ <u>18</u> =Total Cover	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: <u>30 ft r</u>) 1. _____ Absolute % Cover _____ Dominant Species? <input type="checkbox"/> Indicator Status _____ 2. _____ Absolute % Cover _____ Dominant Species? <input type="checkbox"/> Indicator Status _____ _____ =Total Cover	

Remarks: (Include photo numbers here or on a separate sheet.)
No hydrophytic vegetation indicators present.

SOIL

Sampling Point: T2B

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 ¹	Loc ²		
0 - 6	10YR 3/2	100					Silty Clay Loam	
6 - 12	7.5YR 4/3	95	7.5YR 4/6	5	C	M		
12 - 24	10YR 4/3	70	7.5YR 4/6	30	C	M	Silty Clay	
-								
-								
-								

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Iron-Manganese Masses (F12)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21) Very	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Shallow Dark Surface (F22)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)		
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)			

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

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

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:			
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"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

No hydrology indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T2B**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
85 =Total Cover				
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
65 =Total Cover				
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
18 =Total Cover				
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ =Total Cover				

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

No hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-10-16; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>MI125-040-01 Franklin High School</u>	City/County: <u>Franklin/Milwaukee</u>	Sampling Date: <u>2025-05-02</u>
Applicant/Owner: <u>Point of Beginning</u>	State: <u>Wisconsin</u>	Sampling Point: <u>T2C</u>
Investigator(s): <u>Chad M Fradette, Sara Marcinkus</u>	Section, Township, Range: <u>Section 14, T05N, R21E</u>	
Landform (hillside, terrace, etc.): <u>Closed Depression</u>	Local relief (concave, convex, none): <u>Concave</u>	
Slope (%): <u>0-2</u>	Lat: <u>42.8955202</u>	Long: <u>-87.9761839</u>
	Datum: <u>WGS 84</u>	
Soil Map Unit Name: <u>Ozaukee silt loam 2-6% slopes</u>	NWI classification: <u>None</u>	

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly 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"/>	Is the Sampled Area within a Wetland? 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"/>	

Remarks:

Sample plot is within a depression in a woodland infested with buckthorn. A trail bisects the wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</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>75.00</u> (A/B)
1. <u>Ulmus americana</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	
2. <u>Tilia americana</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>20</u> =Total Cover				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>15</u> x 3 = <u>45</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>45</u> (A) <u>115</u> (B) Prevalence Index = B/A = <u>2.55</u>
Sapling/Shrub Stratum (Plot size: <u>15 ft r</u>)				
1. <u>Rhamnus cathartica</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>15</u> =Total Cover				
Herb Stratum (Plot size: <u>5 ft r</u>)				Hydrophytic Vegetation Indicators: <u>1</u> - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> <u>2</u> - Dominance Test is >50% <input checked="" type="checkbox"/> <u>3</u> - Prevalence Index is ≤3.0 ¹ <u>4</u> - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Carex bromoides</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
<u>10</u> =Total Cover				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u> </u> =Total Cover				

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

Two hydrophytic vegetation indicators present.

SOIL

Sampling Point: T2C

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 ¹	Loc ²		
0 - 8	7.5YR 3/1	98	7.5YR 3/4	2	C	M	Silty Clay Loam	
8 - 14	7.5YR 4/2	90	7.5YR 4/6	10	D	M	Silty Clay	
14 - 24	7.5YR 4/3	60	7.5YR 4/6	40	C	M	Silty Clay	
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- | | |
|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Iron Monosulfide (A18) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | |

Indicators for Problematic Hydric Soils³:

- ☐ Iron-Manganese Masses (F12)
☐ Red Parent Material (F21) Very
☐ Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present?Yes ☒ No ☐

Remarks:

Hydric soil indicators A11, F3, and F6 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|---|---|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input checked="" 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"/> True Aquatic Plants (B14) |
| <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"/> Gauge or Well Data (D9) |
| <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches): 1-3
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 ☒ No ☐

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

Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

Hydrology is met with three primary and two secondary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: T2C

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
<u>20</u> =Total Cover				
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
<u>15</u> =Total Cover				
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
<u>10</u> =Total Cover				
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ =Total Cover				

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

Two hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-10-16; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: MII25-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-09
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T3A
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Ditch Local relief (concave, convex, none): Concave
Slope (%): 0-1 Lat: 42.8968538 Long: -87.9755673 Datum: WGS 84
Soil Map Unit Name: Ozaukee silt loam 2-6% slopes 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"/>
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Remarks:
Sample plot is in an excavated drainage ditch around athletic field. The field and drainage ditches were constructed in 2015.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ =Total Cover	Absolute % Cover _____ _____ _____ _____ _____ _____	Dominant Species? _____ _____ _____ _____ _____ _____	Indicator Status _____ _____ _____ _____ _____ _____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)	
Sapling/Shrub Stratum (Plot size: <u>15x50 ft</u>) 1. <u>Salix interior</u> 2. <u>Salix petiolaris</u> 3. _____ 4. _____ 5. _____ _____ =Total Cover	<u>30</u> <u>5</u> _____ _____ _____ <u>35</u>	<input checked="" type="checkbox"/> _____ _____ _____ _____ _____	FACW OBL _____ _____ _____ _____		Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>10</u> x 1 = <u>10</u> FACW species <u>30</u> x 2 = <u>60</u> FAC species <u>5</u> x 3 = <u>15</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>45</u> (A) <u>85</u> (B) Prevalence Index = B/A = <u>1.88</u>
Herb Stratum (Plot size: <u>5 ft r</u>) 1. <u>Carex pellita</u> 2. <u>Equisetum arvense</u> 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ _____ =Total Cover	<u>5</u> <u>5</u> _____ _____ _____ _____ _____ _____ _____ _____ <u>10</u>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> _____ _____ _____ _____ _____ _____ _____ _____ _____	OBL FAC _____ _____ _____ _____ _____ _____ _____ _____ _____		
Woody Vine Stratum (Plot size: <u>30 ft r</u>) 1. _____ 2. _____ _____ =Total Cover	_____ _____ _____	_____ _____ _____	_____ _____ _____		

Remarks: (Include photo numbers here or on a separate sheet.)
Two hydrophytic vegetation indicators present.

SOIL

Sampling Point: T3A

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 ¹	Loc ²		
0 - 24	7.5YR 4/3	90	7.5YR 4/6	10	C	M	Silty Clay	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Dark Surface (S7) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> 2 cm Muck (A10) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Iron Monosulfide (A18) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) | |

Indicators for Problematic Hydric Soils³:

- ☐ Iron-Manganese Masses (F12)
- ☒ Red Parent Material (F21) Very
- ☐ Shallow Dark Surface (F22)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present?Yes ☒ No ☐

Remarks:

Hydric soil indicator F21 present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- | | |
|---|---|
| <input checked="" 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"/> True Aquatic Plants (B14) |
| <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 checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Gauge or Well Data (D9) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | <input type="checkbox"/> Other (Explain in Remarks) |

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☒ Geomorphic Position (D2)
- ☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches): 0-3
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 ☒ No ☐

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

Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

Hydrology is met with two primary and two secondary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T3A**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
			=Total Cover	
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
			=Total Cover	

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

Two hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: MII25-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-09
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T3B
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex
Slope (%): 1-3 Lat: 42.8973222 Long: -87.9753692 Datum: WGS 84
Soil Map Unit Name: Ozaukee silt loam 2-6% slopes NWI classification: None, WWI-forested

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒
Wetland Hydrology Present? Yes ☐ No ☒

Is the Sampled Area
within a Wetland? Yes ☐ No ☒

Remarks:

Sample plot is in a brushy area, woodland remnant.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Tilia americana</u>		<u>50</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
2. <u>Quercus macrocarpa</u>		<u>5</u>		<u>FAC</u>
3. _____				
4. _____				
5. _____				
		<u>55</u>	=Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15 ft r</u>)			
1. <u>Rhamnus cathartica</u>		<u>50</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
2. <u>Ribes cynosbati</u>		<u>1</u>		<u>FAC</u>
3. _____				
4. _____				
5. _____				
		<u>51</u>	=Total Cover	
Herb Stratum	(Plot size: <u>5 ft r</u>)			
1. <u>Erythronium rostratum</u>		<u>25</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
2. <u>Trillium recurvatum</u>		<u>2</u>		<u>FACU</u>
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
		<u>27</u>	=Total Cover	
Woody Vine Stratum	(Plot size: <u>30 ft r</u>)			
1. _____				
2. _____				
			=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.33 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>56</u>	x 3 = <u>168</u>
FACU species <u>77</u>	x 4 = <u>308</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>133</u> (A)	<u>476</u> (B)
Prevalence Index = B/A = <u>3.57</u>	

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is >50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

No hydrophytic vegetation indicators present.

SOIL

Sampling Point: T3B

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 ¹	Loc ²		
0 - 8	10YR 2/2	100					Silty Clay Loam	
8 - 16	7.5YR 4/3	90	7.5YR 4/4	10	C	M	Silty Clay	
16 - 24	10YR 4/4	100					Silty Clay	
-								
-								
-								

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Iron-Manganese Masses (F12)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21) Very	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Shallow Dark Surface (F22)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)		
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)			

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

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

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:			
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"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

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

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

No hydrology indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T3B**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata:
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
	55	=Total Cover		
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
	51	=Total Cover		
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
	27	=Total Cover		
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		=Total Cover		

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

No hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Midwest Region See ERDC/EL TR-10-16; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: MII25-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-09
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T3C
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Ditch Local relief (concave, convex, none): Concave
Slope (%): 0-1 Lat: 42.8978479 Long: -87.9753934 Datum: WGS 84
Soil Map Unit Name: Ozaukee silt loam 2-6% slopes 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"/>
---	--

Remarks:
Sample plot is in an excavated drainage ditch around athletic field. The drainage ditches were constructed in 2015.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 ft r</u>) 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ =Total Cover	Absolute % Cover _____ _____ _____ _____ _____ _____	Dominant Species? _____ _____ _____ _____ _____ _____	Indicator Status _____ _____ _____ _____ _____ _____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)	
Sapling/Shrub Stratum (Plot size: <u>15x50 ft</u>) 1. <u>Salix petiolaris</u> 2. _____ 3. _____ 4. _____ 5. _____ _____ =Total Cover	<u>5</u> _____ _____ _____ _____ _____	<input checked="" type="checkbox"/> _____ _____ _____ _____ _____	<u>OBL</u> _____ _____ _____ _____ _____		Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>5</u> x 1 = <u>5</u> FACW species <u>15</u> x 2 = <u>30</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>20</u> (A) <u>35</u> (B) Prevalence Index = B/A = <u>1.75</u>
Herb Stratum (Plot size: <u>5 ft r</u>) 1. <u>Phragmites australis</u> 2. <u>Impatiens capensis</u> 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ _____ =Total Cover	<u>10</u> <u>5</u> _____ _____ _____ _____ _____ _____ _____ _____ _____	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> _____ _____ _____ _____ _____ _____ _____ _____ _____	<u>FACW</u> <u>FACW</u> _____ _____ _____ _____ _____ _____ _____ _____ _____		
Woody Vine Stratum (Plot size: <u>30 ft r</u>) 1. _____ 2. _____ _____ =Total Cover	_____ _____ _____	_____ _____ _____	_____ _____ _____	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ ____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

Remarks: (Include photo numbers here or on a separate sheet.)
Three hydrophytic vegetation indicators present.

SOIL

Sampling Point: T3C

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 ¹	Loc ²		
0 - 8	10YR 4/2	95	7.5YR 4/6	5	C	M	Silty Clay Loam	
8 - 24	10YR 3/2	50					Silty Clay	
8 - 24	7.5YR 4/3	40	7.5YR 4/6	10	C	M	Silty Clay Loam	
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1) ☐ Sandy Gleyed Matrix (S4)
☐ Histic Epipedon (A2) ☐ Sandy Redox (S5)
☐ Black Histic (A3) ☐ Stripped Matrix (S6)
☐ Hydrogen Sulfide (A4) ☐ Dark Surface (S7)
☐ Stratified Layers (A5) ☐ Loamy Mucky Mineral (F1)
☐ 2 cm Muck (A10) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☒ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Iron Monosulfide (A18) ☐ Depleted Dark Surface (F7)
☐ Sandy Mucky Mineral (S1) ☐ Redox Depressions (F8)
☐ 5 cm Mucky Peat or Peat (S3)

Indicators for Problematic Hydric Soils³:

- ☐ Iron-Manganese Masses (F12)
☐ Red Parent Material (F21) Very
☐ Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present?Yes ☒ No ☐

Remarks:

Hydric soil indicator F3 present.

HYDROLOGY

Wetland Hydrology Indicators:Primary Indicators (minimum of one is required; check all that apply)

- ☒ Surface Water (A1) ☐ Water-Stained Leaves (B9)
☐ High Water Table (A2) ☐ Aquatic Fauna (B13)
☐ Saturation (A3) ☐ True Aquatic Plants (B14)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck Surface (C7)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Gauge or Well Data (D9)
☐ Sparsely Vegetated Concave Surface (B8) ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☒ Geomorphic Position (D2)
☒ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 0-1
 Water Table Present? Yes ☐ No ☒ Depth (inches): _____
 Saturation Present? Yes ☐ No ☒ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

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

Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

Hydrology is met with one primary and two secondary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T3C**

Tree Stratum	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
Sapling/Shrub Stratum				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
Herb Stratum				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
			=Total Cover	
Woody Vine Stratum				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
			=Total Cover	

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

Three hydrophytic vegetation indicators present.

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

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.)

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"/>
--	--

Tree Stratum	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Salix nigra</u>		<u>15</u>	<u>✓</u>	<u>OBL</u>	
2. _____		_____	_____	_____	
3. _____		_____	_____	_____	
4. _____		_____	_____	_____	
5. _____		_____	_____	_____	
		<u>15</u>	=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Rhamnus cathartica</u>		<u>15</u>	<u>✓</u>	<u>FAC</u>	
2. <u>Cornus amomum</u>		<u>10</u>	<u>✓</u>	<u>FACW</u>	
3. <u>Salix interior</u>		<u>10</u>	<u>✓</u>	<u>FACW</u>	
4. <u>Salix bebbiana</u>		<u>5</u>	_____	<u>FACW</u>	
5. _____		_____	_____	_____	
		<u>40</u>	=Total Cover		
Herb Stratum	(Plot size: <u>5 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Phalaris arundinacea</u>		<u>40</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Poa pratensis</u>		<u>10</u>	_____	<u>FAC</u>	
3. <u>Typha X glauca</u>		<u>10</u>	_____	<u>OBL</u>	
4. <u>Equisetum arvense</u>		<u>5</u>	_____	<u>FAC</u>	
5. _____		_____	_____	_____	
6. _____		_____	_____	_____	
7. _____		_____	_____	_____	
8. _____		_____	_____	_____	
9. _____		_____	_____	_____	
10. _____		_____	_____	_____	
		<u>65</u>	=Total Cover		
Woody Vine Stratum	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____		_____	_____	_____	
2. _____		_____	_____	_____	
		_____	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>25</u>	x 1 = <u>25</u>
FACW species <u>65</u>	x 2 = <u>130</u>
FAC species <u>30</u>	x 3 = <u>90</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>120</u> (A)	<u>245</u> (B)
Prevalence Index = B/A = <u>2.04</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

✓ 2 - Dominance Test is >50%

✓ 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present?

Yes ✓ No

Midwest – Version 2.0

SOIL

Sampling Point: T4A

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 ¹	Loc ²		
0 - 12	10YR 2/2	95	7.5YR 4/6	5	C	M	Silty Clay Loam	
12 - 24	10YR 4/2	90	7.5YR 3/4	10	C	M	Silty Clay	
-								
-								
-								
-								

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Iron-Manganese Masses (F12)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21) Very	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Shallow Dark Surface (F22)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)		
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)			

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

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

Remarks:

Hydric soil indicators A11 and F6 present.

HYDROLOGY

Wetland Hydrology Indicators:			
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 checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 6 Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0-6 (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:
 Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

surface water adjacent, flowing water. Hydrology is met with two primary and three secondary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T4A**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata:
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
	15	=Total Cover		
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
	40	=Total Cover		
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
	65	=Total Cover		
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
		=Total Cover		

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

Two hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: MII25-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-09
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T4B
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Ditch Local relief (concave, convex, none): Concave
Slope (%): 0-1 Lat: 42.8977345 Long: -87.9767295 Datum: WGS 84
Soil Map Unit Name: Clayey land NWI classification: PEM1C, WWI-shrub/emergent

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☒ No ☐

**Is the Sampled Area
within a Wetland?** Yes ☒ No ☐

Remarks:

Sample plot is in an excavated storm ditch. The drainage ditch network was constructed in 1975.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15 ft r</u>)			
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Herb Stratum	(Plot size: <u>5 ft r</u>)			
1.	<u>Typha X glauca</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
		<u>30</u> =Total Cover		
Woody Vine Stratum	(Plot size: <u>30 ft r</u>)			
1.				
2.				
		=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That
Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species
Across All Strata: 1 (B)

Percent of Dominant Species That
Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>30</u>	x 1 = <u>30</u>
FACW species <u>0</u>	x 2 = <u>0</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>30</u> (A)	<u>30</u> (B)

Prevalence Index = B/A = 1.00

Hydrophytic Vegetation Indicators:

- ☒ 1 - Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☒ 3 - Prevalence Index is ≤3.0¹
- ☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

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

Three hydrophytic vegetation indicators present.

SOIL

Sampling Point: T4B

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 ¹	Loc ²		
0 - 12	10YR 2/2	95	7.5YR 4/6	5	RM	M	Silty Clay Loam	
12 - 24	10YR 4/2	95	7.5YR 4/6	5	RM	M	Silty Clay Loam	
-								
-								
-								
-								

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

Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Iron-Manganese Masses (F12)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Red Parent Material (F21) Very	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Shallow Dark Surface (F22)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Dark Surface (S7)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)		
<input type="checkbox"/> 2 cm Muck (A10)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Iron Monosulfide (A18)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)			

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

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

Remarks:

Hydric soil indicators A11 and F6 present.

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Drift Deposits (B3)	<input checked="" type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input checked="" type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Gauge or Well Data (D9)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Other (Explain in Remarks)		

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 1 Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0 Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): 0 (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:
 Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

Hydrology is met with four primary and three secondary indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T4B**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
			30 =Total Cover	
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
			=Total Cover	

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

Three hydrophytic vegetation indicators present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: MI125-040-01 Franklin High School City/County: Franklin/Milwaukee Sampling Date: 2025-05-09
Applicant/Owner: Point of Beginning State: Wisconsin Sampling Point: T5A
Investigator(s): Chad M Fradette, Sara Marcinkus Section, Township, Range: Section 14, T05N, R21E
Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex
Slope (%): 1-4 Lat: 42.8984916 Long: -87.9767772 Datum: WGS 84
Soil Map Unit Name: Clayey land 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"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Wetland Hydrology 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"/>
---------------------------------------	------------------------------	--

Remarks:

Sample plot is on a grassy hill slope between two excavated ditches. The area was graded in 1975.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15 ft r</u>)			
1.				
2.				
3.				
4.				
5.				
		=Total Cover		
Herb Stratum	(Plot size: <u>5 ft r</u>)			
1.	<u>Poa pratensis</u>	<u>40</u>	<input checked="" type="checkbox"/>	<u>FAC</u>
2.	<u>Glechoma hederacea</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>FACU</u>
3.	<u>Solidago canadensis</u>	<u>10</u>		<u>FACU</u>
4.				
5.				
6.				
7.				
8.				
9.				
10.				
		<u>65</u>	=Total Cover	
Woody Vine Stratum	(Plot size: <u>30 ft r</u>)			
1.				
2.				
		=Total Cover		

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>40</u>	x 3 = <u>120</u>
FACU species <u>25</u>	x 4 = <u>100</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>65</u> (A)	<u>220</u> (B)
Prevalence Index = B/A = <u>3.38</u>	

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is ≤3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

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

No hydrophytic vegetation indicators present.

SOIL

Sampling Point: T5A

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 ¹	Loc ²		
0 - 13	10YR 3/2	100					Silty Clay Loam	
13 - 24	10YR 4/4	100					Silty Clay	
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

- ☐ Histosol (A1) ☐ Sandy Gleyed Matrix (S4)
☐ Histic Epipedon (A2) ☐ Sandy Redox (S5)
☐ Black Histic (A3) ☐ Stripped Matrix (S6)
☐ Hydrogen Sulfide (A4) ☐ Dark Surface (S7)
☐ Stratified Layers (A5) ☐ Loamy Mucky Mineral (F1)
☐ 2 cm Muck (A10) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Iron Monosulfide (A18) ☐ Depleted Dark Surface (F7)
☐ Sandy Mucky Mineral (S1) ☐ Redox Depressions (F8)
☐ 5 cm Mucky Peat or Peat (S3)

Indicators for Problematic Hydric Soils³:

- ☐ Iron-Manganese Masses (F12)
☐ Red Parent Material (F21) Very
☐ Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1) ☐ Water-Stained Leaves (B9)
☐ High Water Table (A2) ☐ Aquatic Fauna (B13)
☐ Saturation (A3) ☐ True Aquatic Plants (B14)
☐ Water Marks (B1) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) ☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Drift Deposits (B3) ☐ Presence of Reduced Iron (C4)
☐ Algal Mat or Crust (B4) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Iron Deposits (B5) ☐ Thin Muck Surface (C7)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Gauge or Well Data (D9)
☐ Sparsely Vegetated Concave Surface (B8) ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Stunted or Stressed Plants (D1)
☐ Geomorphic Position (D2)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
 Water Table Present? Yes _____ No ☒ Depth (inches): _____
 Saturation Present? Yes _____ No ☒ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

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

Antecedent precipitation has been normal during the wet season. The drought index has indicated a mild drought.

Remarks:

No hydrology indicators present.

VEGETATION Continued – Use scientific names of plants.

 Sampling Point: **T5A**

<u>Tree Stratum</u>	Absolute % Cover	Dominant Species?	Indicator Status	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine – All woody vines greater than 3.28 ft in height.
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
<u>Sapling/Shrub Stratum</u>				
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
			=Total Cover	
<u>Herb Stratum</u>				
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
13. _____	_____	_____	_____	
14. _____	_____	_____	_____	
15. _____	_____	_____	_____	
16. _____	_____	_____	_____	
17. _____	_____	_____	_____	
18. _____	_____	_____	_____	
19. _____	_____	_____	_____	
20. _____	_____	_____	_____	
21. _____	_____	_____	_____	
22. _____	_____	_____	_____	
			65 =Total Cover	
<u>Woody Vine Stratum</u>				
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
			=Total Cover	

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

No hydrophytic vegetation indicators present.

APPENDIX E

Proposed Wetland Grading Plan



LEGEND:

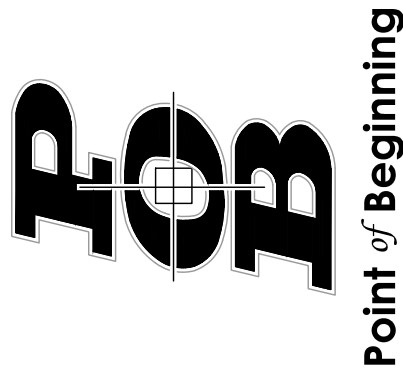
- PROPOSED WOODLAND MITIGATION AREA
- PROPOSED WETLAND SEDGE MEADOW SEED MIX
- PROPOSED WETLAND EMERGENT SEED MIX

REVISIONS	
06-02-2025	WETLAND REVISIONS
06-30-2025	RESUBMITTAL
CHECKED: JB	
DRAWN: JB	
DATE 5/5/2025	
PROJECT NO. 25.0022	

MITIGATION PLAN 3

FRANKLIN HIGH SCHOOL
BUILDING + SITE IMPROVEMENTS
CITY OF FRANKLIN

Civil Engineering
Land Surveying
Landscape Architecture
4941 Kirschling Court
Stevens Point, WI 54481
715.344.9999 (PH) 715.344.9922 (FX)



Point of Beginning

APPENDIX F

Proposed Seed Mixes

Sedge Meadow

Sedge meadows naturally protect water quality by trapping sediment and nutrients during seasonal flooding. These important plant communities also provide wildlife habitat for many small mammals and waterfowl. Best if planted in saturated soils with full sun.

#SDMD	Wet to Wet Mesic	Full Sun to Part Sun	6.00 PLS LBS/Acre	90.00 Seeds/ Sq. Ft
-------	------------------	----------------------	-------------------	---------------------

Wildflowers		Oz/Acre
Acorus calamus	Sweet Flag	0.50
Alisma subcordatum	Mud Plantain	1.25
Anemone canadensis	Meadow Anemone	0.75
Angelica atropurpurea	Great Angelica	1.50
Asclepias incarnata	Marsh (Red) Milkweed	2.50
Aster novae-angliae	New England Aster	0.25
Aster puniceus	Swamp Aster	0.50
Baptisia leucantha (alba)	White Wild Indigo	1.00
Bidens frondosa	Common Beggar's Tick	1.25
Cassia hebecarpa	Wild Senna	4.00
Eupatorium maculatum	Spotted Joe Pye Weed	0.50
Eupatorium perfoliatum	Boneset	0.25
Helenium autumnale	Sneezeweed	0.50
Helianthus giganteus	Tall Sunflower	0.25
Helianthus grosseserratus	Sawtooth Sunflower	0.50
Hypericum pyramidatum	Great St. John's Wort	0.25
Iris virginica shrevei	Southern Blue Flag Iris	4.00
Liatris spicata	Marsh Blazing Star	1.00
Lobelia cardinalis	Cardinal Flower	0.50
Lobelia siphilitica	Great Blue Lobelia	0.25
Lycopus americanus	Water Horehound	0.25
Napaea dioica	Glade Mallow	4.00
Penthorum sedoides	Ditch Stonecrop	0.05
Physostegia virginiana	Obedient Plant	0.50
Pycnanthemum virginianum	Mountain Mint	0.25
Rudbeckia hirta	Black-Eyed Susan	1.00
Rudbeckia laciniata	Wild Golden Glow	1.50
Rudbeckia subtomentosa	Sweet Black-Eyed Susan	0.75
Sagittaria latifolia	Common Arrowhead	1.25
Silphium perfoliatum	Cup Plant	3.00
Silphium terebinthinaceum	Prairie Dock	4.00
Solidago graminifolia	Grass-Leaved Goldenrod	0.10
Solidago ohioensis	Ohio Goldenrod	0.25
Solidago riddellii	Riddell's Goldenrod	1.00
Sparganium eurycarpum	Great Bur Reed	6.00
Thalictrum dasycarpum	Purple Meadow Rue	1.00

Verbena hastata	Blue Vervain	0.25
Vernonia fasciculata	Ironweed	0.50
Grasses, Sedges, & Rushes		Oz/Acre
Andropogon gerardii	Big Bluestem	8.00
Bromus ciliatus	Fringed Brome	16.00
Calamagrostis canadensis	Blue Joint Grass	0.75
Carex bebbii	Bebb's Oval Sedge	0.50
Carex bicknellii	Copper-Shouldered Oval Sedge	1.00
Carex comosa	Bristly Sedge	1.00
Carex crinita	Fringed Sedge	0.50
Carex hystericina	Porcupine Sedge	0.25
Carex lacustris	Common Lake Sedge	0.50
Carex sprengelii	Long-Beaked Sedge	0.25
Carex stipata	Common Fox Sedge	0.50
Carex stricta	Tussock Sedge	0.25
Carex vulpinoidea	Brown Fox Sedge	0.25
Glyceria canadensis	Rattlesnake Grass	1.00
Glyceria grandis	Reed Manna Grass	1.50
Glyceria striata	Fowl Manna Grass	1.00
Juncus dudleyi	Dudley's Rush	0.10
Juncus tenuis	Path Rush	0.10
Juncus torreyi	Torrey's Rush	0.10
Leersia oryzoides	Rice Cut Grass	4.00
Panicum virgatum	Switchgrass	4.00
Scirpus acutus	Hard-Stem Bulrush	2.00
Scirpus atrovirens	Dark-Green Bulrush	0.20
Scirpus cyperinus	Wool Grass	0.10
Scirpus validus	Great Bulrush	1.00
Spartina pectinata	Prairie Cordgrass	4.00

*Note: Seed mix compositions are subject to change depending on seasonal availability.

Wetland Emergent

A nice selection of grasses, sedges, rushes, and wildflowers. Many of these species such as Blue Flag Iris and Arrowhead grow near water level and are rooted in shallow water. Wetland Emergent plants grow best where the water is 3 inches above or below the surface of the soil. These areas are found on shorelines of ponds, marshes, and lakes. Once established emergent plants can withstand several feet of standing water.

#WTLE	Wet to Wet Mesic	Full Sun to Part Sun	4.00 PLS LBS/Acre	113.00 Seeds/ Sq. Ft
-------	------------------	----------------------	-------------------	----------------------

Wildflowers		Oz/Acre
Acorus calamus	Sweet Flag	5.00
Alisma subcordatum	Mud Plantain	2.00
Iris virginica shrevei	Southern Blue Flag Iris	3.50
Mimulus ringens	Monkey Flower	0.20
Sagittaria latifolia	Common Arrowhead	2.00
Sparganium eurycarpum	Great Bur Reed	6.00
Grasses, Sedges, & Rushes		Oz/Acre
Calamagrostis canadensis	Blue Joint Grass	1.25
Carex comosa	Bristly Sedge	5.00
Carex crinita	Fringed Sedge	2.00
Carex hystericina	Porcupine Sedge	5.00
Glyceria grandis	Reed Manna Grass	3.00
Glyceria striata	Fowl Manna Grass	2.00
Juncus effusus	Common Rush	0.30
Leersia oryzoides	Rice Cut Grass	4.00
Scirpus acutus	Hard-Stem Bulrush	1.00
Scirpus atrovirens	Dark-Green Bulrush	2.00
Scirpus cyperinus	Wool Grass	0.75
Scirpus fluviatilis	River Bulrush	2.50
Scirpus pendulus	Red Bulrush	1.00
Scirpus validus	Great Bulrush	2.50
Spartina pectinata	Prairie Cordgrass	13.00

*Note: Seed mix compositions are subject to change depending on seasonal availability.



CITY OF FRANKLIN
REPORT TO THE PLAN COMMISSION
Meeting of July 17, 2025
SITE PLAN AMENDMENT

Item E.1.

RECOMMENDATION: City Development staff recommends approval of this Site Plan Amendment to allow for two container structures, subject to the conditions set forth in the attached resolution.

Project name:	Franklin Field Concessions Stands
Property Owner:	BPC County Land LLC
Applicant:	Christ Conley. ROC Ventures LLC
Property Address/TKN:	7035 S. Ballpark Drive / 744 1003 000
Aldermanic District:	District 6
Zoning District:	PDD No. 37 (The Rock Sports Complex)
Staff Planner:	Régulo Martínez, Planning Manager
Submittal date:	06-26-2025
Application number:	PPZ25-0110

Site Plan Amendment request to allow for two container structures as concessions stands at Franklin Field Stadium. The stadium is a permitted use in the Rock Sports Complex Area of Planned Development District No. 37, therefore a conditional use amendment with public hearing is not required for this project.

The proposed container structures are 20 by 8 feet, and the proposed use is for food and beverage sales. Planning staff reviewed the proposed structures for compliance with minimum building setbacks and maximum building height; the two proposed structures are compliance with these requirements. These structures will not impact the site landscape surface ratio as the proposed locations are already paved.

According to the applicant, the lighting associated with these concession stands will not illuminate any more than lights that have been previously installed within the stadium.

It's worth noting that the applicant has not submitted a noise monitoring report as of writing of this report, which was required to be submitted by July 1, 2025. This is a condition of approval of the 2025 Temporary Use permit for the stadium (Res. 2025-007).

STAFF RECOMMENDATION

City Development staff recommends approval of this Site Plan Amendment to allow for two container structures, subject to the conditions set forth in the attached resolution.

RESOLUTION NO. 2025-____

A RESOLUTION AMENDING THE SITE PLAN FOR THE FRANKLIN FIELD STADIUM
LOCATED AT 7035 SOUTH BALLPARK DRIVE TO ALLOW FOR THE CONSTRUCTION
OF TWO CONTAINER STRUCTURES FOR CONCESSION STANDS USE
(TAX KEY NO. 744-1003-000)
(ROC VENTURES, LLC., APPLICANT,
BPC COUNTY LAND, LLC, PROPERTY OWNER)

WHEREAS, ROC Ventures, LLC, applicant, BPC County Land, LLC, property owner, having applied for an amendment to the site plan for the Franklin Field Stadium located at 7035 South Ballpark Drive, such Site Plan having been previously approved on June 7, 2018, by Resolution No. 2018-014, and amended thereafter by Resolutions 2018-016, 2019-005 and 2020-012; and

WHEREAS, such proposed amendment is to allow for two container structures as concessions stands, and the Plan Commission having reviewed such proposal and having found same to be in compliance with and in furtherance of those express standards and purposes of a Site Plan review pursuant to Section 15-3.0442A of Ordinance 2019-2368.

NOW, THEREFORE, BE IT RESOLVED, by the Plan Commission of the City of Franklin, Wisconsin, that the Site Plan for ROC Ventures, LLC to install two container structures for concession stands use at Franklin Field Stadium, located in the Rock Sports Complex Area, as submitted by ROC Ventures, LLC, as described above, be and the same is hereby approved, subject to the following conditions:

1. ROC Ventures, LLC, applicant, BPC County Land, LLC, property owner, successors and assigns and any developer of the Franklin Field concession stands project shall pay to the City of Franklin the amount of all development compliance, inspection and review fees incurred by the City of Franklin, including fees of consults to the City of Franklin, within 30 days of invoice for same. Any violation of this provision shall be a violation of the Unified Development Ordinance, and subject to §15-9-14 thereof and §1-19. of the Municipal Code, the general penalties and remedies provisions, as amended from time to time.
2. The approval granted hereunder is conditional upon ROC Ventures, LLC, applicant, BPC County Land, LLC, property owner, and the ROC Ventures, LLC Franklin Field concession stands project for the property located at approximately 7035 South Ballpark Drive: (i) being in compliance with all applicable governmental laws, statutes, rules, codes, orders and ordinances; and (ii) obtaining all other governmental approvals, permits, licenses and the like, required for and applicable to the project to be developed and as presented for this approval.

ROC VENTURES, LLC – FRANKLIN FIELD CONCESSION STANDS

RESOLUTION NO. 2025-_____

Page 2

3. The ROC Ventures, LLC, Franklin Field concession stands project shall be developed in substantial compliance with the plans date-stamped June 26, 2025.
4. Signs shall be subject to separate permits in conformance with Article 6 of the Unified Development Ordinance and Ordinance No. 2019-2368 and issuance of a sign permit.
5. The applicant must comply with conditions of approval recommended by the Franklin Fire Department: (i) Follow all relevant WI DSPS and IBC code requirements for fire protection systems for given occupancy, use, and construction types, (ii) No deep frying allowed in the proposed concession stands without approved ventilation hood and fire suppression systems, (iii) Fire Extinguisher placement as per NFPA 10.
6. Structure must conform with WI DSPS and IBC code requirements for given occupancy, use, and construction types.

BE IT FURTHER RESOLVED, by the Plan Commission of the City of Franklin, Wisconsin, that the ROC Ventures, LLC, Franklin Field concession stands project as depicted upon the plans date-stamped June 26, 2025, attached hereto and incorporated herein, shall be developed and constructed within one year from the date of adoption of this Resolution, or this Resolution and all rights and approvals granted hereunder shall be null and void, without any further action by the City of Franklin; and the Site Plan for the property located at approximately 7035 South Ballpark Drive, as previously approved, is amended accordingly.

Introduced at a regular meeting of the Plan Commission of the City of Franklin this _____ day of _____, 2025.

Passed and adopted at a regular meeting of the Plan Commission of the City of Franklin this _____ day of _____, 2025.

APPROVED:

John R. Nelson, Chairman

ATTEST:

Shirley J. Roberts, City Clerk

AYES _____ NOES _____ ABSENT _____

BALLPARK COMMONS
FRANKLIN FIELD AMENDED USAGE SUBMITTAL

Summary

The following submittal contains plans for two structures to be utilized as concessions stands at Franklin Field.

Proposed Use/Structure
1a: Food and Beverage Structure
1b: Food and Beverage Structure

Narrative

1a and 1b will be utilized as food and beverage locations. Structures can be found on the site plan attached.

Concessions

1a.

1a is a 20x8x8 container that will be utilized for food and beverage sale. It is located 84 ft from another structure that is our Merchandise Store and 110 ft from our “Zuern Deck” structure in the Hop yard. The lighting plan to be installed will not illuminate any more than lights that have previously been installed on buildings within the stadium.

1b.

1b is a 20x8x8 container that will be utilized for food and beverage sale. It is located 26 ft from another structure that is a restroom. The lighting plan to be installed will not illuminate any more than lights that have previously been installed on buildings within the stadium.







CITY OF FRANKLIN



REPORT TO THE PLAN COMMISSION

Meeting of July 17, 2025

Sign Review

RECOMMENDATION: City Development staff recommends approval of this Sign Review application, subject to the conditions set forth in the attached resolution.

Project Name:	Carma Laboratories Sign Variance
Property Owner:	Carma Laboratories, Inc.
Applicant:	Alex Scheler, Carma Laboratories
Property Address/Tax Key Number:	9410 S. 76th St / TKN 884 9997 000
Aldermanic District:	District 1
Agent:	Rich Simonson, Carma Laboratories
Zoning District:	M-1 Limited Industrial District
Use of Surrounding Properties:	B-3 Community Business District (South and West) A-1 Agricultural District (East) R-3 Suburban/Estate Single Family Residence District (West) P-1 Park District (North)
Staff Planner:	Marion Ecks, AICP

On March 28, the applicant submitted a request for a waiver of sign requirements under Municipal Code Section 210-4C(5)(b) to allow for more than one monument sign. The applicant proposes to have two monument signs on the 76th St. frontage of their development.

PROJECT ANALYSIS:

The proposed monument signs comply generally with the requirements of Municipal Code Chapter 210 Signs and Billboards.

Municipal Code Section 210-4C(5)(b) states as follows:

***Number.** No more than one monument sign shall be erected on each public street frontage of a property, except with the approval of the Plan Commission, considering the effect upon the aesthetics of and visual harmony with the vicinity and considering any other such factor the Plan Commission shall deem appropriate.*

STAFF RECOMMENDATION

City Development staff recommends approval of this Sign Review application, subject to the conditions set forth in the attached resolution.

STATE OF WISCONSIN

CITY OF FRANKLIN
PLAN COMMISSION

MILWAUKEE COUNTY

[Draft 07-07-2025]

RESOLUTION NO. 2025-_____

A RESOLUTION APPROVING A SECOND MONUMENT SIGN FOR
THE 76TH STREET FRONTAGE OF CARMA LABS
(9410 S. 76TH ST) (ALEX SCHELER, CARMA LABORATORIES, APPLICANT)

WHEREAS, Carma Laboratories, having applied for waiver of sign requirements under Municipal Code Section 210-4C(5)(b) to allow for more than one monument sign; and

WHEREAS, the Plan Commission having reviewed the proposed sign plans and having found same to be in compliance with and in furtherance of the standards of Municipal Code Chapter 210 Signs and Billboards.

NOW, THEREFORE, BE IT RESOLVED, by the Plan Commission of the City of Franklin, Wisconsin, that the monument sign plans City file-stamped July 3, 2025, attached hereto and incorporated herein, be and the same are hereby approved, subject to the following conditions:

1. That the signage shall be constructed and installed pursuant to such signage plans within one year from the date of adoption of this Resolution, or this Resolution and all rights and approvals granted hereunder shall be null and void, without any further action by the Plan Commission.
2. The applicant shall obtain sign permits with the Department of City Development prior to installation.

Introduced at a regular meeting of the Common Council of the City of Franklin this _____ day of _____, 2025.

Passed and adopted at a regular meeting of the Common Council of the City of Franklin this _____ day of _____, 2025.

APPROVED:

John R. Nelson, Mayor

ATTEST:

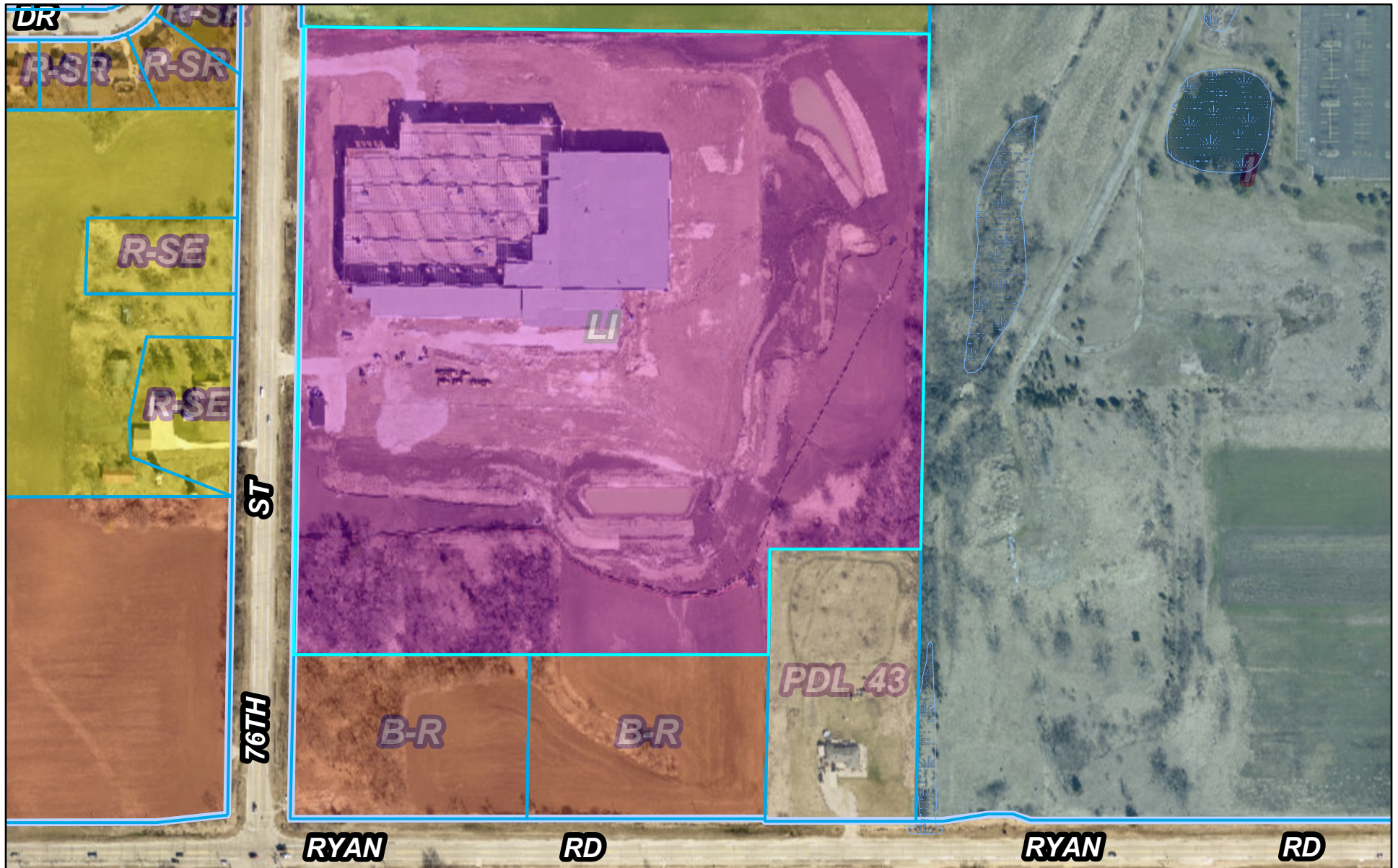
Shirley J. Roberts, City Clerk

CARMA LABS MONUMENT SIGN REVIEW
RESOLUTION NO. 2025-_____

Page 2

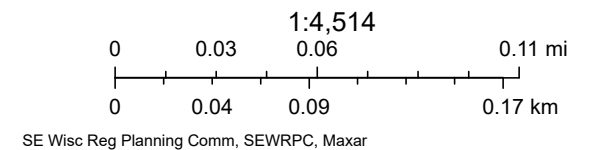
AYES _____ NOES _____ ABSENT _____

City of Franklin Property Viewer



7/9/2025, 9:03:36 AM

 Parcel



Planning Department
9229 West Loomis Road
Franklin, Wisconsin 53132
(414) 425-4024
franklinwi.gov



APPLICATION DATE: _____

STAMP DATE: _____ city use only

BOARD OF ZONING AND BUILDING APPEALS REVIEW APPLICATION

PROJECT INFORMATION [print legibly]

APPLICANT [FULL LEGAL NAMES]		APPLICANT IS REPRESENTED BY [CONTACT PERSON]	
NAME:	Rich Simonson	NAME:	Alex Scheler
COMPANY:	Carma Laboratories, Inc.	COMPANY:	Carma Laboratories, Inc.
MAILING ADDRESS:	9750 S. Franklin Ave.	MAILING ADDRESS:	9750 S. Franklin Ave.
CITY/STATE:	Franklin, WI ZIP: 53132	CITY/STATE:	Franklin, WI ZIP: 53132
PHONE:	414-409-2739	PHONE:	414-409-2757
EMAIL ADDRESS:	rsimonson@carmalabs.com	EMAIL ADDRESS:	ascheler@carmalabs.com

PROJECT PROPERTY INFORMATION

PROPERTY ADDRESS:	9410 S. 76th St.	TAX KEY NUMBER:	8849997000
PROPERTY OWNER:	Carma Laboratories, Inc.	PHONE:	414-409-2757
MAILING ADDRESS:	9750 S. Franklin Ave.	EMAIL ADDRESS:	ascheler@carmalabs.com
CITY/STATE:	Franklin, WI ZIP: 53132	DATE OF COMPLETION:	office use only

APPLICATION TYPE

Please check the application type that you are applying for

☐ Area Exception ☐ Minor Variance ☒ Sign Variance and Appeals ☐ Variance and Appeals

Most requests require Board of Zoning and Building Appeals approval.

Applicant is responsible for providing Board of Zoning and Building Appeals resubmittal materials up to 12 copies pending staff request and comments.

SIGNATURES

The applicant and property owner(s) hereby certify that: (1) all statements and other information submitted as part of this application are true and correct to the best of applicant's and property owner(s)' knowledge; (2) the applicant and property owner(s) has/have read and understand all information in this application; and (3) the applicant and property owner(s) agree that any approvals based on representations made by them in this Application and its submittal, and any subsequently issued building permits or other type of permits, may be revoked without notice if there is a breach of such representation(s) or any condition(s) of approval. By execution of this application, the property owner(s) authorize the City of Franklin and/or its agents to enter upon the subject property(ies) between the hours of 7:00 a.m. and 7:00 p.m. daily for the purpose of inspection while the application is under review. The property owner(s) grant this authorization even if the property has been posted against trespassing pursuant to Wis. Stat. §943.13.

(The applicant's signature must be from a Managing Member if the business is an LLC, or from the President or Vice President if the business is a corporation. A signed applicant's authorization letter may be provided in lieu of the applicant's signature below, and a signed property owner's authorization letter may be provided in lieu of the property owner's signature[s] below. If more than one, all of the owners of the property must sign this Application).

☒ I, the applicant, certify that I have read the following page detailing the requirements for BZBA approval and submittals and understand that incomplete applications and submittals cannot be reviewed.

PROPERTY OWNER SIGNATURE:		APPLICANT SIGNATURE:	
NAME & TITLE:	Rich Simonson, CEO, Carma Laboratories, Inc. DATE: 3/6/25	NAME & TITLE:	DATE:
PROPERTY OWNER SIGNATURE:		APPLICANT REPRESENTATIVE SIGNATURE:	
NAME & TITLE:	DATE:	NAME & TITLE:	Alex Scheler Senior Director of IT DATE: 3/6/25

CITY OF FRANKLIN APPLICATION CHECKLIST

If you have questions about the application materials please contact the planning department.

AREA EXCEPTION APPLICATION MATERIALS

- ☐ This application form accurately completed with signatures or authorization letters (see reverse side for more details).
- ☐ \$500 Application fee payable to the City of Franklin.
- ☐ Word Document legal description of the subject property.
- ☐ Three (3) complete collated sets of application materials to include ...
 - ☐ Three (3) project narratives.
 - ☐ Three (3) the Plat of Survey, Site Plan, Building Elevations, and Outdoor Lighting Plans, as appropriate, and any other supporting documents, which illustrate the Area Exception request. *ALL plans must be collated and folded into 9x12-inch sets.*
- ☐ Two (2) photographs of the subject structure from different views, *when applicable.*
- ☐ Completed Standards in the Review of Area Exceptions form (*section 15-10.0209G. of the UDO*).
- ☐ Three (3) Affidavit forms with original and notarized signatures (*facilities and copies will not be accepted*).
- ☐ Email or flash drive with all plans / submittal materials.
 - All Area Exceptions require a public hearing at Plan Commission, Plan Commission recommendation to BZBA, and BZBA review and approval.
 - If a building permit is not issued within twelve (12) months of approval, the Area Exception will be null and void.

MINOR VARIANCE APPLICATION MATERIALS

- ☐ Copy of the permit "Letter of Denial". (Appeals within 30 days after said denial; Variances within 60 days after said denial.)
 - ☐ This application form accurately completed with signatures or authorization letters (see reverse side for more details).
 - ☐ \$420 Application fee payable to the City of Franklin.
 - ☐ Word Document legal description of the subject property.
 - ☐ Three (3) complete collated sets of application materials to include ...
 - ☐ Three (3) copies of the form "Questions to be Answered by the Applicant" *per Section 15-9.0107 Minor Variances of the UDO*
 - ☐ Three (3) full size, drawn to scale copies of the Plat of Survey, Site Plan, and Building Elevations, as appropriate, photographs supporting the application and any other supporting documents, which illustrate the Variance request.
 - ☐ Three (3) Affidavit Forms with original and notarized signatures (*facilities and copies will not be accepted*).
 - ☐ Completed "Finding and Factors in the Review of Minor Variances" *form from Sections 15-10.0206C.2. of the UDO.*
 - ☐ Email or flash drive with all plans / submittal materials.
 - A Building Permit must be issued within six (6) months of approval or the variance will be null and void.
- Variance Type Requested [check one]: ☐ Accessory Structure (150 square feet or less) ☐ Deck ☐ Fence

SIGN VARIANCE AND APPEALS APPLICATION MATERIALS

- ☒ Copy of the sign permit "Letter of Denial". (Appeals within 30 days after said denial; Variances within 60 days after said denial.)
- ☒ This application form accurately completed with signatures or authorization letters (see reverse side for more details).
- ☒ \$250 Application fee payable to the City of Franklin [\$250 per appeal or variance from Sign Code]
- ☒ Word Document legal description of the subject property.
- ☒ Three (3) complete collated sets of application materials to include ...
 - ☒ Three (3) project narratives.
 - ☒ Three (3) Sign elevations, *drawn to scale not less than 1/2" = 1', plans folded to a maximum size of 9x12 inches. The elevations should denote the sign dimensions and area. Identify the colors, materials, finishes and lighting method (if applicable).*
 - ☒ Three (3) Site Plan, *showing the location of the proposed signage relative to (1) any existing or proposed structures; (2) parking stalls and/or driveways; (3) proposed landscaping and outdoor lighting; (4) the setback distance from the street right-of-way at the proposed location; (5) height of sign above the finished grade; and (6) the vision triangle distances described in Section 15-5.0201 of the Unified Development Ordinance.*
- ☒ Three (3) Affidavit Forms with original and notarized signatures (*facilities and copies will not be accepted*).
- ☒ Email or flash drive with all plans / submittal materials.
 - Permits for construction are REQUIRED after approval. Contact the Building Inspector (414-425-0084) for additional information.

VARIANCE AND APPEALS

- ☐ Copy of the permit "Letter of Denial". (Appeals within 30 days after said denial; Variances within 60 days after said denial.)
 - ☐ This application form accurately completed with signatures or authorization letters (see reverse side for more details).
 - ☐ \$420 Application fee payable to the City of Franklin
 - ☐ Word Document legal description of the subject property.
 - ☐ Three (3) complete collated sets of application materials to include ...
 - ☐ Three (3) project narratives.
 - ☐ Three (3) folded full size, copies of the Plat of Survey, Site Plan, Building Elevations, Landscape Plan and Outdoor Lighting Plan, *drawn to scale as appropriate, Photographs and any other supporting documents, which illustrate the Variance request.*
 - ☐ Three (3) Affidavit Forms with original and notarized signatures (*facilities and copies will not be accepted*).
 - ☐ Completed "Findings and Factors in the Review of Variances" *form from Sections 15-10.0206C.1. and 15-10.0211 of the UDO.*
 - ☐ Completed "Findings and Factors in the Review of Land Division Variances" *form from Sections 15-9.0310B.1 of the UDO.*
 - ☐ Email or flash drive with all plans / submittal materials.
- Variance Type Requested [check one]: ☐ Administrative Appeal ☐ Area Variance ☐ Use Variance ☐ Non-conforming Use(s) ☐ Land Division Variance



March 11, 2025

City of Franklin
9229 W Loomis Road
Franklin, WI 53132

City of Franklin Planning:

We are nearing the end of our New Facility construction project and are proud to continue the tradition that "All the World's Carmex is made in Franklin, Wisconsin!" I am submitting to you this Project Narrative along with a request for Sign Variance and the related Application Materials.

OWNER INFORMATION

Since its inception in 1937, Franklin, Wisconsin-based Carma Laboratories, Inc., has manufactured Carmex brand lip balms. Carma Laboratories, Inc. is a family owned and operated business that was founded in 1937 by Alfred Woelbing, the inventor of Carmex lip balm. Today, the company continues to produce its original lip care formula in its iconic jars as well as tubes and sticks and has expanded the line to include a natural formula, flavored moisture rich lip care products and Carmex Cold Sore Treatment. Carma Labs is a global brand, with its products shipped to 65 countries around the world. For more information, visit www.mycarmex.com.

NEW FACILITY

The New Facility for Carma Laboratories includes an approximately 195,000sf manufacturing space with a 32-0ft clear height and total wall height of 37-0. Adjacent to the manufacturing space is a single story, 30,000sf office to support the business. Carma currently owns and leases multiple buildings in Franklin and with this new Facility will be creating a permanent world headquarters at the site and consolidating operations into a single location. This site will accommodate operations and potential expansion for the foreseeable future.

MONUMENT SIGNAGE

Carma is proposing two tastefully designed, high quality Monument Signs of identical size (6'-0"H x 8'-1"W) with one located at each driveway entrance from 76th St. – Deliveries to the north and Corporate to the south. The signs are designed to be the appropriate size for wayfinding while driving on 76th St. The aesthetic and visual harmony of the property is enhanced by having two signs of identical design. The City has reviewed our initial request and has asked that we reduce Deliveries sign to 5'-0" in height. To ensure proper visibility for delivery driver safety, we are requesting a variance to a height of 6'-0" and to the style originally proposed.

We look forward to further discussion.

Sincerely,

A handwritten signature in black ink that reads "Alex Scheler".

Alex Scheler
Senior Director of IT
Carma Laboratories, Inc.

Legal Description of Carma Laboratories Property from Certified Survey Map (CSM)

Carma Laboratories, Inc.
9410 S. 76th St.
Franklin, WI 53132

Part of the West 1/2 of the Southwest 1/4 of Section 22, Township 5 North, Range 21 East, City of Franklin, Milwaukee County, Wisconsin.

Commencing at the Southwest corner of Section 22, Township 5 North, Range 21 East; thence North 88°35'30" East, along the south line of the SW 1/4, of said Section 22, 60.01 feet; thence North 00°26'01" West, parallel with the west line of said SW 1/4, 60.01 feet to the intersection of the north line of S.T.H. 100 (Ryan Rd.) with the east line of S. 76 St.; thence continuing North 00°26'01" West, along said east line of S. 76th St. and parallel with said west line of the SW 1/4, 330.66 feet to the Point of Beginning; thence continuing North 00°26'01" West, along said east line of S. 76th St. and parallel with said west line of the SW 1/4, 1,247.39'; thence North 89°18'43" East, 1,251.68 feet to the east line of the West 1/2, of said SW 1/4; thence South 00°24'42" East, along said east line, 1,022.24 feet; thence South 88°35'30" West, parallel with said south line of the SW 1/4, 300.05 feet; thence South 00°24'42" East, parallel with said east line of the West 1/2, of the SW 1/4, 209.42 feet; thence South 88°35'30" West, parallel with said south line of the SW 1/4, 951.32 feet to the Point of Beginning. Containing 1,488,341 square feet / 34.168 acres of land, more or less.

Planning Department
9229 West Loomis Road
Franklin, Wisconsin 53132
Email: generalplanning@franklinwi.gov



Phone: (414) 425-4024
Fax: (414) 427-7691
Web Site: www.franklinwi.gov

Affidavit

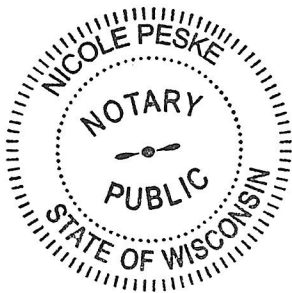
I hereby depose and say that all the statements contained in any and all papers submitted herewith this Application are true.

Signature of Property Owner 1: Rich Simonson Signature of Property Owner 2: _____

Name and Title: Rich Simonson, CEO, Name and Title: _____
Carma Laboratories, Inc

STATE OF WISCONSIN)
) SS
MILWAUKEE COUNTY)

SUBSCRIBED AND SWORN TO BEFORE ME THIS 6 DAY OF March, 2025.



Nicole Peske
NOTARY PUBLIC
MILWAUKEE COUNTY, WISCONSIN
My Commission Expires: 2-1-26

STAFF USE ONLY: DISPOSITION BY BOARD OF ZONING AND BUILDING APPEALS

Application Received (Date): _____ Hearing No. _____

Property Owner(s) Name: _____

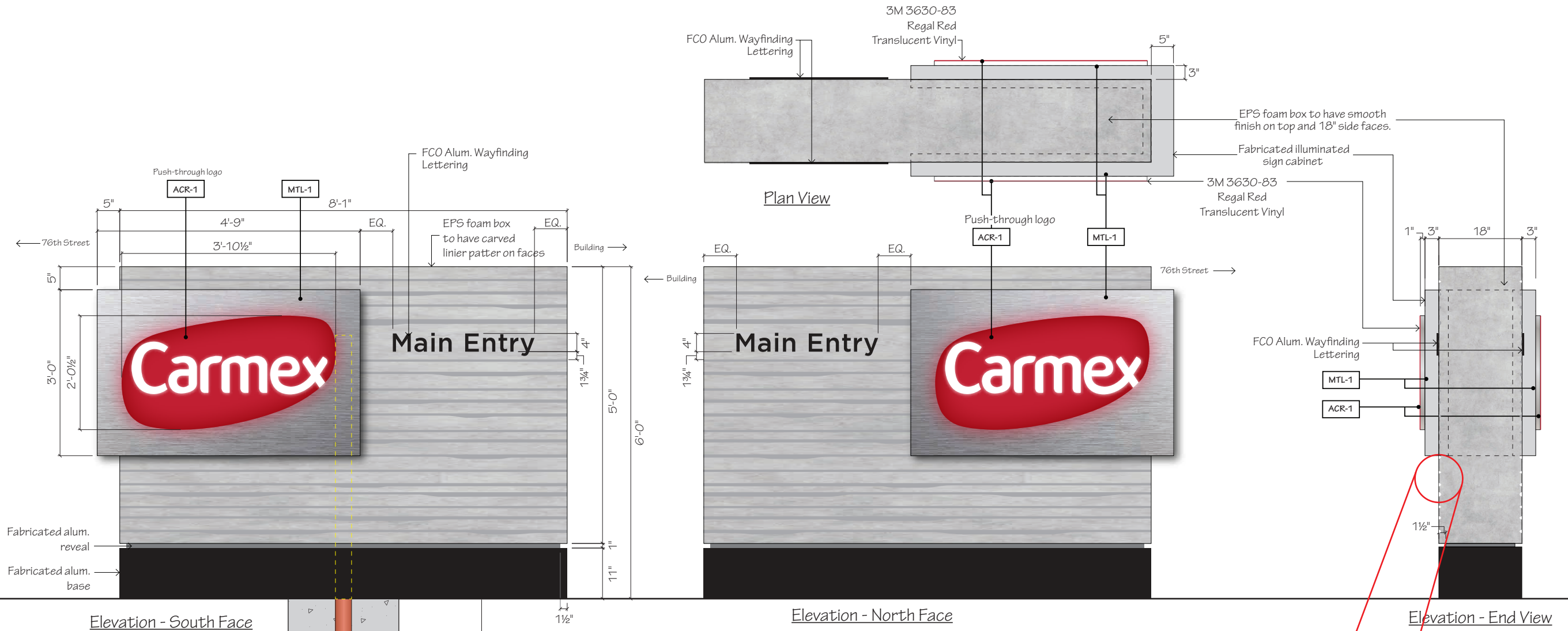
Property Address: _____

BZBA Meeting Date: _____ ☐ Approved ☐ Denied

Signature of Board Members

_____	_____ Yes	_____ No	_____ Abstain	_____ Recues
Print Name:				
_____	_____ Yes	_____ No	_____ Abstain	_____ Recues
Print Name:				
_____	_____ Yes	_____ No	_____ Abstain	_____ Recues
Print Name:				
_____	_____ Yes	_____ No	_____ Abstain	_____ Recues
Print Name:				
_____	_____ Yes	_____ No	_____ Abstain	_____ Recues
Print Name:				

MAIN ENTRY SIGN



(1) 6'-0" x 8'-6" x 1'-6" Double Face Illuminated Monument Sign

- Main Cabinet:** EPS Foam by Peachtree City Foam Craft
- Linear texture to be depressed into the two main faces at a 1/2" depth
 - Customer Provided Vector Texture File Used
 - Ends are smooth
 - Embedded plywood on faces & 1 end for sign cabinet for illum. cabinet mounting - Toggle Bolts
 - Painted to match building - TBD
- Letters:** FCO 1/2" Aluminum Painted Black - Stud Mount
- Sign Cabinet:** 3" deep on faces & 5" deep on end
- Fabricated Aluminum Construction
 - Faces are Brushed Aluminum Laminate - Horizontal Grain (MTL-1)
 - Returns are Painted MP 41342SP Brushed Aluminum - Suede Finish
- Logo Graphics:** Routed & Push-thru 1" White Acrylic (ACR-1)
- 3M 3630-83 Regal Red Translucent Vinyl Applied
 - "Carmex" Reversed Out White
- Reveal:** 1" Fabricated Aluminum Painted to match building - TBD
- Base:** Fabricated Aluminum - TBD Black Paint Match
- Illumination:** White LEDs w/ 24V 60W 120/277V Power Supplies
- Power:** (1) 20Amp @ 120Volts Electrical Circuit Run to Site by Others
- Mounting:** (1) 3" (3 1/2" O.D.) Sch. 40 Steel Pipe set into 2'-0" dia. x 4'-8" deep Concrete Foundation
- Pipe is Sleeved into a 4" Sch. 40 PVC Pipe Embedded into Foam Cabinet
 - Injected Expandable Foam Secures Steel Pipe inside PVC Sleeve - Typ.

NOTE: FIELD SURVEY REQUIRED PRIOR TO FABRICATION

Parvin-Clauss
SIGN COMPANY

Design ■ Fabrication ■ Installation ■ Maintenance

165TubewayDrive ■ CarolStream ■ Illinois 60188
Tel/630-510-2020 ■ Fax/630-510-2074
e-mail/signs@parvinclauss.com
www.parvinclauss.com

PROJECT:

ALL KINDS

Carmex
Hwy. 100 & 76th Street
Franklin, WI 53132

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE

Lisa Staszak / MM

DRAWN BY

Bill Marlow

DATE

11.25.24

SCALE

1/2" = 1'

SHEET NO.

1 of 4

ESTIMATE / JOB NUMBER

14528

FILE NAME

AKS14528

REVISIONS:

1 12.18.24

2

3

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6

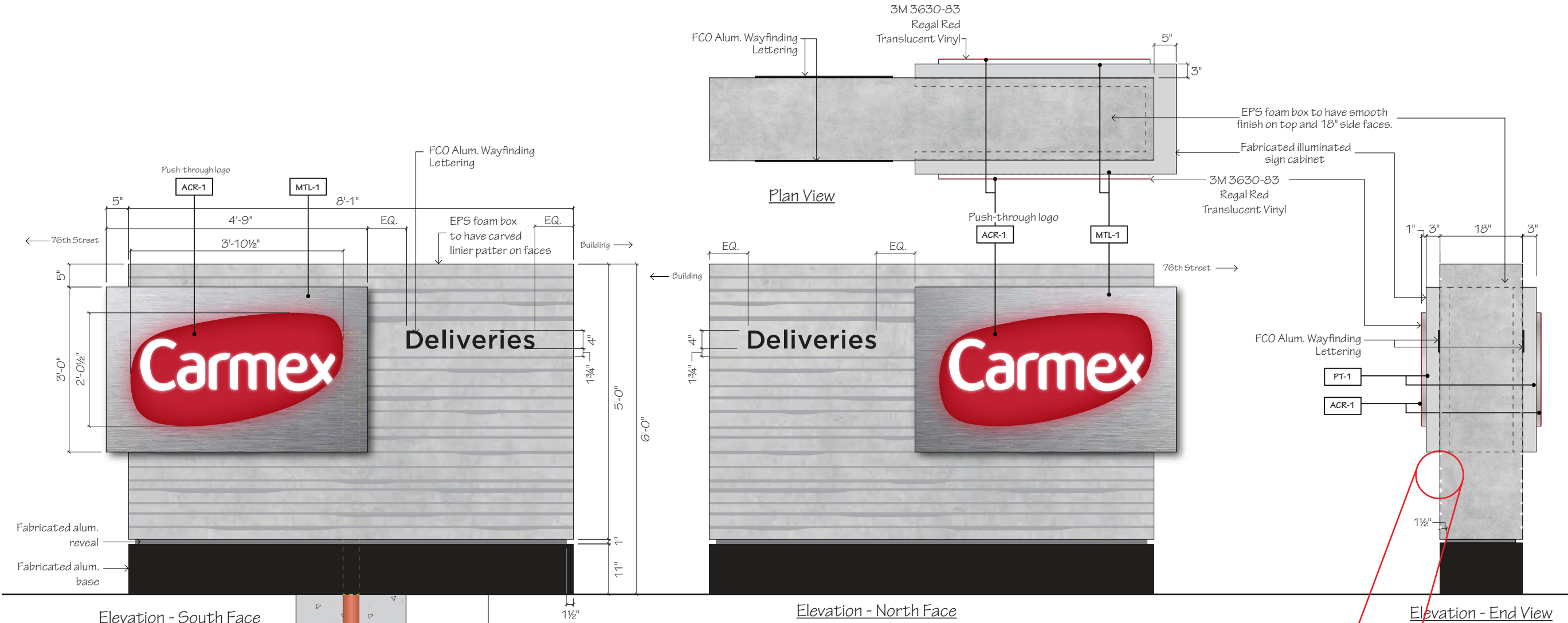
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This sign is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the sign.



DELIVERY ENTRY SIGN - OPTION



- (1) 6'-0" x 8'-6" x 1'-6" Double Face Illuminated Monument Sign
- Main Cabinet:** EPS Foam by Peachtree City Foam Craft
- Linear texture to be depressed into the two main faces at a 1/2" depth
 - Customer Provided Vector Texture File Used
 - Ends are smooth
 - Embedded plywood on faces & 1 end for sign cabinet for illum. cabinet mounting - Toggle Bolts
 - Painted to match building - TBD
- Letters:** FCO 1/2" Aluminum Painted Black - Stud Mount
- Sign Cabinet:** 3" depth exposed on faces & 5" on end (5" deep cabinets inset 2" into main foam cabinet)
- Fabricated Aluminum Construction
 - Faces are Brushed Aluminum Laminate - Horizontal Grain (MTL-1)
 - Returns are Painted MP 413425P Brushed Aluminum (PT-1) - Suede Finish
- Logo Graphics:** Routed & Push-thru 1" White Acrylic (ACR-1)
- 3M 3630-83 Regal Red Translucent Vinyl Applied
 - "Carmex" Reversed Out White
- Reveal:** 1" Fabricated Aluminum Painted to match building - TBD
- Base:** Fabricated Aluminum - TBD Black Paint Match
- Illumination:** White LEDs w/ 24V 60W 120/277V Power Supplies
- Power:** (1) 20Amp @ 120Volts Electrical Circuit Run to Site by Others
- Mounting:** (1) 3" (3½" O.D.) Sch. 40 Steel Pipe set into 2'-0" dia. x 4'-8" deep Concrete Foundation
- Pipe is Sleeved into a 4" Sch. 40 PVC Pipe Embedded into Foam Cabinet
 - Injected Expandable Foam Secures Steel Pipe inside PVC Sleeve - Typ.

NOTE: FIELD SURVEY REQUIRED PRIOR TO FABRICATION

PROJECT:

ALL KINDS

Carmex
Hwy. 100 & 76th Street
Franklin, WI 53132

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE

Lisa Staszak / MM

DRAWN BY

Bill Marlow

DATE

11.25.24

SCALE

1/2" = 1'

SHEET NO.

2 of 4

ESTIMATE / JOB NUMBER

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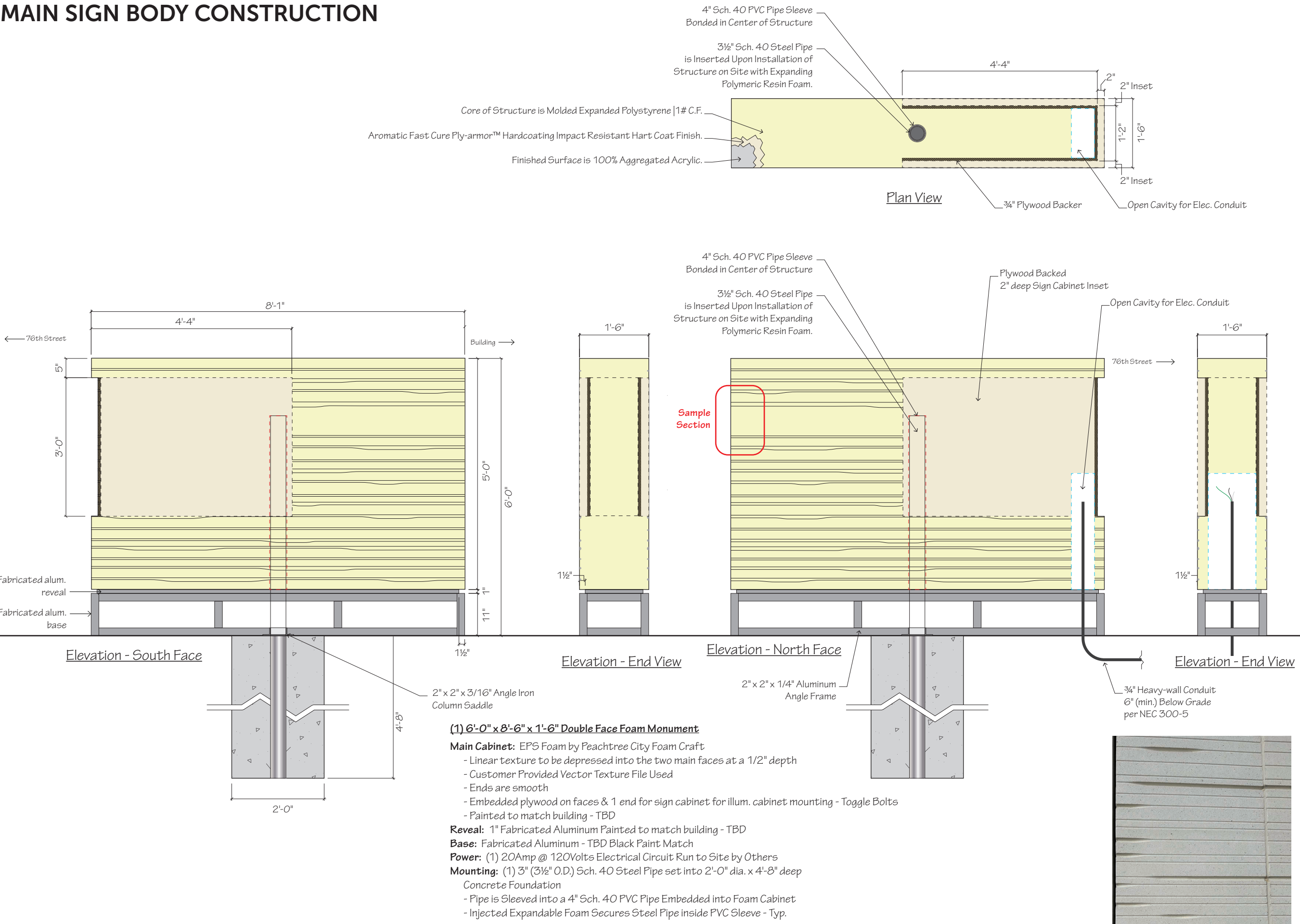
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Match Building Color for EPS Foam
Sign Body ONLY.
Customer provided art file for the texture



MAIN SIGN BODY CONSTRUCTION



PROJECT:

ALL KINDS

Carmex
Hwy. 100 & 76th Street
Franklin, WI 53132

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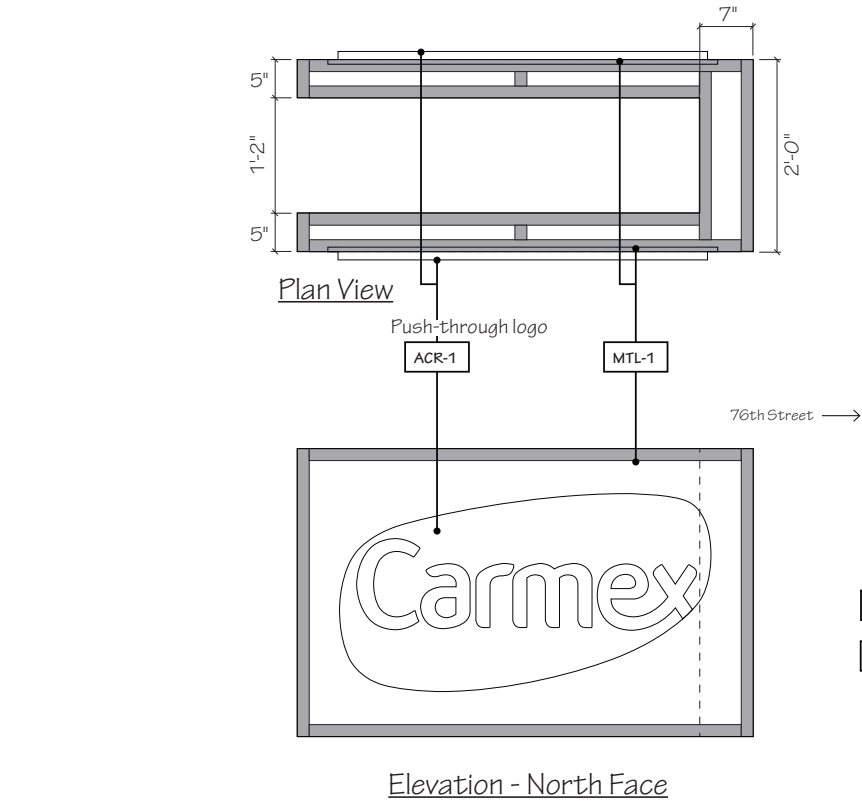
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SIGN CABINET CONSTRUCTION



Cabinet Details

Width	57.0 in	Module Count	25
Height	36.0 in	Module Color	7100K
Depth	5.00 in	Module Watts	15.50 watts
Orientation	Vertical	Module Voltage	24v
Sides	Single Sided	Watts Per Module	0.62 watts
Area	14.2 sq ft	Ordering Length	16.667 feet
Perimeter	15.5 feet	Total Amps	1.100
Row Spacing	11.4 in	Additional Run	0
Power Supply Mode	Simple Optimal	Module Pitch	8.0 in

Illumination Face Lit	Area 14.2 sq ft	Total Circuit Amps (120 VAC) 1.100	Modules 25 ea GEMX2471-W1S
Power Supply Location Self-contained	Depth 5.00 in	Total Module Watts 15.50 watts	Power Supply 1 ea GEPS24-100U-GLX2
	Wire Connectors 22 ea	Max Load Per PS 139.00	Supply Wire 30.000 ft

Modules Used

Module Name	Model Number	Part Count
Tetra MAX 24V Small 71K	GEMX2471-W1S	25

Power Supplies

PS #	Power Supplies	Model Number	Max Watts	Load	Module Count	Module Watts
1	GEPS24-100U-GLX2	GEPS24-100U-GLX2	96	16.67%	25	16

(1) 3'-0" x 4'-9" x 2'-0" Double Face Illuminated Sign Cabinet

Sign Cabinet: Fabricated Aluminum Construction

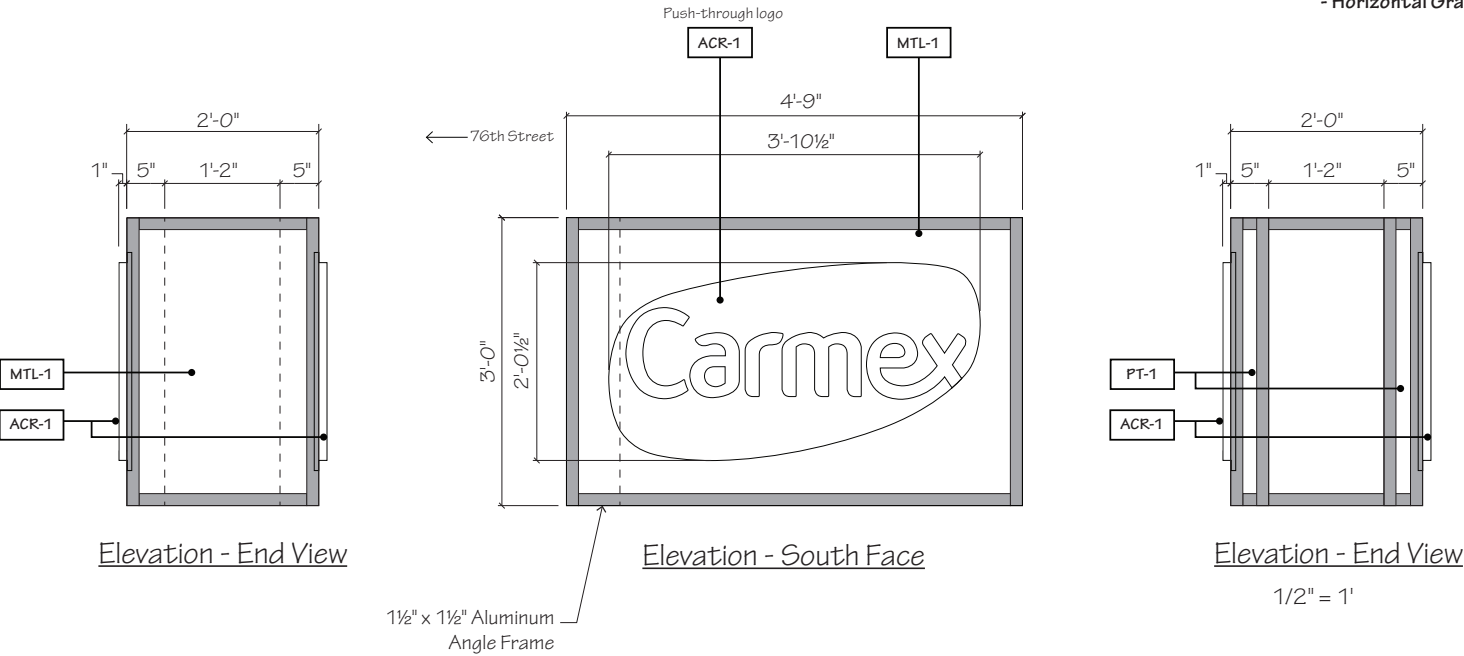
- Faces are .125" thk. Aluminum w/ Brushed Aluminum Laminate - Horizontal Grain (MTL-1)
- Returns are Painted MP 41342SP Brushed Aluminum (PT-1) - Suede Finish

Logo Graphics: Routed & Push-thru 1" White Acrylic (ACR-1)

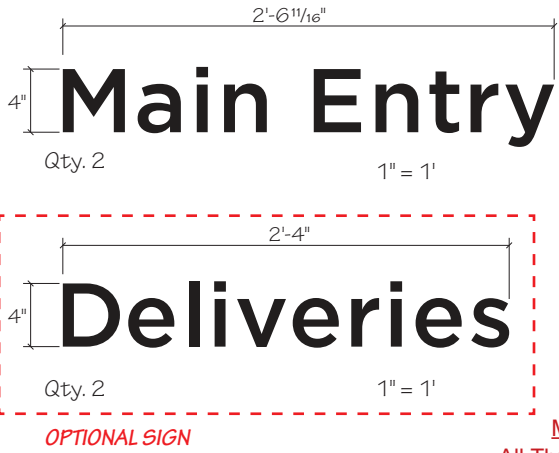
- 3M 3630-83 Regal Red Translucent Vinyl Applied
- "Carmex" Reversed Out White

Illumination: White LEDs w/ 24V 60W 120/277V Power Supplies

Power: (1) 20Amp @ 120Volts Electrical Circuit Run to Site by Others

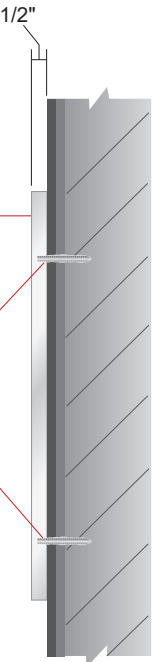


(MTL-1) Brushed Aluminum Laminate
- Horizontal Grain



Mounting Anchor (Hardware):
All Thread Rod: #10-24 x 2" length

Letters: FCO 1/2" Aluminum Painted Black
Mounting: Stud Mount w/ Adhesive Silicone



Parvin-Clauss
SIGN COMPANY

Design ■ Fabrication ■ Installation ■ Maintenance

165TubewayDrive ■ CarolStream ■ Illinois60188
Tel/630-510-2020 ■ Fax/630-510-2074
e-mail/signs@parvinclauss.com
www.parvinclauss.com

PROJECT:

ALL KINDS

Carmex
Hwy. 100 & 76th Street
Franklin, WI 53132

CUSTOMER APPROVAL:

DATE

AUTHORIZED SIGNATURE

REPRESENTATIVE

Lisa Staszak / MM

DRAWN BY

Bill Marlow

DATE

11.25.24

SCALE

as noted

SHEET NO.

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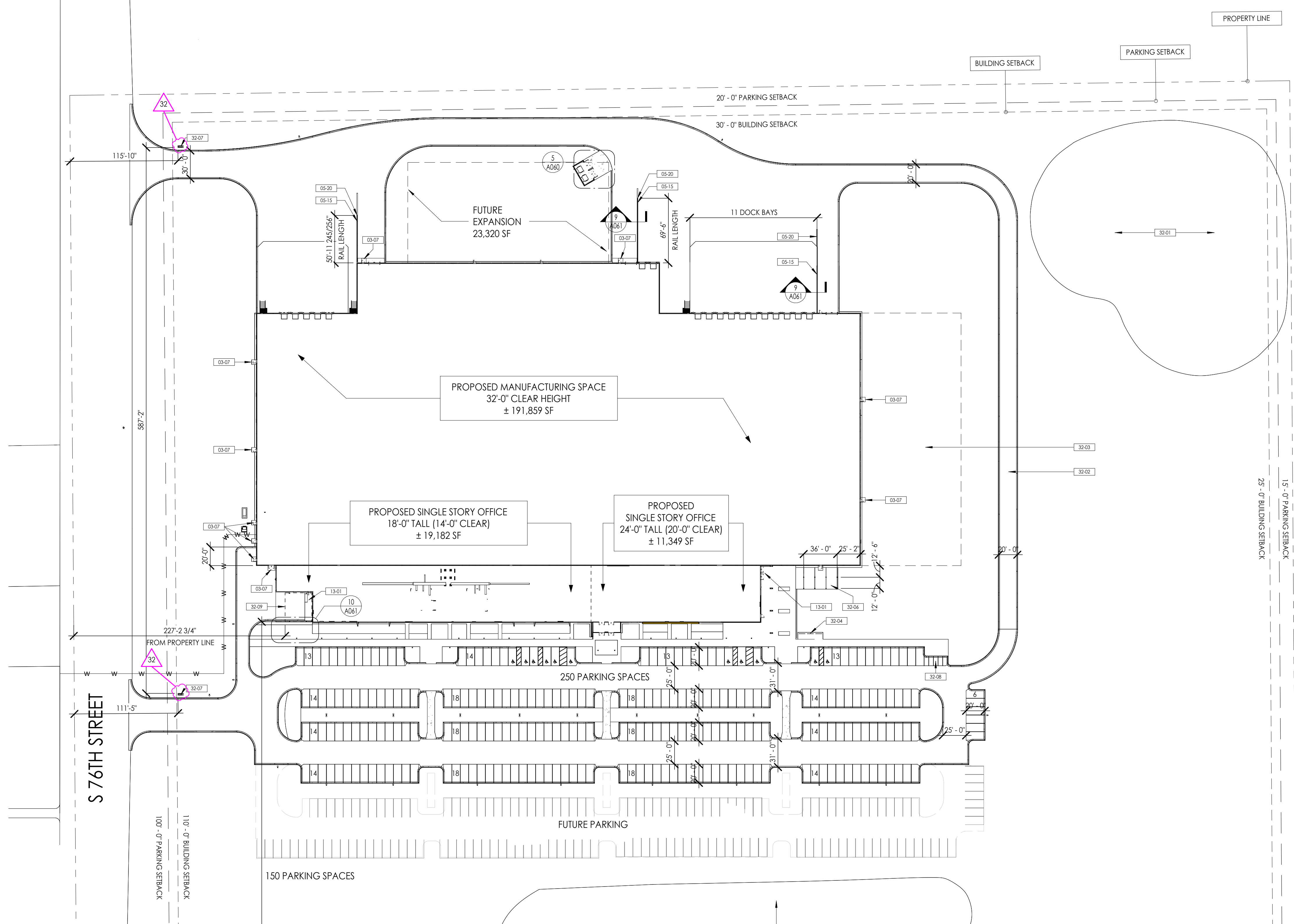
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BUILDING SETBACK

PARKING SETBACK

PROPERTY LINE

PROPOSED MANUFACTURING SPACE
32'-0" CLEAR HEIGHT
± 191,859 SF

PROPOSED SINGLE STORY OFFICE
18'-0" TALL (14'-0" CLEAR)
± 19,182 SF

PROPOSED SINGLE STORY OFFICE
24'-0" TALL (20'-0" CLEAR)
± 11,349 SF

FUTURE
EXPANSION
23,320 SF

250 PARKING SPACES

FUTURE PARKING

150 PARKING SPACES

S 76TH STREET

227'-2 3/4"
FROM PROPERTY LINE

115'-10"

587'-2"

111'-5"

100'-0" PARKING SETBACK

110'-0" BUILDING SETBACK

20'-0" PARKING SETBACK

30'-0" BUILDING SETBACK

25'-0" BUILDING SETBACK

15'-0" PARKING SETBACK