

Planning Department

W240N3065 Pewaukee Road
Pewaukee, WI 53072
(262) 691-0770 Fax (262) 691-1798

**PLAN COMMISSION
MEETING NOTICE AND AGENDA
Thursday, September 17, 2020
7:00 PM**

Common Council Chambers ~ Pewaukee City Hall
W240 N3065 Pewaukee Road, Pewaukee, WI 53072

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1. Call to Order and Pledge of Allegiance
 2. Discussion and Action Regarding Approval of Meeting Minutes Dated June 18, 2020
 3. Discussion and Action Regarding a Mitigation Plan for the Marc & Severine McAllister Property Located at N28 W26954 Woodland Drive (PWC 0930066)
 4. Discussion and Action Regarding a Certified Survey Map for the Pewaukee 16-94 South Proposed Industrial Development Located at N17 W25045 Bluemound Road in Order to Reconfigure Two Lots Into One Lot and an Outlot (PWC 0948985003 & PWC 0945989001)
 5. Discussion and Action Regarding the Site and Building Plans for a Proposed 218,000 Square Foot Multi-Tenant Building for the Pewaukee 16-94 South Industrial Development Located at N17 W25045 Bluemound Road (PWC 0948985003 & PWC 0945989001)
 6. Adjournment

Ami Hurd
Deputy Clerk

9/10/2020

NOTICE

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It is possible that members of other governmental bodies of the municipality may be in attendance to gather information that may form a quorum. At the above stated meeting, no action will be taken by any governmental body other than the governmental body specifically referred to above in this notice.

Any person who has a qualifying disability under the Americans with Disabilities Act that requires the meeting or materials at the meeting to be in an accessible format must contact the City Planner, Nick Fuchs, at (262) 691-0770 three business days prior to the meeting so that arrangements may be made to accommodate your request.

**CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 2.**

DATE: September 17, 2020

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding Approval of Meeting Minutes Dated June 18, 2020

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

6.18.20 Minutes

In attendance:

Mayor S. Bierce, Alderman B. Bergman, T. Janka, D. Linsmeier, S. Sullivan, and D. Kiser.

Also in attendance:

City Planner & Community Development Director N. Fuchs, Administrator S. Klein, Department of Public Works Director M. Wagner and Deputy Clerk A. Hurd.

1. Call to Order and Pledge of Allegiance

Chairman Bierce called the meeting to order at 7:04pm and requested everyone stand for the Pledge of Allegiance.

2. Discussion and Action Regarding Applications for Outdoor Activity on Premises Where Alcoholic Beverages are Consumed

2.1 5 O'clock Club

2.2 Curly's Waterfront

2.3 Doc's Dry Dock

2.4 Edgewater of Pewaukee

2.5 Gina's Sports Dock

2.6 Michael's House of Prime

2.7 Smokey's Bait Shop

2.8 The Station

2.9 Wonderland Tap

Ms. Hurd stated the 5 O'clock Club was increasing their dining and drinking hours by one hour. Last year it went until 9:00pm and this year they are requesting dining and drinking be allowed until 10:00pm.

A motion was made and seconded (D. Kiser, S. Sullivan) to approve the outdoor activity permit for the 5 o'clock Club. Motion Passed: 6-For, 0-Against.

Ms. Hurd stated there were no changes to Curly's Waterfront from last year, and dining and drinking would be allowed until 10:00pm.

A motion was made and seconded (B. Bergman, D. Kiser) to approve the outdoor activity permit for Curly's Waterfront. Motion Passed: 6-For, 0-Against.

Ms. Hurd noted that Doc's Dry Dock withdrew their application.

There were no changes for Edgewater from the previous year, and their dining and drinking hours would be from 11am to 2am Sunday through Thursday, and until 2:30am on Fridays and Saturdays. Music would be from 11:00am to 9:00pm Sunday through Thursday, and 11:00pm on Fridays and Saturdays.

A motion was made and seconded (D. Linsmeier, T. Janka) to approve the outdoor activity permit for Edgewater. Motion Passed: 6-For, 0-Against.

Ms. Hurd noted that Gina's application showed the dining and drinking hours as the same the normal business hours, but that is not what was done last year. Last year the hours were 11:00am to 10:00pm, and it was believed that that is what the applicant wants. The music hours were not changing from last year.

A motion was made and seconded (D. Kiser) to approve the outdoor activity for Gina's Sports Dock. Motion Passed: 6-For, 0-Against.

Michael's House of Prime is a new application. Their proposal requests dining and drinking hours until 10:00pm, and until 10:30pm on Fridays and Saturdays. Ms. Hurd noted the music hours were an hour less, until 9:00pm and until 10:00pm on Fridays and Saturdays.

Mr. Fuchs stated the business should have a conditional use per the zoning district, and will be applying for that for the July Plan Commission meeting. Michael's House of Prime is currently having outdoor dining, which they may continue thru June 30th per their liquor license change of premises approval by the Common Council. They will be allowed to continue with that as long as they submit the application for the conditional use, and as long as the City is not receiving complaints.

A motion was made and seconded (T. Janka, D. Kiser) to table the outdoor activity permit for Michael's House of Prime. Motion Passed: 6-For, 0-Against.

Ms. Hurd stated there were no changes to Smokey's from last year, and they were proposing outdoor drinking until 8:00pm and fishing tournaments on Wednesdays through the end of October.

Commissioner Janka referred to the second business operating out of Smokey's for the boat rental business, and he did not believe the City has ever received a plan of operation or approval for it. Mr. Fuchs noted he would have to look into it, but it is a separate enforcement issue from the outdoor activity permit.

A motion was made and seconded (T. Janka, B. Bergman) to table the outdoor activity permit for Smokey's until the second business issue is addressed. Motion Passed: 6-For, 0-Against.

There were no changes to The Station's request from last year. They will have soccer golf, horseshoes and dining and drinking until 9:00pm each night, and 8:00pm on Sundays.

A motion was made and seconded (D. Kiser, T. Janka) to approve the outdoor activity permit for The Station. Motion Passed: 6-For, 0-Against.

Ms. Hurd noted the only change to Wonderland Tap was that they were changing their horseshoe hours from 12:00pm - 10:00pm to 1:00pm - 9:00pm instead.

A motion was made and seconded (D. Kiser, T. Janka) to approve the outdoor activity permit for Wonderland Tap. Motion Passed: 6-For, 0-Against.

3. Discussion and Action Regarding a Petition for a Rezoning Public Hearing for Arce Handyman LLC to Rezone Property on Bluemound Road From Rs-1 Single-Family Residential to M-1 General Wholesale Business/Warehouse District (Lot 1 of the Concurrently Filed Certified Survey Map) and Rs-3 Single-Family Residential (Lot 2 of the Concurrently Filed Certified Survey Map) for the Purpose of Constructing a Landscape and Handyman Building on Proposed Lot 1 and a Future

Single-Family Residential Building on Proposed Lot 2 (PWC 0951995001)

Mr. Fuchs stated this was discussed previously at the May 21st meeting and there were concerns with the site and building plans. The applicant has submitted revised elevations which include a masonry component to the building, awnings, a pergola by the entrance, and three windows on the south elevation. Staff recommended approval of the applications.

Chairman Bierce opened the public hearing at 7:22pm. No one wished to speak and the public hearing was closed at 7:22pm.

A motion was made and seconded (T. Janka, S. Sullivan) to recommend approval of the rezoning conditioned upon the site and building plan approvals. Motion Passed: 5-For, 0-Against, 1-Abstain (D. Kiser).

Commissioner Kiser stated he was going to abstain, as he lives directly next to this property.

4. Discussion and Action Regarding a Recommendation to the Common Council for a Comprehensive Master Plan Amendment to Change the Year 2050 Land Use/Transportation Plan Use Designation for Arce Handyman LLC for Property Located on Bluemound Road From Manufacturing/Fabrication/Warehousing to Manufacturing/Fabrication/Warehousing and Flood Plains, Lowland and Upland Conservancy, and Other Natural Areas (Lot 1); and From Manufacturing/Fabrication/Warehousing to Medium Density Residential (6,500 SQ. Ft. - 1/2 AC./Dwelling Unit) and Floodplains, Lowland and Upland Conservancy, and Other Natural Areas (Lot 2) (PWC 0951995001)

A motion was made and seconded (D. Linsmeier, B. Bergman) to recommend approval of the comprehensive master plan amendment. Motion Passed: 5-For, 0-Against, 1-Abstain (D. Kiser).

5. Discussion and Action Regarding a Certified Survey Map for Arce Handyman LLC for Property on Bluemound Road for the Purpose of Subdividing an Existing Lot (PWC 0951995001)

Mr. Fuchs stated the certified survey map includes two outlots to the north and south of proposed lot 1, which would contain the proposed development.

A motion was made and seconded (S. Sullivan, T. Janka) to approve the certified survey map. Motion Passed: 5-For, 0-Against, 1-Abstain (D. Kiser).

6. Discussion and Action Regarding a Recommendation to the Common Council for a Conditional Use Permit and Site and Building Plans for Arce Handyman LLC for Property Located on Bluemound Road for the Purpose of Constructing a Combined Warehouse/Office Building for a Landscape and Handyman Service Company (PWC 0951995001)

Commissioner Janka stated he had a problem with the west elevation. Commissioner Kiser was concerned about the dock door facing the street.

The architect for the project, David Koscielniak, described the building and site. The building is oriented to the north, which was the long wall with the pergola and the parking lot. The southwest elevation would be the face of the building as Bluemound Road comes by the facility. The south wall has three windows in

the lower level. He noted the entire site would have to be cleared for the building and the trailer is barely visible from the road.

The left side facing Bluemound Road contains the overhead door and the landscape bed, and is the primary elevation one would see from the street. The right side will be tucked into the wooded area facing the vacant lot. The building will not be used during the evening hours. Mr. Koscielniak noted that he was concerned about vandalism if windows were added under the tree cover.

Mr. Koscielniak then discussed the various building materials, as well as the color of the materials.

The applicant, Pedro Arce, noted there would be no signage, as he will only use the building for equipment storage. He will not have any customers coming to the building. Mr. Arce noted he would have sensors for the lights, and it would be building lighting only for security purposes.

Commissioner Kiser referred to the dock door in the front. He felt the orientation of the door needed to be moved.

Commissioner Bergman referred to the southern elevation and the amount of existing tree line screening the long span of building. He suggested adding a condition regarding the removal of trees. Mr. Fuchs noted they would not be allowed to remove trees on lot 1 without City approval, so what is existing after this development must stay.

Commissioner Janka wanted to see three windows added to the west elevation above the existing three. He also stated he did not believe the garage door looked residential.

Discussion took place regarding the site as it relates to size for maneuvering a tractor trailer and accessing the site on Bluemound Road. It was clarified that the applicant will not be using a tractor trailer, but will instead be using a truck with a trailer attached.

It was suggested to put a 12 foot door on the front and a 12 foot door on the side.

Ms. Wagner added that the County will review the access permit and determine whether a turning lane is required.

A motion was made and seconded (S. Sullivan, D. Linsmeier) to recommend approval of the conditional use and site and building plans with the conditions listed by the City Planner including the lighting, the Business Plan of Operation, landscape plan, and windows at the second story for the west elevation, all for staff approval. Motion Passed: 5-For, 0-Against, 1-Abstain (D. Kiser).

7. Discussion and Action Regarding the Site and Building Plans for the Proposed Building Addition and Site Modifications to Lindner Logistics Located at W229 N1492 Westwood Drive (PWC 0958979007 & PWC 0959988009)

Mr. Fuchs stated the development overlaps over two separate parcels which creates setback issues, so the CSM has been submitted to combine the parcels into one. The building addition is 42,762 square feet on the north side of the building and the addition is contained entirely within an existing paved area. There will be 12 loading docks and overhead doors on the west elevation, which faces the street. The applicant is working to get landscaping and screening along the street. Mr. Fuchs recommended approval subject to screening rooftop equipment.

The applicant noted they would be eliminating the nine current overhead doors on the building. He then discussed the various building materials, lighting and signage. Mr. Fuchs noted the addition matches the southern portion of the building with metal panels and loading docks.

Chairman Bierce noted that the last applicant had to add three windows to a 100 foot stretch of building, yet this building has thousands of feet with no windows. The applicant requested to concentrate the budget on landscaping and screening in order to improve the appearance from the road and soften the condition. Chairman Bierce felt trees and shrubs were temporary, but windows are much more permanent.

Commissioner Bergman felt there should be an overall landscape plan that staff could approve.

A motion was made and seconded (D. Kiser, T. Janka) to concur with the staff recommendations including and updated landscape plan and lighting plan. Motion Passed: 5-For, 1-Against (S. Bierce).

8. Discussion and Action Regarding a Certified Survey Map for the Purpose of Combining Two Lots Into One for the Proposed Building Addition and Site Modifications to Lindner Logistics Located at W229 N1492 Westwood Drive (PWC 0958979007 & PWC 0959988009)

A motion was made and seconded (D. Kiser, S. Sullivan) to approve the CSM. Motion Passed: 6-For, 0-Against.

9. Discussion and Action Regarding a Recommendation to the Common Council to Approve the Conditional Use Permit for Valor Aquaponics Located at N15 W22180 Watertown Road for the Purpose of Operating an Indoor Aquaponics Farm for the Production of Organic Vegetables and Fish (PWC 0960999015)

Mr. Fuchs stated the applicant is requesting to occupy a 6,900 square foot tenant space for an indoor aquaponics farm. There will be two to three employees and there will be no regular customer traffic. Mr. Fuchs stated there will be no exterior changes to the building or site. He noted that it does fit in with the B-6 type of uses and there are no adverse impacts.

A motion was made and seconded (B. Bergman, D. Linsmeier) to recommend approval of the conditional use permit. Motion Passed: 5-For, 1-Against (Sullivan).

10. Discussion and Action and Public Hearing Regarding Proposed Amendments to Chapter 17 of the City of Pewaukee Zoning Ordinance Including Sub-Sections 17.0207b, 17.0301e, 17.0435d, 17.0435e(7)(f)iii, 17.0435l(5), 17.0436 and 17.0717 Related to the Deletion of Appendices A-1, A-2, A-3 and A-4

Mr. Fuchs stated the Plan Commission applications and processes have changed, and he recommended removing them from the zoning code.

A motion was made and seconded (D. Linsmeier, D. Kiser) to recommend approval of the proposed ordinance amendments. Motion Passed: 6-For, 0-Against.

11. Discussion and Possible Action Regarding Proposed Amendments to Chapter 17 of the City of Pewaukee Zoning Ordinance Including Striking a Portion of Sub-section 17.0706c Related to Digital Signs; Adding New Sub-section 17.0706d and Re-lettering the Subsequent Sections Accordingly

Related to Adding Electronic Message Boards Signs as Permitted Under Certain Conditions; and Striking a Portion of Sub-section 17.0711 Related to Lighting, Design and Color.

Mr. Fuchs stated this item was related to issuing a sign permit in error to a business for an electronic sign. It was brought forward to the Common Council a few months ago and the Council directed staff to research a possible amendment to the sign code to allow electronic message boards. Mr. Fuchs described the proposed ordinance and the guidelines related to display, scrolling and brightness. Staff is recommending to not change the City ordinance, as he did not believe it was a true need for the business community.

Commissioner Sullivan stated he was totally against this. Commissioners Kiser and Linsmeier were also against the proposed amendments.

Mr. Fuchs noted there would be a public hearing on the matter at the July 16th Plan Commission meeting.

Commissioner Bergman felt this would alleviate banner signs at liquor license establishments such as Andrea's Red Rooster, Boomers and The Station. He felt there were too many signs at these establishments.

12. Adjournment

A motion was made and seconded (D. Kiser, D. Linsmeier) to adjourn the meeting at 8:51pm. Motion Passed: 6-For, 0-Against.

Respectfully Submitted,

Ami Hurd
Deputy Clerk

**CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 3.**

DATE: September 17, 2020

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding a Mitigation Plan for the Marc & Severine McAllister Property Located at N28 W26954 Woodland Drive (PWC 0930066)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

McAllister Mitigation Plan



LAWN & LANDSCAPING, INC.

1217 S. Grandview Blvd. Waukesha, Wisconsin 53188
OFFICE (262) 544 - 9404

City of Pewaukee – Mitigation Plan

McAllister Residence

Site: N28 W26954 Woodland Dr.

Applicant: John Lossman (Badgerland Lawn & Landscaping, Inc.)

August 18, 2020

Attachments:

- Mitigation Plan Sheet
- Rain Garden Design and Plat

The owners of the property listed above, Marc and Severine McAllister, are proposing to build new permeable paver hardscapes. The total combined impervious surface of the structures and remaining elements exceeds the standard allowable 27.5% lot coverage (2,350 s.f. based on lot square footage of 8,544 s.f.). The impervious surface calculations for the proposed project are listed below:

FOOTPRINT OF EXISTING HARDSCAPES = 2,459 S.F.

TOTAL IMPERVIOUS SURFACE PROPOSED = 3,419 S.F.

In order to exceed the standard allowable coverage a mitigation plan must be prepared that accounts for the difference between the standard allowable coverage and the proposed, larger amount. More specifically the plan must propose measures that hold stormwater onsite for a volume (based on a 2 year, 24 hour rain event) associated with the difference in square footage between the standard allowable coverage and proposed, larger amount. The following are mitigation calculation that apply to this project:

LOT = 8,543.6 SQUARE FEET

3,419 S.F. = 40% COVERAGE OF LOT PROPOSED WITH MITIGATION (35% MAXIMUM)

2,349.5 S.F. = 27.5% COVERAGE OF LOT ALLOWED STANDARD

1,069.5 S.F = DIFFERENCE

1,069.5 S.F. X 2.69" (WATER VOLUME FOR A 2 YEAR, 24 HOUR STORM EVENT) =
2,876.955

239.75 CUBIC FEET OF STORAGE NEEDED FOR MITIGATION

OR

8.88 CUBIC YARDS OF STORAGE NEEDED FOR MITIGATION

OR

1,794 GALLONS OF STORAGE NEEDED FOR MITIGATION

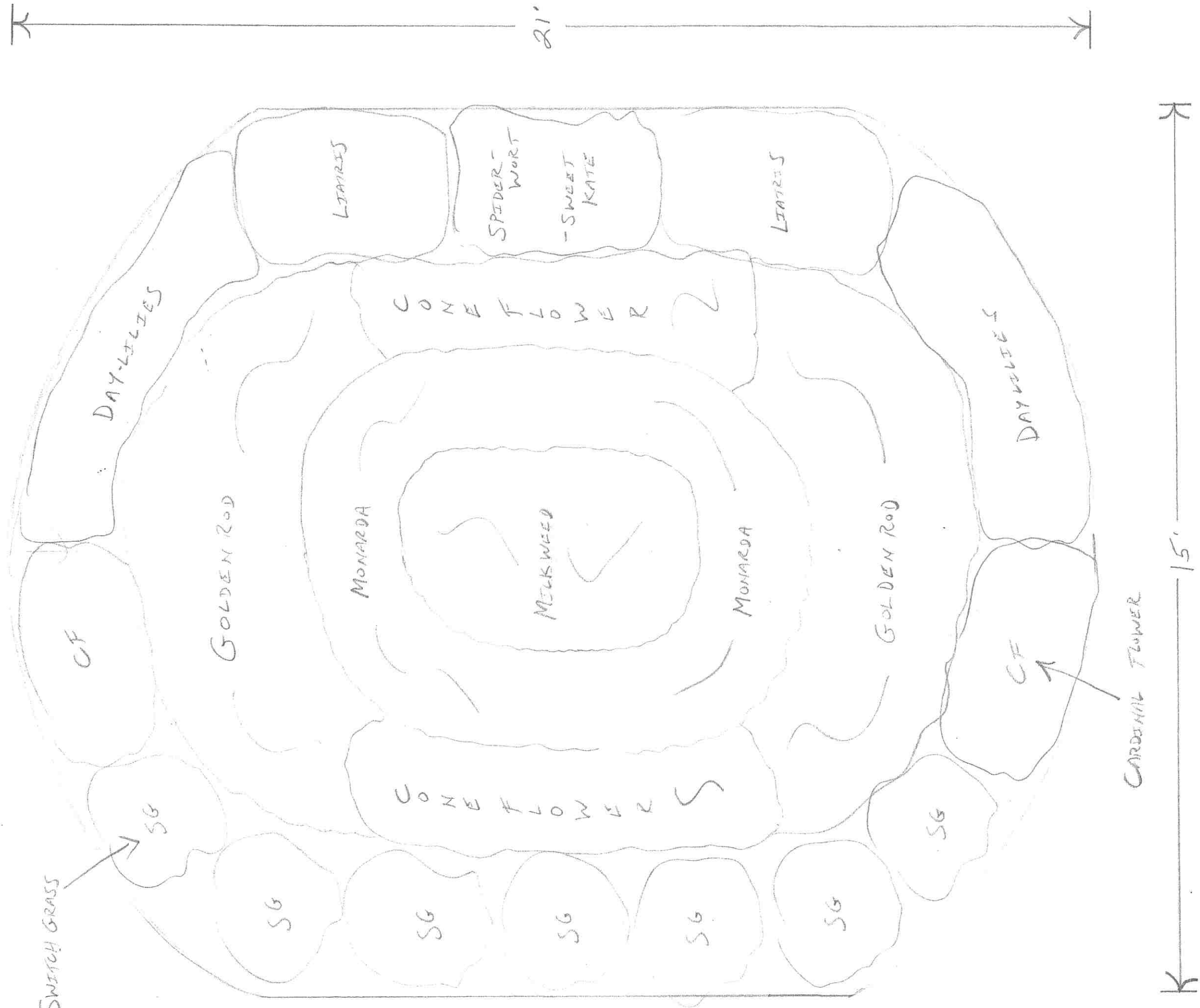
The following mitigation measures are proposed for the site to satisfy this requirement:

- 1.) Installation of one, 12" deep rain garden (15' x 21') per plan to capture stormwater runoff before it enters the lake, Woodland Dr and adjoining properties. The total storage volume for the rain garden = 9 cubic yards (based on a total of 248 square feet of rain garden).
- 2.) Installation of native plants within the rain garden. Native plants ideal for rain gardens as their extensive root systems soak up stormwater and bind the soil (control erosion). See proposed list on attached plan.
- 3.) Installation of swales and berm to keep stormwater onsite and prevent it from migrating onto neighboring properties.
- 4.) Keep and expand current planting areas to further slow and absorb stormwater.

All of the proposed mitigation measures mentioned above can be seen on the attached plan. Implementing these measures should satisfy the city mitigation requirements which would allow Mr. and Mrs. McAllister to proceed with the proposed project.

McCALLISTER RESIDENCE

N. 28 W. 26954 WOODLAND DR. PEWAUKEE, 53072



**CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 4.**

DATE: September 17, 2020

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding a Certified Survey Map for the Pewaukee 16-94 South Proposed Industrial Development Located at N17 W25045 Bluemound Road in Order to Reconfigure Two Lots Into One Lot and an Outlot (PWC 0948985003 & PWC 0945989001)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Pewaukee 16 94 South Staff Report

Pewaukee 16 94 South CSM



Office of the Planner & Community Development Director
W240 N3065 Pewaukee Road
Pewaukee, Wisconsin 53072
Phone (262) 691-0770 Fax (262) 691-1798
fuchs@pewaukee.wi.us

REPORT TO THE PLAN COMMISSION

Meeting of September 17, 2020

Date: September 10, 2020

Project Name: Pewaukee 16-94 South

Project Address/Tax Key No.: Not Assigned/PWC 0948985003 and N17W25045 Bluemound Road/PWC 0945989001

Applicant: Laurie Stollenwerk

Property Owner: Laurie Stollenwerk

Current Zoning: M-6 Mixed Industrial Use District and LC Lowland Conservancy District

Proposed Zoning: Same

2050 Land Use Map Designation: Manufacturing / Fabrication / Warehousing

Use of Surrounding Properties: Industrial to the north and east and Highway 16 to the south and west

Project Description/Analysis:

Briohn Building, on behalf of the applicant Laurie Stollenwerk, submitted a Certified Survey Map and Site & Building Plans for a proposed multi-tenant industrial speculative building for property located at approximately N17W25045 Bluemound Road (Tax Key Nos. 0948985003 and 0945989001).

Tenants are not known at this time, but the building may allow for anywhere from one to five or more tenants within the building. Individual tenants/uses will be required to go through a separate use review and approval process as required by the zoning district and Section 17.0504 of the Zoning Code. This will consist of a Business Plan of Operation or Conditional Use approval depending upon the use.

The subject property is currently vacant and has an area of approximately 42.61 acres. The property is zoned M-6 Mixed Industrial Use District and LC Lowland Conservancy District and is designated as Manufacturing/Fabrication/Warehousing and Floodplains, Lowland & Upland Conservancy and Other Natural Areas on the City's Year 2050 Land Use/Transportation Plan map.

The subject development complies with M-6 District development standards. Note that one of the M-6 District setback requirements states, "Loading and unloading docks or truck doors shall be located not less than 100 feet from the right-of-way of an abutting access street or highway and shall not be visible from abutting streets/highways." The loading docks are more than 100-feet from Bluemound Road and the applicant has included a screening wall that extends east from the northeast corner of the building as well as landscaping at the corner to screen the docks from the road.

Certified Survey Map

The proposed Certified Survey Map reconfigures a 37.64 acre parcel (Tax Key No. 0948985003) and a 5.01 acre parcel located at N17W25045 Bluemound Road (Tax Key No. 0945989001) to create a 24.952-acre developable site (Lot 1) and a 17.658-acre outlot (Outlot 1).

Site Plan

The applicant is proposing a 217,982 square foot building with multiple anticipated tenant spaces. The development will result in approximately 46% greenspace, which complies with the required 40% minimum greenspace standard of the City's Zoning Code.

The project includes the building, which consists of loading docks and overhead doors along the east elevation, 160 parking spaces, and associated landscaping and lighting. In addition, storm water management facilities are proposed as part of the development and located along the west side of the property.

The site will be accessed from a shared drive along Bluemound Road, which has an existing easement in place, which is shown on the CSM.

Related to the site plan, staff recommends:

- *Final grading, erosion control and storm water management plans shall be submitted for approval by the Engineering Department prior to any land disturbance.*
- *No outdoor storage shall be allowed other than trailers parked within the designated trailer parking area to the south of the building.*

Natural Resources

There are five wetland areas onsite. The larger wetland complex will be protected within the proposed outlot. The remaining four wetlands are smaller, isolated wetlands and will be filled as part of this development, except for a small portion of Wetland 4, which is located along the east property line.

According to the applicant, they have received Wisconsin Department of Natural Resources approval for the wetland impacts. *The applicant will be required to provide those approvals to City staff, prior to any land disturbing activities.*

The site also includes a significant number of trees. Those impacts are detailed in the section below.

Landscaping

The applicant is proposing to install 41 Canopy Trees, 159 Evergreen Trees, 25 Ornamental Trees, 131 Deciduous Shrubs, and 56 Evergreen Shrubs. At least three different species of each tree type is provided, except for the Evergreen Shrubs which include two different types.

Removal of existing trees will occur throughout the site. According to the tree inventory plan, which includes trees with a dBH of 4-inches or greater, about 335 trees will be removed and 95 preserved. Trees onsite primarily consist of Boxelders.

Staff has been working with the applicant to preserve as many existing trees as possible. For example, the applicant adjusted the westernmost drive, shifting it further east, to avoid a grove of mature Bur Oak Trees.

As tree removal is significant, staff is recommending that following tree removal and installation of landscaping onsite, the applicant and City staff shall review perimeter landscaping and tree lines, particularly along the east side of the property, to ensure that screening is sufficient. If the new and remaining plantings do not provide appropriate screening as determined by staff or the Plan Commission, the applicant shall provide infill plantings, as reasonably practicable at the direction of staff or the Plan Commission, to further mitigate for the tree impacts onsite. Mitigation shall only be required for trees of a 6" caliper or greater and shall not exceed a 1:1 ratio (one tree required for every one tree removed). The review of landscaping and screening shall not result in a shift to the building or parking lot locations.

Parking

The site plan includes 160 parking spaces. This equates to approximately 1.36 parking spaces per 1,000 square feet of gross floor area. This is a similar ratio that was provided for the recently completed Northmound development that was approved in 2018.

Eight ADA accessible stalls are included within the 160 space parking field. The applicant is also showing future parking that would accommodate 25 additional stalls (for a total of 180 spaces). In addition, the site plan shows 25 larger trailer parking stalls to the south of the building.

The passenger spaces are 9' wide by 20' long (180 square feet), which complies with the City's parking space standards. The trailer stalls are 12' by 55' (660 square feet).

As a mix of office, warehouse and industrial space, staff has no objections to the amount of parking provided.

Architecture

The proposed building exterior primarily consists of painted precast concrete wall panels of different colors. The building height varies and ranges from 38-feet to a peak of 42.5'. The M-6 District states, "No part of a principal structure shall exceed 30 feet in height unless it is serviced with a certified fire suppression sprinkler system, in which case the height may be extended to 50 feet if enclosed stair towers to the roof are also provided."

Section 17.0901f. also states, "The Height of Commercial, Industrial, and Institutional Buildings may be increased to a maximum of six (6) stories if a fully operational sprinkler system is in place included enclosed stairwells to the roof and the Fire Chief has approved in writing a fire safety plan of the structure and use."

Based on these code sections, Fire Chief approval of a fire suppression system and fire safety plan shall be required prior to issuance of a Building Permit.

Two dumpster enclosures are illustrated on the east side of the building at the north and south ends. The dumpster enclosures will be constructed of the same materials as the principal building as depicted and noted on Sheet A5.1.

A rooftop mechanical plan was provided (Sheet A4.1), which illustrates mechanicals centered behind parapet walls. According to the applicant, mechanicals will not be visible from any public right-of-

way. Staff recommends that if rooftop mechanicals are visible from public rights-of-way (Bluemound Road, Highway 16, and I-94), the applicant shall install rooftop screening as approved by the City Planner.

Signage

Sign plans have not yet been submitted. Wall signs are anticipated, but regardless, all signage must comply with standards set forth in Section 17.0700 of the City's Zoning Code and will require separate review and approval by the City Planner as well as a Sign Permit from the Building Services Department, prior to installation.

Utilities

Public sewer and water is available and will serve the subject development.

Lighting

The Lighting Plan consists of parking lot and building lighting. Light levels are at 0.0 footcandles at the property lines. The peak height of lights is 17-feet, which complies with the 20-foot maximum height requirement of the Zoning Code.

Recommendation:

A motion to approve the proposed building and site development plans submitted by Briohn Building Corporation for the property located at approximately N17W25045 Bluemound Road (Tax Key Nos. 0948985003 and 0945989001), subject to the conditions within this report.

A motion to approve the Certified Survey Map reconfiguring properties located at approximately N17W25045 Bluemound Road (Tax Key Nos. 0948985003 and 0945989001), subject to showing the former property line on Sheet 1.

CERTIFIED SURVEY MAP NO.

BEING A DIVISION OF LOT 3 OF CERTIFIED SURVEY MAP NO. 11415 AND PARCEL 1 OF CERTIFIED SURVEY MAP 7930, BEING A PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 AND PART OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 21, AND E=THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 22, TOWN 7 NORTH RANGE 19 EAST, IN THE CITY OF PEWAUKEE, WAUKESHA COUNTY, STATE OF WISCONSIN.

- INDICATES IRON PIPE FOUND
- INDICATES 1 INCH DIA. IRON PIPE, 18 INCHES IN LENGTH, WEIGHING 1.13 LBS PER LINEAL FOOT, SET.

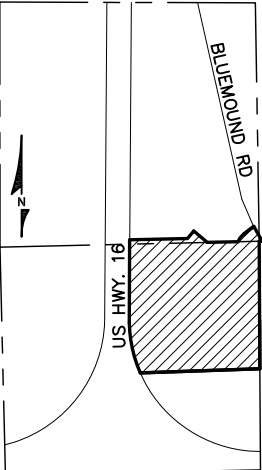
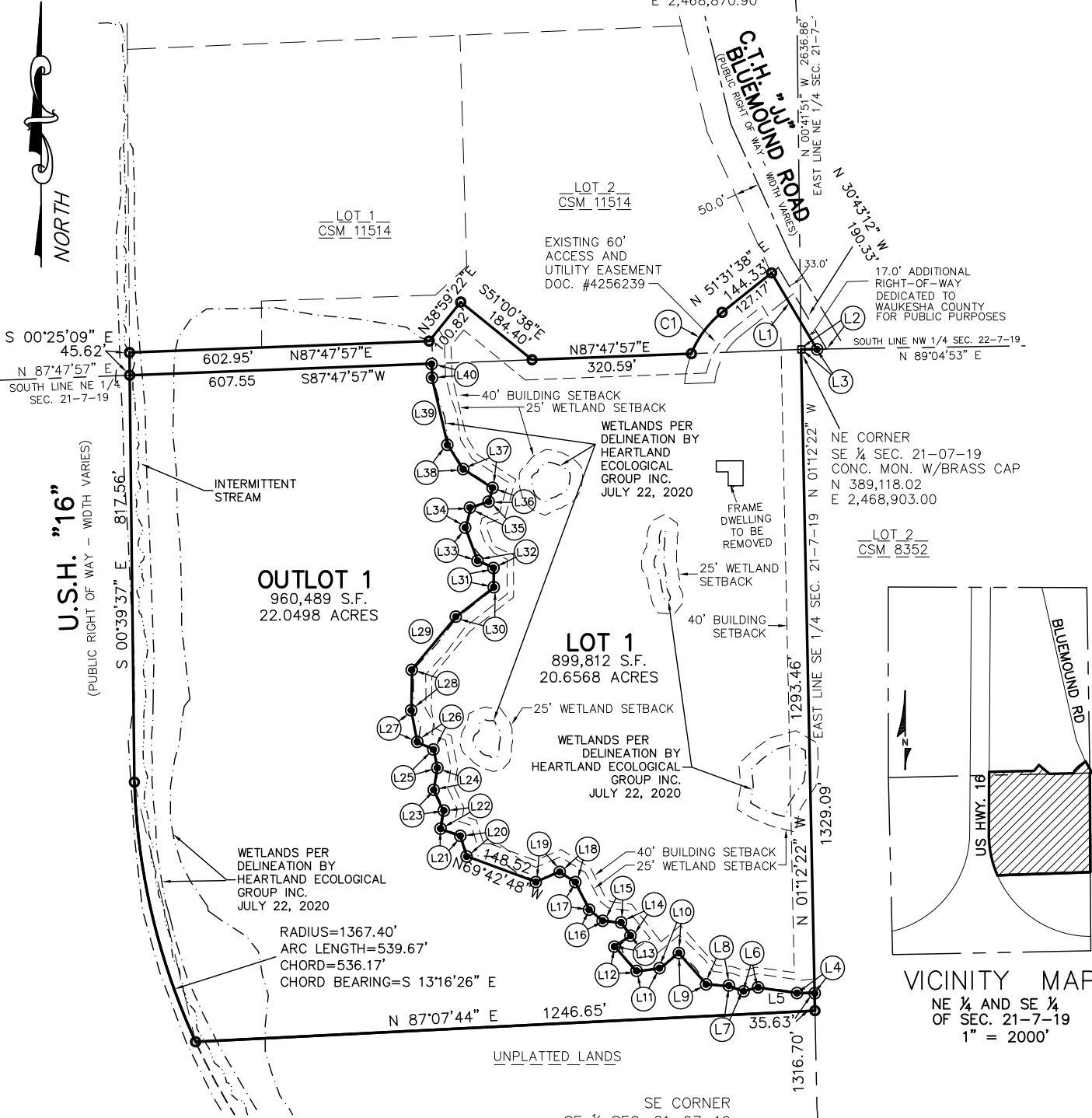
ALL DIMENSIONS SHOWN ARE MEASURED TO THE NEAREST HUNDREDTH OF A FOOT.

ALL BEARINGS SHOWN ARE REFERENCED TO THE EAST LINE OF THE NORTHEAST 1/4 OF SECTION 21-07-19 AS N 00°41'51" W, WISCONSIN STATE PLANE COORDINATE SYSTEM GRID, SOUTH ZONE, AND ALL BEARINGS ARE REFERENCED TO GRID NORTH.

OWNER: LAURIE STOLLENWERK
347 PARK AVENUE
PEWAUKEE, WI 53072

SURVEYOR: CHRISTOPHER A. JACKSON, PLS
CJ ENGINEERING, LLC
9205 W. CENTER ST., STE 214
MILWAUKEE, WI 53213
(414) 443-1312

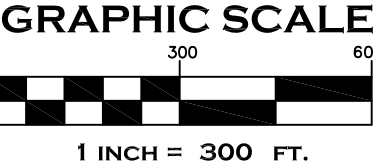
NE CORNER
NE 1/4 SEC. 21-07-19
CONC. MON. W/BRASS CAP
N 391,754.44
E 2,468,870.90



VICINITY MAP
NE 1/4 AND SE 1/4
OF SEC. 21-7-19
1" = 2000'

SEE PAGE 2 FOR LINE TABLE

CURVE	ARC	RAD.	CHRD.	CH. BRG.
C1	104.64'	200.00'	103.45'	N36°32'20"E



CERTIFIED SURVEY MAP NO. _____

BEING A DIVISION OF LOT 3 OF CERTIFIED SURVEY MAP NO. 11415 AND PARCEL 1 OF CERTIFIED SURVEY MAP 7930, BEING A PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 AND PART OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 21, AND E=THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 22, TOWN 7 NORTH RANGE 19 EAST, IN THE CITY OF PEWAUKEE, WAUKESHA COUNTY, STATE OF WISCONSIN.

SURVEYOR'S CERTIFICATE

I, CHRISTOPHER JACKSON, A PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY:

THAT I HAVE SURVEYED, DIVIDED AND MAPPED A A DIVISION OF LOT 3 OF CERTIFIED SURVEY MAP NO. 11415 AND PARCEL 1 OF CERTIFIED SURVEY MAP 7930, BEING A PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 AND PART OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 21, AND THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 22, TOWN 7 NORTH RANGE 19 EAST, IN THE CITY OF PEWAUKEE, WAUKESHA COUNTY, STATE OF WISCONSIN, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEAST CORNER OF THE SOUTHEAST 1/4 OF SECTION 21; THENCE S 01°12'22" E ALONG THE EAST LINE OF SAID SOUTHEAST 1/4 OF SECTION 21, 1293.46 FEET; THENCE S 87°07'44" W 1246.65 FEET; THENCE 539.67 FEET ALONG AN ARC OF A CURVE WHOSE RADIUS IS 1367.40 FEET, WHOSE CENTER LIES TO THE EAST, WHOSE CHORD BEARS S 13°16'26" E 536.17 FEET; THENCE N 00°39'37" E 817.56 FEET; THENCE N 00°25'09" W 45.62 FEET; THENCE N 87°47'57" E 602.95 FEET; THENCE N 38°59'22" E 100.82 FEET; THENCE S 51°00'38" E 184.40 FEET; THENCE N 87°47'57" E 320.59 FEET; THENCE 104.64 FEET ALONG AN ARC OF A CURVE WHOSE RADIUS IS 200.00 FEET, WHOSE CENTER LIES TO THE SOUTH, WHOSE CHORD BEARS N 36°32'20" E 103.45 FEET; THENCE N 51°31'38" E 144.33 FEET; THENCE S 30°43'12" E 190.33 FEET; S 89°04'53" W 51.47 FEET TO THE POINT OF BEGINNING.

CONTAINING 1,860,301 SQUARE FEET OR 42.707 ACRES MORE OR LESS

THAT I HAVE MADE SUCH SURVEY, LAND DIVISION AND MAP BY THE DIRECTION OF LAURIE STOLLENWERK, OWNERS OF SAID LAND.

THAT SUCH MAP IS A CORRECT REPRESENTATION OF ALL EXTERIOR BOUNDARIES OF THE LAND SURVEYED AND THE DIVISION THEREOF MADE.

THAT I HAVE FULLY COMPLIED WITH THE PROVISIONS OF CHAPTER 236 OF THE STATUTES OF THE STATE OF WISCONSIN AND THE REGULATIONS OF THE CITY OF PEWAUKEE IN SURVEYING, DIVIDING, MAPPING AND DEDICATING THE SAME.

DATED THIS _____ DAY OF _____, 20____.

LINE	DIST.	BEARING
L1	178.27'	S30°43'12"E
L2	51.47'	S89°04'53"W
L3	31.88'	S89°04'53"W
L4	33.41	S89°20'23"W
L5	82.44	N82°02'31"W
L6	29.41	S74°47'11"W
L7	31.11	N70°48'49"W
L8	44.85	N85°10'55"W
L9	84.24	N41°36'27"W
L10	47.67	S50°00'18"W
L11	48.89	S82°16'41"W
L12	67.09	N40°35'15"W
L13	39.19	N57°14'00"E
L14	32.26	N38°14'52"W
L15	37.92	N82°37'03"W
L16	34.66	N49°40'34"W
L17	62.05	N26°59'29"W
L18	37.78	N57°48'37"W
L19	50.90	S66°51'29"W
L20	42.83	N17°16'22"W
L21	42.26	N71°17'39"W
L22	37.53	N08°53'58"E
L23	45.41	N25°10'42"W
L24	44.28	N09°14'03"E
L25	37.14	N11°32'37"W
L26	36.32	N65°23'41"W
L27	64.00	N10°45'22"W
L28	83.14	N01°06'35"E
L29	137.60	N39°55'34"E
L30	95.99	N51°59'11"E
L31	39.42	N00°05'17"E
L32	35.15	N65°33'47"W
L33	68.67	N20°58'32"W
L34	44.26	N14°08'11"E
L35	37.45	N72°18'30"E
L36	28.35	N16°00'33"E
L37	72.51	N56°51'36"W
L38	56.54	N31°30'56"W
L39	135.15	N13°19'18"W
L40	30.84	N01°55'16"W

CHRISTOPHER A. JACKSON
PROFESSIONAL LAND SURVEYOR, S-2851
STATE OF WISCONSIN

CERTIFIED SURVEY MAP NO.

BEING A DIVISION OF LOT 3 OF CERTIFIED SURVEY MAP NO. 11415 AND PARCEL 1 OF CERTIFIED SURVEY MAP 7930, BEING A PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 AND PART OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 21, AND E=THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 22, TOWN 7 NORTH RANGE 19 EAST, IN THE CITY OF PEWAUKEE, WAUKESHA COUNTY, STATE OF WISCONSIN.

OWNER'S CERTIFICATE

LAURIE STOLLENWERK, AS OWNER, I HEREBY CERTIFY THAT I CAUSED THE LAND DESCRIBED ON THIS MAP TO BE SURVEYED, DIVIDED, MAPPED AND DEDICATED AS REPRESENTED ON THIS MAP. I CERTIFY THAT THIS CERTIFIED SURVEY MAP IS REQUIRED TO BE SUBMITTED TO THE FOLLOWING FOR APPROVAL: CITY OF PEWAUKEE

LAURIE STOLLENWERK, OWNER

STATE OF WISCONSIN)
MILWAUKEE COUNTY) SS

PERSONALLY CAME BEFORE ME THIS ____DAY OF _____, 20 __, THE ABOVE NAMED LAURIE STOLLENWERK, TO ME KNOWN TO BE THE PERSONS WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED THE SAME.

NOTARY PUBLIC, STATE OF WISCONSIN
MY COMMISSION EXPIRES _____,20

MORTGAGEE CERITIFICATE

FIRST NATIONAL BANK OF HARTFORD, A CORPORATION DULY ORGANIZED AND EXISTING UNDER AND BY VIRTUE OF THE LAWS OF THE STATE OF WISCONSIN, MORTGAGEE OF THE ABOVE DESCRIBED LAND, DOES HEREBY CONSENT TO THE SURVEYING, DIVIDING AND MAPPING OF THE LAND DESCRIBED ON THIS MAP AND DOES HEREBY CONSENT TO THE ABOVE CERTIFICATION OF OWNERS

IN WITNESS WHEREOF, THE SAID FIRST NATIONAL BANK OF HARTFORD, HAS CAUSED THESE PRESENTS TO BE SIGNED BY _____, AT _____, WISCONSIN, THIS ____ DAY OF _____, 20 ____.

BY: _____
NAME:
TITLE:

STATE OF WISCONSIN)
MILWAUKEE COUNTY) SS

PERSONALLY CAME BEFORE ME ON _____, 20 __, BY _____, IN HIS/HER CAPACITY AS _____ OF FIRST NATIONAL BANK OF HARTFORD, TO ME KNOWN TO BE THE PERSON WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED THE SAME.

NOTARY PUBLIC _____
STATE OF WISCONSIN
MY COMMISSION EXPIRES: _____

CERTIFIED SURVEY MAP NO. _____

BEING A DIVISION OF LOT 3 OF CERTIFIED SURVEY MAP NO. 11415 AND PARCEL 1 OF CERTIFIED SURVEY MAP 7930,
BEING A PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 AND PART OF THE NORTHEAST 1/4 OF THE
SOUTHEAST 1/4 OF SECTION 21, AND E=THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 22, TOWN 7
NORTH RANGE 19 EAST, IN THE CITY OF PEWAUKEE, WAUKESHA COUNTY, STATE OF WISCONSIN.

PLANNING COMMISSION APPROVAL

APPROVED BY THE PLANNING COMMISSION OF THE CITY OF PEWAUKEE ON THE . ____ DAY OF
_____, 20____.

STEVE BIERCE, CHAIRMAN

AMI HURD, RECORDING SECRETARY

COMMON COUNCIL APPROVAL

APPROVED BY THE COMMON COUNCIL OF THE CITY OF PEWAUKEE ON THE . ____ DAY OF
_____, 20____.

STEVE BIERCE, MAYOR
CITY OF PEWAUKEE

KELLY TARCZEWSKI, CITY CLERK/TREASURER
CITY OF PEWAUKEE

**CITY OF PEWAUKEE
PLAN COMMISSION AGENDA ITEM 5.**

DATE: September 17, 2020

DEPARTMENT: Planning

PROVIDED BY:

SUBJECT:

Discussion and Action Regarding the Site and Building Plans for a Proposed 218,000 Square Foot Multi-Tenant Building for the Pewaukee 16-94 South Industrial Development Located at N17 W25045 Bluemound Road (PWC 0948985003 & PWC 0945989001)

BACKGROUND:

FINANCIAL IMPACT:

RECOMMENDED MOTION:

ATTACHMENTS:

Description

Title Sheet

Architectural Renderings

GSO.1 Specifications

GSO.2 Specifications

Plat Sheet 1

Plat Sheet 2

C1.0

C2.0

C3.0

C4.0

C5.0

L1.0

L1.1

L1.2

L1.3

L1.4

L1.5

A0.1 Colored Site Plan
A1 Overall First Floor Plan
A4 Roof Plan
A5 Exterior Elevations
E1
E2 Lighting Cut Sheets
E2-1 Lighting Cut Sheets
SWMP
Wastewater Discharge

PROPOSED NEW MULTI-TENANT BUILDING FOR:

PEWAUKEE SOUTH INDUSTRIAL DEVELOPMENT

BLUEMOUND ROAD HWY JJ (EAST OF HWY 16)
PEWAUKEE, WISCONSIN 53072



PEWAUKEE SOUTH INDUSTRIAL - PEWAUKEE, WISCONSIN
EXTERIOR PERSPECTIVE LOOKING SOUTHEAST
JULY 31, 2020



www.briohn.com PHONE: 262.790.0500

A1

2020 BRIOHN DESIGN GROUP, LLC

SHEET INDEX	
0 - GENERAL	
T1.1	TITLE SHEET
T1.2	ARCHITECTURAL RENDERINGS
1 - SPECIFICATIONS	
G50.1	SPECIFICATIONS
G50.2	SPECIFICATIONS
2 - SURVEY	
PST - 1 OF 2	PLAT OF SURVEY WITH TOPOGRAPHY
PST - 2 OF 2	PLAT OF SURVEY WITH TOPOGRAPHY
3 - CIVIL	
C1.0	SITE PLAN
C2.0	SITE GRADING PLAN
C3.0	SITE UTILITY PLAN
C4.0	EROSION CONTROL PLAN
C5.0	SITE DETAILS
4 - LANDSCAPING	
L1.0	OVERALL LANDSCAPE PLAN
L1.1	TREE INVENTORY PLAN / PRESERVATION PLAN
L1.2	ENLARGED LANDSCAPE PLAN NORTH ENLARGEMENT
L1.3	ENLARGED LANDSCAPE PLAN NORTHWEST ENLARGEMENT
L1.4	ENLARGED LANDSCAPE PLAN SOUTH ENLARGEMENT
L1.5	LANDSCAPE DETAILS, NOTES & SCHEDULES
5 - ARCHITECTURAL	
A0.1	COLOR SITE PLAN
A1.0	OVERALL FLOOR PLAN
A4.1	ROOF PLAN
A5.1	EXTERIOR ELEVATIONS
6 - ELECTRICAL	
E1.0	EXTERIOR PHOTOMETRIC LIGHTING PLAN
E2.0	LIGHTING CUT SHEETS
E2.1	LIGHTING CUT SHEETS

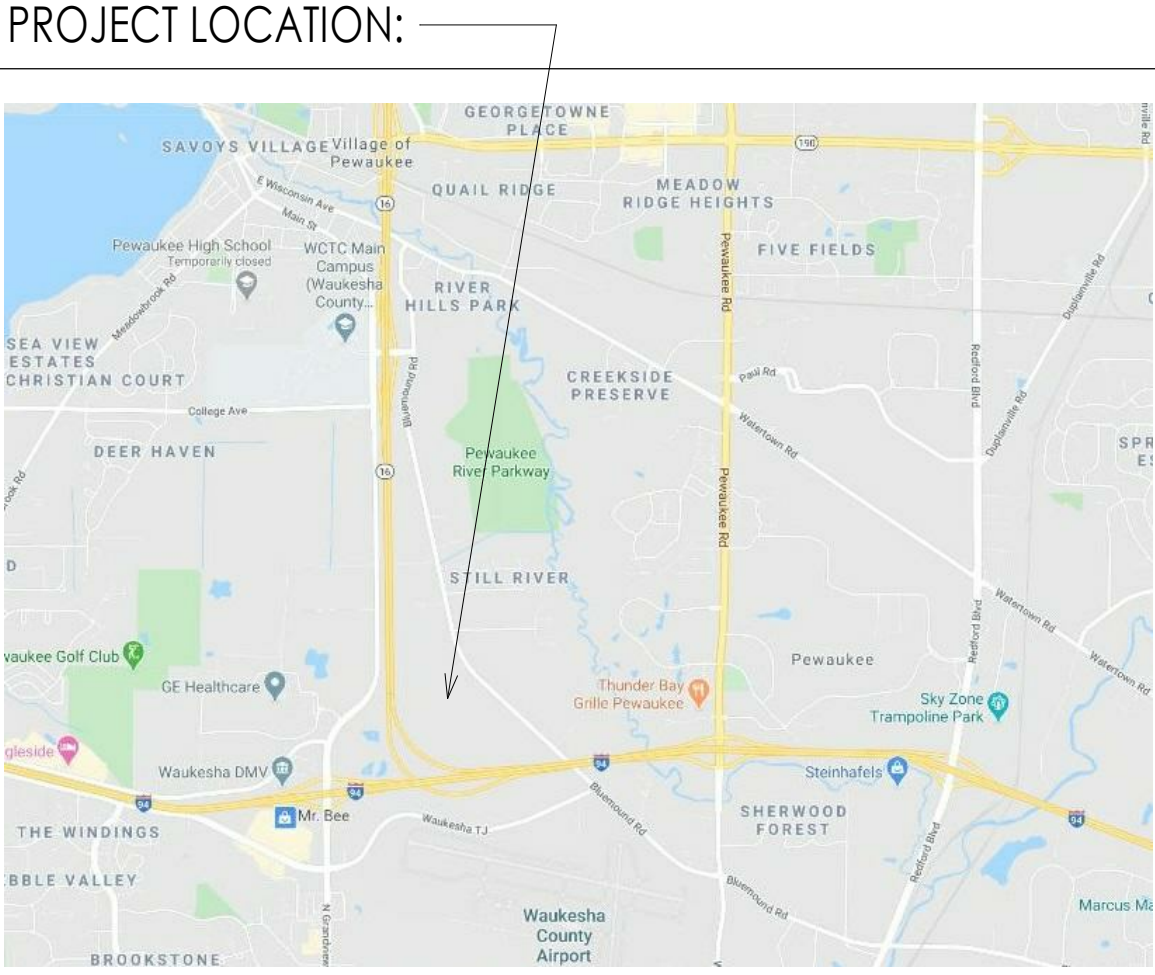


1 SITE PLAN OVERALL
1" = 300'-0"

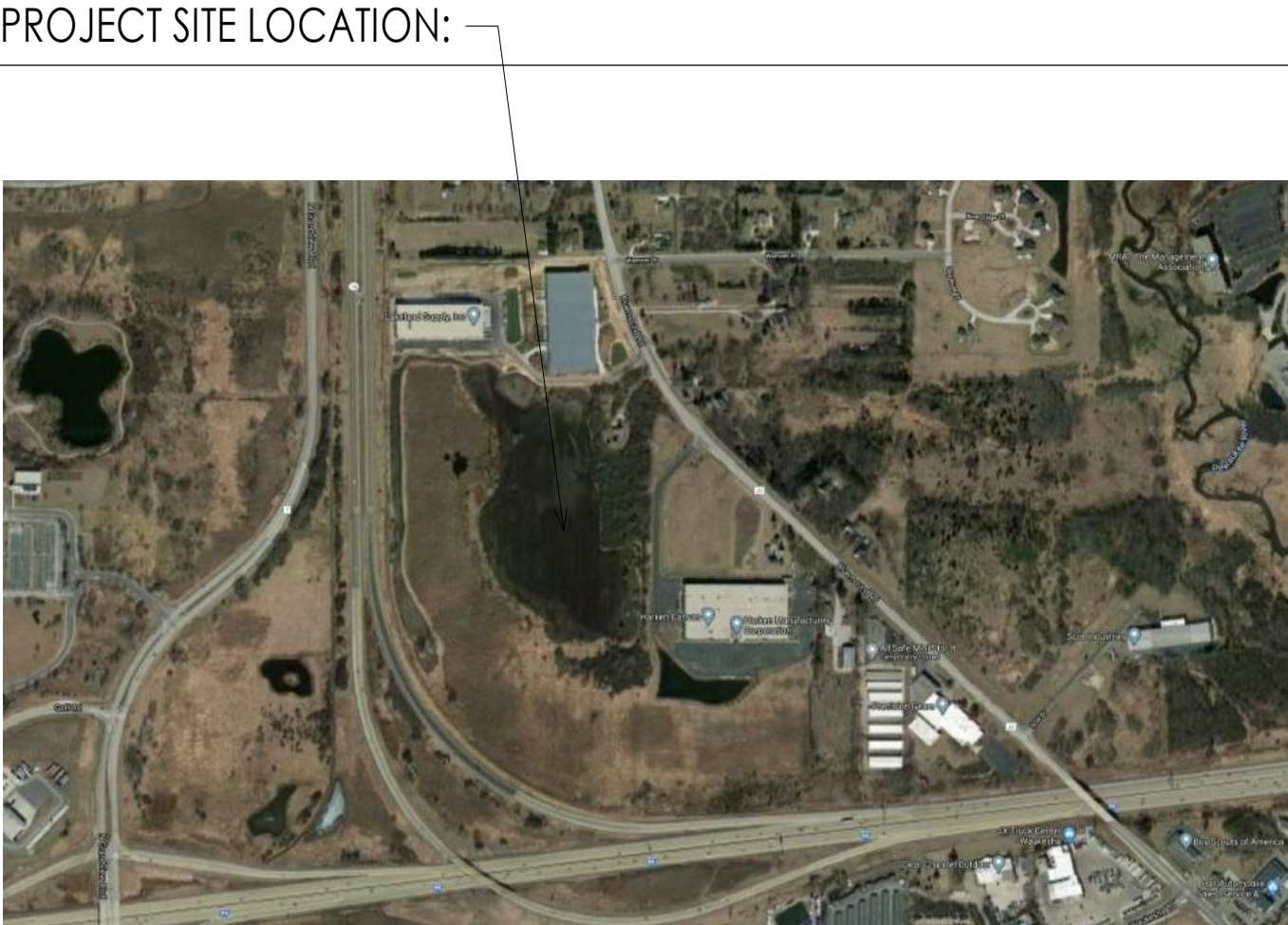
PLAN COMMISSION SUBMITTAL
SEPTEMBER 3, 2020

OWNER :	GENERAL CONTRACTOR :	ARCHITECT :	PROJECT INFORMATION:
2, LLC BRIOHN C/O WESTMINSTER CAPITAL CHARLES E. KING MANAGING PRINCIPAL 270 WESTMINSTER, SUITE 300 LAKE FOREST, IL 60045 (847) 234-1123 PHONE (847) 234-2115 FAX	BRIOHN BUILDING CORPORATION MIKE MIKSICH, P.E. 3885 N. BROOKFIELD RD., SUITE 200 BROOKFIELD, WISCONSIN 53045 (262) 790-0500 PHONE (262) 790-0505 FAX	BRIOHN DESIGN GROUP LLC DOMENIC FERRANTE, AIA CHRISTOPHER WENZLER, AIA 3885 N. BROOKFIELD RD., SUITE 200 BROOKFIELD, WISCONSIN 53045 (262) 790-0500 PHONE (262) 790-0505 FAX	CODE: SPS 360-366 WISCONSIN COMMERCIAL BUILDING CODE (IBC 2015, IECC 2015/2009, IBC 2015, IMC 2015 AND IFGC 2015) SPS 314 FIRE PREVENTION (REFERENCED NFPA) SPS 316 ELECTRICAL SPS 381-387 PLUMBING OCCUPANCY: F-1 (MANUFACTURING) (FUTURE ANTICIPATED) S-1 (STORAGE) (FUTURE ANTICIPATED) B (BUSINESS - OFFICE) (FUTURE POSSIBLE ACCESSORY) CLASS OF CONSTRUCTION: TYPE 2B SPRINKLER SYSTEM: FULLY SPRINKLERED - NFPA 13 FLOOR LEVELS: 1 NUMBER OF STORIES: 1 TOTAL OVERALL AREA: 217,988 SF FOOTPRINT

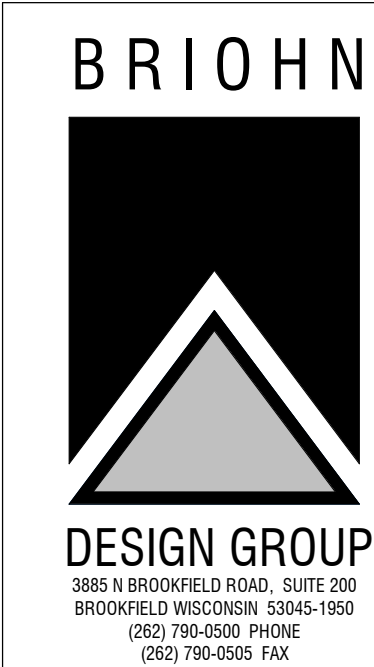
NOTE:
ALL MECHANICAL, ELECTRICAL, PLUMBING AND FIRE
SPRINKLER ENGINEERING BY DESIGN-BUILD CONTRACTORS



3 SITE LOCATION MAP
NO SCALE



4 VICINITY MAP
NO SCALE



TITLE SHEET

PROPOSED NEW MULTI-TENANT BUILDING:
PEWAUKEE SOUTH INDUSTRIAL
DEVELOPMENT
BLUEMOUND ROAD HWY "J"
PEWAUKEE, WISCONSIN

Revision	
Date	
JOB:	3234
DRAWN:	CK
CHECKED:	DF /KJ
DATE:	SEPTEMBER 3, 2020
SHEET:	

T1.1

LEGAL DESCRIPTION:

PARCEL A:

LOT 3, CERTIFIED SURVEY MAP NO. 11514, IN THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 AND THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 21, TOWN 7 NORTH, RANGE 19 EAST, IN THE CITY OF PEWAUKEE, WAUKESHA COUNTY, STATE OF WISCONSIN.

PARCEL B:

PARCEL 1, CERTIFIED SURVEY MAP NO. 7930, IN THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4, THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 21, AND THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 22, TOWNSHIP 7 NORTH, RANGE 19 EAST, IN THE TOWN OF PEWAUKEE, WAUKESHA COUNTY, WISCONSIN.

NOTES

1. LEGAL DESCRIPTION FROM CSM 11514 AND CSM 7930.

2. THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, ON INFORMATION FURNISHED BY THE UTILITY COMPANIES, DIGGERS HOTLINE AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.

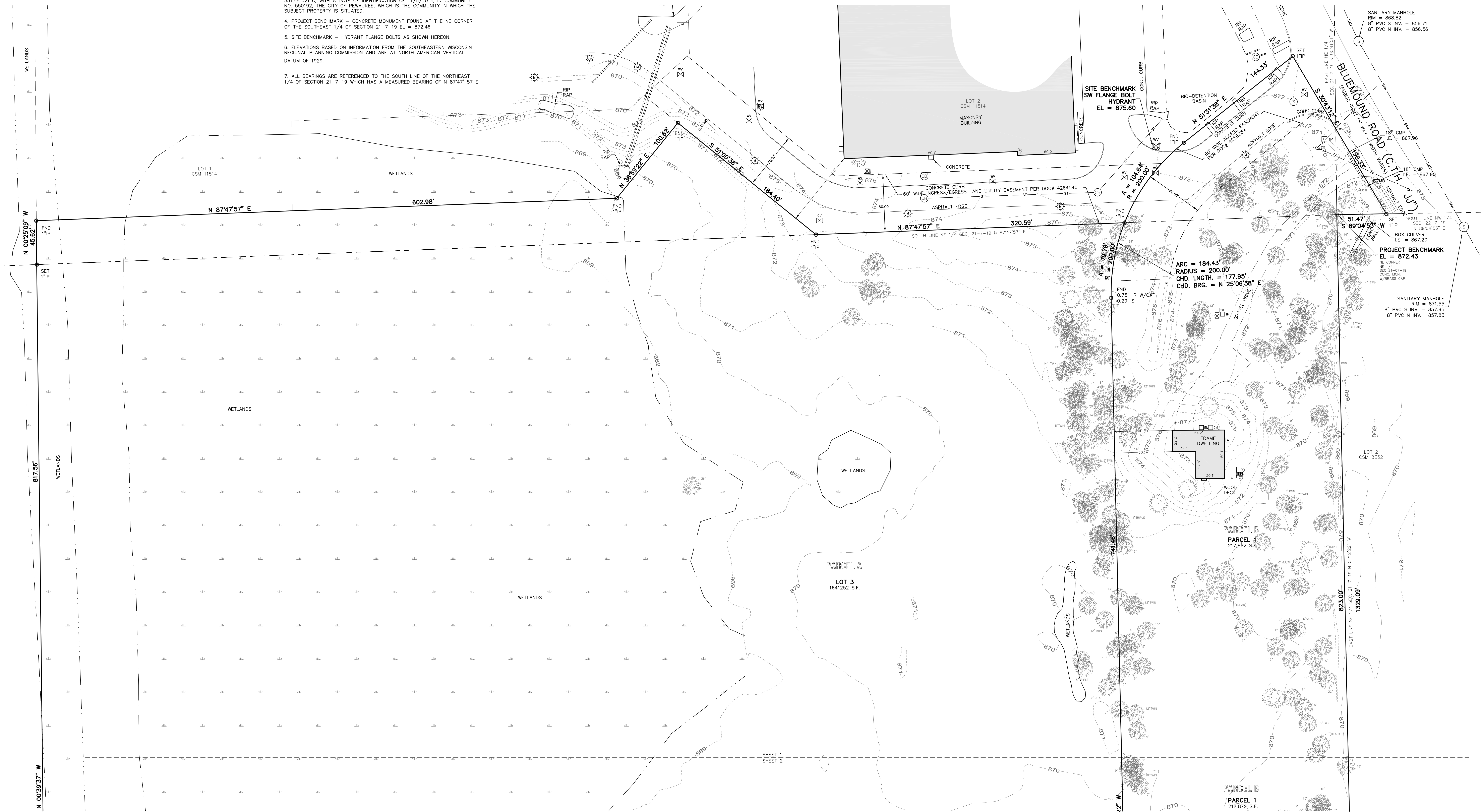
3. SUBJECT PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION X: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN AND ZONE DESIGNATION AE: AREA SUBJECT TO FLOODING BY THE 1% ANNUAL CHANCE FLOOD PER INFORMATION FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 55133C02116, WITH A DATE OF IDENTIFICATION OF 11/5/2014, IN COMMUNITY NO. 550192, THE CITY OF PEWAUKEE, WHICH IS THE COMMUNITY IN WHICH THE SUBJECT PROPERTY IS SITUATED.

4. PROJECT BENCHMARK - CONCRETE MONUMENT FOUND AT THE NE CORNER OF THE SOUTHEAST 1/4 OF SECTION 21-7-19 EL = 872.46

5. SITE BENCHMARK - HYDRANT FLANGE BOLTS AS SHOWN HEREON.

6. ELEVATIONS BASED ON INFORMATION FROM THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION AND ARE AT NORTH AMERICAN VERTICAL DATUM OF 1929.

7. ALL BEARINGS ARE REFERENCED TO THE SOUTH LINE OF THE NORTHEAST 1/4 OF SECTION 21-7-19 WHICH HAS A MEASURED BEARING OF N 87°47' 57" E.



LEGEND		
— SAN —	SANITARY SEWER	⊗ ELECTRIC TRANSFORMER
— ST —	STORM SEWER	⊗ ELECTRIC METER
— W —	WATER MAIN	⊗ ELECTRIC PEDESTAL
— G —	GAS LINE	⊗ ELECTRIC BOX AT GRADE
— TL —	BURIED TELEPHONE LINE	⊗ TELEPHONE BOX AT GRADE
— E —	BURIED ELECTRIC LINE	⊗ TELEPHONE PEDESTAL
— TO —	BURIED FIBER OPTIC LINE	⊗ STORM MANHOLE
— CATV —	BURIED CABLE TELEVISION LINES	⊗ CATCH BASIN
— COMB —	COMBINATION SEWER	⊗ CURB INLET
— WOOD FENCE —	WOOD FENCE	⊗ METAL LIGHT POLE
— METAL FENCE —	METAL FENCE	⊗ CONCRETE LIGHT POLE
— EDGE OF TREES AND BRUSH —	EDGE OF TREES AND BRUSH	⊗ WOOD LIGHT POLE
— DOOR SILL ELEVATION —	DOOR SILL ELEVATION	⊗ MAIL BOX
— FIRE DEPARTMENT CONNECTION —	FIRE DEPARTMENT CONNECTION	⊗ FIBER OPTIC MARKER
		⊗ YARD LIGHT
		⊗ GUY WIRE
		⊗ HYDRANT
		⊗ WATER VALVE
		⊗ GAS VALVE
		⊗ MANHOLE
		⊗ STORM MANHOLE
		⊗ CATCH BASIN
		⊗ CURB INLET
		⊗ METAL LIGHT POLE
		⊗ CONCRETE LIGHT POLE
		⊗ WOOD LIGHT POLE
		⊗ MAIL BOX
		⊗ FIBER OPTIC MARKER
		⊗ GUY WIRE

PLAT OF SURVEY WITH TOPOGRAPHY

FOR

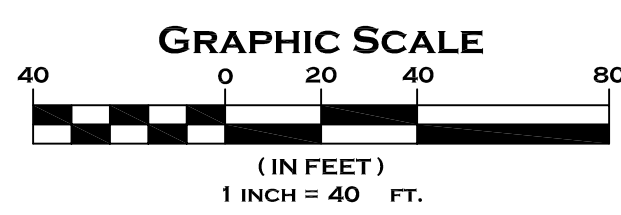
WESTMINSTER SOUTH
N17W25045 BLUEMOUND RD
PEWAUKEE, WI

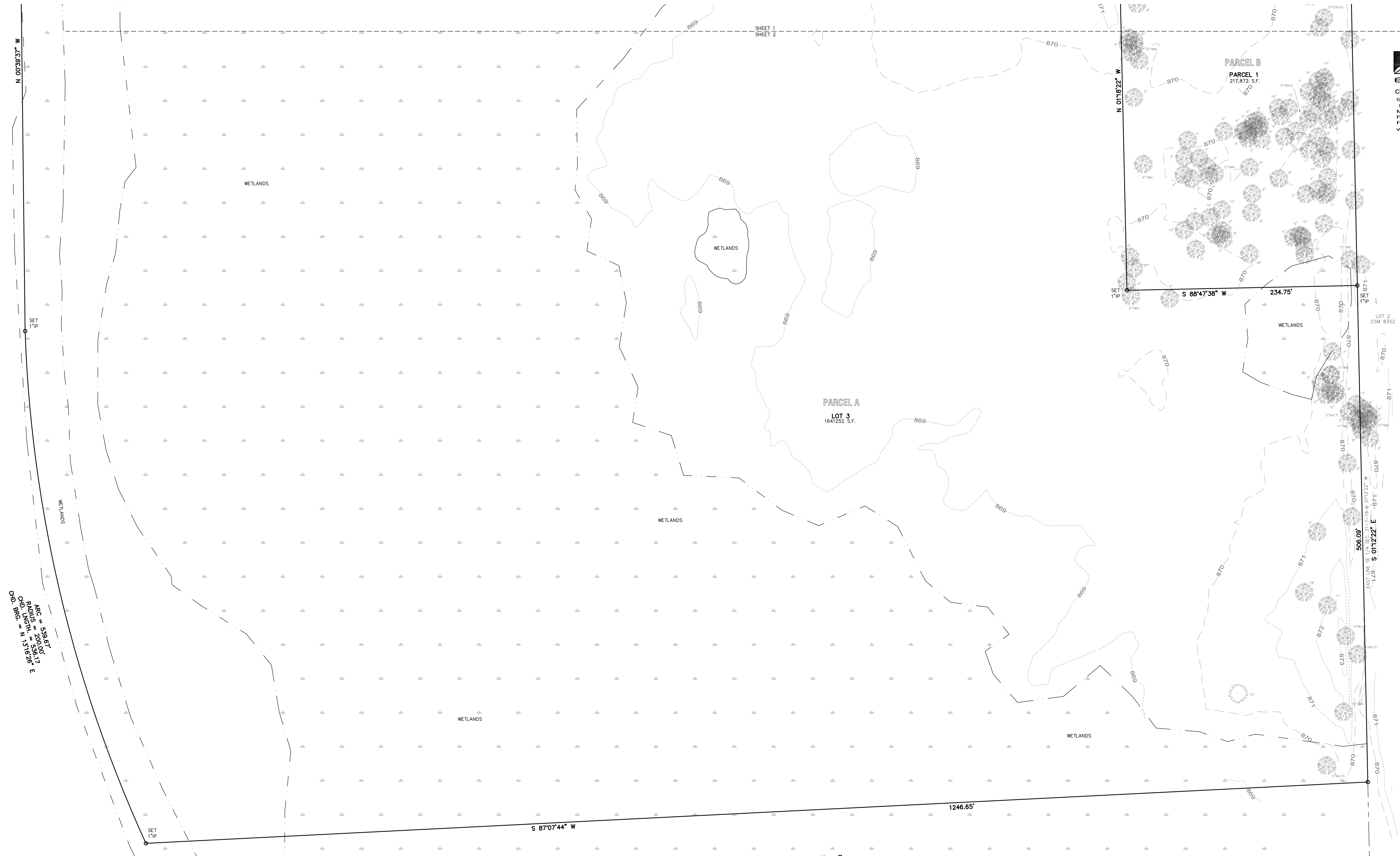
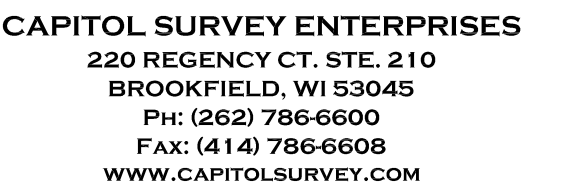
DRAWN BY:	NJF	DATE:	JULY 30, 2020
CHECKED BY:	MJB	DRAWING NO.	P-0
CSE JOB NO.:	20-064	SHEET	1 OF 2

I CERTIFY THAT I HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY, AND THE ABOVE MAP IS A TRUE REPRESENTATION THEREOF AND SHOWS THE SIZE AND LOCATION OF THE PROPERTY, ITS EXTERIOR BOUNDARIES, THE LOCATION AND DIMENSIONS OF ALL VISIBLE STRUCTURES THEREON, BOUNDARY FENCES, APPARENT EASEMENTS AND ROADWAYS AND VISIBLE ENCROACHMENTS, IF ANY. THIS SURVEY IS MADE FOR THE EXCLUSIVE USE OF THE PRESENT PROPERTY, AND ALSO THOSE WHO PURCHASE, MORTGAGE, OR GUARANTEE THE TITLE THERETO, WITHIN ONE (1) YEAR FROM DATE THEREOF.

JULY 30, 2020
DATE

MICHAEL J. BERRY
S-2545
BROOKFIELD, WI
REGISTERED LAND SURVEYOR S-2545

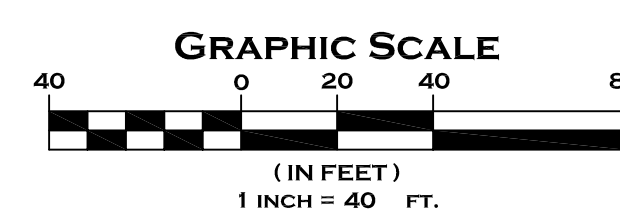
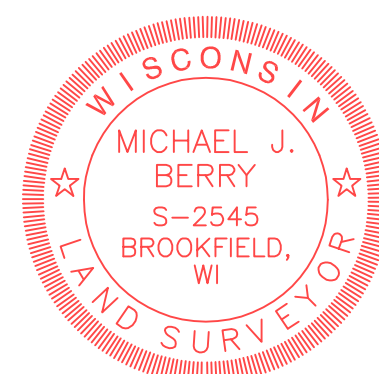




FOR

DRAWN BY: NJF	DATE: JULY 30, 2020
CHECKED BY: MJB	DRAWING No. P - 0
CSE JOB No.: 20 - 064	SHEET 2 OF 2

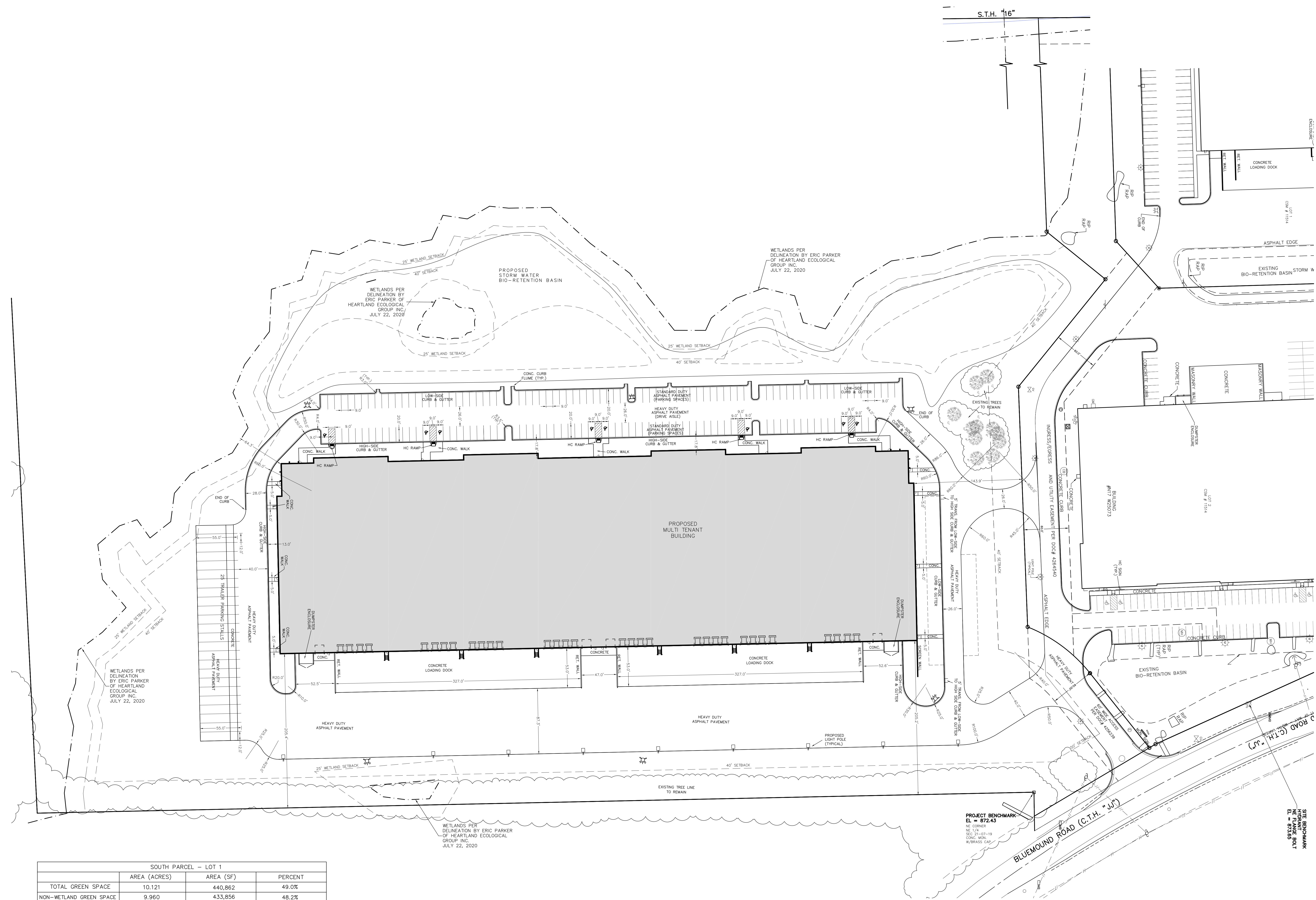
MJB
MICHAEL J. BERRY, R.L.S.
REGISTERED LAND SURVEYOR S-2545



LEGEND

— SAN	SANITARY SEWER	⊗	ELECTRIC TRANSFORMER	⊗	HYDRANT
— ST	STORM SEWER	⊗	ELECTRIC METER	⊗	WATER VALVE
— W	WATER MAIN	⊗	ELECTRIC PEDESTAL	⊗	GAS VALVE
— BG	BURIED GAS LINE	⊗	ELECTRIC BOX AT GRADE	⊗	MANHOLE
— TEL	BURIED TELEPHONE LINE	⊗	ELECTRIC BOX AT GRADE	⊗	STORM MANHOLE
— TBL	BURIED TELEPHONE LINE	⊗	TV PEDESTAL	⊗	CATCH BASIN
— FO	BURIED FIBER OPTIC LINE	⊗	⊗	⊗	CURB INLET
— OWH	OVERHEAD UTILITY LINE	⊗	⊗	⊗	METAL LIGHT POLE
— CATV	BURIED CABLE TELEVISION LINE	⊗	⊗	⊗	CONCRETE LIGHT POLE
— COMB	COMBINATION SEWER	⊗	⊗	⊗	WOOD LIGHT POLE
— WOOD FENCE	WOOD FENCE	⊗	⊗	⊗	MAIL BOX
— METAL FENCE	METAL FENCE	⊗	⊗	⊗	BIAS OPTIC MARKER
—	EDGE OF TREES AND BUSHES	⊗	⊗	⊗	⊗
—	DOOR SLIP ELEVATION	⊗	⊗	⊗	⊗
—	FIRE DEPARTMENT CONNECTION	⊗	⊗	⊗	⊗

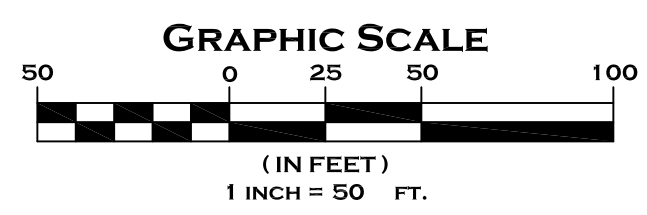
PEWAUKEE SOUTH INDUSTRIAL DEVELOPMENT
BLUEMOUND ROAD (C.T.H. "JJ") PEWAUKEE, WISCONSIN



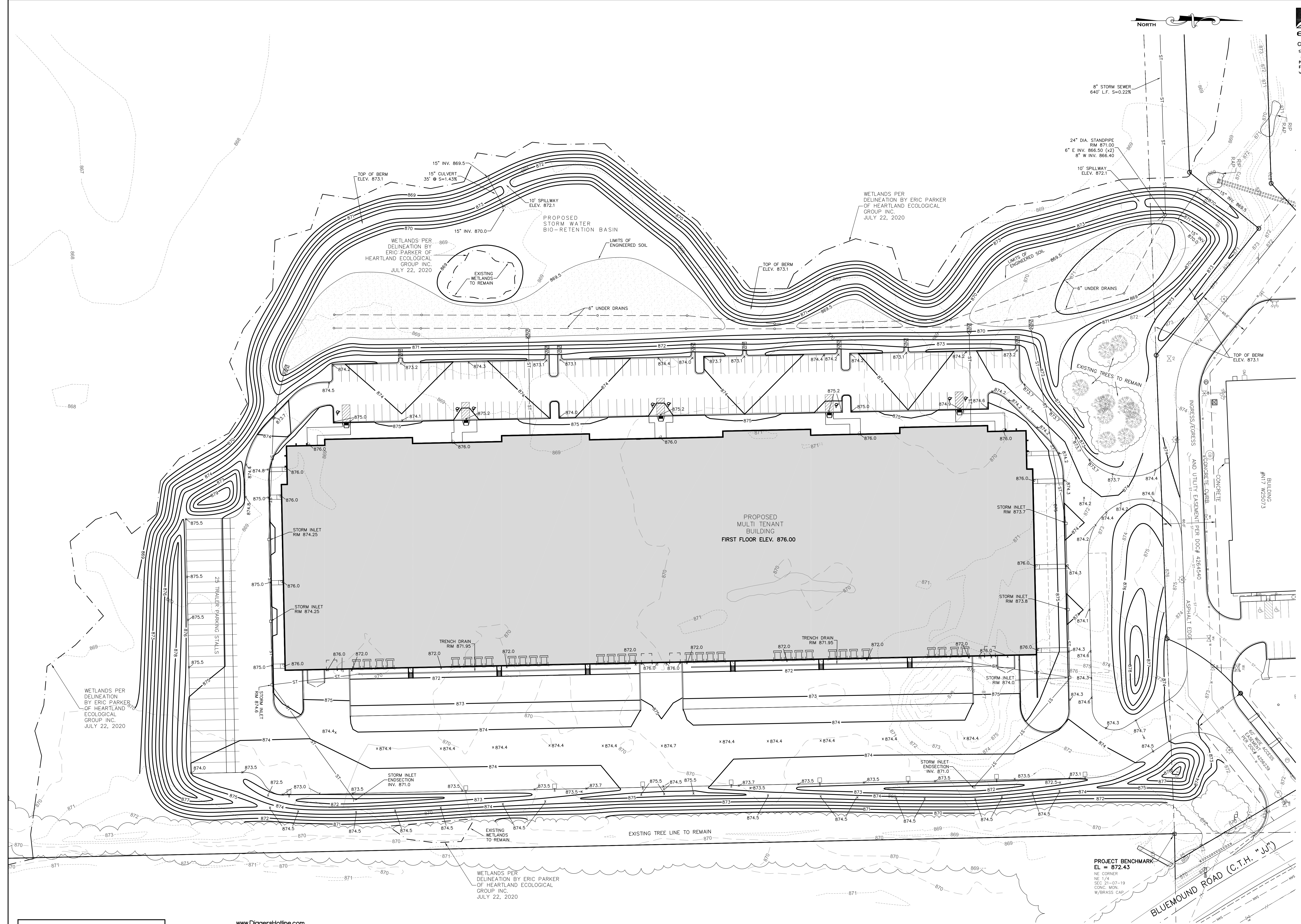
SOUTH PARCEL - LOT 1			
	AREA (ACRES)	AREA (SF)	PERCENT
TOTAL GREEN SPACE	10.121	440,862	49.0%
NON-WETLAND GREEN SPACE	9.960	433,856	48.2%
TOTAL WETLAND AREA	0.804	35,028	3.9%
WETLAND AREA INCLUDED IN GREEN SPACE	0.161	7,006	0.8%
WETLAND AREA NOT INCLUDED IN GREEN SPACE	0.643	28,022	3.1%
GREEN SPACE (USED TO MEET CODE)	9.477	412,840	45.9%
PAVEMENT	5.438	236,885	26.3%
BUILDING	5.004	217,982	24.2%
IMPERVIOUS	10.442	454,867	50.6%
ULTIMATE IMPERVIOUS	10.536	458,950	51.0%
TOTAL LOT 1	20.657	899,812	100.0%

SITE PARKING:
REGULAR PARKING SPACES = 152
ACCESSIBLE PARKING SPACES = 8
FUTURE PARKING SPACES = 25
TOTAL PARKING SPACES = 160
ULTIMATE PARKING SPACES = 185
TRUCK TRAILING PARKING SPACES = 25

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ZONING:
SUBJECT PROPERTY ZONED: M-6/LC, MIXED INDUSTRIAL/LOWLAND CONSERVANCY
BUILDING SETBACK INFORMATION FOR PROPERTIES ZONED M-6/LC ARE AS FOLLOWS:
STREET = 50' MINIMUM
SIDE = 40' MINIMUM
REAR = 40' MINIMUM
BUILDING SEPARATION = 50' MINIMUM

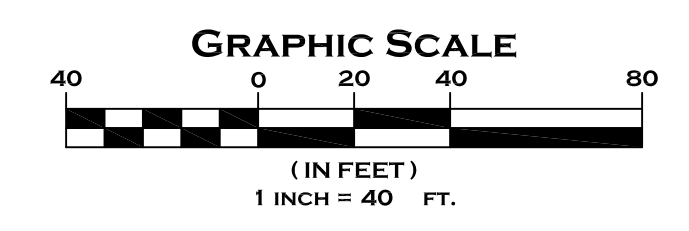


LEGEND

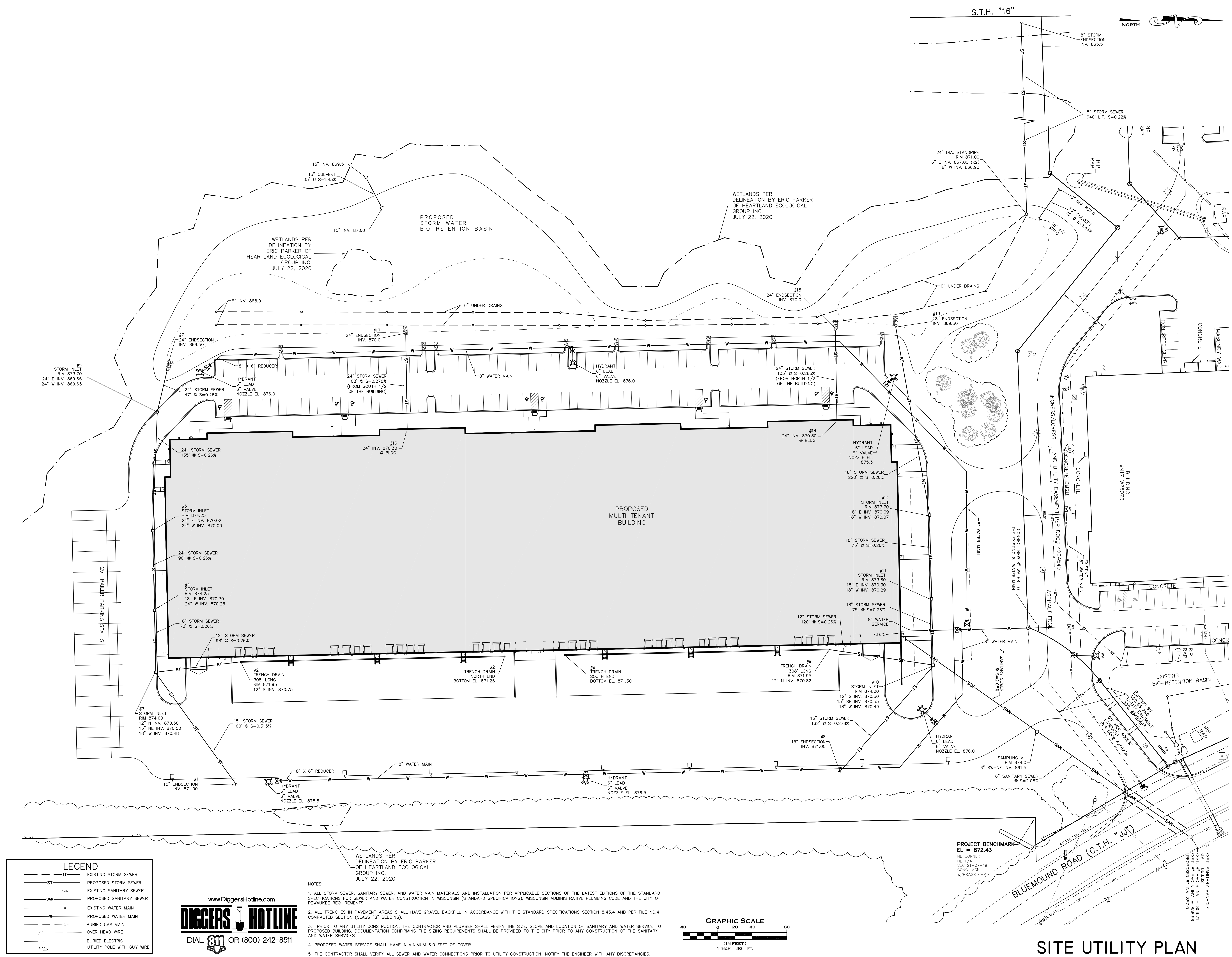
96	EXISTING CONTOUR
96	PROPOSED CONTOUR
ST	PROPOSED STORM SEWER

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- NOTES:
1. SPOT GRADES ALONG THE CURB ARE AT THE FLANGE LINE OF THE CURB.
 2. THE DISTURBED AREA: 761,200 S.F. (17.48 ACRES)
 3. THIS DEVELOPMENT WILL REQUIRE THE IMPORT OF STRUCTURAL FILL AND THE EXPORT OF TOP SOIL. CITY APPROVAL OF THIS IS REQUIRED PRIOR TO ANY SOIL IMPORT OR REMOVAL FROM THE SITE.

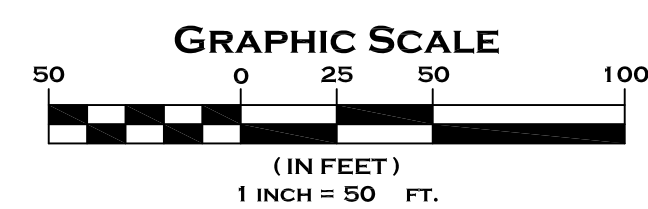
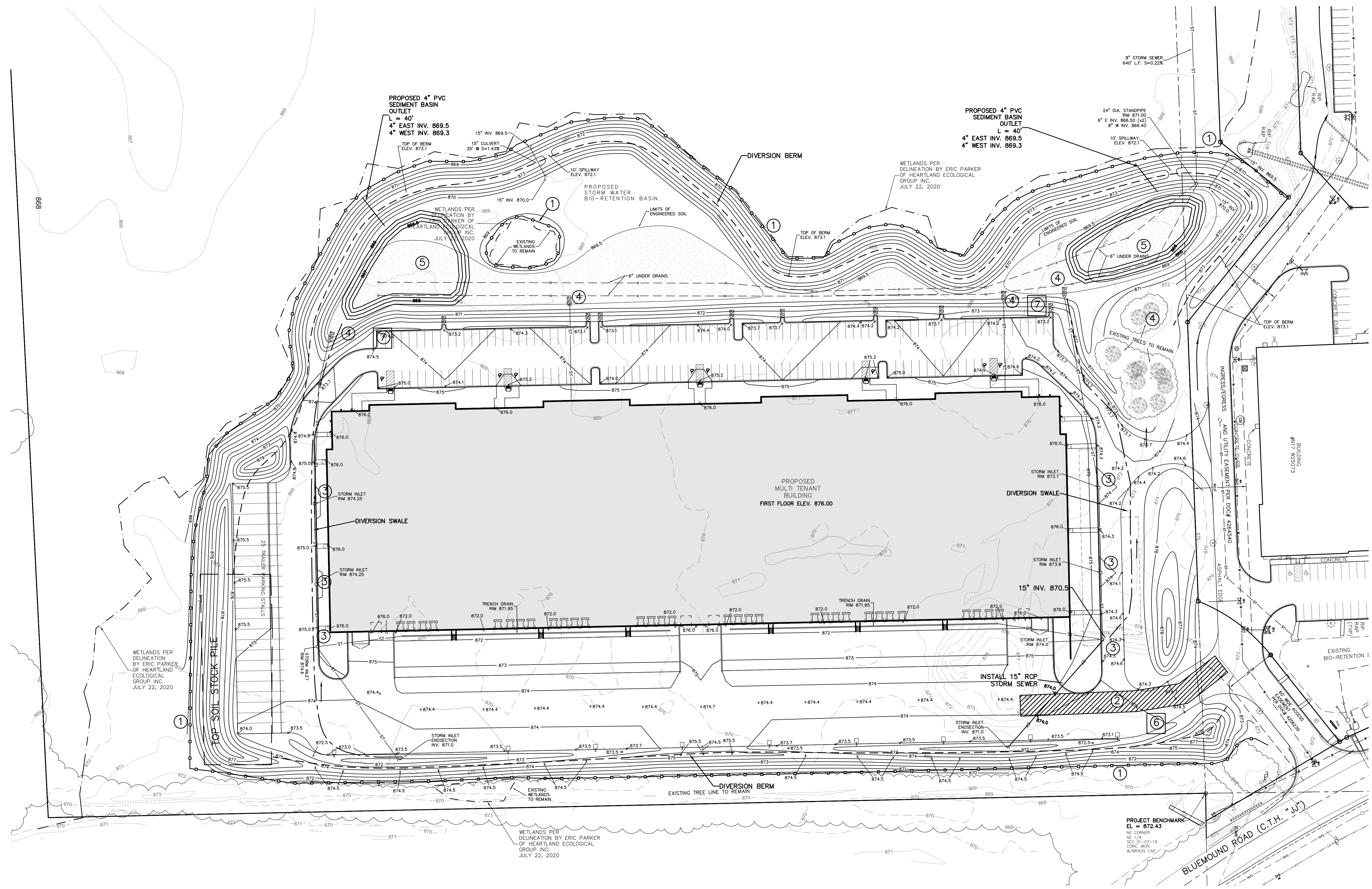


PROJECT BENCHMARK
EL = 872.43
NE CORNER
SEC. 21-07-19
CONC. MON.
W/BRASS CAP



SITE UTILITY PLAN

C3.0



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LEGEND	
96	EXISTING CONTOUR
96	PROPOSED CONTOUR
x 96.5	PROPOSED ELEVATION
ST	PROPOSED STORM SEWER
—●—●—●—	SILT FENCE LOCATION

MAINTENANCE PLAN

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY 1/2" RUNOFF—PRODUCTION RAINFALL, BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
2. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES ABOUT 0.5 FT. DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.
3. ALL SEEDING AREAS WILL BE WATERED, FERTILIZED, RESEED AS NECESSARY, AND MULCHED TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
4. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY STREET CLEANING AT A MINIMUM BEFORE THE END OF THE DAY OR MORE FREQUENTLY AS CONDITIONS WARRANT OR AS DIRECTED BY THE CITY OF PEWAUKEE/WAUKESHA COUNTY.

CONSTRUCTION SCHEDULE

1. OBTAIN PLAN APPROVAL AND OTHER APPLICABLE PERMITS.
2. INSTALL SILT FENCE.
3. INSTALL TRACKING PAD / CONSTRUCTION EXIT. THIS ENTRANCE TO BE USED FOR HAULING FILL INTO PROJECT LIMITS. INSTALL 15" STORM SEWER.
4. INSTALL SEDIMENT BASIN.
 - A. THE AREA OF THE BIO-RETENTION BASINS WILL BE USED FOR SEDIMENTATION BASINS DURING CONSTRUCTION.
 - B. STRIP TOPSOIL FROM THESE AREAS, STOCK PILE AND SURROUND WITH SILT FENCE.
 - C. ROUGH GRADE AND OVER EXCAVATE STORM WATER PONDS (BASINS). INSTALL TEMPORARY.
 - D. UTILIZE DEWATERING BAG AS NECESSARY DURING EXCAVATION.
6. INSTALL THE DIVERSION BERM AND SWALES (USING THE EXISTING TOPSOIL).
7. DEMO EXISTING HOUSE, GRAVEL DRIVE AND PAVEMENT. PROPERLY DISPOSE OF MATERIAL OFF SITE.
8. STOCKPILE ANY ADDITIONAL TOP SOIL AT LOCATIONS SHOWN. SURROUND WITH SILT FENCE.
9. IMPORT, STOCK PILE AND COMPACT FILL NEEDED TO GRADE SITE.
10. ROUGH GRADE ENTIRE SITE.
11. BEGIN WEST BUILDING CONSTRUCTION.
12. UTILIZE DEWATERING BAG AS NECESSARY DURING EXCAVATION FOR BUILDING CONSTRUCTION. DIRECT RUNOFF FROM BAG TO SEDIMENT POND. SEE DEWATERING NOTE.
13. INSTALL PROPOSED UTILITIES.
14. INSTALL INLET PROTECTION IN ALL NEW STORM INLETS AND RIP-RAP OUTLET PROTECTION ON ALL STORM END SECTIONS.
15. ALL EXPOSED SOIL AREAS NOT DISTURBED FOR UP TO SEVEN DAYS MUST BE IMMEDIATELY RESTORED WITH TEMPORARY SEED AND MULCH.
16. INSTALL CURB, WALK AND BASE COURSE OF PAVEMENT.
17. REMOVE SEDIMENTATION BASIN, DEWATER BASIN AND INSTALL LINERS WITHIN BIO-RETENTION BASIN, THE 6" DRAIN TILE AND ASSOCIATED OUTLET PIPE AND ENGINEERED SOIL.
18. FINAL GRADE SLOPES AND TOPSOIL CRITICAL SLOPES; VEGETATE AND MULCH ALL DISTURBED AREAS.
19. ALL EROSION CONTROL METHODS SHALL BE INSTALLED IN ACCORDANCE WITH WNR TECHNICAL STANDARDS AND THE CITY OF PEWAUKEE REQUIREMENTS AND STANDARDS.
20. ALL EROSION CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER RAINFALL. NEEDED REPAIRS WILL BE PERFORMED IMMEDIATELY.
21. AFTER SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND VEGETATE THE DISTURBED AREAS.
22. ESTIMATED TIME BEFORE FINAL STABILIZATION – 18 MONTHS.

DUST CONTROL

DUST CONTROL INCLUDES PRACTICES USED TO REDUCE OR PREVENT THE SURFACE AND AIR TRANSPORT OF DUST DURING CONSTRUCTION. DUST CONTROL SHALL BE USED DURING EXTENDED PERIODS OF DRY, WINDY WEATHER WHERE FLOTTING DUST PARTICLES FROM EXPOSED SOIL WILL BECOME AIRBORNE. DUST CONTROL SHALL ALSO BE UTILIZED AS DIRECTED BY THE CITY OF PEWAUKEE OR WAUKESHA COUNTY.

DUST CONTROL MEASURES FOR CONSTRUCTION ACTIVITIES INCLUDE THE MINIMIZATION OF SOIL DISTURBANCE, APPLYING MULCH AND ESTABLISHING VEGETATION, WATER SPRAYING, SURFACE ROUGHENING, APPLYING POLYMERS, SPRAY-ON TACKIFIERS, CHLORIDES AND BARRIERS. DUST CONTROL MEASURES TO BE IN CONFORMANCE WITH WNR CONSERVATION PRACTICE STANDARD 106B.

TEMPORARY STABILIZATION METHODS

LAND APPLICATION OF ADDITIVES:
DURING WINTER CONSTRUCTION (NOVEMBER 1 TO MAY 1), CONTRACTOR MAY PROVIDE TYPE A SOIL STABILIZER, POLYACRYLAMIDE (PAM) PER LATEST WDOT PAL (UPDATED 11/2/2017) ON ALL DISTURBED AREAS. CONTRACTOR TO INSTALL PAM PER WNR TECHNICAL STANDARD 105D AND THE MANUFACTURER'S SPECIFICATIONS.

ALSO SEE SHEET C5.0 FOR ADDITIONAL CITY OF PEWAUKEE EROSION CONTROL WINTER STABILIZATION REQUIREMENTS.

TEMPORARY SEEDING:
DURING GROWING SEASON (MAY 2 – OCTOBER 31) TEMPORARY SEEDING (COVER CROP) MAY BE USED FOR TEMPORARY STABILIZATION DURING SITE CONSTRUCTION.

Species	Lbs./Acre	Percent Purity
Oats	131*	98
Cereal Rye	131*	97
Winter Wheat	131*	95
Annual Ryegrass	80*	97
* Fall Seeding		

STABILIZATION SHOULD BE COMPLETED WITHIN 7 DAYS OF ESTABLISHING FINAL GRADE OR THAT WILL OTHERWISE EXIST FOR MORE THAN 14 DAYS.

SITE DEWATERING

DEWATERING TO CONFORM WITH WNR CONSERVATION PRACTICE STANDARD 106I.

THE SITE HAS HIGH GROUND WATER SO DEWATERING IS ANTICIPATED. ALL PUMPED EFFLUENT FROM DEWATERING OPERATIONS (TRENCH DEWATERING OR OTHERWISE) SHALL BE DISCHARGED TO A GEOTEXTILE FILTER BAG CONFORMING TO WNR CONSERVATION PRACTICE STANDARD 106I. THE GEOTEXTILE BAG SHALL BE PLACED ON A VEGETATED/STABILIZED GROUND AND DISCHARGE TO A SEDIMENT BASIN OR TRAP. SHOULD NO BASIN EXIST, THE GEOTEXTILE BAG SHALL BE PLACED ON FILTER FABRIC AND SURROUNDED BY A SEDIMENT BALE BARRIER CONFORMING TO CONSERVATION PRACTICE STANDARD 105S. THE FILTER FABRIC SHALL BE BROUGHT UP THE SIDES AND OVER THE TOP OF THE HAY BALES AND SECURED. DISCHARGE SHALL NOT BE ALLOWED TO FLOW OVER UNPROTECTED GROUND. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS PRIOR TO SEDIMENT REMOVAL.

EROSION MATTING

AFTER FINISH GRADING AND TOPSOILING, PROVIDE CLASS 1, TYPE B EROSION MAT PER "WSDOT EROSION CONTROL PAL" (OR EQUAL) IN ALL ROADSIDE DITCHES, DEFINED SWALES, SIDE SLOPES, BERMS AND ALL OTHER SLOPES 4:1 OR GREATER. INSTALL PER MANUFACTURER'S SPECIFICATIONS.

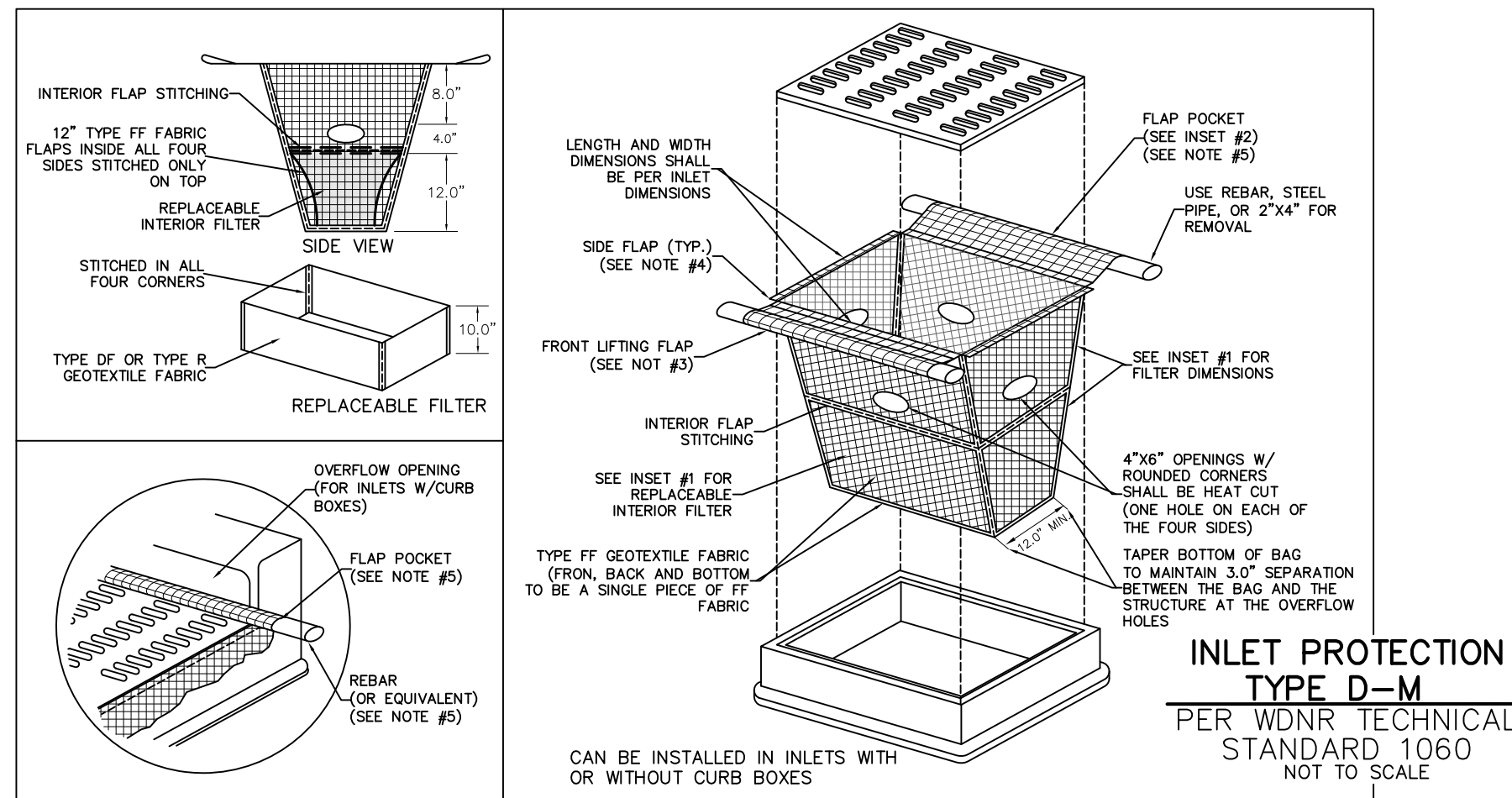
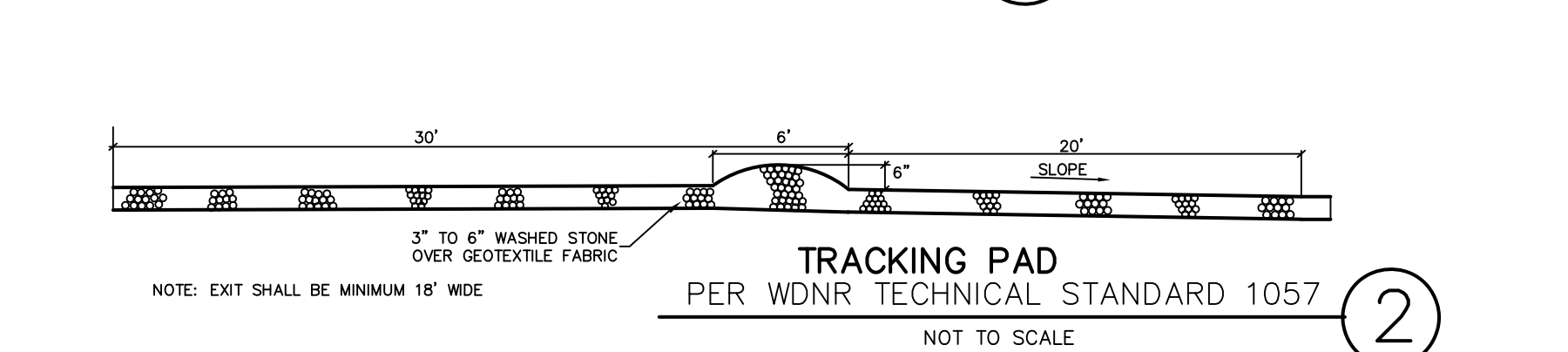
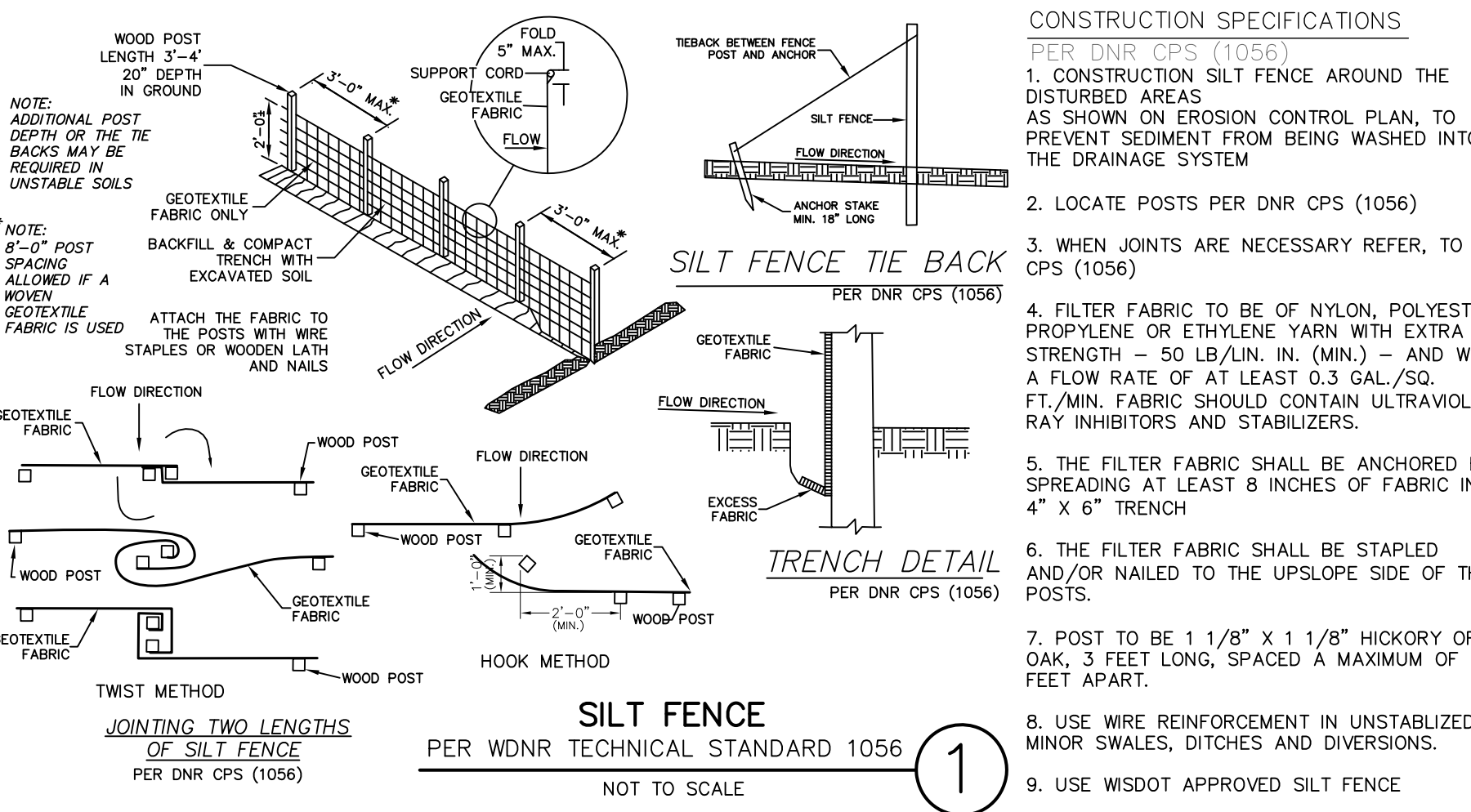
GENERAL NOTES:

1. EROSION CONTROL MATERIALS AND INSTALLATION PER MOST CURRENT WNR TECHNICAL STANDARDS AND THE CITY OF PEWAUKEE TECHNICAL STANDARDS SECTION 050.
2. DRAINAGE SWALES, TEMPORARY DIVERSIONS, SEDIMENT TRAPS AND SEDIMENT BASINS ARE REQUIRED TO BE STABILIZED AND FULLY OPERATIONAL PRIOR TO RECEIVING RUNOFF. FULLY OPERATIONAL INCLUDES THE INSTALLATION OF THE PRIMARY AND EMERGENCY OUTLET STRUCTURES.
3. SEE SHEET C5.0 FOR THE CITY OF PEWAUKEE EROSION CONTROL WINTER STABILIZATION REQUIREMENTS.
4. THE DISTURBED AREA: 761,200 S.F. (17.48 ACRES)
5. THIS DEVELOPMENT WILL REQUIRE THE IMPORT OF STRUCTURAL FILL AND THE EXPORT OF TOP SOIL. CITY APPROVAL OF THIS IS REQUIRED PRIOR TO ANY SOIL IMPORT OR REMOVAL FROM THE SITE.

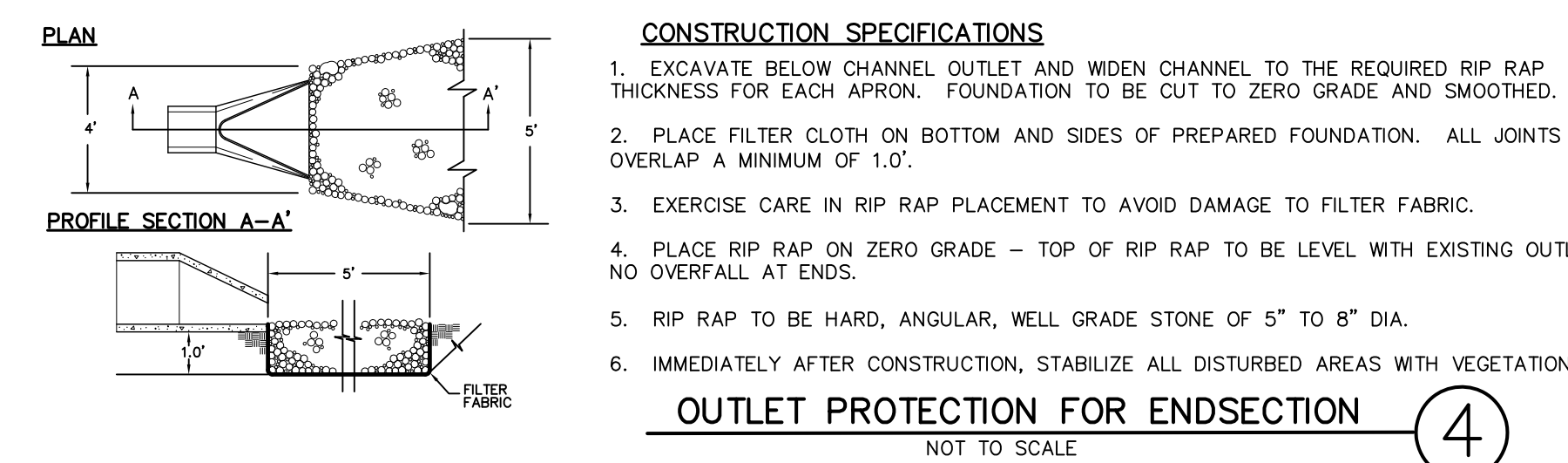
EROSION CONTROL PRACTICES SCHEDULE

- ① SILT FENCE
- ② TRACKING PAD
- ③ INLET PROTECTION
- ④ OUTLET PROTECTION
- ⑤ SEDIMENT BASIN
- ⑥ CONCRETE WASHOUT STATION
- ⑦ HAY BALE SEDIMENT DEWATERING PIT

CJE NO.: 1625-02R7
SEPTEMBER 3, 2020



NOTES:
1. TAPER BOTTOM OF BAG TO MAINTAIN THREE INCHES OF CLEARANCE BETWEEN THE BAG AND THE STRUCTURE, MEASURED FROM THE BOTTOM OF THE OVERFLOW OPENINGS TO GHT STRUCTURE WALL.
2. GEOTEXTILE FABRIC TYPE FF FOR FLAPS, TOP AND BOTTOM OF OUTSIDE OF FILTER BAG, FRONT, BACK AND BOTTOM OF FILTER BAG BEING ONE PIECE.
3. FRONT LIFTING FLAP IS TO BE USED WHEN REMOVING AND MAINTAINING FILTER BAG.
4. SIDE FLAPS SHALL BE A MAXIMUM OF TWO INCHES LONG. FOLD THE FABRIC OVER AND REINFORCE WITH MULTIPLE STITCHES.
5. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2"x4", THE REBAR, STEEL PIPE, OR WOOD SHALL BE INSTALLED IN THE REAR FLAP AND SHALL NOT BLOCK THE TOP HALF OF THE CURB FACE OPENING.
MAINTENANCE NOTES:
1. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED IN THE FABRIC DOES NOT FALL INTO THE STRUCTURE. MATERIAL THAT HAS FALLEN INTO THE INLET SHALL BE IMMEDIATELY REMOVED.



CITY OF PEWAUKEE, SECTION 050 OF THE TECHNICAL STANDARDS FOR WINTER CONSTRUCTION SITE EROSION CONTROL:

A. ALL PROJECTS INVOLVING CONSTRUCTION BETWEEN NOVEMBER 1 AND MAY 1 WILL REQUIRE MEASURES TO STABILIZE THE SITE OVER WINTER. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, GRAVEL ROAD BASE OR 70% MATURE VEGETATIVE COVER OR RIP RAP BY NOVEMBER 1, THEN THE SITE MUST BE PROTECTED WITH OVER-WINTER STABILIZATION PRACTICES.

B. CONSIDERATIONS: WINTER EXCAVATION AND EARTHWORK ACTIVITIES SHOULD BE LIMITED IN EXTENT AND DURATION TO MINIMIZE POTENTIAL EROSION AND SEDIMENTATION IMPACTS.

1. EXPOSE ONLY AS MUCH AREA AS NECESSARY TO COMPLETE THE WORK AND CAN BE STABILIZED IN ONE DAY PRIOR TO ANY RAIN OR SNOW EVENT.

2. SUBSEQUENT WORK AREAS SHOULD NOT BE EXPOSED UNTIL THE PREVIOUSLY EXPOSED AREA HAS BEEN STABILIZED.

3. ALL EROSION AND SEDIMENT CONTROL MEASURES INSTALLED FOR THE PROJECT SHOULD BE ROUTINELY MAINTAINED, CLEANED, INSPECTED AND REPAIRED AS NEEDED FOR THE CONSTRUCTION SEASON. TEMPORARY EMBANKMENTS SHOULD BE FULLY VEGETATED OR OTHERWISE STABILIZED BY ACCEPTED METHODS.

C. MAINTENANCE REQUIREMENTS:

1. MAINTENANCE MEASURES SHOULD OCCUR THROUGHOUT CONSTRUCTION, INCLUDING THE OVER-WINTER PERIOD. AFTER EACH RAINFALL, SNOWSTORM OR PERIOD OF THAWING AND RUNOFF, THE CONSTRUCTION SITE CONTRACTOR SHOULD CONDUCT AN INSPECTION OF ALL EROSION CONTROL MEASURES AND REPAIRS AS NEEDED TO ENSURE THEIR CONTINUING FUNCTION.

2. IF FOR ANY AREA STABILIZED BY TEMPORARY OR PERMANENT SEEDING PRIOR TO NOVEMBER 1, THE CONTRACTOR SHOULD CONDUCT AN INSPECTION TO ASCERTAIN THE CONDITION OF VEGETATIVE COVER AND REPAIR ANY DAMAGED AREAS OR BARE SPOTS AND RESEED AS REQUIRED TO ACHIEVE AN ESTABLISHED VEGETATIVE COVER (AT LEAST 70% AREA VEGETATED WITH HEALTHY, VIGOROUS GROWTH).

D. SPECIFICATIONS:

1. THE FOLLOWING STABILIZATION TECHNIQUES SHALL BE EMPLOYED DURING THE PERIOD FROM NOVEMBER 1 TO MAY 1.

a. THE AREA OF EXPOSED, UNSTABILIZED SOIL SHOULD BE LIMITED TO ONLY WHAT IS REQUIRED TO PERFORM THE WORK. THE EXPOSED AREA SHOULD BE PROTECTED AGAINST EROSION BY METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR RUNOFF PRODUCING CONDITIONS.

b. STABILIZATION AS FOLLOWS SHOULD BE COMPLETED WITHIN 7 DAYS OF ESTABLISHING FINAL GRADE OR THAT WILL OTHERWISE EXIST FOR MORE THAN 14 DAYS:

(i) ALL PROPOSED VEGETATED AREAS HAVING A SLOPE LESS THAN 15% WHICH DO NOT EXHIBIT A MINIMUM 70% VEGETATIVE GROWTH BY NOVEMBER 1, OR WHICH IS DISTURBED AFTER NOVEMBER 1 SHOULD BE DORMANT SEEDED AT A RATE 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND COVERED WITH 2 TO 3 TONS OF HAY OR STRAW MULCH PER ACRE WITH EITHER ANCHORED NETTING OR AN APPROVED TACKIFIER FROM THE MSDOT PRODUCT ACCEPTABILITY LIST (PAL). AN EROSION CONTROL BLANKET OR TYPE A SOIL STABILIZER FROM THE MSDOT PAL MAY BE USED IN LIEU OF MULCH AND NETTING OR MULCH AND TACKIFIER.

(ii) ALL PROPOSED VEGETATED AREAS HAVING A SLOPE GREATER THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 70% VEGETATIVE GROWTH BY NOVEMBER 1 OR WHICH ARE DISTURBED AFTER NOVEMBER 1 SHOULD BE DORMANT SEEDED AT A RATE 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND COVERED WITH A PROPERLY INSTALLED AND ANCHORED EROSION CONTROL BLANKET.

(iii) ALL STONE COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 1.

(iv) INSTALLATION OF ANCHORED HAY OR STRAW MULCH SHOULD NOT OCCUR OVER SNOW DEPTH GREATER THAN 1".

(v) ALL MULCH APPLIED DURING WINTER SHOULD BE ANCHORED WITH NETTING OR TACKIFIER FROM MSDOT PAL.

(vi) STOCKPILES OF SOIL MATERIALS SHOULD BE SEEDING AND MULCHED FOR OVER-WINTER PROTECTION WITH HAY OR STRAW AT 2 TO 3 TONS PER ACRE. MULCHING SHOULD BE DONE WITHIN 24 HOURS OF STOCKPILING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOW FALL. NO STOCKPILE SHOULD BE LOCATED WITHIN 25' OF ANY WETLAND OR OTHER WATER RESOURCE AREA.

(vii) SOIL STABILIZER TYPE A OR EROSION CONTROL BLANKET MAY BE USED IN LIEU OF MULCH.

(viii) FROZEN MATERIALS SHOULD BE STOCKPILED SEPARATELY AND IN A LOCATION THAT IS AWAY FROM ANY AREA NEEDING TO BE PROTECTED. STOCKPILES OF FROZEN MATERIAL WILL MELT IN THE SPRING AND BECOME UNWORKABLE AND DIFFICULT TO TRANSPORT DUE TO HIGH MOISTURE CONTENT IN THE SOIL.

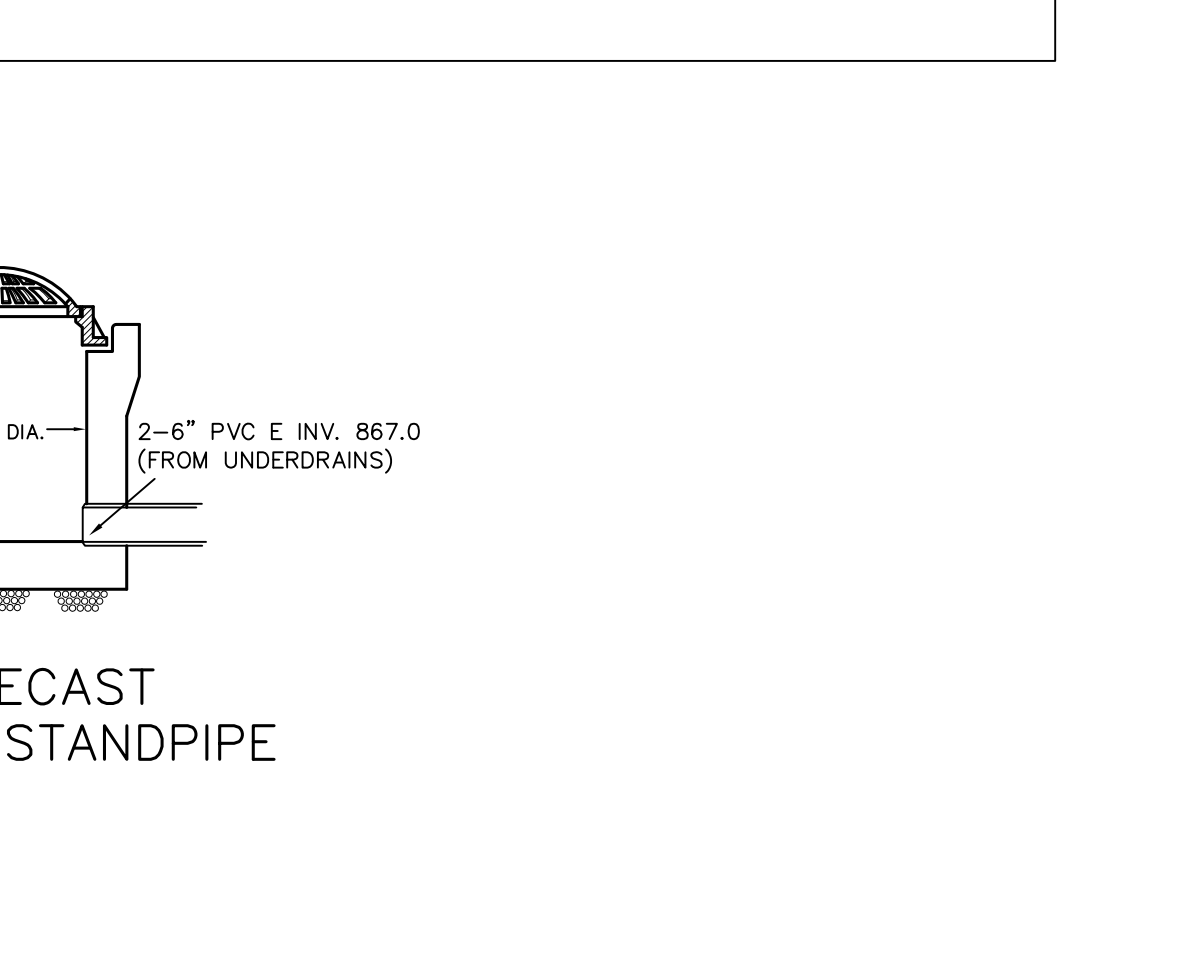
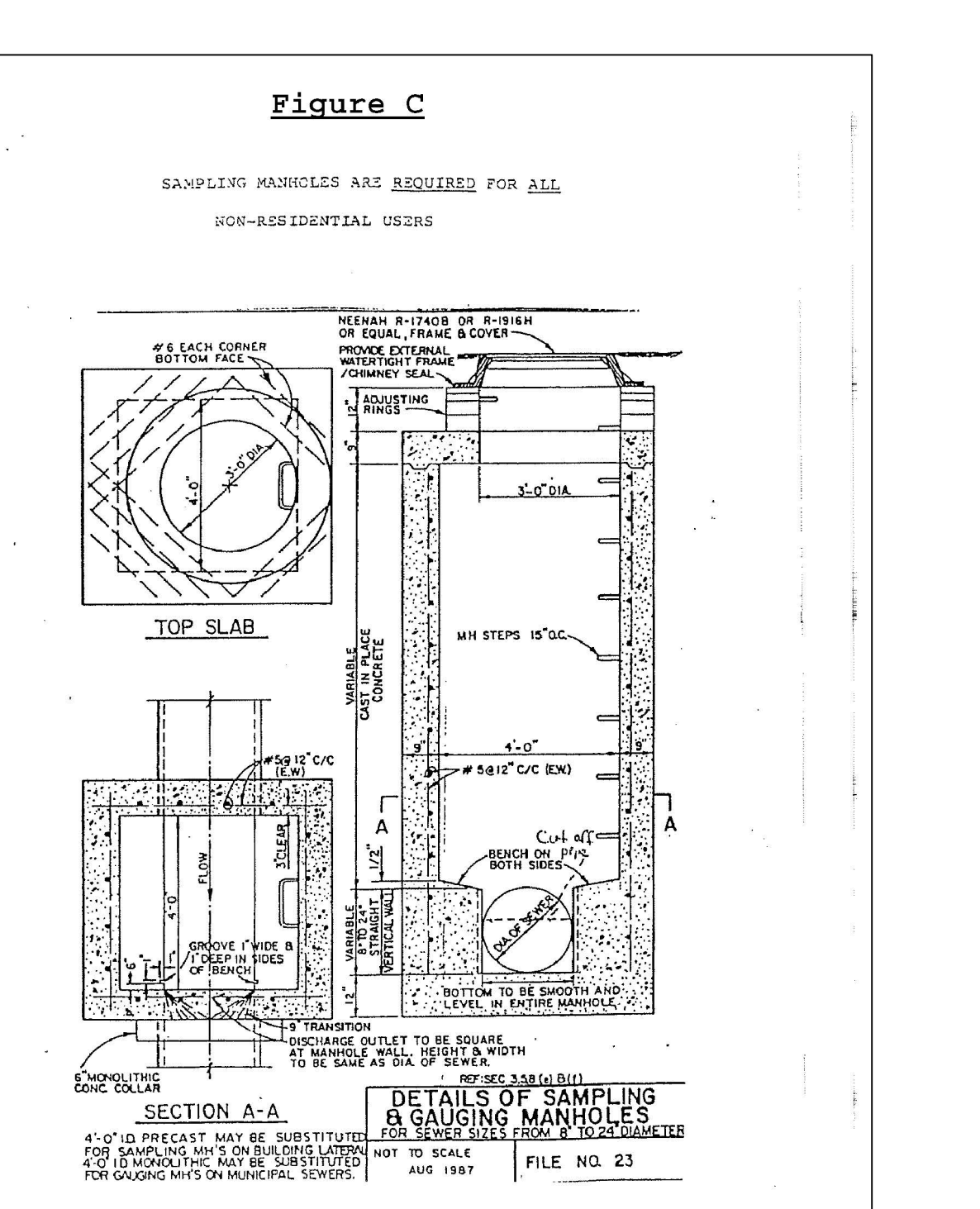
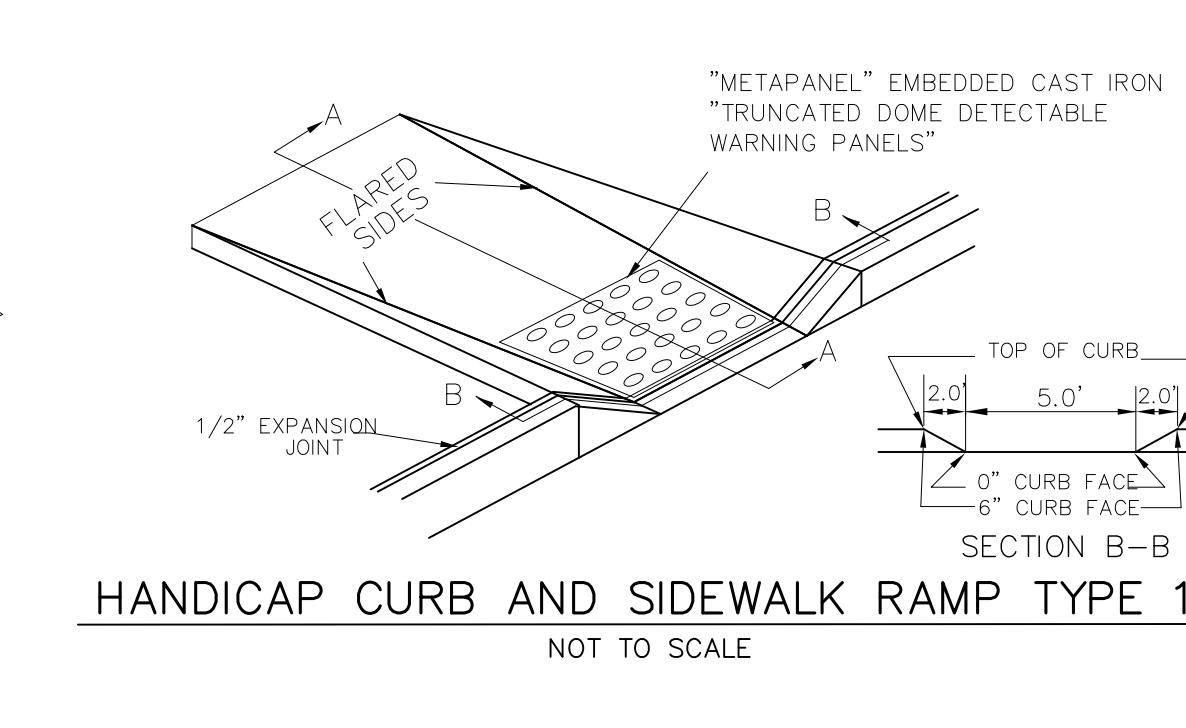
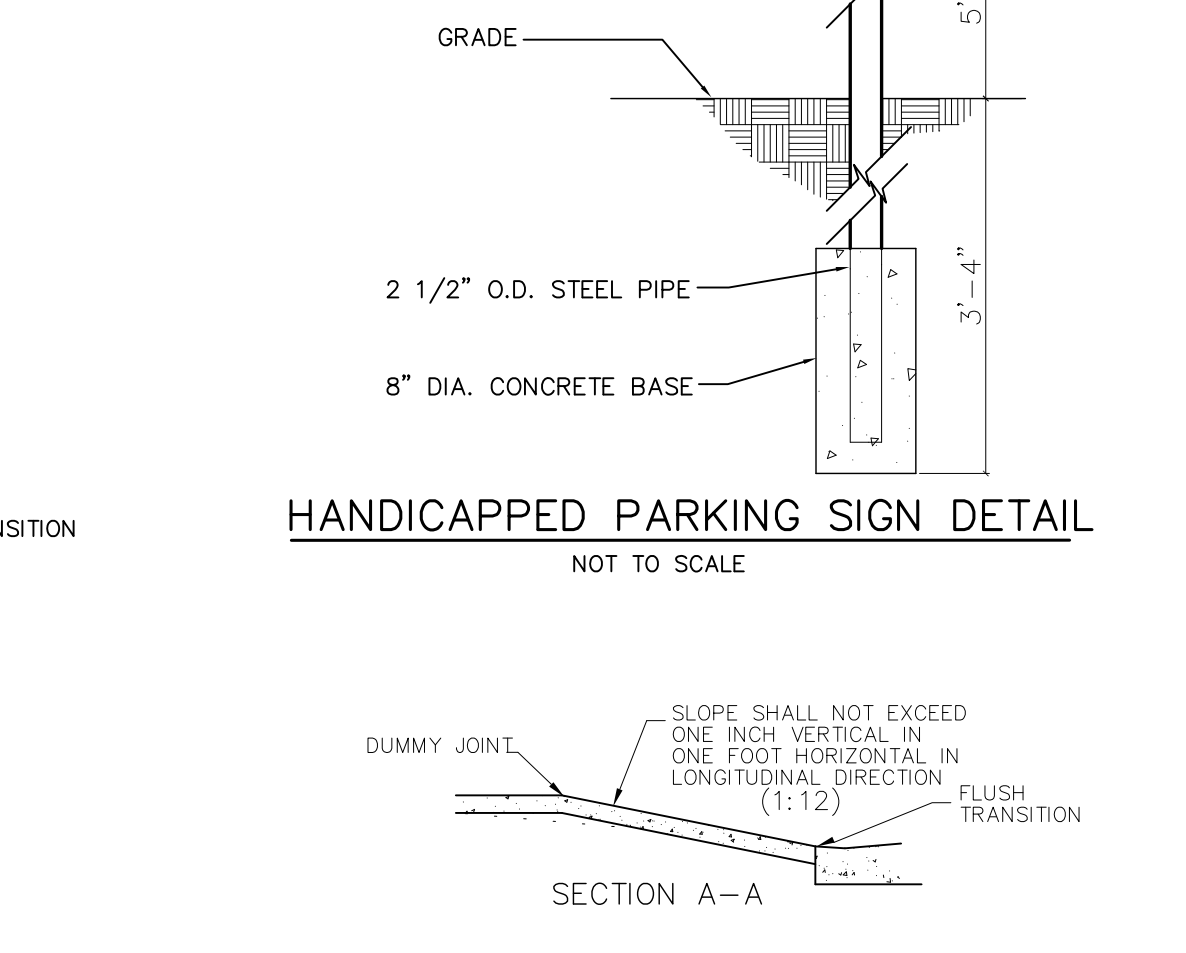
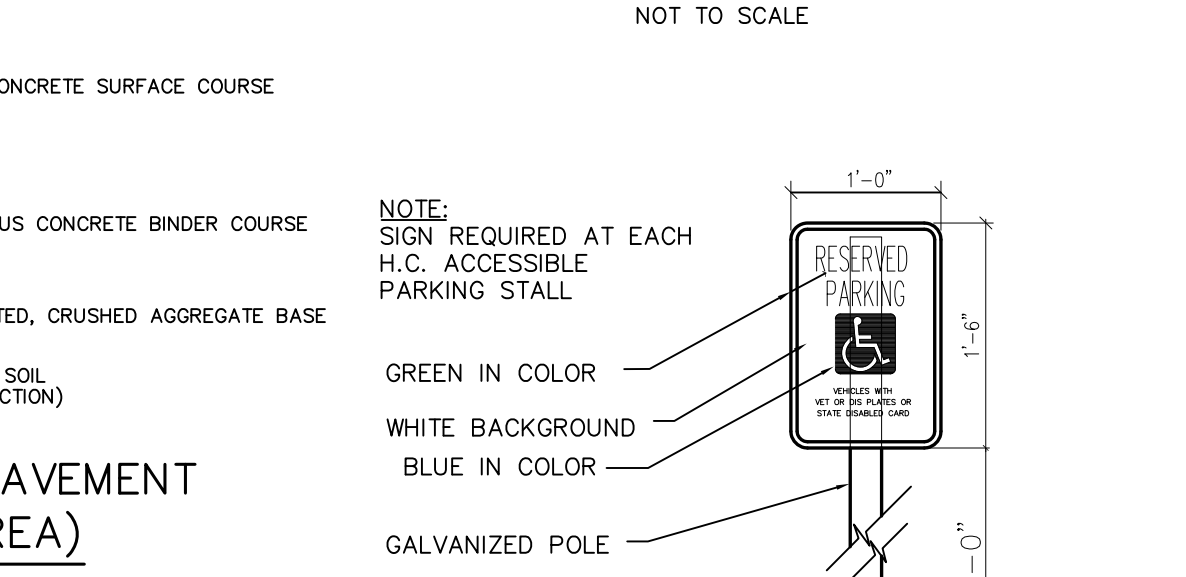
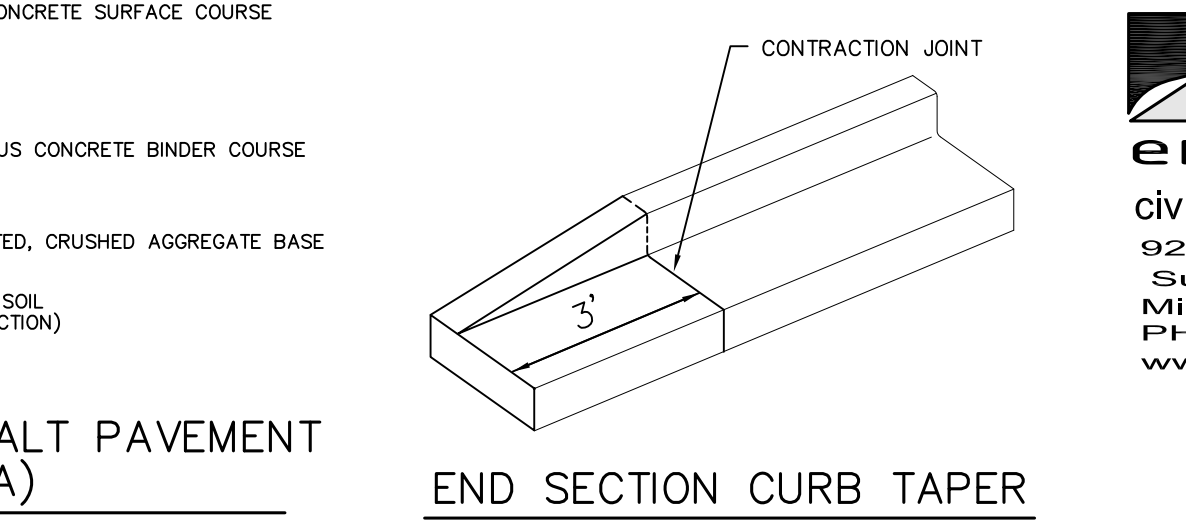
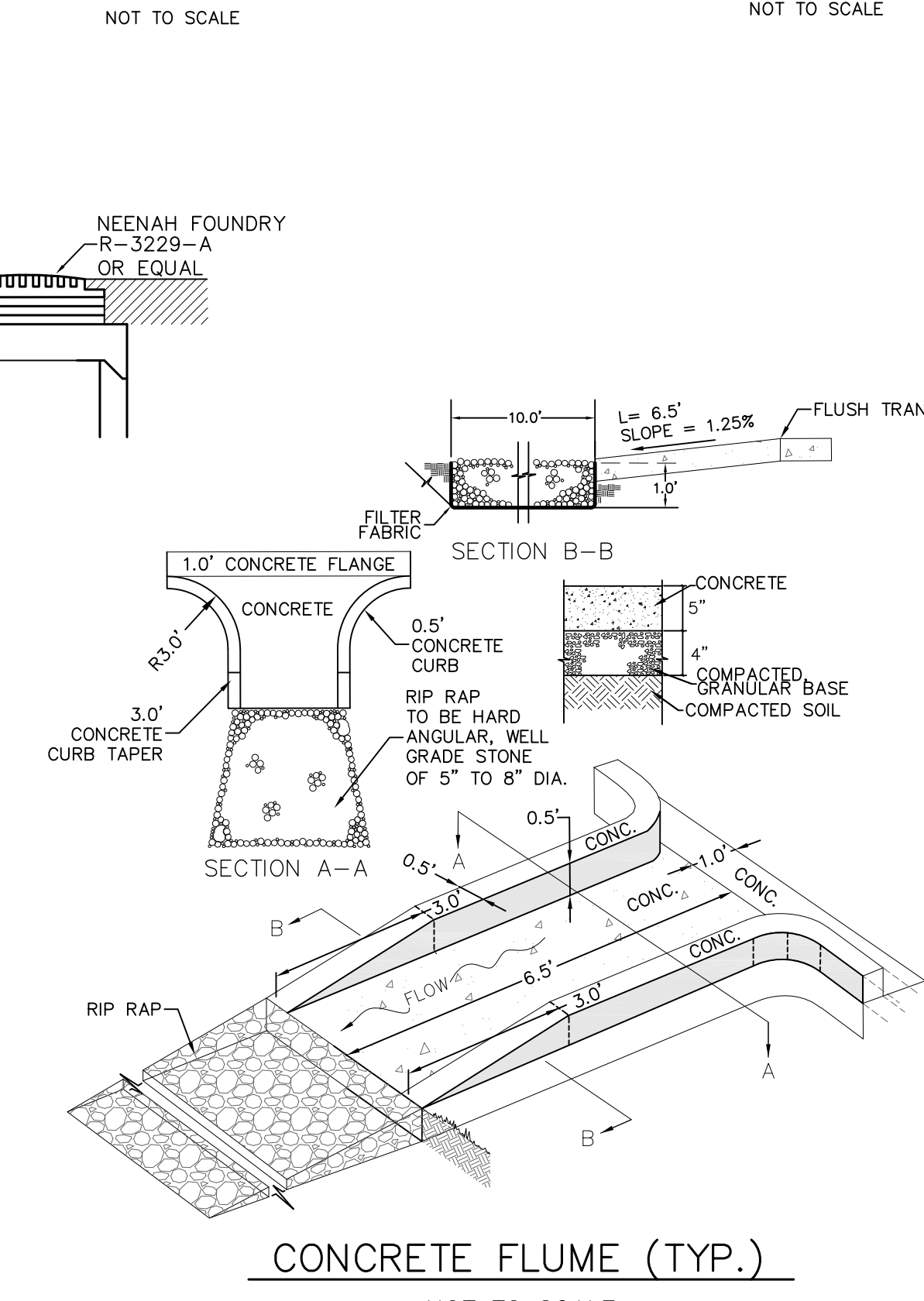
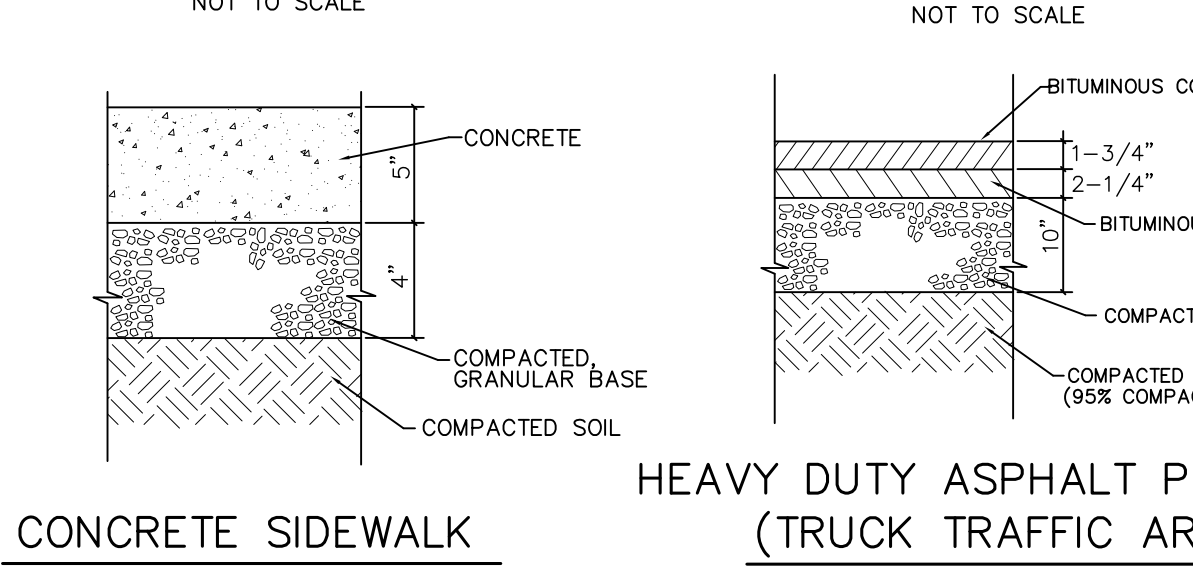
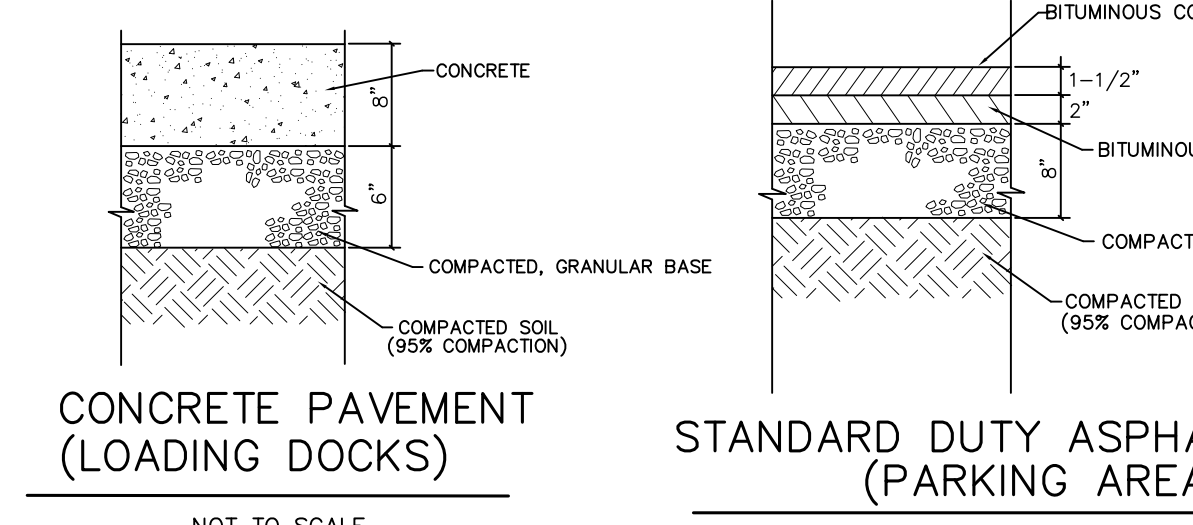
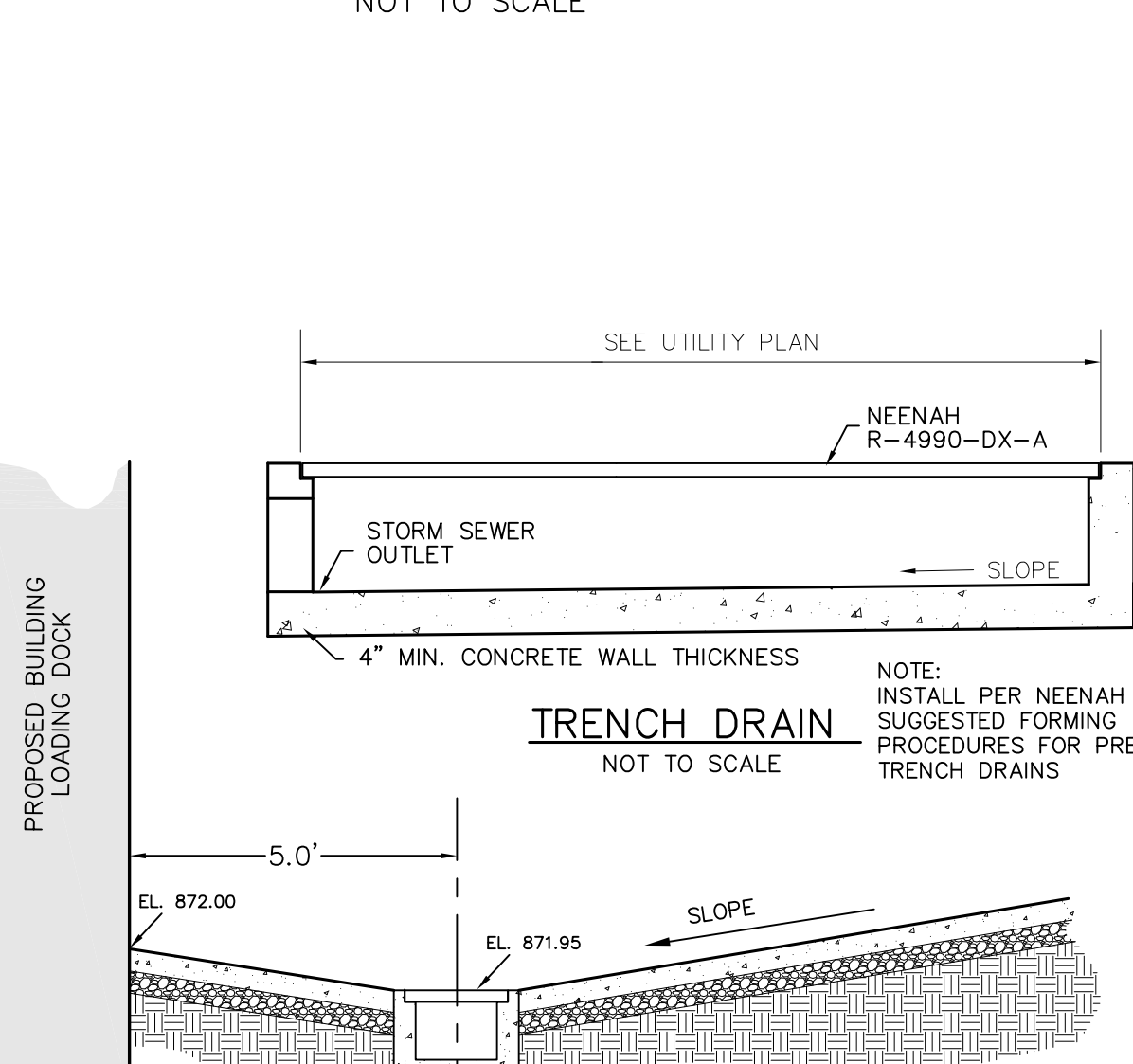
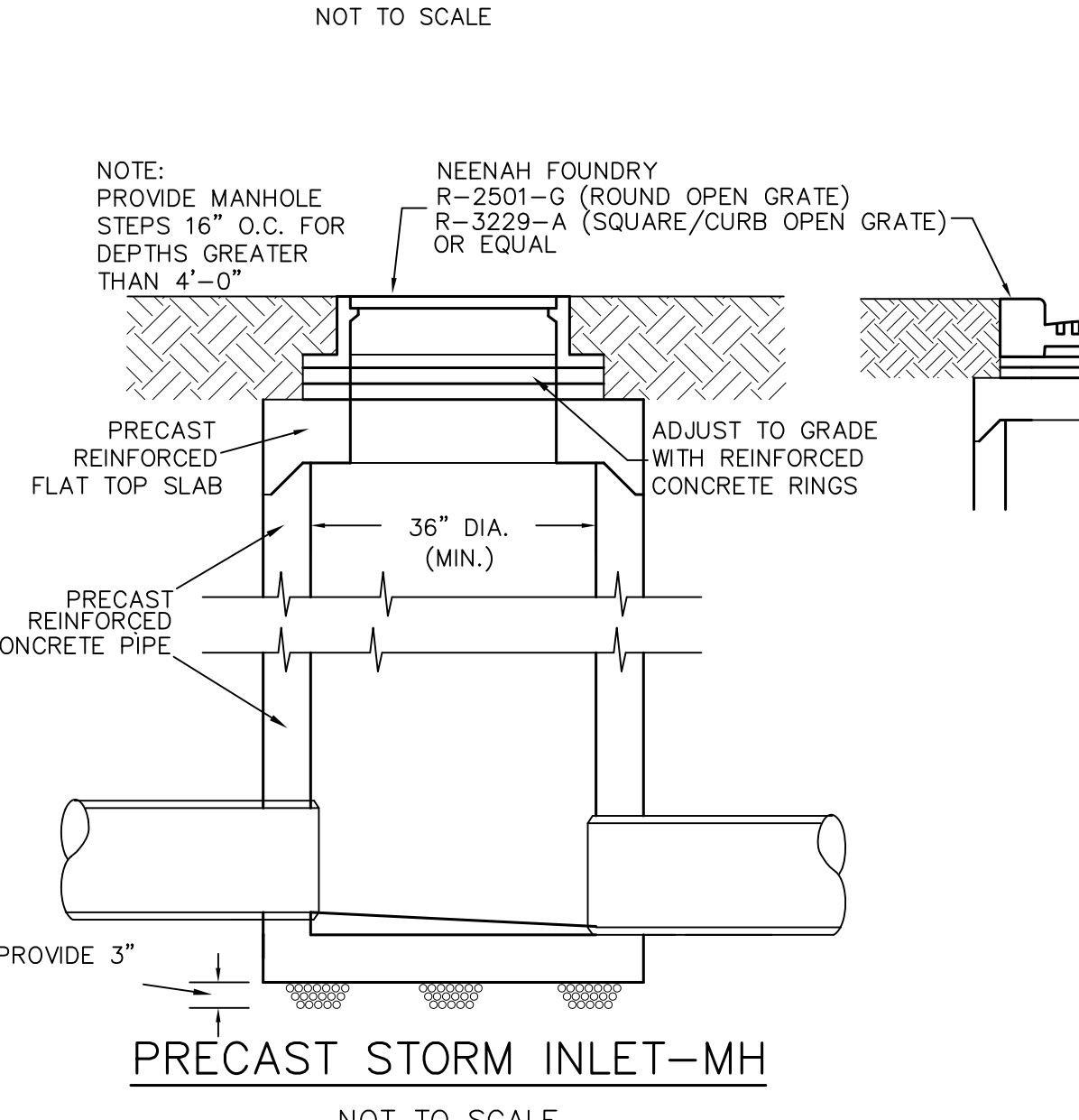
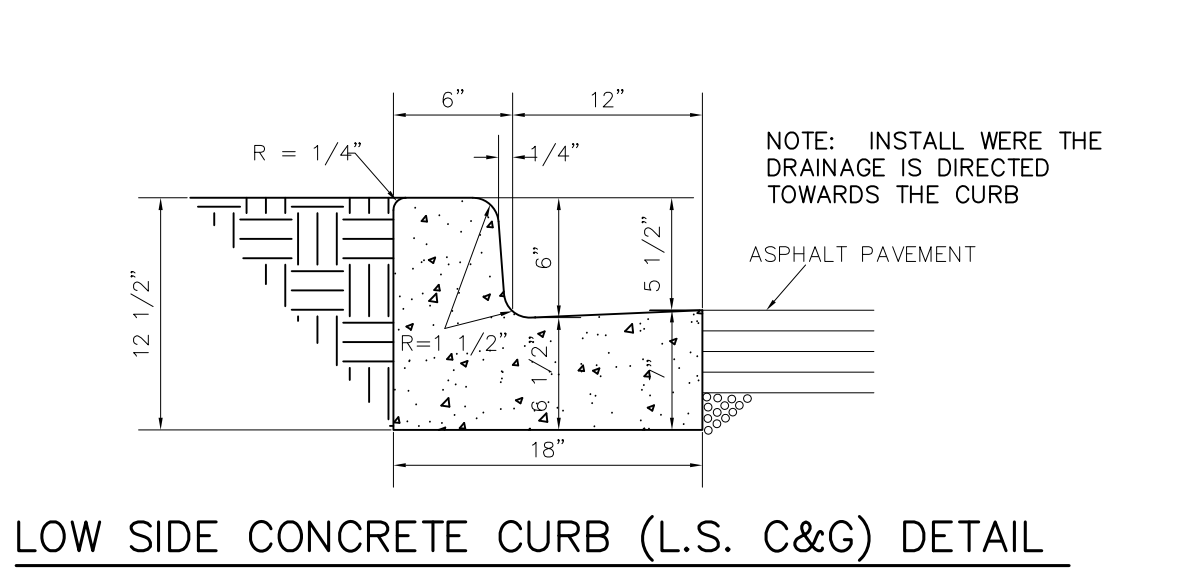
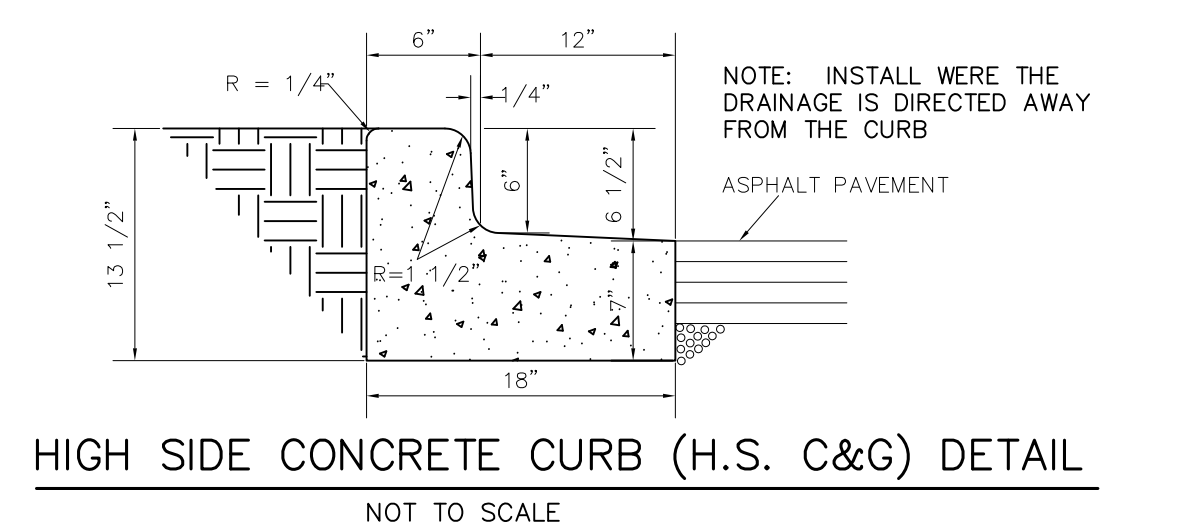
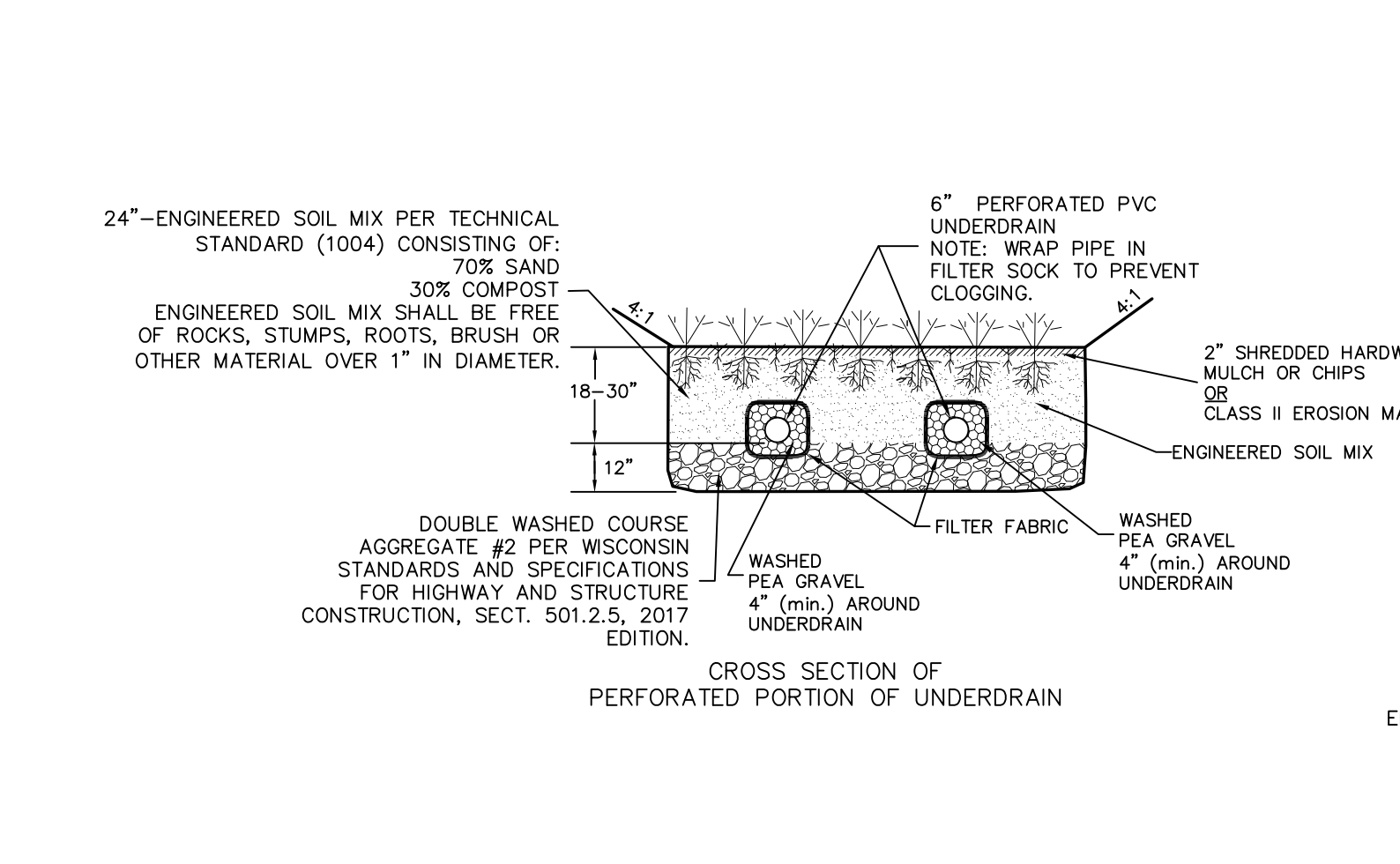
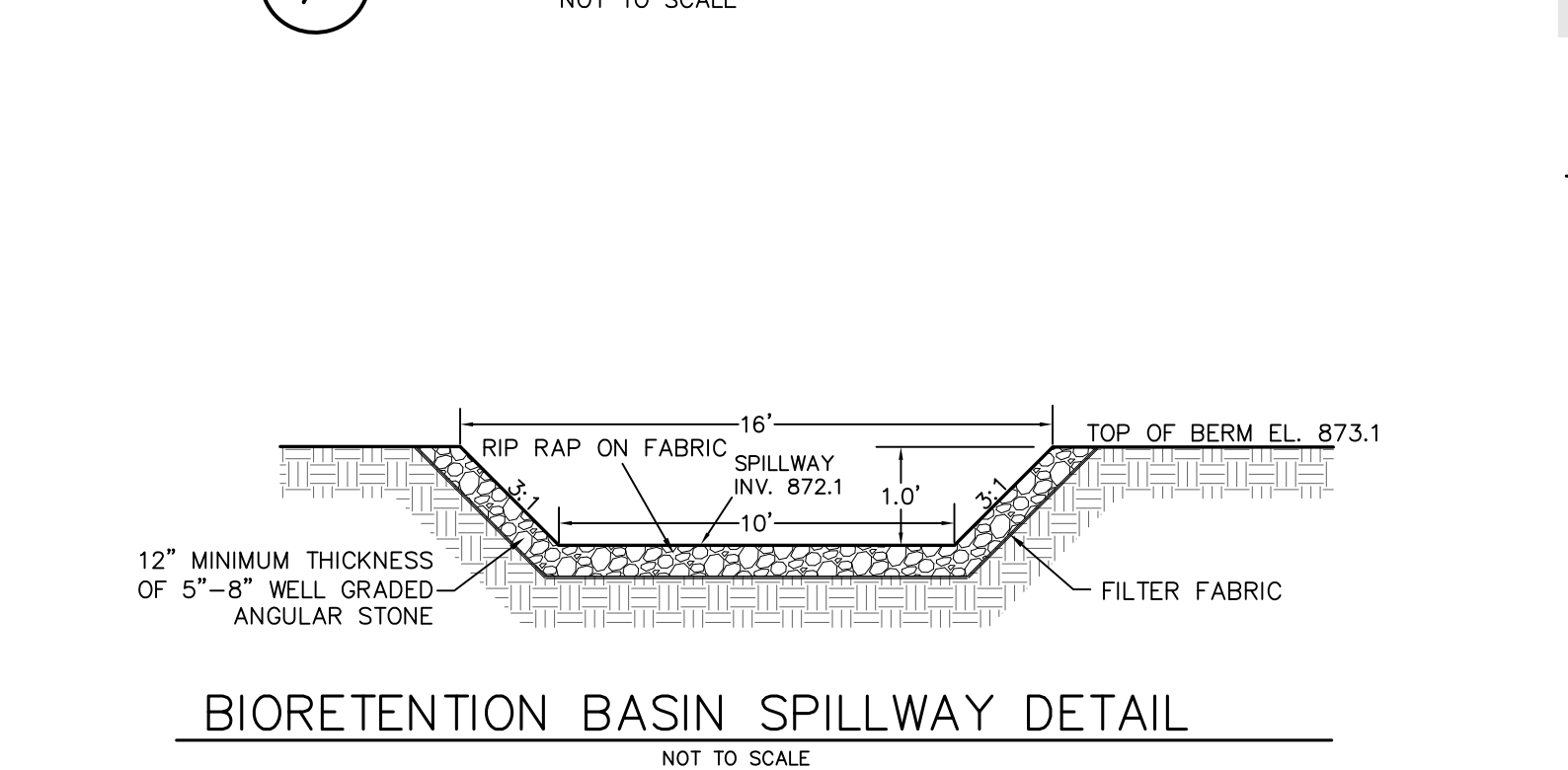
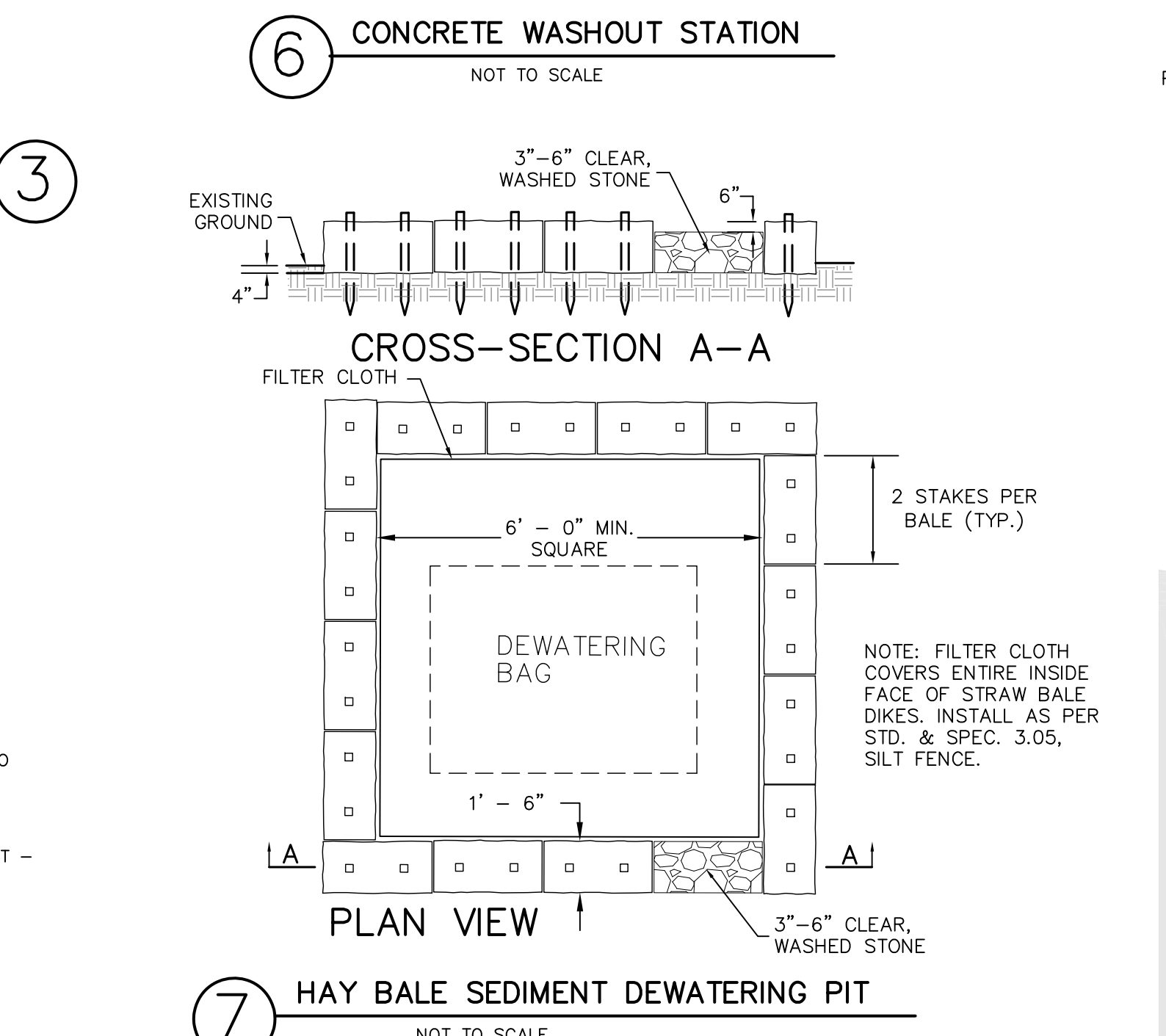
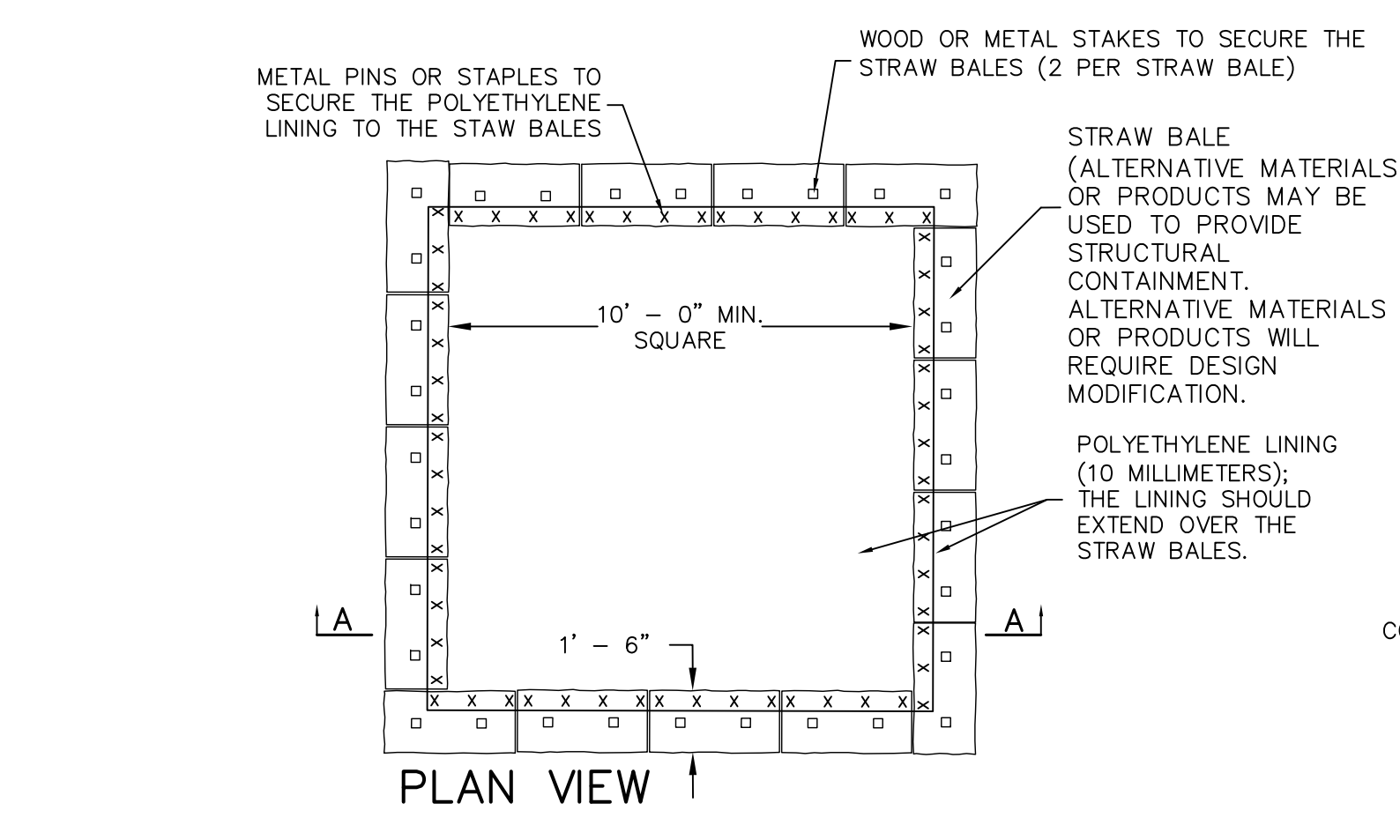
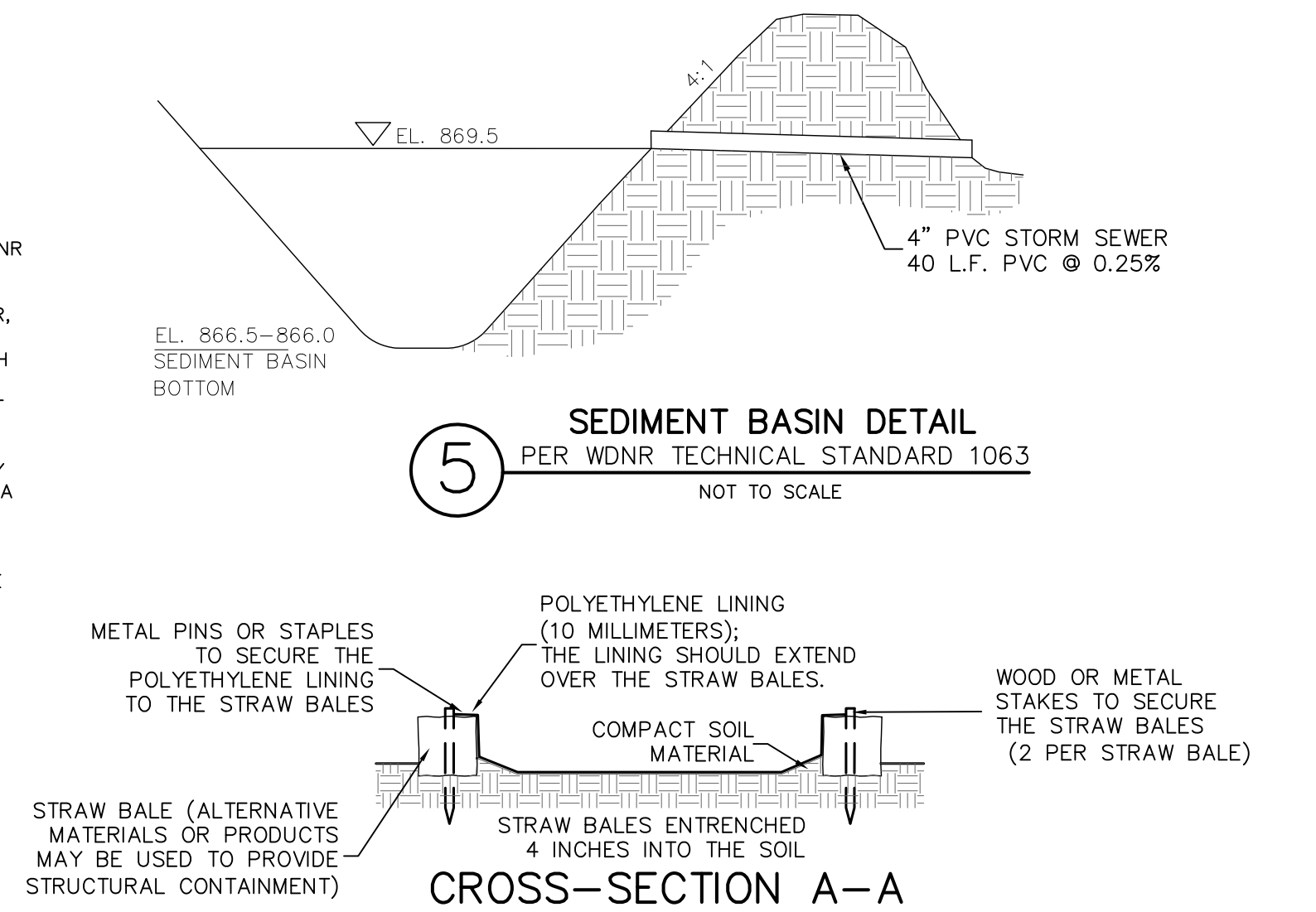
(ix) INSTALLATION OF EROSION BLANKETS SHOULD NOT OCCUR OVER SNOW OF GREATER DEPTH THAN 1" IN DEPTH OR OVER FROZEN GROUND.

(x) ALL GRASS-LINED DITCHES AND CHANNELS SHOULD BE CONSTRUCTED AND STABILIZED BY OCTOBER 15. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM 70% VEGETATIVE GROWTH BY NOVEMBER 1 OR WHICH ARE DISTURBED AFTER NOVEMBER 1 SHOULD BE STABILIZED WITH TEMPORARY STONE WITH FILTER FABRIC OR TEMPORARY SEED AND EROSION CONTROL BLANKETS APPROPRIATE TO THE DESIGN FLOW CONDITIONS.

(xi) ALL STONE LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 1.

(xii) SEDIMENT BARRIERS THAT ARE INSTALLED DURING FROZEN CONDITIONS SHOULD CONFORM TO CONSERVATION PRACTICE STANDARD 1071 W-1.0. ANCHORED IN PLACE AND IN FULL CONTACT WITH THE GROUND SURFACE. SILT FENCE AND HAY BALES SHOULD NOT BE INSTALLED WHEN FROZEN GROUND CONDITIONS PREVENT PROPER EMBEDMENT OF THESE BARRIER.

(xiii) AFTER DECEMBER 1, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION OF THE ROAD OR PARKING AREA HAS CEASED FOR THE WINTER SEASON SHOULD BE PROTECTED WITH A 3" LAYER OF SAND AND GRAVEL WITH A GRADATION CONFORMING TO TABLE 37 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.



Agrecol LLC
www.agrecol.com
10101 N. Casey Road
Evansville, Wisconsin 53536
Ph: 608-223-3571

Infiltration Swale Seed Mix

Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses/Sedges/Rushes:		
<i>Andropogon gerardii</i>	Big Bluestem	10.00
<i>Bromus ciliatus</i>	Fringed Brome	36.00
<i>Carex comosa</i>	Bristly Sedge	5.00
<i>Carex vulpinoidea</i>	Brown Fox Sedge	1.50
<i>Elymus virginicus</i>	Virginia Wild Rye	36.00
<i>Glyceria striata</i>	Fowl Manna Grass	2.00
<i>Panicum virgatum</i>	Switchgrass	3.00
<i>Scirpus atrovirens</i>	Dark-Green Bullrush	0.50
<i>Scirpus cyperinus</i>	Wool Grass	0.25
<i>Sorghastrum nutans</i>	Indian Grass	16.00
<i>Spatina pectinata</i>	Prairie Cordgrass	8.00
Total		118.25

Forbs:		
<i>Alisma subcordatum</i>	Common Water Plantain	2.00
<i>Asclepias incarnata</i>	Marsh (Red) Milkweed	6.00
<i>Aster novae-angliae</i>	New England Aster	2.00
<i>Desmodium canadense</i>	Canada Tick Trefoil	4.00
<i>Ratibida pinnata</i>	Yellow Coneflower	3.00
<i>Rudbeckia hirta</i>	Black-eyed Susan	2.00
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Susan	2.00
<i>Solidago ohioensis</i>	Ohio Goldenrod	1.00
<i>Verbena hastata</i>	Blue Vervain	1.75
<i>Vernonia fasciculata</i>	Ironweed	2.00
Total		25.75

Approximate area of coverage:
Total area (SF) of coverage of infiltration area: 32,750
Total area (acres) of coverage of infiltration area: 0.75

STORMWATER SEED MIX

Agrecol LLC
www.agrecol.com
10101 N. Casey Road
Evansville, Wisconsin 53536
Ph: 608-223-3571

Economy Prairie Seed Mix

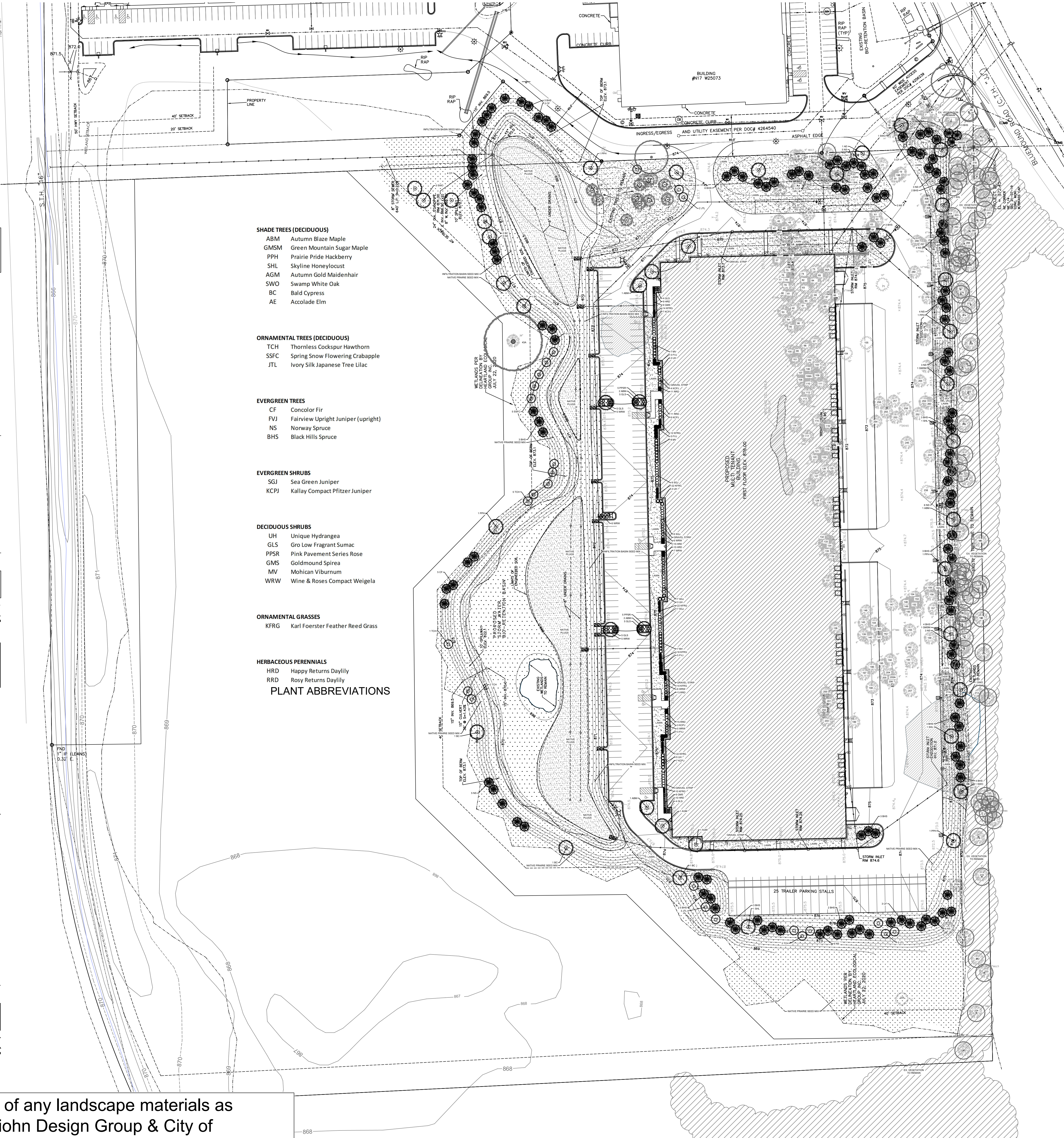
Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses/Sedges/Rushes:		
<i>Andropogon gerardii</i>	Big Bluestem	8.00
<i>Bouteloua curtipendula</i>	Side Oats Grama	32.00
<i>Elymus canadensis</i>	Canada Wild Rye	16.00
<i>Elymus virginicus</i>	Virginia Wild Rye	20.00
<i>Panicum virgatum</i>	Switchgrass	8.00
<i>Schizachyrium scoparium</i>	Little Bluestem	16.00
<i>Spatina pectinata</i>	Prairie Cordgrass	12.00
Total		112.00

Forbs:		
<i>Asclepias tuberosa</i>	Butterfly Weed	2.00
<i>Aster novae-angliae</i>	New England Aster	0.50
<i>Chamaecrista fasciculata</i>	Partridge Pea	8.00
<i>Coreopsis lanceolata</i>	Lance-Leaf (Sand) Coreopsis	2.00
<i>Dalea purpurea</i>	Purple Prairie Clover	4.00
<i>Echinacea purpurea</i>	Purple Coneflower	8.00
<i>Helianthus annuus</i>	Early Sunflower	6.00
<i>Liatris pycnostachya</i>	Prairie Blazing Star	2.00
<i>Monarda fistulosa</i>	Wild Bergamot	1.00
<i>Penstemon digitalis</i>	Foxglove Beard Tongue	0.50
<i>Ratibida pinnata</i>	Yellow Coneflower	4.00
<i>Rudbeckia hirta</i>	Black-eyed Susan	2.00
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Susan	1.00
<i>Solidago rigida</i>	Stiff Goldenrod	1.00
<i>Tradescantia ohioensis</i>	Ohio Spiderwort	4.00
<i>Zizia aurea</i>	Golden Alexanders	2.00
Total		48.00

Approximate area of coverage:
Total area (SF) of coverage: 141,645
Total area (acres) of coverage: 3.25

PRAIRIE SEED MIX

Prior to installation of any landscape materials as outlined herein, Briohn Design Group & City of Pewaukee Staff shall review final placement after tree & brush removal and rough grading have been completed.



- SHADE TREES (DECIDUOUS)**
- ABM Autumn Blaze Maple
 - GMSM Green Mountain Sugar Maple
 - PPH Prairie Pride Hackberry
 - SHL Skyline Honeylocust
 - AGM Autumn Gold Maidenhair
 - SWO Swamp White Oak
 - BC Bald Cypress
 - AE Accolade Elm

- ORNAMENTAL TREES (DECIDUOUS)**
- TCH Thornless Cockspur Hawthorn
 - SSFC Spring Snow Flowering Crabapple
 - JTL Ivory Silk Japanese Tree Lilac

- EVERGREEN TREES**
- CF Concolor Fir
 - FVJ Fairview Upright Juniper (upright)
 - NS Norway Spruce
 - BHS Black Hills Spruce

- EVERGREEN SHRUBS**
- SGJ Sea Green Juniper
 - KCPJ Kallay Compact Pfitzer Juniper

- DECIDUOUS SHRUBS**
- UH Unique Hydrangea
 - GLS Gro Low Fragrant Sumac
 - PPSR Pink Pavement Series Rose
 - GMS Goldmound Spirea
 - MV Mohican Viburnum
 - WRW Wine & Roses Compact Weigela

- ORNAMENTAL GRASSES**
- KFRG Karl Foerster Feather Reed Grass

- HERBACEOUS PERENNIALS**
- HRD Happy Returns Daylily
 - RDD Rosy Returns Daylily

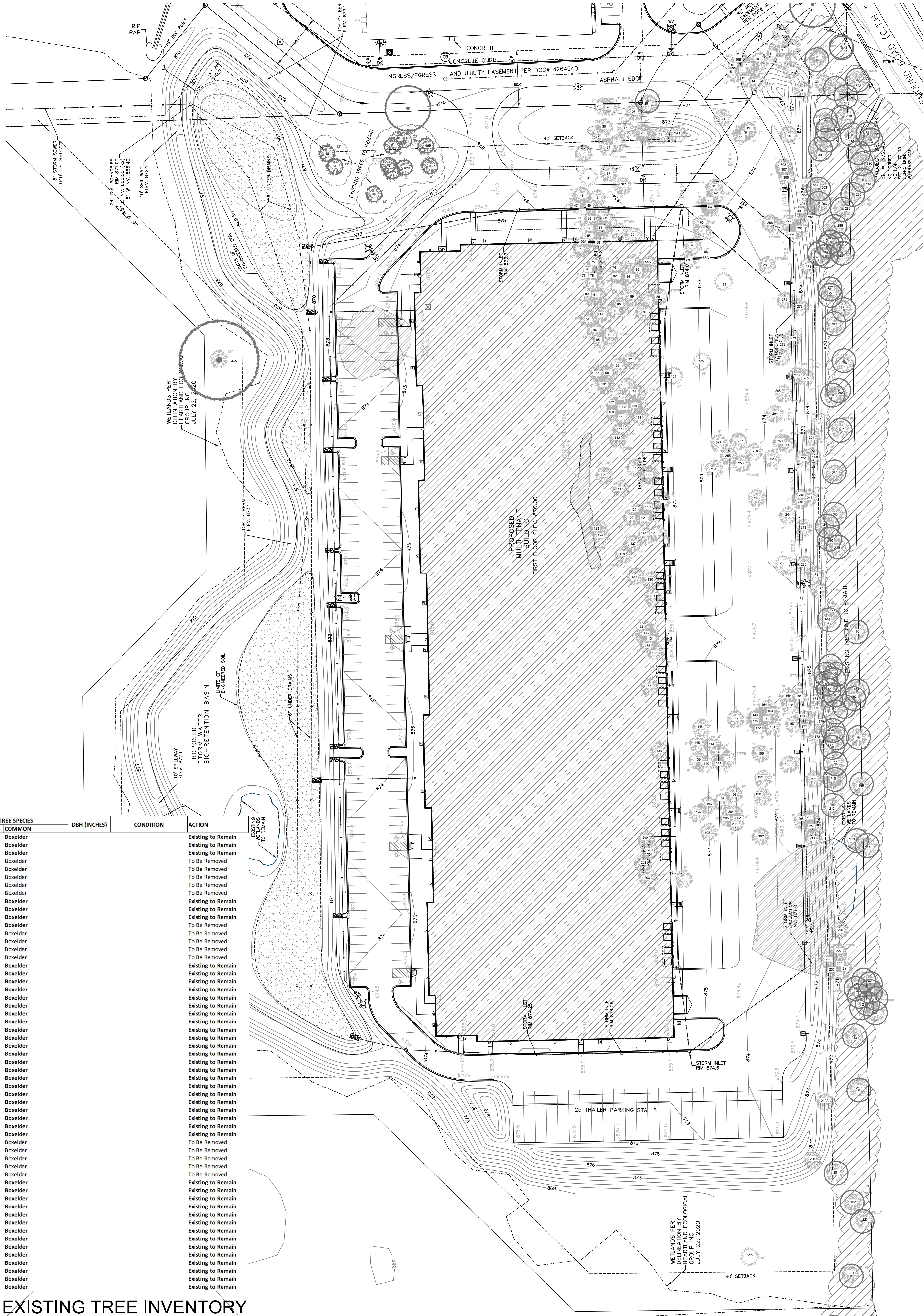
PLANT ABBREVIATIONS



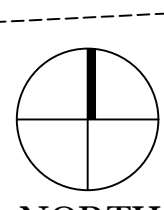
OVERALL LANDSCAPE PLAN
Scale: 1" = 60'0"

Prior to installation of any landscape materials as outlined herein, Briohn Design Group & City of Pewaukee Staff shall review final placement after tree & brush removal and rough grading have been completed.

TAG NUMBER	EXISTING TREE SPECIES	DBH (INCHES)	CONDITION	ACTION	TAG NUMBER	EXISTING TREE SPECIES	DBH (INCHES)	CONDITION	ACTION
1	Not Found				131	Rhamnus	Buckthorn	9"	To Be Removed
2	Acer negundo	Boxelder	12"/12" twin	Existing to Remain	132	Acer negundo	Boxelder	5"	To Be Removed
28	Quercus macrocarpa	Bur Oak	14"/14" twin	Existing to Remain	133	Acer negundo	Boxelder	9"/8"	Twin Trunks
3	Acer negundo	Boxelder	14"	To Be Removed	134	Acer negundo	Boxelder	10"	To Be Removed
4	Acer negundo	Boxelder	18"	To Be Removed	135	Prunus	Black Cherry	5"	To Be Removed
5	Acer negundo	Boxelder	36"	To Be Removed	136	Prunus	Black Cherry	5"	To Be Removed
6	Acer negundo	Boxelder	28"	To Be Removed	137	Acer negundo	Boxelder	5"	To Be Removed
7	Acer negundo	Boxelder	18"	To Be Removed	137A	Prunus	Black Cherry	6"	To Be Removed
8	Acer negundo	Boxelder	12"	To Be Removed	137B	Rhamnus	Buckthorn	6"	To Be Removed
9	Acer negundo	Boxelder	8"/10"/12" ms	To Be Removed	138	Acer negundo	Boxelder	6"	Twin Trunks
10	Acer negundo	Boxelder	15"	To Be Removed	139	Acer negundo	Boxelder	6"	To Be Removed
11	Not Found				140	Acer negundo	Boxelder	6"	To Be Removed
12	Acer negundo	Boxelder	16"	To Be Removed	141	Acer negundo	Boxelder	5"	To Be Removed
13	Acer negundo	Boxelder	18"	To Be Removed	142	Acer negundo	Boxelder	5"/5"	Twin Trunks
14	Acer negundo	Boxelder	18"	To Be Removed	143	Acer negundo	Boxelder	5"	To Be Removed
15	Acer negundo	Boxelder	24"	To Be Removed	144	Acer negundo	Boxelder	4"	To Be Removed
16	Acer negundo	Boxelder	24"	To Be Removed	145	Acer negundo	Boxelder	5"	To Be Removed
168	Not Found				146	Acer negundo	Boxelder	7"	To Be Removed
17	Juglans nigra	Black Walnut	6"	Good Condition	147	Prunus	Black Cherry	6"	To Be Removed
18	Acer negundo	Boxelder	7"	To Be Removed	148	Juniperus	Cedar	5"	Poor Condition
19	Acer negundo	Boxelder	18"	To Be Removed	149	Juniperus	Cedar	5"	Poor Condition
198	Acer negundo	Boxelder	22"	To Be Removed	150	Juniperus	Cedar	5"	Poor Condition
20	Acer negundo	Boxelder	20"	To Be Removed	151	Juniperus	Cedar	6"	Poor Condition
21	Acer negundo	Boxelder	12"	To Be Removed	152	Rhamnus	Buckthorn	5"	To Be Removed
22	Acer negundo	Boxelder	36"	To Be Removed	153	Rhamnus	Buckthorn	5"	To Be Removed
23	Acer negundo	Boxelder	36"	To Be Removed	154	Rhamnus	Buckthorn	6"	To Be Removed
24	Acer negundo	Boxelder	24"	To Be Removed	155	Acer negundo	Boxelder	8"/10"/16"	Multiple Trunks
24B	Acer negundo	Boxelder	10"	To Be Removed	156	Acer negundo	Boxelder	8"	To Be Removed
25	Acer negundo	Boxelder	12"/16"/24"	Multiple Trunks	157	Acer negundo	Boxelder	5"	To Be Removed
26	Juglans nigra	Black Walnut	6"	Good Condition	158	Malus	Domestic Apple Tree	8"	Poor Condition
27	Acer negundo	Boxelder	18"	To Be Removed	159	Malus	Apple Tree	18"	Poor Condition
28	Rhamnus	Buckthorn	5"	To Be Removed	160	Malus	Apple Tree	12"	Poor Condition
29	Rhamnus	Buckthorn	8"	To Be Removed	161	Acer negundo	Boxelder	6"	To Be Removed
30	Rhamnus	Buckthorn	8"	To Be Removed	162	Acer negundo	Boxelder	6"/6"	To Be Removed
31	Acer negundo	Boxelder	15"	To Be Removed	163	Dead Unknown		8"	To Be Removed
32	Tilia	Linden	10"	Average Condition	164	Acer negundo	Boxelder	12"	Existing to Remain
33	Acer negundo	Boxelder	15"	To Be Removed	165	Acer negundo	Boxelder	18"	Existing to Remain
34	Acer negundo	Boxelder	15"/18" twin	To Be Removed	166	Acer negundo	Boxelder	7"	To Be Removed
35	Juglans nigra	Black Walnut	5"	Poor Condition	167	Acer negundo	Boxelder	15"	Existing to Remain
36	Prunus	Black Cherry	5"	Poor Condition	168	Acer negundo	Boxelder	10"	Existing to Remain
37	Acer negundo	Boxelder	5"	To Be Removed	169	Acer negundo	Boxelder	10"	Existing to Remain
37A	Quercus macrocarpa	Bur Oak	36"	Good Condition	170	Acer negundo	Boxelder	10"	Existing to Remain
38	Not Found				171	Acer negundo	Boxelder	11"	Existing to Remain
39	Not Found				172	Acer negundo	Boxelder	8"	Existing to Remain
40	Quercus macrocarpa	Bur Oak	8"	Good Condition	173	Acer negundo	Boxelder	8"	Existing to Remain
41	Quercus macrocarpa	Bur Oak	10"	Good Condition	174	Acer negundo	Boxelder	12"	To Be Removed
42	Quercus macrocarpa	Bur Oak	10"	Good Condition	175	Acer negundo	Boxelder	10"	Existing to Remain
42A	Quercus macrocarpa	Bur Oak	10"	Good Condition	176	Acer negundo	Boxelder	10"	Existing to Remain
42B	Quercus macrocarpa	Bur Oak	8"	Good Condition	177	Juniperus	Cedar	10"	1/2 Dead
43	Quercus macrocarpa	Bur Oak	12"	Good Condition	178	Acer negundo	Boxelder	7"	Existing to Remain
44	Quercus macrocarpa	Bur Oak	12"	Good Condition	179	Acer negundo	Boxelder	10"	Existing to Remain
45	Quercus macrocarpa	Bur Oak	10"	Good Condition	180	Acer negundo	Boxelder	8"	Existing to Remain
46	Acer negundo	Boxelder	18"	To Be Removed	181	Acer negundo	Boxelder	10"	To Be Removed
47	Acer negundo	Boxelder	18"	To Be Removed	182	Acer negundo	Boxelder	10"	To Be Removed
48	Acer negundo	Boxelder	24"	To Be Removed	183	Acer negundo	Boxelder	12"	To Be Removed
49	Acer negundo	Boxelder	18"	To Be Removed	184	Acer negundo	Boxelder	5"	Existing to Remain
50	Acer negundo	Boxelder	24"	To Be Removed	185	Acer negundo	Boxelder	8"	Existing to Remain
51	Juglans	Black Walnut	10"	To Be Removed	186	Acer negundo	Boxelder	8"	Existing to Remain
52	Not Found				187	Acer negundo	Boxelder	10"	Existing to Remain
53	Dead - Unknown	Boxelder	4"	Dead Tree	188	Acer negundo	Boxelder	7"/7"	Twin Trunks
54	Dead - Unknown	Boxelder	4"	Dead Tree	189	Acer negundo	Boxelder	18"	Existing to Remain
55	Acer negundo	Boxelder	6"	To Be Removed	190	Acer negundo	Boxelder	5"	To Be Removed
56	Dead - Unknown	Boxelder	8"	Dead Tree	191	Acer negundo	Boxelder	5"	To Be Removed
56A	Acer negundo	Boxelder	15"	To Be Removed	192	Prunus	Black Cherry	8"	Poor Condition
57	Acer negundo	Boxelder	13"	To Be Removed	193	Prunus	Black Cherry	8"	To Be Removed
58	Juglans	Black Walnut	20"	Good Condition	194	Prunus	Black Cherry	10"	To Be Removed
59	Juglans nigra	Black Walnut	8"	Good Condition	195	Prunus	Black Cherry	14"	To Be Removed
60	Juglans nigra	Black Walnut	5"	Good Condition	196	Prunus	Black Cherry	5"	To Be Removed
61	Acer negundo	Boxelder	10"	To Be Removed	197	Prunus	Black Cherry	10"	To Be Removed
62	Acer negundo	Boxelder	10"	To Be Removed	198	Acer negundo	Boxelder	6"	To Be Removed
63	Acer negundo	Boxelder	8"	To Be Removed	199	Acer negundo	Boxelder	6"	To Be Removed
64	Acer negundo	Boxelder	15"	To Be Removed	200	Malus	Domestic Apple Tree	6"/8"	Twin Trunks
65	Acer negundo	Boxelder	6"	To Be Removed	201	Rhamnus	Buckthorn Missing	Varies	To Be Removed
66	Acer negundo	Boxelder	10"	To Be Removed	202	Acer negundo	Boxelder	8"	To Be Removed
67	Acer negundo	Boxelder	18"	To Be Removed	203	Acer negundo	Boxelder	8"/6"	Twin Trunks
68	Acer negundo	Boxelder	10"	To Be Removed	204	Not Found		18"	To Be Removed
68A	Acer negundo	Boxelder	15"	To Be Removed	205	Acer negundo	Boxelder	18"	To Be Removed
69	Prunus	Black Cherry	12"	To Be Removed	205A	Acer negundo	Boxelder	8"	To Be Removed
70	Dead - Unknown	Boxelder	4"	Dead Tree	206	Acer negundo	Boxelder	15"	To Be Removed
71	Dead - Unknown	Boxelder	4"	Dead Tree	207	Acer negundo	Boxelder	18"	To Be Removed
72	Not Found				208	Acer negundo	Boxelder	15"	To Be Removed
73	Dead - Unknown	Boxelder	4"	Dead Tree	209	Acer negundo	Boxelder	10"	To Be Removed
74	Acer	Boxelder	12"/16"	Twin Trunks	210	Acer negundo	Boxelder	10"	To Be Removed
75	Acer negundo	Boxelder	10"	To Be Removed	211	Acer negundo	Boxelder	10"	To Be Removed
76	Acer negundo	Boxelder	8"	To Be Removed	212	Acer negundo	Boxelder	15"	To Be Removed
77	Acer negundo	Boxelder	8"/10"	Twin Trunks	213	Acer negundo	Boxelder	22"	Existing to Remain
78	Acer negundo	Boxelder	12"	To Be Removed	214	Acer negundo	Boxelder	13"	Existing to Remain
79	Not Found				215	Acer negundo	Boxelder	13"	Existing to Remain
80	Acer negundo	Boxelder	10"	To Be Removed	216	Acer negundo	Boxelder	13"	Existing to Remain
81	Acer negundo	Boxelder	15"	To Be Removed	217	Acer negundo	Boxelder	8"	Existing to Remain
82	Acer negundo	Boxelder	24"	To Be Removed	217A	Acer negundo	Boxelder	8"	Existing to Remain
83	Acer negundo	Boxelder	15"	To Be Removed	217B	Acer negundo	Boxelder	11"	Twin Trunks
84	Acer negundo	Boxelder	30"	Poor Condition	218	Acer negundo	Boxelder	13"	Existing to Remain
85	Acer negundo	Boxelder	12"	To Be Removed	219	Acer negundo	Boxelder	13"	To Be Removed
85A	Acer negundo	Boxelder	12"	To Be Removed	219A	Acer negundo	Boxelder	6"	Average Condition
86	Acer negundo	Boxelder	24"	To Be Removed	220	Juglans nigra	Black Walnut	18"	To Be Removed
87	Acer negundo	Boxelder	12"	To Be Removed	221	Acer negundo	Boxelder	12"	To Be Removed
88	Acer negundo	Boxelder	14"	To Be Removed	222	Populus	Cottonwood	14"	Multiple Trunks
89	Acer negundo	Boxelder	9"	To Be Removed	223	Acer negundo	Boxelder	6"	Multiple Trunks
90	Acer negundo	Boxelder	6"/8"/8"	Multiple Trunks - Dead	224	Acer negundo	Boxelder	15"	Twin Trunks
91	Dead - Unknown	Boxelder	4"	Dead Tree	225	Juniperus	Cedar	7"	To Be Removed
92	Acer negundo	Boxelder	14"	To Be Removed	226	Acer negundo	Boxelder	7"	To Be Removed
93	Acer negundo	Boxelder	30"	To Be Removed	227	Acer negundo	Boxelder	5"	Twin Trunks
94	Juglans nigra	Black Walnut	10"	Average Condition	228	Acer negundo	Boxelder	5"	To Be Removed
95	Crataegus	Hawthorn	11"	To Be Removed	229	Acer negundo	Boxelder	11"	To Be Removed
96	Acer negundo	Boxelder	5"	Twin Trunks	230	Acer negundo	Boxelder	12"	To Be Removed
97	Acer negundo	Boxelder	8"/30"/40"	Multiple Trunks	231	Acer negundo	Boxelder	15"	To Be Removed
98	Acer negundo	Boxelder	8"/30"/40"	Multiple Trunks	232	Acer negundo	Boxelder	12"	To Be Removed
99	Quercus macrocarpa	Bur Oak	6"	To Be Removed	233	Acer negundo	Boxelder	13"	Existing to Remain
100	Crataegus	Hawthorn	6"	To Be Removed	234	Acer negundo	Boxelder	9"	Existing to Remain
101	Crataegus	Hawthorn	6"/6"	Twin Trunks	235	Acer negundo	Boxelder	13"	Multiple Trunks
102	Acer negundo	Boxelder	6"	To Be Removed	236	Acer negundo	Boxelder	9"	Existing to Remain
103	Not Found				237	Juniperus	Cedar	7"	To Be Removed
104	Picea pungens	Colorado Blue Spruce	15"	Good Condition	238	Juniperus	Cedar	7"	To Be Removed
105	Picea pungens	Colorado Blue Spruce	14"	Good Condition	239	Acer negundo	Boxelder	23"	Existing to Remain
106	Crataegus	Hawthorn	6"	Poor Condition	240	Acer negundo	Boxelder	23"	Existing to Remain
106A	Crataegus	Hawthorn	6"	Poor Condition	241	Acer negundo	Boxelder	23"	Existing to Remain
107	Crataegus	Hawthorn	6"	Poor Condition	242	Acer negundo	Boxelder	23"	Existing to Remain
108	Dead - Unknown	Boxelder	6"	To Be Removed	243	Acer negundo	Boxelder	23"	Existing to Remain
109	Ulmus	Elm	6"	Average Condition	244	Acer negundo	Boxelder	23"	Existing to Remain
110	Ulmus	Elm	6"	Average Condition	245	Acer negundo	Boxelder	23"	Existing to Remain
111	Acer negundo	Boxelder	10"	To Be Removed	246	Acer negundo	Boxelder	23"	Existing to Remain
112	Ulmus	Elm	6"	Average Condition	247	Acer negundo	Boxelder	23"	Existing to Remain
113	Acer negundo	Boxelder	10"	Twin Trunks	248	Acer negundo	Boxelder	23"	Existing to Remain
114	Buckthorn	Buckthorn	5"	To Be Removed	249	Acer negundo	Boxelder	23"	Existing to Remain
115	Acer negundo	Boxelder	13"	To Be Removed	250	Acer negundo	Boxelder	23"	Existing to Remain
116	Acer negundo	Boxelder	9"/12"	Twin Trunks	251	Acer negundo	Boxelder	23"	Existing to Remain
117	Acer negundo	Boxelder	10"/8"/6"	Multiple Trunks	252	Acer negundo	Boxelder	23"	Existing to Remain
118	Acer negundo	Boxelder	15"	To Be Removed	253	Acer negundo	Boxelder	23"	Existing to Remain
119	Acer negundo	Boxelder	5"	To Be Removed	254	Acer negundo	Boxelder	23"	Existing to Remain
120	Rhamnus	Buckthorn	5"	To Be Removed	255	Acer negundo	Boxelder	23"	Existing to Remain
121	Ulmus	Elm	4"	To Be Removed	256	Acer negundo	Boxelder	23"	Existing to Remain
122	Acer negundo	Boxelder	10"	To Be Removed	257	Acer negundo	Boxelder	23"	Existing to Remain
123	Rhamnus	Buckthorn Missing	Varies	To Be Removed	258	Acer negundo	Boxelder	23"	Existing to Remain
124	Rhamnus	Buckthorn Missing	Varies	To Be Removed	259	Acer negundo	Boxelder	23"	Existing to Remain
125	Ulmus	Elm	5"	To Be Removed	260	Acer negundo	Boxelder	23"	Existing to Remain
126	Ulmus	Elm	5"	To Be Removed	261	Acer negundo	Boxelder	23"	Existing to Remain
127	Rhamnus	Buckthorn	6"	To Be Removed	262	Acer negundo	Boxelder	23"	Existing to Remain
128	Rhamnus	Buckthorn	8"	Quad	263	Acer negundo	Boxelder	23"	Existing to Remain
129	Rhamnus	Buckthorn	Varies	Missing	264	Acer negundo	Boxelder	23"	Existing to Remain
130	Rhamnus	Buckthorn	6"	To Be Removed	265	Acer negundo	Boxelder	23"	Existing to Remain



EXISTING TREE INVENTORY



TREE INVENTORY PLAN
Scale: 1" = 50'0"

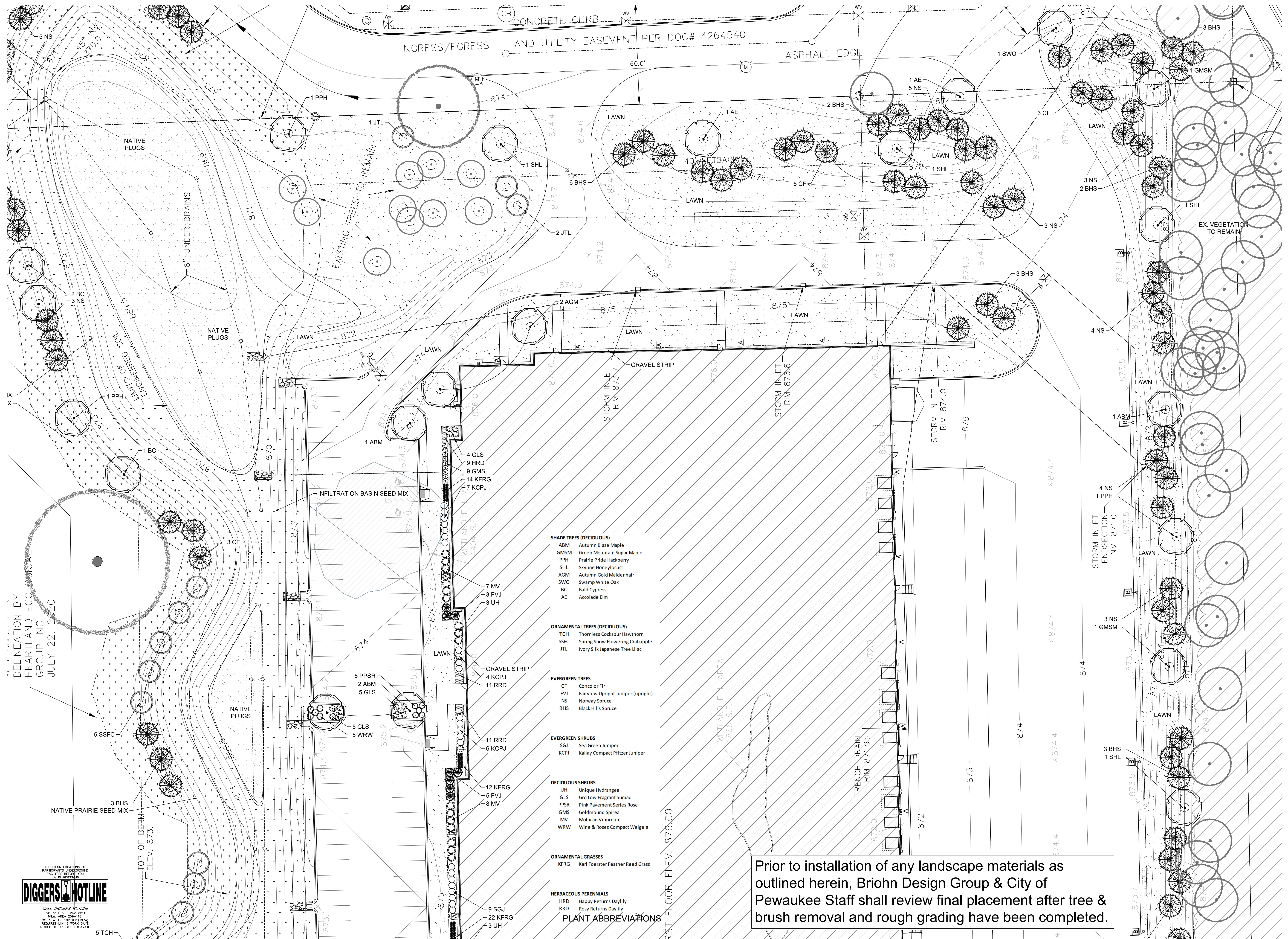


PEWAUKEE SOUTH
INDUSTRIAL DEVELOPMENT
BLUEMOUND ROAD | HWY "J"
PEWAUKEE, WISCONSIN

[illegible]

	3224
I:	PCA/WDH
ED:	DF
	9/03/20
T:	

1.2

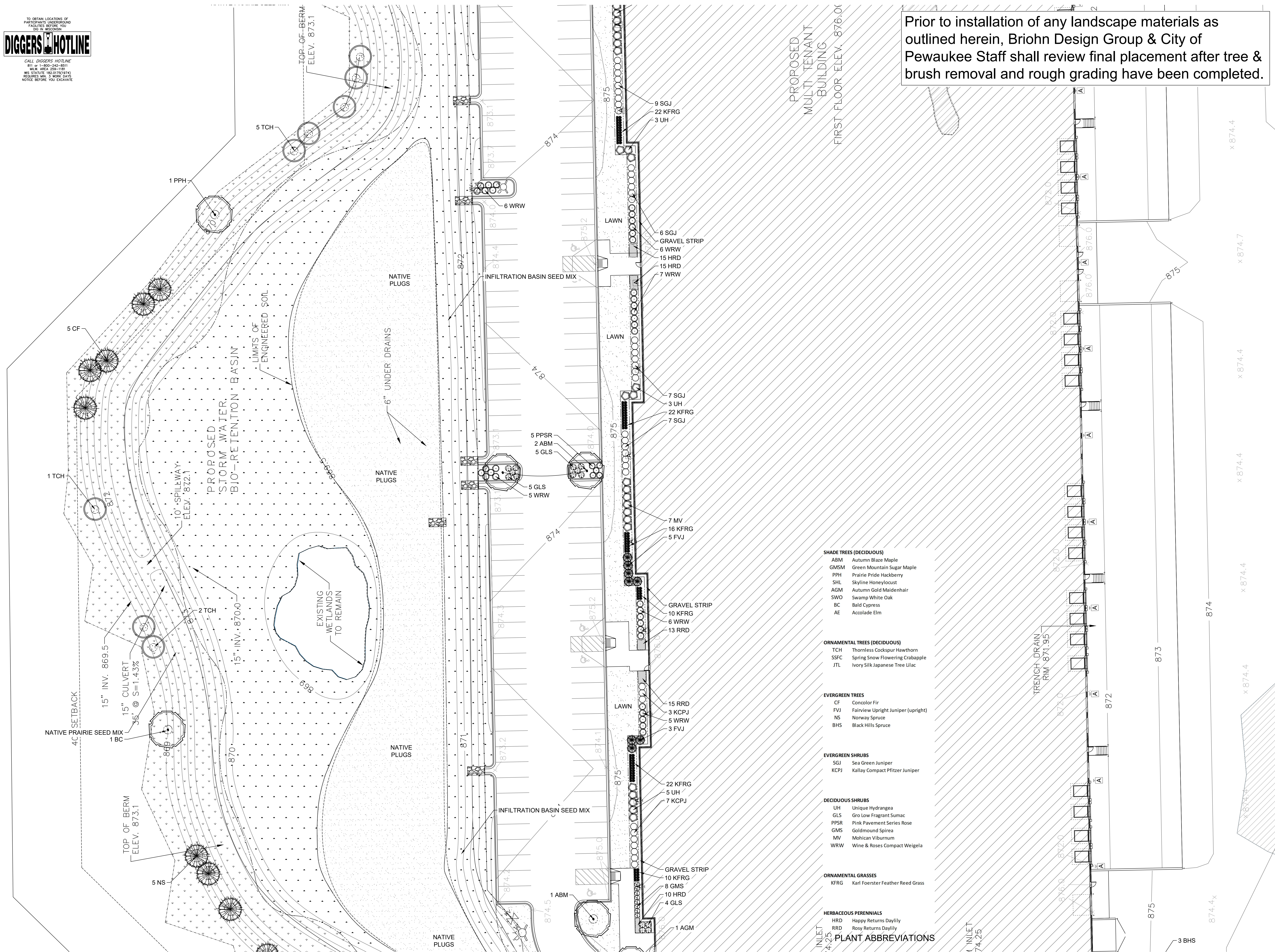


Prior to installation of any landscape materials as outlined herein, Briohn Design Group & City of Pewaukee Staff shall review final placement after tree & brush removal and rough grading have been completed.



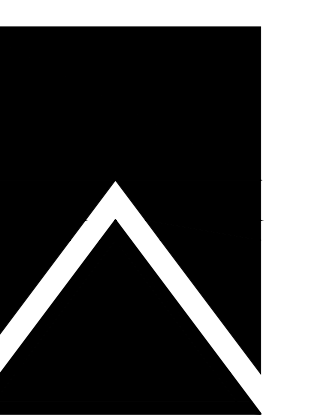
ENLARGED LANDSCAPE PLAN

Scale: 1" = 20'0"



Prior to installation of any landscape materials as outlined herein, Briohn Design Group & City of Pewaukee Staff shall review final placement after tree & brush removal and rough grading have been completed.

RIOHN



DESIGN GROUP
5 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD WISCONSIN 53045-1950
(262) 780-0500 PHONE
(262) 790-0505 FAX

ENLARGED LANDSCAPE PLAN NORTHWEST ENLARGEMENT

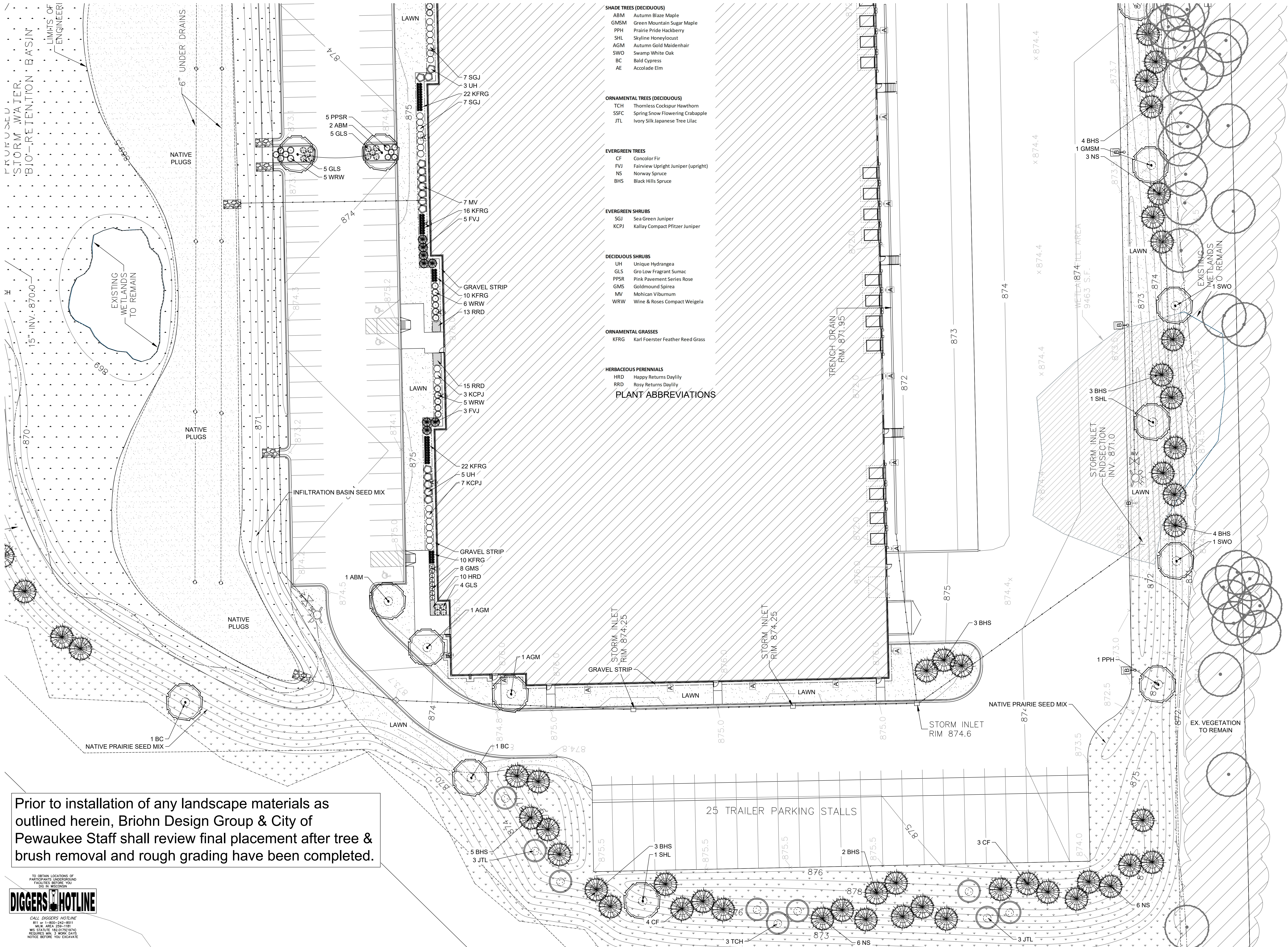
**PEWAUKEE SOUTH
INDUSTRIAL DEVELOPMENT**
BLUEMOUND ROAD | HWY "J"
PEWAUKEE, WISCONSIN

[illegible]

1.3

ENLARGED LANDSCAPE PLAN

Scale: 1" = 20'0"



Prior to installation of any landscape materials as outlined herein, Briohn Design Group & City of Pewaukee Staff shall review final placement after tree & brush removal and rough grading have been completed.

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN
DIGGERS HOTLINE
CALL DIGGERS HOTLINE
800 or 1-800-340-8511
MILWAUKEE AREA 259-1181
MILWAUKEE AREA (259-1181)
REQUIRES MIN. 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE

- SHADE TREES (DECIDUOUS)**
ABM Autumn Blaze Maple
GMSM Green Mountain Sugar Maple
PPH Prairie Pride Hackberry
SHL Skyline Honeylocust
AGM Autumn Gold Maidenhair
SWO Swamp White Oak
BC Bald Cypress
AE Accolade Elm
- ORNAMENTAL TREES (DECIDUOUS)**
TCH Thornless Cockspur Hawthorn
SSFC Spring Snow Flowering Crabapple
JTL Ivory Silk Japanese Tree Lilac
- EVERGREEN TREES**
CF Concolor Fir
FVJ Fairview Upright Juniper (upright)
NS Norway Spruce
BHS Black Hills Spruce
- EVERGREEN SHRUBS**
SGJ Sea Green Juniper
KCPJ Kallay Compact Phytzer Juniper
- DECIDUOUS SHRUBS**
UH Unique Hydrangea
GLS Gro Low Fragrant Sumac
PPSR Pink Pavement Series Rose
GMS Goldmound Spirea
MV Mohican Viburnum
WRW Wine & Roses Compact Weigela
- ORNAMENTAL GRASSES**
KFRG Karl Foerster Feather Reed Grass
- HERBACEOUS PERENNIALS**
HRD Happy Returns Daylily
RRD Rosy Returns Daylily

PLANT ABBREVIATIONS



ENLARGED LANDSCAPE PLAN
Scale: 1" = 20'0"

ENLARGED LANDSCAPE PLAN
SOUTH ENLARGEMENT

PROPOSED BUILDING FOR
PEWAUKEE SOUTH
INDUSTRIAL DEVELOPMENT
BLUEMOUND ROAD | HWY "J"
PEWAUKEE, WISCONSIN

Prior to installation of any landscape materials as outlined herein, Briohn Design Group & City of Pewaukee Staff shall review final placement after tree & brush removal and rough grading have been completed.

- Contractor responsible for contacting Diggers Hotline (811 or 800-242-8511) to have site marked prior to excavation or planting.
- Contractor to verify all plant quantities shown on Plant & Material List and landscape planting symbols and report any discrepancies to Landscape Architect or General Contractor.
- All plantings shall comply with standards as described in American Standard of Nursery Stock - Z60.1 ANSI (latest version). Landscape Architect reserves the right to inspect, and potentially reject any plants that are inferior, compromised, undersized, diseased, improperly transported, installed incorrectly or damaged. No sub-standard "B Grade" or "Park Grade" plant material shall be accepted. Plant material shall originate from nursery(ies) with a similar climate as the planting site.
- Any potential plant substitutions must be approved by Landscape Architect or Owner. All plants must be installed as per sizes indicated on Plant & Material Schedule, unless approved by Landscape Architect. Any changes to sizes shown on plan must be submitted in writing to the Landscape Architect prior to installation.
- Topsoil in Parking Lot Islands (if applicable): All parking lot islands to be backfilled with topsoil to a minimum depth of 18" to insure long-term plant health. Topsoil should be placed within 3" of finish grade by General Contractor / Excavation Contractor during rough grading operations/activity. The landscape contractor shall be responsible for the fine grading of all disturbed areas, planting bed areas, and lawn areas. Crown all parking lot islands a minimum of 6" to provide proper drainage, unless otherwise specified.
- Tree Planting: Plant all trees slightly higher than finished grade at the root flare. Remove excess soil from the top of the root ball, if needed. Remove and discard non-biodegradable ball wrapping and support wire. Removed biodegradable burlap and wire cage (if present) from the top $\frac{1}{3}$ of the rootball and carefully bend remaining wire down to the bottom of the hole. Once the tree has been placed into the hole and will no longer be moved, score the remaining $\frac{2}{3}$ of the burlap and remove the twine. Provide three slow release fertilizer for each tree planted.
- Tree Planting: Backfill tree planting holes 80% existing soils removed from excavation and 20% plant starter mix. Avoid air pockets and do not tamp soil down. Discard any gravel, rocks, heavy clay, or concrete pieces. When hole is $\frac{3}{4}$ full, trees shall be watered thoroughly, and water left to soak in before proceeding to fill the remainder of the hole. Water again to full soak in the new planting. Each tree shall receive a 3" deep, 4-5" diameter (see planting details or planting plan) shredded hardwood bark mulch ring around all trees planted in lawn areas. Do not build up any mulch onto the trunk of any tree. Trees that are installed incorrectly will be replaced at the time and expense of the Landscape Contractor.
- Shrub Planting: All shrubs to be planted in groupings as indicated on the Landscape Plan. Install with the planting of shrubs a $\frac{5}{16}$ mix of plant starter with topsoil. Install topsoil into all plant beds as needed to achieve proper grade and displace undesirable soil (see planting detail). Remove all excessive gravel, clay and stones from plant beds prior to planting. When hole(s) are $\frac{3}{4}$ full, shrubs shall be watered thoroughly, and water left to soak in before proceeding. Provide slow-release fertilizer packets at the rater of 1 per 24" height/diameter of shrub at planting.
- Mulching: All tree and shrub planting beds to receive a 3" deep layer of high quality shredded hardwood bark mulch (not pigment dyed or enviro-mulch). All perennial planting areas (groupings) shall receive a 2" layer of shredded hardwood bark mulch, and groundcover areas a 1-2" layer of the same mulch. Do not mulch annual flower beds (if applicable). Do not allow mulch to contact plant stems and tree trunks.
- Edging: All planting beds shall be edged with a 4" deep spade edge using a flat landscape spade or a mechanical edger. Bedlines are to be cut crisp, smooth as per plan. A clean definition between landscape beds and lawn is required. Pack mulch against lawn edge to hold in place.
- Plant bed preparation/Soil Amendment composition: All perennial, groundcover and annual areas (if applicable) are required to receive a blend of organic soil (Soil Amendments) amendments prior to installation. Roto-till the following materials at the following ratio, into existing soil beds or installed topsoil beds to a depth of approximately 8"-10". Containerized and balled & burlapped plant material should be back-filled with amended soil:

Per 100 SF of bed area (Soil Amendment composition):
 $\frac{3}{4}$ CY Peat Moss or Mushroom Compost
 $\frac{3}{4}$ CY blended/pulverized Topsoil
 $\frac{1}{4}$ CY composted manure

In roto-tilled beds only, also include in above mixture:
2 lbs Starter Fertilizer

- Lawn Installation for all sodded turfgrass areas: Contractor to furnish and prepare blended topsoil (2" minimum) and sod bed, removing all debris and stones $\frac{1}{2}$ " and larger. Apply a 10-10-10 starter lawn fertilizer uniformly throughout areas prior to laying sod. Use only premium sod blend according to TPI (revised 1995) and ASPA Standards. Install sod uniformly with staggered joints, laid tightly end to end and side to side. Roll sod with a walk behind roller and water immediately upon installation to a 3" depth. Stake any sod installed on slopes steeper than 1:3, and in all swale applications. Contractor is responsible to provide a smooth, uniform, healthy turf, and is responsible for the first two mowings of the newly installed turf, and is also responsible for watering during this period.
- Installation preparation for all seeded areas: remove/kill off any existing unwanted vegetation prior to seeding. Prepare the topsoil (if adequate or provide as in item #6 above) and seed bed by removing all surface stones 1" or larger. Apply a starter fertilizer and specified seed uniformly at the specified rate, and provide mulch covering suitable to germinate and establish turf. Provide seed and fertilizer specifications to Landscape Architect and Owner prior to installation. Erosion control measures are to be used in swales and on slopes in excess of 1:3 and where applicable (see Civil Engineering Drawings). Methods of installation may vary are the discretion of the Landscape Contractor on his/her responsibility to establish and guarantee a smooth, uniform, quality turf. A minimum of 2" of blended, prepared and non-compacted topsoil is required for all lawn areas. If straw mulch is used as a mulch covering, a tackifier may be necessary to avoid wind dispersal of mulch covering. Marsh hay containing reed canary grass is NOT acceptable as a mulch covering.

An acceptable quality seed installation is defined as having:
No bare spots larger than one (1) square foot
No more than 10% of the total area with bare areas larger than one (1) square foot
A uniform coverage through all turf areas

- No-Mow seed areas: "No-Mow" fine fescue seed mix with annual rye nurse crop (available at Cedar Creek Seed Farm 888-313-6807; or Prairie Nursery 808-296-3679) or approved equivalent mix from a reputable seed mix provider. Apply at 220 lbs per acre or at rate recommended by supplier. Prepare seed bed and soil as specified in item #13 above.
- Native Prairie Seed Mix / Stormwater Seed Mix: Native seed mixes as listed on the Plant and Material List or other seeding schedules outlined on the landscape plan set. Seed mixes available from Prairie Nursery 808-296-3679 or JF New 608-648-1789 or approved equivalent mix from a reputable seed mix provider. Apply at rates specified herein, or per supplier recommendation. Prepare soil and seed bed as in item #13 above.
- Warranty and Replacements: All plantings are to be watered thoroughly at the time of planting, through construction and upon completion of project as required. Trees, Evergreens, and Shrubs (deciduous and evergreen) shall be guaranteed (100% replacement) for a minimum of one (1) year from the date of project completion. Perennials, groundcovers, and ornamental grasses shall be guaranteed for a minimum of one (1) growing season. Perennials, groundcovers, and ornamental grasses planted after September 15th shall be guaranteed through May 31st of the following year. Only one replacement per plant will be required during the warranty period, except for losses or replacements due to failure to comply with specified requirements. Watering and general ongoing maintenance instructions are to be supplied by the Landscape Contractor to the Owner upon completion of the project.
- The Landscape Contractor is responsible for the watering and maintenance of all landscape areas for a period of 45 days after the substantial completion of the landscape installation. This shall include all trees, shrubs, evergreens, perennials, ornamental grasses, turf grass, no-mow grass, and native prairie seed mix / stormwater seed mix. Work also includes weeding, edging, mulching (only if required), fertilizing, trimming, sweeping up grass clippings, pruning and deadheading.
- Project Completion: Landscape Contractor is responsible to conduct a final review of the project, upon completion, with the Landscape Architect, Client or Owner / Client Representative, and the General Contractor to answer questions, provide written care instructions for new plantings and turf, and insure that all specifications have been met.

LANDSCAPE GENERAL NOTES

Agrecol LLC
www.agrecol.com
10101 N. Casey Road
Evansville, Wisconsin 53536
Ph: 608-223-3571

Rainwater Renewal Garden (Sunny Locations)

64 Plant Plugs per tray; Covers 75-125 SF
each planting plug to minimally measure: 2.5"x2.5"x3.5"

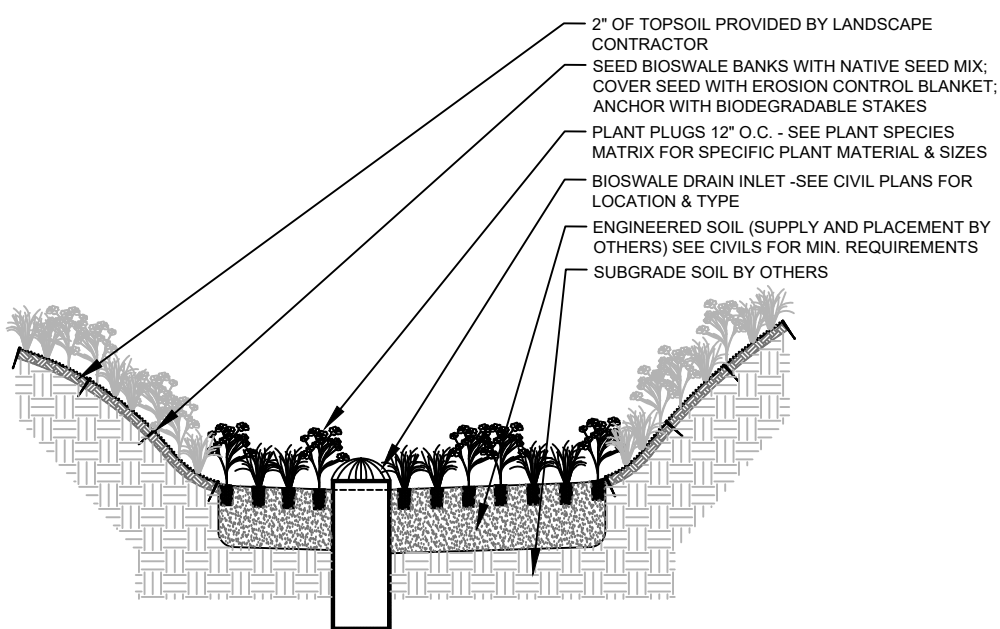
PLS		Ounces/Acre
Botanical Name	Common Name	
<i>Apostrophe forniculum</i>	Lavender Hyssop	4.00
<i>Aster ericoides</i>	Heath Aster	4.00
<i>Blephilia hirsuta</i>	Hairy Wood Mint	4.00
<i>Carex comosa</i>	Bristly Sedge	4.00
<i>Carex hystericina</i>	Porcupine Sedge	4.00
<i>Carex vulpinoidea</i>	Brown Fox Sedge	4.00
<i>Echinacea purpurea</i>	Purple Coneflower	4.00
<i>Eupatorium perfoliatum</i>	Boneset	4.00
<i>Glyceria canadensis</i>	Rattlesnake Grass	4.00
<i>Iris virginica</i>	Souther Blue Flag Iris	4.00
<i>Liatris spicata</i>	Marsh Blazing Star	4.00
<i>Lobelia siphilitica</i>	Great Blue Lobelia	4.00
<i>Pycnanthemum virginianum</i>	Mountain Mint	4.00
<i>Solidago ohioensis</i>	Ohio Goldenrod	4.00
<i>Verbena hastata</i>	Blue Vervain	4.00
<i>Zizia aptera</i>	Heart-Leaved Golden Alexanders	4.00
Total		64.00

Approximate area of coverage:

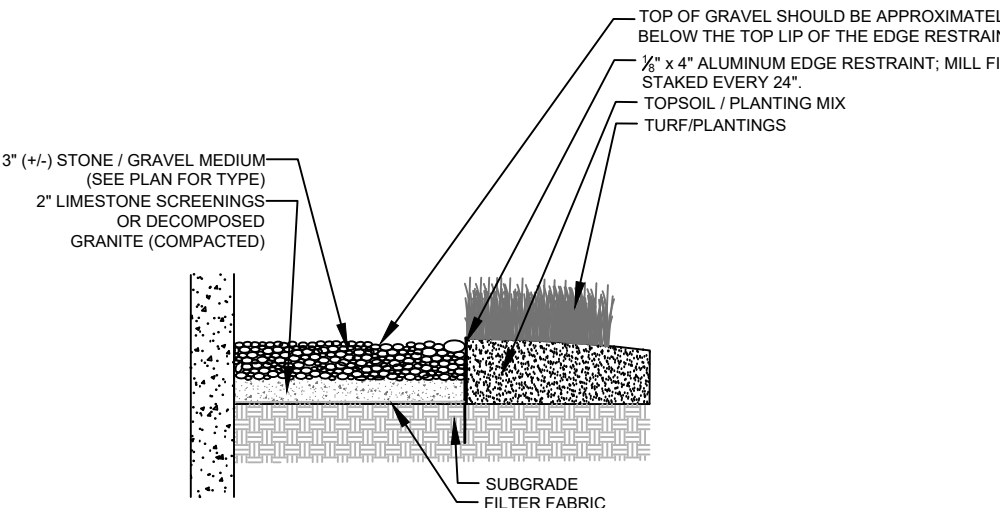
Total acreage of Bio-Filtration/SMP safety shelf (SF): 32,235
Total acreage of Bio-Filtration/SMP safety shelf (acres): 0.74

Rainwater Renewal Garden (Sunny Locations)
2 trays of 32 plants per tray; (75-125 SF per kit coverage): 322
of kits

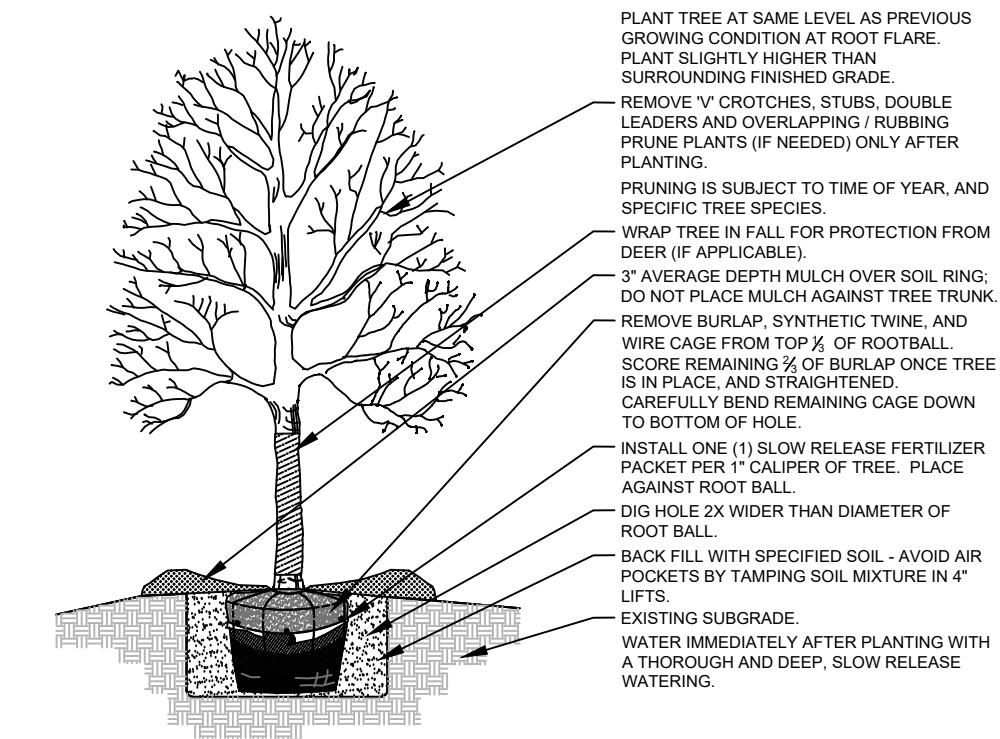
NATIVE PLUGS



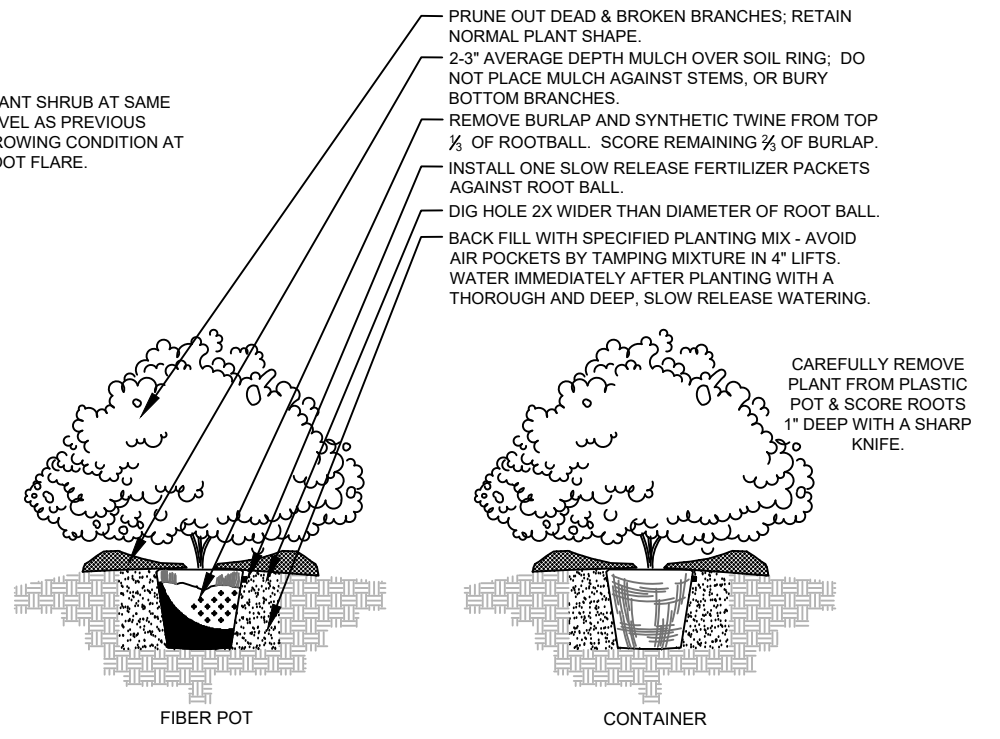
1 DETAIL BIOINFILTRATION BASIN: NATIVE SEED/PLUGS
N.T.S.



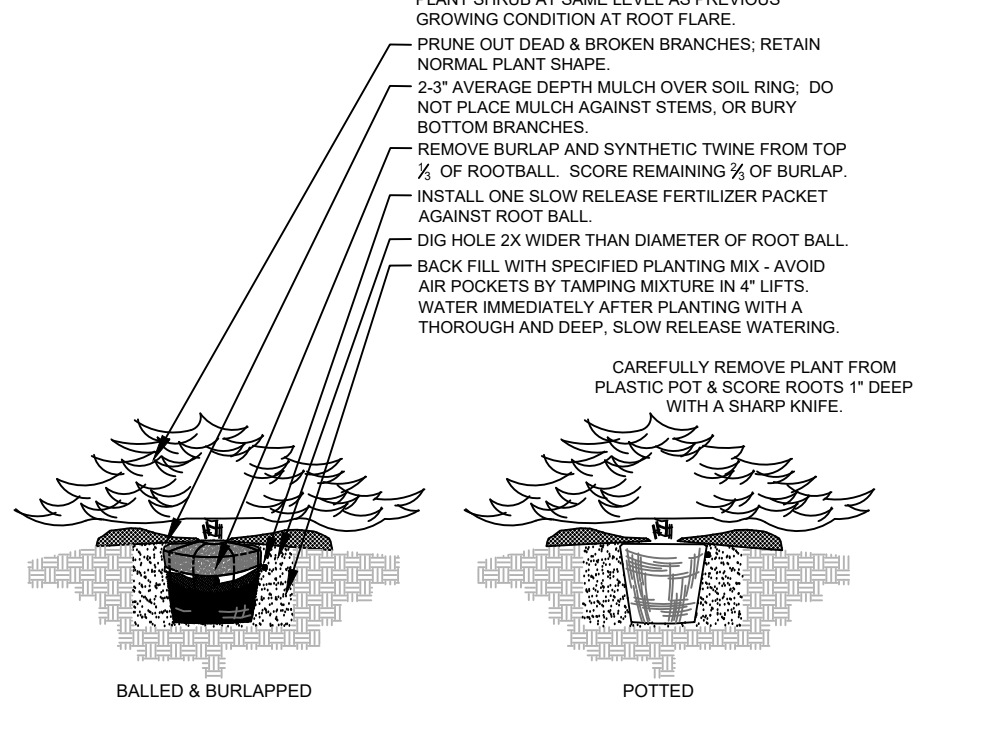
2 DETAIL STONE MAINTENANCE DRIP EDGE DETAIL
N.T.S.



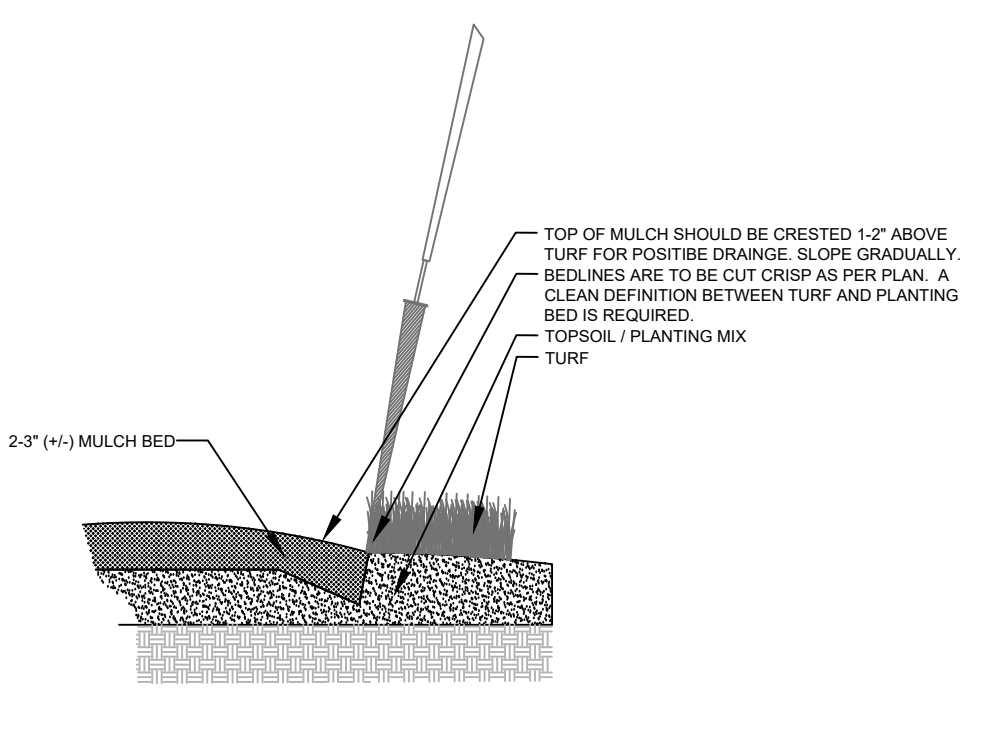
3 DETAIL SHADE TREE PLANTING
N.T.S.



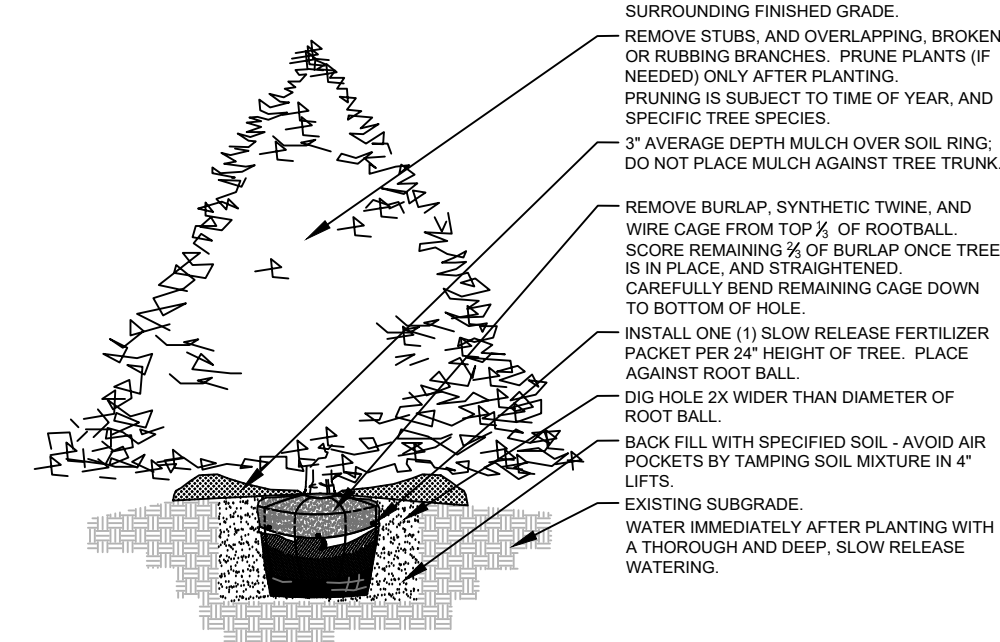
4 DETAIL DECIDUOUS SHRUB PLANTING (POTTED)
N.T.S.



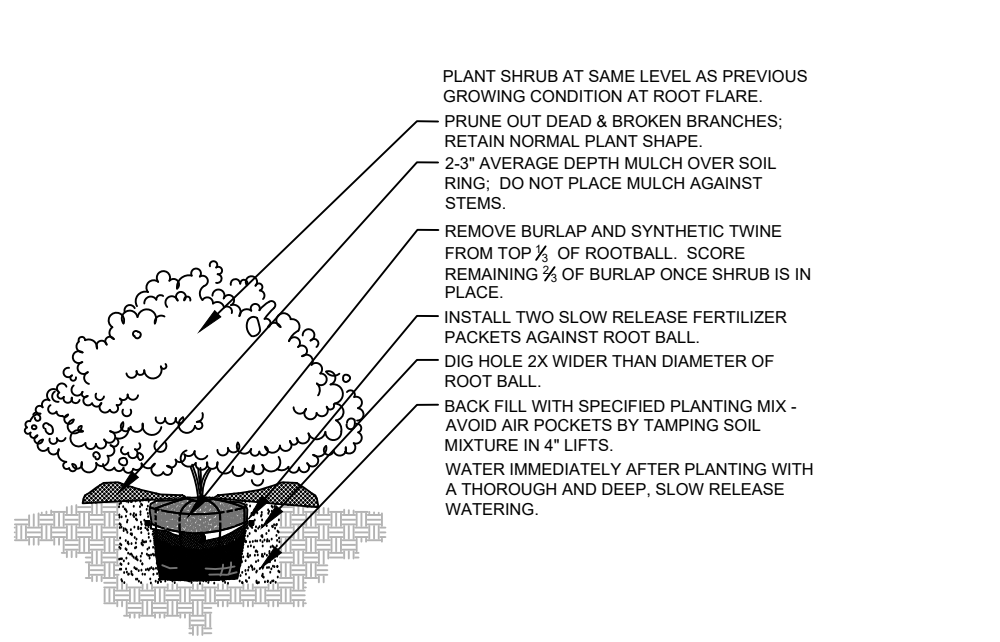
5 DETAIL EVERGREEN SHRUB PLANTING
N.T.S.



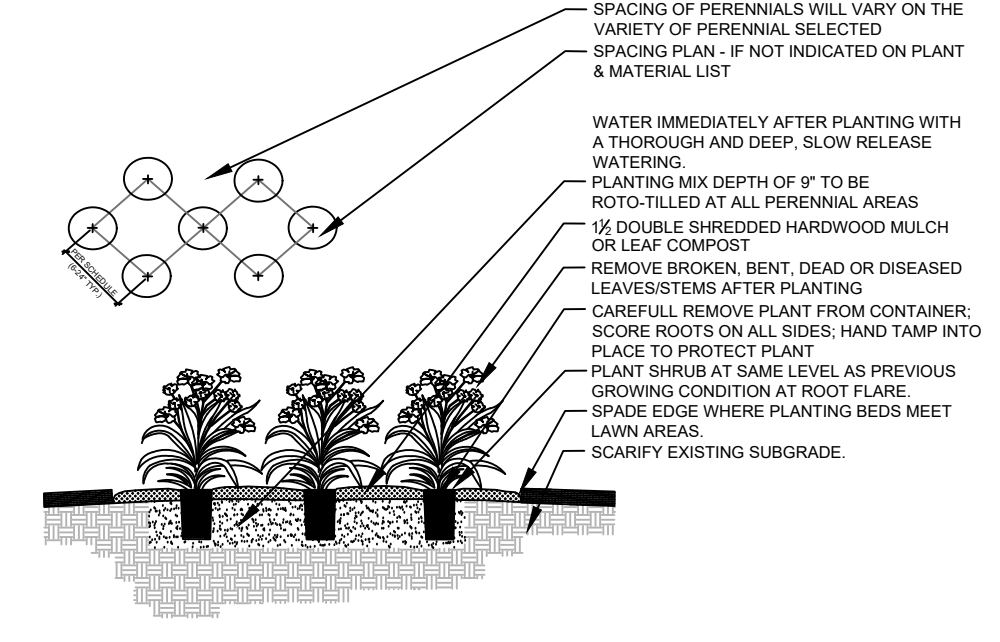
6 DETAIL SPADE EDGE PLANT BED EDGE DETAIL
N.T.S.



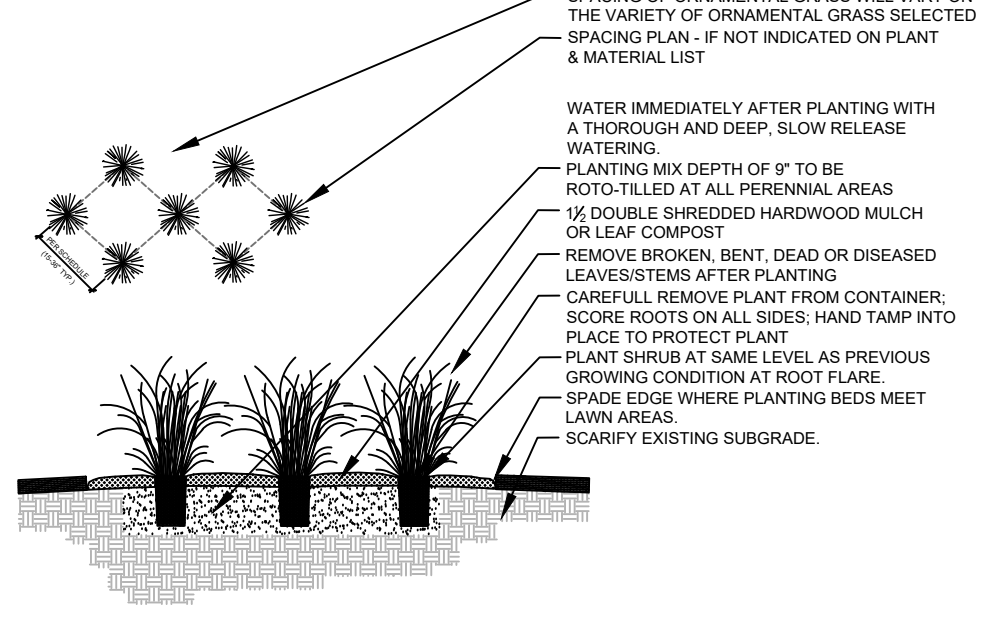
7 DETAIL EVERGREEN TREE PLANTING
N.T.S.



8 DETAIL DECIDUOUS SHRUB PLANTING (B&B)
N.T.S.

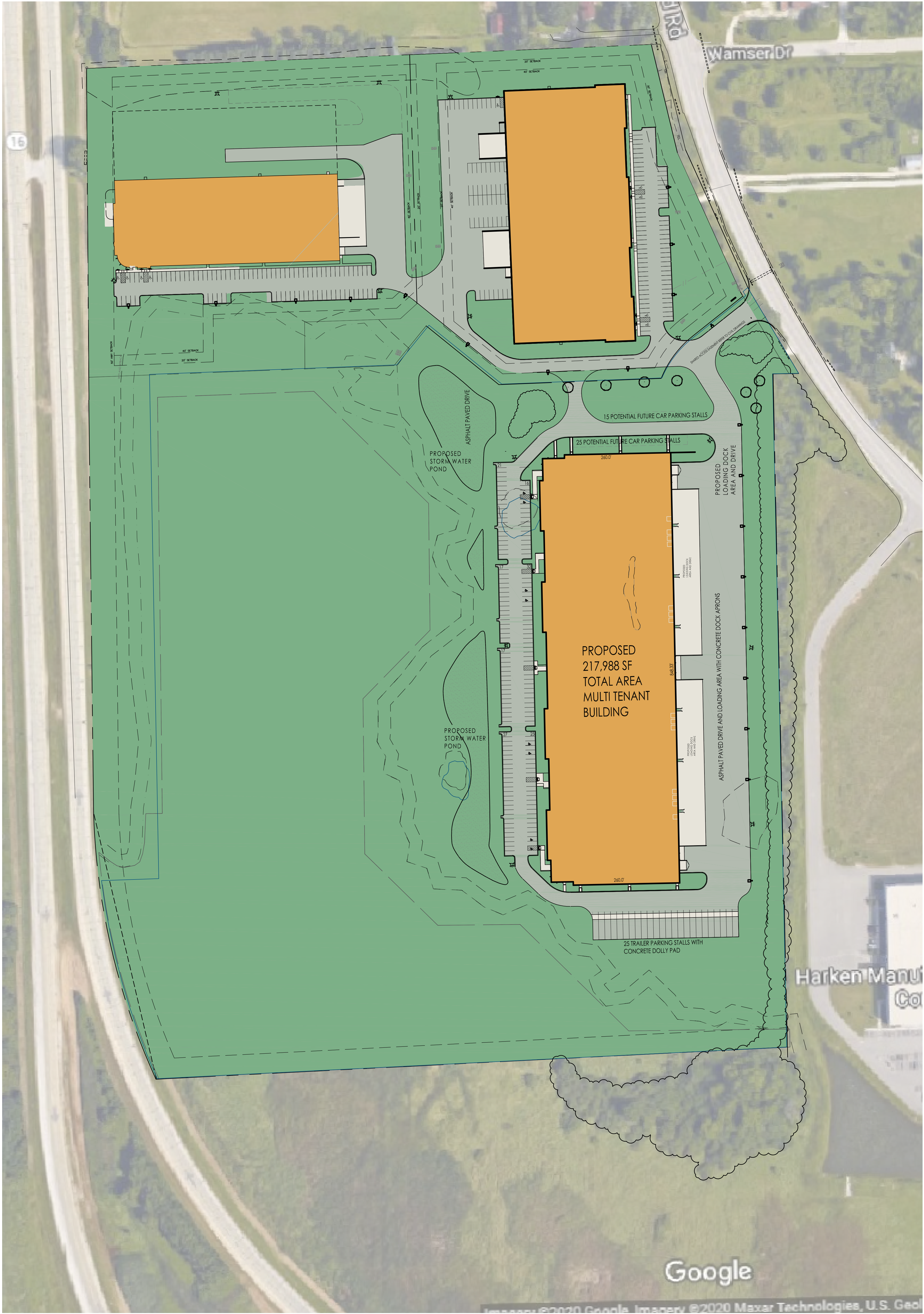


9 DETAIL GROUNDCOVER / PERENNIAL PLANTING
N.T.S.



10 DETAIL ORNAMENTAL GRASS PLANTING
N.T.S.

PLANTING & HARDSCAPE DETAILS



N

1

COLORED SITE PLAN

Scale: 1" = 80'-0"

GENERAL SITE NOTES:

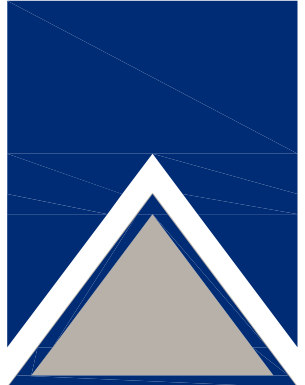
1. VERIFY ALL FIELD CONDITIONS AND DISCOVERIES. BRING ANY DISCREPANCIES TO BRIOHN'S ATTENTION PRIOR TO FABRICATION / CONSTRUCTION BEGINS.

2. REFER TO CIVIL ENGINEERING DRAWINGS FOR MORE DETAILED SITE DESIGN INFORMATION, SPECIFICATIONS AND SITE RELATED DIMENSIONS.

3. REFER TO LANDSCAPE AND EXTERIOR LIGHTING DRAWINGS FOR MORE DETAILED SITE DESIGN INFORMATION, PLANT AND LIGHTING SPECIFICATIONS AND OTHER RELATED DETAILS.

4. DURING CONSTRUCTION, SITE AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS.

BRIOHN



DESIGN GROUP

3885 N BROOKFIELD ROAD, SUITE 200
BROOKFIELD, WISCONSIN 53005-1950
(262) 796-6000 PHONE
(262) 796-6045 FAX

COLORED SITE PLAN

SHEET TITLE

PROPOSED NEW MULTI-TENANT BUILDING:
PEWAUKEE SOUTH INDUSTRIAL
DEVELOPMENT
BLUEMOUND ROAD HWY J
PEWAUKEE, WISCONSIN

JOB: 3234

DRAWN: DF

CHECKED: DF

DATE: 09-03-2020

SHEET:

A0.1

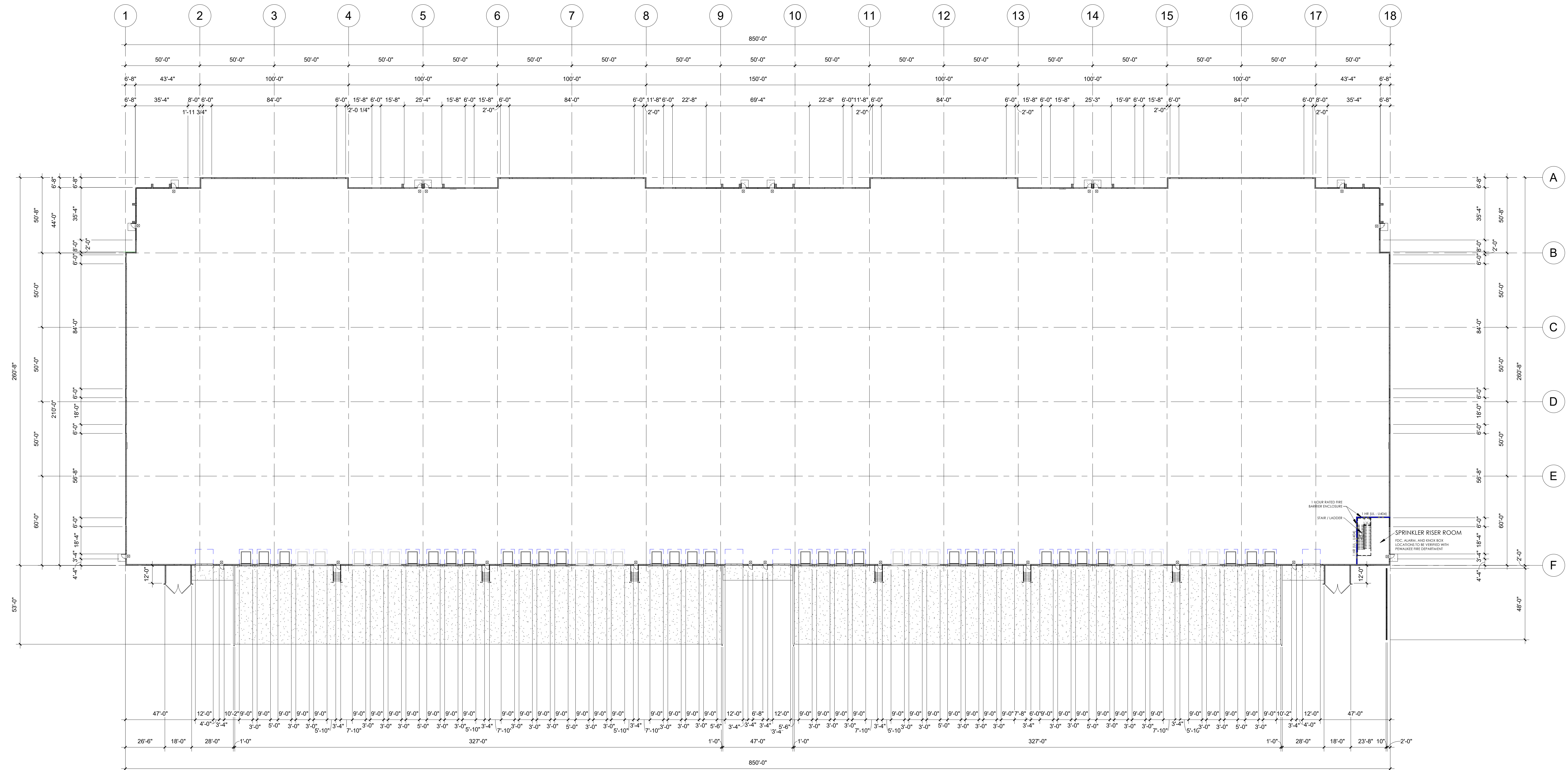


PEWAUKEE SOUTH INDUSTRIAL
DEVELOPMENT
BLUEMOUND ROAD HWY "J"
PEWAUKEE, WISCONSIN

[illegible]

OB:	3234
DRAWN:	CK
CHECKED:	DF
DATE:	SEPTEMBER 3, 2020
HEET:	

A1.0



1 OVERALL FIRST FLOOR PLAN
1" = 30'-0"



- ROOF TOP EQUIPMENT TO BE POSITIONED BEHIND RAISED PARAPETS AS INDICATED BY HATCH PATTERN. PROVIDE SUPPLEMENTAL SCREENING FOR ROOF TOP UNITS THAT ARE NOT SCREENED BY PARAPETS.





<u>NOTES:</u> TRANSFORMER LOCATION IS NOT DONE AT THIS TIME, BUT ADDITIONAL LANDSCAPING SHALL BE INSTALLED TO SCREEN WHEN LOCATION IS DETERMINED.
<u>NOTES:</u> NO GROUND MOUNTED MECHANICALS ARE PLANNED FOR RTU TO SERVE OFFICE AREA. MECHANICALS SHALL BE SCREENED BY EXTENDED PRECAST PARAPETS.

EXTERIOR SYSTEMS

ROOF ASSEMBLY: BALLASTED ROOF MEMBRANE ON 5/8" DIRECT TO BACK APPROVED EPS INSULATION (R25 - TWO LAYERS, STAGGERED) ON METAL DECK (SEE STRUCTURAL DRAWINGS)

INSULATED PRECAST WALL PANEL SYSTEM: 10" INSULATED PRECAST CONCRETE WALL PANEL (R-14)

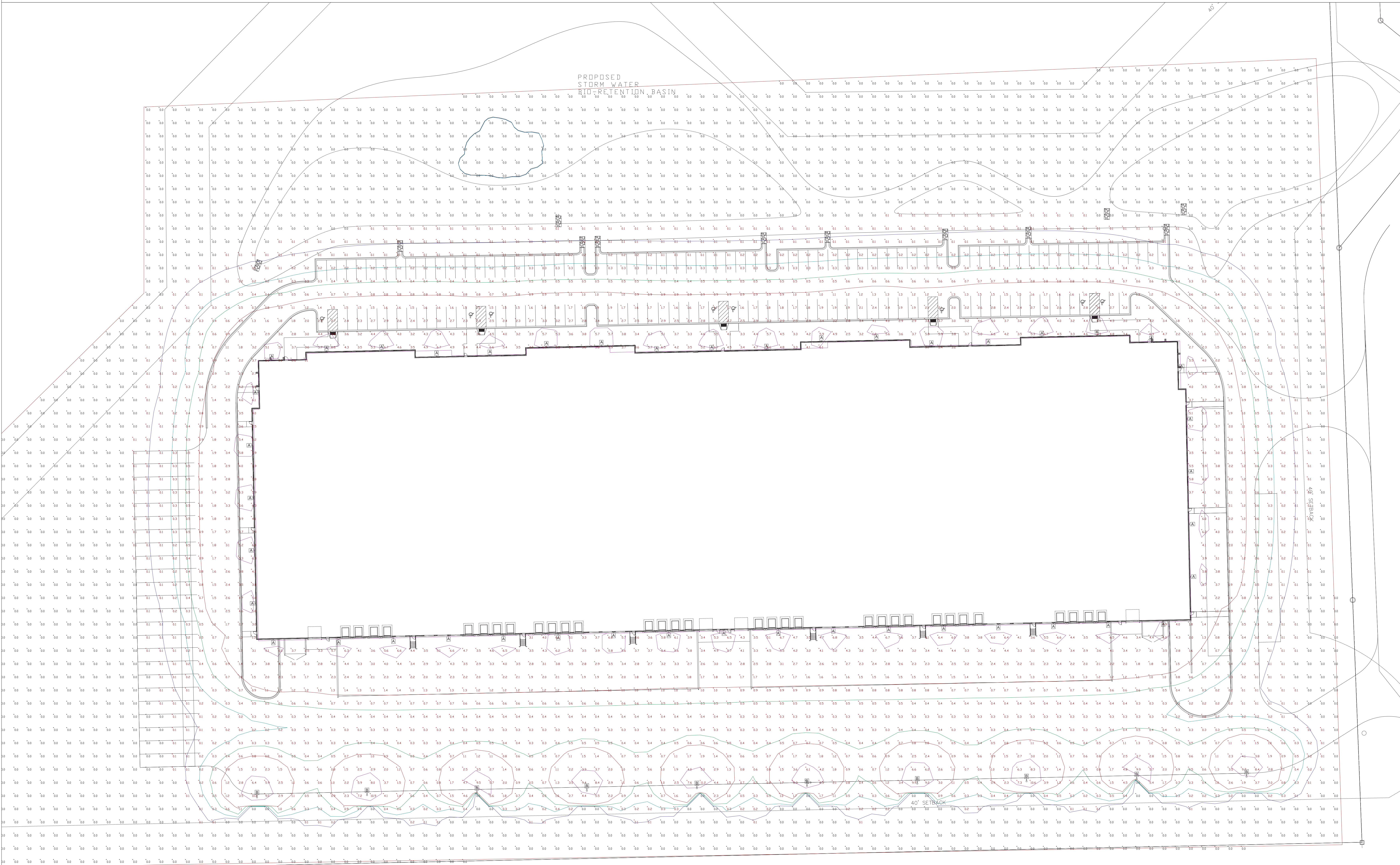
E.I.F.S EXTERIOR WALL SYSTEM: 3" EXTERIOR INSULATION FINISHING SYSTEM, WITH CONTINUOUS AIR AND MOISTURE BARRIER AND DRAINAGE SCREEN ON APPROVED 5/8" GLASS MAT GYPSUM SHEATHING ON 6" CF METAL STUD FRAMING, FILL CAVITY WITH 6" FIBERGLASS BATT INSULATION, VAPOR BARRIER ON WARM SIDE OF STUD AND 5/8" GYPSUM BOARD FINISH

- [D1]** 6" THICK CONCRETE REINFORCED FLOOR SLAB ON COMPACTED GRAVEL BASE.
- [D2]** PRECAST WALL PANELS DOWN TO FOOTING, FINISH AND COLOR TO MATCH BUILDING
- [D3]** PREFINISHED METAL COPING, (24 GA.) COLOR: TO MATCH WALL COLOR
- [D4]** HORIZONTAL COMPOSITE SLATS ON GALVANIZED STEEL GATE FRAME. SLAT COLOR: GREY TO MATCH WALL COLOR. PROVIDE GALVANIZED SUPPORT POSTS.



Schedule						
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lumens per Lamp Wattage
	A	44	SLG-Spring Lighting Group	ALS 130 T4 G1 5K	Wall pack mounted @ 24'	12885 104.9
	B	10	SLG-Spring Lighting Group	ALS 130 T4 G1 5K	15' pole mounted on a 2' base with a back light shield	12885 104.9

Statistics					
Description	Symbol	Avg	Max	Min	Max/Min
Calc Zone #1	+	0.8 fc	11.9 fc	0.0 fc	N/A

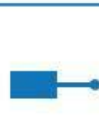
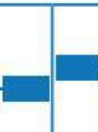



SLG LIGHTING
 GENERATION 1.5.1

MOUNTING DIMENSIONS

BACKLIGHT CONTROL OPTIONS

EPA OF AREA LIGHT

									
S	ALS 90 ALS 130	70W 105W	0.626	0.705	0.971	0.981	0.982	0.975	0.982
M	ALM 195 ALM 260	150W 200W	0.4418	0.7145	0.8813	0.8836	1.0548	1.0135	1.0548
L	ALL 330 ALL 390	250W 300W	0.5614	0.8471	1.105	1.1228	1.294	1.2503	1.294

Due to continuous product improvements, specification and/or equipment updates may change without notice.

10473 R. Airport Boulevard, Suite #400

| Breaux, Texas

| 713.389.5488

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 AL-2015-01


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 LIGHTING
 CORPORATION U.S.A.

PERFORMANCE INFORMATION

		5000K CCT						4000K CCT			
Series Number	Wattage	Lumen	Dist Type	B	U	G	Lumen	B	U	G	
ALS 90 T3 G1 5K	70W	9,000 Lm	Type III	2	0	2	9,000 Lm	2	0	2	
		8,670 Lm	Type IV	2	0	2	8,750 Lm	2	0	2	
		9,479 Lm	Type V	3	0	1	9,777 Lm	3	0	1	
ALS 130 T3 G1 5K	105W	13,400 Lm	Type III	3	0	2	13,400 Lm	3	0	2	
		13,676 Lm	Type IV	3	0	3	13,999 Lm	3	0	3	
		12,787 Lm	Type V	3	0	1	12,885 Lm	3	0	1	
ALM 195 T3 G2 5K	150W	19,700 Lm	Type III	3	0	2	19,497 Lm	3	0	2	
		18,800 Lm	Type IV	3	0	3	18,800 Lm	3	0	3	
		21,150 Lm	Type V	4	0	2	21,385 Lm	4	0	2	
ALM 260 T3 G2 5K	200W	26,200 Lm	Type III	3	0	2	26,096 Lm	3	0	2	
		25,000 Lm	Type IV	3	0	3	25,000 Lm	3	0	3	
		27,200 Lm	Type V	4	0	2	27,086 Lm	4	0	2	
ALL 330 T3 G2 5K	250W	33,250 Lm	Type III	4	0	3	32,883 Lm	4	0	3	
		30,500 Lm	Type IV	4	0	3	30,000 Lm	4	0	3	
		35,250 Lm	Type V	5	0	2	34,623 Lm	5	0	2	
ALL 390 T3 G2 5K	300W	39,300 Lm	Type III	4	0	3	39,495 Lm	4	0	3	
		37,000 Lm	Type IV	4	0	4	36,000 Lm	4	0	4	
		42,300 Lm	Type V	5	0	2	42,998 Lm	5	0	2	

PERFORMANCE COMPARISON

Product Series	Wattage	Lumen	Efficacy	Replaces	Voltage	Max Mounting Height	DLC
ALS 90	70W	9,000 Lm	129 Lm/W	175W	120-277V	15-20 ft	Standard
ALS 130	105W	13,400 Lm	128 Lm/W	250W	120-277V	15-20 ft	Standard
ALM 195	150W	19,700 Lm	131 Lm/W	400W	120-277V	20-30 ft	Premium
ALM 260	200W	26,200 Lm	131 Lm/W	400W	120-277V	20-30 ft	Premium
ALL 330	250W	33,250 Lm	133 Lm/W	750W	120-277V	30-50 ft	Premium
ALL 390	300W	39,300 Lm	131 Lm/W	1000W	120-277V	30-50 ft	Premium

Due to continuous product improvements, specification and/or equipment updates may change without notice.

10443-01 Report Bulbless, Series #000

| Basics, Terms

| 753.939.5480

| sales@lgl.com

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PL-2019

ELECTRICAL LOAD		Current (A)							
		Series Number	Wattage	120V	208V	240V	277V	347V	480V
ALS		ALS 90 T3 G1 5K	70W	0.58	0.34	0.30	0.25	N/A	N/A
		ALS 130 T3 G1 5K	105W	0.87	0.50	0.44	0.38	N/A	N/A
		ALM 195 T3 G2 5K	150W	1.25	0.72	0.63	0.54	0.43	0.31
ALM		ALM 195 T3 G2 HVU 5K	150W	1.25	0.72	0.63	0.54	0.43	0.31
		ALM 260 T3 G2 5K	200W	1.66	0.96	0.83	0.72	0.58	0.42
		ALM 260 T3 G2 HVU 5K	200W	1.66	0.96	0.83	0.72	0.58	0.42
ALL		ALL 330 T3 G2 5K	250W	2.08	1.20	1.04	0.90	0.72	0.52
		ALL 330 T3 G2 HVU 5K	250W	2.08	1.20	1.04	0.90	0.72	0.52
		ALL 390 T3 G2 5K	300W	2.5	1.44	1.25	1.08	0.87	0.62
		ALL 390 T3 G2 HVU 5K	300W	2.5	1.44	1.25	1.08	0.87	0.62

PROJECTED LUMINAIRE MAINTENANCE		OPERATING HOURS				
Ambient Temperature	0	25,000	50,000	100,000	Calculated L70 (Hours)	
25°C / 77°F	1	0.95	0.91	0.81	>214,973	

Lumen Ambient Temperature (LAT) Multipliers

Ambient	Lumen Multiplier
0°C 32°F	1.02
10°C 50°F	1.01
20°C 68°F	1.00
25°C 77°F	1.00
30°C 86°F	0.98
40°C 104°F	0.98

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AL20.01

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DRAWN:	CK
CHECKED:	DF / KJ



9205 W. Center Street, Suite 214
Milwaukee, WI 53222
Ph: (414) 443-1312

STORM WATER MANAGEMENT PLAN

FOR

PEWAUKEE SOUTH INDUSTRIAL DEVELOPMENT

Bluemound Road (CTH “JJ”)
Pewaukee, Wisconsin

August 31, 2020

PREPARED BY:

Christopher Jackson, PE, RLS
CJ Engineering
9205 W. Center Street Suite 214
Milwaukee, WI 53222
Ph. 414-443-1312 x222
chris@cj-engineering.com

CJE Job No.: 1625-02R0-SWMP

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Introduction:

The proposed development will consist of a new industrial building with surface parking and loading area. This development is on the south end of the previous tow building industrial development done on the west side Bluemound Road, east of STH 16. The existing use of the subject property is farmland and single family residence. Existing natural resources include wetlands which are located on the west site; however, the proposed location of the development does not encroach on these wetlands.

In order to meet the storm water management requirements of NR 151 and the City of Pewaukee, the development is proposing to install a large bio-retention basin on the west side of the site between the building and parking areas and the wetlands. The new basin will limit the peak runoff to below the pre-developed rates as defined in the City of Pewaukee storm water ordinance and will provide water quality with over 80% total suspended sediment (TSS) removal prior to discharge to the easterly ditch of S.T.H. 16, or to the existing wetlands to the west.

Based on soil analysis by CGC Inc, the site is exempt of infiltration requirements due to the soil type and the observed shallow depth to groundwater as well as the soil classifications. CGC Inc. measured groundwater at approximately 4.0-7.0' below the existing grade and per WDNR NR 151.123(4)(b) Table 3, the minimum required infiltration separation distance from the bottom of the infiltration system and the elevation of the seasonal high groundwater must be 5.0' or more for commercial properties, parking lots and roads. Furthermore, the site contains, within 1-3 ft. of the surface, prevailing lean clay soils within the subsoil profile and mantling the project site that will impede downward movement yielding an existing infiltration rate of existing soils between 0.04-0.13 inches/hour, below the threshold for infiltration requirements.

With implementation of the on the storm water management practices described, the proposed development meets the storm water management requirements of NR 151 and the City of Pewaukee.

Existing Soil Analysis:

Per the existing site Soil Survey, site soils are Type B soil soils. However; based on physical site investigations, the soil borings, taken across the site, all contain, just beneath the topsoil, 1 ft - 3.5 ft of stiff to hard, brown to Gray Brown Sandy Clay, Brown Mottled Lean Clay. The infiltration rate of these soils per storm soil evaluation form is 0.04-0.13 in/hr which pertain to Group C soils, not B.

Per CGC Inc. "based on the occurrence of the prevailing lean clay soils which mantle the site and our belief that these soils will impede downward movement (i.e., infiltration) of surface runoff water into the subsoils, it is our opinion that the existing site conditions (i.e., lean clay soils, along with shallow groundwater conditions) documented at the site strongly suggest that the site soils appear to exhibit Group C soil parameters and possibly Group D, where undrained soil conditions occur below the surface clays. In conclusion, the existing site soils have been analyzed as Type C soils.

Existing Site: (See the Existing Conditions Plan).

Cover & CN: CN 70, Grass and Wood Cover, Good, HSG C
(Max Pre-settlement CN per City code)
CN70, Cropland, HSG C
(Max Pre-settlement CN per City code)

Area: Total area: 17.543 Acres (existing area matches proposed)

Developed Site: (See the Proposed Conditions Plan).

Cover & CN: CN 74, >75% Grass Cover, Good, HSG C
CN 98, Pavement & Roofs.

Area: Total developed (disturbed) area: 17.543 Acres (includes undetained areas)

24-Hour Rainfall Values:

1-Year: 2.40"
2-Year: 2.70"
10-Year: 3.81"
100-Year: 6.18"

All rainfall data is for 24-hour duration per the NOAA Atlas 14 rainfall values and the MSE3 distribution as recommended by WI DNR and SEWRPC

Method of Analysis:

The storm water runoff quantity was calculated using the methods outlines in TR-55 ("Urban Hydrology for Small Watersheds" by the U.S. Department of Agriculture's Soil Conservation Services). Calculations were performed with the "HydroCAD 10.0" computer software. Water quality calculations were done using WinSLAMM for Windows version 10.2.0.

Drainage Summary: (See Summary of Calculations in Appendix)

Area	1 Year Storm	2 Year Storm	10 Year Storm	100 Year Storm
Existing Conditions				
Subcatchment 1	6.53 cfs	9.58 cfs	23.53 cfs	60.29 cfs
Proposed Conditions				
Runoff to Bio-retention basin (Subcatchment 1)	31.54 cfs	37.24 cfs	58.51 cfs	103.79 cfs
Bio-retention basin Out (Pond 1)	0.55 cfs	0.59 cfs	2.33 cfs	9.67 cfs
Undetained Disturbed area (Subcatchment 2)	2.59 cfs	3.45 cfs	7.01 cfs	15.67 cfs
Reach 1 – Total Site Runoff	2.91 cfs	3.85 cfs	7.53 cfs	16.87 cfs

Water Quality:

Based on the proposed construction of the new bio-retention basins, the site meets the City of Pewaukee and WDNR requirements for water quality for new development by removing 80% of the total suspended solids (TSS) prior to discharge off site, as quantified using WinSLAMM for Windows version 10.2.0 (See appendix for calculation results). The TSS out of total site analysis, including both detained and un-detained areas is as summarized below:

	Before Drainage System	After Controls	% Reduction
Total site	4,666 lbs.	896.1 lbs.	80.8 %

Conclusion:

The proposed bio-retention basin will reduce the peak runoff to well below the pre-settlement peak runoff rates and will provide water quality removing more than 80% of the total suspended solids (TSS) prior to discharge off site. Therefore, the proposed development meets the storm water management water quantity and water quality requirements for the City of Pewaukee and WDNR 151.

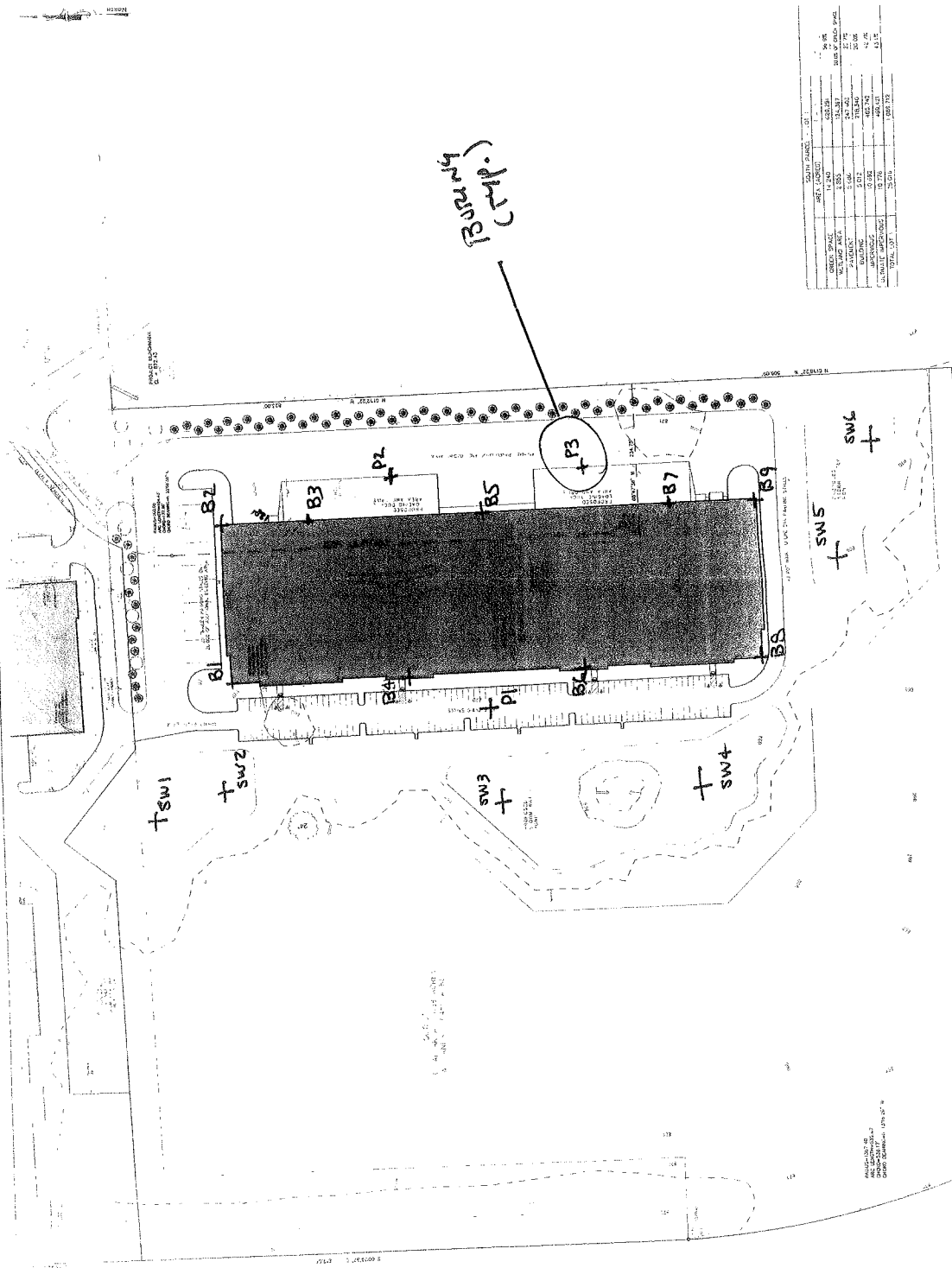
APPENDIX



PEWAUKEE INDUSTRIAL - SOUTH

N17W25081 BLUEMOUND RD., PEWAUKEE, WI

C.E. NO. 1625-0020
FEBRUARY 28, 2020



ITEM	QUANTITY	UNIT	PRICE	TOTAL
CONCRETE PAVEMENT	11,242	SQ. YD.	4.00	45,000.00
ASPHALT PAVEMENT	1,250	SQ. YD.	3.00	3,750.00
GRAVEL	1,000	CY	1.00	1,000.00
LANDSCAPING	10,000	SQ. YD.	0.05	500.00
UTILITY IMPROVEMENTS	10,000	SQ. YD.	0.05	500.00
TOTAL				50,750.00



SITE PLAN C1.0





LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **B1**
 Surface Elevation (ft) **870.1**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI
						12" Dark Brown to Black Clayey TOPSOIL					
1		18	M	3		Soft to Medium Stiff, Gray to Brown Mottled Lean CLAY; Little Fine Sand (CL)	(0.5)				
2		16	W	12		Medium Dense, Brown Fine to Coarse SAND; Little Silt (SP-SM)					
3		18	W	11		Medium Dense, Gray SILT and Silty Fine SAND; Few to Some Lean Clay Seams (ML & SM)					
4		18	W	13			(1.0)				
5		18	M	12		Medium Stiff to Stiff, Gray Lean CLAY; Few Silt Seams (CL)	(1.0-1.75)				
6		18	M	10			(1.5-1.75)				
End of Boring at 20 ft Backfilled with Bentonite Chips											

PRELIMINARY

WATER LEVEL OBSERVATIONS				GENERAL NOTES	
While Drilling	∇ 4.0'	Upon Completion of Drilling	3.0'	Start	4/6/20 End 4/6/20
Time After Drilling				Driller	GeoServe Chief Eddie Rig 7822
Depth to Water				Logger	Eddie Editor JPS
Depth to Cave in				Drill Method	2.25" HSA
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.					

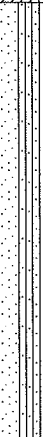


LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **B2**
 Surface Elevation (ft) **873.8**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI
							15" - 18" Dark Brown to Black Clayey TOPSOIL					
1		10	M	3			Stiff, Brown Lean CLAY; Little to Some Fine Sand (CL)	(1.5-1.75)				
2		18	W	6	▼		Loose to Medium Dense, Brown to Gray Brown Fine to Medium SAND; Trace to Little Silt (SP/SP-SM)					
3		16	W	12								
4		18	W	28								

WATER LEVEL OBSERVATIONS

While Drilling ☒ **4.0'** Upon Completion of Drilling **4.0'**
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **4/7/20** End **4/7/20**
 Driller **GeoServe Chief** **Eddie** Rig **7822**
 Logger **Eddie** Editor **JPS**
 Drill Method **2.25" HSA**



LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **B3**
 Surface Elevation (ft) **871.1**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N		qu (qa) (tsf)	W	LL	PL	LOI
					12" - 16" Dark Brown to Black Clayey TOPSOIL					
1		18	M	3	Medium Stiff to Stiff, Gray to Brown Mottled Lean CLAY; Little Fine Sand (CL)	(1.0)				
2		18	W	9	Loose to Medium Dense, Brown to Gray Fine to Medium SAND; Trace to Little Silt (SP/SP-SM)					
3		18	W	18						
4		18	W	22						
5		18	W	9	Medium Stiff to Stiff, Gray Lean CLAY; Few Silt Seams (CL)	(0.75-1.25)				
6		18	W	7		(1.25-1.5)				
					End of Boring at 20 ft Backfilled with Bentonite Chips					

PRELIMINARY

WATER LEVEL OBSERVATIONS

While Drilling ∇ **4.0'** Upon Completion of Drilling **4.0'**
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **4/7/20** End **4/7/20**
 Driller **GeoServe Chief** **Eddie** Rig **7822**
 Logger **Eddie** Editor **JPS**
 Drill Method **2.25" HSA**



LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **B4**
 Surface Elevation (ft) **871.0**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES							
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI		
							12" Dark Brown to Black Clayey TOPSOIL							
1		16	M	3			Very Loose, Gray Mottled Clayey SILT (CL-ML/ML)							
							Loose, Brown to Gray Brown Mottled Silty Fine SAND (SM)							
2		16	W	6										
3		18	W	9										
							Medium Stiff to Stiff, Gray Lean CLAY; Few Silt Seams (CL)							
4		18	W	4				(0.75-1.25)						
5		18	M	12				(1.0-1.25)						
End of Boring at 15 ft Backfilled with Bentonite Chips														
PRELIMINARY														

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ **3.0'** Upon Completion of Drilling **5.0'**
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start **4/6/20** End **4/6/20**
 Driller **GeoServe Chief** **Eddie** Rig **7822**
 Logger **Eddie** Editor **JPS**
 Drill Method **2.25" HSA**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **B5**
 Surface Elevation (ft) **870.2**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL
						 12" - 15" Dark Brown to Black Clayey TOPSOIL					
1		12	M	2		 Soft to Medium Stiff, Gray to Brown Mottled Lean CLAY; Little Fine Sand (CL)	(0.5-0.75)				
2		18	M	3		 Very Loose to Medium Dense, Brown Mottled SILT; Few Gray Brown Silty Clay Seams (ML)					
3		16	M/W	12							
4		18	W	17		Color change to gray below 8 ft					
5		18	M	8		 Medium Stiff to Stiff, Gray Lean CLAY; Few Silt Seams (CL)	(1.5-1.75)				
6		18	M	5			(1.0-1.25)				

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ **5.0'** Upon Completion of Drilling **7.0'**
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start **4/7/20** End **4/7/20**
 Driller **GeoServe Chief** **Eddie** Rig **7822**
 Logger **Eddie** Editor **JPS**
 Drill Method **2.25" HSA**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **B6**
 Surface Elevation (ft) **869.3**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL
						12" Dark Brown to Black Clayey TOPSOIL					
1		8	M	2		Medium Stiff, Dark Gray Mottled Silty CLAY (CL-ML)	(0.75-1.0)				
						Medium Stiff to Stiff, Gray to Brown Mottled Lean CLAY; Little Fine Sand (CL)					
2		18	M	4			(1.25-1.5)				
3		18	M	7		Stiff, Light Brown Silty CLAY; Little Fine Sand (CL-ML)	(1.25-1.5)				
4		18	M	5		Medium Stiff to Stiff, Gray Lean CLAY; Few Silt Seams (CL)	(0.75-1.0)				
5		18	M	5			(1.25)				
End of Boring at 15 ft Backfilled with Bentonite Chips											

PRELIMINARY

WATER LEVEL OBSERVATIONS

While Drilling 4.0' Upon Completion of Drilling 12.5'
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

GENERAL NOTES

Start 4/6/20 End 4/6/20
 Driller GeoServe Chief Eddie Rig 7822
 Logger Eddie Editor JPS
 Drill Method 2.25" HSA

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **B7**
Surface Elevation (ft) **869.7**
Job No. **CM20068**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

[illegible]

WATER LEVEL OBSERVATIONS

While Drilling	<u>▽ 4.0'</u>	Upon Completion of Drilling	<u>4.0'</u>
Time After Drilling	_____	_____	_____
Depth to Water	_____	_____	_____
Depth to Cave in	_____	_____	_____

GENERAL NOTES

Start **4/7/20** End **4/7/20**
 Driller **GeoServe** Chief **Eddie** Rig **7822**
 Logger **Eddie** Editor **JPS**
 Drill Method **2.25" HSA**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **B8**
 Surface Elevation (ft) **868.8**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI
						12" Dark Brown to Black Clayey TOPSOIL					
1		18	M	2		Soft to Medium Stiff, Gray to Brown Mottled Lean CLAY; Little Fine Sand (CL)	(0.5-0.75)				
2		16	M	8		Loose to Medium Dense, Brown Mottled SILT; Few Gray Brown Silty Clay Seams (ML)					
3		16	W	17							
4		18	M	3		Soft to Stiff, Gray Lean CLAY; Few Silt Seams (CL)	(1.0-1.5)				
5		18	M/W	13		A wet fine to coarse sand seam noted at 14.5 ft	(0.75-1.0)				
6		18	M	5			(0.5)				
End of Boring at 20 ft Backfilled with Bentonite Chips											
PRELIMINARY											

WATER LEVEL OBSERVATIONS				GENERAL NOTES	
While Drilling	☒	4.5'/14.5'	Upon Completion of Drilling	5.0'	Start 4/6/20 End 4/6/20 Driller GeoServe Chief Eddie Rig 7822 Logger Eddie Editor JPS Drill Method 2.25" HSA
Time After Drilling					
Depth to Water					
Depth to Cave in					

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **B9**
 Surface Elevation (ft) **869.8**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI
						17" Dark Brown to Black Clayey TOPSOIL					
1		6	M	2		Soft to Stiff, Gray to Brown Mottled Lean CLAY; Little Fine Sand (CL)	(0.5-0.75)				
2		16	M	3			(1.0-1.25)				
					5	Stiff to Hard, Gray Lean CLAY; Few Silt Seams (CL)					
3		18	M	9			(3.0-4.5+)				
4		18	M	4			(1.25-1.5)				
					10						
5		6	W	17		Some coarse gravel and/or cobbles at 14 ft	(1.25)				
					15	End of Boring at 15 ft Backfilled with Bentonite Chips					
					20						
					25						

PRELIMINARY

WATER LEVEL OBSERVATIONS	GENERAL NOTES
While Drilling ☒ 5.0'/14.0' Upon Completion of Drilling <u>5.0'</u> Time After Drilling _____ Depth to Water _____ Depth to Cave in _____	Start <u>4/7/20</u> End <u>4/7/20</u> Driller <u>GeoServe Chief</u> <u>Eddie</u> Rig <u>7822</u> Logger <u>Eddie</u> Editor <u>JPS</u> Drill Method <u>2.25" HSA</u>

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **P1**
 Surface Elevation (ft) **869.9**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI
						12" Dark Brown to Black Clayey TOPSOIL					
1		18	M	2		Soft to Medium Stiff, Gray to Brown Mottled Lean CLAY; Little Fine Sand (CL)	(0.5-0.75)				
2		14	M	14		Medium Dense, Brown Fine to Medium Silty SAND; Some Silt Seams and/or Layers (SM)					
3		18	M	7		Soft to Stiff, Gray Lean CLAY; Few Silt Seams (CL)	(0.5-1.0)				
4		18	M	3			(0.75-1.0)				
End of Boring at 10 ft Backfilled with Bentonite Chips											
RELIMINARY											
WATER LEVEL OBSERVATIONS						GENERAL NOTES					
While Drilling ☒ 5.0' Upon Completion of Drilling 5.0' Time After Drilling _____ Depth to Water _____ Depth to Cave in _____						Start 4/6/20 End 4/6/20 Driller GeoServe Chief Eddie Rig 7822 Logger Eddie Editor JPS Drill Method 2.25" HSA					
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.											



LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **P2**
 Surface Elevation (ft) **870.6**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES						
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI	
						12" - 18" Dark Brown to Black Clayey TOPSOIL						
1		12	M	2		Soft to Stiff, Gray to Gray Brown Mottled Lean CLAY; Little Fine Sand (CL)	(0.5-1.0)					
2		18	M	4	▽		(0.75-1.0)					
3		18	M	10	▼	Stiff to Very Stiff, Gray Lean CLAY; Few Silt Seams (CL)	(1.75)					
4		16	M	16			(1.5-2.25)					
End of Boring at 10 ft Backfilled with Bentonite Chips												
PRELIMINARY												
WATER LEVEL OBSERVATIONS While Drilling ☒ 4.0' Upon Completion of Drilling 6.0' Time After Drilling _____ Depth to Water _____ Depth to Cave in _____						GENERAL NOTES Start 4/7/20 End 4/7/20 Driller GeoServe Chief Eddie Rig 7822 Logger Eddie Editor JPS Drill Method 2.25" HSA						

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **P3**
 Surface Elevation (ft) **869.6**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI
						12" Dark Brown to Black Clayey TOPSOIL					
1		12	M	2		Soft to Medium Stiff, Gray to Dark Gray Mottled Lean CLAY; Little Fine Sand (CL)	(0.5-0.75)				
2		16	M/W	2		Very Soft to Medium Stiff, Gray Mottled Lean CLAY (CL)	(0.25-0.5)				
3		18	W	13	5	Medium Dense, Brown Clayey SILT; Little Fine Sand (CL-ML)					
4		18	M	16	10	Medium Dense, Gray SILT; Little Fine Sand (ML)					
End of Boring at 10 ft Backfilled with Bentonite Chips											
PRELIMINARY											
WATER LEVEL OBSERVATIONS						GENERAL NOTES					
While Drilling ∇ <u>5.0'</u> Upon Completion of Drilling <u>5.0'</u> Time After Drilling _____ Depth to Water _____ Depth to Cave in _____						Start <u>4/7/20</u> End <u>4/7/20</u> Driller <u>GeoServe Chief</u> <u>Eddie</u> Rig <u>7822</u> Logger <u>Eddie</u> Editor <u>JPS</u> Drill Method <u>2.25" HSA</u>					
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.											



LOG OF TEST BORING

Project **Westminster Pewaukee - South**

N17 W25081 Bluemound Road

Location **Pewaukee, Wisconsin**

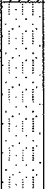
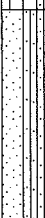
Boring No. **SW-1**

Surface Elevation (ft) **871.0**

Job No. **CM20068**

Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES					
No.	Typ Env	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI
							12" - 18" Dark Brown to Black Clayey TOPSOIL					
1		10	M	4			Medium Stiff to Stiff, Gray Mottled Lean CLAY; Few Black Organic Silt Inclusions (CL)	(1.0-1.25)				
2		12	W	7	▼							
					5		Loose to Medium Dense, Brown Fine to Medium Silty SAND; Some Silt Seams (SM)					
3		14	W	18								
4		18	W	13			Medium Dense, Gray SILT and Silty Fine SAND (ML & SM)					
					10							
5		18	W	18			Medium Dense, Gray Fine SAND; Little Silt, Few Clayey Silt Seams (SP-SM)					
6		18	W	14								
					15							
							End of Boring at 15 ft Backfilled with Bentonite Chips					
					20							
					25							

PRELIMINARY

WATER LEVEL OBSERVATIONS

While Drilling ∇ **4.0'**

Upon Completion of Drilling **4.0'**

Time After Drilling

Depth to Water

Depth to Cave in

GENERAL NOTES

Start **4/6/20** End **4/6/20**
 Driller **GeoServe Chief** **Eddie** Rig **7822**
 Logger **Eddie** Editor **JPS**
 Drill Method **2.25" HSA**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **SW-2**
 Surface Elevation (ft) **870.2**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES				
No.	Rec (in.)	Moist	N	Depth (ft)		qu (qa) (tsf)	W	LL	PL	LOI
					12" Dark Brown to Black Clayey TOPSOIL					
1	12	M	2		Soft to Medium Stiff, Gray to Brown Mottled Lean CLAY; Little Fine Sand; Few Black Organic Silt Inclusions (CL)	(0.5-0.75)				
2	12	W	10		Loose to Medium Dense, Brown Silty Fine SAND; Little Clay (SM)					
3	12	W	7		Loose to Medium Dense, Gray Fine to Medium SAND; Trace to Little Silt, Few Silt Seams (SP/SP-SM)					
4	18	W	14							
5	18	W	10		Loose to Medium Dense, Gray SILT; Some Clay, Little to Some Lean Clay Seams and/or Layers (ML/CL-ML)	(0.5)				
6	18	W	6			(0.5-1.0)				
					End of Boring at 15 ft Backfilled with Bentonite Chips					

PRELIMINARY

WATER LEVEL OBSERVATIONS

While Drilling ∇ **3.0'** Upon Completion of Drilling **4.0'**
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

GENERAL NOTES

Start **4/6/20** End **4/6/20**
 Driller **GeoServe Chief** **Eddie** Rig **7822**
 Logger **Eddie** Editor **JPS**
 Drill Method **2.25" HSA**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **SW-3**
 Surface Elevation (ft) **869.3**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI
						12" Dark Brown to Black Clayey TOPSOIL					
1		18	M	2		Soft to Medium Stiff, Gray Mottled Lean CLAY (CL)	(0.5)				
2		16	M/W	10			(0.5-0.75)				
					5	Loose to Medium Dense, Brown to Gray SILT and Silty Fine SAND (ML & SM)					
3		18	M	16							
4		18	M	4		Medium Stiff to Stiff, Gray Lean CLAY; Few Silt Seams (CL)	(0.75)				
5		18	M	3			(1.25)				
6		18	M	4			(1.0-1.25)				
					15	End of Boring at 15 ft Backfilled with Bentonite Chips					
					20						
					25						

PRELIMINARY

WATER LEVEL OBSERVATIONS				GENERAL NOTES	
While Drilling	▽ 4.5'	Upon Completion of Drilling	6.0'	Start	4/6/20 End 4/6/20
Time After Drilling				Driller	GeoServe Chief Eddie Rig 7822
Depth to Water				Logger	Eddie Editor JPS
Depth to Cave in				Drill Method	2.25" HSA
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.					



LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
Location **Pewaukee, Wisconsin**

Boring No. **SW-4**
Surface Elevation (ft) **868.8**
Job No. **CM20068**
Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI
							12" Dark Brown to Black Clayey TOPSOIL					
1		18	M	2			Medium Stiff to Stiff, Gray Lean CLAY; Few Silt Seams (CL)	(0.75-1.0)				
2		16	W	14	▽		Medium Dense, Brown Fine to Medium Silty SAND (SM)					
					5							
3		18	W	15								
4		18	M	3			Soft to Stiff, Gray Lean CLAY; Few Silt Seams (CL)	(0.5-0.75)				
					10							
5		18	M	4				(1.0-1.5)				
6		18	M	5				(1.0-1.25)				
					15							
							End of Boring at 15 ft Backfilled with Bentonite Chips					
					20							
					25							

WATER LEVEL OBSERVATIONS

While Drilling ▽ **4.0'** Upon Completion of Drilling **5.0'**
Time After Drilling _____
Depth to Water _____ ▽
Depth to Cave in _____

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **4/6/20** End **4/6/20**
Driller **GeoServe Chief** **Eddie** Rig **7822**
Logger **Eddie** Editor **JPS**
Drill Method **2.25" HSA**



LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **SW-5**
 Surface Elevation (ft) **869.1**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks		SOIL PROPERTIES				
No.	TYPE	Rec (in.)	Moist	N			Depth (ft)	qu (qa) (tsf)	W	LL	PL
						12" Dark Brown to Black Clayey TOPSOIL	(0.75-1.25)				
1		18	M	2		Medium Stiff to Stiff, Gray to Brown Mottled Lean CLAY; Little Fine Sand (CL)					
2		18	M/W	5	▽	Medium Stiff, Gray Brown Silty CLAY; Some Silt Seams (CL-ML)					
3		16	M	7	▼	Very Soft to Stiff, Gray Lean CLAY; Few Silt Seams (CL)	(1.0-1.5)				
4		18	M	4			(1.5-2.0)				
5		18	M	5			(0.75-1.25)				
6		10	M/W	7			(0.25-0.75)				
End of Boring at 15 ft Backfilled with Bentonite Chips											

PRELIMINARY

WATER LEVEL OBSERVATIONS

GENERAL NOTES

While Drilling ∇ **4.0'** Upon Completion of Drilling **6.0'**
 Time After Drilling _____
 Depth to Water _____
 Depth to Cave in _____

Start **4/7/20** End **4/7/20**
 Driller **GeoServe Chief** **Eddie** Rig **7822**
 Logger **Eddie** Editor **JPS**
 Drill Method **2.25" HSA**

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.



LOG OF TEST BORING

Project **Westminster Pewaukee - South**
N17 W25081 Bluemound Road
 Location **Pewaukee, Wisconsin**

Boring No. **SW-6**
 Surface Elevation (ft) **870.7**
 Job No. **CM20068**
 Sheet **1** of **1**

336 S. Curtis Rd, West Allis, WI 53214 (414) 443-2000, FAX (414) 443-2099

SAMPLE					VISUAL CLASSIFICATION and Remarks	SOIL PROPERTIES					
No.	TYPE	Rec (in.)	Moist	N		Depth (ft)	qu (qa) (tsf)	W	LL	PL	LOI
						12" Dark Brown to Black Clayey TOPSOIL					
1		6	M	2		Soft to Medium Stiff, Gray to Brown Mottled Lean CLAY; Little Fine Sand (CL)	(0.5-0.75)				
2		16	M	11		Brown Fine to Coarse Silty SAND (SM)					
					5	Very Stiff, Brown Lean CLAY (CL)	(2.5-3.0)				
3			W	27		Very Loose to Medium Dense, Gray Brown to Gray Fine to Coarse Silty SAND; Little Clay and Fine Gravel (SM)					
4		10	W	4							
5		18	W	4							
6		8	W	6							
7		10	W	15							
8		2	W	12							
					20	End of Boring at 20 ft Backfilled with Bentonite Chips					
					25						
WATER LEVEL OBSERVATIONS While Drilling ☒ 4.0' Upon Completion of Drilling 5.0' Time After Drilling _____ Depth to Water _____ Depth to Cave in _____						GENERAL NOTES Start 4/7/20 End 4/7/20 Driller GeoServe Chief Eddie Rig 7822 Logger Eddie Editor JPS Drill Method 2.25" HSA					

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

LOG OF TEST BORING

General Notes

DESCRIPTIVE SOIL CLASSIFICATION

Grain Size Terminology

Soil Fraction	Particle Size	U.S. Standard Sieve Size
Boulders	Larger than 12"	Larger than 12"
Cobbles	3" to 12"	3" to 12"
Gravel: Coarse	¾" to 3"	¾" to 3"
Fine	4.76 mm to ¾"	#4 to ¾"
Sand: Coarse	2.00 mm to 4.76 mm	#10 to #4
Medium	0.42 to mm to 2.00 mm	#40 to #10
Fine	0.074 mm to 0.42 mm	#200 to #40
Silt	0.005 mm to 0.074 mm	Smaller than #200
Clay	Smaller than 0.005 mm	Smaller than #200

Plasticity characteristics differentiate between silt and clay.

General Terminology

Physical Characteristics
Color, moisture, grain shape, fineness, etc.

Major Constituents
Clay, silt, sand, gravel

Structure
Laminated, varved, fibrous, stratified,
cemented, fissured, etc.

Geologic Origin
Glacial, alluvial, eolian, residual, etc.

Relative Density

Term	"N" Value
Very Loose.....	0 - 4
Loose.....	4 - 10
Medium Dense.....	10 - 30
Dense.....	30 - 50
Very Dense.....	Over 50

Relative Proportions Of Cohesionless Soils

Proportional Term	Defining Range by Percentage of Weight
Trace.....	0% - 5%
Little	5% - 12%
Some	12% - 35%
And	35% - 50%

Consistency

Term	q _u -tons/sq. ft
Very Soft.....	0.0 to 0.25
Soft.....	0.25 to 0.50
Medium.....	0.50 to 1.0
Stiff.....	1.0 to 2.0
Very Stiff.....	2.0 to 4.0
Hard.....	Over 4.0

Organic Content by Combustion Method

Soil Description	Loss on Ignition
Non Organic.....	Less than 4%
Organic Silt/Clay.....	4 - 12%
Sedimentary Peat.....	12% - 50%
Fibrous and Woody Peat...	More than 50%

Plasticity

Term	Plastic Index
None to Slight.....	0 - 4
Slight.....	5 - 7
Medium.....	8 - 22
High to Very High ..	Over 22

The penetration resistance, N, is the summation of the number of blows required to effect two successive 6" penetrations of the 2" split-barrel sampler. The sampler is driven with a 140 lb. weight falling 30" and is seated to a depth of 6" before commencing the standard penetration test.

SYMBOLS

Drilling and Sampling

CS – Continuous Sampling
RC – Rock Coring: Size AW, BW, NW, 2"W
RQD – Rock Quality Designation
RB – Rock Bit/Roller Bit
FT – Fish Tail
DC – Drove Casing
C – Casing: Size 2 ½", NW, 4", HW
CW – Clear Water
DM – Drilling Mud
HSA – Hollow Stem Auger
FA – Flight Auger
HA – Hand Auger
COA – Clean-Out Auger
SS - 2" Dia. Split-Barrel Sample
2ST – 2" Dia. Thin-Walled Tube Sample
3ST – 3" Dia. Thin-Walled Tube Sample
PT – 3" Dia. Piston Tube Sample
AS – Auger Sample
WS – Wash Sample
PTS – Peat Sample
PS – Pitcher Sample
NR – No Recovery
S – Sounding
PMT – Borehole Pressuremeter Test
VS – Vane Shear Test
WPT – Water Pressure Test

Laboratory Tests

q_a – Penetrometer Reading, tons/sq ft
q_u – Unconfined Strength, tons/sq ft
W – Moisture Content, %
LL – Liquid Limit, %
PL – Plastic Limit, %
SL – Shrinkage Limit, %
LI – Loss on Ignition
D – Dry Unit Weight, lbs/cu ft
pH – Measure of Soil Alkalinity or Acidity
FS – Free Swell, %

Water Level Measurement

▽ - Water Level at Time Shown
NW – No Water Encountered
WD – While Drilling
BCR – Before Casing Removal
ACR – After Casing Removal
CW – Cave and Wet
CM – Caved and Moist

Note: Water level measurements shown on the boring logs represent conditions at the time indicated and may not reflect static levels, especially in cohesive soils.

CGC, Inc.

Madison - Milwaukee

UNIFIED SOIL CLASSIFICATION SYSTEM

UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART

COARSE-GRAINED SOILS (more than 50% of material is larger than No. 200 sieve size.)		
GRAVELS More than 50% of coarse fraction larger than No. 4 sieve size	Clean Gravels (Less than 5% fines)	
	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
	GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
	Gravels with fines (More than 12% fines)	
	GM	Silty gravels, gravel-sand-silt mixtures
	GC	Clayey gravels, gravel-sand-clay mixtures
SANDS 50% or more of coarse fraction smaller than No. 4 sieve size	Clean Sands (Less than 5% fines)	
	SW	Well-graded sands, gravelly sands, little or no fines
	SP	Poorly graded sands, gravelly sands, little or no fines
	Sands with fines (More than 12% fines)	
	SM	Silty sands, sand-silt mixtures
	SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS (50% or more of material is smaller than No. 200 sieve size.)		
SILTS AND CLAYS Liquid limit less than 50%	ML	Inorganic silts and very fine sands, rock flour, silty of clayey fine sands or clayey silts with slight plasticity
	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
	OL	Organic silts and organic silty clays of low plasticity
SILTS AND CLAYS Liquid limit 50% or greater	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
	CH	Inorganic clays of high plasticity, fat clays
	OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS	PT	Peat and other highly organic soils

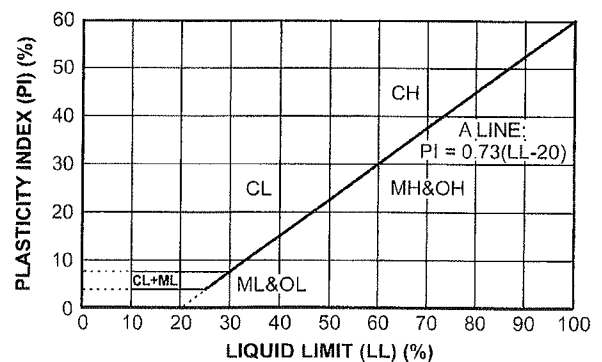
LABORATORY CLASSIFICATION CRITERIA

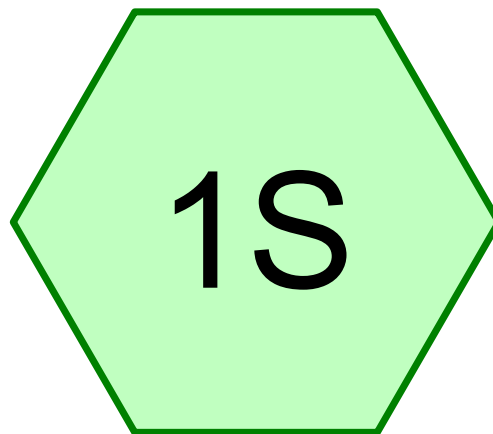
GW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3	
GP	Not meeting all gradation requirements for GW	
GM	Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols
GC	Atterberg limits above "A" line with P.I. greater than 7	
SW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3	
SP	Not meeting all gradation requirements for GW	
SM	Atterberg limits below "A" line or P.I. less than 4	Limits plotting in shaded zone with P.I. between 4 and 7 are borderline cases requiring use of dual symbols.
SC	Atterberg limits above "A" line with P.I. greater than 7	

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

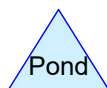
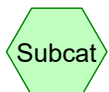
Less than 5 percent GW, GP, SW, SP
 More than 12 percent GM, GC, SM, SC
 5 to 12 percent Borderline cases requiring dual symbols

PLASTICITY CHART





Existing Site



Routing Diagram for CJE1625-02R1-EC
Prepared by Microsoft, Printed 9/1/2020
HydroCAD® 10.00-16 s/n 03450 © 2015 HydroCAD Software Solutions LLC

Time span=5.00-24.00 hrs, dt=0.05 hrs, 381 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Existing Site

Runoff Area=17.929 ac 0.00% Impervious Runoff Depth>0.41"
Flow Length=430' Tc=19.0 min CN=70 Runoff=6.53 cfs 0.609 af

Total Runoff Area = 17.929 ac Runoff Volume = 0.609 af Average Runoff Depth = 0.41"
100.00% Pervious = 17.929 ac 0.00% Impervious = 0.000 ac

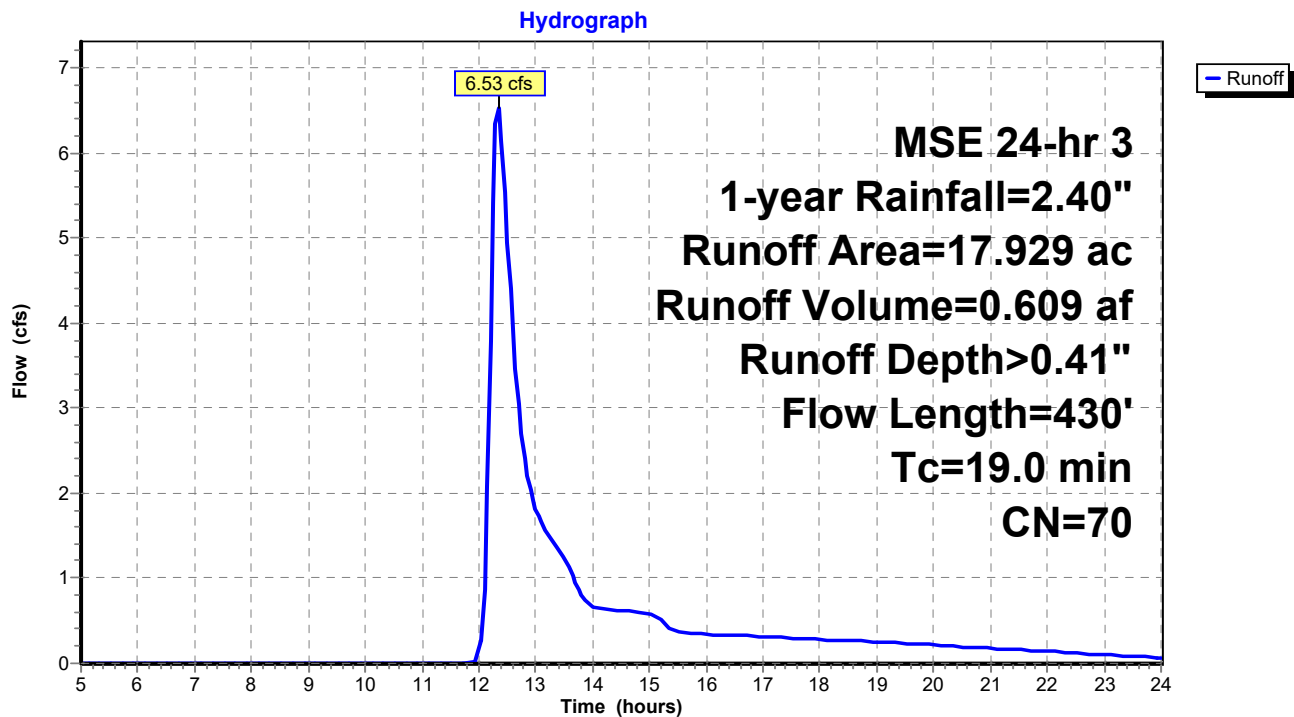
Summary for Subcatchment 1S: Existing Site

Runoff = 6.53 cfs @ 12.34 hrs, Volume= 0.609 af, Depth> 0.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-year Rainfall=2.40"

Area (ac)	CN	Description
* 17.929	70	Pre-settlement Condition, HSG C
17.929		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.0	200	0.0290	0.21		Sheet Flow, A-B Grass: Short n= 0.150 P2= 2.70"
3.0	230	0.0065	1.30		Shallow Concentrated Flow, B-C Unpaved Kv= 16.1 fps
19.0	430	Total			

Subcatchment 1S: Existing Site

Time span=5.00-24.00 hrs, dt=0.05 hrs, 381 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Existing Site

Runoff Area=17.929 ac 0.00% Impervious Runoff Depth>0.55"
Flow Length=430' Tc=19.0 min CN=70 Runoff=9.58 cfs 0.826 af

Total Runoff Area = 17.929 ac Runoff Volume = 0.826 af Average Runoff Depth = 0.55"
100.00% Pervious = 17.929 ac 0.00% Impervious = 0.000 ac

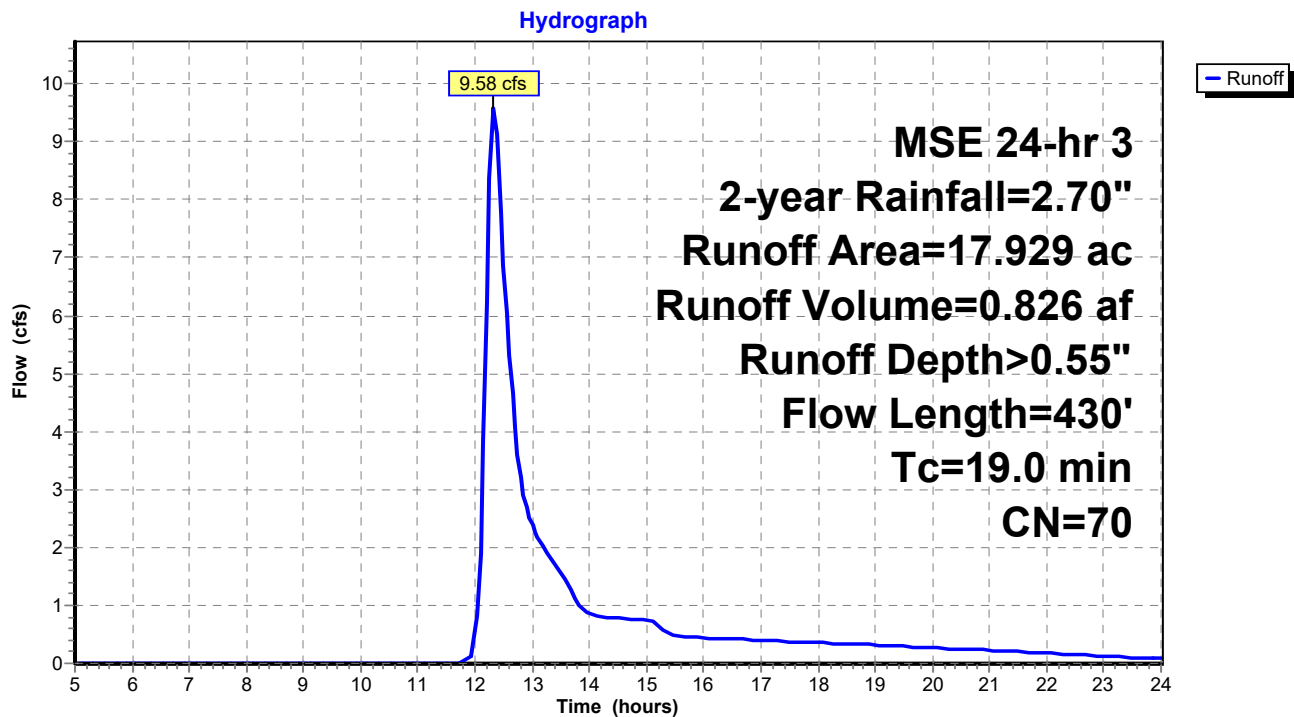
Summary for Subcatchment 1S: Existing Site

Runoff = 9.58 cfs @ 12.33 hrs, Volume= 0.826 af, Depth> 0.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-year Rainfall=2.70"

Area (ac)	CN	Description
* 17.929	70	Pre-settlement Condition, HSG C
17.929		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.0	200	0.0290	0.21		Sheet Flow, A-B Grass: Short n= 0.150 P2= 2.70"
3.0	230	0.0065	1.30		Shallow Concentrated Flow, B-C Unpaved Kv= 16.1 fps
19.0	430	Total			

Subcatchment 1S: Existing Site

Time span=5.00-24.00 hrs, dt=0.05 hrs, 381 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Existing Site

Runoff Area=17.929 ac 0.00% Impervious Runoff Depth>1.20"
Flow Length=430' Tc=19.0 min CN=70 Runoff=23.53 cfs 1.797 af

Total Runoff Area = 17.929 ac Runoff Volume = 1.797 af Average Runoff Depth = 1.20"
100.00% Pervious = 17.929 ac 0.00% Impervious = 0.000 ac

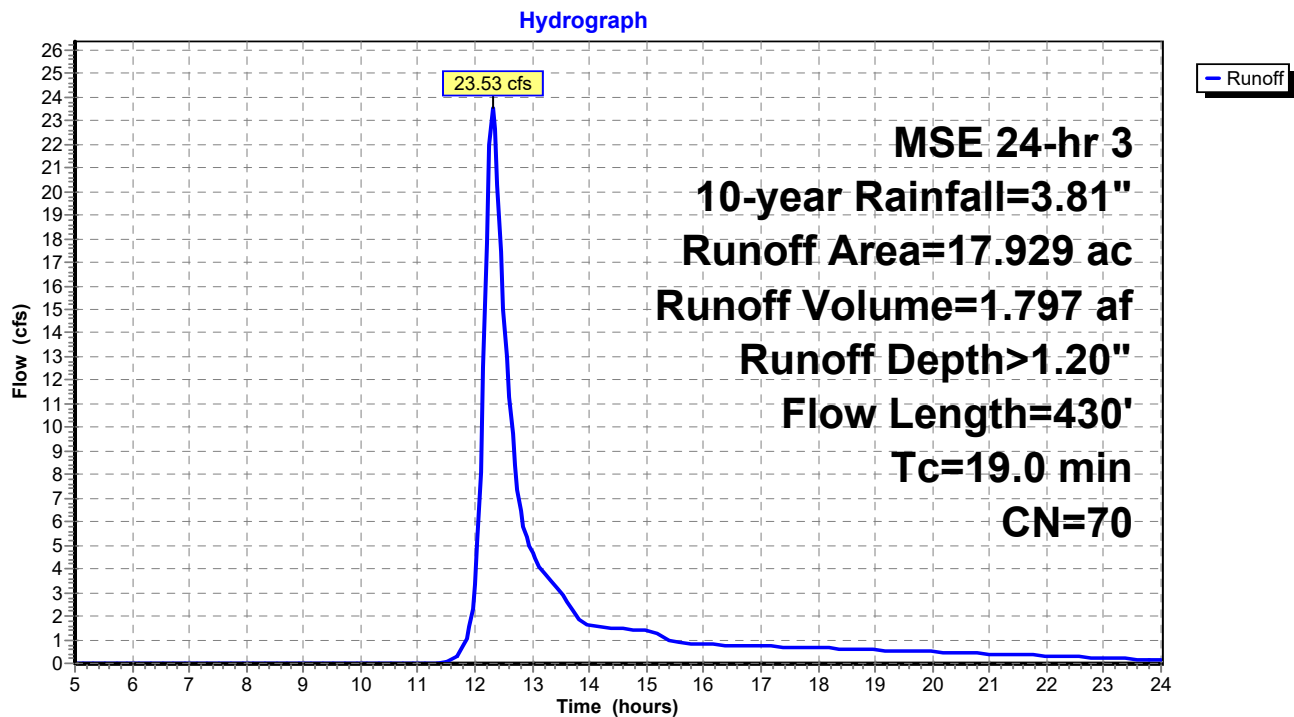
Summary for Subcatchment 1S: Existing Site

Runoff = 23.53 cfs @ 12.31 hrs, Volume= 1.797 af, Depth> 1.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-year Rainfall=3.81"

Area (ac)	CN	Description
* 17.929	70	Pre-settlement Condition, HSG C
17.929		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.0	200	0.0290	0.21		Sheet Flow, A-B Grass: Short n= 0.150 P2= 2.70"
3.0	230	0.0065	1.30		Shallow Concentrated Flow, B-C Unpaved Kv= 16.1 fps
19.0	430	Total			

Subcatchment 1S: Existing Site

Time span=5.00-24.00 hrs, dt=0.05 hrs, 381 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Existing Site

Runoff Area=17.929 ac 0.00% Impervious Runoff Depth>2.94"
Flow Length=430' Tc=19.0 min CN=70 Runoff=60.29 cfs 4.400 af

Total Runoff Area = 17.929 ac Runoff Volume = 4.400 af Average Runoff Depth = 2.94"
100.00% Pervious = 17.929 ac 0.00% Impervious = 0.000 ac

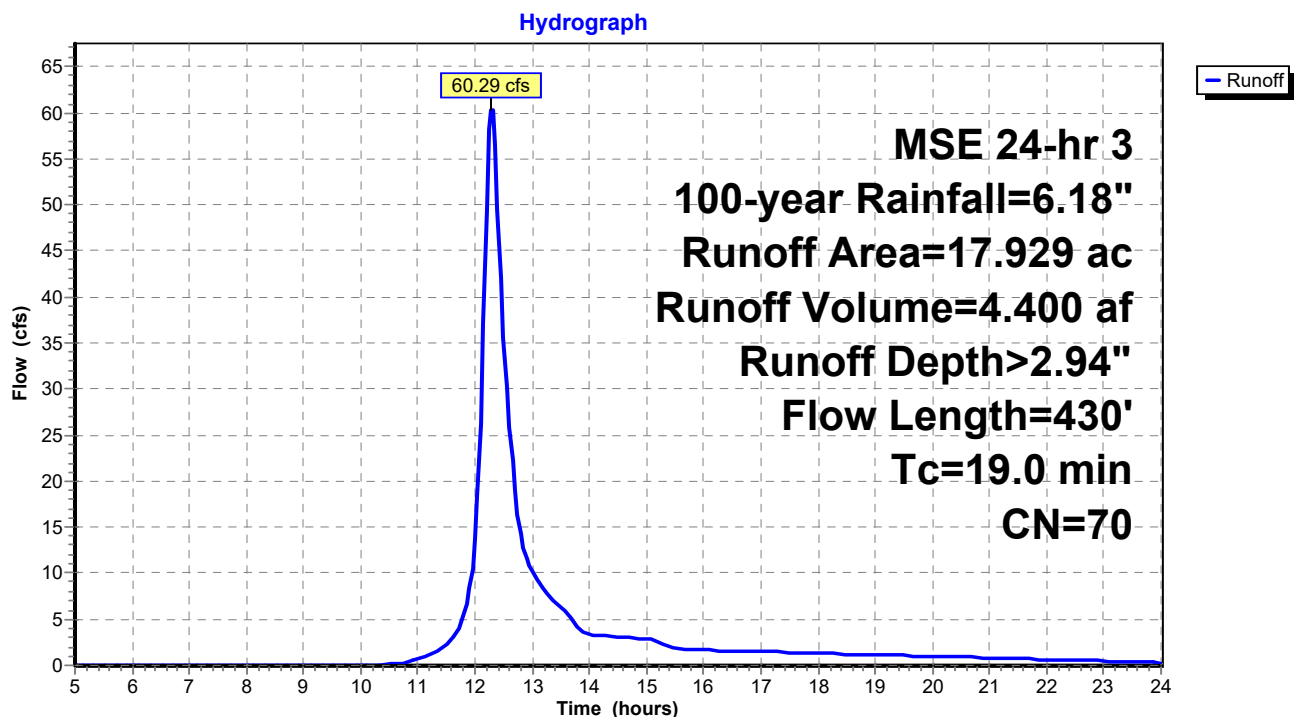
Summary for Subcatchment 1S: Existing Site

Runoff = 60.29 cfs @ 12.29 hrs, Volume= 4.400 af, Depth> 2.94"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-year Rainfall=6.18"

Area (ac)	CN	Description
* 17.929	70	Pre-settlement Condition, HSG C
17.929		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.0	200	0.0290	0.21		Sheet Flow, A-B Grass: Short n= 0.150 P2= 2.70"
3.0	230	0.0065	1.30		Shallow Concentrated Flow, B-C Unpaved Kv= 16.1 fps
19.0	430	Total			

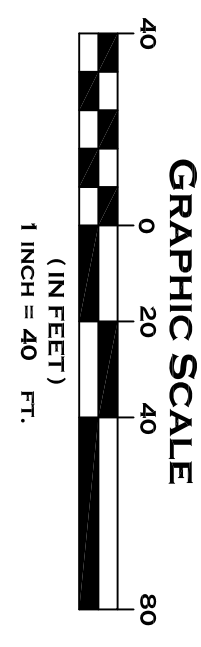
Subcatchment 1S: Existing Site



PEWAUKEE SOUTH INDUSTRIAL DEVELOPMENT
BLUEMOUND ROAD (C.T.H. "JJ") PEWAUKEE, WISCONSIN

CUE NO.: 1625-02R7
AUGUST 31, 2020

SWMP - EXISTING CONDITIONS

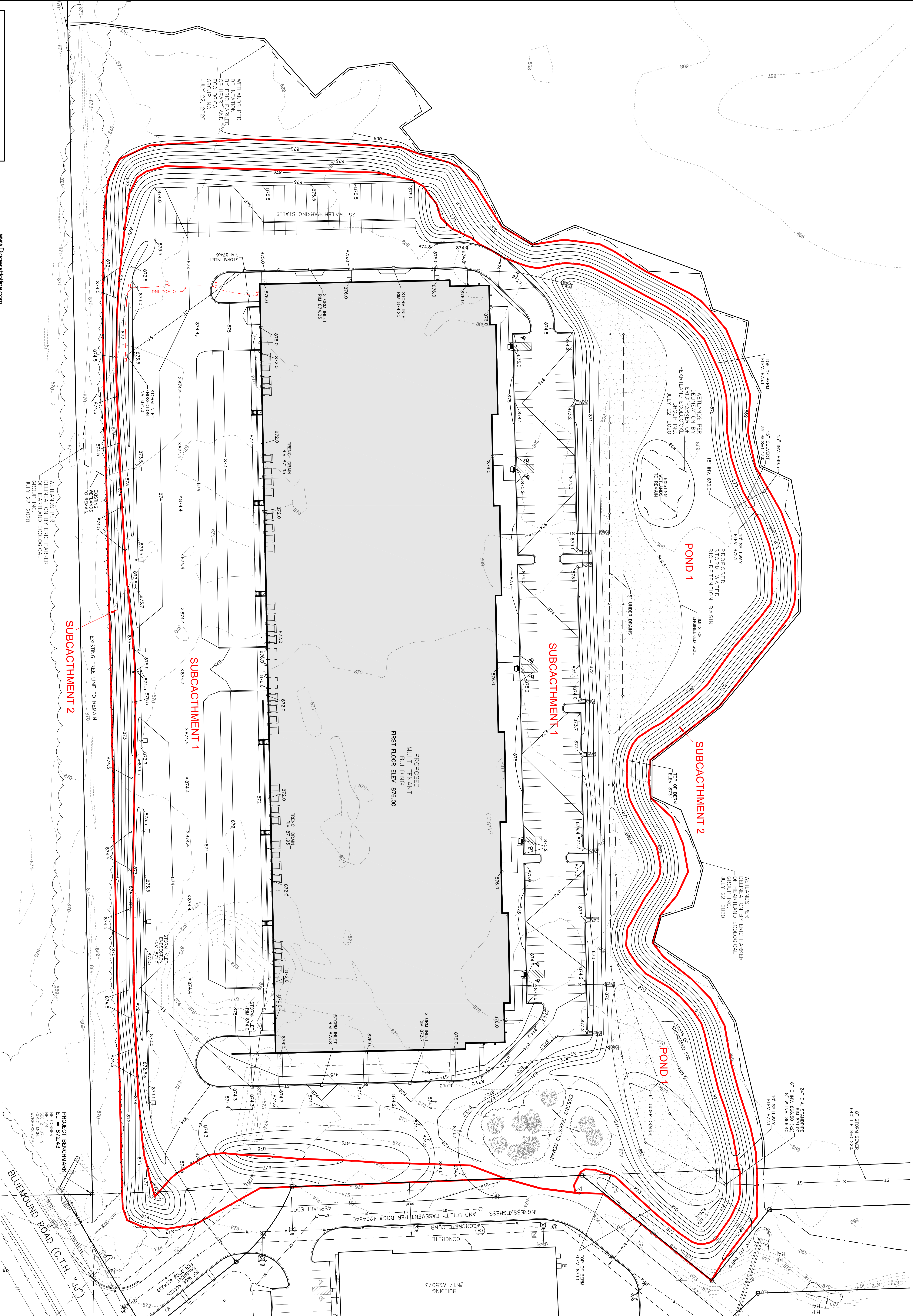




PEWAUKEE SOUTH INDUSTRIAL DEVELOPMENT
BLUEMOUND ROAD (C.T.H. "JJ") PEWAUKEE, WISCONSIN

CJE NO.: 1625-02R7
AUGUST 31, 2020

SWMP - PROPOSED CONDITIONS



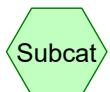
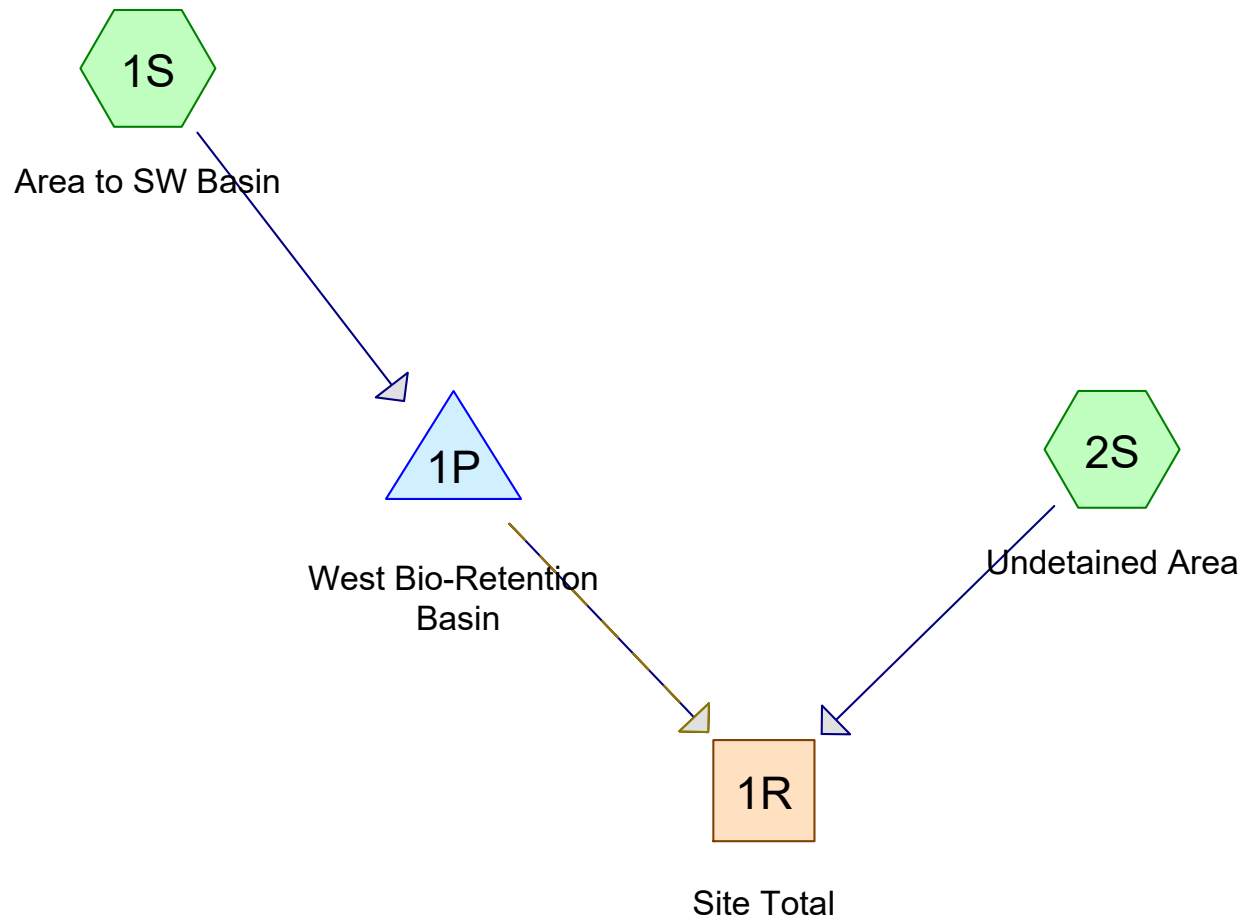
LEGEND

96 --- EXISTING CONTOUR
96 --- PROPOSED CONTOUR
--- PROPOSED ELEVATION
--- PROPOSED STORM SEWER

DIGESTERS HOTLINE
DIAL 811 OR (800) 242-8511

- NOTES:
1. SPOT GRADES ALONG THE CURB ARE AT THE FLANGE LINE OF THE CURB.
 2. THE DISTURBED AREA: 761,200 SF (17.48 ACRES)
 3. THIS DEVELOPMENT WILL REQUIRE THE IMPORT OF STRUCTURAL FILL AND THE EXPORT OF TOP SOIL.
- CITY APPROVAL OF THIS IS REQUIRED PRIOR TO ANY SOIL IMPORT OR REMOVAL FROM THE SITE.

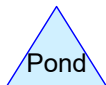




Subcat



Reach



Pond



Link

Routing Diagram for CJE1625-02R1-PC
 Prepared by Microsoft, Printed 9/1/2020
 HydroCAD® 10.00-16 s/n 03450 © 2015 HydroCAD Software Solutions LLC

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Area to SW Basin

Runoff Area=15.368 ac 66.57% Impervious Runoff Depth=1.44"
Flow Length=728' Tc=11.8 min CN=90 Runoff=31.54 cfs 1.847 af

Subcatchment 2S: Undetained Area

Runoff Area=2.561 ac 2.30% Impervious Runoff Depth=0.59"
Tc=6.0 min CN=75 Runoff=2.59 cfs 0.127 af

Reach 1R: Site Total

Inflow=2.91 cfs 1.543 af
Outflow=2.91 cfs 1.543 af

Pond 1P: West Bio-Retention Basin

Peak Elev=869.90' Storage=62,816 cf Inflow=31.54 cfs 1.847 af
Primary=0.55 cfs 1.416 af Secondary=0.00 cfs 0.000 af Tertiary=0.00 cfs 0.000 af Outflow=0.55 cfs 1.416 af

Total Runoff Area = 17.929 ac Runoff Volume = 1.973 af Average Runoff Depth = 1.32"
42.61% Pervious = 7.639 ac 57.39% Impervious = 10.290 ac

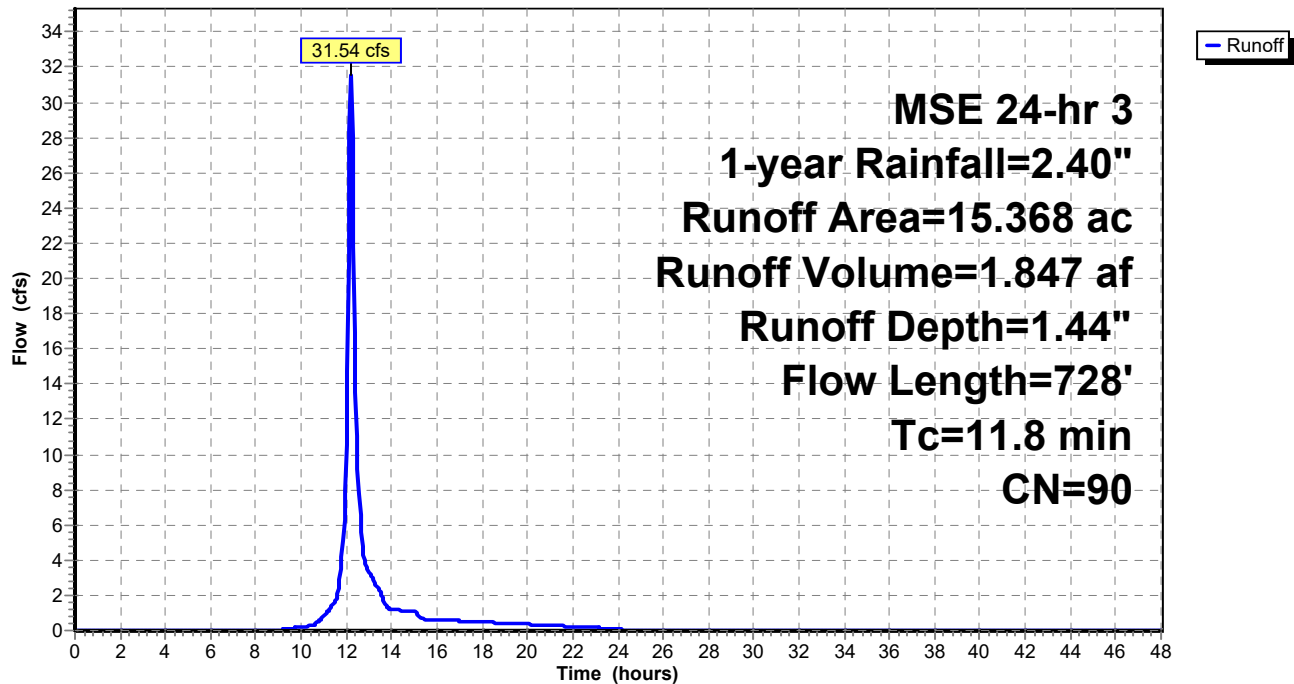
Summary for Subcatchment 1S: Area to SW Basin

Runoff = 31.54 cfs @ 12.20 hrs, Volume= 1.847 af, Depth= 1.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-year Rainfall=2.40"

Area (ac)	CN	Description
5.012	98	Roofs, HSG C
5.219	98	Paved parking
5.137	74	>75% Grass cover, Good, HSG C
15.368	90	Weighted Average
5.137		33.43% Pervious Area
10.231		66.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	52	0.0135	0.12		Sheet Flow, E-F Grass: Short n= 0.150 P2= 2.70"
0.8	48	0.0160	1.00		Sheet Flow, F-G Smooth surfaces n= 0.011 P2= 2.70"
0.3	40	0.0160	2.57		Shallow Concentrated Flow, C-D Paved Kv= 20.3 fps
0.7	78	0.0150	1.97		Shallow Concentrated Flow, D-E Unpaved Kv= 16.1 fps
2.6	510	0.0030	3.26	5.75	Pipe Channel, E-F 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
11.8	728	Total			

Subcatchment 1S: Area to SW Basin**Hydrograph**

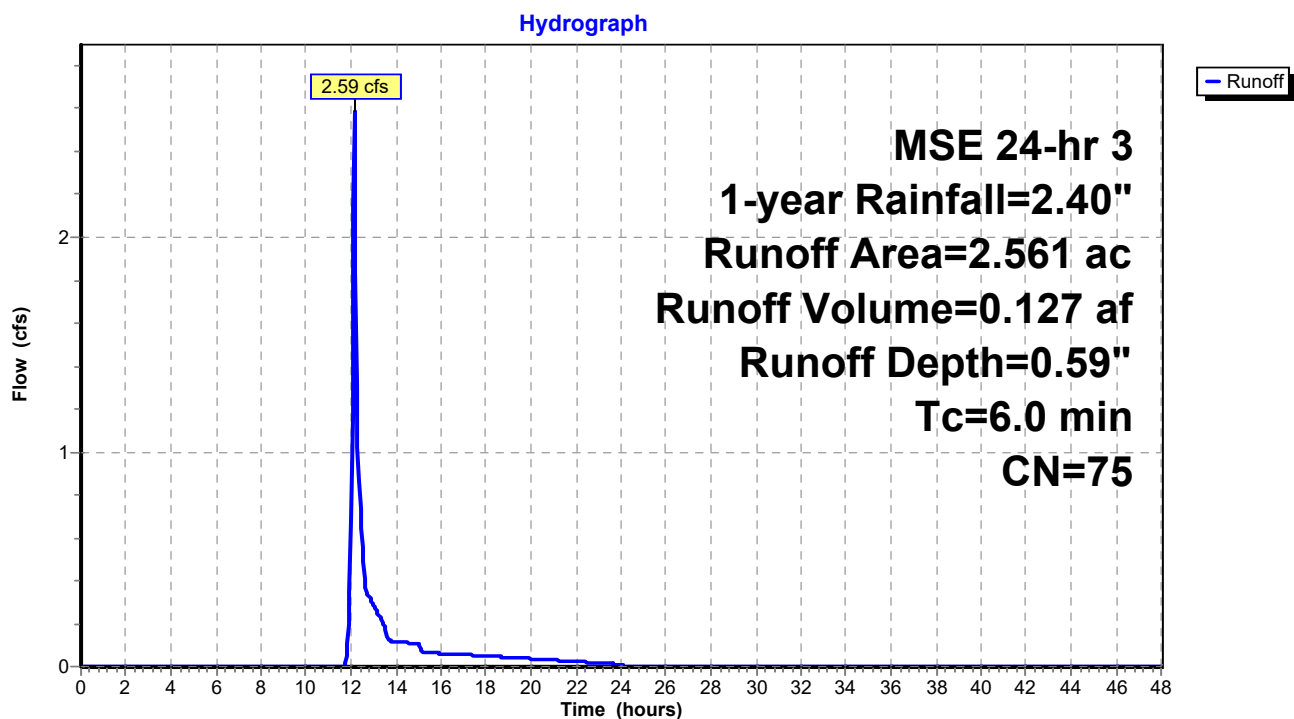
Summary for Subcatchment 2S: Undetained Area

Runoff = 2.59 cfs @ 12.14 hrs, Volume= 0.127 af, Depth= 0.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-year Rainfall=2.40"

Area (ac)	CN	Description
2.502	74	>75% Grass cover, Good, HSG C
0.059	98	Paved parking, HSG C
2.561	75	Weighted Average
2.502		97.70% Pervious Area
0.059		2.30% Impervious Area

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

Subcatchment 2S: Undetained Area

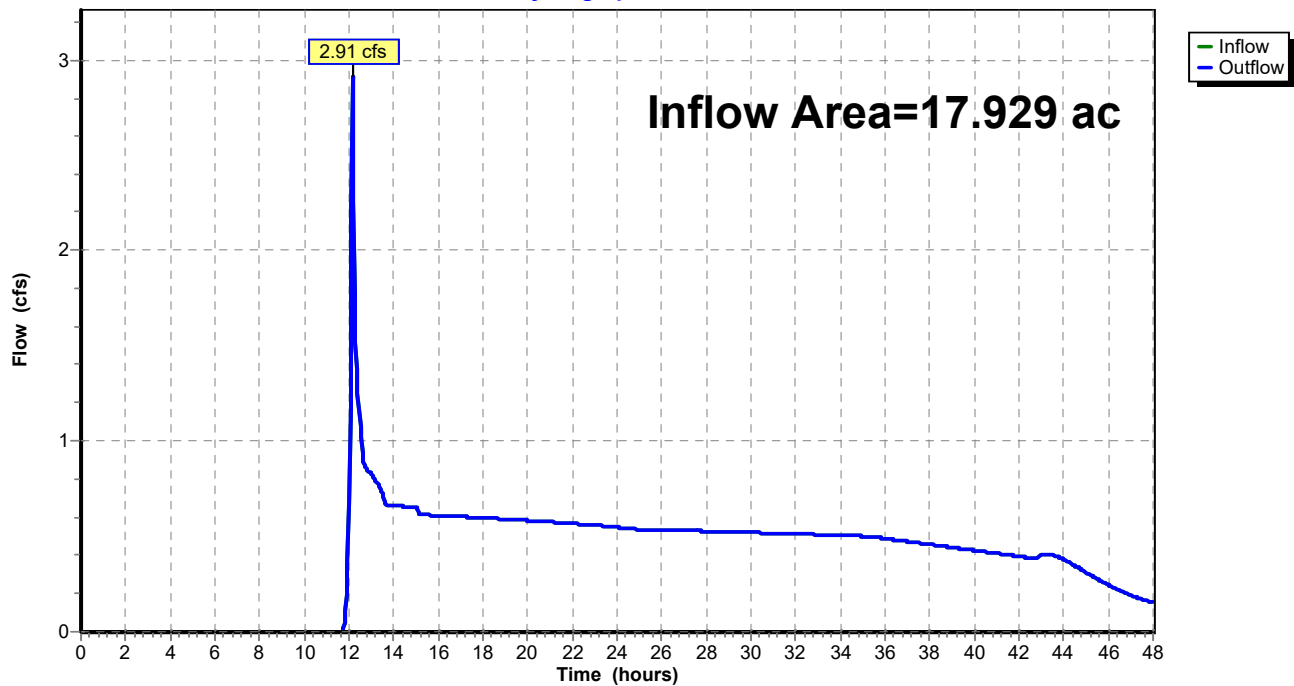
Summary for Reach 1R: Site Total

Inflow Area = 17.929 ac, 57.39% Impervious, Inflow Depth > 1.03" for 1-year event
Inflow = 2.91 cfs @ 12.15 hrs, Volume= 1.543 af
Outflow = 2.91 cfs @ 12.15 hrs, Volume= 1.543 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Reach 1R: Site Total

Hydrograph



Summary for Pond 1P: West Bio-Retention Basin

Inflow Area = 15.368 ac, 66.57% Impervious, Inflow Depth = 1.44" for 1-year event
 Inflow = 31.54 cfs @ 12.20 hrs, Volume= 1.847 af
 Outflow = 0.55 cfs @ 16.94 hrs, Volume= 1.416 af, Atten= 98%, Lag= 284.2 min
 Primary = 0.55 cfs @ 16.94 hrs, Volume= 1.416 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Tertiary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Peak Elev= 869.90' @ 16.94 hrs Surf.Area= 82,449 sf Storage= 62,816 cf

Plug-Flow detention time= 966.8 min calculated for 1.415 af (77% of inflow)
 Center-of-Mass det. time= 901.0 min (1,703.6 - 802.6)

Volume	Invert	Avail.Storage	Storage Description
#1	867.00'	418,329 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
867.00	48,125	0.0	0	0
867.01	48,125	30.0	144	144
869.49	48,125	30.0	35,805	35,949
869.50	48,125	100.0	481	36,431
870.00	90,590	100.0	34,679	71,109
871.00	102,200	100.0	96,395	167,504
872.00	118,840	100.0	110,520	278,024
873.00	134,500	100.0	126,670	404,694
873.10	138,200	100.0	13,635	418,329

Device	Routing	Invert	Outlet Devices
#1	Primary	866.90'	8.0" Round Culvert L= 640.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 866.90' / 865.50' S= 0.0022 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	868.00'	6.0" Round Culvert X 2.00 L= 980.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 868.00' / 867.00' S= 0.0010 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Device 1	871.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	872.10'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir X 2.00 Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64
#5	Tertiary	870.00'	15.0" Round Culvert X 2.00 L= 35.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 870.00' / 869.50' S= 0.0143 '/ Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.23 sf

Primary OutFlow Max=0.55 cfs @ 16.94 hrs HW=869.90' TW=0.00' (Dynamic Tailwater)

└─**1=Culvert** (Passes 0.55 cfs of 0.90 cfs potential flow)

└─**2=Culvert** (Barrel Controls 0.55 cfs @ 1.40 fps)

└─**3=Orifice/Grate** (Controls 0.00 cfs)

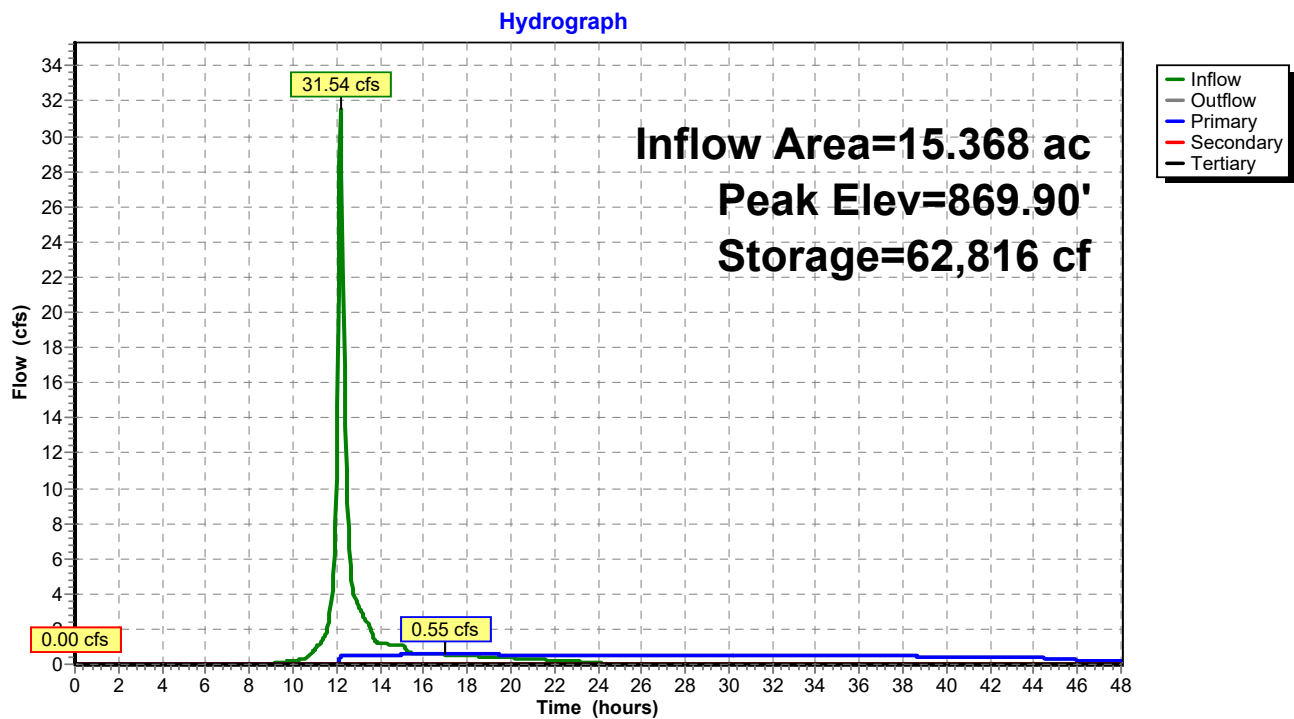
Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=867.00' TW=0.00' (Dynamic Tailwater)

└─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Tertiary OutFlow Max=0.00 cfs @ 0.00 hrs HW=867.00' TW=0.00' (Dynamic Tailwater)

└─**5=Culvert** (Controls 0.00 cfs)

Pond 1P: West Bio-Retention Basin



Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Area to SW Basin

Runoff Area=15.368 ac 66.57% Impervious Runoff Depth=1.71"
Flow Length=728' Tc=11.8 min CN=90 Runoff=37.24 cfs 2.191 af

Subcatchment 2S: Undetained Area

Runoff Area=2.561 ac 2.30% Impervious Runoff Depth=0.77"
Tc=6.0 min CN=75 Runoff=3.45 cfs 0.164 af

Reach 1R: Site Total

Inflow=3.85 cfs 1.748 af
Outflow=3.85 cfs 1.748 af

Pond 1P: West Bio-Retention Basin

Peak Elev=870.05' Storage=76,010 cf Inflow=37.24 cfs 2.191 af
Primary=0.57 cfs 1.570 af Secondary=0.00 cfs 0.000 af Tertiary=0.03 cfs 0.014 af Outflow=0.59 cfs 1.584 af

Total Runoff Area = 17.929 ac Runoff Volume = 2.355 af Average Runoff Depth = 1.58"
42.61% Pervious = 7.639 ac 57.39% Impervious = 10.290 ac

Summary for Subcatchment 1S: Area to SW Basin

Runoff = 37.24 cfs @ 12.20 hrs, Volume= 2.191 af, Depth= 1.71"

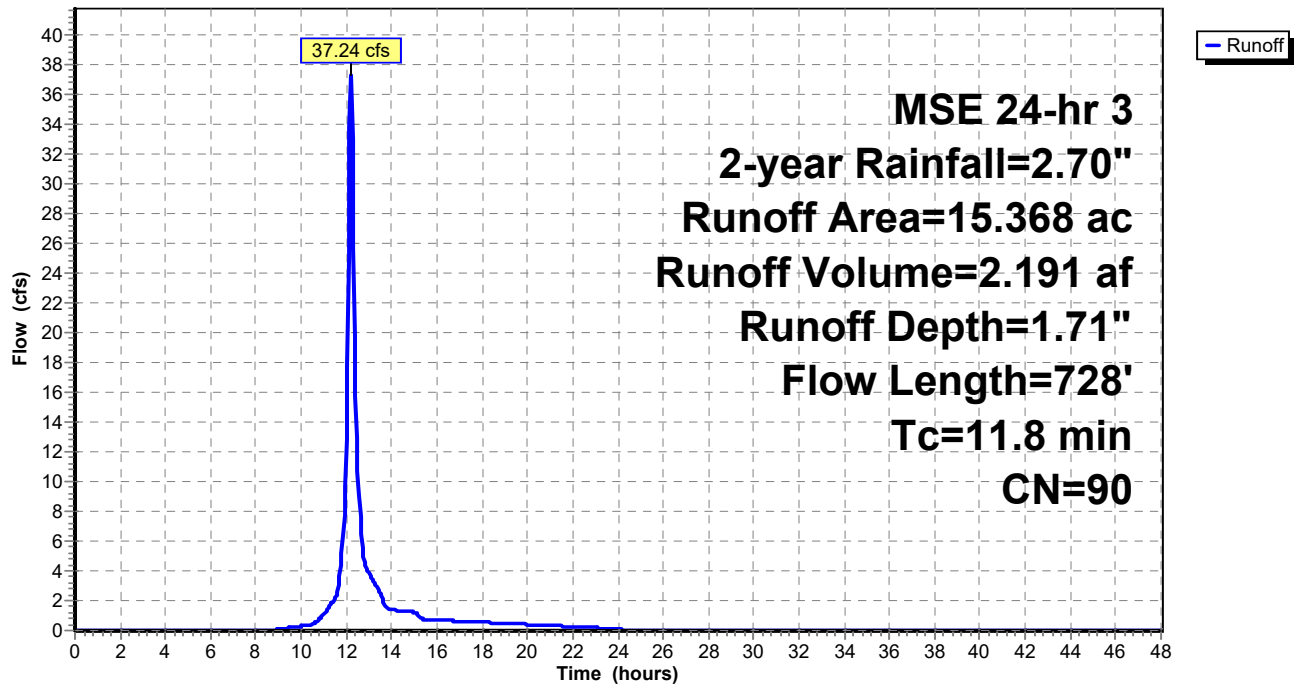
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-year Rainfall=2.70"

Area (ac)	CN	Description
5.012	98	Roofs, HSG C
5.219	98	Paved parking
5.137	74	>75% Grass cover, Good, HSG C
15.368	90	Weighted Average
5.137		33.43% Pervious Area
10.231		66.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	52	0.0135	0.12		Sheet Flow, E-F Grass: Short n= 0.150 P2= 2.70"
0.8	48	0.0160	1.00		Sheet Flow, F-G Smooth surfaces n= 0.011 P2= 2.70"
0.3	40	0.0160	2.57		Shallow Concentrated Flow, C-D Paved Kv= 20.3 fps
0.7	78	0.0150	1.97		Shallow Concentrated Flow, D-E Unpaved Kv= 16.1 fps
2.6	510	0.0030	3.26	5.75	Pipe Channel, E-F 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
11.8	728	Total			

Subcatchment 1S: Area to SW Basin

Hydrograph



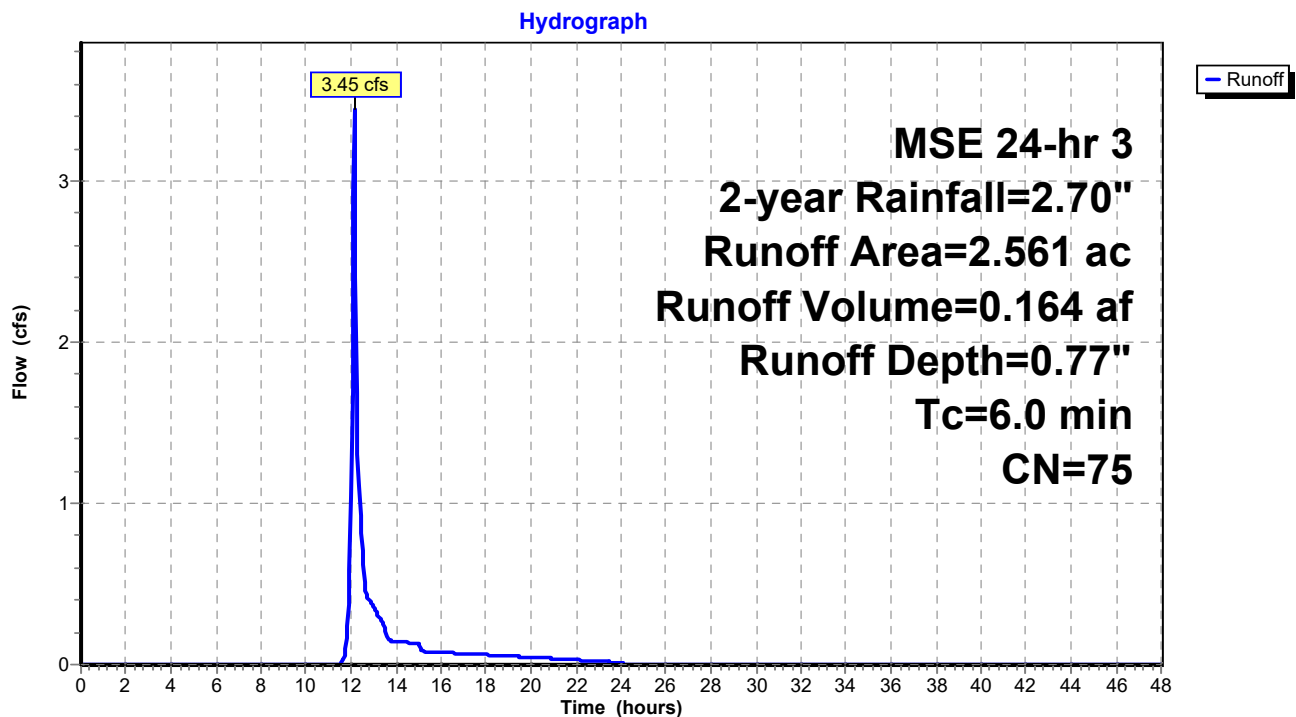
Summary for Subcatchment 2S: Undetained Area

Runoff = 3.45 cfs @ 12.14 hrs, Volume= 0.164 af, Depth= 0.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-year Rainfall=2.70"

Area (ac)	CN	Description
2.502	74	>75% Grass cover, Good, HSG C
0.059	98	Paved parking, HSG C
2.561	75	Weighted Average
2.502		97.70% Pervious Area
0.059		2.30% Impervious Area

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

Subcatchment 2S: Undetained Area

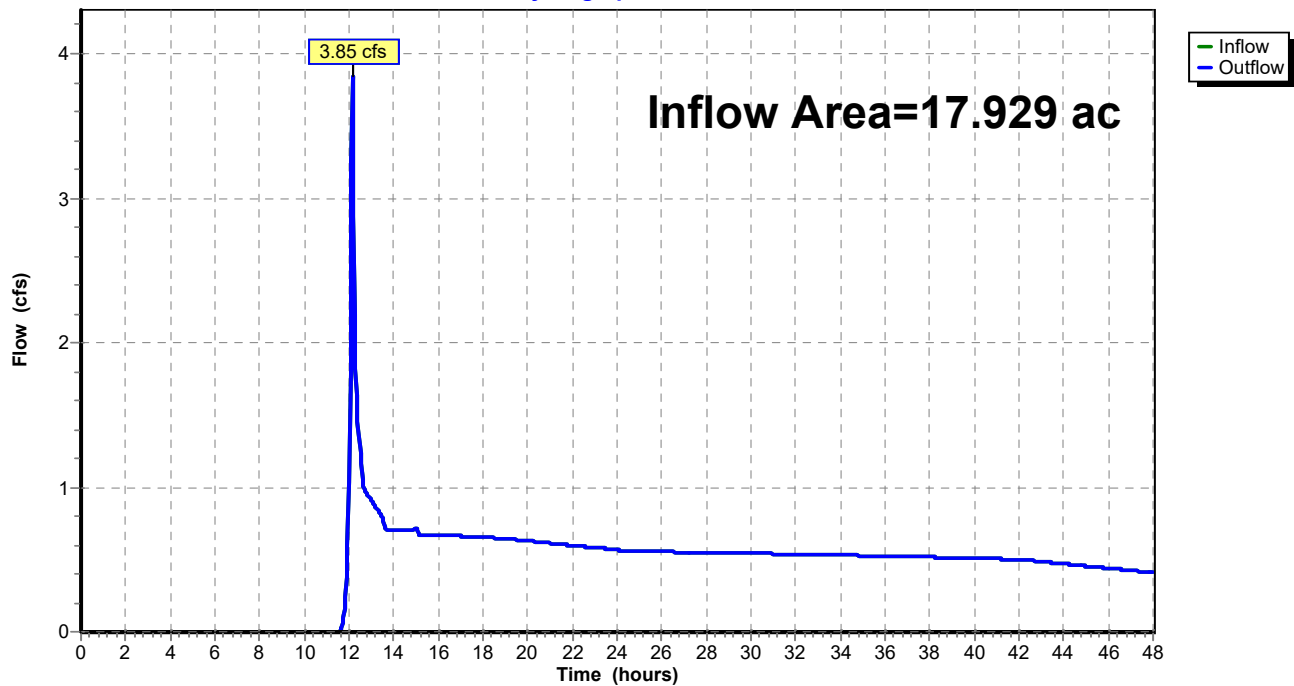
Summary for Reach 1R: Site Total

Inflow Area = 17.929 ac, 57.39% Impervious, Inflow Depth > 1.17" for 2-year event
Inflow = 3.85 cfs @ 12.14 hrs, Volume= 1.748 af
Outflow = 3.85 cfs @ 12.14 hrs, Volume= 1.748 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Reach 1R: Site Total

Hydrograph



Summary for Pond 1P: West Bio-Retention Basin

Inflow Area = 15.368 ac, 66.57% Impervious, Inflow Depth = 1.71" for 2-year event
 Inflow = 37.24 cfs @ 12.20 hrs, Volume= 2.191 af
 Outflow = 0.59 cfs @ 17.44 hrs, Volume= 1.584 af, Atten= 98%, Lag= 314.7 min
 Primary = 0.57 cfs @ 17.44 hrs, Volume= 1.570 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Tertiary = 0.03 cfs @ 17.44 hrs, Volume= 0.014 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Peak Elev= 870.05' @ 17.44 hrs Surf.Area= 91,216 sf Storage= 76,010 cf

Plug-Flow detention time= 1,028.1 min calculated for 1.584 af (72% of inflow)
 Center-of-Mass det. time= 958.1 min (1,757.3 - 799.2)

Volume	Invert	Avail.Storage	Storage Description
#1	867.00'	418,329 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
867.00	48,125	0.0	0	0
867.01	48,125	30.0	144	144
869.49	48,125	30.0	35,805	35,949
869.50	48,125	100.0	481	36,431
870.00	90,590	100.0	34,679	71,109
871.00	102,200	100.0	96,395	167,504
872.00	118,840	100.0	110,520	278,024
873.00	134,500	100.0	126,670	404,694
873.10	138,200	100.0	13,635	418,329

Device	Routing	Invert	Outlet Devices
#1	Primary	866.90'	8.0" Round Culvert L= 640.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 866.90' / 865.50' S= 0.0022 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	868.00'	6.0" Round Culvert X 2.00 L= 980.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 868.00' / 867.00' S= 0.0010 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Device 1	871.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	872.10'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir X 2.00 Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64
#5	Tertiary	870.00'	15.0" Round Culvert X 2.00 L= 35.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 870.00' / 869.50' S= 0.0143 '/ Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.23 sf

Primary OutFlow Max=0.57 cfs @ 17.44 hrs HW=870.05' TW=0.00' (Dynamic Tailwater)

└─**1=Culvert** (Passes 0.57 cfs of 0.92 cfs potential flow)

└─**2=Culvert** (Barrel Controls 0.57 cfs @ 1.44 fps)

└─**3=Orifice/Grate** (Controls 0.00 cfs)

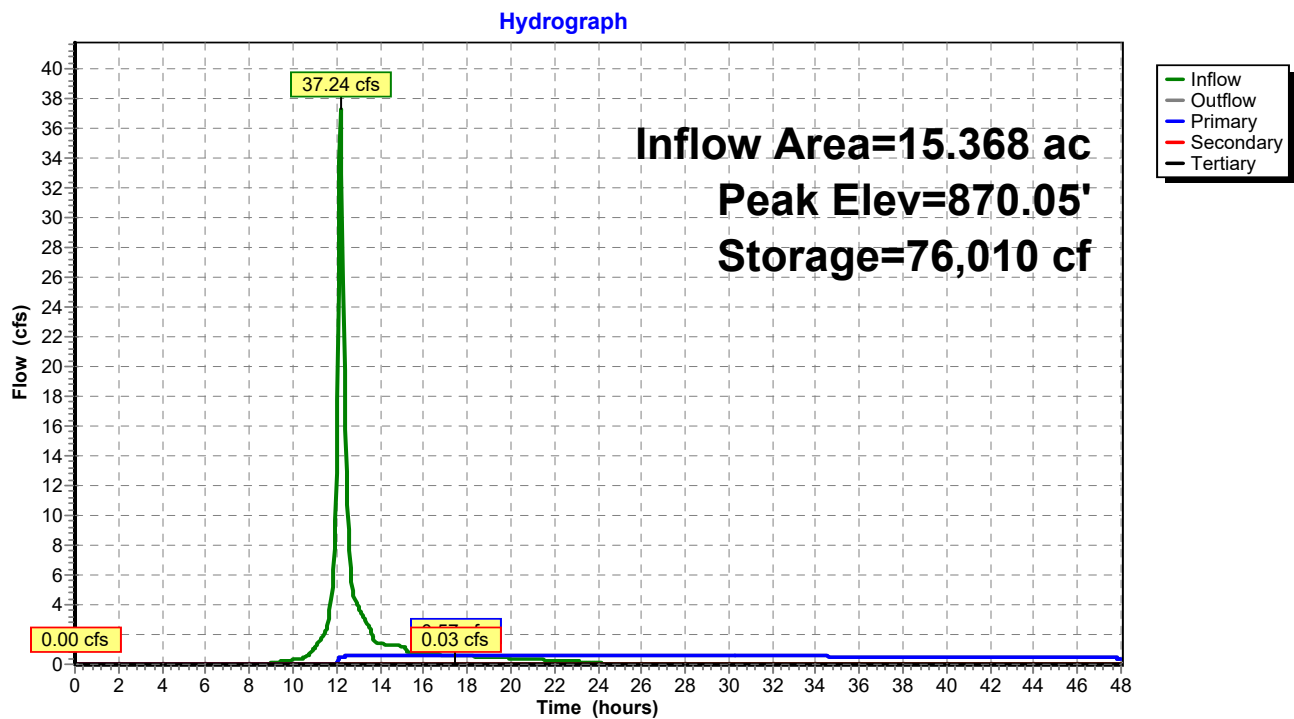
Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=867.00' TW=0.00' (Dynamic Tailwater)

└─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Tertiary OutFlow Max=0.03 cfs @ 17.44 hrs HW=870.05' TW=0.00' (Dynamic Tailwater)

└─**5=Culvert** (Inlet Controls 0.03 cfs @ 0.79 fps)

Pond 1P: West Bio-Retention Basin



Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Area to SW Basin Runoff Area=15.368 ac 66.57% Impervious Runoff Depth=2.74"
Flow Length=728' Tc=11.8 min CN=90 Runoff=58.51 cfs 3.508 af

Subcatchment 2S: Undetained Area Runoff Area=2.561 ac 2.30% Impervious Runoff Depth=1.53"
Tc=6.0 min CN=75 Runoff=7.01 cfs 0.326 af

Reach 1R: Site Total Inflow=7.53 cfs 2.971 af
Outflow=7.53 cfs 2.971 af

Pond 1P: West Bio-Retention Basin Peak Elev=870.44' Storage=111,834 cf Inflow=58.51 cfs 3.508 af
Primary=0.61 cfs 1.671 af Secondary=0.00 cfs 0.000 af Tertiary=1.72 cfs 0.974 af Outflow=2.33 cfs 2.646 af

Total Runoff Area = 17.929 ac Runoff Volume = 3.834 af Average Runoff Depth = 2.57"
42.61% Pervious = 7.639 ac 57.39% Impervious = 10.290 ac

Summary for Subcatchment 1S: Area to SW Basin

Runoff = 58.51 cfs @ 12.20 hrs, Volume= 3.508 af, Depth= 2.74"

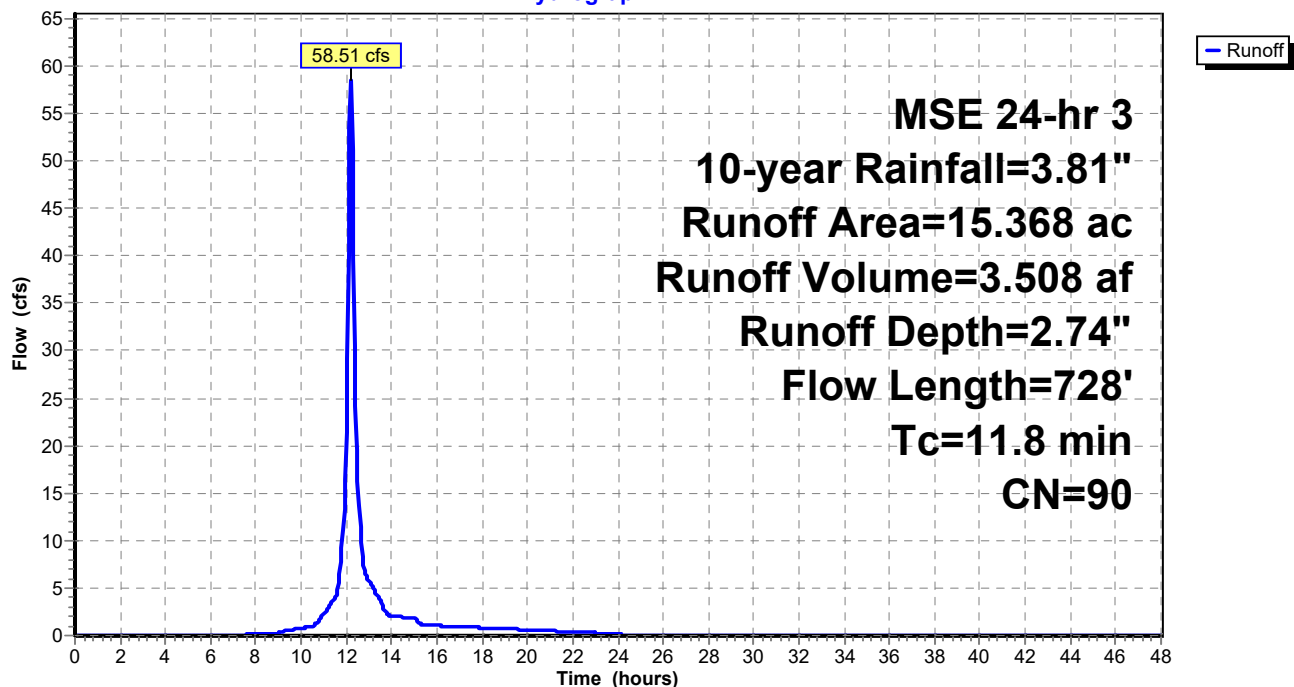
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-year Rainfall=3.81"

Area (ac)	CN	Description
5.012	98	Roofs, HSG C
5.219	98	Paved parking
5.137	74	>75% Grass cover, Good, HSG C
15.368	90	Weighted Average
5.137		33.43% Pervious Area
10.231		66.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	52	0.0135	0.12		Sheet Flow, E-F Grass: Short n= 0.150 P2= 2.70"
0.8	48	0.0160	1.00		Sheet Flow, F-G Smooth surfaces n= 0.011 P2= 2.70"
0.3	40	0.0160	2.57		Shallow Concentrated Flow, C-D Paved Kv= 20.3 fps
0.7	78	0.0150	1.97		Shallow Concentrated Flow, D-E Unpaved Kv= 16.1 fps
2.6	510	0.0030	3.26	5.75	Pipe Channel, E-F 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
11.8	728	Total			

Subcatchment 1S: Area to SW Basin

Hydrograph



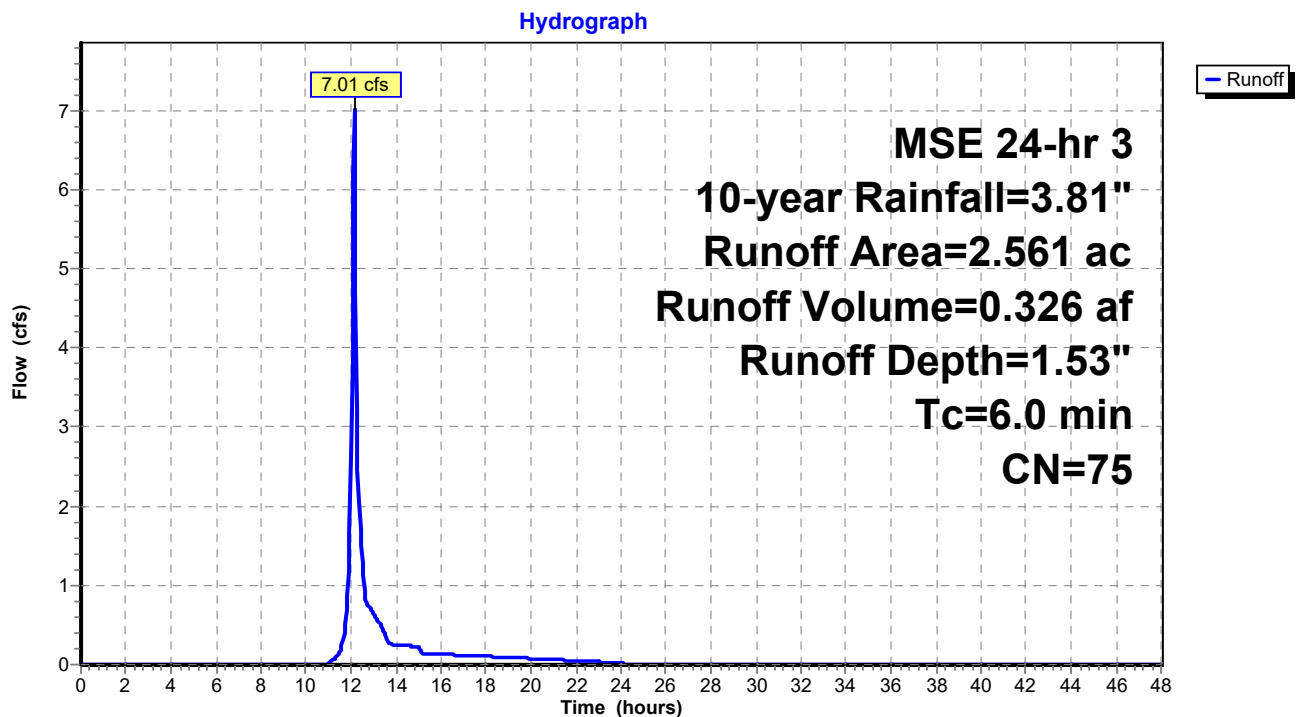
Summary for Subcatchment 2S: Undetained Area

Runoff = 7.01 cfs @ 12.14 hrs, Volume= 0.326 af, Depth= 1.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-year Rainfall=3.81"

Area (ac)	CN	Description
2.502	74	>75% Grass cover, Good, HSG C
0.059	98	Paved parking, HSG C
2.561	75	Weighted Average
2.502		97.70% Pervious Area
0.059		2.30% Impervious Area

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

Subcatchment 2S: Undetained Area

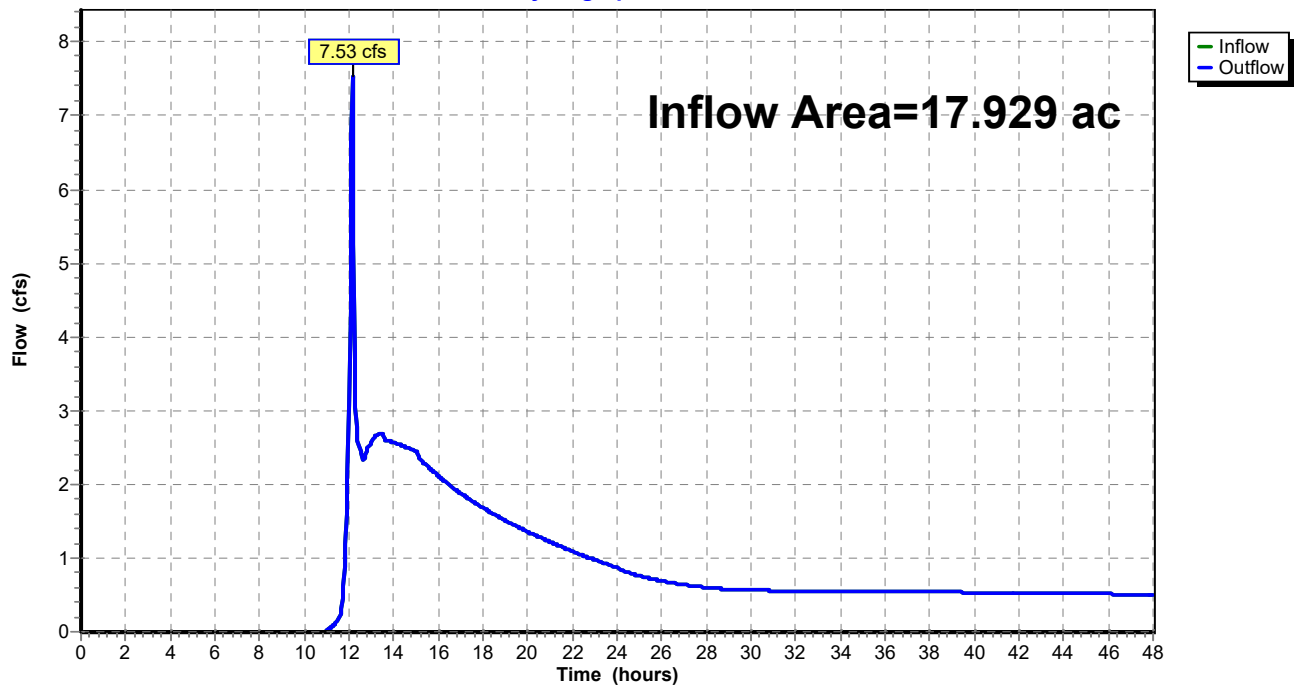
Summary for Reach 1R: Site Total

Inflow Area = 17.929 ac, 57.39% Impervious, Inflow Depth > 1.99" for 10-year event
Inflow = 7.53 cfs @ 12.14 hrs, Volume= 2.971 af
Outflow = 7.53 cfs @ 12.14 hrs, Volume= 2.971 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Reach 1R: Site Total

Hydrograph



Summary for Pond 1P: West Bio-Retention Basin

Inflow Area = 15.368 ac, 66.57% Impervious, Inflow Depth = 2.74" for 10-year event
 Inflow = 58.51 cfs @ 12.20 hrs, Volume= 3.508 af
 Outflow = 2.33 cfs @ 13.76 hrs, Volume= 2.646 af, Atten= 96%, Lag= 93.6 min
 Primary = 0.61 cfs @ 13.76 hrs, Volume= 1.671 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Tertiary = 1.72 cfs @ 13.76 hrs, Volume= 0.974 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Peak Elev= 870.44' @ 13.76 hrs Surf.Area= 95,667 sf Storage= 111,834 cf

Plug-Flow detention time= 769.8 min calculated for 2.646 af (75% of inflow)
 Center-of-Mass det. time= 704.7 min (1,494.5 - 789.8)

Volume	Invert	Avail.Storage	Storage Description
#1	867.00'	418,329 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
867.00	48,125	0.0	0	0
867.01	48,125	30.0	144	144
869.49	48,125	30.0	35,805	35,949
869.50	48,125	100.0	481	36,431
870.00	90,590	100.0	34,679	71,109
871.00	102,200	100.0	96,395	167,504
872.00	118,840	100.0	110,520	278,024
873.00	134,500	100.0	126,670	404,694
873.10	138,200	100.0	13,635	418,329

Device	Routing	Invert	Outlet Devices
#1	Primary	866.90'	8.0" Round Culvert L= 640.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 866.90' / 865.50' S= 0.0022 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	868.00'	6.0" Round Culvert X 2.00 L= 980.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 868.00' / 867.00' S= 0.0010 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Device 1	871.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	872.10'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir X 2.00 Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64
#5	Tertiary	870.00'	15.0" Round Culvert X 2.00 L= 35.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 870.00' / 869.50' S= 0.0143 '/ Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.23 sf

Primary OutFlow Max=0.61 cfs @ 13.76 hrs HW=870.44' TW=0.00' (Dynamic Tailwater)

└─**1=Culvert** (Passes 0.61 cfs of 0.96 cfs potential flow)

└─**2=Culvert** (Barrel Controls 0.61 cfs @ 1.54 fps)

└─**3=Orifice/Grate** (Controls 0.00 cfs)

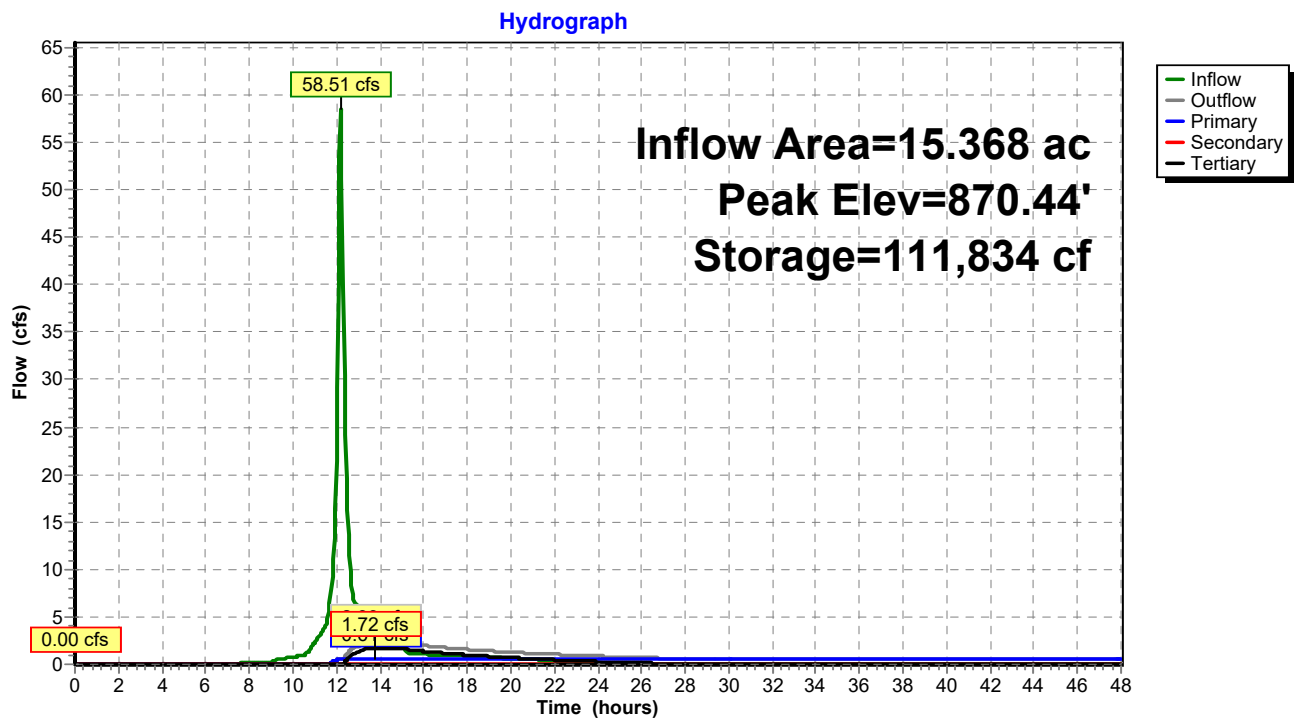
Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=867.00' TW=0.00' (Dynamic Tailwater)

└─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Tertiary OutFlow Max=1.72 cfs @ 13.76 hrs HW=870.44' TW=0.00' (Dynamic Tailwater)

└─**5=Culvert** (Inlet Controls 1.72 cfs @ 2.25 fps)

Pond 1P: West Bio-Retention Basin



Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Area to SW Basin

Runoff Area=15.368 ac 66.57% Impervious Runoff Depth=5.02"
Flow Length=728' Tc=11.8 min CN=90 Runoff=103.76 cfs 6.431 af

Subcatchment 2S: Undetained Area

Runoff Area=2.561 ac 2.30% Impervious Runoff Depth=3.44"
Tc=6.0 min CN=75 Runoff=15.67 cfs 0.733 af

Reach 1R: Site Total

Inflow=16.87 cfs 6.192 af
Outflow=16.87 cfs 6.192 af

Pond 1P: West Bio-Retention Basin

Peak Elev=871.15' Storage=183,080 cf Inflow=103.76 cfs 6.431 af
Primary=1.04 cfs 1.802 af Secondary=0.00 cfs 0.000 af Tertiary=8.63 cfs 3.657 af Outflow=9.67 cfs 5.459 af

Total Runoff Area = 17.929 ac Runoff Volume = 7.164 af Average Runoff Depth = 4.79"
42.61% Pervious = 7.639 ac 57.39% Impervious = 10.290 ac

Summary for Subcatchment 1S: Area to SW Basin

Runoff = 103.76 cfs @ 12.19 hrs, Volume= 6.431 af, Depth= 5.02"

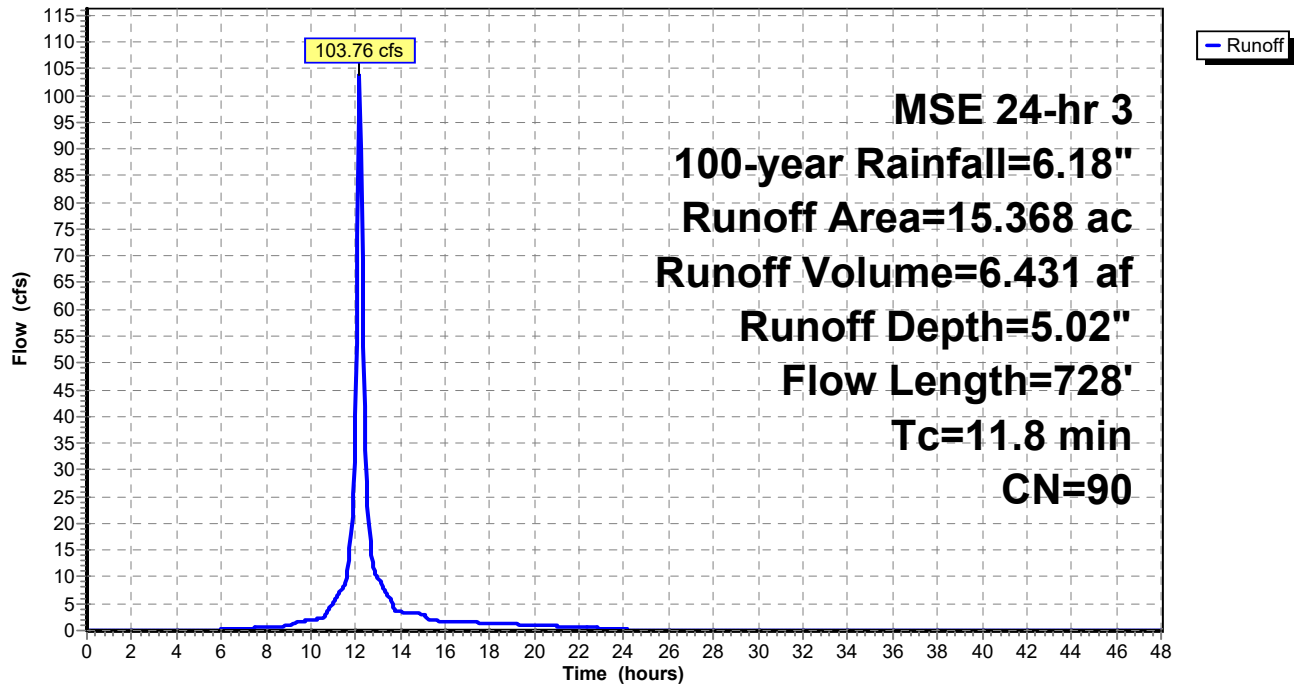
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-year Rainfall=6.18"

Area (ac)	CN	Description
5.012	98	Roofs, HSG C
5.219	98	Paved parking
5.137	74	>75% Grass cover, Good, HSG C
15.368	90	Weighted Average
5.137		33.43% Pervious Area
10.231		66.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	52	0.0135	0.12		Sheet Flow, E-F Grass: Short n= 0.150 P2= 2.70"
0.8	48	0.0160	1.00		Sheet Flow, F-G Smooth surfaces n= 0.011 P2= 2.70"
0.3	40	0.0160	2.57		Shallow Concentrated Flow, C-D Paved Kv= 20.3 fps
0.7	78	0.0150	1.97		Shallow Concentrated Flow, D-E Unpaved Kv= 16.1 fps
2.6	510	0.0030	3.26	5.75	Pipe Channel, E-F 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013 Corrugated PE, smooth interior
11.8	728	Total			

Subcatchment 1S: Area to SW Basin

Hydrograph



Summary for Subcatchment 2S: Undetained Area

Runoff = 15.67 cfs @ 12.13 hrs, Volume= 0.733 af, Depth= 3.44"

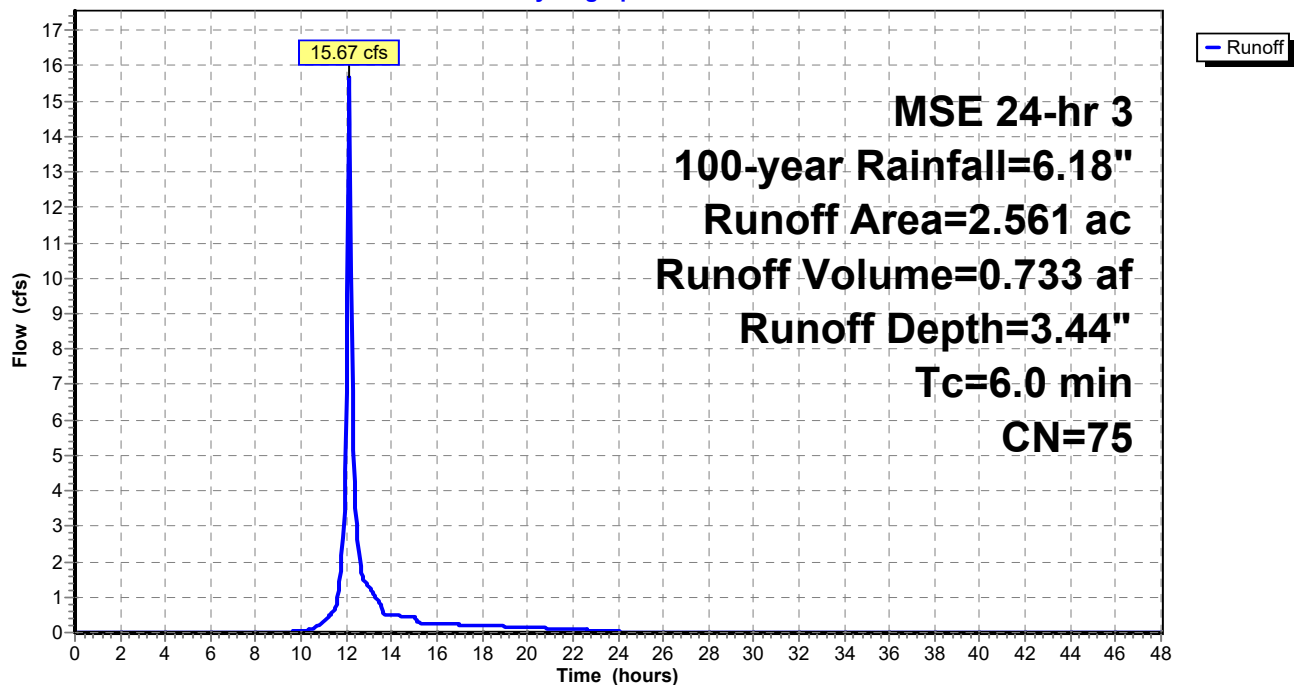
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-year Rainfall=6.18"

Area (ac)	CN	Description
2.502	74	>75% Grass cover, Good, HSG C
0.059	98	Paved parking, HSG C
2.561	75	Weighted Average
2.502		97.70% Pervious Area
0.059		2.30% Impervious Area

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

Subcatchment 2S: Undetained Area

Hydrograph



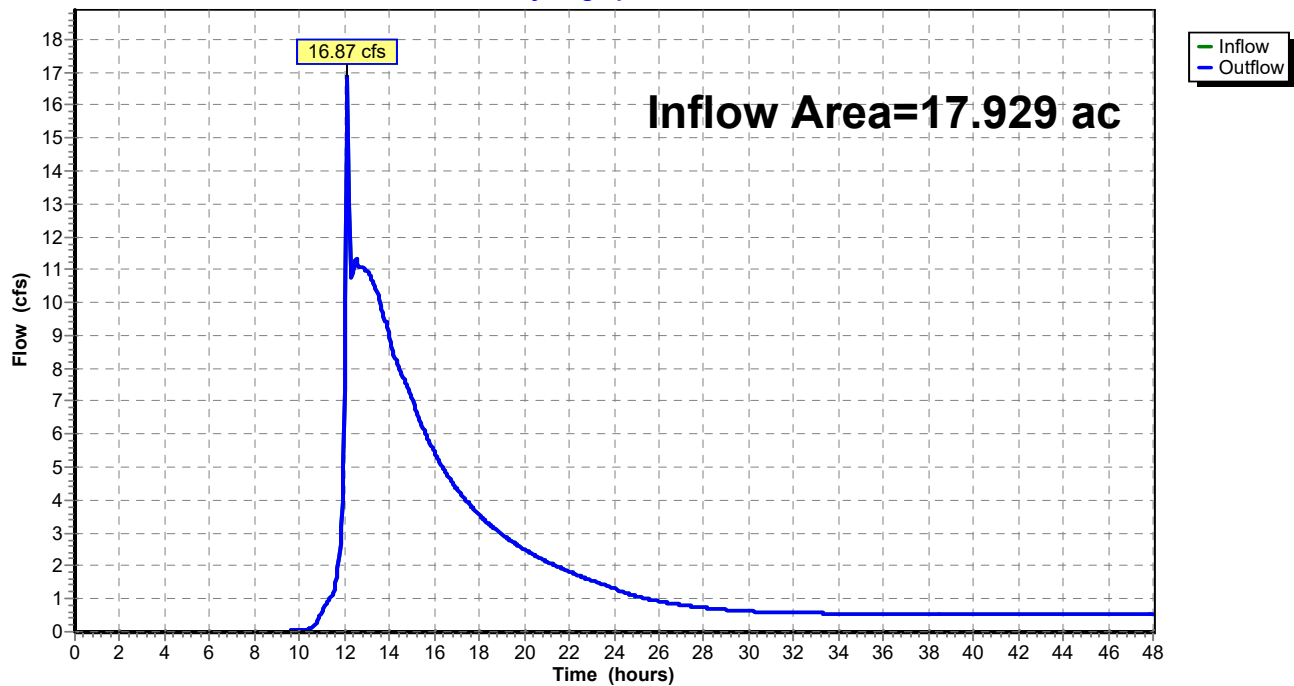
Summary for Reach 1R: Site Total

Inflow Area = 17.929 ac, 57.39% Impervious, Inflow Depth > 4.14" for 100-year event
Inflow = 16.87 cfs @ 12.14 hrs, Volume= 6.192 af
Outflow = 16.87 cfs @ 12.14 hrs, Volume= 6.192 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Reach 1R: Site Total

Hydrograph



Summary for Pond 1P: West Bio-Retention Basin

Inflow Area = 15.368 ac, 66.57% Impervious, Inflow Depth = 5.02" for 100-year event
 Inflow = 103.76 cfs @ 12.19 hrs, Volume= 6.431 af
 Outflow = 9.67 cfs @ 13.01 hrs, Volume= 5.459 af, Atten= 91%, Lag= 49.2 min
 Primary = 1.04 cfs @ 13.01 hrs, Volume= 1.802 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Tertiary = 8.63 cfs @ 13.01 hrs, Volume= 3.657 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Peak Elev= 871.15' @ 13.01 hrs Surf.Area= 104,705 sf Storage= 183,080 cf

Plug-Flow detention time= 487.9 min calculated for 5.453 af (85% of inflow)
 Center-of-Mass det. time= 437.4 min (1,215.3 - 777.9)

Volume	Invert	Avail.Storage	Storage Description
#1	867.00'	418,329 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
867.00	48,125	0.0	0	0
867.01	48,125	30.0	144	144
869.49	48,125	30.0	35,805	35,949
869.50	48,125	100.0	481	36,431
870.00	90,590	100.0	34,679	71,109
871.00	102,200	100.0	96,395	167,504
872.00	118,840	100.0	110,520	278,024
873.00	134,500	100.0	126,670	404,694
873.10	138,200	100.0	13,635	418,329

Device	Routing	Invert	Outlet Devices
#1	Primary	866.90'	8.0" Round Culvert L= 640.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 866.90' / 865.50' S= 0.0022 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.35 sf
#2	Device 1	868.00'	6.0" Round Culvert X 2.00 L= 980.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 868.00' / 867.00' S= 0.0010 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Device 1	871.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	872.10'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir X 2.00 Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64
#5	Tertiary	870.00'	15.0" Round Culvert X 2.00 L= 35.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 870.00' / 869.50' S= 0.0143 '/ Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.23 sf

Primary OutFlow Max=1.04 cfs @ 13.01 hrs HW=871.15' TW=0.00' (Dynamic Tailwater)

└─**1=Culvert** (Barrel Controls 1.04 cfs @ 2.99 fps)

└─**2=Culvert** (Passes < 0.68 cfs potential flow)

└─**3=Orifice/Grate** (Passes < 1.20 cfs potential flow)

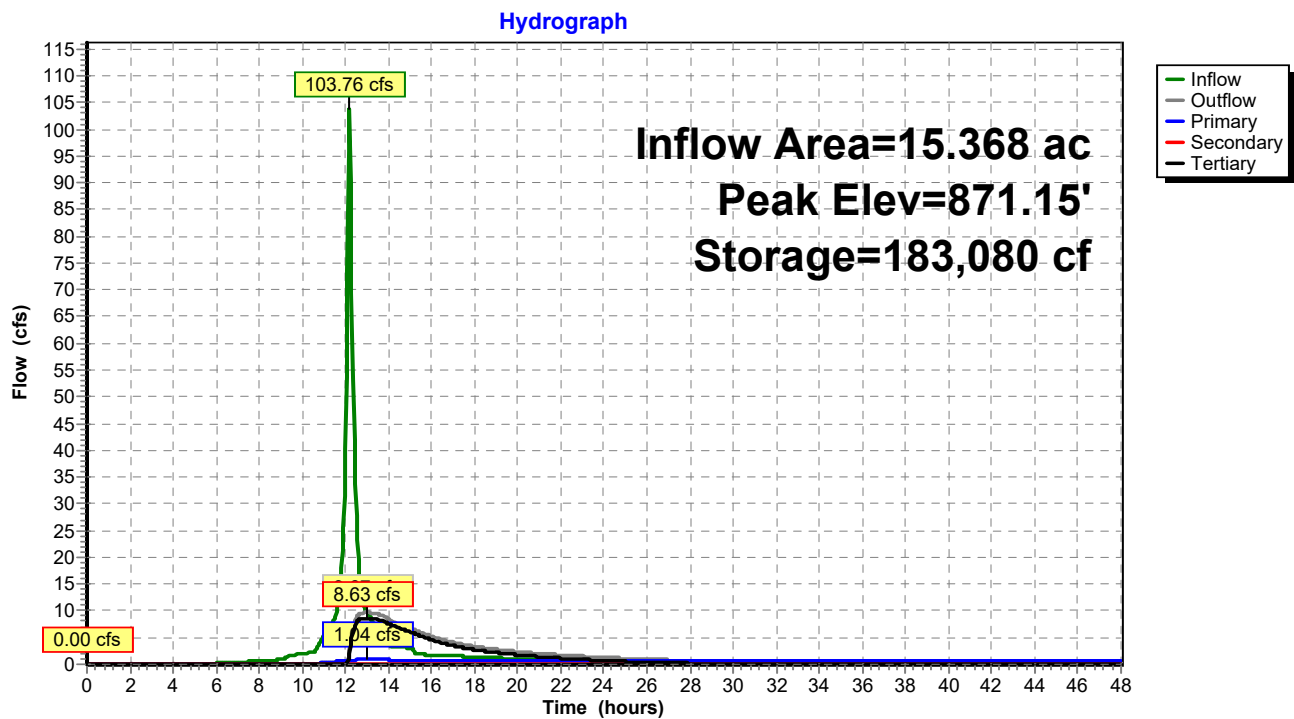
Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=867.00' TW=0.00' (Dynamic Tailwater)

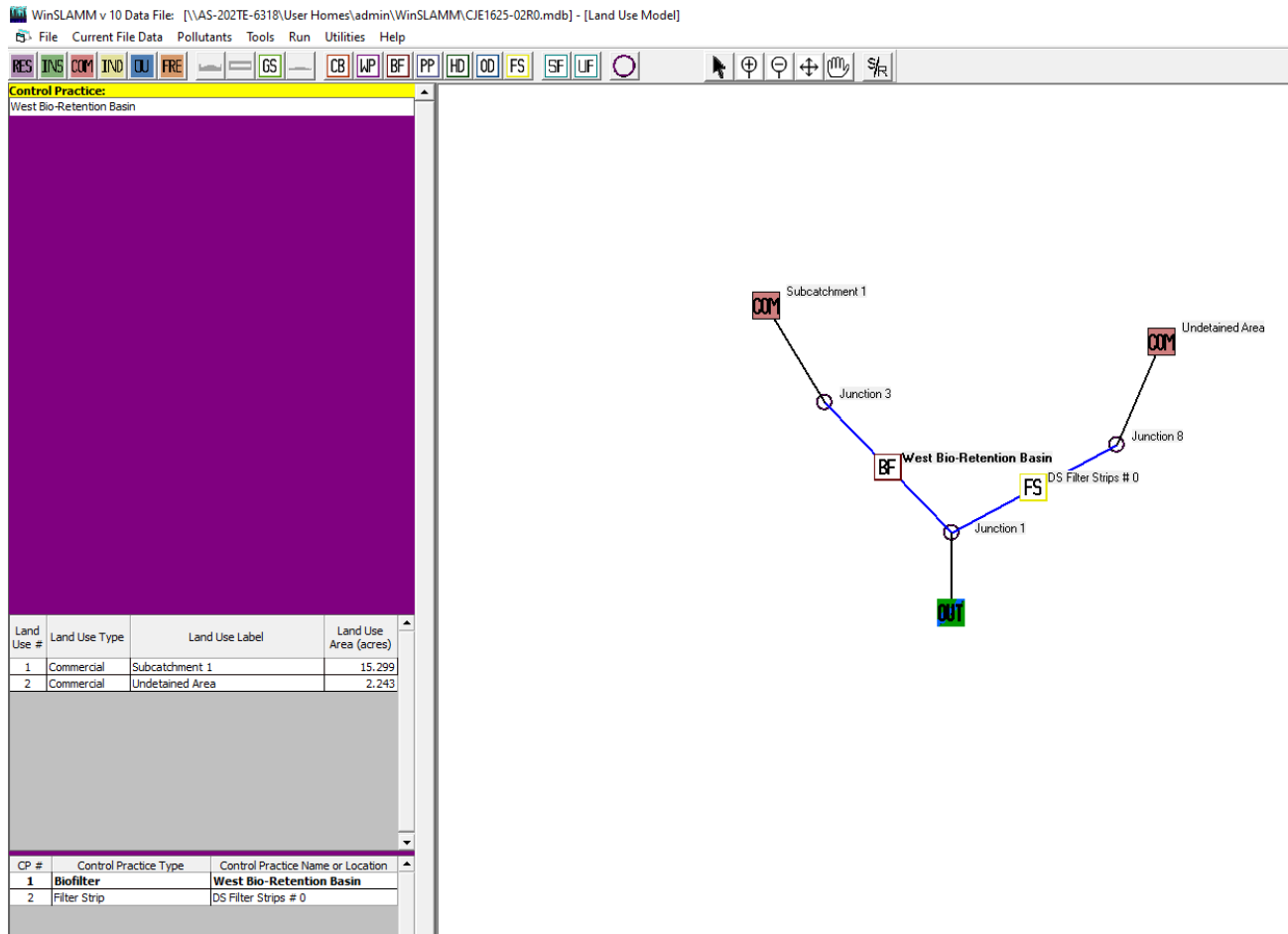
└─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Tertiary OutFlow Max=8.63 cfs @ 13.01 hrs HW=871.15' TW=0.00' (Dynamic Tailwater)

└─**5=Culvert** (Inlet Controls 8.63 cfs @ 3.65 fps)

Pond 1P: West Bio-Retention Basin





CJE1625-02R1 - InputData

Data file name: \\AS-202TE-6318\User Homes\admin\WinSLAMM\CJE1625-02R1.mdb
 WinSLAMM Version 10.2.1
 Rain file name: C:\WinSLAMM Files\Rain Files\WI Milwaukee 69.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_Com Inst Indust Dec06.std
 Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
 Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
 Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
 Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
 Freeway Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust 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_GEO03.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: 01/05/69 Study period ending date: 12/31/69
 Start of Winter Season: 12/06 End of Winter Season: 03/28
 Date: 09-01-2020 Time: 16:38:20
 Site information:

LU# 1 - Commercial: Subcatchment 1 Total area (ac): 15.368
 1 - Roofs 1: 5.012 ac. Flat Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
 13 - Paved Parking 1: 5.219 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
 45 - Large Landscaped Areas 1: 5.137 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Commercial: Undetained Area Total area (ac): 2.561
 25 - Driveways 1: 0.059 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM
 Files\NURP.cpz
 45 - Large Landscaped Areas 1: 2.502 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Biofilter CP# 1 (DS) - West Bio-Retention Basin

1. Top area (square feet) = 135000
 2. Bottom area (square feet) = 48000
 3. Depth (ft): 6.5
 4. Biofilter width (ft) - for Cost Purposes Only: 10
 5. Infiltration rate (in/hr) = 0
 6. Random infiltration rate generation? No
 7. Infiltration rate fraction (side): 1
 8. Infiltration rate fraction (bottom): 1
 9. Depth of biofilter that is rock filled (ft) 1
 10. Porosity of rock filled volume = 0.33
 11. Engineered soil infiltration rate: 3.6
 12. Engineered soil depth (ft) = 2
 13. Engineered soil porosity = 0.27
 14. Percent solids reduction due to flow through engineered soil = 80
 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
 User-Defined Soil Type 1.000
- Biofilter Outlet/Discharge Characteristics:
- Outlet type: Broad Crested Weir
1. Weir crest length (ft): 10
 2. Weir crest width (ft): 10
 3. Height of datum to bottom of weir opening: 5.5
- Outlet type: Surface Discharge Pipe
1. Surface discharge pipe outlet diameter (ft): 1.25
 2. Pipe invert elevation above datum (ft): 3.5
 3. Number of surface pipe outlets: 2
- Outlet type: Drain Tile/Underdrain
1. Underdrain outlet diameter (ft): 0.5

CJE1625-02R1 - InputData

2. Invert elevation above datum (ft): 1
3. Number of underdrain outlets: 2

Control Practice 2: Filter Strip CP# 1 (DS) - DS Filter Strips # 0

Total drainage area (acres)= 2.561
Fraction of drainage area served by filter strips (ac) = 1.00
Total filter strip width (ft) = 3000.0
Effective flow length (ft) = 25
Infiltration rate (in/hr)= 0.020
Typical longitudinal slope (ft.H/ft.V) = 0.250
Typical grass height (in) = 2.0
Swale retardance factor = D
Use stochastic analysis to determine infiltration rate: False
Infiltration rate coefficient of variation (COV) = 0.00
Particle size distribution file name: Not needed - calculated by program
Surface Clogging Load (lbs/sf) = 3.50

CJE1625-02R1 - Output Summary

SLAMM for Windows Version 10.2.1
(c) Copyright Robert Pitt and John Voorhees 2012
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Data file name: \\AS-202TE-6318\User Homes\admin\WinSLAMM\CJE1625-02R0.mdb
Data file description:
Rain file name: C:\WinSLAMM Files\Rain Files\WI Milwaukee 69.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_Com Inst Indust Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GE003.ppd
Start of Winter Season: 12/06 End of Winter Season: 03/28
Model Run Start Date: 01/05/69 Model Run End Date: 12/31/69
Date of run: 09-01-2020 Time of run: 16:37:50
Total Area Modeled (acres): 17.929
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:	849535	-	87.97	4666	-
Outfall Total with Controls:	831911	2.07%	17.25	896.1	80.80%
Annualized Total After Outfall Controls:	843466			908.6	

**CITY OF PEWAUKEE
SEWER & WATER DIVISION
W240 N3065 PEWAUKEE ROAD
PEWAUKEE, WISCONSIN 53072
PHONE: 262-691-0804
FAX: 262-691-5729**

NOTICE OF INTENT TO DISCHARGE WASTEWATER

(Please print. Mail or fax to the address above.)

Note – The discharge shall comply with all conditions of the City Municipal Code Chapter 13.20 found in Title 13 Public Services at: www.cityofbrookfield.com

FORM I – To Be Completed By Commercial / Industrial User

1. Company Name: Tenant TBD
2. Facility Address: Street Approximately N17W25073 Bluemound Rd
City, State, Zip Pewaukee, WI 53072
3. Mailing Address: Street _____
(If Different) City, State, Zip _____
4. Company Representative:
Name _____ Title _____
Phone _____ Fax _____
E-Mail _____
5. Brief description of business:
Speculative warehouse/distribution with office support.

6. Existing number of employees: Full Time 25 Part Time _____
7. Operating: Days/Week 5 Hours/Day 8 # Shifts 1
8. Facility four-digit SIC code 4 2 2 6
Or six-digit NAICS code 4 9 3 1 9 0
9. Reason for filing survey:
a. _____ Change of occupancy
b. x Construction of a new facility /new addition
c. _____ Proposing to discharge from a facility where there is currently no
discharge or adding a new sewer connection
d. _____ Significantly altering the volume or characteristics of an existing discharge
e. _____ Applying for reissuance of an existing discharge permit
f. _____ Per request by municipality – discharge ongoing with no expected changes
g. _____ Update previous information
10. Date when new or altered discharge is expected to begin August 2021

11. Estimated sanitary sewer discharge :

<u>Existing</u>		<u>Proposed</u>
0	Gal / Day process wastewater	0
0	Gal /Day sanitary wastewater	500
0	Gal / Day cooling water	0

Note: A review of quarterly water usage bills may be helpful in assigning flow values.
 Total gal/day (for all uses) = gtr usage (in 1000 gallons) x 1000/# operating days
 in qtr. This daily total is then distributed into estimated gal/day of process, sanitary, and / or
 cooling.

Process wastewater is any discharge other than sanitary, non – contact cooling or boiler
 blowdown water.

Sanitary flow may be estimated as 20 gal/day/employee.

12. Describe process (es) that will result in the discharge of a commercial/ industrial process
 wastewater: n/a

13. List any chemicals / pollutants expected to be present in your discharge:
n/a

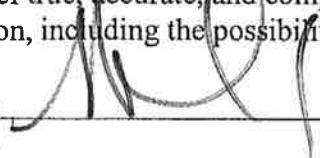
14. Describe any wastewater pretreatment and/or facilities to be used: n/a

15. Is there any usage of toxic organic compounds at the facility?
 (solvents, flammable compounds, etc.) Yes _____ No x

16. How toxic organic compounds disposed of?
☐ Discharge to sanitary sewer
☐ Hauled to treatment / recycling facility
☐ No waste (used in process or sparingly on rags)
☐ Other, specify: _____

17. Comments: _____

I Certify under penalty of law that this document and all attachments were prepared under my direction or
 supervision in accordance with a system designed to assure that qualified personnel properly gather and
 evaluate the information submitted. Based on my inquiry of the person or persons who manage the system
 or those persons directly responsible for gathering the information, the information submitted is to the best
 of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for
 submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Representative  Date 9/4/2020