



# PLAN COMMISSION MEETING AGENDA

May 18, 2026 at 6:00 PM

Kronenwetter Municipal Center - 1582 Kronenwetter Drive Board Room (Lower Level)

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**1. CALL MEETING TO ORDER**

- A. Pledge of Allegiance
- B. Roll Call

**2. ANNOUNCEMENT OF PUBLIC HEARING**

**C. CONDITIONAL USE PERMIT (Joseph Fleming)**

Joseph Fleming, 1755 Pine Road, Kronenwetter, WI 54455, requests a Conditional Use Permit for a Residential Business (Kitchen and food truck operation) at 1755 Pine Road, Kronenwetter, WI 54455. Tax Parcel ID Number: 145-2707-013-0054. Legal description of subject property: PLANTATION ACRES LOT 1 & 2 BLK 2. 0.9700 Acres.

**3. CLOSE PUBLIC HEARING**

**4. PUBLIC COMMENT**

Please be advised per State Statute Section 19.84(2), information will be received from the public. It is the policy of this Village that Public Comment will take no longer than 15 minutes with a three-minute time period, per person, with time extension per the Chief Presiding Officer's discretion. Be further advised that there may be limited discussion on the information received, however, no action will be taken under public comments.

**5. APPROVAL OF MINUTES- DISCUSSION AND POSSIBLE ACTION**

**D. 2026 04 08 PC Meeting Minutes**

**6. REPORTS AND DISCUSSIONS**

**E. Introduction of new Plan Commission members**

**F. PC Duties and Responsibilities**

**G. Staffing for the Plan Commission - Commission to be updated on how the role of the Community Development Director is being filled.**

**7. NEW BUSINESS- DISCUSSION AND POSSIBLE ACTION**

**H. CONDITIONAL USE PERMIT (Joseph Fleming)**

Joseph Fleming, 1755 Pine Road, Kronenwetter, WI 54455, requests a Conditional Use Permit for a Residential Business (Kitchen for food truck operation) at 1755 Pine Road, Kronenwetter, WI 54455. Tax Parcel ID Number: 145-2707-013-0054. Legal description of subject property: PLANTATION ACRES LOT 1 & 2 BLK 2. 0.9700 Acres.

**I. Site Plan for Premier Property Development (Vinnie Tesch)**

The project site is located at 1190 Gardner Park Road Kronenwetter, WI 54455. The project all of Parcel 1 of CSM 8726-34-104 located in part of the Southwest ¼ of the Southeast ¼ of Section 3, Township 27 North, Range 7 East, Village of Kronenwetter, Marathon County, Wisconsin.

**J. American Asphalt CUP Renewal**

**K. Green Tree Subdivision Concept Plan**

**L. Selection of Vice Chairperson**

**8. NEXT MEETING: June 15, 2026**

**9. CONSIDERATION OF ITEMS FOR FUTURE AGENDA**

**10. ADJOURNMENT**

***NOTE: Requests from persons with disabilities who need assistance to participate in this meeting or hearing should be made at least 24 hours in advance to the Village Clerk's office at (715) 693-4200 during business hours.***

**Posted: 05/15/2026 Kronenwetter Municipal Center and [www.kronenwetter.org](http://www.kronenwetter.org)**

**Faxed: WAOW, WSAU, City Pages, Mosinee Times | Emailed: Wausau Daily Herald, WSAW, WAOW, Mosinee Times, Wausau Pilot and Review, City Pages**



**Report to Planning Commission**

**Agenda Item:** Joseph Fleming, 1755 Pine Road, Kronenwetter, WI 54455. Conditional Use Permit Application for a Residential Business (Food Truck and Commercial Kitchen) at 1755 Pine Road, Kronenwetter, WI 54455.

**Meeting Date:** May 16, 2026

**Referring Body:** Plan Commission

**Committee Contact:** Dan Lesniak

**Staff Contact:**

**Report Prepared by:** Kim Coyle

**AGENDA ITEM:** Joseph Fleming, 1755 Pine Road, Kronenwetter, WI 54455 requests a Conditional Use Permit for a Residential Business (Food Truck and Commercial Kitchen) at 1755 Pine Road, Kronenwetter, WI 54455.

**OBJECTIVE(S):** To review the Conditional Use Permit and related documents for a Residential Business to operate a Food Truck business.

**HISTORY/BACKGROUND:** Joseph Fleming, 1755 Pine Road, Kronenwetter, WI 54455 requests a Conditional Use Permit for a Residential Business (Food Truck and Commercial Kitchen) at 1755 Pine Road, Kronenwetter, WI 54455

**RECOMMENDED ACTION:** The Plan Commission may approve the conditional use as originally proposed, may approve the proposed conditional use with conditions or modifications, or may deny approval of the proposed conditional use and include reasons for denial.

G. Review criteria for conditional use permit. Each requested conditional use permit shall meet the following criteria (achieve "yes" answers) to be approved:

- (1) Is the proposed conditional use in harmony with the comprehensive plan, this chapter, and any other plan, program, or ordinance adopted by the village?
- (2) The proposed conditional use does not, in its proposed location and as depicted on the required site plan, result in a substantial or undue adverse impact on nearby property, the character of the neighborhood, environmental factors, traffic factors, parking, public improvements, public property or rights-of-way, or other matters affecting the public health, safety, or general welfare, either as they now exist or as they may in the future be developed as a result of the implementation of the provisions of this chapter, the comprehensive plan, or any other plan, program, map, or ordinance adopted by the village?
- (3) Does the proposed conditional use maintain the desired consistency of land uses, land use intensities, and land use impacts as related to the environs of the subject property?
- (4) Is the proposed conditional use located in an area that will be adequately served by, and will not impose an undue burden on, any of the improvements, facilities, utilities, or services provided by public agencies serving the subject property?

(5) Do the potential public benefits of the proposed conditional use outweigh potential adverse impacts of the proposed conditional use, after taking into consideration the applicant's proposal and any requirements recommended by the applicant to ameliorate such impacts?

Section 2, Item C.

Note: See Staff's Report for comments as it relates to each of the criteria mentioned above.

2017 Act 67

- requires that standards governing conditional uses be “reasonable and, to the extent practicable, measurable...”
- prohibits a community from basing a conditional use permit decision on “personal preferences or speculation.”
- instructs that, where an applicant “meets or agrees to meet all of the requirements and conditions specified” in the ordinance or imposed by the decision-maker, the conditional use permit must be granted.

**ATTACHMENTS:** Conditional Use Permit application and Staff Report.

**JOSEPH FLEMING, CONDITIONAL USE PERMIT APPLICATION FOR A RESIDENTIAL BUSINESS (FOOD TRUCK AND COMMERCIAL KITCHEN) AT 1755 PINE ROAD,**

**KRONENWETTER, WI 54455.**

**TAX PARCEL ID NUMBER: 145-2707-013-0054**

**STAFF REPORT FOR PLAN COMMISSION**

**PUBLIC HEARINGS/  
MEETINGS:**

Plan Commission Public Hearing:

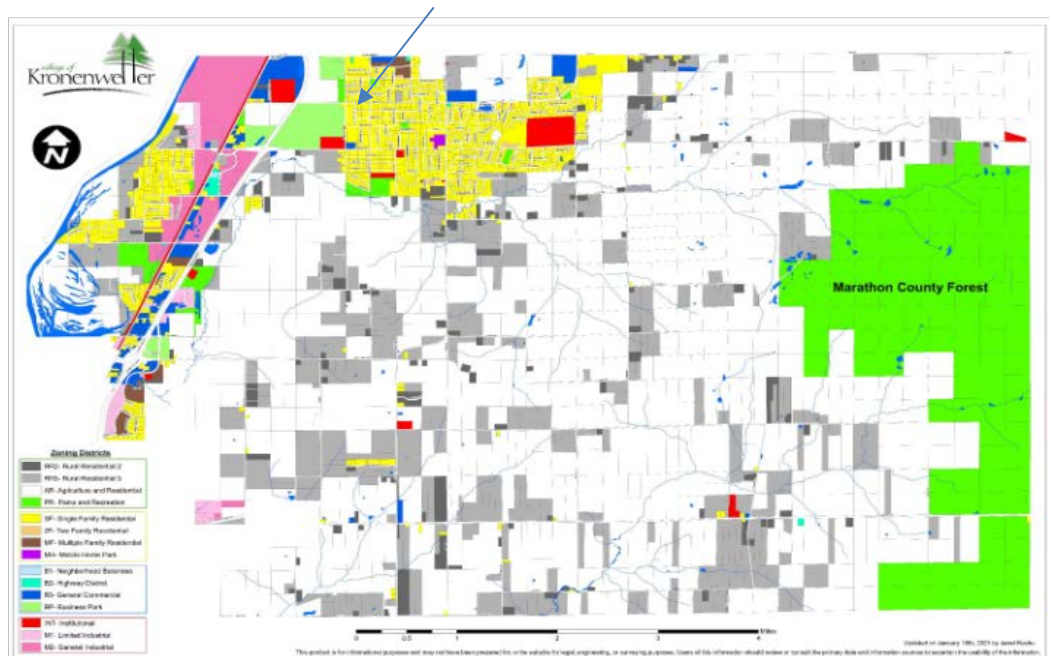
6:00 p.m. May 18, 2026

**APPLICANT:**

Joseph Fleming  
1755 Pine Road  
Kronenwetter, WI 54455.

**LOCATION OF REQUEST:** 1755 Pine Road, Kronenwetter, WI 54455, WI 54455. (See Map 1)

**Map 1: Location Map**  
(Source Data: Village of Kronenwetter Zoning Map)

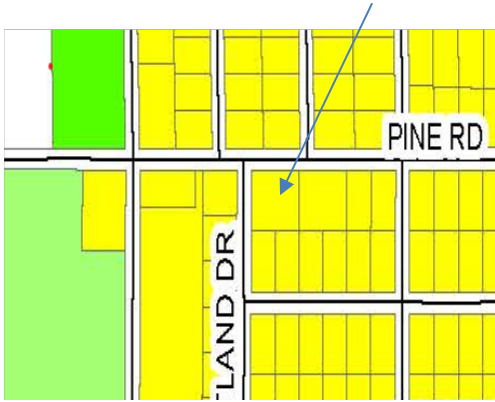




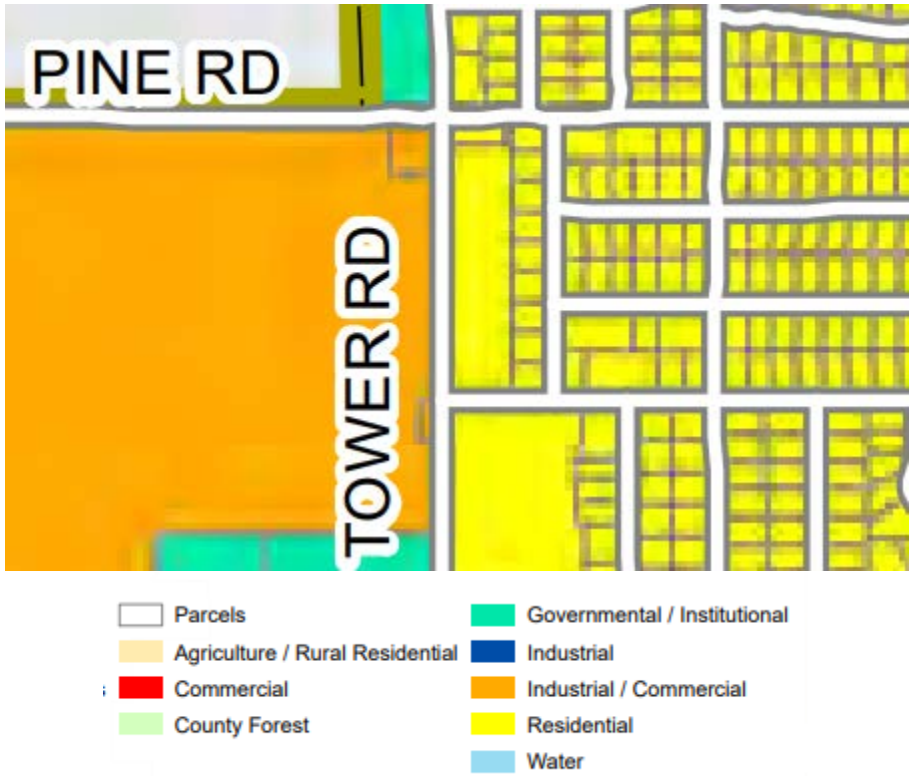
**Map 2: Aerial Photo**  
 (Source Data: Marathon County GIS)

**Zoning Districts**

RR2- Rural Residential 2
RR5- Rural Residential 5
AR- Agriculture and Residential
PR- Parks and Recreation
SF- Single Family Residential
2F- Two Family Residential
MF- Multiple Family Residential
MH- Mobile Home Park
B1- Neighborhood Business
B2- Highway District
B3- General Commercial
BP- Business Park
INT- Institutional
M1- Limited Industrial
M2- General Industrial



**Map 3: Zoning Map**  
 (Source Data: Village of Kronenwetter)



**Map 4: Future Land Use Map**  
 (Source Data: Village of Kronenwetter)

**LEGAL DESCRIPTION OF PROPERTY:**

**PLANTATION ACRES LOT 1 & 2 BLK 2**

**ZONING:**

SF-Single Family

**ACREAGE:**

0.9700 acres

**LEGAL NOTIFICATION:**

A legal advertisement was published in the Wausau Daily Herald on Monday, May 4, 2026, and Monday, May 11, 2026. Notice of the zoning change request was sent by regular mail to adjacent property owners within 500 feet of the subject property on April 30, 2026.

**PROPOSED CONDITIONAL USE:** CONDITIONAL USE PERMIT for a RESIDENTIAL BUSINESS (Food Truck and Commercial Kitchen).

**DEVELOPMENT PATTERN (AND ZONING):**

Subject Property: RES  
 North: RES  
 South: RES  
 East: RES  
 West: IND

**INTRODUCTION**

Joseph Fleming requests a Conditional Use Permit for a RESIDENTIAL BUSINESS (FOOD TRUCK AND COMMERCIAL KITCHEN). The proposed conditional use consists of purchasing a food truck as the owner and operator. The proposed room will be converted into a health code compliant commercial kitchen. This kitchen will serve as a “mobile service base” for a food truck operation. This space will be used for food storage, preparation of food and a base for cleaning and maintaining culinary equipment.

This space will not be used as a retail sales location; there will be no consumer traffic at this location. Traffic will consist of deliveries from USPS or other National carriers. One food trailer will be stored at this location. There will be no visible alterations made to the property or buildings. The proposed residential business will not affect neighboring properties or traffic flow. Primary operating hours will be Tuesday-Sunday 7AM-9PM, these hours reflect the times for deliveries, prep and service hours.

All requirements of § 520-27. - Accessory and miscellaneous land use types. F. Residential business will be met.

**RECOMMENDED MOTION**

The Plan Commission may approve the conditional use as originally proposed, may approve the proposed conditional use with conditions or modifications, or may deny approval of the proposed conditional use and include reasons for denial.

Each requested conditional use permit shall meet the following criteria (achieve "yes" answers) to be approved. Below you find Staff’s comments as it relates to each.

**2017 Act 67**

- requires that standards governing conditional uses be “reasonable and, to the extent practicable, measurable...
- prohibits a community from basing a conditional use permit decision on “personal preferences or speculation.”
- instructs that, where an applicant “meets or agrees to meet all of the requirements and conditions specified” in the ordinance or imposed by the decision-maker, the conditional use permit must be granted.

**FINDINGS OF FACT CONDITIONAL USE**

**1. Is the proposed conditional use in harmony with the Comprehensive Plan, this chapter, and any other plan, program, or ordinance adopted by the Village?**

The proposed Conditional Use Permit for a RESIDENTIAL BUSINESS (FOOD TRUCK AND COMMERCIAL KITCHEN) is located on property zoned SF. The proposed use is allowed with the issuance of a Conditional Use Permit within SF-SINGLE FAMILY RESIDENTIAL Zoning District. A purpose of the ordinance is to implement the comprehensive plan to the extent possible under zoning. The Future Land Use Map has this parcel zoned Residential. This type of business would be a permitted use with a Conditional use permit.

**2. The proposed conditional use does not, in its proposed location and as depicted on the required site plan, result in a substantial or undue adverse impact on nearby property, the character of the neighborhood, environmental factors, traffic factors, parking, public improvements, public property or rights-of-way, or other matters affecting the public health, safety, or general welfare, either as they now exist or as they may in the future be developed as a result of the implementation of the provisions of this chapter, the Comprehensive Plan, or any other plan, program, map, or ordinance adopted by the Village?**

By meeting the requirements of the Zoning Ordinance § 520-27. - Accessory and miscellaneous land use types. F. Residential business. The proposed conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity nor substantially diminish and impair property values within the area. The food truck will be kept on property for the peak times and will be stored off site during off-peak times of the year.

**3. Does the proposed conditional use maintain the desired consistency of land uses, land use intensities, and land use impacts as related to the environs of the subject property?**

The parcel is zoned SF and surrounded by SF zoned properties. The conditional use will not impede the normal and orderly development and improvement of the surrounding properties for uses permitted in these zoned districts. All materials, equipment and operations will be stored on a hard surface as there is a paved area at the rear of the home. The Commercial kitchen will operate only during peak times and there will be no consumer traffic to this address. There will be no visible alterations made to the property or buildings. As a result, the land use, land use intensity and land use impacts remain unchanged.

**4. Is the proposed conditional use located in an area that will be adequately served by, and will not impose an undue burden on, any of the improvements, facilities, utilities, or services provided by public agencies serving the subject property?**

A commercial kitchen will be added to the home for preparing and sanitizing items for the food truck business.

**5. Do the potential public benefits of the proposed conditional use outweigh potential adverse impacts of the proposed conditional use, after taking into consideration the applicant's proposal and any requirements recommended by the applicant to ameliorate such impacts?**

The proposed RESIDENTIAL BUSINESS (FOOD TRUCK AND COMMERCIAL KITCHEN) aligns with the Villages' goal of encouraging small business growth. The business will operate only in the summer months and in a manner respectful of the residential character of Kronenwetter.

# Conditional Use Permit Application

Application Fee: \$350 Regular Meeting / \$500 Special Meeting

A conditional use is a unique use which, because of its distinct characteristics, cannot be classified in any particular district or districts, without consideration, in each case, of the impact of that use upon neighboring land and of the public need for the particular use at the particular location.

Plan Commission Meetings are held on the 3<sup>rd</sup> Monday of each month. Although not required, it is recommended that the applicant attend these meetings.



### Applicant Information

1. Applicant Name Joseph Fleming Phone Number 715-323-7903  
 Address 1755 pine rd kronenwetter WI 54455  
 Email josephfleming74@gmail.com

2. Owner Name Same Phone Number \_\_\_\_\_  
 Address \_\_\_\_\_  
 Email \_\_\_\_\_

3. Prepared By Company Name Same Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 Phone Number \_\_\_\_\_ Email \_\_\_\_\_

### Property Information

4. Property Address 1755 Pine rd Kronenwetter WI 54455

5. Parcel Identification # (PIN) 145-2707-013-0054 6. Parcel Acreage .970

7. Legal Description (attach additional sheet if necessary) Plantation acres Lot 1&2 blk 2

8. Conditional Use request from § 520-27 of the Zoning Ordinance to allow Residential business

9. Generally describe the current zoning and land uses of the subject property and surrounding properties:

Subject Property	<u>1755 Pine rd</u>	Zoning	<u>SF</u>
North	<u>Residential</u>	Zoning	<u>SF</u>
South	<u>Residential</u>	Zoning	<u>SF</u>
East	<u>Residential</u>	Zoning	<u>SF</u>
West	<u>Residential</u>	Zoning	<u>SF</u>

**Required Attachments**

Attach a written statement of the proposed conditional use describing the type of activities, buildings, and structures proposed for the subject property and their general locations.

Attach a site plan of the subject property, with any alterations as may be proposed to accommodate the conditional use.

Attach a written justification for the proposed conditional use consisting of the reasons why the applicant believes the proposed conditional use is appropriate, particularly as evidenced by compliance with the approval criteria:

- Is the proposed conditional use in harmony with the Comprehensive Plan, this chapter, and any other plan, program, or ordinance adopted by the Village?
- The proposed conditional use does not, in its proposed location and as depicted on the required site plan, result in a substantial or undue adverse impact on nearby property, the character of the neighborhood, environmental factors, traffic factors, parking, public improvement, public property or rights-of-way, or other matters affecting the public health, safety, or general welfare, either as they now exist or as they may in the future be developed as a result of the implementation of the provisions of this chapter, the Comprehensive Plan, or other plan, program, map or ordinance adopted by the Village?
- Does the proposed conditional use maintain the desired consistency of land uses, land use intensities, and land use impacts as related to the environs of the subject property?
- Is the proposed conditional use located in an area that will be adequately served by, and will not impose an undue burden on, any of the improvements, facilities, utilities, or services provided by public agencies serving the subject property?
- Dose the potential public benefits of the proposed conditional use outweigh potential adverse impacts of the proposed conditionals use, after taking into consideration the applicant’s proposal and any requirements recommended by the applicant to ameliorate such impacts?

**Applicant Acknowledgement**

To the best of my knowledge, I certify that the information provided on this application and accompanying documents are true and accurate. I also understand that submitting this application authorizes the Zoning Administrator or his/her designee to enter onto the property for the purposed outlined operation.

Applicant	Date
Owner	Date
Prepared By	Date

**FOR OFFICE USE ONLY:**

Application Received \_\_\_\_\_ Check # \_\_\_\_\_

**Plan Commission:**

Meeting Date \_\_\_\_\_ Recommendation: Approved / Denied

Renewal Recommendation: 1 year 2 year 3 year 4 year 5 year

Conditions (see attached)

**Residential Business Zoning Proposal**

**Joseph Fleming**

**1755 Pine Road**

**Nature of the proposed use:**

I am proposing that my 11x14 attached room be approved for residential business usage for the purpose of a commercial kitchen.

The proposed room would be converted into a health code compliant commercial kitchen. This kitchen will serve as a “mobile service base” for a food truck operation.

**Space will be used as follows:**

- Food Storage
- Prepare food for sale
- Provide a service base for cleaning and maintaining culinary equipment

**Storage:**

The room will provide both cold and dry storage of ingredients.

All storage containers and refrigeration units will be NSF certified.

Ingredients to be used will be stored and monitored using local and state health code standards.

**Traffic to location:**

The space **will not** be used as a retail sales location; there will be no consumer traffic at this location.

Traffic will consist of deliveries from USPS or other National carriers.

One food trailer will be stored at this location.

**Visual appearance of structure:**

There will be no signage attached to the structure and all kitchen equipment will be stored inside.

**Hours of operation:**

Primary operating hours will be Tuesday-Sunday 7am-9pm, these hours reflect the times for deliveries, preparation and service hours.

**How conditional use will conform to the standards below:**

**That the establishment, maintenance, or operation of the conditional use will not be detrimental to endanger: the public health, safety, morals, comfort, or general welfare.**

All equipment will be NSF certified to conform to state and local health and safety guidelines. All installed plumbing and electrical will be installed to code. This includes proper ventilation, installation, maintenance, cleaning and fire safety equipment.

**Sound levels:** will be very low and will not be detrimental to our neighbors.

**Smell/air quality:** The smell will be consistent with the cooking process.

**That the conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood.**

The set up we are looking to be put in place will have no impact on the visual, audible or air quality for my neighbors. The structure itself will have no visible changes.

In terms of safety, all required safety precautions will be followed, as well as ongoing maintenance to ensure there is no endangerment to either mine or nearby properties. No open-flame equipment will be used in the kitchen. Only NSF certified electrically operated equipment will be used in the kitchen.

**That the establishment of the conditional use will not impede the normal and orderly development and improvement of the surrounding property for uses as permitted in the district.**

There will be no disruption to the surrounding properties. Minimal deliveries will be shipped to this address. Most of the needed supplies to operate this business will be picked up from local distributors. Operation of this commercial kitchen will be conducted inside and away from the view of neighbors and vehicle traffic in the area.

**The adequate utilities, access roads, drainage and/or necessary facilities have been or are being provided.**

Electricity and water are already present in the room indicated in this proposal. Only minor upgrades will be needed to finish the utilities needed for full operation of this kitchen.

**Adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.**

There will be no additional traffic to this location. We will not be selling as a Point of sale out of this address.

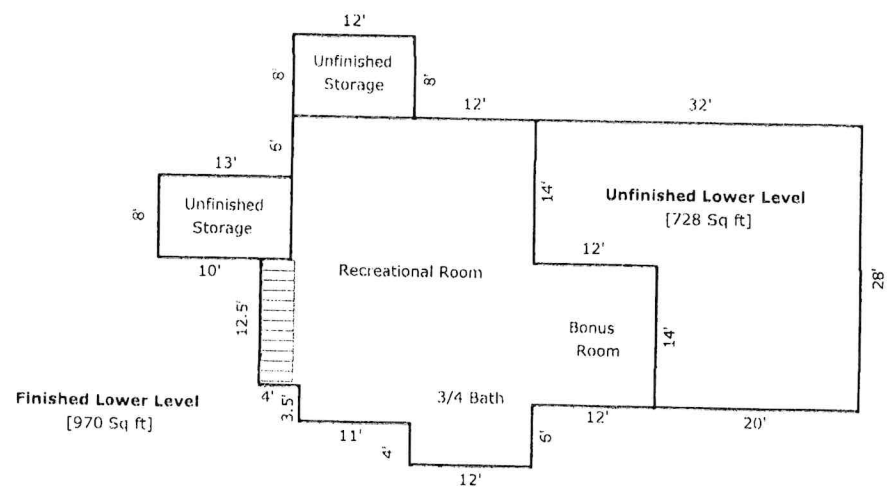
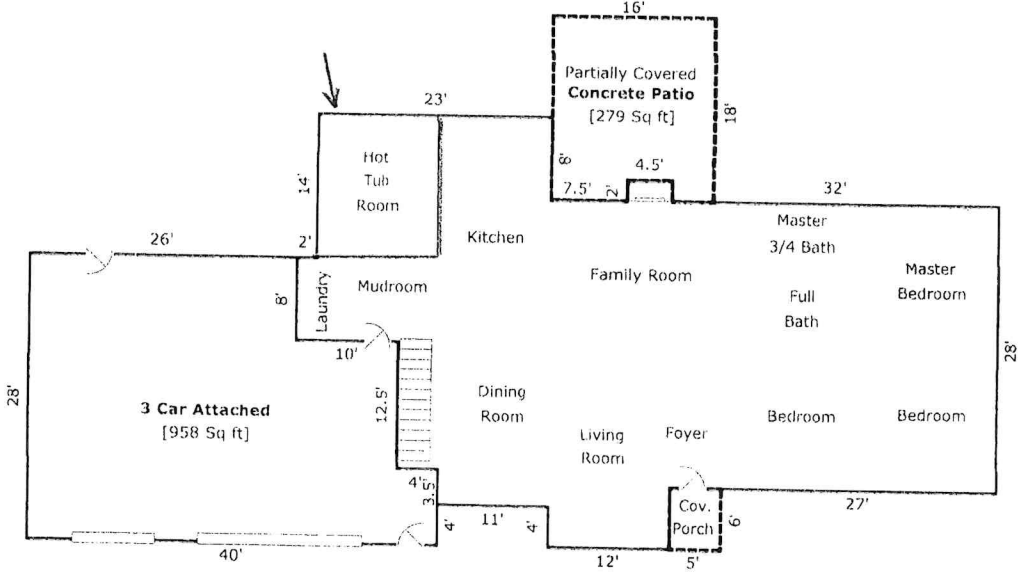
**That the conditional use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may, in each instance, be modified by the village board pursuant to the recommendations of the Village Plan Commission.**

We will adhere to all applicable regulations of the district and fully understand our proposal may be unique to the village. We are willing and excited to work closely with the village and building inspector, and health inspector to ensure all regulations are met.

**Please see attachment A for site plan**

(A)

Proposed Location  
For Commercial Kitchen  
- 11x14 Hot Tub Room



TOTAL Sketch by a la mode, inc.

F. Residential business.

- (1) Compared to a home occupation, a residential business is a higher-impact economic activity performed in a dwelling unit, its attached garage, and/or its detached accessory structure (for residential use), where the principal use of the lot remains the residence of the person primarily conducting the economic activity.
- (2) Performance standards:
  - (a) A residential business may be conducted within the dwelling, an attached garage, and/or in a permanent detached accessory structure (for residential use).
  - (b) The area used to conduct the residential business shall not exceed 25 percent of the improved square footage of the principal dwelling unit, excluding any attached garage.
  - (c) The plan commission may impose additional limitations on the percentage of the property and/or buildings that may be devoted to the occupation.
  - (d) Subject to plan commission approval, a residential business may employ up to one employee living off site, provided an immediate family member residing on site is the principal owner and operator of the business.
  - (e) No activity, materials, goods or equipment incidental to the residential business shall be externally visible, except for one licensed car, van, or light-duty truck used for the residential business and external storage normally allowed for the principal residential use. *No Food Trailer*
  - (f) No residential business may include retail sales other than items produced or value-added on site. The plan commission may prohibit or limit the on-site sale of items or products produced or enhanced on the premises.
  - (g) No residential business shall endanger the public health and safety or interfere with the enjoyment of other parcels in the neighborhood.
  - (h) No mechanical or electrical equipment may be used that creates any disturbance at the property line.
  - (i) Signage shall be as permitted for residential businesses in article XIII.
  - (j) Each conditional use permit for a residential business shall run with the applicant and not with the land.

*Food Truck & Trailer*

- 1) The proposed area for business is less than 25% of the improved Sq footage. No addition to the home, will use Existing "Hot tub room."
- e) using personal truck to pull food trailer (8x16) or (8x18) it will be stored off property. *(Need to change lot interface on 1st page)*  
It will only be at residence for loading and offloading
- D). Employees are husband + wife, no outside employees.

Joseph Fleming 1755 P.02

3/6/2026

- 11' x 14' existing  
use as Commercial Kitchen  
"Mobile Service Base"

- Food Storage
- Food prep
- Cleaning & maintaining culinary equipment

\* One Food Trailer will be stored @  
location (Remove last sentence from  
page)



**PUBLIC HEARING  
VILLAGE OF KRONENWETTER PLAN COMMISSION**

Notice is hereby given that a Public Hearing will be held on Monday, May 18, 2026 at 6:00 P.M., at the Kronenwetter Municipal Center, 1582 Kronenwetter Drive, Kronenwetter, WI 54455, to hear and consider the following:

CONDITIONAL USE PERMIT (Joseph Fleming)

Joseph Fleming, 1755 Pine Road, Kronenwetter, WI 54455, requests a Conditional Use Permit for a Residential Business (Kitchen for food truck operation) at 1755 Pine Road, Kronenwetter, WI 54455. Tax Parcel ID Number: 145-2707-013-0054. Legal description of subject property: PLANTATION ACRES LOT 1 & 2 BLK 2. 0.9700 Acres.

Written testimony may be forwarded to the Village of Kronenwetter Community Development/Planning and Zoning Director, Peter S. Wegner, 1582 Kronenwetter Drive, Kronenwetter, WI 54455 or emailed to [pwegner@kronenwetter.gov](mailto:pwegner@kronenwetter.gov) before the time of the hearing. All interested persons will be given an opportunity to be heard at the hearing. For questions and more information, please contact the Village prior to the meeting.



# PLAN COMMISSION MEETING MINUTES

April 08, 2026 at 6:00 PM

Kronenwetter Municipal Center - 1582 Kronenwetter Drive Board Room (Lower Level)

**1. CALL MEETING TO ORDER**

@6PM

- A. Pledge of Allegiance
- B. Roll Call
  - PRESENT
  - Dick Kvapil
  - Tony Stange
  - Bruce Sinkula
  - Chair Dan Lesniak
  - Ken Charneski

ABSENT  
 Rick Grundman

**2. ANNOUNCEMENT OF PUBLIC HEARING**

- C. Eau Claire River, LLC 7306 Zinser St., Weston, WI 54476 requests a zoning change of 35.58 acres from BP - Business Park to M2 – General Industrial, located at 1320 Kowalski Road, Kronenwetter, WI 54455. Parcel Identification Number 145-2707-023-0996. Legal description of the subject property: SEC 02-27-07 PT OF S 1/2 SW 1/4 THAT PT LYG WLY OF HWY '51' & D/I CSM VOL 10 PG 182 (#2709) (DOC #772685) EX DOC 1488725-(RD).  
 Public Comment:  
 John Meidl, Gary Guernd (Tom Raddant), Chris Blenker, Nick Leait, Matt Yde, Fr. Janusz Kowalski.

**3. CLOSE PUBLIC HEARING**

**4. PUBLIC COMMENT**

Please be advised per State Statute Section 19.84(2), information will be received from the public. It is the policy of this Village that Public Comment will take no longer than 15 minutes with a three-minute time period, per person, with time extension per the Chief Presiding Officer's discretion. Be further advised that there may be limited discussion on the information received, however, no action will be taken under public comments.  
 Gary Guernd-wants to speed up the process for development and work with staff like other communities.

**5. APPROVAL OF MINUTES- DISCUSSION AND POSSIBLE ACTION**

- D. 2026 02 16 PC Meeting Minutes
  - Motion made by Sinkula, Seconded by Kvapil.
  - Voting Yea: Kvapil, Stange, Sinkula, Chair Lesniak, Charneski

**6. REPORTS AND DISCUSSIONS**

E. Community Development Director Report

**7. NEW BUSINESS- DISCUSSION AND POSSIBLE ACTION**

F. Zoning Change Request (Eau Claire River, LLC)

Charneski pointed out that the land is already a sand pit and basically unusable. He is in favor of the zoning change request. Facts and Findings were gone through and found to have met all the requirements.

Motion to send to the board with the recommendation to approve the Zoning change request and facts and findings.

Motion made by Charneski, Seconded by Sinkula.

Voting Yea: Kvpil, Stange, Sinkula, Chair Lesniak, Charneski by roll call.

G. Proposed Distribution Facility, 1619 County Highway XX, Kronenwetter, WI

Wegner walked through the site plan along with vegetation, sound barrier walls and lighting. Facts and Findings were all met.

Motion to approve to conditionally approve the site plan of new distribution building subject to the conditions contained in the staff report and imposed by the Plan Commission and to accept the findings and facts set forth in the staffs report. Remove #9 and clarifying the updated map.

Motion made by Stange, Seconded by Sinkula.

Voting Yea: Kvpil, Stange, Sinkula, Chair Lesniak, Charneski

**8. OLD BUSINESS - DISCUSSION AND POSSIBLE ACTION**

H. Review the process to reverse Plan Commission decisions

No Action.

**9. NEXT MEETING: APRIL 20, 2026**

**10. CONSIDERATION OF ITEMS FOR FUTURE AGENDA**

**11. ADJOURNMENT**

@7:41PM

Motion made by Kvpil, Seconded by Stange.

Voting Yea: Kvpil, Stange, Sinkula, Chair Lesniak, Charneski

***NOTE: Requests from persons with disabilities who need assistance to participate in this meeting or hearing should be made at least 24 hours in advance to the Village Clerk’s office at (715) 693-4200 during business hours.***

**Posted: 04/06/2026 Kronenwetter Municipal Center and [www.kronenwetter.org](http://www.kronenwetter.org)  
Faxed: WAOW, WSAU, City Pages, Mosinee Times | Emailed: Wausau Daily Herald, WSAW, WAOW, Mosinee Times, Wausau Pilot and Review, City Pages**

Minutes prepared by K. Coyle\_



 Outlook

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**FW: Plan Commission Meeting: 04/08/2026 | Distribution Center - Vegetation Buffer Preservation Request**

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From Peter Wegner <pwegner@kronenwetter.gov>

Date Wed 4/8/2026 10:01 AM

To Kimberly Coyle <kcoyle@kronenwetter.gov>

 1 attachment (168 KB)

Tower Road Vegetation Buffer.pdf;

More public comment

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**From:** Becky Hensel <b\_mittlesteadt@live.com>

**Sent:** Wednesday, April 8, 2026 9:12 AM

**To:** mjensen@kronenwetter.gov; Ken Charneski <kcharneski@kronenwetter.gov>; d\_kvapil@yahoo.com; tstange415@gmail.com; brucesinkula@tds.net; rgrundman@nlhs.org; danlesniak54455@gmail.com; Peter Wegner <pwegner@kronenwetter.gov>

**Cc:** Dan Joling <djoling@kronenwetter.gov>; Aaron Myszka <amyszka@kronenwetter.gov>; Craig Mortensen <cmortensen@kronenwetter.gov>; Sandi Sorensen <ssorensen@kronenwetter.gov>; Jessica Stowell <jstowell@kronenwetter.gov>; Jennifer Poyer <jpoyer@kronenwetter.gov>

**Subject:** [External] Plan Commission Meeting: 04/08/2026 | Distribution Center - Vegetation Buffer Preservation Request

**Importance:** High

Rebecca & Jordan Hensel  
2414 Tower Road  
Kronenwetter, WI 54455  
[b\\_mittlesteadt@live.com](mailto:b_mittlesteadt@live.com)  
715-370-8370

04/08/2026

Village of Kronenwetter  
Plan Commission and Village Board  
1582 Kronenwetter Drive  
Kronenwetter, WI 54455

Dear Members of the Plan Commission and Village Board,

I am writing ahead of tonight's meeting regarding the proposed development on the parcel west of Tower Road.

**As discussions around this project continue, I would respectfully ask that the Commission consider whether preservation of the existing vegetation along Tower Road could be incorporated as part of any conditions associated with the project, if that is within the scope of what the Village is able to require.**

The trees along Tower Road represent a mature natural buffer between the roadway and the interior of the parcel. From a planning perspective, this buffer plays an important role in screening, corridor character, and compatibility

between adjacent land uses. Maintaining as much of this vegetation as possible would help preserve visual separation and reduce the direct exposure of surrounding residential areas to a large-scale industrial development.

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I understand that the current plan includes a screening wall with additional landscaping, and that effort is appreciated. However, that approach does not provide the same level of visual screening or environmental benefit as the existing mature tree line.

**Preserving as much of the natural buffer as possible, in addition to the proposed screening wall and additional landscaping, would provide a far more effective and immediate solution. Retaining the current tree line where feasible would significantly soften that impact and help maintain some of the natural character that currently defines this stretch of roadway.**

There are also broader considerations related to residential property values. Research has shown that homes located in close proximity to new industrial developments can experience measurable declines in value, often in the range of 10% or more depending on proximity and level of exposure. While economic development is important, preserving effective screening and buffering may be one of the few practical tools available to help mitigate those impacts in a residential-adjacent setting.

I understand the Village must balance growth, fiscal considerations, and land use planning objectives. At the same time, it is important to recognize that nearby residents may experience the impacts of this decision more directly than its benefits. Thoughtful preservation of the existing buffer would be a meaningful step toward maintaining that balance.

For reference, I have attached a **"Tower Road Vegetation Buffer"** highlighting the areas discussed. Based on prior meeting discussions, it is my understanding that the area identified in red is intended to remain undisturbed. I would appreciate confirmation of that understanding.

I appreciate the time and effort the Plan Commission and staff devote to these decisions and respectfully ask that you consider incorporating vegetation preservation into the site planning discussion if feasible.

**I will do my best to attend tonight's meeting; however, if I am unable to be present, I respectfully request that this email be read into the public record.**

Thank you for your time and consideration.

Sincerely,

Rebecca & Jordan Hensel

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**From:** Becky Hensel <[b\\_mittlesteadt@live.com](mailto:b_mittlesteadt@live.com)>  
**Sent:** Monday, December 15, 2025 1:02 PM  
**To:** [mjensen@kronenwetter.gov](mailto:mjensen@kronenwetter.gov) <[mjensen@kronenwetter.gov](mailto:mjensen@kronenwetter.gov)>; [kcharneski@kronenwetter.gov](mailto:kcharneski@kronenwetter.gov) <[kcharneski@kronenwetter.gov](mailto:kcharneski@kronenwetter.gov)>; [d\\_kvapil@yahoo.com](mailto:d_kvapil@yahoo.com) <[d\\_kvapil@yahoo.com](mailto:d_kvapil@yahoo.com)>; [tstange415@gmail.com](mailto:tstange415@gmail.com) <[tstange415@gmail.com](mailto:tstange415@gmail.com)>; [brucesinkula@tds.net](mailto:brucesinkula@tds.net) <[brucesinkula@tds.net](mailto:brucesinkula@tds.net)>; [rgrundman@nlhs.org](mailto:rgrundman@nlhs.org) <[rgrundman@nlhs.org](mailto:rgrundman@nlhs.org)>; [danlesniak54455@gmail.com](mailto:danlesniak54455@gmail.com) <[danlesniak54455@gmail.com](mailto:danlesniak54455@gmail.com)>; [pwegner@kronenwetter.gov](mailto:pwegner@kronenwetter.gov) <[pwegner@kronenwetter.gov](mailto:pwegner@kronenwetter.gov)>  
**Cc:** [djoling@kronenwetter.gov](mailto:djoling@kronenwetter.gov) <[djoling@kronenwetter.gov](mailto:djoling@kronenwetter.gov)>; [amyszka@kronenwetter.gov](mailto:amyszka@kronenwetter.gov) <[amyszka@kronenwetter.gov](mailto:amyszka@kronenwetter.gov)>; [cmortensen@kronenwetter.gov](mailto:cmortensen@kronenwetter.gov) <[cmortensen@kronenwetter.gov](mailto:cmortensen@kronenwetter.gov)>; [ssorensen@kronenwetter.gov](mailto:ssorensen@kronenwetter.gov) <[ssorensen@kronenwetter.gov](mailto:ssorensen@kronenwetter.gov)>; [jstowell@kronenwetter.gov](mailto:jstowell@kronenwetter.gov) <[jstowell@kronenwetter.gov](mailto:jstowell@kronenwetter.gov)>; [jpoyer@kronenwetter.gov](mailto:jpoyer@kronenwetter.gov) <[jpoyer@kronenwetter.gov](mailto:jpoyer@kronenwetter.gov)>  
**Subject:** Opposition to Rezoning Request – 1619 County Road XX/2409 Tower Road

Rebecca & Jordan Hensel  
 2414 Tower Road

Kronenwetter, WI 54455  
[b\\_mittlesteadt@live.com](mailto:b_mittlesteadt@live.com)  
715-370-8370

Section 5, Item D.

12/15/2025

Village of Kronenwetter  
Plan Commission and Village Board  
1582 Kronenwetter Drive  
Kronenwetter, WI 54455

**Re: Opposition to Rezoning Request – 1619 County Road XX/2409 Tower Road**

Dear Members of the Plan Commission and Village Board,

We are writing as a resident who lives directly across from the proposed rezoning area of 1619 County Road XX and 2409 Tower Road. We strongly oppose the request to rezone this property to M2 – General Industrial.

This area is part of a largely residential neighborhood, and the existing wooded land plays a critical role in preserving the character and livability of the surrounding homes. That forested area currently serves as a natural buffer, reducing noise, limiting visual impacts, and maintaining a sense of separation from Highway 51 and nearby industrial infrastructure.

Rezoning this property to M2 would almost certainly result in the removal of that forest, which would significantly increase highway noise, expose residents to direct views of the Wisconsin Public Service power plant, and introduce new visual, lighting, and operational impacts from a future distribution or industrial facility. These changes would permanently alter the residential environment for those of us who live nearby.

Many residents chose to live in Kronenwetter because of its quiet, residential character. Introducing heavy industrial zoning directly adjacent to existing homes undermines that character and negatively affects quality of life, neighborhood cohesion, and the enjoyment of our properties.

While we understand that the rezoning request is being presented as consistent with the Village's Comprehensive Plan and Tax Increment District goals, those long-term economic objectives should not come at the expense of existing residents who will bear the immediate and permanent impacts of this decision. Rezoning from Business Park to M2 substantially expands the range of allowable uses and reduces safeguards for neighboring residential areas.

Kronenwetter already has areas that are planned, zoned, and developed specifically for industrial and distribution uses, located away from homes and better suited to handle truck traffic, lighting, noise, and large-scale operations.

Placing a distribution center in an existing industrial corridor, rather than expanding heavy industrial zoning into residential-adjacent areas, would allow the Village to support economic development without sacrificing the quality of life of current residents. This approach represents balanced growth and respects both community planning goals and the people who already live here.

We respectfully urge the Plan Commission and Village Board to deny this rezoning request, or at minimum, postpone any approval until meaningful protections are established, such as preservation of existing tree buffers, enhanced setbacks, strict limits on lighting and noise, and clear restrictions on industrial operations adjacent to homes.

Thank you for your time, consideration, and service to the residents of Kronenwetter. I appreciate the opportunity to share my concerns and ask that they be fully considered as part of the public record.

Sincerely,

Rebecca & Jordan Hensel

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**FW: [External] Distribution Facility TID 1 ingress and egress concern**

---

**From** Peter Wegner <pwegner@kronenwetter.gov>

**Date** Wed 4/8/2026 8:29 AM

**To** Kimberly Coyle <kcoyle@kronenwetter.gov>

Kim,

Add this to Public Comment please.

Thanks,

PETE

**Peter S. Wegner**

Village of Kronenwetter

Community Development/Planning and Zoning Director

Phone: 715-692-1729

Email: [pwegner@kronenwetter.gov](mailto:pwegner@kronenwetter.gov)

[www.kronenwetter.gov](http://www.kronenwetter.gov)



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**From:** L P Jaeger <19lpjaeger@gmail.com>

**Sent:** Tuesday, April 7, 2026 3:37 PM

**To:** Peter Wegner <pwegner@kronenwetter.gov>

**Cc:** Ken Charneski <kcharneski@kronenwetter.gov>

**Subject:** [External] Distribution Facility TID 1 ingress and egress concern

Pete,

The latest go around with the Plan Commission for the Proposed Distribution Facility does not appear to include ingress and egress.

I have previously requested that it be placed on Trailwood Lane where there is a TRAFFIC LIGHT.

High traffic volumes in Kronenwetter have reached a volume that its current cow pasture design has become overwhelmed.

It is time for the Plan Commission to give potential traffic impacts on ALL developments high priority.

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Trailwood Lane currently has a traffic light that the Rothschild Plan Commission was enlightened to include in its development west of Trailwood and north of XX.

Please read my email into the discussion on this item at the April 8, 2026 meeting.

Paul Jaeger  
Seville Road



**FW: [External] PC Meeting**

**From** Jennifer Poyer <jpoyer@kronenwetter.gov>  
**Date** Wed 4/8/2026 7:11 AM  
**To** Peter Wegner <pwegner@kronenwetter.gov>; Kimberly Coyle <kcoyle@kronenwetter.gov>

Please share with the Plan Commission members and during public comment tonight.

Thank you!



**Jennifer Poyer**  
**Village of Kronenwetter**  
*Village Clerk*  
  
**Phone:** 715-693-4200 ext. 1728  
**Email:** jpoyer@kronenwetter.gov

1582 Kronenwetter Drive  
Kronenwetter, WI 54455

[www.kronenwetter.gov](http://www.kronenwetter.gov)

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**From:** johnmczerwonka@yahoo.com <johnmczerwonka@yahoo.com>  
**Sent:** Wednesday, April 8, 2026 6:57 AM  
**To:** Jennifer Poyer <jpoyer@kronenwetter.gov>; Nick Leair <nicholas.leair@yahoo.com>  
**Subject:** [External] PC Meeting

Jennifer,

Would you please be able to share for the public comment section at tonight's Plan Commission meeting on April 8th. Thanks

Hi, my name is John Czerwonka, and I am a member of Saint Therese and the previous caretaker for the Gate of Heaven Cemetery. I am writing in response to PGA's request for the zoning change on the property that adjoins our cemetery property that is on the agenda tonight. Land unfortunately is one commodity that we cannot create. As my time as the cemetery caretaker, I have spent countless hours on our property caring for it and meeting with hundreds

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of grieving families to talk about the perfect plot for their recently deceased family member. One thing that most families note while looking at plots, is the peace and tranquility of our cemetery. It brings a little ray of light to them during their grieving time. We are one of the last Catholic cemeteries in central WI and the last couple years of plot sales have shown this. These are sacred grounds to us and our parish. A couple years ago American Asphalt tried strong arming us into mining the sand on our property. We as a parish voted against it even with pressure from the Lacrosse Diocese. I urge you as members of the Plan Commission, to vote against tonight's request for the zone change from Eau Claire River LLC. and help protect our sacred and beloved grounds that hundreds of people have chosen as the final resting grounds for themselves or loved ones.

John Czerwonka

## PC Duties and Responsibilities

Two resources to potentially link into the packet are from UWSP's Center for Land Use Education: <https://www.uwsp.edu/wp-content/uploads/2023/05/Role-of-the-Plan-Commission-PP-8-13-20.pdf> and <https://www.uwsp.edu/clue/center-for-land-use-education/planning-zoning-handbooks/>.

**Premier Property Development, 1190 Gardner Park Road Kronenwetter, WI 54455  
SITE PLAN APPLICATION**

**STAFF REPORT FOR PLAN COMMISSION**

**PUBLIC HEARINGS/  
MEETINGS:**

Plan Commission Public Meeting: 6:00 pm. May 18, 2026

**APPLICANT:**

Dustin Vreeland  
6103 Dawn Street  
Weston, WI 54476

**PROPERTY OWNER:**

Premier Property Development  
Greg & Vinnie Tesch  
1190 Gardner Park Road  
Kronenwetter, WI 54455

**LOCATION OF REQUEST:** 1190 Gardner Park Road, Kronenwetter, Wisconsin, 54455



**Map 1: Site Location**

(Source Data: Village of Kronenwetter)



**ACREAGE:** 5.0680 Acres

**Legal DESCRIPTION:** SEC 03-27-07 PT OF SW 1/4 SE 1/4 - PCL 1 CSM VOL 34 PG 104 (#8726) (DOC #1055283)

**LEGAL NOTIFICATION:** Notice of the project was sent to adjacent property owners within 100 feet of the subject property on February 9, 2026.

**DEVELOPMENT PATTERN (AND ZONING):** Subject Property: General Industrial (M2)  
North: General Industrial (M2)  
South: General Industrial (M2)  
East: General Industrial (M2)  
West: General Commercial (B3)

**INTRODUCTION**

Premier Property Development, 1190 Gardner Park Road Kronenwetter, WI 54455 proposes to construct two buildings (70ft x 80ft, 5400sf and 56ft x 200ft, 11,200sf) buildings. In the future they propose to add three additional (56ft x 200ft, 11,200sf) buildings.

The parcel is currently vacant. The proposed land use is for Storing Guns/Gun Collections and selling them online and Contractor's Outdoor Storage yard and Landscaping Business at the above property. The project is proposed to be completed in phases. Starting with two buildings then adding three more over time.



**Map 2: Aerial Photo**  
(Source Data: Marathon County GIS)



VILLAGE OF KRONENWETTER PLAN COMMISSION  
MAY 18, 2026

Premier Property Development, 1190 Gardner Park Road Kronenwetter, WI 54455  
Site Plan Application

**RECOMMENDED MOTION**

To conditionally approve the Site Plan for Premier Property Development, 1190 Gardner Park Road Kronenwetter, WI 54455, subject to the conditions contained with the Staff's Report and to accept the findings of fact set forth in the Staff's Report.

**FINDINGS OF FACT AND RECOMMENDATION OF THE VILLAGE PLAN COMMISSION**

*Section 520-29(C)(5) of the Village of Kronenwetter General Code states the Plan Commission may approve a site plan only after considering the following:*

***(a) The proposed use(s) conform(s) to the uses permitted in that zoning district.***

The proposed uses for the buildings to be constructed are permitted uses in the General Industrial (M2) Zoning District. Proposed Uses for the three future buildings would be permitted uses within the General Industrial (M2) Zoning District. The proposed uses would fall under § 520-24. - Storage or disposal land use types, § 520-26. - Industrial land use types.

***(b) The dimensional arrangement of buildings and structures conform to the required area, yard, setback and height restrictions of this chapter.***

The dimensional arrangement of the buildings and hard surfaced areas conforms to all requirements of setback and height restrictions of Chapter 520 of the Village General Code.

***(c) The proposed use conforms to all use and design provisions and requirements (if any) as found in this chapter for the specified uses.***

The proposed uses meet all use and design provisions as found in Chapter 520 of the Village General Code.

***(d) There is a proper relationship between the existing and proposed streets and highways within the vicinity of the project in order to assure the safety and convenience of pedestrian and vehicular traffic.***

No new public streets are proposed for this development. An existing access point and new access point off Gardner Park will be utilized to enter the property.

***(e) The proposed on-site buildings, structures and entryways are situated and designed to minimize adverse effects upon owners and occupants of adjacent and surrounding properties by providing for adequate design of ingress/egress, interior/exterior traffic flow, storm water drainage, erosion, grading, lighting and parking, as specified by this chapter or any other codes or laws.***

The proposed site plan is situated to minimize adverse effect upon owners and occupants of adjacent and surrounding properties by providing for adequate design of ingress/egress, interior/exterior traffic flow, storm water drainage, lighting, erosion, grading, and parking, as specified by Chapter 520 of the Village General Code and all other codes or laws. Infiltration basins will be constructed to manage storm water for impervious surfaces. Erosion control measures will be taken during construction.

**(f) Natural features of the landscape are retained where they can enhance the development of the site, or where they furnish a barrier or buffer between the project and adjoining properties used for dissimilar purposes or where they assist in preserving the general safety, health, welfare and appearance of the neighborhood.**

A landscape plan has identified a combination of large deciduous/coniferous trees, shrubs and herbaceous plants strategically placed on the property.

**(g) Adverse effects of the proposed development and activities upon adjoining residents or owners are minimized by appropriate screening, fencing or landscaping, as provided or required.**

The proposed uses comply with ARTICLE XI. - LANDSCAPING AND PRESERVATION STANDARDS. § 520-79. - Landscaping requirements. A landscaping plan, including screening and fencing is attached and approved by staff.

**(h) Land, buildings and structures are readily accessible to emergency vehicles and disabled persons.**

Emergency vehicles will have adequate access to the site and buildings. Emergency vehicles can access the property through the roadway access off Kowalski Road. The Fire Chief, Police Chief, Village Administrator, and Public Works Director have reviewed and approved the site plan.

**(i) The site plan is consistent with the intent and purpose of this chapter, which is to promote the public health, safety and general welfare, to encourage the use of lands in accordance with their character and adaptability, to avoid the overcrowding of population, to lessen congestion on the public roads and streets, to reduce hazards of life and property and to facilitate existing community development plans.**

The site plan is consistent with the intent and purpose of Chapter 520 of the Village General Code. The site plan promotes the public health, safety and general welfare, to encourage the use of lands in accordance with their character and adaptability, to avoid the overcrowding of population, to lessen congestion on the public roads and streets, to reduce hazards of life and property and to facilitate existing community development plans. The lot is zoned M2 - General Industrial. The uses being proposed are permitted uses within the General Industrial (M2) Zoning District.

**(j) The site plan is consistent with the public goals, objectives, principles, standards, policies and urban design criteria set forth in the Village's Master Plan or components thereof.**

The site plan is consistent with and furthers the goals, objectives, principles, and policies established in the Village's Comprehensive Plan. The Future Land Use Map shows the subject property as Industrial. As part of the Comprehensive Plan, the goal of the Village is to make sound land use decisions which strive to coordinate future growth and land uses with infrastructure capabilities and availability. This includes, "Strategically locate new developments in areas to create mutually beneficial relationships among businesses," "Strive to avoid allowing conflicting land uses to be located adjacent to one another" and "Encourage industrial uses in areas with convenient access to arterial roadways."

### **Suggested Conditions:**

1. The Developer shall establish and maintain the required landscaping as required by the site plan during each phase of construction and in accordance with the landscaping plan of the site plan or requirements of the VILLAGE Ordinance.

2. The Developer shall establish and maintain the required stormwater requirements as required by the site plan during the first phase of the construction and in accordance with the site plan.
3. The Developer shall sign and submit a Stormwater Maintenance Agreement prior to the issuing of building permits.
4. The Developer shall pave the asphalt driveway apron entrances, driveways, parking areas as indicated on the site plan.
5. The Developer shall meet all local, state, and federal requirements for fire protection.
6. All exterior lighting shall be full cut-off lighting and installed according to the location, height, and illumination power specified on the site plan.
7. During the site development process, the developer shall maintain the site in an effort to reduce any negative effects of construction on neighboring properties. Any areas of the bare dirt shall be seeded with grass at the completion of each phase.
8. The Developer shall obtain a Roadway Access Permit from the VILLAGE.
9. The Developer shall obtain proper permits for any future land uses associated with the three proposed future buildings.
10. The Developer must comply with all ordinance requirements and performance standards related to current and future proposed uses.
11. The Developer is prohibited from any uses associated with Indoor Sales or Services and Light Industrial Activities Incidental to Indoor Sales and Services.

# Site Plan Application & Submittal Requirement



### Application Fees

- Minor Site Plan Amendment: \$150
- Site Plans less than 5,000 SF of Building Area: \$500
- Site Plans greater than 5,000 SF of Building Area: \$1,000

Completed applications shall be submitted to the Village Clerk 45 days prior to the Planning Commission meeting date on which they will be considered. It is pertinent that the relevant sections of the zoning ordinance be reviewed for regulations and other information, which may be required for submittal depending on the type of application.

1. Project Name Premier Property Development Submittal Date 11/20/25
2. Owner Greg & Vinnie Tesch Telephone 715-551-9700  
Address 1190 Gardner Park Road Kronenwetter
3. Applicant is (check one)  Owner  Agent  Other \_\_\_\_\_  
(If Applicant is not the owner, provide letter of Authorization from Owner)
4. Project Applicant / Contact Person Dustin Vreeland  
Phone # 715-241-0947 Fax # \_\_\_\_\_  
Address 6103 Dawn Street Weston, WI 54476  
Email Address dustin@vreelandassociates.us
5. Is property to be subdivided within an existing subdivision? \_\_\_\_\_  
If so, what is the existing subdivision name? \_\_\_\_\_
6. Location and legal description of property (by government lot, section, township, range and county)  
Parcel 1 of CSM 8726
7. Total acreage of property 5.068
8. Frontage width of parcel 362.45
9. Parcel Identification Number (PIN) 14527070340972
10. Existing Zoning of the property M2
11. Type of Parcel  Commercial  Multi-Family  Industrial  PUD  Other
12. Current Zoning/Use

	<u>Zoning</u>	<u>Land Use</u>
North:	<u>M2</u>	<u>WPS</u>
South:	<u>M2</u>	<u>Wausau Tile</u>
East:	<u>M2</u>	<u>WPS</u>
West:	<u>B3</u>	<u>Animal House Kennel</u>

**CHECKLIST**

- Plans and written submittals. The following is a description of the plans, documents and written submittals required for the various permits by this chapter. Applications shall be submitted on forms provided by the Village Clerk, along with applicable fees as per the fee schedule. All plans and documents must be 11 inches by 17 inches reproducible, except one set of originals at D-size scale. A description of the intended uses, described in reasonable detail, shall include the following:
- a. Zoning. Existing zoning district(s) and proposed zoning district(s) (if different).
  - b. Land use plan designation. The designated type of use shown for the site on the Village Land Use Map.
  - c. Current land uses. Present land uses on the subject property.
  - d. Proposed land uses. Proposed land uses for the subject property.
  - e. Projected use. Projected number of residents, employees, and daily visitors.
  - f. Proposed development. The amount of dwelling units, floor area, impervious surface area, and landscape surface area, and resulting site density floor area ratio, impervious surface area ratio, and landscape surface area ratio.
  - g. Operations. The operational considerations relating to hours of operation, projected normal and peak water usage, sanitary sewer or septic loading, and traffic generation.
  - h. Building material. The exterior building and fencing material types and colors.
  - i. Expansion. Any possible future expansion and related implications.
  - j. Other information. Any other information pertinent to adequate understanding by the Plan Commission of the intended use and its relation to nearby properties.
- Small location map. A map of the subject property showing all lands for which the use is proposed, and all other lands within 200 feet of the boundaries of the subject property. The location map shall clearly indicate the current zoning of the subject property and adjacent properties and show any other jurisdiction(s) that maintain control over the property. The location map shall be at a scale that is not less than one inch equals 800 feet, as well as a location map copy on a sheet no larger than 11 inches by 17 inches, showing the subject property and illustrating its relationship to the nearest street intersection.
- Scale Site Plan: A site plan of the subject property as proposed for development. A site plan shall be submitted at scale (and a reduction at 11" x 17") that includes:
- a. A title block which indicates the name, address and phone/fax number(s) of the current property owner and/or agent(s) (developer, architect, engineer, planner) for project;
  - b. The date of the original plan and the latest date of revision to the plan;
  - c. A north arrow and a graphic scale. Said scale shall not be smaller than one inch equals one hundred (100) feet;
  - d. A legal description of the subject property;
  - e. All property lines and existing and proposed right-of-way lines with bearings and dimensions clearly labeled;
  - f. All existing and proposed easement lines and dimensions with a key provided and explained on the margins of the plan as to ownership and purpose;
  - g. All required building setback lines;
  - h. All existing and proposed buildings, structures, and paved areas, including building entrances, walks, drives, decks, patios, fences, utility poles, drainage facilities, and walls;
  - i. The location and dimensions of all access points onto public streets;
  - j. The location and dimensions of all on-site parking (and off-site parking provision if they are to be employed), including a summary of the number and size of parking stalls provided versus the number required by this Ordinance;
  - k. The location and dimensions of all loading and service areas on the subject property and labels indicating the dimensions of such areas;

- l. The location of all outdoor storage areas and screening devices;
- m. The location, type, height, size and lighting of all signage on the subject property;
- n. The location, height, design/type, illumination power and orientation of exterior lighting on the subject property;
- o. The location and type of any permanently protected green space areas;
- p. The location of existing and proposed drainage facilities;
- q. In the legend, data for the subject property: (Lot Area, Floor Area, Floor Area Ratio, Impervious Surface Area, Impervious Surface Ratio, and Building Height.)

Detailed Landscape Plan: At the same scale as the site plan (and a reduction at 11" x 17'), showing the location of all required buffer yards and landscaped areas and existing and proposed landscape point fencing and berm options for meeting said requirements.

- a. The individual plant locations, species, and size shall be shown.
- b. Screening such as: fencing types and berm heights shall be shown by size and height.

Grading Plan: At the same scale as the site plan (and a reduction at 11" x 17") showing existing and proposed grades, including retaining walls and related devices and erosion control measures. It will include:

- a. Existing and proposed contours at a minimum of 2-foot contours;
- b. Existing and proposed spot elevations at corners of structures and significant changes in grade;
- c. Flow lines of all drainages.

Elevation Drawings: Side views of proposed buildings, structures, or proposed remodeling of existing buildings showing finished exterior treatment shall also be submitted, with adequate labels provided to clearly depict exterior materials, texture, color and overall appearance. Perspective renderings of the proposed project and/or photo of similar structures may be submitted, but not in lieu of adequate drawing showing the actual intended appearance of the buildings.

Erosion Control Plan: At the same scale as the site plan (and a reduction at 11" x 17") showing all erosion control measures:

- a. Location and description of soil types which have been rated severe for erosion limitations by the U.S. Soil Conservation Service;
- b. Elevation and extent of all proposed grading;
- c. Plans and specifications for erosion control devices, such as: retaining walls, cribbing, planting, anti-erosion devices, and other protective measures;
- d. Drainage areas of the site, upstream and downstream culverts or other restrictions;
- e. Plans (written or drawn) for removal, re-contouring, or other disposition of sediment basins or other temporary devices;
- f. Plans prepared as per *Wisconsin Construction Site Best Management Practices Handbook*, prepared by the Wisconsin Department of Natural Resources.

Storm Water Management: The storage and controlled release of excess storm water must be shown along with calculations indicating the development does not exceed the peak discharge of storm water runoff as occurring under the predevelopment existing conditions of the parcel, based upon a ten (10) year storm event. Where site detention is required for runoff control, the detention facilities shall safely pass the runoff of a one hundred (100) year storm through an emergency outlet.

**Note: Applicant must be the landowner or his/her designee. Tenants, agents, designers, contractors, attorneys, etc. shall not sign application unless Power of Attorney is submitted with the application.**

Dustin Vreeland  
Printed Name of Applicant

*Dustin Vreeland*  
Signature of Applicant

---

**FOR OFFICE USE ONLY:**

Application Received 12/9/25 Check # 1083

**Plan Commission:**

Meeting Date \_\_\_\_\_ Recommendation: Approved / Denied

**Village Board:**

Meeting Date \_\_\_\_\_ Decision: Approved / Denied

Address: 1190 Gardner Park Road  
 Application  
 #:

**Permit Fee Worksheet**  
*Single Family Residences: New Construction and Additions*

	Quantity	Fee	Total
Finished Square Footage*	0	\$0.15	\$0.00
Unfinished Square Footage*	0	\$0.10	\$0.00
Plumbing*	0	\$0.10	\$0.00
Lateral Testing	0	\$30.00	\$0.00
Electrical*	0	\$0.10	\$0.00
HVAC*	0	\$0.08	\$0.00
Yard Shed (over 200 sq. ft)	0	\$60.00	\$0.00
Garage- 550 sq.ft or less	0	\$100.00	\$0.00
Garage- over 550 sq.ft (\$75.00 + \$0.20/ sq ft)	0	\$75.00	\$0.00
Outbuilding- 1,000 sq.ft or less	0	\$100.00	\$0.00
Outbuilding- 1,000 to 2,500 sq. ft	0	\$150.00	\$0.00
Outbuilding- Over 2,500 sq. ft (\$200+\$6.00/100 sq.	0	\$0.60	\$0.00
Decks/Porches	0	\$75.00	\$0.00
Plan Review (Site Plan)*	5,000	\$0.10	\$1,000.00
Building Permit Seal	0	\$50.00	\$0.00
Occupancy Escrow- 1 & 2 Family	0	\$1,000.00	\$0.00
Occupancy Escrow - Multi Family	0	\$2,000.00	\$0.00
Erosion Control- One & Two Family	0	\$50.00	\$0.00
Erosion Control- Multi Family	0	\$400.00	\$0.00
Address Number	0	\$30.00	\$0.00
Uniform House Number Sign	0	\$30.00	\$0.00
Connection Fee	0	\$728.00	\$0.00
Road Way Access Permit	0	\$500.00	\$0.00
Early Start - Foundation Only	0	\$100.00	\$0.00
Mobile Home Installation	0	\$100.00	\$0.00
Swimming Pool- Above Ground	0	\$50.00	\$0.00
Swimming Pool- In Ground	0	\$100.00	\$0.00
Raze - Accesory	0	\$50.00	\$0.00
Raze - Residential	0	\$65.00	\$0.00
Fence	0	\$40.00	\$0.00
Rezone	1	\$300.00	\$300.00
<b>Total Sq. Footage</b>	<b>5001</b>	<b>Total</b>	<b>\$1,300.00</b>

\* A \$50.00 minimum applies

\*Fees can be paid through the online portal here:

<https://kronenwetterwi.ourcommunityconnect.com/register>

PLAN REVIEW FEE: \$1,000.00

INSPECTION FEE: \$0.00

WIS. PERMIT SEAL: \$0.00

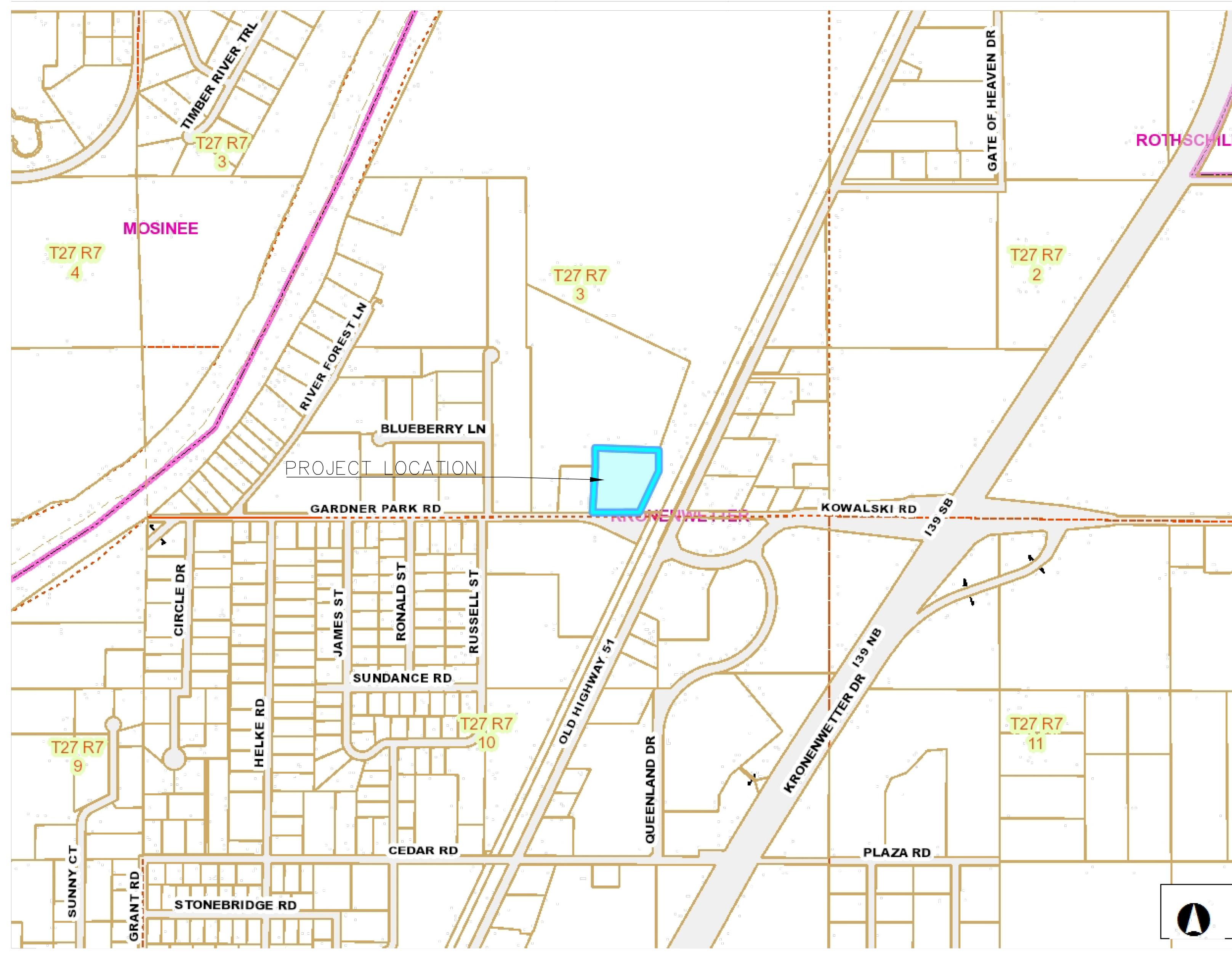
OTHER: \$0.00

*Paid Check # 1083  
 \$1,300.00  
 H. Coyle*

BEARINGS REFERENCED TO THE  
 WISCONSIN COUNTY COORDINATE SYSTEM  
 (MARATHON) MAD83 (2011)

ADDRESS:  
 1109 GARDNER PARK ROAD KRONENWETTER, WI 54455

LOCATION:  
 PARCEL 1 OF CERTIFIED SURVEY MAP NUMBER 8726-34-104, PART OF THE SOUTHWEST 1/4  
 OF THE SOUTHEAST 1/4 OF SECTION 3, TOWNSHIP 27 NORTH, RANGE 7 EAST, VILLAGE OF  
 KRONENWETTER, MARATHON COUNTY, WISCONSIN



LOCATION MAP

DRAWING INDEX

- SHEET C2      EXISTING SITE
- SHEET C3      PROPOSED SITE PLAN
- SHEET C4      PROPOSED UTILITY PLAN
- SHEET C5      PROPOSED GRADING PLAN
- SHEET C6      PROPOSED EROSION CONTROL PLAN
- SHEET C7.0-C7.1      PROPOSED STORMWATER PLAN & DETAIL
- SHEET C8      PROPOSED SITE DETAILS
- SHEET C9      PROPOSED EROSION CONTROL DETAILS

Point Table				
Point #	Northing	Easting	Elevation	Description
1000	160388.64	274928.64	1171.98	South side of 1.25" Iron Pipe
1001	159887.44	274821.80	1172.44	Survey Mag Nail
1002	159891.77	274397.91	1170.95	Survey Mag Nail
1003	160407.57	274435.64	1174.00	Center of 3/4" Rebar

**PRIVATE UTILITIES NOT LOCATED  
UNDERGROUND UTILITIES**

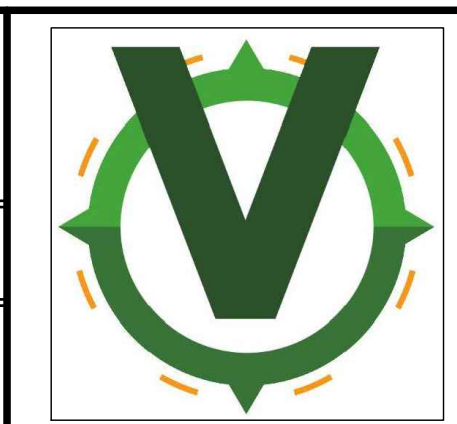
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART,  
 ON THE BASIS OF INFORMATION COMPILED AND FURNISHED  
 BY OTHERS. THE SURVEYOR AND ENGINEER WILL NOT BE  
 RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE  
 BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT.  
 SOME UTILITIES HAVE BEEN LOCATED BY MAPS PROVIDED  
 BY OTHERS - LOCATIONS ARE APPROXIMATE.  
 PRIVATE UTILITIES MAY EXIST BUT ARE NOT SHOWN ON MAP.  
 FIELD VERIFY SANITARY AND STORM SEWER PIPE SIZE AND  
 LOCATION.  
 UNDERGROUND UTILITIES SHOWN ON THIS MAP ARE BASED  
 IN PART ON MARKINGS BY DIGGERS HOTLINE.

**SCALE NOTE:**  
 IF YOU ARE VIEWING THESE PLANS IN AN  
 11"x17" SIZE THEY MAY BE HALF SCALE  
 FROM THE ORIGINAL 22"x34" SIZE DRAWING  
 AND THE DRAWING SCALE IS HALF OF THAT  
 STATED. CHECK SCALE.

STAMP/SIGNATURE:

REVISIONS		
BY	DATE	DESCRIPTION

**TITLE PAGE:**  
 COVER PAGE  
 PROJECT: PREMIER PROPERTY DEVELOPMENT  
 LOCATION: VILLAGE OF KRONENWETTER  
 MARATHON COUNTY, WISCONSIN



**VREELAND ASSOCIATES LAND  
 SURVEYORS & ENGINEERS**  
 6103 DAWN STREET WESTON, WI. 54476  
 PHONE NO.: (715) 241-0947  
 EMAIL: [dustin@vreelandassociates.us](mailto:dustin@vreelandassociates.us)  
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**PREPARED FOR:**  
 GREG TESCH  
**PLAN DATE:**  
 NOVEMBER 19TH, 2025

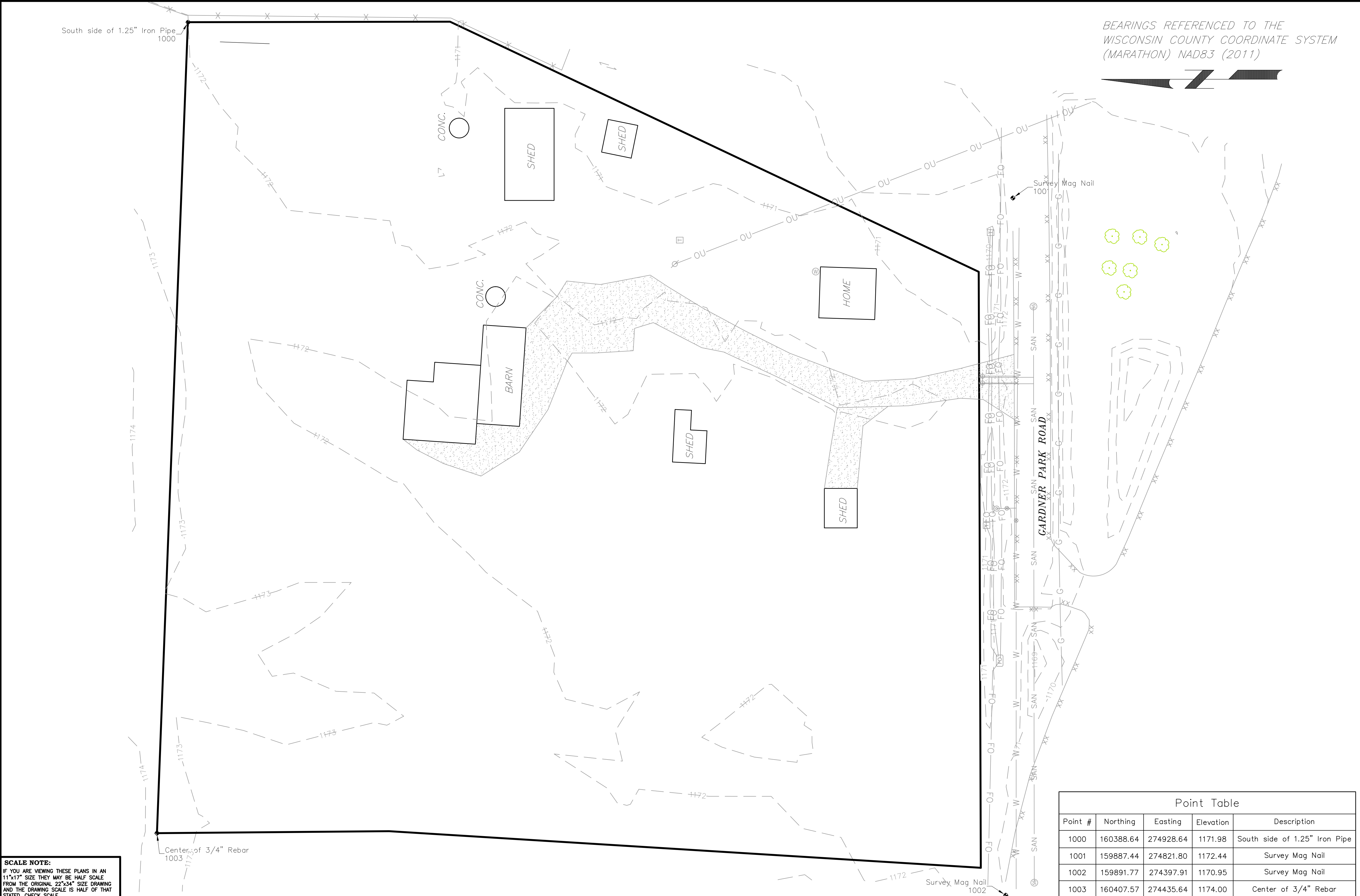
DESIGNER: DUSTIN VREELAND  
 SURVEYED BY: CB & TV  
 FILE NO.: 25-0410 ENGINEERING  
 DATE: SEPTEMBER 15TH, 2025  
 SCALE:  
**NO SCALE**  
 SHEET  
**C1**

**SURVEY LEGEND**

These standard symbols will be found in the drawing.

- SANITARY SEWER
- STORM SEWER
- OVERHEAD UTILITIES
- BURIED ELECTRIC
- BURIED GAS
- BURIED TELEPHONE
- BURIED TELEVISION
- WATERMAIN
- FIBER OPTICS
- IRRIGATION LINE
- FENCE LINE
- EDGE OF BITUMINOUS
- CONTOUR LINE
- F.F.E. = FINISHED FLOOR ELEVATION
- RECTANGULAR CATCH BASIN
- CIRCULAR CATCH BASIN
- SQUARE CATCH BASIN
- STORM MANHOLE
- SANITARY MANHOLE
- SEPTIC TANK
- UTILITY MANHOLE
- WATER MANHOLE
- WELL
- WATER SERVICE
- WATER VALVE
- HYDRANT
- IRRIGATION HEAD
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC TRANSFORMER
- ELECTRIC OUTLET
- ELECTRIC BOX
- WATER FOUNTAIN
- LIGHTPOLE
- POWERPOLE
- FLOOD LIGHT
- BOLLARD
- GUY WIRE
- GAS METER
- GAS VALVE
- TELEPHONE MANHOLE
- TELEPHONE PEDESTAL
- FIBER OPTIC VAULT
- FIBER OPTIC MANHOLE
- PARKING METER
- GUARD POST
- VENT PIPE
- CLEAN OUT
- MONITORING WELL
- BURIED FUEL TANK
- CONTROL BOX
- AIR CONDITIONING UNIT
- BUSH/SHRUB
- HEDGE
- TREE
- PINE TREE

BEARINGS REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (MARATHON) NAD83 (2011)



Point Table				
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**STAMP/SIGNATURE:**

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BY	DATE	DESCRIPTION

**TITLE PAGE:**  
**EXISTING SITE**

PROJECT: PREMIER PROPERTY DEVELOPMENT

LOCATION: VILLAGE OF KRONENWETTER  
MARATHON COUNTY, WISCONSIN



**VREELAND ASSOCIATES LAND SURVEYORS & ENGINEERS**  
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PREPARED FOR: **GREG TESCH**

PLAN DATE: **NOVEMBER 19TH, 2025**

DESIGNER: DUSTIN VREELAND  
SURVEYED BY: CB & TV  
FILE NO.: 25-0410 ENGINEERING  
DATE: SEPTEMBER 15TH, 2025  
SCALE: **1" = 30'**  
SHEET **C2**

**SITE PLAN NOTES:**

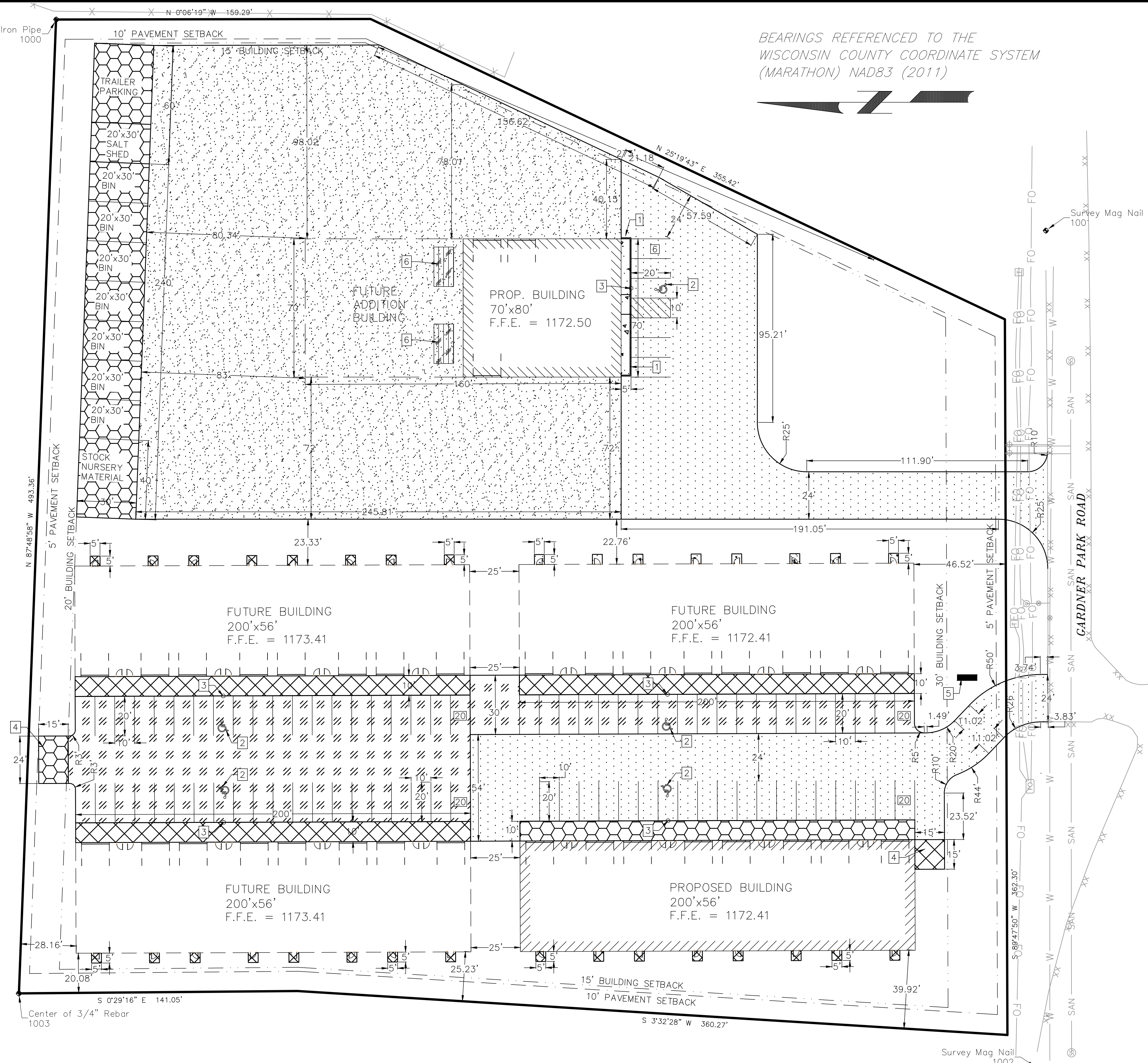
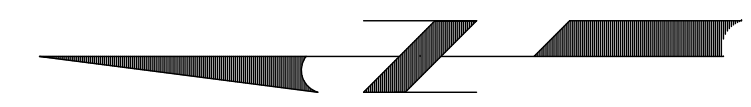
- CONTACT DIGGER'S HOTLINE 5 WORKING DAYS PRIOR TO THE START OF DEMOLITION/CONSTRUCTION.
- GRADE, LINE, AND LEVEL TO BE REVIEWED IN THE FIELD BY THE CONSTRUCTION MANAGER.
- ALL REQUIRED EROSION CONTROL MEASURES ARE TO BE INSTALLED IN ACCORDANCE WITH LOCAL MUNICIPAL AND DEPARTMENT OF NATURAL RESOURCES REGULATIONS.
- ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES AND LOCAL AUTHORITIES.
- SEE SHEET C6 FOR ALL REQUIRED EROSION CONTROL ELEMENTS.
- ANY EXISTING UTILITIES NOT SHOWN ON THIS DOCUMENT WHICH NEED TO BE REMOVED, RELOCATED AND OR ADJUSTED SHALL BE THE RESPONSIBILITY OF THE SITE GRADING CONTRACTOR AND INCLUDED IN THE BASE BID CONTRACT.
- VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE START OF DEMOLITION/CONSTRUCTION.
- ALL BIDDERS PLANNING ON SUBMITTING A BID SHALL VISIT THE SITE AND REVIEW THE EXISTING CONDITIONS PRIOR TO THE BID DATE.
- PRIOR TO THE START OF WORK VERIFY WITH THE LOCAL AUTHORITIES THAT ALL REQUIRED PERMITS HAVE BEEN ACQUIRED.
- COORDINATE CONSTRUCTION IN THE RIGHT OF WAY WITH THE LOCAL AUTHORITIES.
- PROVIDE PROPER BARRICADES, SIGNS AND TRAFFIC CONTROL TO MAINTAIN THRU TRAFFIC ALONG ADJACENT STREETS IN ACCORDANCE WITH LOCAL MUNICIPAL REQUIREMENTS.
- RESTORE ALL EXCAVATED LAWN AREAS WITH A MINIMUM OF 6" OF TOPSOIL, SEED, FERTILIZER, AND MULCH.
- ALL GENERAL LANDSCAPE AREAS SHALL BE SEEDED/FERTILIZED/MULCHED IN ACCORDANCE WITH THE WDNR TECHNICAL STANDARDS.

**SITE PLAN LEGEND**

- PROPOSED 4" CONCRETE WITH 8" BASE COURSE  
SEE DETAIL ON SHEET C8
- FUTURE 4" CONCRETE WITH 8" BASE COURSE  
SEE DETAIL ON SHEET C8
- PROPOSED 3.5" ASPHALT WITH 12" BASE COURSE  
SEE DETAIL ON SHEET C8
- FUTURE 3.5" ASPHALT WITH 12" BASE COURSE  
SEE DETAIL ON SHEET C8
- PROPOSED 12" GRAVEL
- PROPOSED 6" CONCRETE WITH 8" BASE COURSE  
SEE DETAIL ON SHEET C8
- PROPOSED PARKING LOT STALLS
- PROPOSED THICKENED EDGE WALK  
SEE DETAIL ON SHEET C8
- PROPOSED HANDICAP STALL  
SEE DETAIL ON SHEET C8
- PROPOSED HANDICAP SIGN  
SEE DETAIL ON SHEET C8
- PROPOSED DUMPSTER ENCLOSURE  
SEE DETAIL ON SHEET C8
- PROPOSED MONUMENT SIGN  
COORDINATE W/OWNER
- PROPOSED FUEL STORAGE  
COORDINATE W/OWNER

South side of 1.25" Iron Pipe 1000

BEARINGS REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (MARATHON) NAD83 (2011)



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**STAMP/SIGNATURE:**

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REVISIONS		
BY	DATE	DESCRIPTION

**TITLE PAGE:**

**PROPOSED SITE PLAN**

**PROJECT:** PREMIER PROPERTY DEVELOPMENT

**LOCATION:** VILLAGE OF KRONENWETTER  
MARATHON COUNTY, WISCONSIN



**VREELAND ASSOCIATES LAND SURVEYORS & ENGINEERS**  
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**PREPARED FOR:** GREG TESCH

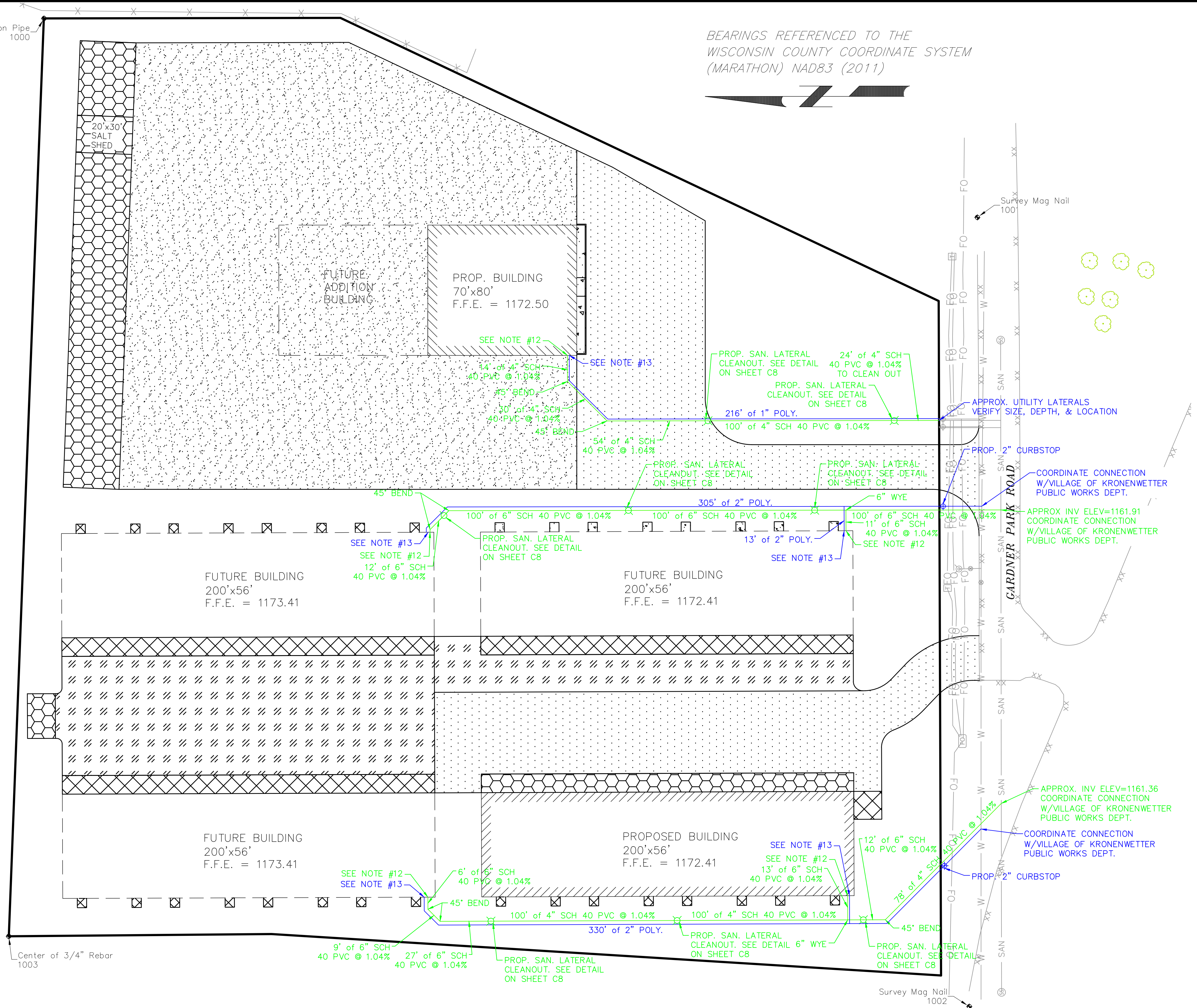
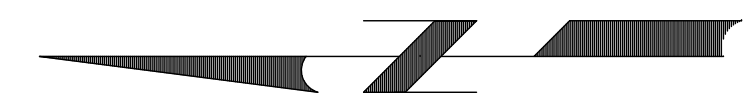
**PLAN DATE:** NOVEMBER 19TH, 2025

DESIGNER: DUSTIN VREELAND
SURVEYED BY: CB & TV
FILE NO.: 25-0410 ENGINEERING
DATE: SEPTEMBER 15TH, 2025
SCALE: 1" = 30'
SHEET C3

**UTILITY PLAN NOTES:**

- CONTACT DIGGER'S HOTLINE 5 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
- GRADE, LINE, AND LEVEL TO BE REVIEWED IN THE FIELD BY THE CONSTRUCTION MANAGER.
- ANY EXISTING UTILITIES NOT SHOWN ON THIS DOCUMENT WHICH NEED TO BE REMOVED, RELOCATED AND OR ADJUSTED SHALL BE THE RESPONSIBILITY OF THE SITE GRADING CONTRACTOR.
- REFER TO THE PROPOSED BUILDING MECHANICAL/PLUMBING PLANS FOR EXACT CONNECTION LOCATIONS AND VERIFY SANITARY LATERAL.
- COORDINATE ALL UTILITY WORK WITH GAS, ELECTRICAL, (INCLUDING MAIN SERVICE, SITE LIGHTING, CONDUITS AND SIGNAGE) CABLE AND TELEPHONE CONSTRUCTION AND RESPECTIVE TRADES RESPONSIBLE FOR INSTALLATION OF SAID UTILITIES.
- COORDINATE ALL WORK WITHIN THE PUBLIC RIGHT OF WAY WITH THE CITY OF MEDFORD.
- ALL TESTING AND INSPECTION SHALL BE DONE IN ACCORDANCE WITH SPS 382.21.
- THE PROPOSED WATER LATERAL SHALL HAVE A MINIMUM COVER OF 7'-5" TO THE TOP OF PIPE FROM THE PROPOSED FINISHED GRADES, SEE SHEET C5 FOR PROPOSED GRADES.
- MINIMUM OF 18" VERTICAL SEPARATION BETWEEN UTILITY CROSSINGS.
- THE MUNICIPALITY SHALL BE CONTACTED PRIOR TO ANY EXCAVATION IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL HAVE HIS TRAFFIC CONTROL PLAN APPROVED PRIOR TO WORK COMMENCING. THE MUNICIPALITY SHALL OPERATE ALL EXISTING WATER VALVES AS NEEDED.
- FIELD VERIFY THE SANITARY LATERAL CONNECTION INVERT ELEVATION PRIOR TO THE START OF WORK.
- CONNECT PROPOSED 4" SANITARY LATERAL TO BUILDING. COORDINATE CONNECTION AND LOCATION WITH BUILDING PLUMBER.
- CONNECT PROPOSED 1" WATER SERVICE, 5' OUTSIDE BUILDING. COORDINATE CONNECTION AND LOCATION WITH BUILDING PLUMBER.

BEARINGS REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (MARATHON) NAD83 (2011)



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	BY	DATE	DESCRIPTION

**TITLE PAGE:**  
**PROPOSED UTILITY PLAN**

PROJECT: PREMIER PROPERTY DEVELOPMENT

LOCATION: VILLAGE OF KRONENWETTER MARATHON COUNTY, WISCONSIN



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PREPARED FOR: **GREG TESCH**



PLAN DATE: **NOVEMBER 19TH, 2025**

DESIGNER: DUSTIN VREELAND  
SURVEYED BY: CB & TV  
FILE NO.: 25-0410 ENGINEERING  
DATE: SEPTEMBER 15TH, 2025  
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SHEET **C4**

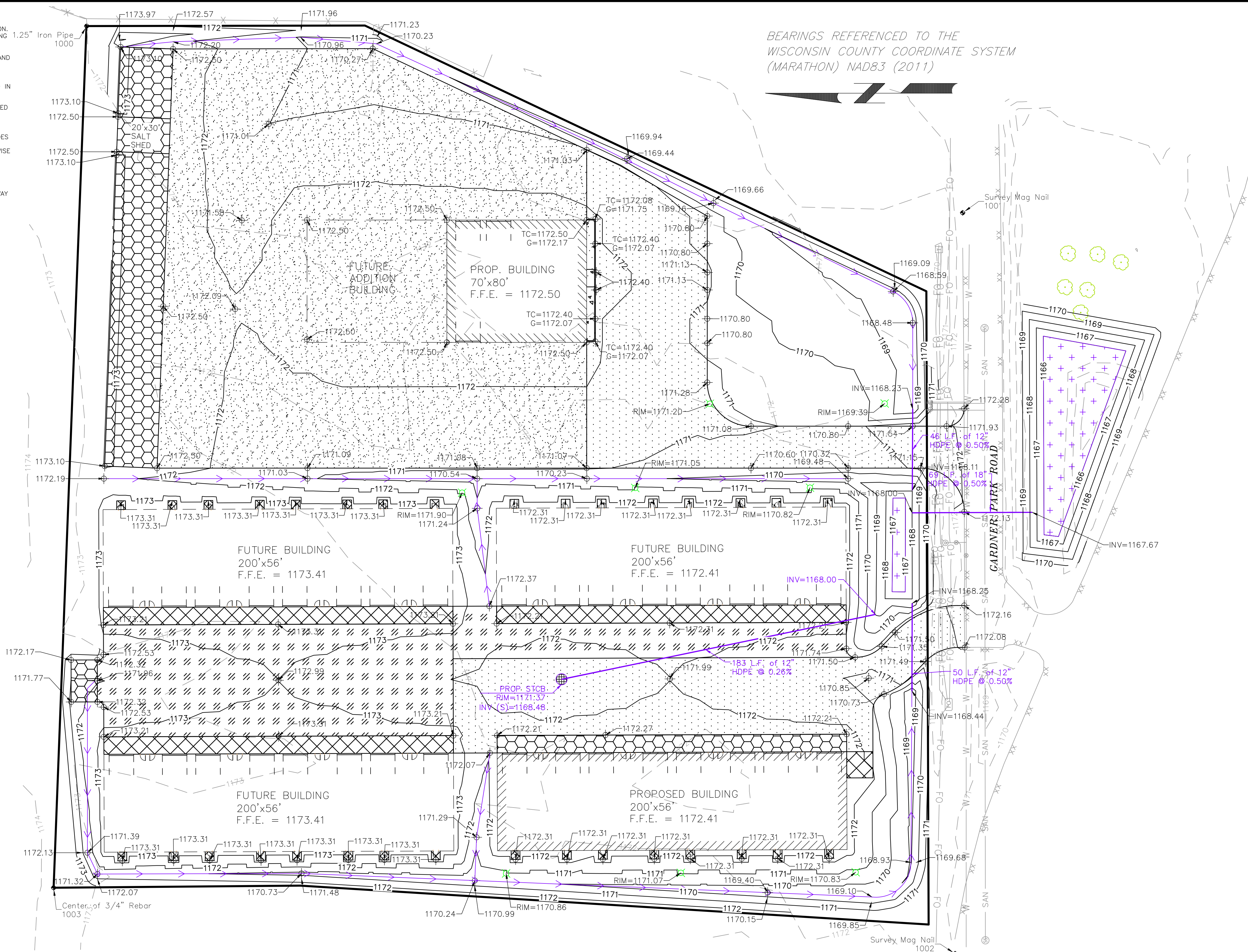
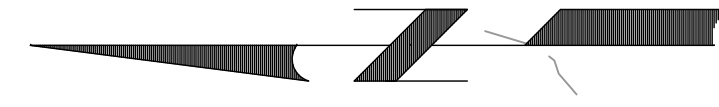
**GRADING NOTES:**

- CONTACT DIGGER'S HOTLINE 5 WORKING DAYS PRIOR TO THE START OF DEMOLITION/CONSTRUCTION.
- THE PROPOSED SITE PLAN FINISH FLOOR ELEVATION OF 1174.55 EQUALS THE PROPOSED BUILDING 1.25" Iron Pipe ARCHITECTURAL FINISH FLOOR ELEVATION OF 100.00'.
- GRADE, LINE, AND LEVEL TO BE REVIEWED IN THE FIELD BY THE CONSTRUCTION MANAGER.
- INSTALL ALL REQUIRED EROSION CONTROL MEASURES IN ACCORDANCE WITH LOCAL AUTHORITIES AND THE DEPARTMENT OF NATURAL RESOURCES REGULATIONS.
- ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES, LOCAL AUTHORITIES REGULATIONS.
- 6" OF TOPSOIL SHALL BE PROVIDED IN ALL GENERAL LAWN AREAS AND 12" SHALL BE PROVIDED IN ALL PLANTING BED AREAS.
- SEE SHEET C6 FOR ALL REQUIRED EROSION CONTROL ELEMENTS.
- ANY EXISTING UTILITIES NOT SHOWN ON THIS DOCUMENT WHICH NEED TO BE REMOVED, RELOCATED AND OR ADJUSTED SHALL BE THE RESPONSIBILITY OF THE SITE GRADING CONTRACTOR AND INCLUDED IN THE BASE BID CONTRACT.
- COORDINATE ALL EARTHWORK ACTIVITIES WITH GAS, ELECTRIC, (INCLUDING MAIN SERVICE, SITE LIGHTING, CONDUITS AND SIGNAGE) CABLE AND TELEPHONE CONSTRUCTION AND RESPECTIVE TRADES FOR THE INSTALLATION OF SAID UTILITIES.
- EXCESS TOPSOIL SHALL BE STOCKPILED AND STORED ONSITE FOR FUTURE USE, UNLESS OTHERWISE DIRECTED BY THE OWNER. SILT FENCE SHALL BE PLACED AROUND STOCKPILE.
- THE LOCAL MUNICIPALITY SHALL BE CONTACTED PRIOR TO ANY EXCAVATION IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL HAVE HIS TRAFFIC CONTROL PLAN APPROVED PRIOR TO WORK COMMENCING. THE LOCAL MUNICIPALITY SHALL OPERATE ALL EXISTING WATER VALVES IF NEEDED.
- GRADES AT BUILDING EDGE SHALL BE 6" BELOW FINISHED FLOOR ELEVATION EXCEPT AT DOOR WAY ENTRANCES OR UNLESS OTHERWISE NOTED.

**GRADING LEGEND:**

- $\phi$  756.02 PROPOSED SPOT ELEVATION
-  PROPOSED SWALE
-  PROPOSED STORMWATER INFILTRATION BASIN SEE SHEET C7.0 & 7.1

BEARINGS REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (MARATHON) NAD83 (2011)



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REVISIONS		
BY	DATE	DESCRIPTION

**TITLE PAGE:**

**PROPOSED GRADING PLAN**

**PROJECT:** PREMIER PROPERTY DEVELOPMENT

**LOCATION:** VILLAGE OF KRONENWETTER  
MARATHON COUNTY, WISCONSIN



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**PLAN DATE:** NOVEMBER 19TH, 2025

DESIGNER: DUSTIN VREELAND
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FILE NO.: 25-0410 ENGINEERING
DATE: SEPTEMBER 15TH, 2025
SCALE: 1" = 30'
SHEET C5

**PROPOSED EROSION CONTROL ACTIVITIES**

1. CONTACT DIGGER'S HOTLINE 5 WORKING DAYS PRIOR TO THE START OF DEMOLITION/CONSTRUCTION.
2. NOTIFY THE LOCAL MUNICIPALITY AT LEAST 2 WORKING DAYS PRIOR TO THE START OF SOIL DISTURBING ACTIVITIES.
3. KEEP A COPY OF THE EROSION CONTROL PLANS AND STORMWATER & EROSION CONTROL MANAGEMENT PLAN ON SITE THROUGHOUT THE PROJECT.
4. INSTALL ALL TEMPORARY EROSION CONTROL ELEMENTS PRIOR TO THE START OF DEMOLITION/CONSTRUCTION.
5. ALL ACTIVITIES SHALL BE CONDUCTED IN A LOGICAL SEQUENCE AS TO MINIMIZE THE AMOUNT OF BARE SOIL EXPOSED AT ANY ONE TIME. MAINTAIN EXISTING VEGETATION AS LONG AS POSSIBLE.
6. CRUSHED ROCK DRIVES FOR SEDIMENT TRACKING UTILIZING 3" CRUSHED ROCK SHALL BE MAINTAINED AT ALL CONSTRUCTION ENTRANCES TO THE SITE. THE ROCK DRIVE SHALL BE A MINIMUM OF 12" THICK AND BE A MINIMUM OF 50 FEET IN LENGTH BY THE WIDTH OF THE DRIVEWAY.
7. OFF SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF A STORM EVENT SHALL BE CLEANED UP BY THE END OF THE NEXT WORK DAY. ALL OFF SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION ACTIVITIES, INCLUDING SOIL TRACKED BY CONSTRUCTION TRAFFIC, SHALL AT A MINIMUM BE CLEANED BY THE END OF EACH WORK DAY. EXCESSIVE AMOUNTS OF SEDIMENT OR OTHER DEBRIS TRACKED ONTO ADJACENT STREETS SHALL BE CLEANED BY THE END OF EACH WORK DAY. EXCESSIVE AMOUNTS OF SEDIMENT OR OTHER DEBRIS TRACKED ONTO ADJACENT STREETS SHALL BE CLEANED IMMEDIATELY. FINE SEDIMENT ACCUMULATIONS SHALL BE CLEANED FROM ADJACENT STREETS BY THE USE OF MECHANICAL OR MANUAL SWEEPING OPERATIONS ONCE A WEEK AT A MINIMUM AND BEFORE IMMINENT RAIN EVENTS.
8. DISTURBED GROUND OUTSIDE OF THE EVERYDAY CONSTRUCTION AREAS, INCLUDING SOIL STOCKPILES, THAT ARE LEFT INACTIVE FOR MORE THAN 7 DAYS SHALL BE TEMPORARILY STABILIZED BY SEEDING/MULCHING OR OTHER APPROVED METHODS.
9. CONCRETE WASHOUT PER EPA GUIDELINES.
10. WASTE MATERIAL THAT IS GENERATED ON THE CONSTRUCTION SITE SHALL BE PROPERLY DISPOSED OF AND NOT ALLOWED TO RUN INTO RECEIVING WATERS. ANY SEDIMENT OR TRASH THAT HAS MOVED OFF-SITE SHALL BE SWEEPED OR CLEANED UP BEFORE THE END OF THE WORK DAY.
11. EROSION CONTROL DEVICES DESTROYED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE END OF EACH WORK DAY.
12. INSPECT ALL EROSION CONTROL MEASURES AT LEAST ONCE A WEEK AND AFTER ANY RAINFALL OF 0.5" OR MORE. MAKE NEEDED REPAIRS AND DOCUMENT ALL ACTIVITIES AS PER THE REQUIREMENTS OF THE NOTICE OF INTENT SUBMITTED BY THE PROJECT CIVIL ENGINEER.
13. ALL TEMPORARY EROSION CONTROL ELEMENTS SHALL REMAIN IN PLACE UNTIL A SUFFICIENT GROWTH OF VEGETATION IS ESTABLISHED AND THEN BE REMOVED AS PART OF THE BASE BID.
14. IF SEDIMENT LADEN WATER NEEDS TO BE REMOVED FROM THE SITE, FILTER BAGS OR SCREENING SHALL BE USED IN ACCORDANCE WITH THE WI DNR TECHNICAL STANDARDS 1061 TO PREVENT THE DISCHARGE OF SEDIMENT TO THE MAXIMUM EXTENT PRACTICABLE.
15. IF BARE SOIL IS EXPOSED DURING THE WINTER MONTHS, STABILIZATION BY MULCHING OR ANIONIC POLYACRYLAMIDE SHALL OCCUR PRIOR TO SNOW OR FROZEN GROUND.
16. SILT FENCE SHALL BE INSTALLED AROUND THE TOPSOIL STOCKPILE.
17. THE CONTRACTOR SHALL ONLY USE PHOSPHORUS FREE FERTILIZER FOR ALL LANDSCAPE APPLICATIONS.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING PLANTED DISTURBED AREAS WHENEVER MORE THAN 7 DAYS OF DRY WEATHER OCCUR.
19. THE CONTRACTOR SHALL PERFORM INSPECTIONS AND MONITORING OF EROSION CONTROL PRACTICES IN ACCORDANCE WITH THE WI DNR "CONSTRUCTION SITE INSPECTION REPORT" FORM 3400-187. THIS FORM CAN BE FOUND ON WISCONSIN DNR WEBSITE OR PROVIDE IF NECESSARY.

**EROSION CONTROL SCHEDULING**

1. INSTALL PERIMETER EROSION CONTROL.
2. BEGIN ROUGH GRADING AND UTILITY INSTALLATION.
3. DURING GRADING ACTIVITIES EXISTING GRASS AND VEGETATION, TO BE REMOVED, SHALL REMAIN IN PLACE FOR AS LONG AS POSSIBLE, TO AVOID SEDIMENT TRANSPORT.
4. ALL DISTURBED AREAS SHALL BE STABILIZED, TEMPORARILY AND/OR PERMANENT, WITHIN 30 DAYS OF DISTURBANCE, OR PERMANENTLY STABILIZED WITHIN 7 DAYS OF ACHIEVING FINISHED GRADE.
5. IF DISTURBED AREAS MUST BE LEFT OVER WINTER, AN ANIONIC POLYACRYLAMIDE SHALL BE APPLIED TO ALL DISTURBED AREAS PRIOR TO GROUND FREEZE. SEE SPECIFICATIONS FOR DETAILS.

**SCALE NOTE:**  
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STAMP/SIGNATURE:		
BY	DATE	DESCRIPTION

**TITLE PAGE: PROPOSED EROSION CONTROL PLAN**

**PROJECT: PREMIER PROPERTY DEVELOPMENT**

**LOCATION: VILLAGE OF KRONENWETTER MARATHON COUNTY, WISCONSIN**

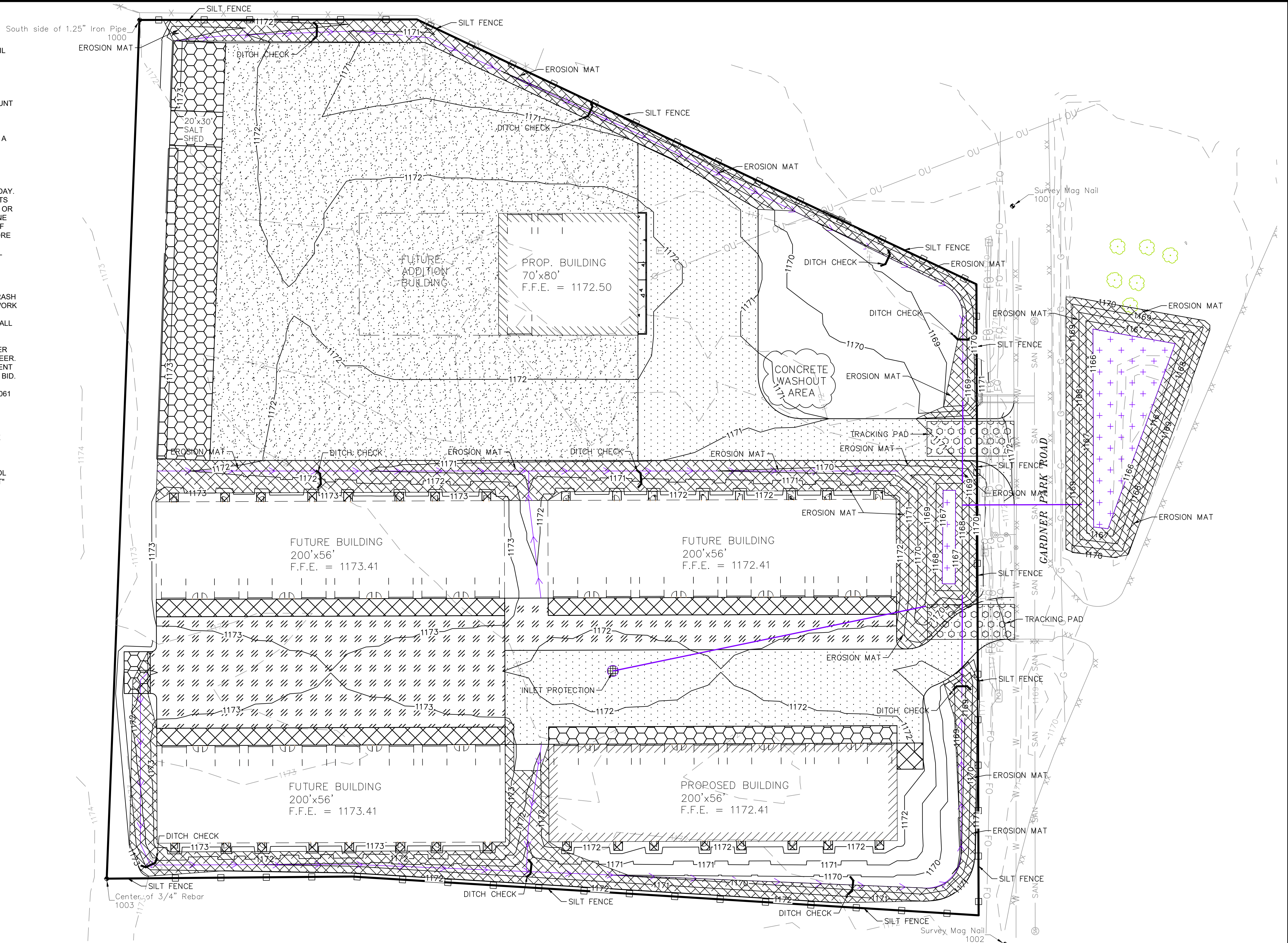


**VREELAND ASSOCIATES LAND SURVEYORS & ENGINEERS**  
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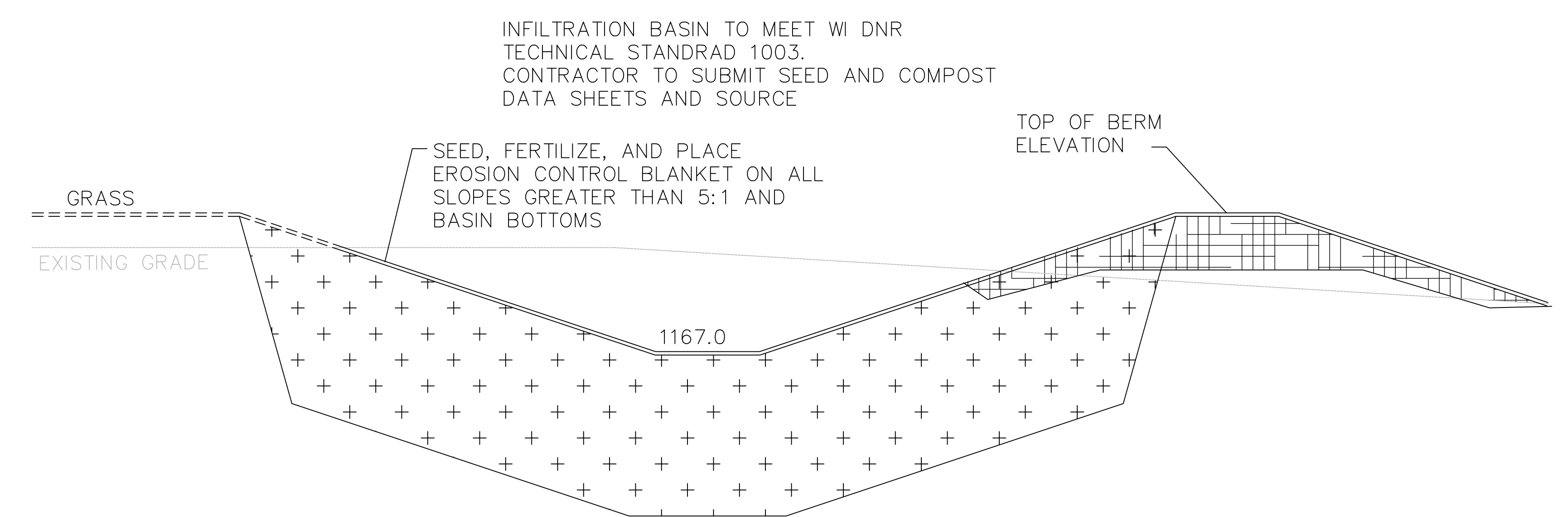
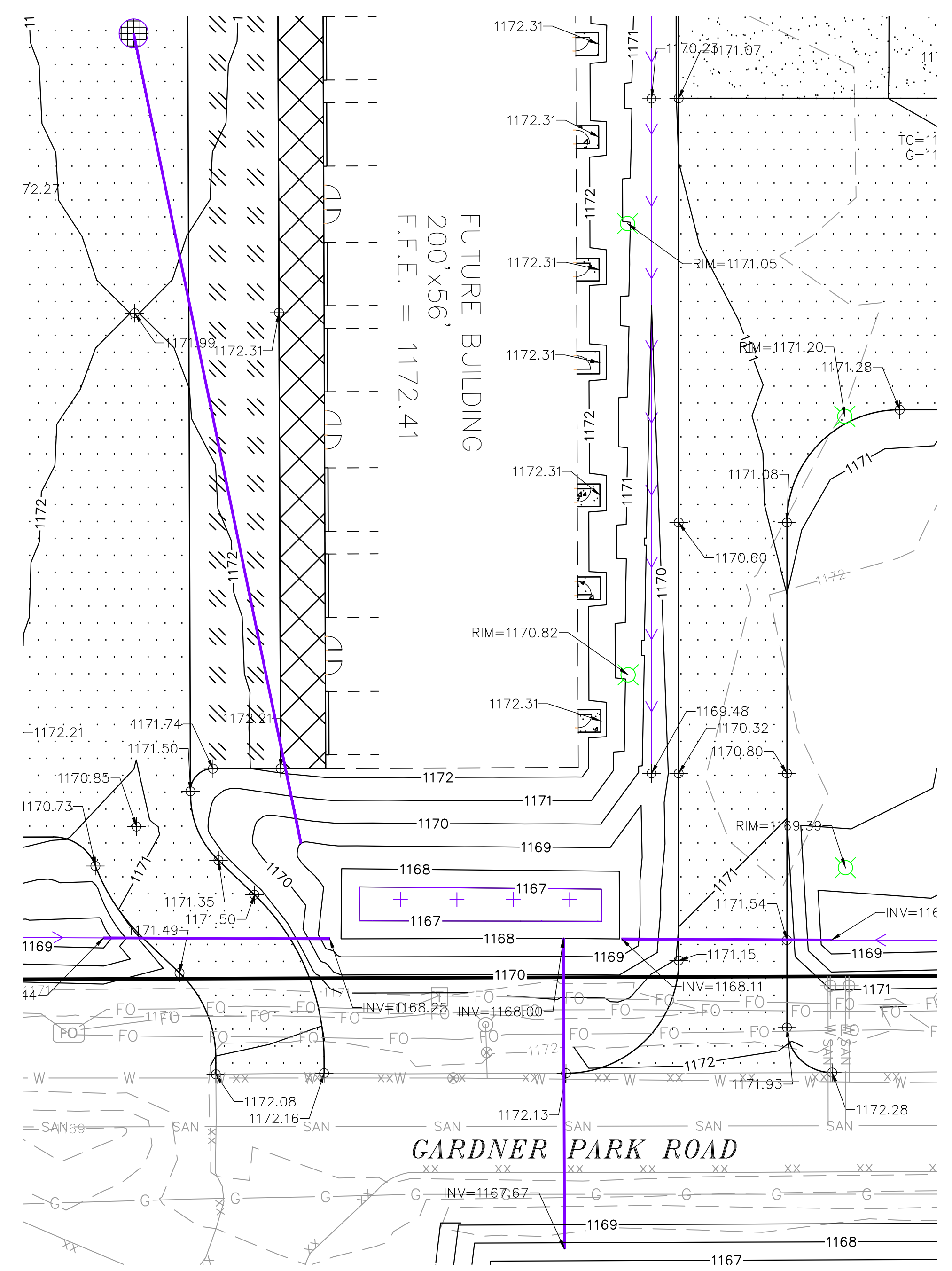
**PREPARED FOR: GREG TESCH**

**PLAN DATE: NOVEMBER 19TH, 2025**

DESIGNER: DUSTIN VREELAND
SURVEYED BY: CB & TV
FILE NO.: 25-0410 ENGINEERING
DATE: SEPTEMBER 15TH, 2025
SCALE: 1" = 30'
SHEET C6



BEARINGS REFERENCED TO THE  
WISCONSIN COUNTY COORDINATE SYSTEM  
(MARATHON) MAD83 (2011)



INFILTRATION BASIN (1165 TO 1167 ELEVATION) TO BE DRESSED WITH 2' OF 20% COMPOST AND 80% ON-SITE OR IMPORTED COARSE SAND MIX. SEED WITH PRAIRIE NURSERY "MOIST MEADOW - RAIN GARDEN MIX" PER WDNR TECHNICAL STANDARD 1003. SEEDING SHALL BE COMPLETED IN THE FALL (AS DORMANT SEEDING PRIOR TO FIRST SNOWFALL) OR IN THE SPRING (MAY 1 AND JUNE 20) AND WILL NEED A COVER CROP PER WDNR TECHNICAL STANDARD 1059 TABLE 1 - TEMPORARY SEEDING SPECIES AND RATES OR PLUGS SHALL BE USED. AVOID COMPACTION DURING CONSTRUCTION. AFTER CONSTRUCTION, INSTALL A PROTECTIVE FENCE UNTIL CONTRIBUTING AREA IS STABILIZED. SAND NEEDS TO MEET USDA COARSE SAND TEXTURAL CLASSIFICATION, AND BE WASHED IF USED FOR INFILTRATION BASIN. IF SAND DOES NOT MEET USDA COARSE SAND TEXTURAL CLASSIFICATION, COARSE SAND WILL NEED TO BE IMPORT. BASED ON SOIL BORINGS COMPLETED BY STAR ENVIRONMENTAL EXCESS FILL HAS BEEN PLACED ON THE SITE. OVER-EXCAVATION MAYBE NECESSARY TO REMOVE PLACED FILL TO MEET THE MINIMUM INFILTRATION STANDARDS. ALL EXISTING MATERIALS AND FOUNDATION FROM DEMOLITION HOME NEEDS TO BE REMOVED FROM INFILTRATION AREA, OVER EXCAVATION MAY BE NEEDED. IF SNOW IS PILED ON THE BASINS, THEN MORE FREQUENT MAINTENANCE OF THE SOILS WILL BE REQUIRED TO MAINTAIN DESIRED PLANT LIFE AND INFILTRATION RATES.

**PROPOSED INFILTRATION BASIN**

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REVISIONS		
BY	DATE	DESCRIPTION

**TITLE PAGE:**  
**PROPOSED 1P  
STORMWATER PLAN & DETAILS**

**PROJECT:** PREMIER PROPERTY DEVELOPMENT

**LOCATION:** VILLAGE OF KRONENWETTER  
MARATHON COUNTY, WISCONSIN



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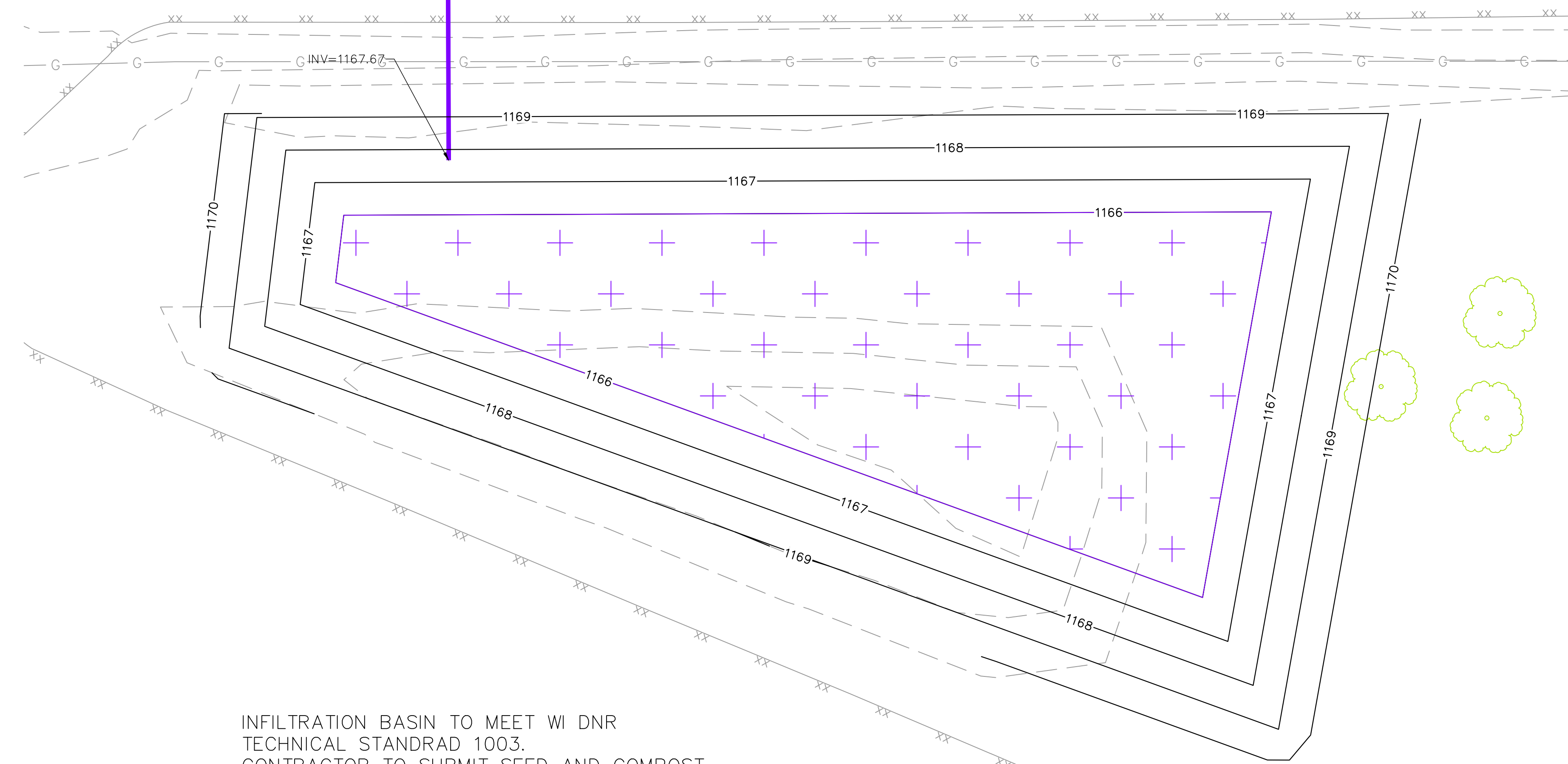
**PREPARED FOR:** GREG TESCH

**PLAN DATE:** NOVEMBER 19TH, 2025

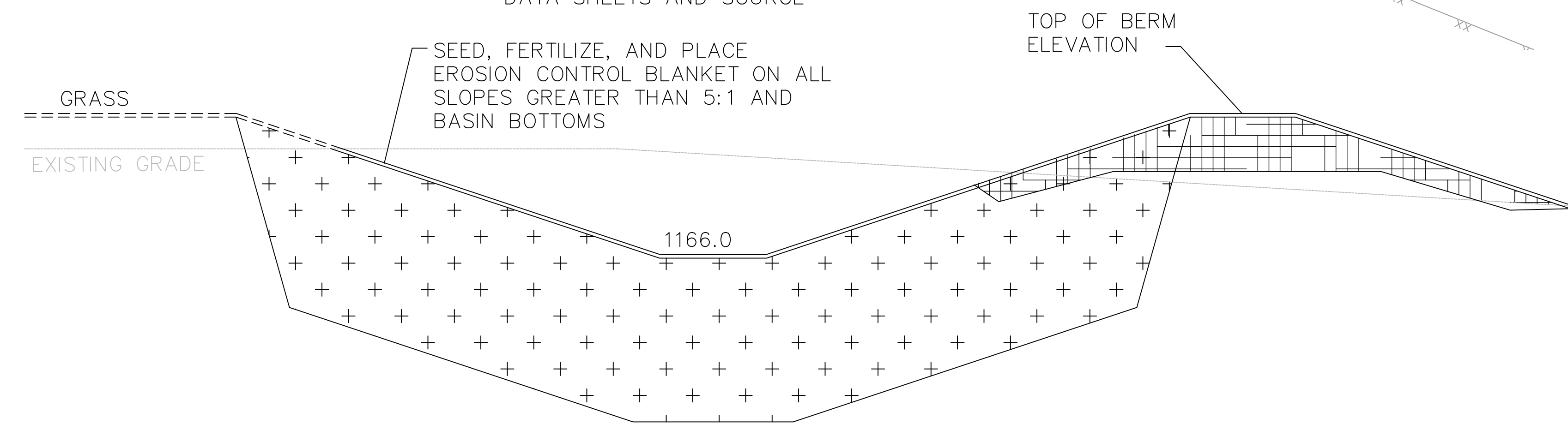
**DESIGNER:** DUSTIN VREELAND  
**SURVEYED BY:** CB & TV  
**FILE NO.:** 25-0410 ENGINEERING  
**DATE:** SEPTEMBER 15TH, 2025  
**SCALE:** 1" = 10'  
**SHEET** C7.0

BEARINGS REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (MARATHON) MAD83 (2011)

# GARDNER PARK ROAD



INFILTRATION BASIN TO MEET WI DNR TECHNICAL STANDRAD 1003. CONTRACTOR TO SUBMIT SEED AND COMPOST DATA SHEETS AND SOURCE



INFILTRATION BASIN (1164 TO 1166 ELEVATION) TO BE DRESSED WITH 2' OF 20% COMPOST AND 80% ON-SITE OR IMPORTED COARSE SAND MIX. SEED WITH PRAIRIE NURSERY "MOIST MEADOW - RAIN GARDEN MIX" PER WDNR TECHNICAL STANDARD 1003. SEEDING SHALL BE COMPLETED IN THE FALL (AS DORMANT SEEDING PRIOR TO FIRST SNOWFALL) OR IN THE SPRING (MAY 1 AND JUNE 20) AND WILL NEED A COVER CROP PER WDNR TECHNICAL STANDARD 1059 TABLE 1 - TEMPORARY SEEDING SPECIES AND RATES OR PLUGS SHALL BE USED. AVOID COMPACTION DURING CONSTRUCTION. AFTER CONSTRUCTION, INSTALL A PROTECTIVE FENCE UNTIL CONTRIBUTING AREA IS STABILIZED. SAND NEEDS TO MEET USDA COARSE SAND TEXTURAL CLASSIFICATION, AND BE WASHED IF USED FOR INFILTRATION BASIN. IF, SAND DOES NOT MEET USDA COARSE SAND TEXTURAL CLASSIFICATION, COARSE SAND WILL NEED TO BE IMPORT. BASED ON SOIL BORINGS COMPLETED BY STAR ENVIRONMENTAL EXCESS FILL HAS BEEN PLACED ON THE SITE. OVER-EXCAVATION MAYBE NECESSARY TO REMOVE PLACED FILL TO MEET THE MINIMUM INFILTRATION STANDARDS. ALL EXISTING MATERIALS AND FOUNDATION FROM DEMOLITION HOME NEEDS TO BE REMOVED FROM INFILTRATION AREA, OVER EXCAVATION MAY BE NEEDED. IF SNOW IS PILED ON THE BASINS, THEN MORE FREQUENT MAINTENANCE OF THE SOILS WILL BE REQUIRED TO MAINTAIN DESIRED PLANT LIFE AND INFILTRATION RATES.

## PROPOSED INFILTRATION BASIN

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BY	DATE	DESCRIPTION

**TITLE PAGE:**  
**PROPOSED 3P  
STORMWATER PLAN & DETAILS**

**PROJECT:** PREMIER PROPERTY DEVELOPMENT

**LOCATION:** VILLAGE OF KRONENWETTER  
MARATHON COUNTY, WISCONSIN

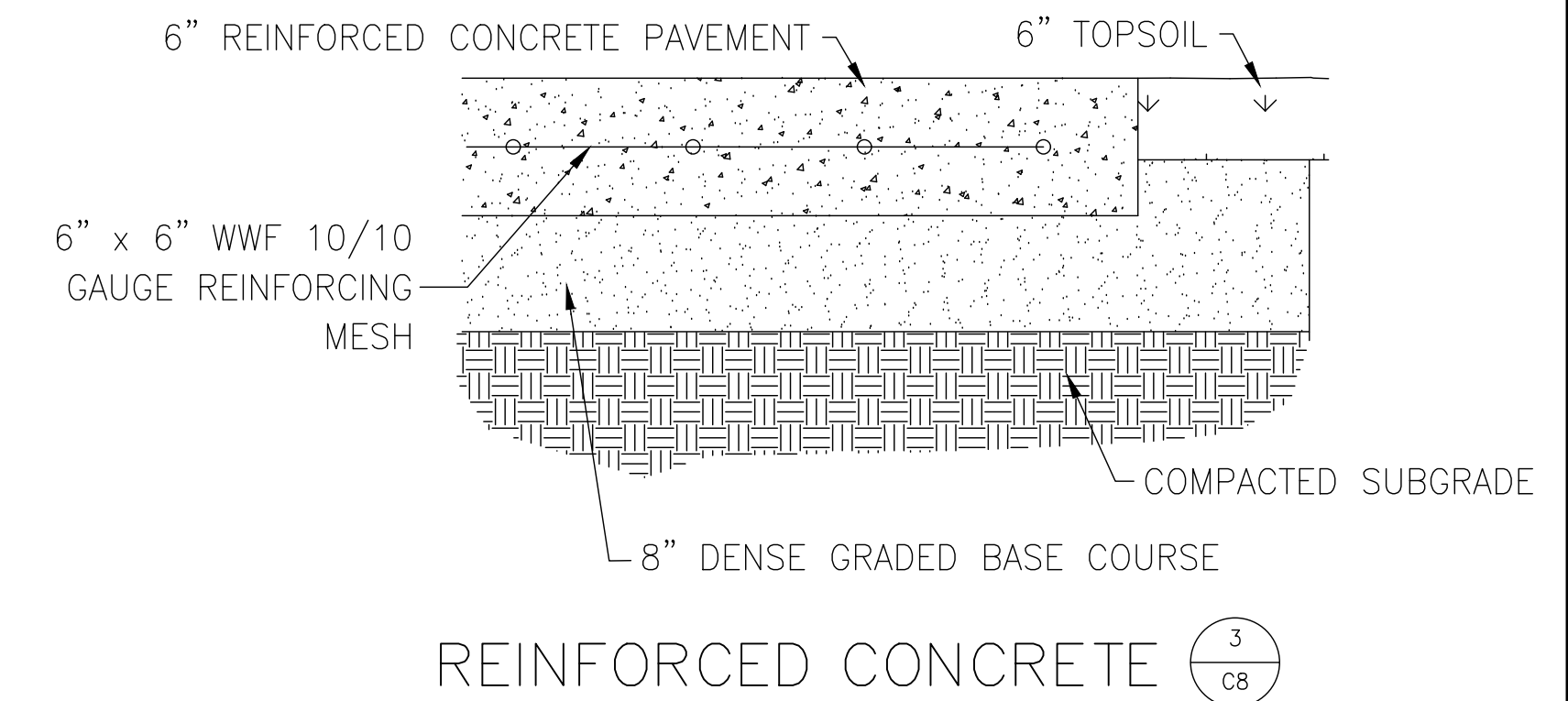
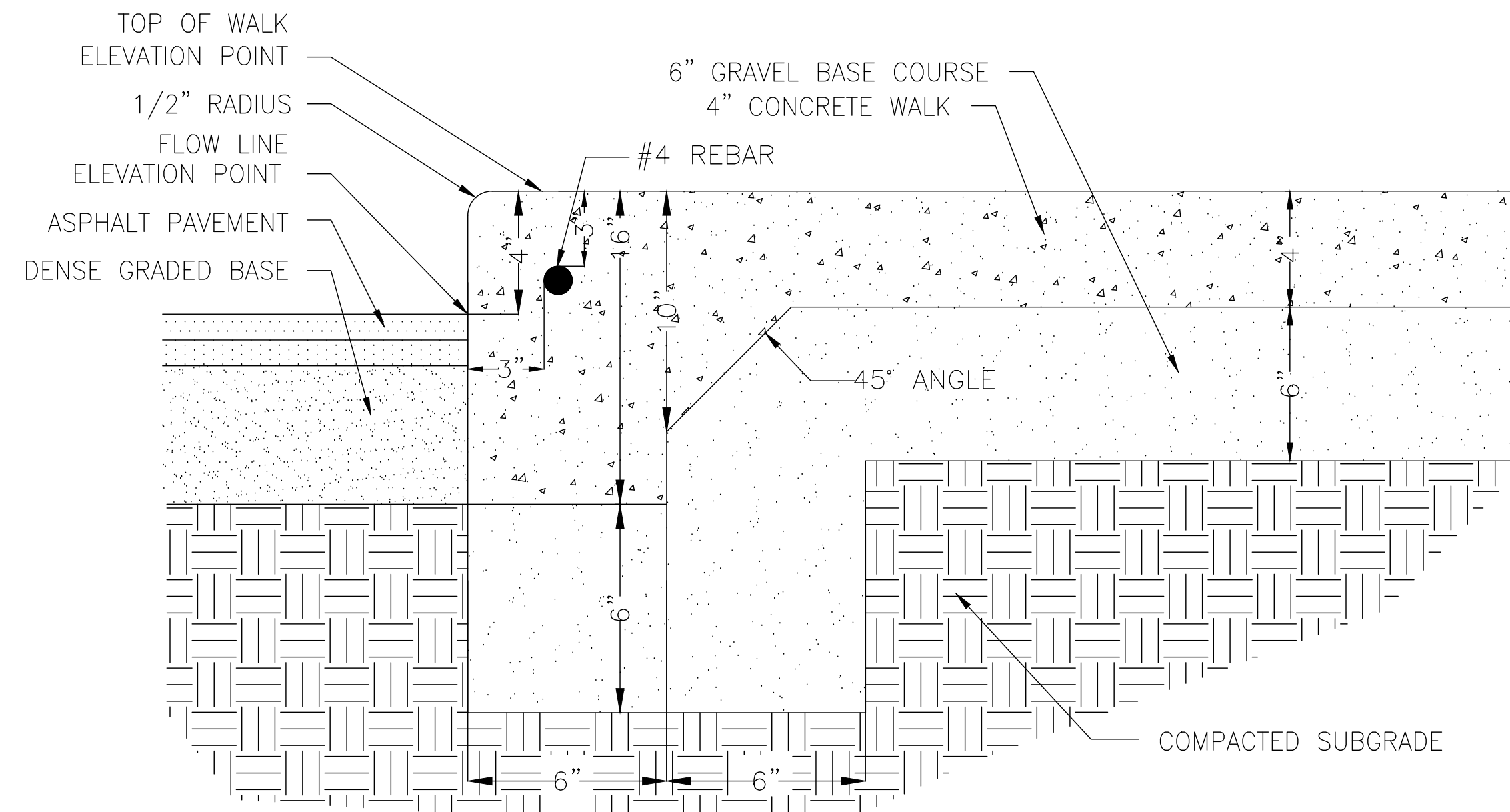
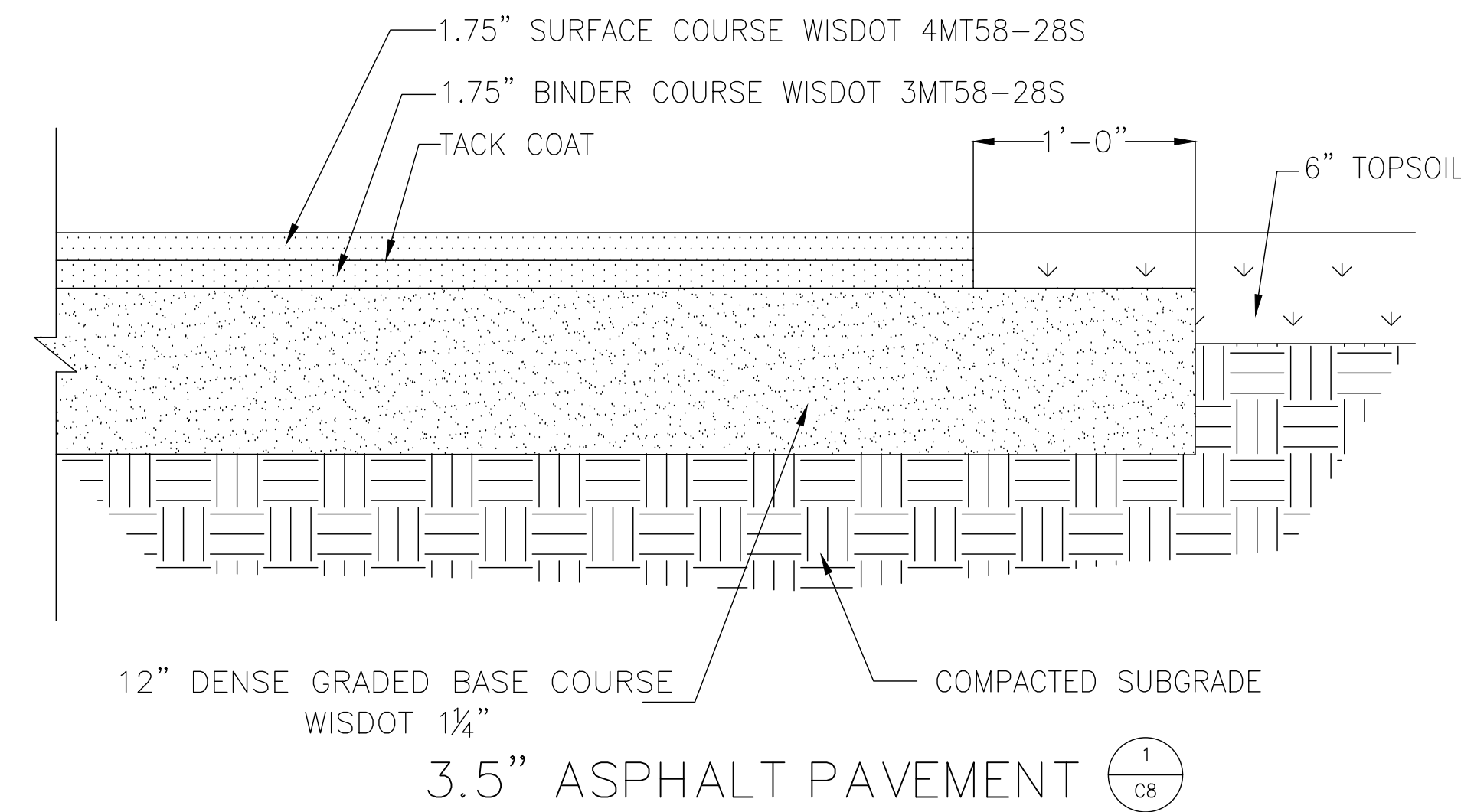


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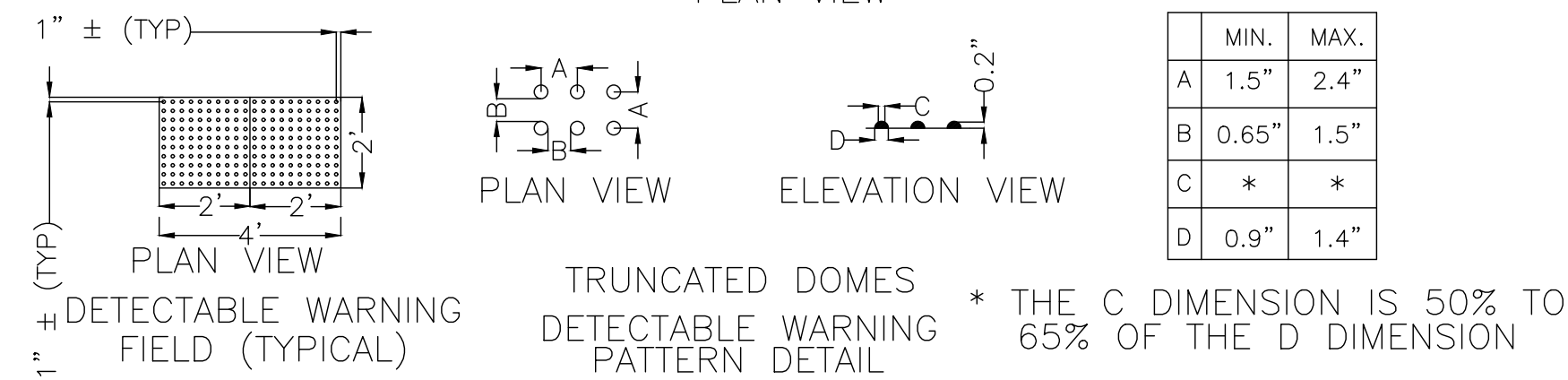
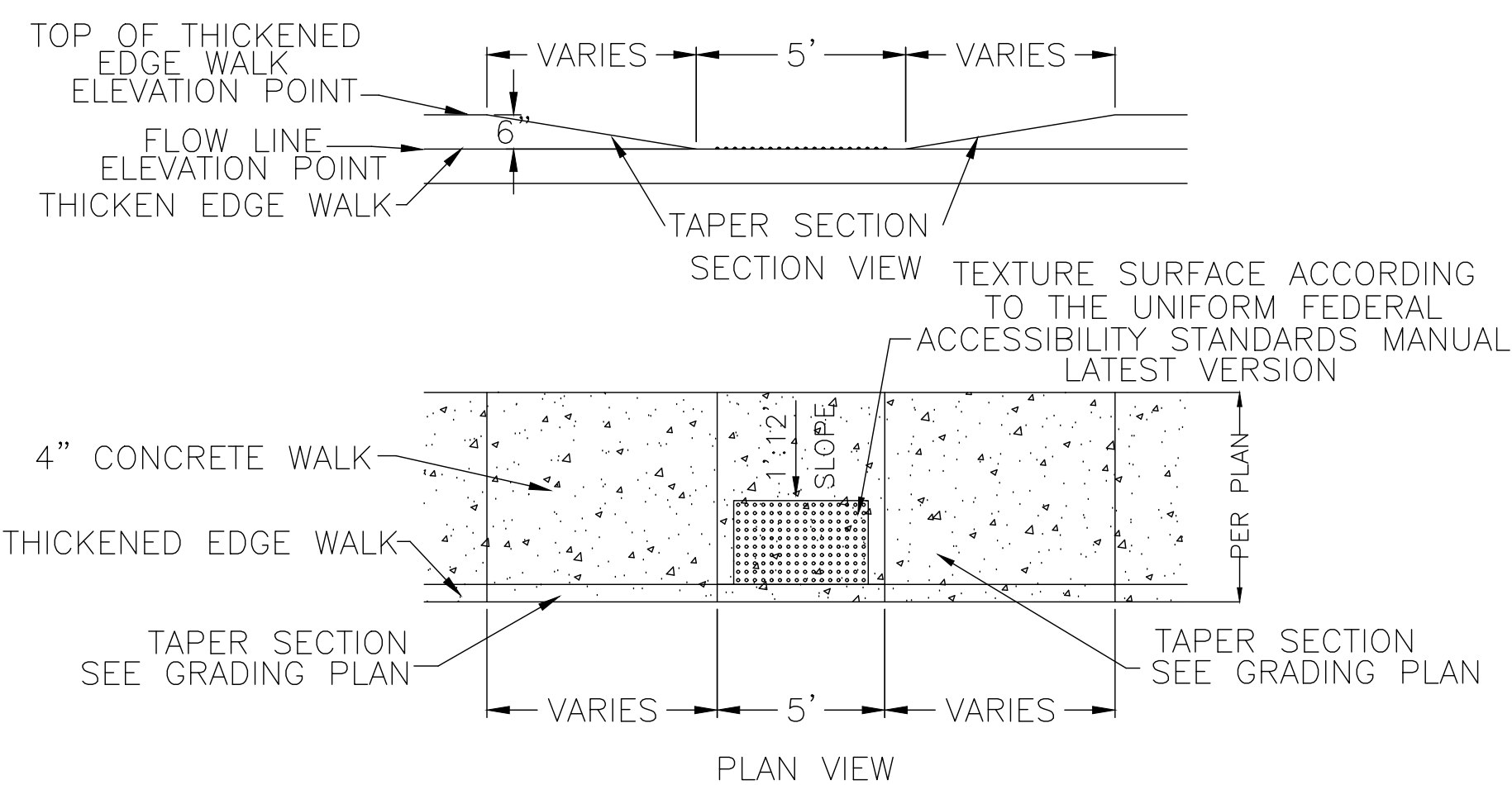
**PREPARED FOR:** GREG TESCH

**PLAN DATE:** NOVEMBER 19TH, 2025

DESIGNER: DUSTIN VREELAND  
SURVEYED BY: CB & TV  
FILE NO.: 25-0410 ENGINEERING  
DATE: SEPTEMBER 15TH, 2025  
SCALE: 1" = 10'  
SHEET **C7.1**

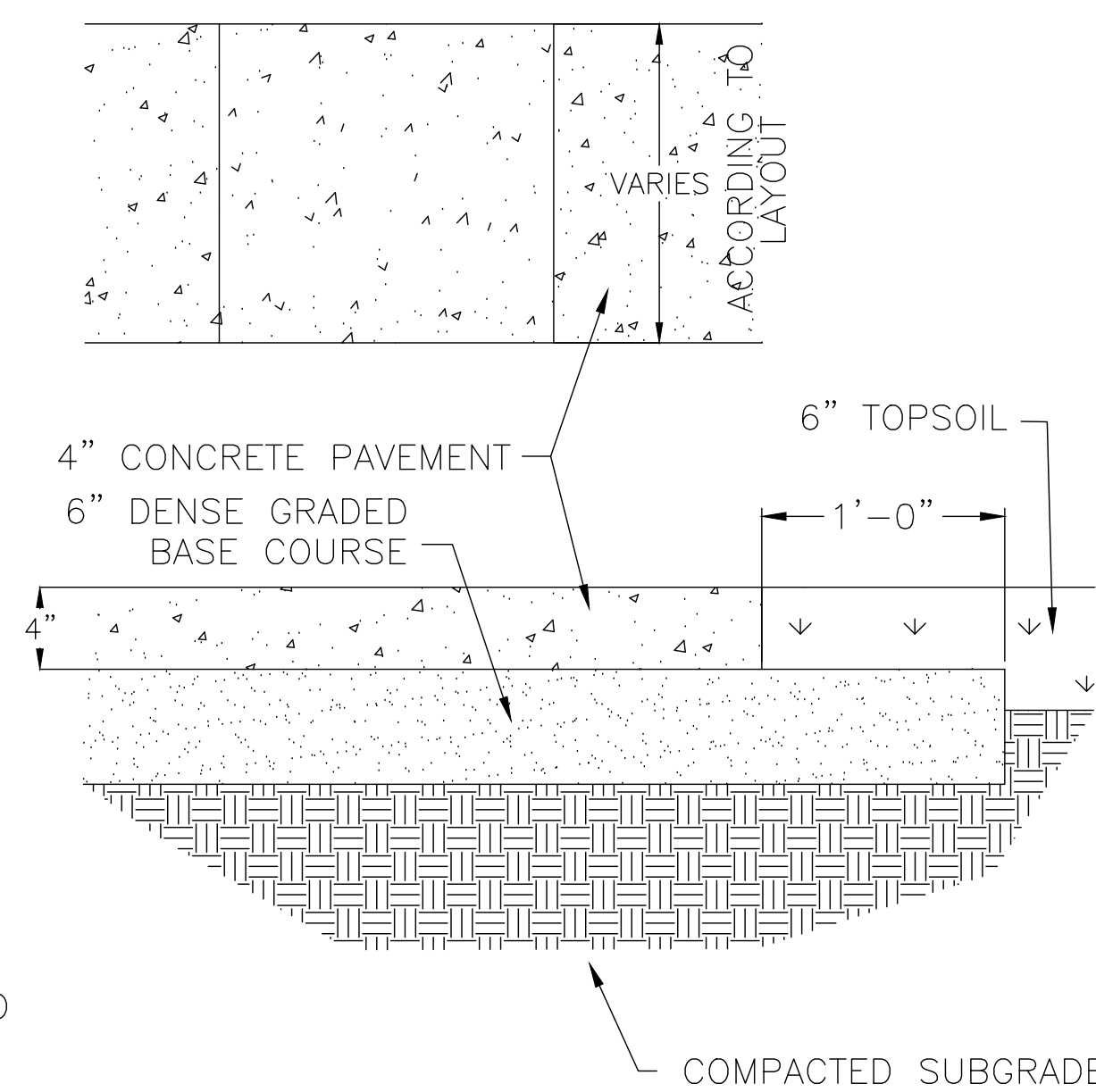


ALL HANDICAP RAMPS AND ACCESS AISLES SHALL MEET ALL CODES AND ADAAG REGULATIONS.

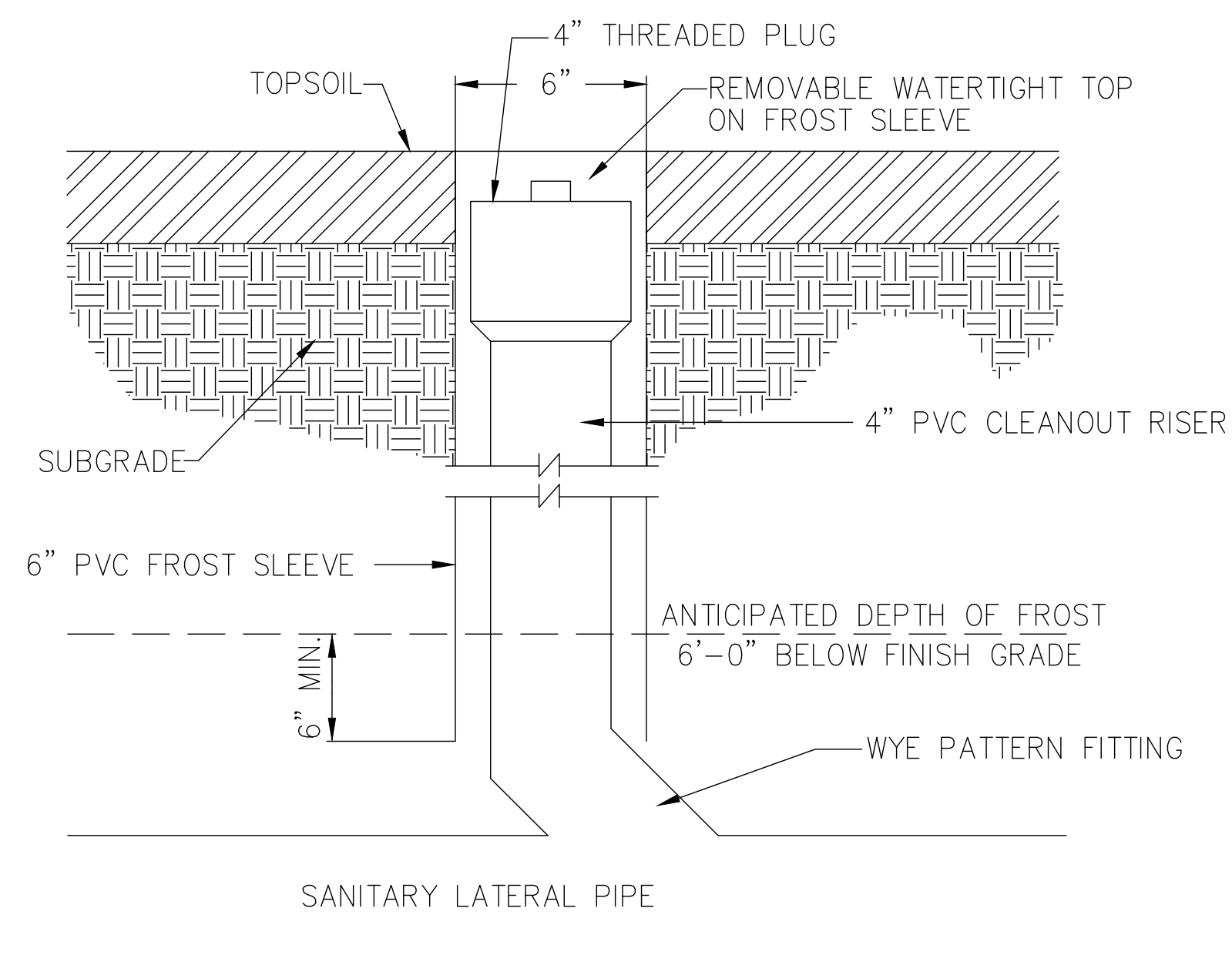


A.D.A. CURB RAMP (4/8 C8)

THICKENED EDGE WALK (2/8 C8)



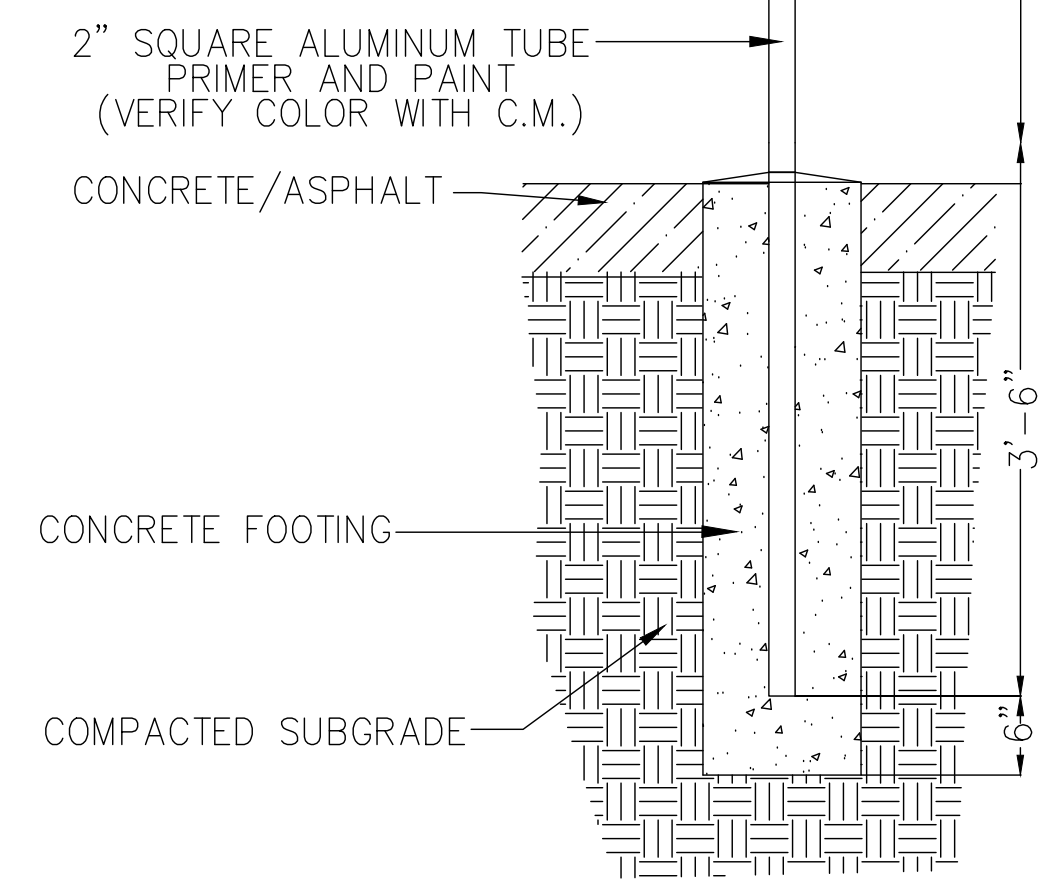
4" CONCRETE WALK (6/8 C8)



SANITARY CLEANOUT (7/8 C8)



NOTES:  
\*THE SIGN MUST BE A WHITE RECTANGLE WITH LONGER DIMEN. VERT.;  
\*THE SIGN MUST INCLUDE THE WORDS: "RESERVED PARKING" AND THE WORDS: "VEHICLES WITH VET. OR DIS. PLATES OR STATE DISABLED CARD"



HANDICAP PARKING SIGN (8/8 C8)

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REVISIONS		
BY	DATE	DESCRIPTION

TITLE PAGE:

**PROPOSED SITE DETAILS**

PROJECT: PREMIER PROPERTY DEVELOPMENT

LOCATION: VILLAGE OF KRONENWETTER MARATHON COUNTY, WISCONSIN



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PREPARED FOR: GREG TESCH

PLAN DATE: NOVEMBER 19TH, 2025

DESIGNER: DUSTIN VREELAND
SURVEYED BY: CB & TV
FILE NO.: 25-0410 ENGINEERING
DATE: SEPTEMBER 15TH, 2025
SCALE: NO SCALE
SHEET C8

**GENERAL NOTES:**

DETAIL OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

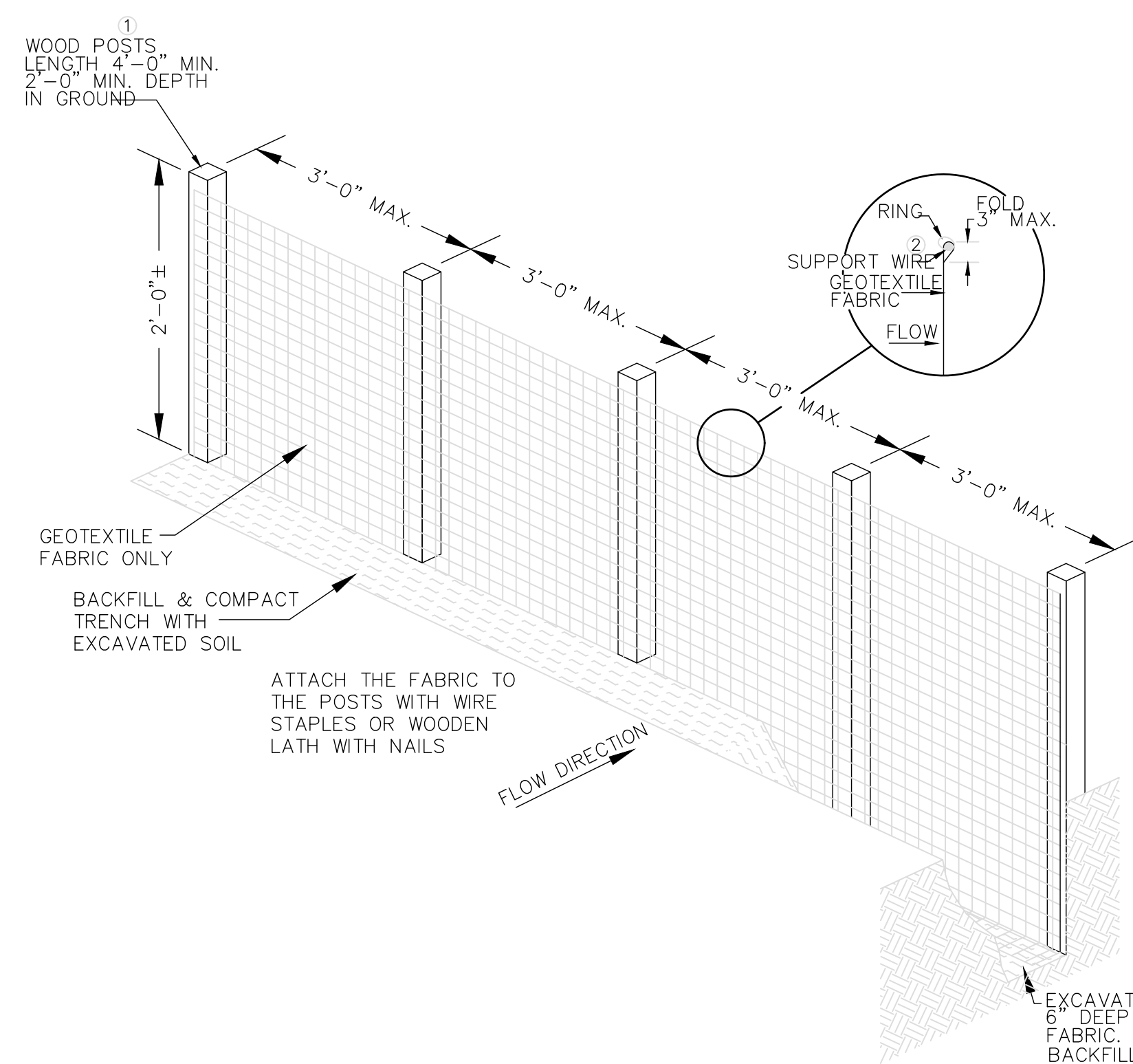
WHEN POSSIBLE THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR HORSESHOE SHAPE, WITH THE ENDS POINTING UPSLOPE TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.

ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOIL CONDITIONS.

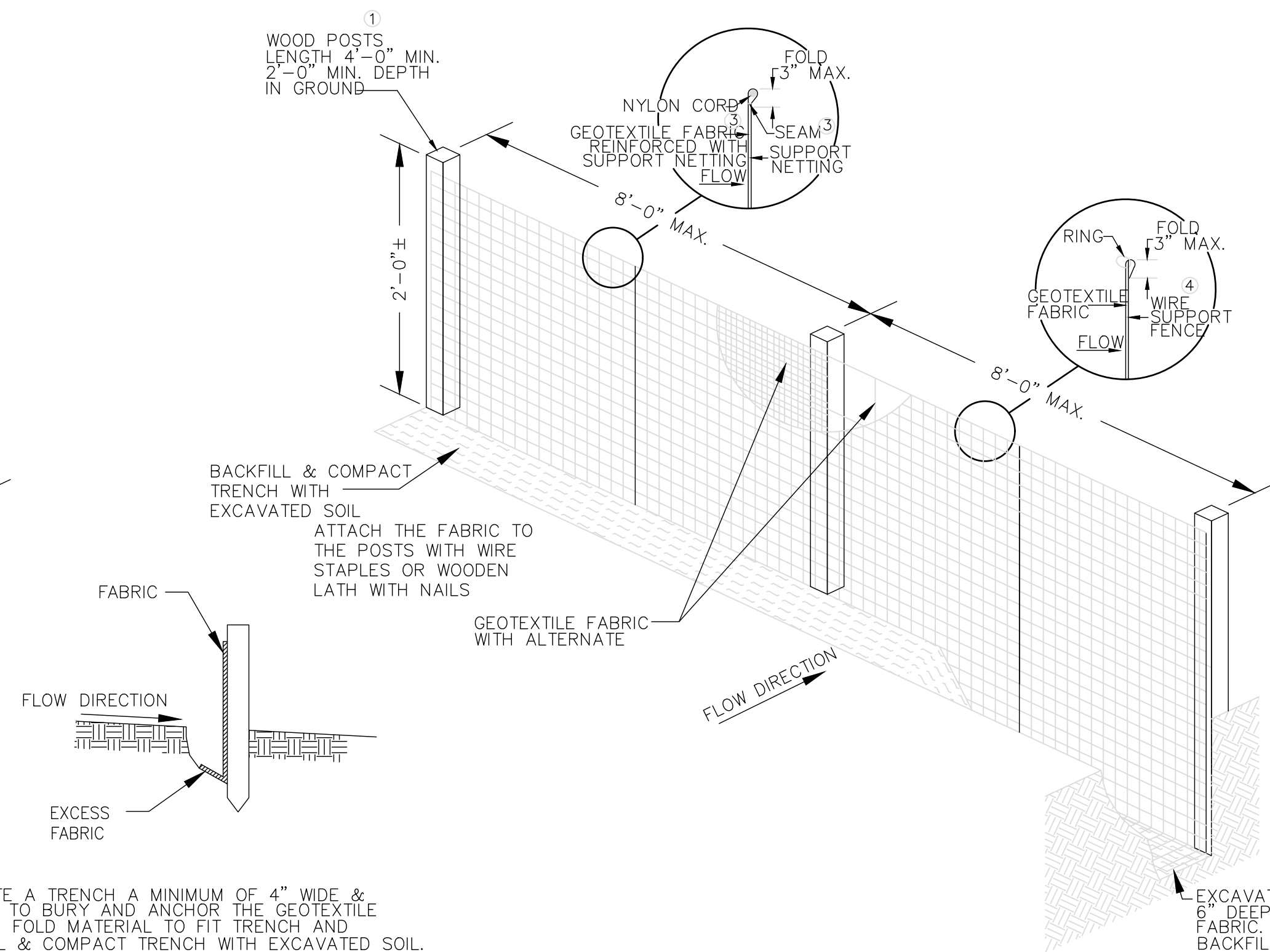
ALTERNATES "A" & "B" ARE EQUAL AND EITHER MAY BE USED.

ATTACH THE FABRIC TO THE POSTS WITH WIRE STAPLES OR WOODEN LATH AND NAILS.

- STEEL POSTS SHALL BE A STUDDED "TEE" OR "U" TYPE WITH A MINIMUM WEIGHT OF 1.28 LBS/LINEAL FOOT (WITHOUT ANCHOR). FIN ANCHORS SUFFICIENT TO RESIST POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 4" DIA. OR 1 1/2" X 3 1/2" EXCEPT WOOD POSTS FOR GEOTEXTILE FABRIC REINFORCED WITH NETTING SHALL BE MINIMUM SIZE OF 1 1/8" X 1 1/8" OAK OR HICKORY.
- MINIMUM 14 GAGE WIRE REQUIRED, FOLD FABRIC 3" OVER THE WIRE AND STAPLE OR PLACE WIRE RINGS ON 12" C-C.
- GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLYPROPYLENE NETTING WITH A MAXIMUM MESH SPACING OF 3/4" OR EQUAL. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.
- WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". SECURE TOP OF GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C-C.
- LENGTH NOT LESS THAN THE CIRCUMFERENCE OF THE LARGEST TIRE ON THE CONSTRUCTION EQUIPMENT, PLUS 5 FEET.

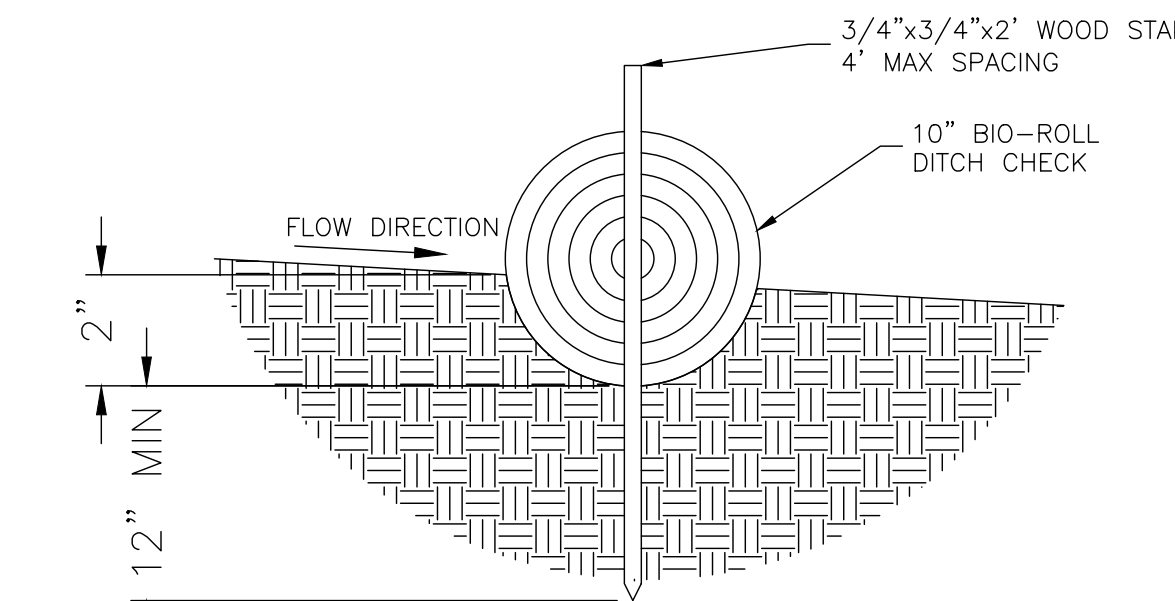


SILT FENCE ALTERNATE "A"



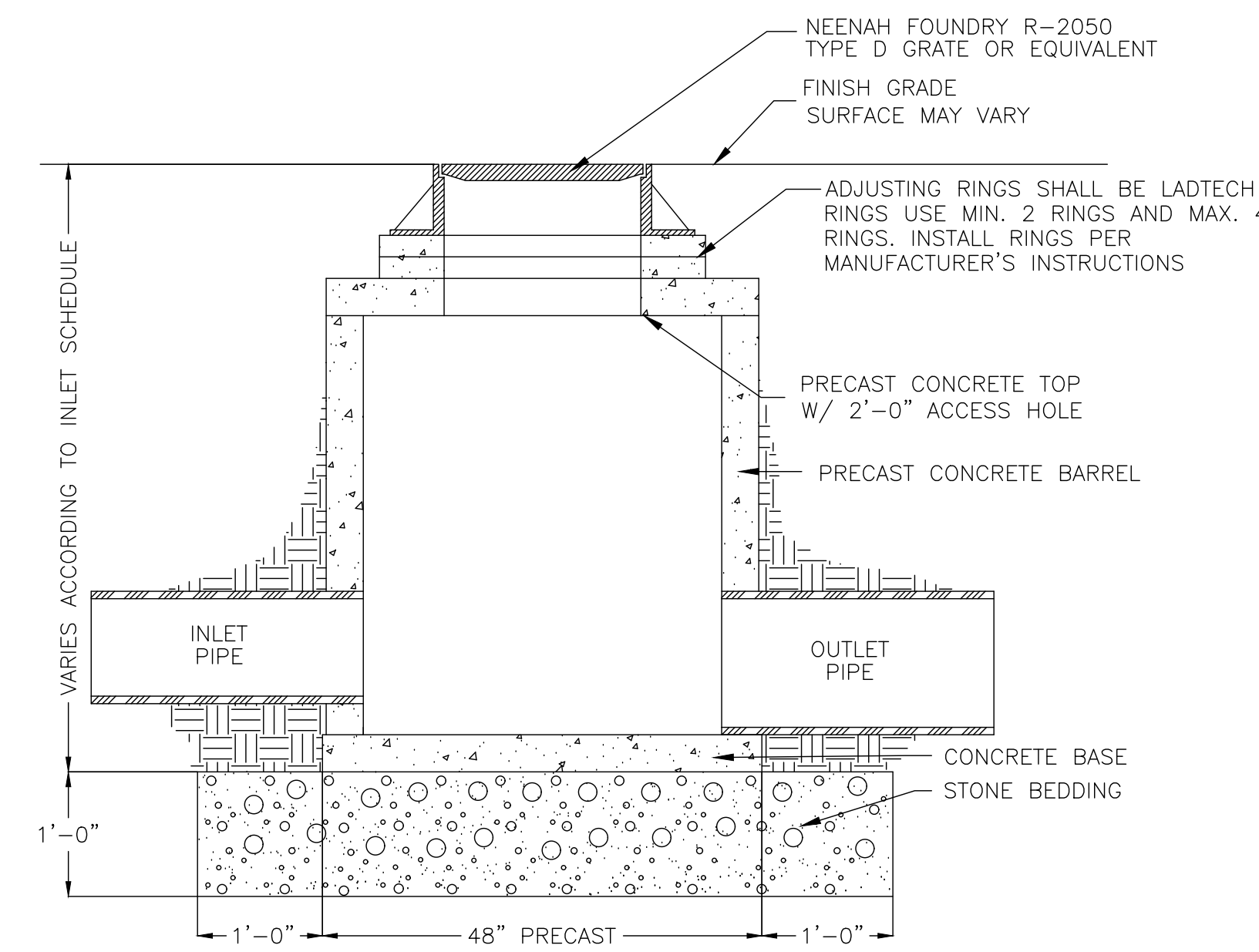
SILT FENCE ALTERNATE "B"

TRENCH DETAIL

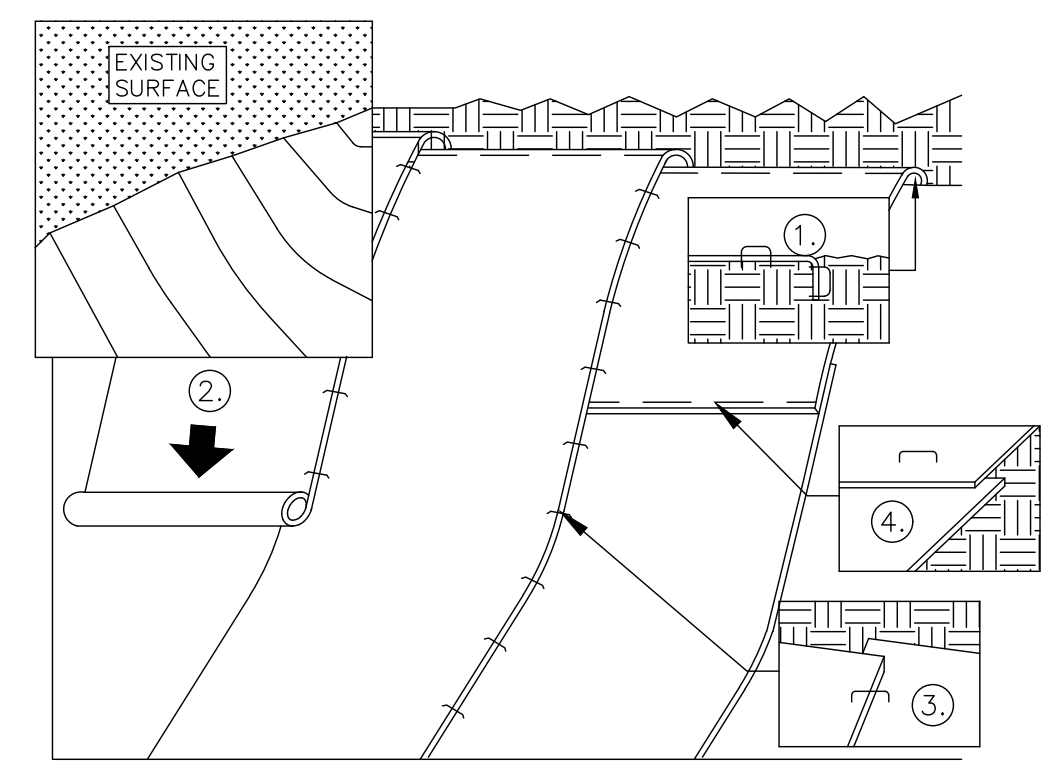


- NOTES:
- USE ONLY DITCH CHECKS FOUND ON THE WISCONSIN DEPARTMENT OF TRANSPORTATION PRODUCT ACCEPTABILITY LIST (PAL).
  - INSPECT DITCH CHECK FOR DEFICIENCIES PRIOR TO FORECASTED RAIN EVENTS, DAILY DURING EXTENDED RAIN EVENTS, AFTER RAIN EVENTS, AND AT 1-WEEK INTERVALS.
  - TURN ENDS OF DITCH CHECK UPSLOPE TO PREVENT WATER FROM FLOWING AROUND END.
  - REMOVE SEDIMENT BEHIND DITCH CHECK BEFORE SEDIMENT LEVEL REACHES THE HALFWAY POINT BETWEEN THE GROUND SURFACE AND TOP OF THE DITCH CHECK.

TEMPORARY DITCH CHECK

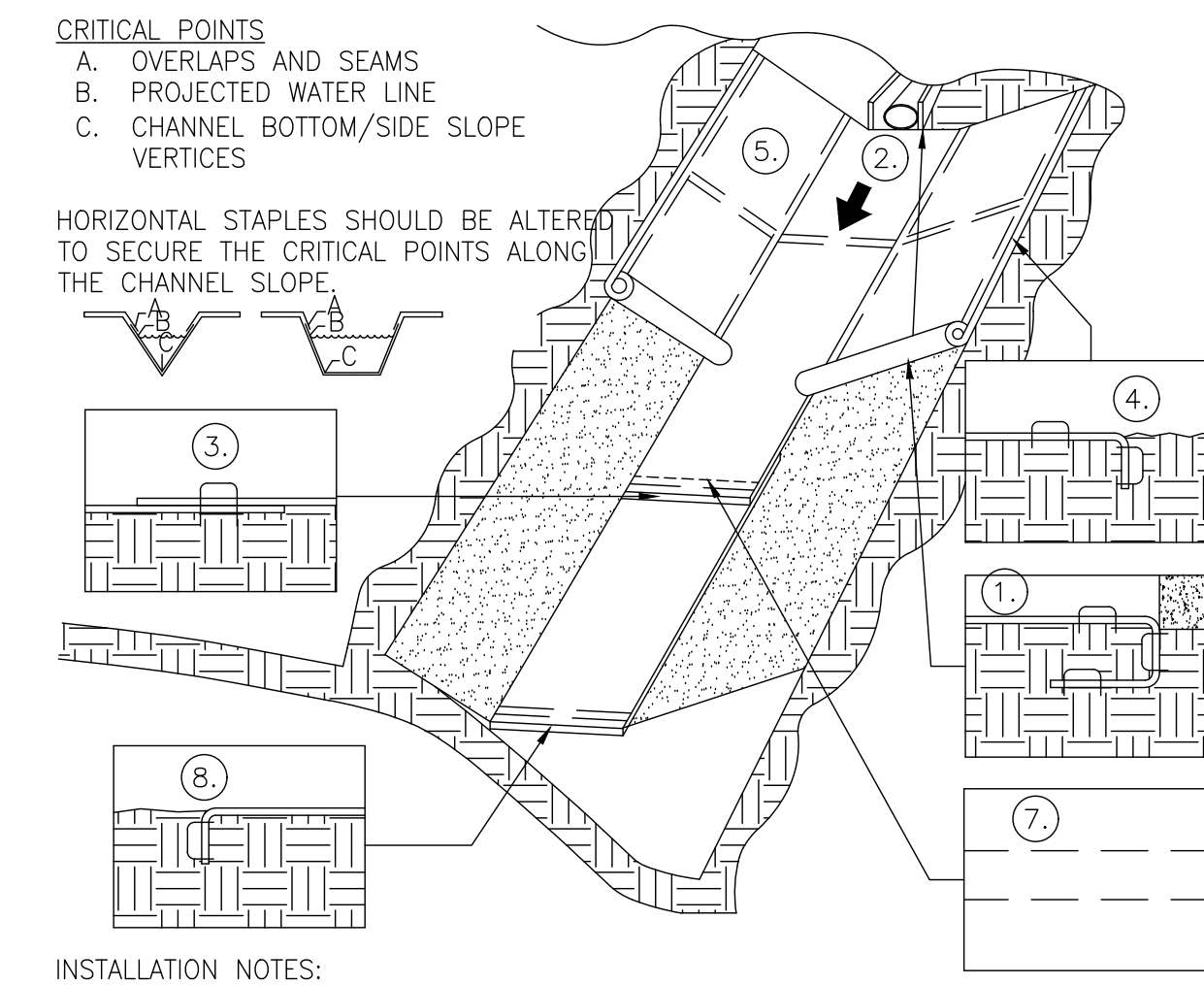


CONCRETE STORM INLET



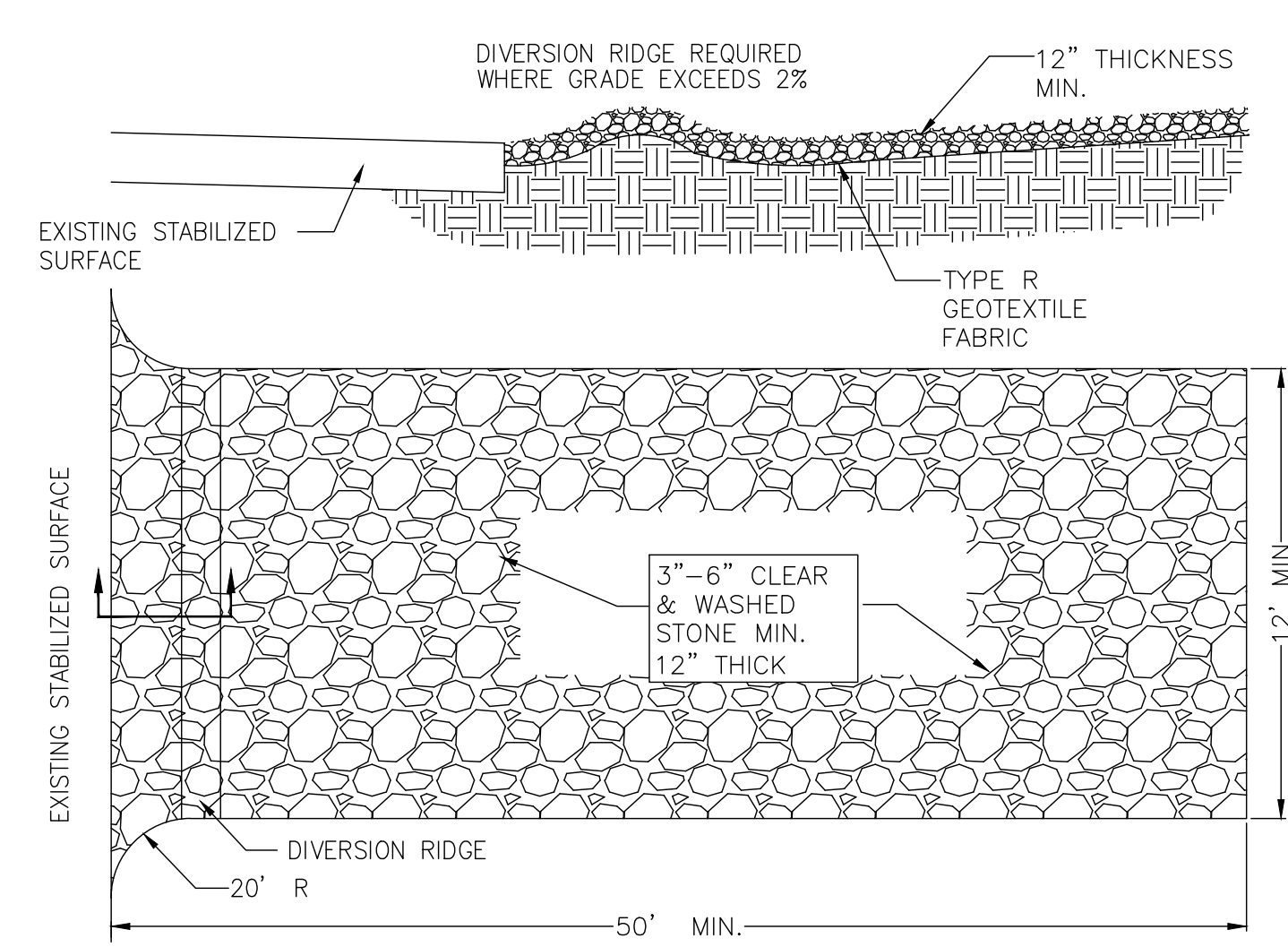
- INSTALLATION NOTES:
- BEGIN AT THE TOP OF THE SLOPE. ANCHOR THE MAT IN A 6" WIDE x 6" DEEP TRENCH. BACKFILL AND COMPACT THE TRENCH.
  - ROLL THE MAT DOWN THE SLOPE IN DIRECTION OF FLOW.
  - OVERLAP PARALLEL EROSION MAT APPROX. 2". PLACE MAT END OVER END (SHINGLE STYLE).
  - OVERLAP END TO END APPROX. 6" AND STAPLE OVERLAP AREA WITH STAPLES APPROX. 12" APART.

NON-CHANNEL EROSION MAT



- INSTALLATION NOTES:
- BEGIN AT THE TOP OF THE CHANNEL SLOPE. ANCHOR THE MAT IN A 6" WIDE x 6" DEEP TRENCH. BACKFILL AND COMPACT THE TRENCH.
  - ROLL THE MAT DOWN THE BOTTOM OF THE CHANNEL SLOPING IN DIRECTION OF FLOW.
  - OVERLAP END TO END APPROX. 6" WITH DOUBLE ROW OF STAGGERED STAPLES APPROX. 4" APART.
  - BEGIN AT THE TOP OF THE SIDE SLOPES. ANCHOR THE MAT IN A 6" WIDE x 6" DEEP TRENCH. BACKFILL AND COMPACT THE TRENCH.
  - EROSION MAT ON SIDE SLOPES MUST BE MINIMUM OVERLAP OF 4" AND STAPLED.
  - OVERLAP END TO END APPROX. 6" AND STAPLE OVERLAP AREA WITH STAPLES APPROX. 12" APART.
  - IN HIGH FLOW CHANNEL, A STABLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A ROW OF STAPLES 4" APART OVER THE WIDTH OF CHANNEL. PLACE A SECOND ROW OF STAPLES 4" BELOW THE FIRST ROW IN A STAGGERED PATTERN.
  - IN THE CHANNEL ANCHOR THE MAT IN A 6" WIDE x 6" DEEP TRENCH. BACKFILL AND COMPACT THE TRENCH.

CHANNEL EROSION MAT



- NOTES:
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TRAP SEDIMENT.
  - WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
  - WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
  - IF TRACKING PAD IS FILLED WITH SEDIMENT REMOVE AND REPLACE AGGREGATE.
  - IF A 50' PAD LENGTH IS NOT POSSIBLE DUE TO SITE GEOMETRY, INSTALL MAXIMUM LENGTH PRACTICABLE.

TRACKING PAD

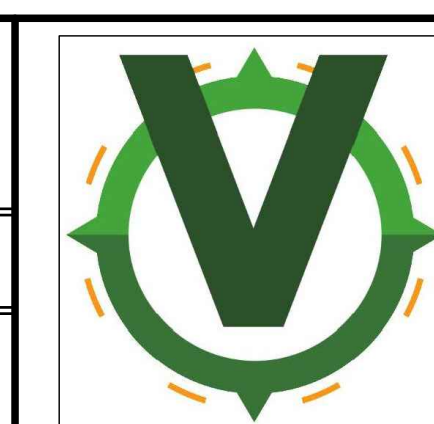
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BY	DATE	DESCRIPTION

**TITLE PAGE: PROPOSED EROSION CONTROL & STORM DETAILS**

PROJECT: PREMIER PROPERTY DEVELOPMENT

LOCATION: VILLAGE OF KRONENWETTER MARATHON COUNTY, WISCONSIN

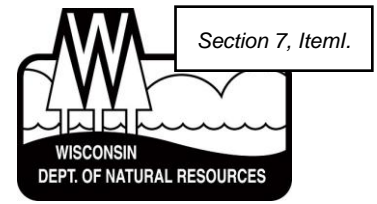


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PREPARED FOR: **GREG TESCH**

PLAN DATE: **NOVEMBER 19TH, 2025**

DESIGNER: DUSTIN VREELAND  
SURVEYED BY: CB & TV  
FILE NO.: 25-0410 ENGINEERING  
DATE: SEPTEMBER 15TH, 2025  
SCALE: **NO SCALE**  
SHEET **C9**



December 8, 2025

Vinnie Tesch  
Premier Property Holdings LLC  
1190 Gardner Park Rd  
Kronenwetter WI 54455  
Via email: contact@premierlawn-wi.com

SUBJECT: Coverage Under WPDES General Permit No. WI-S067831-06: Construction Site Storm Water Runoff  
Permittee Name: Premier Property Holdings LLC Site  
Site Name: Premier Property Development  
FIN: 102521

Dear Permittee:

The Wisconsin Department of Natural Resources received your Water Resources Application for Project Permits or Notice of Intent, on December 01, 2025, for the Premier Property Development site and has evaluated the information provided regarding storm water discharges from your construction site. We have determined that your construction site activities will be regulated under ch. 283, Wis. Stats., ch. NR 216, Wis. Adm. Code, and in accordance with Wisconsin Pollutant Discharge Elimination System (WPDES) General Permit No. WI-S067831-06, Construction Site Storm Water Runoff. All erosion control and storm water management activities undertaken at the site must be done in accordance with the terms and conditions of the general permit.

The **Start Date** of permit coverage for this site is December 08, 2025. The maximum period of permit coverage for this site is limited to 3 years from the **Start Date**. Therefore, permit coverage automatically expires and terminates 3 years from the Start Date and storm water discharges are no longer authorized unless another Notice of Intent and application fee to retain coverage under this permit or a reissued version of this permit is submitted to the Department 14 working days prior to expiration.

A copy of the general permit along with extensive storm water information including technical standards, forms, guidance and other documents is accessible on the Department's storm water program Internet site. To obtain a copy of the general permit, please download it and the associated documents listed below from the following Department Internet site:

<http://dnr.wi.gov/topic/stormwater/construction/forms.html>

- Construction Site Storm Water Runoff WPDES general permit No. WI-S067831-06
- Construction site inspection report form
- Notice of Termination form

If, for any reason, you are unable to access these documents over the Internet, please contact me and I will send them to you.

To ensure compliance with the general permit, please read it carefully and be sure you understand its contents. Please take special note of the following requirements (This is not a complete list of the terms and conditions of the general permit.):

1. The Construction Site Erosion Control Plan and Storm Water Management Plan that you completed prior to submitting your permit application must be implemented and maintained throughout construction. Failure to do so may result in enforcement action by the Department.

2. Construction dewatering discharges from an area subject to remedial action operations or from an area containing contamination that would be subject to remedial action operations are not eligible for coverage under this permit (section 1.1.2.3). Discharges may be eligible for coverage under the [Contaminated Groundwater from Remedial Action Operations General Permit \(WI-0046566-07-0\)](#).
3. The general permit requires that erosion and sediment controls be routinely inspected at least every 7 days, and within 24 hours after a rainfall event of 0.5 inches or greater. Weekly written reports of all inspections must be maintained. The reports must contain the following information:
  - a. Date, time, and exact place of inspection;
  - b. Name(s) of individual(s) performing inspection;
  - c. An assessment of the condition of erosion and sediment controls;
  - d. A description of any erosion and sediment control implementation and maintenance performed;
  - e. A description of the site's present phase of construction.
4. A **Certificate of Permit Coverage** must be posted in a conspicuous place on the construction site. The Certificate of Permit Coverage (WDNR Publication # WT-813) is enclosed for your use.
5. When construction activities have ceased and the site has undergone final stabilization, a Notice of Termination (NOT) of coverage under the general permit must be submitted to the Department.

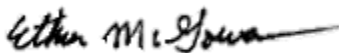
It is important that you read and understand the terms and conditions of the general permit because they have the force of law and apply to you. Your project may lose its permit coverage if you do not comply with its terms and conditions. The Department may also withdraw your project from coverage under the general permit and require that you obtain an individual WPDES permit instead, based on the Department's own motion, upon the filing of a written petition by any person, or upon your request.

If you believe that you have a right to challenge this decision to grant permit coverage, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to ss. 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to s. 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with s. NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with s. NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30-day period for filing a petition for judicial review.

Thank you for your cooperation with the Construction Site Storm Water Discharge Permit Program. If you have any questions concerning the contents of this letter or the general permit, please contact Amanda Harvey at (715) 679-0694.

Sincerely,



Ethan McGowan, PE  
Regional Stormwater Engineer  
Northern & West Central Region

ENCLOSURE: Certificate of Permit Coverage



# CERTIFICATE OF PERMIT COVERAGE

## UNDER THE WPDES CONSTRUCTION SITE STORM WATER RUNOFF PERMIT Permit No. WI-S067831-06

Under s. NR 216.455(2), Wis. Adm. Code, landowners of construction sites with storm water discharges regulated by the Wisconsin Department of Natural Resources (WDNR) Storm Water Permit Program are required to post this certificate in a conspicuous place at the construction site. This certifies that the site has been granted WDNR storm water permit coverage. The landowner must implement and maintain erosion control practices to limit sediment-contaminated runoff to waters of the state in accordance with the permit.

## EROSION CONTROL COMPLAINTS should be reported to the WDNR Tip Line at **1-800-TIP-WDNR (1-800-847-9367)**

Please provide the following information to the Tip Line:

**WDNR Site No. (FIN): 102521**

**Site Name: Premier Property Development**

**Address/Location: Parcel 1 of CSM 8726-34-104 Village of KRONENWETTER**

Additional Information:

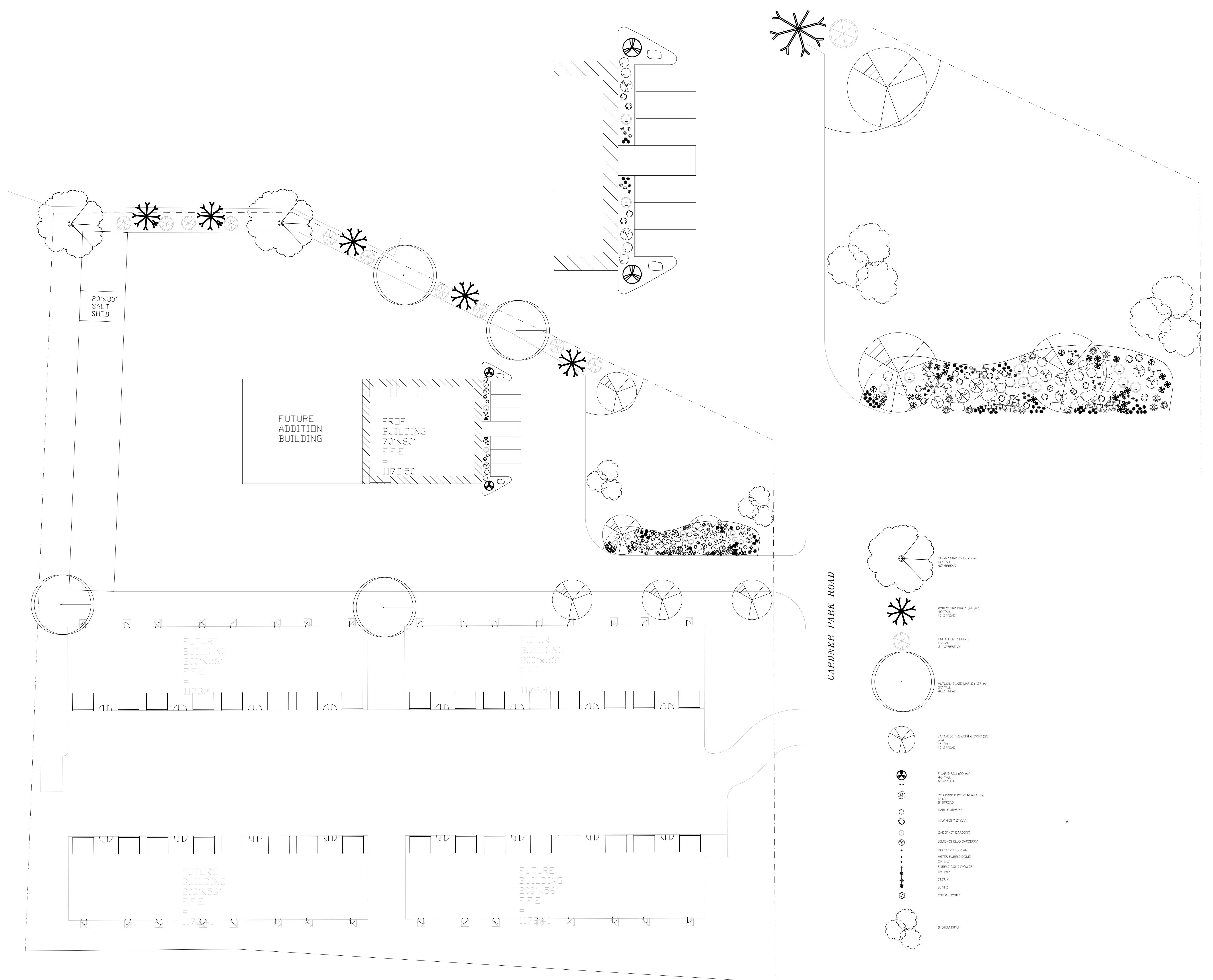
**Landowner: Premier Property Holdings LLC**

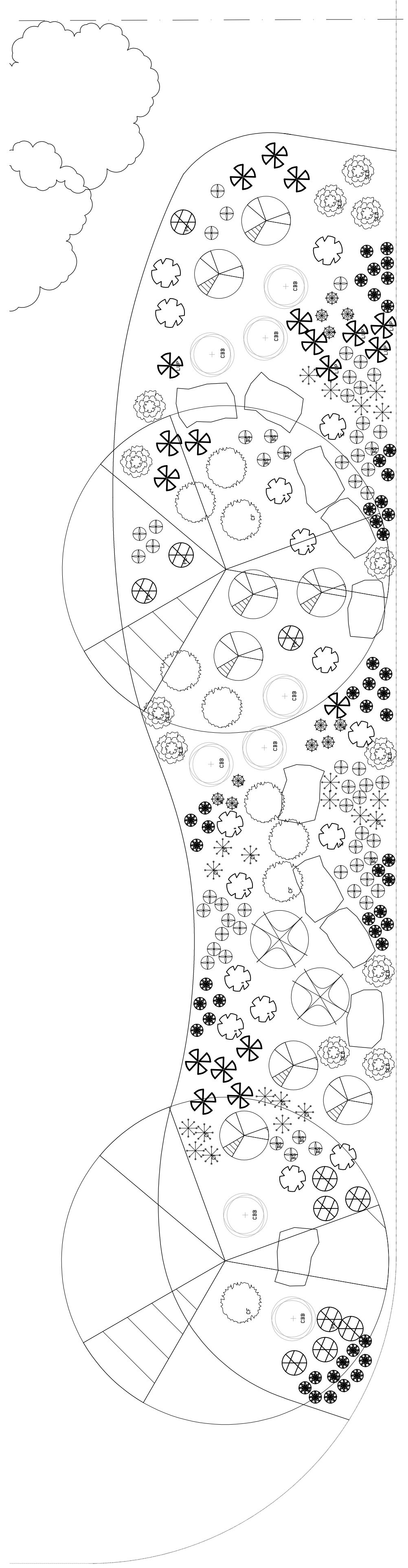
**Landowner's Contact Person: Vinnie Tesch**

**Contact Telephone Number: (715) 870-5770**

**Permit Start Date: December 08, 2025**

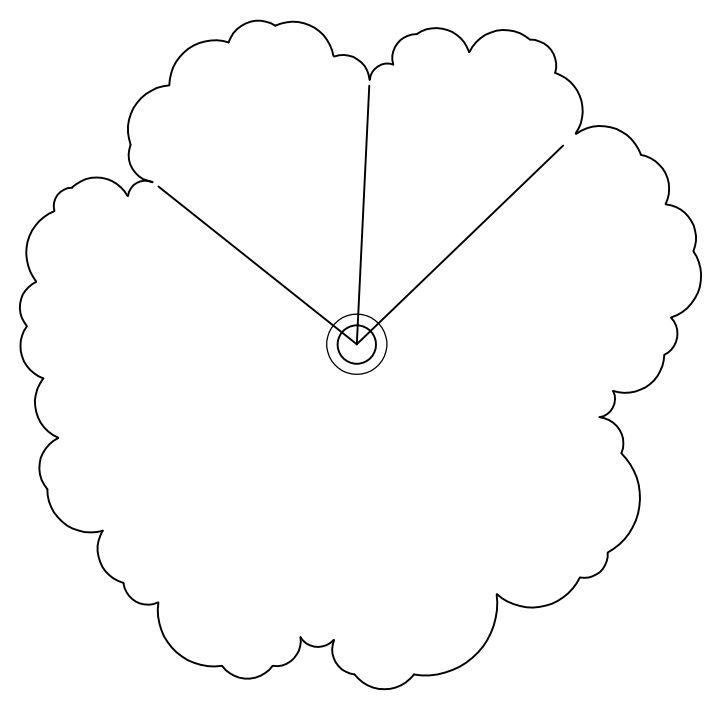
By: *Ethan McJannet*



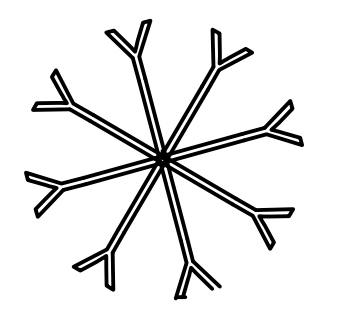


GARDNER PARK ROAD

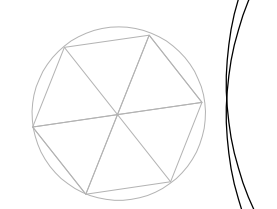
SUGAR MAPLE (125 pts)  
60' TALL  
50' SPREAD



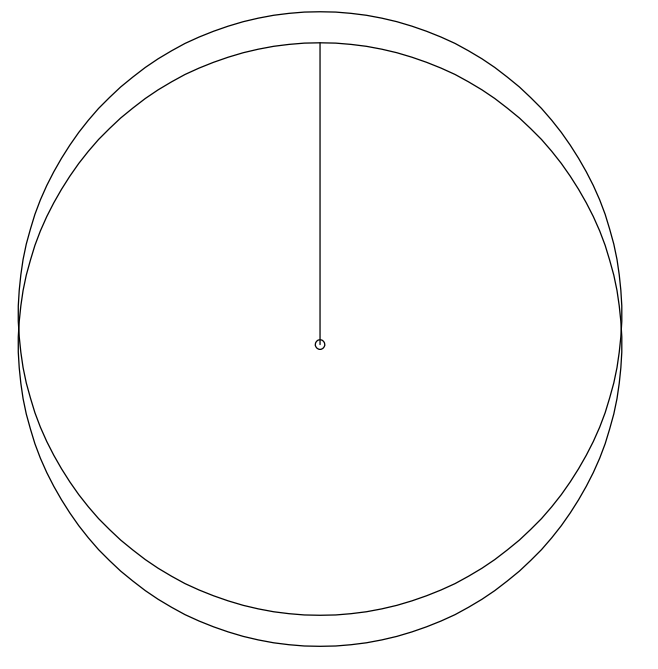
WHITESPIRE BIRCH (60 pts)  
40' TALL  
15' SPREAD



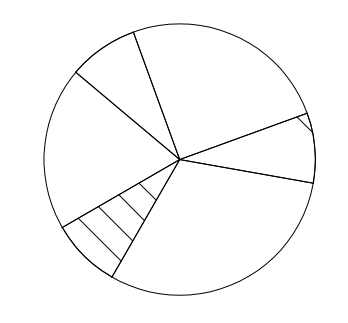
FAT ALBERT SPRUCE  
15' TALL  
8-10' SPREAD



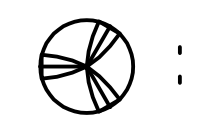
AUTUMN BLAZE MAPLE (125 pts)  
50' TALL  
40' SPREAD



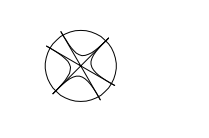
JAPANESE FLOWERING CRAB (60 pts)  
15' TALL  
12' SPREAD



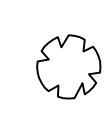
PILAR BIRCH (60 pts)  
40' TALL  
6' SPREAD



RED PRINCE VEGELIA (60 pts)  
6' TALL  
5' SPREAD



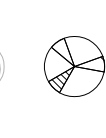
CARL FORESTER



MAY NIGHT SYLVIA



CABERNET BARBERRY



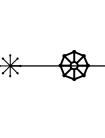
LEMONCELLO BARBERRY



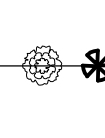
BLACKEYED SUSAN



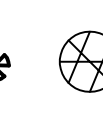
ASTER PURPLE DOME



DAYLILLY



PURPLE CONE FLOWER



ASTIBLE



SEDUM



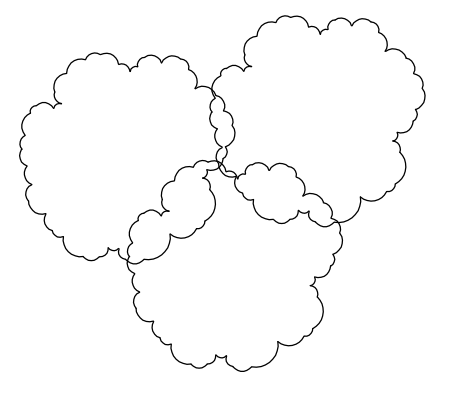
LUPINE



PHLOX - WHITE



3-STEM BIRCH



\*



February 10, 2026

CURRENT RESIDENT  
PO BOX 19001  
GREEN BAY, WI 54307-9001

Subject: Site Plan for Premier Property Development

Dear Landowner:

The Village of Kronenwetter has received a site plan application for the placement of two buildings for storing guns/gun collections and selling them online and contractor's outdoor storage yard/landscaping business at 1190 Gardner Park Road Kronenwetter, WI 54455. The two proposed buildings are 70ft x 80ft, 5400sf and 56ft x 200ft, 11,200sf. In the future they propose to add three additional (56ft x 200ft, 11,200sf) buildings. These buildings will be rented out to other businesses or contractors. A complete copy of the application packet is available for viewing at the Village of Kronenwetter Municipal Center.

You are receiving this letter as the owner of property within 100 feet to the proposed development. The Village Plan Commission will review the site plan at 6:00 PM on February 16, 2026 at the Village of Kronenwetter Municipal Center. There will be an opportunity for public input at the meeting.

Thank you in advance for your assistance. If you have any questions, comments, or concerns please direct them to Peter Wegner, 1582 Kronenwetter Drive, Kronenwetter, WI 54455 or by email to [pwegner@kronenwetter.gov](mailto:pwegner@kronenwetter.gov).

Sincerely,

Peter S. Wegner  
Community Development/Planning and Zoning Director



February 10, 2026

CURRENT RESIDENT  
1174 GARDNER PARK RD  
KRONENWETTER, WI 54455

Subject: Site Plan for Premier Property Development

Dear Landowner:

The Village of Kronenwetter has received a site plan application for the placement of two buildings for storing guns/gun collections and selling them online and contractor's outdoor storage yard/landscaping business at 1190 Gardner Park Road Kronenwetter, WI 54455. The two proposed buildings are 70ft x 80ft, 5400sf and 56ft x 200ft, 11,200sf. In the future they propose to add three additional (56ft x 200ft, 11,200sf) buildings. These buildings will be rented out to other businesses or contractors. A complete copy of the application packet is available for viewing at the Village of Kronenwetter Municipal Center.

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Sincerely,

Peter S. Wegner  
Community Development/Planning and Zoning Director



February 10, 2026

CURRENT RESIDENT  
PO BOX 47  
WAUKESHA, WI 53187-0047

Subject: Site Plan for Premier Property Development

Dear Landowner:

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Sincerely,

Peter S. Wegner  
Community Development/Planning and Zoning Director



February 10, 2026

CURRENT RESIDENT  
2425 E CAMELBACK RD STE 800  
PHOENIX, AZ 85016

Subject: Site Plan for Premier Property Development

Dear Landowner:

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Sincerely,

Peter S. Wegner  
Community Development/Planning and Zoning Director

# Standard Erosion Control Plan Section 7, Item 1.

## for 1- & 2-Family Dwelling Construction Sites

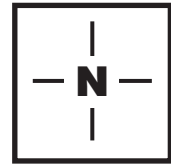
According to Chapters Comm 20 & 21 of the Wisconsin Uniform Dwelling Code, soil erosion control information needs to be included on the plot plan which is submitted and approved prior to the issuance of building permits for 1- & 2-family dwelling units in those jurisdictions where the soil erosion control provisions of the Uniform Dwelling Code are enforced. This Standard Erosion Control Plan is provided to assist in meeting this requirement.

**Instructions:**

1. Complete this plan by filling in requested information, completing the site diagram and marking appropriate boxes on the inside of this form.
2. In completing the site diagram, give consideration to potential erosion that may occur before, during, and after grading. Water runoff patterns can change significantly as a site is reshaped.
3. Submit this plan at the time of building permit application.

PROJECT LOCATION 1190 Gardner Park Road  
 BUILDER \_\_\_\_\_ OWNER Greg & Vinnie Tesch  
 WORKSHEET COMPLETED BY \_\_\_\_\_ DATE \_\_\_\_\_

Please indicate north by completing the arrow.



**SITE DIAGRAM**

Scale: 1 inch = \_\_\_\_ feet



**EROSION CONTROL PLAN LEGEND**

- PROPERTY LINE
- EXISTING DRAINAGE
- TEMPORARY DIVERSION
- FINISHED DRAINAGE
- LIMITS OF GRADING
- SILT FENCE
- STRAW BALES
- GRAVEL
- VEGETATION SPECIFICATION
- TREE PRESERVATION
- STOCKPILED SOIL

# EROSION CONTROL PLAN CHECKLIST

Check (✓) appropriate boxes below, and complete the site diagram with necessary information.

COMPLETED

NOT APPLICABLE

## Site Characteristics

North arrow, scale, and site boundary. Indicate and name adjacent streets or roadways.

Location of existing drainageways, streams, rivers, lakes, wetlands or wells.

Location of storm sewer inlets.

Location of existing and proposed buildings and paved areas.

The disturbed area on the lot.

Approximate gradient and direction of slopes before grading operations.

Approximate gradient and direction of slopes after grading operations.

Overland runoff (sheet flow) coming onto the site from adjacent areas.

## Erosion Control Practices

Location of temporary soil storage piles.

Note: Soil storage piles should be placed behind a sediment fence, a 10 foot wide vegetative strip, or should be covered with a tarp or more than 25 feet from any downslope road or drainageway.

Location of access drive(s).

Note: Access drive should have 2 to 3 inch aggregate stone laid at least 7 feet wide and 6 inches thick. Drives should extend from the roadway 50 feet or to the house foundation (whichever is less).

Location of sediment controls (filter fabric fence, straw bale fence or 10-foot-wide vegetative strip) that will prevent eroded soil from leaving the site.

Location of sediment barriers around on-site storm sewer inlets.

Location of diversions.

Note: Although not specifically required by code, it is recommended that concentrated flow (drainageways) be diverted (re-directed) around disturbed areas. Overland runoff (sheet flow) from adjacent areas greater than 10,000 sq. ft. should also be diverted around disturbed areas.

Location of practices that will be applied to control erosion on steep slopes (greater than 12% grade).

Note: Such practices include maintaining existing vegetation, placement of additional sediment fences, diversions, and re-vegetation by sodding or seeding with use of erosion control mats.

Location of practices that will control erosion on areas of concentrated runoff flow.

Note: Unstabilized drainageways, ditches, diversions, and inlets should be protected from erosion through use of such practices as in-channel fabric or straw bale barriers, erosion control mats, staked sod, and rock rip-rap. When used, a given in-channel barrier should not receive drainage from more than two acres of unpaved area, or one acre of paved area. In-channel practices should not be installed in perennial streams (streams with year round flow).

Location of other planned practices not already noted.

COMPLETED

NOT APPLICABLE

Indicate management strategy by checking (✓) the appropriate box.

### Management Strategies

Temporary stabilization of disturbed areas.

Note: It is recommended that disturbed areas and soil piles left inactive for extended periods of time be stabilized by seeding (between April 1 and September 15), or by other cover, such as tarping or mulching.

Permanent stabilization of site by re-vegetation or other means as soon as possible (lawn establishment).

- Indicate re-vegetation method:  Seed  Sod  Other \_\_\_\_\_
- Expected date of permanent re-vegetation: \_\_\_\_\_
- Re-vegetation responsibility of:  Builder  Owner/Buyer
- Is temporary seeding or mulching planned if site is not seeded by Sept. 15 or sodded by Nov. 15?  Yes  No

Use of downspout and/or sump pump outlet extensions.

Note: It is recommended that flow from downspouts and sump pump outlets be routed through plastic drainage pipe to stable areas such as established sod or pavement.

Trapping sediment during de-watering operations.

Note: Sediment-laden discharge water from pumping operations should be ponded behind a sediment barrier until most of the sediment settles out.

Proper disposal of building material waste so that pollutants and debris are not carried off-site by wind or water.

Maintenance of erosion control practices.

- Sediment will be removed from behind sediment fences and barriers before it reaches a depth that is equal to half the height of the barrier.
- Breaks and gaps in sediment fences and barriers will be repaired immediately. Decomposing straw bales will be replaced (typical bale life is three months).
- All sediment that moves off-site due to construction activity will be cleaned up before the end of the same workday.
- All sediment that moves off-site due to storm events will be cleaned up before the end of the next workday.
- Access drives will be maintained throughout construction.
- All installed erosion control practices will be maintained until the disturbed areas they protect are stabilized.

# EROSION CONTROL REGULATIONS

Erosion control and stormwater regulations can be complex. Local, state and, in some cases, federal regulations may apply. Before construction make sure you have the appropriate permits.

## LOCAL ORDINANCES

Check with your county, city, village, or town for any local erosion control ordinances including shoreland zoning requirements. Except for new 1- & 2-family dwellings, local ordinances may be more strict than state regulations. They may also require erosion control on construction projects not affected by state or federal regulations.

## UNIFORM DWELLING CODE (DEPT. OF COMMERCE)

### CONTROLS REQUIRED

- Silt fences, straw bales, or other approved perimeter measures along downslope sides and side slopes.
- Access drive.
- Straw bales, filter fabric fences or other barriers to protect on-site sewer inlets.
- Additional controls if needed for steep slopes or other special conditions.

### FOR MORE INFORMATION, CONTACT:

- Local building inspector
- Department of Commerce, Safety and Buildings Division, P.O. Box 7970, Madison, Wis. 53707-7970, (608) 267-5113.

## STORMWATER PERMIT (DEPT. OF NATURAL RESOURCES)

### CONTROLS REQUIRED

- Erosion control measures specified in the *Wisconsin Construction Site Best Management Practice Handbook*.
- Measures to control storm water after construction.

### FOR MORE INFORMATION, CONTACT

- Department of Natural Resources, Storm Water Permits, P.O. 7921, Madison, WI 53707-7921, (608) 267-7694.

For more assistance on plan preparation, refer to the Wisconsin Uniform Dwelling Code, the DNR *Wisconsin Construction Site Best Management Handbook*, and UW-Extension publication *Erosion Control for Home Builders*. The *Wisconsin Uniform Dwelling Code* and the *Wisconsin Construction Site Best Management Handbook* are available through the State of Wisconsin Document Sales, (608) 266-3358.

*Erosion Control for Home Builders* (GWQ001) can be ordered through Extension Publications, (608) 262-3346 or the Department of Commerce, (608) 267-4405. A PDF version of *Erosion Control for Home Builders* (GWQ001) and *Standard Erosion Control Plan* are also available at <http://clean-water.uwex.edu/pubs/sheets>

This publication is available from county UW-Extension offices or from Extension Publications, 45 N. Charter St., Madison, WI 53715. (608) 262-3346 or toll-free (877) 947-7827. A publication of the University of Wisconsin-Extension in cooperation with the Wisconsin Department of Natural Resources and the Wisconsin Department of Commerce.



**UW**  
**Extension**

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**GWQ001A Standard Erosion Control Plan for 1 & 2 Family Dwelling Construction Sites**

**DNR WT-458-96**

**R-03-02-2M-10-S**

Editing and design by the Environmental Resources Center, University of Wisconsin-Extension.

 **Printed on recycled paper**

# Erosion Control/Storm Water Management Maintenance/Operation Plan

For:

**Premier Property Holdings LLC  
1190 Gardner Park Road  
Kronenwetter, WI 54455**

Prepared By:



**6103 Dawn Street  
Weston, WI 54476**

Located in:

**Village of Kronenwetter  
Marathon County, WI**

Dated:

**November 21<sup>st</sup>, 2025**

Revised:

**February 5<sup>th</sup>, 2026**



*Dustin Vreeland*

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Premier Property Holdings LLC  
Village of Kronenwetter, Wisconsin

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- B.** Geotechnical Data
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- D.** Proposed Drainage Map and Calculations
- E.** Soil Loss and Sediment Discharge Map and Calculations
- F.** State of Wisconsin Construction Site Inspection Report and Plan of Operation

**Erosion Control/Storm Water Management  
Maintenance and Operation Plan  
for  
Premier Property Holdings LLC**

**1.0 BACKGROUND & GENERAL INFORMATION**

**1.1 Introduction and Project Location**

Vreeland Associates has been retained by Premier Property Holdings – Vinnie Tesch to perform storm water management calculations and prepare a storm water management plan per NR216.47 and NR151, for the proposed commercial buildings project. The project site is located at 1190 Gardner Park Road Kronenwetter, WI 54455. The project all of Parcel 1 of CSM 8726-34-104 located in part of the Southwest ¼ of the Southeast ¼ of Section 3, Township 27 North, Range 7 East, Village of Kronenwetter, Marathon County, Wisconsin.

**1.2 Project Description**

The proposed project consists of developing proposed 5.3 acres for commercial buildings and parking lot. The site will be graded for storm water management best management practices. (See Location Plan in **Appendix A**).

**1.3 Project Requirements**

The project area includes approximately 5.3 acres that will be disturbed. Since the disturbed area exceeds one acre, a Wisconsin Department of Natural Resources Notice of Intent application/permit (NOI-WPDES per WDNR) is required.

The storm water management plan for this project is developed in accordance with the NOI-WPDES requirements and NR216.47/NR151.121 for new development sites.

**1.4 General Project Data**

Soils

Based on existing soil mapping data from the Natural Resources Conservation Service (NRCS), the existing subgrade soils are expected to be Mahtomedi loamy sand, which are classified as hydrologic class “A”. Stormwater test pits were performed by Star Environmental. The test pits found to topsoil overlaying loam fine sand and sand. These test pits are consistent with NRCS. The determined limiting factor for stormwater infiltration was sand layer with an infiltration rate of 3.6 in/hr. The geotechnical data containing soil hydrologic classes are attached in **Appendix B**.

Groundwater

At the site of the proposed infiltration groundwater was not encountered. Groundwater will be well below the proposed project and will not be disturbed.

Wetlands

According to the Wisconsin DNR Wetlands and Wetlands Indicator map, there are not identified wetlands within the project limits.

## 2.0 EXISTING DRAINAGE CONDITIONS

### 2.1 Existing Drainage Area

The existing site consists of one sub-basin (E1). Sub-basin E1 contains existing woods, grass, buildings and gravel driveways. E1 generally flows to the south of the property. An existing drainage map can be found in **Appendix C**.

### 2.2 Existing Drainage Calculation Summary

Existing drainage calculations utilize TR-55 methodology and results for a 1, 2, 10, 25 and 100-year design storm are included. Existing drainage calculations are provided in **Appendix C**.

### 2.3 Existing Off-Site Drainage

Existing off-site storm water runoff draining onto the project site has been taken into consideration for the existing or proposed drainage evaluation.

## 3.0 PROPOSED DRAINAGE CONDITIONS

### 3.1 Proposed Drainage Areas

The proposed site is divided into 4 sub-basins (D1-D4). D1 consists of runoff from the proposed buildings, parking lot and lawn area. D1 is conveyed to the west and will flow to the south through a designed swale for infiltration and treatment. The swale will flow into 2P for treatment and rate control. D2 consists of runoff from the proposed building, parking lot and grass area. Runoff from D2 is conveyed in the middle of the property and will flow to the south through a designed swale for infiltration and treatment. The swale will flow into 2P for treatment and rate control. D3 consists of runoff from the proposed building, parking lot and lawn area. D3 is conveyed to the east and will flow to the south through a designed swale for infiltration and treatment. The swale will flow into 2P for treatment and rate control. D4 consists of runoff from roadway and lawn area. D4 is conveyed into the proposed infiltration basin between the two roadways for treatment and rate control. Runoff from D1-D4 and 2P is conveyed into the proposed stormwater detention basin (1P) for treatment and rate control. A proposed drainage area map is provided in **Appendix C**.

### 3.2 Post-Development Runoff Summary

Proposed drainage calculations utilize TR-55 methodology and results for a 1, 2, 10, 25 and 100-year design storm have been attached. A proposed drainage area map and calculations are provided in **Appendix D**.

### 3.3 Proposed Detention Areas

There are two proposed treatment and rate control devices for storm water management. 2P is a stormwater infiltration basin that will be used for infiltration purposes, total suspended solids removal and peak discharge control. Infiltration basin (2P) is located in the south side in the middle of the proposed project. The basin will utilize a storm sewer culvert as overflow to control the depth of water. 1P is a stormwater infiltration basin that will be used for infiltration purposes, total suspended solids removal and peak discharge control. Infiltration basin (1P) is located in the south side of Gardner Park Road of the proposed project. The basin will utilize a broad-crested weir as overflow to control the depth of water. An emergency overflow has been included for extreme storm events. See **Appendix C** detention basin volume calculations.

**4.0 POST-DEVELOPMENT PERFORMANCE STANDARDS**

**4.1 Total Suspended Solids**

1. According to NR151.122, BMPs shall be designed in accordance with Table 1, or to the maximum extent practicable. For new development projects Table 1 indicates that the total suspended solids load from parking areas and roads shall be reduced by 80 percent, based on an average annual rainfall, as compared to no runoff management controls.

The total suspended solids removal has been modeled in WinSLAMM version 10.5. According to the WinSLAMM modeling the expected TSS removal from the entire site is **94.60%** (excluding the proposed grass swales) the proposed design meets the requirements of NR151.122. See **Appendix D** for the WinSLAMM modeling inputs and outputs.

**4.2 Infiltration**

NR 151 requires that the post-development site infiltrate 90% of the pre-development runoff based on an average annual rainfall. Using WinSLAMM and HydroCAD the results show that the post-development site infiltrates **97.91%** of the average annual rainfall utilizing the swales and infiltration basin for infiltration. See **Appendix D** for input and output results using HydroCAD and WinSLAMM and soil report for measured infiltration.

**4.3 Peak Discharge**

According to NR151.123(1), BMPs shall be employed to maintain or reduce the peak runoff discharge rates, to the maximum extent practicable, as compared to pre-development conditions.

The pre-development and post-development peak rates of discharge leaving the site are summarized in the table below. See **Appendix C** for HydroCAD modeling routing diagrams, summaries, and node listings.

	<b>Pre-Development</b>	<b>Post-Development</b>
	<b>Total (E1)</b>	<b>Total (2L)</b>
<b>1-year 24-hour Peak Flow</b>	1.33 cfs	0.00 cfs
<b>2-year 24-hour Peak Flow</b>	1.54 cfs	0.00 cfs
<b>10-year 24-hour Peak Flow</b>	2.24 cfs	0.00 cfs
<b>25-year 24-hour Peak Flow</b>	2.73 cfs	0.00 cfs
<b>100-year 24-hour Peak Flow</b>	3.77 cfs	1.80 cfs

**4.4 Protective Area**

According to NR151.125(4)(e) areas of post-construction sites from which the runoff does not enter the surface water, including wetlands, without first being treated by a BMP to meet the requirements of 151.122 to 151.123, are exempt from meeting the requirements of the Protective Areas performance standards. Not applicable.

**4.5 Summary**

The modeling of this site shows that the requirements set by the Department of Natural Resources for total suspended solids, peak discharge, and infiltration can all be met with the proposed design.

The Storm Water Management Plan shows basic compliance with accepted engineering practice in hydrology planning and design. The resulting development will function as a positive addition to the community while sustaining environmental benefits in storm water management and quality.

## 5.0 CONSTRUCTION SITE PERFORMANCE STANDARDS

### 5.1 Erosion Control

The purpose of this control plan is to provide guidelines that comply with the state and local requirements, as well as to make recommendations regarding erosion control and storm water management. The construction of this development is a critical phase in terms of storm water management and runoff control. Construction site erosion control will help minimize the impact of development, enhance and protect local environment, and protect the surrounding project area by applying best management practices for erosion control at construction sites. This work shall be planned and executed in accordance with the Wisconsin Department of Natural Resources Storm Water Management Technical Standards and/or accepted local engineering practice. The owner/developer will be responsible for erosion control during the process of construction. Silt fence, site vegetation, inlet protection, tracking pad, and erosion mat will be utilized to keep sediment from leaving the construction site.

### 5.2 Construction Site Erosion Control Measures

The following erosion control devices may be used on the project site at any time during the construction phases to ensure the compliance with NR 216 and local erosion control requirements, as applicable.

a) Silt Fence (WDNR 1056)

Continuous silt fencing will be required along all areas downstream of disturbed area, and around the base of all stockpiled material subject to sediment transportation during rain fall events (stockpiled topsoil, gravel base, etc.). The silt fencing will provide a siltation barrier between the disturbed area and any inlets and ultimately downstream water bodies. All silt fence shall be removed upon completion of the project or when disturbed areas have generated sufficient vegetation to prevent erosion and the threat of sediment reaching inlets and bodies of water.

b) Site Vegetation

Existing site vegetation outside of project limits shall be protected and maintained to the maximum extent practicable. Existing site vegetation within the project limits shall remain undisturbed until construction schedule warrants disturbance. For disturbed areas vegetation that resists erosion, maintains slow storm water velocities, and retains sediment from runoff shall be provided by the contractor. Temporary seeding may be required for disturbed areas that are subject to long periods of construction inactivity. Temporary vegetation is used when areas are disturbed and may remain unfinished long enough to allow vegetation to grow and assist with erosion control. Permanent vegetation is encouraged as soon as possible in the construction process.

c) Tracking Pad (WDNR 1057)

Stone tracking pads will be constructed at all entrances to the construction site to minimize sediment tracking onto existing streets. A minimum of one construction entrance is required for the project site. Tracking pads are temporary and will be removed or much of the aggregate will be removed before the site is completed.

d) Non-channel Erosion Mat (WDNR 1052)

The purpose of this practice is to protect the soil surface from the erosive effect of rainfall and prevent sheet erosion during the establishment of grass or other vegetation, and to reduce soil moisture loss due to evaporation. This practice applies to both Erosion Control Re-vegetative Mats (ECRM) and Turf-Reinforcement Mats (TRM).

1. CLASS I: A short-term duration (minimum of 6 months), light duty, organic mat with photodegradable plastic or biodegradable netting.
  - a. Type A – Use on erodible slopes 2.5:1 or flatter.
  - b. Type B – Double netted product for use on erodible slopes 2:1 or flatter.
- e) Temporary Ditch Check (WDNR 1062)

Temporary Ditch Checks are used to create a temporary dam across a swale or drainage ditch to reduce the velocity of water flowing through the channel. The reduction in velocity reduces active channel erosion and promotes settling of suspended solids. They are composed of straw or wood fibers that are tightly compacted in a fiber mesh tubular cylinder.

- f) Waste and Material Disposal

All waste and unused building materials (including garbage, debris, cleaning wastes, or other construction materials) shall be properly disposed of and not allowed to be carried by runoff into a receiving channel or inlet.

### 5.3 Operation and Maintenance, Short-term

The OWNER of this project is directly responsible for implementation and maintenance of the construction site erosion control measures.

The Contractor shall conduct the following inspections:

- Weekly inspections of implemented erosion and sediment controls.
- Inspections of erosion and sediment controls within 24 hours after precipitation event 0.5 inches or greater which results in runoff during active construction periods.

The Contractor shall maintain weekly written reports of all inspections that include:

- The date, time, and exact place of the inspection.
- The name of the individual who performed the inspection.
- An assessment of the condition of erosion and sediment controls.
- A description of any erosion and sediment control implementation and maintenance performed.
- A description of the present phase of construction at the site.

Repairs shall be made immediately, as required, to maintain effectiveness, until permanent vegetation is established. All repairs to erosion control devices shall be documented on the Wisconsin Department of Natural Resources Construction Site Inspection Report (Form 3400-187). A copy of Form 3400-187 can be found in **Appendix F**.

### 5.4 Operation and Maintenance, Long-term

The OWNER of this project is directly responsible for the operation, inspection, and maintenance of all storm water facilities located within the project site, as described below.

- Infiltration Basin:  
 Inspection: Look for accumulation of sediment and/or debris in basin and riprap. Length of time water is retained in basin. Look for erosion or damage. Review plant health; look for weeds and grasses encroaching on plants.  
 Maintenance: Remove accumulated sediment deposits and/or debris in basin and riprap and repair any eroded or damaged grass areas. Remove any identified weeds or grasses. Do not plow/store snow in bio-retention basin. Annually mow the side slopes to reduce brush and other large root vegetation that may weaken the berms. Once every five years, deep-till infiltration basin promotes infiltration.

- Grass Swale:  
Inspection: Look for accumulation of sediment and/or debris in pond and riprap. Look for erosion or damage. Review plant/grass health.  
Maintenance: Remove accumulated sediment deposits and/or debris in swale and riprap and repair any eroded or damaged grass areas. If water is retained for more than 24-48 hours after a storm event, replace topsoil by removing the top 6" of topsoil, tilling bottom of basin, installing new topsoil and restoring grass in basin.

## 6.0 SOIL AND SEDIMENT LOSS DISCHARGE

The Wisconsin DNR requires that all construction sites must lose less than 5 tons per acre of sediment during the construction of the project. The DNR Soil Loss & Sediment Discharge Calculation Tool version 2.0 was used to determine the construction site sediment discharge. Using the worst-case scenario of a fully disturbed site and the maximum possible flow length, the calculations show that the soil loss is 4.7 tons/acre and the sediment discharge is 2.6 tons/acre. This assumes silt fence sediment control practices. This meets the DNR requirements. Calculations are shown in **Appendix E**. Soil Loss map shows the worst case scenario.

**APPENDIX A**

**Location Map**

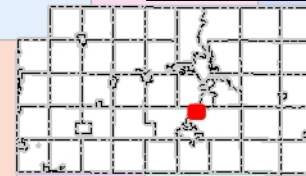


# Land Information Mapping System

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Section 7, Item 1.

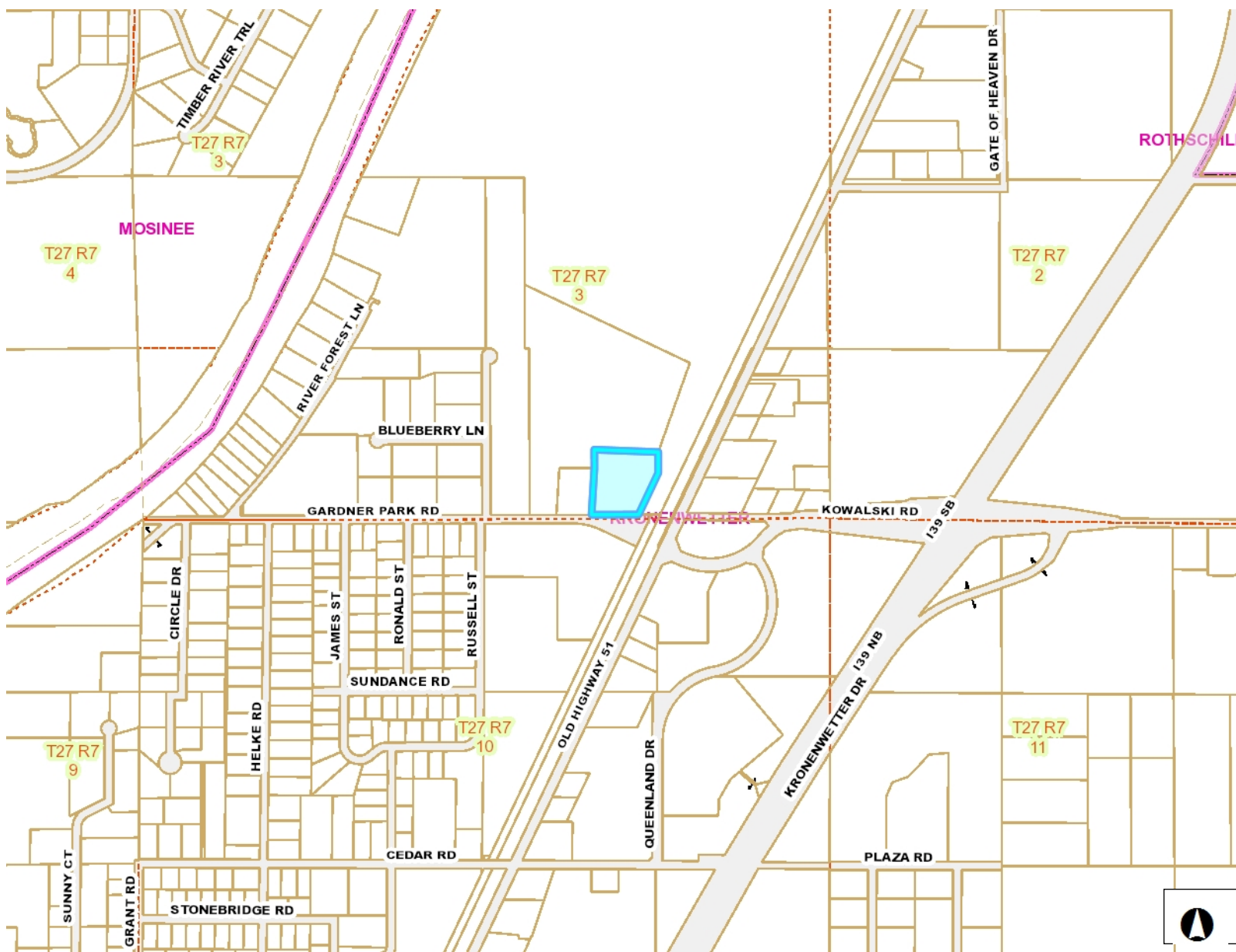


WOOD

PORTAGE

## Legend

- Road Names
- Parcels
- Parcel Lot Lines
- Land Hooks
- Section Lines/Numbers
- Right Of Ways
- Named Places
- Municipalities



570.17 0 570.17 Feet



NAD\_1983\_HARN\_WISCRS\_Marathon\_County\_Feet

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## Notes

**APPENDIX B**  
**Geotechnical Data**

**SOIL EVALUATION FOR STORMWATER  
ON THE  
PREMIER PROPERTY HOLDINGS, LLC PROPERTY  
VILLAGE OF KRONENWETTER  
MARATHON COUNTY  
WISCONSIN**

**Prepared for:**

**Mr. Vinnie Tesch  
Premier Property Holdings, LLC  
2210 River Forest Lane  
Kronenwetter, WI 54455**

**December 12, 2025**

**Prepared by:**

**BRIAN CAMLEK  
CERTIFIED PROFESSIONAL SOIL SCIENTIST  
WDNR PROFESSIONALLY ASSURED WETLAND DELINEATOR  
CERTIFIED SOIL TESTER**

**ALEX J. BLUME  
CERTIFIED PROFESSIONAL SOIL SCIENTIST  
WDNR PROFESSIONALLY ASSURED WETLAND DELINEATOR  
CERTIFIED SOIL TESTER**

**STAR ENVIRONMENTAL, INC.  
Phone: (715) 443-6115  
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December 12, 2025

Mr. Vinnie Tesch  
Premier Property Holdings, LLC  
2210 River Forest Lane  
Kronenwetter, WI 54455

RE: Soils Evaluation for Stormwater on the Premier Property Holdings, LLC Property, located in the SW1/4, SE1/4, Sec. 3, T.27N-R.7E., Village of Kronenwetter, Marathon County, Wisconsin.

The Soils Evaluation for Stormwater and Stormwater Report on Premier Property Holdings, LLC property has been completed and is enclosed for your review.

If you have any questions or concerns on the report or project, please call me. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Camlek".

Brian Camlek  
Certified Professional Soil Scientist  
WDNR Professionally Assured Wetland Delineator  
Certified Soil Tester  
Star Environmental, Inc.

Enclosures

**SOIL EVALUATION FOR STORMWATER  
ON THE  
PREMIER PROPERTY HOLDINGS, LLC PROPERTY**

**Table of Contents**

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 Depth to Bedrock.....1  
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 Soils.....2  
 Conclusion and Recommendations .....2  
 References Cited.....4

**Attachment 1 – Project Site Maps**

- Figure 1 – Location Map
- Figure 2 – Marathon County Soil Survey Map
- Figure 3 – Marathon County Soil Survey Legend
- Figure 4 – Surface Water Data Viewer Map
- Figure 5 – Marathon County Topographic Map
- Figure 6 – Soil Pit Location Map

**Attachment 2 – Soil Pit Logs**

- Soil Evaluation - Storm Logs
- Soil Pits Logs Summary Table
- WDNR Stormwater Tables

**Attachment 3 – USDA-NRCS WETS Tables**

- Antecedent Precipitation Tool (APT)

**Attachment 4 – Onsite Photos**

**Attachment 5 – Resume’**

## SOILS EVALUATION FOR STORMWATER ON THE PREMIER PROPERTY HOLDINGS, LLC PROPERTY

### Introduction

On October 9, 2025, Star Environmental, Inc. conducted a Soils Evaluation for Stormwater on the Premier Property Holdings, LLC Property, located in part of the SW1/4, SE1/4, Sec. 3, T.27N-R.7E., Village of Kronenwetter, Marathon County, Wisconsin.

### Methods

Soils Evaluation techniques used, followed the USDA-NRCS soil descriptive system. The property was subjected to an initial site screening and preliminary survey using the project plan map, recent aerial photographs, and soils maps.

Soil Pit 1 and 2 were described to determine soil limitations and hydraulic application rate for WDNR Storm Water Infiltration Practices, depth to groundwater and bedrock.

On October 9, 2025, Mr. Brian Camlek and Mr. Alex J. Blume, both Certified Professional Soil Scientists, Certified Soil Testers, and WDNR Professionally Assured Wetland Delineators, of Star Environmental, Inc. evaluated the soil backhoe pit excavated by Mr. Vinnie Tesch utilizing a Cat 304 Excavator.

Soil was classified for engineering properties, depth to >50 percent rock fragments, percent fines in each profile, depth to groundwater present, estimated high zone of soil saturation and notes on the geomorphologic landscape position were recorded.

### Geomorphologic Landscape Position

This project site's geomorphologic landscape position would be classified as an outwash plain controlled upland.

### Depth to Bedrock

Bedrock or >50% rock was not present to the depth of the pit or greater than 125 inches.

### Hydrology

Per the WDNR Surface Water Data Viewer, the closest navigable waterbody is the Wisconsin River, located 2,600 feet north west of the site.

### **Hydrology (continued)**

Redoximorphic soil features were not observed to the depth of the soil pits, or greater than 125 inches in both TP-1 and TP-2.

The Antecedent Precipitation Tool (APT) shows that the hydrologic determination is normal for this time of year. (Attachment 3).

### **Soils**

Per the USDA-NRCS Soil Survey, soil pits were in the excessively drained Mahtomedi Loamy Sand Soil Series, an Oxyaquic Glossudalf. The Freeon soil series consists loess or silty lacustrine deposits over dense sandy loam till. The soils present onsite have outwash sands and gravel beneath the silt cap indicating a differing soil mapping unit is present.

### **History**

This site has been historically manipulated multiple times throughout history. Currently the site is used as a staging area for a landscaping business. A house was located in the south east portion of the property but has since been removed.

### **Conclusion and Recommendations**

The apparent groundwater table, or endosaturation was not observed to the depth of both soil pits 1 and 2 or greater than 125 inches.

Bedrock or greater than 50% rock was not encountered to the depth of the soil pits or greater than 125 inches.

This Soils Evaluation for Stormwater Report should be beneficial in determining suitable stormwater practices per the guidelines established by the Wisconsin Department of Natural Resources (WDNR).

This report, conclusion and recommendations are the professional opinion of Brian Camlek and Alex J. Blume, both Certified Professional Soil Scientists, Certified Soil Testers, and WDNR Professionally Assured Wetland Delineators.



---

Brian Camlek  
Certified Professional Soil Scientist  
WDNR Professionally Assured Wetland Delineator  
Certified Soil Tester

December 12, 2025

Date



---

Alex J. Blume  
Certified Professional Soil Scientist  
WDNR Professionally Assured Wetland Delineator  
Certified Soil Tester

December 12, 2025

Date

### References Cited

1. United States Department of Agriculture. 1989.  
*Soil Survey of Marathon County, Wisconsin*. 217 pp.  
and appendices and maps.
2. Chapter NR 151 – Wisconsin Runoff Management, May 2013. 32 pp.
3. Evaluation for Storm Water Infiltration – Technical Standard (1002). September 2017.

## ATTACHMENT 1

### PROJECT SITE MAPS

Figure 1 – Location Map

Figure 2 – Marathon County Soil Survey Map

Figure 3 – Marathon County Soil Survey Legend

Figure 4 – Surface Water Data Viewer Map

Figure 5 – Marathon County Topographic Map

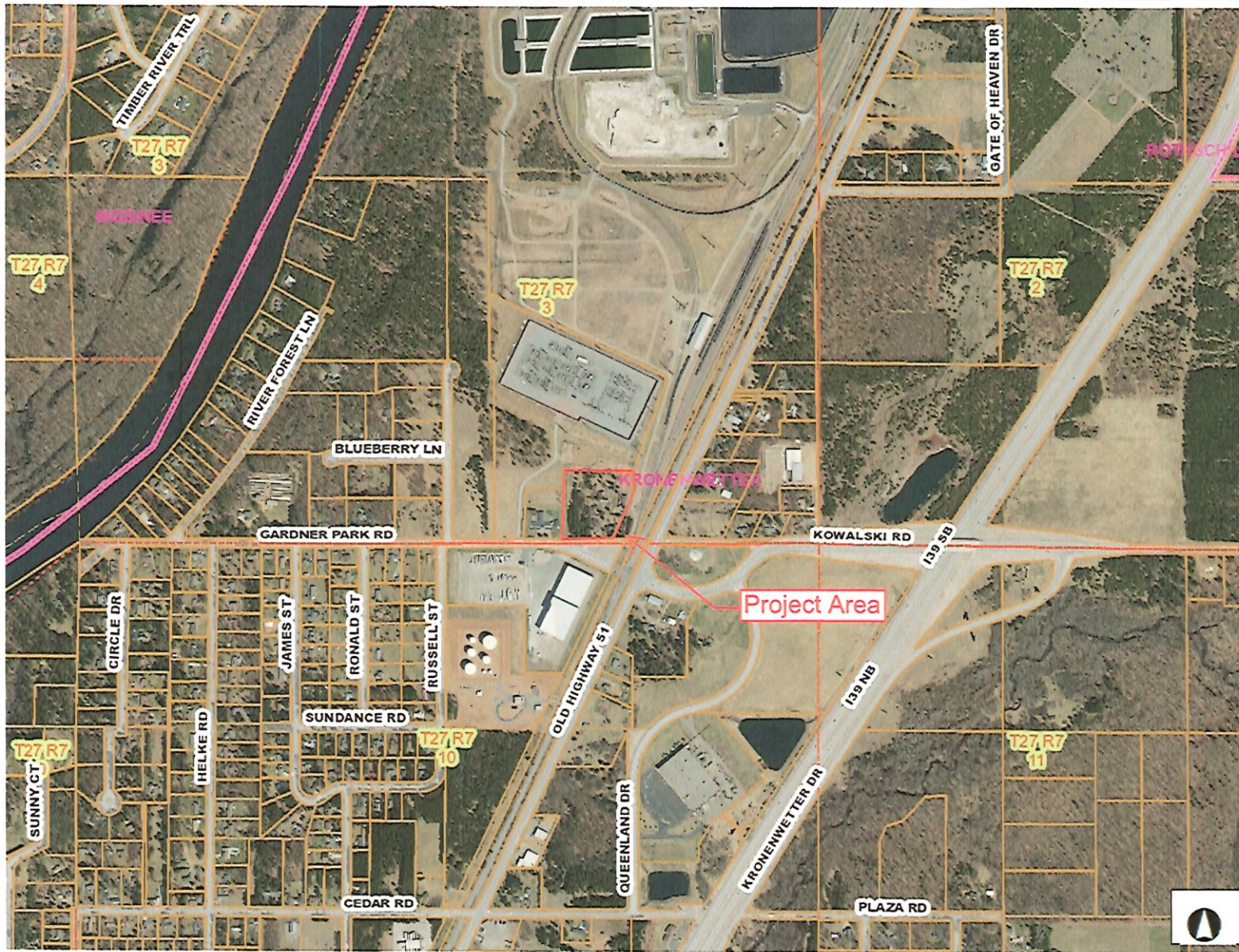
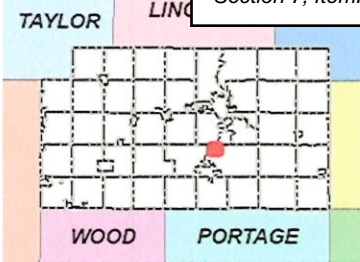
Figure 6 – Soil Pit Location Map



# Land Information Mapping System

## Location Map

Section 7, Item 1.



### Legend

- Road Names
- Parcels
- Parcel Lot Lines
- Land Hooks
- Section Lines/Numbers
- Right Of Ways
- Named Places
- Municipalities
- 2020 Orthos Countywide
  - Red: Band\_1
  - Green: Band\_2
  - Blue: Band\_3

533.90 0 533.90 Feet



NAD\_1983\_HARN\_WISCRS\_Marathon\_County\_Feet

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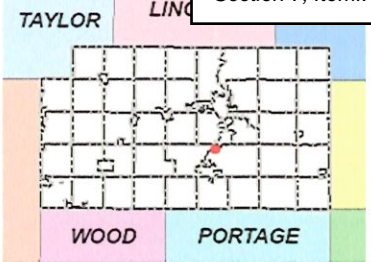
### Notes

Figure 1



# Land Information Mapping System Soil Map

Section 7, Item 1.



## Legend

- Road Names
- Parcels
- Parcel Lot Lines
- Land Hooks
- Right Of Ways
- Named Places
- Municipalities
- NRCS Soils
- 2020 Orthos Countywide
- Red: Band\_1
- Green: Band\_2
- Blue: Band\_3

66.74 0 66.74 Feet



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Notes  
Figure 2

# Marathon County Soil Legend

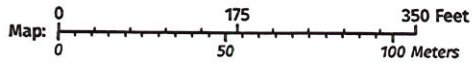
<u>Map Symbol</u>	<u>Soil Name</u>	<u>Map Symbol</u>	<u>Soil Name</u>
AbB	Alban loam, 1 to 6 percent slopes	MdB	Marathon silt loam, 2 to 6 percent slopes
Ad	Aldorf mucky silt loam, 0 to 2 percent slopes	MdC	Marathon silt loam, 6 to 12 percent slopes
AmC	Amery silt loam, 5 to 15 percent slopes	MeC	Marathon silt loam, 2 to 15 percent slopes, stony
CbA	Cable silt loam, 0 to 3 percent slopes, stony	MfA	Marshfield silt loam, 0 to 3 percent slopes
Ch	Cathro muck, 0 to 1 percent slopes	MgA	Meadland loam, 0 to 3 percent slopes
CkA	Chetek sandy loam, 0 to 2 percent slopes	MhA	Meadland loam, 0 to 3 percent slopes, stony
CkB	Chetek sandy loam, 2 to 6 percent slopes	Mm	Meehan loamy sand, 0 to 2 percent slopes
CkC	Chetek sandy loam, 6 to 15 percent slopes]	Mn	Minocqua sandy loam, 0 to 2 percent slopes
CkE	Chetek sandy loam, 15 to 30 percent slopes	MoB	Moberg gravelly silt loam, 2 to 6 percent slopes
Da	Dancy sandy loam, 0 to 2 percent slopes	MoC	Moberg gravelly silt loam, 6 to 15 percent slopes
DoA	Dolph silt loam, 0 to 3 percent slopes	MsB	Mosinee sandy loam, 2 to 6 percent slopes
DuB	Dunnville fine sandy loam, 1 to 4 percent slopes	MsC	Mosinee sandy loam, 6 to 12 percent slopes
FeC	Fenwood silt loam, 6 to 12 percent slopes	MsD	Mosinee sandy loam, 12 to 20 percent slopes
FeD	Fenwood silt loam, 12 to 20 percent slopes	MtC	Mosinee sandy loam, 2 to 15 percent slopes, stony
FfC	Fenwood silt loam, 2 to 15 percent slopes, stony	MyB	Myra silt loam, 1 to 6 percent slopes
FfE	Fenwood silt loam, 15 to 30 percent slopes, stony	MzB	Myra silt loam, 1 to 6 percent slopes, stony
FgB	Fenwood-Rozelville silt loams, 2 to 6 percent slopes	Ne	Newson mucky loamy sand, 0 to 1 percent slopes
Fh	Fordum silt loam, 0 to 1 percent slopes	Oe	Oesterle loam, 0 to 2 percent slopes
FnB	Freeon silt loam, 2 to 6 percent slopes	Pg	Pits, gravel
FnC	Freeon silt loam, 6 to 12 percent slopes	Ph	Pits, quarries
GcB	Graycalm loamy sand, 2 to 6 percent slopes	Po	Plover sandy loam, 0 to 2 percent slopes
Gm	Graycalm loamy sand, moderately well drained, 0 to 2 percent slopes	RbC	Ribhill cobbly silt loam, 6 to 15 percent slopes
Gr	Greenwood peat, 0 to 1 percent slopes	RbE	Ribhill cobbly silt loam, 15 to 30 percent slopes, stony
GuB	Guenther loamy sand, 2 to 6 percent slopes	RcB	Rietbrock silt loam, 1 to 8 percent slopes, stony
HtB	Hatley silt loam, 1 to 6 percent slopes	ReB	Rietbrock silt loam, 1 to 8 percent slopes
HyB	Hatley cobbly silt loam, 1 to 6 percent slopes, boulder	RhA	Rockers loamy sand, 0 to 3 percent slopes
KaB	Kennan sandy loam, 2 to 8 percent slopes	RoA	Rosholt sandy loam, 0 to 2 percent slopes
KaC	Kennan sandy loam, 8 to 15 percent slopes	RoB	Rosholt sandy loam, 2 to 6 percent slopes
KaD2	Kennan sandy loam, 15 to 30 percent slopes, eroded	RsA	Rosholt silt loam, 0 to 2 percent slopes
KeB	Kennan sandy loam, 2 to 8 percent slopes, boulder	RsB	Rosholt silt loam, 2 to 6 percent slopes
KeC	Kennan sandy loam, 8 to 15 percent slopes, boulder	ScA	Scott Lake sandy loam, 0 to 3 percent slopes
KeE	Kennan sandy loam, 15 to 30 percent slopes, boulder	SdA	Scott Lake silt loam, 0 to 3 percent slopes
LDF	Landfill	Se	Seelyeville muck, 0 to 1 percent slopes
LoB	Loyal silt loam, 1 to 6 percent slopes	ShA	Sherry silt loam, 0 to 3 percent slopes
LoC	Loyal silt loam, 6 to 12 percent slopes	St	Sturgeon silt loam, 0 to 2 percent slopes
MaB	Magnor silt loam, 0 to 4 percent slopes	UoB	Udorthents, loamy, gently sloping
MbB	Mahtomedi loamy sand, 0 to 6 percent slopes	UoE	Udorthents, loamy, steep (earthen dam)
MbC	Mahtomedi loamy sand, 6 to 15 percent slopes	WtA, WtB	Withee silt loam 0 to 3 percent slopes
MbE	Mahtomedi loamy sand, 15 to 45 percent slopes		
McA	Mahtomedi loamy sand, moderately well drained, 0 to 3 percent slopes		

Figure 1



**Legend:** (some map layers may not be displayed)

**Notes:**



Service Layer Credits:  
Wetland Indicators & Soils: Surface Water Data Viewer Team, Latest Leaf Off, DNR Basic Feature Vector  
Tile Layer WTM: Surface Water (Cached): WiDNR, USGS, and other data, Wetland Inventory NWI (Dynamic):  
Calvin Lawrence, Dennis Weise, Nina Rihh

Map projection: NAD 1983 HARN Wisconsin TM

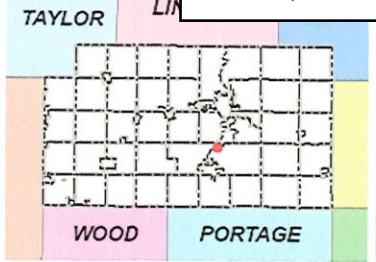


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Figure 4

Date Printed: 12/12/2025 11:45 AM



**Legend**

- Road Names
- Parcels
- Parcel Lot Lines
- Land Hooks
- Right Of Ways
- Named Places
- Municipalities
- 2ft Contour Labels
- County-wide 2ft Contours (2012)
- Index
- Intermediate
- 2020 Orthos Countywide
- Red: Band\_1
- Green: Band\_2
- Blue: Band\_3

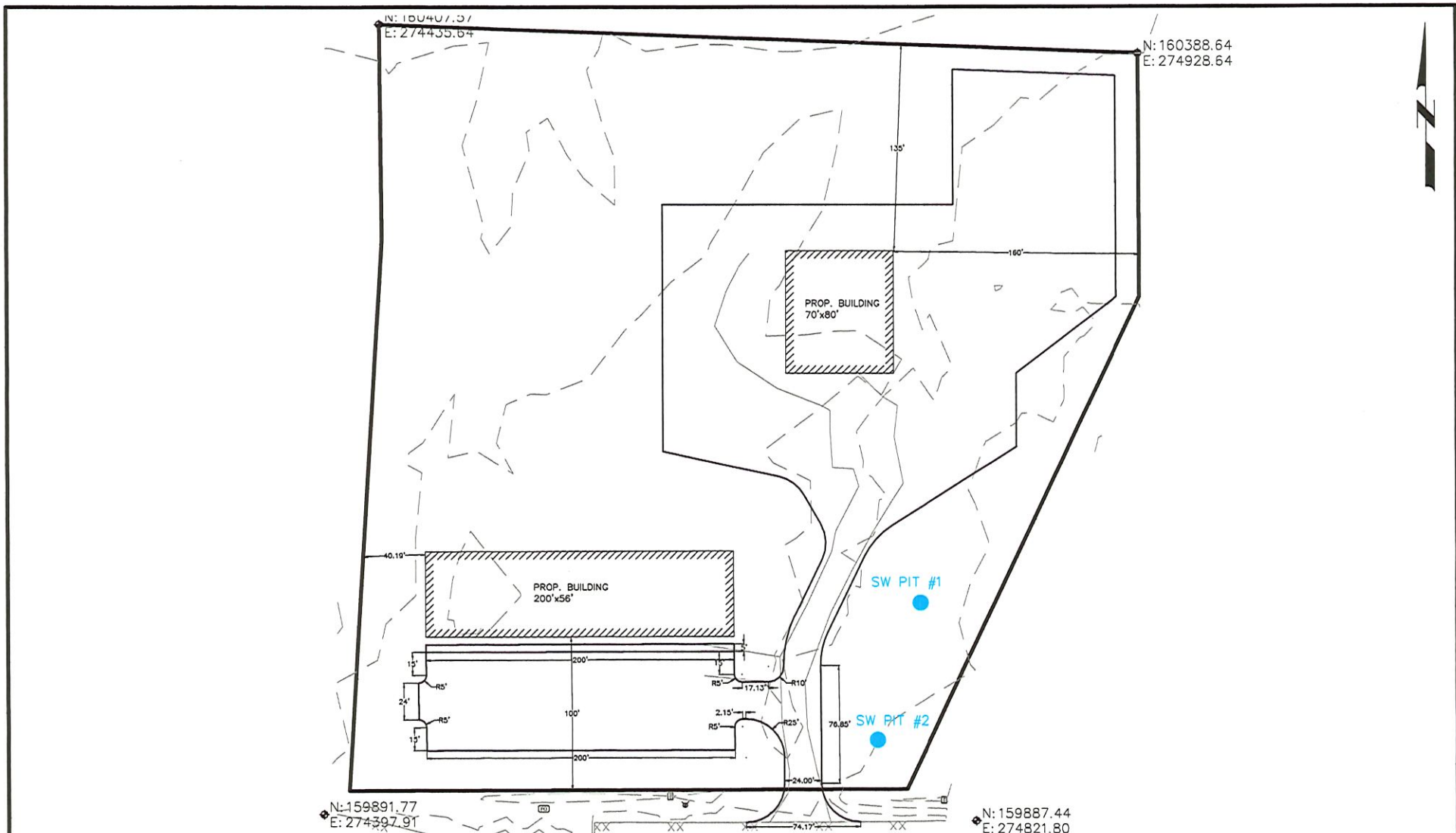
66.74 0 66.74 Feet



NAD\_1983\_HARN\_WISCRS\_Marathon\_County\_Feet

**DISCLAIMER:** The information and depictions herein are for informational purposes and Marathon County-City of Wausau specifically disclaims accuracy in this reproduction and specifically admonishes and advises that if specific and precise accuracy is required, the same should be determined by procurement of certified maps, surveys, plats, Flood Insurance Studies, or other official means. Marathon County-City of Wausau will not be responsible for any damages which result from third party use of the information and depictions herein or for use which ignores this warning. THIS MAP IS NOT TO BE USED FOR NAVIGATION

**Notes**  
Figure 5



STAMP/SIGNATURE:

REVISIONS		
BY	DATE	DESCRIPTION

**TITLE PAGE:**  
**STORMWATER PIT MAP**

PROJECT: **PREMIER PROPERTY DEVELOPMENT**

LOCATION: **VILLAGE OF KRONENWEITER  
 MARATHON COUNTY, WISCONSIN**



**VREELAND ASSOCIATES LAND SURVEYORS & ENGINEERS**  
 6103 DAWN STREET WESTON, WI. 54476  
 PHONE NO.: (715) 241-0947  
 EMAIL: [custin@vreelandassociates.us](mailto:custin@vreelandassociates.us)  
 WEBSITE: [www.vreelandlandsurveying.com](http://www.vreelandlandsurveying.com)

PREPARED FOR: **GREG TESCH**

PLAN DATE: **OCTOBER 6TH, 2025**

DESIGNED: DURTIN VREELAND  
 SURVEYED BY: CS & TV  
 FILE NO.: 15-0413 ENGINEERING  
 DATE: SEPTEMBER 15, 2025  
 SCALE: **1" = 60'**  
 SHEET: **PIT**

## ATTACHMENT 2

### SOIL PIT LOGS

Soil Evaluation -- Storm Logs  
Soil Pits Logs Summary Table  
WDNR Stormwater Tables



1002-CPS-23  
 Division of Industry Services  
 P. O. Box 2658  
 Madison, Wisconsin 53701  
 Scott Walker, Governor  
 Laura Gulierrez, Secretary

Attachment 2:

SOIL AND SITE EVALUATION – STORM

In accordance with SPS 382.365, 385, Wis. Adm. Code, and WDNR Standard 1002

Attach a complete site plan on paper not less than 8 1/2 x 11 inches in size. Plan must include, but not limited to: vertical and horizontal reference point (BM), direction and percent of slope, scale or dimensions, north arrow, and BM referenced to nearest road

Please print all information

Personal information you provide may be used for secondary purposes (Privacy Law, s. 15.04(1)(m))

County	Marathon
Parcel I.D.	145-2707-034-0972
Reviewed by	Date

Property Owner Premier Property Holdings LLC, CO Vinnie Tesch				Property Location SW 1/4 SE 1/4 S 3 T 27 N R 7 <input checked="" type="checkbox"/> E (or) <input type="checkbox"/> W			
Property Owner's Mailing Address 2210 River Forest Lane				Lot #	Block #	Subd. Name or CSM#	
City Kronenwetter	State WI	Zip Code 54455	Phone Number -	<input type="checkbox"/> City	<input checked="" type="checkbox"/> Village Kronenwetter	<input type="checkbox"/> Town	Nearest Road 1190 Gardner Park Road
Drainage area _____ sq. ft. <input type="checkbox"/> acres				Hydraulic Application Test Method		Soil Moisture	
Test site suitable for (check all that apply): <input type="checkbox"/> Site not suitable;				<input checked="" type="checkbox"/> Morphological Evaluation		Date of soil Borings: 10/9/2025	
<input type="checkbox"/> Bioretention; <input type="checkbox"/> Subsurface Dispersal System;				<input type="checkbox"/> Double Ring Infiltrometer		USDA-NRCS WETS Value:	
<input type="checkbox"/> Resuse; <input type="checkbox"/> Irrigation; <input type="checkbox"/> Other _____				<input type="checkbox"/> Other: (specify) _____		<input type="checkbox"/> Dry = 1;	
						<input checked="" type="checkbox"/> Normal = 2;	
						<input type="checkbox"/> Wet = 3.	

TP-1 Boring #  Boring  Pit Ground surface elev. 1710 ft Depth to limiting factor 125 in.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-10	10YR 3/3	-	LS	2MSBK	MVFR	AS	5	19	1.63
2	-22	10YR 4/4	-	LS	2MABK	MVFR	CW	5	19	1.63
3	-48	7.5YR 4/6	-	GRS	SG	ML	CW	20	8	3.60
4	-125	7.5YR 6/6	-	GRS	SG	ML	-	25	7	3.60

Comments: Groundwater, saturation, redoximorphic features, and bedrock not present to the depth of the pit.

TP-2 Boring #  Boring  Pit Ground surface elev. 1710 ft Depth to limiting factor 125 in.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App Rate Inches/Hr
1	0-6	10YR 3/3	-	LS	2MSBK	MVFR	AS	5	19	1.63
2	-16	10YR 4/4	-	LS	2MABK	MVFR	CW	5	19	1.63
3	-38	7.5YR 4/6	-	GRS	SG	ML	CW	20	8	3.60
4	-125	7.5YR 6/6	-	GRS	SG	ML	-	20	8	3.60

Comments: Groundwater, saturation, redoximorphic features, and bedrock not present to the depth of the pit.

CST Name (Please Print) Brian Camlek, Alex J. Blume	Signature <i>[Signature]</i>	Credential Number 1226509, 1491460
Address PO Box 434 Marathon WI 54448	Date Evaluation Conducted 10/9/2025	Telephone Number (715) 443-6115

**STORMWATER AND BEDROCK STUDY  
SOIL PIT LOGS SUMMARY TABLE**

Pit #	Depth to Bedrock (in.)	Depth to Ground Water (in.)	Groundwater Present	Est. High Ground Water (in.)	Depth to Redoximorphic Features
TP-1	>125	>125	No	>125	>125
TP-2	>125	>125	No	>125	>125

**Notes:**

Bedrock or >50% rock was not observed in any of the pits to the depth of the soil pits or greater than 125 inches in TP-1 and TP-2.

The apparent groundwater table, or endosaturation, and saturation was not observed in any of the pits to the depth of the pits or greater than 125 inches in TP-1 and TP-2.

Redoximorphic soil features were not observed to the depth of the pits in both pits, or greater than 125 inches in TP-1 and greater than 96 inches in TP-2.

Date: 10-9-2025

Backhoe: CAT 304 operated by Vinnie Tesch of Premier Lawn & Landscape, LLC

Recorded By: Brian Camlek, Certified Professional Soil Scientist  
Alex J. Blume, Certified Professional Soil Scientist  
Star Environmental, Inc.  
(715) 443-6115

Table 1. Evaluation Requirements to Proposed Infiltration Devices <sup>Note 1</sup>

Infiltration Device (Technical Standard <sup>Note 2, Note 3</sup> )	Tests Required	Minimum Number of Test Pits Required <sup>Note 4, Note 5</sup>
<i>Rain Garden</i>	Soil texture evaluation or infiltration test	N/A
<i>Infiltration Trenches (1007)</i>	Test pits	1 test pit/100 linear feet of trench with a minimum of 2 test pits, and sufficient to determine / confirm variability
<i>Vegetated Swale (1005)</i>	Test pits	1 test pit/ 500 linear feet of swale with a minimum of 2 test pits, and sufficient to determine / confirm variability
<i>Bioretention Systems (1004)</i>	Test pits	1 test pit or a number sufficient to assess infiltration potential, and sufficient to determine / confirm variability
<i>Surface Infiltration Basins (1003)</i>	Test pits	2 test pits then an additional test pit /10,000 square feet and sufficient to determine / confirm variability
<i>Subsurface Dispersal Systems (N/A) greater than 15 feet in width</i>	Test pits	2 test pits then an additional test pit /10,000 square feet and sufficient to determine / confirm variability
<i>Permeable Pavement Systems (1008)</i>	Test pits	2 test pits then an additional test pit /10,000 square feet and sufficient to determine / confirm variability

<sup>Note 1</sup> Maintain trench safety requirements; test pit evaluations can be made from the surface without entering the pit.

<sup>Note 2</sup> Technical standards refer to the corresponding WDNR design technical standard containing design criteria for this practice.

<sup>Note 3</sup> Where initial site borings show uniform soils throughout the site, the professional meeting the Qualifications (see Step D) may reduce the number of test pits, provided information from both test pits and soil borings confirm a uniform soil condition across the proposed device location.

<sup>Note 4</sup> Test pits are optimally located within 10 feet of the footprint perimeter, and not within the footprint.

<sup>Note 5</sup> If a backhoe is unable to excavate a test pit deep enough from the existing surface to reach 5 feet below the native soil interface, then soil borings may be used to evaluate the depth below the which the backhoe is unable to reach. It is expected that even a medium sized backhoe can reach at least 15 feet below grade.

### Step C.2. Infiltration Rate Exemption.

To determine if a site is eligible for exemption from infiltration under s. NR 151.124(4)(c), Wis. Adm. Code, use a scientifically credible field test method unless the least permeable soil horizon within five feet below the native soil interface is one of the following: sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, or clay. Take at least three infiltration tests at the optimal infiltration location per the criteria obtained in Step B, and distribute tests so that they best represent the area being tested (see Step C.3. Infiltration Option 2 for infiltration test methods). Conduct tests within the native soil layer being evaluated for exemption. For a site to be exempt from infiltration requirements, at least two-thirds of tests are to have a measured infiltration rate of less than 0.6 in/hr. Use the infiltration rate from actual field measurements to request an exemption to infiltration requirements; correction factors do not apply.

### Step C.3. Infiltration Rate Determination.

The purpose of this step is to determine a design infiltration rate (Infiltration Options 1 – 3).

Use Infiltration Options below to determine the design infiltration rate. Examples calculate the *static infiltration rate*.

Note that *soil compaction mitigation* reduces the soil density and promotes infiltration.

#### Infiltration Option 1 – Infiltration Rate Not Measured, Soil Compaction Mitigated

Using information from soil test pits, select the design static infiltration rate from Table 2 based on soil texture of the least permeable soil horizon within 5 feet below the native soil interface. See Example 1.

Table 2. Design Static Infiltration Rates for Soil Textures Receiving Storm Water <sup>Note 1</sup>

Soil Texture	Design Static Infiltration Rate Without Measurement (Inches/Hour) <sup>Note 2</sup>
Coarse sand or coarser	3.60
Loamy coarse sand	3.60
Sand	3.60
Loamy sand	1.63
Sandy loam, fine sand, loamy sand, very fine sand, and loamy fine sand	0.50
Loam	0.24
Silt loam	0.13
Sandy clay loam	0.11
Clay loam	0.03
Silty Clay loam	0.04 <sup>Note 3</sup>
Sandy clay	0.04
Silty clay	0.07
Clay	0.07

<sup>Note 1</sup> These infiltration rates are not to be used to request exemption from infiltration requirements.

<sup>Note 2</sup> Infiltration rates represent the lowest value for each textural class presented in Table 2 of Rawls, 1998.

<sup>Note 3</sup> Infiltration rate is an average based on Rawls, 1982 and Clapp & Hornberger, 1978.

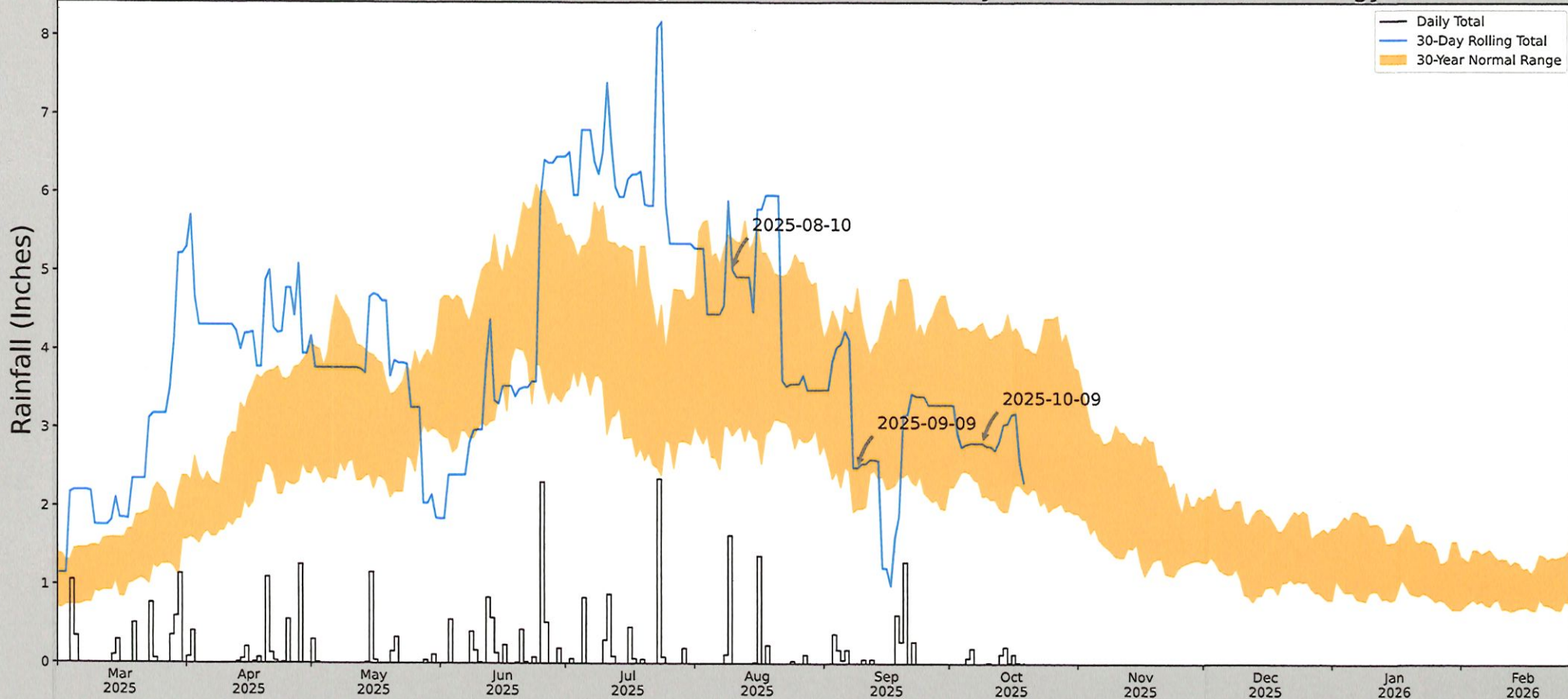
Table 2 assumes separation from the native soil interface to a limiting layer such that mounding of water will not reach the native soil interface. A regulatory authority may require a mounding analysis when concerned that mounding may impair the function of the device or have an adverse impact to property. See Considerations section for more information.

Where adverse soil structure is present, such as moderate to strong platy soil structure, compacted or cemented soil horizons, or massive soil conditions with high bulk density reduce the design static infiltration rates per judgment of an individual meeting the Qualifications in Step D.

**ATTACHMENT 3**

**ANTECEDENT PRECIPITATION TOOL (APT)**

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



Coordinates	44.84431, -89.6553
Observation Date	2025-10-09
Elevation (ft)	1171.882
Drought Index (PDSI)	Not available (2025-09)
WebWIMP H <sub>2</sub> O Balance	Wet Season

30 Days Ending	30 <sup>th</sup> %ile (in)	70 <sup>th</sup> %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-10-09	2.135827	4.357087	2.814961	Normal	2	3	6
2025-09-09	1.974803	4.789764	2.5	Normal	2	2	4
2025-08-10	2.906299	5.422047	5.019685	Normal	2	1	2
Result							Normal Conditions - 12

Figures and tables made by the Antecedent Precipitation Tool Version 3.0



Developed by:  
U.S. Army Corps of Engineers and  
U.S. Army Engineer Research and  
Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
WAUSAU ASOS	44.9275, -89.6253	1201.116	5.933	29.234	2.843	11351	90
WAUSAU WSAW TV	44.9464, -89.6222	1196.85	1.315	4.266	0.597	2	0

**ATTACHMENT 4**

**ONSITE PHOTOS**



Project Area



Cat 304 Excavator Operated by Vinnie Tesch



TP-1 Location



TP-1



TP-1 Excavated Material



Total Depth TP-1



TP-2 Location



TP-2

p



TP-1 Total Depth

**ATTACHMENT 5**

**RESUME'**

**Brian Camlek**

**Certified Professional Soil Scientist  
WDNR Professionally Assured Wetland Delineator,  
Licensed Designer of Engineering Systems  
Star Environmental, Inc.  
705 Third Street, P.O. Box 434  
Marathon, WI 54448  
Telephone: 715-443-6115, Cell: 715-630-4401  
Email: bcamlek.starenvironmental@hotmail.com**

**Experience: Star Environmental, Inc., Certified Professional Soil Scientist**

Professional Experiences in Wetland Delineations, Wetland Mitigation Banks, Non-Metallic Mine Reclamation Plans, Pond Development Plans, Stormwater Pollution Prevention Plans, Soil and Site Evaluations for Septic Systems and Stormwater, Septic System Designs, Septic System and Well Inspections.

**Dade Moeller, Inc., Environmental Scientist**

Sampled Soil, Water, Vegetation and Aquatic Organism while conducting extensive QA/QC of data collected during offshore operations in the Gulf of Mexico in response to the BP Deepwater Horizon Oil Spill of 2010.

**Water and Environmental Analysis Laboratory, UWSP, Environmental Lab Technician**

Analyzed and interpreted water samples for Nitrates, Nitrites, Chloride, Fluoride, Bacteria, Total Hardness, Alkalinity, pH, Turbidity, Biological Oxygen Demand, Chemical Oxygen Demand.

**Education: B.S.-Water Resources and Soil Science, May 2010 University of Wisconsin-Stevens Point**

WDNR Basic and Advanced Wetland Delineation Training Workshops

WDNR Critical Methods in Wetland Delineation Workshop

Completion of UW-La Crosse Grasses, Sedge & Rushes Workshop

Certified Environmental Inspector - Commonground University ASTM E1527-13 Phase 1 ESA

Completion of UW-Madison-WinSLAMM v.10.2 Meeting Urban Stormwater Management

**Qualifications: Certified Professional Soil Scientist**

WDNR Professionally Assured Wetland Delineator

Licensed Designer of Engineering Systems

Certified Environmental Inspector, Environmental Assessment Association

Certified Soil Tester, State of Wisconsin

Certified POWTS Inspector, State of Wisconsin

Licensed Pump Installer, State of Wisconsin

Résumé' of Qualifications

**Alex J. Blume**

**Certified Professional Soil Scientist,  
WDNR Professionally Assured Wetland Delineator,  
Certified Soil Tester, POWTS Inspector,  
Licensed Designer of Engineered Systems,  
Certified Environmental Inspector**

Star Environmental, Inc.  
705 Third Street, P.O. Box 434  
Marathon, WI 54448  
Telephone: 715-443-6115  
Email: [ablume.starenvironmental@hotmail.com](mailto:ablume.starenvironmental@hotmail.com)

**Experience: Star Environmental, Inc., Environmental Specialist**

Professional Experiences in Wetland Delineations, Wetland Mitigation Banks, Grading Plans, Erosion Control Plans, Pond Development Plans, Wetland Crossings, Septic System and Well Inspections, and Soil and Site Evaluations for Septic Systems and Storm Water.

**Education:**

B.S.-Soil and Land Management, May 2019 University of Wisconsin Stevens Point

Treehaven Summer Camp. Six weeks of intensive field exercises practicing techniques used to inventory and manage forest, soil, water and wildlife resources. Special emphasis on mapping, air photo interpretation and vegetation identification.

WDNR Basic and Advanced Wetland Delineation Training Workshops

Completion of UW – Stevens Point Wetland Plants Identification and Sampling Workshop

**Qualifications:**

Certified Soil Tester – State of Wisconsin

Certified Professional Soil Scientist

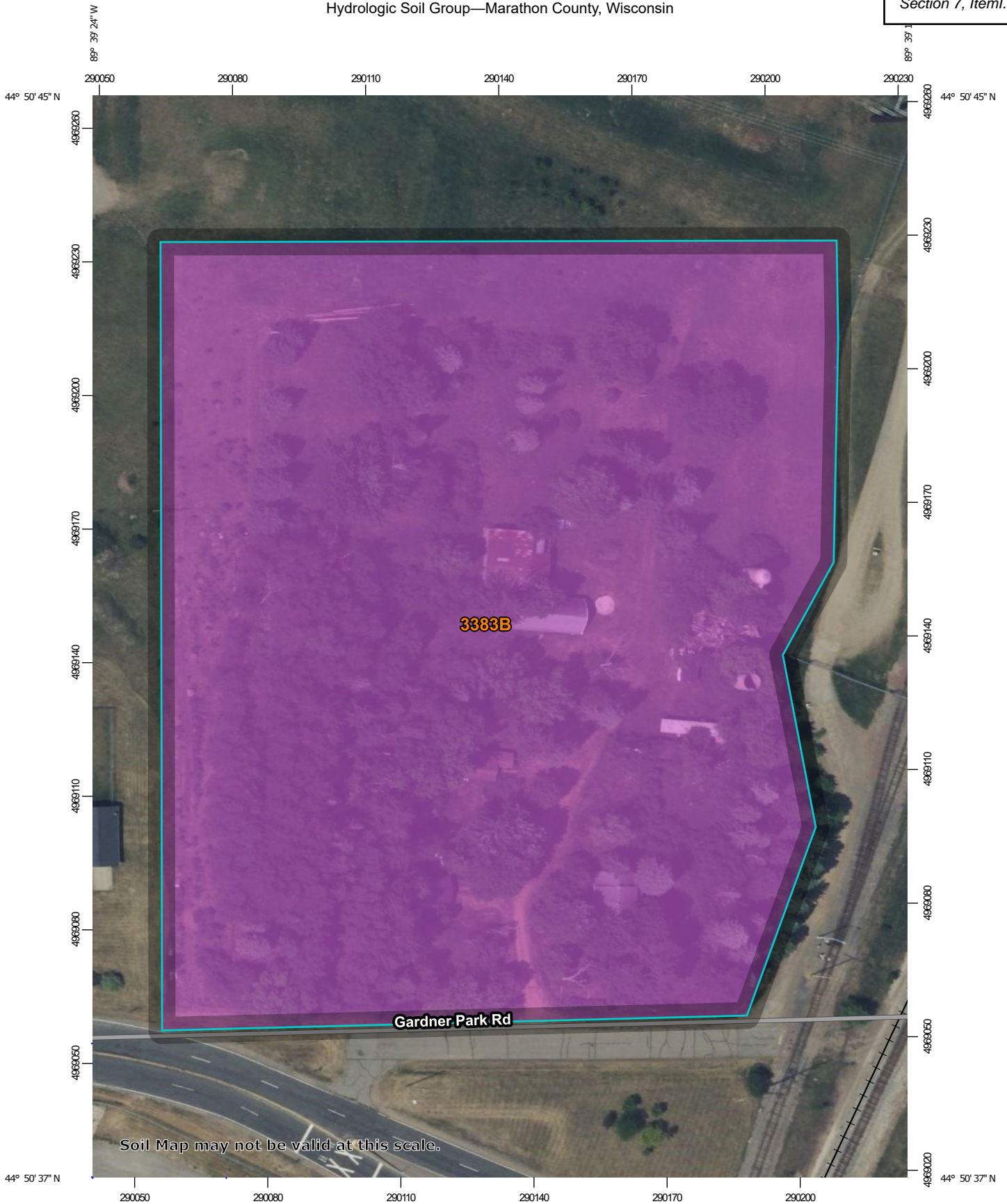
Certified POWTS Inspector – State of Wisconsin

WDNR Professionally Assured Wetland Delineator

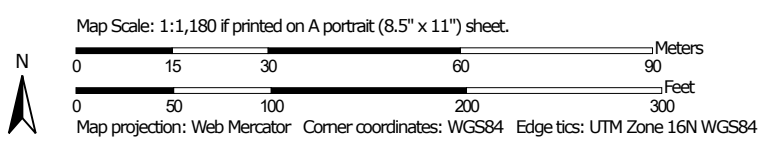
Recognized USACE Wetland Consultant

Licensed Designer of Engineered Systems

































Certified Environmental Inspector, Environmental Assessment Association



Soil Map may not be valid at this scale.



### 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
- Water Features**
  -  Streams and Canals
- Transportation**
  -  Rails
  -  Interstate Highways
  -  US Routes
  -  Major Roads
  -  Local Roads
- Background**
  -  Aerial Photography
- Other**
  -  C
  -  C/D
  -  D
  -  Not rated or not available

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

**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: Marathon County, Wisconsin  
 Survey Area Data: Version 23, Sep 10, 2025

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

Date(s) aerial images were photographed: Jun 7, 2023—Jun 8, 2023

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
3383B	Mahtomedi loamy sand, 0 to 6 percent slopes	A	6.4	100.0%
<b>Totals for Area of Interest</b>			<b>6.4</b>	<b>100.0%</b>

### 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*

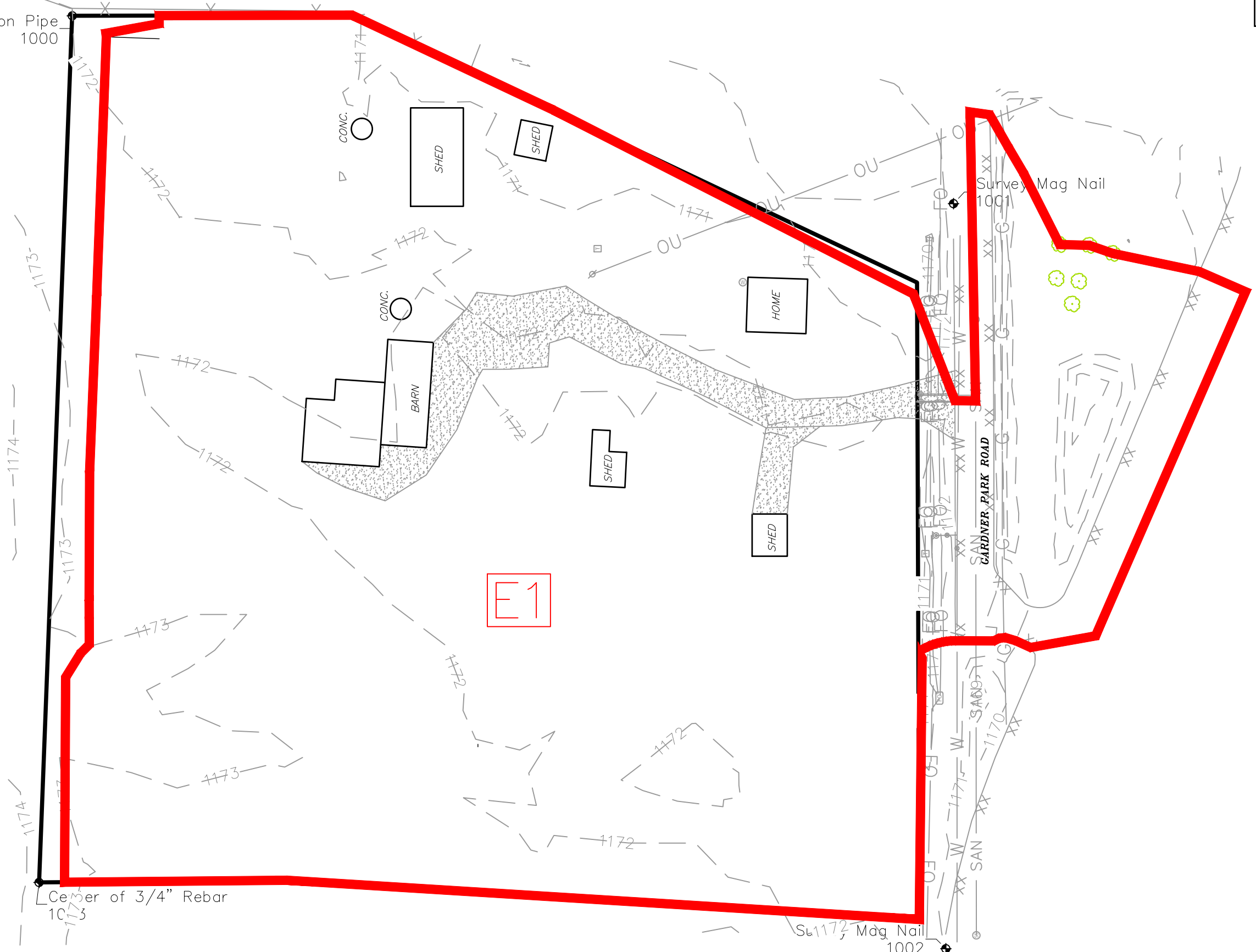
*Component Percent Cutoff: None Specified*

*Tie-break Rule:* Higher

## APPENDIX C

### Existing & Proposed Drainage Map and Calculations

South side of 1.25" Iron Pipe  
1000



Center of 3/4" Rebar  
1013

Mag Nail  
1002

STAMP/SIGNATURE:		REVISIONS	
BY	DATE	DESCRIPTION	

**TITLE PAGE:**  
**EXISTING CATCHMENT**

PROJECT: **PREMIER PROPERTY DEVELOPMENT**

LOCATION: **VILLAGE OF KRONENWETTER  
MARATHON COUNTY, WISCONSIN**



**VREELAND ASSOCIATES LAND  
SURVEYORS & ENGINEERS**  
6103 DAWN STREET WESTON, WI. 54476  
PHONE NO.: (715) 241-0947  
EMAIL: [dustin@vreelandassociates.us](mailto:dustin@vreelandassociates.us)  
WEBSITE: [www.vreelandlandsurveying.com](http://www.vreelandlandsurveying.com)

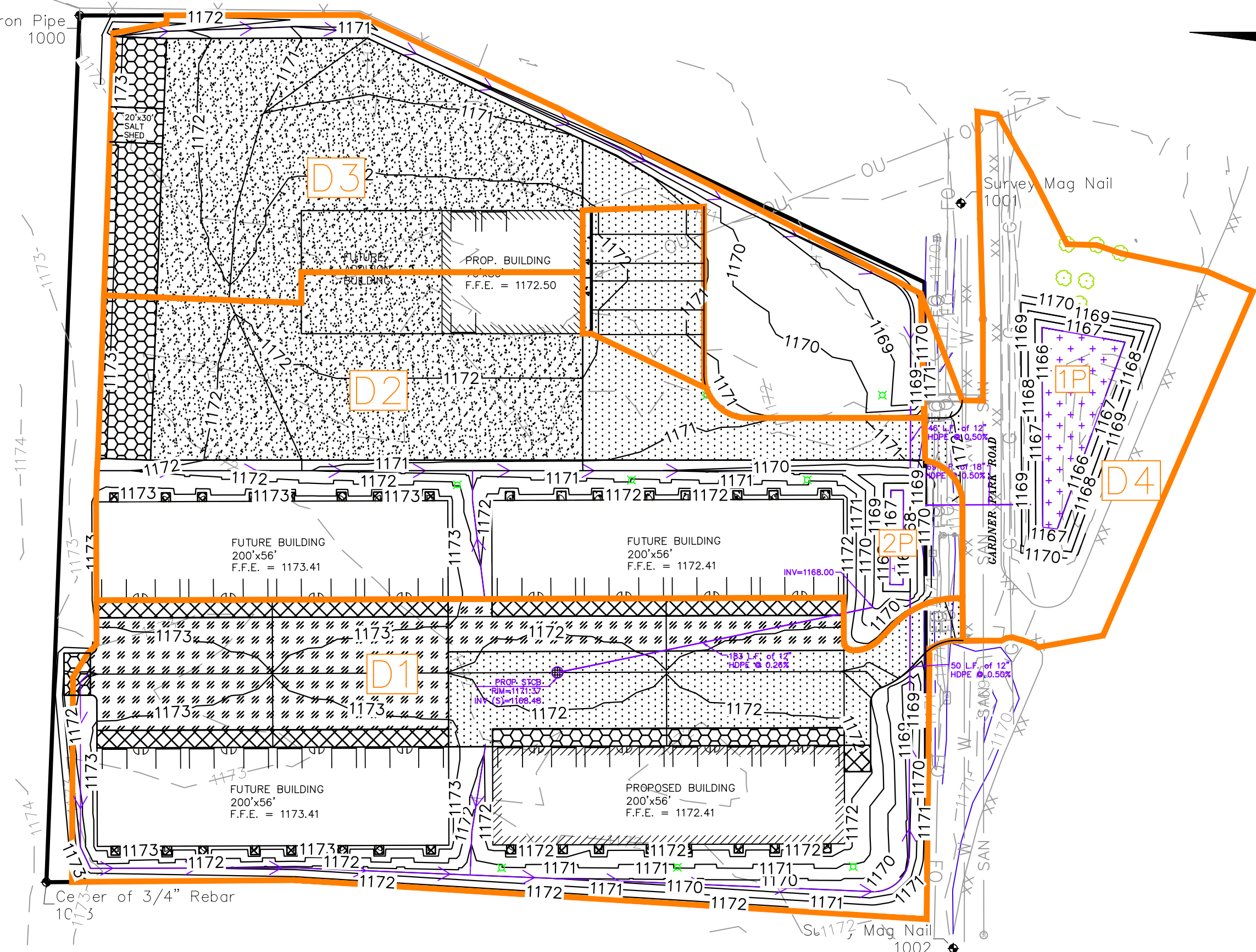
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PREPARED FOR: **GREG TESCH**

PLAN DATE: **OCTOBER 6TH, 2025**

DESIGNER: DUSTIN VREELAND  
SURVEYED BY: CB & TV  
FILE NO.: 25-0410 ENGINEERING  
DATE: SEPTEMBER 15, 2025  
SCALE: **1" = 60'**  
SHEET **EX1** 108

1 side of 1.25" Iron Pipe  
1000



STAMP/SIGNATURE:

REVISIONS		
BY	DATE	DESCRIPTION

TITLE PAGE:  
**PROPOSED CATCHMENT**

PROJECT: **PREMIER PROPERTY DEVELOPMENT**

LOCATION: **VILLAGE OF KRONENWETTER  
MARATHON COUNTY, WISCONSIN**

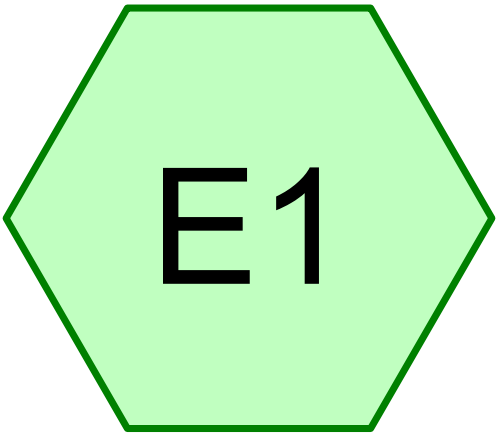


**VREELAND ASSOCIATES LAND SURVEYORS & ENGINEERS**  
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 WEBSITE: [www.vreelandlandsurveying.com](http://www.vreelandlandsurveying.com)  
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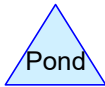
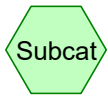
PREPARED FOR: **GREG TESCH**

PLAN DATE: **OCTOBER 6TH, 2025**

DESIGNER: DUSTIN VREELAND  
 SURVEYED BY: CB & TV  
 FILE NO.: 25-0410 ENGINEERING  
 DATE: SEPTEMBER 15, 2025  
 SCALE: **1" = 60'**  
 SHEET **PRO** 109



existing



**Routing Diagram for 25-0410 existing**  
Prepared by {enter your company name here}, Printed 12/1/2025  
HydroCAD® 10.00-26 s/n 09881 © 2020 HydroCAD Software Solutions LLC

**25-0410 existing**

Prepared by {enter your company name here}  
HydroCAD® 10.00-26 s/n 09881 © 2020 HydroCAD Software Solutions LLC

Printed 12/1/2025  
Page 2

**Area Listing (all nodes)**

Area (acres)	CN	Description (subcatchment-numbers)
2.077	39	>75% Grass cover, Good, HSG A (E1)
2.592	30	Woods, Good, HSG A (E1)
0.180	98	buildings (E1)
0.240	96	gravel (E1)
0.232	98	roadway (E1)
<b>5.321</b>	<b>42</b>	<b>TOTAL AREA</b>

**25-0410 existing**

MSE 24-hr 3 1-Year Rainfall=2.27"

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Time span=0.00-40.00 hrs, dt=0.05 hrs, 801 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q  
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment E1: existing**

Runoff Area=5.321 ac 7.74% Impervious Runoff Depth=0.24"  
Tc=20.0 min CN=WQ Runoff=1.33 cfs 0.107 af

**Total Runoff Area = 5.321 ac Runoff Volume = 0.107 af Average Runoff Depth = 0.24"**  
**92.26% Pervious = 4.909 ac 7.74% Impervious = 0.412 ac**

**25-0410 existing**

MSE 24-hr 3 1-Year Rainfall=2.27"

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**Summary for Subcatchment E1: existing**

Runoff = 1.33 cfs @ 12.29 hrs, Volume= 0.107 af, Depth= 0.24"

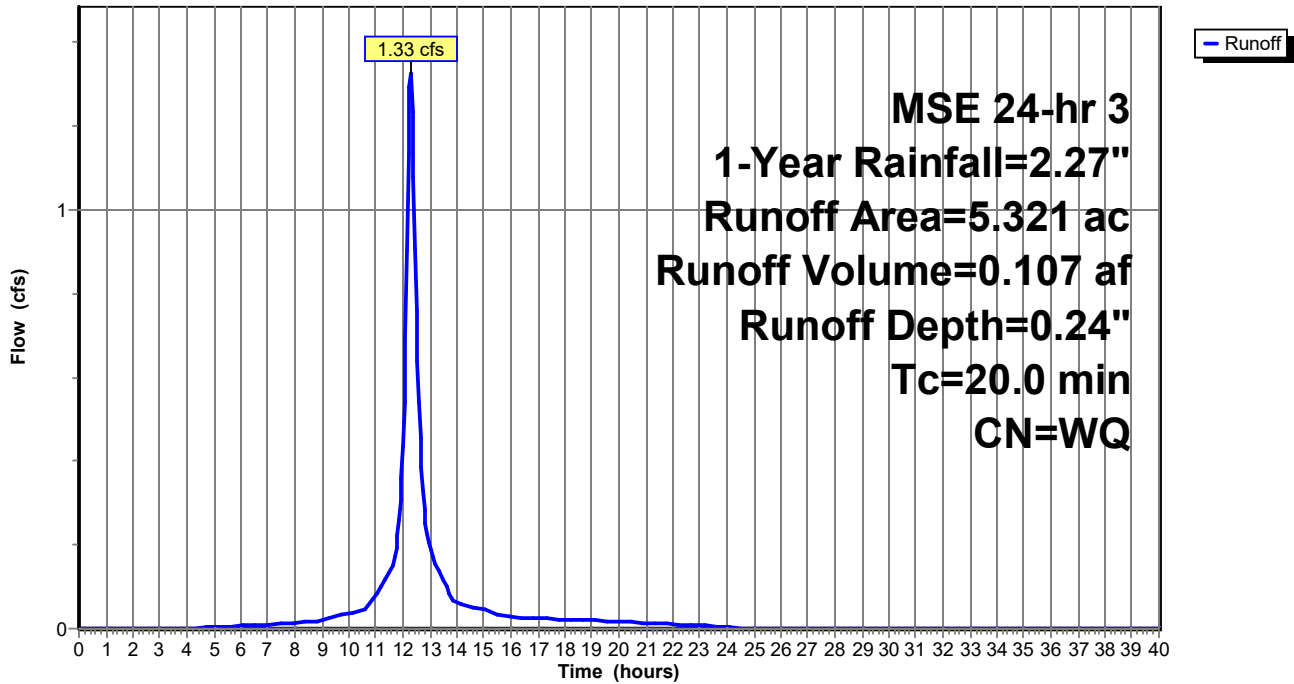
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
MSE 24-hr 3 1-Year Rainfall=2.27"

Area (ac)	CN	Description
* 0.240	96	gravel
* 0.180	98	buildings
2.592	30	Woods, Good, HSG A
1.753	39	>75% Grass cover, Good, HSG A
* 0.232	98	roadway
0.324	39	>75% Grass cover, Good, HSG A
5.321		Weighted Average
4.909		92.26% Pervious Area
0.412		7.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					Direct Entry,

**Subcatchment E1: existing**

Hydrograph



**25-0410 existing**

MSE 24-hr 3 2-Year Rainfall=2.61"

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Time span=0.00-40.00 hrs, dt=0.05 hrs, 801 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q  
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment E1: existing**

Runoff Area=5.321 ac 7.74% Impervious Runoff Depth=0.28"  
Tc=20.0 min CN=WQ Runoff=1.54 cfs 0.125 af

**Total Runoff Area = 5.321 ac Runoff Volume = 0.125 af Average Runoff Depth = 0.28"**  
**92.26% Pervious = 4.909 ac 7.74% Impervious = 0.412 ac**

**25-0410 existing**

MSE 24-hr 3 2-Year Rainfall=2.61"

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**Summary for Subcatchment E1: existing**

Runoff = 1.54 cfs @ 12.29 hrs, Volume= 0.125 af, Depth= 0.28"

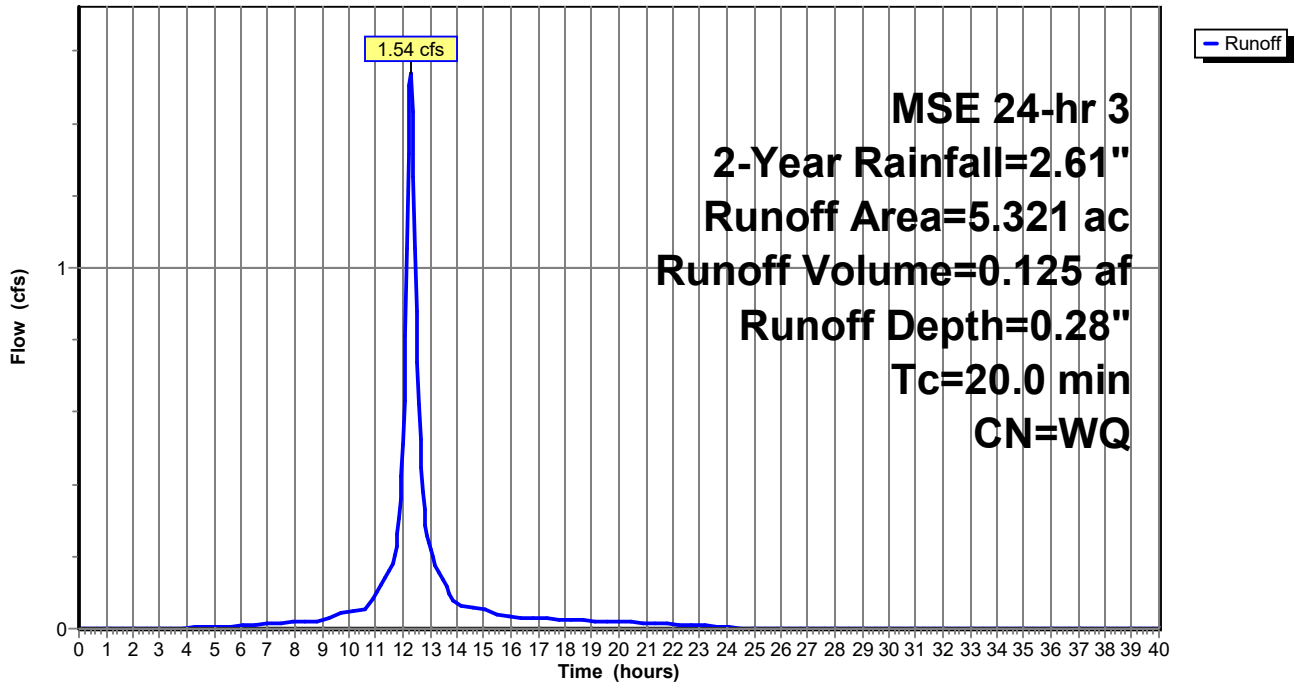
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
MSE 24-hr 3 2-Year Rainfall=2.61"

Area (ac)	CN	Description
* 0.240	96	gravel
* 0.180	98	buildings
2.592	30	Woods, Good, HSG A
1.753	39	>75% Grass cover, Good, HSG A
* 0.232	98	roadway
0.324	39	>75% Grass cover, Good, HSG A
5.321		Weighted Average
4.909		92.26% Pervious Area
0.412		7.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					Direct Entry,

**Subcatchment E1: existing**

Hydrograph



**25-0410 existing**

MSE 24-hr 3 10-Year Rainfall=3.73"

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Time span=0.00-40.00 hrs, dt=0.05 hrs, 801 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q  
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment E1: existing**

Runoff Area=5.321 ac 7.74% Impervious Runoff Depth=0.43"  
Tc=20.0 min CN=WQ Runoff=2.24 cfs 0.189 af

**Total Runoff Area = 5.321 ac Runoff Volume = 0.189 af Average Runoff Depth = 0.43"**  
**92.26% Pervious = 4.909 ac 7.74% Impervious = 0.412 ac**

**25-0410 existing**

MSE 24-hr 3 10-Year Rainfall=3.73"

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**Summary for Subcatchment E1: existing**

Runoff = 2.24 cfs @ 12.29 hrs, Volume= 0.189 af, Depth= 0.43"

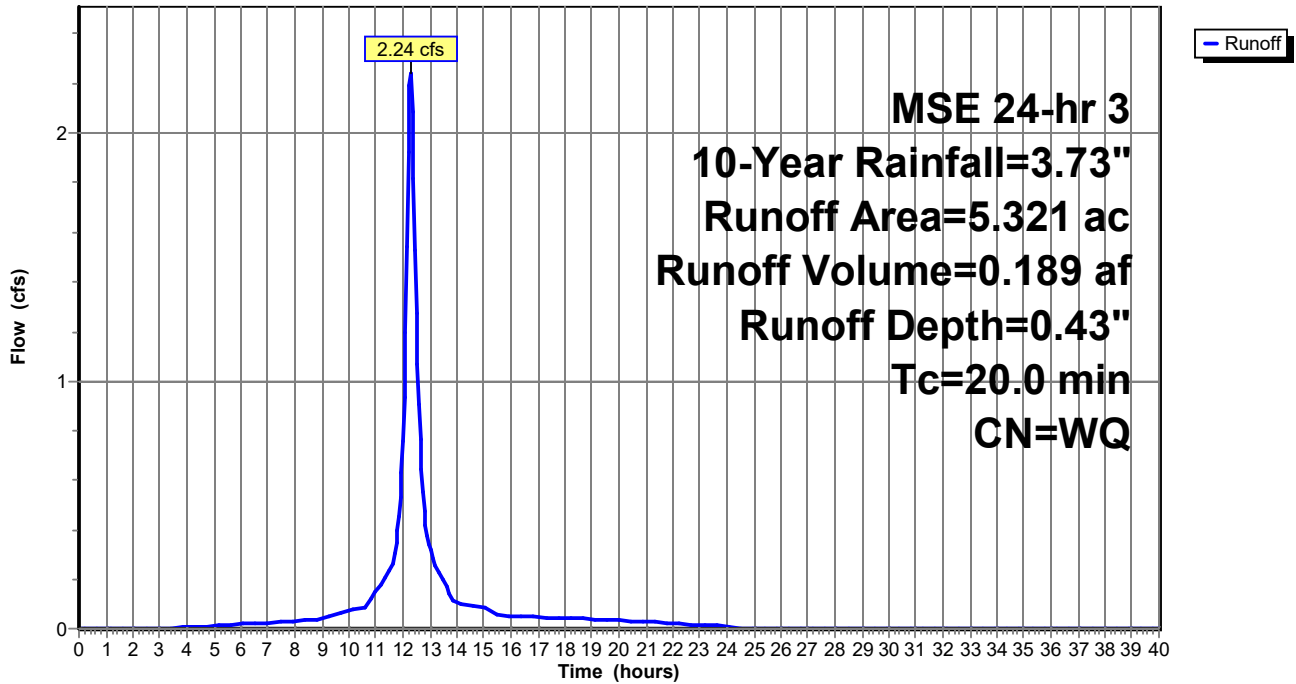
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
MSE 24-hr 3 10-Year Rainfall=3.73"

Area (ac)	CN	Description
* 0.240	96	gravel
* 0.180	98	buildings
2.592	30	Woods, Good, HSG A
1.753	39	>75% Grass cover, Good, HSG A
* 0.232	98	roadway
0.324	39	>75% Grass cover, Good, HSG A
5.321		Weighted Average
4.909		92.26% Pervious Area
0.412		7.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					Direct Entry,

**Subcatchment E1: existing**

Hydrograph



**25-0410 existing**

MSE 24-hr 3 100-Year Rainfall=5.85"

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Time span=0.00-40.00 hrs, dt=0.05 hrs, 801 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q  
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment E1: existing**

Runoff Area=5.321 ac 7.74% Impervious Runoff Depth=0.86"  
Tc=20.0 min CN=WQ Runoff=3.77 cfs 0.382 af

**Total Runoff Area = 5.321 ac Runoff Volume = 0.382 af Average Runoff Depth = 0.86"**  
**92.26% Pervious = 4.909 ac 7.74% Impervious = 0.412 ac**

**25-0410 existing**

MSE 24-hr 3 100-Year Rainfall=5.85"

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**Summary for Subcatchment E1: existing**

Runoff = 3.77 cfs @ 12.30 hrs, Volume= 0.382 af, Depth= 0.86"

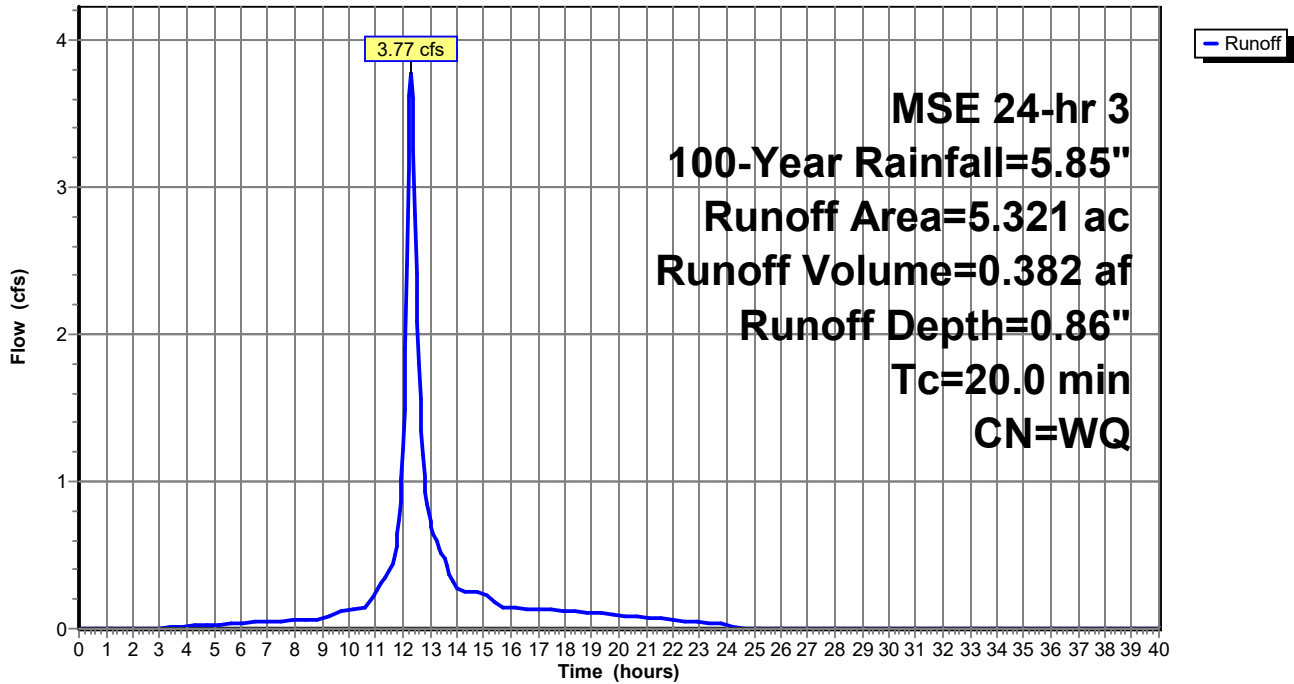
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
MSE 24-hr 3 100-Year Rainfall=5.85"

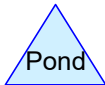
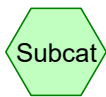
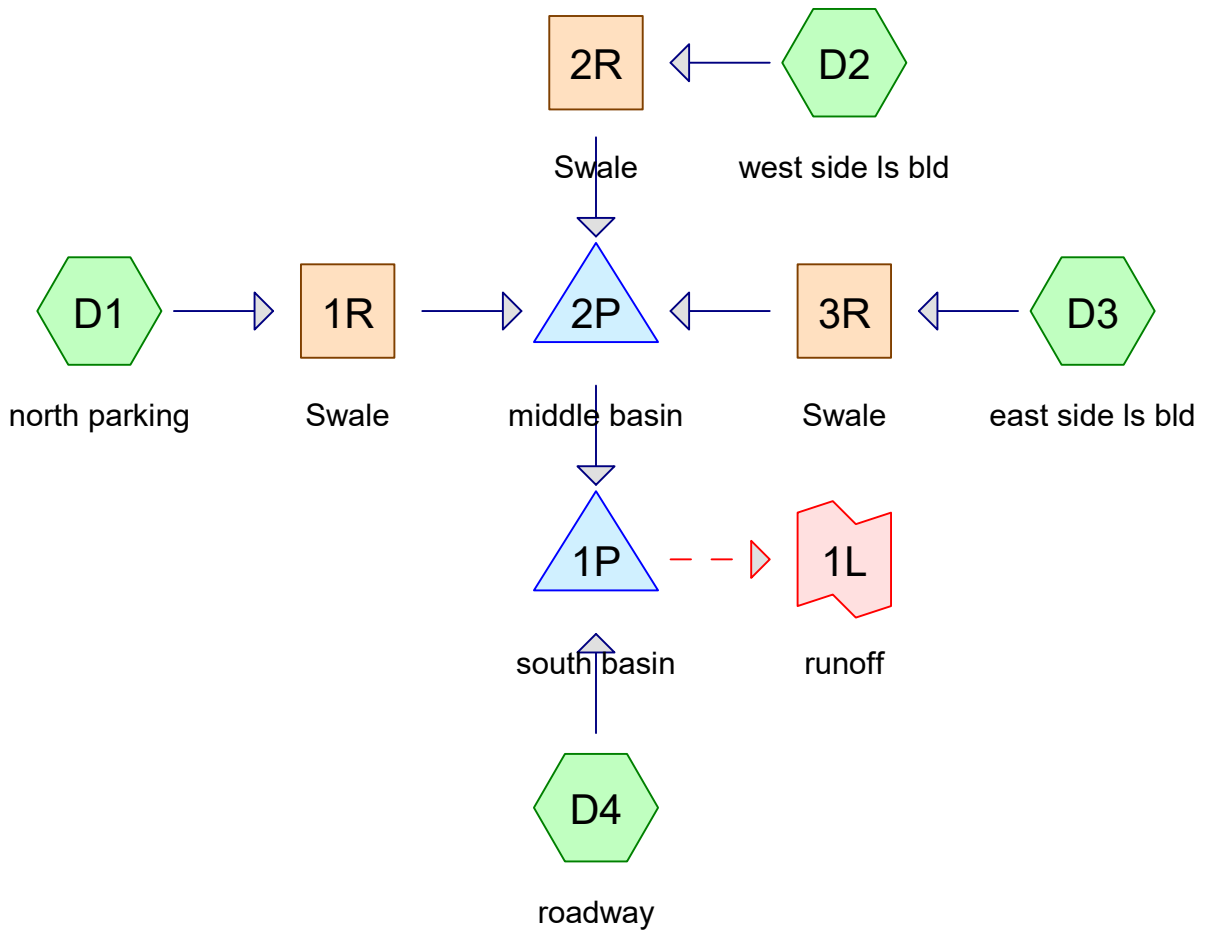
Area (ac)	CN	Description
* 0.240	96	gravel
* 0.180	98	buildings
2.592	30	Woods, Good, HSG A
1.753	39	>75% Grass cover, Good, HSG A
* 0.232	98	roadway
0.324	39	>75% Grass cover, Good, HSG A
5.321		Weighted Average
4.909		92.26% Pervious Area
0.412		7.74% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					Direct Entry,

**Subcatchment E1: existing**

Hydrograph





**Routing Diagram for 25-0410 hydrocad 11-17-25**  
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**Rainfall Events Listing**

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	MSE 24-hr	3	Default	24.00	1	2.27	2
2	2-Year	MSE 24-hr	3	Default	24.00	1	2.61	2
3	10-Year	MSE 24-hr	3	Default	24.00	1	3.73	2
4	25-Year	MSE 24-hr	3	Default	24.00	1	4.51	2
5	100-Year	MSE 24-hr	3	Default	24.00	1	5.85	2

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**Area Listing (all nodes)**

Area (acres)	CN	Description (subcatchment-numbers)
1.480	39	>75% Grass cover, Good, HSG A (D1, D2, D3, D4)
0.111	98	basin (D2, D3, D4)
0.257	98	future bld (D2)
0.257	98	future building (D1)
0.532	98	future parking (D1)
0.005	98	future stoop (D1)
0.005	98	future sw (D2)
0.576	96	gravel park (D2)
0.297	98	parking lot (D2)
0.232	98	pavement (D4)
0.385	98	prop building (D2, D3)
0.572	96	prop gravel (D3)
0.035	98	prop parking (D3)
0.005	98	prop sidewalk (D2)
0.257	98	proposed building (D1)
0.310	98	proposed parking (D1)
0.005	98	stoop (D1)
<b>5.321</b>	<b>81</b>	<b>TOTAL AREA</b>

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**Pipe Listing (all nodes)**

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	2P	1,168.00	1,167.67	66.0	0.0050	0.012	0.0	18.0	0.0	

**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 1-Year Rainfall=2.27"

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Time span=0.00-40.00 hrs, dt=0.05 hrs, 801 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-Q  
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

<b>Subcatchment D1: north parking</b>	Runoff Area=1.854 ac 73.68% Impervious Runoff Depth=1.50" Tc=10.0 min CN=WQ Runoff=3.79 cfs 0.232 af
<b>Subcatchment D2: west side ls bld</b>	Runoff Area=1.868 ac 47.97% Impervious Runoff Depth=1.55" Tc=10.0 min CN=WQ Runoff=4.00 cfs 0.241 af
<b>Subcatchment D3: east side ls bld</b>	Runoff Area=0.971 ac 13.08% Impervious Runoff Depth=1.35" Tc=10.0 min CN=WQ Runoff=1.85 cfs 0.109 af
<b>Subcatchment D4: roadway</b>	Runoff Area=0.628 ac 48.41% Impervious Runoff Depth=0.99" Tc=10.0 min CN=WQ Runoff=0.84 cfs 0.052 af
<b>Reach 1R: Swale</b>	Avg. Flow Depth=0.57' Max Vel=1.66 fps Inflow=3.79 cfs 0.232 af n=0.030 L=689.0' S=0.0050 '/' Capacity=11.62 cfs Outflow=3.12 cfs 0.232 af
<b>Reach 2R: Swale</b>	Avg. Flow Depth=0.61' Max Vel=1.72 fps Inflow=4.00 cfs 0.241 af n=0.030 L=441.0' S=0.0050 '/' Capacity=11.61 cfs Outflow=3.60 cfs 0.241 af
<b>Reach 3R: Swale</b>	Avg. Flow Depth=0.40' Max Vel=1.53 fps Inflow=1.85 cfs 0.109 af n=0.030 L=514.7' S=0.0064 '/' Capacity=13.12 cfs Outflow=1.58 cfs 0.109 af
<b>Pond 1P: south basin</b>	Peak Elev=1,168.67' Storage=12,901 cf Inflow=6.24 cfs 0.449 af Discarded=0.55 cfs 0.449 af Secondary=0.00 cfs 0.000 af Outflow=0.55 cfs 0.449 af
<b>Pond 2P: middle basin</b>	Peak Elev=1,169.42' Storage=4,476 cf Inflow=8.26 cfs 0.582 af Discarded=0.33 cfs 0.186 af Primary=5.85 cfs 0.397 af Outflow=6.18 cfs 0.582 af
<b>Link 1L: runoff</b>	Inflow=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af

**Total Runoff Area = 5.321 ac Runoff Volume = 0.634 af Average Runoff Depth = 1.43"**  
**49.39% Pervious = 2.628 ac 50.61% Impervious = 2.693 ac**

**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 1-Year Rainfall=2.27"

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**Summary for Subcatchment D1: north parking**

Runoff = 3.79 cfs @ 12.17 hrs, Volume= 0.232 af, Depth= 1.50"  
 Routed to Reach 1R : Swale

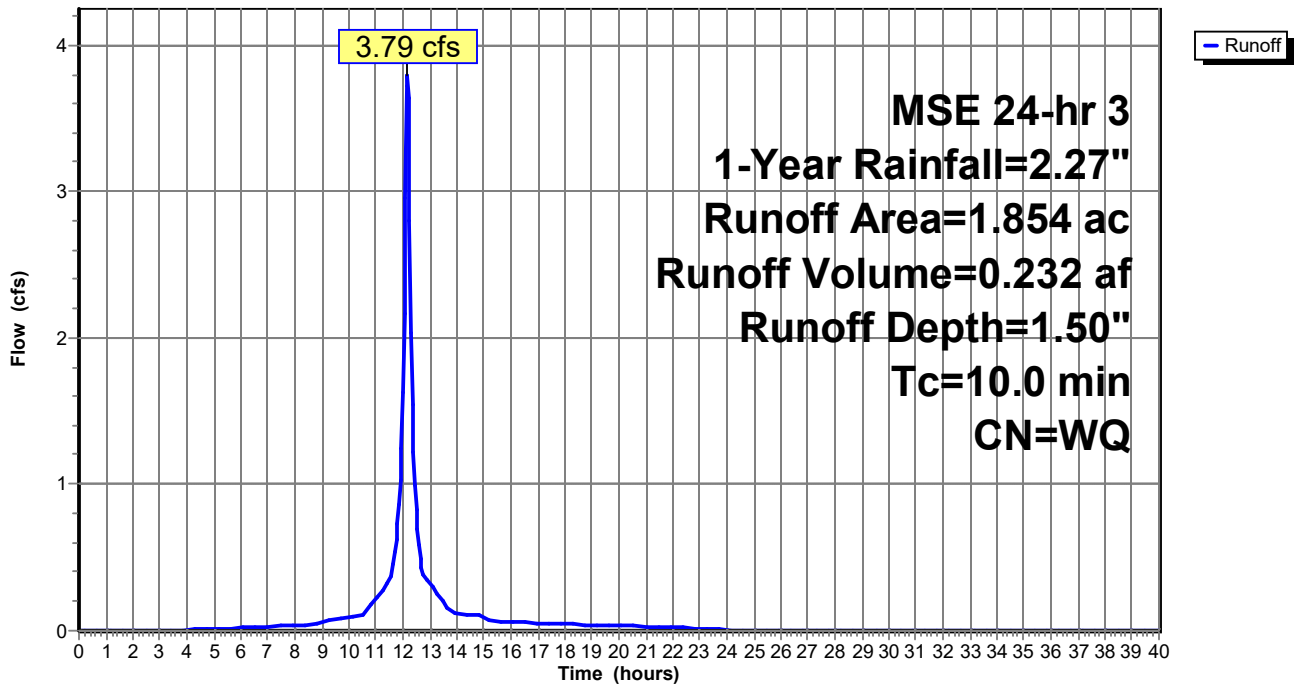
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 1-Year Rainfall=2.27"

Area (ac)	CN	Description
* 0.532	98	future parking
* 0.257	98	future building
0.488	39	>75% Grass cover, Good, HSG A
* 0.310	98	proposed parking
* 0.257	98	proposed building
* 0.005	98	stoop
* 0.005	98	future stoop
1.854		Weighted Average
0.488		26.32% Pervious Area
1.366		73.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, minimum

**Subcatchment D1: north parking**

Hydrograph



**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 1-Year Rainfall=2.27"

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**Summary for Subcatchment D2: west side ls bld**

Runoff = 4.00 cfs @ 12.17 hrs, Volume= 0.241 af, Depth= 1.55"  
 Routed to Reach 2R : Swale

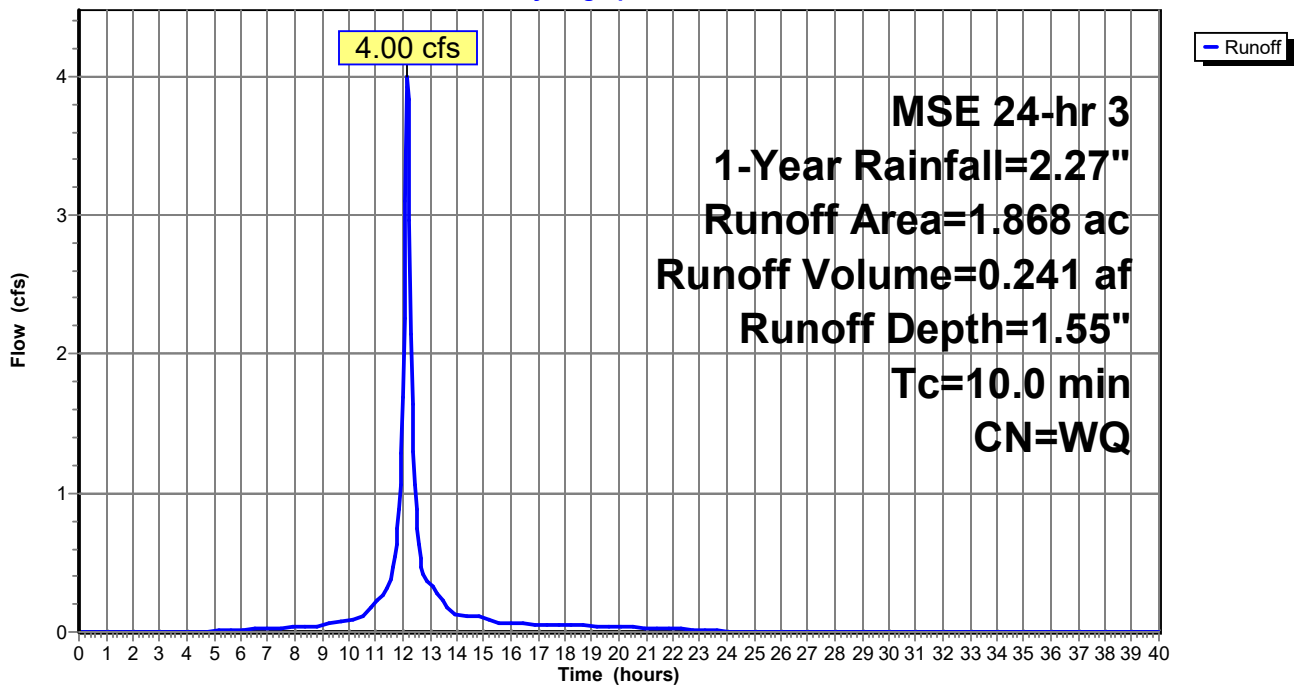
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 1-Year Rainfall=2.27"

Area (ac)	CN	Description
* 0.297	98	parking lot
* 0.576	96	gravel park
* 0.321	98	prop building
* 0.005	98	future sw
* 0.005	98	prop sidewalk
* 0.257	98	future bld
0.396	39	>75% Grass cover, Good, HSG A
* 0.011	98	basin
1.868		Weighted Average
0.972		52.03% Pervious Area
0.896		47.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D2: west side ls bld**

Hydrograph



**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 1-Year Rainfall=2.27"

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**Summary for Subcatchment D3: east side ls bld**

Runoff = 1.85 cfs @ 12.17 hrs, Volume= 0.109 af, Depth= 1.35"  
 Routed to Reach 3R : Swale

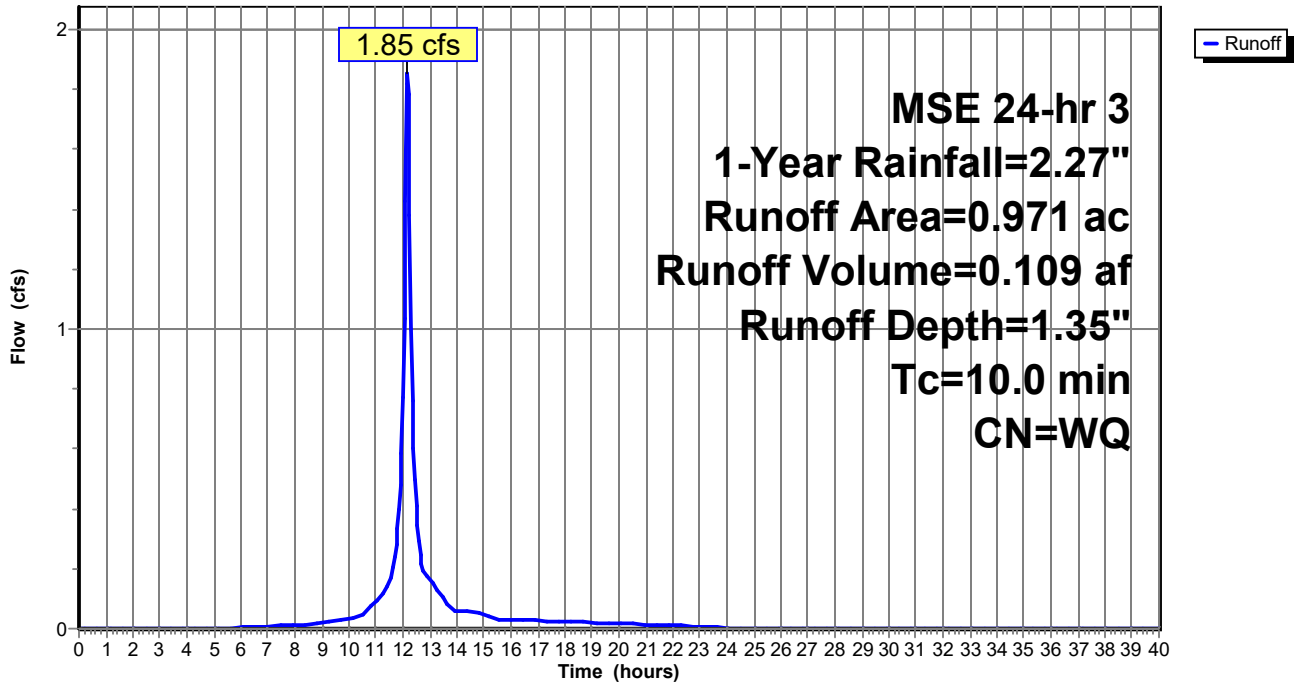
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 1-Year Rainfall=2.27"

Area (ac)	CN	Description
* 0.035	98	prop parking
* 0.572	96	prop gravel
* 0.064	98	prop building
* 0.028	98	basin
0.272	39	>75% Grass cover, Good, HSG A
0.971		Weighted Average
0.844		86.92% Pervious Area
0.127		13.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D3: east side ls bld**

Hydrograph



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MSE 24-hr 3 1-Year Rainfall=2.27"

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**Summary for Subcatchment D4: roadway**

Runoff = 0.84 cfs @ 12.17 hrs, Volume= 0.052 af, Depth= 0.99"  
 Routed to Pond 1P : south basin

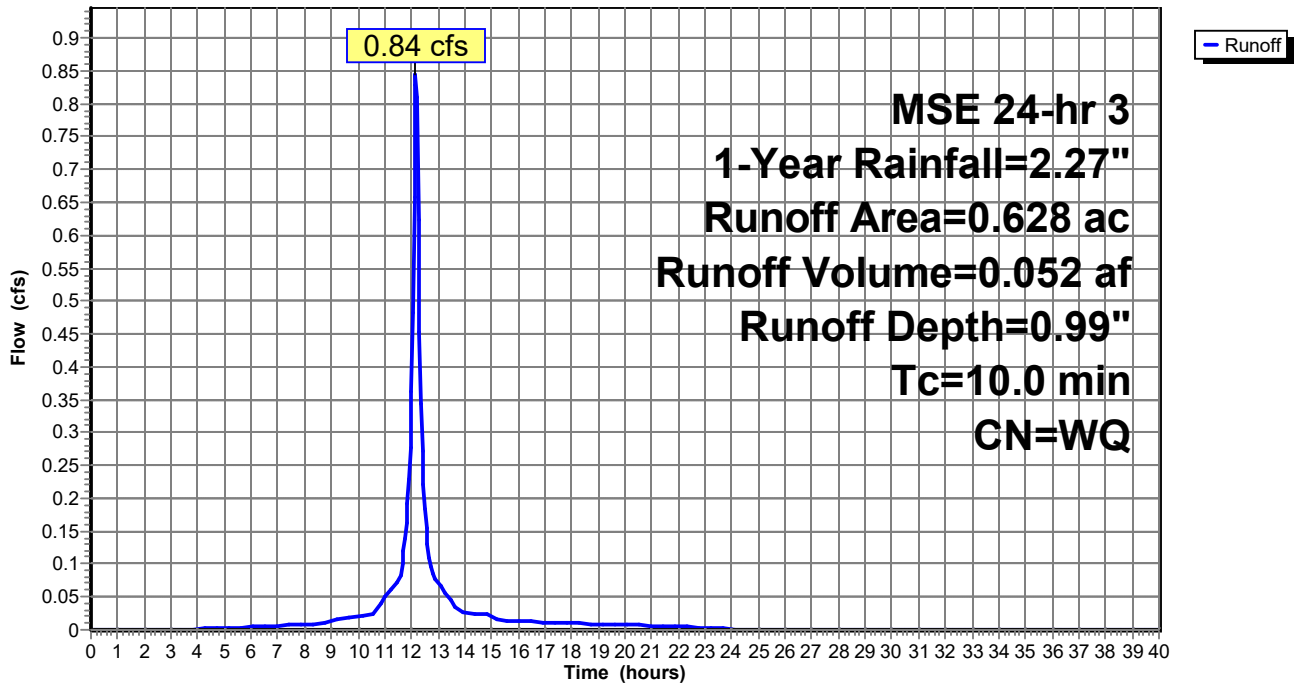
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 1-Year Rainfall=2.27"

Area (ac)	CN	Description
* 0.232	98	pavement
0.324	39	>75% Grass cover, Good, HSG A
* 0.072	98	basin
0.628		Weighted Average
0.324		51.59% Pervious Area
0.304		48.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D4: roadway**

Hydrograph



**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 1-Year Rainfall=2.27"

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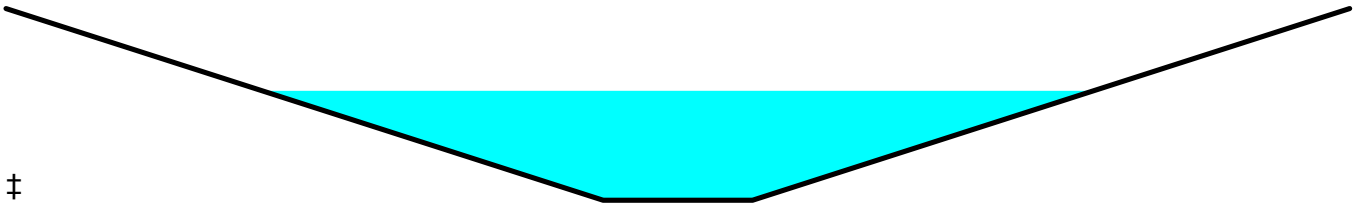
**Summary for Reach 1R: Swale**

Inflow Area = 1.854 ac, 73.68% Impervious, Inflow Depth = 1.50" for 1-Year event  
 Inflow = 3.79 cfs @ 12.17 hrs, Volume= 0.232 af  
 Outflow = 3.12 cfs @ 12.24 hrs, Volume= 0.232 af, Atten= 18%, Lag= 4.0 min  
 Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 1.66 fps, Min. Travel Time= 6.9 min  
 Avg. Velocity = 0.45 fps, Avg. Travel Time= 25.3 min

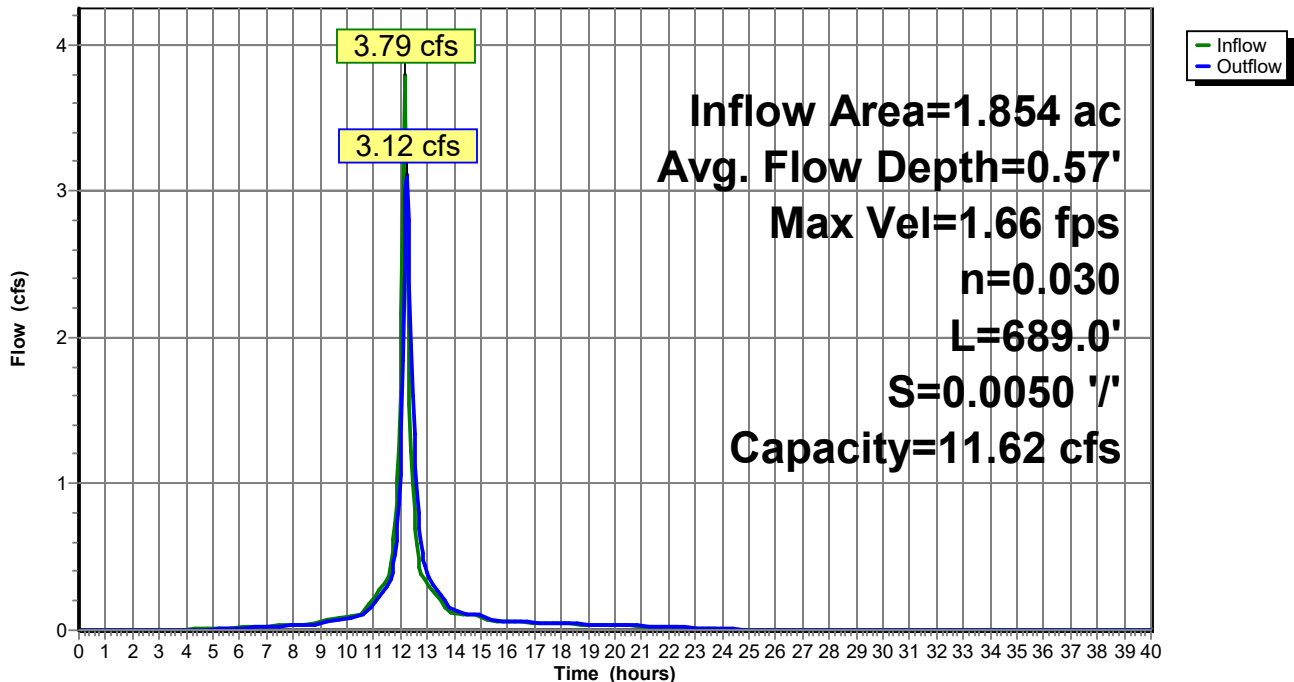
Peak Storage= 1,289 cf @ 12.24 hrs  
 Average Depth at Peak Storage= 0.57' , Surface Width= 5.56'  
 Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 11.62 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding  
 Side Slope Z-value= 4.0 ' / ' Top Width= 9.00'  
 Length= 689.0' Slope= 0.0050 ' / '  
 Inlet Invert= 1,171.94', Outlet Invert= 1,168.50'



**Reach 1R: Swale**

Hydrograph



25-0410 hydrocad 11-17-25

MSE 24-hr 3 1-Year Rainfall=2.27"

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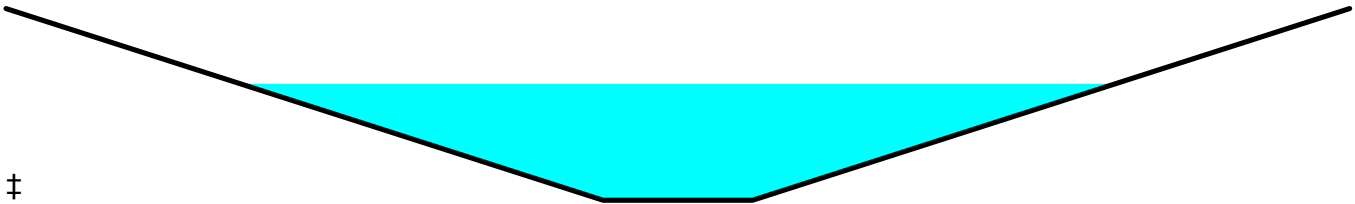
Summary for Reach 2R: Swale

Inflow Area = 1.868 ac, 47.97% Impervious, Inflow Depth = 1.55" for 1-Year event
Inflow = 4.00 cfs @ 12.17 hrs, Volume= 0.241 af
Outflow = 3.60 cfs @ 12.22 hrs, Volume= 0.241 af, Atten= 10%, Lag= 2.8 min
Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.72 fps, Min. Travel Time= 4.3 min
Avg. Velocity = 0.48 fps, Avg. Travel Time= 15.3 min

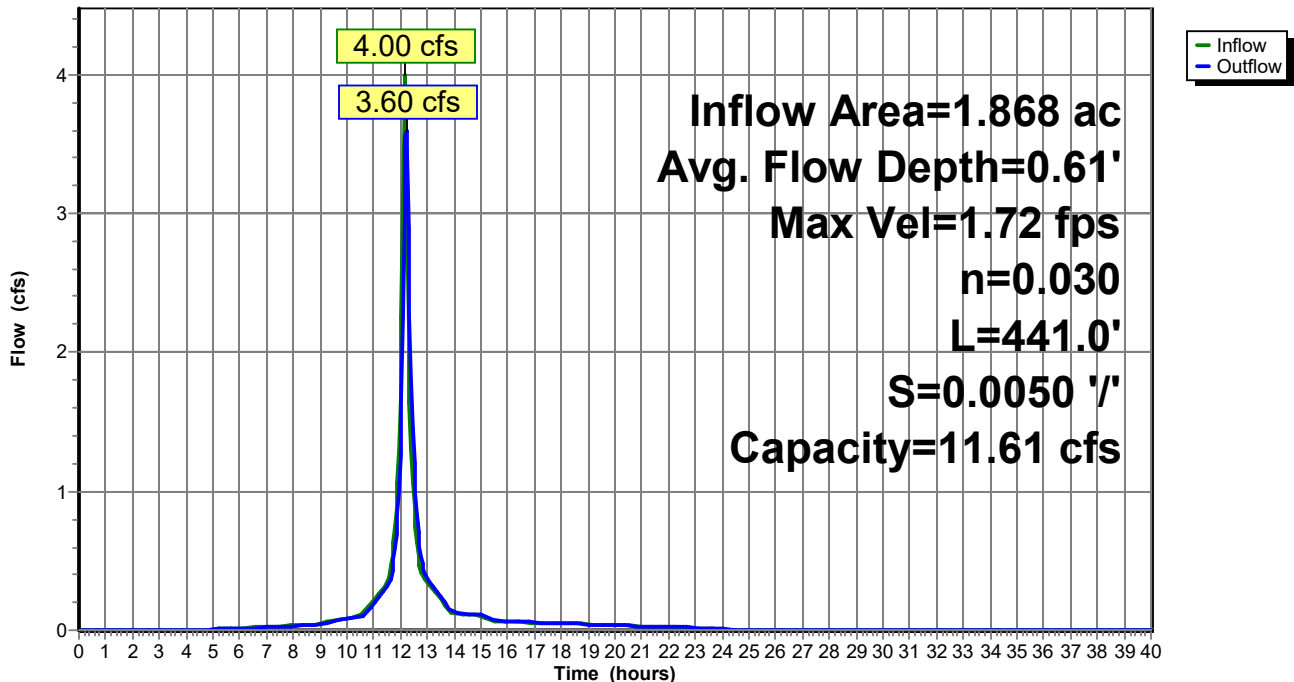
Peak Storage= 919 cf @ 12.22 hrs
Average Depth at Peak Storage= 0.61' , Surface Width= 5.86'
Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 11.61 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 4.0 ' / ' Top Width= 9.00'
Length= 441.0' Slope= 0.0050 ' / '
Inlet Invert= 1,171.78', Outlet Invert= 1,169.58'



Reach 2R: Swale

Hydrograph



**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 1-Year Rainfall=2.27"

Prepared by Vreeland Associates

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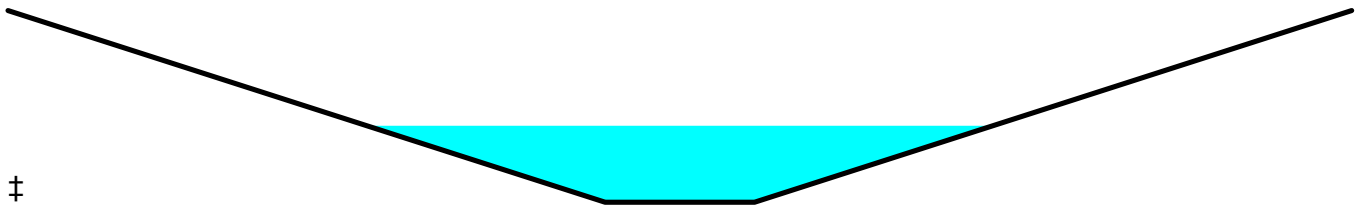
**Summary for Reach 3R: Swale**

Inflow Area = 0.971 ac, 13.08% Impervious, Inflow Depth = 1.35" for 1-Year event  
 Inflow = 1.85 cfs @ 12.17 hrs, Volume= 0.109 af  
 Outflow = 1.58 cfs @ 12.23 hrs, Volume= 0.109 af, Atten= 14%, Lag= 3.5 min  
 Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 1.53 fps, Min. Travel Time= 5.6 min  
 Avg. Velocity = 0.41 fps, Avg. Travel Time= 20.8 min

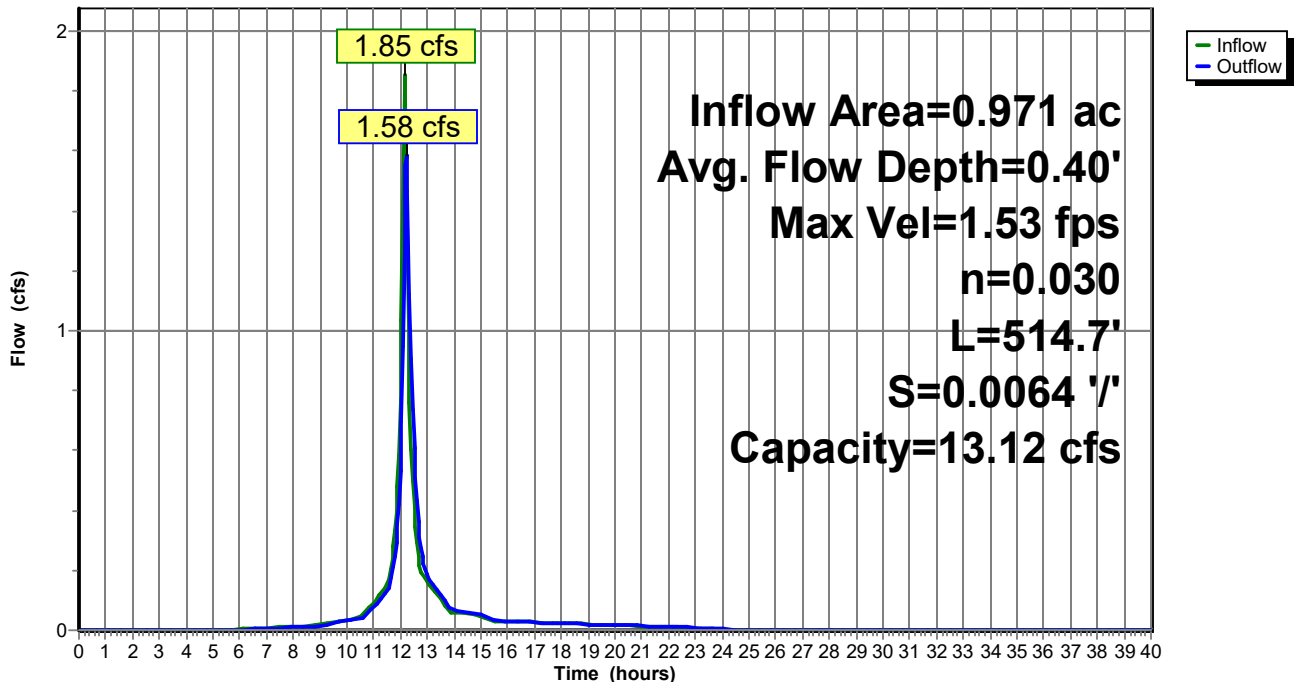
Peak Storage= 532 cf @ 12.23 hrs  
 Average Depth at Peak Storage= 0.40' , Surface Width= 4.19'  
 Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 13.12 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding  
 Side Slope Z-value= 4.0 ' / ' Top Width= 9.00'  
 Length= 514.7' Slope= 0.0064 ' / '  
 Inlet Invert= 1,171.90', Outlet Invert= 1,168.62'



**Reach 3R: Swale**

Hydrograph



**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 1-Year Rainfall=2.27"

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**Summary for Pond 1P: south basin**

Inflow Area = 5.321 ac, 50.61% Impervious, Inflow Depth = 1.01" for 1-Year event  
 Inflow = 6.24 cfs @ 12.32 hrs, Volume= 0.449 af  
 Outflow = 0.55 cfs @ 13.36 hrs, Volume= 0.449 af, Atten= 91%, Lag= 62.4 min  
 Discarded = 0.55 cfs @ 13.36 hrs, Volume= 0.449 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
 Routed to Link 1L : runoff

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Peak Elev= 1,168.67' @ 13.36 hrs Surf.Area= 6,655 sf Storage= 12,901 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)  
 Center-of-Mass det. time= 249.0 min ( 1,012.1 - 763.1 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,166.00'	44,780 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,166.00	3,150	0	0
1,167.00	4,350	3,750	3,750
1,168.00	5,700	5,025	8,775
1,169.00	7,130	6,415	15,190
1,170.00	11,025	9,078	24,268
1,171.00	30,000	20,513	44,780

Device	Routing	Invert	Outlet Devices
#1	Secondary	1,170.18'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
#2	Discarded	1,166.00'	<b>3.600 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.55 cfs @ 13.36 hrs HW=1,168.67' (Free Discharge)  
 ↑2=Exfiltration (Exfiltration Controls 0.55 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=1,166.00' TW=0.00' (Dynamic Tailwater)  
 ↑1=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

25-0410 hydrocad 11-17-25

MSE 24-hr 3 1-Year Rainfall=2.27"

Prepared by Vreeland Associates

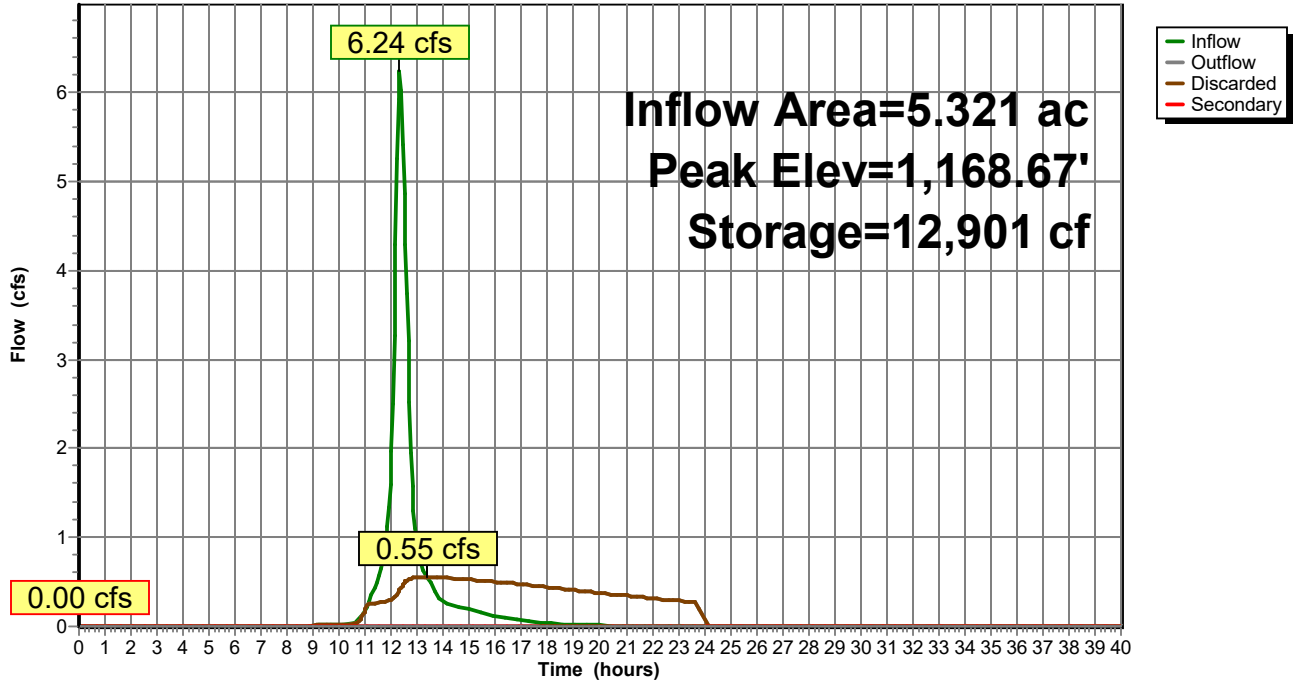
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Pond 1P: south basin

Hydrograph



**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 1-Year Rainfall=2.27"

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**Summary for Pond 2P: middle basin**

[62] Hint: Exceeded Reach 1R OUTLET depth by 0.42' @ 12.40 hrs

[62] Hint: Exceeded Reach 3R OUTLET depth by 0.46' @ 12.35 hrs

Inflow Area = 4.693 ac, 50.91% Impervious, Inflow Depth = 1.49" for 1-Year event  
 Inflow = 8.26 cfs @ 12.23 hrs, Volume= 0.582 af  
 Outflow = 6.18 cfs @ 12.34 hrs, Volume= 0.582 af, Atten= 25%, Lag= 6.7 min  
 Discarded = 0.33 cfs @ 12.34 hrs, Volume= 0.186 af  
 Primary = 5.85 cfs @ 12.34 hrs, Volume= 0.397 af  
 Routed to Pond 1P : south basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Peak Elev= 1,169.42' @ 12.34 hrs Surf.Area= 4,013 sf Storage= 4,476 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)  
 Center-of-Mass det. time= 42.1 min ( 818.7 - 776.5 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,167.00'	27,600 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,167.00	480	0	0
1,168.00	1,120	800	800
1,169.00	3,210	2,165	2,965
1,170.00	5,130	4,170	7,135
1,171.00	7,400	6,265	13,400
1,172.00	21,000	14,200	27,600

Device	Routing	Invert	Outlet Devices
#1	Primary	1,168.00'	<b>18.0" Round Culvert</b> L= 66.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 1,168.00' / 1,167.67' S= 0.0050 '/ Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Discarded	1,167.00'	<b>3.600 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.33 cfs @ 12.34 hrs HW=1,169.41' (Free Discharge)  
 ↑**2=Exfiltration** (Exfiltration Controls 0.33 cfs)

**Primary OutFlow** Max=5.82 cfs @ 12.34 hrs HW=1,169.41' TW=1,167.56' (Dynamic Tailwater)  
 ↑**1=Culvert** (Barrel Controls 5.82 cfs @ 4.36 fps)

25-0410 hydrocad 11-17-25

MSE 24-hr 3 1-Year Rainfall=2.27"

Prepared by Vreeland Associates

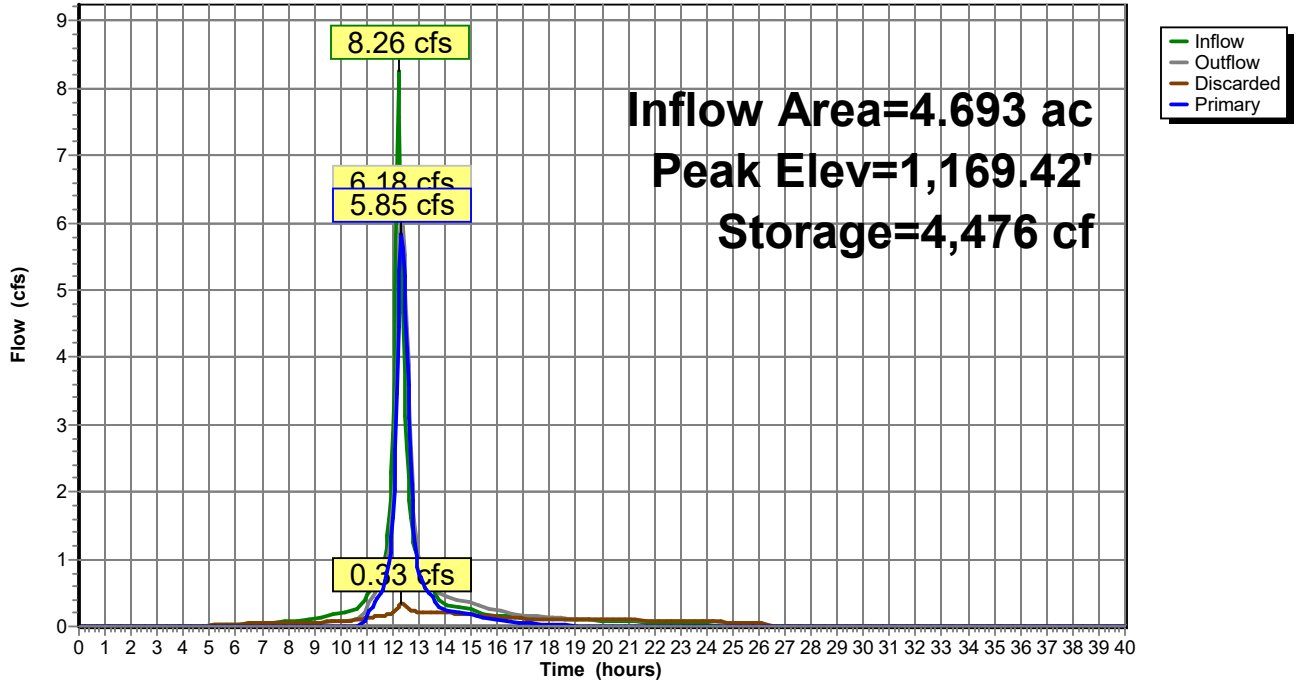
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### Pond 2P: middle basin

Hydrograph



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MSE 24-hr 3 1-Year Rainfall=2.27"

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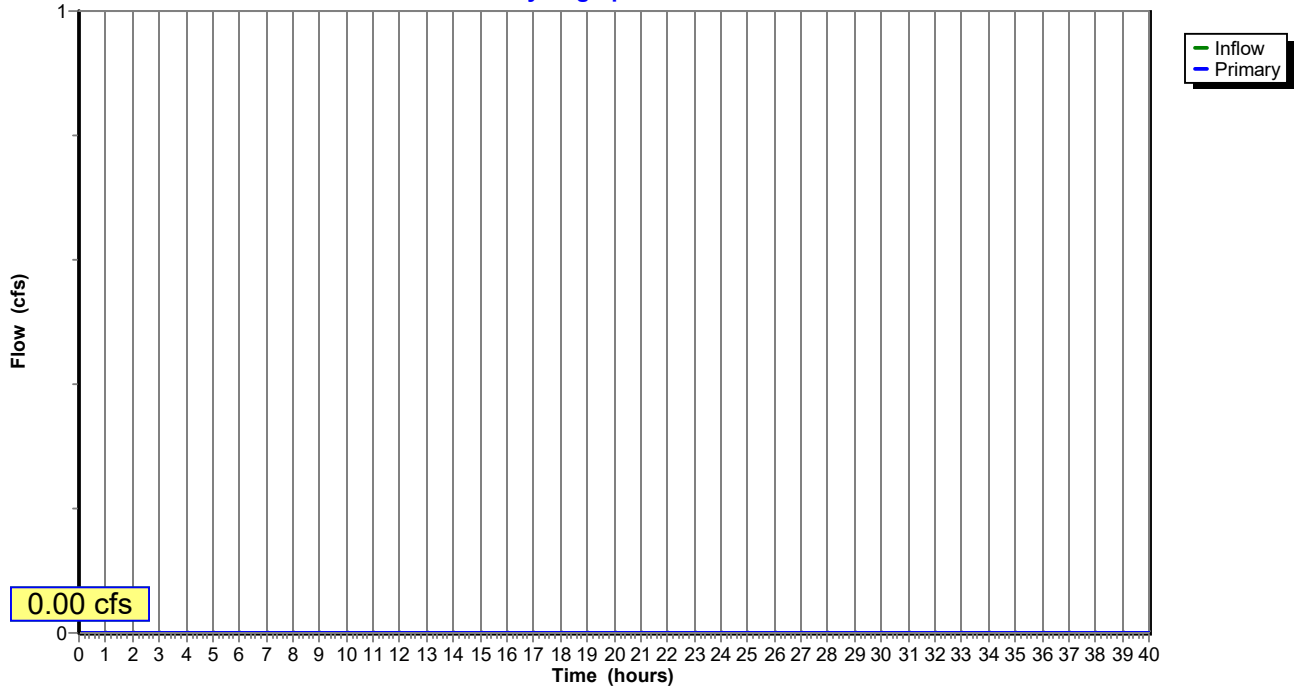
**Summary for Link 1L: runoff**

Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

**Link 1L: runoff**

Hydrograph



**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 2-Year Rainfall=2.61"

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Time span=0.00-40.00 hrs, dt=0.05 hrs, 801 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-Q  
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

<b>Subcatchment D1: north parking</b>	Runoff Area=1.854 ac 73.68% Impervious Runoff Depth=1.75" Tc=10.0 min CN=WQ Runoff=4.39 cfs 0.271 af
<b>Subcatchment D2: west side ls bld</b>	Runoff Area=1.868 ac 47.97% Impervious Runoff Depth=1.81" Tc=10.0 min CN=WQ Runoff=4.64 cfs 0.282 af
<b>Subcatchment D3: east side ls bld</b>	Runoff Area=0.971 ac 13.08% Impervious Runoff Depth=1.59" Tc=10.0 min CN=WQ Runoff=2.16 cfs 0.129 af
<b>Subcatchment D4: roadway</b>	Runoff Area=0.628 ac 48.41% Impervious Runoff Depth=1.15" Tc=10.0 min CN=WQ Runoff=0.98 cfs 0.060 af
<b>Reach 1R: Swale</b>	Avg. Flow Depth=0.61' Max Vel=1.73 fps Inflow=4.39 cfs 0.271 af n=0.030 L=689.0' S=0.0050 '/' Capacity=11.62 cfs Outflow=3.63 cfs 0.271 af
<b>Reach 2R: Swale</b>	Avg. Flow Depth=0.65' Max Vel=1.79 fps Inflow=4.64 cfs 0.282 af n=0.030 L=441.0' S=0.0050 '/' Capacity=11.61 cfs Outflow=4.20 cfs 0.282 af
<b>Reach 3R: Swale</b>	Avg. Flow Depth=0.43' Max Vel=1.59 fps Inflow=2.16 cfs 0.129 af n=0.030 L=514.7' S=0.0064 '/' Capacity=13.12 cfs Outflow=1.86 cfs 0.129 af
<b>Pond 1P: south basin</b>	Peak Elev=1,168.97' Storage=14,963 cf Inflow=7.18 cfs 0.525 af Discarded=0.59 cfs 0.525 af Secondary=0.00 cfs 0.000 af Outflow=0.59 cfs 0.525 af
<b>Pond 2P: middle basin</b>	Peak Elev=1,169.57' Storage=5,124 cf Inflow=9.69 cfs 0.681 af Discarded=0.36 cfs 0.217 af Primary=6.73 cfs 0.465 af Outflow=7.09 cfs 0.681 af
<b>Link 1L: runoff</b>	Inflow=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af

**Total Runoff Area = 5.321 ac Runoff Volume = 0.742 af Average Runoff Depth = 1.67"**  
**49.39% Pervious = 2.628 ac 50.61% Impervious = 2.693 ac**

**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 2-Year Rainfall=2.61"

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**Summary for Subcatchment D1: north parking**

Runoff = 4.39 cfs @ 12.17 hrs, Volume= 0.271 af, Depth= 1.75"  
 Routed to Reach 1R : Swale

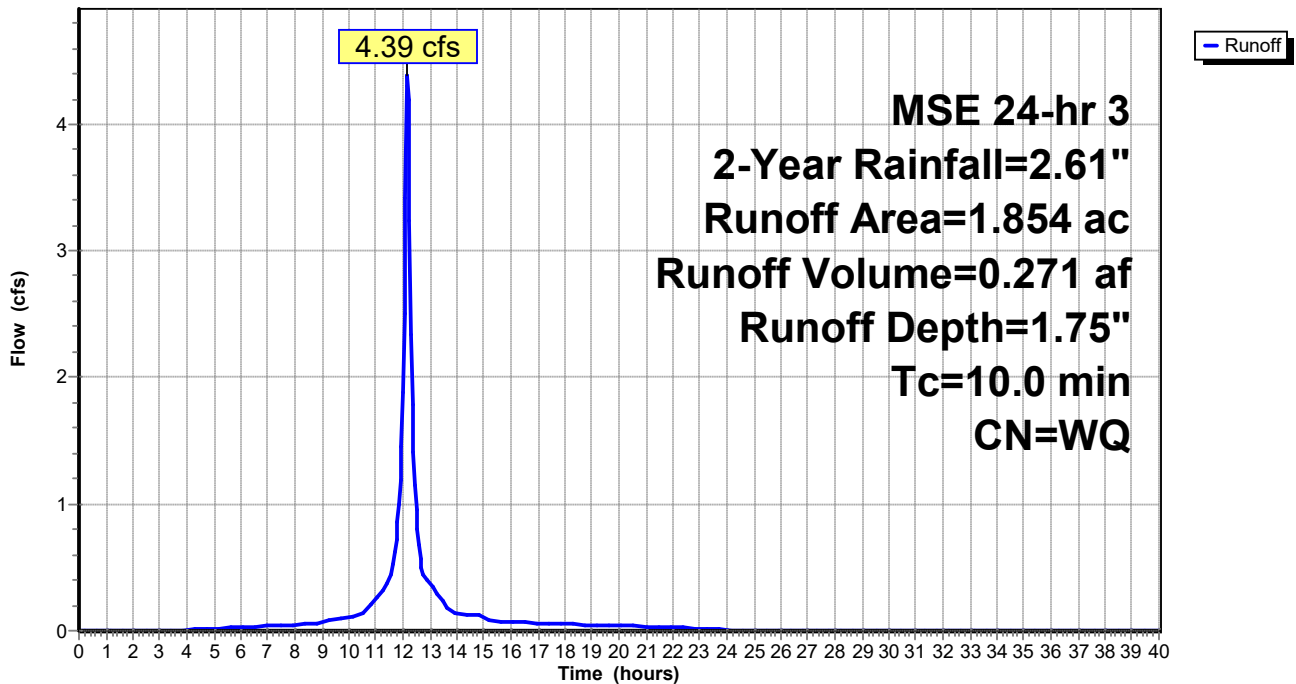
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 2-Year Rainfall=2.61"

Area (ac)	CN	Description
* 0.532	98	future parking
* 0.257	98	future building
0.488	39	>75% Grass cover, Good, HSG A
* 0.310	98	proposed parking
* 0.257	98	proposed building
* 0.005	98	stoop
* 0.005	98	future stoop
1.854		Weighted Average
0.488		26.32% Pervious Area
1.366		73.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, minimum

**Subcatchment D1: north parking**

Hydrograph



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MSE 24-hr 3 2-Year Rainfall=2.61"

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**Summary for Subcatchment D2: west side ls bld**

Runoff = 4.64 cfs @ 12.17 hrs, Volume= 0.282 af, Depth= 1.81"  
 Routed to Reach 2R : Swale

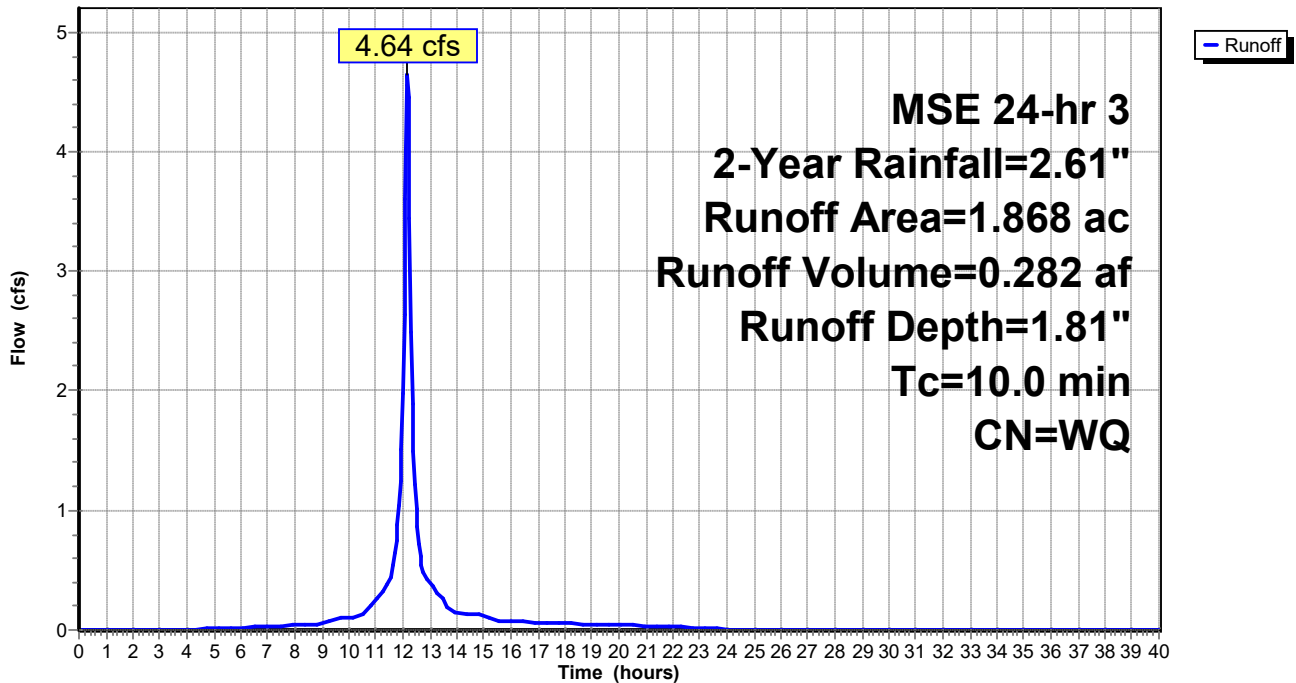
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 2-Year Rainfall=2.61"

Area (ac)	CN	Description
* 0.297	98	parking lot
* 0.576	96	gravel park
* 0.321	98	prop building
* 0.005	98	future sw
* 0.005	98	prop sidewalk
* 0.257	98	future bld
0.396	39	>75% Grass cover, Good, HSG A
* 0.011	98	basin
1.868		Weighted Average
0.972		52.03% Pervious Area
0.896		47.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D2: west side ls bld**

Hydrograph



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MSE 24-hr 3 2-Year Rainfall=2.61"

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**Summary for Subcatchment D3: east side ls bld**

Runoff = 2.16 cfs @ 12.17 hrs, Volume= 0.129 af, Depth= 1.59"  
 Routed to Reach 3R : Swale

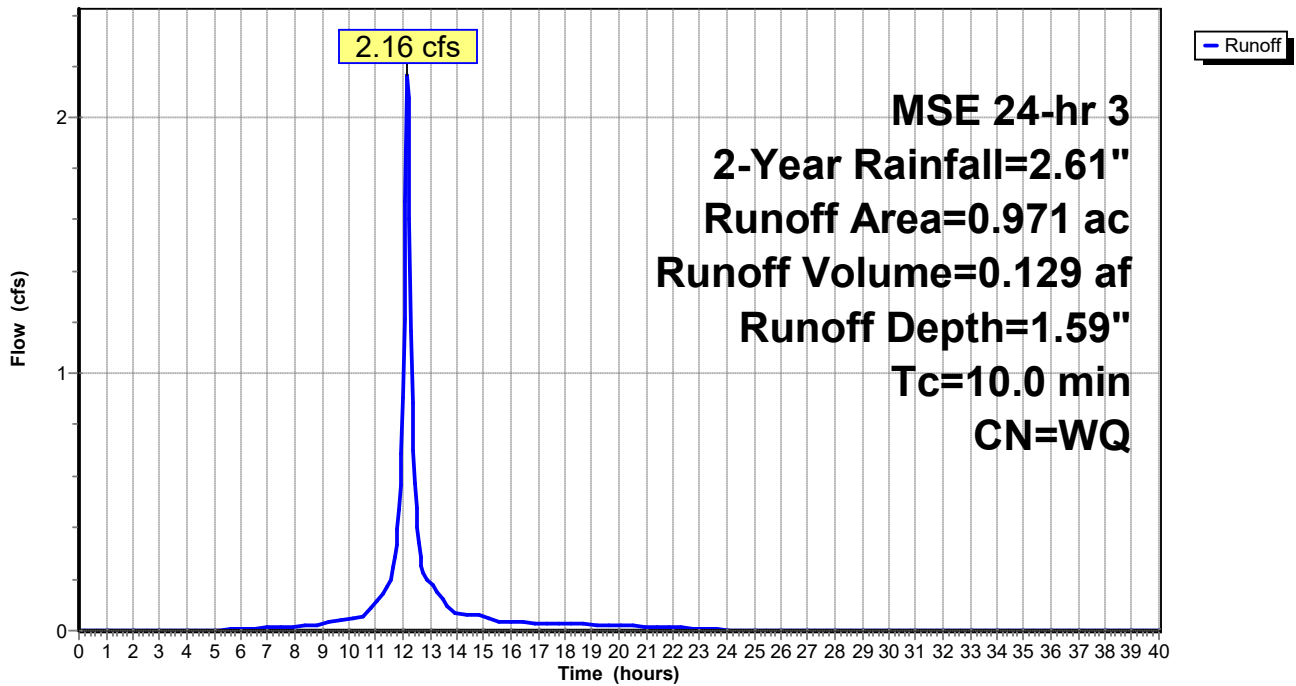
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 2-Year Rainfall=2.61"

Area (ac)	CN	Description
* 0.035	98	prop parking
* 0.572	96	prop gravel
* 0.064	98	prop building
* 0.028	98	basin
0.272	39	>75% Grass cover, Good, HSG A
0.971		Weighted Average
0.844		86.92% Pervious Area
0.127		13.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D3: east side ls bld**

Hydrograph



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MSE 24-hr 3 2-Year Rainfall=2.61"

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**Summary for Subcatchment D4: roadway**

Runoff = 0.98 cfs @ 12.17 hrs, Volume= 0.060 af, Depth= 1.15"  
 Routed to Pond 1P : south basin

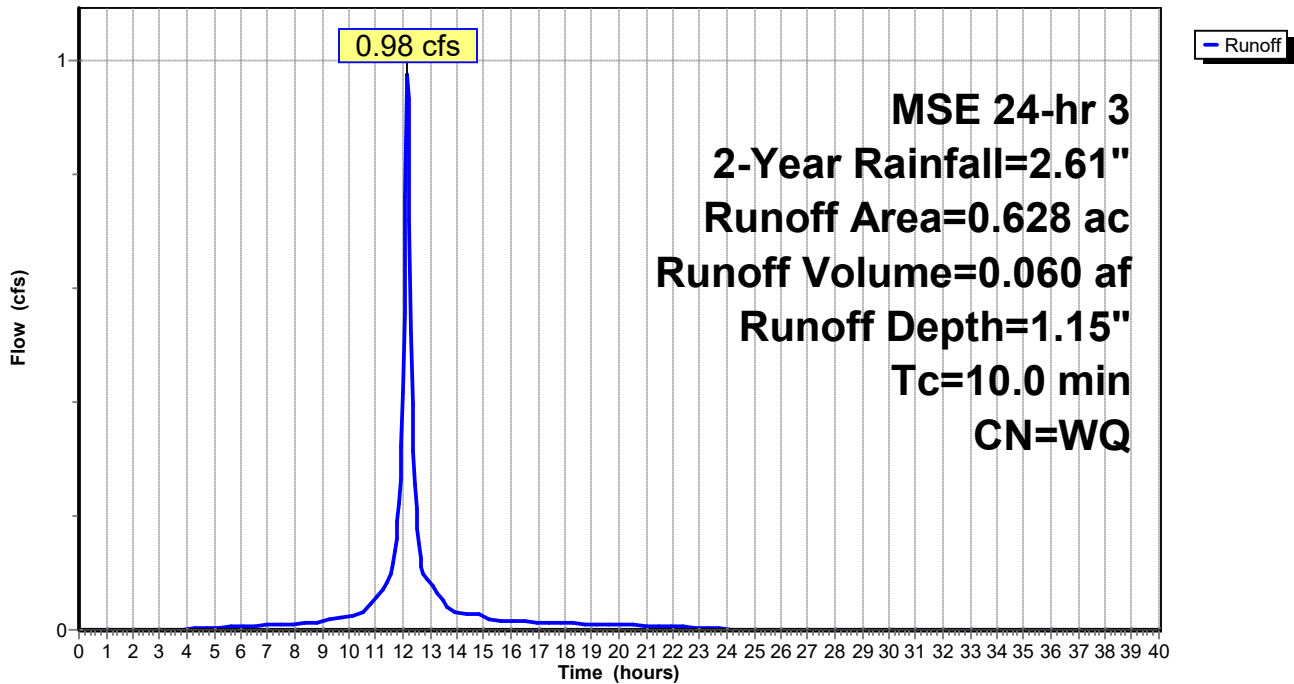
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 2-Year Rainfall=2.61"

Area (ac)	CN	Description
* 0.232	98	pavement
0.324	39	>75% Grass cover, Good, HSG A
* 0.072	98	basin
0.628		Weighted Average
0.324		51.59% Pervious Area
0.304		48.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D4: roadway**

Hydrograph



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MSE 24-hr 3 2-Year Rainfall=2.61"

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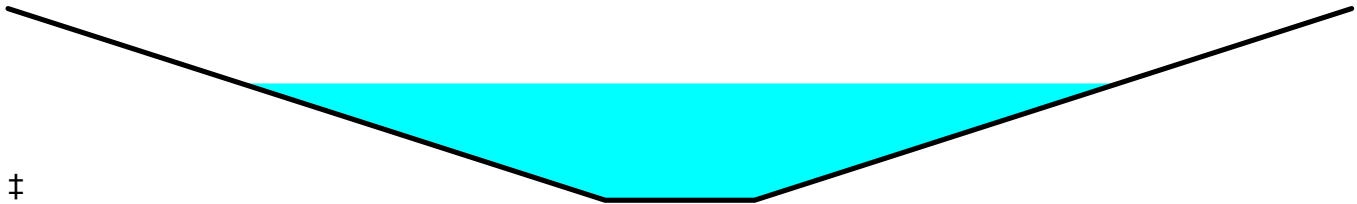
**Summary for Reach 1R: Swale**

Inflow Area = 1.854 ac, 73.68% Impervious, Inflow Depth = 1.75" for 2-Year event  
 Inflow = 4.39 cfs @ 12.17 hrs, Volume= 0.271 af  
 Outflow = 3.63 cfs @ 12.23 hrs, Volume= 0.271 af, Atten= 17%, Lag= 3.9 min  
 Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 1.73 fps, Min. Travel Time= 6.6 min  
 Avg. Velocity = 0.47 fps, Avg. Travel Time= 24.2 min

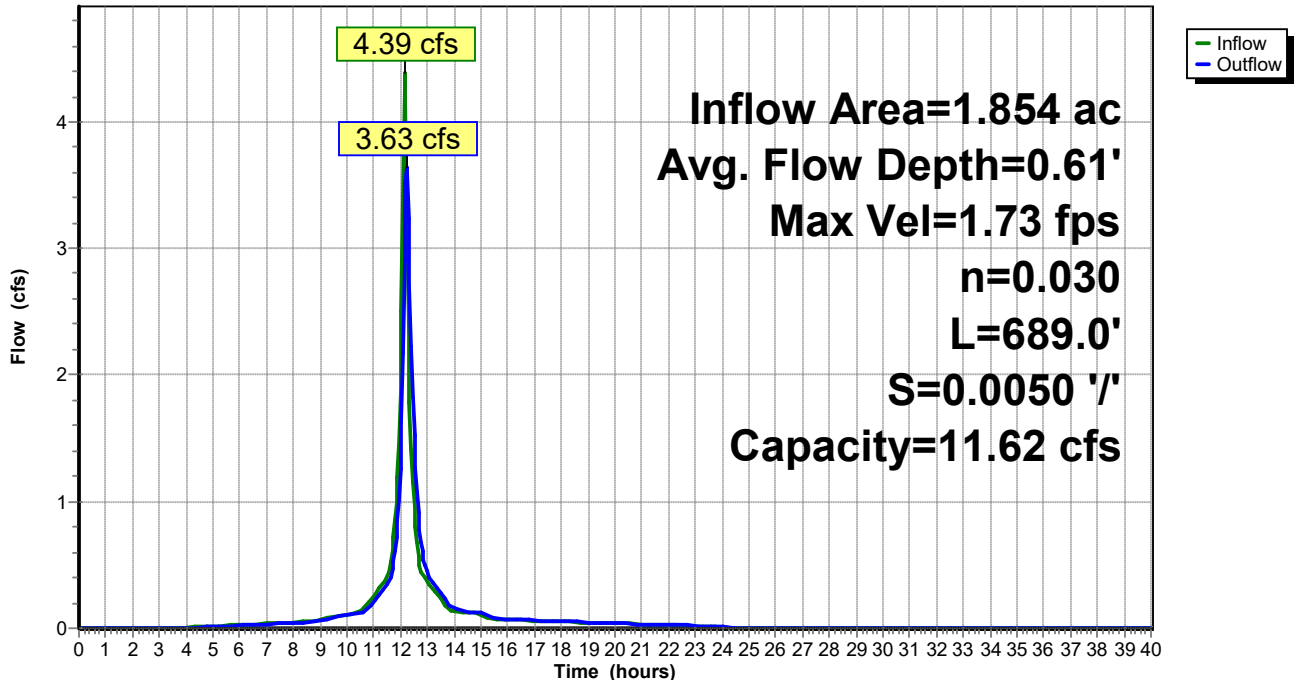
Peak Storage= 1,446 cf @ 12.23 hrs  
 Average Depth at Peak Storage= 0.61' , Surface Width= 5.88'  
 Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 11.62 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding  
 Side Slope Z-value= 4.0 ' / ' Top Width= 9.00'  
 Length= 689.0' Slope= 0.0050 ' / '  
 Inlet Invert= 1,171.94', Outlet Invert= 1,168.50'



**Reach 1R: Swale**

**Hydrograph**



**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 2-Year Rainfall=2.61"

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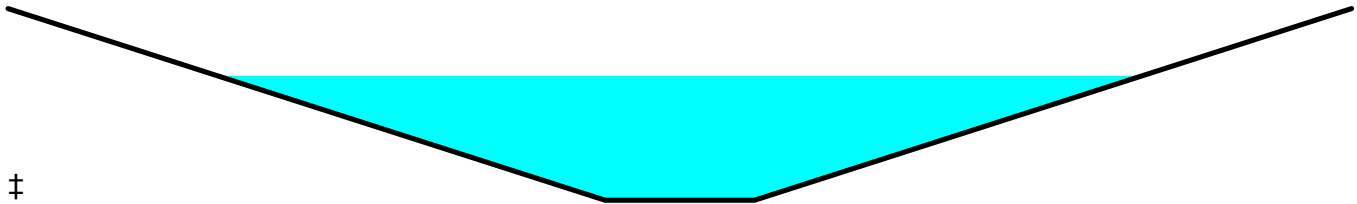
**Summary for Reach 2R: Swale**

Inflow Area = 1.868 ac, 47.97% Impervious, Inflow Depth = 1.81" for 2-Year event  
 Inflow = 4.64 cfs @ 12.17 hrs, Volume= 0.282 af  
 Outflow = 4.20 cfs @ 12.22 hrs, Volume= 0.282 af, Atten= 9%, Lag= 2.7 min  
 Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 1.79 fps, Min. Travel Time= 4.1 min  
 Avg. Velocity = 0.50 fps, Avg. Travel Time= 14.6 min

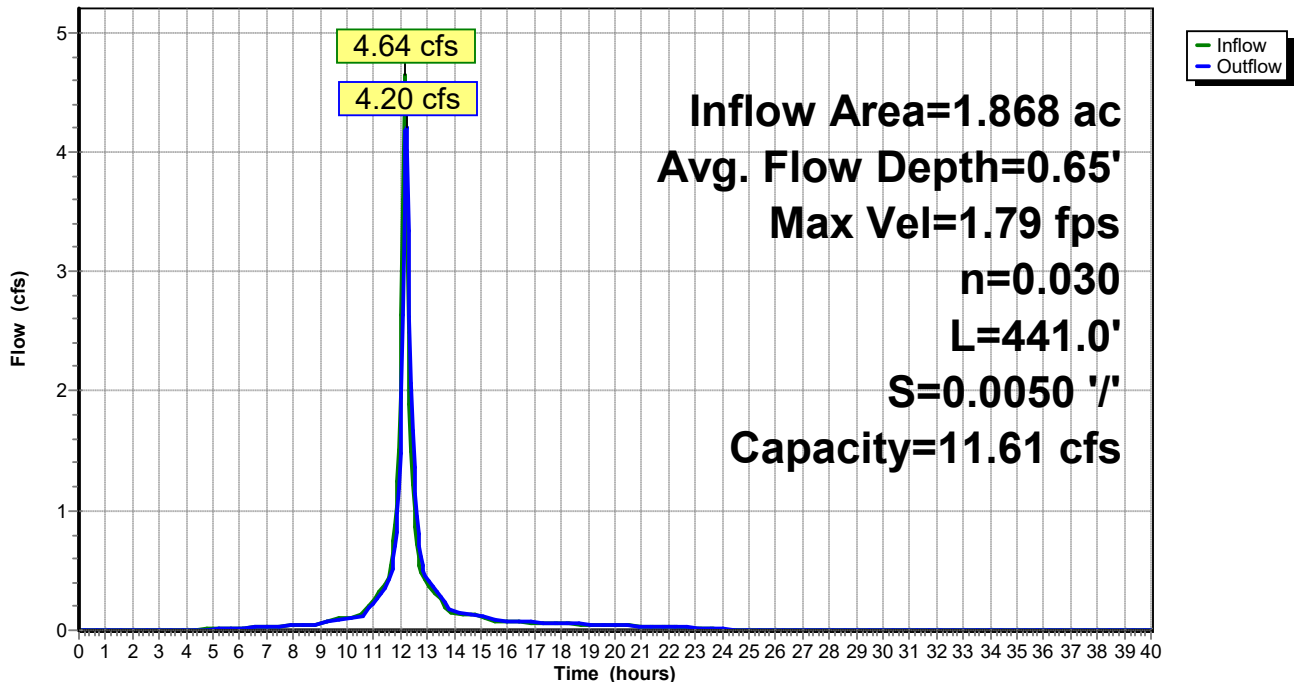
Peak Storage= 1,032 cf @ 12.22 hrs  
 Average Depth at Peak Storage= 0.65' , Surface Width= 6.20'  
 Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 11.61 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding  
 Side Slope Z-value= 4.0 '/' Top Width= 9.00'  
 Length= 441.0' Slope= 0.0050 '/'  
 Inlet Invert= 1,171.78', Outlet Invert= 1,169.58'



**Reach 2R: Swale**

**Hydrograph**



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MSE 24-hr 3 2-Year Rainfall=2.61"

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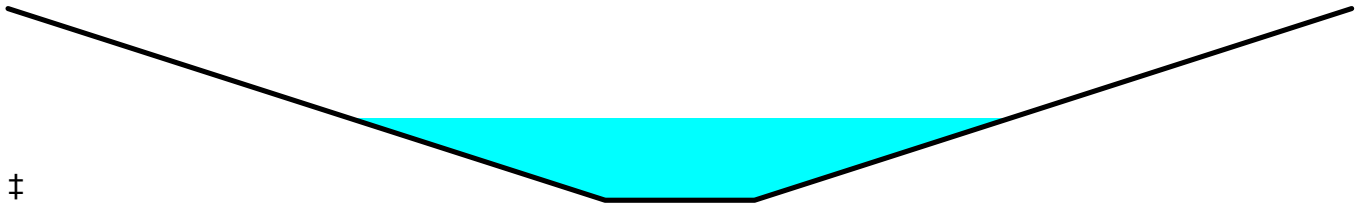
Summary for Reach 3R: Swale

Inflow Area = 0.971 ac, 13.08% Impervious, Inflow Depth = 1.59" for 2-Year event
Inflow = 2.16 cfs @ 12.17 hrs, Volume= 0.129 af
Outflow = 1.86 cfs @ 12.23 hrs, Volume= 0.129 af, Atten= 14%, Lag= 3.3 min
Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.59 fps, Min. Travel Time= 5.4 min
Avg. Velocity = 0.43 fps, Avg. Travel Time= 19.8 min

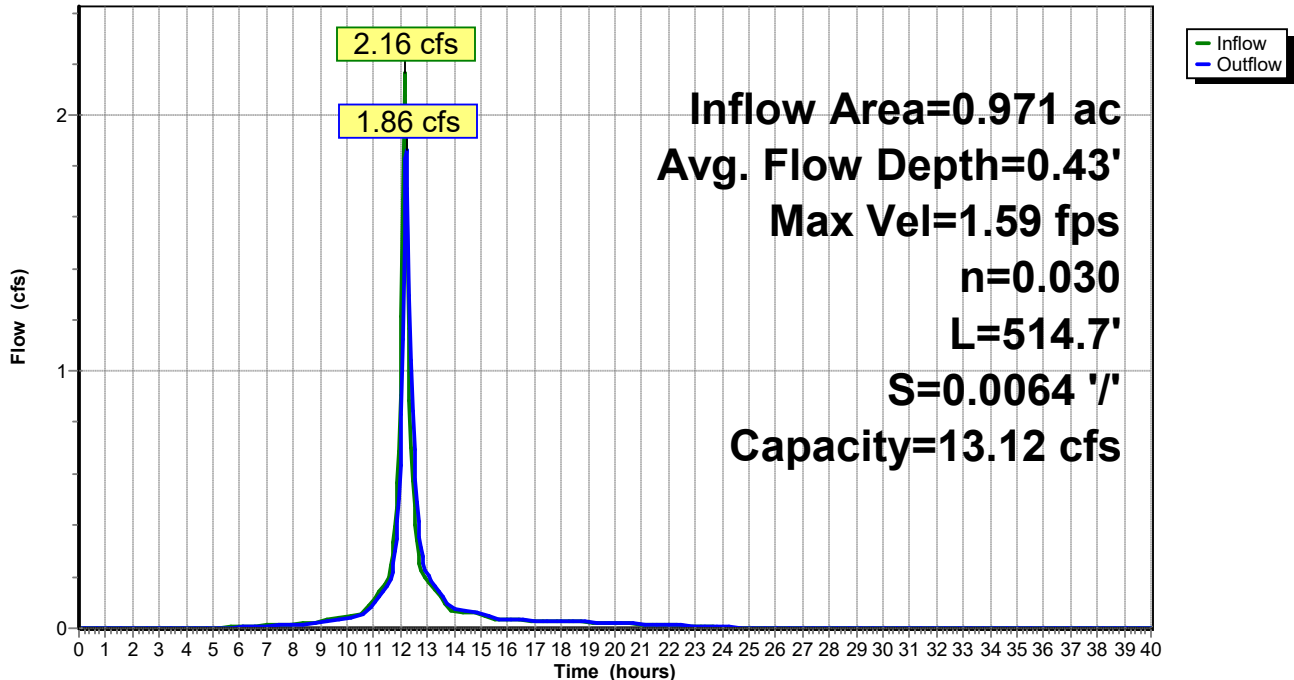
Peak Storage= 600 cf @ 12.23 hrs
Average Depth at Peak Storage= 0.43' , Surface Width= 4.43'
Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 13.12 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 4.0 ' / ' Top Width= 9.00'
Length= 514.7' Slope= 0.0064 ' / '
Inlet Invert= 1,171.90', Outlet Invert= 1,168.62'



Reach 3R: Swale

Hydrograph



**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 2-Year Rainfall=2.61"

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**Summary for Pond 1P: south basin**

Inflow Area = 5.321 ac, 50.61% Impervious, Inflow Depth = 1.18" for 2-Year event  
 Inflow = 7.18 cfs @ 12.32 hrs, Volume= 0.525 af  
 Outflow = 0.59 cfs @ 13.36 hrs, Volume= 0.525 af, Atten= 92%, Lag= 62.6 min  
 Discarded = 0.59 cfs @ 13.36 hrs, Volume= 0.525 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
 Routed to Link 1L : runoff

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Peak Elev= 1,168.97' @ 13.36 hrs Surf.Area= 7,084 sf Storage= 14,963 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)  
 Center-of-Mass det. time= 272.4 min ( 1,038.1 - 765.6 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,166.00'	44,780 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,166.00	3,150	0	0
1,167.00	4,350	3,750	3,750
1,168.00	5,700	5,025	8,775
1,169.00	7,130	6,415	15,190
1,170.00	11,025	9,078	24,268
1,171.00	30,000	20,513	44,780

Device	Routing	Invert	Outlet Devices
#1	Secondary	1,170.18'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
#2	Discarded	1,166.00'	<b>3.600 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.59 cfs @ 13.36 hrs HW=1,168.97' (Free Discharge)  
 ↑2=Exfiltration (Exfiltration Controls 0.59 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=1,166.00' TW=0.00' (Dynamic Tailwater)  
 ↑1=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

25-0410 hydrocad 11-17-25

MSE 24-hr 3 2-Year Rainfall=2.61"

Prepared by Vreeland Associates

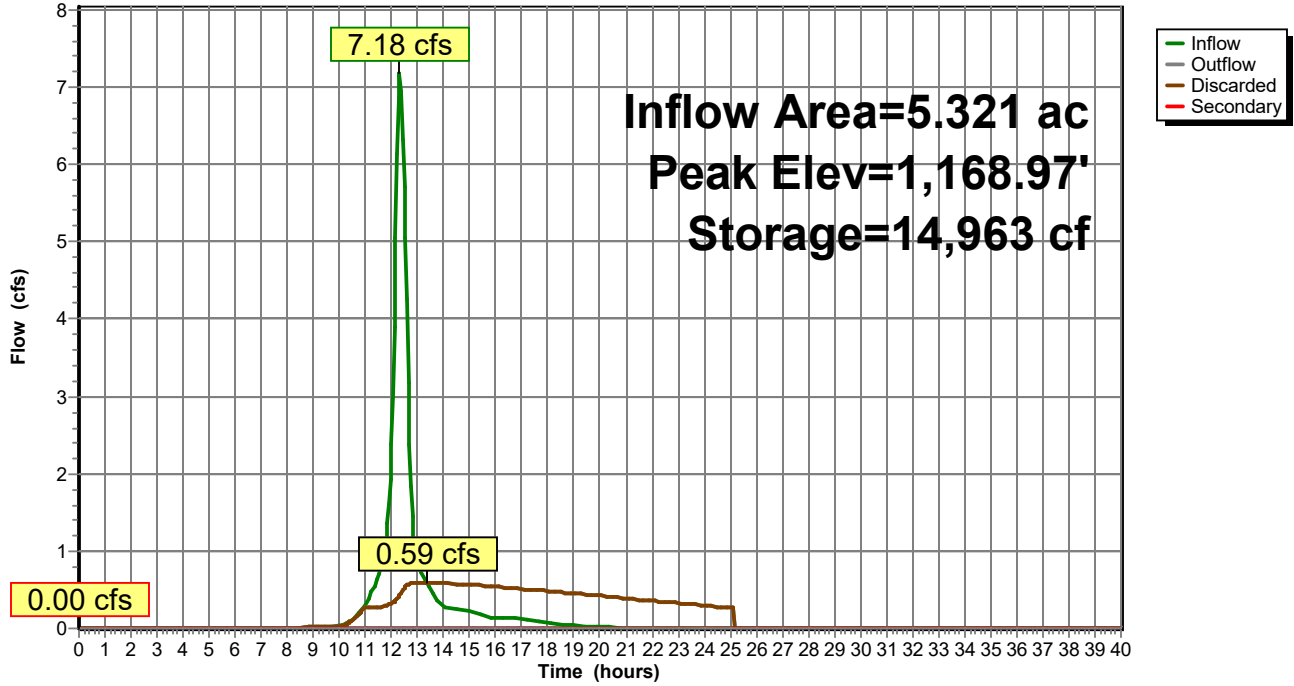
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### Pond 1P: south basin

Hydrograph



**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 2-Year Rainfall=2.61"

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**Summary for Pond 2P: middle basin**

[62] Hint: Exceeded Reach 1R OUTLET depth by 0.54' @ 12.40 hrs

[64] Warning: Exceeded Reach 1R outlet bank by 0.07' @ 12.34 hrs

[62] Hint: Exceeded Reach 3R OUTLET depth by 0.59' @ 12.35 hrs

Inflow Area = 4.693 ac, 50.91% Impervious, Inflow Depth = 1.74" for 2-Year event  
 Inflow = 9.69 cfs @ 12.22 hrs, Volume= 0.681 af  
 Outflow = 7.09 cfs @ 12.34 hrs, Volume= 0.681 af, Atten= 27%, Lag= 6.9 min  
 Discarded = 0.36 cfs @ 12.34 hrs, Volume= 0.217 af  
 Primary = 6.73 cfs @ 12.34 hrs, Volume= 0.465 af  
 Routed to Pond 1P : south basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Peak Elev= 1,169.57' @ 12.34 hrs Surf.Area= 4,312 sf Storage= 5,124 cf

Plug-Flow detention time= 45.1 min calculated for 0.680 af (100% of inflow)  
 Center-of-Mass det. time= 45.2 min ( 818.6 - 773.4 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,167.00'	27,600 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,167.00	480	0	0
1,168.00	1,120	800	800
1,169.00	3,210	2,165	2,965
1,170.00	5,130	4,170	7,135
1,171.00	7,400	6,265	13,400
1,172.00	21,000	14,200	27,600

Device	Routing	Invert	Outlet Devices
#1	Primary	1,168.00'	<b>18.0" Round Culvert</b> L= 66.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 1,168.00' / 1,167.67' S= 0.0050 '/ Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Discarded	1,167.00'	<b>3.600 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.36 cfs @ 12.34 hrs HW=1,169.57' (Free Discharge)

↑**2=Exfiltration** (Exfiltration Controls 0.36 cfs)

**Primary OutFlow** Max=6.70 cfs @ 12.34 hrs HW=1,169.57' TW=1,167.85' (Dynamic Tailwater)

↑**1=Culvert** (Barrel Controls 6.70 cfs @ 4.50 fps)

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MSE 24-hr 3 2-Year Rainfall=2.61"

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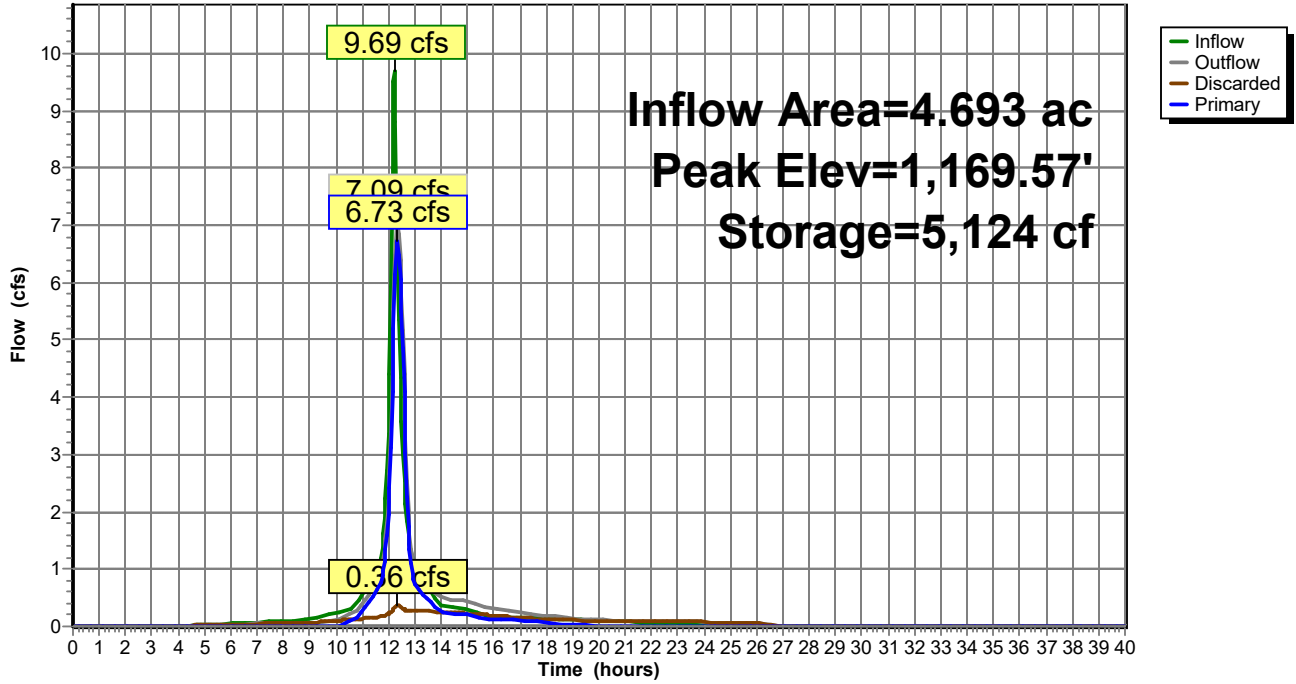
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### Pond 2P: middle basin

Hydrograph



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MSE 24-hr 3 2-Year Rainfall=2.61"

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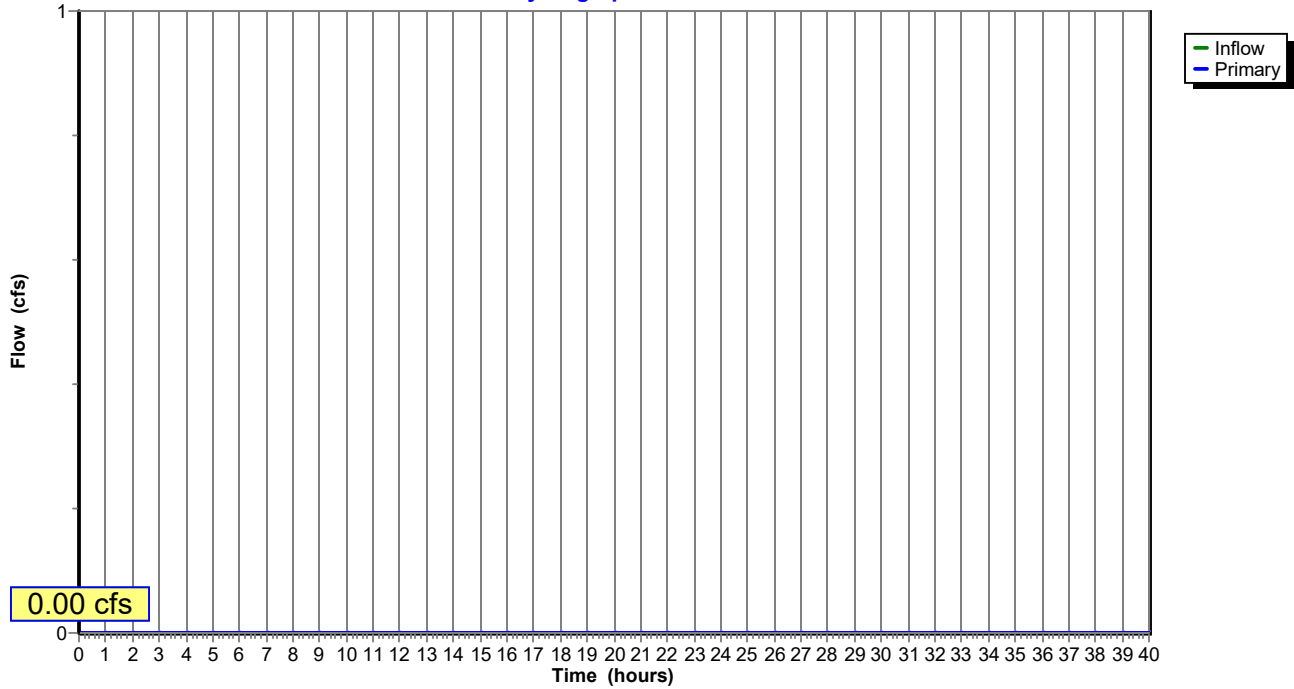
**Summary for Link 1L: runoff**

Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

**Link 1L: runoff**

Hydrograph



**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 10-Year Rainfall=3.73"

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Time span=0.00-40.00 hrs, dt=0.05 hrs, 801 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-Q  
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

<b>Subcatchment D1: north parking</b>	Runoff Area=1.854 ac 73.68% Impervious Runoff Depth=2.58" Tc=10.0 min CN=WQ Runoff=6.33 cfs 0.399 af
<b>Subcatchment D2: west side ls bld</b>	Runoff Area=1.868 ac 47.97% Impervious Runoff Depth=2.69" Tc=10.0 min CN=WQ Runoff=6.75 cfs 0.419 af
<b>Subcatchment D3: east side ls bld</b>	Runoff Area=0.971 ac 13.08% Impervious Runoff Depth=2.39" Tc=10.0 min CN=WQ Runoff=3.17 cfs 0.194 af
<b>Subcatchment D4: roadway</b>	Runoff Area=0.628 ac 48.41% Impervious Runoff Depth=1.70" Tc=10.0 min CN=WQ Runoff=1.41 cfs 0.089 af
<b>Reach 1R: Swale</b>	Avg. Flow Depth=0.72' Max Vel=1.90 fps Inflow=6.33 cfs 0.399 af n=0.030 L=689.0' S=0.0050 '/' Capacity=11.62 cfs Outflow=5.35 cfs 0.399 af
<b>Reach 2R: Swale</b>	Avg. Flow Depth=0.77' Max Vel=1.98 fps Inflow=6.75 cfs 0.419 af n=0.030 L=441.0' S=0.0050 '/' Capacity=11.61 cfs Outflow=6.20 cfs 0.419 af
<b>Reach 3R: Swale</b>	Avg. Flow Depth=0.52' Max Vel=1.77 fps Inflow=3.17 cfs 0.194 af n=0.030 L=514.7' S=0.0064 '/' Capacity=13.12 cfs Outflow=2.80 cfs 0.194 af
<b>Pond 1P: south basin</b>	Peak Elev=1,169.72' Storage=21,331 cf Inflow=9.26 cfs 0.779 af Discarded=0.83 cfs 0.779 af Secondary=0.00 cfs 0.000 af Outflow=0.83 cfs 0.779 af
<b>Pond 2P: middle basin</b>	Peak Elev=1,170.12' Storage=7,766 cf Inflow=14.33 cfs 1.011 af Discarded=0.45 cfs 0.322 af Primary=8.69 cfs 0.690 af Outflow=9.14 cfs 1.011 af
<b>Link 1L: runoff</b>	Inflow=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af

**Total Runoff Area = 5.321 ac Runoff Volume = 1.100 af Average Runoff Depth = 2.48"**  
**49.39% Pervious = 2.628 ac 50.61% Impervious = 2.693 ac**

**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 10-Year Rainfall=3.73"

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**Summary for Subcatchment D1: north parking**

Runoff = 6.33 cfs @ 12.17 hrs, Volume= 0.399 af, Depth= 2.58"  
 Routed to Reach 1R : Swale

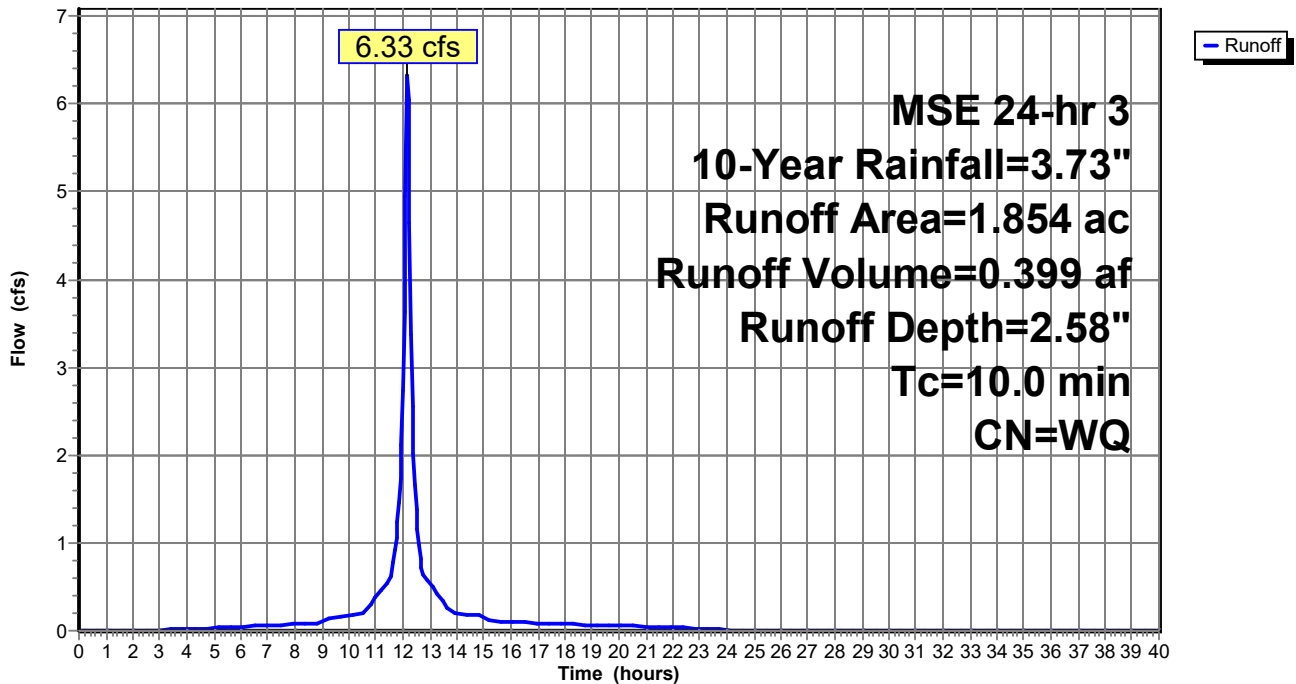
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 10-Year Rainfall=3.73"

Area (ac)	CN	Description
* 0.532	98	future parking
* 0.257	98	future building
0.488	39	>75% Grass cover, Good, HSG A
* 0.310	98	proposed parking
* 0.257	98	proposed building
* 0.005	98	stoop
* 0.005	98	future stoop
1.854		Weighted Average
0.488		26.32% Pervious Area
1.366		73.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, minimum

**Subcatchment D1: north parking**

Hydrograph



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MSE 24-hr 3 10-Year Rainfall=3.73"

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**Summary for Subcatchment D2: west side ls bld**

Runoff = 6.75 cfs @ 12.17 hrs, Volume= 0.419 af, Depth= 2.69"  
 Routed to Reach 2R : Swale

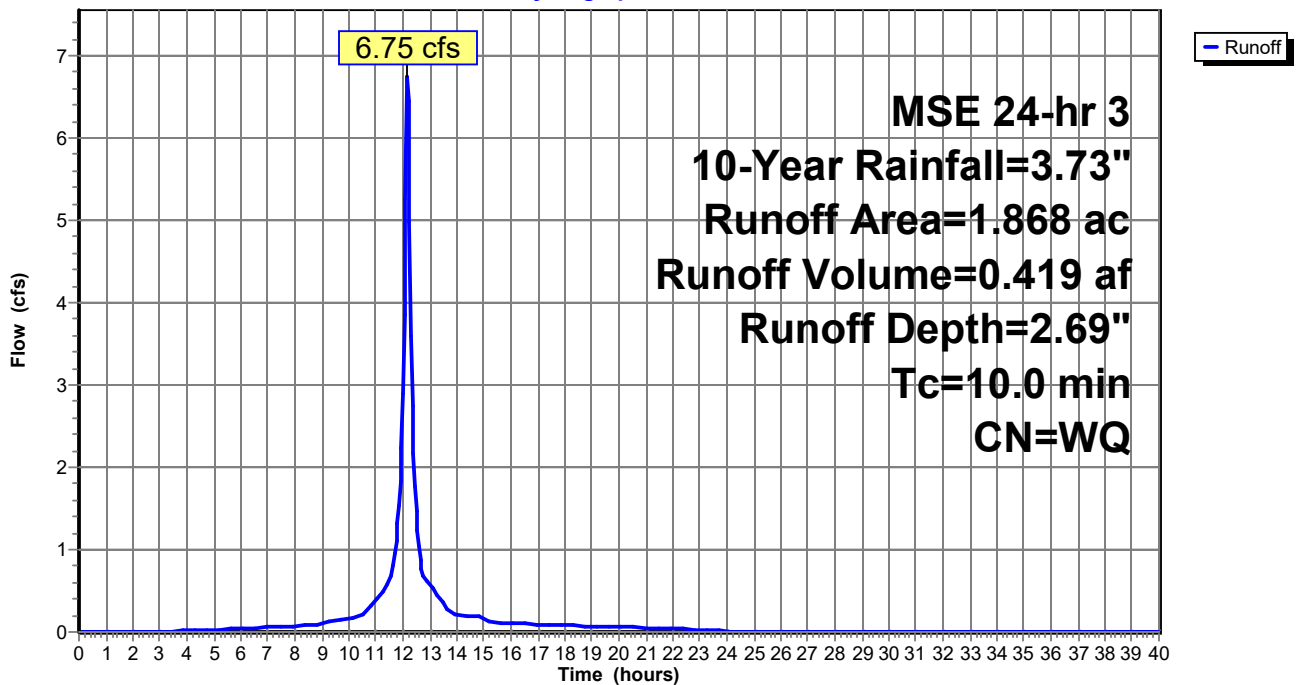
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 10-Year Rainfall=3.73"

Area (ac)	CN	Description
* 0.297	98	parking lot
* 0.576	96	gravel park
* 0.321	98	prop building
* 0.005	98	future sw
* 0.005	98	prop sidewalk
* 0.257	98	future bld
0.396	39	>75% Grass cover, Good, HSG A
* 0.011	98	basin
1.868		Weighted Average
0.972		52.03% Pervious Area
0.896		47.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D2: west side ls bld**

Hydrograph



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MSE 24-hr 3 10-Year Rainfall=3.73"

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**Summary for Subcatchment D3: east side ls bld**

Runoff = 3.17 cfs @ 12.17 hrs, Volume= 0.194 af, Depth= 2.39"  
 Routed to Reach 3R : Swale

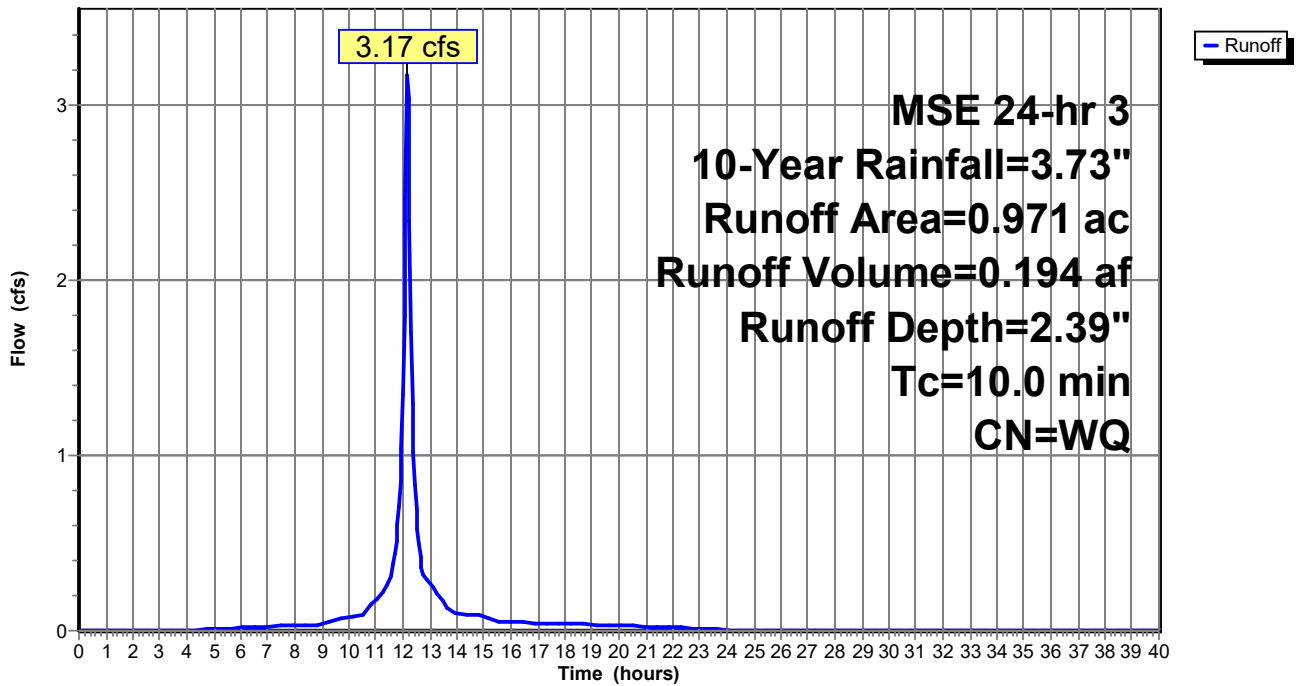
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 10-Year Rainfall=3.73"

Area (ac)	CN	Description
* 0.035	98	prop parking
* 0.572	96	prop gravel
* 0.064	98	prop building
* 0.028	98	basin
0.272	39	>75% Grass cover, Good, HSG A
0.971		Weighted Average
0.844		86.92% Pervious Area
0.127		13.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D3: east side ls bld**

Hydrograph



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MSE 24-hr 3 10-Year Rainfall=3.73"

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**Summary for Subcatchment D4: roadway**

Runoff = 1.41 cfs @ 12.17 hrs, Volume= 0.089 af, Depth= 1.70"  
 Routed to Pond 1P : south basin

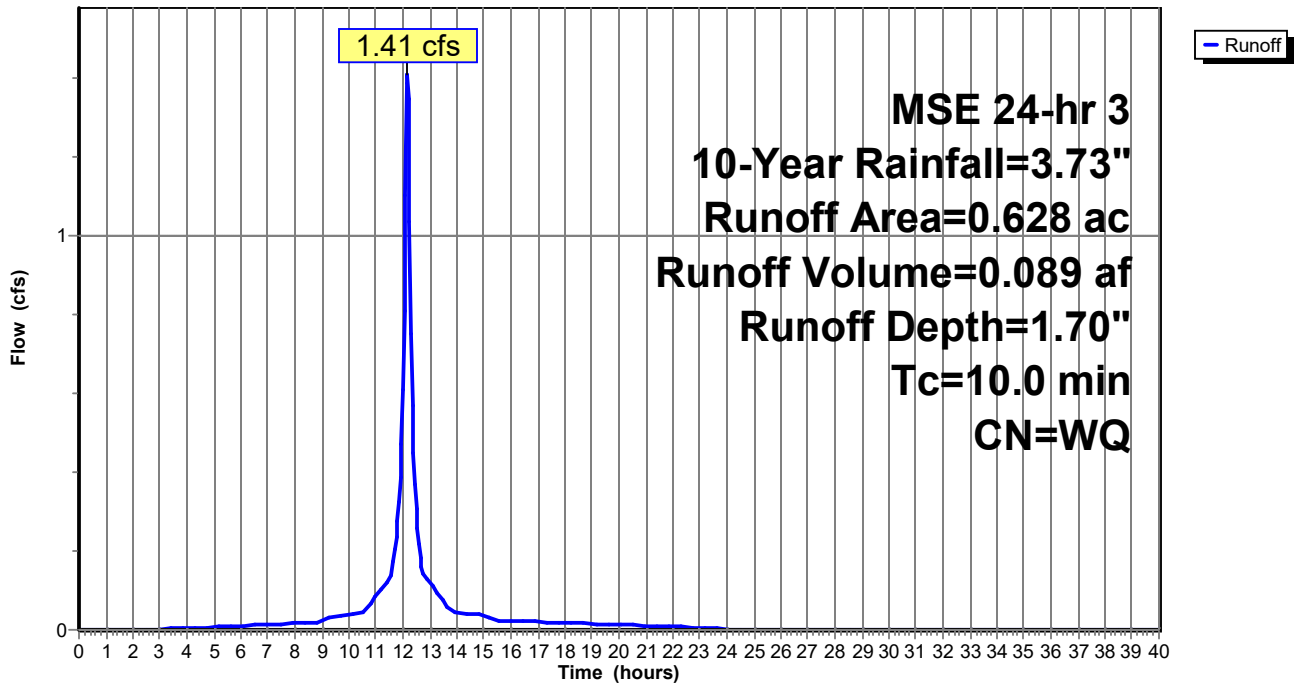
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 10-Year Rainfall=3.73"

Area (ac)	CN	Description
* 0.232	98	pavement
0.324	39	>75% Grass cover, Good, HSG A
* 0.072	98	basin
0.628		Weighted Average
0.324		51.59% Pervious Area
0.304		48.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D4: roadway**

Hydrograph



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MSE 24-hr 3 10-Year Rainfall=3.73"

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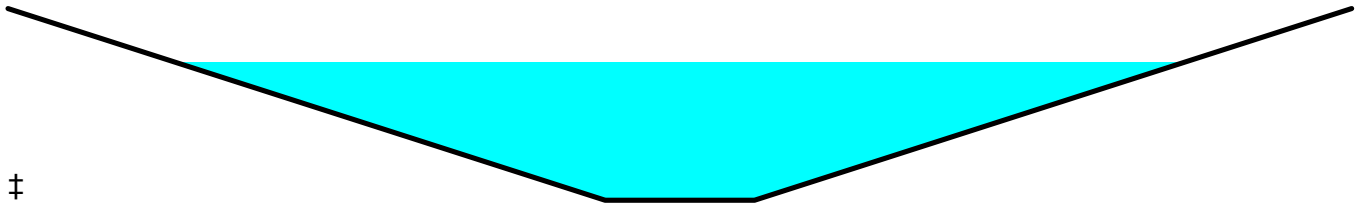
Summary for Reach 1R: Swale

Inflow Area = 1.854 ac, 73.68% Impervious, Inflow Depth = 2.58" for 10-Year event
Inflow = 6.33 cfs @ 12.17 hrs, Volume= 0.399 af
Outflow = 5.35 cfs @ 12.23 hrs, Volume= 0.399 af, Atten= 15%, Lag= 3.6 min
Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.90 fps, Min. Travel Time= 6.0 min
Avg. Velocity = 0.53 fps, Avg. Travel Time= 21.7 min

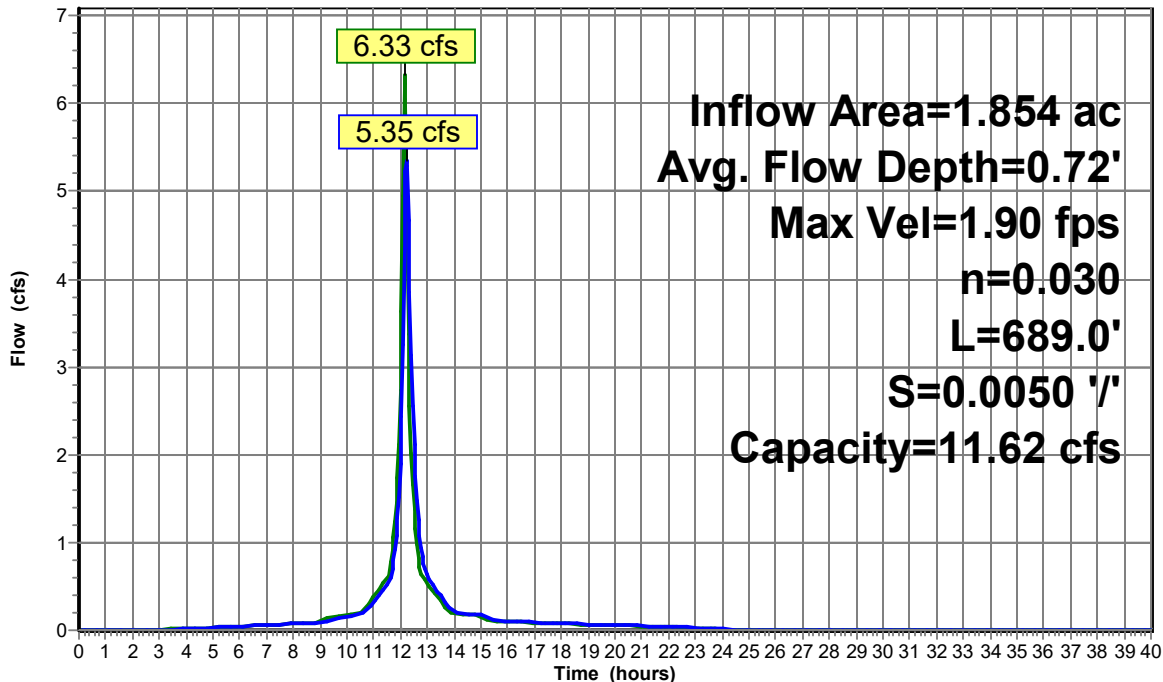
Peak Storage= 1,930 cf @ 12.23 hrs
Average Depth at Peak Storage= 0.72' , Surface Width= 6.77'
Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 11.62 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 4.0 ' / ' Top Width= 9.00'
Length= 689.0' Slope= 0.0050 ' / '
Inlet Invert= 1,171.94', Outlet Invert= 1,168.50'



Reach 1R: Swale

Hydrograph



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MSE 24-hr 3 10-Year Rainfall=3.73"

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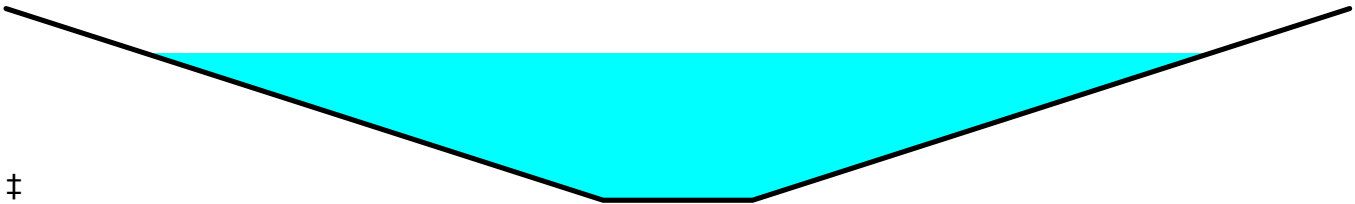
**Summary for Reach 2R: Swale**

Inflow Area = 1.868 ac, 47.97% Impervious, Inflow Depth = 2.69" for 10-Year event  
 Inflow = 6.75 cfs @ 12.17 hrs, Volume= 0.419 af  
 Outflow = 6.20 cfs @ 12.21 hrs, Volume= 0.419 af, Atten= 8%, Lag= 2.5 min  
 Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 1.98 fps, Min. Travel Time= 3.7 min  
 Avg. Velocity = 0.56 fps, Avg. Travel Time= 13.1 min

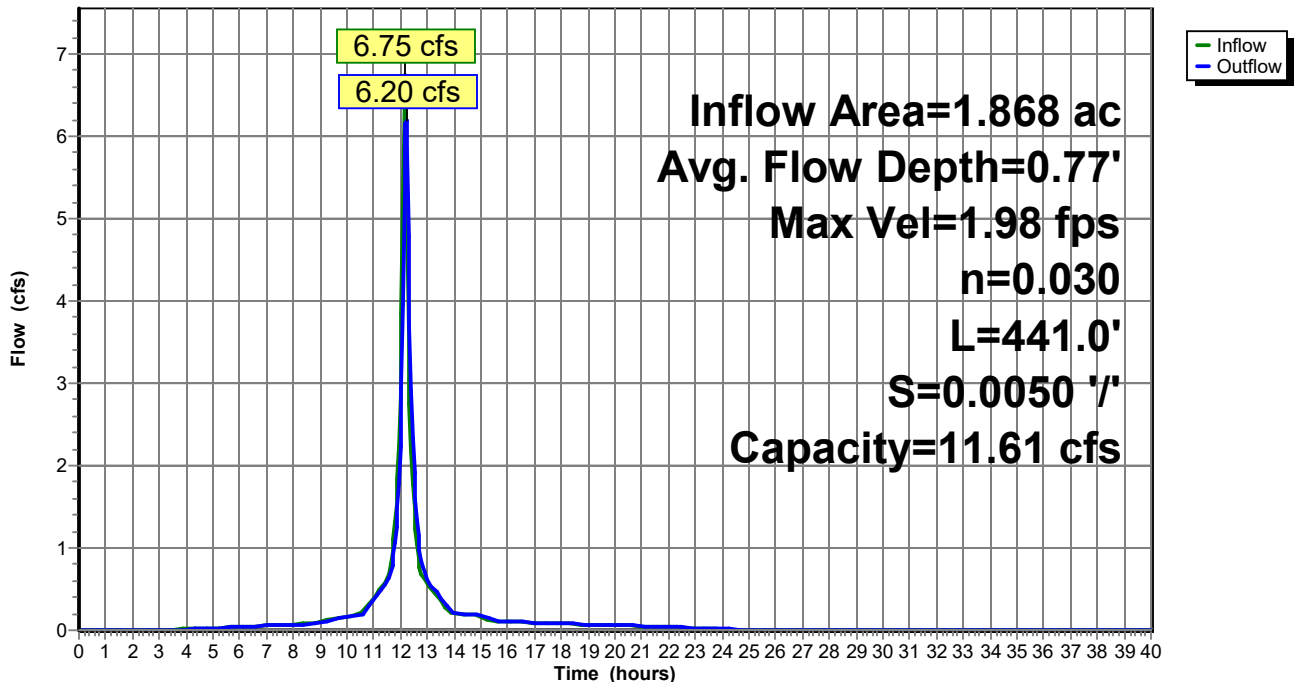
Peak Storage= 1,379 cf @ 12.21 hrs  
 Average Depth at Peak Storage= 0.77' , Surface Width= 7.14'  
 Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 11.61 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding  
 Side Slope Z-value= 4.0 ' / ' Top Width= 9.00'  
 Length= 441.0' Slope= 0.0050 ' / '  
 Inlet Invert= 1,171.78', Outlet Invert= 1,169.58'



**Reach 2R: Swale**

Hydrograph



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MSE 24-hr 3 10-Year Rainfall=3.73"

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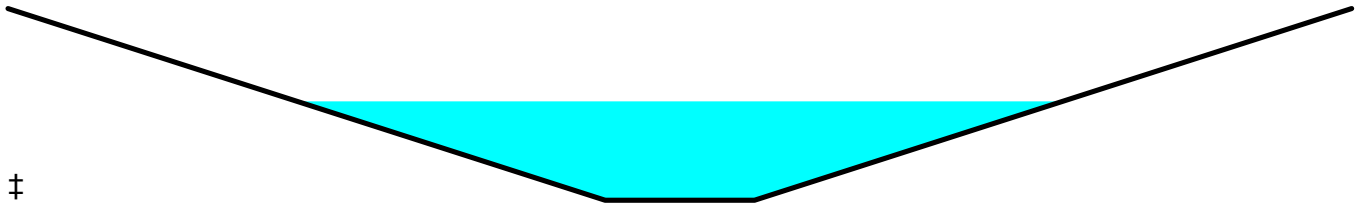
**Summary for Reach 3R: Swale**

Inflow Area = 0.971 ac, 13.08% Impervious, Inflow Depth = 2.39" for 10-Year event  
 Inflow = 3.17 cfs @ 12.17 hrs, Volume= 0.194 af  
 Outflow = 2.80 cfs @ 12.22 hrs, Volume= 0.194 af, Atten= 12%, Lag= 3.1 min  
 Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 1.77 fps, Min. Travel Time= 4.9 min  
 Avg. Velocity = 0.49 fps, Avg. Travel Time= 17.6 min

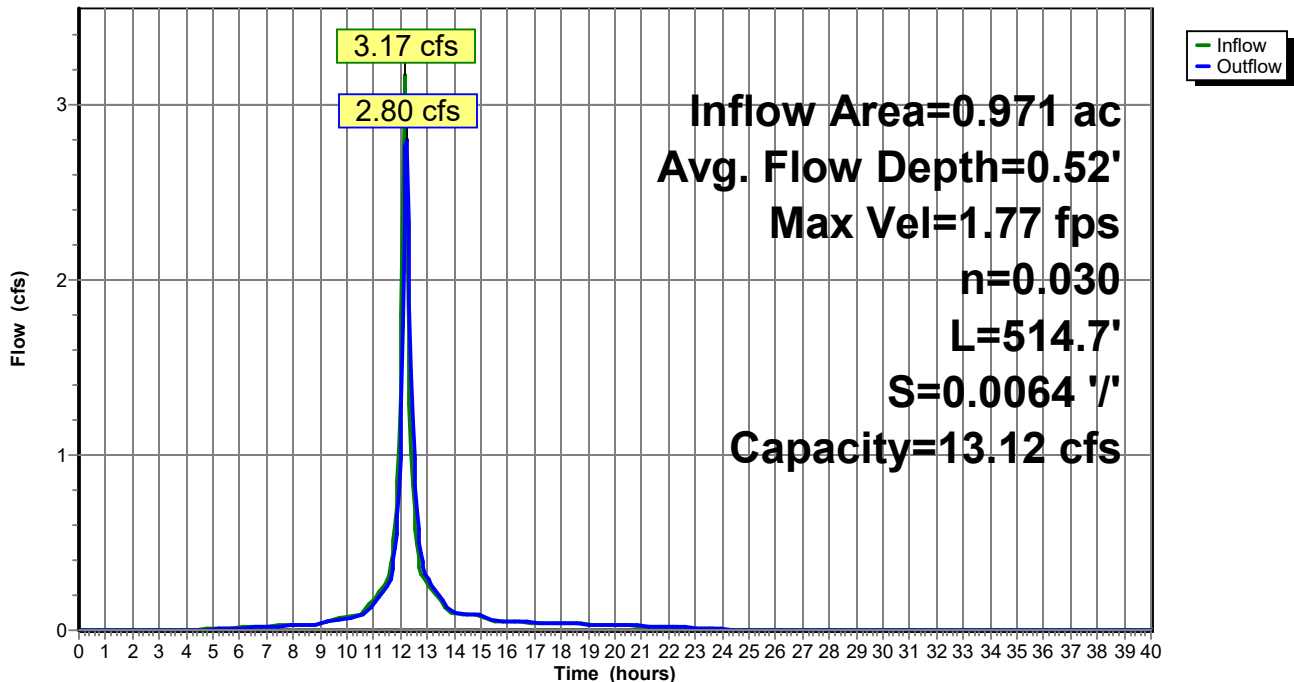
Peak Storage= 812 cf @ 12.22 hrs  
 Average Depth at Peak Storage= 0.52' , Surface Width= 5.12'  
 Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 13.12 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding  
 Side Slope Z-value= 4.0 '/' Top Width= 9.00'  
 Length= 514.7' Slope= 0.0064 '/'  
 Inlet Invert= 1,171.90', Outlet Invert= 1,168.62'



**Reach 3R: Swale**

Hydrograph



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MSE 24-hr 3 10-Year Rainfall=3.73"

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**Summary for Pond 1P: south basin**

Inflow Area = 5.321 ac, 50.61% Impervious, Inflow Depth = 1.76" for 10-Year event  
 Inflow = 9.26 cfs @ 12.34 hrs, Volume= 0.779 af  
 Outflow = 0.83 cfs @ 13.35 hrs, Volume= 0.779 af, Atten= 91%, Lag= 61.0 min  
 Discarded = 0.83 cfs @ 13.35 hrs, Volume= 0.779 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
 Routed to Link 1L : runoff

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Peak Elev= 1,169.72' @ 13.35 hrs Surf.Area= 9,933 sf Storage= 21,331 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)  
 Center-of-Mass det. time= 312.8 min ( 1,084.9 - 772.2 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,166.00'	44,780 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,166.00	3,150	0	0
1,167.00	4,350	3,750	3,750
1,168.00	5,700	5,025	8,775
1,169.00	7,130	6,415	15,190
1,170.00	11,025	9,078	24,268
1,171.00	30,000	20,513	44,780

Device	Routing	Invert	Outlet Devices
#1	Secondary	1,170.18'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
#2	Discarded	1,166.00'	<b>3.600 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.83 cfs @ 13.35 hrs HW=1,169.72' (Free Discharge)  
 ↑2=Exfiltration (Exfiltration Controls 0.83 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=1,166.00' TW=0.00' (Dynamic Tailwater)  
 ↑1=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

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MSE 24-hr 3 10-Year Rainfall=3.73"

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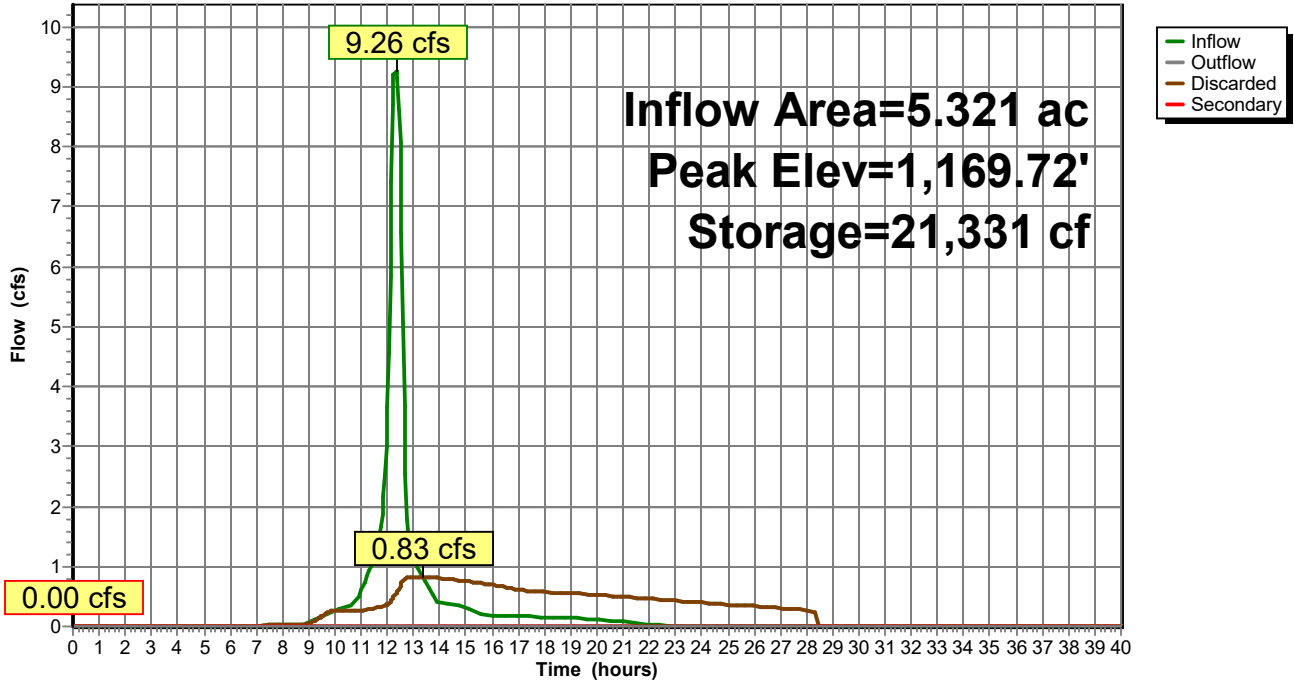
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### Pond 1P: south basin

Hydrograph



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MSE 24-hr 3 10-Year Rainfall=3.73"

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**Summary for Pond 2P: middle basin**

- [62] Hint: Exceeded Reach 1R OUTLET depth by 1.03' @ 12.40 hrs
- [64] Warning: Exceeded Reach 1R outlet bank by 0.62' @ 12.36 hrs
- [61] Hint: Exceeded Reach 2R outlet invert by 0.54' @ 12.35 hrs
- [62] Hint: Exceeded Reach 3R OUTLET depth by 1.09' @ 12.40 hrs
- [64] Warning: Exceeded Reach 3R outlet bank by 0.50' @ 12.36 hrs

Inflow Area = 4.693 ac, 50.91% Impervious, Inflow Depth = 2.59" for 10-Year event  
 Inflow = 14.33 cfs @ 12.22 hrs, Volume= 1.011 af  
 Outflow = 9.14 cfs @ 12.36 hrs, Volume= 1.011 af, Atten= 36%, Lag= 8.5 min  
 Discarded = 0.45 cfs @ 12.36 hrs, Volume= 0.322 af  
 Primary = 8.69 cfs @ 12.36 hrs, Volume= 0.690 af  
 Routed to Pond 1P : south basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Peak Elev= 1,170.12' @ 12.36 hrs Surf.Area= 5,402 sf Storage= 7,766 cf

Plug-Flow detention time= 57.3 min calculated for 1.010 af (100% of inflow)  
 Center-of-Mass det. time= 57.4 min ( 824.2 - 766.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,167.00'	27,600 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,167.00	480	0	0
1,168.00	1,120	800	800
1,169.00	3,210	2,165	2,965
1,170.00	5,130	4,170	7,135
1,171.00	7,400	6,265	13,400
1,172.00	21,000	14,200	27,600

Device	Routing	Invert	Outlet Devices
#1	Primary	1,168.00'	<b>18.0" Round Culvert</b> L= 66.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 1,168.00' / 1,167.67' S= 0.0050 '/ Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Discarded	1,167.00'	<b>3.600 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.45 cfs @ 12.36 hrs HW=1,170.11' (Free Discharge)  
 ↑2=Exfiltration (Exfiltration Controls 0.45 cfs)

**Primary OutFlow** Max=8.66 cfs @ 12.36 hrs HW=1,170.11' TW=1,168.71' (Dynamic Tailwater)  
 ↑1=Culvert (Barrel Controls 8.66 cfs @ 4.90 fps)

25-0410 hydrocad 11-17-25

MSE 24-hr 3 10-Year Rainfall=3.73"

Prepared by Vreeland Associates

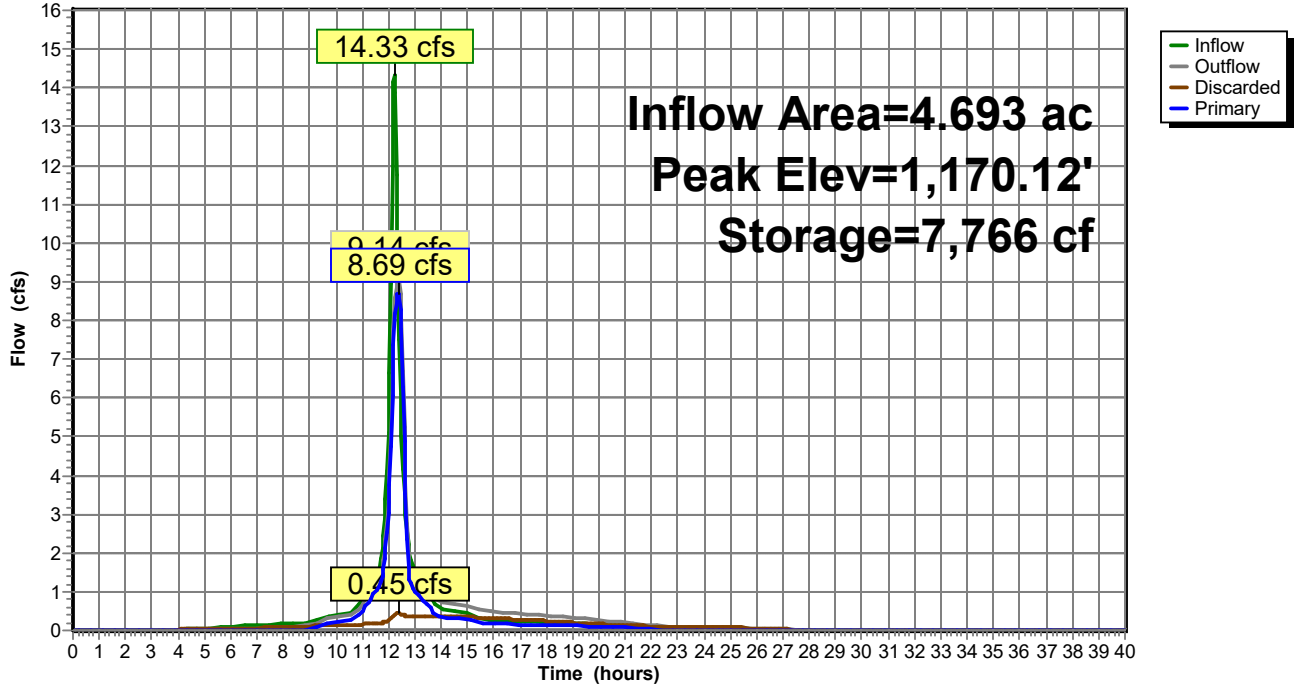
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### Pond 2P: middle basin

Hydrograph



**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 10-Year Rainfall=3.73"

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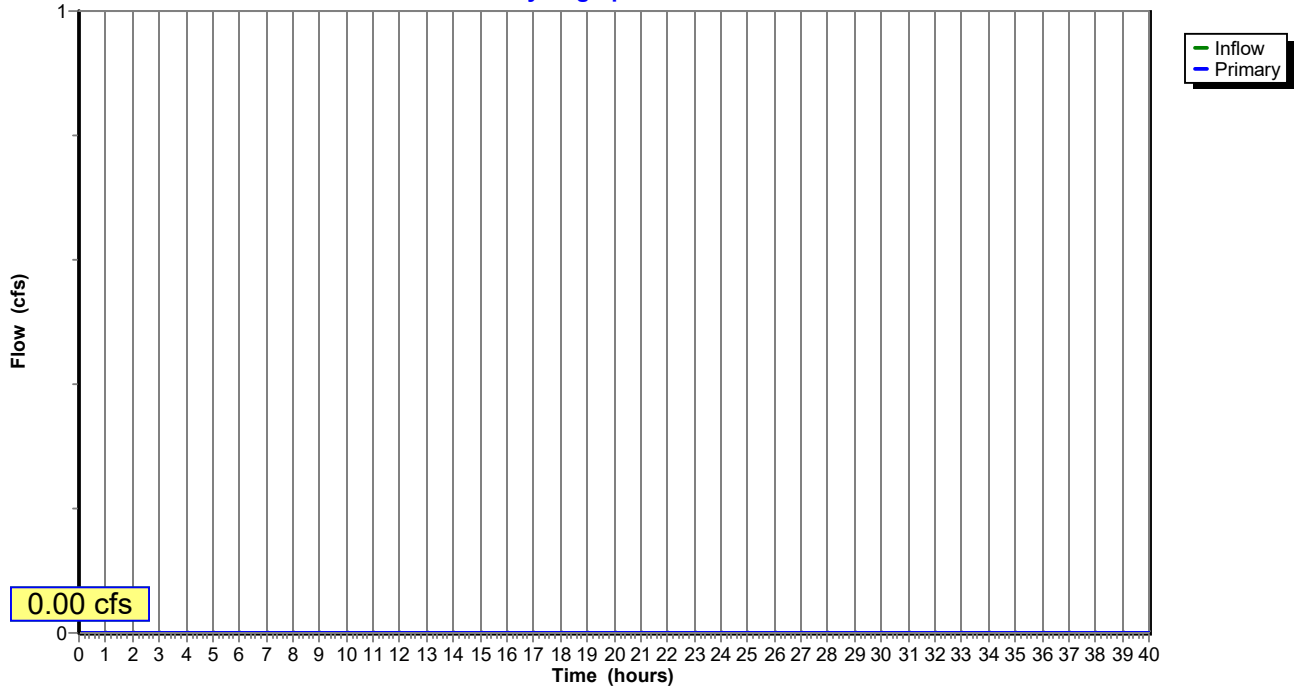
**Summary for Link 1L: runoff**

Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

**Link 1L: runoff**

Hydrograph



**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 25-Year Rainfall=4.51"

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Time span=0.00-40.00 hrs, dt=0.05 hrs, 801 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-Q  
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

<b>Subcatchment D1: north parking</b>	Runoff Area=1.854 ac 73.68% Impervious Runoff Depth=3.18" Tc=10.0 min CN=WQ Runoff=7.67 cfs 0.491 af
<b>Subcatchment D2: west side ls bld</b>	Runoff Area=1.868 ac 47.97% Impervious Runoff Depth=3.32" Tc=10.0 min CN=WQ Runoff=8.21 cfs 0.517 af
<b>Subcatchment D3: east side ls bld</b>	Runoff Area=0.971 ac 13.08% Impervious Runoff Depth=2.97" Tc=10.0 min CN=WQ Runoff=3.87 cfs 0.241 af
<b>Subcatchment D4: roadway</b>	Runoff Area=0.628 ac 48.41% Impervious Runoff Depth=2.13" Tc=10.0 min CN=WQ Runoff=1.71 cfs 0.111 af
<b>Reach 1R: Swale</b>	Avg. Flow Depth=0.79' Max Vel=2.00 fps Inflow=7.67 cfs 0.491 af n=0.030 L=689.0' S=0.0050 '/' Capacity=11.62 cfs Outflow=6.55 cfs 0.491 af
<b>Reach 2R: Swale</b>	Avg. Flow Depth=0.84' Max Vel=2.08 fps Inflow=8.21 cfs 0.517 af n=0.030 L=441.0' S=0.0050 '/' Capacity=11.61 cfs Outflow=7.58 cfs 0.517 af
<b>Reach 3R: Swale</b>	Avg. Flow Depth=0.56' Max Vel=1.86 fps Inflow=3.87 cfs 0.241 af n=0.030 L=514.7' S=0.0064 '/' Capacity=13.12 cfs Outflow=3.44 cfs 0.241 af
<b>Pond 1P: south basin</b>	Peak Elev=1,170.13' Storage=25,808 cf Inflow=10.91 cfs 0.965 af Discarded=1.12 cfs 0.965 af Secondary=0.00 cfs 0.000 af Outflow=1.12 cfs 0.965 af
<b>Pond 2P: middle basin</b>	Peak Elev=1,170.47' Storage=9,825 cf Inflow=17.57 cfs 1.249 af Discarded=0.52 cfs 0.395 af Primary=10.17 cfs 0.853 af Outflow=10.68 cfs 1.249 af
<b>Link 1L: runoff</b>	Inflow=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af

**Total Runoff Area = 5.321 ac Runoff Volume = 1.360 af Average Runoff Depth = 3.07"**  
**49.39% Pervious = 2.628 ac 50.61% Impervious = 2.693 ac**

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MSE 24-hr 3 25-Year Rainfall=4.51"

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**Summary for Subcatchment D1: north parking**

Runoff = 7.67 cfs @ 12.17 hrs, Volume= 0.491 af, Depth= 3.18"  
 Routed to Reach 1R : Swale

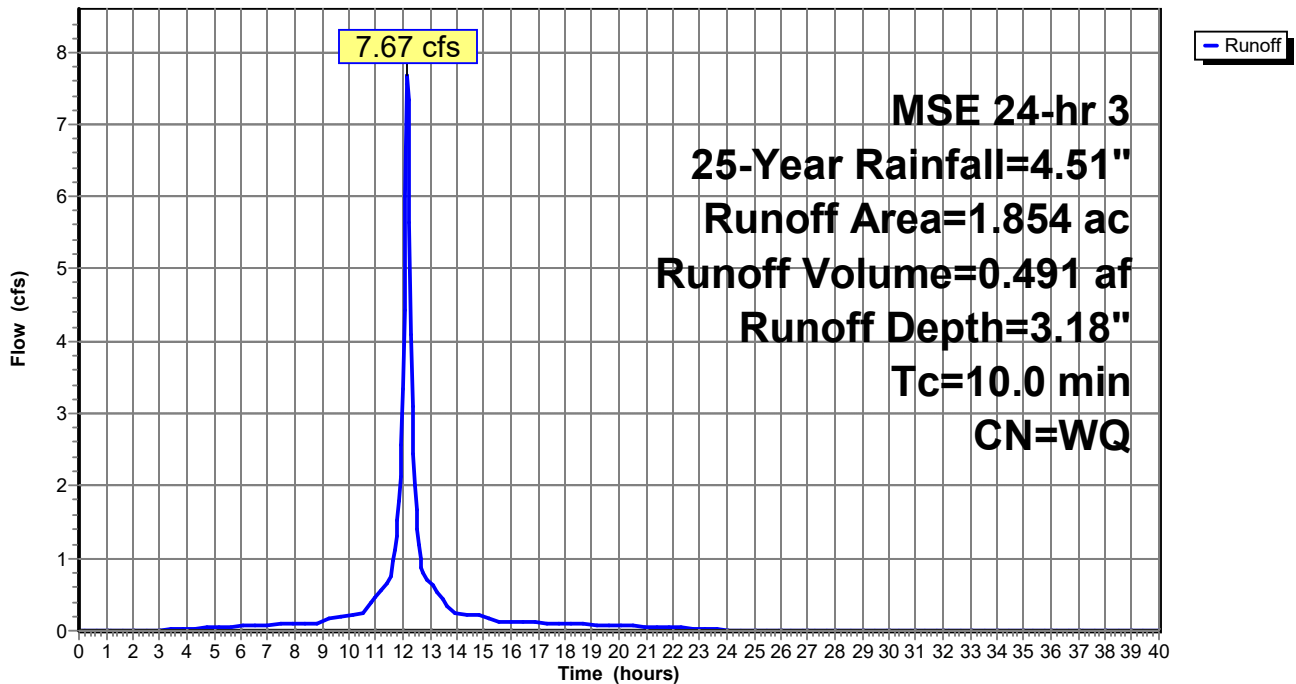
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 25-Year Rainfall=4.51"

Area (ac)	CN	Description
* 0.532	98	future parking
* 0.257	98	future building
0.488	39	>75% Grass cover, Good, HSG A
* 0.310	98	proposed parking
* 0.257	98	proposed building
* 0.005	98	stoop
* 0.005	98	future stoop
1.854		Weighted Average
0.488		26.32% Pervious Area
1.366		73.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, minimum

**Subcatchment D1: north parking**

Hydrograph



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MSE 24-hr 3 25-Year Rainfall=4.51"

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**Summary for Subcatchment D2: west side ls bld**

Runoff = 8.21 cfs @ 12.17 hrs, Volume= 0.517 af, Depth= 3.32"  
 Routed to Reach 2R : Swale

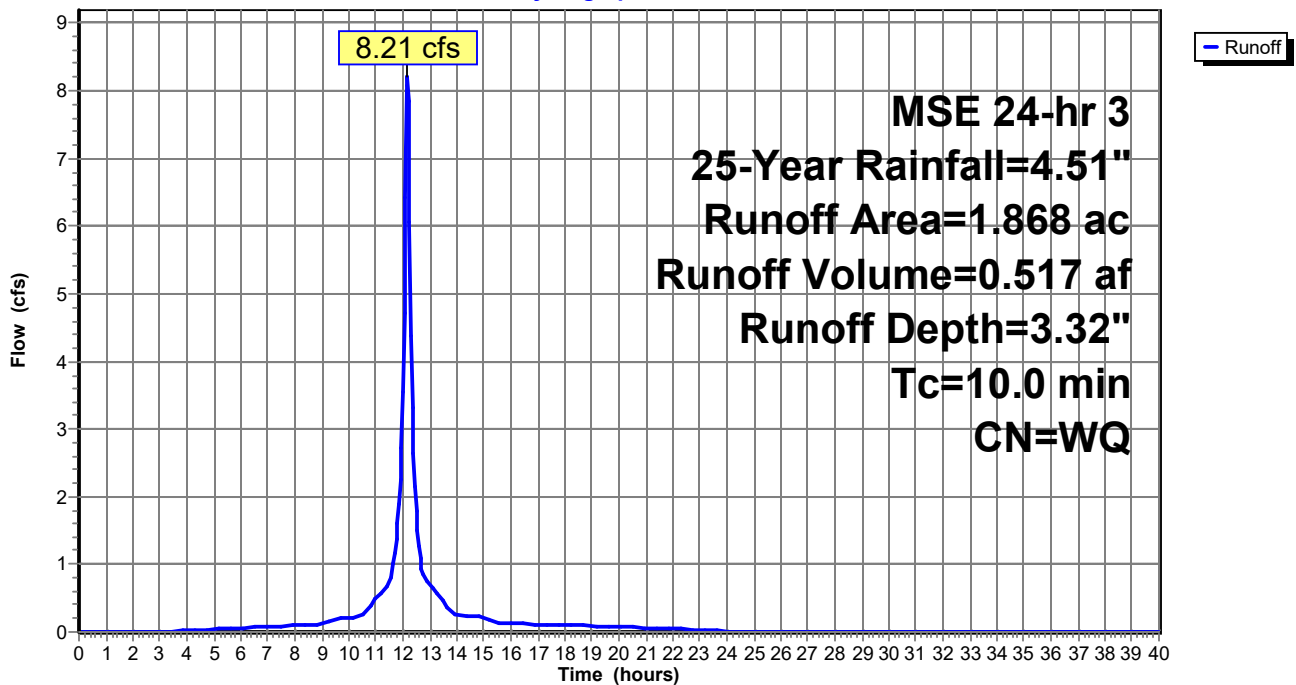
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 25-Year Rainfall=4.51"

Area (ac)	CN	Description
* 0.297	98	parking lot
* 0.576	96	gravel park
* 0.321	98	prop building
* 0.005	98	future sw
* 0.005	98	prop sidewalk
* 0.257	98	future bld
0.396	39	>75% Grass cover, Good, HSG A
* 0.011	98	basin
1.868		Weighted Average
0.972		52.03% Pervious Area
0.896		47.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D2: west side ls bld**

Hydrograph



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MSE 24-hr 3 25-Year Rainfall=4.51"

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**Summary for Subcatchment D3: east side ls bld**

Runoff = 3.87 cfs @ 12.17 hrs, Volume= 0.241 af, Depth= 2.97"  
 Routed to Reach 3R : Swale

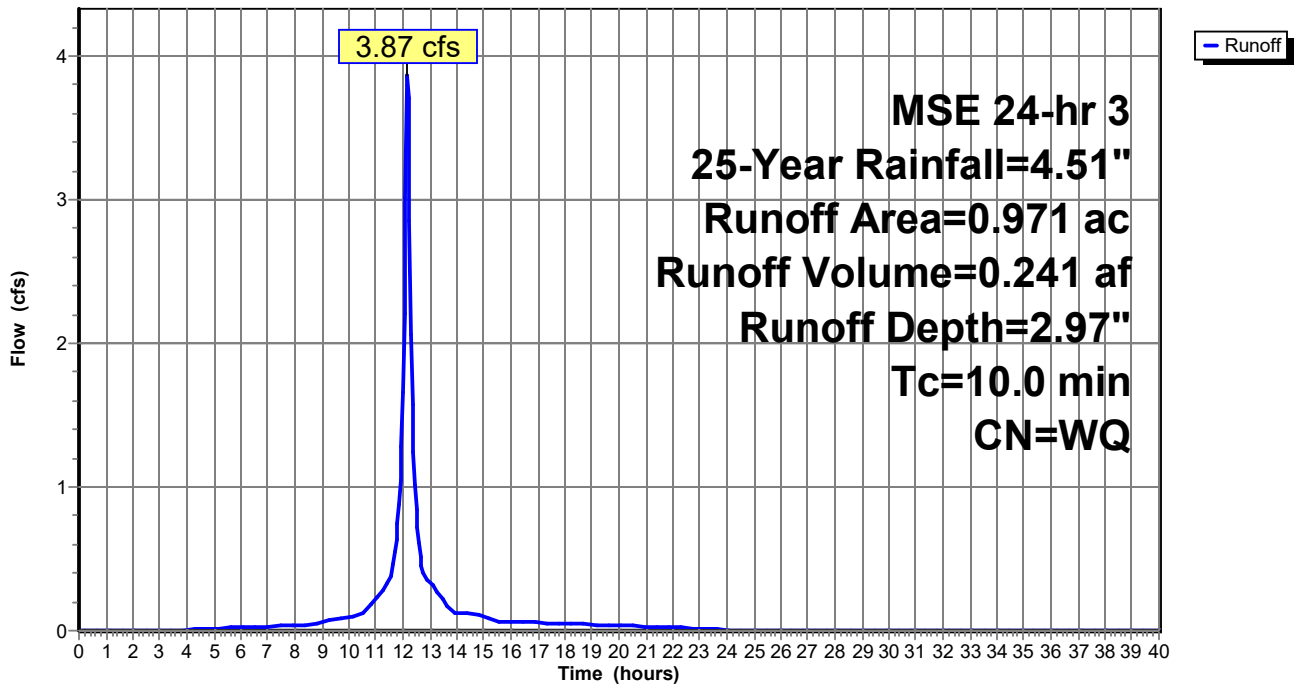
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 25-Year Rainfall=4.51"

Area (ac)	CN	Description
* 0.035	98	prop parking
* 0.572	96	prop gravel
* 0.064	98	prop building
* 0.028	98	basin
0.272	39	>75% Grass cover, Good, HSG A
0.971		Weighted Average
0.844		86.92% Pervious Area
0.127		13.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D3: east side ls bld**

Hydrograph



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MSE 24-hr 3 25-Year Rainfall=4.51"

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**Summary for Subcatchment D4: roadway**

Runoff = 1.71 cfs @ 12.17 hrs, Volume= 0.111 af, Depth= 2.13"  
 Routed to Pond 1P : south basin

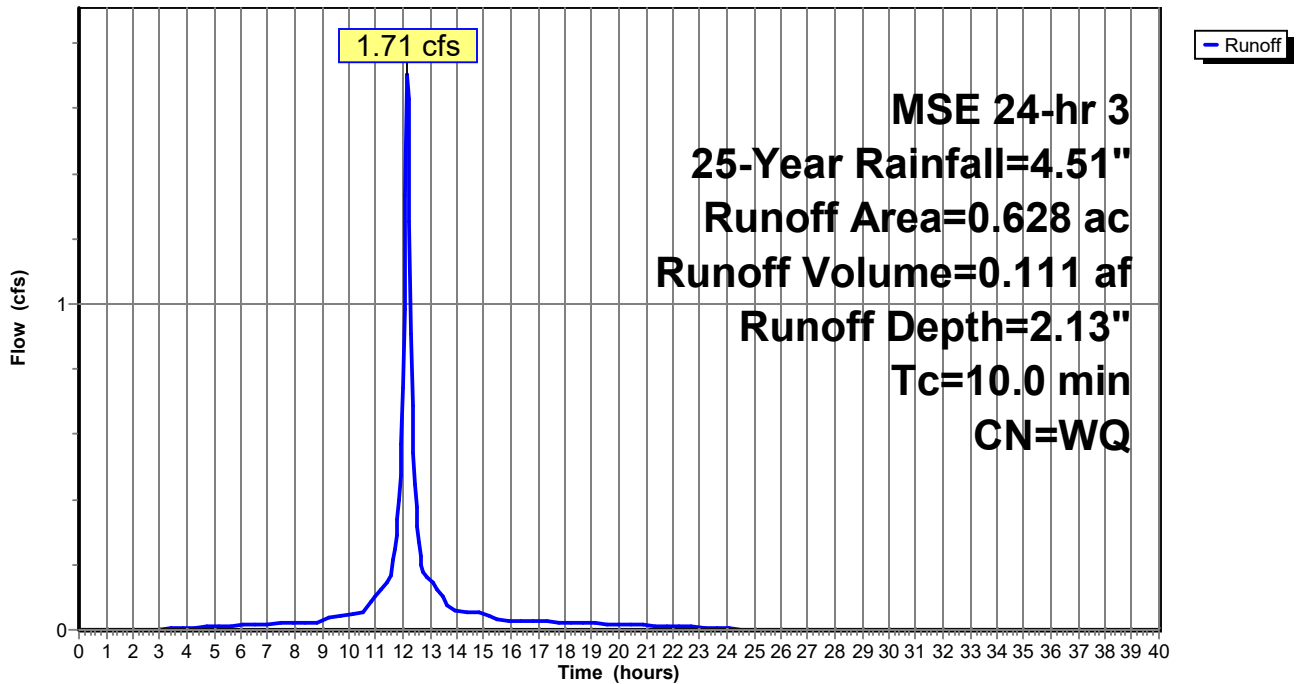
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 25-Year Rainfall=4.51"

Area (ac)	CN	Description
* 0.232	98	pavement
0.324	39	>75% Grass cover, Good, HSG A
* 0.072	98	basin
0.628		Weighted Average
0.324		51.59% Pervious Area
0.304		48.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D4: roadway**

Hydrograph



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MSE 24-hr 3 25-Year Rainfall=4.51"

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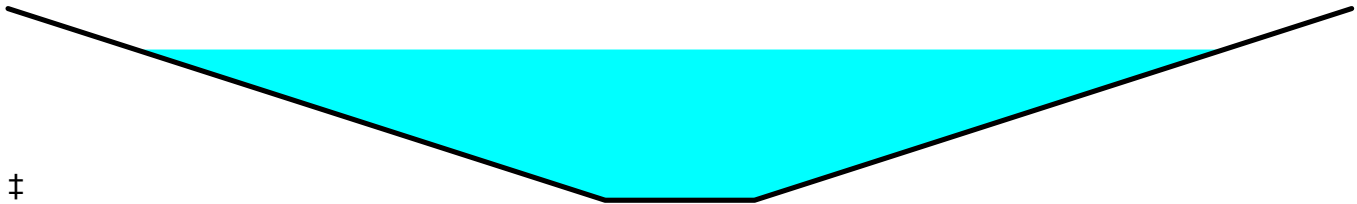
**Summary for Reach 1R: Swale**

Inflow Area = 1.854 ac, 73.68% Impervious, Inflow Depth = 3.18" for 25-Year event  
 Inflow = 7.67 cfs @ 12.17 hrs, Volume= 0.491 af  
 Outflow = 6.55 cfs @ 12.23 hrs, Volume= 0.491 af, Atten= 15%, Lag= 3.5 min  
 Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 2.00 fps, Min. Travel Time= 5.7 min  
 Avg. Velocity = 0.56 fps, Avg. Travel Time= 20.5 min

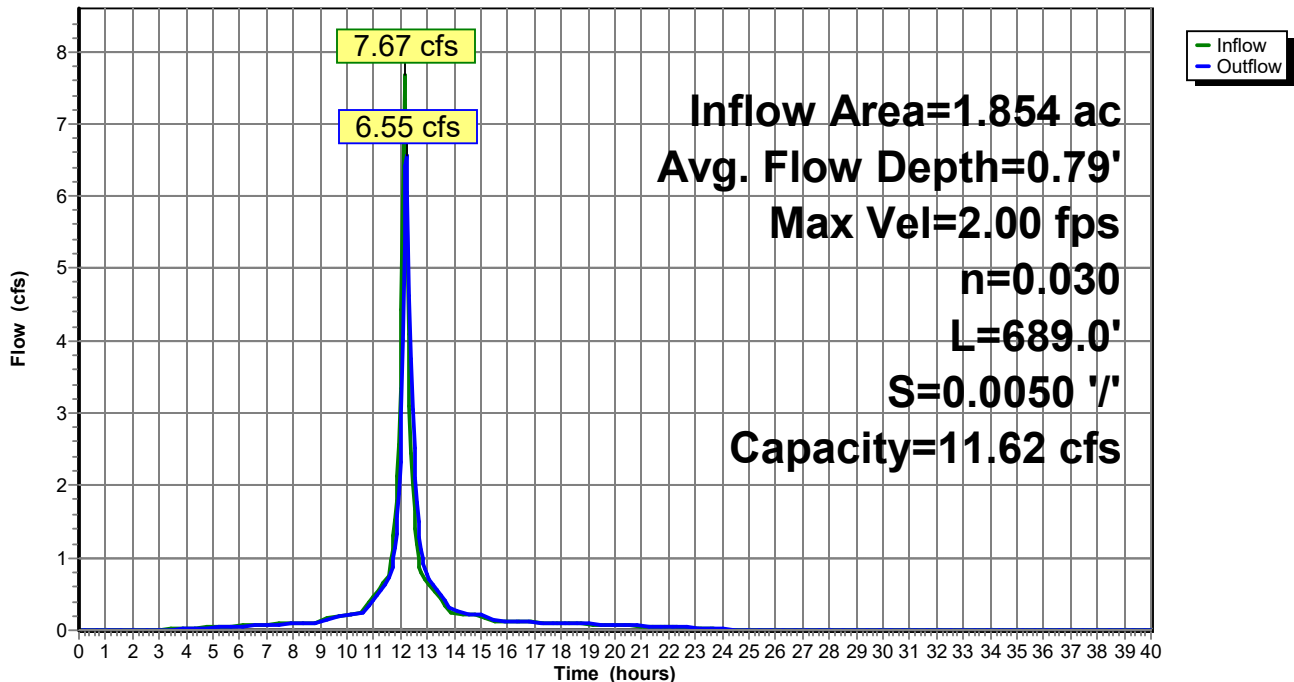
Peak Storage= 2,245 cf @ 12.23 hrs  
 Average Depth at Peak Storage= 0.79' , Surface Width= 7.29'  
 Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 11.62 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding  
 Side Slope Z-value= 4.0 '/' Top Width= 9.00'  
 Length= 689.0' Slope= 0.0050 '/'  
 Inlet Invert= 1,171.94', Outlet Invert= 1,168.50'



**Reach 1R: Swale**

**Hydrograph**



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MSE 24-hr 3 25-Year Rainfall=4.51"

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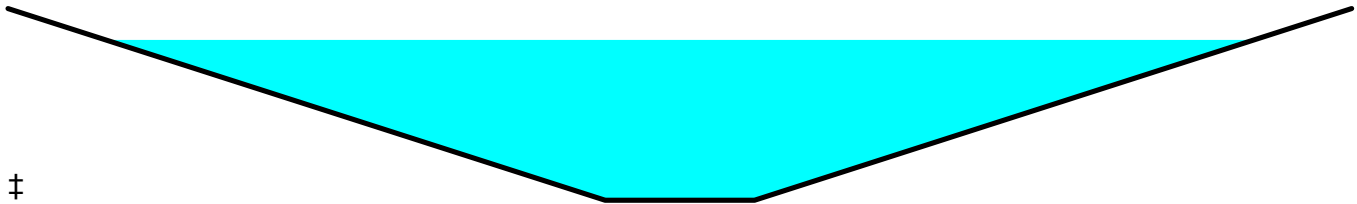
**Summary for Reach 2R: Swale**

Inflow Area = 1.868 ac, 47.97% Impervious, Inflow Depth = 3.32" for 25-Year event  
 Inflow = 8.21 cfs @ 12.17 hrs, Volume= 0.517 af  
 Outflow = 7.58 cfs @ 12.21 hrs, Volume= 0.517 af, Atten= 8%, Lag= 2.5 min  
 Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 2.08 fps, Min. Travel Time= 3.5 min  
 Avg. Velocity = 0.60 fps, Avg. Travel Time= 12.3 min

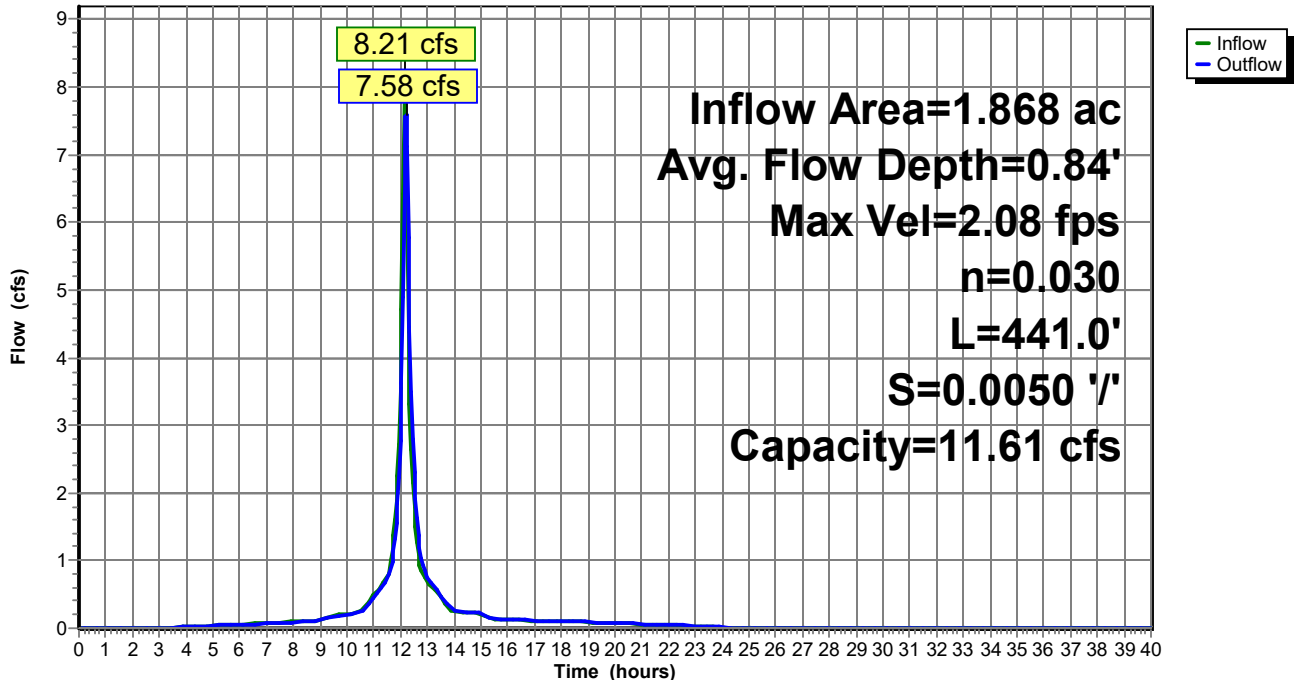
Peak Storage= 1,604 cf @ 12.21 hrs  
 Average Depth at Peak Storage= 0.84' , Surface Width= 7.69'  
 Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 11.61 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding  
 Side Slope Z-value= 4.0 ' / ' Top Width= 9.00'  
 Length= 441.0' Slope= 0.0050 ' / '  
 Inlet Invert= 1,171.78', Outlet Invert= 1,169.58'



**Reach 2R: Swale**

**Hydrograph**



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MSE 24-hr 3 25-Year Rainfall=4.51"

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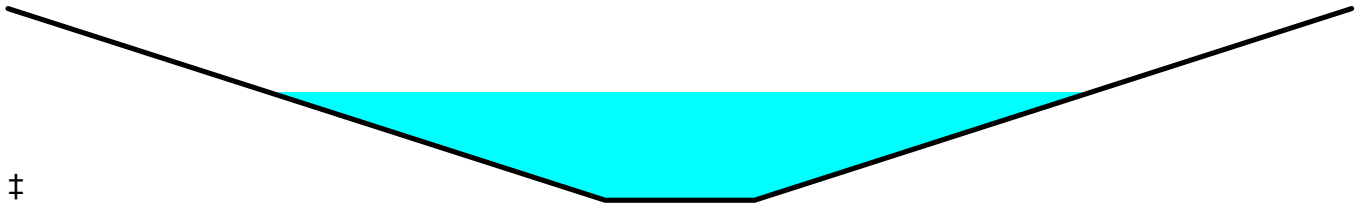
**Summary for Reach 3R: Swale**

Inflow Area = 0.971 ac, 13.08% Impervious, Inflow Depth = 2.97" for 25-Year event  
 Inflow = 3.87 cfs @ 12.17 hrs, Volume= 0.241 af  
 Outflow = 3.44 cfs @ 12.22 hrs, Volume= 0.241 af, Atten= 11%, Lag= 3.0 min  
 Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 1.86 fps, Min. Travel Time= 4.6 min  
 Avg. Velocity = 0.52 fps, Avg. Travel Time= 16.5 min

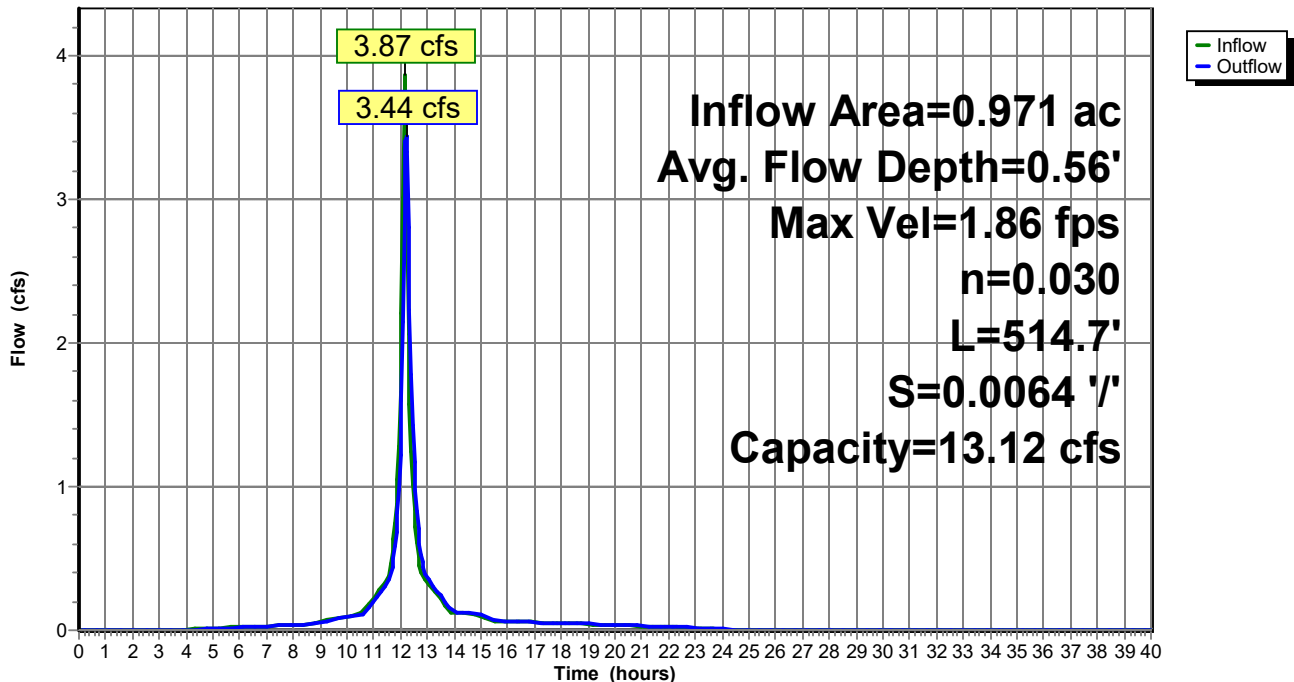
Peak Storage= 948 cf @ 12.22 hrs  
 Average Depth at Peak Storage= 0.56' , Surface Width= 5.52'  
 Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 13.12 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding  
 Side Slope Z-value= 4.0 '/' Top Width= 9.00'  
 Length= 514.7' Slope= 0.0064 '/'  
 Inlet Invert= 1,171.90', Outlet Invert= 1,168.62'



**Reach 3R: Swale**

Hydrograph



**25-0410 hydrocad 11-17-25**

MSE 24-hr 3 25-Year Rainfall=4.51"

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**Summary for Pond 1P: south basin**

Inflow Area = 5.321 ac, 50.61% Impervious, Inflow Depth = 2.18" for 25-Year event  
 Inflow = 10.91 cfs @ 12.33 hrs, Volume= 0.965 af  
 Outflow = 1.12 cfs @ 13.31 hrs, Volume= 0.965 af, Atten= 90%, Lag= 58.9 min  
 Discarded = 1.12 cfs @ 13.31 hrs, Volume= 0.965 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
 Routed to Link 1L : runoff

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Peak Elev= 1,170.13' @ 13.31 hrs Surf.Area= 13,417 sf Storage= 25,808 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)  
 Center-of-Mass det. time= 327.1 min ( 1,101.9 - 774.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,166.00'	44,780 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,166.00	3,150	0	0
1,167.00	4,350	3,750	3,750
1,168.00	5,700	5,025	8,775
1,169.00	7,130	6,415	15,190
1,170.00	11,025	9,078	24,268
1,171.00	30,000	20,513	44,780

Device	Routing	Invert	Outlet Devices
#1	Secondary	1,170.18'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
#2	Discarded	1,166.00'	<b>3.600 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=1.12 cfs @ 13.31 hrs HW=1,170.13' (Free Discharge)  
 ↑2=Exfiltration (Exfiltration Controls 1.12 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=1,166.00' TW=0.00' (Dynamic Tailwater)  
 ↑1=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

25-0410 hydrocad 11-17-25

MSE 24-hr 3 25-Year Rainfall=4.51"

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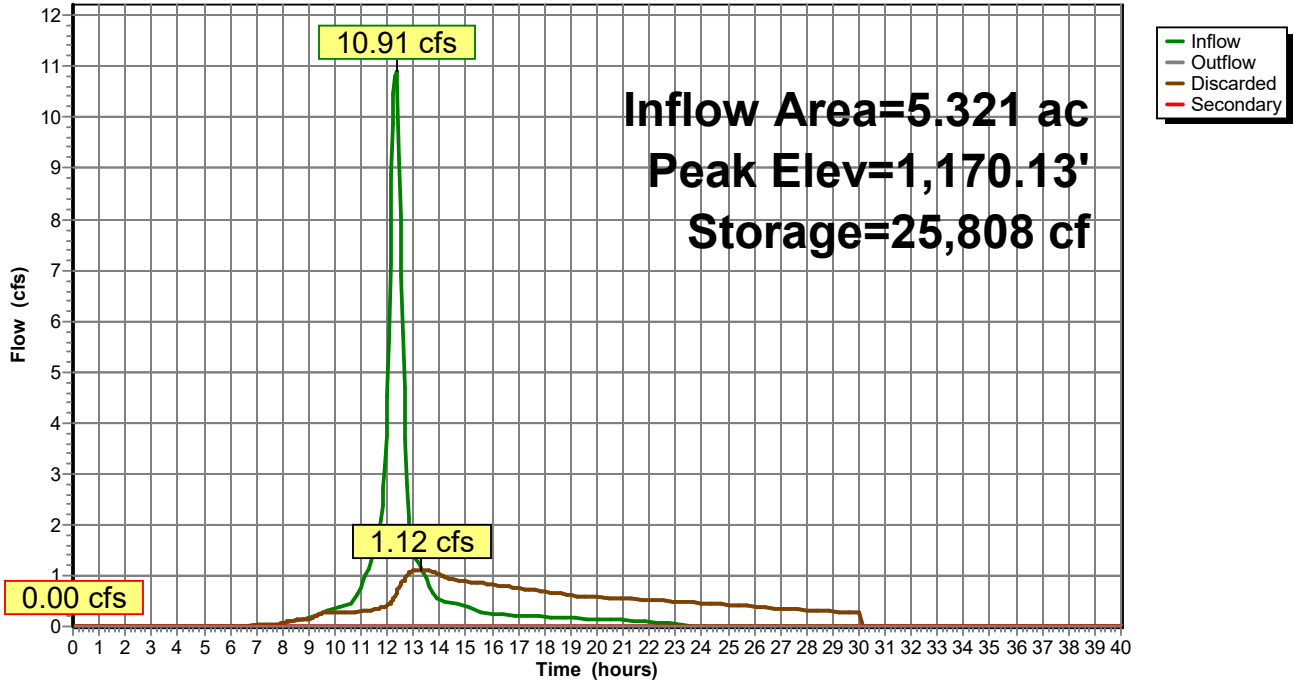
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### Pond 1P: south basin

Hydrograph



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MSE 24-hr 3 25-Year Rainfall=4.51"

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**Summary for Pond 2P: middle basin**

- [62] Hint: Exceeded Reach 1R OUTLET depth by 1.41' @ 13.80 hrs
- [64] Warning: Exceeded Reach 1R outlet bank by 0.97' @ 12.37 hrs
- [62] Hint: Exceeded Reach 2R OUTLET depth by 0.33' @ 13.80 hrs
- [62] Hint: Exceeded Reach 3R OUTLET depth by 1.42' @ 12.40 hrs
- [64] Warning: Exceeded Reach 3R outlet bank by 0.85' @ 12.37 hrs

Inflow Area = 4.693 ac, 50.91% Impervious, Inflow Depth = 3.19" for 25-Year event  
 Inflow = 17.57 cfs @ 12.22 hrs, Volume= 1.249 af  
 Outflow = 10.68 cfs @ 12.35 hrs, Volume= 1.249 af, Atten= 39%, Lag= 7.7 min  
 Discarded = 0.52 cfs @ 12.37 hrs, Volume= 0.395 af  
 Primary = 10.17 cfs @ 12.35 hrs, Volume= 0.853 af  
 Routed to Pond 1P : south basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Peak Elev= 1,170.47' @ 12.37 hrs Surf.Area= 6,207 sf Storage= 9,825 cf

Plug-Flow detention time= 65.0 min calculated for 1.247 af (100% of inflow)  
 Center-of-Mass det. time= 65.1 min ( 829.7 - 764.6 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,167.00'	27,600 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,167.00	480	0	0
1,168.00	1,120	800	800
1,169.00	3,210	2,165	2,965
1,170.00	5,130	4,170	7,135
1,171.00	7,400	6,265	13,400
1,172.00	21,000	14,200	27,600

Device	Routing	Invert	Outlet Devices
#1	Primary	1,168.00'	<b>18.0" Round Culvert</b> L= 66.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 1,168.00' / 1,167.67' S= 0.0050 '/ Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Discarded	1,167.00'	<b>3.600 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.52 cfs @ 12.37 hrs HW=1,170.47' (Free Discharge)  
 ↑**2=Exfiltration** (Exfiltration Controls 0.52 cfs)

**Primary OutFlow** Max=9.89 cfs @ 12.35 hrs HW=1,170.46' TW=1,169.11' (Dynamic Tailwater)  
 ↑**1=Culvert** (Inlet Controls 9.89 cfs @ 5.60 fps)

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MSE 24-hr 3 25-Year Rainfall=4.51"

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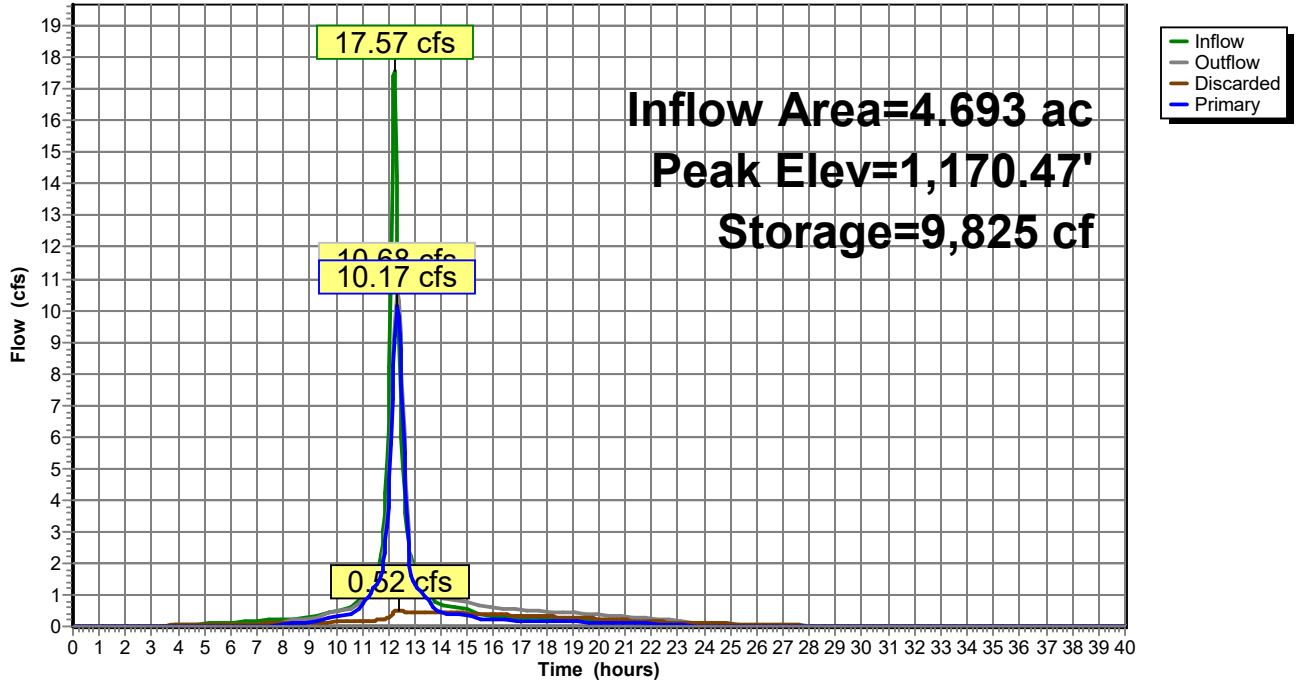
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### Pond 2P: middle basin

Hydrograph



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MSE 24-hr 3 25-Year Rainfall=4.51"

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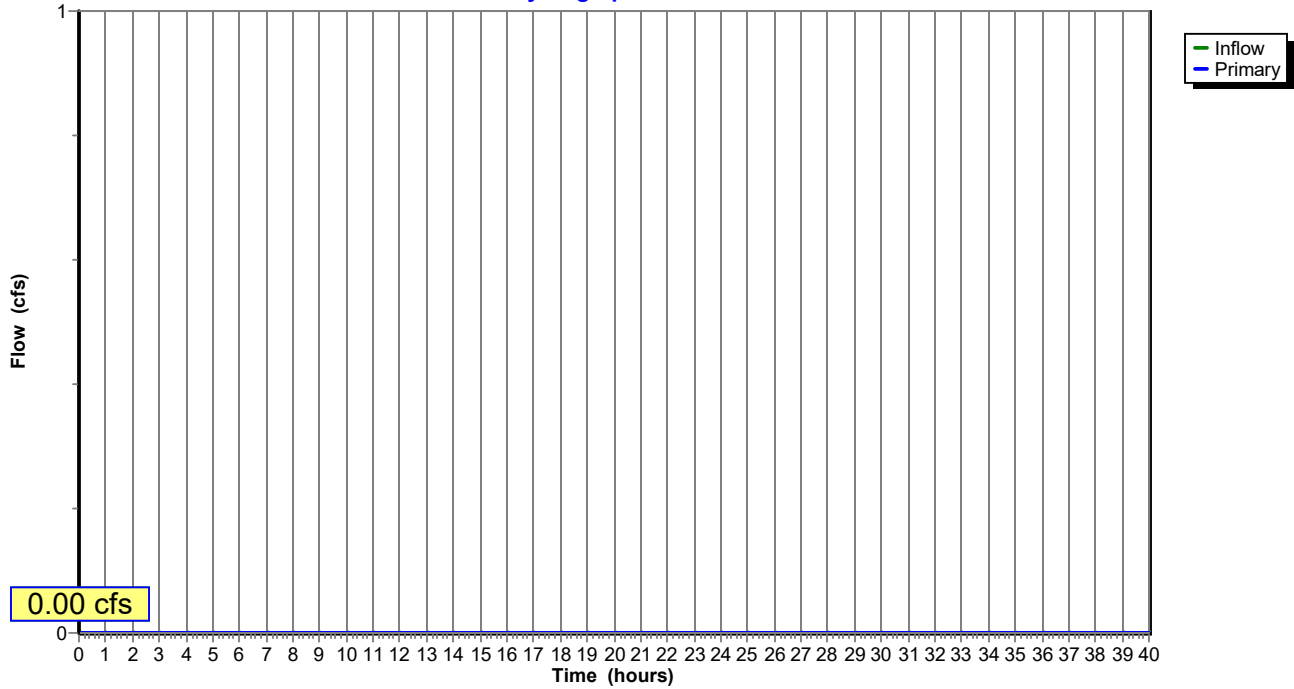
**Summary for Link 1L: runoff**

Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

**Link 1L: runoff**

Hydrograph



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MSE 24-hr 3 100-Year Rainfall=5.85"

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Time span=0.00-40.00 hrs, dt=0.05 hrs, 801 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-Q  
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

<b>Subcatchment D1: north parking</b>	Runoff Area=1.854 ac 73.68% Impervious Runoff Depth=4.24" Tc=10.0 min CN=WQ Runoff=10.03 cfs 0.655 af
<b>Subcatchment D2: west side ls bld</b>	Runoff Area=1.868 ac 47.97% Impervious Runoff Depth=4.44" Tc=10.0 min CN=WQ Runoff=10.74 cfs 0.690 af
<b>Subcatchment D3: east side ls bld</b>	Runoff Area=0.971 ac 13.08% Impervious Runoff Depth=4.02" Tc=10.0 min CN=WQ Runoff=5.09 cfs 0.325 af
<b>Subcatchment D4: roadway</b>	Runoff Area=0.628 ac 48.41% Impervious Runoff Depth=2.92" Tc=10.0 min CN=WQ Runoff=2.26 cfs 0.153 af
<b>Reach 1R: Swale</b>	Avg. Flow Depth=0.89' Max Vel=2.15 fps Inflow=10.03 cfs 0.655 af n=0.030 L=689.0' S=0.0050 '/' Capacity=11.62 cfs Outflow=8.71 cfs 0.655 af
<b>Reach 2R: Swale</b>	Avg. Flow Depth=0.94' Max Vel=2.24 fps Inflow=10.74 cfs 0.690 af n=0.030 L=441.0' S=0.0050 '/' Capacity=11.61 cfs Outflow=10.01 cfs 0.690 af
<b>Reach 3R: Swale</b>	Avg. Flow Depth=0.64' Max Vel=2.01 fps Inflow=5.09 cfs 0.325 af n=0.030 L=514.7' S=0.0064 '/' Capacity=13.12 cfs Outflow=4.58 cfs 0.325 af
<b>Pond 1P: south basin</b>	Peak Elev=1,170.38' Storage=29,767 cf Inflow=12.85 cfs 1.366 af Discarded=1.51 cfs 1.139 af Secondary=4.08 cfs 0.228 af Outflow=5.60 cfs 1.367 af
<b>Pond 2P: middle basin</b>	Peak Elev=1,171.13' Storage=14,462 cf Inflow=23.27 cfs 1.671 af Discarded=0.76 cfs 0.457 af Primary=11.26 cfs 1.213 af Outflow=11.84 cfs 1.671 af
<b>Link 1L: runoff</b>	Inflow=4.08 cfs 0.228 af Primary=4.08 cfs 0.228 af

**Total Runoff Area = 5.321 ac Runoff Volume = 1.824 af Average Runoff Depth = 4.11"**  
**49.39% Pervious = 2.628 ac 50.61% Impervious = 2.693 ac**

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MSE 24-hr 3 100-Year Rainfall=5.85"

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**Summary for Subcatchment D1: north parking**

Runoff = 10.03 cfs @ 12.17 hrs, Volume= 0.655 af, Depth= 4.24"  
 Routed to Reach 1R : Swale

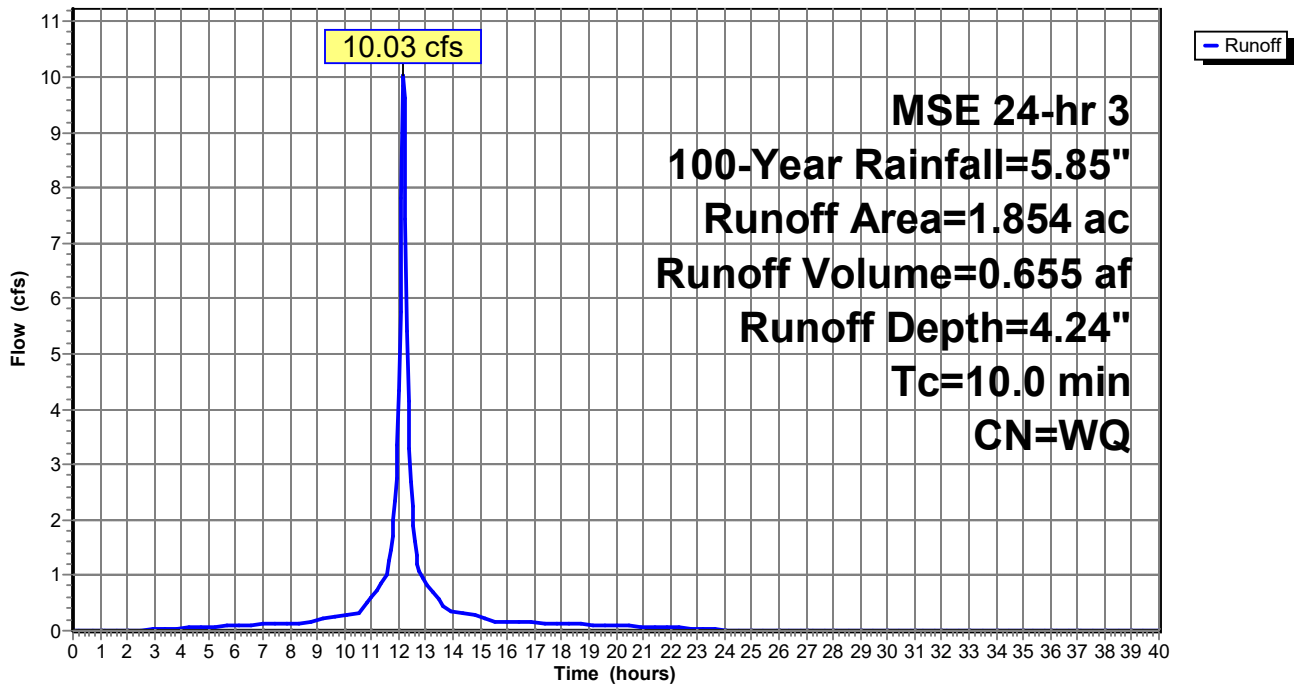
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 100-Year Rainfall=5.85"

Area (ac)	CN	Description
* 0.532	98	future parking
* 0.257	98	future building
0.488	39	>75% Grass cover, Good, HSG A
* 0.310	98	proposed parking
* 0.257	98	proposed building
* 0.005	98	stoop
* 0.005	98	future stoop
1.854		Weighted Average
0.488		26.32% Pervious Area
1.366		73.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, minimum

**Subcatchment D1: north parking**

Hydrograph



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**Summary for Subcatchment D2: west side ls bld**

Runoff = 10.74 cfs @ 12.17 hrs, Volume= 0.690 af, Depth= 4.44"  
 Routed to Reach 2R : Swale

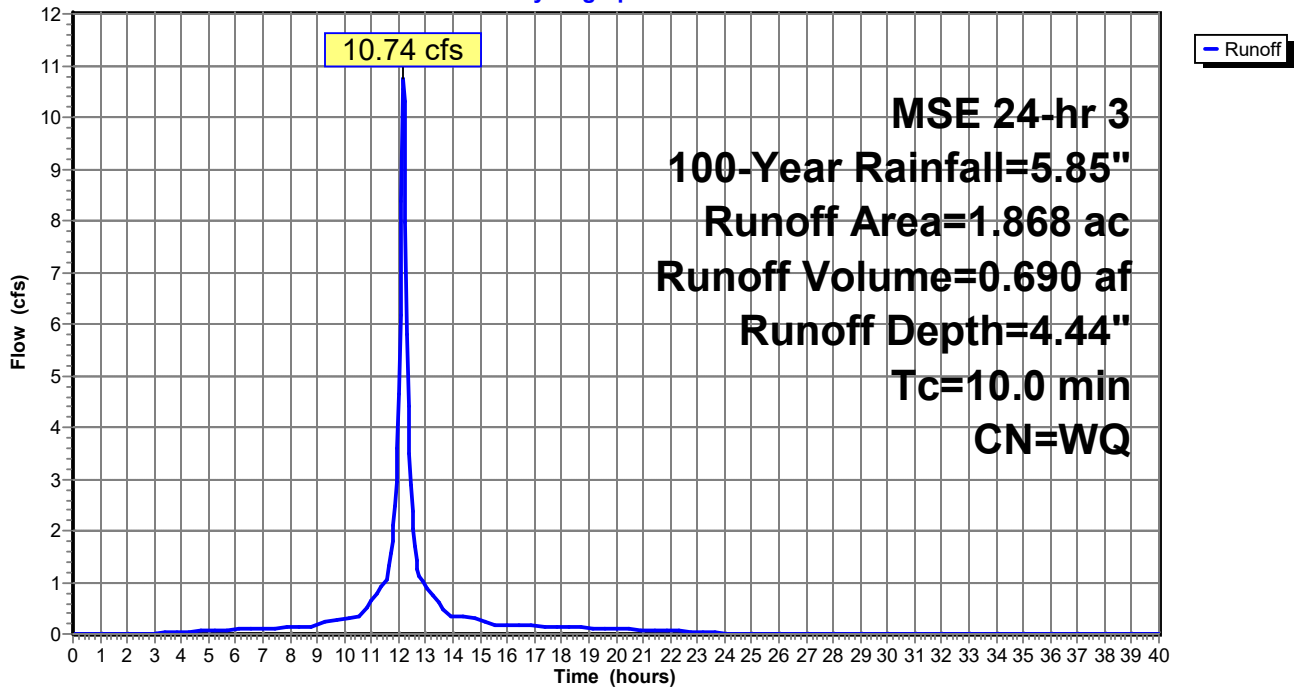
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 100-Year Rainfall=5.85"

Area (ac)	CN	Description
* 0.297	98	parking lot
* 0.576	96	gravel park
* 0.321	98	prop building
* 0.005	98	future sw
* 0.005	98	prop sidewalk
* 0.257	98	future bld
0.396	39	>75% Grass cover, Good, HSG A
* 0.011	98	basin
1.868		Weighted Average
0.972		52.03% Pervious Area
0.896		47.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D2: west side ls bld**

Hydrograph



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**Summary for Subcatchment D3: east side ls bld**

Runoff = 5.09 cfs @ 12.17 hrs, Volume= 0.325 af, Depth= 4.02"  
 Routed to Reach 3R : Swale

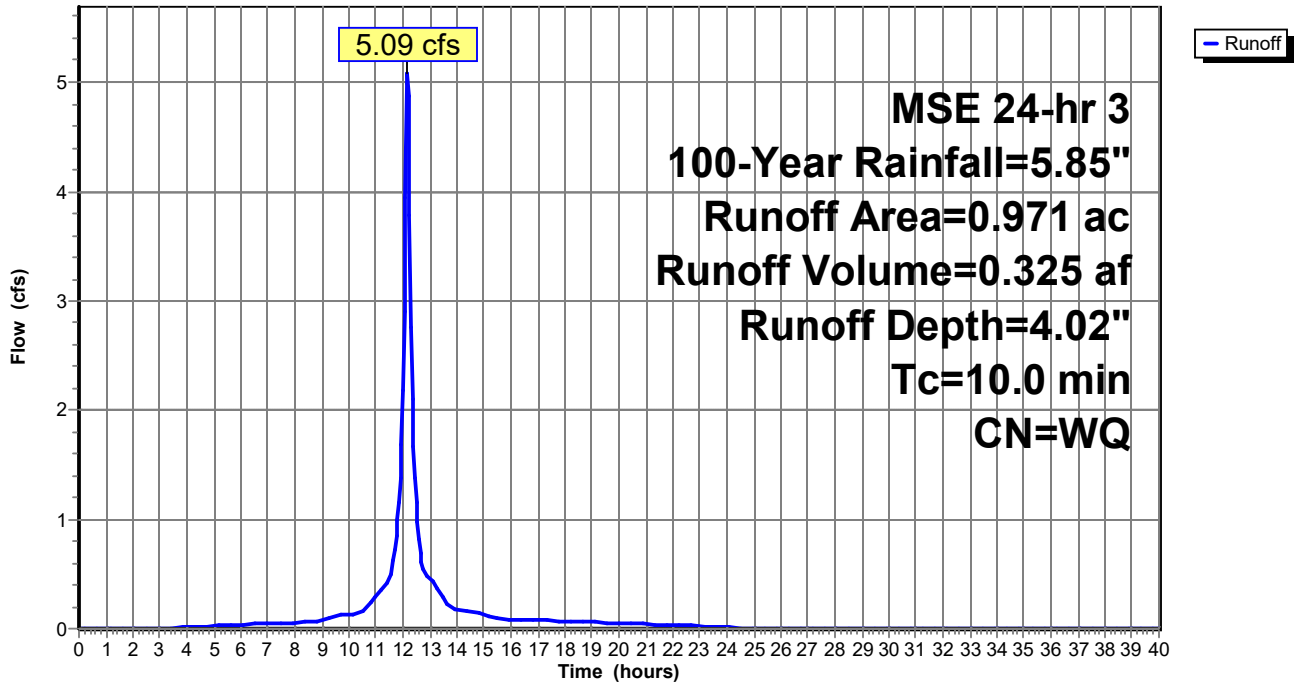
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 100-Year Rainfall=5.85"

Area (ac)	CN	Description
* 0.035	98	prop parking
* 0.572	96	prop gravel
* 0.064	98	prop building
* 0.028	98	basin
0.272	39	>75% Grass cover, Good, HSG A
0.971		Weighted Average
0.844		86.92% Pervious Area
0.127		13.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D3: east side ls bld**

Hydrograph



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**Summary for Subcatchment D4: roadway**

Runoff = 2.26 cfs @ 12.17 hrs, Volume= 0.153 af, Depth= 2.92"  
 Routed to Pond 1P : south basin

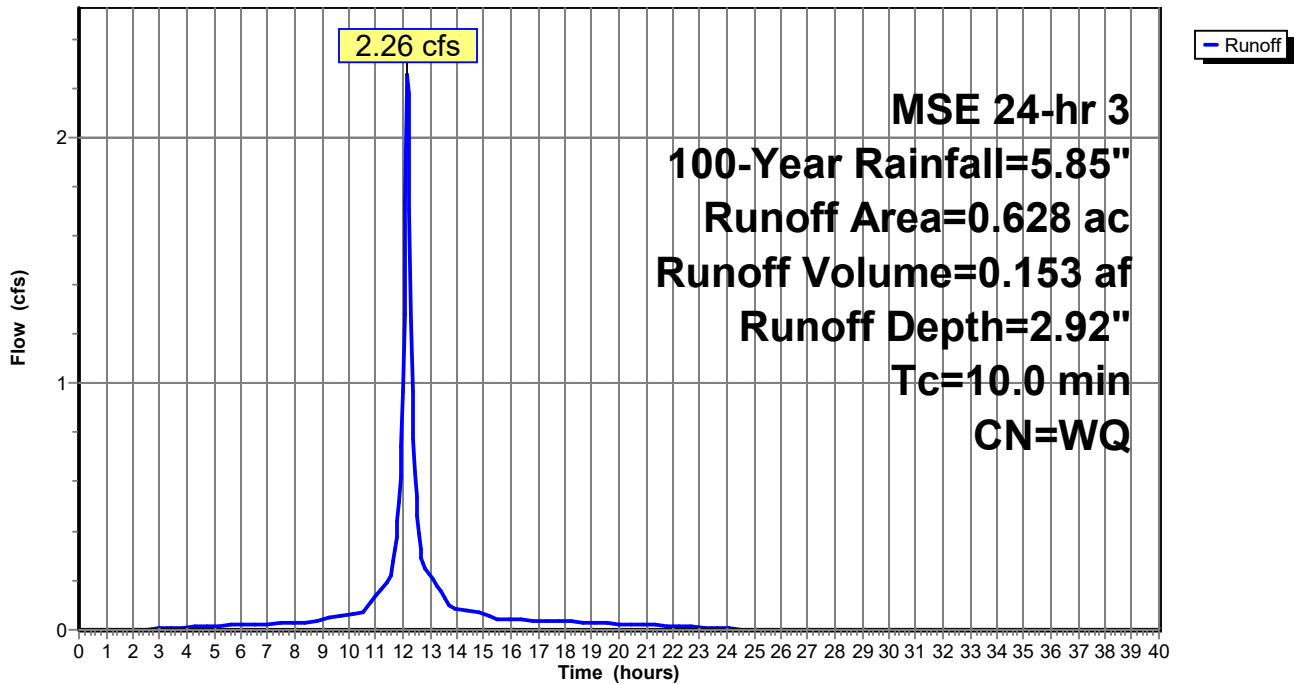
Runoff by SCS TR-20 method, UH=SCS, Weighted-Q, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 MSE 24-hr 3 100-Year Rainfall=5.85"

Area (ac)	CN	Description
* 0.232	98	pavement
0.324	39	>75% Grass cover, Good, HSG A
* 0.072	98	basin
0.628		Weighted Average
0.324		51.59% Pervious Area
0.304		48.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry, min

**Subcatchment D4: roadway**

Hydrograph



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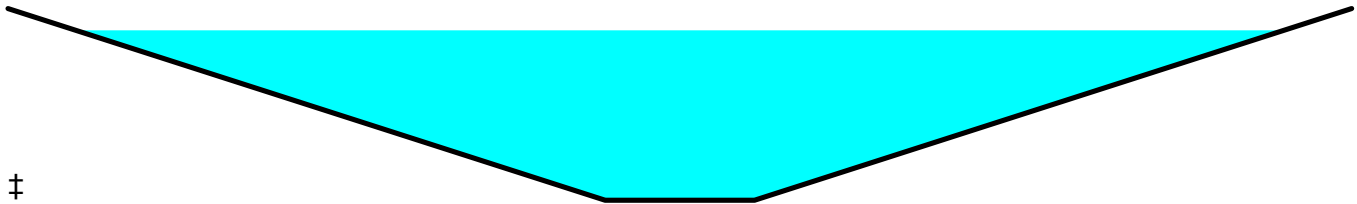
**Summary for Reach 1R: Swale**

Inflow Area = 1.854 ac, 73.68% Impervious, Inflow Depth = 4.24" for 100-Year event  
 Inflow = 10.03 cfs @ 12.17 hrs, Volume= 0.655 af  
 Outflow = 8.71 cfs @ 12.22 hrs, Volume= 0.655 af, Atten= 13%, Lag= 3.3 min  
 Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 2.15 fps, Min. Travel Time= 5.3 min  
 Avg. Velocity = 0.61 fps, Avg. Travel Time= 18.9 min

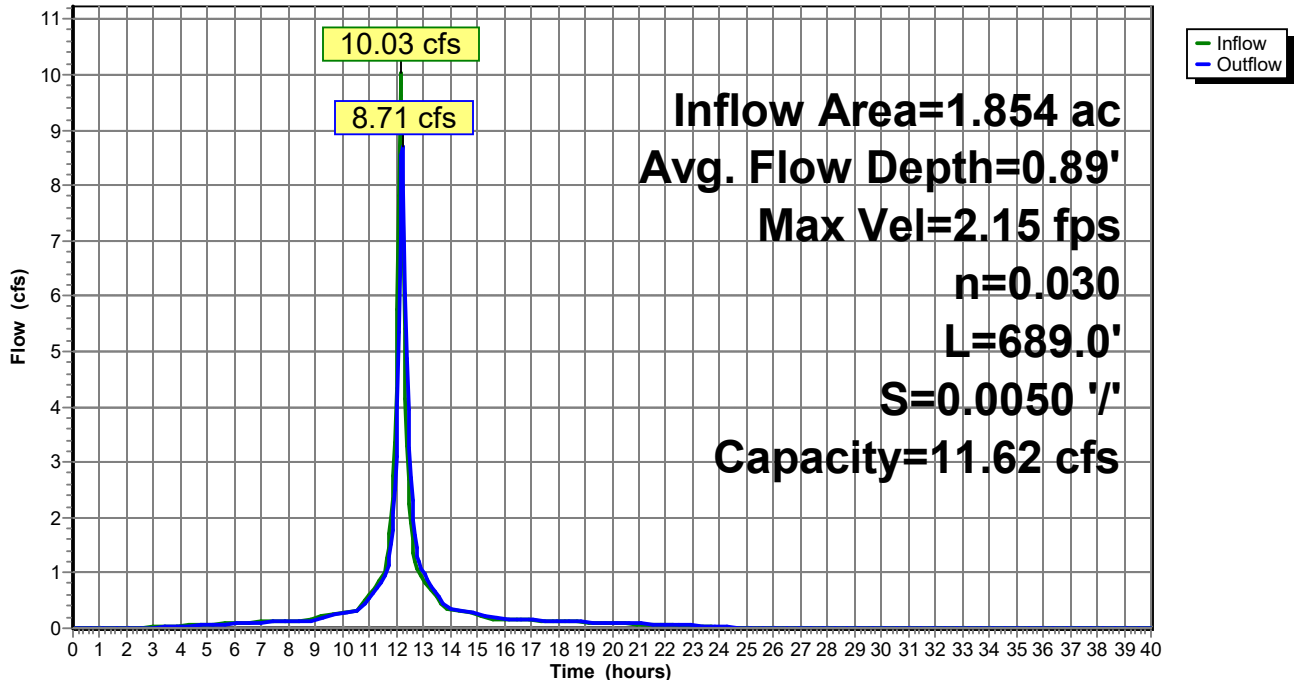
Peak Storage= 2,780 cf @ 12.22 hrs  
 Average Depth at Peak Storage= 0.89' , Surface Width= 8.10'  
 Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 11.62 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding  
 Side Slope Z-value= 4.0 '/' Top Width= 9.00'  
 Length= 689.0' Slope= 0.0050 '/'  
 Inlet Invert= 1,171.94', Outlet Invert= 1,168.50'



**Reach 1R: Swale**

**Hydrograph**



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MSE 24-hr 3 100-Year Rainfall=5.85"

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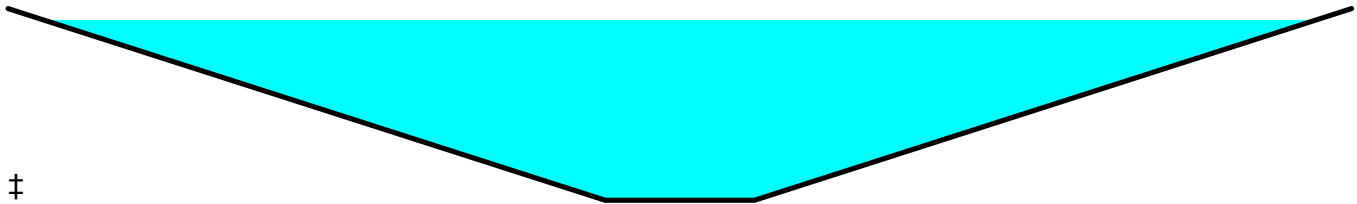
**Summary for Reach 2R: Swale**

Inflow Area = 1.868 ac, 47.97% Impervious, Inflow Depth = 4.44" for 100-Year event  
 Inflow = 10.74 cfs @ 12.17 hrs, Volume= 0.690 af  
 Outflow = 10.01 cfs @ 12.21 hrs, Volume= 0.690 af, Atten= 7%, Lag= 2.3 min  
 Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 2.24 fps, Min. Travel Time= 3.3 min  
 Avg. Velocity = 0.65 fps, Avg. Travel Time= 11.3 min

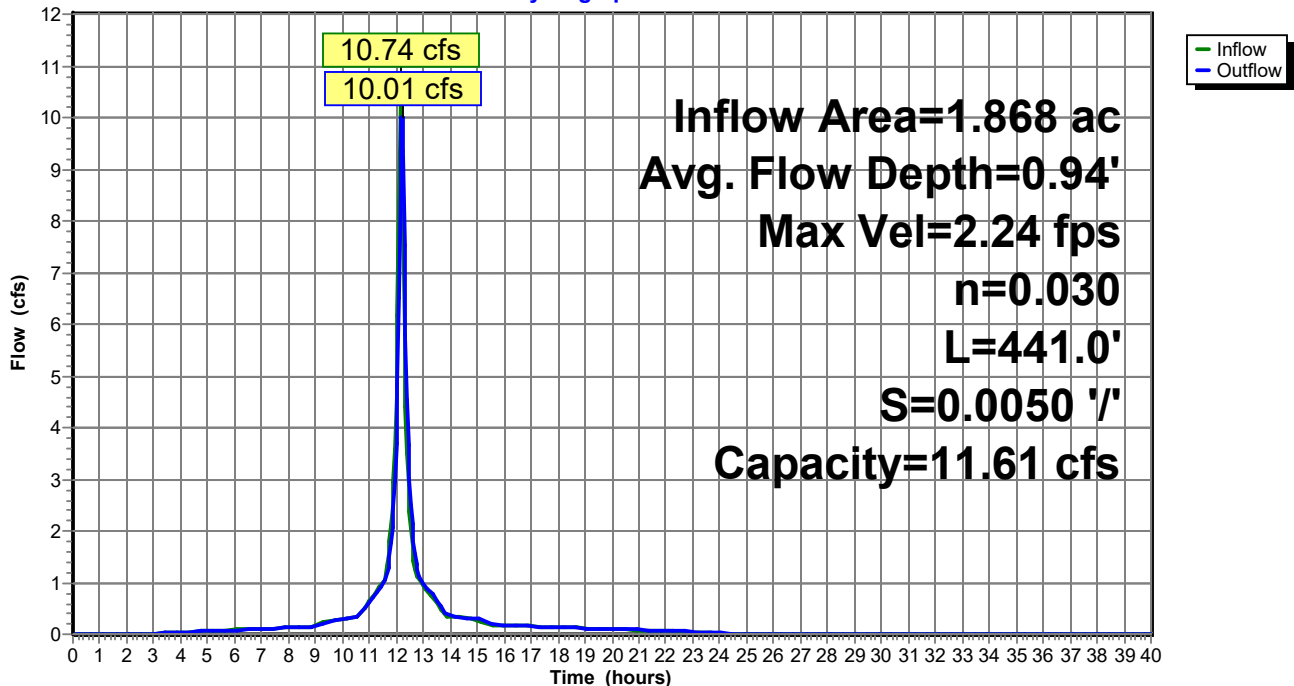
Peak Storage= 1,974 cf @ 12.21 hrs  
 Average Depth at Peak Storage= 0.94' , Surface Width= 8.52'  
 Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 11.61 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding  
 Side Slope Z-value= 4.0 '/' Top Width= 9.00'  
 Length= 441.0' Slope= 0.0050 '/'  
 Inlet Invert= 1,171.78', Outlet Invert= 1,169.58'



**Reach 2R: Swale**

Hydrograph



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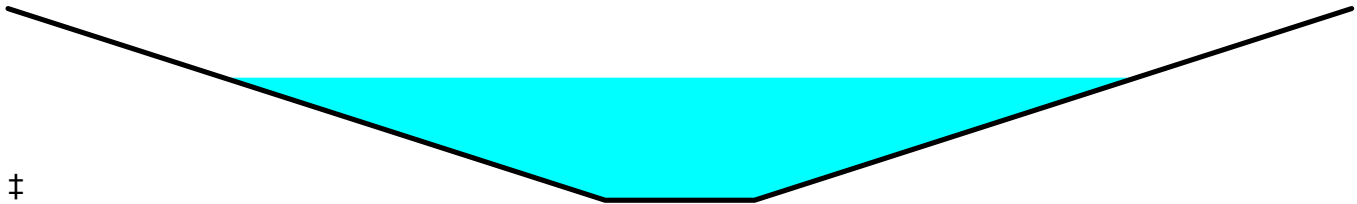
**Summary for Reach 3R: Swale**

Inflow Area = 0.971 ac, 13.08% Impervious, Inflow Depth = 4.02" for 100-Year event  
 Inflow = 5.09 cfs @ 12.17 hrs, Volume= 0.325 af  
 Outflow = 4.58 cfs @ 12.22 hrs, Volume= 0.325 af, Atten= 10%, Lag= 2.8 min  
 Routed to Pond 2P : middle basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Max. Velocity= 2.01 fps, Min. Travel Time= 4.3 min  
 Avg. Velocity = 0.57 fps, Avg. Travel Time= 15.1 min

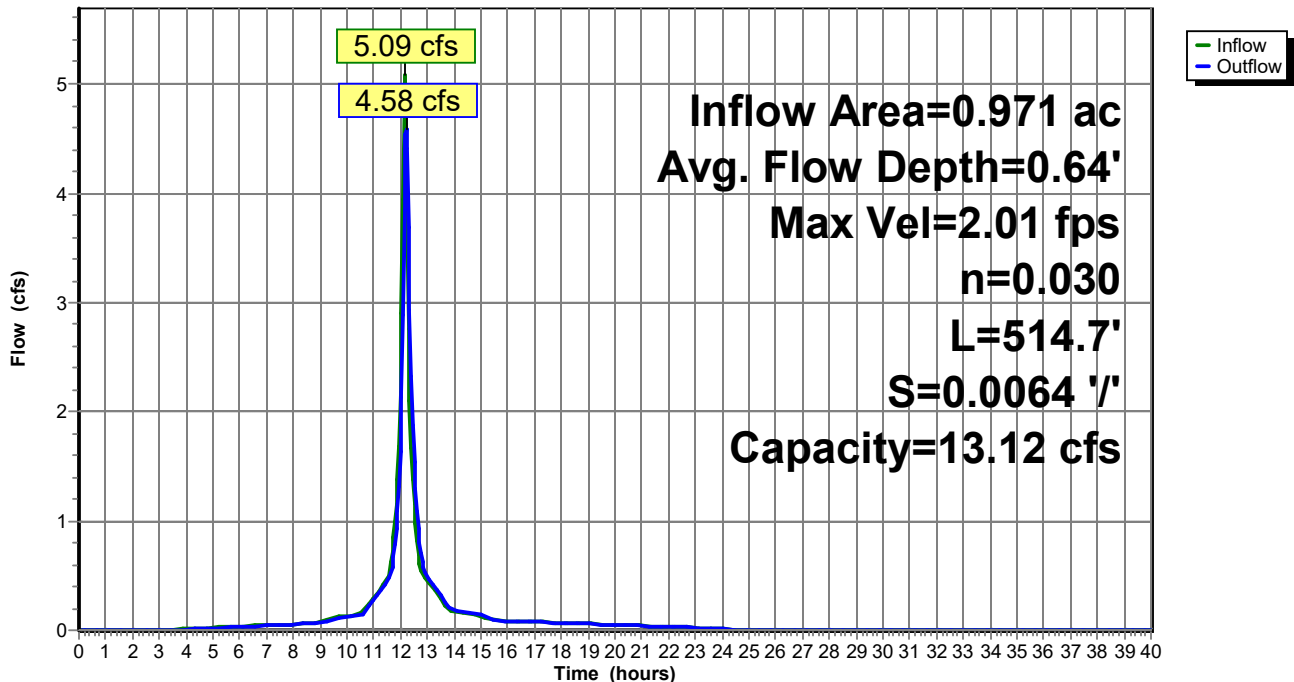
Peak Storage= 1,173 cf @ 12.22 hrs  
 Average Depth at Peak Storage= 0.64' , Surface Width= 6.12'  
 Bank-Full Depth= 1.00' Flow Area= 5.0 sf, Capacity= 13.12 cfs

1.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding  
 Side Slope Z-value= 4.0 '/' Top Width= 9.00'  
 Length= 514.7' Slope= 0.0064 '/'  
 Inlet Invert= 1,171.90', Outlet Invert= 1,168.62'



**Reach 3R: Swale**

Hydrograph



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**Summary for Pond 1P: south basin**

Inflow Area = 5.321 ac, 50.61% Impervious, Inflow Depth = 3.08" for 100-Year event  
 Inflow = 12.85 cfs @ 12.25 hrs, Volume= 1.366 af  
 Outflow = 5.60 cfs @ 12.79 hrs, Volume= 1.367 af, Atten= 56%, Lag= 31.9 min  
 Discarded = 1.51 cfs @ 12.79 hrs, Volume= 1.139 af  
 Secondary = 4.08 cfs @ 12.79 hrs, Volume= 0.228 af  
 Routed to Link 1L : runoff

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Peak Elev= 1,170.38' @ 12.79 hrs Surf.Area= 18,172 sf Storage= 29,767 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)  
 Center-of-Mass det. time= 268.3 min ( 1,042.4 - 774.1 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,166.00'	44,780 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,166.00	3,150	0	0
1,167.00	4,350	3,750	3,750
1,168.00	5,700	5,025	8,775
1,169.00	7,130	6,415	15,190
1,170.00	11,025	9,078	24,268
1,171.00	30,000	20,513	44,780

Device	Routing	Invert	Outlet Devices
#1	Secondary	1,170.18'	<b>20.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
#2	Discarded	1,166.00'	<b>3.600 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=1.51 cfs @ 12.79 hrs HW=1,170.38' (Free Discharge)  
 ↑2=Exfiltration (Exfiltration Controls 1.51 cfs)

**Secondary OutFlow** Max=4.07 cfs @ 12.79 hrs HW=1,170.38' TW=0.00' (Dynamic Tailwater)  
 ↑1=Broad-Crested Rectangular Weir (Weir Controls 4.07 cfs @ 1.04 fps)

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MSE 24-hr 3 100-Year Rainfall=5.85"

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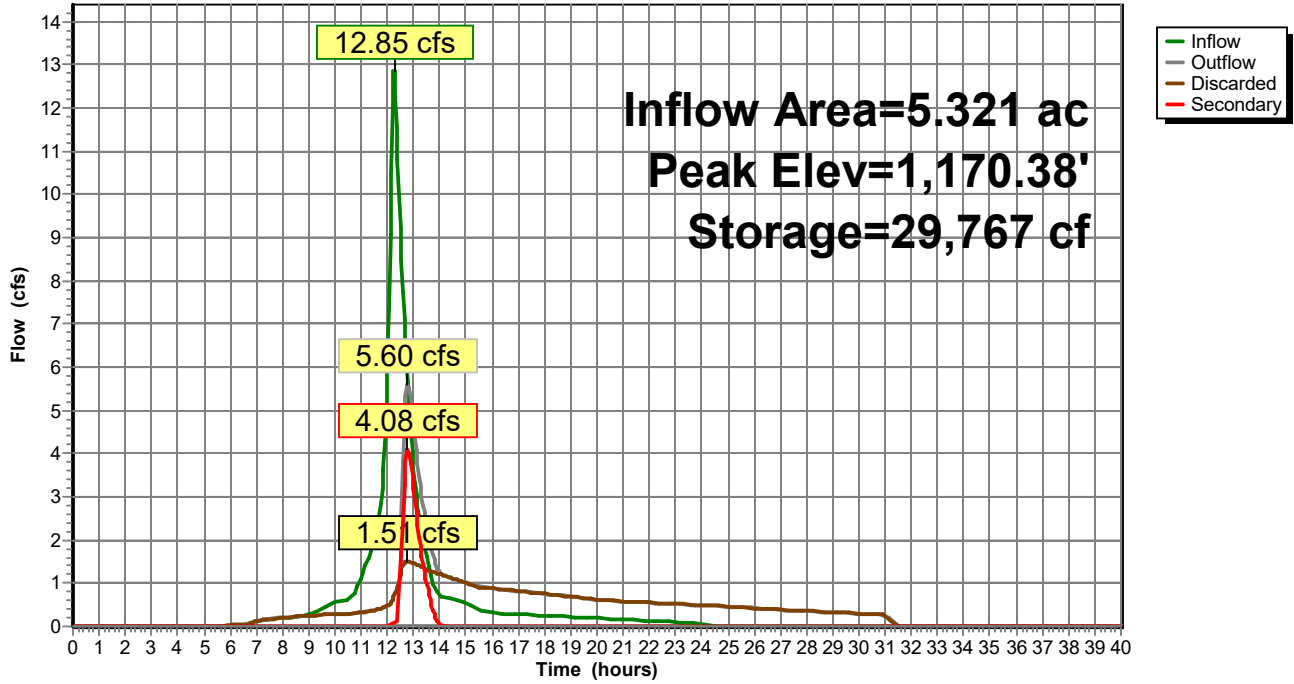
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### Pond 1P: south basin

Hydrograph



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**Summary for Pond 2P: middle basin**

- [62] Hint: Exceeded Reach 1R OUTLET depth by 2.03' @ 12.55 hrs
- [64] Warning: Exceeded Reach 1R outlet bank by 1.63' @ 12.43 hrs
- [62] Hint: Exceeded Reach 2R OUTLET depth by 0.97' @ 12.55 hrs
- [64] Warning: Exceeded Reach 2R outlet bank by 0.55' @ 12.43 hrs
- [62] Hint: Exceeded Reach 3R OUTLET depth by 2.09' @ 12.50 hrs
- [64] Warning: Exceeded Reach 3R outlet bank by 1.51' @ 12.43 hrs

Inflow Area = 4.693 ac, 50.91% Impervious, Inflow Depth = 4.27" for 100-Year event  
 Inflow = 23.27 cfs @ 12.22 hrs, Volume= 1.671 af  
 Outflow = 11.84 cfs @ 12.27 hrs, Volume= 1.671 af, Atten= 49%, Lag= 3.4 min  
 Discarded = 0.76 cfs @ 12.43 hrs, Volume= 0.457 af  
 Primary = 11.26 cfs @ 12.27 hrs, Volume= 1.213 af  
 Routed to Pond 1P : south basin

Routing by Dyn-Stor-Ind method, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs  
 Peak Elev= 1,171.13' @ 12.43 hrs Surf.Area= 9,147 sf Storage= 14,462 cf

Plug-Flow detention time= 60.0 min calculated for 1.669 af (100% of inflow)  
 Center-of-Mass det. time= 60.1 min ( 822.1 - 761.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	1,167.00'	27,600 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,167.00	480	0	0
1,168.00	1,120	800	800
1,169.00	3,210	2,165	2,965
1,170.00	5,130	4,170	7,135
1,171.00	7,400	6,265	13,400
1,172.00	21,000	14,200	27,600

Device	Routing	Invert	Outlet Devices
#1	Primary	1,168.00'	<b>18.0" Round Culvert</b> L= 66.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 1,168.00' / 1,167.67' S= 0.0050 '/ Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#2	Discarded	1,167.00'	<b>3.600 in/hr Exfiltration over Surface area</b>

**Discarded OutFlow** Max=0.76 cfs @ 12.43 hrs HW=1,171.13' (Free Discharge)  
 ↑2=Exfiltration (Exfiltration Controls 0.76 cfs)

**Primary OutFlow** Max=10.22 cfs @ 12.27 hrs HW=1,170.82' TW=1,169.38' (Dynamic Tailwater)  
 ↑1=Culvert (Inlet Controls 10.22 cfs @ 5.78 fps)

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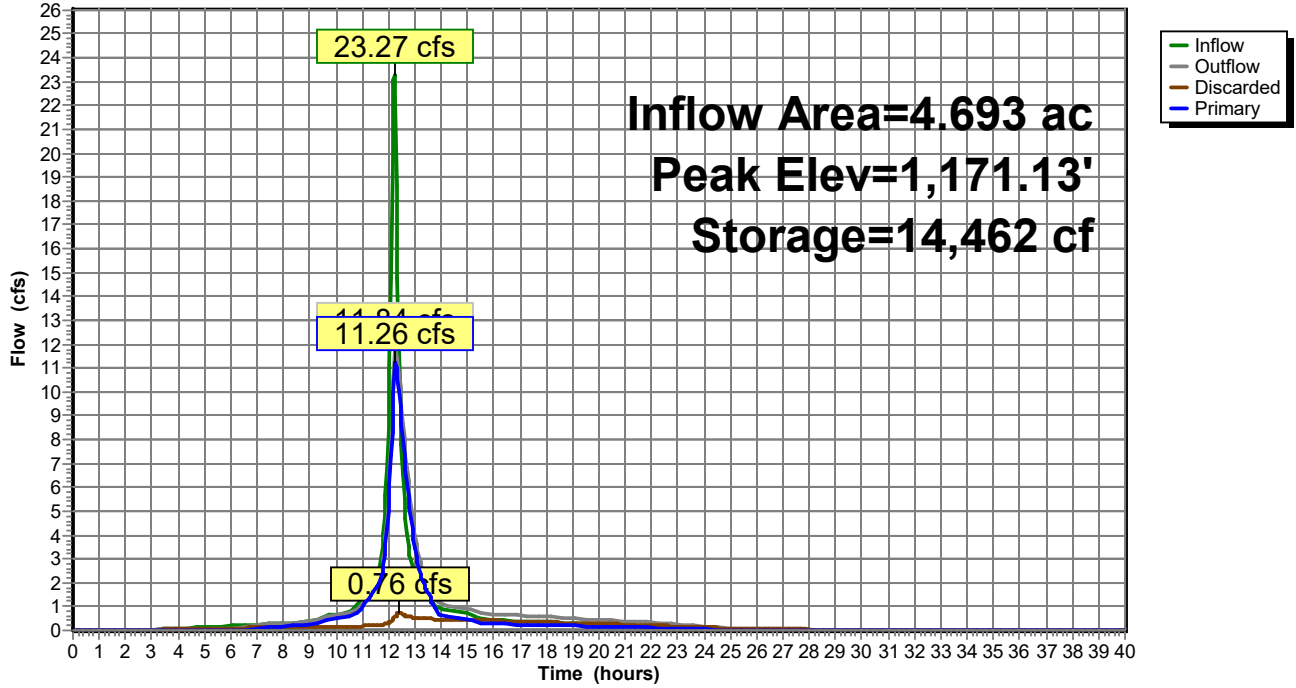
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### Pond 2P: middle basin

Hydrograph



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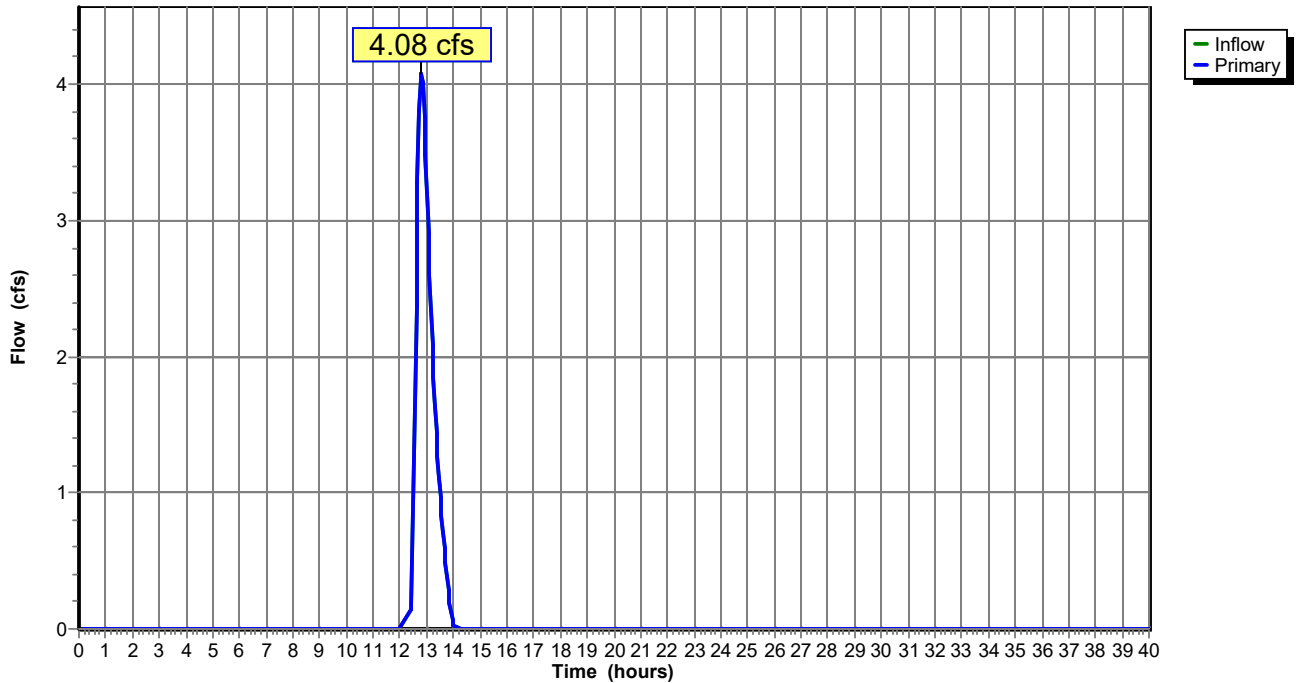
**Summary for Link 1L: runoff**

Inflow = 4.08 cfs @ 12.79 hrs, Volume= 0.228 af  
Primary = 4.08 cfs @ 12.79 hrs, Volume= 0.228 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-40.00 hrs, dt= 0.05 hrs

**Link 1L: runoff**

Hydrograph



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## APPENDIX D

### Proposed Infiltration and WinSLAMM Calculations

**Infiltration Volumes**

**Premier Property Holdings LLC**

Location: Village of Kronenwetter

**Existing Infiltration Volume:**

---

Inflow Area: 241,192 sf  
Rainfall Total: 22.63 in

Total Volume= Inflow Area x Rainfall Total  
Total Volume: 454,847 cf

Volume Leaving Site: 0

Existing Infiltration Volume = Total Volume-Volume Leaving Site  
Existing Infiltration Volume: 454,847 cf

**Proposed Infiltration Volume:**

---

Inflow Area: 241,192 sf  
Total Rainfall Infiltrated: 22.63 in

Total Volume= Inflow Area x Rainfall Total  
Total Potential Volume Runoff: 454,847 cf  
Outfall Total (from WinSLAMM): 9,511 cf  
Proposed Infiltration Volume 445,336 cf

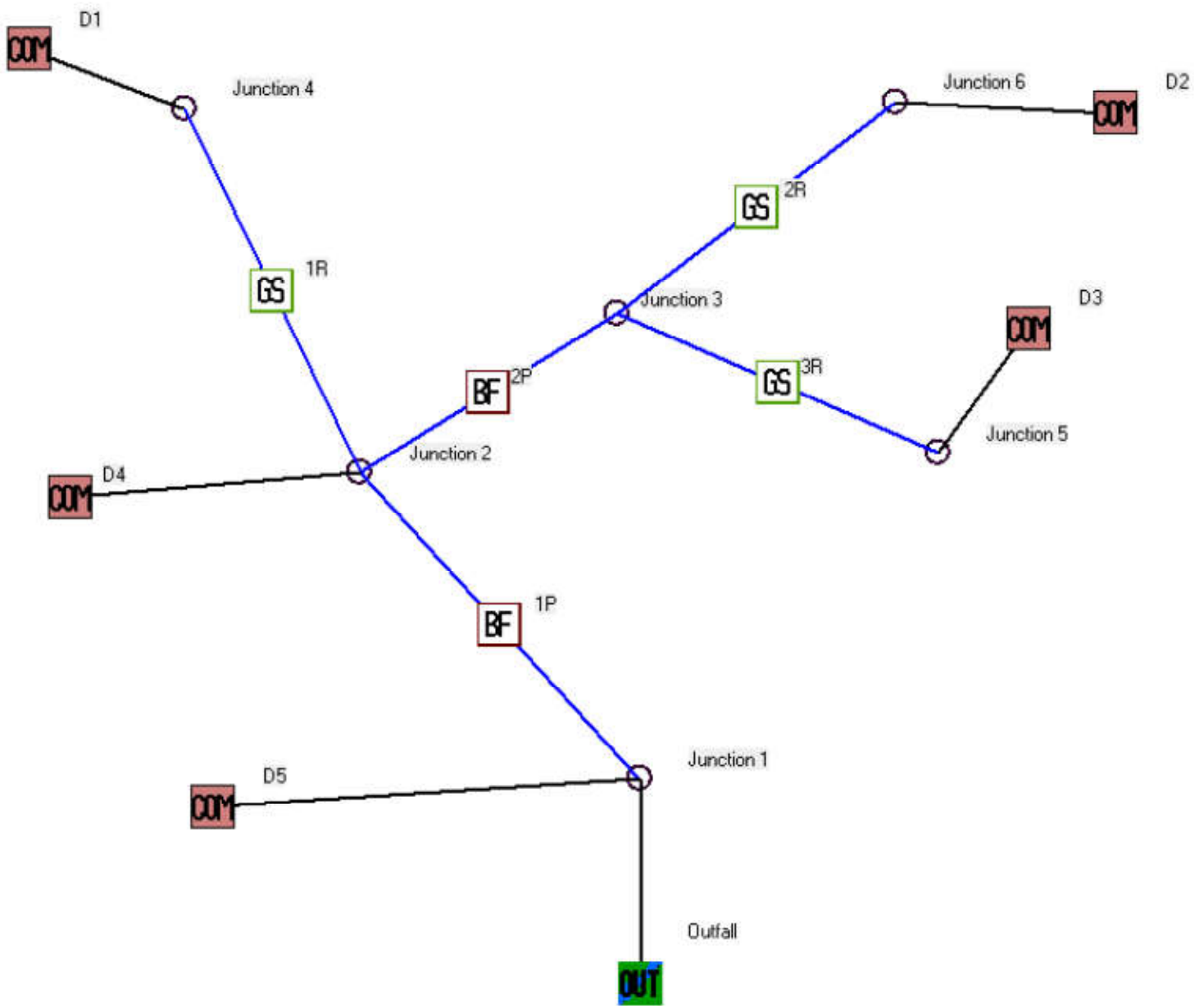
**Percent of Pre-development Infiltration Volume Infiltrated:**

---

Infiltration Percent = Proposed Infiltration Volume/Existing Infiltration Volume  
Infiltration Percent: 97.91%

Calculated by: **Dustin Vreeland**

Date: 11/21/2025



Data file name: \\VREELAND-SERVER\Data\Vital\Cad Files\2025\25-0410 Tesch\25-04

winslamm 11-17-25.mdb

WinSLAMM Version 10.5.0

Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Green Bay WI 1969.RAN

Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI\_AVG01.pscx

Runoff Coefficient file name: C:\WinSLAMM Files\WI\_SL06 Dec06.rsvx

Residential Street Delivery file name: C:\WinSLAMM Files\WI\_Res and Other Urban Dec06.std

Institutional Street Delivery file name: C:\WinSLAMM Files\WI\_Res and Other Urban Dec06.std

Commercial Street Delivery file name: C:\WinSLAMM Files\WI\_Res and Other Urban Dec06.std

Industrial Street Delivery file name: C:\WinSLAMM Files\WI\_Res and Other Urban Dec06.std

Other Urban Street Delivery file name: C:\WinSLAMM Files\WI\_Res and Other Urban Dec06.std

Freeway Street Delivery file name: C:\WinSLAMM Files\WI\_Res and Other Urban Dec06.std

Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False

Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI\_GE003.ppdx

Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv

Cost Data file name:

Seed for random number generator: -42

Study period starting date: 01/02/69

Study period ending date: 12/28/69

Start of Winter Season: 11/25

End of Winter Season: 03/29

Date: 02-05-2026

Time: 10:02:23

Site information:

Pre-Development Area Description	Pre-Development Area (ac)	Pre-Development CN
gravel	.240	96
building	.180	98
woods	2.590	30
grass	1.882	39
Total Area (ac)/Composite CN	4.892	39

LU# 1 - Commercial: D1 Total area (ac): 1.854

1 - Roofs 1: 0.257 ac. Pitched Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

2 - Roofs 2: 0.257 ac. Pitched Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

13 - Paved Parking 1: 0.532 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

14 - Paved Parking 2: 0.310 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

31 - Sidewalks 1: 0.005 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

32 - Sidewalks 2: 0.005 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

51 - Small Landscaped Areas 1: 0.488 ac. Normal Sandy Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Commercial: D2 Total area (ac): 1.868

1 - Roofs 1: 0.321 ac. Pitched Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

2 - Roofs 2: 0.257 ac. Pitched Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

13 - Paved Parking 1: 0.297 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

19 - Unpaved Parking 1: 0.576 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

Files\NURP.cpz  
 32 - Sidewalks 2: 0.005 ac. Connected Source Area PSD File: C:\WinSLAMM  
 Files\NURP.cpz  
 33 - Sidewalks 3: 0.005 ac. Connected Source Area PSD File: C:\WinSLAMM  
 Files\NURP.cpz  
 51 - Small Landscaped Areas 1: 0.396 ac. Normal Sandy Source Area PSD File:  
 C:\WinSLAMM Files\NURP.cpz  
 70 - Water Body Areas: 0.011 ac. Source Area PSD File:

LU# 3 - Commercial: D3 Total area (ac): 0.971  
 1 - Roofs 1: 0.064 ac. Pitched Connected Source Area PSD File: C:\WinSLAMM  
 Files\NURP.cpz  
 13 - Paved Parking 1: 0.035 ac. Connected Source Area PSD File: C:\WinSLAMM  
 Files\NURP.cpz  
 19 - Unpaved Parking 1: 0.572 ac. Connected Source Area PSD File: C:\WinSLAMM  
 Files\NURP.cpz  
 51 - Small Landscaped Areas 1: 0.272 ac. Normal Sandy Source Area PSD File:  
 C:\WinSLAMM Files\NURP.cpz  
 70 - Water Body Areas: 0.028 ac. Source Area PSD File:

LU# 4 - Commercial: D4 Total area (ac): 0.628  
 13 - Paved Parking 1: 0.232 ac. Connected Source Area PSD File: C:\WinSLAMM  
 Files\NURP.cpz  
 51 - Small Landscaped Areas 1: 0.324 ac. Normal Sandy Source Area PSD File:  
 C:\WinSLAMM Files\NURP.cpz  
 70 - Water Body Areas: 0.072 ac. Source Area PSD File:

Control Practice 1: Biofilter CP# 1 (DS) - 1P

1. Top area (square feet) = 30000
2. Bottom aea (square feet) = 3150
3. Depth (ft): 5
4. Biofilter width (ft) - for Cost Purposes Only: 10
5. Infiltration rate (in/hr) = 3.6
6. Random infiltration rate generation? No
7. Infiltration rate fraction (side): 0.01
8. Infiltration rate fraction (bottom): 1
9. Depth of biofilter that is rock filled (ft) 0
10. Porosity of rock filled volume = 0
11. Engineered soil infiltration rate: 0
12. Engineered soil depth (ft) = 0
13. Engineered soil porosity = 0
14. Percent solids reduction due to flow through engineered soil = 0
15. Biofilter peak to average flow ratio = 3.8
16. Number of biofiltration control devices = 1
17. Particle size distribution file: Not needed - calculated by program
18. Initial water surface elevation (ft): 0

Soil Data Soil Type Fraction in Eng. Soil  
 Biofilter Outlet/Discharge Characteristics:  
 Outlet type: Broad Crested Weir

1. Weir crest length (ft): 10
2. Weir crest width (ft): 5
3. Height of datum to bottom of weir opening: 4.18

Control Practice 2: Biofilter CP# 2 (DS) - 2P

1. Top area (square feet) = 21000



Swale dynamic infiltration rate (in/hr)= 3.600  
 Typical swale depth (ft) for cost analysis (optional) = 0.0  
 Particle size distribution file name: Not needed - calculated by program  
 Use total swale length instead of swale density for infiltration calculations:

True

Control Practice 5: Grass Swale CP# 3 (DS) - 3R

Total drainage area (acres)= 0.971  
 Fraction of drainage area served by swales (ac) = 1.00  
 Swale density (ft/ac) = 530.38  
 Total swale length (ft) = 515  
 Average swale length to outlet (ft)= 500  
 Typical bottom width (ft) = 1.0  
 Typical swale side slope (\_H:1V) = 4.0  
 Typical longitudinal slope (ft.H/ft.V) = 0.006  
 Swale retardance factor: D  
 Typical grass height (in) = 2.0  
 Swale dynamic infiltration rate (in/hr)= 3.600  
 Typical swale depth (ft) for cost analysis (optional) = 0.0  
 Particle size distribution file name: Not needed - calculated by program  
 Use total swale length instead of swale density for infiltration calculations:

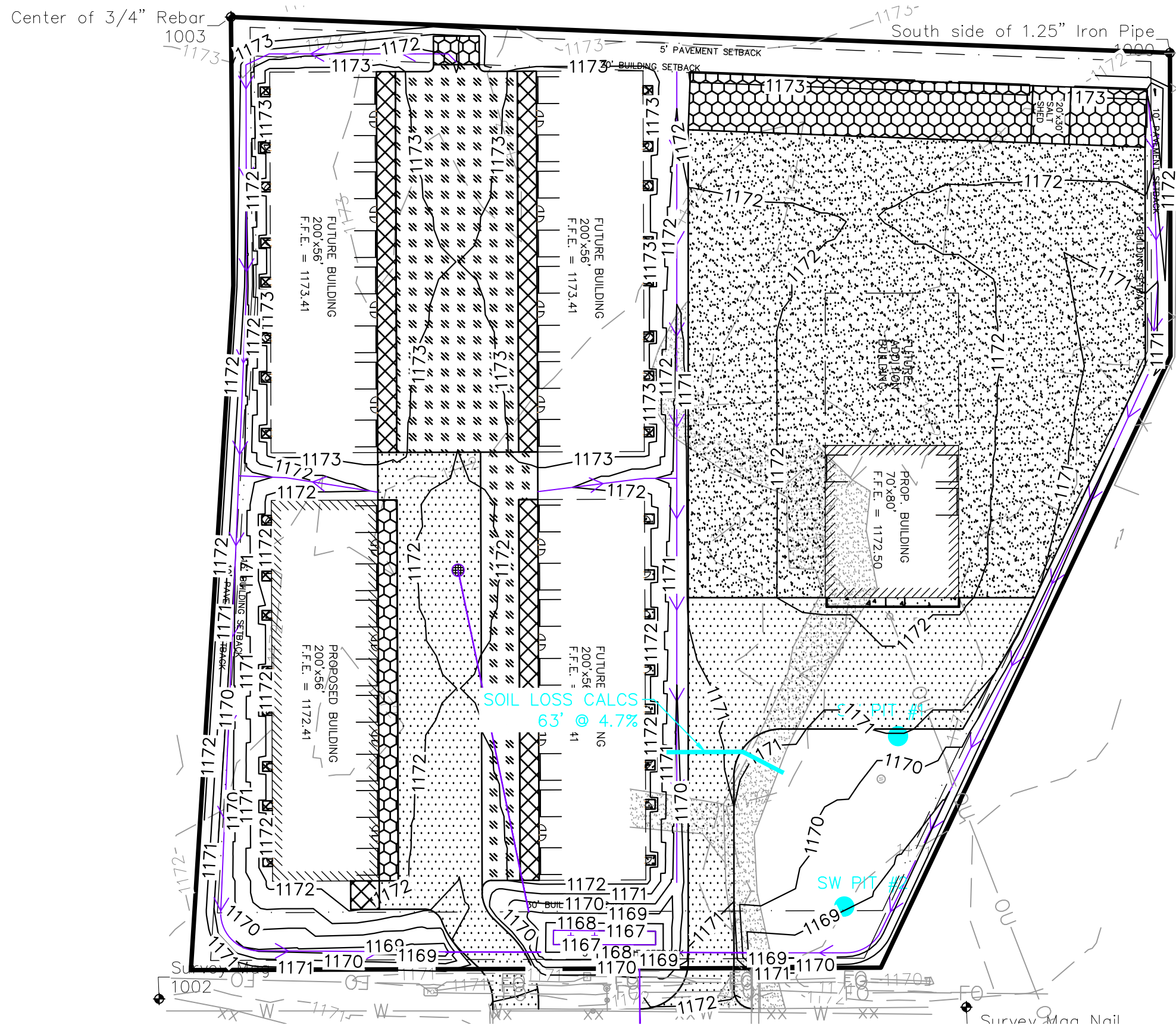
True

Data file name: \\VREELAND-SERVER\Data\Vital\Cad Files\2025\25-0410 Tesch\25-0410 winslamm 11-17-25.mdb  
 Data file description:  
 Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Green Bay WI 1969.RAN  
 Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI\_AVG01.pscx  
 Runoff Coefficient file name: C:\WinSLAMM Files\WI\_SL06 Dec06.rsvx  
 Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI\_GEO03.ppd  
 Residential Street Delivery file name: C:\WinSLAMM Files\WI\_Res and Other Urban Dec06.std  
 Institutional Street Delivery file name: C:\WinSLAMM Files\WI\_Res and Other Urban Dec06.std  
 Commercial Street Delivery file name: C:\WinSLAMM Files\WI\_Res and Other Urban Dec06.std  
 Industrial Street Delivery file name: C:\WinSLAMM Files\WI\_Res and Other Urban Dec06.std  
 Other Urban Street Delivery file name: C:\WinSLAMM Files\WI\_Res and Other Urban Dec06.std  
 Freeway Street Delivery file name: C:\WinSLAMM Files\WI\_Res and Other Urban Dec06.std  
 Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False  
 Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv  
 Cost Data file name:  
 Seed for random number generator: -42  
 Start of Winter Season: 11/25 End of Winter Season: 03/29  
 Model Run Start Date: 01/02/69 Model Run End Date: 12/28/69  
 Date of run: 12-01-2025 Time of run: 05:45:59  
 Total Area Modeled (acres): 5.537  
 Years in Model Run: 0.99

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of all Land Uses without Controls:	240126	-	95.66	1434	-
Outfall Total with Controls:	9511	96.04%	130.4	77.41	94.60%
Annualized Total After Outfall Controls:	9644			78.48	

## APPENDIX E

### Soil Loss and Sediment Discharge Map and Calculations



STAMP/SIGNATURE:

REVISIONS		
BY	DATE	DESCRIPTION

TITLE PAGE:  
**SOIL LOSS MAP**

PROJECT: **PREMIER PROPERTY DEVELOPMENT**

LOCATION: **VILLAGE OF KRONENWETTER  
 MARATHON COUNTY, WISCONSIN**



**VREELAND ASSOCIATES LAND SURVEYORS & ENGINEERS**  
 6103 DAWN STREET WESTON, WI. 54476  
 PHONE NO.: (715) 241-0947  
 EMAIL: [dustin@vreelandassociates.us](mailto:dustin@vreelandassociates.us)  
 WEBSITE: [www.vreelandlandsurveying.com](http://www.vreelandlandsurveying.com)  
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PREPARED FOR: **GREG TESCH**

PLAN DATE: **OCTOBER 6TH, 2025**

DESIGNER: DUSTIN VREELAND
SURVEYED BY: CB & TV
FILE NO.: 25-0410 ENGINEERING
DATE: SEPTEMBER 15, 2025
SCALE: <b>1" = 60'</b>
SHEET <b>SO</b> 200



# Soil Loss & Sediment Discharge Calculation Tool

for use on Construction Sites in the State of Wisconsin

WDNR Version 2.1 (12-05-2024)



YEAR 1

Developer: Premier Property Holding

Project: Premier Property Holding Development

Date: 10/21/25

County: Marathon

Version 2.1

Activity (1)	Begin Date (2)	End Date (3)	Period % R (4)	Annual R Factor (5)	Sub Soil Texture (6)	Soil Erodibility K Factor (7)	Slope (%) (8)	Slope Length (ft) (9)	LS Factor (10)	Land Cover C Factor (11)	Soil loss A (tons/acre) (12)	SDF (13)	Sediment Control Practice (14)	Sediment Discharge (t/ac) (15)
Bare Ground	08/04/25	06/03/26	56.1%	130	Sand	0.15	4.7%	64	0.40	1.00	4.4	0.910	Silt Fence	2.4
Seed with Mulch or Erosion Control	06/03/26	08/03/26	43.2%	130	Sand	0.15	4.7%	64	0.40	0.10	0.3	0.910	Silt Fence	0.2
End	08/03/26	----	----	----	-----	----	4.7%	64	0.40	-----	----	0.000		0.0
		----	----	----	-----	----	4.7%	64	0.40	-----	----	0.000		0.0
		----	----	----	-----	----	4.7%	0	----	-----	----	0.000		0.0
		----	----	----	-----	----	0.0%	0	----	-----	----	0.000		0.0
<b>TOTAL</b>											<b>4.7</b>		<b>TOTAL</b>	<b>2.6</b>
													<b>% Reduction Required</b>	<b>NONE</b>

**Notes:**

See Help Page for further descriptions of variables and items in drop-down boxes.  
 The last land disturbing activity on each sheet must be 'End'. This is either 12 months from the start of construction or final stabilization.  
 For periods of construction that exceed 12 months, please demonstrate that 5 tons/acre/year is not exceeded in any given 12 month period.

NOTE: THIS TOOL ONLY ADDRESSED SOIL EROSION DUE TO SHEET FLOW. MEASURES TO CONTROL CHANNEL EROSION MAY ALSO BE REQUIRED TO MEET SEDIMENT DISCHARGE REQUIREMENTS.

**Recommended Permanent Seeding Dates:**

4/15-6/1 and 8/1-8/21 Turf, introduced grasses and legumes  
 Thaw-6/30 Native Grasses, forbs, and legumes

Designed By:	Dustin Vreeland
Date	7/10/2025

**APPENDIX F**

**State of Wisconsin Construction Site Inspection Report**

**Notice:** This form was developed in accordance with s. NR 216.48 Wis. Adm. Code for WPDES permittees' convenience; however, use of this specific form is voluntary. Multiple copies of this form may be made to compile the inspection report. Inspections of the construction site and implemented erosion and sediment control best management practices (BMPs) must be performed weekly and within 24 hours after a rainfall event 0.5 inches or greater.

<b>Construction Site Name and Location (Project, Municipality, and County):</b>	<b>Site/Facility ID No. (FIN):</b>
<b>Onsite Contact/Contractor:</b>	<b>Onsite Phone/Cell:</b>

**Note: Inspection reports, along with erosion control and storm water management plans, are required to be maintained on site in accordance with s. NR 216.48 (4) and made available upon request. PLEASE PRINT LEGIBLY.**

<b>Date of inspection:</b>	<b>Time of inspection:</b> Start: _____ <input type="radio"/> am <input type="radio"/> pm End: _____ <input type="radio"/> am <input type="radio"/> pm	<b>Type of inspection:</b> <input type="radio"/> Weekly <input type="radio"/> Precipitation Event <input type="radio"/> Other (specify)
<b>Weather/Site Conditions:</b> Temp. _____ °F Antecedent Soil Moisture Last Rainfall Depth: _____ inches Last Rainfall Date: _____	<input type="radio"/> Dry <input type="radio"/> Frozen or snow covered <input type="radio"/> Variable <input type="radio"/> Frozen (Thaw predicted in next week) <input type="radio"/> Wet <input type="radio"/> Melting Snow/slush	<b>Describe current phase of construction:</b>  Scheduled Final Stabilization Date for Universal Soil Loss Equation (USLE) <sup>1</sup> :  <b>Project on Schedule<sup>2</sup>?</b> <input type="radio"/> Yes <input type="radio"/> No
<b>Name(s) of individual(s) performing inspection:</b>		<b>Inspector Phone/Cell:</b>

I certify that the information contained on this form is an accurate assessment of site conditions at the time of inspection:

**Inspector Signature** \_\_\_\_\_

**Date:** \_\_\_\_\_

Inspection Questions:	Yes	No (Identify Actions Required):	Location/Comments:	Actions Completed by Date & Initials
1. Is the erosion control plan accessible to operators?	<input type="checkbox"/>	<input type="checkbox"/> Provide onsite copy		
2. Is the permit certificate posted where visible?	<input type="checkbox"/>	<input type="checkbox"/> Post certificate		
3. Is the current phase of construction on sequence with the site-specific erosion and sediment control plan, including installation/stabilization of ponds and ditches?	<input type="checkbox"/>	<input type="checkbox"/> Add sediment control <input type="checkbox"/> Install missing ditch/pipe/pond <input type="checkbox"/> Stabilize bare soil		
4. Are all erosion and sediment control BMPs shown on plan properly installed and in functional condition?	<input type="checkbox"/>	<input type="checkbox"/> Repair <input type="checkbox"/> Modify <input type="checkbox"/> Install/Replace		
5. Is inlet protection properly installed and functioning in all inlets likely to receive runoff from the site?	<input type="checkbox"/>	<input type="checkbox"/> Clean <input type="checkbox"/> Replace <input type="checkbox"/> Install		
6. Is the air free of fugitive dust resulting from construction activity and bare soil exposure?	<input type="checkbox"/>	<input type="checkbox"/> Apply water <input type="checkbox"/> Apply dust control product		

<sup>1</sup> The Universal Soil Loss Equation (USLE) model and the Construction Site Soil Loss and Sediment Discharge Guidance are available at: [http://dnr.wi.gov/topic/stormwater/standards/const\\_standards.htm](http://dnr.wi.gov/topic/stormwater/standards/const_standards.htm)

<sup>2</sup> If the project is not on schedule then the soil loss summary for the project should be reviewed and schedule, plan or practices modified accordingly.

Inspection Questions:	Yes	No (Identify Actions Required):	Location/Comments:	Actions Completed by Date & Initials
7. Is the public right of way curb line free of tracked soil and accumulation?	<input type="checkbox"/>	<input type="checkbox"/> Install tracking pad <input type="checkbox"/> Widen/lengthen pad <input type="checkbox"/> Amend stone/Add geotextile <input type="checkbox"/> Install wheel washing station <input type="checkbox"/> Close entrance/exit <input type="checkbox"/> Limit traffic across disturbed areas <input type="checkbox"/> Sweep road and curb line		
8. Are wetlands, lakes, streams, ditches, or storm sewers downstream of the site free of sedimentation and turbid water leaving the site? <sup>3</sup>	<input type="checkbox"/>	<input type="checkbox"/> Repair/Replace erosion control <input type="checkbox"/> Add sediment controls <input type="checkbox"/> Modify operations <input type="checkbox"/> Contact DNR to verify extent of cleanup required		
9. Is dewatering and/or vehicle and equipment washing being done in a manner that prevents erosion and sediment discharge?	<input type="checkbox"/>	<input type="checkbox"/> Install treatment train <input type="checkbox"/> Install energy dissipation <input type="checkbox"/> Modify discharge location <input type="checkbox"/> Modify intake to reduce sediment		
10. Are soil stockpiles existing for more than 7 days covered and stabilized?	<input type="checkbox"/>	<input type="checkbox"/> Seed <input type="checkbox"/> Install mat/mulch/polymer <input type="checkbox"/> Cover with tarp/plastic sheeting		
11. Are downstream channels and other downhill areas protected from scour and erosion?	<input type="checkbox"/>	<input type="checkbox"/> Install energy dissipation at outfall <input type="checkbox"/> Install ditch checks <input type="checkbox"/> Install slope interruption <input type="checkbox"/> Install onsite detention		
12. Are good housekeeping practices or treatment controls in place to prevent the discharge of chemicals, cement, trash, and other materials into wetlands, waterways, storm sewers, ditches, or drainage-ways? <sup>4</sup>	<input type="checkbox"/>	<input type="checkbox"/> Properly dispose of trash <input type="checkbox"/> Provide concrete washout station <input type="checkbox"/> Contact DNR to verify extent of cleanup required		
13. Is the plan reflective of current site operations and does it address all erosion and sediment control issues identified during the inspection?	<input type="checkbox"/>	<input type="checkbox"/> Revise sequence <input type="checkbox"/> Revise sediment control BMP <input type="checkbox"/> Revise erosion control BMP <input type="checkbox"/> Revise post-construction storm water BMP		
14. Are all areas where construction has temporarily ceased (and will not resume for more than 2 weeks) temporarily stabilized?	<input type="checkbox"/>	<input type="checkbox"/> Topsoil & seed <input type="checkbox"/> Install mat/mulch/polymer <input type="checkbox"/> Cover with tarp/plastic sheeting		
15. Are all areas at final grade permanently vegetated or stabilized with other treatments?	<input type="checkbox"/>	<input type="checkbox"/> Topsoil & seed <input type="checkbox"/> Install mat/mulch/polymer <input type="checkbox"/> Sod <input type="checkbox"/> Install stone base		
16. Have temporary sediment controls been removed in areas of the site that meet the permit definition of 'final stabilization'?	<input type="checkbox"/>	<input type="checkbox"/> Water to establish vegetation <input type="checkbox"/> Repair or reseed areas <input type="checkbox"/> Remove temporary practices		

<sup>3</sup> If sediment discharge enters a wetland or waterbody, the permittee should consult with DNR staff to determine if sediment cleanup and/or additional control measures are required.

<sup>4</sup> The permittee shall notify the DNR immediately via the spills hotline at (800)943-0003 of any release or spill of a hazardous substance to the environment in accordance with s. 292.11, Wis. Stats., and ch. NR 706, Wis. Adm. Code.



## **Report to Planning Commission**

**Agenda Item:** AMERICAN ASPHALT OF WI, 1116 HAPPY HOLLOW, CONDITIONAL USE PERMIT RENEWAL

**Meeting Date:** May 18, 2026

**Referring Body:** Plan Commission

**Committee Contact:**

**Staff Contact:** Greg Ulman, DPW

**Report Prepared by:** Greg Ulman, DPW

**AGENDA ITEM:** AMERICAN ASPHALT OF WI, 1116 HAPPY HOLLOW, CONDITIONAL USE PERMIT RENEWAL

**OBJECTIVE(S):** American Asphalt submitted a Conditional Use Permit Renewal Application and for Non-Metallic Mining for the Plant 22 Sand Pit Site (1116 Happy Hollow Road). No complaints have been filed with the Village. Staff recommends Committee approve the renewal of the conditional permit.

**HISTORY/BACKGROUND:** The Village typically renews Non-Metallic Mining Conditional Use Permits for 1 year. Their current permit expires on June 30, 2026.

**RECOMMENDED ACTION:** To approve a one-year renewal for the conditional use permit for the American Asphalt Plant 22 Sand Pit Site.

**ATTACHMENTS:** Conditional Use Permit Renewal Application.

# Conditional Use Permit Renewal Application

Application Fee: \$200

A conditional use is a unique use which, because of its distinct characteristics, cannot be classified in any particular district or districts, without consideration, in each case, of the impact of that use upon neighboring land and of the public need for the particular use at the particular location.

Plan Commission Meetings are held on the 3<sup>rd</sup> Monday of each month.

Although not required, it is recommended that the applicant attend these meetings.



### Applicant Information

1. Applicant Name American Asphalt of WI Phone Number 715-693-5200

Address PO Box 98 Mosinee WI 54455

Email matt.eslinger@americanasphaltofwi.com

2. Owner Name Mathy Construction Co Phone Number 608-783-6411

Address PO Box 189 Onalaska WI 54650

Email jason.weiker@milestonematerials.com

3. Prepared By Company Name Applicant Name \_\_\_\_\_

Address \_\_\_\_\_

Phone Number \_\_\_\_\_ Email \_\_\_\_\_

### Property Information

4. Property Address 1116 Happy Hollow Rd, Plant 22 Sand Pit

5. Parcel Identification # (PIN) See Line #14 6. Location of Site (attach map) \_\_\_\_\_

7. Legal Description (attach an additional sheet if necessary) Sec. 10, T27N, R7E

8. Current Zoning District M-2 General Industrial 9. Parcel Acreage 53.47

10. Original Conditional Use Permit request from Section 520-121 of the Zoning Ordinance to allow non-metallic mining

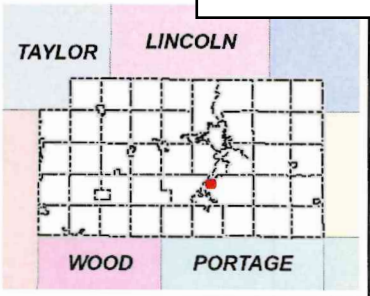
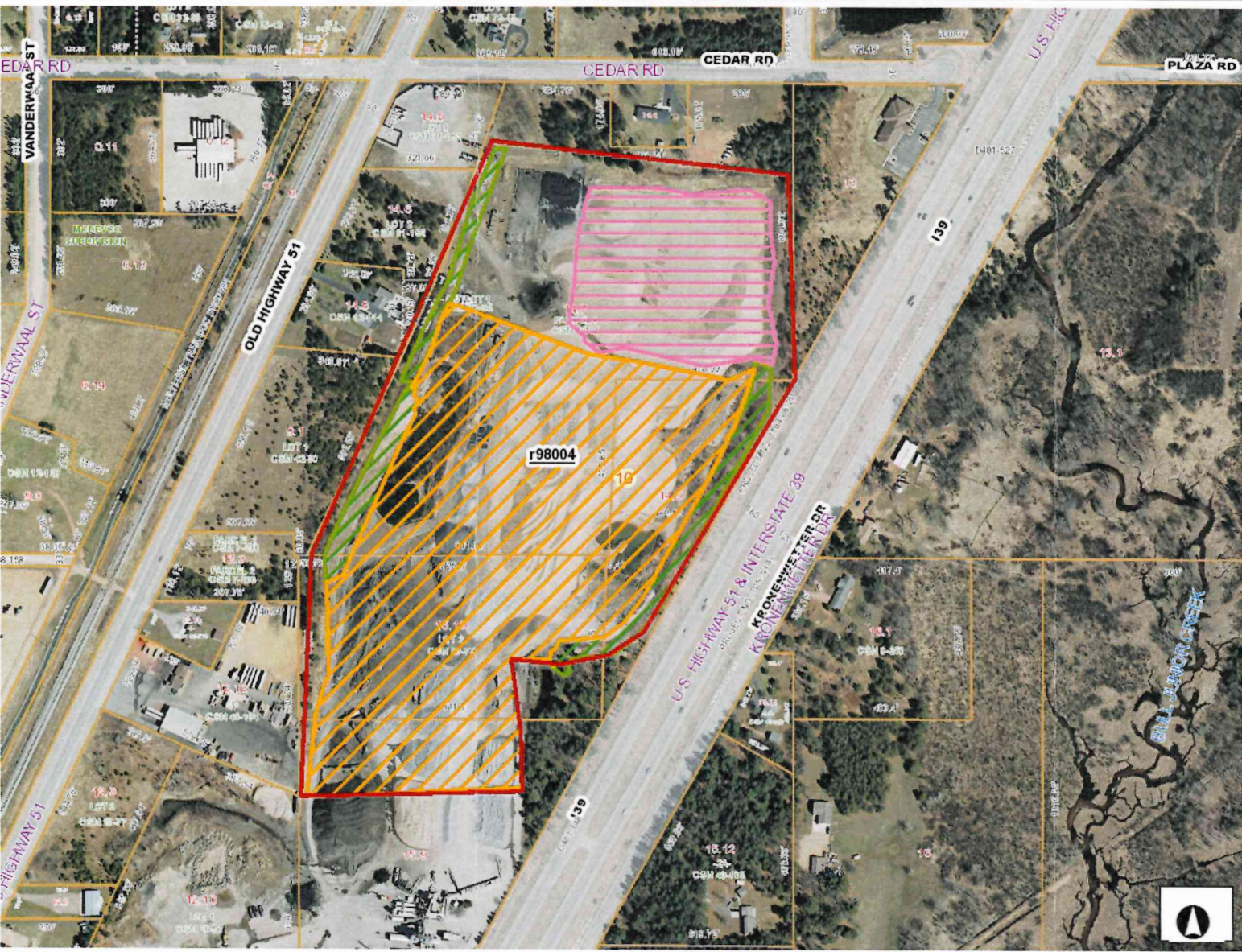
11. Issuance Date of Original Conditional Use Permit 1998

12. Expiration Date of Current Conditional Use Permit 6-30-26

13. Number of Times Permit has been renewed Annually



MARATHON COUNTY WAUSAU  
**Land Information Mapping System**



**Legend**

- Boundary
- ▨ Disturbance
- ▨ Undisturbed
- ▨ Overburden
- ▨ Product
- ▨ Pending
- ▨ Sand
- ▨ Excluded
- ▨ Reclaimed
- ▨ Interim Reclaimed
- ▨ Topsoil
- ▨ Byproduct
- ▨ Pond340
- ▨ Constructed Wetland
- Road Names
- Parcels
- ▬ Parcel Lot Lines
- ▬ Land Hooks
- ▬ Section Lines/Numbers
- ▬ Right Of Ways
- ▬ Named Places
- ▬ Municipalities

2020 Orthos Countywide

- Red: Band\_1
- Green: Band\_2
- Blue: Band\_3

200.00 0 200.00 Feet  
 NAD\_1983\_HARN\_WISCRS\_Marathon\_County\_Feet

**DISCLAIMER:** The information and depictions herein are for informational purposes and Marathon County-City of Wausau specifically disclaims accuracy in this reproduction and specifically admonishes and advises that if specific and precise accuracy is required, the same should be determined by procurement of certified maps, surveys, plats, Flood Insurance Studies, or other official means. Marathon County-City of Wausau will not be responsible for any damages which result from third party use of the information and depictions herein or for use which ignores this warning.  
**THIS MAP IS NOT TO BE USED FOR NAVIGATION**

**Notes**  
 R98-004 AMERICAN ASPHALT  
 KRONENWETTER  
 SEC 10-27-7 EXPIRES 04/14



**Report to Planning Commission**

**Agenda Item:** Concept Plan Green Tree Companies, Vacant No Address, Kronenwetter, WI 54455. PARCEL # 145-2708-051-0985, 145-2708-051-0988, 145-2708-051-0987 AND 145-2708-051-0989.

**Meeting Date:** May 18, 2026

**Referring Body:** Plan Commission

**Committee Contact:**

**Staff Contact:** Greg Ulman, DPW

**Report Prepared by:** Greg Ulman, DPW

**AGENDA ITEM:** Concept Plan Green Tree Companies, Vacant No Address, Kronenwetter, WI 54455.

**OBJECTIVE(S):** To review the proposed Green Tree Concept Plan

**HISTORY/BACKGROUND:** Alliance Holdings, Vacant No Address, Kronenwetter, WI 54455. Proposes a 109-lot subdivision on PARCEL #s 145-2708-051-0985, 145-2708-051-0988, 145-2708-051-0987 AND 145-2708-051-0989.

Per Chapter 460 - SUBDIVISION OF LAND, specifically, § 460-10. - Preliminary consultation and concept plan.

Prior to filing an application for the approval of a preliminary plat or certified survey map, the subdivider shall consult with the village for assistance and advice regarding site suitability, general subdivision requirements, approval procedures and preliminary review of the conceptual plan for the proposed subdivision or certified survey map.

B. Village review. The village may place the conceptual plan on the plan commission agenda for review. Conceptual plan consultation and review does not constitute approval of the preliminary plat or certified survey map.

**RECOMMENDED ACTION:** To review the proposed Concept Plan and provide input.

**ATTACHMENTS:** Subdivision Concept Plan Application and Staff Report.

**PARCEL # 145-2708-051-0985, 145-2708-051-0988, 145-2708-051-0987 AND 145-2708-051-0989  
(GREEN TREE COMPANIES)  
Concept Plan**

**STAFF REPORT FOR PLANNING COMMISSION**

**PUBLIC HEARINGS/  
MEETINGS:**

Plan Commission Meeting: 6:00 p.m. May 18, 2026

**APPLICANT:**

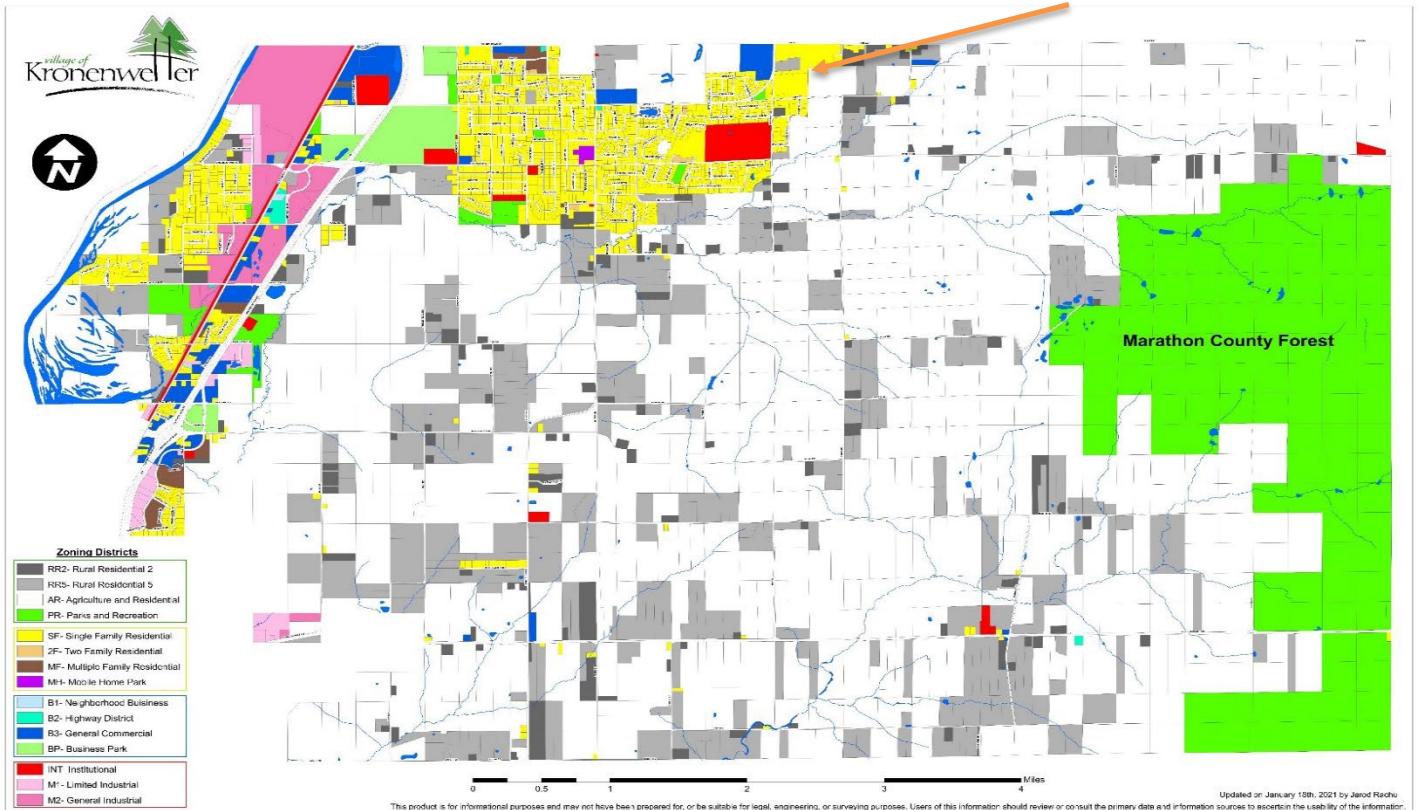
Green Tree Companies

**OWNER:**

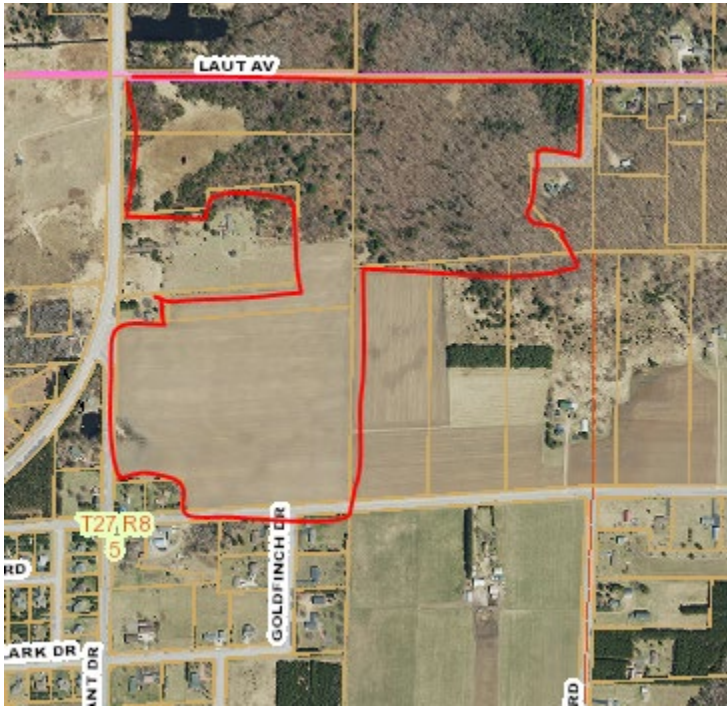
Alliance Holdings LLC  
P.O. Box 8005  
Wausau, WI 54402

**LOCATION OF REQUEST:** Vacant No Address, Kronenwetter, WI 54455 (See Map1)

**VILLAGE OF KRONENWETTER OFFICIAL ZONING MAP**



**Map 1: Location Map**  
(Source Data: Marathon Co. GIS)



2020 AERIAL PHOTO  
(SOURCE DATA: MARATHON CO. GIS)

**Current Zoning: SF (Single Family Residential)**

**Future Land Use Map: Residential**

**RECOMMENDED ACTION:** TO REVIEW THE PROPOSED CONCEPT PLAN AND PROVIDE INPUT

# Subdivision Concept Plan Application

Application Fee: \$200

[Village of Kronenwetter Subdivision Ordinance Chapter §460](#)

Prior to filing an application for the approval of a preliminary plat or certified survey map, the subdivider shall consult with the Village for assistance and advice regarding site suitability, general subdivision requirements, approval procedures, and preliminary review of the concept plan for the proposed subdivision.

The Village may place the concept plan on the Plan Commission agenda for review. Plan Commission meetings are held on the 3<sup>rd</sup> Monday of each month.



## Applicant Information

1. Applicant Name Thomas Umlauf (Green Tree Companies) Phone Number (715)966-0508

Address \_\_\_\_\_

Email thomasu@greentreecompanies.com

2. Property Titleholder Name Alliance Holdings Phone Number \_\_\_\_\_

Address \_\_\_\_\_

Email \_\_\_\_\_

3. Prepared By Company Name Scholfield Group, LLC Name William (Bill) Scholfield

Address NW157N7071 Mayflower Ct, Menomonie Falls, WI 53051

Phone Number (715) 574-7007 Email bill@scholfieldgroup.com

## Property Information

4. Property Address Unaddressed PIN's 1452708051 - 0958 - 0988 - 0987 - 0989

5. Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ 6. Parcel Identification # (PIN) \_\_\_\_\_

7. Legal Description (attach an additional sheet if necessary) Pending

8. Parcel Acreage Approx. 85ac 9. Zoning District (SF) Single Family Residential

10. Will the plat application be accompanied by a zoning change request? (if yes, what district) NO  
*The zoning change application is required to be submitted with the preliminary plat application*

11. Is the property to be subdivided within an existing subdivision? (if yes, what subdivision) Individual 1ac Lots

12. Number of lots proposed in the subdivision: Approx. 65

13. How will water be provided? Private Well 14. How will sewage disposal take place? Private Sanitary

**Required Attachments**

Using a topographic survey map, prepare a sketch/ conceptual plan of the proposed subdivision or land divisions and show the following information:

- (1) Property boundaries
- (2) Proposed road layout and design, lot layout and proposed dedications
- (3) General existing and proposed utility location and layout
- (4) General topography, including the slopes of roads and lots
- (5) General soil conditions, including the evaluation of seasonal high groundwater levels
- (6) Building limitations, such as wetlands, soils, floodplains, drainage ways, rock outcroppings and vegetation
- (7) Current and proposed zoning
- (8) Any contiguous property owned or controlled by the subdivider
- (9) Any additional information requested by the Village

*Refer to Chapter 460 of the Village of Kronenwetter Ordinances "Subdivision of Land" for further regulations on review and approval procedures, requirements for public improvements, and design standards.*

I hereby certify and say that all the above statements and all accompanying statements and drawings are correct and true based on information and belief. I understand that conceptual plan consultation and review does not constitute approval of the preliminary plat or certified survey map.

Green Tree Companies Thomas Umlauf

\_\_\_\_\_  
*(Printed Name of Applicant)*

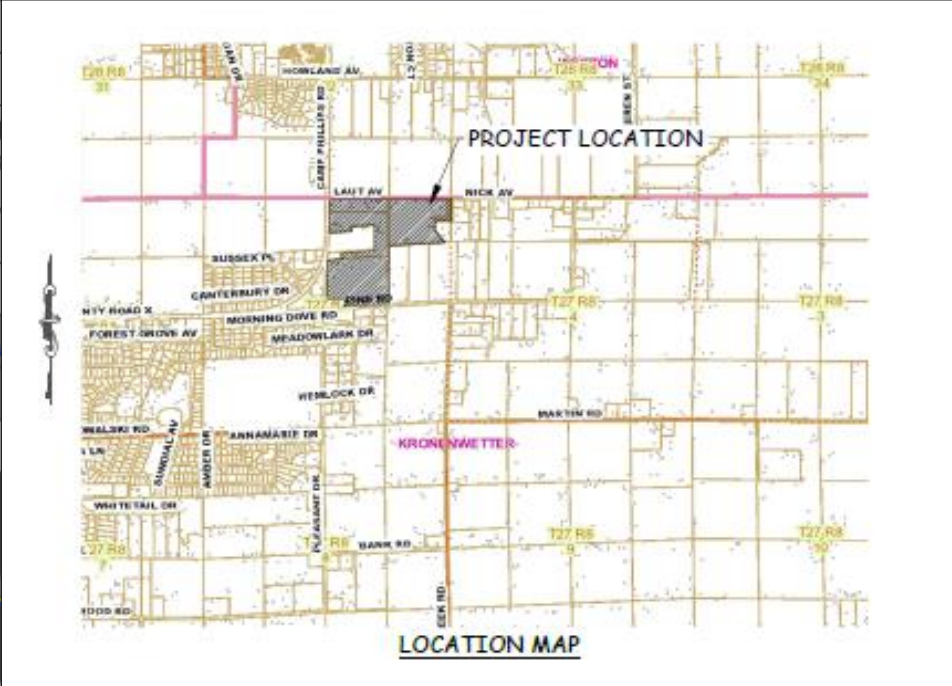
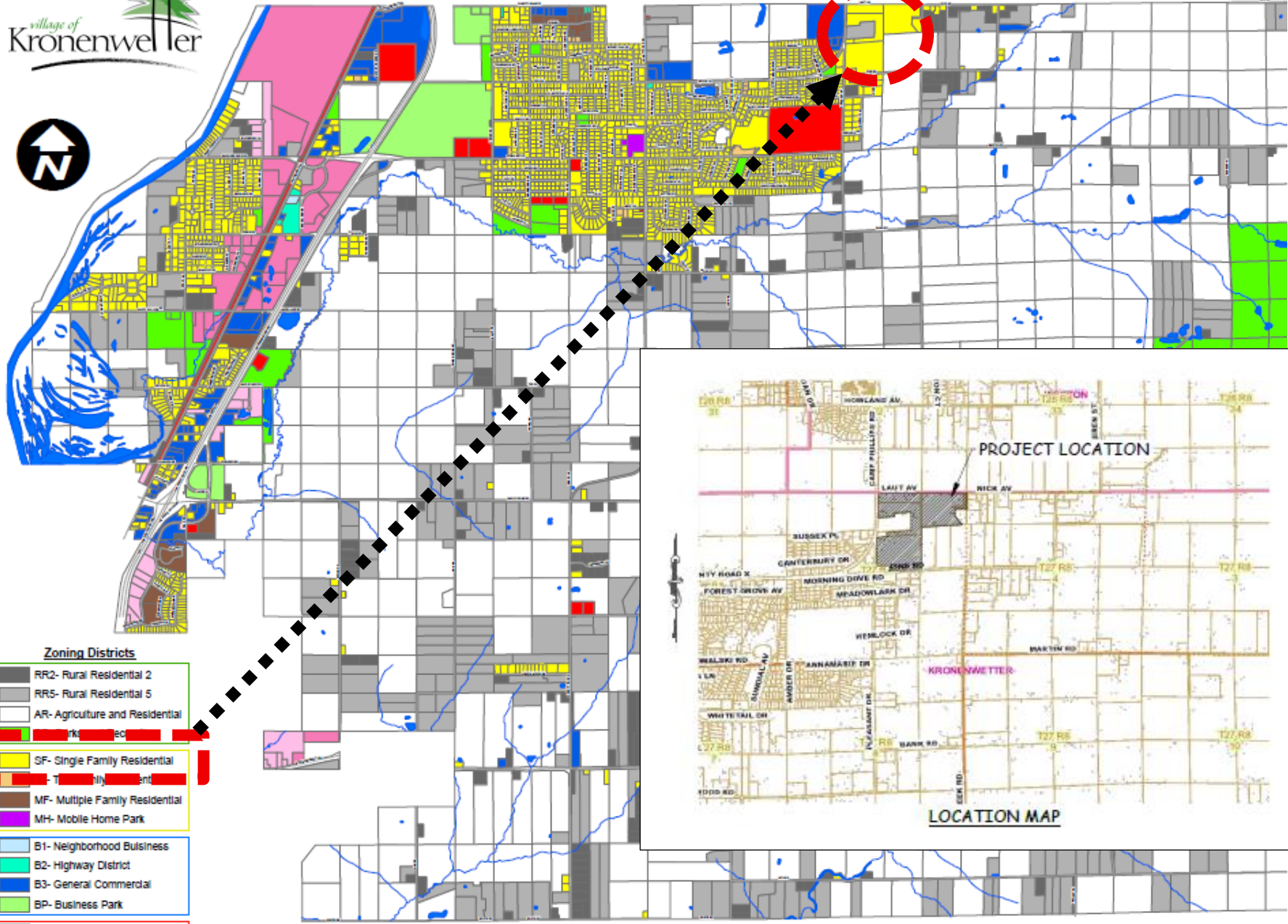
William B Scholfield *handsignature to follow*

\_\_\_\_\_  
*(Signature of Applicant)*

5/14/26

\_\_\_\_\_  
*(Date)*

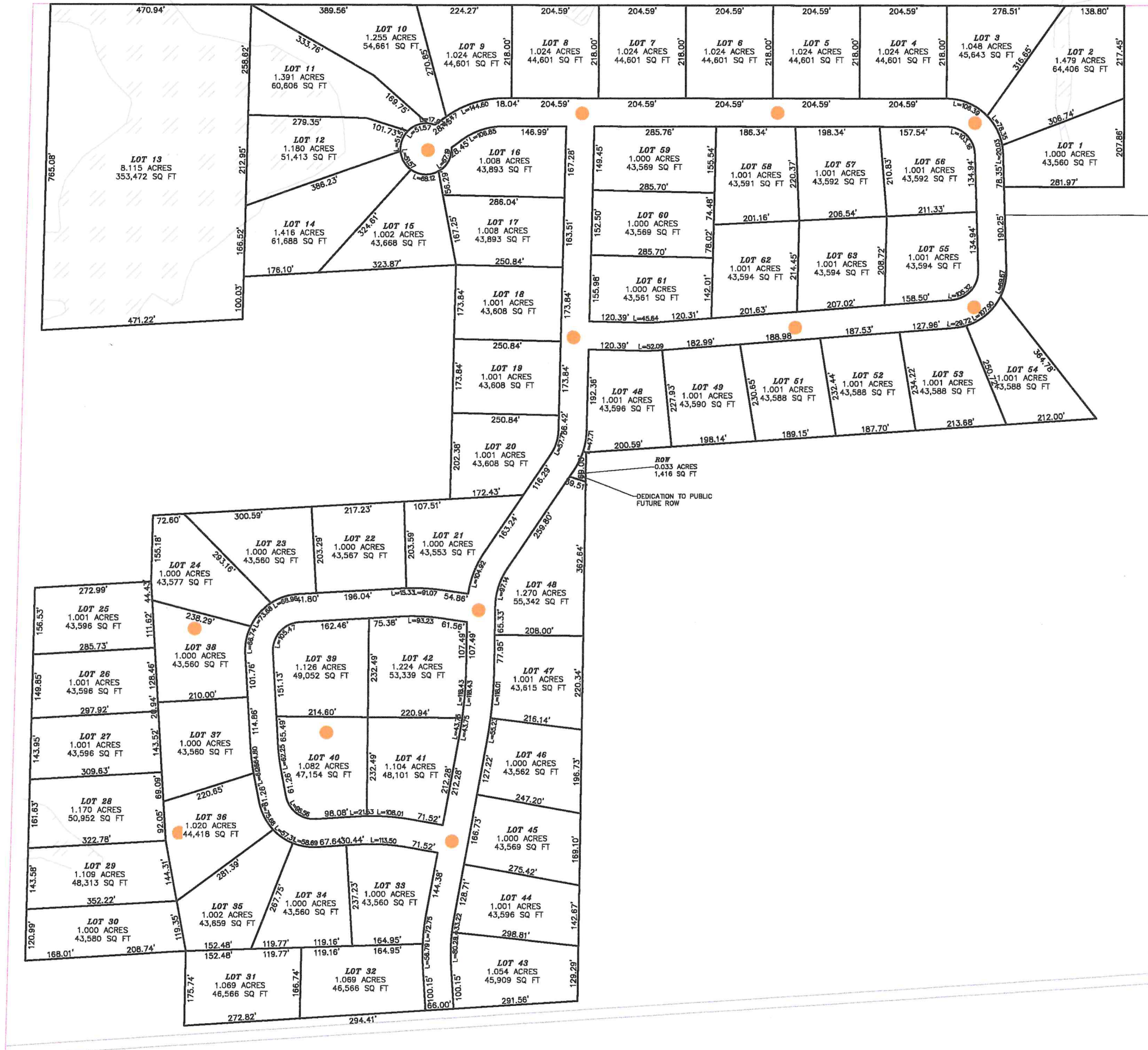
# VILLAGE OF KRONENWETTER OFFICIAL ZONING MAP



- Zoning Districts**
- RR2- Rural Residential 2
  - RR5- Rural Residential 5
  - AR- Agriculture and Residential
  - SF- Single Family Residential
  - MF- Multiple Family Residential
  - MH- Mobile Home Park
  - B1- Neighborhood Business
  - B2- Highway District
  - B3- General Commercial
  - BP- Business Park
  - INT- Institutional
  - M1- Limited Industrial
  - M2- General Industrial



This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and



## Exhibit 'A'

Parcel Identification No. (PIN): **145-2708-051-0985**

Legal Description: Lot 1 of Certified Survey Map Number 14156 recorded in Volume 62 of Certified Survey Maps on Page 163 as Document Number 1431752 located in part of the Northeast 1/4 of the Fractional Northeast 1/4 of Section 5, Township 27 North, Range 8 East, Village of Kronenwetter, Marathon County, Wisconsin.

Parcel Identification No. (PIN): **145-2708-051-0988**

Legal Land Description: Of Lot 1 of Certified Survey Map Number 6849 recorded in Volume 26 of Certified Survey Maps on Page 42 as Document Number 970341. Except: CSM Number 6906 recorded in Volume 26 on Page 99 as Document Number 972876, Except: CSM Number 14156 recorded in Volume 62 on Page 163 as Document Number 1431752 located in part of the Northwest 1/4 of the Fractional Northeast 1/4 of Section 5, Township 27 North, Range 8 East, Village of Kronenwetter, Marathon County, Wisconsin.

Parcel Identification No. (PIN): **145-2708-051-0987**

Legal Land Description: Of Lot 1 of Certified Survey Map Number 6906 recorded in Volume 26 of Certified Survey Maps on Page 99 as Document Number 972876. Except: CSM Number 13780 recorded in Volume 60 on Page 157 as Document Number 1404121, Except: CSM Number 14156 recorded in Volume 62 on Page 163 as Document Number 1431752 located in part of the Northwest 1/4 of the Fractional Northeast 1/4 and part of the Southwest 1/4 of the Fractional Northeast 1/4 of Section 5, Township 27 North, Range 8 East, Village of Kronenwetter, Marathon County, Wisconsin.

Parcel Identification No. (PIN): **145-2708-051-0989**

Legal Land Description: Of the Southwest 1/4 of the Fractional Northeast 1/4, Except the West 417.42' of the South 208.71' thereof, Except the West 41.25', Except CSM Number 3808 recorded in Volume 14 on Page 106 as Document Number 834517, Except CSM Number 6836 recorded in Volume 26 on Page 29 as Document Number 969863, Except CSM Number 6849 recorded in Volume 26 on Page 99 as Document Number 972876, located in Section 5, Township 27 North, Range 8 East, Village of Kronenwetter, Marathon County, Wisconsin.

# WETLAND DELINEATION MAP

ALLIANCE HOLDINGS PROPERTIES LOCATED IN PART OF THE NE1/4, SECTION 5,  
TOWNSHIP 27 NORTH - RANGE 8 EAST, VILLAGE OF KRONENWETTER, MARATHON COUNTY, WISCONSIN



SCALE: 1" = 270' UNLESS NOTED



NOT A CERTIFIED SURVEY MAP

LEGEND:

- PROJECT BOUNDARY
- - - - - PROPERTY LINE
- WETLAND BOUNDARY

CREATED BY:



705 3RD STREET, PO Box 434  
MARATHON, WISCONSIN 54448  
PHONE: (715) 443-6115  
STARENMENTAL@HOTMAIL.COM

Soil Map—Marathon County, Wisconsin

Section 6, Item I.



44° 51' 32" N  
 44° 51' 32" N  
 89° 35' 8" W  
 89° 34' 8" W  
 295700 295800 295900 296000 296100 296200 296300 296400 296500 296600 296700 296800 296900 297000  
 4970500 4970400 4970300 4970200 4970100 4970000 4969900 4969800 4969700

Map Scale: 1:5,080 if printed on A landscape (11" x 8.5") sheet.  
 0 50 100 200 300 Meters  
 0 250 500 1000 1500 Feet  
 Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



### 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 1:20,000.

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: Marathon County, Wisconsin  
Survey Area Data: Version 22, Sep 3, 2024

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

Date(s) aerial images were photographed: Jun 7, 2023—Jun 8, 2023

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
Ch	Cathro muck, 0 to 1 percent slopes	0.7	0.8%
McA	Mahtomedi loamy sand, moderately well drained, 0 to 3 percent slopes	45.1	52.4%
MhA	Meadland loam, 0 to 3 percent slopes, stony	16.4	19.1%
Mm	Meehan loamy sand, 0 to 2 percent slopes	9.3	10.8%
MtC	Mosinee sandy loam, 2 to 15 percent slopes, stony	7.4	8.5%
Ne	Newson mucky loamy sand, river valley, 0 to 1 percent slopes	7.2	8.4%
<b>Totals for Area of Interest</b>		<b>86.0</b>	<b>100.0%</b>

## Marathon County, Wisconsin

### Ch—Cathro muck, 0 to 1 percent slopes

#### Map Unit Setting

*National map unit symbol:* ggvn  
*Elevation:* 600 to 1,400 feet  
*Mean annual precipitation:* 28 to 36 inches  
*Mean annual air temperature:* 39 to 48 degrees F  
*Frost-free period:* 120 to 170 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Cathro and similar soils:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Cathro

##### Setting

*Landform:* Depressions on lake plains, depressions on outwash plains, drainageways on ground moraines, drainageways on lake plains, drainageways on outwash plains, depressions on ground moraines

*Landform position (two-dimensional):* Toeslope

*Down-slope shape:* Concave, linear

*Across-slope shape:* Concave

*Parent material:* Organic material over silty or loamy drift

##### Typical profile

*Oe - 0 to 5 inches:* muck  
*Oa1-Oa3 - 5 to 28 inches:* muck  
*C1,C2 - 28 to 60 inches:* loam

##### Properties and qualities

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Very poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high (0.14 to 1.98 in/hr)  
*Depth to water table:* About 0 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Calcium carbonate, maximum content:* 25 percent  
*Available water supply, 0 to 60 inches:* Very high (about 16.6 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6w  
*Hydrologic Soil Group:* B/D

Map Unit Description: Cathro muck, 0 to 1 percent slopes---Marathon County, Wisconsin

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*Ecological site:* F090BY002WI - Mucky Swamp  
*Forage suitability group:* Not suited, flooded or organics  
(G090BY010WI)  
*Other vegetative classification:* Not suited, flooded or organics  
(G090BY010WI), Picea mariana-Larix laricina/Ledum  
groenlandicum(Aronia melancarpa variant) , Black Spruce-  
Tamarack/Labrador Tea(BlackChokeberry variant) (5PmLLe-  
An)  
*Hydric soil rating:* Yes

## Data Source Information

Soil Survey Area: Marathon County, Wisconsin  
Survey Area Data: Version 22, Sep 3, 2024

Map Unit Description: Mahtomedi loamy sand, moderately well drained, 0 to 3 percent slopes--Marathon County, Wisconsin

## Marathon County, Wisconsin

### McA—Mahtomedi loamy sand, moderately well drained, 0 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2xk6w

*Elevation:* 670 to 1,600 feet

*Mean annual precipitation:* 28 to 36 inches

*Mean annual air temperature:* 39 to 48 degrees F

*Frost-free period:* 120 to 170 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Mahtomedi, moderately well drained, and similar soils:* 100 percent

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

#### Description of Mahtomedi, Moderately Well Drained

##### Setting

*Landform:* Outwash plains, stream terraces

*Landform position (two-dimensional):* Summit

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Sandy outwash

##### Typical profile

*Ap - 0 to 7 inches:* loamy sand

*Bw1 - 7 to 19 inches:* loamy coarse sand

*Bw2 - 19 to 26 inches:* gravelly coarse sand

*C - 26 to 60 inches:* gravelly sand

##### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Moderately well drained

*Runoff class:* Negligible

*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)

*Depth to water table:* About 42 to 60 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Low (about 3.8 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4s

*Hydrologic Soil Group:* A

*Ecological site:* F090BY013WI - Sandy Upland

Map Unit Description: Mahtomedi loamy sand, moderately well drained, 0 to 3 percent slopes--Marathon County, Wisconsin

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*Forage suitability group:* Low AWC, adequately drained  
(G090BY002WI)

*Other vegetative classification:* Low AWC, adequately drained  
(G090BY002WI), Pinus strobus - Acer rubrum / Vaccinium  
angustifolium - Amphicarpa bracteata , Eastern White Pine -  
Red Maple / Low Sweet Blueberry - Hog-peanut (PARVAm),  
Pinus strobus - Quercus spp. / Gaultheria procumbens -  
Ceanothus americanus , Eastern White Pine - Oak spp. /  
Wintergreen - New Jersey Tea (PQGGe)

*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Marathon County, Wisconsin  
Survey Area Data: Version 22, Sep 3, 2024

## Marathon County, Wisconsin

### MhA—Meadland loam, 0 to 3 percent slopes, stony

#### Map Unit Setting

*National map unit symbol:* ggwy  
*Elevation:* 800 to 1,950 feet  
*Mean annual precipitation:* 28 to 36 inches  
*Mean annual air temperature:* 39 to 48 degrees F  
*Frost-free period:* 120 to 170 days  
*Farmland classification:* Prime farmland if drained

#### Map Unit Composition

*Meadland and similar soils:* 98 percent  
*Minor components:* 2 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Meadland

##### Setting

*Landform:* Ground moraines  
*Landform position (two-dimensional):* Footslope  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Loamy drift over loamy till and/or loamy residuum weathered from igneous and metamorphic rock

##### Typical profile

*A,E - 0 to 5 inches:* loam  
*Bs,B/E - 5 to 15 inches:* sandy loam  
*Bt - 15 to 25 inches:* loam  
*C - 25 to 60 inches:* loam

##### Properties and qualities

*Slope:* 0 to 3 percent  
*Surface area covered with cobbles, stones or boulders:* 0.1 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high (0.14 to 1.98 in/hr)  
*Depth to water table:* About 6 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Moderate (about 8.7 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* B/D

Map Unit Description: Meadland loam, 0 to 3 percent slopes, stony--Marathon County, Wisconsin

*Ecological site:* F090BY011WI - Moist Loamy Lowland  
*Forage suitability group:* Mod AWC, high water table (G090BY004WI)  
*Other vegetative classification:* Mod AWC, high water table (G090BY004WI), Tsuga canadensis / Maianthemum canadense - Coptis groenlandica , Eastern Hemlock / Wild Lily-of-the-valley - Goldthread (TMC)  
*Hydric soil rating:* No

### Minor Components

#### Dancy

*Percent of map unit:* 1 percent  
*Landform:* Depressions  
*Ecological site:* F090BY006WI - Wet Loamy Lowland  
*Other vegetative classification:* Fraxinus nigra-Acer rubrum/ Impatiens capensis(Ilex verticillata variant) , Black Ash-Red Maple/Spotted Touch-me-not(Winterberry variant) (5FnArl-lx)  
*Hydric soil rating:* Yes

#### Sherry

*Percent of map unit:* 1 percent  
*Landform:* Depressions  
*Ecological site:* F090BY006WI - Wet Loamy Lowland  
*Other vegetative classification:* Fraxinus nigra-Acer rubrum/ Impatiens capensis(Ilex verticillata variant) , Black Ash-Red Maple/Spotted Touch-me-not(Winterberry variant) (5FnArl-lx)  
*Hydric soil rating:* Yes

## Data Source Information

Soil Survey Area: Marathon County, Wisconsin  
 Survey Area Data: Version 22, Sep 3, 2024

## Marathon County, Wisconsin

### Mm—Meehan loamy sand, 0 to 2 percent slopes

#### Map Unit Setting

*National map unit symbol:* ggwz  
*Elevation:* 670 to 1,950 feet  
*Mean annual precipitation:* 28 to 36 inches  
*Mean annual air temperature:* 39 to 48 degrees F  
*Frost-free period:* 120 to 170 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Meehan and similar soils:* 99 percent  
*Minor components:* 1 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Meehan

##### Setting

*Landform:* Outwash plains, stream terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Sandy outwash

##### Typical profile

*Ap - 0 to 10 inches:* loamy sand  
*Bw1,Bw2,BC - 10 to 30 inches:* sand  
*C - 30 to 60 inches:* sand

##### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat poorly drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)  
*Depth to water table:* About 6 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.4 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Ecological site:* F090BY009WI - Moist Sandy Upland  
*Forage suitability group:* Low AWC, high water table (G090BY001WI)

Map Unit Description: Meehan loamy sand, 0 to 2 percent slopes---Marathon County, Wisconsin

---

*Other vegetative classification:* Low AWC, high water table (G090BY001WI), Acer rubrum - Abies balsamea / Vaccinium angustifolium - Coptis groenlandica , Red Maple Balsam Fir/ Low Sweet Blueberry - Goldthread (ArAbVC), Acer rubrum / Vaccinium angustifolium - Rubus pubescens , Red Maple / Low Sweet Blueberry - Dwarf raspberry (ArVRp)  
*Hydric soil rating:* No

### Minor Components

#### Newson

*Percent of map unit:* 1 percent

*Landform:* Depressions

*Ecological site:* F090BY005WI - Wet Sandy Lowland

*Other vegetative classification:* Pinus strobus-Acer rubrum/ Gaylussacia baccata , Eastern White Pine-Red Maple/Black Huckleberry (5PArGy)

*Hydric soil rating:* Yes

## Data Source Information

Soil Survey Area: Marathon County, Wisconsin

Survey Area Data: Version 22, Sep 3, 2024

Map Unit Description: Mosinee sandy loam, 2 to 15 percent slopes, stony---Marathon County, Wisconsin

## Marathon County, Wisconsin

### MtC—Mosinee sandy loam, 2 to 15 percent slopes, stony

#### Map Unit Setting

*National map unit symbol:* ggx6  
*Elevation:* 800 to 1,950 feet  
*Mean annual precipitation:* 28 to 36 inches  
*Mean annual air temperature:* 39 to 48 degrees F  
*Frost-free period:* 120 to 170 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Mosinee and similar soils:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Mosinee

##### Setting

*Landform:* Hills  
*Landform position (two-dimensional):* Shoulder, backslope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Loamy drift over shattered bedrock igneous and/or metamorphic

##### Typical profile

*A - 0 to 7 inches:* sandy loam  
*Bw1,Bw2 - 7 to 18 inches:* gravelly sandy loam  
*Bw3,Bw4 - 18 to 41 inches:* gravelly sandy loam  
*R - 41 to 60 inches:* bedrock

##### Properties and qualities

*Slope:* 2 to 15 percent  
*Surface area covered with cobbles, stones or boulders:* 0.1 percent  
*Depth to restrictive feature:* 40 to 60 inches to lithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to high (0.00 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.4 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* A  
*Ecological site:* F090BY014WI - Loamy Bedrock Upland

Map Unit Description: Mosinee sandy loam, 2 to 15 percent slopes, stony---Marathon County, Wisconsin

---

*Forage suitability group:* Mod AWC, adequately drained  
(G090BY005WI)

*Other vegetative classification:* Mod AWC, adequately drained  
(G090BY005WI), Acer saccharum / Viburnum acerifolium ,  
Sugar Maple / Maple-leaved Viburnum (AVb)

*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Marathon County, Wisconsin

Survey Area Data: Version 22, Sep 3, 2024

## Marathon County, Wisconsin

### Ne—Newson mucky loamy sand, river valley, 0 to 1 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2xxj2  
*Elevation:* 1,080 to 1,430 feet  
*Mean annual precipitation:* 28 to 36 inches  
*Mean annual air temperature:* 39 to 48 degrees F  
*Frost-free period:* 120 to 170 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Newson and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Newson

##### Setting

*Landform:* Stream terraces, valley trains  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Sandy outwash

##### Typical profile

*Oe - 0 to 3 inches:* mucky peat  
*Oa - 3 to 5 inches:* muck  
*A - 5 to 7 inches:* mucky loamy sand  
*Bg - 7 to 15 inches:* loamy sand  
*BCg - 15 to 26 inches:* sand  
*Cg - 26 to 79 inches:* sand

##### Properties and qualities

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Poorly drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 6.00 in/hr)  
*Depth to water table:* About 0 to 6 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Low (about 5.6 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6w

Map Unit Description: Newson mucky loamy sand, river valley, 0 to 1 percent slopes---  
Marathon County, Wisconsin

*Hydrologic Soil Group:* A/D  
*Ecological site:* F090BY005WI - Wet Sandy Lowland  
*Forage suitability group:* Low AWC, high water table  
(G090BY001WI)  
*Other vegetative classification:* Low AWC, high water table  
(G090BY001WI), Larix laricina-Acer rubrum/Ilex verticillata ,  
Tamarack-Red Maple/Winterberry (1LARlx)  
*Hydric soil rating:* Yes

## Minor Components

### Meehan

*Percent of map unit:* 10 percent  
*Landform:* Stream terraces, valley trains  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* F090BY009WI - Moist Sandy Upland  
*Other vegetative classification:* Low AWC, high water table  
(G095AY001WI), Acer rubrum - Abies balsamea / Vaccinium  
angustifolium - Coptis groenlandica , Red Maple Balsam Fir/  
Low Sweet Blueberry - Goldthread (ArAbVC), Acer rubrum /  
Vaccinium angustifolium - Rubus pubescens , Red Maple / Low  
Sweet Blueberry - Dwarf raspberry (ArVRp)  
*Hydric soil rating:* No

### Dancy

*Percent of map unit:* 5 percent  
*Landform:* Stream terraces, valley trains  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* F090BY006WI - Wet Loamy Lowland  
*Other vegetative classification:* Mod AWC, high water table  
(G090BY004WI), Fraxinus nigra-Acer rubrum/Impatiens  
capensis(Ilex verticillata variant) , Black Ash-Red Maple/  
Spotted Touch-me-not(Winterberry variant) (5FnArl-Ix)  
*Hydric soil rating:* Yes

### Markey

*Percent of map unit:* 5 percent  
*Landform:* Valley trains  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Ecological site:* F090BY002WI - Mucky Swamp  
*Other vegetative classification:* Not suited, flooded or organics  
(G090AY010WI), Picea mariana-Larix laricina/Ledum  
groenlandicum(Aronia melanocarpa variant) , Black Spruce-  
Tamarack/Labrador Tea(BlackChokeberry variant) (5PmLLe-  
An)

*Hydric soil rating:* Yes

## Data Source Information

Soil Survey Area: Marathon County, Wisconsin  
Survey Area Data: Version 22, Sep 3, 2024