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VILLAGE OF GERMANTOWN
N112 W17001 MEQUON ROAD, GERMANTOWN, WI 53022

MEETING:	**PLAN COMMISSION**
DATE AND TIME:	**MONDAY, December 13, 2021 6:30 p.m.**
LOCATION:	**Germantown Village Hall Board Room, N112 W17001 Mequon Road**

NOTICE: Pursuant to the recommendations of the Centers for Disease Control and Prevention concerning the prevention of COVID-19 infections, any member of the body and/or citizen may also attend the meeting virtually through the WebEx platform, Meeting # 2551 036 3225 Password: p9Pekmduf27 which can be accessed by phone at 408-418-9388 or by logging on https://villageofgermantown.my.webex.com/villageofgermantown.my/j.php?MTID=m473cf814b2c66b95b91daa81dfd0388c Citizens not wishing to attend the meeting personally or virtually may submit written comments by sending an email to comments@village.germantown.wi.us by 4 p.m. on the day of the meeting so that it can be provided to the members of the body for their consideration.

I. **CALL TO ORDER** This meeting has been given public notice in accordance with Wisconsin Statutes, Section 19.83 and 19.84 in such form that will apprise the general public and news media of subject matter that is intended for discussion and action.

II. **ROLL CALL**

III. **PUBLIC INPUT/PUBLIC APPEARANCE** Please be advised per §19.84(2) that information will be received from the public, however, no action will be taken at this time.

IV. **APPROVAL OF MINUTES** November 8, 2021 and November 29, 2021

V. **NEW BUSINESS**

A. Odyssey Hotel Group, LLC, Agent and Property Owner of Holiday Inn Express - W177 N9675 Riversbend Lane. Amendment to: (1) the Nevaiser Planned Development District (PDD) Resolution #19-16 to amend the General Development Plan; and (2) the Riversbend Planned Development District (PDD) Resolution #18-16 to amend the General Development Plan and Site Plan Review for exterior building renovations. **[PUBLIC HEARING & ACTION; APPLICANT REQUEST TO TABLE UNTIL JANUARY 10, 2022]**

B. Village of Germantown Floodplain Zoning Ordinance - Amendment to Section 23 of the Germantown Municipal Code and includes the adoption of revised Flood Insurance Rate Maps(FIRM's) and revised Flood Insurance Study (FIS). **[PUBLIC HEARING & ACTION]**

C. TR Capital, LLC, Agent and Property Owner of W219 N11588 Appleton Avenue. Site Plan Review for re-development of a 3.65-acre commercial self-storage facility **[ACTION]**

D. Robert Zignego, Property Owner of Lot 38 in Harvest Hills Subdivision and Michael & Pamela Madrzak, Property Owners of N116 W13444 Elm Lane. Applications for: (1) a Conditional Use Permit (CUP) to allow grading and filling on portions of a 25' wetland setback; and (2) a 3-Lot Certified Survey Map (CSM). **[ACTION]**

E. MSI General Corporation, Agent for DJN Family LTD Partnership, Property Owner of Enercon Industries - N120 W19349 Freistadt Road**.** Site Plan Review for a 52,955 SQFT Building Addition. **[ACTION]**

F. Village of Germantown - Review and Adoption of the Village's 2021-2026 Comprehensive Outdoor Recreation Plan (CORP). **[ACTION]**

VI. **ANNOUNCEMENTS**

VII. **ADJOURNMENT**

UPON REASONABLE NOTICE, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request this service please contact the Village Clerk at (262)250-4740 at least 2 days prior to the meeting. Notice is given that a majority of the Village Board may attend this meeting to gather information about an item over which they have decision making responsibility. This may constitute a meeting of the Village Board per State ex rel. Badke v. Greendale Village Board, even though the Village Board will not take formal action at this meeting.

PLAN COMMISSION MINUTES
November 8, 2021

CALL TO ORDER: Chairman Wolter called the meeting to order at 6:33 pm.

ROLL CALL: Chairman Dean Wolter, Trustee Representative David Baum, Commissioners Matt Kimmler, Peter Nilles, and Tony Laszewski were in attendance. Commissioner Bill Shadid and Bob Williams were absent and excused. Also present were Community Development Director Jeff Retzlaff, Associate Planner Emily Zandt and Planning Assistant Lori Johnson.

PUBLIC INPUT:
None

APPROVAL OF MINUTES:
MOTION Baum second Nilles to Approve the Minutes from October 25, 2021.
MOTION carried unanimously.

Mark and Jennifer Reinert-W168 N12184 Century Lane and Jim Birmily-W168 N12196 Century Lane. The property owners are requesting approval of a Land Use Plan map amendment, rezoning application and 2-lot certified survey map to divide the existing 4.9-acre residential property containing 2 existing single-family houses. Director Retzlaff summarized the proposal.

Public Hearing opened at 6:42 pm.
Public Hearing closed at 6:42

MOTION Baum second Nilles to approve the proposed 2020 Land Use Plan map amendment to change the 4.9-acre parcel from Agricultural/Conservation Residential to Rural Residential as proposed.
MOTION carried unanimously.

MOTION Baum second Nilles to approve Rezoning the property from the Rs-1:Single-Family District to the Rs-2: Single-Family District with a Planned Development District (PDD) overlay containing the following changes to the underlying Rs-2 District requirements as set forth in a formal conditions & restrictions resolution for the PDD:

1. ***Reduce the front/street yard building setback to 45 feet or the existing setback, whichever is greater (applies to the existing dwellings only).***
2. ***Reduce the side yard building setback to the existing setback or 15 feet, whichever is greater (applies to the existing dwellings only).***
3. ***Reduce the minimum lot width/frontage from 220 feet to the existing lot width/frontage.***
4. ***Revise the rear yard building setback to 25 feet outside of the delineated wetland boundary or 35 feet, whichever is greater.***

MOTION carried unanimously.

MOTION Baum second Nilles to approve the proposed 2-lot Certified Survey Map (CSM) to divide the 4.9-acre parcel jointly owned by Mark & Jennifer Reinert and Jim Birmily located on Century Lane subject to the following conditions:

1. ***All technical issues and plan corrections identified by the Public Works Department surveyor (see letter dated November 4, 2021) shall be addressed and reflected in a revised CSM submitted to the Village prior to Village Board action.***
2. ***The CSM shall be revised to include the underlying Rs-2 District setback requirements or as established in the PDD conditions and restrictions resolution.***

MOTION carried unanimously.

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Matthew & Amy Seban for TLC Acres - W210 N10738 Appleton Avenue. Conditional Use Permit #08-19 requires that the CUP be reviewed by the Plan Commission one year after approval and include a public hearing. The purpose for this review is to receive a status report from the owner regarding the activities authorized under the CUP and compliance with the conditions upon which the CUP was granted for the 53.4-acre TLC Acres property. Director Retzlaff summarized the proposal. He indicated 3 complaints have been received related to mud tracking onto Appleton Avenue and have been addressed by the owner sweeping the roads and recently the construction of an asphalt driveway. He said no action is required or recommended by staff regarding the conditional use permit.

Matt Seban commented on his business. He stated he received 3 documented complaints in the 2.5 years he's had the property. He indicated it has become clear that the issues his neighbors have are with the construction of tier #2 and not the landscaping business. He said the completion of tier 2 has been delayed and he does not know when it will be finished. He indicated he has worked hard to reduce the neighbor's concerns by installing white noise backup alarms on his equipment, instructing the truck drivers to use vibrators and slam brakes only when necessary. He also paved the driveway and has maintained open communication with his neighbors.

Discussion followed. Trustee Baum said he's received complaints regarding noise saying that no one can sit outside on their porch in the evenings or weekends without hearing banging and beeping from trucks. Chairman Wolter asked Director Retzlaff if the public hearing is on the CUP that outlines the hours for the landscaping business and storing of vehicles and not for the fill or creation of the tiers. Director Retzlaff explained that filling and grading is allowed on a property with an erosion control permit if it is required.

Public Hearing opened 7:05 pm.

- Chairman Wolter read comments from Sara Bojarski, N105 W21151 Oak Lane - concerns with noise, banging of metal from dump trucks unloading, disruptive vibrations, noise pollution, mud, and a nuisance to the community, rocks on road, rescind the CUP for TLC Landscape.
- Chairman Wolter read comments given to him from Trustee Phil Hudson received from Bobby Siewert, N105 W21005 Oak Lane - still not a good neighbor to residents on Park Hill and Oak Lane, truck noise, street is dirty.
- Linda Arnold, W210 N10779 Appleton Avenue, did not feel she also needed to complain about the same issues as her neighbors, doesn't know if mud and dirt issue will be resolved after the asphalt driveway was put in, look forward to having good relations with TLC.
- Bill Paplham, W209 N10589 Oak Lane, has very little complaints, will live with the trucking until its finished, he's done a great deal with the property put in grass and trees and should be allowed to continue.
- Tanya Kapp, W210 N10735 Appleton Avenue, timeline has long passed, traffic is up, deliveries, numerous accidents, mailboxes knocked over, dust, trucks coming in before the sun comes up, traffic warning signs needed at top of the hill.
- Sharon Gleixner, W210 N10743 Appleton Avenue, her mailbox was hit 3 times, dangerous area with all the trucks coming and going, crazy hours, noise is loud with windows shut, workers are there as early as 5 am, dust, dirt, feels like a construction company.
- Tom Steinbach, W204 N10609 Hilltop Drive, said Mr. Seban has addressed his concerns, understands land owners have a right to do things on their property, he wants the project completed, there should be a way to measure noise, timeframe for completion needed, put controls on vibration issue and slamming tailgates.

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- Dennis Myers, Trustee, spoke to Washington County regarding Appleton Avenue. State DOT went out and put signs up letting people know coming from north to south of upcoming traffic issues.

Public Hearing closed 7:37 pm.

Discussion followed. Director Retzlaff questioned if the dumping or truck noise is part of the landscaping operation or the tier construction, and will the noise and dust go away when the tier is completed. Clearly from the comments made, the trucks associated with the landscape business, are creating a dusty situation for the neighborhood and is related to the operations permitted under the conditional use permit that has specific days and hours of operation. Discussion continued regarding tier 2. Mr. Seban said he is not that far from tier 2 being finished but does not know how long that will take. He said his engineering firm has finished the topo and calcs for the loads, but he did not have that information with him for the meeting. Trustee Baum suggested that he provide that information to Director Retzlaff to determine a time frame of how long it will take to complete the project. Discussion continued regarding putting time limitations when trucks could dump but Mr. Seban said the project could take longer with those conditions. He said he doesn't haul any trucks on Sundays. Trustee Baum stated residents would be happy if dumping was limited to certain times. Mr. Seban said the neighbors have his personal cell phone number to reach him with complaints or concerns.

Director Retzlaff stated the Village Engineer was at the site to follow up and found the site was in compliance with the erosion control permit. He indicated the topographic survey could calculate how many more loads are required to finish, but a fixed number of loads are not brought in every day. Mr. Seban commented traffic has gone down significantly and that he hasn't had 200 trucks in the last month. Chairman Wolter asked if the Plan Commission could limit the number of trucks that can dump or based on the zoning is it a right of something that is allowed and could be contested. Director Retzlaff said he has reached out to the Village Attorney and asked the question can the hours be regulated beyond the standard hours in the code dealing with noise, essentially 10 pm to 6 am under a nuisance action, but he has not heard back. If a nuisance complaint is filed and investigated and is deemed to be creating a nuisance for the neighborhood, we would do something to mitigate the nuisance. But we have not heard complaints regarding noise, only the mud tracking. He encouraged residents to file a complaint.

Chairman Wolter explained the CUP deals with the businesses that are operated on the property, the fill is his right as a land owner based on the zoning. He asked the residents if their issues were caused by the fill or the business. The main complaints he's received have been noise of the dump trucks, dirt on the highway, banging and vibration, and hours of operation of the dumping which seems to be mostly related to the fill. So what can we legally do to help limit that but then knowing that limiting the time to dump will lengthen the time to fill the property.

Attorney Sajdak commented that the lack of complaints puts us in a tough spot. He said we could as part of a nuisance type action look to have limits on the numbers or hours, but it would be hard to establish there is nuisance because we don't have the complaints. Trustee Baum suggested Mr. Seban put a plan together to handle the complaints that will be coming forward.

Director Retzlaff asked the Plan Commission for feedback on the visual screening as listed in Condition #5 of the CUP. Trustee Baum stated Plan Commission wanted a fence, a wall, a berm or landscaping and it was not their intent for the owner to use a sea-can as a buffer. Mr. Seban feels

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the sea-can looks better than a cedar fence adding he had planted 12 to 15 spruce trees along Appleton Avenue. The container is meant to block the view on the other side of the building. He understands it will still need to be approved. Director Retzlaff said the berm and trees along the north property line are satisfactory and the view from the west is hidden by the building. If standing on Appleton Avenue you could not tell there was anything behind the shipping container and it looks like the building. It is the view from the south that that is not buffered. Trustee Baum did not like that you can see the equipment and trucks. Mr. Seban stated he will commit to working with Director Retzlaff to screen it the way the Village wants. Trustee Baum stated he can accept using the shipping container if it is the same material as the building.

Chairman Wolter advised Mr. Seban the message was loud and clear tonight and whatever he can do to remedy the complaints would be appreciated from the Village as well as the neighbors. He added that people want to know about when the project will be completed and whatever he could do to provide that information would be appreciated. He said he can understand the aggravation and frustration that it causes the people that surrounding the property and he appreciated everyone coming out and for those that contacted us with their concerns as well as for Mr. Seban coming here and addressing each concern as it was brought to him.

No action was taken.

MOTION Baum second Laszewski to go to Item E on the agenda.
MOTION carried unanimously.

Jacob & Julie Schneider - N115 W20265 Woodland Drive. The property owners are seeking approval to construct a privacy fence in a front yard at a height of 6' on their residential lot.

MOTION Baum second Nilles to Approve the proposed installation of a fence 6' in height along the Woodland Drive front/street yard for the residential lot located at N115 W20265 Woodland Drive.
MOTION carried unanimously.

MOTION Baum second Laszewski to go back to Item C on the agenda
MOTION carried unanimously.

Robert Zignego - Lot 38 Harvest Hills Subdivision & Mike & Pamela Madrzak - N116 W13444 Elm Lane. The property owners are seeking approval of a 3-lot Certified Survey Map, Rezoning from Rs-3 single family residential to Rs-1 single family residential and Rs-2 single family residential and a Conditional Use Permit to allow development within the required 25' wetland setback for the property located north of the Elm Lane and Forest Drive intersection. Associate Planner Zandt summarized the proposal.

Public Hearing opened at 8:37 pm

- Chairman Wolter read a comment from Carrie Boehlke, she was concerned with water drainage, traffic on Elm Lane, the driveway is too big for one home.
- David Yurk, Surveyor-Payne and Dolan Inc., agent for Robert Zignego, questioned why staff is recommending Rs-1 Zoning because the owner wants to keep the woods on his lot. Associate Planner Zandt explained the Rs-1 zoning is better aligned with the zoning districts, allows horses as a permitted

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use and larger accessory structures. She stated access to the buildable area of the lots without going through wetland and the 25-foot setback is preferred.

- Bruce Bernarde, N120 W13645 Freistadt Road, concerned about water, wetlands, the size of the driveway installed, future division of property
- Robert Zignego, N120 W17520 Freistadt Road, explained the Rs-2 lot line follows the tree line and the natural shape of the land. He said there aren't a lot of buildable sites on the property and changing the driveway gives up land for a 4.5-acre lot. He said there are no more wetlands on the property to cross and explained the larger driveway is to provide the fire department better access to the home sites.
- Marcus Stern, W132 N11550 Forest Drive, concerned that land may be devalued because of a half hazard development, the driveway is already in, and the wetlands were destroyed.
- Bob Aiken, N119 W17780 Cove Lane, thinks what the Zignego's have in mind will be very nice for their home, concerned with disturbing the wetlands and the driveway culvert pipe should have flared ends.
- David Yurk, State Statute allows one more lot, but needs approval from the Village.
- Bruce Bernarde, N120 W13645 Freistadt Road, does not have a problem with building a house, he has a problem with the water and the proper permit wasn't received to put the driveway in.
- Robert Zignego said he has a permit with the DNR and Army Corps of Engineers and a culvert permit from the Village. He thought that's all he needed.
- Marcus Stern, W132 N11550 Forest Drive, is there some recourse because Zignego didn't apply for a permit.

Public Hearing closed 9:08 pm.

Discussion followed. Director Retzlaff explained Mr. Zignego applied for and obtained a culvert permit for work in the right of way just off the edge of Elm Lane. Under the subdivision regulations for a private shared driveway for up to three lots, the proposed 30-foot ingress egress easement is consistent with what the code requires. However the driveway was constructed before consulting with the Village about anything north of the culvert in the right-of-way. He obtained permits from the DNR to fill small portions of the wetland but that doesn't mean the Village can't issue its own permit and does require a conditional use permit for encroachment into a setback area and make sure the wetland is protected. There was an assumption the amount of wetland was limited to what was shown, but there may be additional driveway wetland crossing further north that has not been accounted for in the conditional use permit and therefore it is incomplete, will need to be amended and action tabled.

Trustee Baum was comfortable with the width of the driveway but said a revised driveway survey showing the other wetland crossings is needed. He does not see the property becoming a subdivision because there is limited area where structures can be located. Director Retzlaff explained this parcel had a number of proposals to divide it, but the developer decided to create one single lot at that time and deal with it the future. At that time the Village thoughts were if the parcel was divided it should be with as few lots as possible because of the wetlands and other features. This plan is more consistent with what staff preferred. The change to the zoning will prohibit division of the property any further without coming back for a public hearing and rezoning and essentially prohibits any other division of the lots in the future. Mr. Zignego stated he has no intention of dividing the property any further.

MOTION Baum second Kimmler to Approve the Rezoning of the 37.18-acre property from Rs-2:Single Family Residential and Rs-3:Single Family Residential to A-2:Agricultural to Rs-1: Single-Family Residential, as proposed by Village Staff:

Lot 1 - A-2: Agricultural

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Lot 2 - Rs-1: Single-family Residential
Lot 3 - Rs-1: Single-family Residential
MOTION carried 4-1 (Nilles)

MOTION Baum second Kimmler to Approve the proposed 3-lot Certified Survey Map (CSM) for the Zignego/Madrzak property to create two buildable lots and increase the acreage of the existing single-family lot totaling 37.18 acres into three parcels located north of Elm Lane subject to the following conditions:

1. ***All technical issues and plan corrections identified by the Village Public Works Director and consultant engineer in a memo dated November 4, 2021 shall be addressed and reflected in a revised CSM submitted and approved by the Public Works Department prior to taking the application to the Village Board for final action.***
2. ***Proposed Lot 2 shall be increased in size to meet the 5-acre minimum in the Rs-1 Single-family Residential District.***
3. ~~***The proposed lots shall be reconfigured to allow access to the buildable areas on Lots 1 and 2 without additional encroachment within the required 25' setback from the delineated wetlands.***~~

Commissioner Nilles said he could not support approving the CSM until he sees the revised CSM with the adjusted lot lines.

MOTION to Amend Kimmler second Nilles to Postpone action until the CSM has been revised.
MOTION to Amend carried.
MOTION to Approve as Amended to Postpone carried.

Director Retzlaff stated the CUP addresses the impact to the wetland setback area, but because the driveway now goes through more than what was originally thought, it will need to be amended. He requested a plat of survey or something showing where the driveway is.

MOTION Baum second Nilles to Postpone action on the Conditional Use Permit until there are drawings that show the wetland crossings.
MOTION to Postpone carried unanimously.

TR Capital LLC - W219 N11588 Appleton Avenue. The property owner is seeking approval of site development and building plans for three commercial self-storage buildings and outside storage on the 3.65-acre property. Associate Planner Zandt summarized the proposal. Discussion followed regarding the condition to revise the setback to meet the recommended 15 feet from the north property line in order to preserve the tree line.

Jon Then, TR Capital, said moving the building to meet the 15-foot setback will shrink it. Eric Roberts, TR Capital, said there is nothing along the north tree line worth saving and that they plan to put in a new berm with trees. He added that the abutting neighbor, Richard Ehrlich, W216 N11718 Appleton Avenue wants the trees removed because they are mostly dead. He asked that condition #3 be removed. Director Retzlaff said it was unfortunate there was nothing left in the tree line worth saving adding staff feels the landscaping needs to be enhanced there. He does not believe the amount and level of enhancement can be put within 10 feet. A revised landscape plan to enhance the buffer on the north needs to be submitted for review. Discussion continued. Director Retzlaff stated the zoning code sets minimum standards for setbacks and requires site plan approval where

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other things are considered based on circumstances including type of landscaping. He explained the area to the north is a farm field now, but the 2020 Land Use Plan shows this area suitable for residential development. The possible future development of the land to the north is what is driving staffs concern and requirement for the 15-foot setback to provide an enhanced landscape buffer that is consistent with the Village arborist's recommendation. Discussion continued.

Associate Planner Zandt stated the Village arborist feels some trees along the north property line are worth saving and that is why there is a condition to send an arborist to the site to determine what can and should be saved. Mr. Roberts stated changing the north setback to 15 feet changes everything for them.

Trustee Baum questioned what the Plan Commission was approving because there were different plans presented. He had concerns with putting evergreen trees in a 10-foot area and was also concerned the bottom panel on the building would rust out because there is no wainscotting on the building. He said the berm drains back into the building and will be problematic for the building. He agrees with staff's recommendation that more space is needed along the north and wants to see the right drawings, right elevations, site plans with the back ends, corrected drawings and corrected landscape plan.

Chairman Wolter was not opposed to the 10-foot setback. He appreciates the owner redoing the property to make it look better and understands the struggles with the brownfields. He is more forgiving on the north property line and establishing a relationship with the adjacent property owner regarding the berm and then presenting something to Planning. He also understands Director Retzlaff's concerns regarding the future land use plan, but if the developer can show a landscaping plan that does some of the things he is looking to accomplish there and still have the site plan with the 10-foot setback, he is willing to look at it in consideration of what the applicant is doing to the property. He said it is hard to approve the proposal without seeing it and needs more clarity in the picture.

Eric Roberts said they want to grade the property before the frost hits and finish cleaning it up. Director Retzlaff stated cleaning and grubbing the site could continue, but a grading plan is required. Chairman Wolter said the landscape plan does not need a berm. It needs to show how the view will be blocked and provide the type of plantings that will be used. Director Retzlaff explained any construction related items, landscaping, berming and filling would need to be shown on the site plan and the adjoining property. Associate Planner Zandt said the developer could apply for a permit to demolish the buildings, but a site and grading plan is required before grading can be done.

MOTION Baum second Nilles to Postpone until appropriate drawings can be brought to the next Plan Commission meeting.

Chairman Wolter stated he appreciates what the property owner is doing to the site.
MOTION carried unanimously.

Blaeser Construction, Agent for Wendy's Restaurant - N96 W17600 County Line Road. The property owner has submitted building plans for site and building renovations and replacement signage for the existing restaurant. Director Retzlaff summarized the proposal. Discussion followed on the building design and renovations. Trustee Baum commented the proposed renovations do not do anything to enhance or improve the building.

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MOTION Baum second Laszewski to Approve the site and building plans for the proposed exterior building remodeling renovations for the Wendy's restaurant located at N96 W17600 County Line Road subject to the following 4 conditions:

1. ***This approval is subject to all the conditions and requirements set forth herein and adopted by the Plan Commission. Approval is granted for the architectural plans dated September 14, 2021, unless superseded by subsequent plan sheets approved by the Village Planner or pursuant to revisions required herein and/or by the Plan Commission.***
2. ***In the event there is a need to replace the existing HVAC mechanicals as part of this remodeling project or in the future, a separate plan shall be submitted for review and the possible need for visual screening from County Line Road and Rivercrest Drive.***
3. ***The existing sample manhole serving the Wendy's restaurant needs to be reconstructed to eliminate the deck (per Village standards). Reconstruction shall include proper cone size, chimney replacement, seal installation, and replacement of all iron per current Village specifications. The current Village specifications shall be documented in a revised plan sheet added to the application. Contact Tim Zimmerman, Wastewater Utility Superintendent, for details and specifications.***
4. ***State approved plans and a $20,000 occupancy bond are required by the Building Inspection Department as part of the building permit application.***

MOTION carried 4-1 (Baum)

MOTION Baum second Nilles to Approve the proposed pylon sign face replacement for the Wendy's restaurant located at N96 W17600 County Line Road subject to the following condition:

1. ***An electrical permit shall be obtained from Inspection Services prior to installation of any/all electrical components.***

MOTION carried 4-1 (Baum).

Michaels Signs, agent for ZPG Development LLC, property owner - W210 N13150 Gateway Crossing. The request is for approval of a new ground sign for the multi-tenant building. Associate Planner Zandt stated the proposed sign is very similar to the Zilber 2 and Zilber 3 signs approved in 2018.

MOTION Baum second Laszewski to Approve the proposed ground sign for ZPG Development property located at N210 W14150 Gateway Crossing subject to the following conditions:

1. ***The street address coordinates on the base of the sign shall be a minimum of 5 inches in size. Revised plans shall be submitted to Planning Staff prior to installation***.

MOTION carried unanimously.

RJB Contracting, agent for Walmart - W190 N9855 Appleton Avenue - Application for exterior remodeling of the existing Walmart retail store. Director Retzlaff explained the remodeling is the addition of more blue paint on the entry features from what was previously approved in 2017. A rep for Walmart asked for forgiveness saying it was a misstep on their part. Trustee Baum said it was too much blue that contradicts with the overall scheme of the building. Audrey Freeman, Walmart, said it was a miscommunication not getting a permit for the repaint. She commented that this is a project for all the Walmart stores to be consistent with the rebranding. Commissioner Kimmler and Laszewski

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also did not like blue. Amy Miles, Walmart, stated this is a standardized look for Walmart. Trustee Baum said he fully understands an accent color to pop out the entrances and features but this color has no basis with the context of the building and looks like a mistake.

Chairman Wolter asked what would appear more acceptable to the board. Trustee Baum stated an earth tone color that will match the existing color pallet would be more acceptable. Chairman Wolter commented that they can go back to they way it was previously approved.
MOTION Baum second Nilles to Approve the site and building plans for the proposed remodeling of the Walmart retail store located at W190 N9855 Appleton Avenue.

MOTION Failed (3-2 Baum, Laszewski, Kimmler)

Director Retzlaff explained the property owner could go back to what was previously approved without coming back to Plan Commission or they could propose something else.

Community Development Department - 2050 Land Use Plan Update and Discussion
Director Retzlaff asked Plan Commission members of their availability for a special meeting in November. It was decided the next 2050 Land Use Plan discussion meeting will be held November 29th.

ANNOUNCEMENTS Chairman Wolter said the Christmas Parade and candy cane run are this weekend. The festivities will be held at Firemen's Park new pavilion. Also the Veterans Day memorial event will be Sunday at 11:00 am at the Germantown War Memorial.

ADJOURNMENT: There being no further business, the meeting was adjourned at 10:48 pm.

Respectfully submitted,

Lori Johnson, Planning Assistant

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PLAN COMMISSION MINUTES
November 29, 2021

CALL TO ORDER: Planning Assistant Lori Johnson called the meeting to order at 6:30 pm.

ROLL CALL: Trustee Representative David Baum, Commissioners Tony Laszewski, Matt Kimmler, Peter Nilles, Bob Williams and Bill Shadid were in attendance. Chairman Dean Wolter was absent and excused. Also present were Community Development Director Jeff Retzlaff, Associate Planner Emily Zandt and Planning Assistant Lori Johnson.

MOTION Nilles second Laszewski to Appoint Trustee Baum as Chairman Pro-Tem. MOTION carried unanimously.

PUBLIC INPUT:
Trustee Jan Miller asked how residents were notified of the 2050 Plan Discussion and said that putting a notice on the Village EMC to get the word out for the public to participate. She said the 2050 plan is important and is concerned because the Plan shows 2 percent recreational use and there is no indication for expansion in the plan. She said Germantown needs to acquire land now for parks and hopes that the 2050 plan is reviewed and checks the inventory of parkland. The Plan Commission should take the parkland acquisition seriously.

Gil Standridge, Park and Recreation Director, reviewed statistics from the 2020 Community Survey where the top park amenities desired by the public are trails, concessions, beer garden, outdoor aquatic center, and a canoe and kayak launch. At the Park Planning open house meeting 64 percent of respondents said Germantown did not have enough outdoor recreation land and 86 percent said Germantown did not have enough passive recreation land. He is hoping to use some impact fees to conduct a study to look at expanding our trails. There is a strong desire within the community that we pursue building outdoor spaces and create more active and passive parkland.

Community Development Department - 2050 Land Use Plan Update and Discussion - Director Retzlaff explained that tonight's meeting is a continuing Plan Commission workshop to discuss specific components, currently the Neighborhood, District and Corridor component of the overall 2050 Plan. It is not a presentation of a specific recommended plan at this time. He said Gil Standridge, Park & Recreation Director, will be at the December 13th meeting to present the CORP Plan (Community Outdoor Recreation Plan) to Plan Commission. Wisconsin Statutes require the Plan Commission to approve and adopt any and all components of the master plan for the Village.

He stated at the last meeting on October 25th he talked about some assembly housing related bills under consideration adding that the status has not changed at this point. He indicated PC talked about the CORP Plan and reviewed several neighborhoods and districts in the 2050 Plan. Discussion followed on the following Corridors:

- Victory Center Corridor: Director Retzlaff reviewed the 2050 Plan for this area. Everett Frenz, property owner of land in this corridor presented a plan for future development for this area. He said the development would include a K-4 school, community center building, fieldhouse. The plan includes townhomes, family apartment buildings, 4 family ranch homes, 8 family buildings and senior housing. The development will have bike and walking paths. Trustee Baum asked if this was the best use for the area. Commissioner Laszewski said he could see this area as industrial use, but not commercial and that residential use makes sense, but the density seems like a lot of buildings.

Discussion continued. Trustee Baum said he sees this area as transitioning from residential to industrial and was not in favor of what was presented. He added the location is distant to the central

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business area and that residential use would be more of a challenge for the area. Commissioner Shadid stated he didn't know if the development would fit the area but would like to see more on the plan. Discussion ensued on industrial use versus residential along the Hwy. 145 area. Trustee Baum commented if the right plan with the right components came forward it could work, but feels a residential type use would be a challenge. Director Retzlaff explained this district is very flexible for development and shows a matrix of uses. He asked if a statement should be included in the 2050 Plan pertaining to development on one side of the road or another. Trustee Baum said he would support adding something in the 2050 Plan that would support residential development west of Hwy. 145 and commercial to the east. He sees smaller industrial type buildings with light industrial would flourish over residential use. Commissioner Kimmler added that the area is diverse and if a good plan comes forward we should review it. He could also see a single-family housing subdivision in the area and did not feel a dividing line was needed. Discussion continued.

- Omega Hills District: Most suitable for industrial with no residential.
- Lannon-Mequon Road Corridor: Mixed use area with possible high density east of Virginia Highlands.
- County Line Road District: Possible park at former Riversbend golf course; add desirable parkland to Plan.
- Willow Creek Business Park District: Add parcel on Appleton Avenue as industrial or commercial use. Take residential lots along Lannon Road out of district and add to Willow Creek-Weidenbach or Amy Belle neighborhood. Readjust Lannon Mequon Road Corridor. OK with residential or higher density residential along County Line west of Electric Company
- Germantown Business Park District: No changes
- Germantown Industrial Park District: No change to boundary or uses.

Director Retzlaff explained he will make changes to the NDC maps as discussed and will bring back a final draft as part of the next community meeting.

This meeting was for discussion only. No action was taken.

ANNOUNCEMENTS None

ADJOURNMENT: There being no further business, the meeting was adjourned at 10:03 pm.

Respectfully submitted,

Lori Johnson, Planning Assistant

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PLANNED DEVELOPMENT DISTRICT (PDD) AMENDMENT & SITE PLAN REVIEW

12/13/21 Plan Commission Meeting

Odyssey Hotels / Riversbend Country Club Inc.

Village Planner Report **Germantown, Wisconsin**

Summary

Rachit Dhingra, agent for Odyssey Hotels and Riversbend Country Club Inc., property owners, has submitted a proposal to amend the Neviaser Planned Development (PDD) conditions and restrictions and site development and building plans for an expansion of the hotel property located at W177 N9675 Riversbend Lane.

Location: W177 N9675 Riversbend Lane

Agent/
Property Owner: Rachit Dhingra
Odyssey Hotel Group
1808 N. Wells Street
Chicago, IL

Zoning: B-5: Highway Business/PDD (Holiday Inn Hotel)
I: Institutional/PDD (Riversbend Golf Course)

Adjacent Land Uses		Zoning
North	Residential/	Rm-3
South	Commercial	B-5
East	Commercial/Residential	B-5/Rm-3
West	Commercial	B-1/B-2



Background

The 2.88-acre Odyssey Hotel property located at W177 N9675 Riversbend Lane is east and adjacent to the former Riversbend golf course property and south of the residential area known as the Riversbend Condominiums. In 1997 the Neviaser PDD was created to facilitate development of the property with a 72-room hotel. Currently, the hotel is operated by Odyssey Hotels as a Holiday Inn Express.

In 2016, the Village approved amendments to the Neviaser PDD to allow the hotel building to be expanded from a 2 to 3-story building up to a height of fifty (50) feet (60 feet parapet) with up to 130 guest rooms. At the same time, the Village approved amendments to the Riversbend Planned Development District (PDD) to remove “golf course” as a permitted use and added “off-site parking” as a permitted use. At that time, the Odyssey Hotel Group had an offer to purchase the golf course property from Charles Schmit and construct a small parking area on the north side of the existing parking lot serving Buffalo Wild Wings to serve the expanded hotel.

Proposal

PDD Amendments

At this time, Rachit Dhingra, agent for Odyssey Hotels and Riversbend Country Club Inc., has submitted a proposal to amend the Neviaser PDD and the Riversbend PDD to:

1. Reduce the number of required parking stalls from 128 to 103 as part of the hotel expansion (Neviaser PDD);
2. Revise the General Development Plan (GDP) to reflect the reduced “off-site” parking area and landscaping to be constructed on the former golf course property (now owned in common by/with the Odyssey Hotel Group)

Site Development & Building Plans

In addition, site development and building plans have been submitted for expansion of the hotel up to only 100 guest rooms and a 3-story building, and, minor improvements to the proposed “off-site” parking area.

Staff Comments

At this time, Odyssey Hotel Group has requested that the Plan Commission’s review and consideration of the PDD amendment and Site Plan applications be TABLED until the Plan Commission meeting in January, 2022.

Village of Germantown ...Willkommen

Fee must accompany application

- ☐ $700 Minor Addition
- ☐ $1,240 Construction <10,000 SF
- ☐ $2,095 Construction 10,000 SF to 50,000
- ☐ $3,460 Industrial Construction >50,000 SF
- ☐ $3,460 Commercial Construction >50,000
- ☐ $200 Plan Commission Consultation
- ☐ $125 Fire Department Plan Review

PAID_____ DATE_____

SITE PLAN REVIEW APPLICATION

Pursuant to Section 17.43 of the Municipal Code

Please read and complete this application carefully. **All applications must be signed and dated.**

1 APPLICANT OR AGENT

Odyssey Hotel Group
W177N9675 Riversbend Ln
Germantown, WI 53022

Phone (312) 867-7911
E-Mail rdhingra@odysseyhotels.com

PROPERTY OWNER

Odyssey Hotel Group
W177N9675 Riversbend Ln
Germantown, WI 53022

Phone (312) 867-7911
E-Mail rdhingra@odysseyhotels.com

2 PROPERTY ADDRESS

W177N9675 Riversbend Ln

3 NEIGHBORING USES – Specify name and type of use, e.g. Enviro Tech – Industrial, Smith – Residential, etc.

North	South	East	West
Condos	Commercial - KFC, Speedway	Commercial - Thrivent, Panda Express	Commercial - Starbucks Parking Lot

4 READ AND INITIAL THE FOLLOWING:

X I am aware of the Village of Germantown ordinance requiring fire sprinklers in most new construction.

X I understand that all new development is subject to Impact and/or Connection Fees that must be paid before building permits will be issued.

X I understand that an incomplete application will be withdrawn from the Plan Commission agenda and that all resubmissions to the Plan Commission are subject to a new application fee.

5 SIGNATURES – ALL APPLICATION MUST BE SIGNED BY OWNER!

Applicant — Oct/27/2021 — Date

Owner — Oct/27/2021 — Date

Village of Germantown Willkommen

Fee Must Accompany Application

☐ $820 Paid _____Date_____

☐ $200 PC Consultation Only
Paid _____Date_____

PLANNED DEVELOPMENT DISTRICT (PDD) AMENDMENT APPLICATION

Applications NOT signed by the Property Owner(s) will not be accepted. Attach additional sheets and/or include supplemental information in support of your application.

APPLICANT OR AGENT:
Odyssey Hotel Group

Address: W177N9675 Riversbend Ln
Germantown, WI 53022

Phone: 312-867-7911

FAX:

E-Mail: rdhingra@odysseyhotels.com

PROPERTY OWNER(S):
Odyssey Hotel Group

Address: W177N9675 Riversbend Ln
Germantown, WI 53022

Phone: 312-867-7911

FAX:

E-Mail: rdhingra@odysseyhotels.com

PDD Name & Resolution No.:

Resolution No. 19-16 which amended Resolution No. 16-97 for the Neviaser PDD

Legal Description of Property or Area (metes and bounds description):

Attach separate legal description if necessary

Lot 1 of Certified Survey Map No. 3903 recorded in the office of the Register of Deeds for Washington County, Wisconsin, on July 22, 1992 in Volume 25 of Certified Survey Maps, at Page 14, as Document No. 607696, being a part of the Southwest Quarter of the Southeast Quarter of Section 33, Township 9 North, Range 20 East, Village of Germantown, Washington County, Wisconsin.

Check all that apply:

- ☐ **REQUEST TO AMEND PDD ZONING**
- ☐ **REQUEST TO AMEND PDD GENERAL DEVELOPMENT PLAN**
- ☒ **REQUEST TO AMEND PDD CONDITIONS & RESTRICTIONS**

List of Proposed Amendment(s) (include Resolution # and Condition #):

Attach Revised Plan(s) or Separate Pages as Necessary

Resolution # 19-16, Condition #3 - Parking.

Reduction in parking is requested. There will be less than 128 parking spaces which was what was required by the 2016 approval for a 73-128 guest room hotel. See attached narrative for explanation.

Detailed Explanation and Justification for Proposed Amendment(s):

Attach Revised Plan(s) or Separate Pages as Necessary

See attached narrative.

APPLICATION SUBMITTAL REQUIREMENTS (to be submitted at time of application):

All Amendment Applications:

- ☒ Complete Application Form (Affidavit of Understanding and signatures required)
- ☒ Application Fee
- ☒ Detailed explanation of and justification for proposed amendment(s)
- ☒ Detailed explanation of if and how the proposed amendment(s) will affect other aspects of the development included within the PDD

General Development Plan Amendment Only:

- ☐ Legal Description of the land subject of map amendment in electronic/digital file format (e.g. Microsoft Word)
- ☐ Revised or New General Development Plan at a scale of 1" = 50' or other suitable scale necessary to accurately present:
  - Exterior boundary of the land subject of the map amendment
  - All existing and/or proposed features to be included in the development

AFFIDAVIT OF UNDERSTANDING

Please read and indicate that you understand and agree to the following (initials in box):

X	I understand that Village Staff, the Plan Commission and/or the Village Board may request additional information to properly evaluate this application and failure to provide such information may be sufficient justification to deny this application;
X	I understand that, regardless of the justification and/or information provided in support of my application, the Village is not obligated to approve my application nor amend the PDD as requested;
X	I am aware that the approval of an application to amend a PDD only amends the General Development Plan and/or conditions & Restrictions Resolution and does not otherwise revise or change the zoning of the land affected by the amendment(s), and, I may be required to obtain separate permits and/or approvals (e.g. site plan, building permits, etc.) from the Village or other agencies as a prerequisite to actual or continued development of such land.

ALL APPLICATIONS MUST BE SIGNED BY THE APPLICANT/AGENT AND PROPERTY OWNER(S)

Applicant/Agent — Oct 27 2021 — Date

Property Owner — Oct 27 2021 — Date

Applicant/Agent — Date

Property Owner — Date

November 1, 2021

PDD Amendment Narrative

Project: Odyssey Hotel Group – Holiday Inn Express conversion to Fairfield Inn & Suites
W177N9675 Riversbend Ln
Germantown, WI 50322

Odyssey Hotel Group is requesting PDD Amendment review and approval for the Holiday Inn property at W177N9675 Riversbend Lane (Tax Parcel #GTNV_334100). The requested amendment is to Resolution No. 19-16 from December 19, 2016 (which amended Resolution No. 16-97 for the Neviaser PDD). Odyssey Hotel Group is the successor to the original developer.

The exterior of the building will be modified as shown in the attached exterior elevations and renderings. The existing hip roof on the building will be removed, a third floor will be added and the existing lobby will be heightened. Four (4) columns supporting the existing Porte Cochere will be reused and a new metal canopy structure will be installed in its place to comply with Fairfield Inn and Suites' prototype. A stone finish is proposed at the main entry and at the main pier of the Porte Cochere. EIFS (Exterior Insulated Finishing System) on the existing building will be repainted and the EIFS installed on the new construction will match existing adjacent finishes. The EIFS at the main entry section will receive a thicker EIFS finish (+5, +6") and a metal "trellis" will be used at the cap of the main entry. The existing stair tower is being refinished with a horizontal wood plank system per prototype. The new roof structure will be tapered and have a parapet with varied heights around the entire perimeter. The brick finish around the pool area will remain. The pool is being eliminated completely and the interior reconfigured. The existing concrete patio will remain as outdoor seating accessed from the breakfast area. Some minor site work including the reconfiguring of existing parking spaces and new sidewalk is proposed. The existing building footprint is not being altered or added onto.

The proposed building height(s) are in accordance with the existing PDD and include:

- Main parapet at third floor = +32'-0"
- Upper parapet = +36'-9"
- Parapet at stair tower + 40'-9"
- Parapet at Lobby / Breakfast Area = +13'-0"

The proposed amendment is to Condition #3 – Parking. Resolution 19-16 approved the following:

3. Parking. The project shall include a minimum **number** of ~~**85**~~ off-street parking spaces **based on the maximum number of rooms as follows:** No garages or maintenance buildings are approved for this site.
    a. **128 spaces: 73 to 123 guest rooms**
    b. **130 spaces: 123 to 130 guest rooms**

Currently, 103 spaces for 100 guest rooms are proposed. The proposed number of spaces is less than the previously approved parking from Resolution No. 19-16. Pursuant to the Village of Germantown Municipal Code [Section 17.45(1)(d)12] this is an adequate number of spaces for a hotel having 100 guest rooms (1 space per guest room) and 6 employees (1 space for each 2 employees) per shift.

A substantial buffer currently exists along the northern perimeter of the hotel property fronting on Riversbend Circle W and Riversbend Lane obscuring the view of the hotel as viewed from those respective streets. The residential properties northwest of the hotel also have a dense evergreen screen along their lot lines. A low berm with evergreen trees is located at the northeast corner of the hotel parking spaces to the west (north end of the Buffalo Wild Wings/Starbucks parking lot); other than the construction of a connector sidewalk to provide pedestrian access from these parking spaces to the hotel, the parking spaces will not be modified or altered. Landscape plantings will be added to the existing berm at the northeast corner of the commercial parking lot to provide additional screening from the residential properties that are north of the parking lot.

RESOLUTION NO. 18-16

AMENDING RESOLUTION NO. 02-13 CONTAINING CONDITIONS AND RESTRICTIONS FOR THE RIVERSBEND COUNTRY CLUB INC-CONTINENTAL 246 FUND LLC PLANNED DEVELOPMENT DISTRICT ("RIVERSBEND PDD")

WHEREAS, Continental 246 Fund LLC, agent for Riversbend Country Club Inc., property owner (hereinafter "Developer") applied for and was granted B-1 Neighborhood Business District zoning with a Planned Development District (PDD) overlay on the subject parcels located on County Line Road in the Village of Germantown (the "PDD Property"); and

WHEREAS, Section 17.27(4) of the Village of Germantown Municipal Code allows for the adoption of conditions and restrictions for Planned Development Districts; and

WHEREAS, Rachit Dhingra, agent for Odyssey Hotels, property owner and successor to the orginal developer Daniel Neviaser, and Riversbend Country Club Inc., property owner, has requested approval for a series of amendments to the Neviaser PDD and the Riversbend-Continental 246 Fund LLC PDD as it pertains to development of the Riversbend golf course property and the Odyssey Hotel property and other conditions and requirements set forth in the Conditions and Restrictions Resolution No. 16-97 and No. 02-13; and

WHEREAS, the Village Plan Commission did, on December 12, 2016, review said PDD amendments and subsequently recommended that the Village Board approve the proposed amendments to the Neviaser PDD and Resolution No. 16-97; and

NOW, THEREFORE, BE IT RESOLVED, that the Village Board of the Village of Germantown hereby approves and adopts the proposed amendments to the Neviaser PDD and amends Resolution No. 02-13 as follows where items underlined are to be added and items ~~stricken~~ are to be deleted:

1. **General Development Plans**. **Except for the expanded parking area depicted on Sheet C-1 dated November 8, 2016,** ~~**Exhibit B,**~~ the detailed set of site development and building plans dated December 20, 2012, shall be considered the General Development Plans for this PDD, including the size and orientation of the building, setbacks, and location of access points, landscaping, utilities, grading and erosion control plan, floor plan and architectural elevations. All development within the PDD property shall be consistent with these plans or any subsequent plans (additional or revised) submitted pursuant to the conditions of approval adopted by the Plan Commission on January 14, 2013. Significant changes to said site development and building plans may require further review and approval by the Plan Commission as deemed necessary by the Zoning Administrator.

~~2.~~ **Use Regulations**. The uses allowed for Lot 1 and Lot 2 shall be as set forth in the B-1: Neighborhood Business Zoning District regulations (Zoning Code Section 17.28), except that a restaurant with outdoor service shall be allowed on Lot 2 to the extent shown in the approved plans. The uses allowed for Lot 3 shall be as set forth in the I: Institutional Zoning District regulations (Zoning Code Section 17.26), except that ~~**a golf course with a club house facility shall be allowed on Lot 3 only to the extent shown in the General**~~

~~**Development Plans.**~~ **"off-site parking areas" shall be allowed as a permitted use consistent with the site plans dated November 8, 2016.**

Introduced by: Baum

~~Adopted:~~ December 19, 2016

Vote: Ayes: 9 Nays: 0

Dean M. Wolter, Village President

ATTEST:

Barbara K.D. Goeckner, Village Clerk

RESOLUTION No. 19 - 16

AMENDING
RESOLUTION NO. 16-97 CONTAINING CONDITIONS AND RESTRICTIONS FOR THE NEVIASER PLANNED DEVELOPMENT DISTRICT (PDD)

WHEREAS, Daniel Neviaser of Neviaser Investments applied for and was granted rezoning to the B-5: Highway Business Planned Development District (PDD) on the subject parcel (Key Number GTNV 334-100, hereinafter "the property") which was granted by the Village Board on March 17, 1997; and

WHEREAS, Section 17.27(4) of the Village of Germantown Municipal Code allows for the adoption of conditions and restrictions for PDDs, and

WHEREAS, Rachit Dhingra, agent for Odyssey Hotels, property owner and successor to the orginal developer Daniel Neviaser, and Riversbend Country Club Inc., property owner, has requested approval for a series of amendments to the Neviaser PDD and the Riversbend-Continental 246 Fund LLC PDD as it pertains to development of the Riversbend golf course property and the Odyssey Hotel property and other conditions and requirements set forth in the Conditions and Restrictions Resolution No. 16-97 and No. 02-13; and

WHEREAS, the Village Plan Commission did, on December 12, 2016, review said PDD amendments and subsequently recommended that the Village Board approve the proposed amendments to the Neviaser PDD and Resolution No. 16-97; and

NOW, THEREFORE, BE IT RESOLVED, that the Village Board of the Village of Germantown hereby approves and adopts the proposed amendments to the Neviaser PDD and amends Resolution No. 16-97 as follows where items underlined are to be added and items ~~stricken~~ are to be deleted:

1. General Development Plan. **Except for the expanded parking area depicted on Sheet C-1 dated November 8, 2016,** the plan dated and revised through November 8, 1996, shall be considered the approved General Development Plan for the subject property, including the location of driveways, parking spaces, buildings and signage Detailed surveys, utility plans, building plans, lighting Ind landscaping plans covering any portion of the total project intended for construction shall be presented to the Plan Commission prior to issuance of any building permits These plans shall conform substantially to the approved General Development Plan in both location, design and number. Utility and driveway plans shall be based on the standards of then Village Public Works Department. If revisions of the development plan are necessary due to adverse site conditions, resubmittal and approval of all revisions by the Plan Commission will be required.

2. Building size height, location, and lot coverage
    a. The building shall include **up to a total of 130** ~~**no more than 73**~~ guest rooms.
    b. The building shall **not exceed a height of 50 feet** ~~**be no more than 35 feet in height as per Section 17.08(13),**~~ except the **parapet** ~~**eastern**~~ tower, which **shall not exceed** ~~**may be up to 35**~~ **60** feet tall.
    c. The buildings shall meet the following setback and lot coverage requirements:
        i. Front yard setback from Riversbend Lane: minimum 50 feet

ii. Front yard setback from Riversbend Circle West: minimum 15 feet
iii. Side yard setback from south property line: minimum 50 feet
iv. Side yard setback from west property line: minimum **10** ~~49~~ feet

d. The overall building, parking and hard surfaces shall not exceed 70% lot area.

3. Parking. The project shall include a minimum **number** of ~~85~~ off-street parking spaces **based on the maximum number of rooms as follows:** No garages or maintenance buildings are approved for this site.
   a. **128 spaces: 73 to 123 guest rooms**
   b. **130 spaces: 123 to 130 guest rooms**

4. Driveway Construction and Ownership. All internal driveways shall be constructed and maintained by the owner. Construction standards will be to Village specifications. Private easements and access agreements are not enforced by the Village and must be addressed separately.

5. Public Utilities.
   a. The developer will provide all necessary easements and dedication of facilities as required by the Village Engineer.

6. Signage.
   a. The property is allowed one free standing sign, maximum 160 square feet area, maximum 25 foot height.
   b. The property is allowed two wall mounted signs, maximum 150 square feet each.
   c. All signs shall be internally illuminated.
   d. No roof signage is allowed for this project.
   e. No wall mounted signage is allowed on the north side of the building.

7. Specific Lighting and Landscaping plans shall be submitted to and approved by the Plan Commission prior to occupancy of the building.

8. Garbage and Refuse collection and Disposal shall be provided by the property owner at his cost.

9. The berm (including plantings) to be repaired and maintained by the property owner, with replacement of any dead plantings.

10. **The minimum parking stall size shall be 162 sqft.**

11. **The minimum parking setback for parking areas located to the north, south and west of the hotel shall be (0) feet.**

12. **The minimum parking setback from the north parking area to the adjacent residential district shall be 43 feet.**

Amending Resolution No. 16-97 Neviaser Planned Development District (PDD)
Resolution 19-16

Introduced by Trustee: Baum
Adopted: December 19, 2016

Vote: Ayes: 9
Nays: 0

Dean M. Wolter, Village President

ATTEST:

Barbara K.D. Goeckner, Village Clerk

This instrument drafted by:
Jeffrey W. Retzlaff, AICP, Director, Community Development Department, Village of Germantown

GENERAL DEVELOPMENT PLAN FOR:
ODYSSEY HOTELS
GERMANTOWN, WISCONSIN

LEGEND

000.00	PROPOSED SPOT ELEVATIONS (FLOW LINE OF CURB UNLESS OTHERWISE SPECIFIED)
000.00 EG	EXISTING GRADE SPOT ELEVATIONS
000.00 BG / 000.00 FG	PROPOSED SPOT ELEVATIONS (REFERENCE R–WALL DETAIL) BG–FINISHED SURFACE GRADE AT BACK OF WALL FG–FINISHED SURFACE GRADE AT FRONT OF WALL
000.00 TC / 000.00 BC	PROPOSED SPOT ELEVATIONS (TOP OF CURB, BOTTOM OF CURB)
000.00 TW / 000.00 BW	PROPOSED SPOT ELEVATIONS (TOP OF WALK, BOTTOM OF WALK)
	EXISTING WATER VALVE IN BOX
	PROPOSED WATER VALVE IN BOX
	EXISTING WATER VALVE IN MANHOLE
	EXISTING WATER SERVICE VALVE
	EXISTING TELEPHONE MANHOLE
	EXISTING STORM CATCH BASIN
	PROPOSED STORM CATCH BASIN – ST CB
	PROPOSED STORM FIELD INLET – ST FI
	EXISTING SQUARE CATCH BASIN
	EXISTING STORM CURB INLET
	PROPOSED STORM CURB INLET – ST CI
	EXISTING UTILITY POLE
	EXISTING UTILITY POLE WITH GUY WIRE
	EXISTING STREET LIGHT
	EXISTING TELEPHONE PEDESTAL
	EXISTING ELECTRIC PEDESTAL
	EXISTING ELECTRIC BOX
	EXISTING CABLE TV PEDESTAL
	PROPOSED DRAINAGE FLOW
	1–1/4" REBAR SET WEIGHING 4.30 LB/FT.
	3/4" REBAR SET WEIGHING 1.50 LB/FT.
	1–1/4" REBAR FOUND
	3/4" REBAR FOUND
	2" IRON PIPE FOUND
	1" IRON PIPE FOUND
	EXISTING FLOOD LIGHT
	SECTION CORNER
	PROPOSED APRON END SECTION
	EXISTING MARSH AREA
	EXISTING DECIDUOUS TREE WITH TRUNK DIAMETER
	EROSION MATTING
IP	PROPOSED INLET PROTECTION
	EXISTING CONIFEROUS TREE
	EXISTING SHRUB
	EXISTING STUMP
	SOIL BORING
	EXISTING WELL
	PROPOSED WELL
	EXISTING LIGHT POLE
	EXISTING SIGN
	CENTER LINE
	EXISTING HANDICAP PARKING STALL
	PROPOSED HANDICAP PARKING STALL
	EXISTING GAS VALVE
	EXISTING WOODED AREA
	EXISTING HEDGE
	EXISTING CHAINLINK FENCE
	EXISTING WOOD FENCE
	EXISTING BARBED WIRE FENCE
	PROPOSED PROPERTY LINE
	EXISTING GUARD RAIL
ST	EXISTING STORM SEWER AND MANHOLE
ST	PROPOSED STORM SEWER AND MANHOLE – ST MH
SA	EXISTING SANITARY SEWER AND MANHOLE
SA	PROPOSED SANITARY SEWER AND MANHOLE – SAN MH
W	EXISTING WATER LINE AND HYDRANT
W	PROPOSED WATER LINE AND HYDRANT
OU	EXISTING OVERHEAD UTILITY LINE
FO	EXISTING UNDERGROUND FIBER OPTIC LINE
E	EXISTING UNDERGROUND ELECTRIC CABLE
T	EXISTING UNDERGROUND TELEPHONE CABLE
G	EXISTING UNDERGROUND GAS LINE
	PROPOSED CURB AND GUTTER
	EXISTING CURB AND GUTTER
	GRADING/SEEDING LIMITS
	RIGHT–OF–WAY LINE
	INTERIOR PROPERTY LINE
	RAILROAD TRACKS
800	EXISTING GROUND CONTOUR
800	PROPOSED GROUND CONTOUR
POL	EXISTING POLISH SEWER AND MANHOLE
POL	PROPOSED POLISH SEWER AND MANHOLE
P	EXISTING PROCESS SEWER AND MANHOLE
P	PROPOSED PROCESS SEWER AND MANHOLE
CLW	EXISTING CLEAR WATER LINE
CLW	PROPOSED CLEAR WATER LINE

PLAN SPECIFICATIONS (BASED ON CSI FORMAT)

DIVISION 31 EARTH WORK

31 10 00 SITE CLEARING (DEMOLITION)

A. CONTRACTOR SHALL CALL DIGGERS HOT LINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING SITE DEMOLITION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
B. DEMOLITION PLAN IS AN OVERVIEW OF DEMOLITION TO TAKE PLACE ON SITE. CONTRACTOR TO FIELD VERIFY EXISTING SITE CONDITIONS PRIOR TO BIDDING. CONTRACTOR SHALL REMOVE, REPLACE, OR DEMOLISH ALL ITEMS AS NEEDED DURING CONSTRUCTION.
C. CONTRACTOR TO PROTECT EXISTING IMPROVEMENTS THAT ARE SCHEDULED TO REMAIN. ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPLACED AT CONTRACTORS EXPENSE.
D. ALL CONCRETE NOTED TO BE REMOVED SHALL BE REMOVED TO THE NEAREST CONTROL JOINT.

31 20 00 EARTH MOVING

A. CONTRACTOR SHALL CALL DIGGERS HOT LINE AND CONDUCT A PRIVATE UTILITY LOCATE AS REQUIRED TO ENSURE THAT ALL UTILITIES HAVE BEEN LOCATED BEFORE STARTING EXCAVATION. DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
B. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT FOR ALL EXCAVATION, GRADING, FILL AND BACKFILL WORK AS REQUIRED TO COMPLETE THE GENERAL CONSTRUCTION WORK. ALL EXCAVATION AND BACKFILL FOR ELECTRICALS AND MECHANICALS ARE THE RESPONSIBILITY OF THE RESPECTIVE CONTRACTOR UNLESS OTHERWISE SPECIFIED IN THE BID DOCUMENTS.
C. ALL ORGANIC TOPSOIL INSIDE THE BUILDING AREA, UNDER PAVED AREAS, AND AT SITE FILL AREAS SHALL BE REMOVED. PROOF ROLL SUBGRADES BEFORE PLACING FILL WITH HEAVY PNEUMATIC-TIRED EQUIPMENT, SUCH AS A FULLY-LOADED TANDEM AXLE DUMP TRUCK, TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. CONTRACTOR SHALL VERIFY TOPSOIL DEPTHS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REVIEW AND FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND ACCOUNT FOR EXISTING CONDITIONS PRIOR TO SUBMITTING BID FOR THE PROJECT. EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY LOCAL ZONING REQUIREMENTS.
D. PLACE AND COMPACT FILL MATERIAL IN LAYERS TO REQUIRED ELEVATIONS. UNIFORMLY MOISTEN OR AERATE SUBGRADE AND EACH SUBSEQUENT FILL OR BACKFILL LAYER BEFORE COMPACTION AS RECOMMENDED TO ACHIEVE SPECIFIED DRY DENSITY. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY, OTHERWISE SATISFACTORY SOIL MATERIAL THAT IS TOO WET TO COMPACT TO SPECIFIED DRY DENSITY.
E. PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4" IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
F. COMPACT THE SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY ACCORDING TO ASTM D 698, STANDARD PROCTOR TEST. FILL MAY NOT BE PLACED ON FROZEN GROUND AND NO FROZEN MATERIALS MAY BE USED FOR BACK FILL. APPLY THE MORE STRINGENT REQUIREMENTS WHEN COMPARING BETWEEN THE FOLLOWING AND THE GEOTECHNICAL REPORT.
   1. UNDER FOUNDATIONS - SUBGRADE, AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 98 PERCENT.
   2. UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS MORE THAN 3 FEET BELOW THE SLAB - PLACE A DRAINAGE COURSE LAYER OF 3/4" CRUSHED STONE, WITH 5% TO 12% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.
   3. UNDER INTERIOR SLAB-ON-GRADE WHERE GROUNDWATER IS WITHIN 3 FEET OF THE SLAB SURFACE- PLACE A DRAINAGE COURSE LAYER OF CLEAN 3/4" CRUSHED STONE, WITH NO MORE THAN 5% FINES, PER THICKNESS INDICATED ON FOUNDATION PLANS ON PREPARED SUBGRADE. COMPACT THE SUBGRADE AND DRAINAGE COURSE TO NOT LESS THAN 95 PERCENT.
   4. UNDER EXTERIOR CONCRETE AND ASPHALT PAVEMENTS - COMPACT THE SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT LESS THAN 95 PERCENT.
   5. UNDER WALKWAYS - COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL TO NOT LESS THAN 95 PERCENT.
   6. UNDER LAWN OR UNPAVED AREAS - COMPACT SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL, TO NOT LESS THAN 85 PERCENT.
G. CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS. IT IS SUGGESTED THAT THE GEOTECHNICAL FIRM USED TO PERFORM THE SUBSURFACE SOIL INVESTIGATION BE ENGAGED FOR THE FIELD QUALITY CONTROL TESTS. THE GEOTECHNICAL REPORT WAS PERFORMED BY (NAME OF GEOTECHNICAL FIRM).
H. ALLOW THE TESTING AGENCY TO TEST AND INSPECT SUBGRADES AND EACH FILL OR BACKFILL LAYER. PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS. PROVIDE ONE TEST FOR EVERY 2000 SQUARE FEET OF PAVED AREA OR BUILDING SLAB, ONE TEST FOR EACH SPREAD FOOTING, AND ONE TEST FOR EVERY 50 LINEAR FEET OF WALL STRIP FOOTING.
I. WHEN THE TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.
J. THE BUILDING SITE SHALL BE GRADED TO PROVIDE DRAINAGE AWAY FROM THE BUILDING AS INDICATED ON THE PLANS. SITE EARTHWORK SHALL BE GRADED TO WITHIN 0.10' OF REQUIRED EARTHWORK ELEVATIONS ASSUMING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE GRADING PLAN.

31 30 00 EROSION CONTROL

A. THE GRADING PLAN REFLECTS LESS THAN 1 ACRE OF DISTURBED AREA. THE SITE IS THEREFORE EXEMPT FROM WISCONSIN DEPARTMENT OF NATURAL RESOURCES NR 216 NOTICE OF INTENT REQUIREMENTS. THE DESIGN ENGINEER SHALL PREPARE AN EROSION CONTROL PLAN TO MEET NR 151.105 CONSTRUCTION SITE PERFORMANCE STANDARDS FOR NON-PERMITTED SITES.
B. EROSION AND SEDIMENT CONTROL IMPLEMENTED DURING CONSTRUCTION SHALL STRICTLY COMPLY WITH THE GUIDELINES AND REQUIREMENTS SET FORTH IN WISCONSIN ADMINISTRATIVE CODE (W.A.C.) NR 151, THE STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES RUNOFF MANAGEMENT PERFORMANCE STANDARDS. TECHNICAL STANDARDS PUBLISHED BY THE WISCONSIN DNR SHALL ALSO BE UTILIZED TO IMPLEMENT THE REQUIRED PERFORMANCE STANDARDS. THE METHODS AND TYPES OF EROSION CONTROL WILL BE DEPENDENT ON THE LOCATION AND TYPE OF WORK INVOLVED. ALL SEDIMENT CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION, AND INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL. BELOW IS A LIST OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES TO ACHIEVE THE PERFORMANCE STANDARDS REQUIRED.
   1. SILT FENCE SHALL BE PLACED ON SITE AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. SILT FENCE SHALL ALSO BE PROVIDED AROUND THE PERIMETER OF ALL SOIL STOCKPILES THAT WILL EXIST FOR MORE THAN 7 DAYS. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1056 (CURRENT EDITION).
   2. DITCH CHECKS SHALL BE PROVIDED TO REDUCE THE VELOCITY OF WATER FLOWING IN DITCH BOTTOMS. PLACE AT LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. FOLLOW PROCEDURES FOUND IN THE WISCONSIN DNR TECHNICAL STANDARD 1062 (CURRENT EDITION).
   3. STONE TRACKING PADS AND TRACKOUT CONTROL PRACTICES SHALL BE PLACED AT ALL CONSTRUCTION SITE ENTRANCES AND SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE CONSTRUCTION SITE. SEE THE EROSION CONTROL PLAN FOR LOCATIONS. THE AGGREGATE USED FOR THE STONE TRACKING PAD SHALL BE 3/8" TO 3 INCH CLEAR OR WASHED STONE AND SHALL BE PLACED IN A LAYER AT LEAST 12 INCHES THICK. THE STONE SHALL BE UNDERLAIN WITH A WISDOT TYPE R GEOTEXTILE FABRIC AS NEEDED. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT (12' MIN WIDTH) AND SHALL BE A MINIMUM OF 50 FEET LONG. SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. OTHER TRACKOUT CONTROL PRACTICES INCLUDING STABILIZED WORK SURFACES, MANUFACTURED TRACKOUT CONTROL DEVICES, TIRE WASHING, AND STREET/PAVEMENT CLEANING SHALL BE IMPLEMENTED AS NECESSARY TO MITIGATE THE TRACKOUT OF SEDIMENT OFFSITE. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1057 (CURRENT EDITION).
   4. STORM DRAIN INLET PROTECTION SHALL BE PROVIDED FOR ALL NEW AND DOWNSTREAM STORM CATCH BASINS AND CURB INLETS. TYPE B OR C PROTECTION SHOULD BE PROVIDED AND SHALL BE IN CONFORMANCE WITH WISCONSIN DNR TECHNICAL STANDARD 1060 (CURRENT EDITION).
   5. DUST CONTROL MEASURES SHALL BE PROVIDED TO REDUCE OR PREVENT THE SURFACE AND AIR TRANSPORT OF DUST DURING CONSTRUCTION. CONTROL MEASURES INCLUDE APPLYING MULCH AND ESTABLISHING VEGETATION, WATER SPRAYING, SURFACE ROUGHENING, APPLYING POLYMERS, SPRAY-ON TACKIFIERS, CHLORIDES, AND BARRIERS. SOME SITES MAY REQUIRE AN APPROACH THAT UTILIZES A COMBINATION OF MEASURES FOR DUST CONTROL. FOLLOW PROCEDURES FOUND IN WISCONSIN DNR TECHNICAL STANDARD 1068 (CURRENT EDITION).
   6. THE USE, STORAGE, AND DISPOSAL OF CHEMICALS, CEMENT, AND OTHER COMPOUNDS AND MATERIALS USED ON SITE SHALL BE MANAGED DURING THE CONSTRUCTION PERIOD TO PREVENT THEIR TRANSPORT BY RUNOFF INTO WATERS OF THE STATE.
   7. CONTRACTOR SHALL PROVIDE AN OPEN AGGREGATE CONCRETE TRUCK WASHOUT AREA ON SITE. CONTRACTOR TO ENSURE THAT CONCRETE WASHOUT SHALL BE CONTAINED TO THIS DESIGNATED AREA AND NOT BE ALLOWED TO RUN INTO STORM INLETS OR INTO THE OVERLAND STORMWATER DRAINAGE SYSTEM. WASHOUT AREA SHALL BE REMOVED UPON COMPLETION OF CONSTRUCTION.
   8. TEMPORARY SITE RESTORATION SHALL TAKE PLACE IN DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE OR ON WHICH LAND DISTURBING ACTIVITIES WILL NOT BE PERFORMED FOR A PERIOD GREATER THAN 14 DAYS AND REQUIRES VEGETATIVE COVER FOR LESS THAN ONE YEAR. THIS TEMPORARY SITE RESTORATION REQUIREMENT ALSO APPLIES TO SOIL STOCKPILES THAT EXIST FOR MORE THAN 7 DAYS. PERMANENT RESTORATION APPLIES TO AREAS WHERE PERENNIAL VEGETATIVE COVER IS NEEDED TO PERMANENTLY STABILIZE AREAS OF EXPOSED SOIL. PERMANENT STABILIZATION SHALL OCCUR WITHIN 3 WORKING DAYS OF FINAL GRADING. TOPSOIL, SEED, AND MULCH SHALL BE IN GENERAL CONFORMANCE WITH TECHNICAL STANDARDS 1058 AND 1059 AND SHALL MEET THE SPECIFICATIONS FOUND IN THE LANDSCAPING AND SITE STABILIZATION SECTION OF THIS CONSTRUCTION DOCUMENT. ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR FINAL STABILIZATION MUST BE REPAIRED AND THE STABILIZATION WORK REDONE.
   9. IF SITE DEWATERING IS REQUIRED FOR PROPOSED CONSTRUCTION ACTIVITIES, ALL SEDIMENT LADEN WATER GENERATED DURING THE DEWATERING PROCESS SHALL BE TREATED TO REMOVE SEDIMENT PRIOR TO DISCHARGING OFF-SITE OR TO WATERS OF THE STATE. FOLLOW ALL PROCEDURES FOUND IN TECHNICAL STANDARD 1061.
   10. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION WORK OR A STORM EVENT SHALL BE CLEANED UP BY THE END OF EACH WORKING DAY. DUST CONTROL REQUIREMENTS SHALL BE FOLLOWED PER WI DNR TECHNICAL STANDARD 1068 (CURRENT EDITION). FLUSHING SHALL NOT BE ALLOWED.
C. ALL EROSION CONTROL DEVICES SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24 HOUR PERIOD. MAINTENANCE SHALL BE PERFORMED PER WISCONSIN ADMINISTRATIVE CODE (W.A.C.) NR 151 STORMWATER MANAGEMENT TECHNICAL STANDARD REQUIREMENTS.
D. EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL THE AREA(S) SERVED HAVE ESTABLISHED VEGETATIVE COVER.
E. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL EROSION CONTROL PERMITS.

DIVISION 32 EXTERIOR IMPROVEMENTS

32 20 00 CONCRETE AND AGGREGATE BASE

A. CONTRACTOR TO PROVIDE CRUSHED AGGREGATE BASE AND CONCRETE WHERE INDICATED ON THE PLANS.
B. ALL AGGREGATE PROVIDED MUST COMPLY WITH SECTION 305 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION. ALL AGGREGATE PLACED MUST BE COMPACTED TO AN AVERAGE DENSITY PER WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
C. DESIGN AND CONSTRUCTION OF ALL CAST-IN-PLACE EXTERIOR CONCRETE FLAT WORK SHALL CONFORM TO ACI 330R-08 & ACI 318-08.
D. EXTERIOR CONCRETE FLAT WORK CONSTRUCTION TO BE PROVIDED PER MORE STRINGENT REQUIREMENTS OF THE GEOTECHNICAL REPORT OR THIS SPECIFICATION. CONCRETE FLAT WORK CONSTRUCTION IS AS FOLLOWS:
   1. SIDEWALK CONCRETE/ PATIO - 4" OF CONCRETE OVER 4" OF 3/4" CRUSHED AGGREGATE BASE. CONTRACTION JOINTS SHALL CONSIST OF 1/8" WIDE BY 1" DEEP TOOLED JOINT WHERE INDICATED ON THE PLANS.

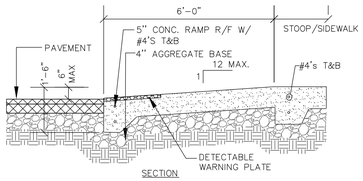
E. DESIGN MIXES SHALL BE IN ACCORDANCE WITH ASTM C94
   1. STRENGTH TO BE MINIMUM OF 4,500 PSI AT 28 DAYS FOR EXTERIOR CONCRETE.
   2. MAXIMUM WATER/CEMENT RATIO SHALL BE 0.45.
   3. SLUMP SHALL NOT EXCEED 4" FOR EXTERIOR CONCRETE FLAT WORK
   4. SLUMP SHALL BE 2.5" OR LESS FOR SLIP-FORMED CURB AND GUTTER
   5. SLUMP SHALL BE BETWEEN 1.5" TO 3" FOR NON SLIP-FORMED CURB AND GUTTER.
   6. ALL EXTERIOR CONCRETE SHALL BE AIR ENTRAINED WITH 4% TO 7% AIR CONTENT. NO OTHER ADMIXTURES SHALL BE USED WITHOUT APPROVAL OF EXCEL ENGINEERING, INC. CALCIUM CHLORIDE SHALL NOT BE USED.
   7. MAXIMUM AGGREGATE SIZE FOR ALL EXTERIOR CONCRETE SHALL BE 0.75 INCHES.

F. VERIFY EQUIPMENT CONCRETE PAD SIZES WITH RESPECTIVE CONTRACTORS. PADS SHALL HAVE FIBERMESH 300 FIBERS AT A RATE OF 1.5 LBS/CU. YD. OR 6 X 6-W1.4 X W1.4 WELDED WIRE MESH WITH MINIMUM 1 INCH COVER. EQUIPMENT PADS SHALL BE 3.5 INCHES THICK WITH 1 INCH CHAMFER UNLESS SPECIFIED OTHERWISE. COORDINATE ADDITIONAL PAD REQUIREMENTS WITH RESPECTIVE CONTRACTOR.
G. ALL CONCRETE FLAT WORK SURFACES AND CONCRETE CURB FLOWLINES SHALL BE CONSTRUCTED TO WITHIN 0.05' OF DESIGN SURFACE AND FLOWLINE GRADES ASSURING POSITIVE DRAINAGE IS MAINTAINED IN ACCORDANCE WITH THE DESIGN PLANS.
H. CONCRETE FLAT WORK SHALL HAVE CONTRACTION JOINTS OR SAW CUT JOINTS PLACED AS INDICATED ON THE PLANS OR PER THIS SPECIFICATION. SAWCUTS SHALL BE DONE AS SOON AS POSSIBLE, BUT NO LATER THAN 24 HOURS AFTER CONCRETE IS PLACED. CONCRETE CURB AND GUTTER JOINTING SHALL BE PLACED EVERY 10' OR CLOSER (6' MIN). IF CONCRETE PAVEMENT IS ADJACENT TO CONCRETE CURB, JOINTING IN THE PAVEMENT AND CURB SHALL ALIGN. ALL EXTERIOR CONCRETE SHALL HAVE A LIGHT BROOM FINISH UNLESS NOTED OTHERWISE. A UNIFORM COAT OF A HIGH SOLIDS CURING COMPOUND MEETING ASTM C309 SHOULD BE APPLIED TO ALL EXPOSED CONCRETE SURFACES. ALL CONCRETE IS TO BE CURED FOR 7 DAYS. EXTERIOR CONCRETE SHALL BE SEPARATED FROM BUILDINGS WITH CONTINUOUS 0.5 INCH FIBER EXPANSION JOINT AND/OR 0.25 INCH FIBER EXPANSION JOINT AT DECORATIVE PATTERN JOINTS.
I. ALL REINFORCING BARS SHALL BE ASTM A615 GRADE 60. THICKNESS OF CONCRETE COVER OVER REINFORCEMENT SHALL BE NOT LESS THAN 3" WHERE CONCRETE IS DEPOSITED AGAINST THE GROUND WITHOUT THE USE OF FORMS AND NOT LESS THAN 1.5" IN ALL OTHER LOCATIONS. ALL REINFORCING SHALL BE LAPPED 36 DIAMETERS FOR UP TO #6 BARS, 60 DIAMETERS FOR #7 TO #10 BARS OR AS NOTED ON THE DRAWINGS AND EXTENDED AROUND CORNERS WITH CORNER BARS. PLACING AND DETAILING OF STEEL REINFORCING AND REINFORCING SUPPORTS SHALL BE IN ACCORDANCE WITH CRSI AND ACI MANUAL AND STANDARD PRACTICES. THE REINFORCEMENT SHALL NOT BE PAINTED AND MUST BE FREE OF GREASE,OIL, DIRT OR DEEP RUST WHEN PLACED IN THE WORK. ALL WELDED WIRE FABRIC SHALL MEET THE REQUIREMENTS OF ASTM A 185. WELDED WIRE FABRIC SHALL BE PLACED 2" FROM TOP OF SLAB, UNLESS INDICATED OTHERWISE.
J. CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO SAMPLE MATERIALS, PERFORM TESTS, AND SUBMIT TEST REPORTS DURING CONCRETE PLACEMENT. TESTS WILL BE PERFORMED ACCORDING TO ACI 301. CAST AND LABORATORY CURE ONE SET OF FOUR STANDARD CYLINDERS FOR EACH COMPOSITE SAMPLE FOR EACH DAY'S POUR OF EACH CONCRETE MIX EXCEEDING 5 CU. YD., BUT LESS THAN 25 CU. YD., PLUS ONE SET FOR EACH ADDITIONAL 50 CU. YD. OR FRACTION THEREOF. PERFORM SLUMP AND COMPRESSIVE-STRENGTH TESTS ACCORDING TO ASTM C 39. TEST TWO SPECIMENS AT 7 DAYS AND TWO SPECIMENS AT 28 DAYS. PERFORM SLUMP TESTING ACCORDING TO ASTM C 143. PROVIDE ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIX. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE.
K. PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. IN HOT, DRY, AND WINDY WEATHER, APPLY AN EVAPORATION-CONTROL COMPOUND ACCORDING TO MANUFACTURER'S INSTRUCTIONS AFTER SCREEDING AND BULL FLOATING, BUT BEFORE POWER FLOATING AND TROWELLING.
L. LIMIT MAXIMUM WATER-CEMENTITOUS RATIO OF CONCRETE EXPOSED TO FREEZING, THAWING AND DEICING SALTS TO 0.45.
M. TEST RESULTS WILL BE REPORTED IN WRITING TO THE DESIGN ENGINEER, READY-MIX PRODUCER, AND CONTRACTOR WITHIN 24 HOURS AFTER TESTS. REPORTS OF COMPRESSIVE STRENGTH TESTS SHALL CONTAIN THE PROJECT IDENTIFICATION NAME AND NUMBER, DATE OF CONCRETE PLACEMENT, NAME OF CONCRETE TESTING SERVICE, CONCRETE TYPE AND CLASS, LOCATION OF CONCRETE BATCH IN STRUCTURE, DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, CONCRETE MIX PROPORTIONS AND MATERIALS, COMPRESSIVE BREAKING STRENGTH, AND TYPE OF BREAK FOR BOTH 7-DAY TESTS AND 28-DAY TESTS.

32 30 00 LANDSCAPING AND SITE STABILIZATION

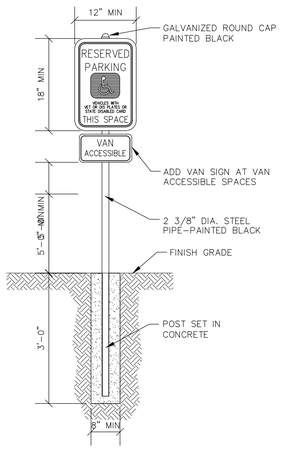
A. TOPSOIL: CONTRACTOR TO PROVIDE A MINIMUM OF 6" OF TOPSOIL FOR ALL DISTURBED OPEN AREAS. REUSE SURFACE SOIL STOCKPILED ON SITE AND SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN QUANTITIES ARE INSUFFICIENT. EXCAVATOR SHALL BE RESPONSIBLE FOR ROUGH PLACEMENT OF TOPSOIL TO WITHIN 1" OF FINAL GRADE PRIOR TO LANDSCAPER FINAL GRADING. LANDSCAPER TO PROVIDE PULVERIZING AND FINAL GRADING OF TOPSOIL. PROVIDE SOIL ANALYSIS BY A QUALIFIED SOIL TESTING LABORATORY AS REQUIRED TO VERIFY THE SUITABILITY OF SOIL TO BE USED AS TOPSOIL AND TO DETERMINE THE NECESSARY SOIL AMENDMENTS. TEST SOIL FOR PRESENCE OF ATRAZINE AND INFORM EXCEL ENGINEERING, INC. IF PRESENT PRIOR TO BIDDING PROJECT. TOPSOIL SHALL HAVE A PH RANGE OF 5.5 TO 8, CONTAIN A MINIMUM OF 5 PERCENT ORGANIC MATERIAL CONTENT, AND SHALL BE FREE OF STONES 1 INCH OR LARGER IN DIAMETER. ALL MATERIALS HARMFUL TO PLANT GROWTH SHALL ALSO BE REMOVED.
   TOPSOIL INSTALLATION: LOOSEN SUBGRADE TO A MINIMUM DEPTH OF 6 INCHES AND REMOVE STONES LARGER THAN 1" IN DIAMETER. ALSO REMOVE ANY STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEOUS MATTER AND DISPOSE OF THEM OFF THE PROPERTY. SPREAD TOPSOIL TO A DEPTH OF 6" BUT NOT LESS THAN WHAT IS REQUIRED TO MEET FINISHED GRADES AFTER LIGHT ROLLING AND NATURAL SETTLEMENT. DO NOT SPREAD TOPSOIL IF SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET. GRADE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN 0.05 FEET OF FINISHED GRADE ELEVATION.
B. SEEDED LAWNS:
   1. PERMANENT LAWN AREAS SHALL BE SEEDED WITH THE FOLLOWING MIXTURE: 65% KENTUCKY BLUEGRASS BLEND (2.0-2.6 LBS./1,000 S.F.), 20% PERENNIAL RYEGRASS (0.6-0.8 LBS./1,000 S.F.), 15% FINE FESCUE (0.4-0.6 LBS/1,000 S.F.). STRAW AND MULCH SHALL BE LAID AT 100LBS/1,000 S.F. FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10 OR EQUIVALENT AT 5-6 LBS/1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. ALL SITE DISTURBED AREAS NOT DESIGNATED FOR OTHER LANDSCAPING AND SITE STABILIZATION METHODS SHALL BE SEEDED AS PERMANENT LAWN. NO BARE TOPSOIL SHALL BE LEFT ONSITE. FOLLOW PROCEDURES FOUND IN WDNR TECHNICAL STANDARDS 1058 & 1059.
   2. ALL PERMANENT AND TEMPORARY STORM WATER CONVEYANCE SWALE BOTTOMS AND SIDE SLOPES AS WELL AS STORMWATER MANAGEMENT BASIN BOTTOMS AND SIDE SLOPES SHALL BE SEEDED WITH THE FOLLOWING MIXTURE: 45% KENTUCKY BLUEGRASS (0.60 LBS./1000 S.F.), 40% CREEPING RED FESCUE (0.50 LBS./1,000 S.F.), AND 15% PERENNIAL RYEGRASS (0.20 LBS./1,000 S.F.). FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10 OR EQUIVALENT AT 5-6 LBS./1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. FOLLOW PROCEDURES FOUND IN WDNR TECHNICAL STANDARDS 1058 & 1059.
   3. ALL TEMPORARY SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE: 100% RYEGRASS AT 1.9 LBS./1,000 S.F. STRAW AND MULCH SHALL BE LAID AT 100 LBS./1,000 S.F. FERTILIZE AS PER SOIL TEST OR APPLY 5-10-10 OR EQUIVALENT AT 5-6 LBS./1,000 S.F. SEE EROSION MATTING SPECIFICATIONS AS REQUIRED. FOLLOW PROCEDURES FOUND IN WDNR TECHNICAL STANDARDS 1058 & 1059.

C. SEEDED LAWN MAINTENANCE: CONTRACTOR TO PROVIDE MAINTENANCE OF ALL LANDSCAPING FOR A PERIOD OF 90 DAYS FROM THE DATE OF INSTALLATION. AT THE END OF THE MAINTENANCE PERIOD, A HEALTHY, UNIFORM, CLOSE STAND OF GRASS SHOULD BE ESTABLISHED FREE OF WEEDS AND SURFACE IRREGULARITIES. LAWN COVERAGE SHOULD EXCEED 90% AND BARE SPOTS SHOULD NOT EXCEED 5"X5". CONTRACTOR SHOULD REESTABLISH LAWNS THAT DO NOT COMPLY WITH THESE REQUIREMENTS AND CONTINUE MAINTENANCE UNTIL LAWNS ARE SATISFACTORY.
D. EROSION MATTING: CONTRACTOR TO PROVIDE EROSION CONTROL MATTING (NORTH AMERICAN GREEN S150) OR EQUIVALENT ON ALL SLOPES THAT ARE 4:1 AND GREATER OUTSIDE OF STORMWATER CONVEYANCE SWALES AND STORMWATER MANAGEMENT BASINS.
E. TREES AND SHRUBS: FURNISH NURSERY-GROWN TREES AND SHRUBS WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAP



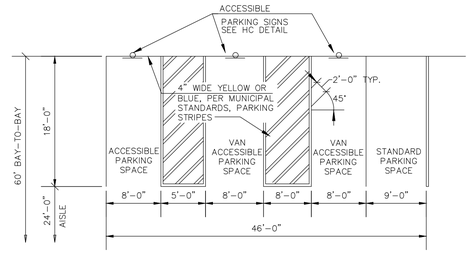
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HANDICAP SIGNAGE WITH CONCRETE BASE DETAIL

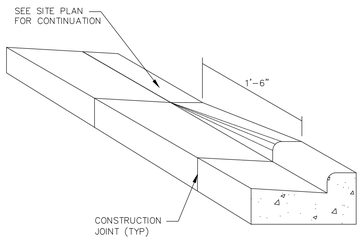
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STANDARD & VAN ACCESSIBLE PARKING STALL STRIPING

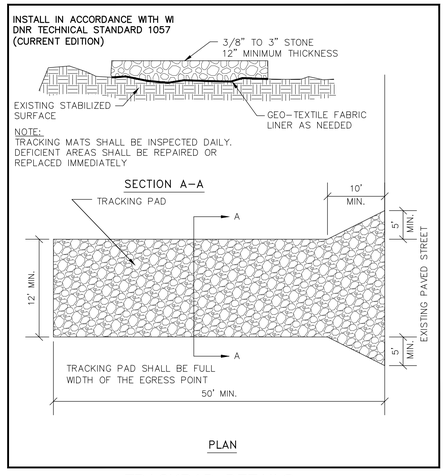
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SPECIFICATION NOTE:
SEE SHEET C0.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS



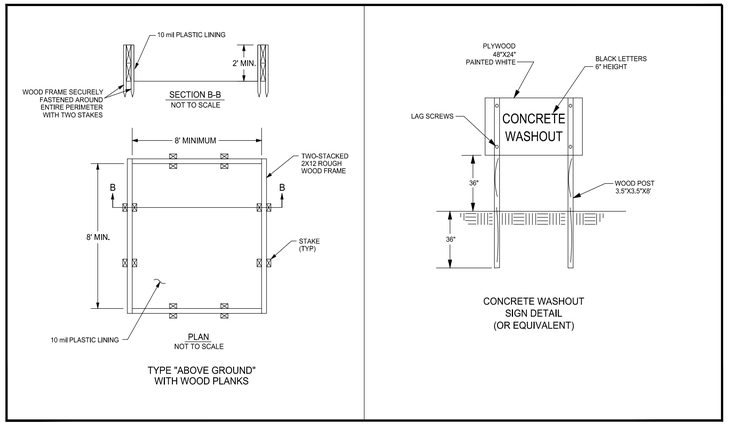
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TRACKPAD DETAILS

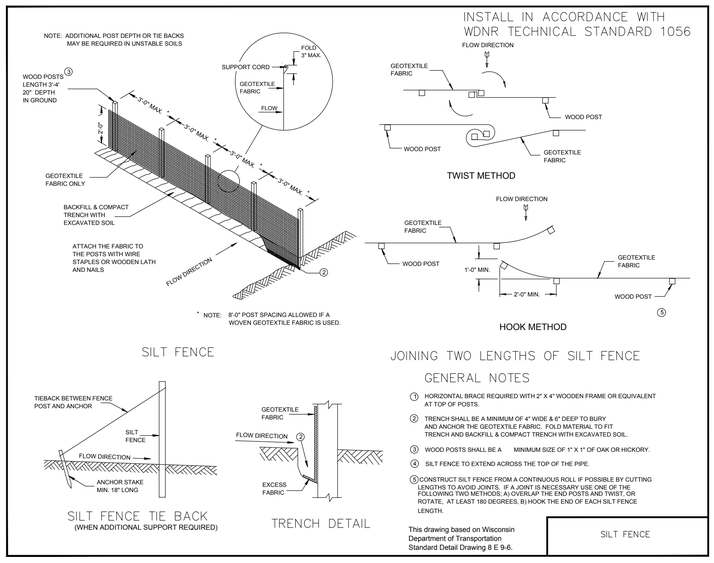
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CONTRACTOR TO ADHERE TO NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (BLUE BOOK) DATED NOVEMBER 2016

CONCRETE WASHOUT DETAIL

NO SCALE



SILT FENCE – INSTALLATION DETAIL

NO SCALE

CIVIL DETAILS

EXCEL
ARCHITECTS • ENGINEERS • SURVEYORS
Always a **Better Plan**
100 Camelot Drive
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PROJECT INFORMATION

GENERAL DEVELOPMENT PLAN FOR:
ODYSSEY HOTELS
RIVERSBEND LA • GERMANTOWN, WI

PROFESSIONAL SEAL

PRELIMINARY DATES
NOV. 1, 2021

NOT FOR CONSTRUCTION

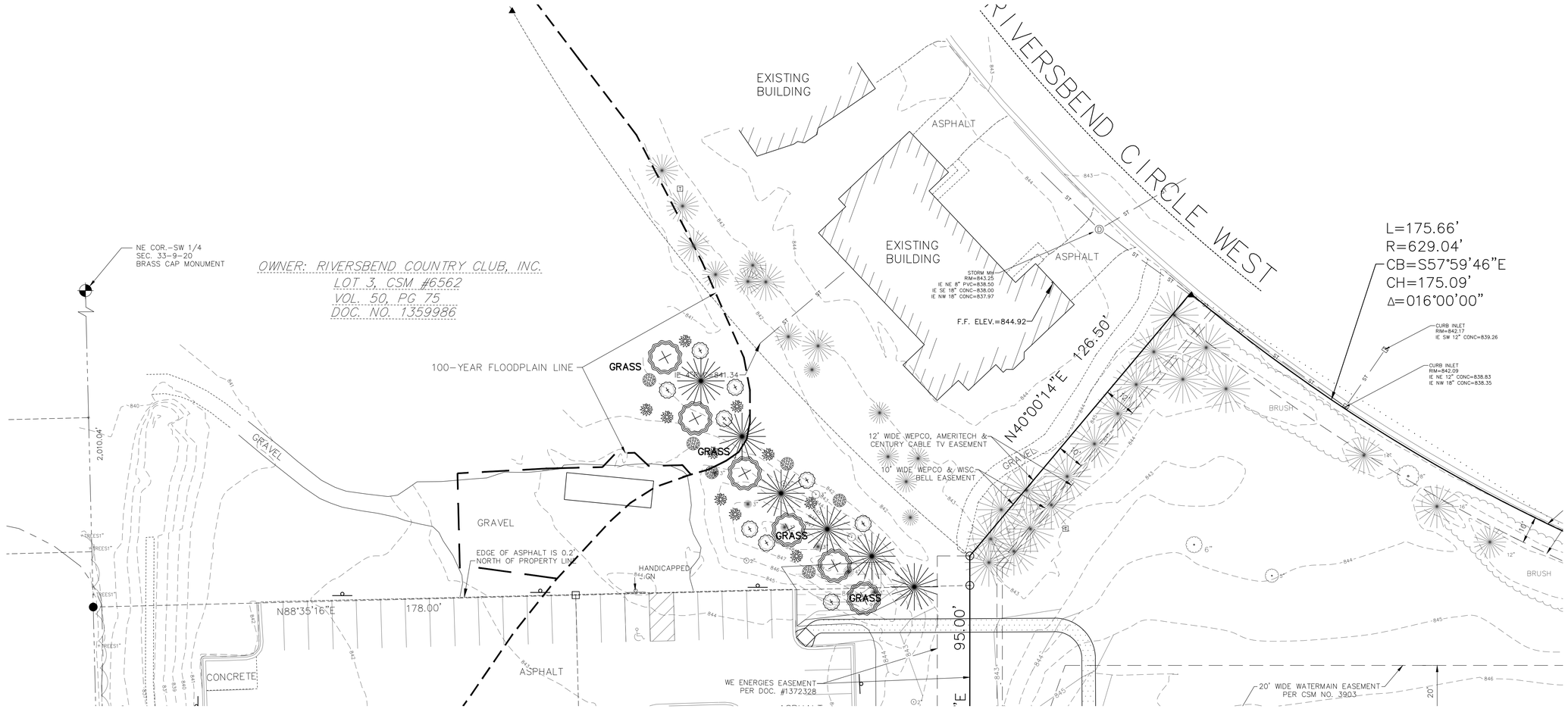
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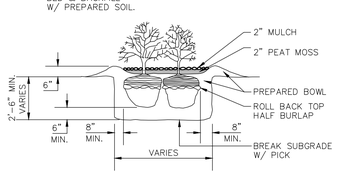
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EROSION MATTING LOCATION

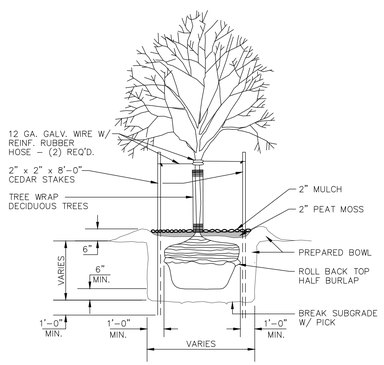
SPECIFICATION NOTE:
SEE SHEET C0.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS



NOTE:
FOR MASS PLANTINGS EXCAVATE ENTIRE BED & BACKFILL W/ PREPARED SOIL.



SHRUB PLANTING DETAIL
NO SCALE



TREE PLANTING DETAIL
NO SCALE

LANDSCAPING PLANTING SCHEDULE

SYMBOL	COMMON NAME	BOTANICAL NAME	PLANTED SIZE	QUANTITY
	EVERGREEN TREES			
	Arborvitae - Nigra	Thuja occidentalis 'Nigra'	2'	9
	Austrian Pine	Pinus nigra	4'	6
	Colorado Spruce	Picea pungens	4'	6
	DECIDUOUS SHRUBS			
	Ginkgo Goldspire	Blagon	3 qt	10
	EVERGREEN SHRUBS			
	Arborvitae Sunkist	Thuja occidentalis 'Sunkist'	24"	6

NORTH
1"= 20' SCALE
20' 0 20' 40' FEET

LANDSCAPE AND RESTORATION PLAN

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PROJECT INFORMATION

GENERAL DEVELOPMENT PLAN FOR:
ODYSSEY HOTELS
RIVERSBEND LA • GERMANTOWN, WI

PROFESSIONAL SEAL

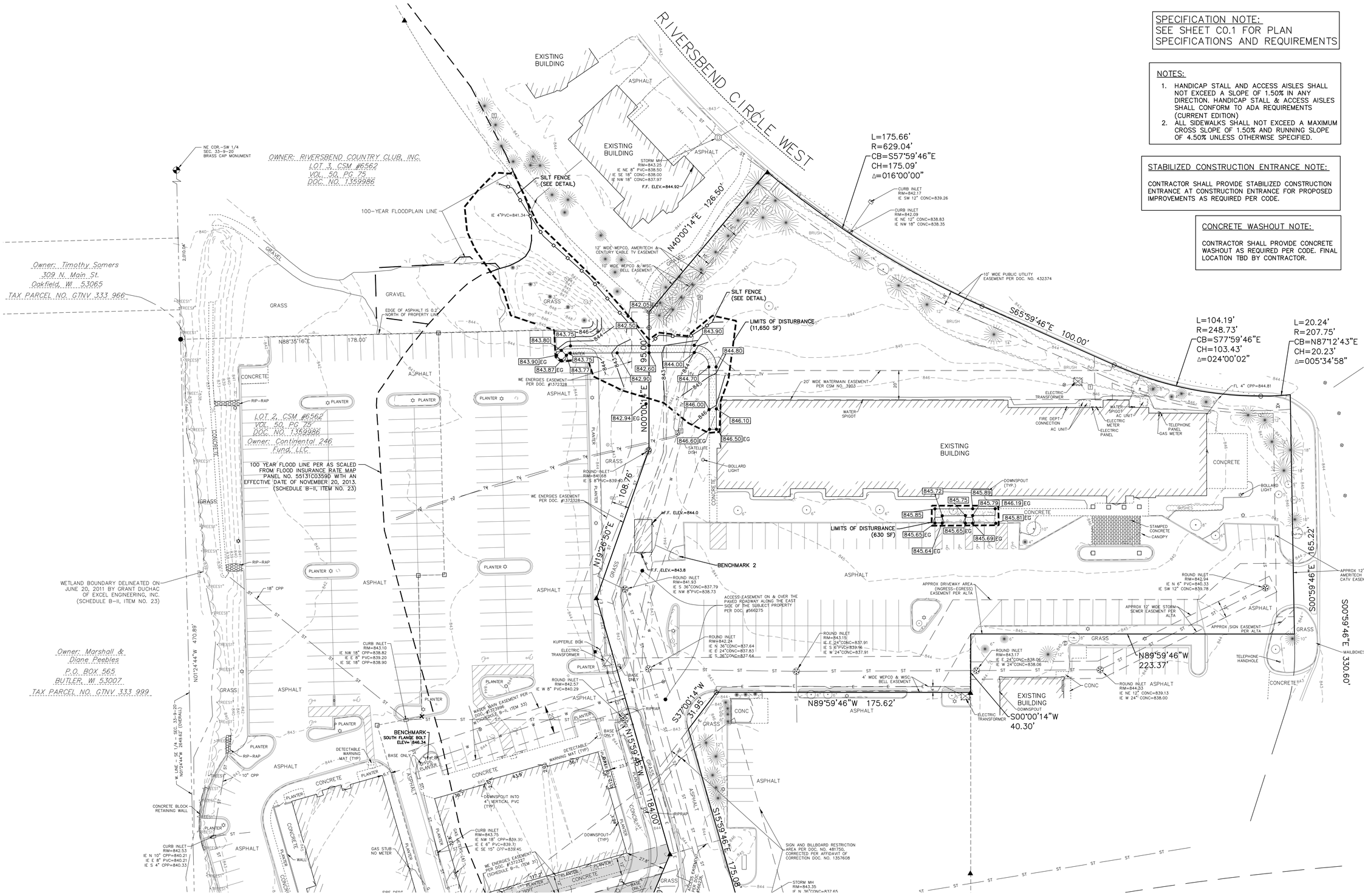
PRELIMINARY DATES
NOV. 1, 2021

NOT FOR CONSTRUCTION

JOB NUMBER
2142200

SHEET NUMBER
C1.3

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NORTH

1"= 30' SCALE 30' 0 30' 60' FEET

CIVIL GRADING AND EROSION CONTROL PLAN

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PROFESSIONAL SEAL

PRELIMINARY DATES
NOV. 1, 2021

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JOB NUMBER
2142200

SHEET NUMBER
C1.2

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SITE INFORMATION:

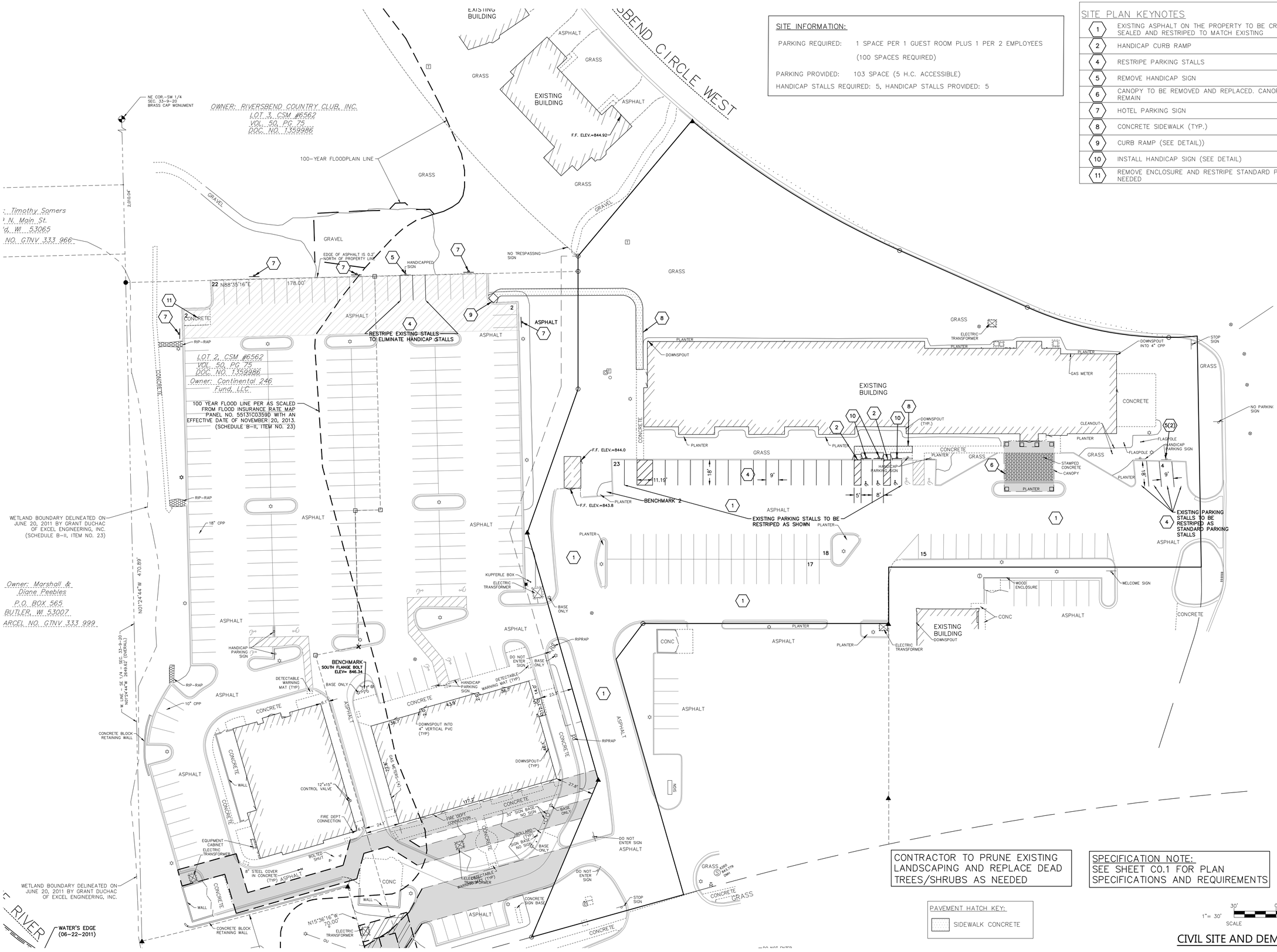
PARKING REQUIRED: 1 SPACE PER 1 GUEST ROOM PLUS 1 PER 2 EMPLOYEES (100 SPACES REQUIRED)

PARKING PROVIDED: 103 SPACE (5 H.C. ACCESSIBLE)

HANDICAP STALLS REQUIRED: 5, HANDICAP STALLS PROVIDED: 5

SITE PLAN KEYNOTES

1	EXISTING ASPHALT ON THE PROPERTY TO BE CRACK FILLED AND SEALED AND RESTRIPED TO MATCH EXISTING
2	HANDICAP CURB RAMP
4	RESTRIPE PARKING STALLS
5	REMOVE HANDICAP SIGN
6	CANOPY TO BE REMOVED AND REPLACED. CANOPY COLUMNS TO REMAIN
7	HOTEL PARKING SIGN
8	CONCRETE SIDEWALK (TYP.)
9	CURB RAMP (SEE DETAIL))
10	INSTALL HANDICAP SIGN (SEE DETAIL)
11	REMOVE ENCLOSURE AND RESTRIPE STANDARD PARKING STALL IF NEEDED



CONTRACTOR TO PRUNE EXISTING LANDSCAPING AND REPLACE DEAD TREES/SHRUBS AS NEEDED

PAVEMENT HATCH KEY:
SIDEWALK CONCRETE

SPECIFICATION NOTE:
SEE SHEET C0.1 FOR PLAN SPECIFICATIONS AND REQUIREMENTS

NORTH

1"= 30' SCALE 30' 0 30' 60' FEET

CIVIL SITE AND DEMOLITION PLAN

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PROJECT INFORMATION

GENERAL DEVELOPMENT PLAN FOR:
ODYSSEY HOTELS
RIVERSBEND LA • GERMANTOWN, WI

PROFESSIONAL SEAL

PRELIMINARY DATES
JULY 19, 2021
NOV. 1, 2021

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2142200

SHEET NUMBER
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Progress Printing - 10-04-21

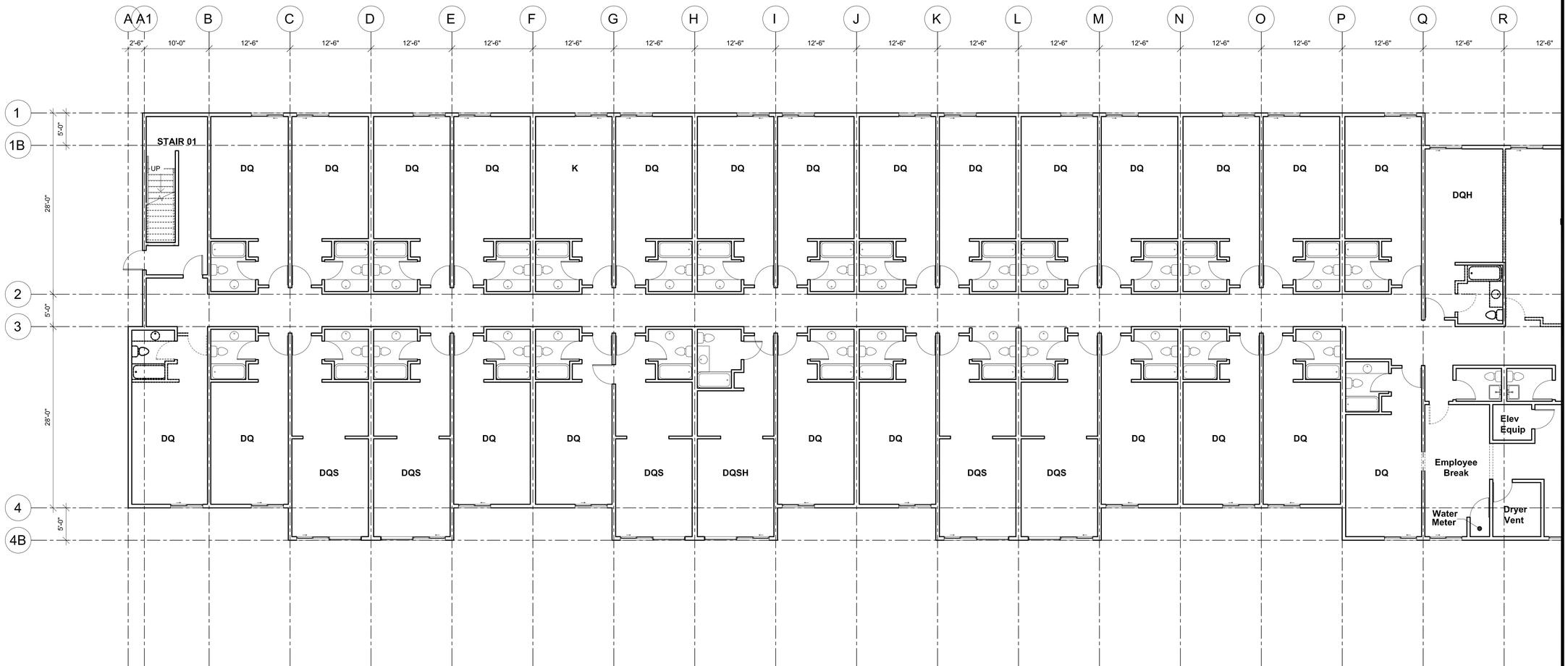
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Date	10-04-21
Job Number	20-006
Scale	AS NOTED
Drawn	SVK
Checked	SVK
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Sheet

A-000a



1 FIRST FLOOR DEMOLITION PLAN

Scale: 1/8" = 1'-0"

ALTERATIONS BY PARTIES OTHER THAN STUDIO 78 ARE BEYOND ITS CONTROL AND ARE THE SOLE RESPONSIBILITY OF THE CONTRACTORS AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS STUDIO 78 AGAINST ALL CLAIMS OR ACTIONS ARISING FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.

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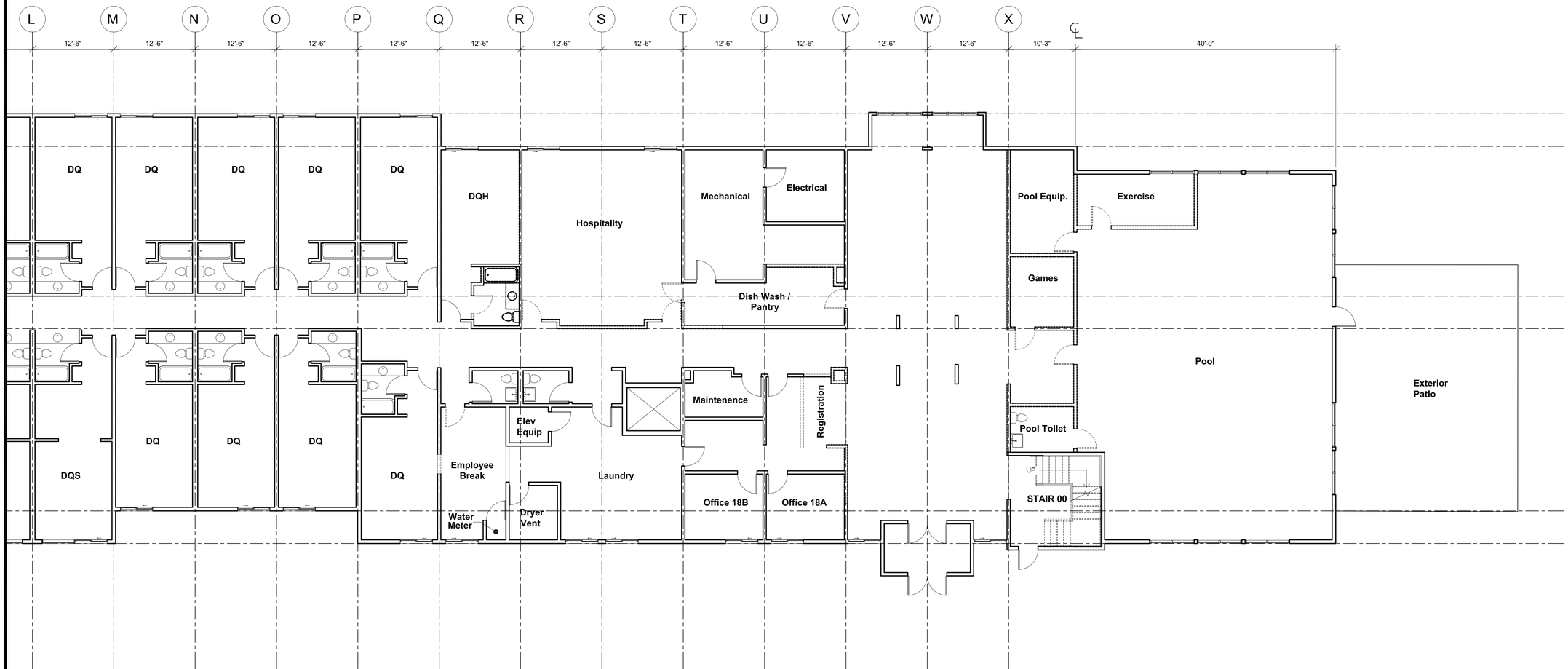
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FIRST FLOOR
DEMOLITION PLAN

Sheet Information	
Date	09-17-21
Job Number	20-006
Scale	AS NOTED
Drawn	SVK
Checked	SVK
Approved	SVK

Sheet

A-101a



1 **FIRST FLOOR DEMOLITION PLAN**

Scale: 1/8" = 1'-0"

ALTERATIONS BY PARTIES OTHER THAN STUDIO 78 ARE BEYOND ITS CONTROL AND ITS ASSUME NO RESPONSIBILITY FOR SUCH CHANGES AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS STUDIO 78 AGAINST ALL CLAIMS, DEMANDS AND LIABILITY ARISING FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.

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FIRST FLOOR DEMOLITION PLAN

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Date	09-17-21
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Checked	SVK
Approved	SVK

Sheet

A-101b

1 **FIRST FLOOR PROPOSED PLAN**

Scale: 1/8" = 1'-0"

ALTERATIONS BY PARTIES OTHER THAN STUDIO 78 ARE BEYOND ITS CONTROL AND ARE THE SOLE RESPONSIBILITY OF THE CONTRACTORS AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS STUDIO 78 AGAINST ALL CLAIMS OR ACTIONS ARISING FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.

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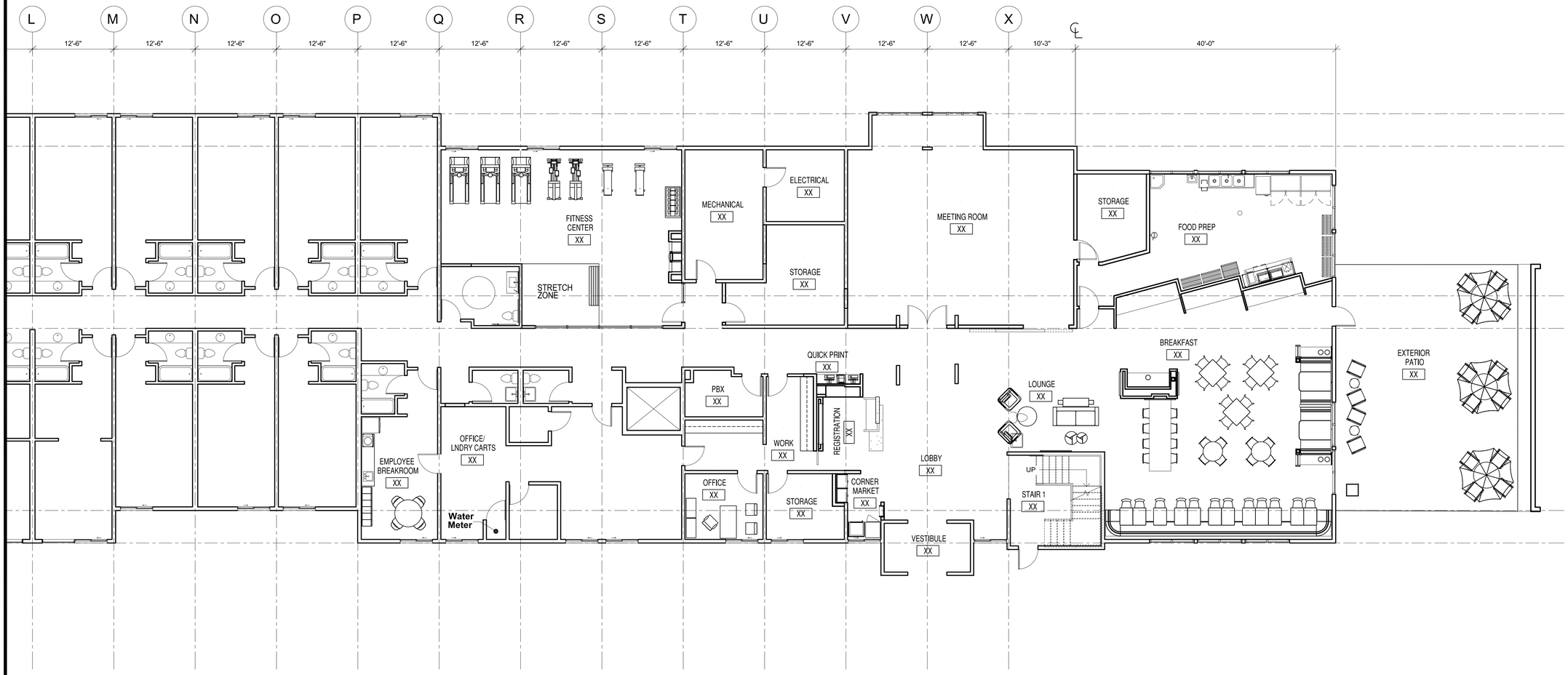
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FIRST FLOOR
PROPOSED PLAN

Sheet Information	
Date	09-17-21
Job Number	20-006
Scale	AS NOTED
Drawn	SVK
Checked	SVK
Approved	SVK

Sheet

A-101c



1 **FIRST FLOOR PROPOSED PLAN**
Scale: 1/8" = 1'-0"

ALTERATIONS BY PARTIES OTHER THAN 'STUDIO 78' ARE BEYOND ITS CONTROL AND ARE SOLELY RESPONSIBILITY FOR SUCH CHANGES AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS 'STUDIO 78' AGAINST ALL LIABILITY ARISING FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.

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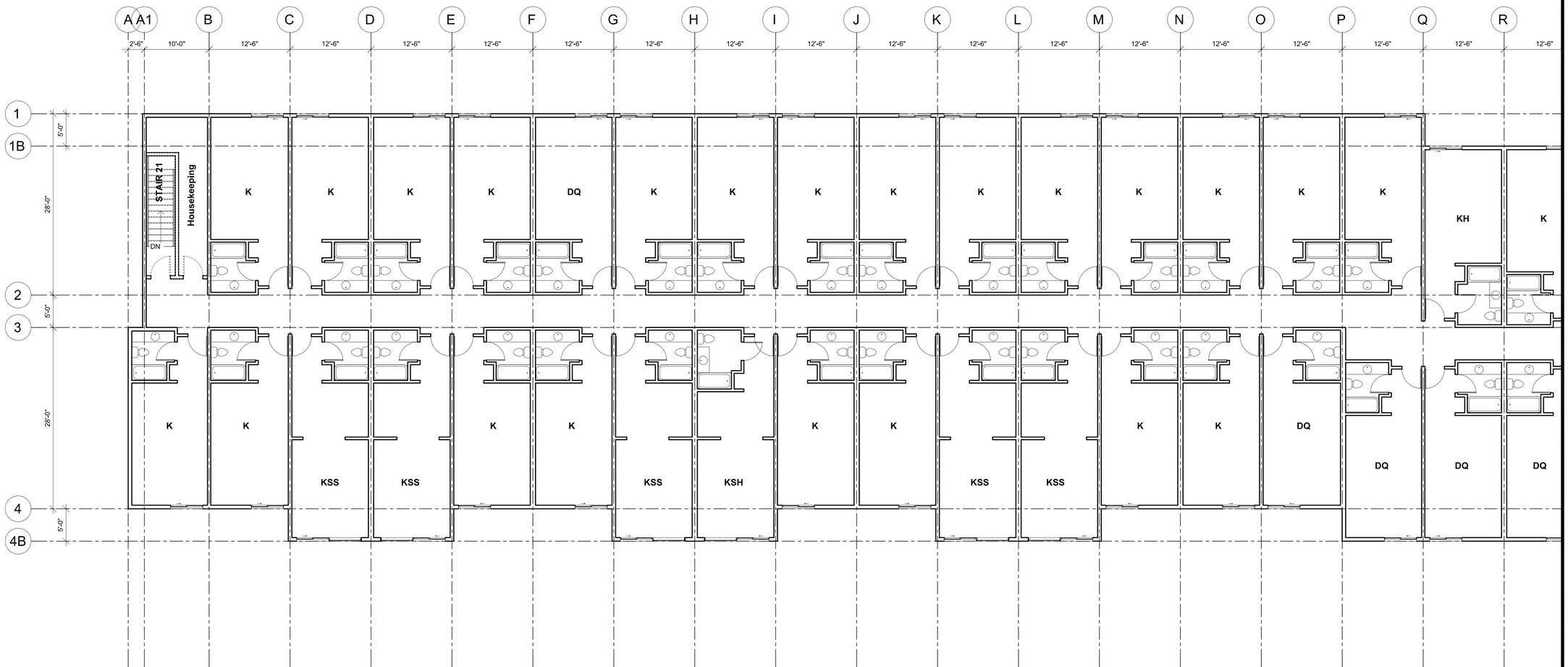
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Job Number	20-006
Scale	AS NOTED
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Checked	SVK
Approved	SVK

Sheet

A-101d

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1 **SECOND FLOOR DEMOLITION PLAN**

Scale: 1/8" = 1'-0"

ALTERATIONS BY PARTIES OTHER THAN STUDIO 78 ARE BEYOND ITS CONTROL AND ARE THE SOLE RESPONSIBILITY OF THE CONTRACTORS AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS STUDIO 78 AGAINST ALL CLAIMS OR ACTIONS ARISING FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.

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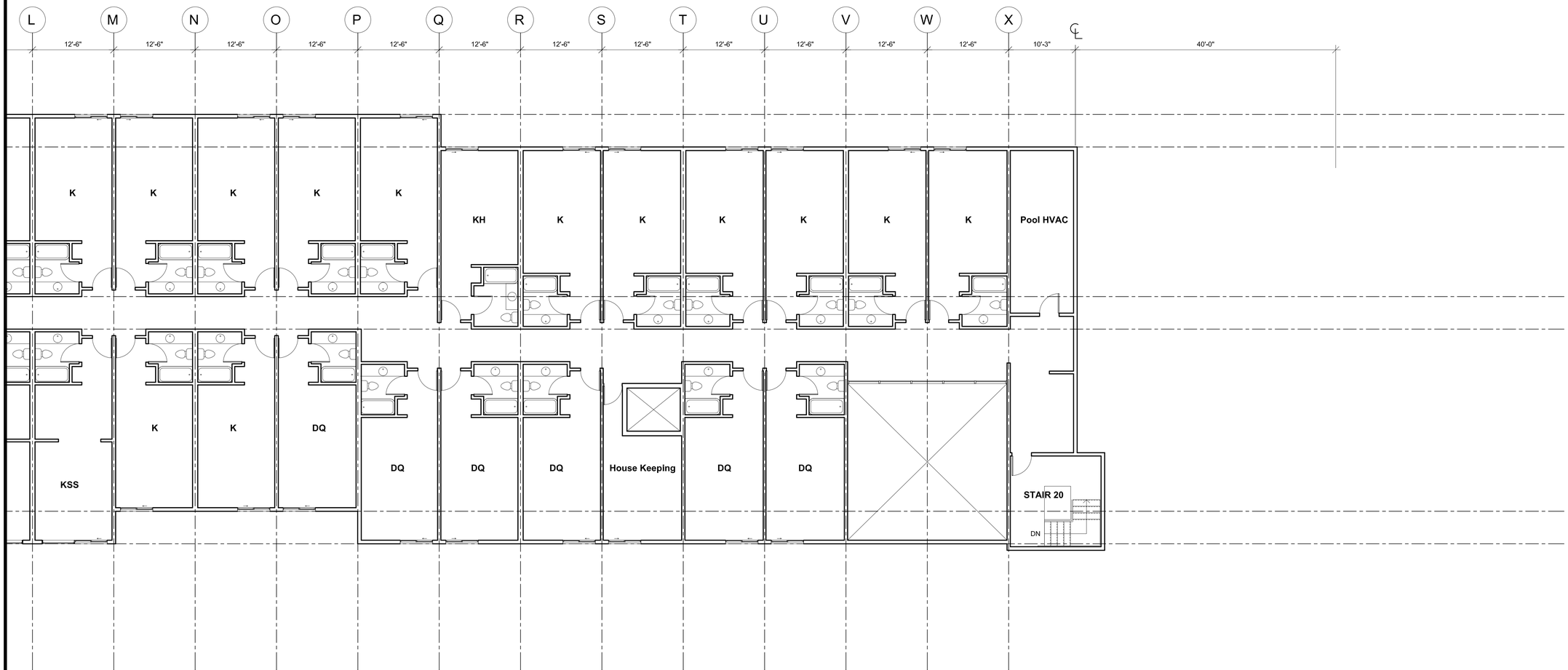
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SECOND FLOOR
DEMOLITION PLAN

Sheet Information	
Date	09-17-21
Job Number	20-006
Scale	AS NOTED
Drawn	SVK
Checked	SVK
Approved	SVK

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A-102a



1 SECOND FLOOR DEMOLITION PLAN

Scale: 1/8" = 1'-0"

ALTERATIONS BY PARTIES OTHER THAN STUDIO 78 ARE BEYOND ITS CONTROL AND SHALL BE CONSTRUED TO RELIEVE STUDIO 78 OF ALL LIABILITIES AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS STUDIO 78 FROM ANY AND ALL CLAIMS OF LOSS, LIABILITIES OR EXPENSES FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.

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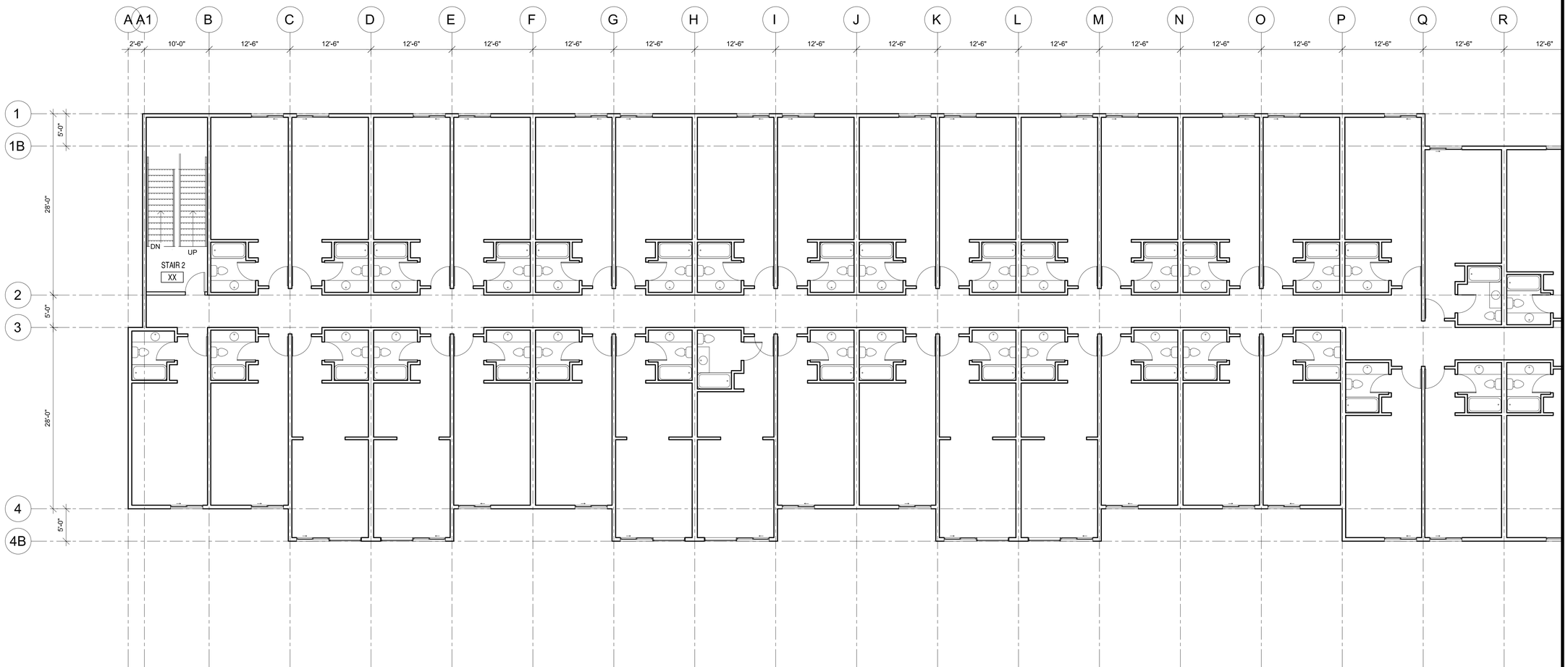
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SECOND FLOOR DEMOLITION PLAN

Sheet Information	
Date	09-17-21
Job Number	20-006
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A-102b



1 SECOND FLOOR PROPOSED PLAN

Scale: 1/8" = 1'-0"

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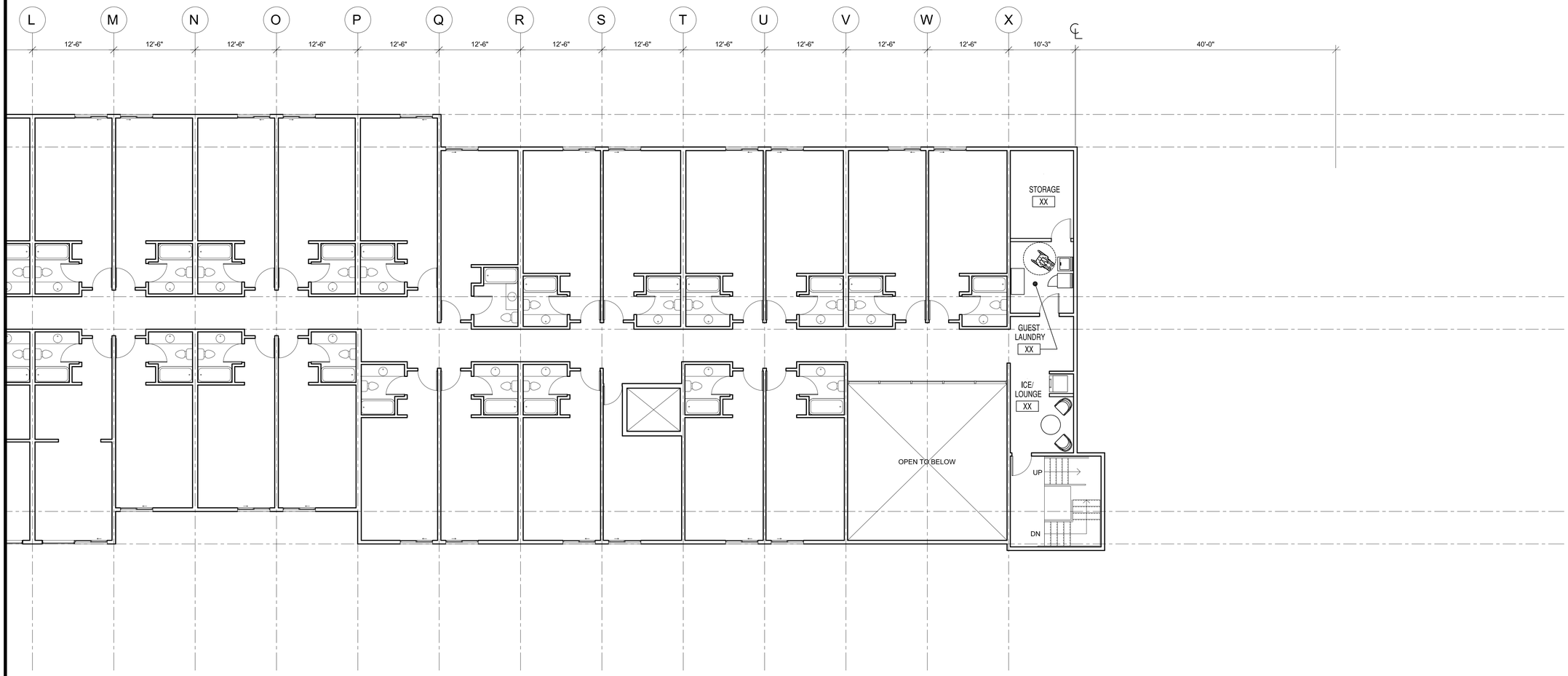
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PROPOSED PLAN

Sheet Information	
Date	09-17-21
Job Number	20-006
Scale	AS NOTED
Drawn	SVK
Checked	SVK
Approved	SVK

Sheet

A-102c

ALTERATIONS BY PARTIES OTHER THAN STUDIO 78 ARE BEYOND ITS CONTROL AND USE SHALL BE SOLELY AT THE USER'S RISK. USER WAIVES AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS STUDIO 78 AGAINST ALL CLAIMS OR ACTIONS ARISING FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.



1 **SECOND FLOOR PROPOSED PLAN**
Scale: 1/8" = 1'-0"

ALTERATIONS BY PARTIES OTHER THAN STUDIO 78 ARE BEYOND ITS CONTROL AND SHALL BE SOLELY RESPONSIBILITY FOR SUCH CHANGES AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS STUDIO 78 AGAINST ALL CLAIMS OR LIABILITIES ARISING FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.

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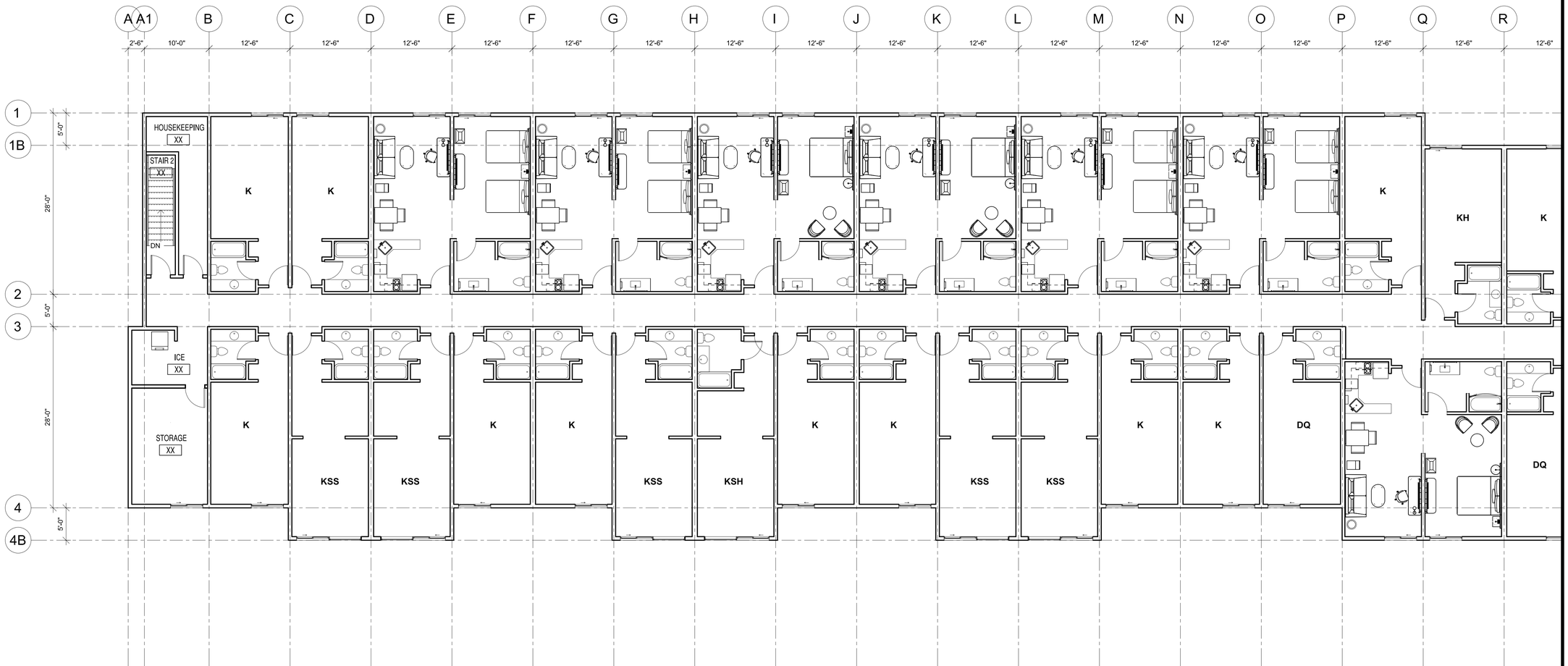
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Sheet Information	
Date	09-17-21
Job Number	20-006
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A-102d



1 THIRD FLOOR PROPOSED PLAN

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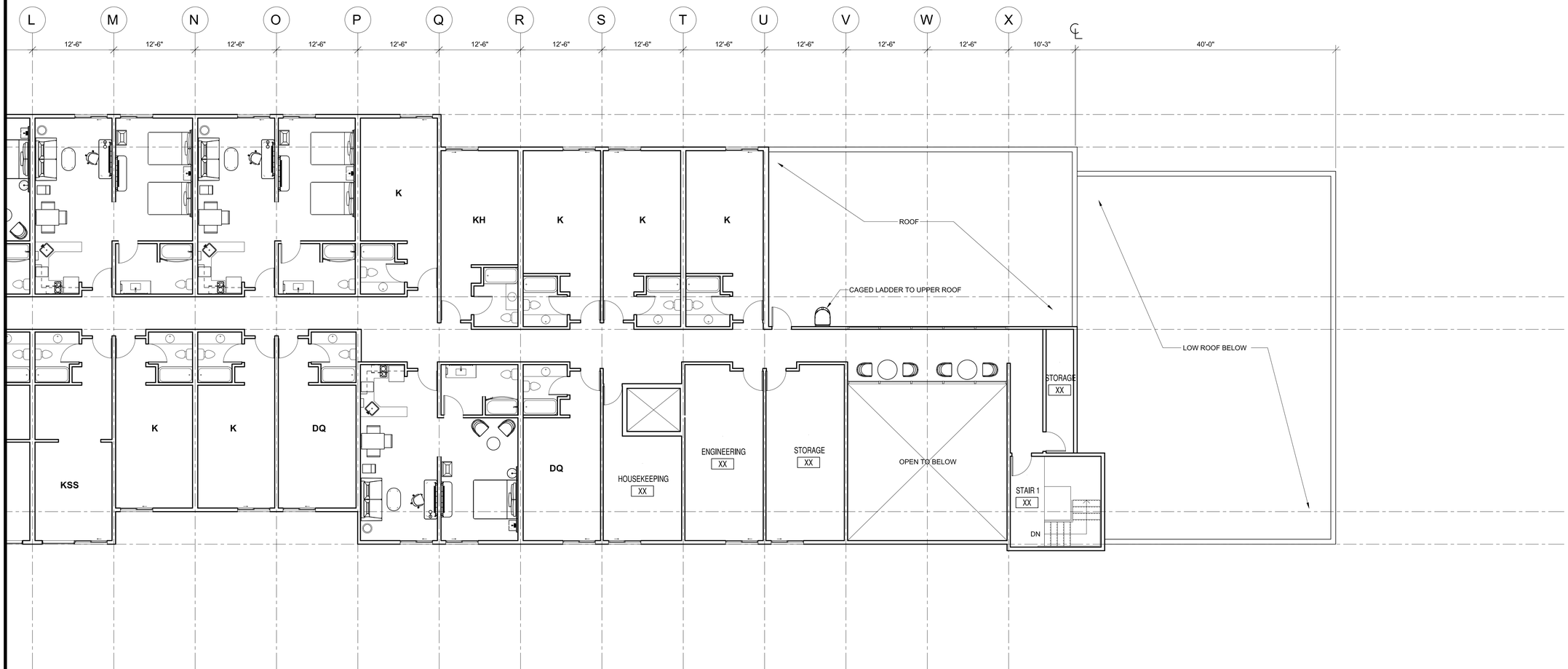
THIRD FLOOR
PROPOSED PLAN

Sheet Information	
Date	09-17-21
Job Number	20-006
Scale	AS NOTED
Drawn	SVK
Checked	SVK
Approved	SVK

Sheet

A-103a

ALTERATIONS BY PARTIES OTHER THAN STUDIO 78 ARE BEYOND ITS CONTROL AND USE SHALL BE SOLELY AT THE RISK OF OTHERS AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS STUDIO 78 AGAINST ALL CLAIMS OR ACTIONS ARISING FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.



1 **THIRD FLOOR PROPOSED PLAN**

Scale: 1/8" = 1'-0"

ALTERATIONS BY PARTIES OTHER THAN STUDIO 78 ARE BEYOND ITS CONTROL AND SHALL BE SOLELY RESPONSIBLE FOR ALL RISKS AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS STUDIO 78 AGAINST ALL CLAIMS OR LIABILITY ARISING FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.

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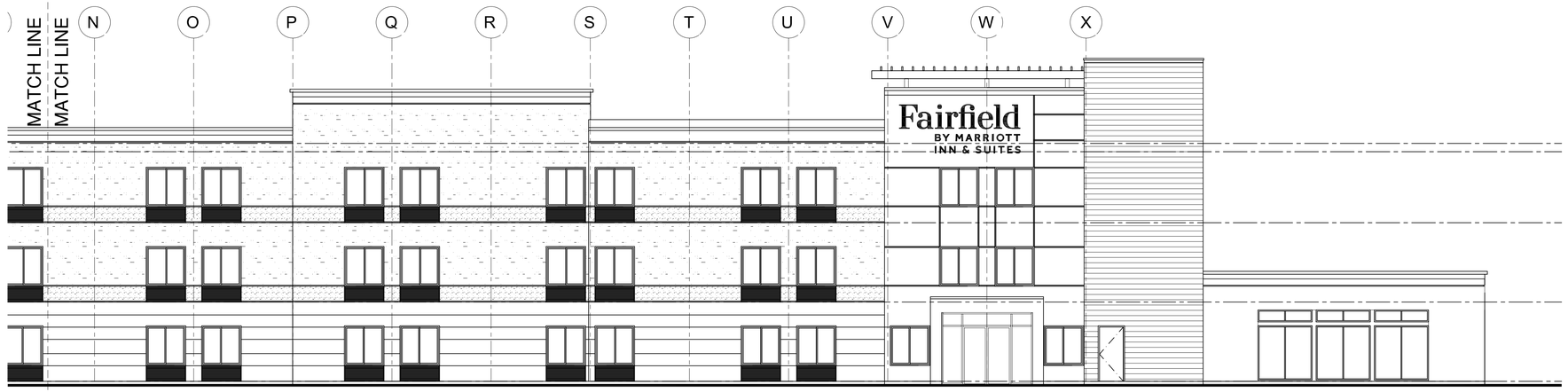
THIRD FLOOR
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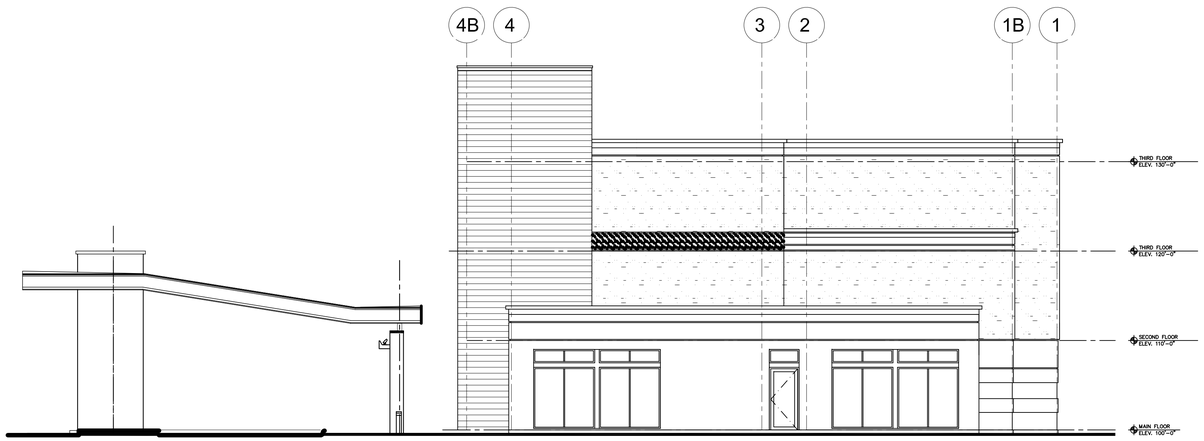
Sheet

A-103b





1 **REAR ELEVATION - PROPOSED**
SCALE: 1/8" = 1'-0"



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

ALTERATIONS BY PARTIES OTHER THAN STUDIO 78 ARE BEYOND ITS CONTROL AND ARE SOLELY THE RESPONSIBILITY OF SUCH PARTIES AND DO HEREBY WAIVE ANY CLAIMS AGAINST STUDIO 78 AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS STUDIO 78 FROM ANY LIABILITY, CLAIMS OR LAWSUITS ARISING FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.

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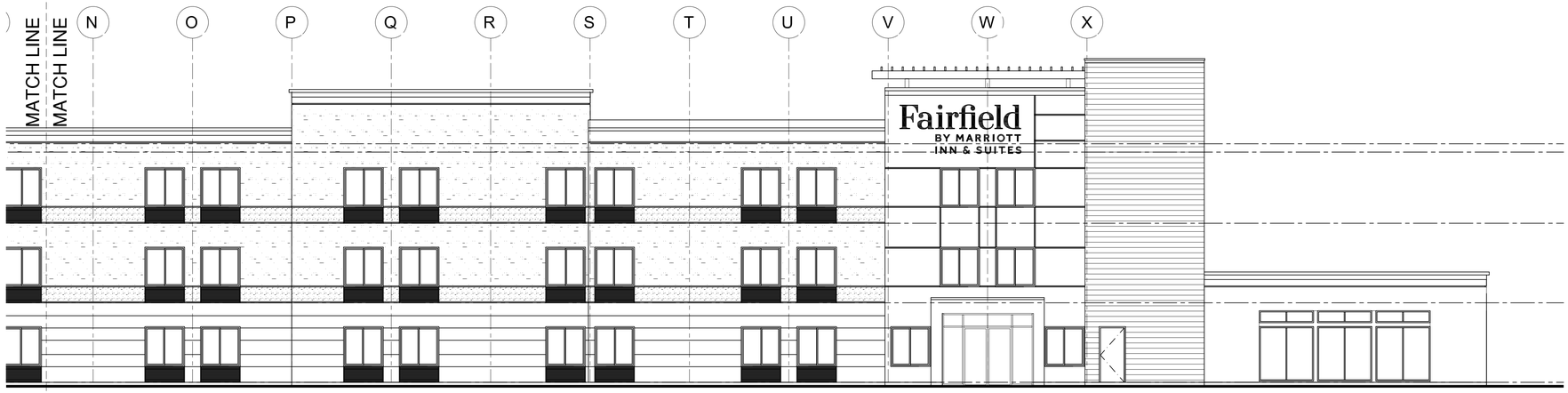
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EXTERIOR ELEVATIONS

Sheet Information	
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Job Number	20-006
Scale	AS NOTED
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Approved	SVK

Sheet
A-212

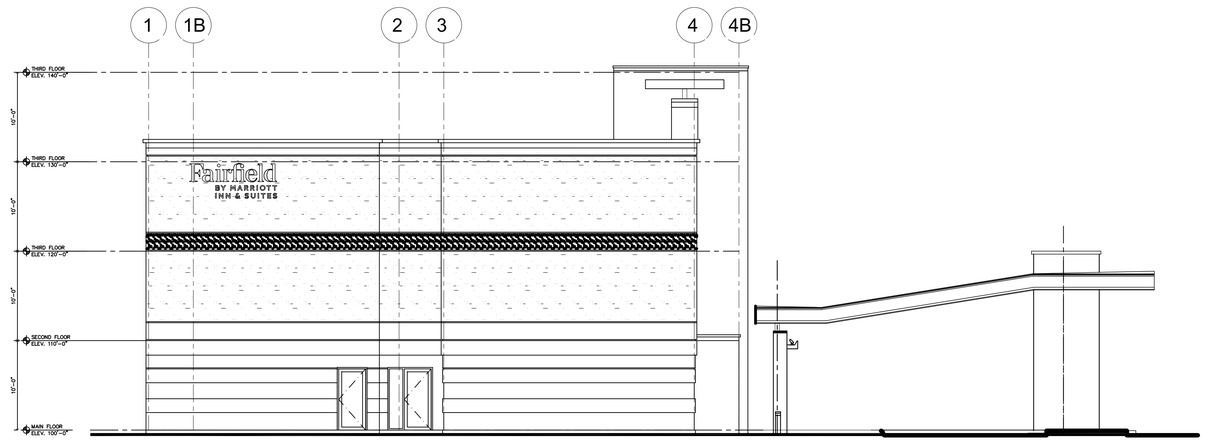
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2 FRONT ELEVATION - PROPOSED

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



1 SOUTH ELEVATION - PROPOSED

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

ALTERATIONS BY PARTIES OTHER THAN STUDIO 78 ARE BEYOND ITS CONTROL AND ARE THE RESPONSIBILITY OF THE SUBSEQUENT OWNERS AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS STUDIO 78 FROM ALL CLAIMS, SUITS, COSTS, AND LIABILITY ARISING FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.

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Title

EXTERIOR ELEVATIONS

Sheet Information	
Date	10-04-21
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Scale	AS NOTED
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A-000e

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ALTERATIONS BY PARTIES OTHER THAN STUDIO 78 ARE BEYOND ITS CONTROL AND THE OWNER SHOULD ASSUME RESPONSIBILITY FOR SUCH CHANGES AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS STUDIO 78 AGAINST ALL CLAIMS OR ACTION ARISING FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.

ALTERATIONS BY PARTIES OTHER THAN STUDIO 78 ARE BEYOND ITS CONTROL AND ARE SOLELY THE RESPONSIBILITY OF THOSE PERFORMING THEM AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS STUDIO 78 AGAINST ALL CLAIMS OR LOSS ARISING FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.

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Approved	SVK

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A-000d



237 Woodridge Drive
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SK@DesignStudio78.com

Marriott Project #57344

Holiday Inn Express
Conversion To
Fairfield Inn & Suites

W. 177 N. 9675 Riversbend Lane
Germantown, Wisconsin 53022

Not For Construction

Revisions

NO.	ISSUE	DATE

Title

RENDERING

Sheet Information	
Date	10-04-21
Job Number	20-006
Scale	AS NOTED
Drawn	SVK
Checked	SVK
Approved	SVK

Sheet

A-000c

Progress Printing - 10-04-21

ALTERATIONS BY PARTIES OTHER THAN STUDIO 78 ARE BEYOND ITS CONTROL AND USER SHALL ASSUME ALL RESPONSIBILITY FOR SUCH CHANGES AND FURTHER AGREES TO PROTECT, INDEMNIFY, AND HOLD HARMLESS STUDIO 78 AGAINST ALL CLAIMS OF LIABILITY ARISING FROM ALTERATION OR DEVIATION FROM THESE DOCUMENTS.



STUDIO 78

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FAIRFIELD INN & SUITES Marriott

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1359988

RECIPROCAL EASEMENT AGREEMENT

Document Number | Document Title

RECORDED
May 23, 2014 8:30 AM
SHARON A MARTIN, REGISTER OF DEEDS
WASHINGTON COUNTY, WISCONSIN

Recording Fee Paid: $30.00

Recording Area 37

Name and Return Address

Continental Properties Company, Inc.
Attn: Legal Department
W134N8675 Executive Parkway
Menomonee Falls, WI 53051

Part of GTNV 333-965

Parcel Identification Number (PIN)

Drafted By:
Continental Properties Company, Inc.
W134N8675 Executive Parkway
Menomonee Falls, WI 53051
Joshua Gunn

THIS PAGE IS PART OF THIS LEGAL DOCUMENT – DO NOT REMOVE.

This information must be completed by submitter: document title, name & return address, and PIN (if required). Other information such as the granting clause, legal description, etc., may be placed on this first page of the document or may be placed on additional pages of the document.
WRDA Rev. 12/22/2010

RECIPROCAL EASEMENT AGREEMENT

THIS RECIPROCAL EASEMENT AGREEMENT (hereinafter "**REA**"), is made and declared as of this 22 day of May, 2014, by CONTINENTAL 246 FUND LLC, a Wisconsin limited liability company ("**Continental**") and RIVERSBEND COUNTRY CLUB, INC., a Wisconsin corporation ("**Riversbend**").

WITNESSETH:

WHEREAS, Continental is the owner in fee simple of the land located in the Village of Germantown, Washington County, Wisconsin and more particularly described on Exhibit A attached hereto ("**East Property**") and depicted on the Site Plan attached hereto as Exhibit D (the "**Site Plan**");

WHEREAS, Continental is the owner in fee simple of the land located in the Village of Germantown, Washington County, Wisconsin and more particularly described on Exhibit B attached hereto ("**West Property**") and depicted on the Site Plan;

WHEREAS, Riversbend is the owner in fee simple of the land located in the Village of Germantown, Washington County, Wisconsin and more particularly described on Exhibit C attached hereto ("**Riversbend Property**"; the East Property, the West Property and the Riversbend Property are sometimes collectively referred to herein as the "**Shopping Center**") and depicted on the Site Plan; and

WHEREAS; the parties desire to make integrated use of the East Property, the West Property and the Riversbend Property to develop and operate the properties substantially in accordance with the Site Plan and this REA, and to establish certain covenants, conditions and restrictions relating to their development and operation.

NOW, THEREFORE, in consideration of the foregoing, and the covenants and declarations, as hereinafter set forth, it is agreed and declared as follows:

ARTICLE I
DEFINITIONS

As used hereinafter in this REA, the following terms shall have the following respective meanings:

1.1 "**Building**" shall mean any enclosed structure placed, constructed or located on a Parcel.

1.2 "**Building Area**" shall mean those areas of the East Property, West Property and the Riversbend Property which are designated as such on the Site Plan and within which a Building may be constructed, placed or located.

1.3 "**Claims**" shall mean claims, losses, liabilities, actions, proceedings, costs and expenses (including reasonable attorneys' fees and cost of suit actually incurred).

1.4 "**Common Areas**" shall mean all portions of the East Property and West Property not shown as Building Areas and those portions of the Building Areas upon which buildings are not constructed. Common Areas shall not include Outdoor Seating Areas (as defined in Section 4.2).

1.5 "**Common Area Improvements**" refers to the Permanent Access Drives, roads, streets, drives, passageways, sidewalks, landscape areas, drainage facilities, lighting facilities and parking and service areas serving the Parcels, directional and parking signs, all monument or pylon signs serving the Parcels and any other improvements designated for the common use of occupants of the Parcels. Common Area Improvements shall not include appurtenant building canopies, building supports, loading docks, truck ramps, dumpster and enclosures or any other outward extensions of a Building which are not intended for the common use of occupants of the Parcels.

1.6 "**Common Utility Lines**" shall mean those Utility Lines which are installed to provide the applicable service to more than one (1) of the Parcels. The Shared Detention Ponds shall be deemed to be a Common Utility Line.

1.7 "**Effective Date**" means the first date written above.

1.8 "**Floor Area**" refers to and means with respect to any Building within the Shopping Center, whether or not actually occupied, the actual number of square feet of floor space within the exterior walls of all floors, measured to the center lines of all common walls or to the exterior of all non-common walls, including stairs, interior elevators, escalators, air conditioning and other interior equipment rooms; but excluding: (i) unenclosed loading docks and platforms, transformer vaults, utility or mechanical penthouses or utility enclosures located outside of the exterior walls of the building serviced thereby; (ii) patio or outside selling areas or Outdoor Seating Areas; (iii) any mezzanine space or basement space not used for retail sales. Upon written request from a Party (as hereinafter defined), each Party shall deliver to the requesting Party a certification from an architect duly licensed in the State of Wisconsin certifying the exact Floor Area of all Buildings on the requested Party's Parcel; provided however that after construction of the Building(s) on a Party's Parcel only one such certification shall be permitted until new Buildings are constructed on such Parcel. If any Party causes an as-built survey to be prepared with respect to any portion of the Shopping Center, such Party shall furnish a copy of the survey to the other Parties for informational purposes only.

1.9 "**Force Majeure**" shall mean any accident, breakage, war, insurrection, civil commotion, riots, acts of God or the elements, governmental action, installation, wear, use, repairs, renewal, improvements, alterations, strikes or lockouts, picketing (whether legal or illegal), inability of a Party or its agents or contractors, as applicable, to obtain fuel or supplies, or any other cause or causes beyond the reasonable control of such Party or its agents or contractors, as applicable.

1.10 "**Indemnify**" shall mean indemnify, protect, hold harmless and defend with counsel designated by the insurer charged with the obligation to defend (or if no insurer is involved, with counsel reasonably acceptable to the Person being defended).

1.11 "**Interest Rate**" means the rate of three percent (3%) per annum over the then existing prime rate of interest per annum ad defined in The Wall Street Journal or its successor (but in no event exceeding the maximum rate permitted by law).

1.12 "**Laws**" shall mean and include all then applicable laws, rules, regulations, orders, ordinances, statutes and other requirements of all federal, state, county and municipal authorities having jurisdiction over the Parcels.

1.13 "**Mortgagee**" refers to and shall include a mortgagee, trustee and beneficiary under any deed of trust or mortgage, and the term "Mortgage" shall include any indenture of mortgage, deed of trust, and to the extent applicable, a sale and lease back transaction.

1.14 "**Occupant**" refers to and means any Person from time to time entitled to use and occupy any Parcel under any lease, deed, agreement to purchase or other instrument whereunder such Person has acquired rights with respect to the use and occupancy of such Parcel.

1.15 "**Parcel**" or "**Parcels**" refers to and means each of the East Property, the West Property and the Riversbend Property.

1.16 "**Party**" or "**Parties**" refers to and means the owner or owners, respectively, of fee simple title from time to time of the Parcels or any portion thereof; provided, however, in the event of the sale by an owner of all or a portion of the Parcel and a simultaneous leaseback of the same or portions thereof (a "sale/leaseback"), the seller/lessee under such sale/leaseback shall be deemed to be the Party with respect to the related Parcel for the purposes of this REA, unless otherwise designated in the sale/leaseback lease.

1.17 "**Permanent Access Drives**" shall mean those drives noted as "Permanent Access Drives" on the Site Plan.

1.18 "**Permittees**" refers to and means all Occupants and their respective officers, directors, partners, employees, agents, contractors, customers, visitors, invitees, licensees, assignees, subtenants and concessionaires; provided however, persons engaged in civic, public or political activities on the Parcels, including but not limited to the following activities, shall not be considered to be Permittees: (i) exhibiting any placard, sign or notice; (ii) distributing any circular, handbill, placard or booklet; (iii) soliciting memberships or contributions for private, civic, public or charitable purposes; (iv) parading, picketing or demonstrating; and (v) failing to follow rules or regulations established by the Parties relating to the use of the Parcels.

1.19 "**Person**" refers to and shall include individuals, partnerships, limited liability companies, firms, associations and corporations, or any other form of business or government entity, and the use of the singular shall include the plural.

1.20 "**Protected Area**" shall have the meaning set forth in Section 4.5 hereof.

1.21 "**Separate Utility Lines**" shall mean those Utility Lines which are installed to provide the applicable service to a Parcel, exclusive of all of the other Parcels. For the purpose of this REA, the portion of a Utility Line extending between a Common Utility Line and a Building shall be considered a Separate Utility Line.

1.22 "**Shared Detention Ponds**" shall mean those certain detention ponds labeled as the "Shared Detention Ponds" on the Site Plan.

1.23 "**Utility Lines**" shall mean those facilities and systems for the transmission of utility services, including without limitation, the drainage and storage of surface water.

ARTICLE II
EASEMENTS

2.1 Access and Parking. Each Parcel is hereby granted in common with all other Parcels, for each Party's respective use, and for the use of their respective Permittees, in common with all others entitled to use the same, mutual, reciprocal and non-exclusive easements over the Common Area of each Parcel, for ingress into and egress from such respective Parcel, for the passage and parking of vehicles, and for passage and accommodation of pedestrians, on such respective portions of such Common Area as are set aside, maintained and authorized for such use pursuant to the terms of this REA, and for the doing of such other things as are authorized or required to be done on said Common Area pursuant to this REA. Notwithstanding the foregoing, (a) the owner of the Riversbend Property shall use its best efforts to cause its Permittees to park their vehicles only in the area designated as "Golf Course Parking Area" on the Site Plan, (b) the Parties, for themselves and future Parties hereto, reserve the right to close off the Common Area of a Parcel for such reasonable period or periods of time as: (i) may be legally necessary to prevent the acquisition of prescriptive rights by anyone; and (ii) may be reasonably necessary for repairs and/or maintenance; provided, however, that prior to closing off any portion of the Common Area, as herein provided, such Party shall give written notice to any other Party, and shall coordinate such closing with all other Parties so that there is no unreasonable interference with any Occupant's access to or operation of any portion of its Parcel; and (iii) may be necessary for initial construction of the Common Area and improvements on any Parcel provided that such Party gives written notice to any other Party of the location of the staging area during construction provided that the location of the staging area is not within any Permanent Access Drives and does not unreasonably interfere with any Occupant's access to any part of its Parcel; (c) no Party and no Occupant of any Party's Parcel shall, during construction or reconstruction, stage, deposit, store or have any construction material or equipment on the Parcel of another Party and in no event shall the Common Area be closed pursuant to (b)(i) or (b)(ii) above from August 1st to January 15th of any calendar year (except in the event of an emergency and during the initial construction). In the event that the Permittees of the Riversbend Property fail to limit their parking to the Golf Course Parking Area, then the Occupants of the East Property and the West Property, respectively, shall have the right to install signs within the Common Area of their respective Parcels, which designate the parking outside of the Golf Course Parking Area

as solely for use by customers of the East Property and the West Property. The owner of the East Property shall have the right to designate up to eight (8) exclusive parking spaces on the East Property for the exclusive use of one or more Occupants of the East Property and such Occupants' invitees (provided that such exclusive parking spaces shall not be located along the common boundary line between the West Property and the East Property). The owner of the West Property shall have the right to designate up to six (6) exclusive "to go" parking spaces on the West Property for the exclusive use of one or more Occupants of the West Property and such Occupants' invitees. Each such designation shall be honored by the owners of the East Property, the West Property and the Riversbend Property.

2.2 Utilities. Each Party hereby grants and conveys to each other Party non-exclusive perpetual easements in, to, over, under, along and across those portions of the Common Area (exclusive of any portion located within Building Areas) located on the grantor's Parcel necessary for the installation, operation, flow, passage, use, maintenance, connection, repair, relocation, and removal of Utility Lines serving the grantee's Parcel, including but not limited to, sanitary sewers, storm drains, and water (fire and domestic), gas, electrical, telephone and communication lines, subject to the following requirements and restrictions:

(a) All Utility Lines shall be underground except: (i) ground mounted electrical transformers; (ii) stormwater management practices, (iii) the Shared Detention Ponds; (iv) as may be necessary during periods of construction, reconstruction, repair, or temporary service; (v) as may be required by governmental agencies having jurisdiction over the Parcels; (vi) as may be required by the provider of such service; and (iiii) fire hydrants.

(b) At least ten (10) days prior to any installation, maintenance, connection, repair, relocation or removal of Utility Lines located on another Party's Parcel pursuant to the easement granted herein (except in an emergency, the work may be initiated with reasonable notice), the grantee shall first provide the grantor with a written statement describing the need for such work, shall identify the proposed location of the Utility Line, the nature of the service to be provided, the anticipated commencement and completion dates for the work and shall furnish a certificate of insurance showing that its contractor has obtained the minimum insurance coverage required by Section 8.2.

(c) The initial location of any Utility Line shall be subject to the prior written approval of the Party whose Common Area is to be burdened thereby, such approval not to be unreasonably withheld or conditioned, and such Party shall respond to any request within fifteen (15) days after receipt. The easement area shall be no wider than necessary to reasonably satisfy the requirements of a private or public utility. Upon request, the grantee shall provide to the grantor a copy of an as-built survey showing the location of such Utility Line.

(d) Except as otherwise agreed to by the grantor and the grantee, any Party installing Separate Utility Lines pursuant to the provisions of this subparagraph shall pay all costs and expenses with respect thereto and shall cause all work in connection therewith (including general clean-up and proper surface and/or subsurface restoration) to be completed as quickly as possible and in a manner so as to minimize interference with the use of the Common Area. In addition, the grantee of any Separate Utility Line shall Indemnify the grantor from all Claims arising out of or resulting from the installation, maintenance and operation of the Separate Utility Line.

(e) The grantor whose Parcel is affected by a Utility Line shall have the right to relocate such Utility Line upon ten (10) days' prior written notice, provided that such relocation:

(i) shall not be commenced between August 1st and January 15th;

(ii) shall not interfere with or diminish the utility service to the grantee during the grantee's business hours; and if an electrical line/computer line is being relocated, then the grantor and grantee shall coordinate such interruption to eliminate any detrimental effects;

(iii) shall not reduce or unreasonably impair the usefulness or function of such Utility Line;

(iv) shall be performed without cost or expense to grantee;

(v) shall be completed using materials and design standards which equal or exceed those originally used; and

(vi) shall have been approved by the provider of such service and the appropriate governmental or quasi-governmental agencies having jurisdiction thereover.

Documentation of the relocated easement area, including the furnishing of an "as-built" survey, shall be performed at the grantor's expense and shall be accomplished as soon as possible following completion of such relocation. At the request of any Party hereto, this Agreement shall be supplemented to memorialize the as-built location (and corresponding easement) of any Utility Line.

(f) Each Party hereby grants and conveys to each other Party the perpetual right and easement to discharge surface storm drainage and/or runoff from the grantee's Parcel over, upon and across the Common Area of the grantor's Parcel, and the owner of the Riversbend Property hereby grants and conveys to each other Party the perpetual right and easement to discharge and store surface drainage and/or runoff into the Shared Detention Ponds, upon the following conditions and terms:

(i) The Common Area grades and the Shared Detention Ponds shall be initially constructed in strict conformance with the details approved by the Parties; provided that the owner of the Riversbend Property hereby approves the grading and drainage plans for the East Property and West Property; and

(ii) Following the initial construction of the improvements on the Parcels, no Party shall alter or permit to be altered the surface of the Common Area or the area or capacity of the drainage/retention system constructed on its Parcel if such alteration would unreasonably increase the flow of surface water onto an adjacent Parcel either in the aggregate or by directing the flow of surface water to a limited area. The foregoing shall not limit or affect the rights of the East Property and the West Property to discharge surface drainage to the Shared Detention Ponds pursuant to this REA.

2.3 Monument Sign Easement. Continental, for itself and any future party owning any of the Parcels, hereby grants, declares and reserves a perpetual, exclusive easement over that portion of the East Property depicted on Exhibit D attached hereto and made a part hereof, for the installation, replacement and removal of a monument sign ("**Monument Sign**"). The initial Monument Sign shall be in substantially the location shown on Exhibit D and shall be constructed in accordance with the sign rendering shown on Exhibit E attached hereto. The owner of the West Property, the East Property and the Riversbend Property shall each be entitled to certain panels on the Monument Sign in accordance with the allocation shown on Exhibit E.

2.4 Trash Enclosure Easements. Continental, for itself and any future party owning the West Property, hereby grants and conveys to the owner of the Riversbend Property a perpetual, exclusive easement over that portion of the West Property depicted on Exhibit D attached hereto and made a part hereof, for the placement of a trash enclosure and facilities for the removal of trash from the Riversbend Property ("**Golf Course Trash Enclosure**"). The Golf Course Trash Enclosure shall be located in the area labeled as such on Exhibit D and the design and construction of the enclosure and facilities shall be subject to the prior written approval of the owner of the West Property, which approval shall not be unreasonably withheld. Continental, for itself and any future party owning the West Property, hereby grants and conveys to the owner of the East Property a perpetual, exclusive easement over that portion of the West Property depicted on Exhibit D attached hereto and made a part hereof, for the placement of a trash enclosure and facilities for the removal of trash from the East Property (" **East Property Trash Enclosure**"). The East Property Trash Enclosure shall be located in the area labeled as such on Exhibit D and the design and construction of the enclosure and facilities shall be

subject to the prior written approval of the owner of the West Property, which approval shall not be unreasonably withheld.

ARTICLE III
TAXES

3.1 Taxes. Each Party shall pay or cause to be paid before delinquency all taxes and assessments levied or assessed against its Parcel, and indemnify and defend the other Parties and hold the other Parties harmless from and against any and all claims or demands for payment of such taxes or assessments.

ARTICLE IV
BUILDING AREAS, COMMON AREAS, AND CONSTRUCTION OBLIGATIONS

4.1 Improvements. The East Property and the West Property shall be developed as a uniform and harmonious development as generally shown on the Site Plan. The Parties shall be permitted in accordance with the terms and restrictions contained in this REA to construct buildings within the Building Area as so labeled on the Site Plan. Portions of the Building Area upon which buildings or other improvements are not constructed shall be paved and/or landscaped by the Party owning the Parcel and integrated into the Common Area until construction thereon commences. Except as set forth in Section 4.5 below, each Party may alter, modify and/or rearrange the Common Areas on its Parcel from time to time as it determines in its sole discretion.

4.2 Building Areas. All buildings constructed on the East Property and the West Property shall be located wholly within the areas labeled "**Building Area**" on the Site Plan. Canopies and roof overhangs (including supporting columns or pillars), normal foundations, sidewalks, required emergency exits (including associated stairs, landings, footings and foundations), trash enclosures, loading and delivery docks (whether open or enclosed), covered areas attached to such docks, and doors for ingress and egress may project or extend from any building over or outside of the Building Area; provided: (a) any such projection or extension shall comply with all applicable governmental laws, rules, ordinances and regulations; and (b) no such extension or projection is permitted if it: (i) materially alters the parking configuration or vehicular or pedestrian circulation or access in and through the Parcels or to and from adjacent streets from that shown on the Site Plan; (ii) unreasonably interferes with the use and occupancy of any Parcel or portions thereof; or (iii) hinders the construction of buildings on adjacent Building Areas (collectively, the "**Building Extensions**"). In addition, each Party or occupant shall be entitled to utilize certain outdoor seating area(s) adjacent to the Buildings on its Parcel designated as "**Outdoor Seating Areas**" on the Site Plan (it also being acknowledged that outdoor seating shall also be permitted within any Building Area). The Building Extensions and Outdoor Seating Areas are collectively referred to as the "**Permitted Extensions**". Permitted Extensions, as they may exist from time to time, are not part of the Common Area, and shall be maintained and insured against fire and other casualty as part of the building from which they extend or project.

4.3 Building Encroachments.

(a) In order to accommodate any Building improvements which inadvertently may be constructed beyond a Parcel's boundary line, each Party grants to each Party owning an adjacent Parcel an easement not to exceed a maximum lateral distance of six inches (6"), in, to, over, under and across that portion of the grantor's Parcel adjacent to such common boundary line for the maintenance and replacement of such encroaching Building improvements. The foregoing easement grant shall not diminish or waive any right of a Party to recover damages resulting from the constructing Party's failure to construct its Building within its Parcel.

(b) If a constructing Party (the "**Constructing Party**") determines that it is necessary to place underground piers, footings and/or foundations ("**Subsurface Construction Elements**") across the boundary line of its Parcel, the Constructing Party shall advise the Party owning the adjacent Parcel (the "**Adjacent Party**") of its construction requirement and shall provide plans and specifications relating thereto, including proposed construction techniques for the Subsurface Construction Elements. The Adjacent Party hereby grants and conveys to the Constructing Party for the benefit of its Parcel an easement, not to exceed a maximum

lateral distance of five feet (5'), in, to, under and across that portion of the Adjacent Party's Parcel not theretofore occupied by any then existing structure, for the installation, maintenance and replacement of such Subsurface Construction Elements.

(c) The Adjacent Party reserves the right to require the Constructing Party to modify the design specifications for the Subsurface Construction Elements in order to permit the Adjacent Party the opportunity to use the same in connection with the construction of its Building improvements to the end that each Party shall be able to place its Building immediately adjacent to the common boundary line. If a common Subsurface Construction Element is used by the Parties, each shall assume and pay its reasonable share of the cost and expense of the design and construction and maintenance thereof. If any Building using a common Subsurface Construction Element is destroyed and not replaced or removed, the common Subsurface Construction Element shall remain in place for the benefit of the other Building using the same.

(d) The easements in each instance shall: (i) continue in effect for the term of this REA and thereafter for so long as the Building using the easement area exists (including a reasonable period to permit reconstruction or replacement of such Building if the same shall be destroyed, damaged or demolished); and (ii) include the reasonable right of access necessary to exercise and enjoy such grant upon terms and with the limitations described in Section 2.1.

(e) With respect to Buildings constructed along the common boundary line between Parcels, nothing herein shall be deemed to create or establish a "common" or "party" wall to be shared with the adjacent Building, or the right for a Building to receive support from or apply pressure to the adjacent Building.

4.4 Parking Ratio. Each Parcel shall independently maintain sufficient parking to comply with all applicable laws, ordinances, regulations, and zoning codes given the use being made of such Parcel.

4.5 Protected Areas. After the initial construction of the Common Area Improvements, without the prior written consent of the other Parties (which consent may be withheld or conditioned, in each Party's sole discretion), (a) the Permanent Access Drives shall not be altered or modified and (b) the areas designated as "**Protected Areas**" on the Site Plan shall not be materially altered or modified.

4.6 Construction Requirements. All work performed in the construction, repair, replacement, alteration or expansion of any improvements shall be performed as expeditiously as possible and in such a manner as not to unreasonably interfere, obstruct or delay (i) access to or from the Parcels, or any part thereof, to or from any public right-of-way, (ii) customer vehicular parking, (iii) the receiving of merchandise by any business being operated on a Parcel, including, without limitation, access to its Building, or (iv) construction work being performed on any other Parcels. Unless otherwise specifically stated herein, the Person contracting for the performance of such work (the "**Contracting Party**") shall, at its sole cost and expense, promptly repair and restore or cause to be promptly repaired and restored to its prior condition all Buildings, signs and Common Area improvements damaged or destroyed in the performance of such work. Staging for the initial construction of Buildings, or the replacement, alteration or expansion of any Building, sign or Common Area improvements shall be located solely on the constructing Party's Parcel. Each staging area on any Parcel shall be located in such a way that it will not interfere with the use of the Protected Area on any other Parcel. Once the initial construction is complete and either or both of the Occupants of the West Property and the East Property are open for business, any construction vehicles accessing the West Property or the Riversbend Property by crossing the East Property shall access the West Property or the Riversbend Property via the curb cut and driveways designated on the Site Plan as "**Permitted Construction Access**". At such time as any business has commenced operations on any Parcel, then each Contracting Party shall keep its Parcel and the Permitted Construction Access in a clean and neat condition for the duration of any construction on such Contracting Party's Parcel.

ARTICLE V
USE, NUISANCE AND GOVERNMENTAL COMPLIANCE

5.1 Use of Parcels. The Parcels may be used for any lawful purpose (except for any purpose which is expressly prohibited by this REA).

5.2 Nuisance. A Party shall not suffer or permit thereon the maintenance of any nuisance, including unusual noises and obnoxious odors (except that customary restaurant noises and odors shall not constitute a nuisance), on its Parcel.

5.3 Compliance with Laws. To the extent that the terms of this REA require or allow a Party, as the case may be, to perform any construction, repair, alteration, replacement, remediation or similar task or action (collectively, "**Tasks**"), then the Party shall perform such Tasks in accordance with all applicable laws, statutes, ordinances, codes, rules and regulations.

5.4 Hazardous Materials. No Party shall use or permit the use of Hazardous Materials (as hereinafter defined) on, about, under or in its Parcel or any other Parcel except in the ordinary course of its usual business operations conducted thereon, and any such use shall at all times be in compliance with all Environmental Laws (as hereinafter defined). Each Party shall Indemnify the other Parties from and against all Claims, including, but not limited to, costs of investigation, litigation and remedial response arising out of any Hazardous Materials used or permitted to be used by such Party, whether or not in the ordinary course of business. "**Hazardous Materials**" shall mean petroleum products, asbestos, polychlorinated biphenyls, radioactive materials and all other dangerous, toxic or hazardous pollutants, contaminants, chemicals, materials or substances listed or identified in, or regulated by, any Environmental Law. "**Environmental Laws**" shall mean all Laws which relate to or deal with human health or the environment, all as may be amended from time to time.

5.5 Restrictions on Common Area Use. Except to the extent required by law, no Permittee shall be charged for the right to use the Common Area. Each Party shall use its best efforts to cause the employees of the Occupants of its Parcel to park their vehicles only on such Parcel. No merchandise, equipment or services, including, but not limited to, vending machines, promotional devices and similar items, shall be displayed, offered for sale or lease, or stored on the sidewalks in front of or alongside the Buildings or within the remainder of the Common Area; provided, however, that the foregoing prohibition shall not be applicable to trash enclosures constructed in connection with the construction of a Building or replacements thereof in the same location, and provided, further that the foregoing restrictions shall not restrict customary use of Outdoor Seating Areas, as the same are not part of the Common Area.

ARTICLE VI
UTILITIES AND LIGHTING

6.1 Utilities. Each Party agrees to pay, or cause to be paid, all charges for utility services used by such Party and/or its Occupants.

6.2 Lighting.

(a) After completion of the lighting system on its Parcel, each Party hereby covenants and agrees to keep its Tract fully illuminated from dusk to at least two (2) hours past the close of any business operating on such Parcel, or if no business is operating on such Parcel until 10:00 p.m.. Each Party further agrees to keep any exterior Building security lights on from dusk until dawn. During the term of this REA, each Party grants an irrevocable license to each other Party for the purpose of permitting the lighting from one Tract to incidentally shine on the adjoining Tract.

(b) It is recognized that Occupants of the Parcels may be open for business at different hours, and that a Party may wish to have the Common Area lights on another Parcel illuminated before or after the required time period set forth in Section 6.2(a). Accordingly, a Party ("**Requesting Party**") shall have the right, at any time, to require the Party that controls the lighting on such Tract ("**Requested Party**") to keep the Common Area lights it controls operating as stipulated by the Requesting Party, provided that the Requesting Party notifies the Requested Party of such request not less than seven (7) days in advance. The Requesting Party shall state the period during which it wishes such Common Area lights to be kept operating and shall pay the costs of such lighting to the Requested Party within ten (10) days after receipt

of an invoice from the Requested Party. Upon the failure of a Requesting Party to pay the estimated amount or renew a prepayment as required hereby, the Requested Party shall have the right to discontinue such additional lighting and to exercise any other remedies herein provided. Any such request for additional lighting may be withdrawn or terminated at any time by written notice from the Requesting Party, and a new request or requests for changed hours of additional operation may be made from time to time.

ARTICLE VIII
OCCUPANT SIGNS

7.1 Monument Sign Construction. Continental shall construct, at its sole cost and expense (subject to reimbursement from its Occupants), the initial Monument Sign structure (excluding individual tenant sign panels which shall be fabricated and installed by the Occupants of each Parcel), extend electricity to each sign panel box and install a meter to the initial Monument Sign in accordance with the approved plans and specifications. The Occupant entitled to utilize each panel on the Monument Sign shall be responsible for the fabrication and installation of the individual tenant signage.

7.2 Monument Sign Maintenance. Following installation of the Monument Sign, the owner of the East Property shall be responsible for keeping the Monument Sign fully operational, and shall operate, maintain and repair the Monument Sign in a manner consistent with a first-class shopping center. The owners of the East Property, the West Property and the Riversbend Property shall contribute to the cost of operating, maintaining and repairing the Monument Sign based on the fraction, the numerator of which is the square footage of such party's sign panel(s) on the Monument Sign, and the denominator of which is the square footage of all panels on the Monument Sign. Payments shall be made within thirty (30) days following receipt of invoices setting forth the amount owed, accompanied by reasonable supporting documentation, invoices and work orders. If the owner of the East Property fails to maintain the Monument Sign in accordance with the standards set forth herein, the owner of the West Property may exercise all remedies contained in Article XIV hereof, including without limitation self-help. Each Occupant entitled to place a sign panel on the Monument Sign shall keep its sign panel in good condition and repair.

7.3 Building Signs.

(a) Subject to all applicable laws, ordinances, rules and regulations, each Occupant may have the maximum number of identification sign placed on the exterior of the Building it occupies. No Occupant identification sign attached to the exterior of a Building shall be:

(iii) placed at any angle to the Building; provided, however, the foregoing shall not apply to any sign located under a sidewalk canopy if such sign is at least eight (8) feet above the sidewalk;

(iv) painted on the surface of any Building;

(iii) flashing, moving or audible, except that in the case of a bank, a moving sign that shows the Dow Jones Industrial Average, time and temperature, and similar information customarily shown on first-class bank signs may be used and in the case of a pharmacy, "reader" boards may be used in a manner consistent with national pharmacy chains;

(iv) employ exposed raceways, exposed neon tubes, exposed ballast boxes, or exposed transformers; provided, however, exposed raceways shall be permitted if (A) the primary purpose of the raceways are to limit damage to the Buildings to which the raceways are attached and (B) the raceways do not draw undue attention when viewed from the Common Area; or

(v) paper, cardboard and/or temporary (exclusive of contractor signs), stickers or decals; provided, however, the foregoing shall not prohibit (A) the placement at the entrance of each Occupant's space of a small sticker or decal, indicating hours of business, emergency telephone

numbers, acceptance of credit cards, and other similar information, or (B) "For Sale" signs, "For Lease" signs, "Coming Soon" signs and "Grand Opening" signs placed within a Parcel for a period of time not to exceed ninety (90) days per instance.

(b) No Occupant shall have an exterior sign which identifies leased departments and/or concessionaires operating under the Occupant's business or trade name, nor shall such sign identify specific brands or products for sale or services offered within a business establishment, unless such identification is used as part of the Occupant's trade name.

7.4 Miscellaneous Signs. Notwithstanding anything contained herein to the contrary, each Party shall be permitted to place the following signs within the Common Area located on its Parcel:

(a) directional signs or informational signs such as "Handicapped Parking";

(b) temporary signs displaying leasing information;

(c) one (1) temporary sign identifying each contractor working on a construction job;

(d) one (1) temporary sign identifying a lender financing a construction project; and

(e) parking signs installed pursuant to Section 2.1 above.

Notwithstanding anything herein to the contrary, (a) the Occupants of the West Property shall each have the right to place up to six (6) exclusive "to go" parking signs on the Common Area located on each Occupant's Parcel and (b) the Occupants of the East Property may place up to eight (8) exclusive parking signs to the extent permitted by the owner of the East Property and Section 2.1 hereof, provided the eight parking stalls identified on the East Property shall not be located along the common boundary of the East Property and the West Property.

ARTICLE VII
INDEMNIFICATION AND INSURANCE

8.1 Liability Insurance Coverage and Limits. Each Party agrees to maintain, and/or cause to be maintained, at no cost to the other Parties, commercial general liability insurance insuring against claims for personal injury, bodily injury, death and property damage occurring on, in or about such Party's Parcel and the ways immediately adjoining such Party's Parcel, with cumulative policy limits of not less than Three Million Dollars ($3,000,000.00) for any one occurrence whether via a single policy or a combination of underlying and umbrella coverages. The insurance required hereunder shall: (i) be issued by a company having an AM Best rating of at least A-:VIII; (ii) provide for thirty (30) days notice of cancellation or amendment; (iii) contain a contractual liability endorsement; and (iv) name the other Parties hereto (and the first Mortgagee of each Party) as additional insureds.

8.2 Contractor's Insurance. During the period of any construction by or at the request of any Party, such Party agrees to obtain or require its contractor(s) to obtain, and thereafter maintain so long as such construction activity is occurring, at least the following minimum insurance coverage: (i) workers' compensation - statutory limits; (ii) builder's risk equal to the replacement cost of the improvements; (iii) commercial general and commercial automobile liability covering personal injury and property damage with limits of not less than Three Million Dollars ($3,000,000.00) for any one occurrence; (iv) independent contractor's liability or owner's protective liability with policy limits of not less than Three Million Dollars ($3,000,000.00); (v) products/completed operations coverage which shall be kept in effect for two (2) years after completion of any construction work; (vi) XCU coverage, if applicable; (vii) broad form property damage endorsements; personal injury endorsements; and blanket contractual liability endorsement.

8.3 Property Insurance. The Parties shall cause their buildings and improvements to the Common Areas to be insured against loss or damage by fire and the perils commonly covered under the "special form" policy for not less than the full replacement cost thereof, including all improvements, alterations, additions and changes made, but excluding footings, foundations and excavation. Insurance required to be carried by the Parties hereunder

shall: (i) be issued by a company having an AM Best rating of at least A-:VIII; and (ii) provide for thirty (30) days notice of cancellation or amendment.

8.4 Policy Requirements. Insurance coverage required by this REA may contain the following elements, so long as the required coverage is not diminished, the required limits are not reduced, and the elements thereof are otherwise commercially reasonable: a Party's insurance program may include blanket, layered, umbrella, conventional and/or manuscript forms of policies, as well as retention levels and loss reserves which are charged against earnings or otherwise funded. The Parties shall pay all deductible amounts payable for all insurance required to be maintained by the respective Party hereunder. Upon request, each Party shall cause certificates of insurance reasonably evidencing compliance with the requirements of this Section to be delivered to the other Parties. The insurance policies and certificates required by this Section shall require the insurance company to furnish the other Parties thirty (30) days prior written notice of any cancellation or lapse, or the effective date of any reduction in the amounts or scope of coverage.

8.5 Liens. No Party shall permit the lien of any contractor, subcontractor, mechanic, materialman, laborer, architect or any other Person or entity arising out of work, material or services performed or supplied or contracted for by that Party, or those claiming by, through or under such Party, to be or remain a lien upon any other Parcel or the Common Areas, but such Party shall have the right to contest the lien in good faith by appropriate judicial proceedings so long as: (i) the proceeding operates to stay any execution or foreclosure on the lien; and (ii) the Party diligently pursues the contest to its conclusion. In any event, such Party shall indemnify the other parties harmless from any such lien, and such indemnity shall survive a termination of this REA.

8.6 Self Insurance. Insurance under this Article VIII may be provided pursuant to a plan of self insurance, provided that any Person so self-insuring notifies the other Parties of its intent to self-insure and shall upon request deliver to such other Parties each calendar year a copy of its annual report or Form 10-K that is audited by an independent certified public accountant which discloses that such Person has Two Hundred Million Dollars ($200,000,000) or more of net current assets.

8.7 Indemnification. Each Party agrees to defend, protect, indemnify and hold harmless each other Party from and against all claims or demands, including any action or proceedings brought thereon, and all costs, losses, expenses and liability of any kind relating thereto, including reasonable attorneys' fees and cost of suit, arising out of or resulting from the injury to or death of any Person, or damage to the property of any Person located on the Parcel owned by each indemnifying Party; provided, however, the foregoing obligation shall not apply to claims or demands based on the negligence or willful act or omission of such other Party, its licensees, concessionaires, agents, servants, or employees, or the agents, servants, or employees of any licensee or concessionaire thereof. In the event it is determined that such other Party was not at fault, then the indemnifying Party shall reimburse such other Party for all reasonable costs and/or expenses incurred by it defending against such claim or demand.

ARTICLE IX
DAMAGE OR DESTRUCTION

9.1 If any of the Buildings are damaged by fire or other casualty (whether insured or not), the Party upon whose Parcel such Building is located shall, subject to governmental regulations and/or insurance adjustment delays, promptly remove the debris resulting from such event and provide a sightly barrier, and within a reasonable time thereafter shall perform one of the following alternatives:

(i) such Party shall repair or restore the Building so damaged to a complete unit, such repair or restoration to be performed in accordance with all applicable provisions of this REA;

(ii) such Party shall erect another Building in such location, such construction to be performed in accordance with all applicable provisions of this REA; or

(iii) such Party shall demolish the damaged portion and/or the balance of such Building and restore the cleared area to either a hard surface condition or a landscaped condition in which event the area shall be Common Area until a replacement Building is erected.

ARTICLE X
RESTRICTIVE COVENANTS

10.1 Restrictive Covenants. The types of uses permitted on the Parcels shall be those of a retail and/or commercial nature found in first class shopping centers of a similar size in the metropolitan marketing area in which the Parcels are located. Notwithstanding the foregoing the Riversbend Property is currently operated as a golf course and shall have the right to continue to be used as a golf course and related purposes. In the event that the Riversbend Property is ever changed to a retail or restaurant use, then parking for such retail and/or restaurant use shall be solely contained within the Riversbend Property. In no event shall (i) any Parcel contain a business operation which would violate one of the "**Prohibited Uses**" listed on Exhibit F attached hereto and made a part hereof or (ii) the Riversbend Property or the East Property contain a business operation that would violate the "**West Exclusive Use**" listed on Exhibit F-1attached hereto and made a part hereof. No building constructed on the Parcels shall consist of more than one (1) story plus Mezzanine. "**Mezzanine**" means any floor area above the ground floor that does not extend over the entire ground floor and which is used in connection with the primary commercial use of the building but is not used as a sales area or generally open to the public. No Mezzanine or basement of any Building shall be used as an area for sales or display or open to the public generally. The restrictions set forth in this Section shall be deemed to be restrictions and covenants against the Parcels, a servitude upon each of the Parcels, shall run with the land and shall be binding upon any Person acquiring any interest in any Parcel or part thereof. In the event of a breach or threatened breach of any of the restrictions or covenants contained in this Section, the Parties shall be entitled to injunctive relief in addition to any other remedy available under this REA, except for termination.

ARTICLE XI
NOTICES

11.1 Notices. All notices, requests, demands, and other communications hereunder shall be in writing and shall be given by: (i) national courier service which maintains delivery records; or (ii) certified or registered mail, postage prepaid, return receipt requested, to the Parties at the following addresses, or at such other address as the Parties may designate by written notice in the above manner:

If to Continental:
Continental 246 Fund LLC
Attention: Legal Department
W134 N8675 Executive Parkway
Menomonee Falls, WI 53051
Facsimile: (262) 502-5522

If to Riversbend:
Riversbend Country Club, Inc.
Attention: Charles L. Schmit
N96 W18034 County Line Road
Germantown, WI 53022

Communications may also be given by fax, provided the communication is concurrently given by one of the above methods. Notices are effective upon receipt, or upon attempted delivery if delivery is refused or if delivery is impossible because of failure to provide a reasonable means for accomplishing delivery. Each Party shall give all other Parties notice of their Notice address upon acquiring an interest in the Parcels.

ARTICLE XII
CERTIFICATION

12.1. A Party shall, within fifteen (15) days after receipt of another Party's written request therefor, acknowledge and deliver to the requesting Party, a statement in writing certifying: (i) that this REA is unmodified and in full force and effect (or if there have been modifications, that the same is in full force and effect as modified and stating the modifications); (ii) the dates to which any charges have been paid; (iii) if the same is true, no default has been declared pursuant to this REA by any Party and the Party furnishing such certification at the time has no knowledge of any facts or circumstances which it might reasonably believe would give rise to default by any Party, and (iv) and identifying the date of this REA and any amendment thereto.

ARTICLE XIII
MAINTENANCE

13.1 Building Improvements. After completion of construction, each Party shall maintain and keep (i) the exterior portion of the Buildings, if any, located on its Parcel in first-class condition and state of repair, and (ii) unless otherwise provided in this REA, the Buildings and Common Area located on its Parcel in compliance with all applicable Laws, and in compliance with the provisions of this REA. Each Party shall store all trash and garbage in adequate containers, to locate such containers so that they are not readily visible from the parking area, and to arrange for regular removal of such trash or garbage.

13.2 Utility Lines.

(a) Each Party shall maintain and repair, or cause to be maintained and repaired, in a good state of repair and safe condition, all Separate Utility Lines used by such Party regardless of where located unless the provider of the utility service or a public or quasi-public authority has agreed to maintain such Utility Lines. Any maintenance, replacement and/or repair of non-dedicated Utility Lines located on another Party's Parcel shall be performed only after ten (10) days' notice to the grantor (except in an emergency the work may be initiated with reasonable notice), after normal business hours whenever possible, and in such a manner as to cause as little disturbance in the use of the grantor's Parcel as is practicable under the circumstances. Any Party performing or causing to be performed maintenance or repair work shall promptly pay all costs and expenses associated therewith, diligently complete such work as quickly as possible and promptly clean the area and restore the affected portion of the Common Area to a condition equal to or better than the condition which existed prior to the commencement of such work.

(b) Common Utility Lines shall be maintained, repaired and/or replaced by the Party on whose Parcel the Common Utility Lines are located in accordance with the standards set forth in Section 13.2(a) above.

13.3 Maintenance of Common Areas. Each Party shall operate and maintain, or cause to be operated and maintained, the Common Area on its respective Parcel in good order, condition and repair. The maintenance and repair obligations shall include, but not be limited to, the following:

(a) Drive and Parking Areas. Maintaining all paved surfaces and curbs in a smooth and evenly covered condition, including, without limitation, replacing base, skin patching, resealing and resurfacing (for the purpose of this section, an overlay of the drives and parking areas shall be considered to be a maintenance item).

(b) Debris and Refuse. Periodically removing all papers, debris, filth, refuse, ice and snow, including periodic vacuuming and broom sweeping to the extent necessary to keep the Common Area in a first-class, clean and orderly condition. All sweeping shall be performed at appropriate intervals during such times as shall not interfere with the conduct of business or use of the Common Area by Permittees. Snow shall be plowed as soon as a two-inch accumulation occurs and re-plowed as necessary to maintain less than a two-inch accumulation at all times; upon cessation of the snowfall, the Common Area shall be plowed to the paved surface.

(c) Non-Occupant Signs and Markers. Maintaining, cleaning, repairing and replacing directional, stop and handicapped parking signs and markers; restriping of parking lots and drive lanes as necessary to maintain parking space designation and traffic direction; and keeping clearly marked fire lanes, loading zones, no parking areas and pedestrian crosswalks.

(d) Lighting. Operating, maintaining, cleaning, repairing and replacing Common Area lighting facilities, including light standards, wires, conduits, lamps, ballasts and lenses, time clocks and circuit breakers.

(e) Landscaping. Maintaining and replacing all landscape plantings, trees and shrubs, including those adjacent to the exterior walls of Buildings, in an attractive and thriving condition, trimmed and weed free. Maintaining and replacing landscape planters, including those adjacent to exterior walls of Buildings. Modifying irrigation system to satisfy governmental water allocation or emergency requirements.

(f) Obstructions. Keeping the Common Area free from any obstructions including those caused by the sale or display of merchandise, unless such obstruction is permitted under the provisions of this REA.

(g) Sidewalks. Maintaining, cleaning, repairing and replacing all sidewalks, including those adjacent and contiguous to Buildings. Sidewalks shall be cleaned at least monthly and shall be swept at appropriate intervals during such times as shall not interfere with the conduct of business or use of the Common Area.

(h) Traffic. Supervising traffic at entrances and exits to, within and between the Parcels as conditions reasonably require in order to maintain an orderly and proper traffic flow.

(i) Security. In their sole and absolute discretion and without any obligation to do so, providing security services for the Common Area.

13.4 Maintenance of the Shared Detention Ponds. The owner of the Riversbend Property, at its sole cost and expense, shall maintain, clean and repair the Shared Detention Ponds, or cause the Shared Detention Ponds to be maintained, cleaned and repaired, in compliance with all applicable Laws so as to keep the Shared Detention Ponds in a safe, attractive and fully functional condition and in a good state of repair, including, without limitation, periodically removing all papers, debris, filth and refuse from the Shared Detention Ponds. The Shared Detention Ponds shall be repaired or replaced with materials of a quality which is at least equal to the quality of the materials being repaired or replaced. The owner of the Riversbend Property shall Indemnify each other Party from and against any mechanic's, materialmen's and/or laborer's liens and all Claims in connection therewith arising out of the operation, maintenance and repair of the Shared Detention Ponds by said Party, and if any Parcel shall become subject to any such lien, the owner of the Riversbend Property shall promptly cause such lien to be released and discharged of record, either by paying the indebtedness which gave rise to such lien or by posting such bond or other security as shall be required by law to obtain such release and discharge. No alterations to the Shared Detention Ponds shall be permitted without the consent of each Party, which consent may be withheld in such Party's sole discretion. If the owner of the Riversbend Property fails to maintain the Shared Detention Ponds, or if other owners fail to maintain stormwater management facilities on their Parcels in accordance with this Agreement, it is agreed by the Parties that such default shall be subject to only a ten (10) day cure period before the rights of Curing Owner(s) shall apply pursuant to Section 14.2, rather than 30 days as provided in Section 14.1.

13.5 Maintenance of Shared Access Road. Each of the Parties acknowledges the right of each of the Parcels to use the access road labeled as "Shared Access Road" on the Site Plan pursuant to that certain Declaration of Conditions, Covenants and Easements Affecting Property of RAL Germantown/Monroe Income Limited Partnership dated September 14, 1990 and record as Document #566275 in Volume 1089, Page 225 of the County Records of Washington County, Wisconsin (the "**Access Easement**"). It is acknowledged that the Access Easement does not require the Parcels to contribute to the maintenance of the Shared Access Road and that payment for such maintenance is required only to the extent that a Party causes "excessive wear and tear or damage." Each of the Parties hereby agrees to pay to the grantor of the Access Easement ("**Access Easement Grantor**") any required payments due in connection with excessive wear and tear or damage caused by such Party or its Occupants and to indemnify and hold harmless each of the other Parties against any claims related to the same. Further, in the event that Access Easement Grantor fails to maintain the Shared Access Road in the condition that would otherwise be required for roadways pursuant to Section 13.3 of this Agreement, then (except in an emergency), after commercially reasonable efforts have been made to obtain performance from such Access Easement Grantor, any Party (the "**Repairing Party**") may perform critically necessary maintenance on the Shared Access Road and bill a portion of the actual and reasonable out-of-pocket costs and expenses incurred in performing such maintenance to the other Parties (the "**Access Road Costs**") as provided in the remainder of this paragraph. If a Party desires to perform maintenance that is not critically necessary, and if such Party desires

reimbursement for a share of the same from the other Parties, the Parties shall use commercially reasonable efforts to agree on the scope of maintenance beyond that critically necessary before any Party performs such maintenance. The Parties shall pay their "Pro Rata Share" (as hereinafter defined) of Access Road Costs to the Repairing Party within thirty (30) days after receipt of an invoice and reasonable backup therefor. A Party's "**Pro Rata Share**" means a fraction, the numerator of which is the square footage of the Party's Floor Area at the time Access Road Costs were incurred, and the denominator of which is the total square footage of all Floor Area in the Shopping Center, including the Party's Floor Area, at the time Access Road Costs were incurred, provided that any Floor Area on the Riversbend Property shall be excluded from both the numerator and denominator of such fraction, it being acknowledged that the Riversbend Property owner shall not share in Access Road Costs or Traffic Signal Costs. Notwithstanding anything to the contrary contained in this Section 13.5 or Section 13.6, so long as the lease between the owner of the West Property and Blazin Wings, Inc. (and any amendments thereto) remains in effect, the owner of the West Property shall never be required to contribute more than $5,000 for Access Road Costs and Traffic Signal Costs with respect to any 12 month period (in which event the other Parties will also be required to pay any shortfall resulting thereby).

13.6 Lighting, Maintenance, Insurance and Replacement of the Traffic Signal. In connection with the initial development of the Shopping Center, a traffic signal will be installed in the location labeled "Traffic Signal" on the Site Plan (the "Traffic Signal"). As a condition of the governmental approvals for the Shopping Center, the Village of Germantown has required that the owners of the Shopping Center pay the electricity costs of lighting the Traffic Signal (the "Traffic Signal Costs"). The owner of the East Property shall initially perform such Traffic Signal obligations (i.e., paying the lighting bills, but such owner shall receive reimbursement from the owner of the West Property of a portion of the Traffic Signal Costs based on the West Property Owner's Pro Rata Share (as defined in Section 13.5 above). The West Property Owner shall pay its Pro Rata Share of Traffic Signal Costs to the East Property owner within thirty (30) days after receipt of an invoice and reasonable backup therefor. The Riversbend Property owner shall not have responsibility for Traffic Signal Costs.

13.7 Lift Station Changes. The Parties acknowledge that, on or about the date hereof, Continental and Riversbend have executed that certain Declaration of Covenants and Restrictions (the "Declaration") for the benefit of the Village of Germantown. In the event that any owner of a Parcel hereunder requests changes to the lift station as contemplated by the Declaration, such requesting owner shall be solely responsible for any cost in connection therewith and shall indemnify and hold harmless the other owners from all such costs.

13.8 Damage to the Common Area. If any of the Common Area is damaged or destroyed by any cause whatsoever, whether insured or uninsured, during the term of this REA, other than damage caused by ordinary use or wear and tear, the Party upon whose Parcel such Common Area is located shall repair or restore such Common Area at its sole cost and expense with all due diligence. Except to the extent limited by Article IX, if such damage or destruction of Common Area is caused in whole or in part by another Party or by a third Person, the Party obligated to make such repair or restoration reserves and retains the right to proceed against such other Party or third Person for indemnity, contribution or damages.

ARTICLE XIV
FAILURE TO PERFORM

14.1 Default. The occurrence of any one or more of the following events shall constitute a material default and breach of this REA by the non-performing Party (the "**Defaulting Owner**"):

(a) The failure to make any payment required to be made under this REA within ten (10) days after the Defaulting Owner has received notice of its failure to make such payment as and when due; or

(b) The failure to observe or perform any of the covenants, conditions or obligations of this REA, other than as described in (a) above, within thirty (30) days after the issuance of a notice by another Party or Occupant (either a "**Non-Defaulting Owner**") specifying the nature of the default claimed; provided, however if such matter is not susceptible of being cured within thirty (30) days, the cure period shall be extended for a reasonable period of time provided the Defaulting Owner commences the cure within said 30-day period and thereafter diligently prosecutes the cure to completion; provided that if either Party fails to timely remove snow or

ice from the Common Area on its Parcel on three (3) or more consecutive occasions (provided such Party received written notice of each such failure from the Non-Defaulting Owner), then the Non-Defaulting Owner shall thereafter not be required to provide the Defaulting Owner with time to cure any subsequent failures to remove snow or ice therefrom and the Non-Defaulting Owner shall instead have the immediate right, at its option, to remove snow and ice from all or any portion of such area(s) and shall have the rights of a Curing Owner (defined below).

Each Party shall be responsible for the default of its Occupants.

14.2 Right to Cure.

(a) With respect to any default under Section 14.1, any Curing Owner (as hereinafter defined) shall have the right, but not the obligation, to cure such default by the payment of money or the performance of some other action for the account of and at the expense of the Defaulting Owner; provided, however, if an event that would become a default under Section 14.1(b) with the passage of time shall constitute an emergency condition, the Curing Owner acting in good faith, shall have the right to cure such event prior to the passage of the time period set forth in Section 14.1(b).

(b) If any Curing Owner shall cure a default, the Defaulting Owner shall reimburse the Curing Owner for all costs and expenses reasonably incurred in connection with such curative action, plus interest thereon at the Interest Rate, within ten (10) days after receipt of an invoice from such Curing Owner, together with reasonable documentation supporting the expenditures made. Furthermore, the Curing Owner shall have the right, if such invoice is not paid within said ten-day period, to record a lien on the Parcel of the Defaulting Owner for the amount of the unpaid costs incurred by the Curing Owner pursuant to this Section 14.2.

(c) To effectuate any such cure, a Curing Owner shall have the right to enter upon the Parcel of the Defaulting Owner (but not into any Building) to perform any necessary work or furnish any necessary materials or services to cure the default of the Defaulting Owner.

(d) As used in this Section 14.2, the term "**Curing Owner**" shall refer to a Non-Defaulting Owner that issued a notice of default pursuant to Section 14.1 hereof and elected to exercise self-help pursuant to this Section 14.2.

14.3 Remedies.

(a) Notwithstanding anything to the contrary contained in this REA, each Non-Defaulting Owner, shall have the right to prosecute any proceedings at law or in equity against any Defaulting Owner hereto, or any other Person violating or attempting to violate or default upon any of the provisions contained in this REA, and to recover damages for any such violation or default.

(b) In the event of any violation or threatened violation by any Person of any of the easements, restrictions or other terms of this REA, any or all of the Parties shall have the right to enjoin such violation or threatened violation in a court of competent jurisdiction.

(c) All of the remedies permitted or available to a Party under this REA or at law or in equity shall be cumulative and not alternative, and invocation of any such right or remedy shall not constitute a waiver or election of remedies with respect to any other permitted or available right or remedy.

(d) In all situations arising out of this REA, all Parties shall attempt to avoid and mitigate the damages resulting from the conduct of any other Party. Each Party shall take all reasonable measures to effectuate the provisions of this REA.

(e) Notwithstanding anything contained herein to the contrary the remedies available to the Parties shall not include the termination of the REA.

14.4 Default Liens.

(a) The liens provided for in Section 14.2(b) above shall only be effective when filed as a claim of lien against the Defaulting Owner in the official real estate records of the County of the State in which the Parcels are located by the Party making the claim. The claim of lien shall include the following:

(i) The name of the lien claimant;

(ii) A statement concerning the basis for the claim of lien and identifying the lien claimant as the Non-Defaulting Owner;

(iii) An identification of the owner or reputed owner of the Parcel or interest therein against which the lien is claimed;

(iv) A description of the Parcel against which the lien is claimed;

(v) A description of the work performed which has given rise to the claim of lien and a statement itemizing the amount thereof; and

(vi) A statement that the lien is claimed pursuant to the provisions of this REA, reciting the date of recordation and the recorded document number (or book and page) hereof.

(b) The lien shall attach from the date a claim of a lien is recorded and may be enforced in any manner allowed by law, including, but not limited to, by suit in the nature of an action to foreclose a mortgage or mechanic's lien under the applicable provisions of the laws of the State in which the Parcels are located. The curing Party shall have the power to purchase the interest of the defaulting Party at such foreclosure sale and thereafter to hold, lease, mortgage and convey the same. Upon payment in full to the curing Party (prior to such a foreclosure) of all costs and expenses secured by the lien, together with all applicable interest due thereon and attorney's fees relating thereto, the curing Party shall promptly cause to be recorded a further notice stating the satisfaction and release of the lien against the defaulting Party's Parcel.

(c) A curing Party's right to record a lien as provided herein shall not be impaired by an intervening sale or other disposition of the affected Parcel, new Parcel or demised premises by the defaulting Party. The claim of lien, when so established against the real property described in the claim of lien, shall be prior and superior to any right, title, interest, lien or claim which may be or has been acquired or attached to such real property after the time of filing the claim of lien, and shall be subordinate to any others. The claim of lien shall be for the use and benefit of the Person curing the default of the Owner in default.

14.5 Attorneys' Fees. If any Person initiates or defends any legal action or proceeding to enforce or interpret any of the terms of this REA, the prevailing party in any such action or proceeding shall be entitled to recover from the non-prevailing party in any such action or proceeding its reasonable costs and attorneys' fees (including its reasonable costs and attorneys' fees on any appeal). All such costs and attorneys' fees shall be deemed to have accrued on commencement of any legal action or proceeding and shall be enforceable whether or not such legal action or proceeding is prosecuted to judgment.

ARTICLE XV
MISCELLANEOUS PROVISIONS

15.1 Relationship of the Parties. Nothing herein shall be deemed or construed by the Parties or by any third party as creating the relationship of principal and agent or of partnership or of joint venture between the Parties, it being understood and agreed that no provision herein, nor any acts of the Parties, shall be deemed to create any relationship between the Parties except as specifically set forth herein.

15.2 Remedies Not Exclusive. The various rights and remedies herein contained and reserved to each of the Parties, except as herein otherwise expressly provided, are not exclusive of any other right or remedy of such Party, but are cumulative and in addition to every other remedy now or hereafter existing at law, in equity or by statute. No delay or omission of the right to exercise any power or remedy by either Party, shall impair any such right, power or remedy or be construed as a waiver of any default or non-performance or as acquiescence therein.

15.3 No Presumption. This REA shall be interpreted and construed only by the contents hereof, and there shall be no presumption or standard of construction in favor of or against any Party.

15.4 Headings. The headings of the Sections contained herein are for convenience only and do not define, limit, or construe their contents.

15.5 Pronouns. When required by context, the singular includes the plural, and the neuter gender includes a person, corporation, firm or association.

15.6 Severability. If any term or provision of this REA or the application of it to any Person or circumstance shall to any extent be held by a court in an action affecting this REA to be invalid or unenforceable, the remainder of this REA or the application of such term or provision to Persons or circumstances other than those to which it is invalid or unenforceable shall not be affected thereby, and each term and provision of this REA shall be valid and shall be enforced to the extent permitted by law.

15.7 No Other Agreements. This REA is intended to be a complete and exclusive statement of the terms hereof and the terms of this REA may not be explained or supplemented by evidence of consistent additional terms. This REA may not be amended or modified by any act or conduct of the Parties or by oral agreement, unless reduced to a writing signed by all Parties.

15.8 Successors. All of the rights and obligations of the Parties under this REA shall bind and inure to the benefit of the respective heirs, personal representatives, successors, grantees and assigns of the Parties and the restrictions, covenants and obligations pertaining to each of the Parcels shall run with the land and shall continue until this REA is terminated or expires.

15.9 Governing Law. This REA shall be governed by and construed in accordance with the internal laws of the state of Wisconsin without regard to choice of law.

15.10 Incorporation. The Exhibits attached hereto are incorporated herein by reference.

15.11 Exculpation. Anything to the contrary in this REA notwithstanding, the covenants contained in this REA to be performed by a Party shall not be binding personally, but instead said covenants are made for the purpose of binding only the fee simple estate and income therefrom which the Party owns.

15.12 Consent. In any instance in which any Party to this REA shall be requested to consent to or approve of any matter with respect to which such Party's consent or approval is required by any of the provisions of this REA, such consent or approval shall be given in writing, and shall not be unreasonably withheld, delayed or qualified, unless the provisions of this REA with respect to a particular consent or approval shall expressly provide that the same may be given or refused in the sole and absolute judgment of such Party.

15.13 Breach Shall Not Defeat Mortgage. A breach of any of the terms, conditions, covenants or restrictions of this REA shall not defeat or render invalid the lien of any first Mortgage made in good faith and for value, but such term, condition, covenant or restriction shall be binding upon and effective against any Person who acquires title to the Parcel encumbered by said Mortgage, by foreclosure, trustee's sale or otherwise, provided however, no mortgagor, its successors or assigns, shall be personally liable for any breach hereunder unless and until it takes title to the Parcel encumbered by said Mortgage and then only for breaches which occur after the date it takes title or which occurred prior to such date and remain uncured.

15.14 Condemnation. If any Parcel or any part thereof shall be condemned, or conveyed under threat of condemnation, the award shall be paid to the Party owning the land or the improvements taken, and the other Parties hereby waive and release any right to recover any value attributable to the property interest so taken, except that (i) if the taking includes improvements belonging to more than one Party, such as Utility Lines or signs, the portion of the award allocable thereto shall be used to relocate, replace or restore such jointly owned improvements to a useful condition, and (ii) if the taking includes easement rights which are intended to extend beyond the term of this REA, the portion of the award allocable to each such easement right shall be paid to the respective grantee thereof.

In addition to the foregoing, if a separate claim can be filed for the taking of any other property interest existing pursuant to this REA which does not reduce or diminish the amount paid to the Party owning the land or the improvement taken, then the owner of such other property interest shall have the right to seek an award for the taking thereof. Except to the extent they burden the land taken, no easement or license set forth in this REA shall expire or terminate based solely upon such taking.

15.15 Notice of Transfer.

(a) Subject to the provisions of Section 16.16, each Party shall be liable for the performance of all covenants, obligations and undertakings herein set forth with respect to its Parcel which accrue during the period of such ownership, and such liability shall continue with respect to any portion transferred until the notice of transfer set forth below is given, at which time (i) the transferring Party shall be released from the obligations of this REA arising subsequent to the effective date of the transfer notice and (ii) the transferee Party shall assume the obligations of this REA arising subsequent to the effective date of the transfer notice.

(b) A Party transferring all or any portion of its interest in a Parcel shall give notice to all other Parties of such transfer and shall include therein the name and address of the new Party and a copy of the legal description of the Parcel or portion thereof transferred. Until the notice of transfer is given, the transferring Party shall (for the purpose of this REA only) be the transferee's agent.

(c) If a Parcel is owned by more than one Person as tenants in common or as joint tenants, the Person or Persons holding at least fifty-one percent (51%) of the ownership interest in the Parcel shall designate one of their number to represent all owners of the Parcel and such designated Person shall be deemed to be the Party for the purposes of exercising rights (but not performing obligations) for such Parcel.

(d) Nothing to the contrary contained in this REA shall affect the existence, priority, validity or enforceability of any lien permitted hereunder which is placed upon the transferred Parcel or part thereof prior to receipt of the notice of the transfer or which is placed on the transferred Parcel or part thereof after receipt of the notice of transfer with respect to events occurring prior to the effective date of the transfer notice.

15.16 Limitation of Liability. Except as specifically provided below, there shall be absolutely no corporate or personal liability of persons, firms, corporations or entities who constitute a Party hereto, including, but not limited to, officers, directors, shareholders, members, partners, employees or agents of a party hereto with respect to any of the terms, covenants, conditions, and provisions of this REA. Any non-defaulting Party who seeks recovery from a defaulting Party hereto shall look solely to the interest of such defaulting Party, its successors and assigns, in such defaulting Party's Parcel (including, without limitation, the rents, issues and proceeds therefrom) for the satisfaction of each and every remedy of the non-defaulting Party; provided, however, the foregoing shall not in any way impair, limit or prejudice the right of any Party:

(a) to pursue equitable relief in connection with any term, covenants or condition of this REA, including a proceeding for temporary restraining order, preliminary injunction, permanent injunction or specific performance;

(b) to recover from another Party all damages and costs on account of, or in connection with, casualty insurance or condemnation proceeds which are not applied or used in accordance with the terms of this REA;

(c) to recover from another Party (or its guarantor) all losses suffered, liabilities incurred or costs imposed arising out of or in connection with, or on account of, such Party's (or its guarantor's) breach of its obligation to carry liability insurance, or fund its self-insurance obligation pursuant to Section 8.6;

(d) to recover from a Party all damages and costs arising out of or in connection with, or on account of, a breach by such Party of its obligations under Section 5.4;

(e) to recover from a Party all damages and costs arising out of or in connection with, or on account of, the failure by such Party to pay when due any tax, assessment or lien as specified under Section 15.3; and

(f) to recover from a Party all damages and costs as a result of any fraud or misrepresentation by such Party in connection with any term, covenants, or condition in this REA.

SEPARATE SIGNATURE PAGE TO FOLLOW
[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, this REA has been executed as of the date first above written.

CONTINENTAL:

CONTINENTAL 246 FUND LLC, a Wisconsin limited liability company

By: CONTINENTAL PROPERTIES COMPANY, INC.,
a Wisconsin corporation, its Managing Member

By: Daniel J Minahan
Daniel J. Minahan, President AH

STATE OF WISCONSIN

COUNTY OF WAUKESHA

I, Amanda Meyer, a Notary Public for the aforesaid County and State, certify that Daniel J. Minahan personally came before me this day and acknowledged that he is the President of Continental Properties Company, Inc., the Managing Member of Continental 246 Fund LLC, and that he, as President being authorized to do so, executed the foregoing on behalf of the company. And the said President acknowledged the said writing to be the act and deed of said company.

Witness my hand and notarial stamp or seal, this 13 day of May, 2014.

Notary Public

My commission expires: 02/22/2015

[NOTARIAL SEAL]

NOTARY PUBLIC
AMANDA MEYER
STATE OF WISCONSIN

(Signatures Continue On Following Page)

(Signatures Continued From Previous Page)

RIVERSBEND COUNTRY CLUB, INC.
a Wisconsin corporation

By: Charles L. Schmit
Name: Charles L. Schmit
Title: President

STATE OF WISCONSIN

COUNTY OF Ozaukee

I, William J. Farrell, a Notary Public for the aforesaid County and State, certify that Charles L. Schmit personally came before me this day and acknowledged that he is the President of Riversbend Country Club, Inc., and that he, as President, being authorized to do so, executed the foregoing on behalf of the company. And the said President acknowledged the said writing to be the act and deed of said company.

Witness my hand and notarial stamp or seal, this 12 day of May, 2014.

Notary Public

My commission expires: permanent

[NOTARIAL SEAL]

WILLIAM J. FARRELL NOTARY PUBLIC STATE OF WISCONSIN

EXHIBIT A

EAST PROPERTY LEGAL DESCRIPTION

Lot 1 of Certified Survey Map No. 6562 recorded in the office of the Register of Deeds for Washington County, Wisconsin, on May 23, 2014 in Volume 50 of Certified Survey Maps, at Page 75 as Document No. 1335986, being a part of the Southwest ¼ of the Southeast ¼ of Section 33, Township 9 North, Range 20 East, Village of Germantown, Washington County, Wisconsin.

EXHIBIT B

WEST PROPERTY LEGAL DESCRIPTION

Lot 2 of Certified Survey Map No. 6562 recorded in the office of the Register of Deeds for Washington County, Wisconsin, on May 23, 2014 in Volume 50 of Certified Survey Maps, at Page 75 as Document No. 1359986, being a part of the Southwest ¼ of the Southeast ¼ of Section 33, Township 9 North, Range 20 East, Village of Germantown, Washington County, Wisconsin.

EXHIBIT C

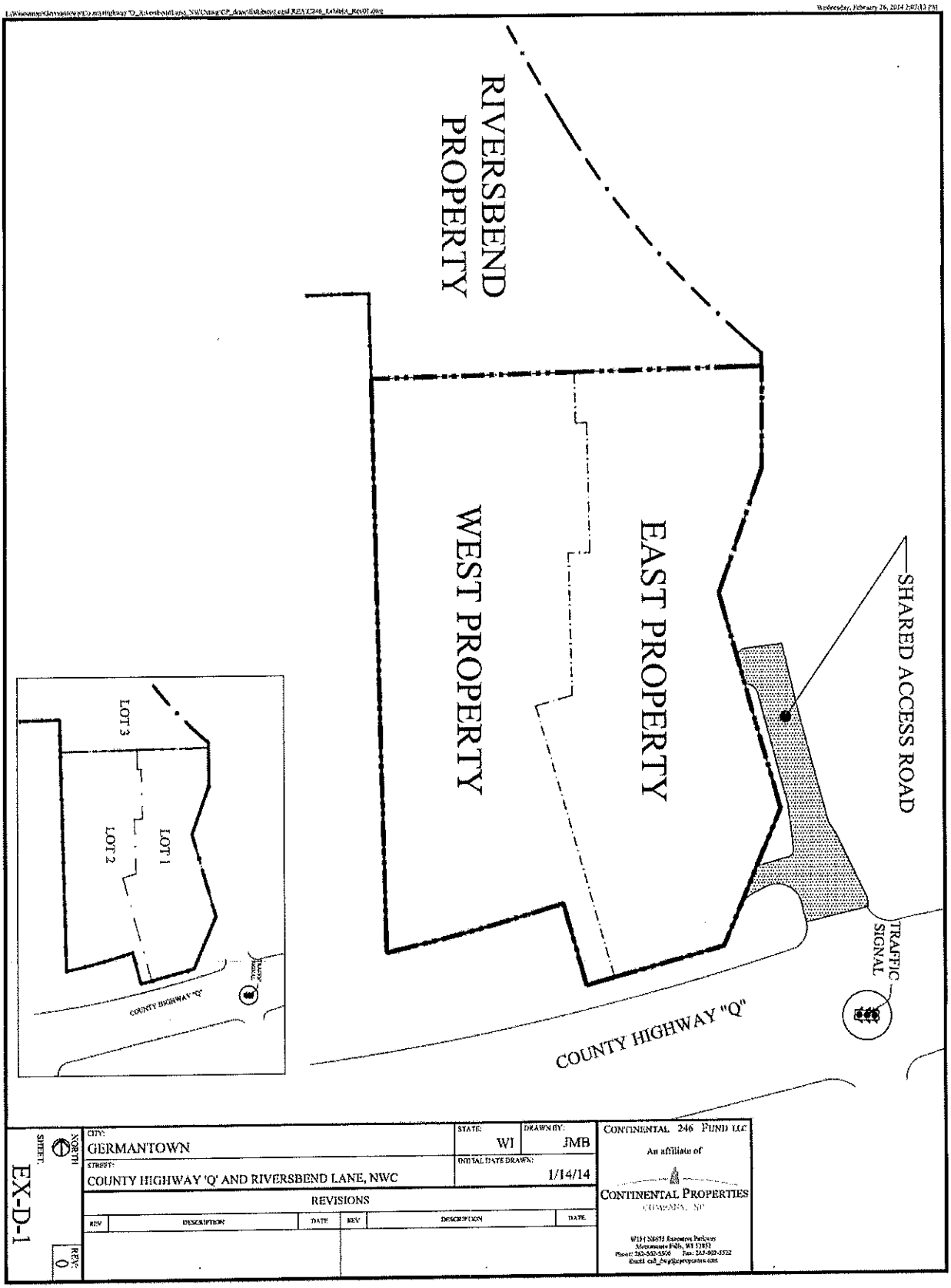
RIVERSBEND PROPERTY LEGAL DESCRIPTION

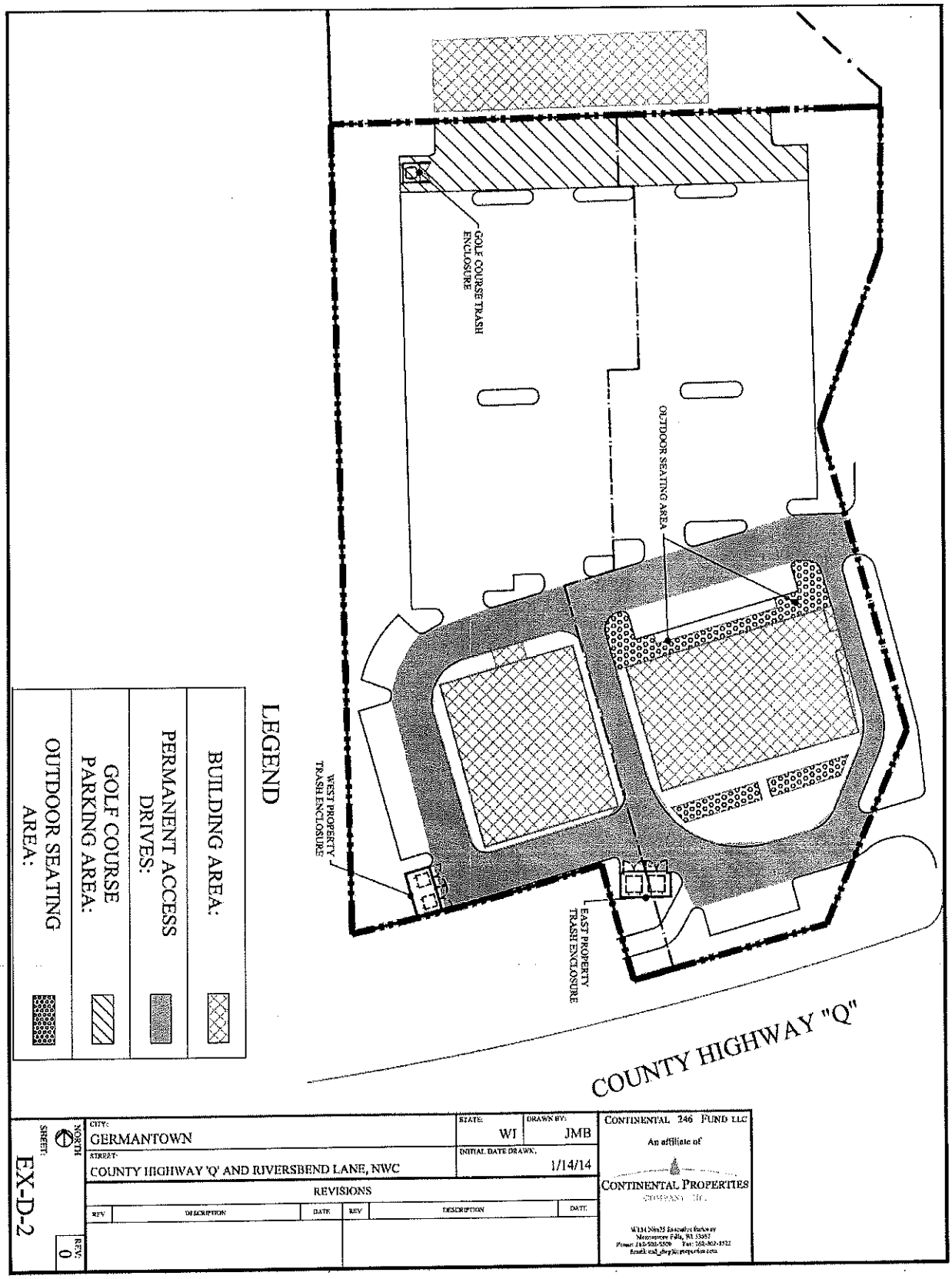
Lot 3 of Certified Survey Map No. 6562 recorded in the office of the Register of Deeds for Washington County, Wisconsin, on May 23, 2014 in Volume 50 of Certified Survey Maps, at Page 75 as Document No. 1359986, being a part of the Southwest ¼ of the Southeast ¼ of Section 33, Township 9 North, Range 20 East, Village of Germantown, Washington County, Wisconsin.

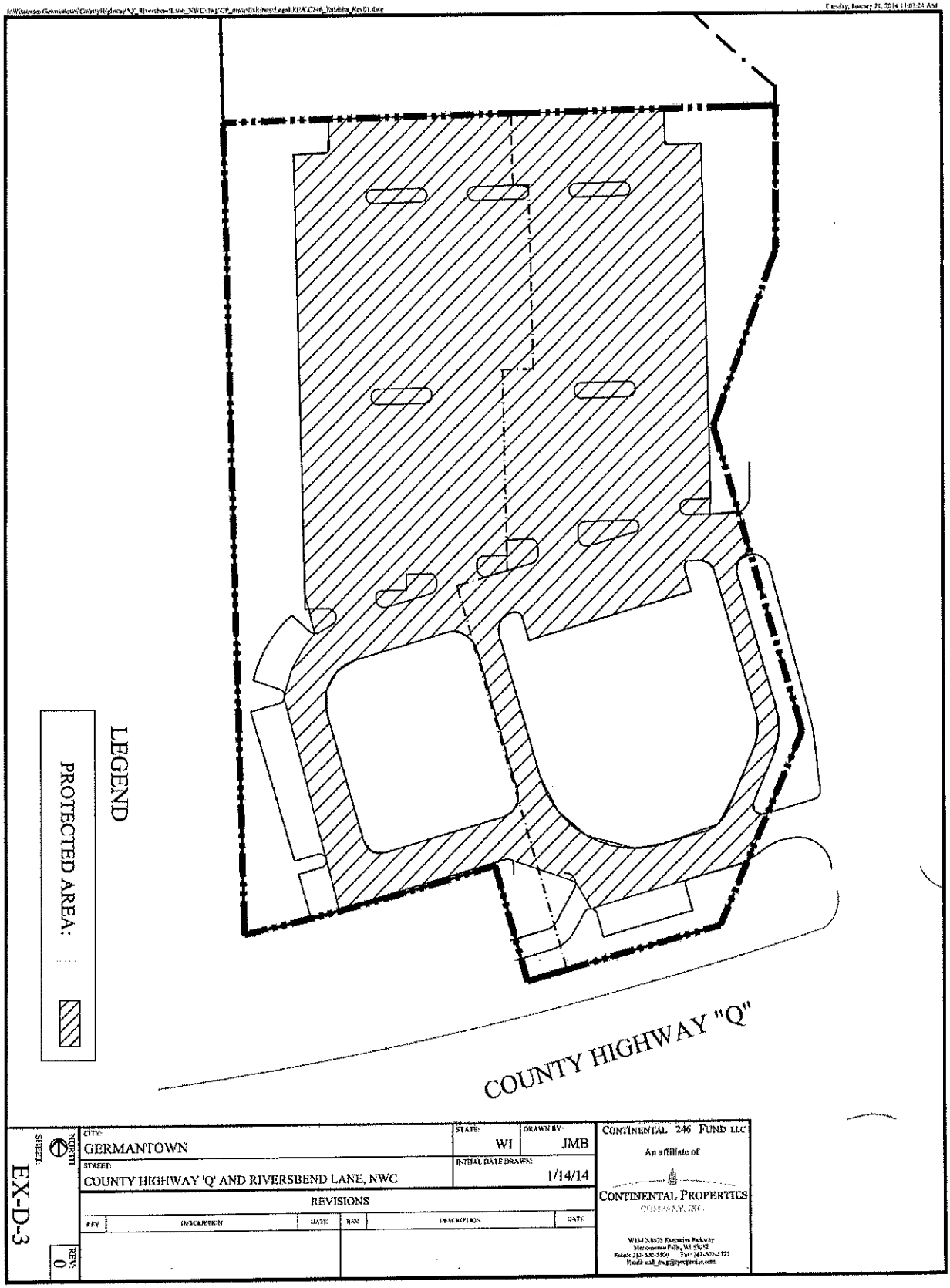
EXHIBIT D

SITE PLAN

(see attached)


RIVERSBEND PROPERTY
WEST PROPERTY
EAST PROPERTY
SHARED ACCESS ROAD
TRAFFIC SIGNAL
COUNTY HIGHWAY "Q"
LOT 3
LOT 2
LOT 1
COUNTY HIGHWAY "Q"
NORTH
SHEET:
EX-D-1
REV: 0
CITY: GERMANTOWN
STATE: WI
DRAWN BY: JMB
STREET: COUNTY HIGHWAY 'Q' AND RIVERSBEND LANE, NWC
INITIAL DATE DRAWN: 1/14/14
REVISIONS
REV
DESCRIPTION
DATE
REV
DESCRIPTION
DATE
CONTINENTAL 246 FUND LLC
An affiliate of
CONTINENTAL PROPERTIES
COMPANY, INC.


GOLF COURSE TRASH ENCLOSURE
OUTDOOR SEATING AREA
WEST PROPERTY TRASH ENCLOSURE
EAST PROPERTY TRASH ENCLOSURE
COUNTY HIGHWAY "Q"
LEGEND
BUILDING AREA:
PERMANENT ACCESS DRIVES:
GOLF COURSE PARKING AREA:
OUTDOOR SEATING AREA:
NORTH
SHEET:
EX-D-2
REV: 0
CITY: GERMANTOWN
STATE: WI
DRAWN BY: JMB
STREET: COUNTY HIGHWAY 'Q' AND RIVERSBEND LANE, NWC
INITIAL DATE DRAWN: 1/14/14
REVISIONS
REV | DESCRIPTION | DATE | REV | DESCRIPTION | DATE
CONTINENTAL 246 FUND LLC
An affiliate of
CONTINENTAL PROPERTIES COMPANY, INC.



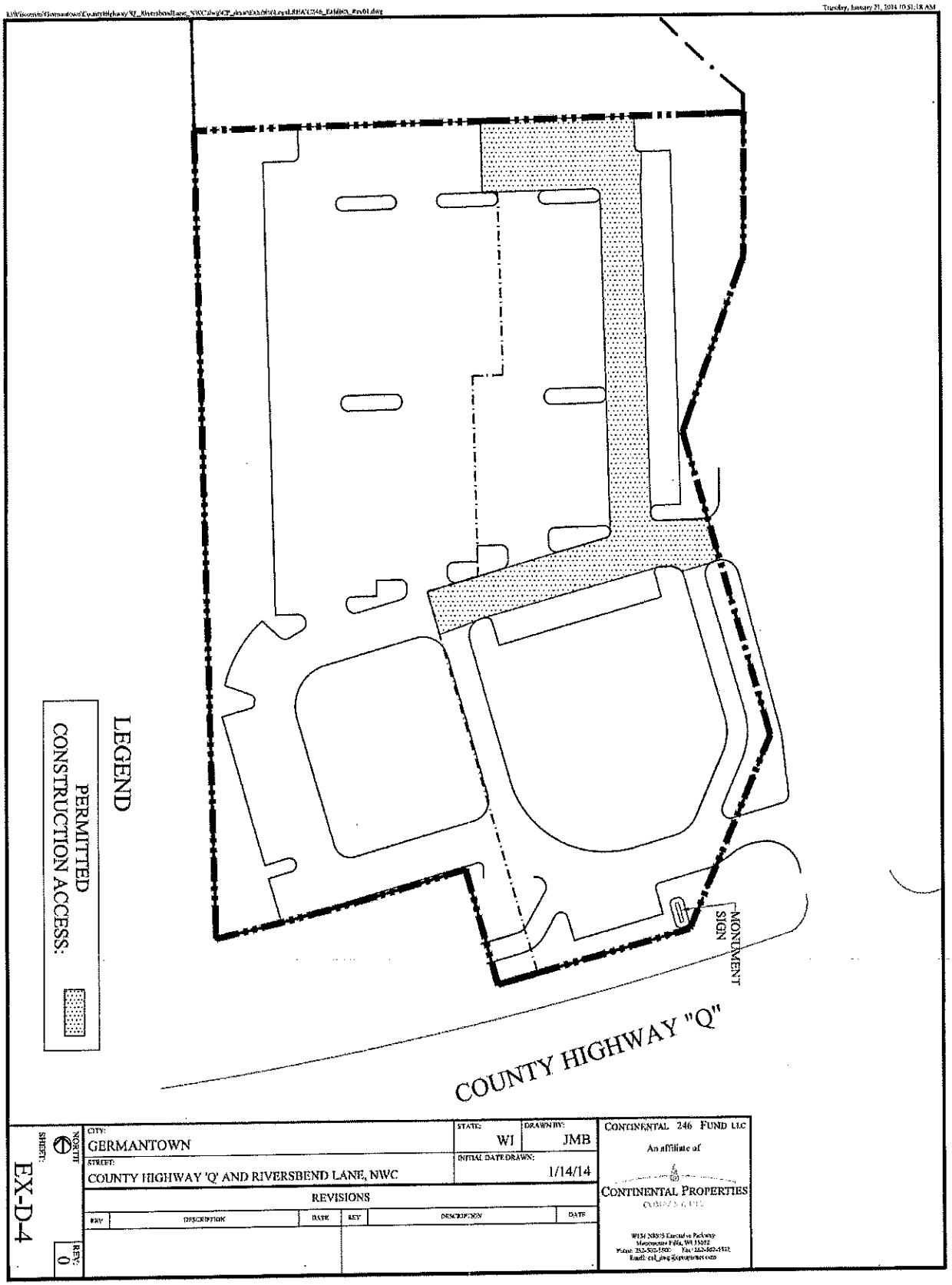
CITY: GERMANTOWN	STATE: WI	DRAWN BY: JMB	CONTINENTAL 246 FUND LLC An affiliate of CONTINENTAL PROPERTIES COMPANY, INC.
STREET: COUNTY HIGHWAY 'Q' AND RIVERSBEND LANE, NWC	INITIAL DATE DRAWN: 1/14/14		

REVISIONS

REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE

SHEET: EX-D-3 REV: 0

NORTH


LEGEND
PERMITTED CONSTRUCTION ACCESS:
MONUMENT SIGN
COUNTY HIGHWAY "Q"
NORTH
SHEET:
EX-D-4
REV: 0
CITY:
GERMANTOWN
STATE:
WI
DRAWN BY:
JMB
STREET:
COUNTY HIGHWAY 'Q' AND RIVERSBEND LANE, NWC
INITIAL DATE DRAWN:
1/14/14
REVISIONS
REV
DESCRIPTION
DATE
REV
DESCRIPTION
DATE
CONTINENTAL 246 FUND LLC
An affiliate of
CONTINENTAL PROPERTIES

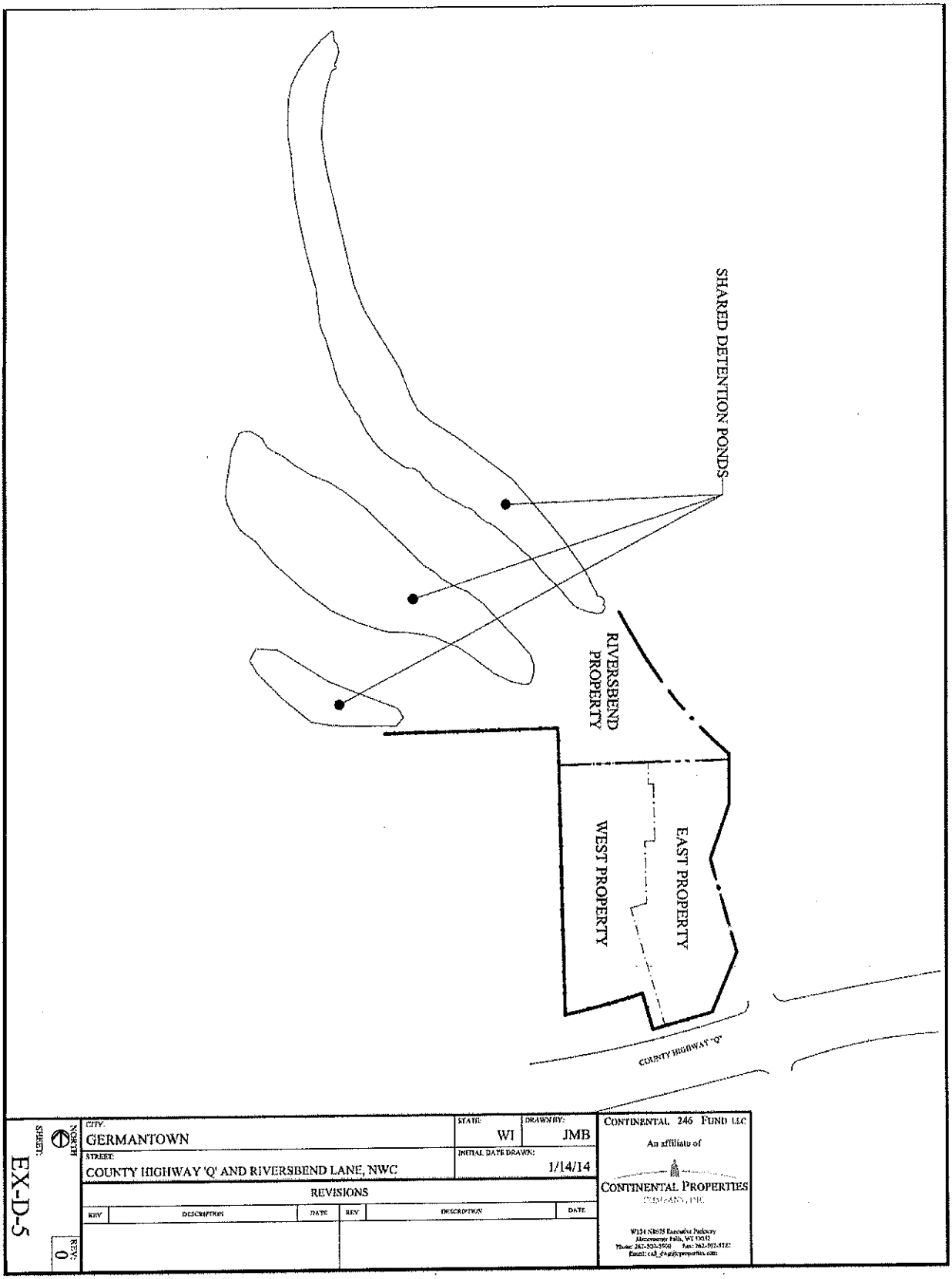

SHARED DETENTION PONDS
RIVERSBEND PROPERTY
WEST PROPERTY
EAST PROPERTY
COUNTY HIGHWAY "Q"
NORTH
CITY:
GERMANTOWN
STATE:
WI
DRAWN BY:
JMB
STREET:
COUNTY HIGHWAY 'Q' AND RIVERSBEND LANE, NWC
INITIAL DATE DRAWN:
1/14/14
REVISIONS
REV
DESCRIPTION
DATE
REV
DESCRIPTION
DATE
SHEET:
EX-D-5
REV:
0
CONTINENTAL 246 FUND LLC
An affiliate of
CONTINENTAL PROPERTIES
COMPANY, INC.

EXHIBIT E

MONUMENT SIGN RENDERING

(see attached)

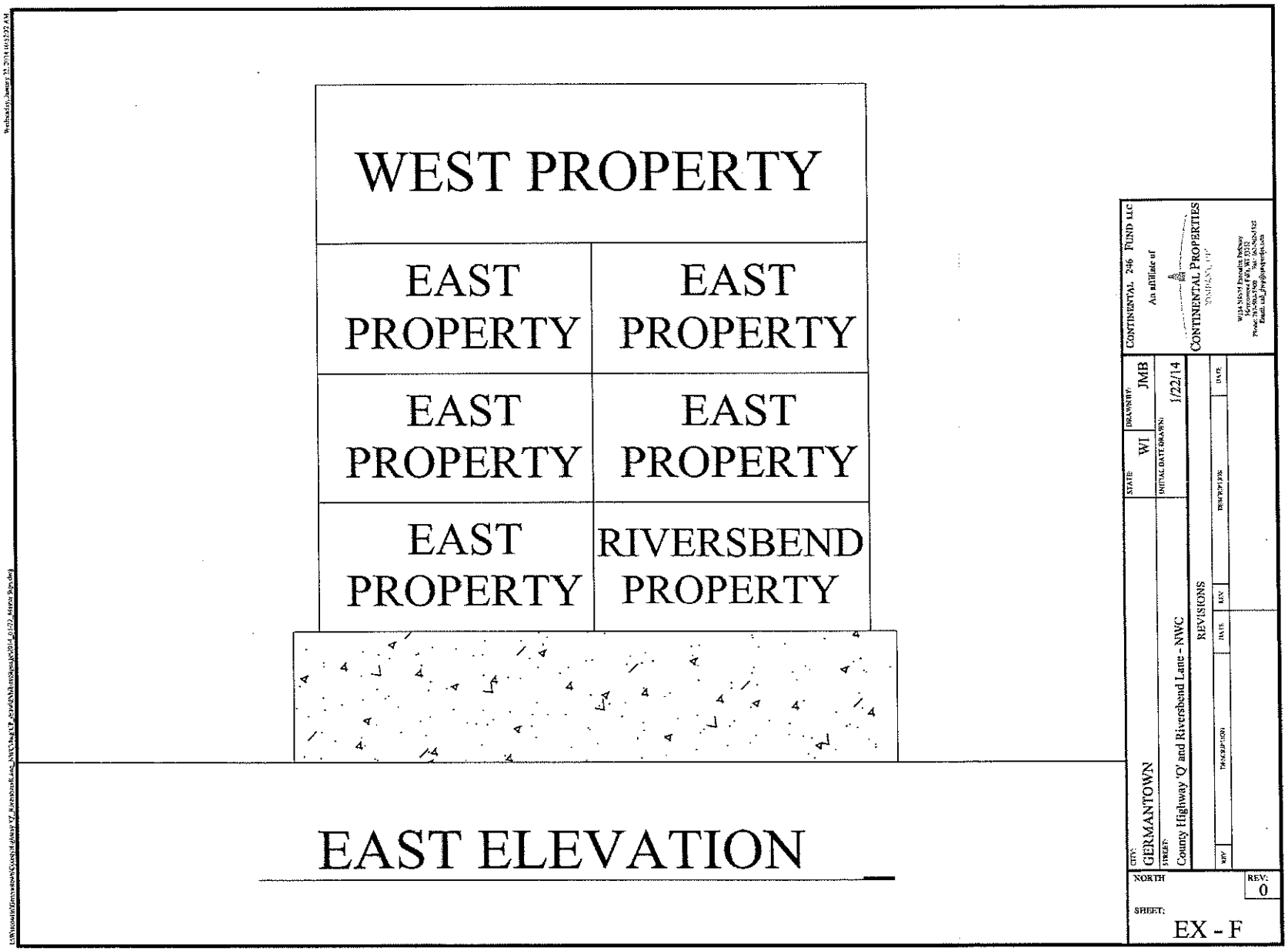

WEST PROPERTY
EAST PROPERTY
EAST PROPERTY
EAST PROPERTY
EAST PROPERTY
EAST PROPERTY
EAST PROPERTY
RIVERSBEND PROPERTY
EAST ELEVATION
CONTINENTAL 246 FUND LLC
An affiliate of
CONTINENTAL PROPERTIES
CITY: GERMANTOWN
STATE: WI
DRAWN BY: JMB
INITIAL DATE DRAWN: 1/22/14
STREET: County Highway 'Q' and Riversbend Lane - NWC
REVISIONS
NORTH
REV: 0
SHEET: EX - F

EXHIBIT F

Prohibited Uses

(a) Warehouse or storage facility or any assembling, manufacturing, distilling, refining, smelting, agricultural, rendering or mining operation;

(b) "Second-hand" store whose principal business is selling used merchandise, thrift shops, "Salvation Army" type stores, "Goodwill" type stores, and similar businesses; provided, however, the foregoing restriction shall not prohibit the operation of an antique shop or first class resale business such as "Play It Again Sports", "Music Go Round" or quality furniture or clothing consignment store;

(c) Mobile home park, trailer court, labor camp, junk yard, or stock yard (except that this provision shall not prohibit the temporary use of construction trailers during any periods of construction, reconstruction or maintenance);

(d) Dumping, disposing, incinerating, or reducing of garbage (exclusive of dumpsters for the temporary storage of garbage and any garbage compactors);

(e) Fire, going out of business (except during the thirty (30) day period immediately prior to the date on which such occupant actually goes out of business), relocation, bankruptcy or similar sales unless pursuant to court order;

(f) Central laundry, dry cleaning plant, or laundromat; provided, however, this restriction shall not apply to: (i) any dry cleaning facility providing on-site service oriented to pickup and delivery by the ultimate consumer, including, nominal supporting facilities; or (ii) any dry cleaning facility which performs on-site clothing cleaning for its customers only using (x) a wet cleaner using aqueous non-solvent systems, and/or (y) a dry cleaner using Exxon DF 2000 or PureDry Solvent;

(g) Selling or leasing of new or used automobiles, trucks, trailers, boats or recreational vehicles except the incidental renting of delivery vehicles in connection with the operation of another business such as a home improvement store;

(h) Bowling alley, skating rink, gymnasium, dance hall, discotheque, night club, cabaret, or off-track betting parlor;

(i) Any veterinary hospital or animal raising or boarding facility; provided, however, this prohibition shall not be applicable to pet shops. Notwithstanding the foregoing exception, any veterinary or boarding services provided in connection with the operation of a pet shop shall only be incidental to such operation; the boarding of pets as a separate customer service shall be prohibited; all kennels, runs and pens shall be located inside the building; and the combined incidental veterinary and boarding facilities shall occupy no more than fifteen percent (15%) of the floor area of the pet shop;

(j) Funeral home or mortuary;

(k) Any establishment offering one or more of the following products, services or forms of entertainment whether as its primary business or incidental to another business: (i) the sale or rental of "X" rated motion pictures (in any format), the sale of books, magazines or other print material (or any electronic version thereof) which may not legally be sold to minors or which have as their primary emphasis the depiction of nudity, sexual conduct or other prurient interests including national so-called gentlemen's magazines such as "Playboy" and "Penthouse"; (ii) the offering of adult entertainment involving partial or complete nudity, with or without the sale of alcoholic beverages; (iii) the exhibition of motion pictures (in any format) that exhibit the male or female genitalia, depict sexual acts or present any material considered by the general public to be lewd, lascivious, obscene, pornographic or generally catering to prurient interests; (iv) except in connection with the operation of a licensed prescription pharmacy, the operation of a

business which sells any product generally used for or in connection with the consumption or ingestion of illegal drugs such as bongs, waterpipes, roach clips, coke spoons, hypodermic needles, cigarette papers, or any evolution of such products or any new product, generally used, or considered by the general public or law enforcement officials as being used, primarily for the consumption or ingestion of illegal drugs whether or not such products may also have a legal use or a use unrelated to the consumption or ingestion of illegal drugs; (v) a massage parlor, modeling studio, rap parlor or any similar or other business offering "adult oriented" entertainment or services; (vi) psychic, fortune teller, card reader or similar establishment; (vii) casino, gambling hall, off track betting facility or gambling operation;

(l) Flea market;

(m) Car wash;

(n) Living quarters, sleeping apartments or lodging rooms or residential use of any kind;

(o) Tattoo parlor or body piercing establishment (however, ear piercing as an incidental part of another business shall be permitted);

(p) Church, school, day care center or religious or educational facility, including without limitation, religious reading room, beauty school, barber college or other facility catering primarily to students or trainees rather than customers;

(q) General office facility other than: (i) an incidental office located within a business establishment and used for the purposes of managing the business being operated therein; (ii) offices that provide services directly to consumers, which are customarily found in first class neighborhood shopping centers such as financial institutions, real estate agencies, stock brokerages, title company, escrow offices, travel and insurance agencies, law offices, and medical and dental offices that do not admit patients for overnight stays;

(r) Cinema or movie theater or performing arts theatre;

(s) Amusement arcade or amusement center (which does not apply to ancillary use of video games and electronic amusement devises in connection with operation of a restaurant and/or bar);

(t) Any use involving the sale of gasoline or diesel fuel or other petroleum products, or use as an automobile or truck service station or repair establishment, including tire sale establishments;

(u) Any food depository, food pantry, half-way house, homeless shelter or other similar use;

(v) Any jail, penal, detention or correctional institution;

(w) Gun shop or shooting range;

(x) A facility whose primary business is check cashing or "pay day" loans;

(y) A facility whose primary business is the sale of tobacco and tobacco related products.

EXHIBIT F-1

West Exclusive Use

No (i) a restaurant and/or bar with a sports theme or concept as a "Sports Bar" (defined below) or (ii) a restaurant and/or bar which serves bone-in or boneless chicken wings as a menu item with two or more types of sauces, where sales of the same in the aggregate constitute 7% or more of such operation's food sales on a gross revenue basis (a "**Wings Restaurant**"). A "**Sports Bar**" is defined as a restaurant and/or bar which markets itself for the viewing of sports events, and which has (i) three (3) or more televisions, or (ii) any projection programming or broadcasting, or (iii) any screens that exceed 37" diagonal. Competing businesses prohibited by the foregoing exclusive shall include, without limitation, Champps, Hooters, Wing Stop, Buffalo Wings & Rings, Paradocks East Coast Grille, Raising Cane's, Quaker Steak and Lube, The Green Turtle, Brick House Tavern & Tap, Show Me's, Tilted Kilt Pub & Eatery, Cheddar's Casual Café, East Coast Wings & Grill, BJ's Restaurant, AJ Gators Sports Bar & Grill, Gators Sports Bar & Grill, and Brewhouse, Hurricane Grill and Wings.

FLOODPLAIN ZONING CODE AMENDMENT

12/13/21 Plan Commission Meeting

Village of Germantown

Planning & Zoning Report **Germantown, Wisconsin**

Summary

The Community Development Department is presenting an updated Floodplain Zoning Code (Chapter 23 of the Germantown Municipal Code), a revised Flood Insurance Study (FIS), and revised Flood Insurance Rate Maps (FIRMs) for consideration and adoption for the purpose of maintaining the Village's eligibility in the Federal National Flood Insurance Program (NFIP).

Background/Staff Comments

As stated in the purpose section of the Village's Floodplain Zoning Ordinance (Chapter 23 of the Municipal Code), two of the primary purposes of the ordinance and regulations contained therein are to "protect life, health and property" and "minimize rescue and relief efforts undertaken at the expense of the taxpayers". As such, the Village of Germantown is a "participating community" in the National Flood Insurance Program (NFIP) that is administered through the Department of Homeland Security's Federal Emergency Management Agency (FEMA). In exchange for adopting and enforcing a floodplain management ordinance, Federally-backed flood insurance and disaster relief is made available to residents and property owners throughout the Village because of our status as a "participating community". The NFIP was established in 1968 and the Village of Germantown has been an ongoing participating community since 1974.

Communities that participate in the NFIP are responsible for making sure our floodplain management regulations (adopted and enforced under the Village's Floodplain Zoning Code) meet or exceed the minimum requirements of the NFIP in Section 60.3 Title 44 of the Code of Federal Regulations (44 CFR) and Chapter NR 116 Wisconsin Administrative Code. One of the NFIP requirements is that each time FEMA provides updated and/or additional flood hazard information concerning the Village of Germantown, the Village is required to adopt that information, as well as, the latest information or floodplain management requirements of the DNR.

In 2013, the Village adopted revised FIS and FIRMs covering the entire Village as a part of FEMA's nationwide "Flood Map Modernization" program that began in 2006. This program was intended to create more reliable and accurate floodplain maps in a digital format (vs. the old paper maps). The resulting maps presented the floodplain boundaries, hazard areas, and flood elevations overlayed on aerial photography. Since the completion of the "Flood Map Modernization" program, FEMA and the DNR have been conducting additional, more detailed studies of certain watersheds.

In addition to an ordinance amendment, updated FIS and FIRMs were adopted in 2015 as a result of a more detailed study of the Rock River watershed area in Washington County including Amy Belle Creek and the Bark River in the Village of Richfield. The updated FIS and FIRM panel revisions did not actually affect area in the Village of

Germantown, but the FIRM panels impacted covered area beyond the Village of Richfield into the Village of Germantown.

The updated FIS and FIRMs presented for adoption today were completed as a part of the Cedar Creek Risk MAP (Mapping, Assessment and Planning) project in Washington County. This study included new and revised studies for 80 miles of stream including Cedar Creek and 24 tributaries. The project reached FEMA's Letter of Final Determination (LFD) as of August 25, 2021. That date was the beginning of the 6-month floodplain zoning ordinance adoption phase. All jurisdictions in Washington County are affected by the recent study and updated maps and have until February 25, 2022 to adopt the revised FIS and FIRM Panels as well as the WI DNR's model Floodplain Zoning Ordinance, which was effective April 5, 2021. The adoption of these items will allow the Village of Germantown to remain in good standing with the NFIP.

The Cedar Creek study affected five (5) FIRM Panels in the Village of Germantown, primarily along the northern and western edges of the Village (see maps for location reference). The revised panels have been included in the packet. Washington County has posted an interactive Story Map which shows the current Cedar Creek floodplain map as well as the revised floodplain map for easy comparison. The map can be found here:
https://washingtoncowi.maps.arcgis.com/apps/StorytellingSwipe/index.html?appid=ec0dbac67b0c481091de6779a24a79ec

The WI DNR's updated model Floodplain Zoning Ordinance, effective April 5, 2021, is in large part the same as the ordinance the Village adopted in 2013. One of the more major changes of the ordinance is the addition of language within the Nonconforming Uses section. This section provides language related to Wisconsin Act 175 which essentially prevents jurisdictions from prohibiting repair, reconstruction or improvement of a non-conforming structure based on cost if, as a result of the repair, the nonconforming building will be permanently changed to comply with the floodplain ordinance or living quarters in the nonconforming building are raised to at or above the flood protection elevation.

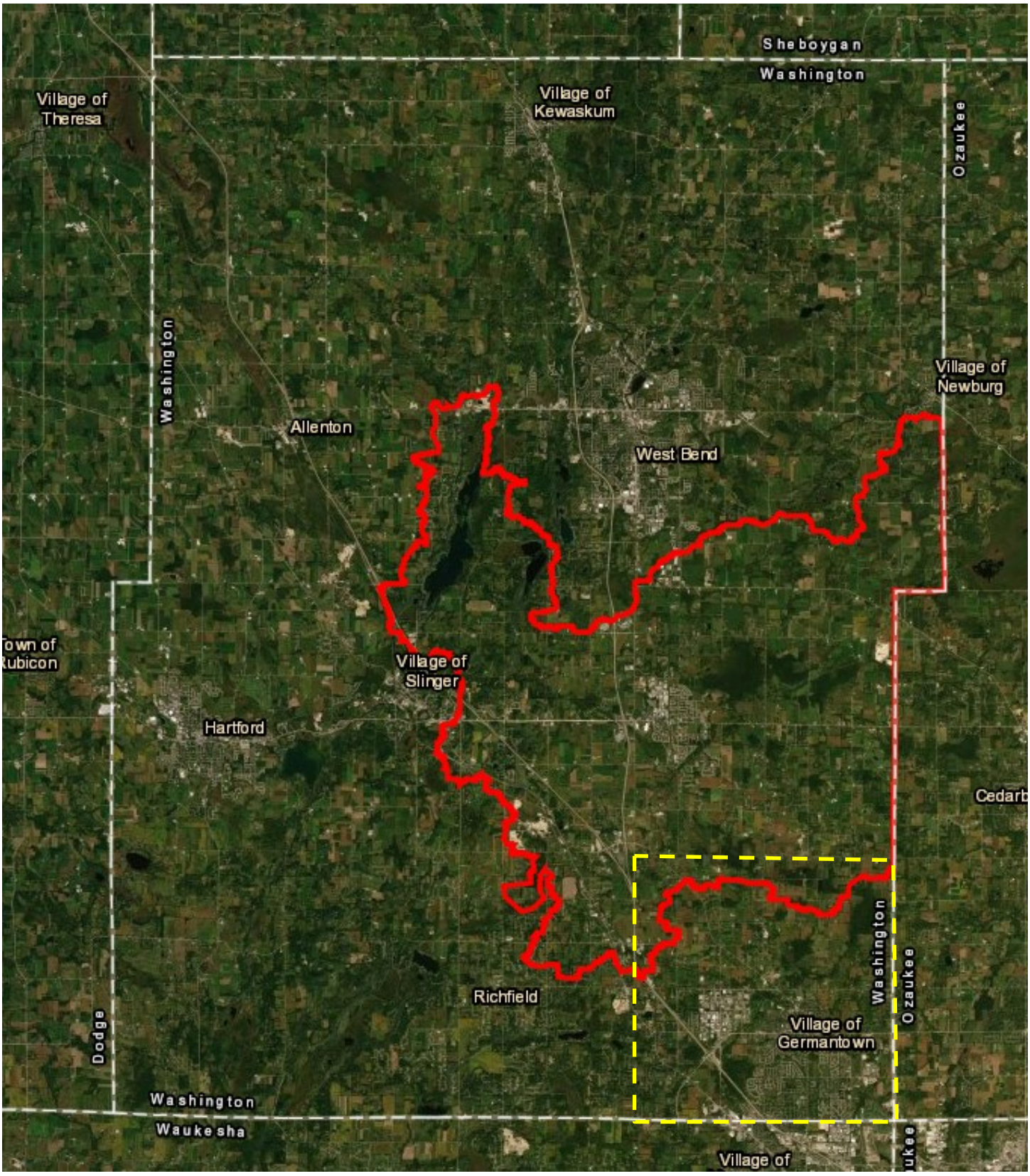
The WI DNR has recommended that all jurisdictions repeal and replace their current Floodplain Zoning Ordinance with the revised Model Ordinance that meets all of the requirements necessary to maintain participation in the NFIP.

Note: Due to the page length, the revised FIS documents have not been included in the packet. The FIS Reports can be viewed under "Pending Products" on the FEMA website here:
https://msc.fema.gov/portal/availabilitySearch?addcommunity=550472&communityName=GERMANTOWN,%20VILLAGE%20OF#searchresultsanchor
You may also contact Planning and Zoning staff if you would like to review those documents. Staff's presentation will include aerial and other images that will assist in visualizing the map revisions and areas impacted.

Staff Recommendation

APPROVE the proposed Floodplain Zoning Code amendment as drafted which includes by reference the revised Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRM's) having an effective date of February 25, 2022.

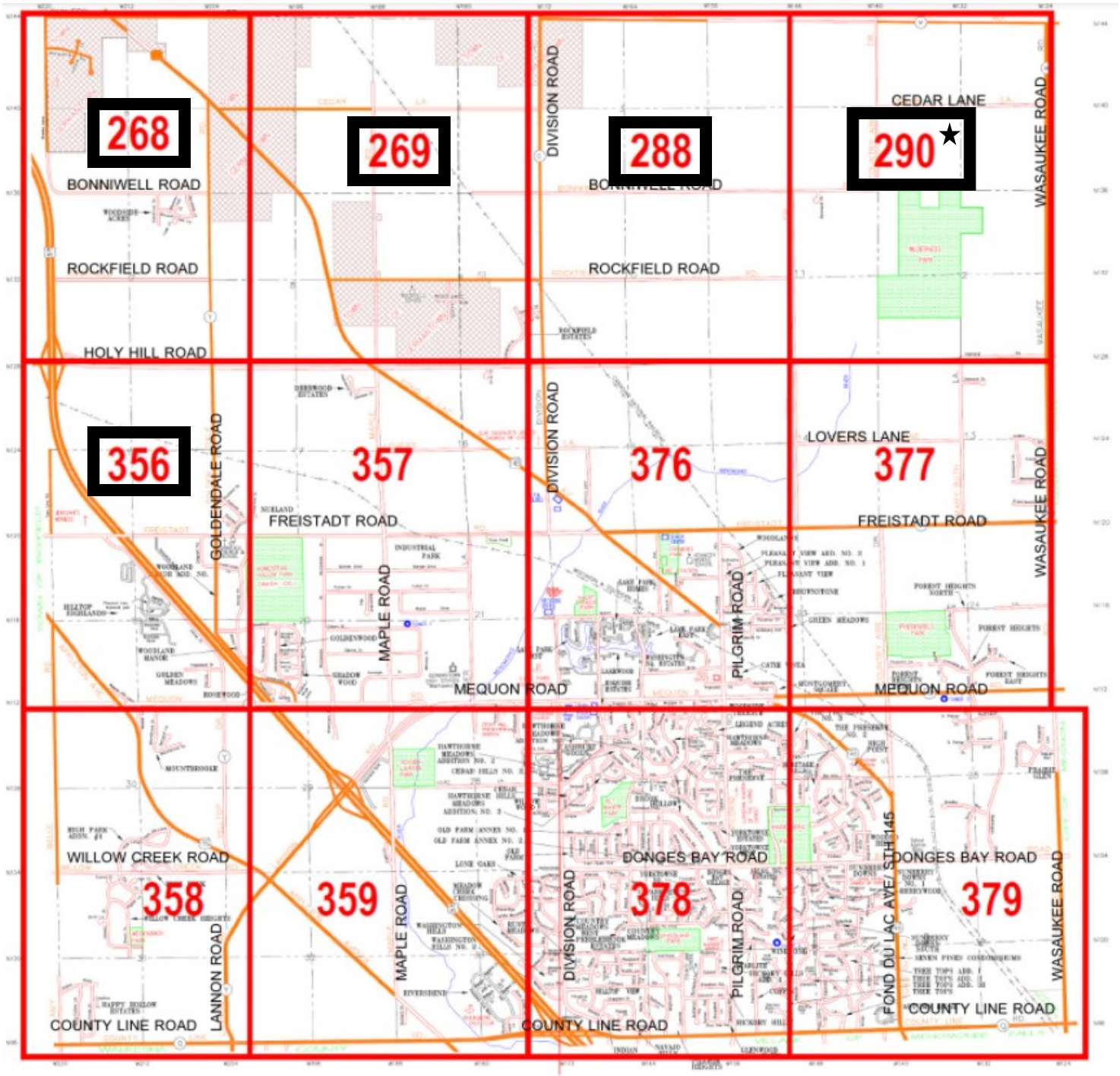
Cedar Creek Study Area within Washington County



Cedar Creek Study Area

Village of Germantown - general boundary

Impacted FIRM Panels in the Village of Germantown



FIRM Panels impacted by Cedar Creek Watershed Risk MAP Study—
Revised Panels to be effective 2/25/21

★ Currently effective FIRM Panel 290 will become 289 with the amended panels effective 2/25/22.

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

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



September 17, 2021

Mr. Dean Wolter
President, Village of Germantown
N112 W17001 Mequon Road
Germantown, WI 53022
Sent via email: dwolter@village.germantown.wi.us

Dear Mr. Wolter:

Recently, Villageof Germantown received a Letter of Final Determination (LFD) date of February 25, 2022, from the Federal Emergency Management Agency (FEMA) notifying the village that updated Flood Insurance Rate Maps (FIRMs) and the Flood Insurance Study (FIS) for Washington County must be adopted into the local floodplain ordinance within six months. The village ordinance must be updated and approved by DNR and FEMA no later than **February 25, 2022 or your community will be suspended from the National Flood Insurance Program (NFIP).**

This letter and the documents located at: https://dnr.wi.gov/topic/FloodPlains/riskmap.html, under Cedar Creek – Washington County, explain the ordinance adoption process. Please use the new Model Floodplain Ordinance, effective April 2021, for all updates. The 2021 state model meets the minimum requirements of the NFIP and Chapter NR116, Wisconsin Administrative Code. The link above contains the following files:

- FIRM and FIS Information for the Official Maps Section of the Local Floodplain Ordinance – The document lists each community's FIRMs and FIS.

- Storage District Maps for Washington County- The Villages of Slinger, Richfield and Jackson, and Washington County all have updated flood storage maps to add to their ordinance. DNR staff can assist with the wording in the ordinance. Local floodplain zoning staff from the affected communities need to download copies of the updated map panels to have on file for regulatory purposes.

- Checklist for Standard Model Ordinance - Checklist used to cross reference local sections, to ensure all applicable text is included.

- 2021 Standard Model Ordinance – An editable copy of the WDNR 2021 Standard Model Ordinance for communities in Word format.

- Adopting an Ordinance: A Step By Step Guide - A quick guide outlining the adoption process.

DNR staff are prepared to assist you in the ordinance review and adoption process, provide example public notices and explain state and federal regulatory requirements. Communities are encouraged to have DNR staff review the draft local floodplain ordinance well before the ordinance is presented to the local governing body for adoption in order to ensure compliance with the NFIP and Chapter NR116, Wisconsin Administrative Code. We advise you to start on this process as soon as possible to allow for the time necessary to complete the adoption process and to allow for any unintentional delays. FEMA will not permit extensions beyond the **February 25, 2022** deadline. **If the ordinance is not legally adopted by the community and approved by the DNR and FEMA, the community will be immediately suspended from the NFIP.**

The process for amending a local floodplain ordinance is:

- Ordinance Draft (recommended) – Email draft ordinance to DNR at DNRfloodplian@Wisconsin.gov for review 2-4 weeks prior to the public hearing to ensure it is compliant with the minimum standards of the NFIP and Chapter NR116, Wisconsin Administrative Code before adoption. We advise the Community to adopt the DNR model as it does meet current minimum standards for the NFIP and Chapter NR116. However, the community may be more restrictive than the minimum standards, if desired.

- Notice of Public Hearing (Class2) - The publication or posting of a public hearing notice for two consecutive weeks with the final notice being published or posted **no less than seven (7) days** prior to the public hearing. It is critical that the notice is published/posted correctly because if it is not, it may not be valid and the community would be required to go through the adoption process again.

- Decision of Governing Body – Once an amended floodplain ordinance has been adopted, please submit the following information to DNRfloodplain@Wisconsin.gov within ten (10) days after adoption:

  - A certified copy of the adopted ordinance.

  - An affidavit of publication of the *notice of public hearing* from the newspaper with the notice. If the notice was posted, a notarized affidavit by the local official (usually the clerk) stating that the notice of public hearing was posted in three public places (with date and location), together with the notice, or posted in one public place and placed electronically on a municipality internet site per s. 985.02(2)(a).

  - An affidavit of publication of the *ordinance adoption* from the newspaper with the notice. If the notice was posted, a notarized affidavit by the local official (usually the clerk) stating that the notice of public hearing was posted in three public places (with date and location), together with the notice, or posted in one public place and placed electronically on a municipality internet site per s. 985.02(2)(a).

  - A pdf of the ordinance package can be e-mailed to the DNR at DNRfloodplain@wisconsin.gov. DNR staff will then forward the approved ordinance to FEMA.

For further information on the ordinance adoption process or the Wisconsin Model Ordinance, please contact Mia Van Horn, Water Regulations and Zoning Specialist, Sr., DNRFLOODPLAIN@wisconsin.gov or by phone at (608) 590-5296.

Sincerely,

Brian J. Cunningham

Brian J. Cunningham
Floodplain Management Policy Coordinator
Public Trust and Zoning Section

Cc: Jeffrey W. Retzlaff, Zoning Administrator, via email: jretzlaff@village.germantown.wi.us
Andrea Stern, DNR Water Mngmt Engineer, SE Region, Waukesha via email: andrea.stern@wisconsin.gov



FEMA Digital Flood Map Products

- **FIRM Panel Image:** Flood Insurance Rate Maps (FIRM) are digital images of flood hazard maps. The images are digital pictures of entire flood map panels that can be viewed and printed from a computer. Most communities and counties have many map panels to cover the entire jurisdiction and an index map that shows the location of each map panel.

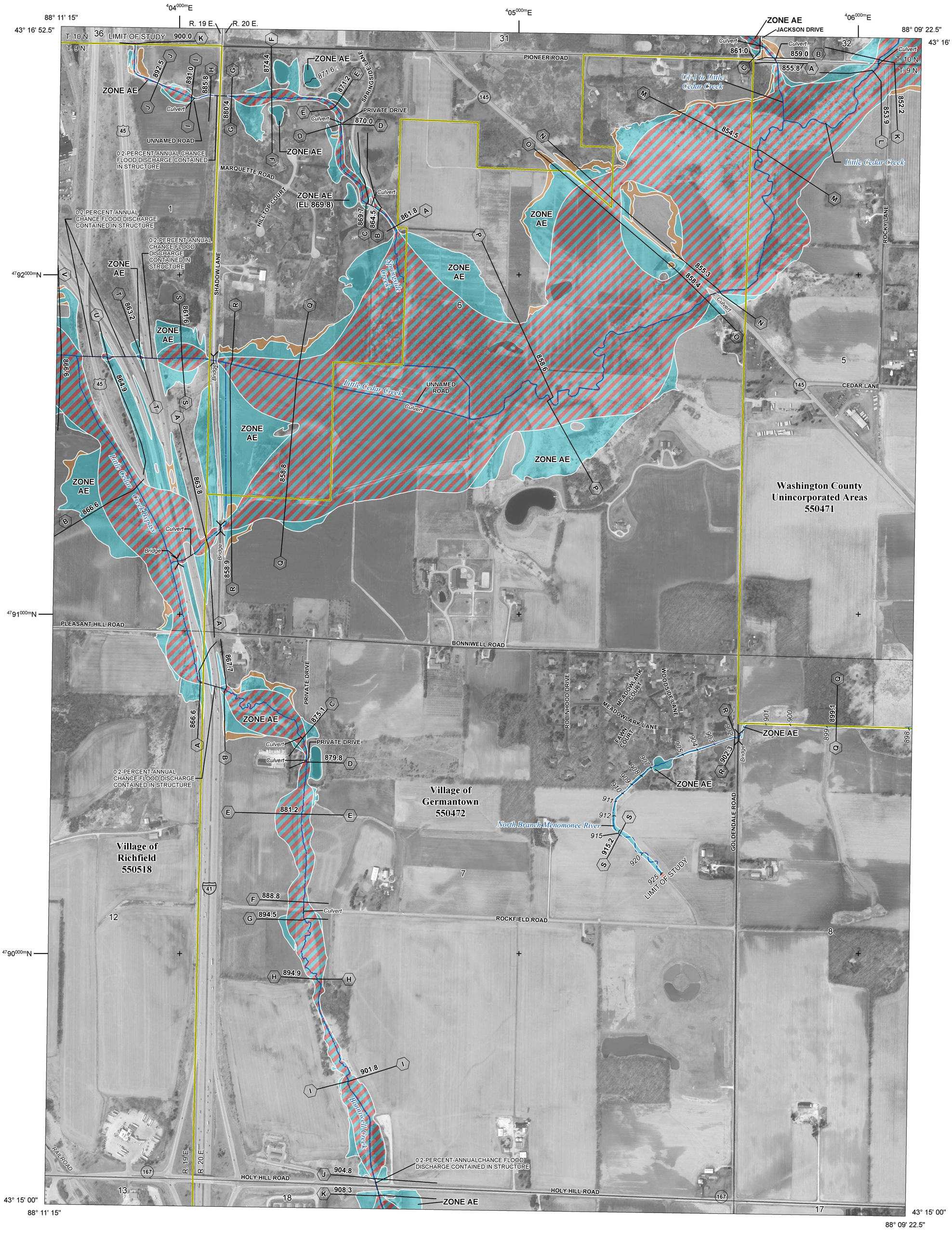
- **FIRM Worldfile:** A TFW or PGW file may accompany your flood hazard map. They are used to help view the flood maps in GIS applications.

FIRM Panel Images are TIF or PNG image files and have file names with a Community or County ID followed by a 4-digital panel number and letter suffix representing a version (e.g. 12345C0123F.tif). The FIRM worldfiles will have the same filenames but with a .tfw or .pgw extension.

FIRM Panel Images can be viewed using most freely available image viewer applications. You can also use the FIRMette-Desktop software available from the FEMA Flood Map Service Center (MSC) website at msc.fema.gov/portal/resources/firmettes. FIRM images can also be viewed in specialized GIS software where the worldfiles are used to make the images compatiable with other GIS data. See the MSC Products and Tools Overview page for more information on avialable data and tools for using FEMA's flood risk data.

For more information on available digital products, visit FEMA's Map Service Center website at https://msc.fema.gov or call the FEMA Map Information eXchange (FMIX) at 877-336-2627.

RiskMAP
Increasing Resilience Together



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT HTTPS://MSC.FEMA.GOV

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- With BFE or Depth *Zone AE, AO, AH, VE, AR*
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- Levee, Dike, or Floodwall

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- E 18.2 / 17.5 — Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 — Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- 513 — Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

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SCALE

N

Map Projection:
NAD 1983 HARN UTM Zone 16N;
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet 1:6,000

0 500 1,000 2,000 Feet

0 125 250 500 Meters

PANEL LOCATOR



* PANEL NOT PRINTED



NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

WASHINGTON COUNTY, WISCONSIN
And Incorporated Areas

PANEL 268 OF 395

FEMA

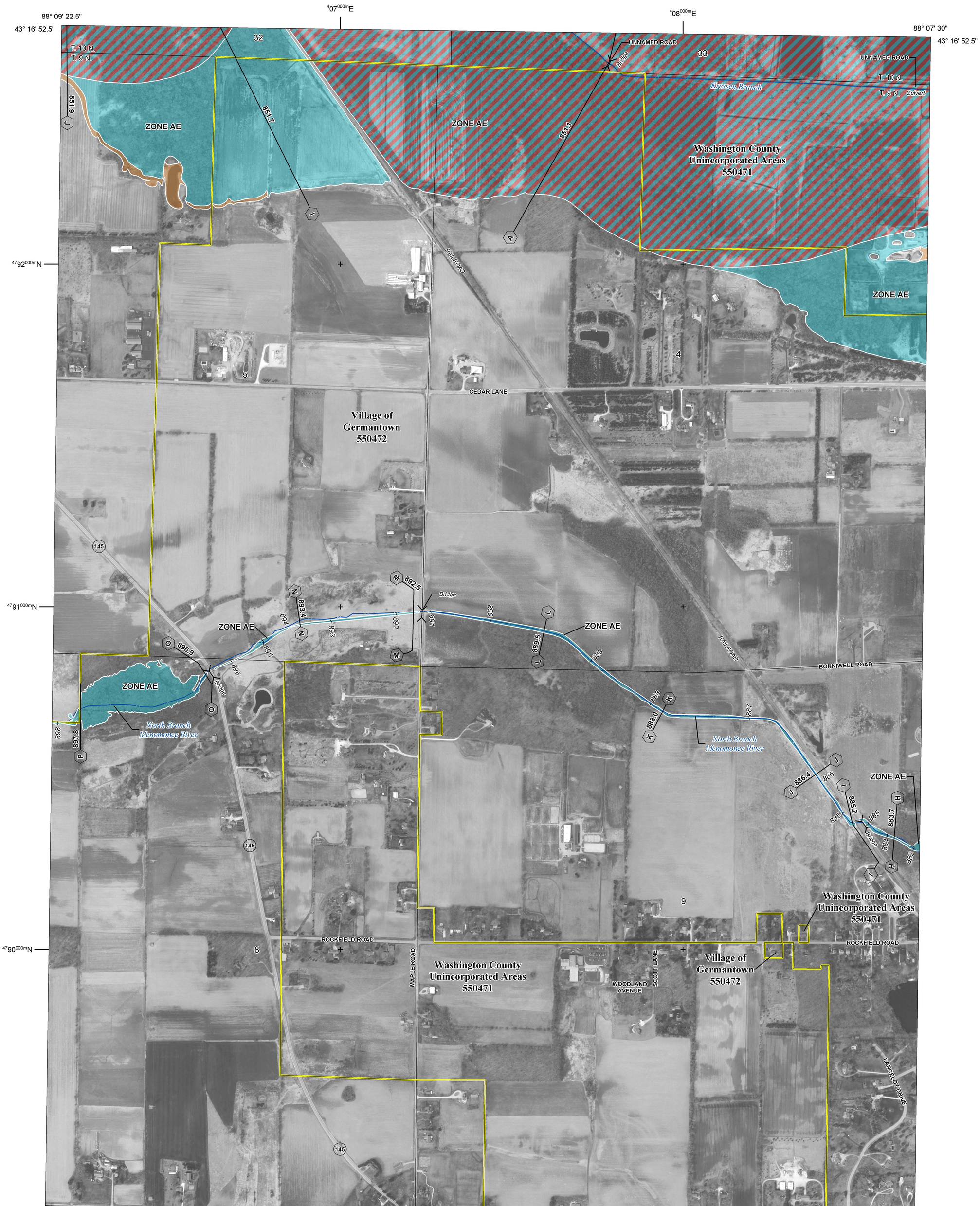
Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
GERMANTOWN, VILLAGE OF	550472	0268	E
RICHFIELD, VILLAGE OF	550518	0268	E
WASHINGTON COUNTY	550471	0268	E

VERSION NUMBER
2.5.3.0

MAP NUMBER
55131C0268E

MAP REVISED
FEBRUARY 25, 2022



NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 9 NORTH, RANGE 20 EAST AND TOWNSHIP 10 NORTH, RANGE 20 EAST,.

FLOOD HAZARD INFORMATION

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PANEL LOCATOR



* PANEL NOT PRINTED



NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

WASHINGTON COUNTY, WISCONSIN
And Incorporated Areas

PANEL 269 OF 395

FEMA

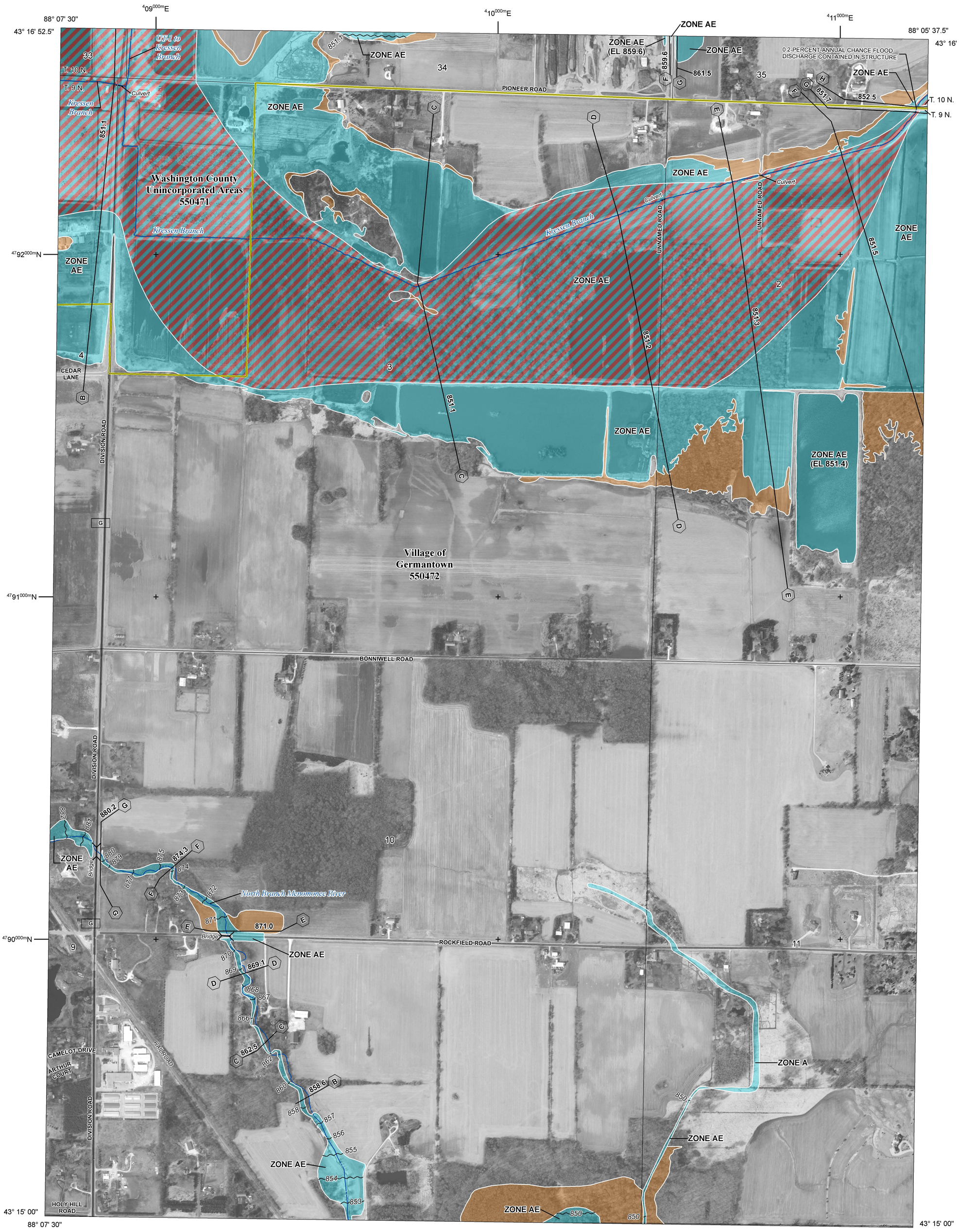
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GERMANTOWN, VILLAGE OF	550472	0269	E
WASHINGTON COUNTY	550471	0269	E

VERSION NUMBER
2.5.3.0

MAP NUMBER
55131C0269E

MAP REVISED
FEBRUARY 25, 2022



NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 9, RANGE 20 EAST AND TOWNSHIP 10, RANGE 20 EAST.

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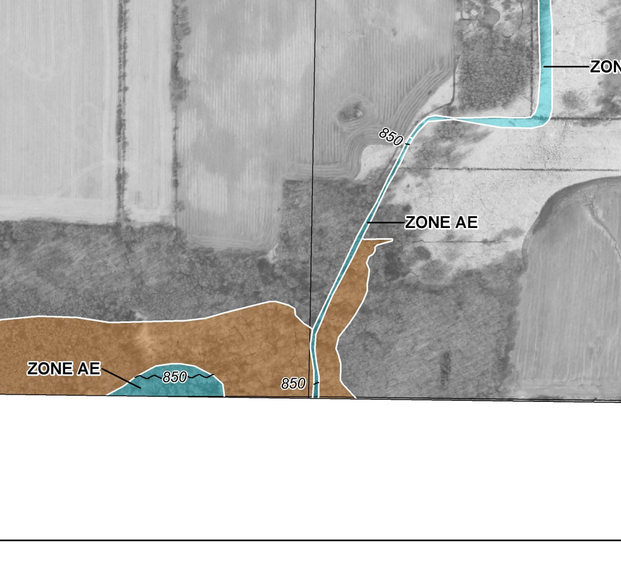
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NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

WASHINGTON COUNTY, WISCONSIN
And Incorporated Areas

PANEL 288 OF 395

FEMA

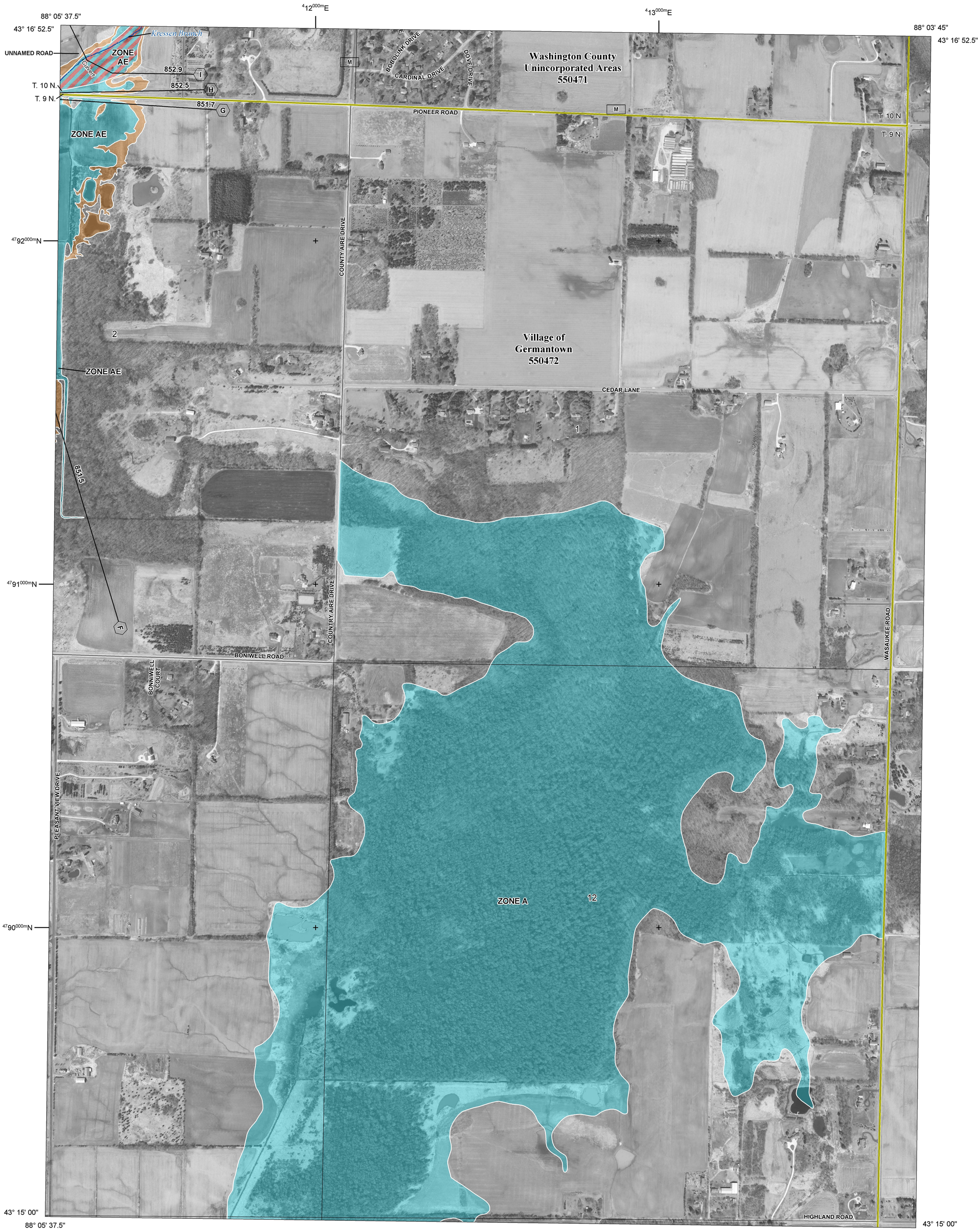
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VERSION NUMBER
2.5.3.0

MAP NUMBER
55131C0288E

MAP REVISED
FEBRUARY 25, 2022



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PANEL 289 OF 395

FEMA

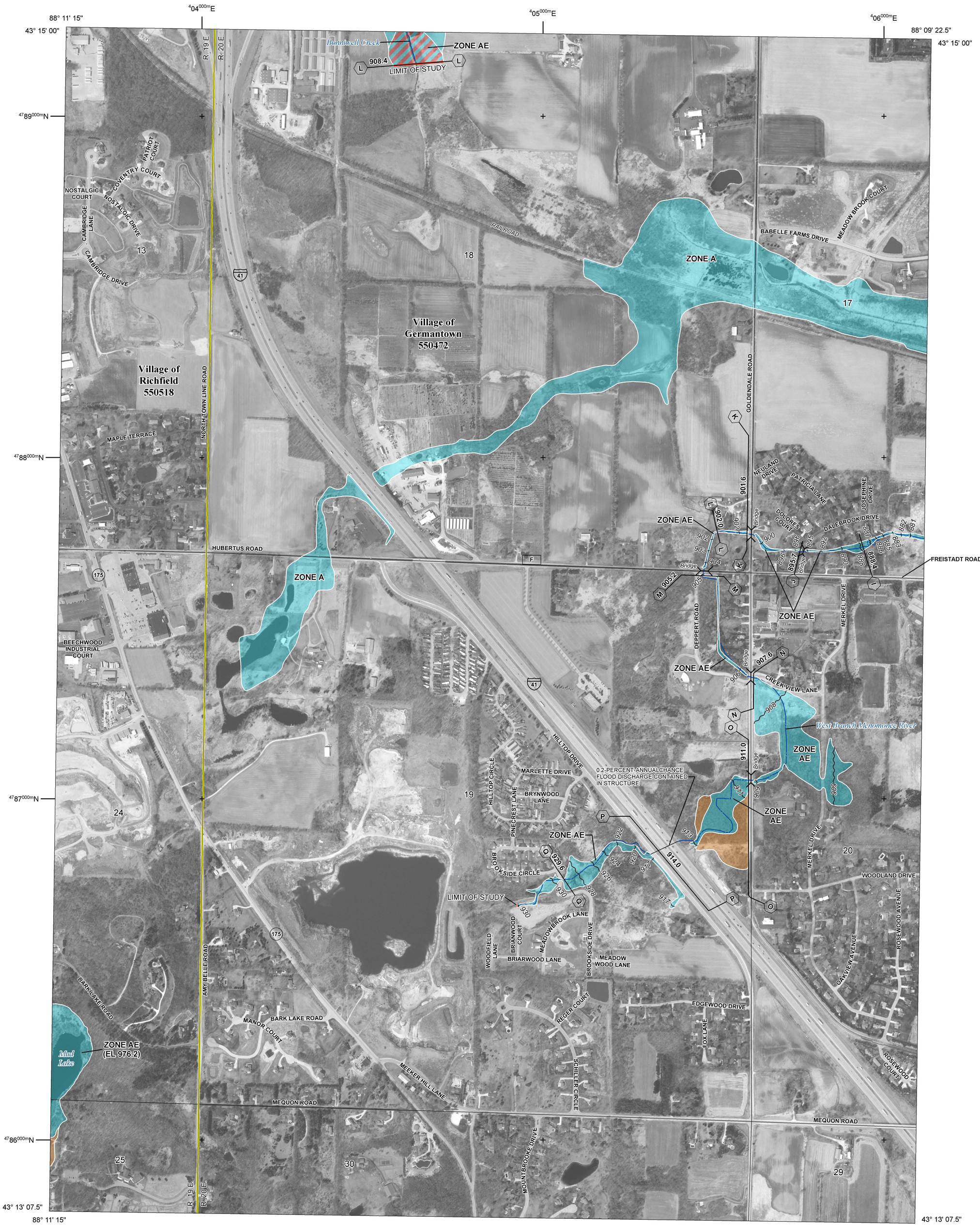
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VERSION NUMBER
2.5.3.0

MAP NUMBER
55131C0289E

MAP REVISED
FEBRUARY 25, 2022



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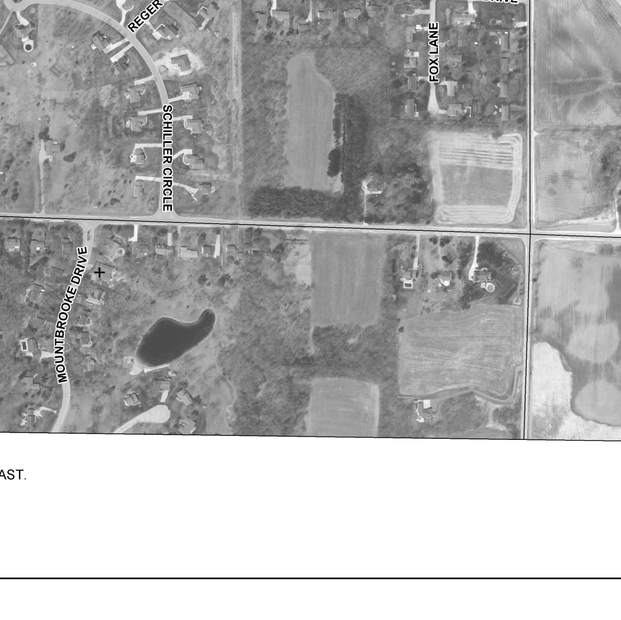
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PANEL LOCATOR



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NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

WASHINGTON COUNTY, WISCONSIN
And Incorporated Areas

PANEL 356 OF 395

FEMA

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
GERMANTOWN, VILLAGE OF	550472	0356	F
RICHFIELD, VILLAGE OF	550518	0356	F

VERSION NUMBER
2.5.3.0

MAP NUMBER
55131C0356F

MAP REVISED
FEBRUARY 25, 2022

ORDINANCE NO. _____

AN ORDINANCE AMENDING SECTION 23 (FLOODPLAIN ZONING CODE) OF THE VILLAGE OF GERMANTOWN ZONING CODE

THE VILLAGE BOARD OF THE VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN, ORDAINS AS FOLLOWS:

SECTION 1. That Section 23 of the Village of Germantown Municipal Code is repealed and recreated as set forth in Exhibit 1 (with all sections to be renumbered upon codification).

SECTION 2. This ordinance shall take effect and be in full force the day after its passage and publication as provided by law and approval by the Wisconsin Department of Natural Resources (DNR) and Federal Emergency Management Agency (FEMA) of the United States Department of Homeland Security.

Introduced by Trustee:

Adopted:

Vote: Ayes: Nays:

_____
Dean Wolter, Village President

ATTEST:

_____
Deanna Braunschweig, Village Clerk

APPROVED AS TO FORM:

_____
Brian C. Sajdak, Village Attorney

Published:

DRAFT

EXHIBIT 1

DRAFT

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1.0 STATUTORY AUTHORIZATION, FINDING OF FACT, STATEMENT OF PURPOSE, TITLE AND GENERAL PROVISIONS

1.1 STATUTORY AUTHORIZATION

This ordinance is adopted pursuant to the authorization in s. 61.35 and 62.23, for villages and cities and the requirements in s. 87.30, Stats.

1.2 FINDING OF FACT

Uncontrolled development and use of the floodplains and rivers of this municipality would impair the public health, safety, convenience, general welfare and tax base.

1.3 STATEMENT OF PURPOSE

This ordinance is intended to regulate floodplain development to:

(1) Protect life, health and property;

(2) Minimize expenditures of public funds for flood control projects;

(3) Minimize rescue and relief efforts undertaken at the expense of the taxpayers;

(4) Minimize business interruptions and other economic disruptions;

(5) Minimize damage to public facilities in the floodplain;

(6) Minimize the occurrence of future flood blight areas in the floodplain;

(7) Discourage the victimization of unwary land and homebuyers;

(8) Prevent increases in flood heights that could increase flood damage and result in conflicts between property owners; and

(9) Discourage development in a floodplain if there is any practicable alternative to locate the activity, use or structure outside of the floodplain.

1.4 TITLE

This ordinance shall be known as the Floodplain Zoning Ordinance for Village of Germantown, Wisconsin.

1.5 GENERAL PROVISIONS

(1) AREAS TO BE REGULATED

This ordinance regulates all areas of special flood hazard identified as zones A, AO, AH, A1-30, or AE on the Flood Insurance Rate Map. Additional areas identified on maps approved by the Department of Natural Resources (DNR) and local community may also be regulated under the provisions of this ordinance, where applicable.

(2) OFFICIAL MAPS & REVISIONS

Special Flood Hazard Areas (SFHA) are designated as zones A, A1-30, AE, AH, or AO on the Flood Insurance Rate Maps (FIRMs) based on flood hazard analyses summarized in the Flood Insurance Study (FIS) listed in subd. (a) below. Additional flood hazard areas subject to regulation under this ordinance are identified on maps based on studies approved by the DNR and listed in subd.

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(b) below. These maps and revisions are on file in the office of the ***Village Clerk (Village of Germantown).***

(a) OFFICIAL MAPS: Based on the Flood Insurance Study (FIS):

1. Flood Insurance Rate Map (FIRM), panel numbers 55131C0290D, 55131C0357D, 55131C0359D, 55131C0376D, 55131C0377D, 55131C0378D, and 55131C0379D, dated 11/20/2013;

2. Flood Insurance Rate Map (FIRM), panel number 55131C0358E, dated 10/16/2015;

3. Flood Insurance Rate Map (FIRM), panel numbers 55131C0268E, 55131C0269E, 55131C0288E, 55131C0289E, and 55131C0356F, dated 02/25/2022;

4. Flood Insurance Study (FIS) for Village of Germantown, Washington County, 55131CV001C, 55131CV002C, 55131CV003C, 55131CV004C, 55131CV005C, and 55131CV006C, dated 02/25/2022.

   Approved by: The DNR and FEMA

(b) OFFICIAL MAPS**:** Based on other studies. Any maps referenced in this section must be approved by the DNR and be more restrictive than those based on the FIS at the site of the proposed development.

(3) ESTABLISHMENT OF FLOODPLAIN ZONING DISTRICTS

The flood hazard areas regulated by this ordinance are divided into districts as follows:

(a) The Floodway District (FW), is the channel of a river or stream and those portions of the floodplain adjoining the channel required to carry the regional floodwaters, within AE Zones as shown on the FIRM, or within A Zones shown on the FIRM when determined according to s. 5.1(5).

(b) The Floodfringe District (FF) is that portion of a riverine special flood hazard area outside the floodway within AE Zones on the FIRM, or, when floodway limits have been determined according to s. 5.1(5), within A Zones shown on the FIRM.

(c) The General Floodplain District (GFP) is those riverine areas that may be covered by floodwater during the regional flood in which a floodway boundary has not been delineated on the FIRM and also includes shallow flooding areas identified as AH and AO zones on the FIRM.

(4) LOCATING FLOODPLAIN BOUNDARIES

Discrepancies between the exterior boundaries of zones A1-30, AE, AH, or A on the official floodplain zoning map and actual field conditions may be resolved using the criteria in subd (a) or (b) below. If a significant difference exists, the map shall be amended according to s. 8.0 *Amendments*. The zoning administrator can rely on a boundary derived from a profile elevation to grant or deny a land use permit, whether or not a map amendment is required. The

zoning administrator shall be responsible for documenting actual pre-development field conditions and the basis upon which the district boundary was determined. Disputes between the zoning administrator and an applicant over the district boundary line shall be settled according to s. 7.3(3) and the criteria in (a) and (b) below**.** Where the flood profiles are based on established base flood elevations from a FIRM, FEMA must approve any map amendment or revision pursuant to s. 8.0 *Amendments*.

(a) If flood profiles exist, the map scale and the profile elevations shall determine the district boundary. The regional or base flood elevations shall govern if there are any discrepancies.

(b) Where flood profiles do not exist for projects, including any boundary of zone A, or AO, the location of the boundary shall be determined by the map scale.

(5) REMOVAL OF LANDS FROM FLOODPLAIN

(a) Compliance with the provisions of this ordinance shall not be grounds for removing land from the floodplain unless it is filled at least two feet above the regional or base flood elevation, the fill is contiguous to land outside the floodplain, and the map is amended pursuant to s. 8.0 *Amendments.*

(b) The delineation of any of the Floodplain Districts may be revised by the community where natural or man-made changes have occurred and/or where more detailed studies have been conducted. However, prior to any such change, approval must be obtained from the Wisconsin Department of Natural Resources and Federal Emergency Management Agency. A completed Letter of Map Revision is a record of this approval. The floodplain administrator shall not sign a community acknowledgement form unless all criteria set forth in the following paragraphs are met:

1. The land and/or land around the structure must be filled at least two feet above the regional or base flood elevation;

2. The fill must be contiguous to land outside the floodplain; Applicant shall obtain floodplain development permit before applying for a LOMR or LOMR-F;

(c) Removal of lands from the floodplain may also occur by operation of §87.30(1)(e), Wis. Stat. if a property owner has obtained a letter of map amendment from the federal emergency management agency under 44 C.F.R. 70.

(6) COMPLIANCE

(a) No structure or use within areas regulated by this ordinance shall hereafter be located, erected, constructed, reconstructed, repaired, extended, converted, enlarged, or altered without full compliance with the terms of these regulations and all other applicable regulations that apply to uses within the jurisdiction of these regulations.

(b) Failure to obtain a floodplain development permit shall be a violation of these regulations and shall be punishable in accordance with s. 9.0.

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(c) Floodplain development permits issued on the basis of plans and applications approved by the Floodplain Administrator authorize only the use, and arrangement, set forth in such approved plans and applications, or amendments thereto if approved by the Floodplain Administrator. Use, arrangement, or construction contrary to that authorized shall be deemed a violation of these regulations and punishable in accordance with s. 9.0.

(7) MUNICIPALITIES AND STATE AGENCIES REGULATED

Unless specifically exempted by law, all cities, villages, towns, and counties are required to comply with this ordinance and obtain all necessary permits. State agencies are required to comply if s. 13.48(13), Stats., applies. The construction, reconstruction, maintenance and repair of state highways and bridges by the Wisconsin Department of Transportation is exempt when s. 30.2022, Stats., applies. Although exempt from a local zoning permit and permit fees, DOT must provide sufficient project documentation and analysis to ensure that the community is in compliance with Federal, State, and local floodplain standards.

(8) ABROGATION AND GREATER RESTRICTIONS

(a) This ordinance supersedes all the provisions of any municipal zoning ordinance enacted under s. 61.35 for villages or s. 87.30, Stats., which relate to floodplains. A more restrictive ordinance shall continue in full force and effect to the extent of the greater restrictions, but not otherwise.

(b) This ordinance is not intended to repeal, abrogate or impair any existing deed restrictions, covenants or easements. If this ordinance imposes greater restrictions, the provisions of this ordinance shall prevail.

(9) INTERPRETATION

In their interpretation and application, the provisions of this ordinance are the minimum requirements liberally construed in favor of the governing body and are not a limitation on or repeal of any other powers granted by the Wisconsin Statutes. If a provision of this ordinance, required by ch. NR 116, Wis. Adm. Code, is unclear, the provision shall be interpreted in light of the standards in effect on the date of the adoption of this ordinance or in effect on the date of the most recent text amendment to this ordinance.

(10) WARNING AND DISCLAIMER OF LIABILITY

The flood protection standards in this ordinance are based on engineering experience and research. Larger floods may occur, or the flood height may be increased by man-made or natural causes. This ordinance does not imply or guarantee that non-floodplain areas or permitted floodplain uses will be free from flooding and flood damages. This ordinance does not create liability on the part of, or a cause of action against, the municipality or any officer or employee thereof for any flood damage that may result from reliance on this ordinance.

(11) SEVERABILITY

Should any portion of this ordinance be declared unconstitutional or invalid by a court of competent jurisdiction, the remainder of this ordinance shall not be affected.

(12) ANNEXED AREAS FOR CITIES AND VILLAGES

The Washington County floodplain zoning provisions in effect on the date of

annexation shall remain in effect and shall be enforced by the municipality for all annexed areas until the municipality adopts and enforces an ordinance which meets the requirements of ch. NR 116, Wis. Adm. Code and 44 CFR 59-72, *National Flood Insurance Program* (NFIP). These annexed lands are described on the municipality's official zoning map. County floodplain zoning provisions are incorporated by reference for the purpose of administering this section and are on file in the office of the municipal zoning administrator. All plats or maps of annexation shall show the regional flood elevation and the floodway location.

2.0 GENERAL STANDARDS APPLICABLE TO ALL FLOODPLAIN DISTRICTS

The community shall review all permit applications to determine whether proposed building sites will be reasonably safe from flooding and assure that all necessary permits have been received from those governmental agencies whose approval is required by federal or state law.

(1) If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall:

(a) be designed and anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

(b) be constructed with flood-resistant materials;

(c) be constructed by methods and practices that minimize flood damages; and

(d) be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(2) If a subdivision or other proposed new development is in a flood-prone area, the community shall assure that:

(a) such proposed subdivision or other proposed new development is consistent with the need to minimize flood damage within the flood-prone area;

(b) public utilities and facilities such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage; and

(c) adequate drainage is provided to reduce exposure to flood hazards.

All subdivision proposals (including manufactured home parks) shall include regional flood elevation and floodway data for any development that meets the subdivision definition of this ordinance and all other requirements in s. 7.1(2).

2.1 HYDRAULIC AND HYDROLOGIC ANALYSES

(1) No floodplain development shall:

(a) Obstruct flow, defined as development which blocks the conveyance of floodwaters by itself or with other development, causing any increase in the regional flood height; or

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(b) Cause any increase in the regional flood height due to floodplain storage area lost.

(2) The zoning administrator shall deny permits if it is determined the proposed development will obstruct flow or cause any increase in the regional flood height, based on the officially adopted FIRM or other adopted map, unless the provisions of s. 8.0 *Amendments* are met.

2.2 WATERCOURSE ALTERATIONS

No land use permit to alter or relocate a watercourse in a mapped floodplain shall be issued until the local official has notified in writing all adjacent municipalities, the Department and FEMA regional offices, and required the applicant to secure all necessary state and federal permits. The standards of s. 2.1 must be met and the flood carrying capacity of any altered or relocated watercourse shall be maintained.

As soon as is practicable, but not later than six months after the date of the watercourse alteration or relocation and pursuant to s. 8.0 *Amendments,* the community shall apply for a Letter of Map Revision (LOMR) from FEMA. Any such alterations must be reviewed and approved by FEMA and the DNR through the LOMC process.

2.3 CHAPTER 30, 31, WIS. STATS., DEVELOPMENT

Development which requires a permit from the Department, under chs. 30 and 31, Stats., such as docks, piers, wharves, bridges, culverts, dams and navigational aids, may be allowed if the necessary permits are obtained and amendments to the floodplain zoning ordinance are made according to s. 8.0 *Amendments*.

2.4 PUBLIC OR PRIVATE CAMPGROUNDS

Public or private campgrounds shall have a low flood damage potential and shall meet the following provisions:

(1) The campground is approved by the Department of Agriculture, Trade and Consumer Protection;

(2) A land use permit for the campground is issued by the zoning administrator;

(3) The character of the river system and the campground elevation are such that a 72-hour warning of an impending flood can be given to all campground occupants;

(4) There is an adequate flood warning procedure for the campground that offers the minimum notice required under this section to all persons in the campground. This procedure shall include a written agreement between the campground owner, the municipal emergency government coordinator and the chief law enforcement official which specifies the flood elevation at which evacuation shall occur, personnel responsible for monitoring flood elevations, types of warning systems to be used and the procedures for notifying at-risk parties, and the methods and personnel responsible for conducting the evacuation;

(5) This agreement shall be for no more than one calendar year, at which time the agreement shall be reviewed and updated - by the officials identified in sub. (4) - to remain in compliance with all applicable regulations, including those of the state Department of Agriculture, Trade and Consumer Protection and all other applicable

regulations;

(6) All mobile recreational vehicles placed on the site must meet one of the following:

(a) Only camping units that are fully licensed, if required, and ready for highway use are allowed; or

(b) The camping units shall not occupy any site in the campground for more than 180 consecutive days, at which time the camping unit must be removed from the floodplain for a minimum of 24 hours;

A mobile recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect utilities and security devices and has no permanently attached additions.

(7) All camping units that remain on site for more than 30 days shall be issued a limited authorization by the campground operator, a written copy of which is kept on file at the campground. Such authorization shall allow placement of a camping unit consistent with 2.4(6) and shall ensure compliance with all the provisions of this section;

(8) The municipality shall monitor the limited authorizations issued by the campground operator to assure compliance with the terms of this section;

(9) All camping units that remain in place for more than 180 consecutive days must meet the applicable requirements in either s. 3.0, 4.0, 5.1, or 5.3 for the floodplain district in which the structure is located;

(10) The campground shall have signs clearly posted at all entrances warning of the flood hazard and the procedures for evacuation when a flood warning is issued; and

(11) All service facilities, including but not limited to refuse collection, electrical service, gas lines, propane tanks, sewage systems and wells shall be properly anchored and placed at or floodproofed to the flood protection elevation.

3.0 FLOODWAY DISTRICT (FW)

3.1 APPLICABILITY

This section applies to all floodway areas on the floodplain zoning maps and those identified pursuant to s. 5.1(5).

3.2 PERMITTED USES

The following open space uses are allowed in the Floodway District and the floodway areas of the General Floodplain District, if:

- they are not prohibited by any other ordinance;
- they meet the standards in s. 3.3 and 3.4; and
- all permits or certificates have been issued according to s. 7.1.

(1) Agricultural uses, such as: farming, outdoor plant nurseries, horticulture, viticulture and wild crop harvesting.

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(2) Nonstructural industrial and commercial uses, such as loading areas, parking areas and airport landing strips.

(3) Nonstructural recreational uses, such as golf courses, tennis courts, archery ranges, picnic grounds, boat ramps, swimming areas, parks, wildlife and nature preserves, game farms, fish hatcheries, shooting, trap and skeet activities, hunting and fishing areas and hiking and horseback riding trails, subject to the fill limitations of s. 3.3(4).

(4) Uses or structures accessory to open space uses or classified as historic structures that comply with s. 3.3 and 3.4.

(5) Extraction of sand, gravel or other materials that comply with s. 3.3(4).

(6) Functionally water-dependent uses, such as docks, piers or wharves, dams, flowage areas, culverts, navigational aids and river crossings of transmission lines, and pipelines that comply with chs. 30 and 31, Stats.

(7) Public utilities, streets and bridges that comply with s. 3.3(3).

(8) Portable latrines that are removed prior to flooding and systems associated with recreational areas and Department-approved campgrounds that meet the applicable provisions of local ordinances and ch. SPS 383, Wis. Adm. Code.

(9) Public or private wells used to obtain potable water for recreational areas that meet the requirements of local ordinances and chs. NR 811 and NR 812, Wis. Adm. Code.

(10) Wastewater treatment ponds or facilities permitted under s. NR 110.15(3)(b), Wis. Adm. Code.

(11) Sanitary sewer or water supply lines to service existing or proposed development located outside the floodway that complies with the regulations for the floodplain area occupied.

3.3 STANDARDS FOR DEVELOPMENTS IN THE FLOODWAY

(1) GENERAL

(a) Any development in the floodway shall comply with s. 2.0 and have a low flood damage potential.

(b) Applicants shall provide an analysis calculating the effects of this proposal on the regional flood height to determine the effects of the proposal according to s. 2.1 and 7.1(2)(c). The analysis must be completed by a registered professional engineer in the state of Wisconsin.

(c) Any encroachment in the regulatory floodway is prohibited unless the data submitted for subd. 3.3(1)(b) above demonstrates that the encroachment will cause no increase in flood elevations in flood events up to the base flood at any location or removes the encroached area from the regulatory floodway as provided in s. 1.5(5).

(2) STRUCTURES

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Structures accessory to permanent open space uses, including utility and sanitary facilities, or functionally dependent on a waterfront location may be allowed by permit if the structures comply with the following criteria:

(a) Not designed for human habitation, does not have a high flood damage potential and is constructed to minimize flood damage;

(b) Shall either have the lowest floor elevated to or above the flood protection elevation or shall meet all the following standards:

1. Have the lowest floor elevated to or above the regional flood elevation and be dry floodproofed so that the structure is watertight with walls substantially impermeable to the passage of water and completely dry to the flood protection elevation without human intervention during flooding;

2. Have structural components capable of meeting all provisions of Section 3.3(2)(g) and;

3. Be certified by a registered professional engineer or architect, through the use of a Federal Emergency Management Agency Floodproofing Certificate, that the design and methods of construction are in accordance with Section 3.3(2)(g).

(c) Must be anchored to resist flotation, collapse, and lateral movement;

(d) Mechanical and utility equipment must be elevated to or above the flood protection elevation; and

(e) Must not obstruct flow of flood waters or cause any increase in flood levels during the occurrence of the regional flood.

(f) For a structure designed to allow the automatic entry of floodwaters below the Regional Flood Elevation, the applicant shall submit a plan that meets s. 3.3(2)(a) through 3.3(2)(e) and meets or exceeds the following standards:

1. The lowest floor must be elevated to or above the regional flood elevation;

2. a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

3. the bottom of all openings shall be no higher than one foot above the lowest adjacent grade; openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters, otherwise must remain open.

4. The use must be limited to parking, building access or limited storage.

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(g) Certification: Whenever floodproofing measures are required, a registered professional engineer or architect shall certify that the following floodproofing measures will be utilized, where appropriate, and are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the regional flood:

1. Reinforcement of floors and walls to resist rupture, collapse, or lateral movement caused by water pressures or debris buildup;

2. Construction of wells, water supply systems and waste treatment systems so as to prevent the entrance of flood waters in such systems and must be in accordance with provisions in Sections 3.4(4) and 3.4(5);

3. Subsurface drainage systems to relieve external pressures on foundation walls and basement floors;

4. Cutoff valves on sewer lines or the elimination of gravity flow basement drains; and

5. Placement of utilities to or above the flood protection elevation.

(3) PUBLIC UTILITIES, STREETS AND BRIDGES
Public utilities, streets and bridges may be allowed by permit, if:

(a) Adequate floodproofing measures are provided to the flood protection elevation; and

(b) Construction meets the development standards of s. 2.1.

(4) FILLS OR DEPOSITION OF MATERIALS
Fills or deposition of materials may be allowed by permit, if:

(a) The requirements of s. 2.1 are met;

(b) No material is deposited in navigable waters unless a permit is issued by the Department pursuant to ch. 30, Stats., and a permit pursuant to s. 404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. 1344 has been issued, if applicable, and all other requirements have been met;

(c) The fill or other materials will be protected against erosion by riprap, vegetative cover, sheet piling or bulkheading; and

(a) The fill is not classified as a solid or hazardous material.

3.4 PROHIBITED USES

All uses not listed as permitted uses in s. 3.2 are prohibited, including the following uses:

(1) Habitable structures, structures with high flood damage potential, or those not associated with permanent open-space uses;

(2) Storing materials that are buoyant, flammable, explosive, injurious to property, water

quality, or human, animal, plant, fish or other aquatic life;

(3) Uses not in harmony with or detrimental to uses permitted in the adjoining districts;

(4) Any private or public sewage systems, except portable latrines that are removed prior to flooding and systems associated with recreational areas and Department-approved campgrounds that meet the applicable provisions of local ordinances and ch. SPS 383, Wis. Adm. Code;

(5) Any public or private wells which are used to obtain potable water, except those for recreational areas that meet the requirements of local ordinances and chs. NR 811 and NR 812, Wis. Adm. Code;

(6) Any solid or hazardous waste disposal sites;

(7) Any wastewater treatment ponds or facilities, except those permitted under s. NR 110.15(3)(b), Wis. Adm. Code; and

(8) Any sanitary sewer or water supply lines, except those to service existing or proposed development located outside the floodway which complies with the regulations for the floodplain area occupied.

4.0 FLOODFRINGE DISTRICT (FF)

4.1 APPLICABILITY

This section applies to all floodfringe areas shown on the floodplain zoning maps and those identified pursuant to s. 5.1(5).

4.2 PERMITTED USES

Any structure, land use, or development is allowed in the Floodfringe District if the standards in s. 4.3 are met, the use is not prohibited by this or any other ordinance or regulation and all permits or certificates specified in s. 7.1 have been issued.

4.3 STANDARDS FOR DEVELOPMENT IN THE FLOODFRINGE

Section 2.0 shall apply in addition to the following requirements according to the use requested. Any existing structure in the floodfringe must meet the requirements of s. 6.0 *Nonconforming Uses*;

(1) RESIDENTIAL USES

Any structure, including a manufactured home, which is to be newly constructed or moved into the floodfringe, shall meet or exceed the following standards. Any existing structure in the floodfringe must meet the requirements of s. 6.0 *Nonconforming Uses*;

(a) All new construction, including placement of manufactured homes, and substantial improvement of residential structures, shall have the lowest floor elevated to or above the flood protection elevation on fill. The fill around the structure shall be one foot or more above the regional flood elevation extending at least 15 feet beyond the limits of the structure. No area may be removed from the floodfringe district unless it can be shown to meet s. 1.5(5).

(b) Notwithstanding s. 4.3 (1)(a), a basement or crawlspace floor may be placed at

the regional flood elevation if the basement or crawlspace is designed to make all portions of the structure below the flood protection elevation watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. No floor of any kind is allowed below the regional flood elevation;

(c) Contiguous dryland access shall be provided from a structure to land outside of the floodplain, except as provided in subd. (d).

(d) In developments where existing street or sewer line elevations make compliance with subd. (c) impractical, the municipality may permit new development and substantial improvements where roads are below the regional flood elevation, if:

1. The municipality has written assurance from police, fire and emergency services that rescue and relief will be provided to the structure(s) by wheeled vehicles during a regional flood event; or

2. The municipality has a DNR-approved emergency evacuation plan that follows acceptable hazard mitigation planning guidelines.

(2) ACCESSORY STRUCTURES OR USES

In addition to s. 2.0, new construction and substantial improvements of Accessory structures shall be constructed on fill with the lowest floor at or above the regional flood elevation.

(3) COMMERCIAL USES

In addition to s. 2.0, any commercial structure which is erected, altered or moved into the floodfringe shall meet the requirements of s. 4.3(1). Subject to the requirements of s. 4.3(5), storage yards, surface parking lots and other such uses may be placed at lower elevations if an adequate warning system exists to protect life and property.

(4) MANUFACTURING AND INDUSTRIAL USES

In addition to s. 2.0, any manufacturing or industrial structure which is erected, altered or moved into the floodfringe shall have the lowest floor elevated to or above the flood protection elevation or meet the floodproofing standards in s 7.5. Subject to the requirements of s. 4.3(5), storage yards, surface parking lots and other such uses may be placed at lower elevations if an adequate warning system exists to protect life and property.

(5) STORAGE OF MATERIALS

Materials that are buoyant, flammable, explosive, or injurious to property, water quality or human, animal, plant, fish or aquatic life shall be stored at or above the flood protection elevation or floodproofed in compliance with s. 7.5. Adequate measures shall be taken to ensure that such materials will not enter the water body during flooding.

(6) PUBLIC UTILITIES, STREETS AND BRIDGES

All utilities, streets and bridges shall be designed to be compatible with comprehensive floodplain development plans; and

(a) When failure of public utilities, streets and bridges would endanger public health

or safety, or where such facilities are deemed essential, construction or repair of such facilities shall only be permitted if they are designed to comply with s. 7.5.

(b) Minor roads or non-essential utilities may be constructed at lower elevations if they are designed to withstand flood forces to the regional flood elevation.

(7) SEWAGE SYSTEMS

All sewage disposal systems shall be designed to minimize or eliminate infiltration of flood water into the system, pursuant to s. 7.5(3), to the flood protection elevation and meet the provisions of all local ordinances and ch. SPS 383, Wis. Adm. Code.

(8) WELLS

All wells shall be designed to minimize or eliminate infiltration of flood waters into the system, pursuant to s. 7.5(3), to the flood protection elevation and shall meet the provisions of chs. NR 811 and NR 812, Wis. Adm. Code.

(9) SOLID WASTE DISPOSAL SITES

Disposal of solid or hazardous waste is prohibited in floodfringe areas.

(10) DEPOSITION OF MATERIALS

Any deposited material must meet all the provisions of this ordinance.

(11) MANUFACTURED HOMES

(a) Owners or operators of all manufactured home parks and subdivisions shall provide adequate surface drainage to minimize flood damage, and prepare, secure approval and file an evacuation plan, indicating vehicular access and escape routes, with local emergency management authorities.

(b) In existing manufactured home parks, all new homes, replacement homes on existing pads, and substantially improved homes shall:

1. have the lowest floor elevated to the flood protection elevation; and

2. be anchored so they do not float, collapse or move laterally during a flood

(c) Outside of existing manufactured home parks, including new manufactured home parks and all single units outside of existing parks, all new, replacement and substantially improved manufactured homes shall meet the residential development standards for the floodfringe in s. 4.3(1).

(12) MOBILE RECREATIONAL VEHICLES

All mobile recreational vehicles must be on site for less than 180 consecutive days and be either:

(a) fully licensed and ready for highway use; or

(b) shall meet the elevation and anchoring requirements in s. 4.3 (11)(b) and (c).

A mobile recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect utilities and security devices and has no permanently attached additions.

5.0 OTHER FLOODPLAIN DISTRICTS

5.1 GENERAL FLOODPLAIN DISTRICT (GFP)

(1) APPLICABILITY

The provisions for the General Floodplain District shall apply to development in all floodplains mapped as A, AO, AH, and in AE zones within which a floodway is not delineated on the Flood Insurance Rate Maps identified in s. 1.5(2)(a).

(2) FLOODWAY BOUNDARIES

For proposed development in zone A, or in zone AE within which a floodway is not delineated on the Flood Insurance Rate Map identified in s. 1.5(2)(a), the boundaries of the regulatory floodway shall be determined pursuant to s. 5.1(5). If the development is proposed to encroach upon the regulatory floodway, the development is subject to the standards of s 3.0. If the development is located entirely within the floodfringe, the development is subject to the standards of s. 4.0.

(3) PERMITTED USES

Pursuant to s. 5.1(5) it shall be determined whether the proposed use is located within the floodway or floodfringe. Those uses permitted in the Floodway (s. 3.2) and Floodfringe (s. 4.2) Districts are allowed within the General Floodplain District, according to the standards of s. 5.1(4) provided that all permits or certificates required under s. 7.1 have been issued.

(4) STANDARDS FOR DEVELOPMENT IN THE GENERAL FLOODPLAIN DISTRICT

Section 3.0 applies to floodway areas, determined to pursuant to 5.1(5); Section 4.0 applies to floodfringe areas, determined to pursuant to 5.1(5).

(a) New construction and substantial improvement of structures in zone AO shall have the lowest floor, including basement, elevated:

1. To or above the depth, in feet, as shown on the FIRM above the highest adjacent natural grade; or

2. If the depth is not specified on the FIRM, to or above two (2) feet above the highest adjacent natural grade.

(b) New Construction and substantial improvement of structures in zone AH shall have the lowest floor, including basement, elevated to or above the flood protection elevation.

(c) In AO/AH zones, provide adequate drainage paths to guide floodwaters around structures.

(d) All development in zones AO and zone AH shall meet the requirements of s. 4.0 applicable to flood fringe areas.

(5) DETERMINING FLOODWAY AND FLOODFRINGE LIMITS

Upon receiving an application for development within zone A, or within zone AE where a floodway has not been delineated on the Flood Insurance Rate Maps, the zoning administrator shall:

(a) Require the applicant to submit two copies of an aerial photograph or a plan which shows the proposed development with respect to the general floodplain district limits, stream channel, and existing floodplain developments, along with a legal description of the property, fill limits and elevations, building floor elevations and flood proofing measures; and the flood zone as shown on the FIRM.

(b) Require the applicant to furnish any of the following information deemed necessary by the Department to evaluate the effects of the proposal upon flood height and flood flows, regional flood elevation and to determine floodway boundaries.

1. A Hydrologic and Hydraulic Study as specified in s. 7.1(2)(c).

2. Plan (surface view) showing elevations or contours of the ground; pertinent structure, fill or storage elevations; size, location and layout of all proposed and existing structures on the site; location and elevations of streets, water supply, and sanitary facilities; soil types and other pertinent information;
3. Specifications for building construction and materials, floodproofing, filling, dredging, channel improvement, storage, water supply and sanitary facilities.

6.0 NONCONFORMING USES

6.1 GENERAL

(1) APPLICABILITY

(a) The standards in this section shall apply to all uses and buildings that do not conform to the provisions contained within a floodplain zoning ordinance or with s. 87.30, Stats. and §§ NR 116.12-14, Wis. Adm. Code and 44 CFR 59-72., these standards shall apply to all modifications or additions to any nonconforming use or structure and to the use of any structure or premises which was lawful before the passage of this ordinance or any amendment thereto. A party asserting existence of a lawfully established nonconforming use or structure has the burden of proving that the use or structure was compliant with the floodplain zoning ordinance in effect at the time the use or structure was created.

(b) As permit applications are received for additions, modifications, or substantial improvements to nonconforming buildings in the floodplain, municipalities shall develop a list of those nonconforming buildings, their present equalized assessed value and a list of the costs of those activities associated with changes to those buildings.

(2) The existing lawful use of a structure or its accessory use which is not in conformity with the provisions of this ordinance may continue subject to the following conditions:

(a) No modifications or additions to a nonconforming use or structure shall be permitted unless they comply with this ordinance. The words "modification" and "addition" include, but are not limited to, any alteration, addition, modification, structural repair, rebuilding or replacement of any such existing use, structure or accessory structure or use. Maintenance is not considered a modification; this includes painting, decorating, paneling and other nonstructural components and the maintenance, repair or replacement of existing private sewage or water supply systems or connections to public utilities. Any costs associated with the repair of a damaged structure are not considered maintenance.

The construction of a deck that does not exceed 200 square feet and that is adjacent to the exterior wall of a principal structure is not an extension, modification or addition. The roof of the structure may extend over a portion of the deck in order to provide safe ingress and egress to the principal structure.

(b) If a nonconforming use or the use of a nonconforming structure is discontinued for 12 consecutive months, it is no longer permitted and any future use of the property, and any structure or building thereon, shall conform to the applicable requirements of this ordinance;

(c) The municipality shall keep a record which lists all nonconforming uses and nonconforming structures, their present equalized assessed value, the cost of all modifications or additions which have been permitted, and the percentage of the structure's total current value those modifications represent;

(d) No modification or addition to any nonconforming structure or any structure with a nonconforming use, which over the life of the structure would equal or exceed 50% of its present equalized assessed value, shall be allowed unless the entire structure is permanently changed to a conforming structure with a conforming use in compliance with the applicable requirements of this ordinance. Contiguous dry land access must be provided for residential and commercial uses in compliance with s. 4.3(1). The costs of elevating the lowest floor of a nonconforming building or a building with a nonconforming use to the flood protection elevation are excluded from the 50% provisions of this paragraph;

(e) No maintenance on a per event basis to any nonconforming structure or any structure with a nonconforming use, the cost of which would equal or exceed 50% of its present equalized assessed value, shall be allowed unless the entire structure is permanently changed to a conforming structure with a conforming use in compliance with the applicable requirements of this ordinance. Contiguous dry land access must be provided for residential and commercial uses in compliance with s. 4.3(1). Maintenance to any nonconforming structure, which does not exceed 50% of its present equalized assessed value on a per event basis, does not count against the cumulative calculations over the life of the structure for substantial improvement calculations.

(f) If on a per event basis the total value of the work being done under (d) and (e) equals or exceeds 50% of the present equalized assessed value the work shall not be permitted unless the entire structure is permanently changed to a conforming structure with a conforming use in compliance with the applicable requirements of this ordinance. Contiguous dry land access must be provided for residential and commercial uses in compliance with s. 4.3(1).

(g) Except as provided in subd. (h), if any nonconforming structure or any structure with a nonconforming use is destroyed or is substantially damaged, it cannot be replaced, reconstructed or rebuilt unless the use and the structure meet the current ordinance requirements. A structure is considered substantially damaged if the total cost to restore the structure to its pre-damaged condition equals or exceeds 50% of the structure’s present equalized assessed value.

(h) For nonconforming buildings that are substantially damaged or destroyed by a

nonflood disaster, the repair or reconstruction of any such nonconforming building shall be permitted in order to restore it to the size and use in effect prior to the damage event, provided that the following minimum requirements are met and all required permits have been granted prior to the start of construction:

1. Residential Structures

a. Shall have the lowest floor, including basement, elevated to or above the flood protection elevation using fill, pilings, columns, posts or perimeter walls. Perimeter walls must meet the requirements of s. 7.5(2).

b. Shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy and shall be constructed with methods and materials resistant to flood damage.

c. Shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or elevated so as to prevent water from entering or accumulating within the components during conditions of flooding.

d. In A Zones, obtain, review and utilize any flood data available from a federal, state or other source.

e. In AO Zones with no elevations specified, shall have the lowest floor, including basement, meet the standards in s. 5.1(4).

f. in AO Zones, shall have adequate drainage paths around structures on slopes to guide floodwaters around and away from the structure.

2. Nonresidential Structures

a. Shall meet the requirements of s. 6.1(2)(h)1a-f.

b. Shall either have the lowest floor, including basement, elevated to or above the regional flood elevation; or, together with attendant utility and sanitary facilities, shall meet the standards in s. 7.5 (1) or (2).

c. In AO Zones with no elevations specified, shall have the lowest floor, including basement, meet the standards in s. 5.1(4).

(3) A nonconforming historic structure may be altered if the alteration will not preclude the structure's continued designation as a historic structure, the alteration will comply with s. 3.3 (1), flood resistant materials are used, and construction practices and floodproofing methods that comply with s. 7.5 are used. Repair or rehabilitation of historic structures shall be exempt from the development standards of s. 6.1 (2)(h)1 if it is determined that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and is the minimum necessary to preserve the historic character and design of the structure.

(4) Notwithstanding anything in this chapter to the contrary, modifications, additions, maintenance, and repairs to a nonconforming building shall not be prohibited based on

cost and the building's nonconforming use shall be permitted to continue if:

(a) Any living quarters in the nonconforming building are elevated to be at or above the flood protection elevation;

(b) The lowest floor of the nonconforming building, including the basement, is elevated to or above the regional flood elevation;

(c) The nonconforming building is permanently changed to conform to the applicable requirements of 2.0; and

(d) If the nonconforming building is in the floodway, the building is permanently changed to conform to the applicable requirements of 3.3(1), 3.3(2)(b) through (e), 3.3(3), 3.3(4), and 6.2; or

(e) If the nonconforming building is in the floodfringe, the building is permanently changed to conform to the applicable requirements of 4.3 and 6.3.

(f) New construction and substantial improvements of residential buildings in zones A1-30, AE, and AH must have the lowest floor (including basement) elevated to or above the base flood elevation.

(g) New construction and substantial improvements of non-residential buildings in zones A1-30, AE, and AH must have the lowest floor (including basement) elevated to or above the base flood elevation, or (together with attendant utility and sanitary facilities) be designed so that below the base flood elevation the building is watertight with walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

i. Where a non-residential structure is intended to be made watertight below the base flood elevation, a registered professional engineer or architect must develop and/or review structural design, specifications, and plans for the construction, and must certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of s. 6.1(4)(g) above.

ii. The community must maintain a record of such certification including the specific elevation to which each such structure is floodproofed.

(h) Fully enclosed areas below the lowest floor of new construction and substantial improvements in zones A1-30, AE, and AH that are usable solely for parking of vehicles, building access, or storage, must be designed to adequately equalize hydrostatic forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or meet the following criteria:

i. A minimum of two openings into each enclosed area must be located below the base flood elevation and provide a total net area of not less than one square inch for every square foot of enclosed area;

ii. The bottom of all openings must be no higher than one foot above the

adjacent grade;

iii. Openings may be equipped with screens, louvers, valves, or other coverings if they permit the automatic entry and exit of floodwaters.

(i) Manufactured homes that are placed or substantially improved within zones A1-30, AE, and AH outside of a manufactured home park or subdivision, in a new manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or in an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as a result of flood, must be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation, and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

(j) Manufactured homes that are placed or substantially improved within zones A1-30, AE, and AH on existing sites in an existing manufactured home park that is not undergoing expansion and on which a manufactured home has not incurred substantial damage as a result of flood must be elevated so that either the lowest floor of the manufactured home is at or above the base flood elevation, or the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade, and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

(k) Recreational vehicles placed on sites within zones A1-30, AH, and AE must either

i. Be on site for fewer than 180 consecutive days; or

ii. Be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions); or

iii. Meet the elevation and anchoring requirements for manufactured homes in s. 6.1(4)(i) above.

(l) In a regulatory floodway that has been delineated on the FIRM in zone A1-30 or AE, encroachments, including new construction, substantial improvement, or other development (including fill) must be prohibited unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment will not result in any increase in flood levels within the community during the occurrence of the base flood discharge.

(m) In zone A, the community must obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source as criteria for requiring new construction, substantial improvement, and other development to meet ss. 6.1(4)(f) through (l) (inclusive) above. If floodway data are available, the community must select and adopt a regulatory floodway based on the principle that the area chosen for the regulatory floodway must be designed to carry the waters of the base flood without increasing the water

surface elevation of that flood more than one foot at any point.

(n) In zones A1-30 or AE where a regulatory floodway has not been delineated on the FIRM, no new construction, substantial improvement, or other development (including fill) may be permitted unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

(o) Notwithstanding the requirements of ss. 6.1(4)(l) and (n) above, the community may permit certain development in zones A1-30 and AE where a floodway has not been delineated, which will increase the water surface elevation of the base flood by more than one foot, or in a regulatory floodway, which will result in an increase in base flood elevations, if the community first obtains a Conditional Letter of Map Revision (CLOMR) from FEMA and fulfills the requirements of Section 65.12 of Title 44, Code of Federal Regulations.

(p) In zone AO, new construction and substantial improvements of residential structures must have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM (at least two feet if no depth number is specified).

(q) In zone AO, new construction and substantial improvements of nonresidential structures must have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM (at least two feet if no depth number is specified), or (together with attendant utility and sanitary facilities) be structurally dry-floodproofed to that level according to the standard specified in s. 6.1(4)(g) above.

6.2 FLOODWAY DISTRICT

(1) No modification or addition shall be allowed to any nonconforming structure or any structure with a nonconforming use in the Floodway District, unless such modification or addition:

(a) Has been granted a permit or variance which meets all ordinance requirements;

(b) Meets the requirements of s. 6.1;

(c) Shall not increase the obstruction to flood flows or regional flood height;

(d) Any addition to the existing structure shall be floodproofed, pursuant to s. 7.5, by means other than the use of fill, to the flood protection elevation; and

(e) If any part of the foundation below the flood protection elevation is enclosed, the following standards shall apply:

1. The enclosed area shall be designed by a registered architect or engineer to allow for the efficient entry and exit of flood waters without human intervention. A minimum of two openings must be provided with a minimum net area of at least one square inch for every one square foot of the enclosed area. The lowest part of the opening can be no more than 12 inches above the adjacent grade;

2. The parts of the foundation located below the flood protection elevation must be constructed of flood-resistant materials;

3. Mechanical and utility equipment must be elevated or floodproofed to or above the flood protection elevation; and

4. The use must be limited to parking, building access or limited storage.

(2) No new on-site sewage disposal system, or addition to an existing on-site sewage disposal system, except where an addition has been ordered by a government agency to correct a hazard to public health, shall be allowed in the Floodway District. Any replacement, repair or maintenance of an existing on-site sewage disposal system in a floodway area shall meet the applicable requirements of all municipal ordinances, s. 7.5(3) and ch. SPS 383, Wis. Adm. Code.

(3) No new well or modification to an existing well used to obtain potable water shall be allowed in the Floodway District. Any replacement, repair or maintenance of an existing well in the Floodway District shall meet the applicable requirements of all municipal ordinances, s. 7.5(3) and chs. NR 811 and NR 812, Wis. Adm. Code.

6.3 FLOODFRINGE DISTRICT

(1) No modification or addition shall be allowed to any nonconforming structure or any structure with a nonconforming use unless such modification or addition has been granted a permit or variance by the municipality and meets the requirements of s. 4.3 except where s. 6.3(2) is applicable.

(2) Where compliance with the provisions of subd. (1) would result in unnecessary hardship and only where the structure will not be used for human habitation or be associated with a high flood damage potential, the Board of Adjustment/Appeals, using the procedures established in s. 7.3, may grant a variance from those provisions of subd. (1) for modifications or additions using the criteria listed below. Modifications or additions which are protected to elevations lower than the flood protection elevation may be permitted if:

(a) No floor is allowed below the regional flood elevation for residential or commercial structures;

(b) Human lives are not endangered;

(c) Public facilities, such as water or sewer, shall not be installed;

(d) Flood depths shall not exceed two feet;

(e) Flood velocities shall not exceed two feet per second; and

(f) The structure shall not be used for storage of materials as described in s. 4.3(5).

(3) All new private sewage disposal systems, or addition to, replacement, repair or maintenance of a private sewage disposal system shall meet all the applicable provisions of all local ordinances, s. 7.5 (3) and ch. SPS 383, Wis. Adm. Code.

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(4) All new wells, or addition to, replacement, repair or maintenance of a well shall meet the applicable provisions of this ordinance, s. 7.5 (3) and ch. NR 811 and NR 812, Wis. Adm. Code.

7.0 ADMINISTRATION

Where a zoning administrator, planning agency or a board of appeals has already been appointed to administer a zoning ordinance adopted under ss. 59.69, 59.692 or 62.23(7), Stats., these officials shall also administer this ordinance.

7.1 ZONING ADMINISTRATOR

(1) DUTIES AND POWERS

The zoning administrator is authorized to administer this ordinance and shall have the following duties and powers:

(a) Advise applicants of the ordinance provisions, assist in preparing permit applications and appeals, and assure that the regional flood elevation for the proposed development is shown on all permit applications.

(b) Issue permits and inspect properties for compliance with provisions of this ordinance and issue certificates of compliance where appropriate.

(c) Inspect and assess all damaged floodplain structures to determine if substantial damage to the structures has occurred.

(d) Keep records of all official actions such as:

1. All permits issued, inspections made, and work approved;
2. Documentation of certified lowest floor and regional flood elevations;
3. Floodproofing certificates.
4. Water surface profiles, floodplain zoning maps and ordinances, nonconforming uses and structures including changes, appeals, variances and amendments.
5. All substantial damage assessment reports for floodplain structures.
6. List of nonconforming structures and uses.

(e) Submit copies of the following items to the Department Regional office:

1. Within 10 days of the decision, a copy of any decisions on variances, appeals for map or text interpretations, and map or text amendments;

2. Copies of case-by-case analyses and other required information.

3. Copies of substantial damage assessments performed and all related correspondence concerning the assessments.

(f) Investigate, prepare reports, and report violations of this ordinance to the municipal zoning agency and attorney for prosecution. Copies of the reports shall also be sent to the Department Regional office.

(g) Submit copies of amendments to the FEMA Regional office.

(2) LAND USE PERMIT

A land use permit shall be obtained before any development; repair, modification or

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addition to an existing structure; or change in the use of a building or structure, including sewer and water facilities, may be initiated. Application to the zoning administrator shall include:

(a) GENERAL INFORMATION

1. Name and address of the applicant, property owner and contractor;

2. Legal description, proposed use, and whether it is new construction or a modification;

(b) SITE DEVELOPMENT PLAN

A site plan drawn to scale shall be submitted with the permit application form and shall contain:

1. Location, dimensions, area and elevation of the lot;

2. Location of the ordinary highwater mark of any abutting navigable waterways;

3. Location of any structures with distances measured from the lot lines and street center lines;

4. Location of any existing or proposed on-site sewage systems or private water supply systems;

5. Location and elevation of existing or future access roads;

6. Location of floodplain and floodway limits as determined from the official floodplain zoning maps;

7. The elevation of the lowest floor of proposed buildings and any fill using the vertical datum from the adopted study – either National Geodetic Vertical Datum (NGVD) or North American Vertical Datum (NAVD);

8. Data sufficient to determine the regional flood elevation in NGVD or NAVD at the location of the development and to determine whether or not the requirements of s. 3.0 or 4.0 are met; and

9. Data to determine if the proposed development will cause an obstruction to flow or an increase in regional flood height or discharge according to s. 2.1. This may include any of the information noted in s. 3.3(1).

(c) HYDRAULIC AND HYDROLOGIC STUDIES TO ANALYZE DEVELOPMENT

All hydraulic and hydrologic studies shall be completed under the direct supervision of a professional engineer registered in the State. The study contractor shall be responsible for the technical adequacy of the study. All studies shall be reviewed and approved by the Department.

1. Zone A floodplains and in AE zones within which a floodway is not delineated:
   a. Hydrology

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i. The appropriate method shall be based on the standards in ch. NR 116.07(3), Wis. Admin. Code, *Hydrologic Analysis: Determination of Regional Flood Discharge.*

b. Hydraulic modeling

The regional flood elevation shall be based on the standards in ch. NR 116.07(4), Wis. Admin. Code, *Hydraulic Analysis: Determination of Regional Flood Elevation* and the following:

i. determination of the required limits of the hydraulic model shall be based on detailed study information for downstream structures (dam, bridge, culvert) to determine adequate starting WSEL for the study.

ii. channel sections must be surveyed.

iii. minimum four-foot contour data in the overbanks shall be used for the development of cross section overbank and floodplain mapping.

iv. a maximum distance of 500 feet between cross sections is allowed in developed areas with additional intermediate cross sections required at transitions in channel bottom slope including a survey of the channel at each location.

v. the most current version of HEC-RAS shall be used.

vi. a survey of bridge and culvert openings and the top of road is required at each structure.

vii. additional cross sections are required at the downstream and upstream limits of the proposed development and any necessary intermediate locations based on the length of the reach if greater than 500 feet.

viii. standard accepted engineering practices shall be used when assigning parameters for the base model such as flow, Manning's N values, expansion and contraction coefficients or effective flow limits. The base model shall be calibrated to past flooding data such as high water marks to determine the reasonableness of the model results. If no historical data is available, adequate justification shall be provided for any parameters outside standard accepted engineering practices.

ix. the model must extend past the upstream limit of the difference in the existing and proposed flood profiles in order to provide a tie-in to existing studies. The height difference between the proposed flood profile and the existing study profiles shall be no more than 0.00 feet.

c. Mapping

A work map of the reach studied shall be provided, showing all cross-section locations, floodway/floodplain limits based on best available topographic data, geographic limits of the proposed development and whether the proposed development is located in the floodway.

i. If the proposed development is located outside of the floodway, then it is

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determined to have no impact on the regional flood elevation.

ii. If any part of the proposed development is in the floodway, it must be added to the base model to show the difference between existing and proposed conditions. The study must ensure that all coefficients remain the same as in the existing model, unless adequate justification based on standard accepted engineering practices is provided.

2. Zone AE Floodplains

a. Hydrology

If the proposed hydrology will change the existing study, the appropriate method to be used shall be based on ch. NR 116.07(3), Wis. Admin. Code, *Hydrologic Analysis: Determination of Regional Flood Discharge.*

b. Hydraulic model

The regional flood elevation shall be based on the standards in ch. NR 116.07(4), Wis. Admin. Code, *Hydraulic Analysis: Determination of Regional Flood Elevation* and the following:

i. Duplicate Effective Model

The effective model shall be reproduced to ensure correct transference of the model data and to allow integration of the revised data to provide a continuous FIS model upstream and downstream of the revised reach. If data from the effective model is available, models shall be generated that duplicate the FIS profiles and the elevations shown in the Floodway Data Table in the FIS report to within 0.1 foot.

ii. Corrected Effective Model.

The Corrected Effective Model shall not include any man-made physical changes since the effective model date but shall import the model into the most current version of HEC-RAS for Department review.

iii. Existing (Pre-Project Conditions) Model.

The Existing Model shall be required to support conclusions about the actual impacts of the project associated with the Revised (Post-Project) Model or to establish more up-to-date models on which to base the Revised (Post-Project) Model.

iv. Revised (Post-Project Conditions) Model.

The Revised (Post-Project Conditions) Model shall incorporate the Existing Model and any proposed changes to the topography caused by the proposed development. This model shall reflect proposed conditions.

v. All changes to the Duplicate Effective Model and subsequent models must be supported by certified topographic information, bridge plans, construction plans and survey notes.

vi. Changes to the hydraulic models shall be limited to the stream reach for which the revision is being requested. Cross sections upstream and downstream of the revised reach shall be identical to those in the effective model and result in water surface elevations and topwidths computed by the revised models matching those in the effective models

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upstream and downstream of the revised reach as required. The Effective Model shall not be truncated.

c. Mapping

Maps and associated engineering data shall be submitted to the Department for review which meet the following conditions:

i. Consistency between the revised hydraulic models, the revised floodplain and floodway delineations, the revised flood profiles, topographic work map, annotated FIRMs and/or Flood Boundary Floodway Maps (FBFMs), construction plans, bridge plans.

ii. Certified topographic map of suitable scale, contour interval, and a planimetric map showing the applicable items. If a digital version of the map is available, it may be submitted in order that the FIRM may be more easily revised.

iii. Annotated FIRM panel showing the revised 1% and 0.2% annual chance floodplains and floodway boundaries.

iv. If an annotated FIRM and/or FBFM and digital mapping data (GIS or CADD) are used then all supporting documentation or metadata must be included with the data submission along with the Universal Transverse Mercator (UTM) projection and State Plane Coordinate System in accordance with FEMA mapping specifications.

v. The revised floodplain boundaries shall tie into the effective floodplain boundaries.

vi. All cross sections from the effective model shall be labeled in accordance with the effective map and a cross section lookup table shall be included to relate to the model input numbering scheme.

vii. Both the current and proposed floodways shall be shown on the map.

viii. The stream centerline, or profile baseline used to measure stream distances in the model shall be visible on the map.

(d) EXPIRATION

All permits issued under the authority of this ordinance shall expire no more than 180 days after issuance. The permit may be extended for a maximum of 180 days for good and sufficient cause. If the permitted work has not started within 180 days of the permit date, the development must comply with any regulation, including any revision to the FIRM or FIS, that took effect after the permit date.

(3) CERTIFICATE OF COMPLIANCE

No land shall be occupied or used, and no building which is hereafter constructed, altered, added to, modified, repaired, rebuilt or replaced shall be occupied until a certificate of compliance is issued by the zoning administrator, except where no permit is required, subject to the following provisions:

(a) The certificate of compliance shall show that the building or premises or part

thereof, and the proposed use, conform to the provisions of this ordinance;

(b) Application for such certificate shall be concurrent with the application for a permit;

(c) If all ordinance provisions are met, the certificate of compliance shall be issued within 10 days after written notification that the permitted work is completed;

(d) The applicant shall submit a certification signed by a registered professional engineer, architect or land surveyor that the fill, lowest floor and floodproofing elevations are in compliance with the permit issued. Floodproofing measures also require certification by a registered professional engineer or architect that the requirements of s. 7.5 are met.

(e) Where applicable pursuant to s. 5.1(4), the applicant must submit a certification by a registered professional engineer or surveyor of the elevation of the bottom of the lowest horizontal structural member supporting the lowest floor (excluding pilings or columns), and an indication of whether the structure contains a basement.

(f) Where applicable pursuant to s. 5.1(4), the applicant must submit certifications by a registered professional engineer or architect that the structural design and methods of construction meet accepted standards of practice as required by s. 5.1(4).

(4) OTHER PERMITS

Prior to obtaining a floodplain development permit the applicant must secure all necessary permits from federal, state, and local agencies, including but not limited to those required by the U.S. Army Corps of Engineers under s. 404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. 1344.

7.2 ZONING AGENCY

(1) The Village of Germantown Plan Commission shall:

(a) oversee the functions of the office of the zoning administrator; and

(b) review and advise the governing body on all proposed amendments to this ordinance, maps and text.

(c) publish adequate notice pursuant to Ch. 985, Stats., specifying the date, time, place and subject of the public hearing.

(2) The Village of Germantown Plan Commission shall not:

(a) grant variances to the terms of the ordinance in place of action by the Board of Adjustment/Appeals; or

(b) amend the text or zoning maps in place of official action by the governing body.

7.3 BOARD OF APPEALS

The Board of Appeals, created under s. 62.23(7)(e), Stats., for cities or villages, is hereby authorized or shall be appointed to act for the purposes of this ordinance. The Board shall exercise the powers conferred by Wisconsin Statutes and adopt rules for the conduct of business. The zoning administrator shall not be the secretary of the Board.

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(1) POWERS AND DUTIES

The Board of Appeals shall:

(a) Appeals - Hear and decide appeals where it is alleged there is an error in any order, requirement, decision or determination made by an administrative official in the enforcement or administration of this ordinance;

(b) Boundary Disputes - Hear and decide disputes concerning the district boundaries shown on the official floodplain zoning map; and

(c) Variances - Hear and decide, upon appeal, variances from the ordinance standards.

(2) APPEALS TO THE BOARD

(a) Appeals to the board may be taken by any person aggrieved, or by any officer or department of the municipality affected by any decision of the zoning administrator or other administrative officer. Such appeal shall be taken within 30 days unless otherwise provided by the rules of the board, by filing with the official whose decision is in question, and with the board, a notice of appeal specifying the reasons for the appeal. The official whose decision is in question shall transmit to the board all records regarding the matter appealed.

(b) NOTICE AND HEARING FOR APPEALS INCLUDING VARIANCES

1. Notice - The board shall:

   a. Fix a reasonable time for the hearing;
   b. Publish adequate notice pursuant to Wisconsin Statutes, specifying the date, time, place and subject of the hearing; and
   c. Assure that notice shall be mailed to the parties in interest and the Department Regional office at least 10 days in advance of the hearing.

2. Hearing - Any party may appear in person or by agent. The board shall:

   a. Resolve boundary disputes according to s. 7.3(3);
   b. Decide variance applications according to s. 7.3(4); and
   c. Decide appeals of permit denials according to s. 7.4.

(c) DECISION: The final decision regarding the appeal or variance application shall:

1. Be made within a reasonable time;

2. Be sent to the Department Regional office within 10 days of the decision;

3. Be a written determination signed by the chairman or secretary of the Board;

4. State the specific facts which are the basis for the Board's decision;

5. Either affirm, reverse, vary or modify the order, requirement, decision or determination appealed, in whole or in part, dismiss the appeal for lack of jurisdiction or grant or deny the variance application; and

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6. Include the reasons for granting an appeal, describing the hardship demonstrated by the applicant in the case of a variance, clearly stated in the recorded minutes of the Board proceedings.

(3) BOUNDARY DISPUTES

The following procedure shall be used by the Board in hearing disputes concerning floodplain district boundaries:

(a) If a floodplain district boundary is established by approximate or detailed floodplain studies, the flood elevations or profiles shall prevail in locating the boundary.

(b) The person contesting the boundary location shall be given a reasonable opportunity to present arguments and technical evidence to the Board; and

(c) If the boundary is incorrectly mapped, the Board should inform the zoning committee or the person contesting the boundary location to petition the governing body for a map amendment according to s. 8.0 *Amendments*.

(4) VARIANCE

(a) The Board may, upon appeal, grant a variance from the standards of this ordinance if an applicant convincingly demonstrates that:

1. Literal enforcement of the ordinance will cause unnecessary hardship;

2. The hardship is due to adoption of the floodplain ordinance and unique property conditions, not common to adjacent lots or premises. In such case the ordinance or map must be amended;

3. The variance is not contrary to the public interest; and

4. The variance is consistent with the purpose of this ordinance in s. 1.3.

(b) In addition to the criteria in subd. (a), to qualify for a variance under FEMA regulations, the Board must find that the following criteria have been met:

1. The variance shall not cause any increase in the regional flood elevation;

2. The applicant has shown good and sufficient cause for issuance of the variance;

3. Failure to grant the variance would result in exceptional hardship;

4. Granting the variance will not result in additional threats to public safety, extraordinary expense, create a nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances;

5. The variance granted is the minimum necessary, considering the flood hazard, to afford relief.

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(c) A variance shall not:

1. Grant, extend or increase any use prohibited in the zoning district;

2. Be granted for a hardship based solely on an economic gain or loss;

3. Be granted for a hardship which is self-created.

4. Damage the rights or property values of other persons in the area;

5. Allow actions without the amendments to this ordinance or map(s) required in s. 8.0 *Amendments*; and

6. Allow any alteration of an historic structure, including its use, which would preclude its continued designation as an historic structure.

(d) When a floodplain variance is granted the Board shall notify the applicant in writing that it may increase risks to life and property and flood insurance premiums could increase up to $25.00 per $100.00 of coverage. A copy shall be maintained with the variance record.

7.4 <u>TO REVIEW APPEALS OF PERMIT DENIALS</u>

(1) The Zoning Agency (s. 7.2) or Board shall review all data related to the appeal. This may include:

(a) Permit application data listed in s. 7.1(2);

(b) Floodway/floodfringe determination data in s. 5.1(5);

(c) Data listed in s. 3.3(1)(b) where the applicant has not submitted this information to the zoning administrator; and

(d) Other data submitted with the application or submitted to the Board with the appeal.

(2) For appeals of all denied permits the Board shall:

(a) Follow the procedures of s. 7.3;

(b) Consider zoning agency recommendations; and

(c) Either uphold the denial or grant the appeal.

(3) For appeals concerning increases in regional flood elevation the Board shall:

(a) Uphold the denial where the Board agrees with the data showing an increase in flood elevation. Increases may only be allowed after amending the flood profile and map and all appropriate legal arrangements are made with all adversely affected property owners as per the requirements of s. 8.0 *Amendments*; and

(b) Grant the appeal where the Board agrees that the data properly demonstrates that the project does not cause an increase provided no other reasons for denial exist.

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7.5 FLOODPROOFING STANDARDS

(1) No permit or variance shall be issued for a non-residential structure designed to be watertight below the regional flood elevation until the applicant submits a plan certified by a registered professional engineer or architect that the floodproofing measures will protect the structure or development to or above the flood protection elevation and submits a FEMA Floodproofing Certificate. Floodproofing is not an alternative to the development standards in ss. 2.0, 3.0, 4.0, 5.1, or 5.3.

(2) For a structure designed to allow the entry of floodwaters, no permit or variance shall be issued until the applicant submits a plan either:

(a) certified by a registered professional engineer or architect; or

(b) meeting or exceeding the following standards:

1. a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

2. the bottom of all openings shall be no higher than one-foot above grade; and

3. openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

(3) Floodproofing measures shall be designed, as appropriate, to:

(a) Withstand flood pressures, depths, velocities, uplift and impact forces and other regional flood factors;

(b) Protect structures to the flood protection elevation;

(c) Anchor structures to foundations to resist flotation and lateral movement;

(d) Minimize or eliminate infiltration of flood waters;

(e) Minimize or eliminate discharges into flood waters;

(f) Placement of essential utilities to or above the flood protection elevation; and

(g) If any part of the foundation below the flood protection elevation is enclosed, the following standards shall apply:

1. The enclosed area shall be designed by a registered architect or engineer to allow for the efficient entry and exit of flood waters without human intervention. A minimum of two openings must be provided with a minimum net area of at least one square inch for every one square foot of the enclosed area. The lowest part of the opening can be no more than 12 inches above the adjacent grade;

2. The parts of the foundation located below the flood protection elevation must be constructed of flood-resistant materials;

3.Mechanical and utility equipment must be elevated or floodproofed to or above the flood protection elevation; and

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4. The use must be limited to parking, building access or limited storage.

7.6 PUBLIC INFORMATION

(1) Place marks on structures to show the depth of inundation during the regional flood.

(2) All maps, engineering data and regulations shall be available and widely distributed.

(3) Real estate transfers should show what floodplain district any real property is in.

8.0 AMENDMENTS

Obstructions or increases may only be permitted if amendments are made to this ordinance, the official floodplain zoning maps, floodway lines and water surface profiles, in accordance with s. 8.1.

(1) In AE Zones with a mapped floodway, no obstructions or increases shall be permitted unless the applicant receives a Conditional Letter of Map Revision from FEMA and amendments are made to this ordinance, the official floodplain zoning maps, floodway lines and water surface profiles, in accordance with s. 8.1. Any such alterations must be reviewed and approved by FEMA and the DNR.

(2) In A Zones increases equal to or greater than 1.0 foot may only be permitted if the applicant receives a Conditional Letter of Map Revision from FEMA and amendments are made to this ordinance, the official floodplain maps, floodway lines, and water surface profiles, in accordance with s. 8.1.

8.1 GENERAL

The governing body shall change or supplement the floodplain zoning district boundaries and this ordinance in the manner outlined in s. 8.2 below. Actions which require an amendment to the ordinance and/ or submittal of a Letter of Map Change (LOMC) include, but are not limited to, the following:

(1) Any fill or floodway encroachment that obstructs flow causing any increase in the regional flood height;

(2) Any change to the floodplain boundaries and/or watercourse alterations on the FIRM;

(3) Any changes to any other officially adopted floodplain maps listed in s. 1.5 (2)(b);

(4) Any floodplain fill which raises the elevation of the filled area to a height at or above the flood protection elevation and is contiguous to land lying outside the floodplain;

(5) Correction of discrepancies between the water surface profiles and floodplain maps;

(6) Any upgrade to a floodplain zoning ordinance text required by s. NR 116.05, Wis. Adm. Code, or otherwise required by law, or for changes by the municipality; and

(7) All channel relocations and changes to the maps to alter floodway lines or to remove an area from the floodway or the floodfringe that is based on a base flood elevation from a FIRM requires prior approval by FEMA.

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8.2 PROCEDURES

Ordinance amendments may be made upon petition of any party according to the provisions of s. 62.23, Stats., for cities and villages. The petitions shall include all data required by s. 5.1(5) and 7.1(2). The Land Use Permit shall not be issued until a Letter of Map Revision is issued by FEMA for the proposed changes.

(1) The proposed amendment shall be referred to the zoning agency for a public hearing and recommendation to the governing body. The amendment and notice of public hearing shall be submitted to the Department Regional office for review prior to the hearing. The amendment procedure shall comply with the provisions of s. 62.23, Stats., for cities and villages.

(2) No amendments shall become effective until reviewed and approved by the Department.

(3) All persons petitioning for a map amendment that obstructs flow causing any increase in the regional flood height, shall obtain flooding easements or other appropriate legal arrangements from all adversely affected property owners and notify local units of government before the amendment can be approved by the governing body.

9.0 ENFORCEMENT AND PENALTIES

Any violation of the provisions of this ordinance by any person shall be unlawful and shall be referred to the municipal attorney who shall expeditiously prosecute all such violators. A violator shall, upon conviction, forfeit to the municipality a penalty of not more than $50.00 (fifty dollars), together with a taxable cost of such action. Each day of continued violation shall constitute a separate offense. Every violation of this ordinance is a public nuisance and the creation may be enjoined and the maintenance may be abated by action at suit of the municipality, the state, or any citizen thereof pursuant to s. 87.30, Stats.

10.0 DEFINITIONS

Unless specifically defined, words and phrases in this ordinance shall have their common law meaning and shall be applied in accordance with their common usage. Words used in the present tense include the future, the singular number includes the plural and the plural number includes the singular. The word "may" is permissive, "shall" is mandatory and is not discretionary.

1. A ZONES – Those areas shown on the Official Floodplain Zoning Map which would be inundated by the regional flood. These areas may be numbered or unnumbered A Zones. The A Zones may or may not be reflective of flood profiles, depending on the availability of data for a given area.

2. AH ZONE – See “AREA OF SHALLOW FLOODING”.

3. AO ZONE – See “AREA OF SHALLOW FLOODING”.

4. ACCESSORY STRUCTURE OR USE – A facility, structure, building or use which is accessory or incidental to the principal use of a property, structure or building. An accessory structure shall not be used for human habitation.

5. ALTERATION – An enhancement, upgrade or substantial change or modification other than an addition or repair to a dwelling or to electrical, plumbing, heating, ventilating, air conditioning and other systems within a structure.

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6. AREA OF SHALLOW FLOODING – A designated AO, AH, AR/AO, AR/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a 1 percent or greater annual chance of flooding to an average depth of 1 to 3 feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flood may be evident. Such flooding is characterized by ponding or sheet flow.

7. BASE FLOOD – Means the flood having a one percent chance of being equaled or exceeded in any given year, as published by FEMA as part of a FIS and depicted on a FIRM.

8. BASEMENT – Any enclosed area of a building having its floor sub-grade on all sides.

9. BREAKAWAY WALL – A wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

10. BUILDING – See STRUCTURE.

11. BULKHEAD LINE – A geographic line along a reach of navigable water that has been adopted by a municipal ordinance and approved by the Department pursuant to s. 30.11, Stats., and which allows limited filling between this bulkhead line and the original ordinary highwater mark, except where such filling is prohibited by the floodway provisions of this ordinance.

12. CAMPGROUND – Any parcel of land which is designed, maintained, intended or used for the purpose of providing sites for nonpermanent overnight use by 4 or more camping units, or which is advertised or represented as a camping area.

13. CAMPING UNIT – Any portable device, no more than 400 square feet in area, used as a temporary shelter, including but not limited to a camping trailer, motor home, bus, van, pick-up truck, or tent that is fully licensed, if required, and ready for highway use.

14. CERTIFICATE OF COMPLIANCE – A certification that the construction and the use of land or a building, the elevation of fill or the lowest floor of a structure is in compliance with all of the provisions of this ordinance.

15. CHANNEL – A natural or artificial watercourse with definite bed and banks to confine and conduct normal flow of water.

16. CRAWLWAYS or CRAWL SPACE – An enclosed area below the first usable floor of a building, generally less than five feet in height, used for access to plumbing and electrical utilities.

17. DECK – An unenclosed exterior structure that has no roof or sides and has a permeable floor which allows the infiltration of precipitation.

18. DEPARTMENT – The Wisconsin Department of Natural Resources.

19. DEVELOPMENT – Any artificial change to improved or unimproved real estate, including,

but not limited to, the construction of buildings, structures or accessory structures; the construction of additions or alterations to buildings, structures or accessory structures; the repair of any damaged structure or the improvement or renovation of any structure, regardless of percentage of damage or improvement; the placement of buildings or structures; subdivision layout and site preparation; mining, dredging, filling, grading, paving, excavation or drilling operations; the storage, deposition or extraction of materials or equipment; and the installation, repair or removal of public or private sewage disposal systems or water supply facilities.

20. DRYLAND ACCESS – A vehicular access route which is above the regional flood elevation and which connects land located in the floodplain to land outside the floodplain, such as a road with its surface above regional flood elevation and wide enough for wheeled rescue and relief vehicles.

21. ENCROACHMENT – Any fill, structure, equipment, use or development in the floodway.

22. FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) – The federal agency that administers the National Flood Insurance Program.

23. FLOOD INSURANCE RATE MAP (FIRM) – A map of a community on which the Federal Insurance Administration has delineated both the floodplain and the risk premium zones applicable to the community. This map can only be amended by the Federal Emergency Management Agency.

24. FLOOD or FLOODING – A general and temporary condition of partial or complete inundation of normally dry land areas caused by one of the following conditions:
    - The overflow or rise of inland waters;
    - The rapid accumulation or runoff of surface waters from any source;
    - The inundation caused by waves or currents of water exceeding anticipated cyclical levels along the shore of Lake Michigan or Lake Superior; or
    - The sudden increase caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a seiche, or by some similarly unusual event.

25. FLOOD FREQUENCY – The probability of a flood occurrence which is determined from statistical analyses. The frequency of a particular flood event is usually expressed as occurring, on the average once in a specified number of years or as a percent (%) chance of occurring in any given year.

26. FLOODFRINGE – That portion of the floodplain outside of the floodway which is covered by flood waters during the regional flood and associated with standing water rather than flowing water.

27. FLOOD HAZARD BOUNDARY MAP – A map designating approximate flood hazard areas. Flood hazard areas are designated as unnumbered A-Zones and do not contain floodway lines or regional flood elevations. This map forms the basis for both the regulatory and insurance aspects of the National Flood Insurance Program (NFIP) until superseded by a Flood Insurance Study and a Flood Insurance Rate Map.

28. FLOOD INSURANCE STUDY – A technical engineering examination, evaluation, and determination of the local flood hazard areas. It provides maps designating those areas affected by the regional flood and provides both flood insurance rate zones and base flood

elevations and may provide floodway lines. The flood hazard areas are designated as numbered and unnumbered A-Zones. Flood Insurance Rate Maps, that accompany the Flood Insurance Study, form the basis for both the regulatory and the insurance aspects of the National Flood Insurance Program.

29. FLOODPLAIN – Land which has been or may be covered by flood water during the regional flood. It includes the floodway and the floodfringe and may include other designated floodplain areas for regulatory purposes.

30. FLOODPLAIN ISLAND – A natural geologic land formation within the floodplain that is surrounded, but not covered, by floodwater during the regional flood.

31. FLOODPLAIN MANAGEMENT – Policy and procedures to ensure wise use of floodplains, including mapping and engineering, mitigation, education, and administration and enforcement of floodplain regulations.

32. FLOOD PROFILE – A graph or a longitudinal profile line showing the relationship of the water surface elevation of a flood event to locations of land surface elevations along a stream or river.

33. FLOODPROOFING – Any combination of structural provisions, changes or adjustments to properties and structures, water and sanitary facilities and contents of buildings subject to flooding, for the purpose of reducing or eliminating flood damage.

34. FLOOD PROTECTION ELEVATION – An elevation of two feet of freeboard above the Regional Flood Elevation. (Also see: FREEBOARD.)

35. FLOOD STORAGE – Those floodplain areas where storage of floodwaters has been taken into account during analysis in reducing the regional flood discharge.

36. FLOODWAY – The channel of a river or stream and those portions of the floodplain adjoining the channel required to carry the regional flood discharge.

37. FREEBOARD – A safety factor expressed in terms of a specified number of feet above a calculated flood level. Freeboard compensates for any factors that cause flood heights greater than those calculated, including ice jams, debris accumulation, wave action, obstruction of bridge openings and floodways, the effects of watershed urbanization, loss of flood storage areas due to development and aggregation of the river or stream bed.

38. HABITABLE STRUCTURE – Any structure or portion thereof used or designed for human habitation.

39. HEARING NOTICE – Publication or posting meeting the requirements of Ch. 985, Stats. For appeals, a Class 1 notice, published once at least one week (7 days) before the hearing, is required. For all zoning ordinances and amendments, a Class 2 notice, published twice, once each week consecutively, the last at least a week (7 days) before the hearing. Local ordinances or bylaws may require additional notice, exceeding these minimums.

40. HIGH FLOOD DAMAGE POTENTIAL – Damage that could result from flooding that includes any danger to life or health or any significant economic loss to a structure or building and its contents.

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41. HIGHEST ADJACENT GRADE – The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

42. HISTORIC STRUCTURE – Any structure that is either:
    - Listed individually in the National Register of Historic Places or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
    - Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
    - Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
    - Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either by an approved state program, as determined by the Secretary of the Interior; or by the Secretary of the Interior in states without approved programs.

43. INCREASE IN REGIONAL FLOOD HEIGHT – A calculated upward rise in the regional flood elevation greater than 0.00 foot, based on a comparison of existing conditions and proposed conditions which is directly attributable to development in the floodplain but not attributable to manipulation of mathematical variables such as roughness factors, expansion and contraction coefficients and discharge.

44. LAND USE – Any nonstructural use made of unimproved or improved real estate. (Also see DEVELOPMENT.)

45. LOWEST ADJACENT GRADE – Elevation of the lowest ground surface that touches any of the exterior walls of a building.

46. LOWEST FLOOR – The lowest floor of the lowest enclosed area (including basement).

47. MAINTENANCE – The act or process of ordinary upkeep and repairs, including redecorating, refinishing, nonstructural repairs, or the replacement of existing fixtures, systems or equipment with equivalent fixtures, systems or structures.

48. MANUFACTURED HOME – A structure transportable in one or more sections, which is built on a permanent chassis and is designed to be used with or without a permanent foundation when connected to required utilities. The term "manufactured home" includes a mobile home but does not include a "mobile recreational vehicle."

49. MOBILE/MANUFACTURED HOME PARK OR SUBDIVISION – A parcel (or contiguous parcels) of land, divided into two or more manufactured home lots for rent or sale.

50. MOBILE/MANUFACTURED HOME PARK OR SUBDIVISION, EXISTING – A parcel of land, divided into two or more manufactured home lots for rent or sale, on which the construction of facilities for servicing the lots is completed before the effective date of this ordinance. At a minimum, this would include the installation of utilities, the construction of streets and either final site grading or the pouring of concrete pads.

51. MOBILE/MANUFACTURED HOME PARK, EXPANSION TO EXISTING – The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed. This includes installation of utilities, construction of

streets and either final site grading, or the pouring if concrete pads.

52. MOBILE RECREATIONAL VEHICLE – A vehicle which is built on a single chassis, 400 square feet or less when measured at the largest horizontal projection, designed to be self-propelled, carried or permanently towable by a licensed, light-duty vehicle, is licensed for highway use if registration is required and is designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel or seasonal use. Manufactured homes that are towed or carried onto a parcel of land, but do not remain capable of being towed or carried, including park model homes, do not fall within the definition of "mobile recreational vehicles."

53. MODEL, CORRECTED EFFECTIVE – A hydraulic engineering model that corrects any errors that occur in the Duplicate Effective Model, adds any additional cross sections to the Duplicate Effective Model, or incorporates more detailed topographic information than that used in the current effective model.

54. MODEL, DUPLICATE EFFECTIVE – A copy of the hydraulic analysis used in the effective FIS and referred to as the effective model.

55. MODEL, EFFECTIVE – The hydraulic engineering model that was used to produce the current effective Flood Insurance Study.

56. MODEL, EXISTING (PRE-PROJECT) – A modification of the Duplicate Effective Model or Corrected Effective Model to reflect any man made modifications that have occurred within the floodplain since the date of the effective model but prior to the construction of the project for which the revision is being requested. If no modification has occurred since the date of the effective model, then this model would be identical to the Corrected Effective Model or Duplicate Effective Model.

57. MODEL, REVISED (POST-PROJECT) – A modification of the Existing or Pre-Project Conditions Model, Duplicate Effective Model or Corrected Effective Model to reflect revised or post-project conditions.

58. MUNICIPALITY or MUNICIPAL – The county, city or village governmental units enacting, administering and enforcing this zoning ordinance.

59. NAVD or NORTH AMERICAN VERTICAL DATUM – Elevations referenced to mean sea level datum, 1988 adjustment.

60. NGVD or NATIONAL GEODETIC VERTICAL DATUM – Elevations referenced to mean sea level datum, 1929 adjustment.

61. NEW CONSTRUCTION – Structures for which the start of construction commenced on or after the effective date of a floodplain zoning regulation adopted by this community and includes any subsequent improvements to such structures.

62. NON-FLOOD DISASTER – A fire or an ice storm, tornado, windstorm, mudslide or other destructive act of nature, but excludes a flood.

63. NONCONFORMING STRUCTURE – An existing lawful structure or building which is not in conformity with the dimensional or structural requirements of this ordinance for the area of the floodplain which it occupies. (For example, an existing residential structure in the

floodfringe district is a conforming use. However, if the lowest floor is lower than the flood protection elevation, the structure is nonconforming.)

64. NONCONFORMING USE – An existing lawful use or accessory use of a structure or building which is not in conformity with the provisions of this ordinance for the area of the floodplain which it occupies. (Such as a residence in the floodway.)

65. OBSTRUCTION TO FLOW – Any development which blocks the conveyance of floodwaters such that this development alone or together with any future development will cause an increase in regional flood height.

66. OFFICIAL FLOODPLAIN ZONING MAP – That map, adopted and made part of this ordinance, as described in s. 1.5(2), which has been approved by the Department and FEMA.

67. OPEN SPACE USE – Those uses having a relatively low flood damage potential and not involving structures.

68. ORDINARY HIGHWATER MARK – The point on the bank or shore up to which the presence and action of surface water is so continuous as to leave a distinctive mark such as by erosion, destruction or prevention of terrestrial vegetation, predominance of aquatic vegetation, or other easily recognized characteristic.

69. PERSON – An individual, or group of individuals, corporation, partnership, association, municipality or state agency.

70. PRIVATE SEWAGE SYSTEM – A sewage treatment and disposal system serving one structure with a septic tank and soil absorption field located on the same parcel as the structure. It also means an alternative sewage system approved by the Department of Safety and Professional Services, including a substitute for the septic tank or soil absorption field, a holding tank, a system serving more than one structure or a system located on a different parcel than the structure.

71. PUBLIC UTILITIES – Those utilities using underground or overhead transmission lines such as electric, telephone and telegraph, and distribution and collection systems such as water, sanitary sewer and storm sewer.

72. REASONABLY SAFE FROM FLOODING – Means base flood waters will not inundate the land or damage structures to be removed from the floodplain and that any subsurface waters related to the base flood will not damage existing or proposed buildings.

73. REGIONAL FLOOD – A flood determined to be representative of large floods known to have occurred in Wisconsin. A regional flood is a flood with a one percent chance of being equaled or exceeded in any given year, and if depicted on the FIRM, the RFE is equivalent to the BFE.

74. START OF CONSTRUCTION – The date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond initial excavation, or the placement of a manufactured home on a foundation. Permanent

construction does not include land preparation, such as clearing, grading and filling, nor does it include the installation of streets and/or walkways, nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms, nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For an alteration, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

75. STRUCTURE – Any manmade object with form, shape and utility, either permanently or temporarily attached to, placed upon or set into the ground, stream bed or lake bed, including, but not limited to, roofed and walled buildings, gas or liquid storage tanks, bridges, dams and culverts.

76. SUBDIVISION – Has the meaning given in s. 236.02(12), Wis. Stats.

77. SUBSTANTIAL DAMAGE – Damage of any origin sustained by a structure, whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed 50 percent of the equalized assessed value of the structure before the damage occurred.

78. SUBSTANTIAL IMPROVEMENT – Any repair, reconstruction, rehabilitation, addition or improvement of a building or structure, the cost of which equals or exceeds 50 percent of the equalized assessed value of the structure before the improvement or repair is started. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the work performed. The term does not include either any project for the improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions; or any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

79. UNNECESSARY HARDSHIP – Where special conditions affecting a particular property, which were not self-created, have made strict conformity with restrictions governing areas, setbacks, frontage, height or density unnecessarily burdensome or unreasonable in light of the purposes of the ordinance.

80. VARIANCE – An authorization by the board of adjustment or appeals for the construction or maintenance of a building or structure in a manner which is inconsistent with dimensional standards (not uses) contained in the floodplain zoning ordinance.

81. VIOLATION – The failure of a structure or other development to be fully compliant with the floodplain zoning ordinance. A structure or other development without required permits, lowest floor elevation documentation, floodproofing certificates or required floodway encroachment calculations is presumed to be in violation until such time as that documentation is provided.

82. WATERSHED – The entire region contributing runoff or surface water to a watercourse or body of water.

83. WATER SURFACE PROFILE – A graphical representation showing the elevation of the water surface of a watercourse for each position along a reach of river or stream at a certain flood flow. A water surface profile of the regional flood is used in regulating floodplain areas.

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84. WELL – means an excavation opening in the ground made by digging, boring, drilling, driving or other methods, to obtain groundwater regardless of its intended use.

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SITE PLAN APPLICATION

12/13/21 Plan Commission Meeting

TR Capital, LLC

Planning & Zoning Report **Germantown, Wisconsin**

Summary

TR Capital, LLC, property owner, is seeking approval of Site Development and Building Plans for three commercial self-storage buildings and outside storage within a secure area screened from view on the 3.65-acre property located at W219N11588 Appleton Avenue.

Location: W219N11588 Appleton Avenue

Applicant/
Property Owner: TR Capital, LLC
N91W27428 Red Fox Run
Hartland, WI 53029

Current Zoning: M-1: Limited Industrial

Adjacent Land Uses		Zoning
North	Agricultural	A-1
South	Quarry	M-4
East	Quarry	M-4
West	Residential	Richfield



Background

Due to needed revisions, the Plan Commission voted to postpone this item at their November 8, 2021 meeting. Since then, Village Staff, the Village's consulting engineer, and the applicants have met to discuss and work through the concerns brought forth by Staff and the Plan Commission. This staff report reflects the revised application documents submitted December 6, 2021.

Proposal

TR Capital, LLC, property owner, is seeking approval of Site Development and Building Plans for three commercial self-storage buildings and outside storage within a secure area screened from view on the 3.65-acre property located at W219N11588 Appleton Avenue.

In August 2021, the Village Board approved a Land Use Plan Map amendment, a Rezoning and a Conditional Use Permit (CUP) for the property owned by TR Capital LLC for the purpose of redeveloping the existing single-family home and commercial plant sales into both enclosed self-storage and exterior boat/vehicle self-storage.

The proposed site development and building plans include:

- Three enclosed self-storage buildings (totaling 61 units)
- 71 parking spaces for outdoor vehicle storage
- 6' chain link fence along the west, south and east property lines with a rolling gate at the driveway to enclose the property; 8' fence with privacy slats along the north property line (the buildings along the north and south property lines will act as the fence in those locations)
- Asphalt paving on the western portion of the property, near the storage buildings, and recycled asphalt paving in the outdoor parking storage area.

Access & Parking

The access to the site will remain in the existing location off of Appleton Avenue. No additional temporary onsite parking is proposed.

Utilities

The existing well has been abandoned and the septic tank has been removed from the property. These will not be replaced. This property is not served by Village sewer or water.

Storm Water Management

The subject property will be served by a proposed Detention Pond to be located in the southwest corner of the property. The site will contain 74.6% impervious surface. The proposed development will meet the 80% maximum requirement for impervious surface on a site in the M-1 Limited Industrial District. A Stormwater Management plan has been submitted to the Village and is pending approval from the Department of Public Works.

Landscaping & Buffering

The proposed landscaping of the site includes a variety of evergreen, deciduous, and ornamental trees and evergreen and deciduous shrubs along the Appleton Avenue road

right-of-way. Additional landscaping has been added since the previous submittal. There will be two large trees removed from the property to accommodate the proposed development. Replacement trees will be located near the driveway entrance to the property. Evergreen trees are proposed to be planted along the north and south property lines in order to screen the proposed storage buildings and parking from adjacent properties.

Lighting

Exterior lighting on the subject property will include:

- (16) 44W LED 5000 Lumen cut-off wall building-mounted fixtures at a height of 10' on the internal facing storage building walls

Signage

A monument sign "placeholder" is shown in the northwest corner of the property along Appleton Avenue. Details of the monument sign and any other proposed signage will be provided in a separate Sign Permit Application reviewed by the Plan Commission.

Staff Comment

The revised site plan includes a 15' setback between the north storage building and the north property line to allow additional space for landscape screening. The 15' setback could not be continued along the entire north property line due to the location of the DNR Cap, which is just over 8' from the north property line.

The applicant has submitted a revised landscape plan based on staff and Plan Commission comments. The revised plan includes additional evergreen trees along the north property line to screen the buildings and parking area. Additional evergreen and deciduous trees have also been added along the south property line for improved screening of the south storage building. Plantings are not feasible along the eastern half of the south property line due to the proposed grading, therefore staff recommends privacy slats also be required on the east and south sides of the parking area. This has been added as a condition of approval. Staff supports the revised landscape plan.

The Village Forester has reviewed the revised landscape plans and recommends that the Autumn Blaze Maples proposed be replaced with The Autumn Fantasy Maple, which has a better branching structure. An updated landscape plan should be submitted. This has been added as a condition of approval.

The Public Works Director and Engineering Consultant have provided additional comments in a memo dated December 8, 2021 regarding stormwater and grading on the site. Revised plan shall be submitted and approved prior to the issuance of a grading permit.

VILLAGE STAFF RECOMMENDATION

APPROVE the site development and building plans submitted by TR Capital for the proposed commercial storage facilities at W219N11588 Appleton Avenue subject to the following conditions:

1. This approval is subject to all the conditions and requirements set forth herein and adopted by the Plan Commission. Approval is granted for the following plans unless said plan sheets are revised pursuant to revisions required under the specific conditions of approval included by the Plan Commission:
    a. Architectural plan set dated September 3, 2021
    b. Civil Engineering plan dated December 1, 2021
    c. Landscaping plan dated December 1, 2021
    d. Lighting Plans dated December 1, 2021
2. An updated landscape plan addressing the comment by the Village Forester shall be submitted to Planning and Zoning staff prior to occupancy.
3. Privacy slats shall be required on the north, east and south fencing surrounding the parking area.
4. All technical issues and plan corrections identified by the Village Engineer and Public Works Department staff (see December 8, 2021 memo from the Public Works Director) shall be addressed and reflected in revised plans and/or supplemental information reviewed and approved by Village staff prior to issuance of a grading permit.
5. The submitted stormwater management plan shall be approved by the Department of Public Works/Engineering prior to commencing work onsite.
6. All landscaping, screening, grading, and paving improvements shown on the approved site plans shall be installed as proposed prior to issuance of an occupancy permit unless a cash bond or letter of credit in an amount equal to 120 percent of the estimated installation and material costs reviewed and approved by the Village is submitted to the Village as necessary to ensure that installation of the proposed features and improvements will be completed within one (1) year after issuance of the occupancy permit.
7. State agency (DSPS) approved plans and a $20,000 occupancy bond are required by Inspection Services at the time of building permit application. The Village of Germantown is an authorized delegated agent of DSPS to provide all commercial plan review and inspection services through SAFEBuilt and the Village of Germantown.
8. All proposed exterior signage, including monument and wall-mounted signs, shall be reviewed and approved under a separate application by the Plan Commission.

From:	John Gall - Wachtel Tree Science
To:	Lori Johnson; Lawrence Ratayczak; John Delain; Chief Mike Snow; Tim Zimmerman; Paul Haugen; Thomas Olejniczak; Brad Seubert; Scott Anderson
Cc:	Jeff Retzlaff; Emily Zandt
Subject:	Re: Staff Review for December 13 Plan Commission-TR Capital
Date:	Tuesday, December 7, 2021 7:40:44 AM

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Village Forester comments
Revised Application - **TR Capital**

Suggest replacing Autum Blaze Maple with Autumn Fantasy Maple which has much better branching structure.

Recommend approval of revised landscape plan submitted 12-06-2021.

Respectfully submitted.

John Gall,
Contract Village Forester

From: Lori Johnson <ljohnson@germantownwi.gov>
Sent: Monday, December 6, 2021 11:08 AM
To: Lawrence Ratayczak <lratayczak@germantownwi.gov>; John Delain <jdelain@germantownwi.gov>; Chief Mike Snow <msnow@germantownpolice.org>; Tim Zimmerman <tzimmerman@germantownwi.gov>; Paul Haugen <phaugen@germantownwi.gov>; Thomas Olejniczak <tom.olejniczak@hecl.com>; Brad Seubert <brad.seubert@hecl.com>; Scott Anderson <sanderson@germantownwi.gov>; John Gall - Wachtel Tree Science <JGall@wachteltree.com>
Cc: Jeff Retzlaff <jretzlaff@germantownwi.gov>; Emily Zandt <ezandt@germantownwi.gov>
Subject: Staff Review for December 13 Plan Commission-TR Capital

EXTERNAL SENDER

https://www.dropbox.com/t/Qe16Gf7HPbP1pBFS

RE: Revised Application for TR Capital- W219 N11588 Appleton Avenue - for December 13 Plan Commission Meeting

Please review the REVISED development application packet and provide your written comments to the Planning Department no later than Wednesday, December 8, 2021. Your comments are important and will be incorporated into the staff report prepared for the Plan Commission. Please contact Jeff Retzlaff or Emily Zandt if you have

Engineering Department Memorandum

To : Jeffrey W. Retzlaff, AICP, Planning Director/Zoning Administrator

From : Lawrence Ratayczak, P.E., Director of Public Works

Date : December 08, 2021

Re : TR Capitol – Site Plan Review #3

Items Reviewed:

1. Civil Plan Set C0.1 – C5.3 (12 pages) Dated: 12-02-21
2. Stormwater Management report

Engineering Department

General Comments:

1. Please respond to each item below. A written response addressing each item shall be included in your submittal.
2. The submitted plans have been reviewed for general conformance with State and Village design guidelines. Additional comments could arise as a result of the plan completion and modifications. The items listed below will need to be fully resolved before the Engineering Dept. can recommend a formal approval of the plans and permit for construction.
3. *This project will require a WRAPP/NOI from the DNR. Please submit a copy of the approved permit prior to final approval. The NOI approval will be forwarded upon receipt.*
4. The project will require DSPS plumbing and infiltration system review and approval. Please provide a copy of the DSPS approval prior to engineering approval. The DSPS approval will be forwarded upon receipt.
5. As-builts prepared to Village standards shall be prepared and provided to the Village post-construction (for all applicable items). As-built pond plans will be provided following construction.
6. A professional engineer's original seal is to be affixed, signed and dated on the final set of construction plans. Plans are electronically stamped. Plans provide are not stamped, upon approval provide a final set of stamped construction drawings.
7. Utility permits and permits for work within the ROW are required. Contact the Village engineering department to obtain permits. The Owners or Contractor will contact the Engineering Department to obtain the necessary permits.
8. As a guide to the review response: Items in italics are resolved or acknowledged, items in regular font are to be addressed yet, items in blue are the engineer's response, and items in red are additional feedback to remaining original comment.
9. *The proposed stormwater basin is labeled as a detention pond in some places, a wet retention pond in some places, and a bio-retention basin in other areas. Please revise labeling to be consistent.*

C-103 Grading Plan

1. *Label the steep slope areas of the plan with the max slope. Slopes shall not exceed 3:1. All steep slopes have been labeled. The site is adjacent to a quarry which requires the slopes to exceed the maximum of 3:1. The Owners and Contractor are aware of this situation and the plans include the proper erosion control measures to stabilize and restore the slope. The Bio-filter slope is allowed to be a maximum of 2:1 slope according to DNR Technical Standard 1004.*
2. *Show additional contours to the north to confirm off-site drainage. The contours to the north are included on the Existing and Proposed Drainage Plans. The area to the north of the site drains to a low area just to the north of the property line. There is an existing berm/fence line that does not allow the drainage from the north to drain into the site. There is no signs of crop damage that would indicate significant ponding, so the area clearly infiltrates, which makes sense since the area is adjacent to a quarry. A description of the existing site conditions and pictures of the berm/low area are included in the report. The existing topography provided does not indicate any berm along the property line. The contours show a small isolated area that may not drain, but it appears the majority of the area to the north drains through this site. Please provide existing survey data that clearly defines the berm. A simple solution could be to install a culvert pipe that runs south under the site to bypass the drainage from the north through the site. This solution would also avoid further issues if the site to the north is ever developed.*
3. *Proposed swale on the south side of the south storage building is very narrow and not likely to be constructed properly. Revise to something constructible with 3:1 max side slopes and 1.0% minimum slope The proposed swale on the south side of the south storage building has been revised to provide a swale at a 1% minimum slope with 3:1 side slopes. Proposed swale on the south side still is very narrow and not likely to be constructed property. Please revise swale to something constructible.*
4. Please change the inlet that was added to a catch basin with an 18” sump to provide some pretreatment prior to the basin.

C-104 Erosion Control Plan

1. *Provide erosion control notes that specify inspection requirement, permit requirements, timeframes for stabilization, etc. Refer WDNR guidance. https:lldnr.wisconsin.govltopic/Stormwaterlpublications.html The Wisconsin DNR erosion control notes requested have been added to Sheet C-104. Please address the following items in the notes.*
    a. *Add a requirement to stabilize all disturbed areas that will remain inactive for 14 days or longer.*
    b. *Stabilize areas of final grading within 7 days of reaching final grade.*
    c. *Note #13 references a sediment trap and wet retention basin. Where will the sediment trap be located? Show and label it on the plans. Provide notes for sequencing of the bio-retention basin how it will be protected during construction.*
    d. *Add the bio-retention basin construction to the construction schedule.*
    e. *Remove reference to the City of Milwaukee*
2. *Graphically show all required erosion matting on the plans. Swales shall have erosion matting for concentrated flows.*
3. *The majority of the pavement drains to a single point and down a 2:1 slope into the basin. That area will likely be an ongoing erosion and maintenance issue. How will the slope be permanently protected?*

C-105 Erosion Control Details

1. *How will the rip rap stilling basin show be installed on the steep slope. Riprap will be installed on the steep slope as shown on the detail provide on Sheet C-105.*

C-109 Construction Notes

1. *Grading and erosion control notes call for a max slope of 3:1, however plans show a greater slope.*
2. *Grading and erosion control notes call for curlex erosion matting, and does not appear to match what is specified on the plans.*

C-106 Stormwater Management plan details

1. *The basin has been changed to a bio-retention basin, but the bio-retention basin does not meet many of the requirements of WDNR technical standards. A wet retention basin would likely be a better fit for this site. A change to a wet retention basin would address many of the following comments.*
2. *Berm top width shall be a minimum of 10' The berm width is 10 feet at the 100-year storm elevation which should meet the requirements. The biofilter is accessible to be maintained from the parking area so access is not required along the berm to maintain the device.*
3. *Berm shall include a core trench or keyway per WDNR technical standards. A keyway is required for wet detention ponds, so the bio-filter should not require a keyway this there is not a permanent wet pool. The outlet pipe does include an anti-seep collar to prevent seepage through the berm. The core trench is not required as long as the plan is revised to meet WDNR technical standard requirement of a maximum of 18" ponding depth.*
4. *Provide permanent erosion control protection for the overflow spillway. TRM is shown on the overflow spillway on Sheet C-104. Provide specification or addition details on what TRM is proposed.*
5. *Bio-Filter note #1 states the bio-filter basin shall conform to WDNR technical standard 1003. 1003 is for infiltration basins. Please update the notes for WDNR technical standard 1004, Bio-retention basin.*
6. *Design of the bio-retention basin must be revised to meet WDNR technical standards. Including the following.*
   a. *A maximum drainage area of 2 acres*
   b. *Plugs shall be used for the plantings. Seeding is not allowed. A planting plan is required.*
   c. *Pea gravel lens to separate stone storage layer and engineered soil*
   d. *Underdrain to be a minimum of 6"*
   e. *A stone storage layer is required.*
7. *The outlet pipe invert is higher than the invert of the underdrain and will not completely drain the basin. If a clay liner is used, the underdrain and outlet pipe must be at the bottom of the basin so the entire storage area is able to drain.*
8. Provide requirements for the clay liner. *The liner shall extend up the 2 year water elevation.* **Please list the requirements for the clay liner on the plans. (material properties of the clay, compaction, etc)**

Stormwater management plan comments

1. *Site appears to be a mix of new development and redevelopment. Existing impervious area can be considered redevelopment, but non-paved or gravel areas are new development. A weighted average of new development at 80% and redevelopment at 40% can be used to determine water quality requirements. Infiltration requirement will apply to new development areas.*
   The bio-filter will provide 80% TSS reduction which will meet the requirement for the weighted water quality requirements. Please calculate and provide the required weighted TSS reduction, or revise the design to and narrative to meet the 80% requirement.
2. *Provide soil borings for the site. Report notes that the site is exempt from infiltration based on soils and redox present. Please provide additional information on why the site is exempt. Gravels soils would not meet the exemption based on soil type. We reached out to Pete Wood at the Wisconsin DNR to determine if soil test pits were required since the site is contaminated. Pete indicated that since the site is contaminated, soil test pits were not required. The email is attached showing the correspondence .*
3. Provide documentation that the material management plan for the site has been updated and the WDNR is approving of the stormwater management plan for this contaminated site.

The material management plan will be updated following Plan Commission approval. Please provide a copy of the WDNR approved material management plan prior to final engineering approval.

4. *WDNR generally does not allow for water quality credit for dry detention basins. Review WDNR guidance documents and adjust design accordingly. The plans have been revised to include a bio-filter with clay liner to minimize infiltration to the contaminated soils. Confirm design still meets requirements after making the revisions to the basin noted above.Design must accommodate all tributary flow to the basin. A portion of Appleton Ave and offsite flow to the north of the site appear tributary to the basin. Update to include those areas.*
   There is a berm along the north lot line and low areas in the field that store the rain. There is no evidence of site run on or long-term standing water. Tributary flows from Appleton ave do not appear to be included in the calcs. Please revise. Note that WDNR requirements to account for the water volume, but not TSS reduction credit must be followed.
5. *All disturbed areas of the site must be included in the analysis. Include the undetained areas south and east of the detention basin in the calcs. The undetained areas south and east of the bio-filter have been included in the analysis.*
6. *Review Tc time for proposed area. Cales show 45' of sheet flow, based on the plan it appears to be about 10' before turning into shallow concentrated flow. The time of concentration flowline location has been shown on updated in the analysis. TC path show at the start of the 'To Bio-filter' area does not match the contours. Revise Tc time to follow the contours (Tc path shall be perpendicular to contours).*
7. *The 2" hole at the end of the 6" pipe is likely to become clogged and will not be easy to clear. Revise design or provide information on how that will be protected from clogging.*
   The 6" PVC with 2" hole has been replaced with an underdrain since the pond has been revised to a bio-filter.

8. *Provide a detail for how the fencing will cross the overflow weir and not obstruct the weir. The fence location has been added to the overflow detail included on Sheet C-106. Provide a minimum dimension between the bottom of the fence and top of the overflow weir.*
9. *Include all disturbed areas of the site in the SLAMM model. All disturbed areas are included in the SLAMM model.*
10. *SLAMM model must account for offsite tributary flow per WDNR requirements. The off-site drainage concerns were addressed in the comment included under the Grading Plan. Tributary flows from Appleton Ave must be accounted for.*
11. *Basin is modeled as a bio-filter in WinSLAMM. If basin is intended to function as a bio-filter it must be designed to WDNR bio-retention technical standards. Including pretreatment, pending depth, etc. The basin has been modified as a bio-filter on the plans and analysis.*
    If the bio-retention basin remains in the design, please adjust the SLAMM model to address the following comments.
    a. *Infiltration is not allowed on contaminated sites. Revise native soil infiltration rate to 0*
    b. *A stone storage layer is required.*
12. Provide information on how the flow from the north in the 15" pipe is accounted for in the outlet calcs for the basin. Currently the 15" pipe is controlling the flow out of the basin in the 100 year event, The additional flow from the north will have an effect on the capacity of the pipe and flow out of the basin.
13. Please change the underdrain outlet to a vertical orifice not a 'tube/siphon/float valve'
14. Provide information on the start and end time used for the volume calcs and provide printouts from hydrocad showing how the volume during the critical time was calculated.
15. Currently the small strip of greenspace north of the pavement is included in the 'to pond' area but this area will bypass the pond via the storm sewer. Revise calcs to include this as an undetained area.

Lori Johnson

From: jworden@quamengineering.com
Sent: Monday, December 6, 2021 9:32 AM
To: Emily Zandt; 'Roberts, Eric'; 'Jon Then'; kparish@quamengineering.com
Cc: Jeff Retzlaff; Lori Johnson
Subject: RE: Project Review Comments 11-16-21
Attachments: Plan Set 24x36 12-1-21.pdf; Stormwater Report 12-2-21.pdf; RE: W219N11588 Appleton Avenue Tax Key GTNV_193995; RE: TR Capital Germantown - DNR SW Permit Letter Attached

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Attached is the updated plans and stormwater report for the TR Capital Project. We will be dropping off hard copies later to meet the village requirements.

Community Development Department

1. Please update the DNR Cap on your plans to accurately show its location and size.

The cap has been adjusted to correct size.

2. Please confirm that the property owner to the north, Richard Ehrlich, is agreeing to the 10' landscaping easement on his property in which a berm will be constructed in order to accommodate the evergreen trees that will be planted one foot south of the shared property line, as shown on the landscape detail on the Landscape Plan, and that an easement document will be submitted and recorded per Condition 9 below.
   The landscape easement has been reconsidered however the setback has been extended to 15'
3. The proposed berm should rise at least 3' above the first-floor elevation of the proposed buildings and 3' above the grade of the proposed parking area to improve screening of the buildings and the parking area from the property to the north.
   A 3' berm is not feasible in this location so the setback has been maximized to provide a 1 foot berm.
4. Please confirm that the 3' berm will extend the entire length of the north property line.
   A 3' berm is not feasible in this location so the setback has been maximized to provide a 1 foot berm.
5. Submit a revised grading plan including the berm and all grading to be completed on the property to the north.

The grading plan has been revised to show the berm.

6. Submit a revised Stormwater Management Plan that reflects the revised grading plan and incorporates comments from the Public Works Department/Engineering Consultant in the memo dated November 11, 2021.

A revised stormwater report is attached.

7. Per comments previously provided by the Village Forester, the evergreen trees to be planted need to be 7'-8' in height. All deciduous trees shall be a minimum of 2.5" in caliper.
   The landscape plan has been revised as suggested.
8. Additional landscaping, a variety of deciduous and evergreen shall be added to the area along Appleton Avenue to help screen the buildings from the road. At least four (4) "street trees" (1 per 50' of frontage) are required for this property per Chapter 17.43(5).

There are more than 4 street trees provided on this plan.

9. Provide an easement agreement drafted by an attorney for the proposed Landscape Easement to be reviewed and approved by the Village Attorney. The easement agreement will need to be

recorded prior to any grading or building permits being issued. If your attorney has specific questions about the content of the easement agreement, please have them reach out to the Village Attorney Brian Sajdak at brian@wrslegal.net

The landscape easement has been reconsidered however the setback has been extended to 15'

10. Have you reached out to Sue King at the Department of Transportation (DOT) and provided her with the necessary information for the Connection Permit application? Approval by the DOT will be added as a condition of approval for the site plan.

Sue has approved the entrance however the DOT is still reviewing stormwater.

Lori Johnson

From: Wood, Peter C - DNR <Peter.Wood@wisconsin.gov>
Sent: Thursday, December 2, 2021 10:14 AM
To: jworden@quamengineering.com
Subject: RE: TR Capital Germantown - DNR SW Permit Letter Attached

Yes, that's OK. Just make sure you have something in the contract documents to make sure it works. It may take a few seasons to establish the vegetation from seed so keep the landscape contractor on the hook for at least a year or two if possible. Otherwise, the owner will need to do this.

Pete Wood
Phone: 262-822-8227
Peter.Wood@Wisconsin.gov

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Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

From: jworden@quamengineering.com <jworden@quamengineering.com>
Sent: Thursday, December 02, 2021 9:57 AM
To: Wood, Peter C - DNR <Peter.Wood@wisconsin.gov>
Subject: RE: TR Capital Germantown - DNR SW Permit Letter Attached's

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Paul,

We were proposing a seed mix rather than all the plugs in this pond situation. I wanted to confirm that you are comfortable with this in our design.

Thanks,

Jonathan Worden P.E.

Quam Engineering, LLC
122 Wisconsin Street
West Bend, WI 53095
Office: (262)346-7800
Direct: (262)353-9765
jworden@quamengineering.com
www.quamengineering.com

From: Wood, Peter C - DNR <Peter.Wood@wisconsin.gov>
Sent: Thursday, November 18, 2021 9:48 AM
To: jwthen@yahoo.com

Cc: jworden@quamengineering.com
Subject: TR Capital Germantown - DNR SW Permit Letter Attached

Pete Wood, P.E.
Storm Water Engineer – Water Division
Wisconsin Department of Natural Resources
1027 W St Paul Avenue
Milwaukee, WI 53233
Phone: 262-822-8227
Peter.Wood@wisconsin.gov
We are committed to service excellence.
Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

Lori Johnson

From: King, Susan - DOT <Susan.King@dot.wi.gov>
Sent: Monday, November 15, 2021 2:29 PM
To: jworden@quamengineering.com
Subject: RE: W219N11588 Appleton Avenue Tax Key GTNV_193995

Jonathan,

I spoke with Art Baumann WisDOT Traffic Engineer and the driveway can remain in it's current location. Please use this email thread when replying.

Thank you,
Sue King
Permit Coordinator
Wisconsin Department of Transportation
SE Region
262-548-6713
susan.king@dot.wi.gov

From: jworden@quamengineering.com <jworden@quamengineering.com>
Sent: Monday, November 15, 2021 9:03 AM
To: King, Susan - DOT <Susan.King@dot.wi.gov>
Subject: RE: W219N11588 Appleton Avenue Tax Key GTNV_193995

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Susan,

I just wanted to reiterate we aren't planning on making any changes to the DOT ROW with our proposed plans.

Jonathan Worden P.E.

Quam Engineering, LLC
122 Wisconsin Street
West Bend, WI 53095
Office: (262)346-7800
Direct: (262)353-9765
jworden@quamengineering.com
www.quamengineering.com

From: King, Susan - DOT <Susan.King@dot.wi.gov>
Sent: Monday, November 15, 2021 8:27 AM

To: jworden@quamengineering.com
Subject: RE: W219N11588 Appleton Avenue Tax Key GTNV_193995

Jonathon,

There are no fees for the permit. There will be no road improvements required for this development. The driveway must align with the center of Amy Belle Rd. intersection. Please submit plans showing this change. If you have any concerns or questions please contact me.

Thank you,
Sue King
Permit Coordinator
Wisconsin Department of Transportation
SE Region
262-548-6713
susan.king@dot.wi.gov

From: jworden@quamengineering.com <jworden@quamengineering.com>
Sent: Monday, November 15, 2021 7:40 AM
To: King, Susan - DOT <Susan.King@dot.wi.gov>
Subject: RE: W219N11588 Appleton Avenue Tax Key GTNV_193995

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Susan,

Attached is the permit with additional information. What are the fees on this permit and what are our payment options?

Thanks

Jonathan Worden P.E.

Quam Engineering, LLC
122 Wisconsin Street
West Bend, WI 53095
Office: (262)346-7800
Direct: (262)353-9765
jworden@quamengineering.com
www.quamengineering.com

From: King, Susan - DOT <Susan.King@dot.wi.gov>
Sent: Thursday, November 11, 2021 7:35 AM
To: jworden@quamengineering.com
Subject: RE: W219N11588 Appleton Avenue Tax Key GTNV_193995

Jonathon,

The permit application is incomplete. Please have the fee owner sign, date, provide a phone number and email address. The signature can be electronically signed by typing it in. Resubmit the permit application by using this email thread. If you have any questions, please give me a call.

Thank you,
Thank you,
Sue King
Permit Coordinator
Wisconsin Department of Transportation
SE Region
262-548-6713
susan.king@dot.wi.gov

From: jworden@quamengineering.com <jworden@quamengineering.com>
Sent: Wednesday, November 10, 2021 4:43 PM
To: King, Susan - DOT <Susan.King@dot.wi.gov>
Subject: FW: W219N11588 Appleton Avenue Tax Key GTNV_193995

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Susan,

Attached is a filled out permit. Let me know if you have any questions and we can get you a signature.

Thanks,

Jonathan Worden P.E.

Quam Engineering, LLC
122 Wisconsin Street
West Bend, WI 53095
Office: (262)346-7800
Direct: (262)353-9765
jworden@quamengineering.com
www.quamengineering.com

> **From:** Emily Zandt <ezandt@germantownwi.gov>
> **Date:** November 10, 2021 at 2:32:30 PM CST
> **To:** ROSIE.A.ROBERTS@gmail.com, Jon Then <jwthen@yahoo.com>
> **Cc:** susan.king@dot.wi.us, Jeff Retzlaff <jretzlaff@germantownwi.gov>
> **Subject: FW: W219N11588 Appleton Avenue Tax Key GTNV_193995**
>
> Eric and Jon,
> Due to the new use/ownership of the property at W219N11588 Appleton Avenue, a Connection Permit is required from the WI DOT for access to State Trunk Hwy 175 (see the email below).

Please work directly with Sue King, Permit Coordinator (cc'd on this email) to submit the necessary information.
Let me know if you have any questions.
Thank you,
Emily

Emily Zandt, AICP
Associate Planner/Zoning Administrator
Village of Germantown
(262)-250-4735

From: King, Susan - DOT <Susan.King@dot.wi.gov>
Sent: Wednesday, November 10, 2021 2:14 PM
To: Emily Zandt <ezandt@germantownwi.gov>
Cc: Jeff Retzlaff <jretzlaff@germantownwi.gov>; Scott Schmidt <Scott.Schmidt@washcowisco.gov>
Subject: RE: W219N11588 Appleton Avenue Tax Key GTNV_193995

Emily,

Attached is the permit application, please compete and submit the permit application along with the stormwater management plan and a recorded copy of the warranty deed. WisDOT will review the submittal and determine if road improvements will be needed.

Thank you,
Sue King
Permit Coordinator
Wisconsin Department of Transportation
SE Region
262-548-6713
susan.king@dot.wi.gov

Stormwater Comments

C-103 Grading Plan

1. *Label the steep slope areas of the plan with the max slope. Slopes shall not exceed 3:1. All steep slopes have been labeled. The site is adjacent to a quarry which requires the slopes to exceed the maximum of 3:1. The Owners and Contractor are aware of this situation and the plans include the proper erosion control measures to stabilize and restore the slope. The Bio-filter slope is allowed to be a maximum of 2:1 slope according to DNR Technical Standard 1004.*

2. Show additional contours to the north to confirm off-site drainage. The contours to the north are included on the Existing and Proposed Drainage Plans. The area to the north of the site drains to a low area just to the north of the property line. There is an existing berm/fence line that does not allow the drainage from the north to drain into the site. There is no signs of crop damage that would indicate significant ponding, so the area clearly infiltrates, which makes sense since the area is adjacent to a quarry. A description of the existing site conditions and pictures of the berm/low area are included in the report. The existing topography provided does not indicate any berm along the property line. The contours show a small isolated area that may not drain, but it appears the majority of the area to the north drains through this site. Please provide existing survey data that clearly defines the berm. A simple solution could be to install a culvert pipe that runs south under the site to bypass the drainage from the north through the site. This solution would also avoid further issues if the site to the north is ever developed. Storm Sewer has been added to the north property line for runoff from the north to pass through the site.

3. Proposed swale on the south side of the south storage building is very narrow and not likely to be constructed properly. Revise to something constructible with 3:1 max side slopes and 1.0% minimum slope The proposed swale on the south side of the south storage building has been revised to provide a swale at a 1% minimum slope with 3:1 side slopes. Proposed swale on the south side still is very narrow and not likely to be constructed property. Please revise swale to something constructible. A cross section for the southern ditch has been added to the plans. The swale is 1' deep with 3:1 slopes which is a standard ditch crossection.

C-104 Erosion Control Plan

1. Provide erosion control notes that specify inspection requirement, permit requirements, timeframes for stabilization, etc. Refer WDNR guidance. https:lldnr.wisconsin.govltopic/Stormwaterlpublications.html The Wisconsin DNR erosion control notes requested have been added to Sheet C-104. Please address the following items in the notes.
   a. Add a requirement to stabilize all disturbed areas that will remain inactive for 14 days or longer.
   b. Stabilize areas of final grading within 7 days of reaching final grade.
   c. Note #13 references a sediment trap and wet retention basin. Where will the sediment trap be located? Show and label it on the plans. Provide notes for sequencing of the bio-retention basin how it will be protected during construction.
   d. Add the bio-retention basin construction to the construction schedule.
   e. Remove reference to the City of Milwaukee

   The notes above have been revised based on these comments.
2. Graphically show all required erosion matting on the plans. Swales shall have erosion matting for concentrated flows.

The erosion control mat is shown on sheet C-104 and called out in the notes.

3. The majority of the pavement drains to a single point and down a 2:1 slope into the basin. That area will likely be an ongoing erosion and maintenance issue. How will the slope be permanently protected?

The slope is being protected with curb and gutter and inlet to direct runoff into the bio-filter. Erosion mat will also be added to this slope but it shouldn't receive much water.

C-105 Erosion Control Details

1. *How will the rip rap stilling basin show be installed on the steep slope. Riprap will be installed on the steep slope as shown on the detail provide on Sheet C-105.*

C-109 Construction Notes

1. Grading and erosion control notes call for a max slope of 3:1, however plans show a greater slope.

The notes have been update to match the plans.

2. Grading and erosion control notes call for curlex erosion matting, and does not appear to match what is specified on the plans.

The notes have been update to match the plans.

C-106 Stormwater Management plan details

1. The basin has been changed to a bio-retention basin, but the bio-retention basin does not meet many of the requirements of WDNR technical standards. A wet retention basin would likely be a better fit for this site. A change to a wet retention basin would address many of the following comments.

A wet pond fits but will not meet the TSS reduction of 60% required for this site. Therefore the Bio-Filter was selected.

2. *Berm top width shall be a minimum of 10' The berm width is 10 feet at the 100-year storm elevation which should meet the requirements. The biofilter is accessible to be maintained from the parking area so access is not required along the berm to maintain the device.*
3. Berm shall include a core trench or keyway per WDNR technical standards. A keyway is required for wet detention ponds, so the bio-filter should not require a keyway this there is not a permanent wet pool. The outlet pipe does include an anti-seep collar to prevent seepage through the berm. The core trench is not required as long as the plan is revised to meet WDNR technical standard requirement of a maximum of 18" ponding depth.
   Core trench is provided on sheet C-106.
4. Provide permanent erosion control protection for the overflow spillway. TRM is shown on the overflow spillway on Sheet C-104. Provide specification or addition details on what TRM is proposed.

Additional information has been provided.

5. Bio-Filter note #1 states the bio-filter basin shall conform to WDNR technical standard 1003. 1003 is for infiltration basins. Please update the notes for WDNR technical standard 1004, Bio-retention basin.
   The note has been changed.
6. Design of the bio-retention basin must be revised to meet WDNR technical standards. Including the following.
   a. A maximum drainage area of 2 acres
   b. Plugs shall be used for the plantings. Seeding is not allowed. A planting plan is required. c. Pea gravel lens to separate stone storage layer and engineered soil
   d. Underdrain to be a minimum of 6"
   e. A stone storage layer is required.
   The DNR recognizes this device to be functioning more similarly to a infiltration basin. It is designed to be able to handle larger quantities of water similar to an infiltration basin. The seeding has been reviewed by the DNR and is acceptable under the added clause that a stand of the plantings is established after a year. The storage layer, pea gravel lens and the underdrain comments were addressed on sheet C-106.
7. The outlet pipe invert is higher than the invert of the underdrain and will not completely drain the basin. If a clay liner is used, the underdrain and outlet pipe must be at the bottom of the basin so the entire storage area is able to drain.
   The outlet invert has been lowered to allow the underdrain to completely drain the basin. The underdrain has been designed to be located on the top of the clay liner.
8. Provide requirements for the clay liner. The liner shall extend up the 2 year water elevation.

The clay liner has been updated on bio-filter cross section on notes.

Stormwater management plan comments

1. Site appears to be a mix of new development and redevelopment. Existing impervious area can be considered redevelopment, but non-paved or gravel areas are new development. A weighted average of new development at 80% and redevelopment at 40% can be used to determine water quality requirements. Infiltration requirement will apply to new development areas.
   The bio-filter will provide 80% TSS reduction which will meet the requirement for the weighted water quality requirements. Please calculate and provide the required weighted TSS reduction, or revise the design to and narrative to meet the 80% requirement.
   The weighted TSS removal required is in the report on page 5. The bio-filter meets the weighted TSS reduction requirment.
2. *Provide soil borings for the site. Report notes that the site is exempt from infiltration based on soils and redox present. Please provide additional information on why the site is exempt. Gravels soils would not meet the exemption based on soil type. We reached out to Pete Wood at the Wisconsin DNR to determine if soil test pits were required since the site is contaminated. Pete indicated that since the site is contaminated, soil test pits were not required. The email is attached showing the correspondence .*
3. Provide documentation that the material management plan for the site has been updated and the WDNR is approving of the stormwater management plan for this contaminated site.
   The material management plan will be updated following Plan Commission approval. Please provide a copy of the WDNR approved material management plan prior to final engineering approval. The material management plan has been submitted to the DNR for review. Approval will be sent when received.

4. WDNR generally does not allow for water quality credit for dry detention basins. Review WDNR guidance documents and adjust design accordingly. The plans have been revised to include a bio-filter with clay liner to minimize infiltration to the contaminated soils. Confirm design still meets requirements after making the revisions to the basin noted above.

   The updated calculations are included showing the bio-filter meets the TSS reduction requirements.

5. Design must accommodate all tributary flow to the basin. A portion of Appleton Ave and offsite flow to the north of the site appear tributary to the basin. Update to include those areas.
There is a berm along the north lot line and low areas in the field that store the rain. There is no evidence of site run on or long-term standing water. Tributary flows from Appleton ave do not appear to be included in the calcs. Please revise. Note that WDNR requirements to account for the water volume, but not TSS reduction credit must be followed.
Appleton Avenue drains along the curb line to a curb cut located to the south of this site. Therefore no runoff from Appleton Avenue drains to the site.

6. All disturbed areas of the site must be included in the analysis. Include the undetained areas south and east of the detention basin in the calcs. The undetained areas south and east of the bio-filter have been included in the analysis.

7. Review Tc time for proposed area. Cales show 45' of sheet flow, based on the plan it appears to be about 10' before turning into shallow concentrated flow. The time of concentration flowline location has been shown on updated in the analysis. TC path show at the start of the 'To Bio-filter' area does not match the contours. Revise Tc time to follow the contours (Tc path shall be perpendicular to contours).
The TC line has been updated to follow the contours as requested.

8. The 2" hole at the end of the 6" pipe is likely to become clogged and will not be easy to clear. Revise design or provide information on how that will be protected from clogging.
The 6" PVC with 2" hole has been replaced with an underdrain since the pond has been revised to a bio- filter.

7. Provide a detail for how the fencing will cross the overflow weir and not obstruct the weir. The fence location has been added to the overflow detail included on Sheet C-106. Provide a minimum dimension between the bottom of the fence and top of the overflow weir.
The dimension is displayed on the detail located on sheet C-106.

8. Include all disturbed areas of the site in the SLAMM model. All disturbed areas are included in the SLAMM model.

9. SLAMM model must account for offsite tributary flow per WDNR requirements. The off-site drainage concerns were addressed in the comment included under the Grading Plan. Tributary flows from Appleton Ave must be accounted for.
Appleton Avenue drains along the curb line to a curb cut located to the south of this site. Therefore no runoff from Appleton Avenue drains to the site.

13. Basin is modeled as a bio-filter in WinSLAMM. If basin is intended to function as a bio-filter it must be designed to WDNR bio-retention technical standards. Including pretreatment, pending depth, etc. The basin has been modified as a bio-filter on the plans and analysis.
If the bio-retention basin remains in the design, please adjust the SLAMM model to address the following comments.
    a. Infiltration is not allowed on contaminated sites. Revise native soil infiltration rate to 0 b. A stone storage layer is required.

The WinSLAMM calculations have been updated as requested.

Let me know if you have any questions or concerns.

Thanks,

Jonathan Worden P.E.

Quam Engineering, LLC
122 Wisconsin Street
West Bend, WI 53095
Office: (262)346-7800
Direct: (262)353-9765
jworden@quamengineering.com
www.quamengineering.com

From: Emily Zandt <ezandt@germantownwi.gov>
Sent: Tuesday, November 16, 2021 8:22 AM
To: 'Roberts, Eric' <EROBERTS@quad.com>; 'Jon Then' <jwthen@yahoo.com>; jworden@quamengineering.com;

kparish@quamengineering.com
Cc: Jeff Retzlaff <jretzlaff@germantownwi.gov>; Lori Johnson <ljohnson@germantownwi.gov>
Subject: Project Review Comments 11-16-21

Good Morning,
Please see the attached review memos for the revised materials submitted.
Let us know if you have any questions.
Thank you,
Emily

Emily Zandt, AICP
Associate Planner/Zoning Administrator
Village of Germantown
(262)-250-4735

SITE PLAN APPLICATION

11/8/21 Plan Commission Meeting

TR Capital, LLC

Planning & Zoning Report **Germantown, Wisconsin**

Summary

TR Capital, LLC, property owner, is seeking approval of Site Development and Building Plans for three commercial self-storage buildings and outside storage within a secure area screened from view on the 3.65-acre property located at W219N11588 Appleton Avenue.

Location: W219N11588 Appleton Avenue

Applicant/
Property Owner: TR Capital, LLC
N91W27428 Red Fox Run
Hartland, WI 53029

Current Zoning: M-1: Limited Industrial

Adjacent Land Uses		Zoning
North	Agricultural	A-1
South	Quarry	M-4
East	Quarry	M-4
West	Residential	Richfield



Proposal

TR Capital, LLC, property owner, is seeking approval of Site Development and Building Plans for three commercial self-storage buildings and outside storage within a secure area screened from view on the 3.65-acre property located at W219N11588 Appleton Avenue.

In August 2021, the Village Board approved a Land Use Plan Map amendment, a Rezoning and a Conditional Use Permit (CUP) for the property owned by TR Capital LLC for the purpose of redeveloping the existing single-family home and commercial plant sales into both enclosed self-storage and exterior boat/vehicle self-storage.

The proposed site development and building plans include:

- Three enclosed self-storage buildings (totaling 61 units)
- 73 parking spaces for outdoor vehicle storage
- 6’ chain link fence with rolling gate at driveway to enclose the property (the buildings along the north and south property lines will act as the fence in those locations)
- Asphalt paving on the western portion of the property, near the storage buildings, and recycled asphalt paving in the outdoor parking storage area.

Access & Parking

The access to the site will remain in the existing location off of Appleton Avenue. No additional temporary onsite parking is proposed.

Utilities

The existing well is in the process of being abandoned and septic tank removed. These will not be replaced. This property is not served by Village sewer or water.

Storm Water Management

The subject property will be served by a proposed Detention Pond to be located in the southwest corner of the property. The site will contain 75.4% impervious surface. The proposed development will meet the 80% maximum requirement for impervious surface on a site in the M-1 Limited Industrial District. A Stormwater Management plan has been submitted to the Village and is pending approval from the Department of Public Works.

Landscaping & Buffering

The proposed landscaping of the site includes a variety of evergreen and ornamental trees and evergreen and deciduous shrubs along the Appleton Avenue road right-of-way. There will be two large trees removed from the property to accommodate the proposed development. Replacement trees will be located near the driveway entrance to the property. Evergreen trees are proposed to be planted along the north and south property lines in order to screen the proposed storage buildings from adjacent properties.

Lighting

Exterior lighting on the subject property will include:

- (16) 44W LED 5000 Lumen cut-off wall building-mounted fixtures at a height of

10’ on the internal facing storage building walls

Signage

A monument sign “placeholder” is shown in the northwest corner of the property along Appleton Avenue. Details of the monument sign and any other proposed signage will be provided in a separate Sign Permit Application reviewed by the Plan Commission.

Staff Comment

The applicant has submitted a revised landscape plan based on the Village Foresters comments. The revised plan included evergreen trees along the north and south property lines to screen the buildings. Staff feels that the proposed trees, to be planted 40 feet apart, is insufficient for adequate screening. Additional landscaping should be added to both locations. There are trees that may screen the proposed development during the summer months, but during the cold months the leaves will be gone, providing a direct view to these long, monotonous buildings.

Further, the Village Forester recommended that no development takes place within 15’ of the north lot line in order to preserve the tree line. This tree line is essential to the screening of the property from the north and from southbound traffic on Appleton Avenue. Staff recommends that no development be permitted within 15’ of the north property line and has included this as a condition of approval.

The Public Works Director and Engineering Consultant have provided comments regarding the stormwater, grading, and erosion control on the site. Revised plans have been submitted and are awaiting review and approval by the Public Works Department.

VILLAGE STAFF RECOMMENDATION

APPROVE the site development and building plans submitted by TR Capital for the proposed commercial storage facilities at W219N11588 Appleton Avenue subject to the following conditions:

1. This approval is subject to all the conditions and requirements set forth herein and adopted by the Plan Commission. Approval is granted for the following plans unless said plan sheets are revised pursuant to revisions required under the specific conditions of approval included by the Plan Commission:
    a. Architectural plan set dated September 7, 2021
    b. Civil Engineering plan dated November 4, 2021
    c. Landscaping plan dated November 4, 2021
    d. Lighting Plans dated September 7, 2021
2. Additional landscaping, to include a variety of evergreen plants and shrubs, shall be provided along the north and south property lines to better screen the storage buildings. A revised landscape plan shall be submitted and approved by the Village Planner and the Village Forester prior to the issuance of any

building permits.

3. The site plan shall be revised to meet the recommended setback of 15’ from the north property line in order to preserve the north tree line.
4. All technical issues and plan corrections identified by the Village Engineer and Public Works Department staff (see September 22, 2021 memo from the Public Works Director) shall be addressed and reflected in revised plans and/or supplemental information reviewed and approved by Village staff prior to issuance of a building permit.
5. The submitted stormwater management plan shall be approved by the Department of Public Works/Engineering prior to commencing work onsite.
6. All landscaping, screening, grading, and paving improvements shown on the approved site plans shall be installed as proposed prior to issuance of an occupancy permit unless a cash bond or letter of credit in an amount equal to 120 percent of the estimated installation and material costs reviewed and approved by the Village is submitted to the Village as necessary to ensure that installation of the proposed features and improvements will be completed within one (1) year after issuance of the occupancy permit.
7. State agency (DSPS) approved plans and a $20,000 occupancy bond are required by Inspection Services at the time of building permit application. The Village of Germantown is an authorized delegated agent of DSPS to provide all commercial plan review and inspection services through SAFEBuilt and the Village of Germantown.
8. All proposed exterior signage, including monument and wall-mounted signs, shall be reviewed and approved under a separate application by the Plan Commission.

From: jworden@quamengineering.com <jworden@quamengineering.com>
Sent: Thursday, November 4, 2021 11:59 AM
To: Emily Zandt <ezandt@germantownwi.gov>; 'Roberts, Eric' <EROBERTS@quad.com>
Cc: rosie.a.roberts@gmail.com; 'Jon Then' <jwthen@yahoo.com>; Jeff Retzlaff <jretzlaff@germantownwi.gov>; Lori Johnson <ljohnson@germantownwi.gov>; 'Kevin Quam' <kparish@quamengineering.com>
Subject: RE: TR Capital Site Plan Review Comments

Emily,

Please see revised civil plans attached to address the Village comments below. Our responses and revisions to the comments are in blue below.

Community Development Department

1. Chapter 17.45(1)(c) requires an 8' wide greenbelt between parking areas and all property boundaries. Please modify the paved parking area along the north property line to at least meet this requirement. (See the recommended setback from the village Forester for preserving the trees along the north property line.) The tree line to the north is essential for screening.
   The plans have been revised to provide an 8' wide greenbelt between the parking areas and property boundaries, see Sheet C-102.

2. The setback of 10' from buildings to the side property lines is insufficient for this site. Landscaping should be added to the area between the buildings and the fence line to provide adequate screening of the site.
   Landscaping has been added to the north side of the 25'x240' building to provide adequate screening. See Sheet C-107.

3. The west end of the most southern proposed building provides visual interest on the west elevation. Can this be mimicked on the proposed buildings to the north? Could landscaping also be added to the west side of each of the buildings?
   The northern buildings cannot provide the visual interest of the south building due to access around the middle building and the north building is not wide enough. The Landscape Plan includes trees and shrubs between the chain link fence and Appleton Avenue to break up the middle and northern building facade. The landscape plantings have been adjusted based on the foresters recommendations.

4. The site shall be fully enclosed by a 6' chain link fence. Please connect the fence on the east end of the property. The fence has been enclosed as requested and is shown on Sheet C-102. The fence along the north and south buildings has been modified to use the building face as a fence.

5. Will wheel stops be installed for the parking stalls along the perimeter of the outdoor storage? We do not believe there is a need for wheel stops since the vehicles parking on this site are going to be parked for long periods of time (months) with low traffic volume. There are also no pedestrian walkways to protect that would require wheel stops.

6. What is the difference between "proposed asphalt" and "recycled asphalt"? Chapter 17.45(1)(c) requires all off street parking to be surfaced with a "bituminous or concrete pavement".
   Recycled asphalt is milled (basically crushed asphalt). It is placed and rolled to compact it which allows the fines and tar to adhere together simulating asphalt.

7. Please provide proposed lighting specification sheets from the manufacturer. The lighting specifications are attached to this email.
8. Proposed signage will require Plan Commission review and approval. The proposed signage will be addressed at a future plan commission meeting.
9. Demolition permits are required for removal of the existing barn prior to any work. Contact SafeBuilt staff in the Village Inspection Services for permit requirements and information.
   The Owners will contact Safebuilt to apply for the demolition permit.

Village Forester

It appears that most of the trees along the north property line either straddle the property line or are situated north of the property line. To protect the longevity of the tree line, it is recommended that no development take place within 15 feet of the north property line. Most of the trees along the north property line are listed as prohibited plants by the Village of Germantown. Many of them are dead or dying and should be removed. Care will be taken to preserve the trees that are in good condition and not invasive.

The tree at the NW corner of the parcel is a 42" cottonwood in good condition and east of the overhead electrical distribution lines along Appleton Avenue. Eliminating three storage units to the east of the tree would allow it to remain. The second tree located behind the existing house is a 25" Norway maple. A large section of the main stem has broken out from previous storm damage. I would recommend that this tree be removed as planned. The Cottonwood is on the list of prohibited plants by the Village of Germantown. The tree is old and the Owners are concerned about it falling on the proposed storage units in the future and would like to remove it. The Landscape Plan includes additional landscaping to replace the 42" cottonwood.

Further comments are as follows:

- The evergreens to be planted should be 7'-8' in size.
- Replace (1) Colorado Blue Spruce with Serbian Spruce
- Replace (3) Black Hills Spruce with Norway Spruce
- Burning Bush is an invasive species according to WDNR NR40 Rule. Need to change species
- Landscape plan is lacking a vertical dimension left of the entrance drive; recommend (2) 2" minimum deciduous trees chosen from Germantown's recommended tree list

The Landscape Plan has been revised to include the sizes and species according to the above recommendations.

Engineering Department

General Comments:

1. Please respond to each item below. A written response addressing each item shall be included in your submittal.
2. The submitted plans have been reviewed for general conformance with State and Village design guidelines. Additional comments could arise as a result of the plan completion and modifications. The items listed below will need to be fully resolved before the Engineering Dept. can recommend a formal approval of the plans and permit for construction.
3. This project will require a WRAPP/NOI from the DNR. Please submit a copy of the approved permit prior to final approval. The NOI approval will be forwarded upon receipt.
4. The project will require DSPS plumbing and infiltration system review and approval. Please provide a copy of the DSPS approval prior to engineering approval. The DSPS approval will be forwarded upon receipt.
5. As-builts prepared to Village standards shall be prepared and provided to the Village post-construction (for all applicable items). As-built pond plans will be provided following construction.
6. A professional engineer's original seal is to be affixed, signed and dated on the final set of construction plans. Plans are electronically stamped.
7. Utility permits and permits for work within the ROW are required. Contact the Village engineering department to obtain permits. The Owners or Contractor will contact the Engineering Department to obtain the necessary permits.
8. As a guide to the review response: Items in italics are resolved or acknowledged, items in regular font are to be addressed yet, items in Bold are additional feedback to remaining original comment.

C-103 Grading Plan

1. Label the steep slope areas of the plan with the max slope. Slopes shall not exceed 3:1. All steep slopes have been labeled. The site is adjacent to a quarry which requires the slopes to exceed the maximum of 3:1. The Owners and Contractor are aware of this situation and the plans include the proper erosion control measures to stabilize and restore the slope. The Bio-filter slope is allowed to be a maximum of 2:1 slope according to DNR Technical Standard 1004.

2. Show additional contours to the north to confirm off-site drainage. The contours to the north are included on the Existing and Proposed Drainage Plans. The area to the north of the site drains to a low area just to the north of the property line. There is an existing berm/fence line that does not allow the drainage from the north to drain into the site. There is no signs of crop damage that would indicate significant ponding, so the area clearly infiltrates, which makes sense since the area is adjacent to a quarry. A description of the existing site conditions and pictures of the berm/low area are included in the report.

3. Proposed swale on the south side of the south storage building is very narrow and not likely to be constructed properly. Revise to something constructible with 3:1 max side slopes and 1.0% minimum slope The proposed swale on the south side of the south storage building has been revised to provide a swale at a 1% minimum slope with 3:1 side slopes.

C-104 Erosion Control Plan

1. Provide erosion control notes that specify inspection requirement, permit requirements, timeframes for stabilization, etc. Refer WDNR guidance. https:lldnr.wisconsin.govltopic/Stormwaterlpublications.html The Wisconsin DNR erosion control notes requested have been added to Sheet C-104.

C-105 Erosion Control Details

1. How will the rip rap stilling basin show be installed on the steep slope. Riprap will be installed on the steep slope as shown on the detail provide on Sheet C-105.

C-106 Stormwater Management plan details

1. How will the rip rap I stilling basin show be installed on the steep slope? Riprap will be installed on the steep slope as shown on the detail provide on Sheet C-105.
2. Berm top width shall be a minimum of 10' The berm width is 10 feet at the 100-year storm elevation which should meet the requirements. The biofilter is accessible to be maintained from the parking area so access is not required along the berm to maintain the device.
3. Berm shall include a core trench or keyway per WDNR technical standards. A keyway is required for wet detention ponds, so the bio-filter should not require a keyway this there is not a permanent wet pool. The outlet pipe does include an anti-seep collar to prevent seepage through the berm.
4. Provide permanent erosion control protection for the overflow spillway. TRM is shown on the overflow spillway on Sheet C-104.

Stormwater management plan comments

1. Site appears to be a mix of new development and redevelopment. Existing impervious area can be considered redevelopment, but non-paved or gravel areas are new development. A weight average of new development at 80% and redevelopment at 40% can be used to determine water quality requirements. Infiltration requirement will apply to new development areas.

The bio-filter will provide 80% TSS reduction which will meet the requirement for the weighted water quality requirements.

2. Provide soil borings for the site. Report notes that the site is exempt from infiltration based on soils and redox present. Please provide additional information on why the site is exempt. Gravels soils would not meet the exemption based on soil type. We reached out to Pete Wood at the Wisconsin DNR to determine if soil test pits were required since the site is contaminated. Pete indicated that since the site is contaminated, soil test pits were not required. The email is attached showing the correspondence .

3. Provide documentation that the material management plan for the site has been updated and the WDNR is approving of the stormwater management plan for this contaminated site.

The material management plan will be updated following Plan Commission approval.

4. WDNR generally does not allow for water quality credit for dry detention basins. Review WDNR guidance documents and adjust design accordingly. The plans have been revised to include a bio-filter with clay liner to minimize infiltration to the contaminated soils.

5. Design must accommodate all tributary flow to the basin. A portion of Appleton Ave and offsite flow to the north of the site appear tributary to the basin. Update to include those areas.

There is a berm along the north lot line and low areas in the field that store the rain. There is no evidence of site run on or long-term standing water.

5. All disturbed areas of the site must be included in the analysis. Include the undetained areas south and east of the detention basin in the calcs. The undetained areas south and east of the bio-filter have been included in the analysis.
6. Review Tc time for proposed area. Cales show 45' of sheet flow, based on the plan it appears to be about 10' before turning into shallow concentrated flow. The time of concentration flowline location has been shown on updated in the analysis.

8. The 2" hole at the end of the 6" pipe is likely to become clogged and will not be easy to clear. Revise design or provide information on how that will be protected from clogging.
The 6" PVC with 2" hole has been replaced with an underdrain since the pond has been revised to a bio-filter.

10. Provide a detail for how the fencing will cross the overflow weir and not obstruct the weir. The fence location has been added to the overflow detail included on Sheet C-106.
11. Include all disturbed areas of the site in the SLAMM model. All disturbed areas are included in the SLAMM model.
12. SLAMM model must account for offsite tributary flow per WDNR requirements. The off-site drainage concerns were addressed in the comment included under the Grading Plan.

12. Basin is modeled as a bio-filter in WinSLAMM. If basin is intended to function as a bio-filter it must be designed to WDNR bio-retention technical standards. Including pretreatment, pending depth, etc. The basin has been modified as a bio-filter on the plans and analysis.

Please review the attached plans and stormwater management report and if everything is acceptable please provide approval. Please contact me with any additional questions or comments.

Thanks,

Jonathan Worden P.E.

Quam Engineering, LLC
122 Wisconsin Street
West Bend, WI 53095
Office: (262)346-7800
Direct: (262)353-9765
jworden@quamengineering.com
www.quamengineering.com

Engineering Department Memorandum

To : Jeffrey W. Retzlaff, AICP, Planning Director/Zoning Administrator

From : Lawrence Ratayczak, P.E., Director of Public Works

Date : September 22, 2021

Re : TR Capitol – Site Plan Review #1

Items Reviewed:

1. Civil Plan Set C0.1 – C5.3 (12 pages) Dated: 07-11-19

General Comments:

1. Please respond to each item below. **A written response addressing each item shall be included in your submittal**.
2. The submitted plans have been reviewed for general conformance with State and Village design guidelines. Additional comments could arise as a result of the plan completion and modifications. The items listed below will need to be fully resolved before the Engineering Dept. can recommend a formal approval of the plans and permit for construction.
3. This project will require a WRAPP/NOI from the DNR. Please submit a copy of the approved permit prior to final approval.
4. The project will require DSPS plumbing and infiltration system review and approval. Please provide a copy of the DSPS approval prior to engineering approval
5. As-builts prepared to Village standards shall be prepared and provided to the Village post-construction (for all applicable items).
6. A professional engineer's original seal is to be affixed, signed and dated on the final set of construction plans.
7. Utility permits and permits for work within the ROW are required. Contact the Village engineering department to obtain permits.
8. As a guide to the review response: Items in *italics* are resolved or acknowledged, items in regular font are to be addressed yet, items in **Bold** are additional feedback to remaining original comment.

C-103 Grading Plan

1. Label the steep slope areas of the plan with the max slope. Slopes shall not exceed 3:1
2. Show additional contours to the north to confirm off-site drainage.
3. Proposed swale on the south side of the south storage building is very narrow and not likely to be constructed properly. Revise to something constructible with 3:1 max side slopes and 1.0% minimum slope

C-104 Erosion Control Plan

1. Provide erosion control notes that specify inspection requirement, permit requirements, timeframes for stabilization, etc. Refer WDNR guidance. https://dnr.wisconsin.gov/topic/Stormwater/publications.html

C-105 Erosion Control Details

1. How will the rip rap / stilling basin show be installed on the steep slope?

C-106 Stormwater Management plan details

1. How will the rip rap / stilling basin show be installed on the steep slope?
2. Berm top width shall be a minimum of 10'
3. Berm shall include a core trench or keyway per WDNR technical standards
4. Provide permanent erosion control protection for the overflow spillway.

Stormwater management plan comments

1. Site appears to be a mix of new development and redevelopment. Existing impervious area can be considered redevelopment, but non-paved or gravel areas are new development. A weight average of new development at 80% and redevelopment at 40% can be used to determine water quality requirements. Infiltration requirement will apply to new development areas.
2. Provide soil borings for the site. Report notes that the site is exempt from infiltration based on soils and redux present. Please provide additional information on why the site is exempt. Gravels soils would not meet the exemption based on soil type.
3. Provide documentation that the material management plan for the site has been updated and the WDNR is approving of the stormwater management plan for this contaminated site.
4. WDNR generally does not allow for water quality credit for dry detention basins. Review WDNR guidance documents and adjust design accordingly.
5. Design must accommodate all tributary flow to the basin. A portion of Appleton Ave and offsite flow to the north of the site appear tributary to the basin. Update to include those areas.
6. All disturbed areas of the site must be included in the analysis. Include the undetained areas south and east of the detention basin in the calcs.
7. Review Tc time for proposed area. Calcs show 45' of sheet flow, based on the plan it appears to be about 10' before turning into shallow concentrated flow.
8. The 2" hole at the end of the 6" pipe is likely to become clogged and will not be easy to clear. Revise design or provide information on how that will be protected from clogging.
9. Provide a detail for how the fencing will cross the overflow weir and not obstruct the weir.
10. Include all disturbed areas of the site in the SLAMM model.
11. SLAMM model must account for offsite tributary flow per WDNR requirements.
12. Basin is modeled as a bio-filter in WinSLAMM. If basin is intended to function as a bio-filter it must be designed to WDNR bio-retention technical standards. Including pretreatment, ponding depth, etc.

Village of Germantown ...Willkommen

Fee must accompany application

- ☐ $700 Minor Addition
- ☐ $1,240 Construction <10,000 SF
- ☑ $2,095 Construction 10,000 SF to 50,000
- ☐ $3,460 Industrial Construction >50,000 SF
- ☐ $3,460 Commercial Construction >50,000
- ☐ $200 Plan Commission Consultation
- ☐ $125 Fire Department Plan Review

PAID_____ DATE_____

SITE PLAN REVIEW APPLICATION

Pursuant to Section 17.43 of the Municipal Code

Please read and complete this application carefully. **All applications must be signed and dated.**

1 APPLICANT OR AGENT

TR Capital, LLC
Jon Then
N91 W27428 Red Fox Run
Hartland, WI 53029

Phone (262) 719-3368
E-Mail rosie.a.roberts@gmail.com

PROPERTY OWNER

TR Capital, LLC
Jon Then
N91 W27428 Red Fox Run
Hartland, WI 53029

Phone (262) 719-3368
E-Mail rosie.a.roberts@gmail.com

2 PROPERTY ADDRESS

W219N11588 Appleton Ave
Germantown, WI 53022

3 NEIGHBORING USES – Specify name and type of use, e.g. Enviro Tech – Industrial, Smith – Residential, etc.

North	South	East	West
Residential/Agricultural/Undeveloped	Commercial (undeveloped)	Commercial (undeveloped) (same property as South)	Agricultural/Undeveloped/ Commercial

4 READ AND INITIAL THE FOLLOWING:

X I am aware of the Village of Germantown ordinance requiring fire sprinklers in most new construction.

X I understand that all new development is subject to Impact and/or Connection Fees that must be paid before building permits will be issued.

X I understand that an incomplete application will be withdrawn from the Plan Commission agenda and that all resubmissions to the Plan Commission are subject to a new application fee.

5 SIGNATURES – ALL APPLICATION MUST BE SIGNED BY OWNER!

(TR Capital) 9-3-21
Applicant Date

9-3-21
Owner Date

TR Capital

PO Box 75
Sussex, WI 53089

Owners:
Jon Then
Heidi Then
Rosie Roberts
Eric Roberts

Planning Commission,

TR Capital, LLC is excited to present the following documents for your review regarding the proposed development of the property located at W21N11588 Appleton Ave.

The following documents have been provided.

Existing Conditions Plan
Proposed Site Plan
Grading Plan
Erosion Control Plan
Erosion Control Details
Storm Water Management Plans and Details
Landscape Plan
Lighting Plan
Construction Notes
Building Plans for the 3 Buildings.

Thanks for your time and support.
TR Capital, LLC

I HAVE REVIEWED THE PRELIMINARY DRAWINGS.

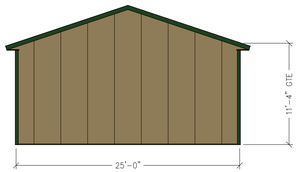
CUSTOMER SIGNATURE: DATE:

I UNDERSTAND THAT CHANGES MAY BE NECESSARY PER CODE OR STRUCTURAL REQUIREMENTS

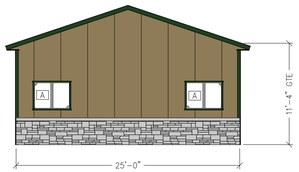
ALL DRAWINGS ARE INTELLECTUAL PROPERTY OF WALTERS BUILDINGS UNTIL SOLD

DOOR & WINDOW SCHEDULE

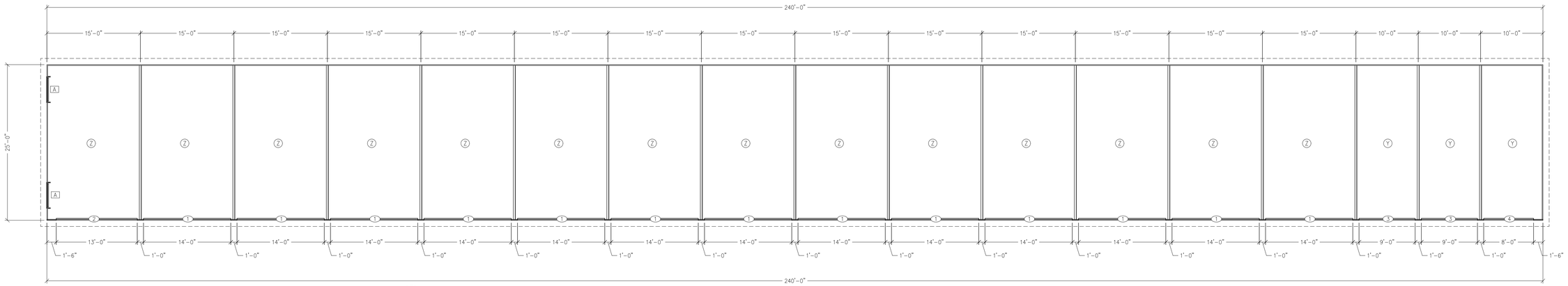
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2	13'-0"x10'-0" ROLL UP DOOR OPENING	1
3	9'-0"x9'-0" ROLL UP DOOR OPENING	2
4	8'-0"x9'-0" ROLL UP DOOR OPENING	1
A	4'-0"x3'-0" HORIZONTAL SLIDE-BY WINDOW	2
Z	15'x40' UNIT	14
Y	10'x40' UNIT	3



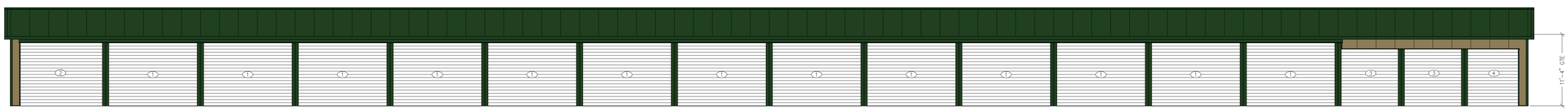
1 A3 EAST END ELEVATION
SCALE: 1/8" = 1'-0"



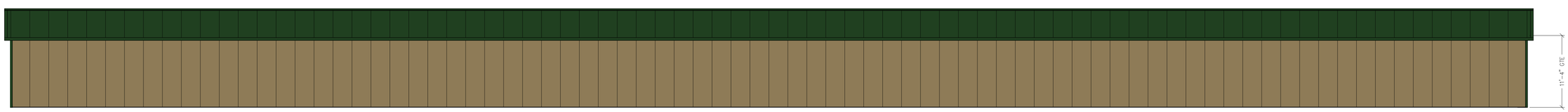
2 A3 WEST END ELEVATION
SCALE: 1/8" = 1'-0"



3 A3 FRAMING PLAN
SCALE: 1/8" = 1'-0"



4 A3 SOUTH SIDE ELEVATION
SCALE: 1/8" = 1'-0"



5 A3 NORTH SIDE ELEVATION
SCALE: 1/8" = 1'-0"

Walters Buildings
Jack Walters & Sons, Corp.
P.O. Box 388
6600 Midland Ct.
Allenton, WI 53002
1-800-558-7800
www.waltersbuildings.com

REVISIONS:

OWNER: JOHN THEN

PROJECT: STORAGE

LOCATION: GERMANTOWN,, WI

SALES REP / DEALER: MARSHALL WISTH

DRAWN BY: JOHN SCHNEIDER JR

ESTIMATED BY:

LAST SAVED BY: JSCHNEIDER ON: 9/3/2021

SCALE: 1/8" = 1'-0" (0, 5, 8, 10)

JOB NUMBER: P95-1590

SHEET NUMBER: A

I HAVE REVIEWED THE PRELIMINARY DRAWINGS.

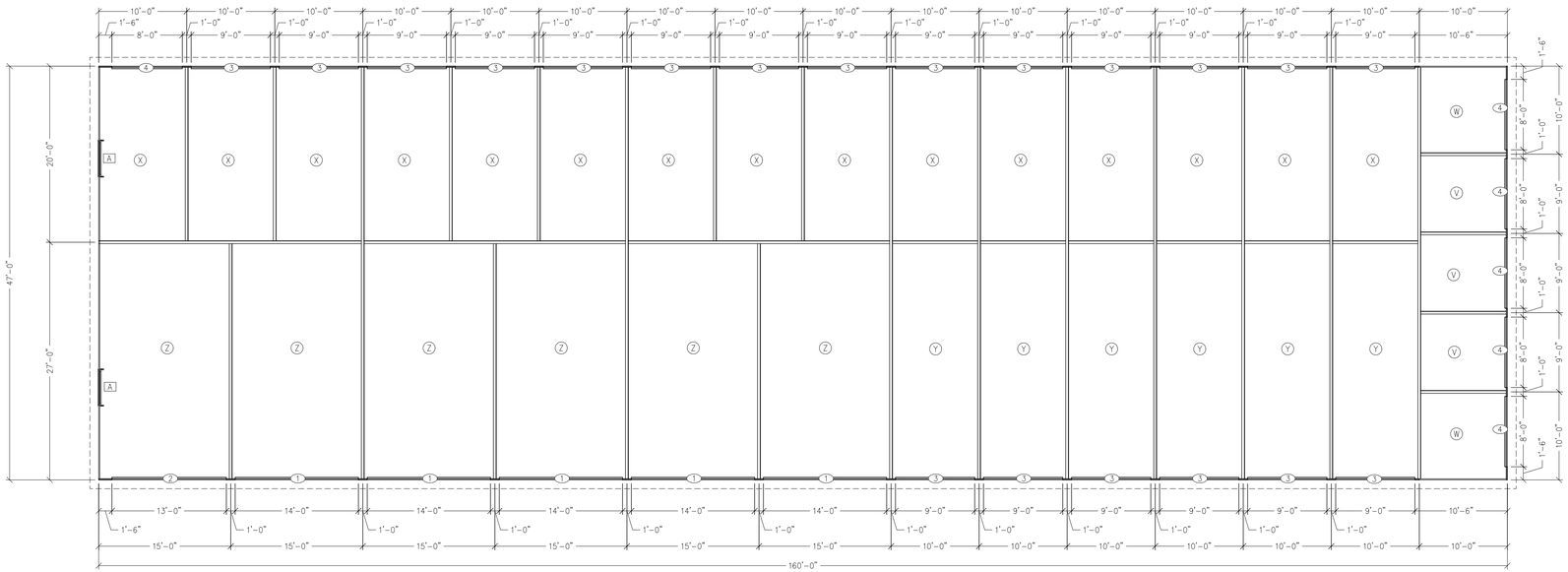
CUSTOMER SIGNATURE: DATE:

I UNDERSTAND THAT CHANGES MAY BE NECESSARY PER CODE OR STRUCTURAL REQUIREMENTS

ALL DRAWINGS ARE INTELLECTUAL PROPERTY OF WALTERS BUILDINGS UNTIL SOLD

DOOR & WINDOW SCHEDULE

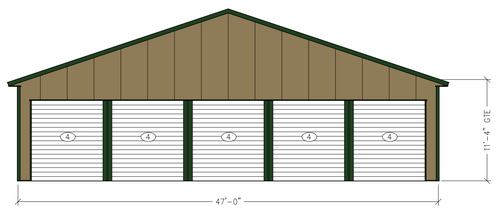
TAG	TYPE	QUANTITY
1	14'-0"x10'-0" ROLL UP DOOR OPENING	5
2	13'-0"x10'-0" ROLL UP DOOR OPENING	1
3	9'-0"x9'-0" ROLL UP DOOR OPENING	20
4	8'-0"x9'-0" ROLL UP DOOR OPENING	6
A	4'-0"x3'-0" HORIZONTAL SLIDE-BY WINDOW	2
Z	15'x27' UNIT	6
Y	10'x27' UNIT	6
X	10'x20' UNIT	15
W	10'x10' UNIT	2
V	9'x10' UNIT	3



1 / A3 FRAMING PLAN
SCALE: 1/8" = 1'-0"



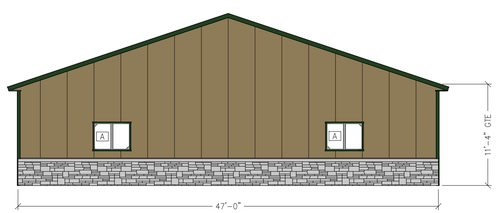
2 / A3 SOUTH SIDE ELEVATION
SCALE: 1/8" = 1'-0"



3 / A3 EAST END ELEVATION
SCALE: 1/8" = 1'-0"



4 / A3 NORTH SIDE ELEVATION
SCALE: 1/8" = 1'-0"



5 / A3 WEST END ELEVATION
SCALE: 1/8" = 1'-0"

Walters Buildings
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P.O. Box 388
6600 Midland Ct.
Allenton, WI 53002
1-800-558-7800
www.waltersbuildings.com

REVISIONS:

OWNER: JOHN THEN

PROJECT: STORAGE

LOCATION: GERMANTOWN,. WI

SALES REP / DEALER: MARSHALL WISTH

DRAWN BY: JOHN SCHNEIDER JR

ESTIMATED BY:

LAST SAVED BY: JSCHNEIDER ON: 9/3/2021

SCALE: 1/8" = 1'-0" (0, 5', 8', 10')

JOB NUMBER: P95-1590

SHEET NUMBER: B

I HAVE REVIEWED THE PRELIMINARY DRAWINGS.

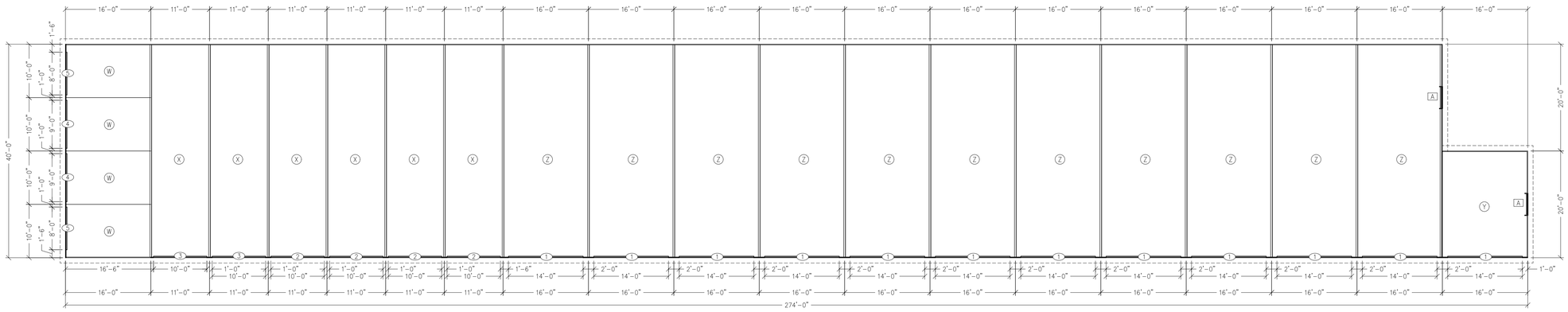
CUSTOMER SIGNATURE: DATE:

I UNDERSTAND THAT CHANGES MAY BE NECESSARY PER CODE OR STRUCTURAL REQUIREMENTS

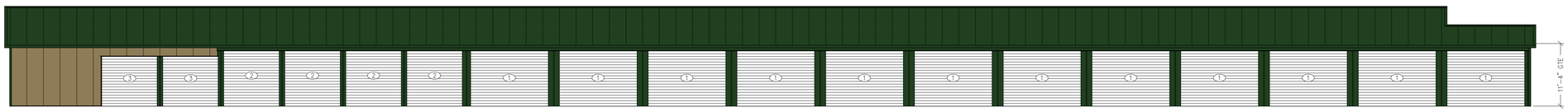
ALL DRAWINGS ARE INTELLECTUAL PROPERTY OF WALTERS BUILDINGS UNTIL SOLD

DOOR, WINDOW & UNIT SCHEDULE

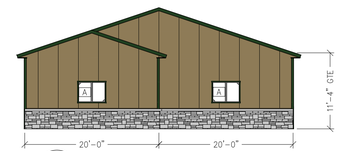
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2	10'-0"x10'-0" ROLL UP DOOR FRAMED OPENING	4
3	10'-0"x9'-0" ROLL UP DOOR FRAMED OPENING	2
4	9'-0"x9'-0" ROLL UP DOOR FRAMED OPENING	2
5	8'-0"x9'-0" ROLL UP DOOR FRAMED OPENING	2
A	4'-0"x3'-0" HORIZONTAL SLIDE-BY WINDOW	2
Z	16'x40' UNIT	11
Y	16'x20' UNIT	1
X	11'x40' UNIT	6
W	10'x16' UNIT	4



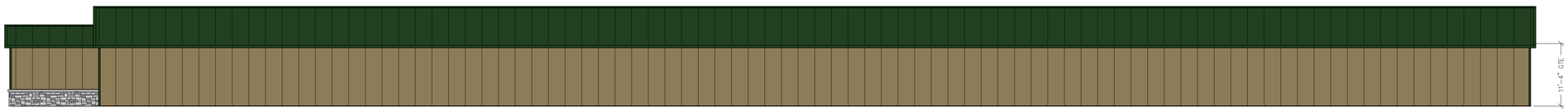
1 / A2 FRAMING PLAN
SCALE: 3/32" = 1'-0"



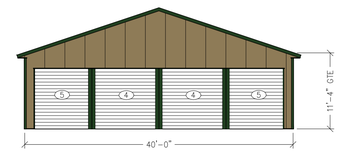
2 / A2 NORTH SIDE ELEVATION
SCALE: 3/32" = 1'-0"



3 / A2 WEST END ELEVATION
SCALE: 3/32" = 1'-0"



4 / A2 SOUTH SIDE ELEVATION
SCALE: 3/32" = 1'-0"



5 / A2 EAST END ELEVATION
SCALE: 3/32" = 1'-0"

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REVISIONS:

OWNER:
JOHN THEN

PROJECT:
STORAGE

LOCATION:
GERMANTOWN, WI

SALES REP / DEALER:
MARSHALL WISTH

DRAWN BY:
JOHN SCHNEIDER JR

ESTIMATED BY:

LAST SAVED BY:
JSCHNEIDER ON: 9/3/2021

SCALE:
AS NOTED

JOB NUMBER:
P95-1590

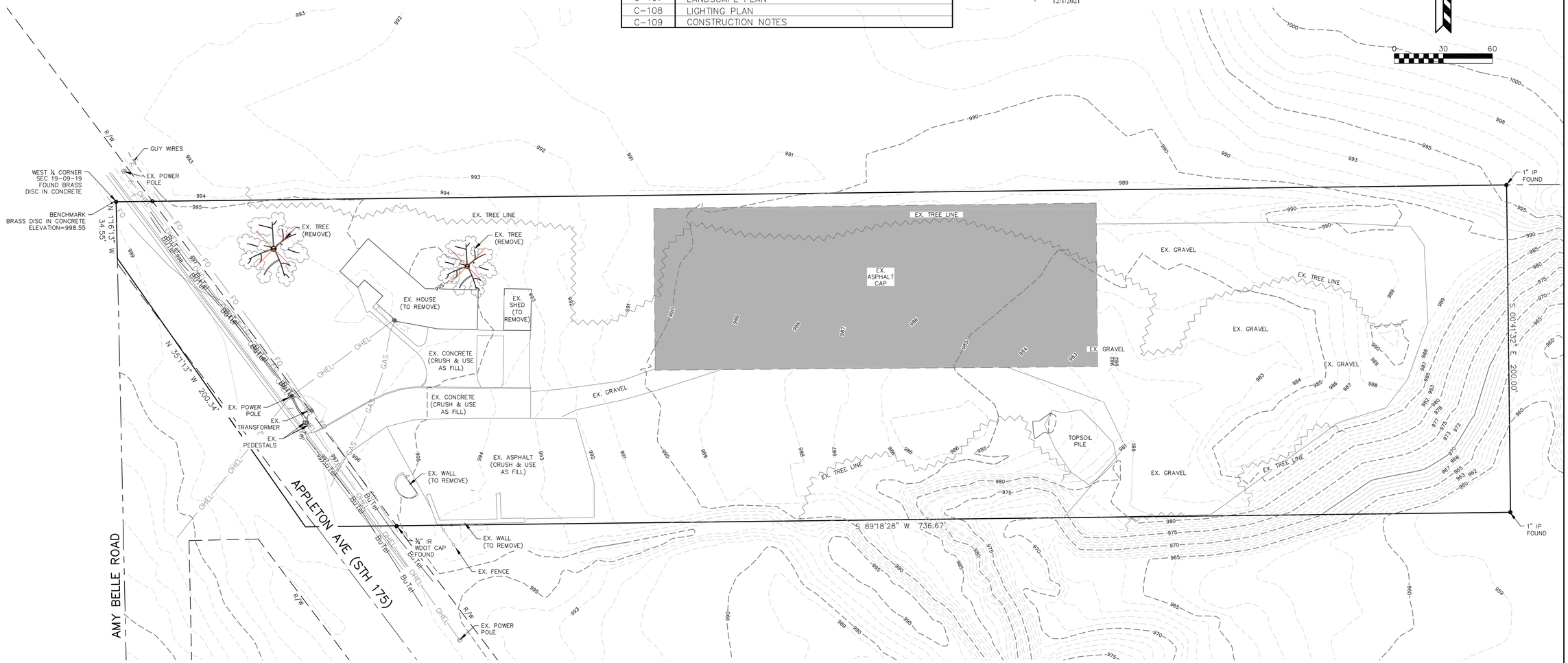
SHEET NUMBER:
C

VJT-04-21\VJT04BASE.DWG

QUAM ENGINEERING, LLC 122 Wisconsin Street, West Bend, WI 53095 (262) 346-7800

CIVIL SHEET INDEX:	
SHEET	SHEET TITLE
C-101	EXISTING SITE & DEMOLITION PLAN
C-102	PROPOSED SITE PLAN
C-103	GRADING PLAN
C-104	EROSION CONTROL PLAN
C-105	EROSION CONTROL DETAILS
C-106	STORMWATER MANAGEMENT AND DETAILS
C-107	LANDSCAPE PLAN
C-108	LIGHTING PLAN
C-109	CONSTRUCTION NOTES

WISCONSIN
KEVIN PARISH
37406
MADISON
WI
PROFESSIONAL ENGINEER
Kevin Parish
12/1/2021



LEGEND:

- 896 – EXISTING MINOR CONTOUR.
- 895 – EXISTING MAJOR CONTOUR.
- OHEL – OVERHEAD ELECTRIC LINE.
- BuEl – BURIED ELECTRIC LINE.
- BuTel – BURIED TELEPHONE LINE.
- FO – FIBER OPTIC LINE.
- GAS – GAS LINE.
- SAN – SANITARY SEWER MAIN OR LATERAL.
- WAT – WATER MAIN OR SERVICE.
- STORM SEWER LINE.
- ELEC – ELECTRIC METER.
- GAS – GAS METER.
- GAS VALVE.
- FIRE HYDRANT.
- E – POWER POLE.
- SN – SANITARY SEWER MANHOLE.
- ST – STORM SEWER MANHOLE.
- STORM SEWER INLET.
- T – TELEPHONE PEDESTAL.
- TRAN – TRANSFORMER.
- W – WATER VALVE.

Existing Area Table	
Description	Area (sf)
Building	2,537
Concrete	4,543
Asphalt	33,664
Gravel	31,363
Total Impevious Area	72,107
Total Lot Area	150,873

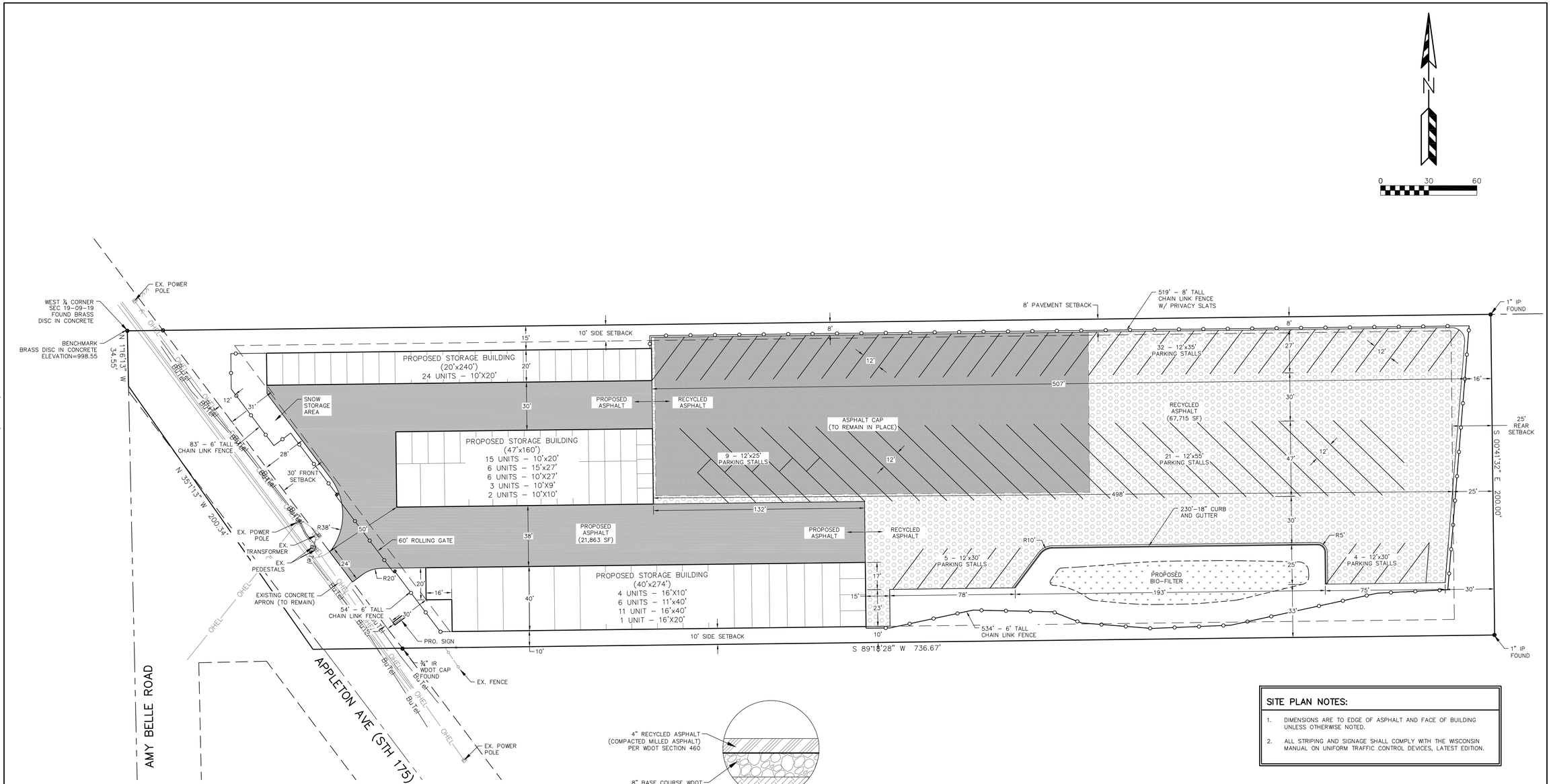
APPLETON AVENUE STORAGE FACILITY
EXISTING CONDITIONS PLAN
DATED: NOVEMBER 19, 2021

C-101

QUAM ENGINEERING, LLC
Residential and Commercial Site Design Consultants
122 Wisconsin Street; West Bend, Wisconsin 53095
Phone (262) 346-7800; www.quamengineering.com

VJT-04-21\VJT04BASE.DWG

QUAM ENGINEERING, LLC 122 Wisconsin Street, West Bend, WI 53095 (262) 346-7800



SITE INFORMATION BLOCK

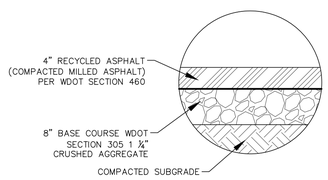
Site Address W219 N11588 Appleton Avenue
Site acreage (total) 3.464 acres

Current Zoning M-1
Setbacks Building/Pavement
Front 30' / 10'
Side 10' / 8'
Rear 25' / 8'
Maximum Percent Coverage 80%

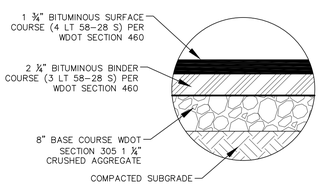
Number of Outdoor Storage Stalls:

Stall Size	Stalls
12' x 20'	9
12' x 30'	9
12' x 35'	32
12' x 40'	21
Total	73

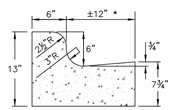
Proposed Area Table	
Description	Area (sf)
Total Lot Area	150,873
Building	22,960
Asphalt	89,578
Total Impevious Area	112,538
% Impervious	74.6
Total Green Space	38,335
% Green Space	25.4



RECYCLED ASPHALT SECTION



ASPHALT PAVEMENT SECTION



18" STANDARD CONCRETE CURB & GUTTER

GENERAL NOTES:

1. LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15' NOR LESS THAN 6' IN LENGTH. THE JOINTS SHALL BE A MINIMUM OF 3" IN DEPTH. EXPANSION JOINTS SHALL BE PLACED TRANSVERSLY AT RADIUS POINTS ON CURVES OF RADIUS 200' OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER. THE EXPANSION JOINT SHALL BE A ONE PIECE ASPHALTIC MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 1/2" THICK. IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE.
2. * CURB APRON ±12" TO FIT STANDARD CURB MACHINE

18" CURB AND GUTTER DETAILS

SITE PLAN NOTES:

1. DIMENSIONS ARE TO EDGE OF ASPHALT AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
2. ALL STRIPING AND SIGNAGE SHALL COMPLY WITH THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

PAVING LEGEND

RECYCLED ASPHALT
10" CRUSHED AGGREGATE BASE COURSE
4" RECYCLED ASPHALT (2-2" LIFTS)

8" CRUSHED AGGREGATE BASE COURSE
2 1/4" ASPHALTIC BINDER 3 LT 58-28 S
1 3/4" ASPHALTIC SURFACE 4 LT 58-28 S

APPLETON AVENUE STORAGE FACILITY
PROPOSED SITE PLAN
DATED: DECEMBER 1, 2021

C-102

QUAM ENGINEERING, LLC
Residential and Commercial Site Design Consultants
122 Wisconsin Street; West Bend, Wisconsin 53095
Phone (262) 346-7800; www.quamengineering.com

QUAM ENGINEERING, LLC 122 Wisconsin Street, West Bend, WI 53095 (262) 346-7800

VJT-04-21\VJT04BASE.DWG

LEGEND:

- 936 – EXISTING MINOR CONTOUR.
- 935 – EXISTING MAJOR CONTOUR.
- 936 – PROPOSED MINOR CONTOUR.
- 935 – PROPOSED MAJOR CONTOUR.
- EX=934.23 – EXISTING SPOT ELEVATION.
- 934.23 – PROPOSED SPOT ELEVATION.
- PROPOSED STORM SEWER.

N

0 30 60

WEST ¼ CORNER SEC 19-09-19 FOUND BRASS DISC IN CONCRETE

BENCHMARK BRASS DISC IN CONCRETE ELEVATION=998.55

N 11°51'37" W 34.55'

EX. POWER POLE

2' TALL BERM (SEE DETAIL C-107)

PROPOSED SWALE (SEE DETAIL C-105)

PROPOSED STORAGE BUILDING (20'x240')

PROPOSED STORAGE BUILDING (47'x160')

PROPOSED STORAGE BUILDING (40'x274')

PROPOSED ASPHALT

ASPHALT CAP (FILL WITH BASE AND RECYCLED ASPHALT TO PROPOSED GRADES)

CB #1 (3' DIA) RIM=987.00 15" IE=983.94

172' - 15" PVC STORM @ 5.52%

RECYCLED ASPHALT

INLET #2 (2'x3') TC=984.20 15" IE=980.10

10'-15" HDPE @ 1.0% 15" IE=980.00

PROPOSED BIO-FILTER (SEE DETAIL C-106)

POND OUTLET STRUCTURE (SEE DETAIL C-106)

OVERFLOW WEIR

1" IP FOUND

S 00°41'32" E 200.00'

S 89°18'28" W 736.67'

N 35°11'3" W 200.34'

EX. TRANSFORMER

EX. PEDESTALS

996.72

996.65

995.25

APPLETON AVE (STH 175)

AMY BELLE ROAD

¾" IR WDOT CAP FOUND

EX. FENCE

OHEL

Buried

EO

APPLETON AVENUE STORAGE FACILITY

GRADING PLAN

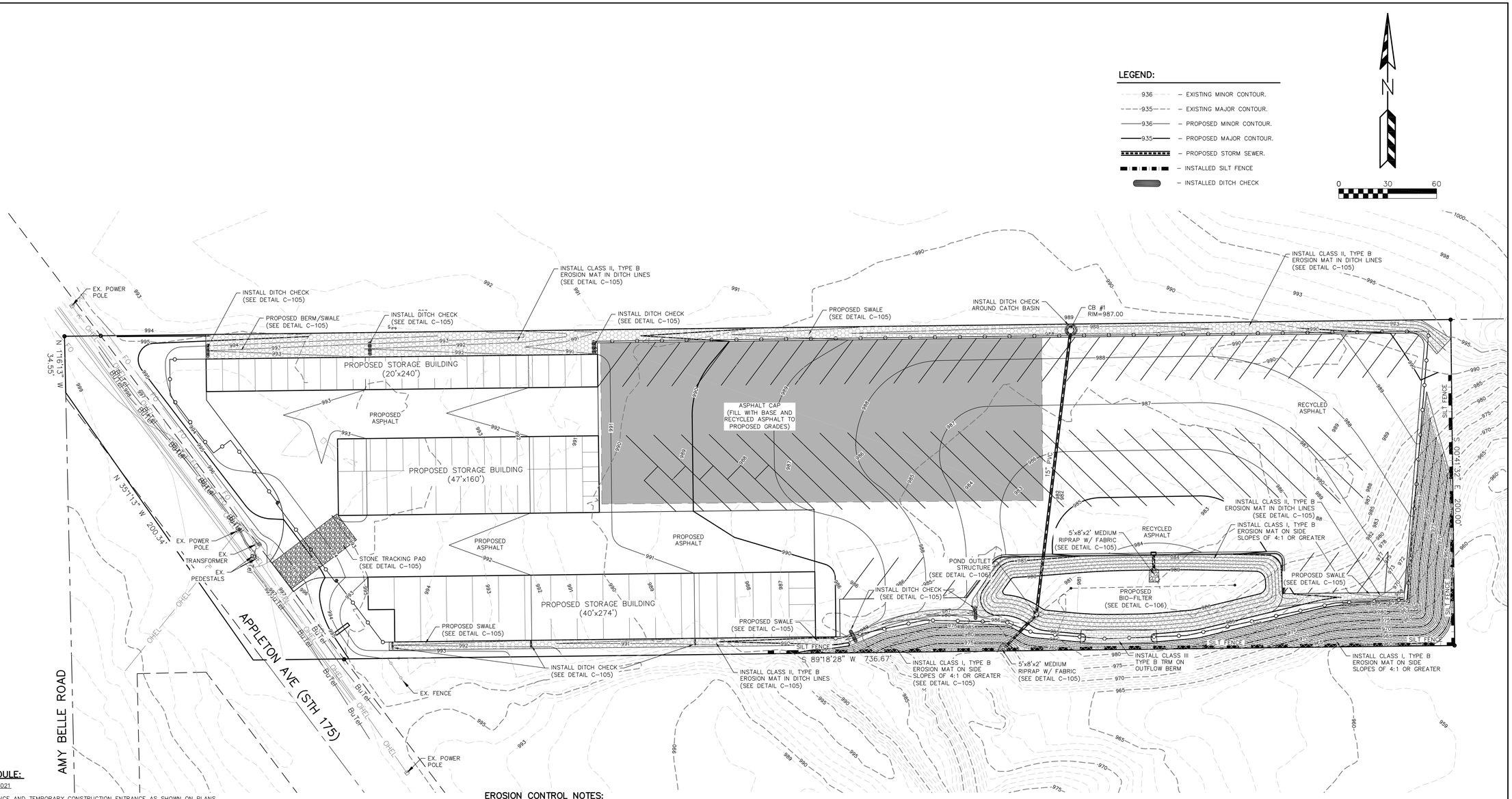
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TIME SCHEDULE:

NOVEMBER 15, 2021

INSTALL SILT FENCE AND TEMPORARY CONSTRUCTION ENTRANCE AS SHOWN ON PLANS.

NOVEMBER 15, 2021 – SEPTEMBER 1, 2022

DEMO EXISTING BUILDINGS, CRUSH CONCRETE AND ASPHALT AND STOCKPILE FOR USE AS FILL.

STRIP TOPSOIL AND CONSTRUCT TEMPORARY TOPSOIL STOCKPILE LOCATION ACCORDING TO "SPECIFICATIONS FOR GRADING & EROSION CONTROL" ON "CONSTRUCTION NOTES PAGE".

BEGIN CONSTRUCTION OF BIO-FILTER. DO NOT INSTALL ENGINEERED SOIL UNTIL FINAL RESTORATION.

BEGIN PROPOSED SITE GRADING INCLUDING BUILDING PAD PREPARATION.

INSTALL BASE COURSE, PAVEMENT, AND RECYCLED ASPHALT.

SEPTEMBER 2 – 15, 2022

ALL PERMANENT SEEDING SHALL BE COMPLETED BY SEPTEMBER 15. ALL TEMPORARY SEEDING SHALL BE COMPLETED BY OCTOBER 15 (REFER TO DNR STANDARD 1059.)

INSTALL ENGINEERED SOIL, CLAY LINER, STONE STORAGE LAYER AND 6" UNDERDRAIN IN BIO-FILTER. INSTALL COCONUT MATTING AND NATIVE SEED MIX.

STABILIZATION FOR ALL EXPOSED SOIL AFTER OCTOBER 15 SHALL CONSIST OF ANIONIC POLYACRYLAMIDE (PAM) IN ADDITION TO TEMPORARY SEEDING IN AREAS WITHOUT EROSION CONTROL MAT. PLACE PAM IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1050. AFTER OCTOBER 15 ALL SLOPES 4:1 OR STEEPER THAT ARE NOT PERMANENTLY VEGETATED SHALL HAVE EROSION MAT INSTALLED IN PREPARATION OF WINTER CONDITIONS. SLOPES SHALL NOT EXCEED 2:1.

SPREAD SALVAGED OR IMPORTED TOPSOIL IN PROPOSED LANDSCAPE AREAS AND RESTORE.

CONTRACTOR MAY MODIFY SEQUENCING AS NEEDED TO COMPLETE CONSTRUCTION IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS SET FORTH IN FEDERAL, STATE & LOCAL PERMITS. NOTIFY VILLAGE OF GERMANTOWN PRIOR TO CHANGE.

AS CONDITIONS WARRANT DURING CONSTRUCTION ADDITIONAL BMPS SHALL BE INSTALLED TO REDUCE THE MIGRATION OF SEDIMENT THE THE MAXIMUM EXTENT PRACTICABLE

REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AFTER SITE IS STABILIZED AND STABILIZE AND AREAS DISTURBED BY REMOVAL OF BMPS.

EROSION CONTROL NOTES:

1. POST WDNR CERTIFICATE OF PERMIT COVERAGE ON SITE AND MAINTAIN UNTIL CONSTRUCTION ACTIVITIES HAVE CEASED, THE SITE IS STABILIZED, AND A NOTICE OF TERMINATION IS FILED WITH WDNR.
2. KEEP A COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
3. SUBMIT PLAN REVISIONS OR AMENDMENTS TO THE WDNR AT LEAST 5 DAYS PRIOR TO FIELD IMPLEMENTATION.
4. OWNER IS RESPONSIBLE FOR ROUTINE SITE INSPECTIONS AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER. KEEP INSPECTION REPORTS ON-SITE AND MAKE THEM AVAILABLE UPON REQUEST.
5. INSPECT AND MAINTAIN ALL INSTALLED EROSION CONTROL PRACTICES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
6. WHEN POSSIBLE: PRESERVE EXISTING VEGETATION (ESPECIALLY ADJACENT TO SURFACE WATERS), MINIMIZE LAND-DISTURBING CONSTRUCTION ACTIVITY ON SLOPES OF 20% OR MORE, MINIMIZE SOIL COMPACTION, AND PRESERVE TOPSOIL.
7. REFER TO THE WDNR STORMWATER CONSTRUCTION TECHNICAL STANDARDS AT http://dnr.wi.gov/topic/stormwater/standards/const_standards.html.
8. INSTALL PERIMETER EROSION CONTROLS AND ROCK TRACKING PAD CONSTRUCTION ENTRANCE(S) PRIOR TO ANY LAND-DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRUBBING. USE WDNR TECHNICAL STANDARD STONE TRACKING PAD AND TIRE WASHING #1057 FOR ROCK CONSTRUCTION ENTRANCE(S).
9. INSTALL INLET PROTECTION PRIOR TO LAND-DISTURBING ACTIVITIES IN THE CONTRIBUTING DRAINAGE AREA AND/OR IMMEDIATELY UPON INLET INSTALLATION. COMPLY WITH WDNR TECHNICAL STANDARD STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES #1060.
10. STAGE CONSTRUCTION GRADING ACTIVITIES TO MINIMIZE THE CUMMULATIVE EXPOSED AREA. CONDUCT TEMPORARY GRADING FOR EROSION CONTROL PER WDNR TECHNICAL STANDARD TEMPORARY GRADING PRACTICES FOR EROSION CONTROL #1067.
11. PERMITTING OF GROUNDWATER DEWATERING IS THE RESPONSIBILITY OF OWNER. GROUNDWATER DEWATERING IS SUBJECT TO A DNR WASTEWATER DISCHARGE PERMIT AND A DNR HIGH CAPACITY WELL APPROVAL IF CUMULATIVE PUMP CAPACITY IS 70 GPM OR MORE. (Rev. February 2017)
12. PROVIDE ANTI-SCOUR PROTECTION AND MAINTAIN NON-EROSIVE FLOW DURING DEWATERING. PERFORM DEWATERING OF ACCUMULATED SURFACE RUNOFF IN ACCORDANCE WITH WDNR TECHNICAL STANDARD DE-WATERING #1061. (Rev. February 2017)
13. CONSTRUCT AND PROTECT THE BIO-FILTER AND VEGETATION FROM RUNOFF AND SEDIMENT DURING CONSTRUCTION. REFERENCE THE WDNR TECHNICAL STANDARD BIORETENTION FOR INFILTRATION # 1004.
14. INSTALL AND MAINTAIN SILT FENCING PER WDNR TECHNICAL STANDARD SILT FENCE #1056. REMOVE SEDIMENT FROM BEHIND SILT FENCES AND SEDIMENT BARRIERS BEFORE SEDIMENT REACHES A DEPTH THAT IS EQUAL TO ONE-HALF OF THE FENCE AND/OR BARRIER HEIGHT.
15. REPAIR BREAKS AND GAPS IN SILT FENCES AND BARRIERS IMMEDIATELY. REPLACE DECOMPOSING STRAW BALES (TYPICAL BALE LIFE IS 3 MONTHS). LOCATE, INSTALL, AND MAINTAIN STRAW BALES PER WDNR TECHNICAL STANDARD DITCH CHECKS #1062.
16. INSTALL AND MAINTAIN FILTER SOCKS IN ACCORDANCE WITH WDNR TECHNICAL STANDARD INTERIM MANUFACTURED PERIMETER CONTROL AND SLOPE INTERRUPTION PRODUCTS # 1071.
17. IMMEDIATELY STABILIZE STOCKPILES AND SURROUND STOCKPILES AS NEEDED WITH SILT FENCE OR OTHER PERIMETER CONTROL IF STOCKPILES WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER.
18. STABILIZE ALL DISTURBED AREAS THAT REMAIN INACTIVE FOR 14 DAYS OR LONGER.
19. STABILIZE AREAS OF FINAL GRADING WITHIN 7 DAYS OF REACHING FINAL GRADE.

APPLETON AVENUE STORAGE FACILITY
EROSION CONTROL PLAN
DATED: DECEMBER 1, 2021

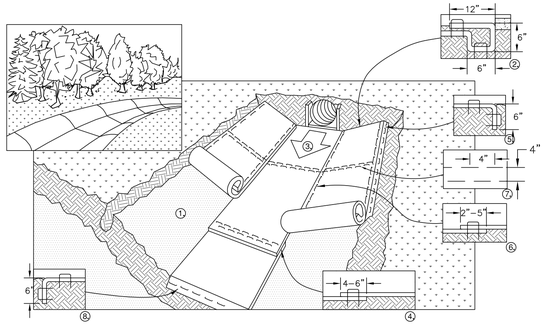
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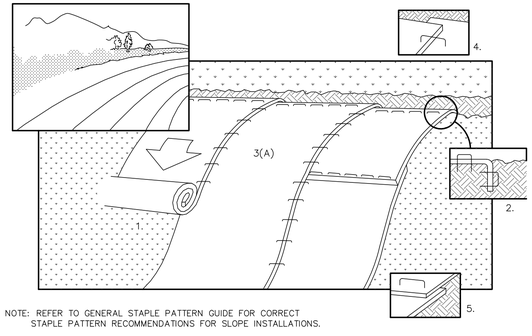
MAXIMUM PERIOD OF BARE SOIL FOR SLOPES > 20%		
SLOPE AREA DRAINS TO SEDIMENT BASIN OR SEDIMENT TRAP?	MAXIMUM PERIOD OF BARE SOIL EXPOSURE (CALENDAR DAYS)	
	LAND DISTURBANCE BETWEEN SEPTEMBER 16TH AND MAY IST	LAND DISTURBANCE BETWEEN MAY 2ND AND SEPTEMBER 15TH
YES	90	90
NO	60	30



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPE MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 4" AND STAPLED.
7. A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

NOTE: ALL STAPLES MUST BE 6" OR GREATER IN LENGTH

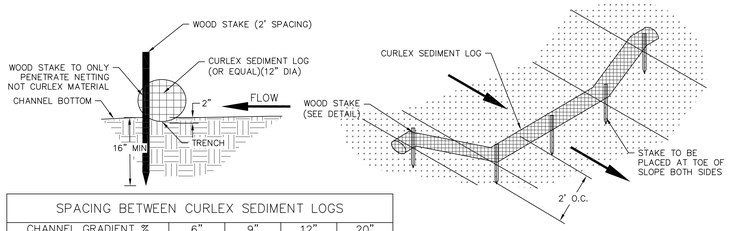
EROSION CONTROL MAT – CHANNEL INSTALLATION



NOTE: REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

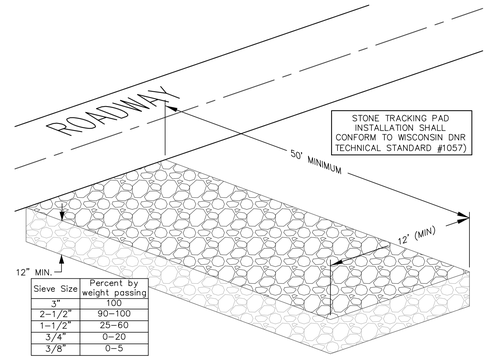
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY
6. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SLOPE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.

EROSION CONTROL MAT – SLOPE INSTALLATION



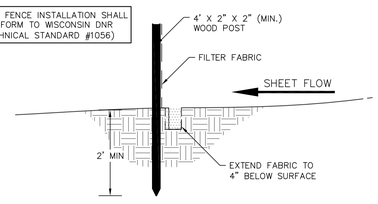
SPACING BETWEEN CURLEX SEDIMENT LOGS				
CHANNEL GRADIENT %	6"	9"	12"	20"
0.5	91.7	136.7	183.3	250.0
1.0	45.8	68.3	91.7	125.0
1.5	30.6	45.6	61.1	83.3
2	22.9	34.2	45.8	62.5

SEDIMENT LOG DETAIL

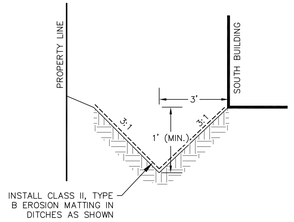


Sieve Size	Percent by weight passing
3"	100
2-1/2"	90-100
1-1/2"	25-60
3/4"	0-20
3/8"	0-5

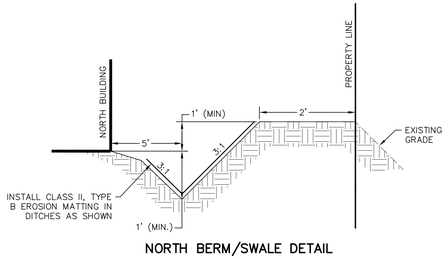
STONE TRACKING PAD DETAIL



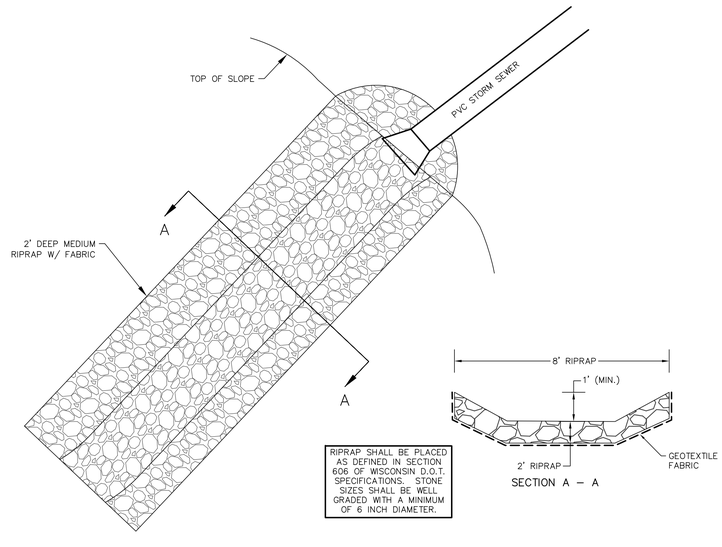
SILT FENCE CONSTRUCTION (SHEET FLOW)



SOUTH SWALE CROSS SECTION



NORTH BERM/SWALE DETAIL



SECTION A – A

RIPRAP SLOPE STABILAZATION DETAIL

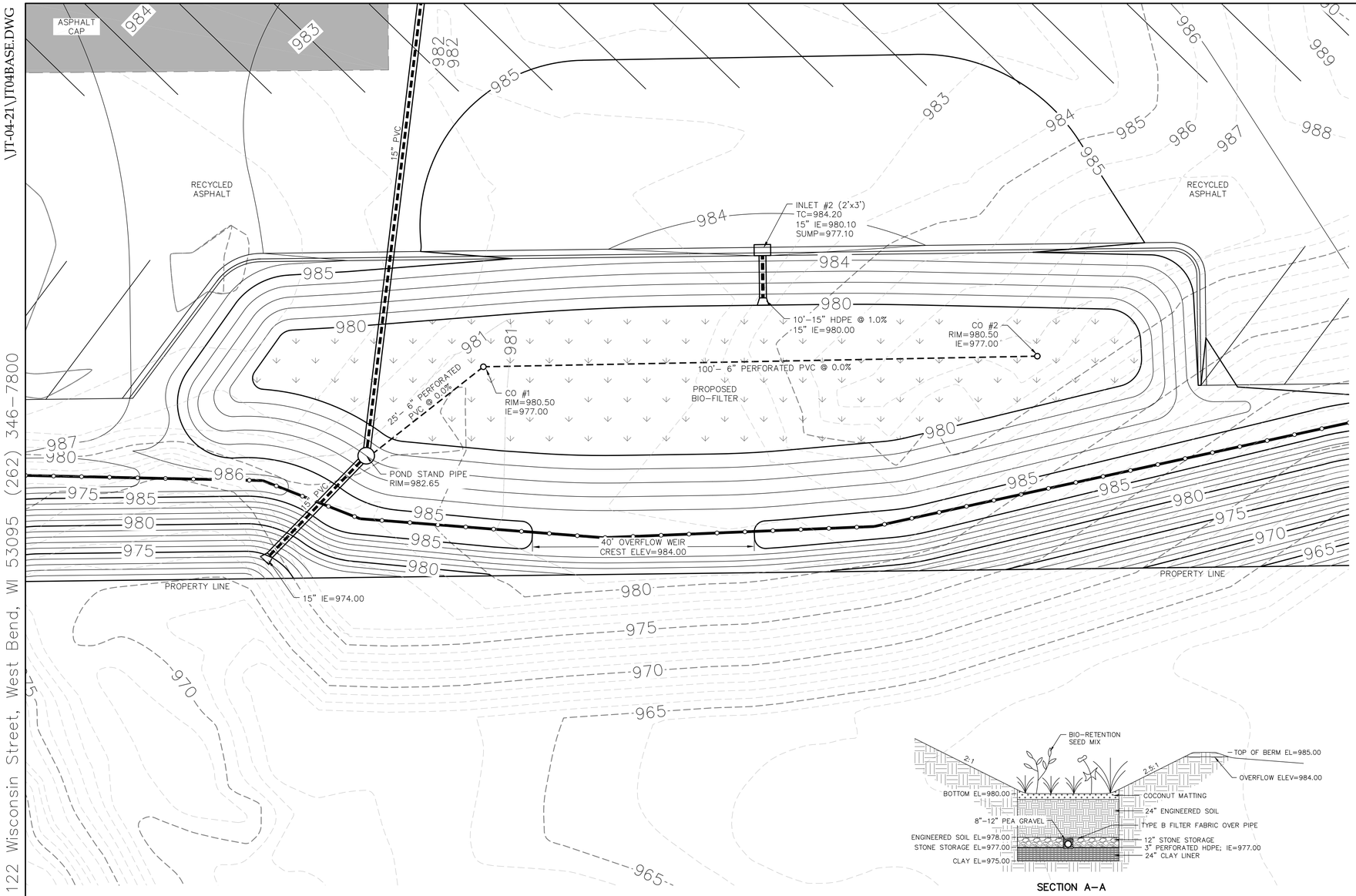
APPLETON AVENUE STORAGE FACILITY
EROSION CONTROL DETAILS
DATED: DECEMBER 1, 2021

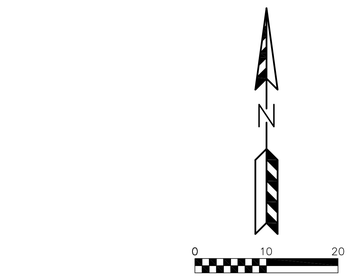
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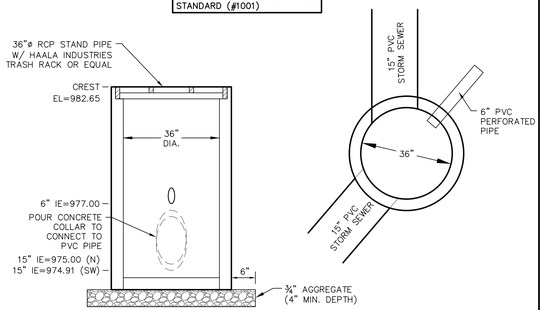
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OUTLET STRUCTURE CONSTRUCTION SHALL CONFORM TO WISCONSIN DNR TECHNICAL STANDARD (#1001)



STAND PIPE DETAIL

BIO-FILTER NOTES:

1. BIO-FILTER BASIN CONSTRUCTION SHALL CONFORM TO WISCONSIN DNR TECHNICAL STANDARD #1004.

2. ESTABLISHMENT - COVER CROPS NEED TO BE APPLIED IN CONJUNCTION WITH THE INITIAL SEEDING OF PERMANENT VEGETATION. WHEN ESTABLISHING TURF TYPE GRASS, USE THE CRITERIA CONTAINED IN THE DNR CONSERVATION PRACTICE STANDARD SEEDING FOR CONSTRUCTION SITE EROSION CONTROL (1059). SOD SHALL NOT BE USED. IF TURF GRASS IS UTILIZED, THE BASIN CANNOT BE USED FOR RECREATIONAL PURPOSES DUE TO COMPACTION CONCERNS.

3. NATIVE SEEDING - NATIVE VEGETATION SHALL BE ESTABLISHED IN CONFORMANCE WITH RECOMMENDATIONS FROM A QUALIFIED NATIVE NURSERY IN THE AREA. IF TREES ARE TO BE USED, SPECIES SHALL BE SELECTED THAT WILL NOT INTERFERE WITH THE FUNCTION OF THE BASIN, OR CAUSE MAINTENANCE PROBLEMS. SECTION IX REFERENCES, LISTS SOURCES THAT PROVIDE SUGGESTED SEED MIXTURES. NATIVE (PRAIRIE) SEEDING SHALL BE COMPLETED IN THE FALL (AS DORMANT SEEDING PRIOR TO FIRST SNOWFALL) OR IN THE SPRING (BETWEEN MAY 1 AND JUNE 20), OR PLUGS SHALL BE USED.

4. FERTILIZER - SOIL TESTING SHALL BE USED TO DETERMINE PROPER APPLICATIONS FOR NUTRIENTS AND LIMING. FERTILIZER APPLICATION SHALL CONFORM TO THE CRITERIA LOCATED IN NRCS CONSERVATION PRACTICE TECHNICAL STANDARD, CRITICAL AREA PLANTING (342) OR WDNR CONSERVATION PRACTICE STANDARD SEEDING FOR CONSTRUCTION SITE EROSION CONTROL (1059).

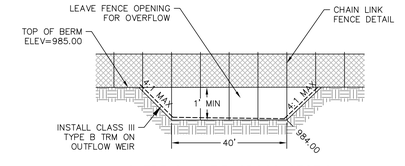
5. MULCH - MULCH SHALL CONFORM TO THE CRITERIA LOCATED IN WDNR CONSERVATION PRACTICE STANDARD MULCHING FOR CONSTRUCTION SITES (1058).

6. BIO-FILTER BASIN SHALL NOT BE INSTALLED UNTIL THE SITE IS STABILIZED.

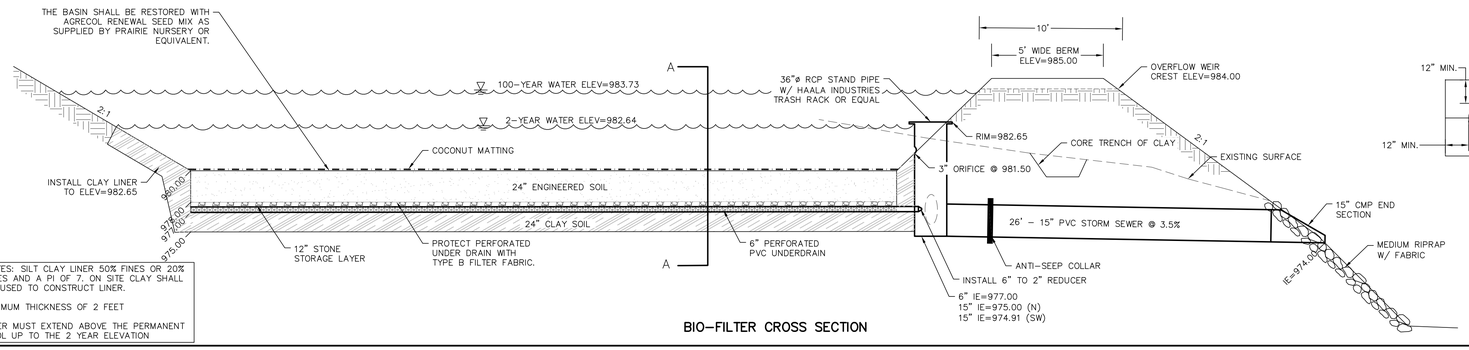
7. ONCE CONSTRUCTION OF THE BIO-FILTER BASIN BEGINS, THE BASIN SHALL BE CORDONED OFF AND PROTECTED FROM COMPACTION FROM HEAVY EQUIPMENT.

8. SEED MIXTURE FOR BIO-FILTER BASIN BOTTOM SHALL BE AGRECOL RENEWAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SATISFACTORY STAND ON ALL SEEDED AREAS FOR ONE YEAR AFTER THE PROJECT'S FINAL ACCEPTANCE.

SECTION A-A



OVERFLOW WEIR CROSS SECTION

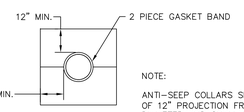


NOTES: SILT CLAY LINER 50% FINES OR 20% FINES AND A PI OF 7. ON SITE CLAY SHALL BE USED TO CONSTRUCT LINER.

MINIMUM THICKNESS OF 2 FEET

LINER MUST EXTEND ABOVE THE PERMANENT POOL UP TO THE 2 YEAR ELEVATION

BIO-FILTER CROSS SECTION



NOTE:

ANTI-SEEP COLLARS SHALL HAVE A MINIMUM OF 12" PROJECTION FROM THE PIPE OUTSIDE DIAMETER AND SHALL BE SPACED AT AN INTERVAL NOT TO EXCEED 12 TIMES THE PROJECTION. COLLARS SHALL NOT BE PLACED CLOSER THAN WITHIN 2" OF A PIPE JOINT.

ANTI-SEEP COLLAR DETAIL

APPLETON AVENUE STORAGE FACILITY

STORMWATER MANAGEMENT PLAN AND DETAILS

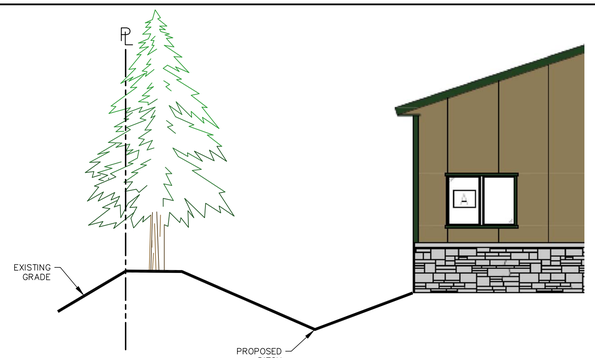
DATED: DECEMBER 1, 2021

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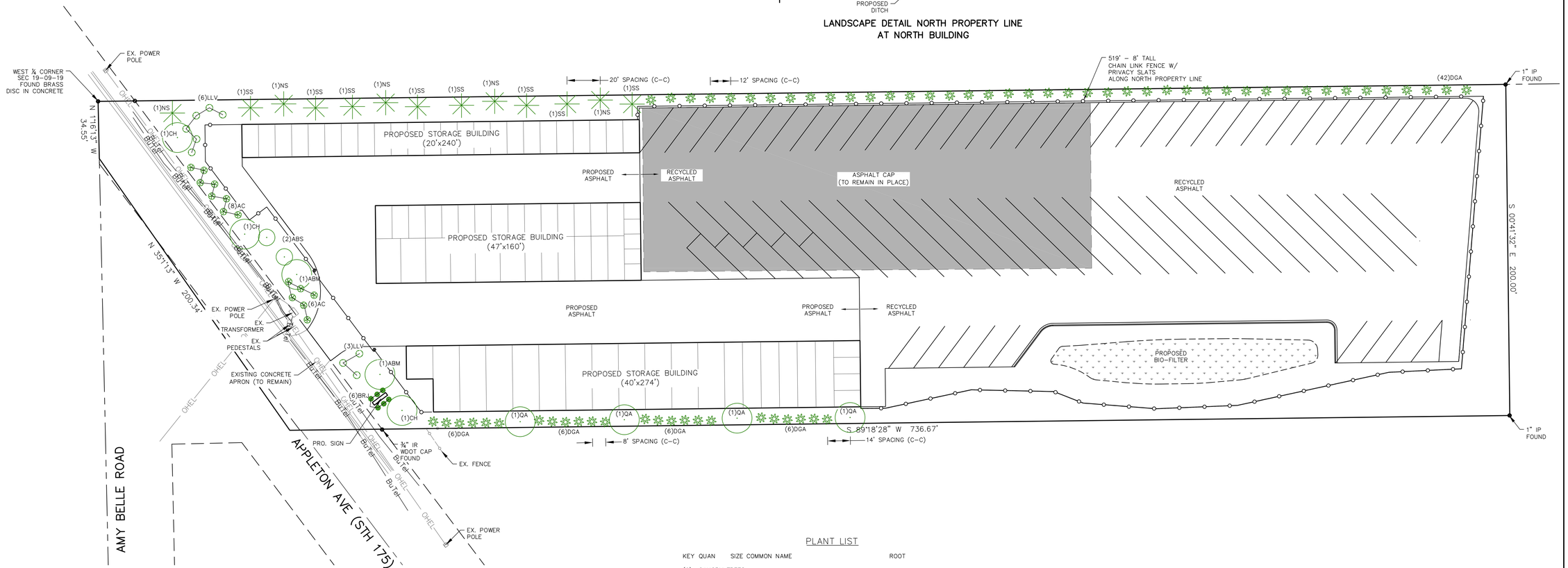
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LANDSCAPE DETAIL NORTH PROPERTY LINE
AT NORTH BUILDING



PLANT LIST

KEY	QUAN	SIZE	COMMON NAME	ROOT
(9)			CANOPY TREES	
ABM	2	2.5"	AUTUMN BLAZE MAPLE	BB
CH	3	2.5"	COMMON HACKBERRY	BB
QA	4	2.5"	QUAKING ASPEN	BB
(2)			LOW ORNAMENTAL TREES	
ABS	2	2.5"	AUTUMN BRILLIANCE SERVICEBERRY	BB
(79)			EVERGREEN TREES	
SS	8	7'	SERBIAN SPRUCE	BB
NS	5	7'	NORWAY SPRUCE	BB
DGA	66	7'	DARK GREEN ARBORVITAE	BB
(23)			DECIDUOUS SHRUBS	
AC	14	18"	ALPINE CURRANT	POT
LLV	9	36"	LEATHER LEAF VIBURNUM	POT
(6)			EVERGREEN SHRUBS	
BRJ	6	1 G	BLUE RUG JUNIPER	CON

NOTES:

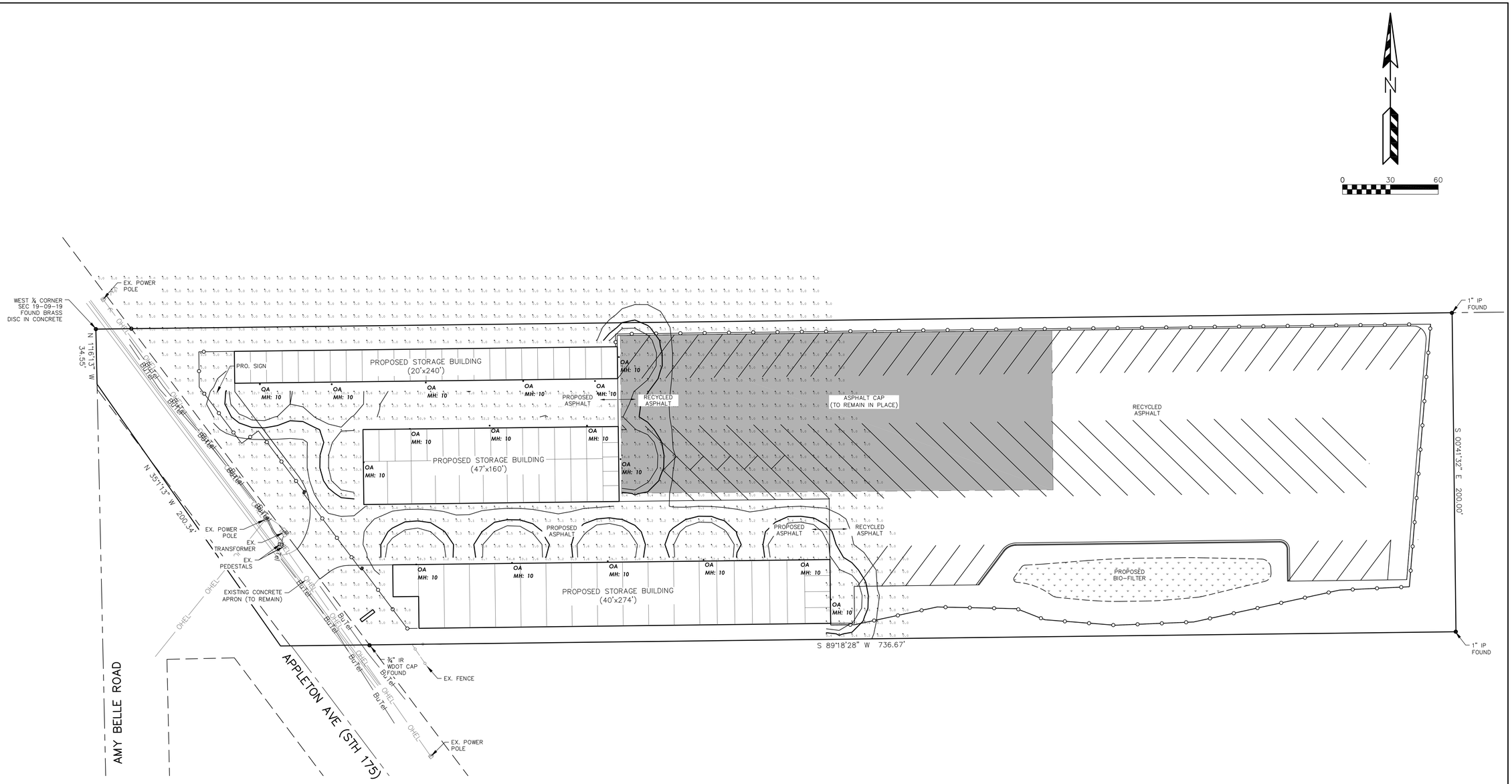
1) DESIGNATED LAWN AREAS TO RECEIVE A MINIMUM OF 6" OF TOPSOIL, STARTER FERTILIZER, AND LOCALLY GROWN BLUEGRASS SOD.
2) FOUNDATION PLANTING BEDS AND DESIGNATED PLANTING BEDS TO BE MULCHED WITH SHREDDED HARDWOOD BARK MULCH SPREAD TO A DEPTH OF 3".
3) INDIVIDUAL TREES AND SHRUB GROUPINGS IN LAWN AREAS TO RECEIVE SHREDDED HARDWOOD BARK MULCH PLANT RINGS (4' DIAMETER) SPREAD TO A DEPTH OF 3"
4) DESIGNATED PLANTING BEDS TO BE SEPARATED FROM LAWN AREAS WITH 5" BLACK VINYL EDGING.
5) OWNER WILL BE RESPONSIBLE FOR LANDSCAPE MAINTENANCE AFTER COMPLETION AND ACCEPTANCE OF THE PROJECT.

APPLETON AVENUE STORAGE FACILITY
LANDSCAPE PLAN
DATED: DECEMBER 1, 2021

C-107

QUAM ENGINEERING, LLC
Residential and Commercial Site Design Consultants
122 Wisconsin Street; West Bend, Wisconsin 53095
Phone (262) 346-7800; www.quamengineering.com

VJT-04-21\VJT04BASE.DWG



LUMINAIRE SCHEDULE								
Symbol	Qty	Label	Manufacturer	Description	Arrangement	Lum. Lumens	Lum. Watts	LLF
⊡	17	OA	LUMARK	AXCS4A	SINGLE	5520	43.7	0.900

CALCULATION SUMMARY							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CALCPTS_1	Illuminance	Fc	0.95	19.7	0.0	N.A.	N.A.

NOTES:

1) STANDARD REFLECTANCE OF 80/50/20 UNLESS NOTED OTHERWISE
2) NOT A CONSTRUCTION DOCUMENT, FOR DESIGN PURPOSES ONLY
3) STANDARD INDOOR CALC POINTS @ 30 A.F.F. UNLESS NOTED OTHERWISE
4) STANDARD OUTDOOR CALC POINTS @ GRADE UNLESS NOTED OTHERWISE
5) EGRESS CALC POINTS @ 0" A.F.F.
6) MLAZGAR ASSOCIATES ASSUMES NO RESPONSIBILITY FOR INSTALLED LIGHT LEVELS DUE TO FIELD CONDITIONS, ETC.

APPLETON AVENUE STORAGE FACILITY
LIGHTING PLAN
DATED: DECEMBER 1, 2021

C-108

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GENERAL SPECIFICATIONS FOR CONSTRUCTION ACTIVITIES:

1. THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR SEWER & WATER IN WISCONSIN, AND WISCONSIN ADMINISTRATIVE CODE, SPS 360 382–383, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.

2. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR EXECUTION OF THE WORK. THE CONTRACTOR SHALL CONDUCT HIS WORK ACCORDING TO THE REQUIREMENTS OF THE PERMITS.

3. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE MUNICIPALITY FORTY–EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.

4. THE MUNICIPALITY SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE PUBLIC PORTIONS OF THE WORK. THE OWNER SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF ALL PRIVATE PORTIONS OF THE WORK.

5. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, AND THE MUNICIPALITY, THEIR AGENTS, ETC, FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.

6. SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

7. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL UTILITY INFORMATION SHOWN ON THE PLANS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL CALL DIGGERS HOTLINE AT 1–800–242–8511 TO NOTIFY THE UTILITIES OF HIS INTENTIONS, AND TO REQUEST FIELD STAKING OF EXISTING UTILITIES.

8. SILT FENCE AND OTHER EROSION CONTROL FACILITIES MUST BE INSTALLED PRIOR TO CONSTRUCTION OR ANY OTHER LAND DISTURBING ACTIVITY. FOLLOW THE SEQUENCE OF CONSTRUCTION ON THE EROSION CONTROL PLAN FOR MORE DETAILS. INSPECTIONS SHALL BE MADE WEEKLY OR AFTER EVERY RAINFALL OF 0.5" OR MORE. REPAIRS SHALL BE MADE IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL FACILITIES ONCE THE THREAT OF EROSION HAS PASSED WITH THE APPROVAL OF THE GOVERNING AGENCY.

9. ANY ADJACENT PROPERTIES OR ROAD RIGHT–OF–WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR.

10. TRASH AND DEBRIS SHALL NOT BE ALLOWED TO ACCUMULATE ON THIS SITE AND THE SITE SHALL BE CLEAN UPON COMPLETION OF WORK.

11. THE OWNER SHALL HAVE THE RIGHT TO HAVE ALL MATERIALS USED IN CONSTRUCTION TESTED FOR COMPLIANCE WITH THESE SPECIFICATIONS.

SPECIFICATIONS FOR GRADING & EROSION CONTROL:

1. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING AND FOR ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT. CONTRACTOR SHALL NOTIFY OWNER OF THE NEED TO IMPORT OR HAUL OFF SOIL. ON–SITE LOCATIONS SUITABLE FOR BORROW OR FILL MAY BE PRESENT. COORDINATE WITH OWNER.

2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT MAY BE AVAILABLE FROM THE OWNER.

3. SITE SHALL BE CLEARED TO THE LIMITS SHOWN ON THE PLANS. REMOVE VEGETATION FROM THE SITE BURNING IS NOT PERMITTED. PROTECT TREES AND OTHER FEATURES FROM DAMAGE WITH FENCING.

4. THE GEOTECHNICAL ENGINEER IS RESPONSIBLE FOR VERIFYING COMPACTION AND FILL PLACEMENT IN THE FIELD. THE GEOTECHNICAL ENGINEER MAY SUPERCEDE THESE SPECIFICATIONS IF THERE IS GOOD CAUSE TO DO SO. AN EXPLANATION MUST BE SUBMITTED TO THE ENGINEER IN WRITING BEFORE ANY DEVIATIONS ARE MADE.

5. IF NO GEOTECHNICAL RECOMMENDATION IS AVAILABLE, THEN THE FOLLOWING SPECIFICATIONS SHALL APPLY. ALL FILL SHALL BE CONSIDERED STRUCTURAL FILL AND SHALL BE PLACED IN ACCORDANCE WITH THE FOLLOWING: THE COMPACTED FILL SUBGRADE SHALL CONSIST OF AND SHALL BE UNDERLAIN BY SUITABLE BEARING MATERIALS, FREE OF ALL ORGANIC, FROZEN OR OTHER DELETERIOUS MATERIAL AND INSPECTED AND APPROVED BY THE RESIDENT GEOTECHNICAL ENGINEER.PREPARATION OF THE SUBGRADE, AFTER STRIPPING, SHALL CONSIST OF PROOF–ROLLING TO DETECT UNSTABLE AREAS THAT MIGHT BE UNDERCUT, AND COMPACTING THE SCARIFIED SURFACE TO THE SAME MINIMUM DENSITY INDICATED BELOW.THE COMPACTED FILL MATERIALS SHALL BE FREE OF ANY DELETERIOUS, ORGANIC OR FROZEN MATTER AND SHALL HAVE A MAXIMUM LIQUID LIMIT (ASTM–D–423) AND PLASTICITY INDEX (ASTM D–424) IF 30 AND 10 RESPECTFULLY, UNLESS SPECIFICALLY TESTED AND FOUND TO HAVE LOW EXPANSIVE PROPERTIES AND APPROVED BY AN EXPERIENCED SOILS ENGINEER. THE TOP TWELVE (12") INCHES OF COMPACTED FILL SHOULD HAVE A MAXIMUM THREE (3") INCH PARTICLE DIAMETER AND ALL UNDERLYING COMPACTED FILL A MAXIMUM SIX (6") INCH PARTICLE DIAMETER UNLESS SPECIFICALLY APPROVED BY AN EXPERIENCED SOILS ENGINEER. ALL FILL MATERIAL MUST BE TESTED AND APPROVED UNDER THE DIRECTION AND SUPERVISION OF AN EXPERIENCED SOILS ENGINEER PRIOR TO PLACEMENT, IF THE FILL IS TO PROVIDE NON–FROST SUSCEPTIBLE CHARACTERISTICS, IT MUST BE CLASSIFIED AS A CLEAN GW, GP, SW, OR SP PER UNITED SOIL CLASSIFICATION SYSTEM(ASTM D–2487). FOR STRUCTURAL FILL THE DENSITY OF THE STRUCTURAL COMPACTED FILL AND SCARIFIED SUBGRADE AND GRADES SHALL NOT BE LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D–698) WITH THE EXCEPTION TO THE TOP 12 INCHES OF PAVEMENT SUBGRADE WHICH SHALL A MINIMUM IN–SITU DENSITY OF 100 PERCENT OF THE MAXIMUM DRY DENSITY, OR 5 PERCENT HIGHER THAN UNDERLYING FILL MATERIALS.THE MOISTURE CONTENT OF COHESIVE SOIL SHALL NOT VARY BY MORE THAN –1 TO +3 PERCENT AND GRANULAR SOIL ±3 PERCENT OF OPTIMUM WHEN PLACED AND COMPACTED OR RECOMPACTED, UNLESS SPECIFICALLY APPROVED BY THE SOILS ENGINEER TAKING INTO CONSIDERATION THE TYPE OF MATERIALS AND COMPACTION EQUIPMENT BEING USED. THE COMPACTION EQUIPMENT SHOULD CONSIST OF SUITABLE MECHANICAL EQUIPMENT SPECIFICALLY DESIGNED FOR SOIL COMPACTION. BULLDOZERS OR SIMILAR TRACKED VEHICLES ARE TYPICALLY NOT SUITABLE FOR COMPACTION. MATERIAL THAT IS TOO WET TO PERMIT PROPER COMPACTION MAY BE SPREAD ON THE FILL AND PERMITTED TO DRY. DISCING,HARROWING OR PULVERIZING MAY BE NECESSARY TO REDUCE THE MOISTURE CONTENT TO A SATISFACTORY VALUE, AFTER WHICH IT SHALL BE COMPACTED. THE FINISHED SUBGRADE AREAS OF THE SITE SHALL BE COMPACTED TO 100 PERCENT OF THE STANDARD PROCTOR (ASTM D–398) MAXIMUM DENSITY.

6. NO FILL SHALL BE PLACED ON A WET OR SOFT SUBGRADE THE SUBGRADE SHALL BE PROOF–ROLLED AND INSPECTED BY THE GEOTECHNICAL ENGINEER BEFORE ANY MATERIAL IS PLACED.

7. SUBGRADE TOLERANCES ARE +/– 1" FOR LANDSCAPE AREAS AND +/– ½" FOR ALL PAVEMENT AND BUILDING AREAS.

8. TOPSOIL SHALL BE FREE OF DELETERIOUS MATERIALS, ROOTS, OLD VEGETATION, ROCKS OVER 2" DIAMETER AND SHALL NOT BE EXCESSIVELY CLAYEY IN NATURE. NO CLUMPS LARGER THAN 4" ARE ACCEPTABLE. TOPSOIL MAY BE AMENDED AS NEEDED WITH SAND OR COMPOST TO BE LOOSE WHEN SPREAD.

9. THE CONTRACTOR SHALL MAINTAIN SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE THE EXCAVATION OF TEMPORARY DITCHED OR PUMPING TO ALLEVIATE WATER PONDING. ANY DEWATERING SHALL NOT GO DIRECTLY TO STREAMS, CREEKS, WETLANDS OR OTHER ENVIRONMENTALLY SENSITIVE AREAS WITHOUT BEING TREATED FIRST. A DIRT BAG OR OTHER DEWATERING TREATMENT DEVICE MAY BE USED TO CAPTURE SEDIMENT FROM THE PUMPED WATER.

10. THE STONE TRACKING PAD SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION. THE TRACKING PAD IS TO BE MAINTAINED BY THE CONTRACTOR IN A CONDITION, WHICH WILL PREVENT THE TRACK OF MUD OR DRY SEDIMENT ONTO THE ADJACENT PUBLIC STREETS. SEDIMENT REACHING THE PUBLIC ROAD SHALL BE REMOVED BY STREET CLEANING (NOT HYDRAULIC FLUSHING) BEFORE THE END OF EACH WORKDAY.

11. SOIL STOCKPILES SHALL BE LOCATED A MINIMUM OF 75 FEET FROM LAKES, STREAMS, WETLANDS, DITCHES, DRAINAGE WAYS, CURBS AND GUTTERS OR OTHER STORMWATER CONVEYANCE SYSTEM, UNLESS OTHERWISE APPROVED BY THE ENGINEER. MEASURES SHALL BE TAKEN TO MINIMIZE EROSION AND RUNOFF FROM ANY SOIL STOCKPILES THAT WILL LIKELY REMAIN FOR MORE THAN FIVE WORKING DAYS. ANY STOCKPILE THAT REMAINS FOR MORE THAN 30 DAYS SHALL BE COVERED OR TREATED WITH STABILIZATION PRACTICES SUCH AS TEMPORARY OR PERMANENT SEEDING AND MULCHING.

12. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO GRADING OPERATIONS AND SHALL BE PROPERLY MAINTAINED FOR MAXIMUM EFFECTIVENESS UNTIL VEGETATION IS ESTABLISHED. ALL EROSION CONTROL MEASURES AND STRUCTURES SERVING THE SITE MUST BE INSPECTED AT LEAST WEEKLY OR WITHIN 24 HOURS OF A 0.5 INCH RAIN EVENT. ALL MAINTENANCE WILL FOLLOW AN INSPECTION WITHIN 24 HOURS.

13. CUT AND FILL SLOPES SHALL BE NO GREATER THAN 2:1.

14. EROSION CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ACCEPTANCE OF THIS PROJECT. EROSION CONTROL MEASURES AS SHOWN SHALL BE THE MINIMUM PRECAUTIONS THAT WILL BE ALLOWED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECOGNIZING AND CORRECTING ALL EROSION CONTROL PROBLEMS THAT ARE A RESULT OF CONSTRUCTION ACTIVITIES. ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED IN WRITING BY THE STATE OR LOCAL INSPECTORS, OR THE DEVELOPER'S ENGINEER, SHALL BE INSTALLED WITHIN 24 HOURS.

15. ALL DISTURBED SLOPES OF 4:1 OR GREATER AND DRAINAGE SWALES SHALL BE STABILIZED WITH EROSION CONTROL FABRIC AS SHOWN ON EROSION CONTROL PLAN SHEET C–104 (INSTALL PER MANUFACTURER'S SPECIFICATIONS).

SPECIFICATIONS FOR PRIVATE UTILITIES:

1. EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE.BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN. CONTRACTOR SHALL CALL "DIGGERS HOTLINE" PRIOR TO ANY CONSTRUCTION.

2. MATERIALS FOR STORM SEWER SHALL BE AS FOLLOWS: STORM SEWER PIPE 48" OR LESS SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) CORRUGATED PIPE WITH AN INTEGRALLY FORMED SMOOTH WATERWAY SUCH AS ADS N–12. FOR PIPE 10" OR LESS IN DIAMETER, PVC, ASTM D–3034, SDR–26, MAY ALSO BE USED. WHERE SPECIFICALLY REQUIRED, REINFORCED CONCRETE PIPE (RCP), ASTM C–76, CLASS III OR HIGHER, MAY BE USED. TRENCH SECTION SHALL BE CLASS "B" FOR PVC AND HDPE AND CLASS "C" FOR CONCRETE (PER STANDARD SPECIFICATIONS). MANHOLES, INLETS AND CATCH BASINS SHALL BE PRE CAST REINFORCED CONCRETE, ASTM C–478. CASTINGS SHALL BE HEAVY DUTY CAST IRON. AREA DRAINS SHALL BE ADSNYLOPLAST OR EQUIVALENT AND SHALL BE A MINIMUM OF 24" IN DIAMETER. CONNECTIONS TO EXISTING PIPES SHALL BE MADE WITH INSERT A WYE OR EQUIVALENT. LAST (3) THREE JOINTS SHALL BE RESTRAINED WITH RODS. PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M–294, TYPE S.

3. TRACER WIRE (NO.8 SINGLE STRAND COPPER) AND WARNING TAPE SHALL BE INSTALLED ON ALL UTILITIES IN ACCORDANCE WITH THE LOCAL AND STATE CODES. TRACER WIRE SHALL TERMINATE IN A VALVECO TERMINAL BOX AT EACH END IN ACCORDANCE WITH 182.0715(2R) OF STATE STATUTES.

4. ALL UTILITY CONSTRUCTION SHALL BE DONE IN COMPLIANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (LATEST EDITION AND ADDENDUM) AND ALL STATE AND LOCAL CODES. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE WHICH SPECIFICATIONS APPLY, AND TO COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE LOCAL AND STATE AUTHORITIES.

5. THE LENGTHS OF ALL UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM THE PLAN. LENGTHS SHALL BE VERIFIED IN THE FIELD DURING CONSTRUCTION.

6. GENERAL CONTRACTOR SHALL COORDINATE WITH LOCAL GAS TELEPHONE, AND ELECTRICAL UTILITIES FOR EXACT LOCATION SIZE AND DEPTH OF NEW SERVICE AND REMOVAL OF EXISTING SERVICES.

7.ALL WORK WITHIN THE APPLETON AVENUE RIGHT–OF–WAY REQUIRES A PERMIT FROM THE WISCONSIN D.O.T.

SPECIFICATIONS FOR PAVING:

1. AGGREGATES USED IN THE CRUSHED STONE BASE SHALL CONFORM TO THE GRADATION REQUIREMENTS SECTIONS 301.2 AND 305.2.2 OF THE STANDARD SPECIFICATIONS. THICKNESS SHALL BE PER THE DETAIL ON THE PLANS. BASE SHALL BE 1–1/4" INCH DIAMETER LIMESTONE TRAFFIC BOND AGGREGATE BASE COURSE UNLESS NOTED OTHERWISE. SUBSTITUTION AND/OR RECYCLED MATERIALS MAY BE ALLOWED WITH APPROVAL FROM THE OWNER.

2. SUBGRADE SHALL BE PROOFROLLED AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF STONE BASE. EXCAVATE UNSUITABLE AREAS AND REPLACE WITH BREAKER RUN STONE AND RECOMPACT. REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL SPECIFICATIONS.

3. EXISTING PAVEMENT SHALL BE SAWCUT IN NEAT STRAIGHT LINES TO FULL DEPTH AT ANY POINT WHERE EXISTING PAVEMENT IS REMOVED. CURB AND WALK SHALL BE REMOVED TO THE NEAREST JOINT. REMOVED PAVEMENT SHALL BE REPLACED WITH THE SAME SECTION AS EXISTING. MUNICIPAL STANDARDS MAY REQUIRE ADDITIONAL WORK.

4. ASPHALT FOR PARKING AREAS AND THE PRIVATE ROAD SHALL BE PER THE DETAILS MATERIALS AND PLACEMENT SHALL CONFORM TO THE DOT STANDARD SPECIFICATIONS, SECTION 450 AND 460 LT 58–28 S IS REQUIRED UNLESS NOTED OTHERWISE A COMMERCIAL GRADE MIX MAY BE SUBSTITUTED ONLY WITH APPROVAL FROM THE OWNER.

5. TACK COAT SHALL BE IN ACCORDANCE WITH THE SUBSECTION 455.2.5 OF THE STANDARD SPECIFICATIONS. THE RATE OF APPLICATION SHALL BE 0.025 GAL/SY.

6. PAVEMENT MARKINGS SHALL BE PAINT IN ACCORDANCE WITH WISCONSIN DOT SECTION 646 OF THE STANDARD SPECIFICATIONS AND WITH LOCAL CODES. THE FOLLOWING ITEMS SHALL BE PAINTED WITH COLORS NOTED BELOW:

PARKING STALLS: WHITE

RESTORATION NOTES:

1. ALL DISTURBED AREAS, EXCEPT STREET PAVEMENT AND SIDEWALK AREAS, SHALL RECEIVE A MINIMUM OF FOUR (4) INCHES OF TOPSOIL, FERTILIZER, SEED AND MULCH. RESTORATION WILL OCCUR AS SOON AFTER THE DISTURBANCE AS PRACTICAL. LAWN AREAS WITH SLOPES GREATER THAN 4:1 SHALL BE SEEDED WITH OLDS "NOMOW" MIX OR EQUAL. ALL OTHER DISTURBED AREAS SHALL BE SEEDED WITH MADISON PARKS MIX OR EQUAL. MIXTURES SHALL BE IN ACCORDANCE WITH SECTION 630 OF D.O.T. SPECIFICATIONS.

2. AN EQUAL AMOUNT OF ANNUAL RYEGRASS SHALL BE ADDED TO THE MIX. SEED MIXTURES SHALL BE APPLIED AT THE RATE OF FOUR (4) POUNDS PER 1,000 SQUARE FEET. FERTILIZER SHALL BE APPLIED AT THE RATE OF FOUR (4) POUNDS PER 1,000 SQUARE FEET. FERTILIZER SHALL MEET THE MINIMUM REQUIREMENTS THAT FOLLOW: NITROGEN, NOT LESS THAN 16%; PHOSPHORIC ACID, NOT LESS THAN 6%; POTASH, NOT LESS THAN 6%.

3. ALL FINISH GRADED AREAS SHALL BE SEEDED AND MULCHED BY SEPTEMBER 15TH. IF THE SITE DOES NOT HAVE FINISH GRADED AREAS COMPLETED BY OCTOBER 15TH, ALL DISTURBED AREAS SHALL BE RESTORED WITH TEMPORARY SEEDING (COVER CROP). AREAS NEEDING PROTECTION DURING PERIODS WHEN PERMANENT SEEDING IS NOT APPLIED SHALL BE SEEDED WITH ANNUAL SPECIES FOR TEMPORARY PROTECTION. SEE TABLE 1 OF THE WISCONSIN DNR CONSERVATION PRACTICE STANDARD 1059, FOR SEEDING RATES OF COMMONLY USED SPECIES. THE RESIDUE FROM THIS CROP MAY EITHER BE INCORPORATED INTO THE SOIL DURING SEEDBED PREPARATION AT THE NEXT PERMANENT SEEDING PERIOD OR LEFT ON THE SOIL SURFACE AND THE PLANTING MADE AS A NO–TILL SEEDING.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SATISFACTORY STAND OF GRASS ON ALL SEEDED AREAS FOR ONE YEAR AFTER THE PROJECT'S FINAL ACCEPTANCE.

APPLETON AVENUE STORAGE FACILITY

CONSTRUCTION NOTES

DATED: DECEMBER 1, 2021

C–109

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Lumark

DESCRIPTION

The Lumark Axcent LED wall mount luminaire provides a flush-mounted, architectural design with high performing, energy-efficient illumination resulting in up to 95% energy and maintenance savings over traditional sources. The die-cast aluminum construction along with stainless steel hardware, gasketed housing, and sealed optical compartment make the Axcent impervious to contaminants. The Axcent replaces 70W to 450W metal halide equivalents making it ideal for pathway illumination, building entrances, vehicle ramps, schools, tunnels, stairways, loading docks and floodlighting applications.

Catalog #		**Type**
Project		
Comments		**Date**
Prepared by		

SPECIFICATION FEATURES

Construction
Low-profile LED design with rugged die-cast aluminum housing. Matching housing styles incorporate both a full cutoff and refractive lens design. External fin design on the back of the fixture extracts heat from the surface resulting in a thermally optimize design for longer luminaire life. One-piece silicone gasket seals the fixture, keeping out moisture and dusts in compliance with IP66 rating. The fixture is 3G vibration rated (ANSI C136.31) and UL/cUL listed ensuring reliability and durability in wall mount applications.

Optical
Silicone-sealed optical LED chamber incorporates a custom engineered reflector providing high-efficiency illumination. Refractive lens models incorporate a molded lens assembly designed for maximum forward throw. Optional glare free lens is available for visual comfort at reduced lumen values. Available in Type IV distribution with lumen packages ranging from 1,800 to 17,300 nominal lumens. Light engine configurations consist of high-efficiency, discrete LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life. Offered in standard 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 5000K CCT / 70CRI min and 3000K / 80CRI min are available.

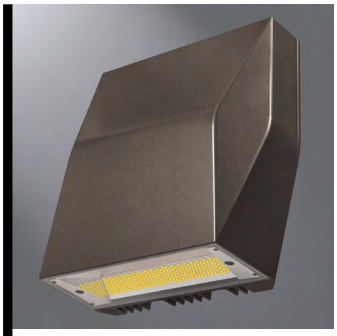
Electrical
LED driver is mounted to the die-cast aluminum housing for optimal heat sinking. Integral LED electronic driver incorporates 6kV surge protection. Class 1 electronic drivers have a power factor >90% and THD<20%. 120-277V 50/60Hz standard operation with optional 347V 60Hz or 480V 60Hz options available. 480V is compatible for use with 480V Wye systems only. 0-10V dimming driver is standard with leads external to the fixture to accommodate controls capability such a dimming and occupancy. 10kV/10kA surge protection option is available.

Mounting
Steel wedge mounting plate fits directly to 4" standard j-box or directly to wall with the "Hook-N-Lock" mechanism for quick installation. Secure with two captive, corrosion resistant, stainless steel set screws, which are concealed but accessible from bottom of fixture. Optional floodlight kits available in slipfitter, knuckle and trunnion mount configurations. Optional pole mount configuration provides a quick-mount solution to round and square poles. The easy installation arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8".

Emergency Egress
Optional integral cold weather battery emergency egress includes emergency operation test switch, an AC-ON indicator light and a premium, maintenance-free battery pack. The separate emergency lighting LEDs are wired to provided redundant emergency lighting. Listed to UL Standard 924, Emergency Lighting.

Finish
The Axcent is protected with five state super TGIC polyester powder coat paint in carbon bronze and five other color finishes. Super TGIC power coat paint finishes withstand extreme climate conditions while providing optimal color and gloss retention of the installed life.

Warranty
Five-year warranty.





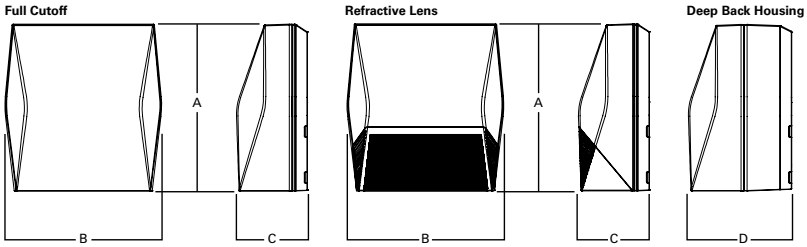
AXCS / AXCL
AXCENT

14-123W

LED

APPLICATIONS:
WALL / SURFACE / INVERTED FLOODLIGHTING / PATHWAY / SITE LIGHTING

DIMENSIONS



Dimensional Data

	AXCS Small	AXCL Large
A	8" [202mm]	11-1/2" [292mm]
B	7-1/2" [190mm]	10-3/4" [273mm]
C	3-5/8" [94mm]	4-7/8" [124mm]
D	6-1/8" [155mm]	7-1/8" [181mm]

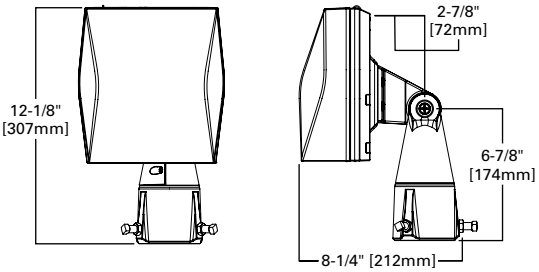
CERTIFICATION DATA
3G Vibration Rated
Dark Sky Approved (Fixed mount, Full cutoff, and 3000K CCT only)
DesignLights Consortium® Qualified*
FCC Class A
IP66 Rated
ISO9001, UL/cUL Wet Location Listed
ROHS Compliant
Title 24 Compliant
UL924 Listed (CBP Models)

TECHNICAL DATA
-40°C Minimum Ambient Temperature
+40°C Maximum Ambient Temperature
External Supply Wiring 90°C Minimum

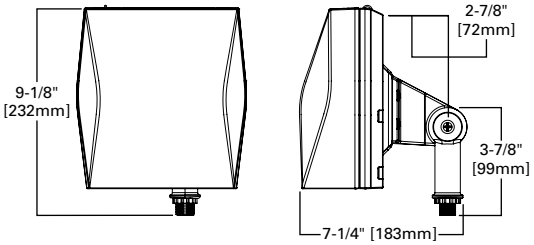
SHIPPING DATA:
Approximate Net Weight:
Small fixture=5 lbs. [2.36 kgs.]
Small with sensor or CBP=10 lbs. [4.40 kgs.]
Large fixture=12 lbs. [5.45 kgs.]
Large with sensor or CBP=17 lbs. [7.73 kgs.]
Large with sensor & CBP=21 lbs. [9.54 kgs.]

MOUNTING OPTIONS

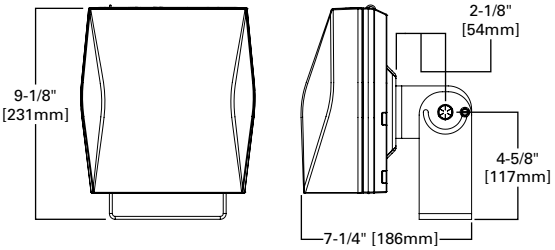
Slipfitter Mount (Small)
Tenon OD: 2-3/8" | EPA: 0.60



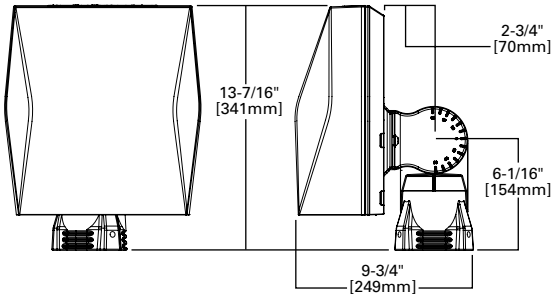
Knuckle Mount (Small)



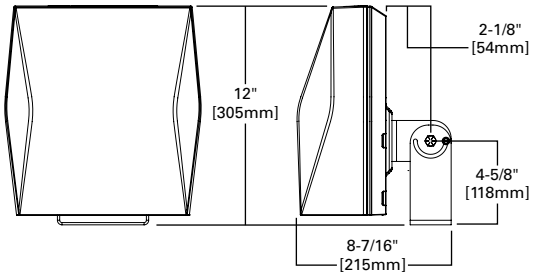
Trunnion Mount (Small)



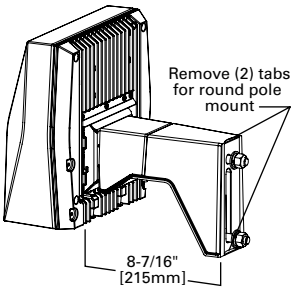
Slipfitter Mount (Large)
Tenon OD: 2-3/8" to 2-7/8" | EPA: 1.10



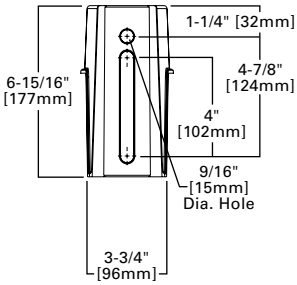
Trunnion Mount (Large)



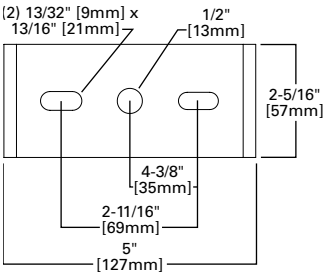
Pole Mount Arm (Shown with Large fixture)
EPA: 1.1



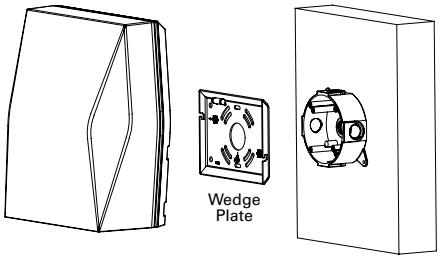
Drill Pattern



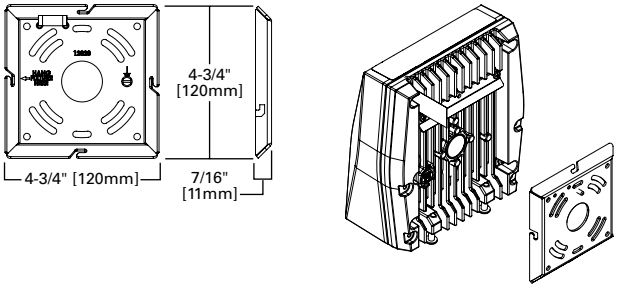
Trunnion Mount Detail



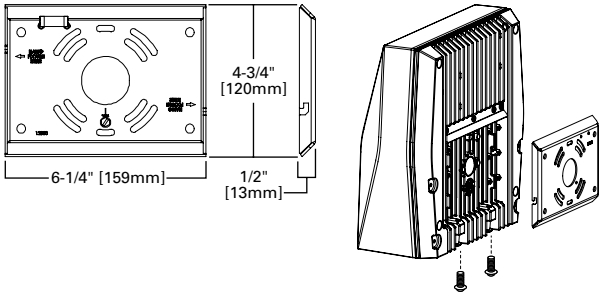
Through-branch Wiring (Available through rated junction box - supplied by others)



Wall Mount Plate Detail (Small)



Wall Mount Plate Detail (Large)

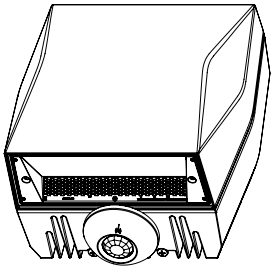


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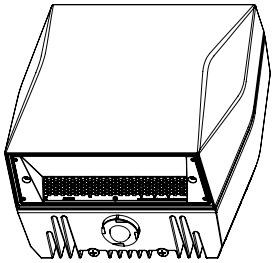
Specifications and
dimensions subject to
change without notice.

CONTROL OPTIONS

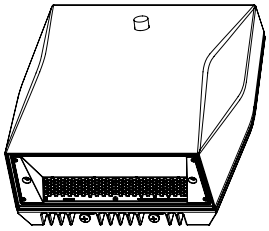
LumaWatt Pro Sensor



Occupancy Sensor

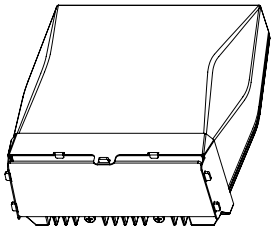


Button Photocontrol

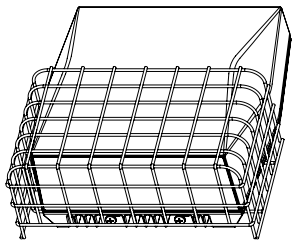


VANDAL SHIELD AND WIRE GUARD OPTIONS

Vandal Shield



Wire Guard



CONTROL OPTIONS

0-10V
This fixture is offered standard with 0-10V dimming driver(s) for use with a lighting control panel or other control method.

Photocontrol (PC1, PC2, and PC)
Optional button-type photocontrol provides a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels.

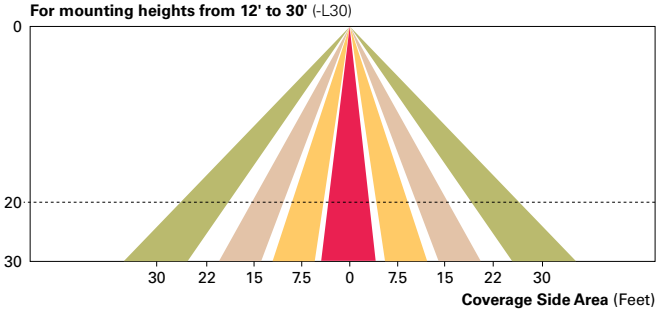
After Hours Dim (AHD)
This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a “dusk-to-dawn” period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

Dimming Occupancy Sensor (MSP/DIM-LXX and MSP-LXX)
These sensors are factory installed in the luminaire housing. When the MSP/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MSP/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of ten minutes. The MSP-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity.

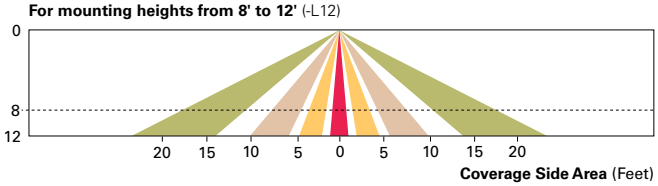
These occupancy sensors includes an integrated photocell that can be activated with the ISHH-01 accessory for “dusk-to-dawn” control or daylight harvesting - the factory preset is ON. The ISHH-01 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters.

A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8’-30’.

For mounting heights from 12' to 30' (-L30)



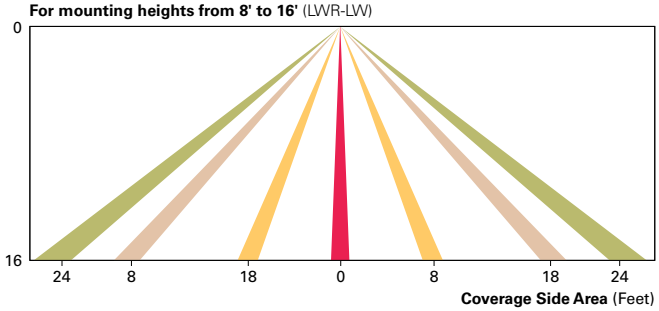
For mounting heights from 8' to 12' (-L12)



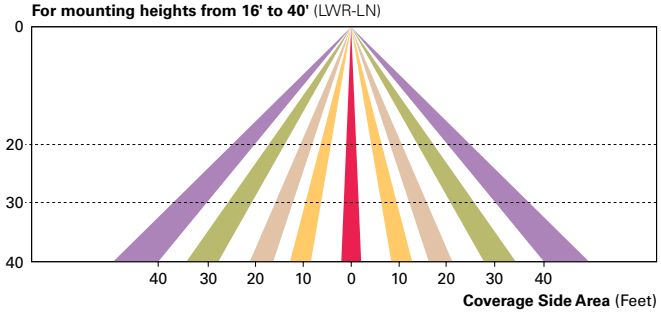
LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)
The LumaWatt Pro system is a peer-to-peer wireless network of luminaire-integral sensors for any sized project. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication. The end-user can securely create and manage sensor profiles with browser-based management software. The software will automatically broadcast to the sensors via wireless gateways for zone-based and individual luminaire control. The LumaWatt Pro software provides smart building solutions by utilizing the sensor to provide easy-to-use dashboard and analytic capabilities such as improved energy savings, traffic flow analysis, building management software integration and more.

For additional details, refer to the LumaWatt Pro product guides.

For mounting heights from 8' to 16' (LWR-LW)



For mounting heights from 16' to 40' (LWR-LN)



POWER AND LUMENS (AXCENT SMALL)

Light Engine		**AXCS1A**	**AXCS2A**	**AXCS3A**	**AXCS4A**	**AXCS5A**
Power (Watts)		14	21	27	44	52
Input Current @ 120V (A)		0.12	0.18	0.23	0.37	0.43
Input Current @ 240V (A)		0.06	0.09	0.11	0.18	0.22
Input Current @ 277V (A)		0.05	0.08	0.10	0.16	0.19
Input Current @ 347V (A)		0.04	0.06	0.08	0.13	0.15
Input Current @ 480V (A)		0.03	0.04	0.06	0.09	0.11
Configuration						
Full Cutoff	4000K/5000K Lumens	1,806	2,561	3,537	5,520	6,300
	3000K Lumens	1,526	2,164	2,989	4,665	5,324
	BUG Rating	B1-U0-G0	B1-U0-G0	B1-U0-G0	B2-U0-G1	B2-U0-G1
Refractive Lens	4000K/5000K Lumens	1,915	2,716	3,704	5,858	6,699
	3000K Lumens	1,618	2,295	3,130	4,950	5,661
	BUG Rating	B1-U3-G2	B1-U3-G2	B1-U3-G2	B1-U4-G3	B1-U4-G3

POWER AND LUMENS (AXCENT LARGE)

Light Engine		**AXCL6A**	**AXCL8A**	**AXCL10A**	**AXCL12A**
Power (Watts)		56	72	102	123
Input Current @ 120V (A)		0.44	0.60	0.83	1.01
Input Current @ 240V (A)		0.22	0.31	0.41	0.51
Input Current @ 277V (A)		0.20	0.27	0.36	0.45
Input Current @ 347V (A)		0.17	0.22	0.30	0.37
Input Current @ 480V (A)		0.13	0.16	0.22	0.27
Configuration					
Full Cutoff	4000K Lumens	7,594	9,696	13,283	16,823
	5000K Rating	7,465	9,531	13,058	16,538
	3000K Lumens	6,619	8,450	11,577	14,662
	BUG Rating	B1-U0-G1	B1-U0-G1	B3-U0-G2	B3-U0-G2
Refractive Lens	4000K Lumens	7,809	9,970	13,641	17,346
	5000K Rating	7,689	9,817	13,450	17,034
	3000K Lumens	6,817	8,704	11,924	15,102
	BUG Rating	B1-U4-G4	B2-U5-G5	B2-U5-G5	B2-U5-G5

POWER AND LUMENS (SMALL + CBP)

Light Engine		**AXCS1A**	**AXCS2A**	**AXCS3A**	**AXCS4A**
Power (Watts)		18	25	31	48
Input Current @ 120V (A)		0.15	0.21	0.26	0.40
Input Current @ 240V (A)		0.08	0.11	0.13	0.20
Input Current @ 277V (A)		0.07	0.09	0.11	0.18
Configuration					
Full Cutoff	4000K/5000K Lumens	629	587	647	570
	3000K Lumens	531	496	547	482
Refractive Lens	4000K/5000K Lumens	667	623	686	605
	3000K Lumens	563	526	580	511

Note: Power and current based on full power consumption while CBP is charging. Lumen outputs are while operating in emergency mode only.

POWER AND LUMENS (LARGE + CBP)

Light Engine		**AXCL6A**	**AXCL8A**	**AXCL10A**
Power (Watts)		60	76	106
Input Current @ 120V (A)		0.50	0.63	0.88
Input Current @ 240V (A)		0.25	0.32	0.44
Input Current @ 277V (A)		0.22	0.27	0.38
Configuration				
Full Cutoff	4000K/5000K Lumens	1,070		
	3000K Lumens	945		
Refractive Lens	4000K/5000K Lumens	1,098		
	3000K Lumens	973		

Note: Power and current based on full power consumption while CBP is charging. Lumen outputs are while operating in emergency mode only.

LUMEN MAINTENANCE (AXCENT SMALL)

Ambient Temperature	**TM-21 Lumen Maintenance** (72,000 Hours)	**Theoretical L70** (72,000 Hours)
Up to 3A		
25°C	90%	246,000
40°C	90%	225,000
50°C	89%	195,000
Up to 5A		
25°C	89%	240,000
40°C	88%	223,000
50°C	87%	186,000

LUMEN MAINTENANCE (AXCENT LARGE)

Ambient Temperature	**TM-21 Lumen Maintenance** (72,000 Hours)	**Theoretical L70** (72,000 Hours)
Up to 8A		
25°C	94%	556,000
40°C	94%	556,000
50°C	92%	340,000
Up to 10A		
25°C	94%	556,000
40°C	94%	478,000
50°C	87%	207,000
Up to 12A		
25°C	94%	151,000
40°C	81%	125,000

LUMEN MULTIPLIER

Ambient Temperature	**Lumen Multiplier**
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.97

ORDERING INFORMATION

Sample Number: AXCS1A-AP-347V

Model Series [1]	**LED Color Temperature**	**Color**	**Options** (Add as Suffix)
Full Cutoff **AXCS1A**=14W **AXCS2A**=21W **AXCS3A**=27W **AXCS4A**=44W **AXCS5A**=52W **AXCL6A**=56W **AXCL8A**=72W **AXCL10A**=102W **AXCL12A**=123W **Refractive Lens** **AXCS1ARL**=14W **AXCS2ARL**=21W **AXCS3ARL**=27W **AXCS4ARL**=44W **AXCS5ARL**=52W **AXCL6ARL**=56W **AXCL8ARL**=72W **AXCL10ARL**=102W **AXCL12ARL**=123W	**[Blank]**=4000K, Neutral **C**=5000K, Cool **W**=3000K, Warm	**[Blank]**=Carbon Bronze (Standard) **WT**=Summit White **BK**=Black **AP**=Grey **GM**=Graphite Metallic **DP**=Dark Platinum	**347V**=347V [2] **480V**=480V [2] **PC1**=Photocontrol 120V [3, 4, 5] **PC2**=Photocontrol 208-277V, 347V, 480V [4, 5, 6] **PC**=Photocontrol 120-277V, 347V, 480V [4, 7, 8] **KKIT**=Knuckle Floodlight Mount [7] **TRNKIT**=Trunnion Floodlight Mount **SFKIT**=Slipfitter Floodlight Mount **PMAKIT**=Pole Mount Arm **LWR-LW**=LumaWatt Pro Wireless Sensor, Wide Lens for 8' - 16' Mounting Height [4, 9] **LWR-LN**=LumaWatt Pro Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height [4, 9] **MSP/DIM-L12**=Integrated Sensor for Dimming Operation, 8' - 12' Mounting Height [4, 9, 10] **MSP/DIM-L30**=Integrated Sensor for Dimming Operation, 12' - 30' Mounting Height [4, 9, 10] **MSP-L12**=Integrated Sensor for ON/OFF Operation, 8' - 12' Mounting Height [4, 9, 10] **MSP-L30**=Integrated Sensor for ON/OFF Operation, 12' - 30' Mounting Height [4, 9, 10] **CBP**=Cold Weather Battery Pack [3, 11, 12, 13, 14, 15] **CBP-CEC**=Cold Weather Battery Pack, CEC compliant [3, 11, 12, 13, 14, 15] **10K**=10kV/10kA Surge Protection **HA**=50°C High Ambient [12, 16] **GRF**=Glare Reducing Lens [17] **AHD145**=After Hours Dim, 5 Hours [5, 18] **AHD245**=After Hours Dim, 6 Hours [5, 18] **AHD255**=After Hours Dim, 7 Hours [5, 18] **AHD355**=After Hours Dim, 8 Hours [5, 18]

Accessories (Order Separately) [19]

VS/AXCS=Vandal Shield Axcent Small [7, 20]
VS/AXCS-MS=Vandal Shield Axcent Small (With Motion Sensor) [7, 20]
WG/AXCS=Wire Guard Axcent Small [7]
WG/AXCS-MS=Wire Guard Axcent Small (With Motion Sensor) [7]
VS/AXCL=Vandal Shield Axcent Large [5, 20]
VS/AXCL-MS=Vandal Shield Axcent (With Motion Sensor) [5, 20]
WG/AXCL=Wire Guard Axcent Large [5]
WG/AXCL-MS=Wire Guard Axcent (With Motion Sensor) [5]
KKIT/AXCS-XX=Knuckle and Visor Floodlight Kit (For Axcent Small) [7]
SFKIT/AXCS-XX=Slipfitter Floodlight Kit (For Axcent Small) [7]
TRNKIT/AXCS-XX=Trunnion and Visor Floodlight Kit (For Axcent Small) [7]
TRNKIT-XX=Trunnion Floodlight Kit (For Axcent Large) [5]
SFKIT-XX=Slipfitter Floodlight Kit (For Axcent Large) [5]
PMAKIT-XX=Pole Mount Kit
ISHH-01=Integrated Sensor Programming Remote [21]
MA1010-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon
MA1011-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon
MA1017-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon
MA1018-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon

NOTES:
1. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
2. Transformer used only when ordered with motion sensor or AXCS1 through AXCS5 or AXCL6 fixture wattages.
3. Not available in 347 or 480 VAC.
4. Button photocontrol and any motion sensor not offered together.
5. Only available on AXCL6-AXCL12 models.
6. Used with 277, 347, and 480 VAC options.
7. Only available on AXCS1-AXCS5 models.
8. This configuration may contain materials that are not RoHS compliant. Contact your lighting representative for more information.
9. Uses deep back housing.
10. The ISHH-01 accessory is required to adjust parameters.
11. Ambient operating temperature -20°C to 25°C for AXCL6 through AXCL10. Ambient operating temperature -20°C to 30°C on AXCS4 models. Ambient operating temperature -20°C to 40°C on AXCS1 through AXCS3 models.
12. Not available with AXCS5 or AXCL12 models.
13. Uses deep back housing for AXCS1, AXCLS2, AXCS3, and AXCS4 models.
14. Not to be mounted in upwards / inverted orientation. Downlight wall mount only for AXCS1 through AXCS4.
15. In AXCS1, AXCS2, AXCS3, and AXCS4 models, CBP cannot be used with any sensor option (PC, MSP, LWR).
16. Can not be ordered with CBP or PC options.
17. Use dedicated IES files on product website for lumen values and distributions.
18. Requires the use of PC1 or PC2 button photocontrol. See After Hours Dim supplemental guide for additional information.
19. Replace XX with color designation.
20. For use with full cutoff lens configurations only.
21. This tool enables adjustment to parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult you lighting representative for more information.

STOCK ORDERING INFORMATION

Model Series [1]			
Full Cutoff		**Refractive Lens**	
AXCS1A=14W	**AXCL10A**=102W	**AXCS1ARL**=14W	**AXCL10ARL**=102W
AXCS2A=21W	**AXCL12A**=123W	**AXCS2ARL**=21W	**AXCL12ARL**=123W
AXCS3A=27W	**AXCL6A-347V**=56W	**AXCS3ARL**=27W	**AXCL6ARL-347V**=56W
AXCS4A=44W	**AXCL8A-347V**=72W	**AXCS4ARL**=44W	**AXCL8ARL-347V**=72W
AXCS5A=52W	**AXCL10A-347V**=102W	**AXCS5ARL**=52W	**AXCL10ARL-347V**=102W
AXCL6A=56W	**AXCL12A-347V**=123W	**AXCL6ARL**=56W	**AXCL12ARL-347V**=123W
AXCL8A=72W		**AXCL8ARL**=72W	

NOTES:
1. All stock configuations are 4000K color temperatures, standard Carbon Bronze finish, and wall mount configuration.

COOPER Lighting Solutions
Cooper Lighting Solutions
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com

Specifications and dimensions subject to change without notice.

STORMWATER MANAGEMENT REPORT

APPLETON AVENUE STORAGE FACILITY
VILLAGE OF GERMANTOWN, WISCONSIN

September 7, 2021
Revised: November 4, 2021
Revised: November 22, 2021
Revised: December 2, 2021

PREPARED FOR:
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Hartland, WI 53029

PREPARED BY:
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122 Wisconsin Street
West Bend, WI 53095

JT-04-21

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APPENDICES

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B. Pre-Development Hydrology and Hydraulics
C. Post-Development Hydrology and Hydraulics
D. TSS Reduction Calculations
E. USLE Worksheet
F. Stormwater Maintenance Agreement
G. Exhibits
    1) Pre-Development Conditions Drainage Map
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    3) Grading Plan
    4) Erosion Control Plan
    5) Details
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INTRODUCTION

The proposed development that is covered in the Erosion Control and Stormwater Management Report is located along the east side of Appleton Avenue across from Amy Belle Road in the Village of Germantown, Washington County. The site is part of the northeast ¼ of the southwest ¼, Section 19, Town 9 North, Range 20 East. The property is located at W219N11588 Appleton Ave.

The existing site consists primarily of a house and an old landscaping business connecting into an existing gravel pit on the south and east sides of the property. There is an old, contaminated area in the middle of the site capped with asphalt.

The proposed development will include the construction of three proposed storage buildings, associated drive isles and RV parking lot in the rear of the site. All sedimentation and erosion control measures, including the silt fence/sock and the stone construction entrance will be installed prior to any grading activities. Stormwater management will be provided by the construction of a proposed Detention Pond.

The proposed development is a part of the Menomonee River Watershed. The sub-watershed includes the proposed development. The Menomonee River is approximately 2 miles east of the development.

The intent of this report is to provide details on how the stormwater will be collected and managed so that it leaves the proposed development in accordance with the Village of Germantown, MMSD and Wisconsin DNR stormwater management standards.

STANDARDS

The stormwater management system for the proposed site will meet the post-construction stormwater requirements for the Village of Germantown, Milwaukee MMSD, and the Wisconsin Department of Natural Resources.

Total Suspended Solids

For new development, by design, reduce to the maximum extent practicable, the total suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls. For redevelopment, by design, the total suspended solids load by 40%, based on an average annual rainfall, for all paved areas as compared to no runoff management controls.

Storm Water Quantity

The target design criteria for the stormwater management facilities proposed in this report follow the Village of Germantown ordinances, MMSD Chapter 13 Surface Water and Stormwater Rule, and NR 151 of the Wisconsin Administrative Code. The Volumetric Design Procedure was used to demonstrate compliance with the water quantity requirements of these regulations. The procedure requires that existing runoff volume not be exceeded during the critical time period of the Menomonee River watershed that the site is located in.

Infiltration

BMPs shall be designed, installed and maintained to infiltrate runoff so that post-development infiltration volume shall be at least 90 percent of the pre-settlement infiltration volume based on the average annual rainfall. The Village Engineer may determine exceptions based on site history, land use and soil conditions. This project is exempt from infiltration requirements based on the existing soil types and presence of redox within the soil test pits; information on the existing site soils can be found in the appendices.

Method of Analysis

The storm water runoff rates and quantities have been analyzed using the methodology prescribed in Urban Hydrology for Small Watersheds, United States Department of Agriculture Soil Conservation Service Technical Release 55 (TR-55). The SCS Type II, 24-hour rainfall distribution curve was used for the calculations.

Rainfall Analysis

The selected design storms were based on NOAA Atlas 14.

Recurrence Interval (Year)	Rainfall depth (in)
2	2.65
10	3.82
50	5.53
100	6.41

PRE-DEVELOPMENT SITE CONDITIONS

The existing site consists of a house, driveways, landscape storage bins and connecting paved areas. All the runoff from the site drains to the quarry to the southeastern side of the site. The existing house and landscaping pins will be razed and existing well and septic will be abandoned.

Table 1 below shows the soil types found on the site. The site contains predominately of a gravel pit and well drained soils.

Table 1 Soil Types

Symbol	Soil	Hydroloqic Group
FsB	Fox silt loam	B
GP	Gravel Pit	

There is off-site drainage to the north that drains south towards this development as shown on the Existing Drainage Plan. The runoff from this area drains to a low area just to the north of the north property line and mostly infiltrates but drains through the property in large storm events.

POST-DEVELOPMENT SITE CONDITIONS

The project includes the construction of three proposed storage buildings, associated parking drive aisles, and proposed gravel parking for RV storage.

Detailed watershed information can be found in the HydroCAD calculations found in the Appendix C. The proposed site discharge location will match the current site discharge location. Discharge from the proposed bio-filter will discharge to the south towards the existing quarry. The area running through the site will be piped to the same outlet location as the bio-filter. The proposed drainage area is shown on the Post-Development Conditions Drainage Map included in Appendix G.

The post-development conditions runoff volume is to be reduced so that it is less than or equal the pre-development conditions runoff volume. The overall development is required to provide a weighted average of new development and redevelopment TSS reduction. The water quality and quantity summaries are included on page 5 of this report. The calculations are included in Appendices A, B and C.

STORMWATER MANAGEMENT

The post-construction stormwater quantity requirement for the Appleton Avenue Storage project was met using the Volumetric Design Procedure. Detailed watershed information can also be found in the HydroCAD computer analysis printouts found in the Appendices. The table below contains the runoff volumes for the critical period in the Menomonee River, 9.5 hours. They are in compliance with the MMSD's Volumetric Design Procedure.

Table 2 - Water Quantity Requirements

Rain Event	Pre-Dev. Runoff Volume {acre-ft)	Post-Dev. Runoff Volume {acre-ft)
2-year	0.236	0.222
100-year	1.105	0.964

The table below contains the peak flows and elevations for the project bio-filter for 2-year and 100-year events.

Table 3 - Post-Development Peak Discharge Rates

Pond	Rain Event	Outflow Peak (cfs)	Peak Elevation (ft)
Pond 1P	2	0.29	982.29
	100	13.35	983.73

The stormwater quality requirement for this project was met using WinSLAMM to demonstrate that the wet-detention basin will effectively remove over 40% of redevelopment and 80% of the new development Total Suspended Solids (TSS) based on the average annual rainfall for the redevelopment of this site. Water Quality calculations can be found in Appendix D. The following tables are a summary of the results:

Table 4 – Redevelopment Area

	Square Feet	Weighted Percentage
Redevelopment 40%	72,107	
New Development 80%	78,766	60.88%

Table 5 - Water Quality Requirements

Annual Pounds Yielded	Pounds after Outlet Controls	Removal Rate
1463	342.0	76.62%

Infiltration

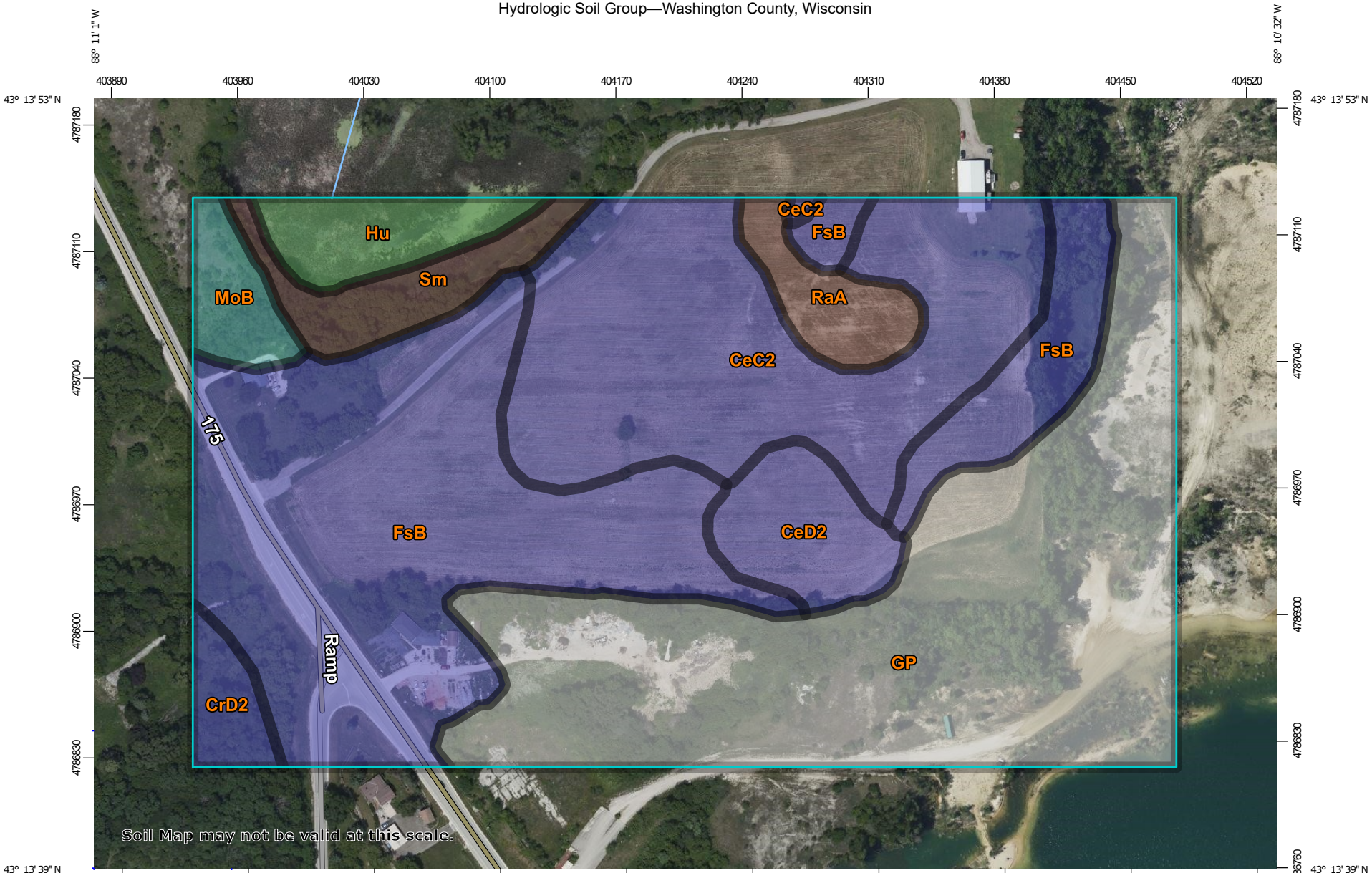
The existing site contains a contaminated soils and is a redevelopment so infiltration will not be required for this site.

CONCLUSION

The best management practices for the proposed project, will maintain runoff volumes in the post-developed condition compared with the pre-developed condition during the critical time period for the Menomonee River. The detention pond will also provide 40% TSS reduction as required by state and local requirements.

APPENDIX A

SOILS INFORMATION



Map Scale: 1:3,000 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 40 80 160 240

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Washington County, Wisconsin
Survey Area Data: Version 21, Sep 9, 2021

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

Date(s) aerial images were photographed: May 20, 2020—Aug 20, 2020

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CeC2	Casco loam, 6 to 12 percent slopes, eroded	B	8.6	20.1%
CeD2	Casco loam, 12 to 20 percent slopes, eroded	B	1.7	3.9%
CrD2	Casco-Rodman complex, 12 to 20 percent slopes, eroded	B	0.7	1.7%
FsB	Fox silt loam, 2 to 6 percent slopes	B	13.3	31.2%
GP	Gravel pit		13.5	31.7%
Hu	Houghton mucky peat, 0 to 2 percent slopes	A/D	1.3	3.1%
MoB	Mayville silt loam, 2 to 6 percent slopes	C	0.9	2.2%
RaA	Radford silt loam, 0 to 3 percent slopes	B/D	1.1	2.7%
Sm	Sebewa silt loam, 0 to 2 percent slopes	B/D	1.5	3.5%
Totals for Area of Interest			**42.7**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

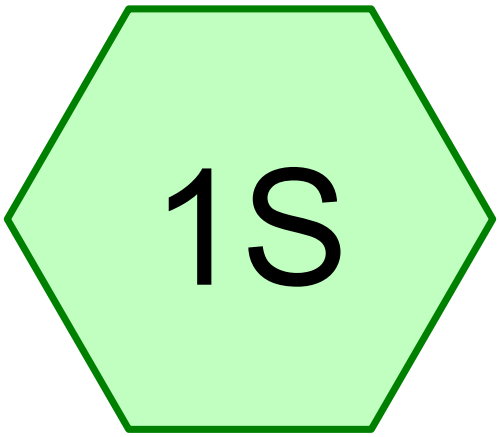
Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX B

PRE-DEVELOPMENT HYDROLOGY AND HYDRAULICS



Pre-Dev

Subcat Reach Pond Link

Routing Diagram for Pre Development
Prepared by {enter your company name here}, Printed 11/22/2021
HydroCAD® 10.00-24 s/n 06587 © 2018 HydroCAD Software Solutions LLC

Project Notes

Rainfall events imported from "NRCS-Rain.txt" for 9208 WI Washington
Rainfall events imported from "NRCS-Rain.txt" for 9208 WI Washington

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.527	61	>75% Grass cover, Good, HSG B (1S)
0.773	98	Existing Asphalt (1S)
0.058	98	Existing Buildings (1S)
0.104	98	Existing Concrete (1S)
0.720	96	Existing Gravel (1S)
0.424	55	Woods, Good, HSG B (1S)
3.607	**77**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
1.951	HSG B	1S
0.000	HSG C	
0.000	HSG D	
1.655	Other	1S
3.607		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	1.527	0.000	0.000	0.000	1.527	>75% Grass cover, Good	1S
0.000	0.000	0.000	0.000	0.773	0.773	Existing Asphalt	1S
0.000	0.000	0.000	0.000	0.058	0.058	Existing Buildings	1S
0.000	0.000	0.000	0.000	0.104	0.104	Existing Concrete	1S
0.000	0.000	0.000	0.000	0.720	0.720	Existing Gravel	1S
0.000	0.424	0.000	0.000	0.000	0.424	Woods, Good	1S
0.000	**1.951**	**0.000**	**0.000**	**1.655**	**3.607**	**TOTAL AREA**	

Summary for Subcatchment 1S: Pre-Dev

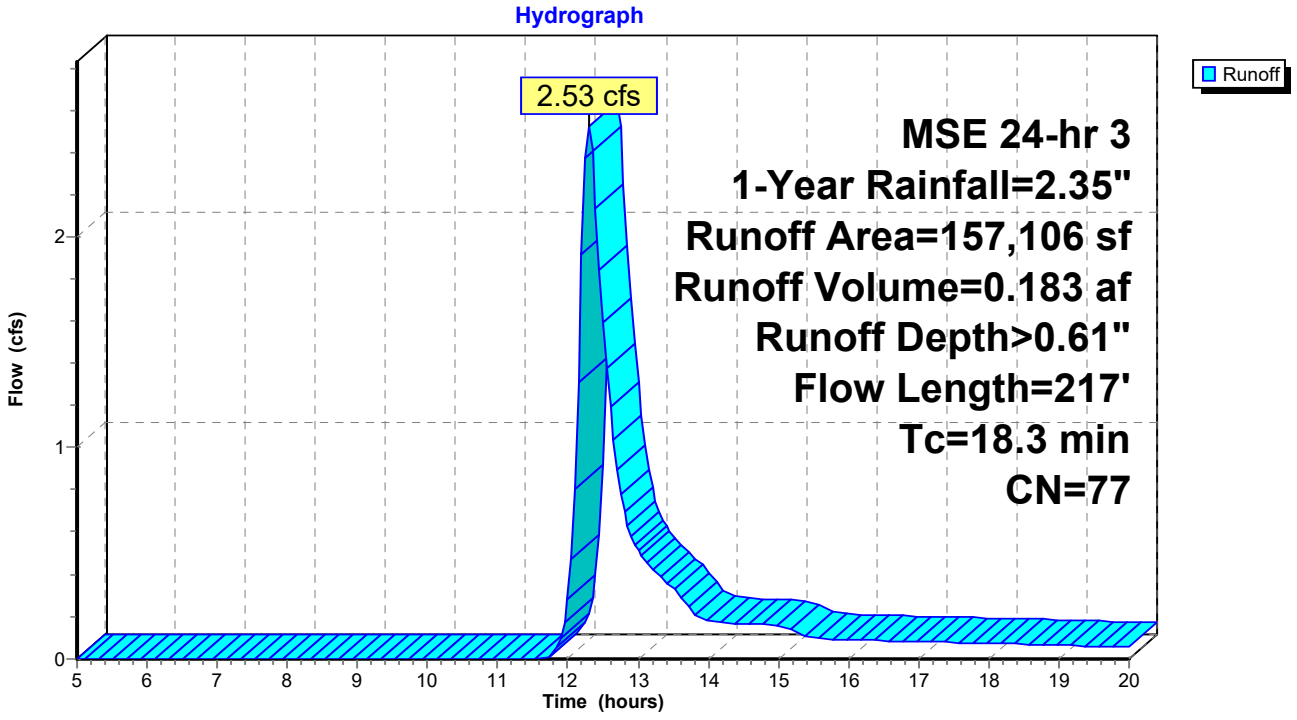
Runoff = 2.53 cfs @ 12.30 hrs, Volume= 0.183 af, Depth> 0.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.35"

	Area (sf)	CN	Description
*	33,664	98	Existing Asphalt
*	4,543	98	Existing Concrete
*	2,537	98	Existing Buildings
*	31,363	96	Existing Gravel
	18,484	55	Woods, Good, HSG B
	66,515	61	>75% Grass cover, Good, HSG B
	157,106	77	Weighted Average
	116,362		74.07% Pervious Area
	40,744		25.93% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.7	150	0.0333	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.65"
0.6	67	0.1340	1.83		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
18.3	217	Total			

Subcatchment 1S: Pre-Dev



Summary for Subcatchment 1S: Pre-Dev

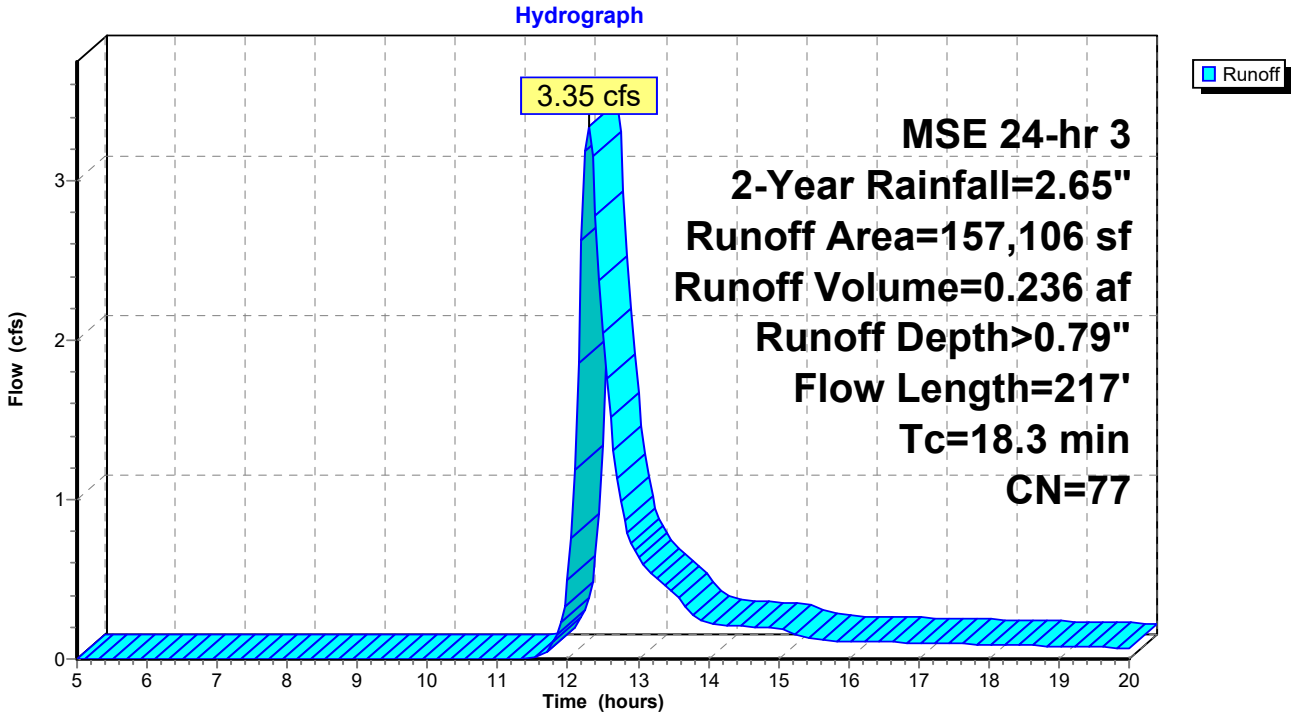
Runoff = 3.35 cfs @ 12.30 hrs, Volume= 0.236 af, Depth> 0.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.65"

	Area (sf)	CN	Description
*	33,664	98	Existing Asphalt
*	4,543	98	Existing Concrete
*	2,537	98	Existing Buildings
*	31,363	96	Existing Gravel
	18,484	55	Woods, Good, HSG B
	66,515	61	>75% Grass cover, Good, HSG B
	157,106	77	Weighted Average
	116,362		74.07% Pervious Area
	40,744		25.93% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.7	150	0.0333	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.65"
0.6	67	0.1340	1.83		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
18.3	217	Total			

Subcatchment 1S: Pre-Dev



Summary for Subcatchment 1S: Pre-Dev

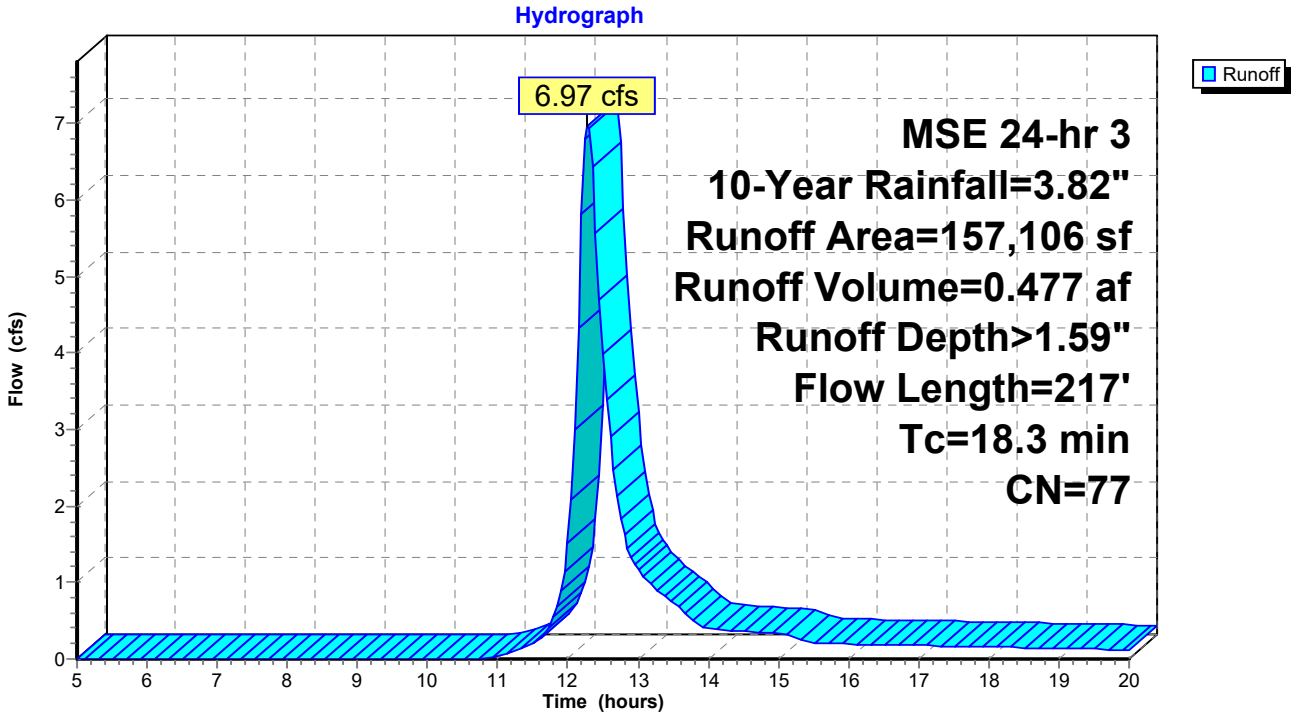
Runoff = 6.97 cfs @ 12.29 hrs, Volume= 0.477 af, Depth> 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.82"

	Area (sf)	CN	Description
*	33,664	98	Existing Asphalt
*	4,543	98	Existing Concrete
*	2,537	98	Existing Buildings
*	31,363	96	Existing Gravel
	18,484	55	Woods, Good, HSG B
	66,515	61	>75% Grass cover, Good, HSG B
	157,106	77	Weighted Average
	116,362		74.07% Pervious Area
	40,744		25.93% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.7	150	0.0333	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.65"
0.6	67	0.1340	1.83		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
18.3	217	Total			

Subcatchment 1S: Pre-Dev



Summary for Subcatchment 1S: Pre-Dev

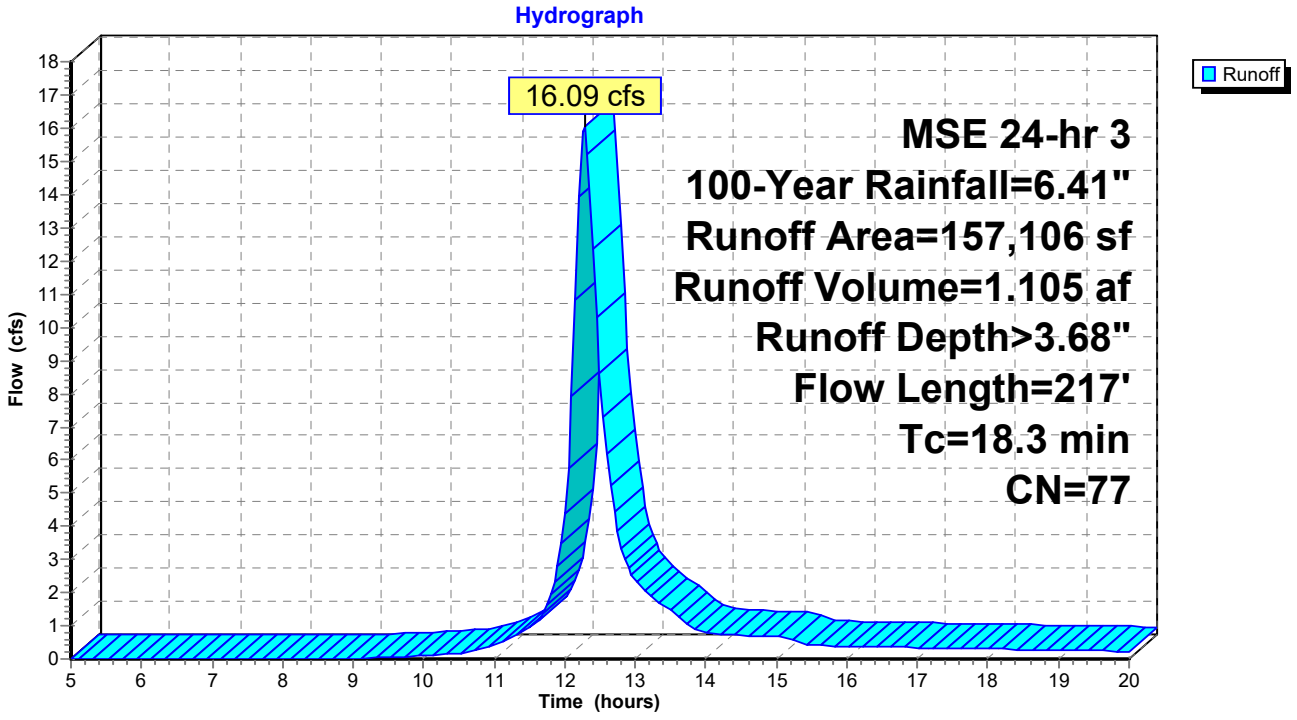
Runoff = 16.09 cfs @ 12.28 hrs, Volume= 1.105 af, Depth> 3.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.41"

	Area (sf)	CN	Description
*	33,664	98	Existing Asphalt
*	4,543	98	Existing Concrete
*	2,537	98	Existing Buildings
*	31,363	96	Existing Gravel
	18,484	55	Woods, Good, HSG B
	66,515	61	>75% Grass cover, Good, HSG B
	157,106	77	Weighted Average
	116,362		74.07% Pervious Area
	40,744		25.93% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.7	150	0.0333	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.65"
0.6	67	0.1340	1.83		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
18.3	217	Total			

Subcatchment 1S: Pre-Dev

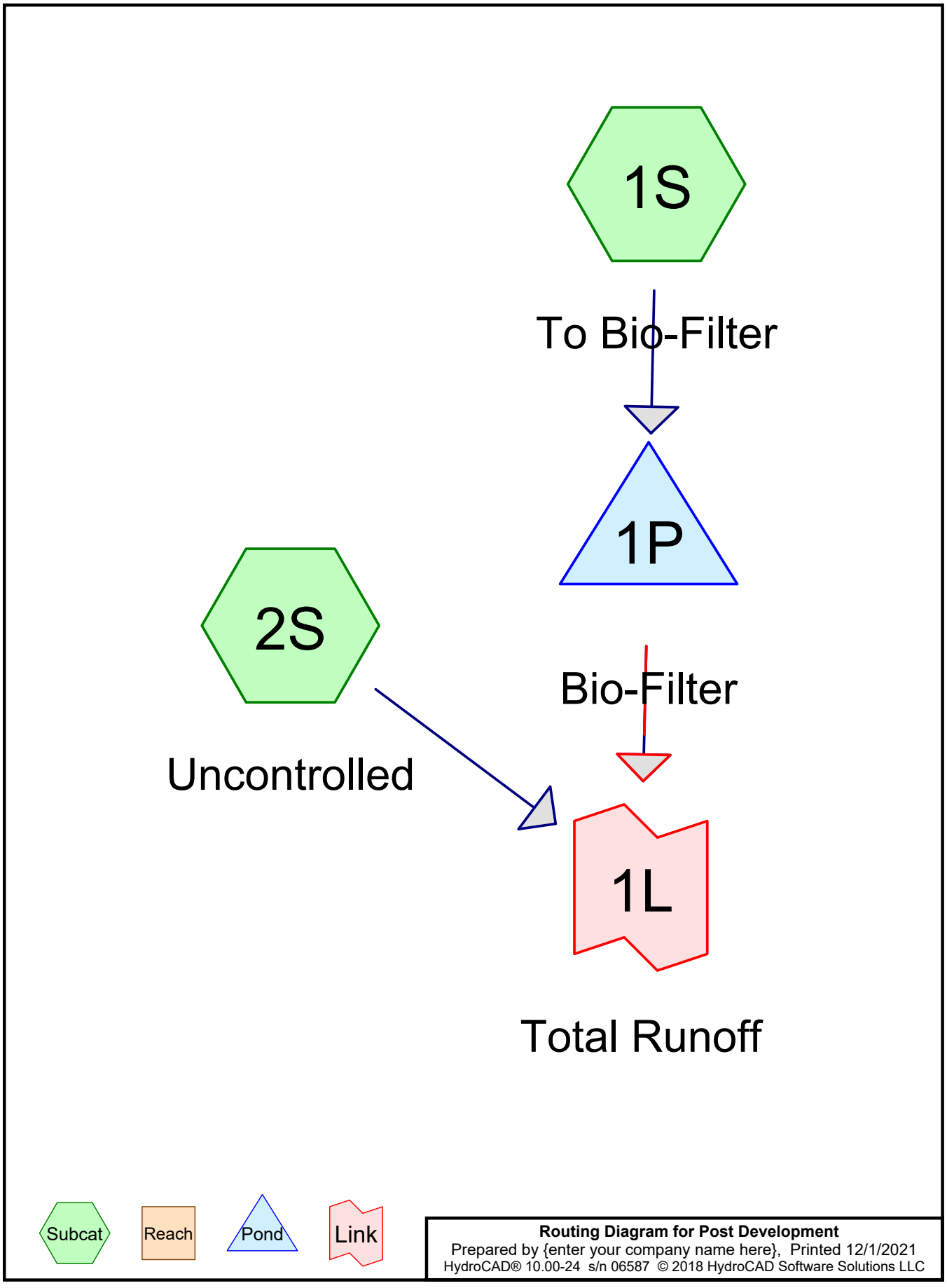


Events for Subcatchment 1S: Pre-Dev

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
1-Year	2.35	2.53	0.183	0.61
2-Year	2.65	3.35	0.236	0.79
10-Year	3.82	6.97	0.477	1.59
100-Year	**6.41**	**16.09**	**1.105**	**3.68**

APPENDIX C

POST-DEVELOPMENT HYDROLOGY AND HYDRAULICS



Routing Diagram for Post Development
Prepared by {enter your company name here}, Printed 12/1/2021
HydroCAD® 10.00-24 s/n 06587 © 2018 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.023	61	>75% Grass cover, Good, HSG B (1S, 2S)
2.056	98	Paved parking (1S)
0.527	98	Proposed Buildings (1S)
3.607	**88**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
1.023	HSG B	1S, 2S
0.000	HSG C	
0.000	HSG D	
2.584	Other	1S
3.607		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	1.023	0.000	0.000	0.000	1.023	>75% Grass cover, Good	1S, 2S
0.000	0.000	0.000	0.000	2.056	2.056	Paved parking	1S
0.000	0.000	0.000	0.000	0.527	0.527	Proposed Buildings	1S
0.000	**1.023**	**0.000**	**0.000**	**2.584**	**3.607**	**TOTAL AREA**	

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	1P	974.91	974.00	26.0	0.0350	0.013	15.0	0.0	0.0

Time span=11.75-21.25 hrs, dt=0.05 hrs, 191 points x 3
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: To Bio-Filter Runoff Area=149,435 sf 75.31% Impervious Runoff Depth>1.21"
Flow Length=687' Tc=10.1 min CN=89 Runoff=6.86 cfs 0.345 af

Subcatchment 2S: Uncontrolled Runoff Area=7,671 sf 0.00% Impervious Runoff Depth>0.14"
Tc=6.0 min CN=61 Runoff=0.02 cfs 0.002 af

Pond 1P: Bio-Filter Peak Elev=982.29' Storage=10,134 cf Inflow=6.86 cfs 0.345 af
Primary=0.29 cfs 0.182 af Secondary=0.00 cfs 0.000 af Outflow=0.29 cfs 0.182 af

Link 1L: Total Runoff Inflow=0.29 cfs 0.184 af
Primary=0.29 cfs 0.184 af

Total Runoff Area = 3.607 ac Runoff Volume = 0.347 af Average Runoff Depth = 1.16"
28.37% Pervious = 1.023 ac 71.63% Impervious = 2.584 ac

Summary for Subcatchment 1S: To Bio-Filter

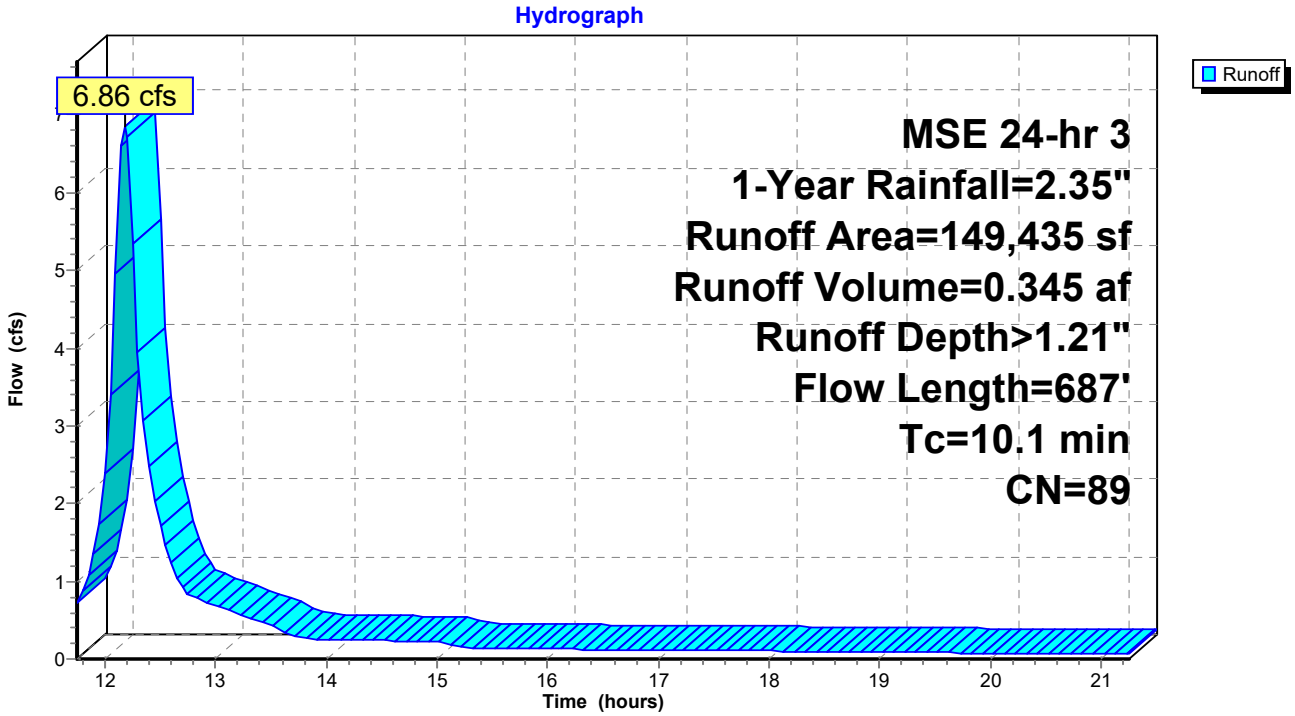
Runoff = 6.86 cfs @ 12.18 hrs, Volume= 0.345 af, Depth> 1.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.35"

	Area (sf)	CN	Description
*	22,960	98	Proposed Buildings
*	89,578	98	Paved parking
	36,897	61	>75% Grass cover, Good, HSG B
	149,435	89	Weighted Average
	36,897		24.69% Pervious Area
	112,538		75.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	54	0.0500	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.65"
2.9	260	0.0100	1.50		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
0.6	373	0.0270	10.86	65.14	**Channel Flow,** Area= 6.0 sf Perim= 10.0' r= 0.60' n= 0.016 Asphalt, rough
10.1	687	Total			

Subcatchment 1S: To Bio-Filter



Summary for Subcatchment 2S: Uncontrolled

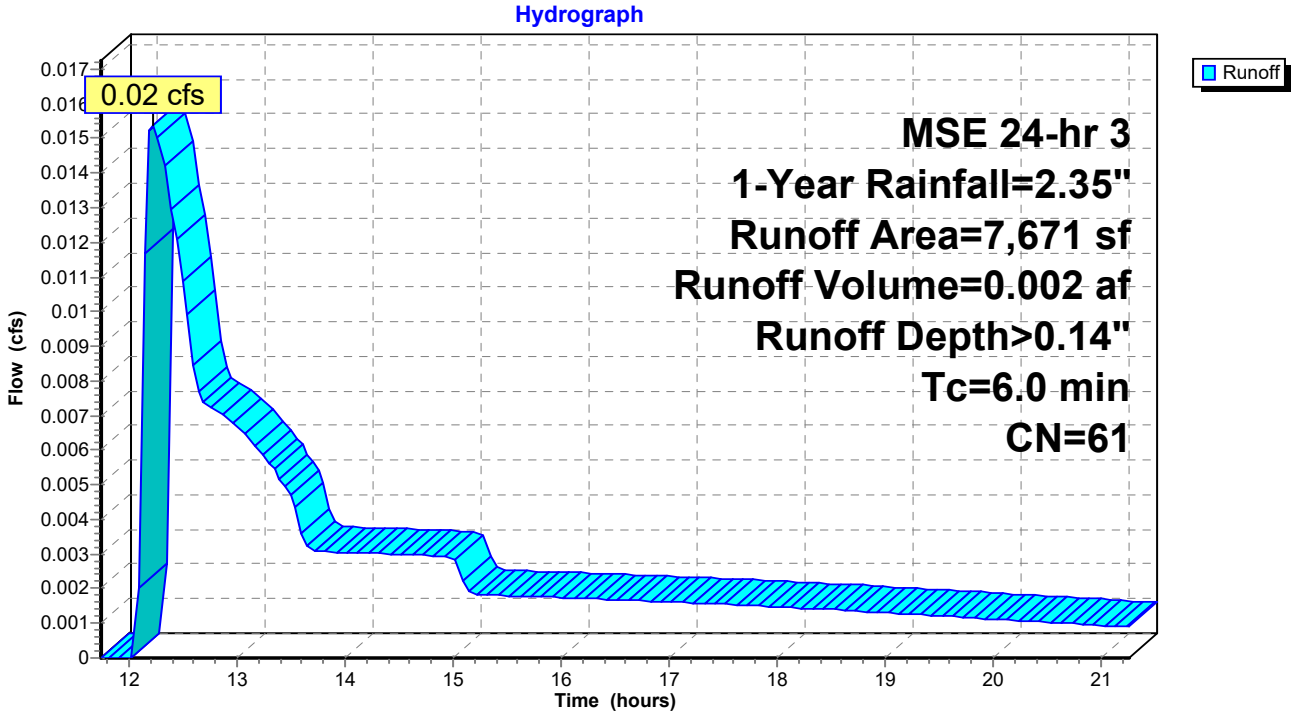
Runoff = 0.02 cfs @ 12.23 hrs, Volume= 0.002 af, Depth> 0.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.35"

Area (sf)	CN	Description
7,671	61	>75% Grass cover, Good, HSG B
7,671		100.00% Pervious Area

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

Subcatchment 2S: Uncontrolled



Summary for Pond 1P: Bio-Filter

Inflow Area = 3.431 ac, 75.31% Impervious, Inflow Depth > 1.21" for 1-Year event
Inflow = 6.86 cfs @ 12.18 hrs, Volume= 0.345 af
Outflow = 0.29 cfs @ 13.71 hrs, Volume= 0.182 af, Atten= 96%, Lag= 92.1 min
Primary = 0.29 cfs @ 13.71 hrs, Volume= 0.182 af
Secondary = 0.00 cfs @ 11.75 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs / 3
Peak Elev= 982.29' @ 13.71 hrs Surf.Area= 12,343 sf Storage= 10,134 cf

Plug-Flow detention time= 254.1 min calculated for 0.181 af (52% of inflow)
Center-of-Mass det. time= 180.9 min (980.9 - 800.0)

Volume	Invert	Avail.Storage	Storage Description
#1	977.00'	10 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) 3,453 cf Overall x 0.3% Voids
#2	978.00'	21 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) 6,941 cf Overall x 0.3% Voids
#3	980.00'	30,971 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)
		31,002 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
977.00	3,488	0	0
977.99	3,488	3,453	3,453

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
978.00	3,488	0	0
979.99	3,488	6,941	6,941

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
980.00	3,488	0	0
981.00	4,282	3,885	3,885
982.00	5,115	4,699	8,584
983.00	5,986	5,551	14,134
984.00	7,206	6,596	20,730
985.00	13,275	10,241	30,971

Device	Routing	Invert	Outlet Devices
#1	Primary	974.91'	**15.0" Round Culvert** L= 26.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 974.91' / 974.00' S= 0.0350 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	977.00'	**Tube/Siphon/Float Valve** 2.000" Diameter, C= 0.600 125.0' Long Tube, Hazen-Williams C= 150 Inlet / Outlet Elev. = 977.00' / 977.00'
#3	Device 1	981.50'	**3.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	982.65'	**36.0" Horiz. Orifice/Grate** C= 0.600

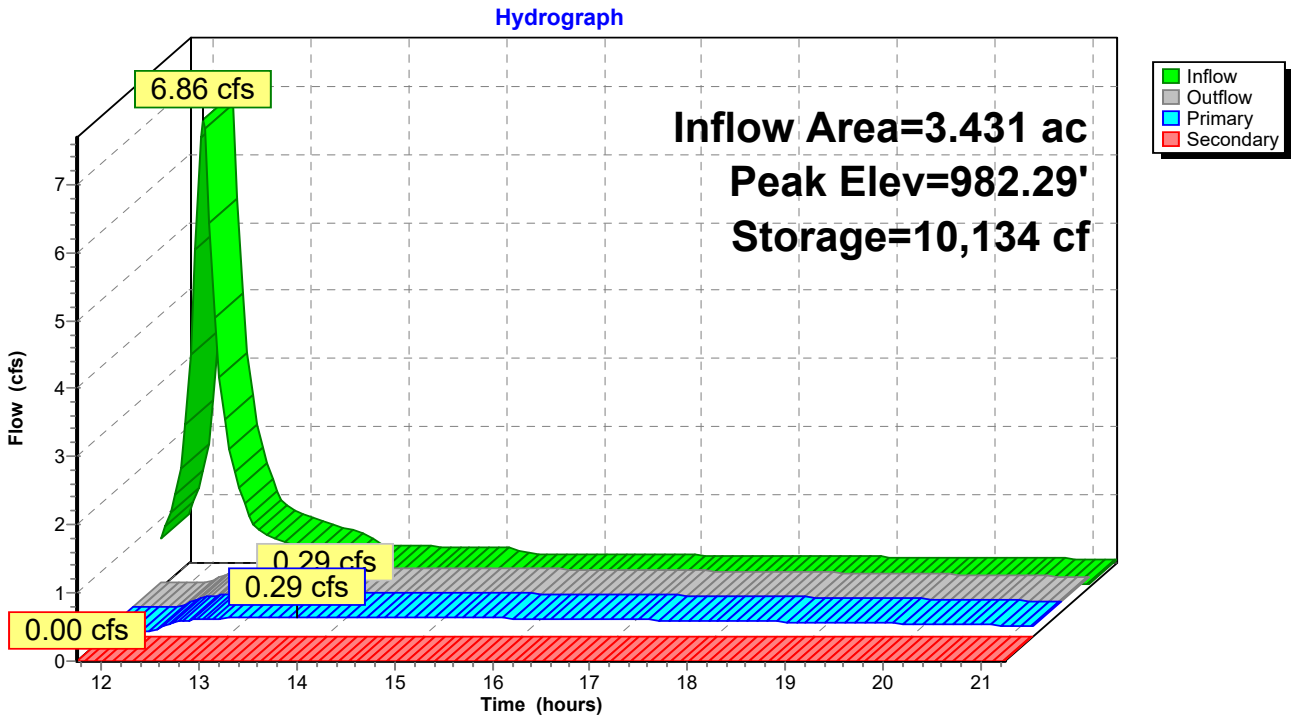
Limited to weir flow at low heads

#5	Secondary	984.00'	**40.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.29 cfs @ 13.71 hrs HW=982.29' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.29 cfs of 12.12 cfs potential flow)
  - **2=Tube/Siphon/Float Valve** (Tube Controls 0.10 cfs @ 4.41 fps)
  - **3=Orifice/Grate** (Orifice Controls 0.19 cfs @ 3.93 fps)
  - **4=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 11.75 hrs HW=980.01' TW=0.00' (Dynamic Tailwater)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Bio-Filter

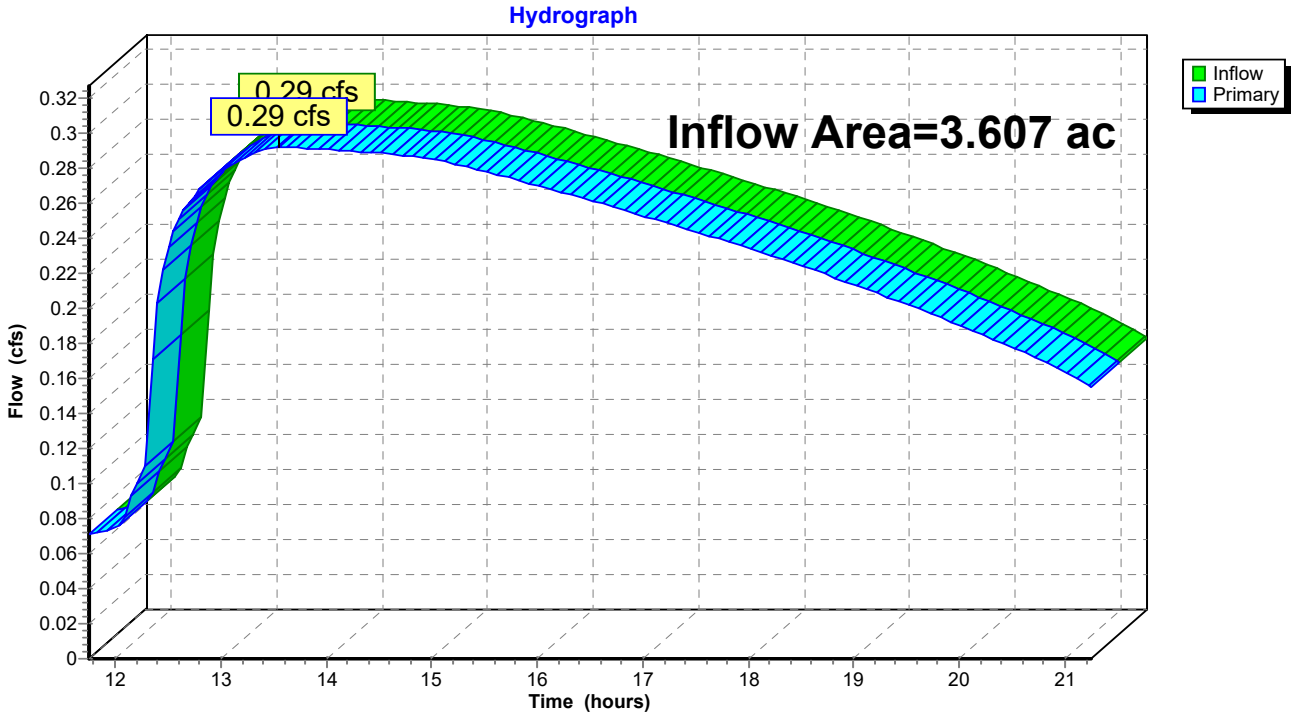


Summary for Link 1L: Total Runoff

Inflow Area = 3.607 ac, 71.63% Impervious, Inflow Depth > 0.61" for 1-Year event
Inflow = 0.29 cfs @ 13.56 hrs, Volume= 0.184 af
Primary = 0.29 cfs @ 13.56 hrs, Volume= 0.184 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs

Link 1L: Total Runoff



Time span=11.75-21.25 hrs, dt=0.05 hrs, 191 points x 3
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: To Bio-Filter Runoff Area=149,435 sf 75.31% Impervious Runoff Depth>1.43"
Flow Length=687' Tc=10.1 min CN=89 Runoff=8.19 cfs 0.409 af

Subcatchment 2S: Uncontrolled Runoff Area=7,671 sf 0.00% Impervious Runoff Depth>0.23"
Tc=6.0 min CN=61 Runoff=0.04 cfs 0.003 af

Pond 1P: Bio-Filter Peak Elev=982.64' Storage=12,069 cf Inflow=8.19 cfs 0.409 af
Primary=0.34 cfs 0.222 af Secondary=0.00 cfs 0.000 af Outflow=0.34 cfs 0.222 af

Link 1L: Total Runoff Inflow=0.34 cfs 0.226 af
Primary=0.34 cfs 0.226 af

Total Runoff Area = 3.607 ac Runoff Volume = 0.412 af Average Runoff Depth = 1.37"
28.37% Pervious = 1.023 ac 71.63% Impervious = 2.584 ac

Summary for Subcatchment 1S: To Bio-Filter

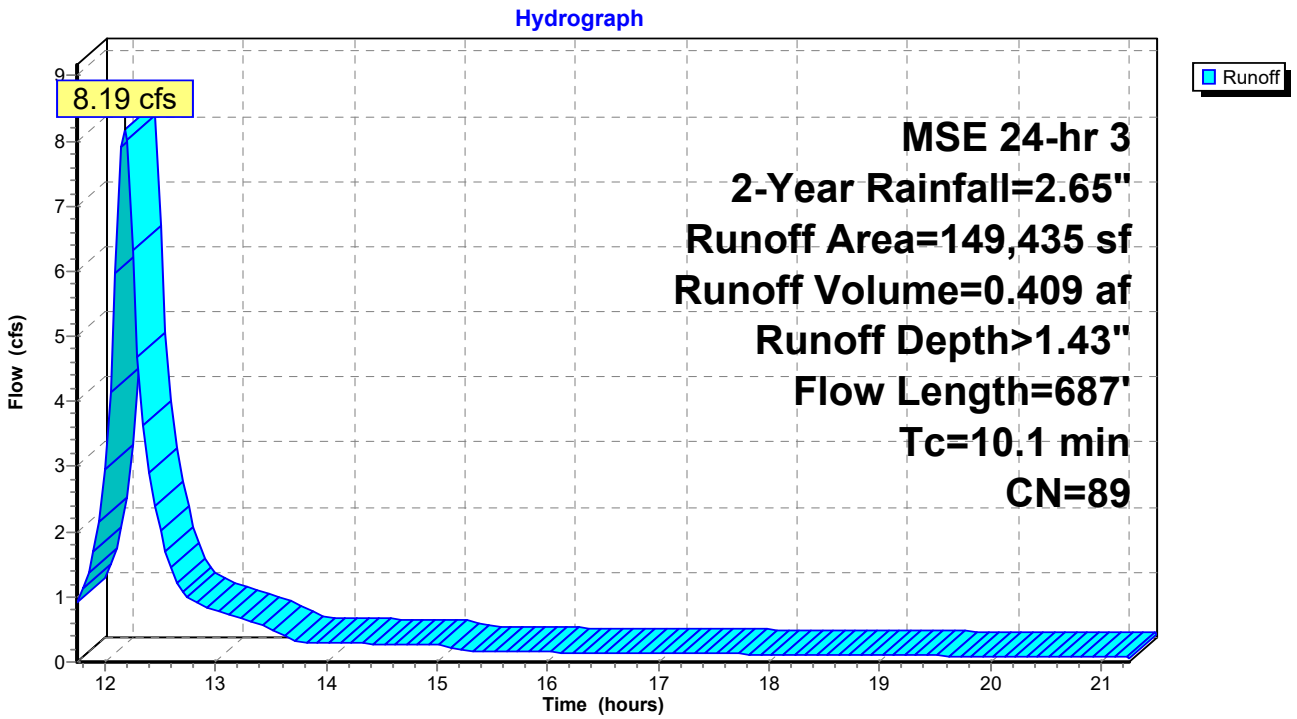
Runoff = 8.19 cfs @ 12.18 hrs, Volume= 0.409 af, Depth> 1.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.65"

	Area (sf)	CN	Description
*	22,960	98	Proposed Buildings
*	89,578	98	Paved parking
	36,897	61	>75% Grass cover, Good, HSG B
	149,435	89	Weighted Average
	36,897		24.69% Pervious Area
	112,538		75.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	54	0.0500	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.65"
2.9	260	0.0100	1.50		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
0.6	373	0.0270	10.86	65.14	**Channel Flow,** Area= 6.0 sf Perim= 10.0' r= 0.60' n= 0.016 Asphalt, rough
10.1	687	Total			

Subcatchment 1S: To Bio-Filter



Summary for Subcatchment 2S: Uncontrolled

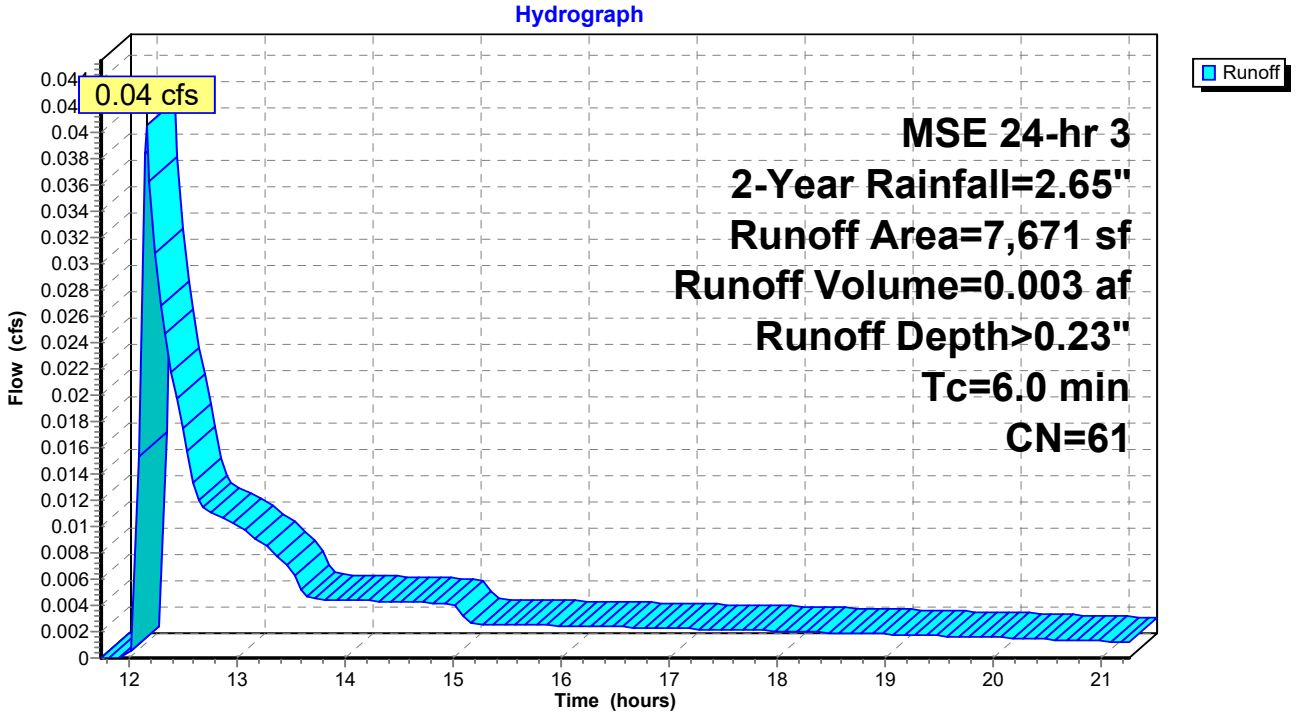
Runoff = 0.04 cfs @ 12.17 hrs, Volume= 0.003 af, Depth> 0.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.65"

Area (sf)	CN	Description
7,671	61	>75% Grass cover, Good, HSG B
7,671		100.00% Pervious Area

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

Subcatchment 2S: Uncontrolled



Summary for Pond 1P: Bio-Filter

Inflow Area = 3.431 ac, 75.31% Impervious, Inflow Depth > 1.43" for 2-Year event
Inflow = 8.19 cfs @ 12.18 hrs, Volume= 0.409 af
Outflow = 0.34 cfs @ 13.71 hrs, Volume= 0.222 af, Atten= 96%, Lag= 92.0 min
Primary = 0.34 cfs @ 13.71 hrs, Volume= 0.222 af
Secondary = 0.00 cfs @ 11.75 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs / 3
Peak Elev= 982.64' @ 13.71 hrs Surf.Area= 12,649 sf Storage= 12,069 cf

Plug-Flow detention time= 258.2 min calculated for 0.219 af (54% of inflow)
Center-of-Mass det. time= 187.9 min (986.3 - 798.4)

Volume	Invert	Avail.Storage	Storage Description
#1	977.00'	10 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) 3,453 cf Overall x 0.3% Voids
#2	978.00'	21 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) 6,941 cf Overall x 0.3% Voids
#3	980.00'	30,971 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)
		31,002 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
977.00	3,488	0	0
977.99	3,488	3,453	3,453

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
978.00	3,488	0	0
979.99	3,488	6,941	6,941

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
980.00	3,488	0	0
981.00	4,282	3,885	3,885
982.00	5,115	4,699	8,584
983.00	5,986	5,551	14,134
984.00	7,206	6,596	20,730
985.00	13,275	10,241	30,971

Device	Routing	Invert	Outlet Devices
#1	Primary	974.91'	**15.0" Round Culvert** L= 26.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 974.91' / 974.00' S= 0.0350 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	977.00'	**Tube/Siphon/Float Valve** 2.000" Diameter, C= 0.600 125.0' Long Tube, Hazen-Williams C= 150 Inlet / Outlet Elev. = 977.00' / 977.00'
#3	Device 1	981.50'	**3.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	982.65'	**36.0" Horiz. Orifice/Grate** C= 0.600

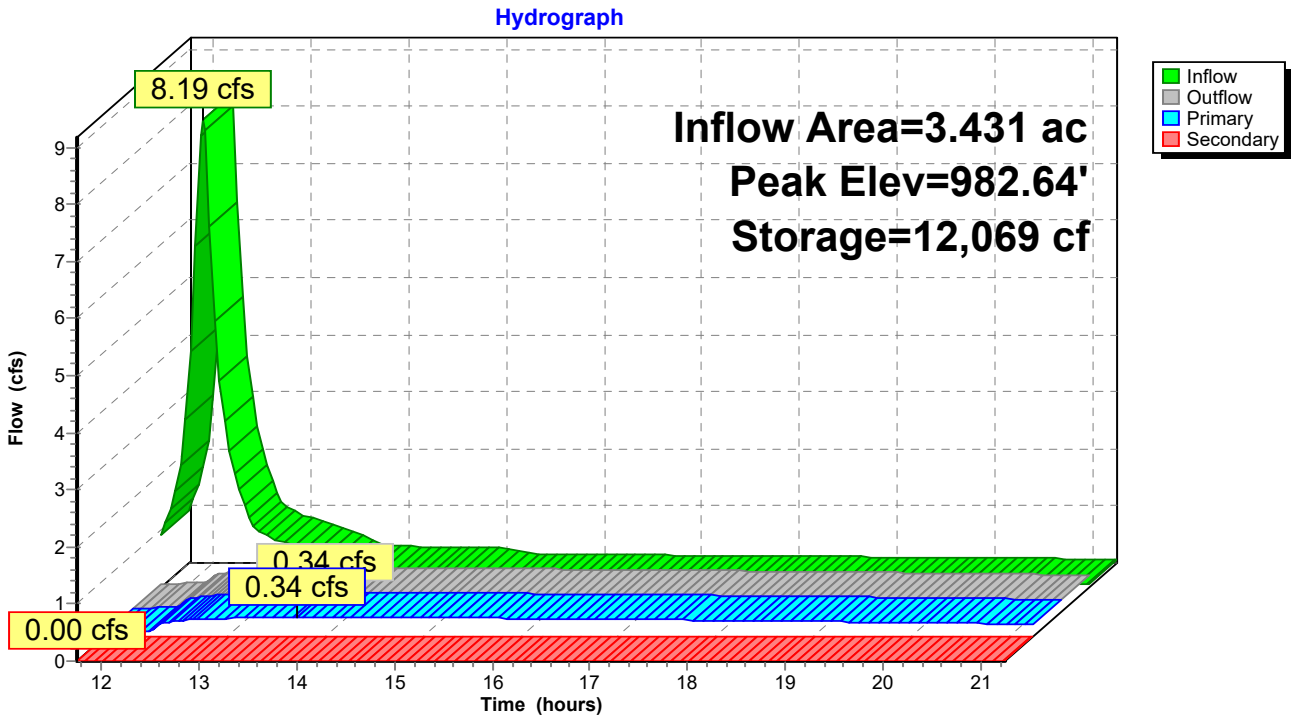
Limited to weir flow at low heads

#5	Secondary	984.00'	**40.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.34 cfs @ 13.71 hrs HW=982.64' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.34 cfs of 12.43 cfs potential flow)
  - **2=Tube/Siphon/Float Valve** (Tube Controls 0.10 cfs @ 4.56 fps)
  - **3=Orifice/Grate** (Orifice Controls 0.24 cfs @ 4.85 fps)
  - **4=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 11.75 hrs HW=980.01' TW=0.00' (Dynamic Tailwater)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Bio-Filter

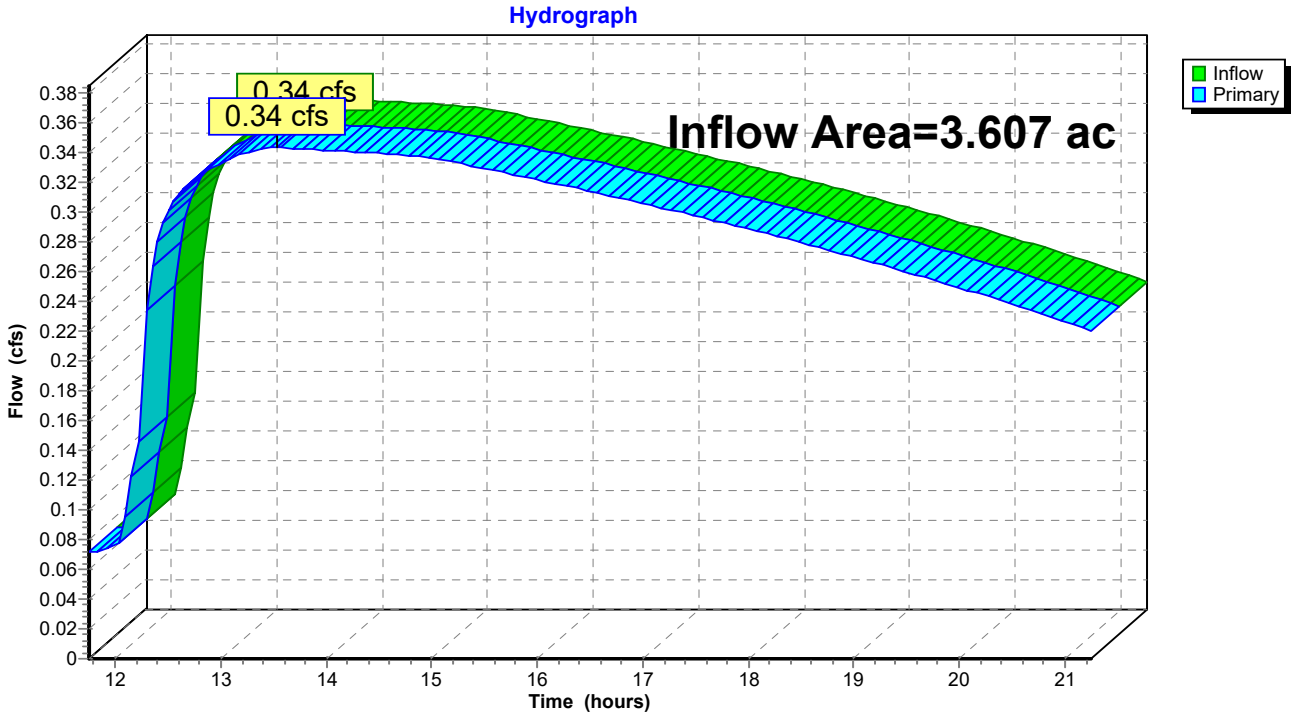


Summary for Link 1L: Total Runoff

Inflow Area = 3.607 ac, 71.63% Impervious, Inflow Depth > 0.75" for 2-Year event
Inflow = 0.34 cfs @ 13.53 hrs, Volume= 0.226 af
Primary = 0.34 cfs @ 13.53 hrs, Volume= 0.226 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs

Link 1L: Total Runoff



Time span=11.75-21.25 hrs, dt=0.05 hrs, 191 points x 3
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: To Bio-Filter Runoff Area=149,435 sf 75.31% Impervious Runoff Depth>2.31"
Flow Length=687' Tc=10.1 min CN=89 Runoff=13.47 cfs 0.661 af

Subcatchment 2S: Uncontrolled Runoff Area=7,671 sf 0.00% Impervious Runoff Depth>0.69"
Tc=6.0 min CN=61 Runoff=0.20 cfs 0.010 af

Pond 1P: Bio-Filter Peak Elev=982.93' Storage=13,759 cf Inflow=13.47 cfs 0.661 af
Primary=4.98 cfs 0.448 af Secondary=0.00 cfs 0.000 af Outflow=4.98 cfs 0.448 af

Link 1L: Total Runoff Inflow=5.05 cfs 0.458 af
Primary=5.05 cfs 0.458 af

Total Runoff Area = 3.607 ac Runoff Volume = 0.671 af Average Runoff Depth = 2.23"
28.37% Pervious = 1.023 ac 71.63% Impervious = 2.584 ac

Summary for Subcatchment 1S: To Bio-Filter

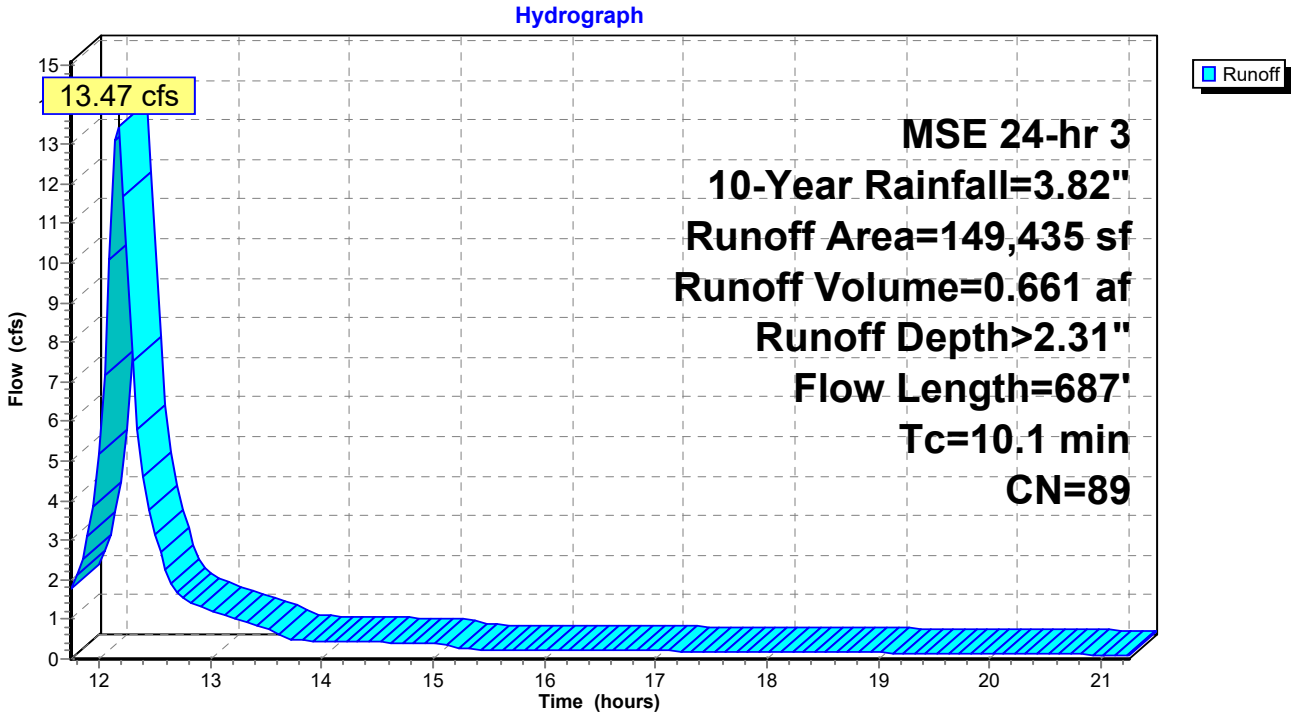
Runoff = 13.47 cfs @ 12.17 hrs, Volume= 0.661 af, Depth> 2.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.82"

	Area (sf)	CN	Description
*	22,960	98	Proposed Buildings
*	89,578	98	Paved parking
	36,897	61	>75% Grass cover, Good, HSG B
	149,435	89	Weighted Average
	36,897		24.69% Pervious Area
	112,538		75.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	54	0.0500	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.65"
2.9	260	0.0100	1.50		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
0.6	373	0.0270	10.86	65.14	**Channel Flow,** Area= 6.0 sf Perim= 10.0' r= 0.60' n= 0.016 Asphalt, rough
10.1	687	Total			

Subcatchment 1S: To Bio-Filter



Summary for Subcatchment 2S: Uncontrolled

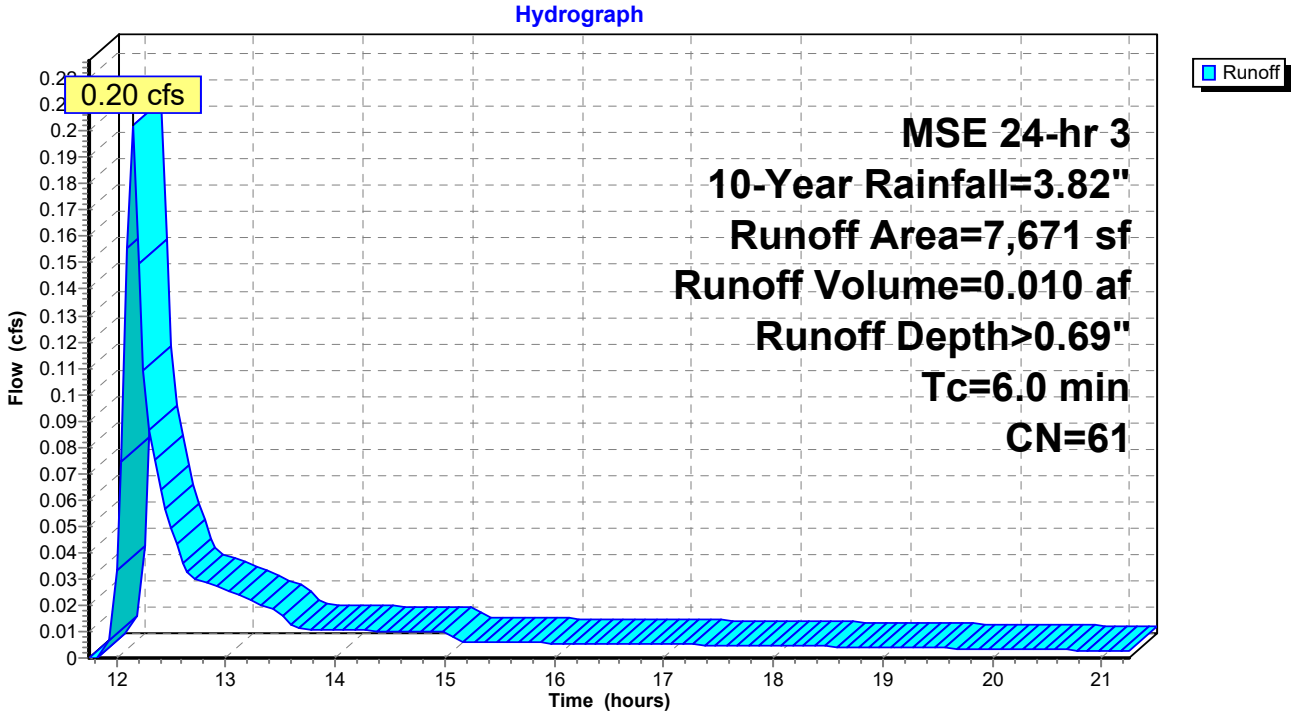
Runoff = 0.20 cfs @ 12.15 hrs, Volume= 0.010 af, Depth> 0.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=3.82"

Area (sf)	CN	Description
7,671	61	>75% Grass cover, Good, HSG B
7,671		100.00% Pervious Area

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

Subcatchment 2S: Uncontrolled



Summary for Pond 1P: Bio-Filter

Inflow Area = 3.431 ac, 75.31% Impervious, Inflow Depth > 2.31" for 10-Year event
Inflow = 13.47 cfs @ 12.17 hrs, Volume= 0.661 af
Outflow = 4.98 cfs @ 12.39 hrs, Volume= 0.448 af, Atten= 63%, Lag= 13.2 min
Primary = 4.98 cfs @ 12.39 hrs, Volume= 0.448 af
Secondary = 0.00 cfs @ 11.75 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs / 3
Peak Elev= 982.93' @ 12.39 hrs Surf.Area= 12,903 sf Storage= 13,759 cf

Plug-Flow detention time= 156.8 min calculated for 0.445 af (67% of inflow)
Center-of-Mass det. time= 93.6 min (888.3 - 794.6)

Volume	Invert	Avail.Storage	Storage Description
#1	977.00'	10 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) 3,453 cf Overall x 0.3% Voids
#2	978.00'	21 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) 6,941 cf Overall x 0.3% Voids
#3	980.00'	30,971 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)
		31,002 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
977.00	3,488	0	0
977.99	3,488	3,453	3,453

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
978.00	3,488	0	0
979.99	3,488	6,941	6,941

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
980.00	3,488	0	0
981.00	4,282	3,885	3,885
982.00	5,115	4,699	8,584
983.00	5,986	5,551	14,134
984.00	7,206	6,596	20,730
985.00	13,275	10,241	30,971

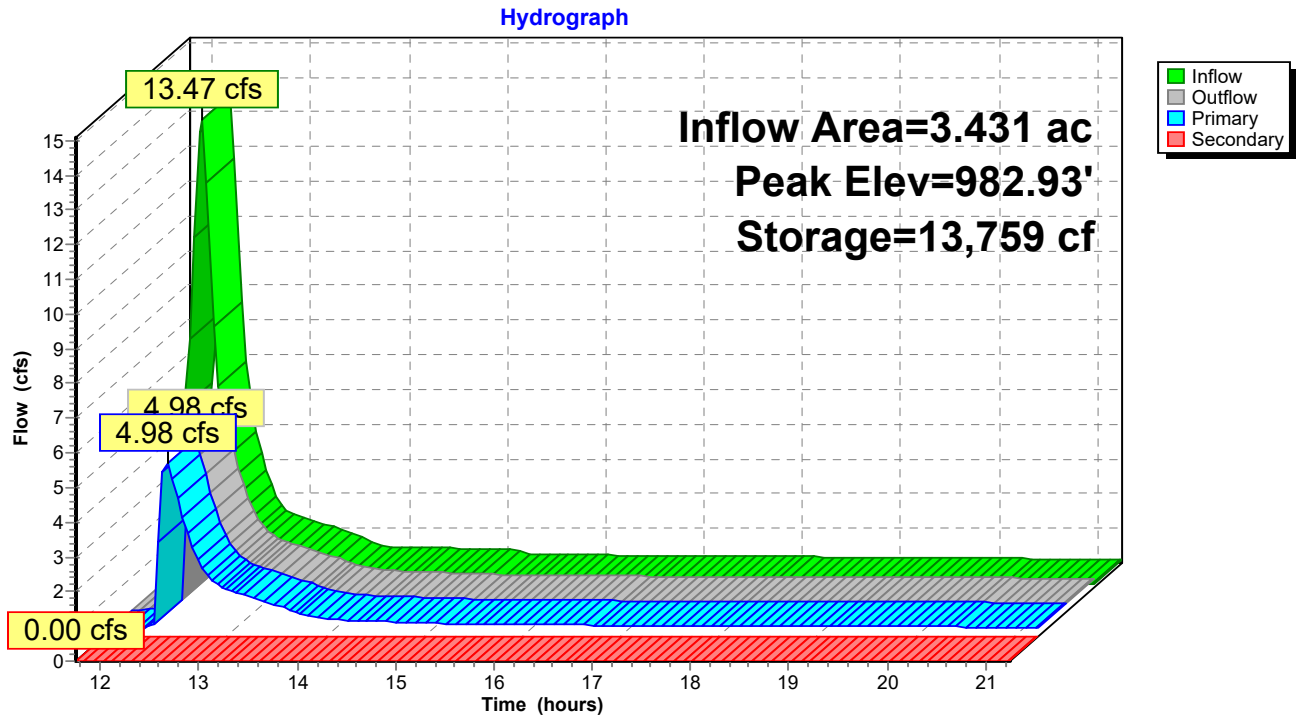
Device	Routing	Invert	Outlet Devices
#1	Primary	974.91'	**15.0" Round Culvert** L= 26.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 974.91' / 974.00' S= 0.0350 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	977.00'	**Tube/Siphon/Float Valve** 2.000" Diameter, C= 0.600 125.0' Long Tube, Hazen-Williams C= 150 Inlet / Outlet Elev. = 977.00' / 977.00'
#3	Device 1	981.50'	**3.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	982.65'	**36.0" Horiz. Orifice/Grate** C= 0.600

			Limited to weir flow at low heads
#5	Secondary	984.00'	**40.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=4.95 cfs @ 12.39 hrs HW=982.93' TW=0.00' (Dynamic Tailwater)
└─**1=Culvert** (Passes 4.95 cfs of 12.69 cfs potential flow)
  └─**2=Tube/Siphon/Float Valve** (Tube Controls 0.10 cfs @ 4.69 fps)
  └─**3=Orifice/Grate** (Orifice Controls 0.27 cfs @ 5.50 fps)
  └─**4=Orifice/Grate** (Weir Controls 4.58 cfs @ 1.73 fps)

Secondary OutFlow Max=0.00 cfs @ 11.75 hrs HW=980.03' TW=0.00' (Dynamic Tailwater)
└─**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Bio-Filter

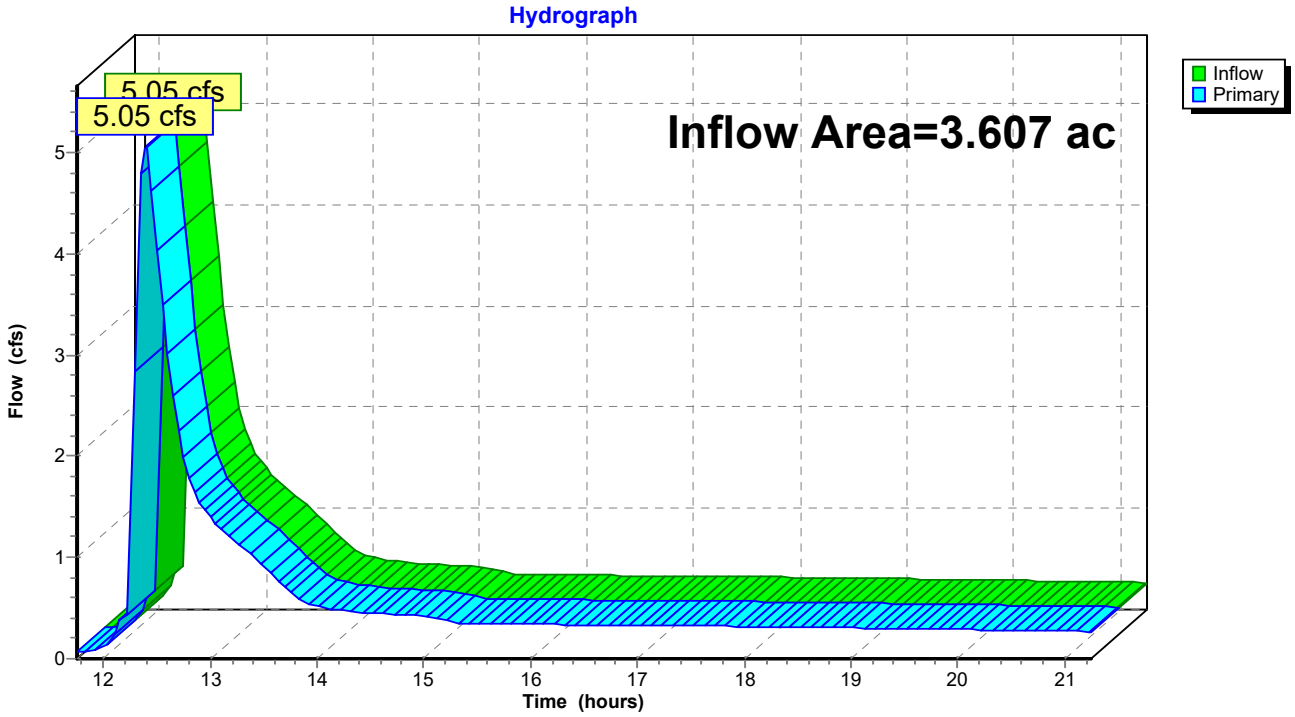


Summary for Link 1L: Total Runoff

Inflow Area = 3.607 ac, 71.63% Impervious, Inflow Depth > 1.52" for 10-Year event
Inflow = 5.05 cfs @ 12.39 hrs, Volume= 0.458 af
Primary = 5.05 cfs @ 12.39 hrs, Volume= 0.458 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs

Link 1L: Total Runoff



Time span=11.75-21.25 hrs, dt=0.05 hrs, 191 points x 3
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: To Bio-Filter Runoff Area=149,435 sf 75.31% Impervious Runoff Depth>4.27"
Flow Length=687' Tc=10.1 min CN=89 Runoff=25.15 cfs 1.220 af

Subcatchment 2S: Uncontrolled Runoff Area=7,671 sf 0.00% Impervious Runoff Depth>2.18"
Tc=6.0 min CN=61 Runoff=0.72 cfs 0.032 af

Pond 1P: Bio-Filter Peak Elev=983.73' Storage=18,862 cf Inflow=25.15 cfs 1.220 af
Primary=13.35 cfs 0.964 af Secondary=0.00 cfs 0.000 af Outflow=13.35 cfs 0.964 af

Link 1L: Total Runoff Inflow=13.62 cfs 0.996 af
Primary=13.62 cfs 0.996 af

Total Runoff Area = 3.607 ac Runoff Volume = 1.252 af Average Runoff Depth = 4.17"
28.37% Pervious = 1.023 ac 71.63% Impervious = 2.584 ac

Summary for Subcatchment 1S: To Bio-Filter

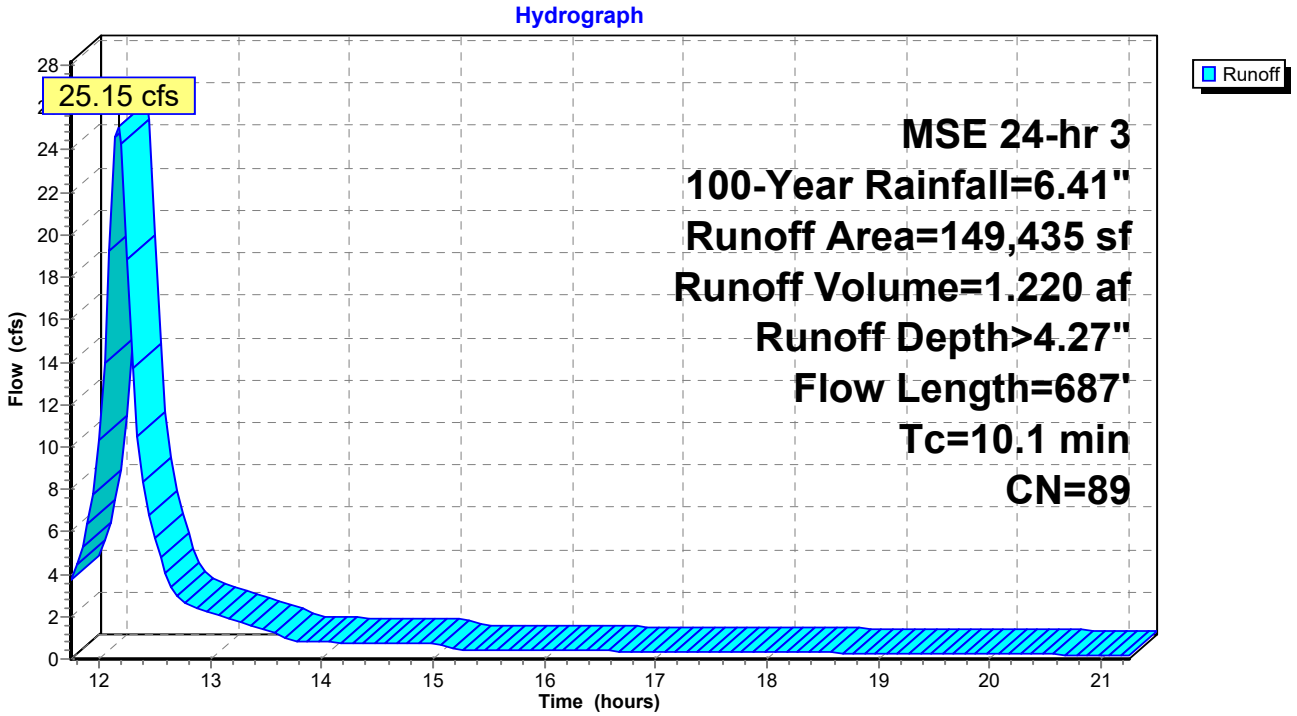
Runoff = 25.15 cfs @ 12.17 hrs, Volume= 1.220 af, Depth> 4.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.41"

	Area (sf)	CN	Description
*	22,960	98	Proposed Buildings
*	89,578	98	Paved parking
	36,897	61	>75% Grass cover, Good, HSG B
	149,435	89	Weighted Average
	36,897		24.69% Pervious Area
	112,538		75.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	54	0.0500	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.65"
2.9	260	0.0100	1.50		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
0.6	373	0.0270	10.86	65.14	**Channel Flow,** Area= 6.0 sf Perim= 10.0' r= 0.60' n= 0.016 Asphalt, rough
10.1	687	Total			

Subcatchment 1S: To Bio-Filter



Summary for Subcatchment 2S: Uncontrolled

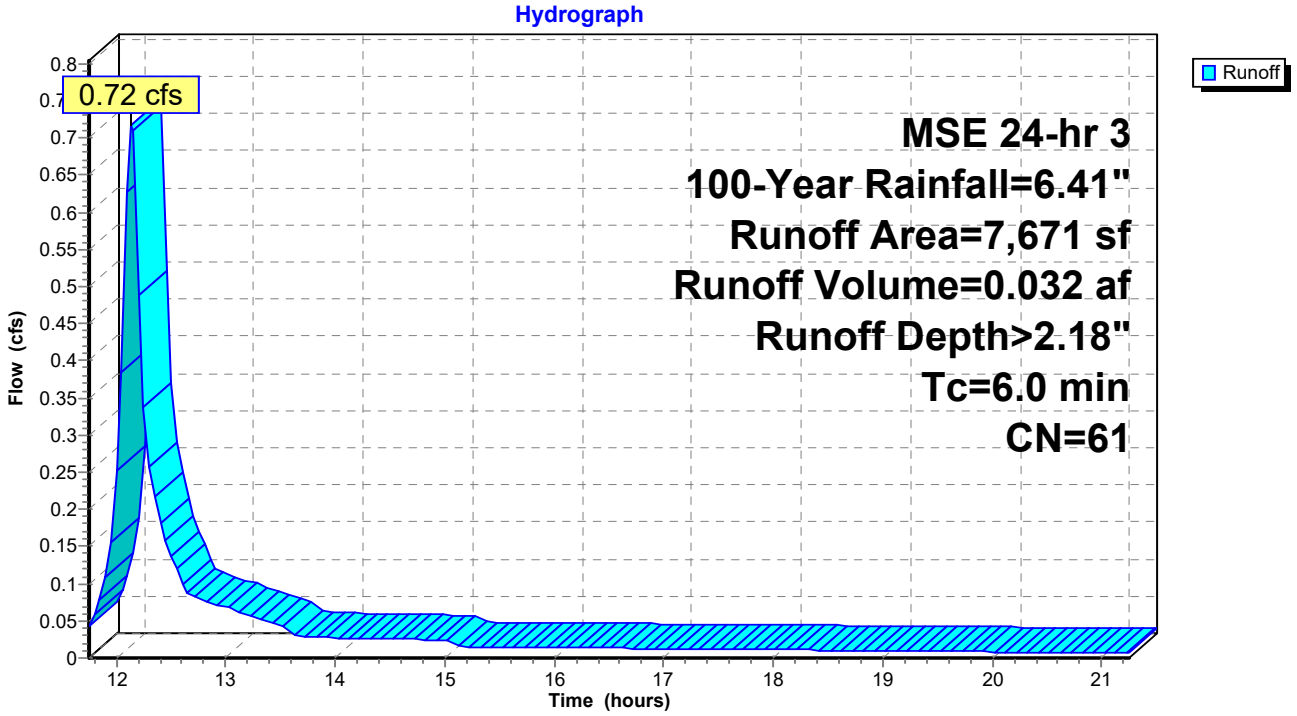
Runoff = 0.72 cfs @ 12.14 hrs, Volume= 0.032 af, Depth> 2.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.41"

Area (sf)	CN	Description
7,671	61	>75% Grass cover, Good, HSG B
7,671		100.00% Pervious Area

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

Subcatchment 2S: Uncontrolled



Summary for Pond 1P: Bio-Filter

Inflow Area = 3.431 ac, 75.31% Impervious, Inflow Depth > 4.27" for 100-Year event
Inflow = 25.15 cfs @ 12.17 hrs, Volume= 1.220 af
Outflow = 13.35 cfs @ 12.31 hrs, Volume= 0.964 af, Atten= 47%, Lag= 8.3 min
Primary = 13.35 cfs @ 12.31 hrs, Volume= 0.964 af
Secondary = 0.00 cfs @ 11.75 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs / 3
Peak Elev= 983.73' @ 12.31 hrs Surf.Area= 13,853 sf Storage= 18,862 cf

Plug-Flow detention time= 89.2 min calculated for 0.956 af (78% of inflow)
Center-of-Mass det. time= 36.1 min (827.4 - 791.3)

Volume	Invert	Avail.Storage	Storage Description
#1	977.00'	10 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) 3,453 cf Overall x 0.3% Voids
#2	978.00'	21 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc) 6,941 cf Overall x 0.3% Voids
#3	980.00'	30,971 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)
		31,002 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
977.00	3,488	0	0
977.99	3,488	3,453	3,453

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
978.00	3,488	0	0
979.99	3,488	6,941	6,941

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
980.00	3,488	0	0
981.00	4,282	3,885	3,885
982.00	5,115	4,699	8,584
983.00	5,986	5,551	14,134
984.00	7,206	6,596	20,730
985.00	13,275	10,241	30,971

Device	Routing	Invert	Outlet Devices
#1	Primary	974.91'	**15.0" Round Culvert** L= 26.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 974.91' / 974.00' S= 0.0350 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	977.00'	**Tube/Siphon/Float Valve** 2.000" Diameter, C= 0.600 125.0' Long Tube, Hazen-Williams C= 150 Inlet / Outlet Elev. = 977.00' / 977.00'
#3	Device 1	981.50'	**3.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	982.65'	**36.0" Horiz. Orifice/Grate** C= 0.600

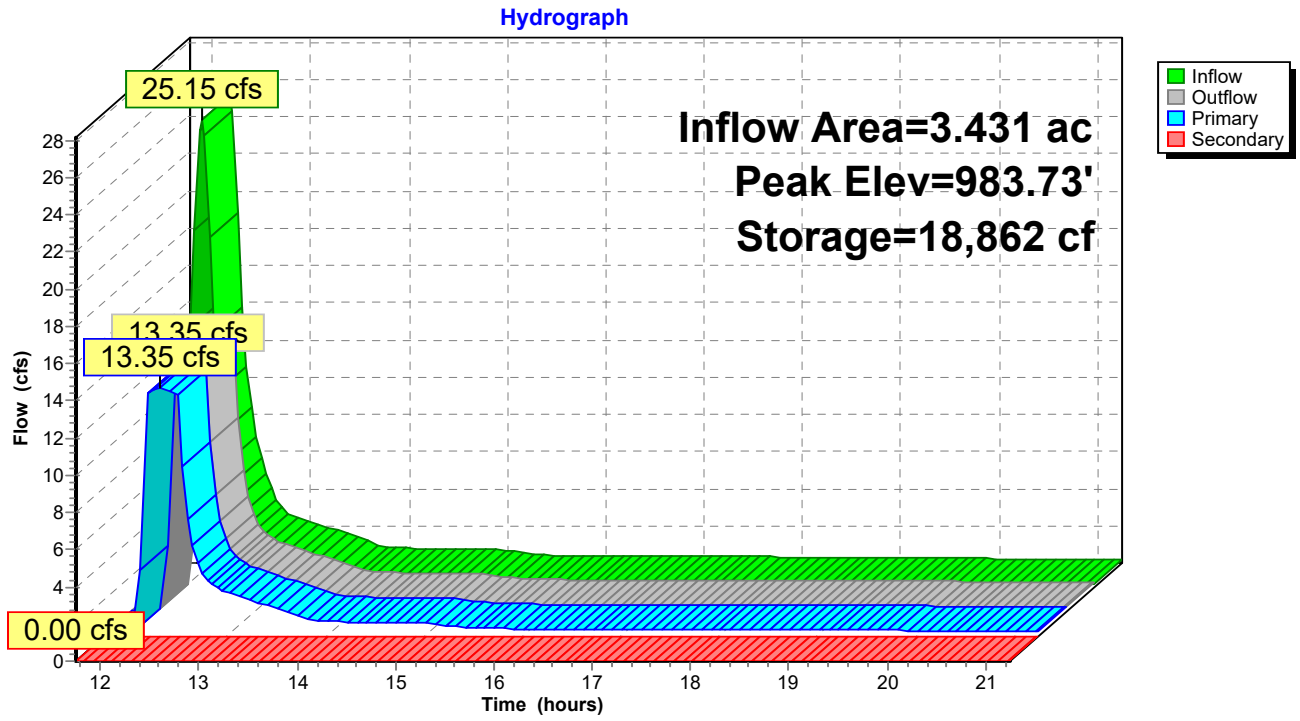
Limited to weir flow at low heads

#5	Secondary	984.00'	**40.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=13.35 cfs @ 12.31 hrs HW=983.72' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Inlet Controls 13.35 cfs @ 10.88 fps)
  - **2=Tube/Siphon/Float Valve** (Passes < 0.11 cfs potential flow)
  - **3=Orifice/Grate** (Passes < 0.34 cfs potential flow)
  - **4=Orifice/Grate** (Passes < 34.16 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 11.75 hrs HW=980.08' TW=0.00' (Dynamic Tailwater)
- **5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Bio-Filter

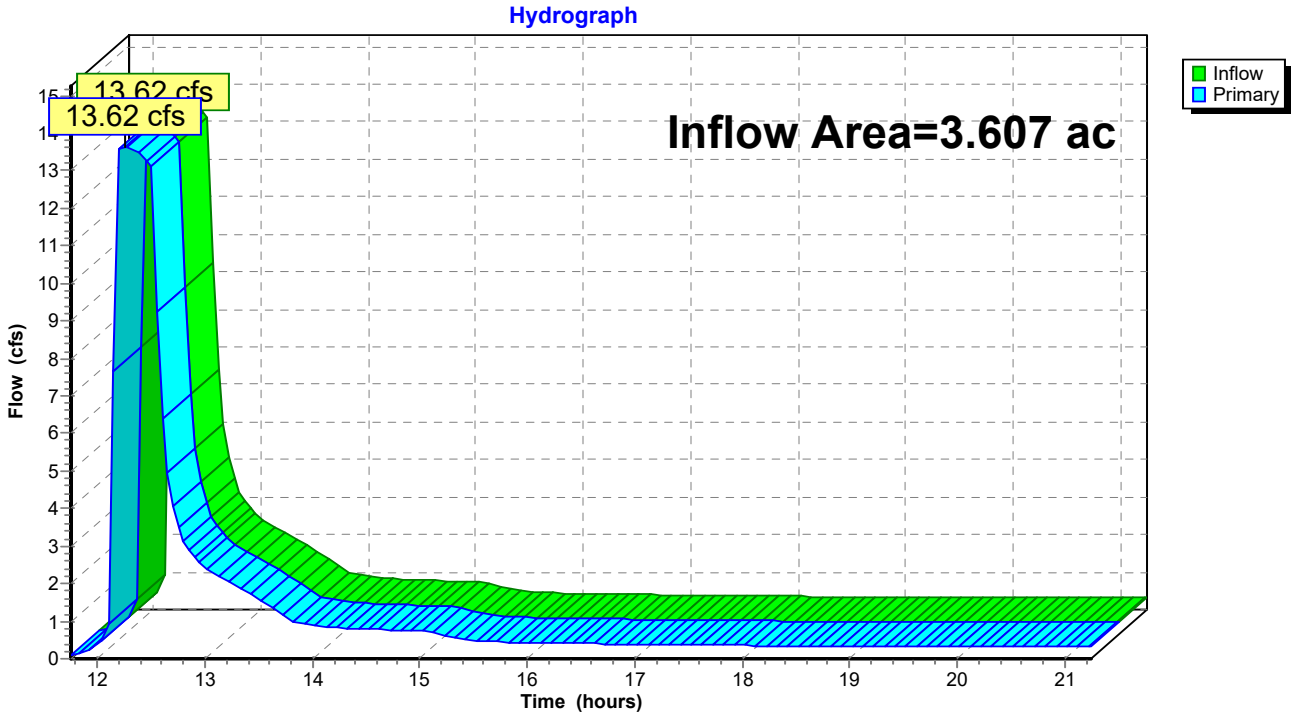


Summary for Link 1L: Total Runoff

Inflow Area = 3.607 ac, 71.63% Impervious, Inflow Depth > 3.31" for 100-Year event
Inflow = 13.62 cfs @ 12.25 hrs, Volume= 0.996 af
Primary = 13.62 cfs @ 12.25 hrs, Volume= 0.996 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs

Link 1L: Total Runoff

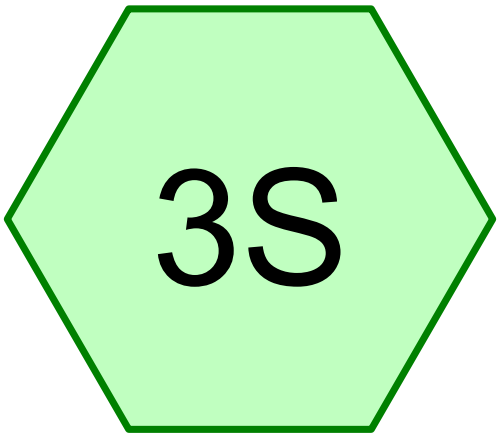


Events for Pond 1P: Bio-Filter

Event	Inflow (cfs)	Outflow (cfs)	Primary (cfs)	Secondary (cfs)	Elevation (feet)	Storage (cubic-feet)
1-Year	6.86	0.29	0.29	**0.00**	982.29	10,134
2-Year	8.19	0.34	0.34	0.00	982.64	12,069
10-Year	13.47	4.98	4.98	0.00	982.93	13,759
100-Year	**25.15**	**13.35**	**13.35**	0.00	**983.73**	**18,862**

Events for Link 1L: Total Runoff

Event	Inflow (cfs)	Primary (cfs)	Elevation (feet)
1-Year	0.29	0.29	**0.00**
2-Year	0.34	0.34	0.00
10-Year	5.05	5.05	0.00
100-Year	**13.62**	**13.62**	0.00



Offsite runon.

Subcat Reach Pond Link

Routing Diagram for Post Development
Prepared by {enter your company name here}, Printed 11/22/2021
HydroCAD® 10.00-24 s/n 06587 © 2018 HydroCAD Software Solutions LLC

Project Notes

Rainfall events imported from "NRCS-Rain.txt" for 9208 WI Washington
Rainfall events imported from "NRCS-Rain.txt" for 9208 WI Washington

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.725	78	Row crops, straight row, Good, HSG B (3S)
2.725	**78**	**TOTAL AREA**

Summary for Subcatchment 3S: Offsite runon.

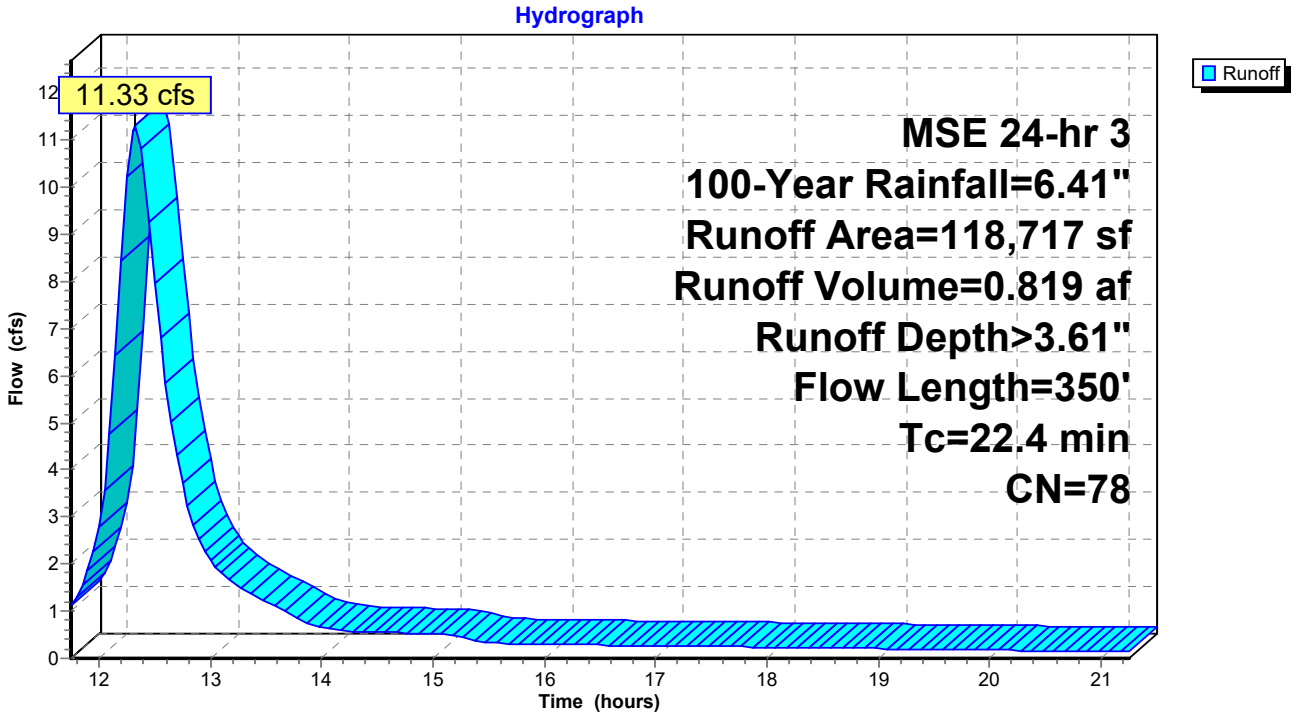
Runoff = 11.33 cfs @ 12.32 hrs, Volume= 0.819 af, Depth> 3.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 11.75-21.25 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=6.41"

Area (sf)	CN	Description
118,717	78	Row crops, straight row, Good, HSG B
118,717		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.7	300	0.0400	0.23		**Sheet Flow,** Cultivated: Residue>20% n= 0.170 P2= 2.65"
0.7	50	0.0200	1.27		**Shallow Concentrated Flow,** Cultivated Straight Rows Kv= 9.0 fps
22.4	350	Total			

Subcatchment 3S: Offsite runon.



WORK SHEET FOR STORM SEWER DESIGN

PROJECT: Appleton Avenue Storage Facility
DATE: 11/22/2021

Computed by: Jonathan Worden
Checked by: Kevin Parish

LOCATION		BASIN		RAINFALL - RUNOFF						SEWER			
Upstream Structure	Downstream Structure	Runoff Coeff.	Area	Design Storm	Rain Intensity	Direct Runoff	Other Runoff	Design Runoff		Sewer Size	Slope of Sewer	Capacity Flowing Full	
		(C)	(A) Acres	Yr.	(I) In./Hr.	Q=C*I*A CFS	CFS	CFS	GPM	In.	Ft./Ft.	CFS	GPM
CB #1	Stand Pipe		2.73	From HydroCAD		11.30	0.00	11.30	5071	15	0.0350	12.1	5438

* C_{10}= 0.72 = Commercial Soil B, Slope 2-6% from the FDM Procedure 13-10-5 Figure 2.

* C_{100}= 0.21 = Agricultural Soil B, Slope 2-6% from the FDM Procedure 13-10-5 Figure 2.

A = Drainage area to structure.

I = rainfall intensity for West Bend, Wisconsin from NOAA Atlas 14, Vol. 8, Ver. 2

Manning's Roughness Coefficient	
n=	0.013
10 Year Storm	100 Year Storm
7.27	10.8

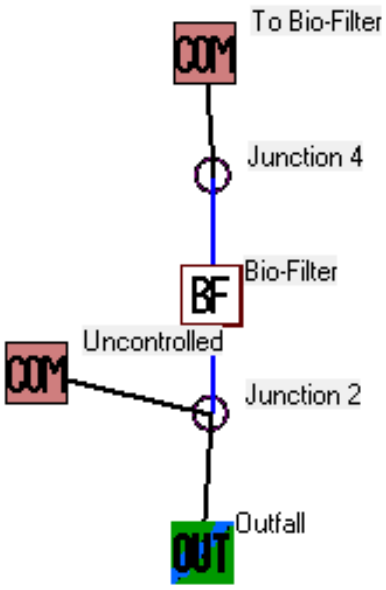
APPENDIX D

TSS REDUCTION CALCULATIONS

TSS REDUCTION CALCULATIONS

TSS Calculations:

The detention pond will remove a minimum of 40% of total suspended solids (TSS) from redeveloped areas and 80% suspended solids from new development areas. See page 3 below for percent reduction.



WinSLAMM Version 10.4.0
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Milwaukee WI 1969.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_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_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway 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: 12-01-2021 Time: 12:19:08
Site information:
Old Germantown Farmstead-Village of Germantown, Wisconsin
LU# 1 - Commercial: To Bio-Filter Total area (ac): 3.430
1 - Roofs 1: 0.527 ac. Pitched Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

13 - Paved Parking 1: 2.056 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.847 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Commercial: Uncontrolled Total area (ac): 0.176
45 - Large Landscaped Areas 1: 0.176 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Biofilter CP# 1 (DS) - Bio-Filter
1. Top area (square feet) = 13275
2. Bottom aea (square feet) = 3488
3. Depth (ft): 8
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): 0.01
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

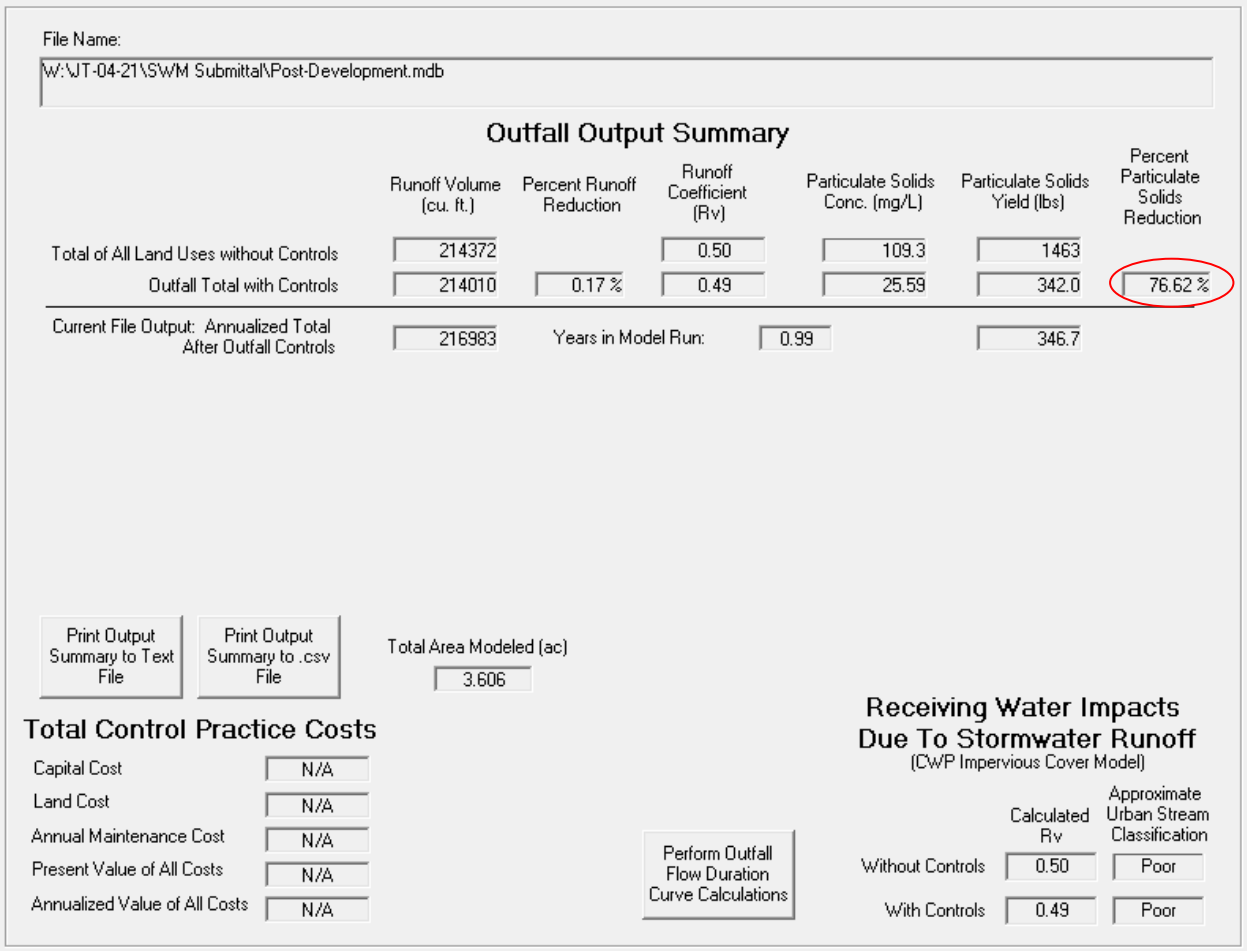
Soil Data Soil Type Fraction in Eng. Soil
User-Defined Soil Type 1.000

Biofilter Outlet/Discharge Characteristics:
Outlet type: Broad Crested Weir
1. Weir crest length (ft): 40
2. Weir crest width (ft): 5
3. Height of datum to bottom of weir opening: 7

Outlet type: Vertical Stand Pipe
1. Stand pipe diameter (ft): 3
2. Stand pipe height above datum (ft): 5.65

Outlet type: Surface Discharge Pipe
1. Surface discharge pipe outlet diameter (ft): 0.25
2. Pipe invert elevation above datum (ft): 4.5
3. Number of surface pipe outlets: 1

Outlet type: Drain Tile/Underdrain
1. Underdrain outlet diameter (ft): 0.17
2. Invert elevation above datum (ft): 1
3. Number of underdrain outlets: 1


File Name:
W:\JT-04-21\SWM Submittal\Post-Development.mdb
Outfall Output Summary
Runoff Volume (cu. ft.)
Percent Runoff Reduction
Runoff Coefficient (Rv)
Particulate Solids Conc. (mg/L)
Particulate Solids Yield (lbs)
Percent Particulate Solids Reduction
Total of All Land Uses without Controls
214372
0.50
109.3
1463
Outfall Total with Controls
214010
0.17 %
0.49
25.59
342.0
76.62 %
Current File Output: Annualized Total After Outfall Controls
216983
Years in Model Run:
0.99
346.7
Print Output Summary to Text File
Print Output Summary to .csv File
Total Area Modeled (ac)
3.606
Total Control Practice Costs
Capital Cost
N/A
Land Cost
N/A
Annual Maintenance Cost
N/A
Present Value of All Costs
N/A
Annualized Value of All Costs
N/A
Perform Outfall Flow Duration Curve Calculations
Receiving Water Impacts Due To Stormwater Runoff
(CWP Impervious Cover Model)
Calculated Rv
Approximate Urban Stream Classification
Without Controls
0.50
Poor
With Controls
0.49
Poor

APPENDIX E

USLE WORKSHEET

Soil Loss & Sediment Discharge Calculation Tool

for use on Construction Sites in the State of Wisconsin

WDNR Version 2.0 (06-29-2017)

YEAR 1

Developer: TR Capital, LLC

Project: Appleton Avenue Storage Facility

Date: 09/07/21

County: Washington

Version 1.0

Activity (1)	Begin Date (2)	End Date (3)	Period % R (4)	Annual R Factor (5)	Sub Soil Texture (6)	Soil Erodibility K Factor (7)	Slope (%) (8)	Slope Length (ft) (9)	LS Factor (10)	Land Cover C Factor (11)	Soil loss A (tons/acre) (12)	SDF (13)	Sediment Control Practice (14)	Sediment Discharge (t/ac) (15)
Bare Ground	04/01/22	09/01/22	76.0%	120	Silt Loam	0.43	3.3%	212	0.44	1.00	17.3	1.061	Sediment Basin	3.7
Seed with Mulch or En	09/01/22	11/01/22	17.0%	120	Silt Loam	0.43	3.3%	212	0.44	0.10	0.4	1.061	Sediment Basin	0.1
End	11/01/22	-----	-----	-----	-------	-----	3.3%	212	0.44	------	-----	0.000		0.0
		-----	-----	-----	-------	-----	3.3%	212	0.44	-----	-----	0.000		0.0
		-----	-----	-----	-------	-----	3.3%	0	-----	-----	-----	0.000		0.0
		-----	-----	-----	-------	-----	0.0%	0	-----	-----	-----	0.000		0.0
										TOTAL	**17.6**		**TOTAL**	**3.7**
													% Reduction Required	**NONE**

Notes:

See Help Page for further descriptions of variables and items in drop-down boxes.
The last land disturbing activity on each sheet must be 'End'. This is either 12 months from the start of construction or final stabilization.
For periods of construction that exceed 12 months, please demonstrate that 5 tons/acre/year is not exceeded in any given 12 month period.

NOTE: THIS TOOL ONLY ADDRESSED SOIL EROSION DUE TO SHEET FLOW. MEASURES TO CONTROL CHANNEL EROSION MAY ALSO BE REQUIRED TO MEET SEDIMENT DISCHARGE REQUIREMENTS.

Recommended Permanent Seeding Dates:

4/15-6/1	and	8/1-8/21	Turf, introduced grasses and legumes
Thaw-6/30			Native Grasses, forbs, and legumes

Designed By:	JIW
Date	9/7/2021

APPENDIX F

STORMWATER MAINTENANCE AGREEMENT

STORM WATER MANAGEMENT PRACTICES MAINTENANCE AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 20___, by and between TR Capital, LLC, hereinafter called the "Owner," and the Village of Germantown, a municipal corporation located in Washington County, Wisconsin, hereinafter called the "Village."

WITNESSETH:

WHEREAS, the Owner is the owner of the following described lands situated in the Village of Germantown, Washington County, State of Wisconsin:

Being a part of the Northeast ¼ of the Southwest ¼ of Section 19, Town 9 North, Range 20 East, Village of Germantown, Washington County, Wisconsin.

hereinafter called the "Property."

_____

Return to:
Village of Germantown
N112 W17001 Mequon Road
Germantown, WI 53022

_____

Parcel No.: GTNV_193.975

WHEREAS, the Owner is developing the Property; and

WHEREAS, the Site Plan known as Appleton Avenue Storage, hereinafter called the "Plan," which is expressly made a part hereof, as approved or to be approved by the Village, provides for on-site storm water management practices within the confines of the Property; and

WHEREAS, the Village and the Owner agree that the health, safety and welfare of the residents of the Village of Germantown, require that on-site storm water management practices be constructed and maintained on the Property; and

WHEREAS, the Village requires that on-site storm water management facilities as shown on the Plan be constructed and adequately maintained by the Owner.

NOW, THEREFORE, in consideration of the foregoing recitals, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The on-site storm water management facilities shall be constructed by the Owner in accordance with the plans and specifications indicated in the Plan and applicable statutes, ordinances and rules. The storm water management practices shall serve the drainage area designated in the Plan.

2. The Owner shall regularly inspect the storm water management facilities and specifically the function of the approved storm water management system as often as conditions require, but in any event at least once each year. The Operations and Maintenance Manual attached to this agreement as Exhibit A and each by this reference made a part hereof, shall be followed for the regular inspections of the storm water management facilities. The Owner shall keep the operation and maintenance reports from past inspections as well as a log of maintenance activities indicating the date and type of maintenance completed. The reports and maintenance log shall be submitted to the Department of Public Works Director and retained by the Village

for a period of 10 years. The purpose of the inspections is to assure safe and proper functioning of the facilities. The inspections shall cover all facilities including, but not limited to, berms, outlet structures, pond areas and access roads. Deficiencies shall be noted in the operation and maintenance reports.

3. The Owner shall adequately maintain the storm water management facilities including, but not limited to, all pipes and channels built to convey storm water to the facility, as well as all structures, improvements and vegetation provided to control the quantity and quality of the storm water. Adequate maintenance, in accordance with Exhibit A, is herein defined as keeping the storm water management facilities in good working condition so that these facilities are performing their design functions and are maintained in accordance with the Plan.

4. The Owner hereby grants permission to the Village, its authorized agents and employees, to enter upon the Property and to inspect the storm water management facilities whenever the Village deems necessary. The purpose of the Village's inspection is to investigate reported deficiencies and/or to respond to citizen complaints. The Village shall provide the Owner with copies of the inspection findings and a directive to commence with repairs if necessary. Corrective actions shall be taken within a reasonable timeframe as established by the Department of Public Works Director.

5. If the Owner fails to maintain the storm water management facilities in good working condition, consistent with the terms of the Plan and does not perform the required corrective actions and inspections in the specified time, the Village may perform the corrective actions identified in the inspection report and charge the Owner for the cost of such work. If the Owner fails pay to such costs to the Village within 30 days as required by Section 7, below, the cost of such work may be specially assessed against the Property pursuant to Wisconsin Statutes Section 66.0703. The Owner hereby acknowledges that the Property benefits from the corrective actions taken by the Village and hereby waives any right to notice or hearing of said special assessment pursuant to Section 66.0703(7)(b), Stats.

6. The Owner shall perform the work necessary to keep the storm water management facilities in good working order as appropriate. In the event a maintenance schedule for the storm water management facilities (including sediment removal) is outlined on the approved plans, the schedule shall be followed. The minimal amount of maintenance on the storm water management facilities shall be in accordance with Exhibit A.

7. In the event the Village, pursuant to this Agreement, performs work of any nature or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Owner shall reimburse the Village within 30 days of receipt of an invoice for all actual costs incurred by the Village hereunder.

8. This Agreement imposes no liability of any kind whatsoever on the Village, its officers, agents and employees, and the Owner agrees to indemnify and hold the Village harmless as and against any and all claims, actions, causes of action, demands, including attorney fees and court costs which the Village may incur as a result of the failure of the storm water management system and/or actions taken or not taken by the Village to enforce the terms of this Agreement including, but not limited to, the performance of maintenance activities.

9. This Agreement shall be recorded at the Washington County Register of Deeds Office and shall constitute a covenant running with the land and shall be binding on the Owner, its administrators, executors, assigns, heirs and any other successors in interests or future owners of the Property, including any homeowners or condominium association.

10. Notwithstanding anything in this Agreement to the contrary, in the event the Owner, or the Owner's successors and assigns, sell or otherwise transfer ownership in the Property, the Owner or the successor or assigns making said transfer, is hereby released from any and all liabilities and obligations under the terms of this Agreement. The liabilities and obligations under this Agreement shall transfer with the ownership of the Property to the new owner of the Property.

VILLAGE OF GERMANTOWN

By: _____ Dated: _____
Steven Kreklow, Village Administrator

By: _____ Dated: _____
Deanna Braunschweig, Village Clerk

A C K N O W L E D G M E N T

STATE OF WISCONSIN)
)ss.
WASHINGTON COUNTY)

Personally came before me the ____ day of _____, 2____ the above named Steven Kreklow, to me known to be the Village Administrator of the Village of Germantown and to me known to be the person who executed the foregoing document and acknowledged the same.

_____
Notary Public, State of Wisconsin
Washington County.
My Commission is permanent. (If NOT, expiration date is: _____)

A C K N O W L E D G M E N T

STATE OF WISCONSIN)
)ss.
WASHINGTON COUNTY)

Personally came before me the ____ day of _____, 2_____ the above named Deanna Braunschweig, to me known to be the Clerk of the Village of Germantown and to me known to be the person who executed the foregoing document and acknowledged the same.

_____
Notary Public, State of Wisconsin
Washington County.
My Commission is permanent. (If NOT, expiration date is: _____)

TR Capital, LLC

By: _____ Dated: _____
Name, Title

This Document Drafted By *Jonathan Worden*
Quam Engineering, LLC *September 7, 2021*

Exhibit A
Operation and Maintenance Manual

This exhibit explains the basic function of each of the storm water facilities and prescribes the minimum maintenance requirements to remain compliant with conditions of development approval, storm water management plan approval, and Village ordinances and policies. The maintenance activities listed below are aimed to ensure these practices continue serving their intended functions in perpetuity.

Minimum Maintenance Requirements:
To ensure the proper function of the storm water management facilities, the following activities must be completed:

Bio-Filter Basin

1. Outlet structures and outlet pipes shall be kept clear of debris. Non-structurally sound devices shall be replaced. Litter and debris shall be removed. All grassed areas, embankments and flow control devices showing signs of erosion shall be repaired to the original plan requirements.
2. The Owner shall visually inspect the basin outlet structures and basin perimeters annually. The basin perimeter areas shall be mowed a minimum of twice per year.
3. Mowing shall maintain a minimum grass height of the side slopes at 6 to 8 inches. All undesirable vegetation and volunteer tree growth shall be removed, including close proximity to the outlet structures.
4. Siltation in the basins shall be removed if clogging occurs and disposed offsite in accordance with NR 528.
5. The Owner shall maintain records of all inspections.

Grassed Swales:

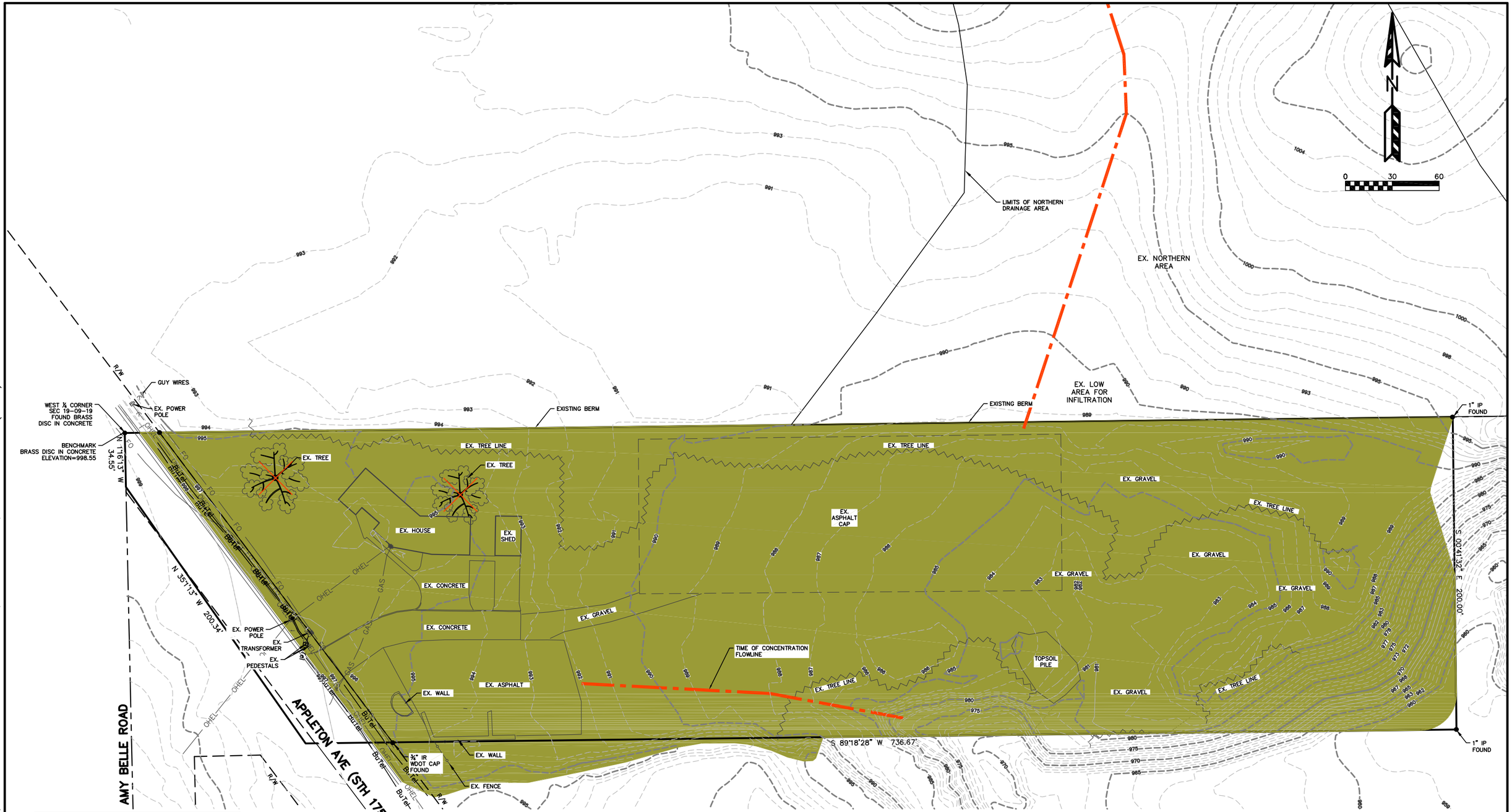
- Swales should be inspected periodically during the first year of use and after all major storm events in perpetuity for possible erosion to the channel.
- Trash and other debris should be removed seasonally.
- Ditch Checks should be inspected for evidence of bypassing.
- Channelization, barren areas, and low spots within the channel should be repaired and reseeded.
- Accumulated biomass should be removed periodically.

APPENDIX G

Exhibits

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Existing Area Table	
Description	Area (sf)
Building	2,537
Concrete	4,543
Asphalt	33,664
Gravel	31,363
Total Impevious Area	72,107
Total Lot Area	150,873

EXISTING DRAINAGE AREAS

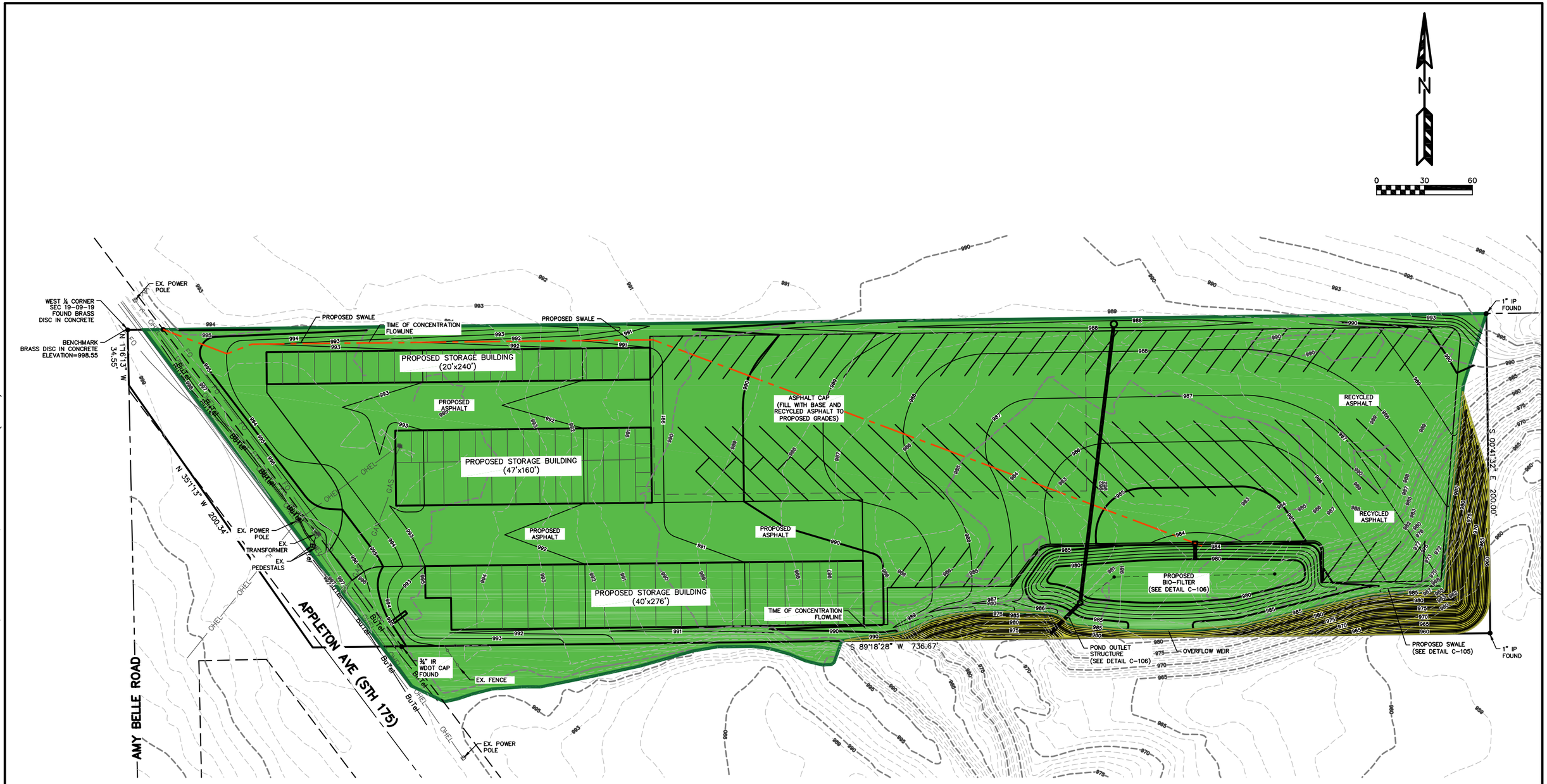
PRE-DEVELOPMENT
AREA=157,106 s.f.
CN=77

APPLETON AVENUE STORAGE FACILITY
EXISTING DRAINAGE PLAN
DATED: NOVEMBER 4, 2021

C-200

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Proposed Area Table	
Description	Area (sf)
Total Lot Area	150,873
Building	22,960
Asphalt	89,578
Total Impevious Area	112,538
% Impervious	74.6
Total Green Space	38,335
% Green Space	25.4

PROPOSED DRAINAGE AREAS

TO POND
AREA=149,435 s.f.
CN=89

UNCONTROLLED
AREA=7,671 s.f.
CN=61

APPLETON AVENUE STORAGE FACILITY
PROPOSED DRAINAGE PLAN
DATED: DECEMBER 1, 2021

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LEGEND:

- 936 – EXISTING MINOR CONTOUR.
- 935 – EXISTING MAJOR CONTOUR.
- 936 – PROPOSED MINOR CONTOUR.
- 935 – PROPOSED MAJOR CONTOUR.
- EX=934.23 – EXISTING SPOT ELEVATION.
- 934.23 – PROPOSED SPOT ELEVATION.
- PROPOSED STORM SEWER.

N

0 30 60

WEST ¼ CORNER SEC 19-09-19 FOUND BRASS DISC IN CONCRETE

BENCHMARK BRASS DISC IN CONCRETE ELEVATION=998.55

N 1°16'13" W 34.55'

N 35°11'13" W 200.34'

EX. POWER POLE

EX. TRANSFORMER

EX. PEDESTALS

2' TALL BERM (SEE DETAIL C-107)

PROPOSED SWALE (SEE DETAIL C-105)

PROPOSED STORAGE BUILDING (20'x240')

PROPOSED STORAGE BUILDING (47'x160')

PROPOSED STORAGE BUILDING (40'x274')

PROPOSED ASPHALT

ASPHALT CAP (FILL WITH BASE AND RECYCLED ASPHALT TO PROPOSED GRADES)

CB #1 (3' DIA) RIM=987.00 15" IE=983.94

172' - 15" PVC STORM @ 5.2%

INLET #2 (2'x3') TC=984.20 15" IE=980.10

10'-15" HDPE @ 1.0% 15" IE=980.00

RECYCLED ASPHALT

PROPOSED BIO-FILTER (SEE DETAIL C-106)

POND OUTLET STRUCTURE (SEE DETAIL C-106)

OVERFLOW WEIR

1" IP FOUND

S 00°41'32" E 200.00'

S 89°18'28" W 736.67'

PROPOSED SWALE (SEE DETAIL C-105)

¾" IR WDOT CAP FOUND

EX. FENCE

EX. POWER POLE

AMY BELLE ROAD

APPLETON AVE (STH 175)

APPLETON AVENUE STORAGE FACILITY

GRADING PLAN

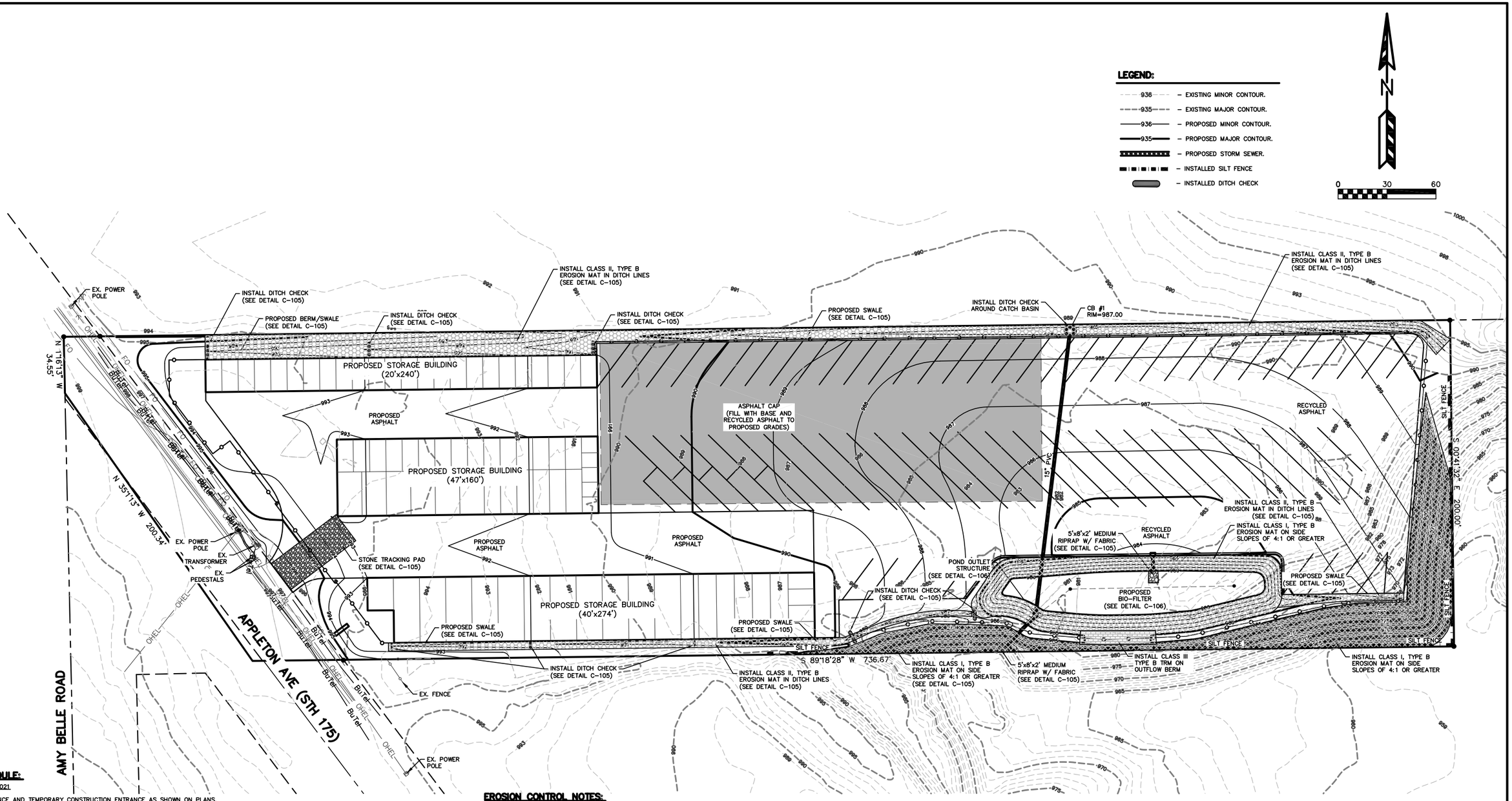
DATED: DECEMBER 1, 2021

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TIME SCHEDULE:

NOVEMBER 15, 2021

INSTALL SILT FENCE AND TEMPORARY CONSTRUCTION ENTRANCE AS SHOWN ON PLANS.

NOVEMBER 15, 2021 – SEPTEMBER 1, 2022

DEMO EXISTING BUILDINGS, CRUSH CONCRETE AND ASPHALT AND STOCKPILE FOR USE AS FILL.

STRIP TOPSOIL AND CONSTRUCT TEMPORARY TOPSOIL STOCKPILE LOCATION ACCORDING TO "SPECIFICATIONS FOR GRADING & EROSION CONTROL" ON "CONSTRUCTION NOTES PAGE".

BEGIN CONSTRUCTION OF BIO-FILTER. DO NOT INSTALL ENGINEERED SOIL UNTIL FINAL RESTORATION.

BEGIN PROPOSED SITE GRADING INCLUDING BUILDING PAD PREPARATION.

INSTALL BASE COURSE, PAVEMENT, AND RECYCLED ASPHALT.

SEPTEMBER 2 – 15, 2022

ALL PERMANENT SEEDING SHALL BE COMPLETED BY SEPTEMBER 15. ALL TEMPORARY SEEDING SHALL BE COMPLETED BY OCTOBER 15 (REFER TO DNR STANDARD 1059.)

INSTALL ENGINEERED SOIL, CLAY LINER, STONE STORAGE LAYER AND 6" UNDERDRAIN IN BIO-FILTER. INSTALL COCONUT MATTING AND NATIVE SEED MIX.

STABILIZATION FOR ALL EXPOSED SOIL AFTER OCTOBER 15 SHALL CONSIST OF ANIONIC POLYACRYLAMIDE (PAM) IN ADDITION TO TEMPORARY SEEDING IN AREAS WITHOUT EROSION CONTROL MAT. PLACE PAM IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1050. AFTER OCTOBER 15 ALL SLOPES 4:1 OR STEEPER THAT ARE NOT PERMANENTLY VEGETATED SHALL HAVE EROSION MAT INSTALLED IN PREPARATION OF WINTER CONDITIONS. SLOPES SHALL NOT EXCEED 2:1.

SPREAD SALVAGED OR IMPORTED TOPSOIL IN PROPOSED LANDSCAPE AREAS AND RESTORE.

CONTRACTOR MAY MODIFY SEQUENCING AS NEEDED TO COMPLETE CONSTRUCTION IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS SET FORTH IN FEDERAL, STATE & LOCAL PERMITS. NOTIFY VILLAGE OF GERMANTOWN PRIOR TO CHANGE.

AS CONDITIONS WARRANT DURING CONSTRUCTION ADDITIONAL BMPS SHALL BE INSTALLED TO REDUCE THE MIGRATION OF SEDIMENT THE THE MAXIMUM EXTENT PRACTICABLE

REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AFTER SITE IS STABILIZED AND STABILIZE AND AREAS DISTURBED BY REMOVAL OF BMPS.

EROSION CONTROL NOTES:

1. POST WDNR CERTIFICATE OF PERMIT COVERAGE ON SITE AND MAINTAIN UNTIL CONSTRUCTION ACTIVITIES HAVE CEASED, THE SITE IS STABILIZED, AND A NOTICE OF TERMINATION IS FILED WITH WDNR.
2. KEEP A COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
3. SUBMIT PLAN REVISIONS OR AMENDMENTS TO THE WDNR AT LEAST 5 DAYS PRIOR TO FIELD IMPLEMENTATION.
4. OWNER IS RESPONSIBLE FOR ROUTINE SITE INSPECTIONS AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER. KEEP INSPECTION REPORTS ON-SITE AND MAKE THEM AVAILABLE UPON REQUEST.
5. INSPECT AND MAINTAIN ALL INSTALLED EROSION CONTROL PRACTICES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
6. WHEN POSSIBLE: PRESERVE EXISTING VEGETATION (ESPECIALLY ADJACENT TO SURFACE WATERS), MINIMIZE LAND-DISTURBING CONSTRUCTION ACTIVITY ON SLOPES OF 20% OR MORE, MINIMIZE SOIL COMPACTION, AND PRESERVE TOPSOIL.
7. REFER TO THE WDNR STORMWATER CONSTRUCTION TECHNICAL STANDARDS AT http://dnr.wi.gov/topic/stormwater/standards/const_standards.html.
8. INSTALL PERIMETER EROSION CONTROLS AND ROCK TRACKING PAD CONSTRUCTION ENTRANCE(S) PRIOR TO ANY LAND-DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRUBBING. USE WDNR TECHNICAL STANDARD STONE TRACKING PAD AND TIRE WASHING #1057 FOR ROCK CONSTRUCTION ENTRANCE(S).
9. INSTALL INLET PROTECTION PRIOR TO LAND-DISTURBING ACTIVITIES IN THE CONTRIBUTING DRAINAGE AREA AND/OR IMMEDIATELY UPON INLET INSTALLATION. COMPLY WITH WDNR TECHNICAL STANDARD STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES #1060.
10. STAGE CONSTRUCTION GRADING ACTIVITIES TO MINIMIZE THE CUMMULATIVE EXPOSED AREA. CONDUCT TEMPORARY GRADING FOR EROSION CONTROL PER WDNR TECHNICAL STANDARD TEMPORARY GRADING PRACTICES FOR EROSION CONTROL #1067.
11. PERMITTING OF GROUNDWATER DEWATERING IS THE RESPONSIBILITY OF OWNER. GROUNDWATER DEWATERING IS SUBJECT TO A DNR WASTEWATER DISCHARGE PERMIT AND A DNR HIGH CAPACITY WELL APPROVAL IF CUMULATIVE PUMP CAPACITY IS 70 GPM OR MORE. (Rev. February 2017)
12. PROVIDE ANTI-SCOUR PROTECTION AND MAINTAIN NON-EROSIVE FLOW DURING DEWATERING. PERFORM DEWATERING OF ACCUMULATED SURFACE RUNOFF IN ACCORDANCE WITH WDNR TECHNICAL STANDARD DE-WATERING #1061. (Rev. February 2017)
13. CONSTRUCT AND PROTECT THE BIO-FILTER AND VEGETATION FROM RUNOFF AND SEDIMENT DURING CONSTRUCTION. REFERENCE THE WDNR TECHNICAL STANDARD BIORETENTION FOR INFILTRATION # 1004.
14. INSTALL AND MAINTAIN SILT FENCING PER WDNR TECHNICAL STANDARD SILT FENCE #1056. REMOVE SEDIMENT FROM BEHIND SILT FENCES AND SEDIMENT BARRIERS BEFORE SEDIMENT REACHES A DEPTH THAT IS EQUAL TO ONE-HALF OF THE FENCE AND/OR BARRIER HEIGHT.
15. REPAIR BREAKS AND GAPS IN SILT FENCES AND BARRIERS IMMEDIATELY. REPLACE DECOMPOSING STRAW BALES (TYPICAL BALE LIFE IS 3 MONTHS). LOCATE, INSTALL, AND MAINTAIN STRAW BALES PER WDNR TECHNICAL STANDARD DITCH CHECKS #1062.
16. INSTALL AND MAINTAIN FILTER SOCKS IN ACCORDANCE WITH WDNR TECHNICAL STANDARD INTERIM MANUFACTURED PERIMETER CONTROL AND SLOPE INTERRUPTION PRODUCTS # 1071.
17. IMMEDIATELY STABILIZE STOCKPILES AND SURROUND STOCKPILES AS NEEDED WITH SILT FENCE OR OTHER PERIMETER CONTROL IF STOCKPILES WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER.
18. STABILIZE ALL DISTURBED AREAS THAT REMAIN INACTIVE FOR 14 DAYS OR LONGER.
19. STABILIZE AREAS OF FINAL GRADING WITHIN 7 DAYS OF REACHING FINAL GRADE.

APPLETON AVENUE STORAGE FACILITY
EROSION CONTROL PLAN
DATED: DECEMBER 1, 2021

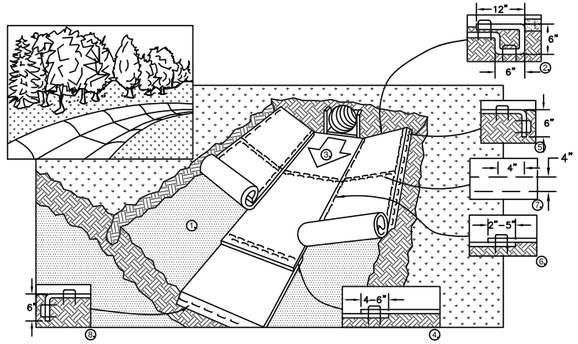
C-104

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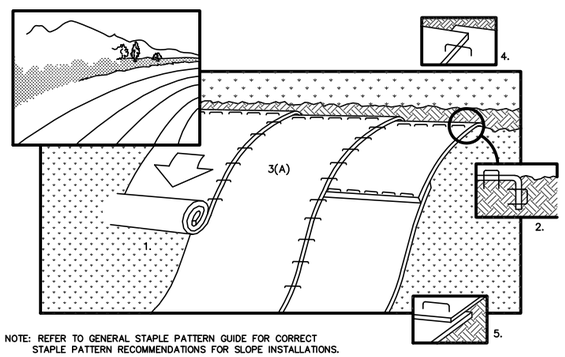
MAXIMUM PERIOD OF BARE SOIL FOR SLOPES > 20%		
SLOPE AREA DRAINS TO SEDIMENT BASIN OR SEDIMENT TRAP?	MAXIMUM PERIOD OF BARE SOIL EXPOSURE (CALENDAR DAYS)	
	LAND DISTURBANCE BETWEEN SEPTEMBER 16TH AND MAY 1ST	LAND DISTURBANCE BETWEEN MAY 2ND AND SEPTEMBER 15TH
YES	90	90
NO	60	30



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.
4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPE MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 4" AND STAPLED.
7. A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

NOTE: ALL STAPLES MUST BE 6" OR GREATER IN LENGTH

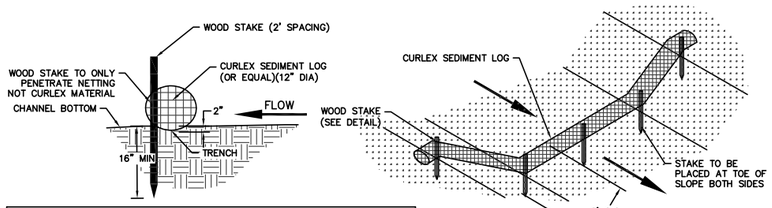
EROSION CONTROL MAT - CHANNEL INSTALLATION



NOTE: REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

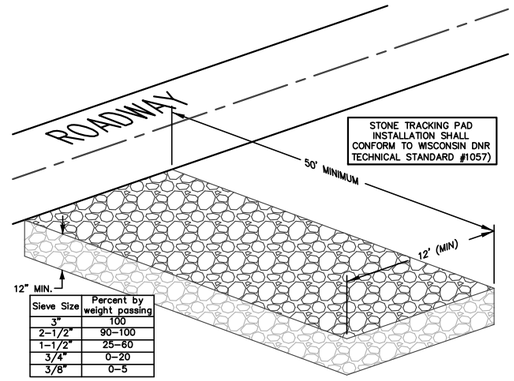
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF FERTILIZER AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY
6. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SLOPE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.

EROSION CONTROL MAT - SLOPE INSTALLATION



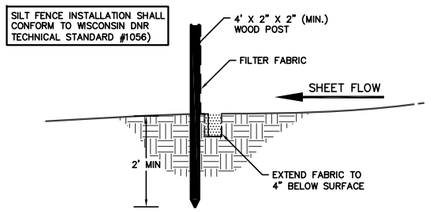
SPACING BETWEEN CURLEX SEDIMENT LOGS				
CHANNEL GRADIENT %	6"	9"	12"	20"
0.5	91.7	136.7	183.3	250.0
1.0	45.8	68.3	91.7	125.0
1.5	30.6	45.6	61.1	83.3
2	22.9	34.2	45.8	62.5

SEDIMENT LOG DETAIL

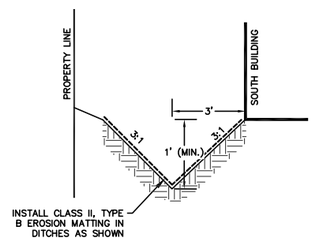


Sieve Size	Percent by weight passing
3"	100
2-1/2"	90-100
1-1/2"	25-60
3/4"	0-20
3/8"	0-5

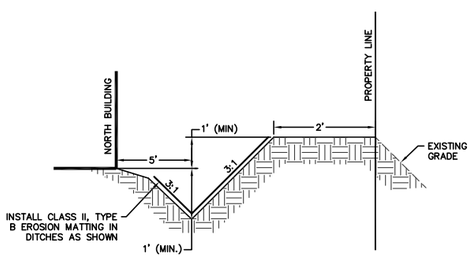
STONE TRACKING PAD DETAIL



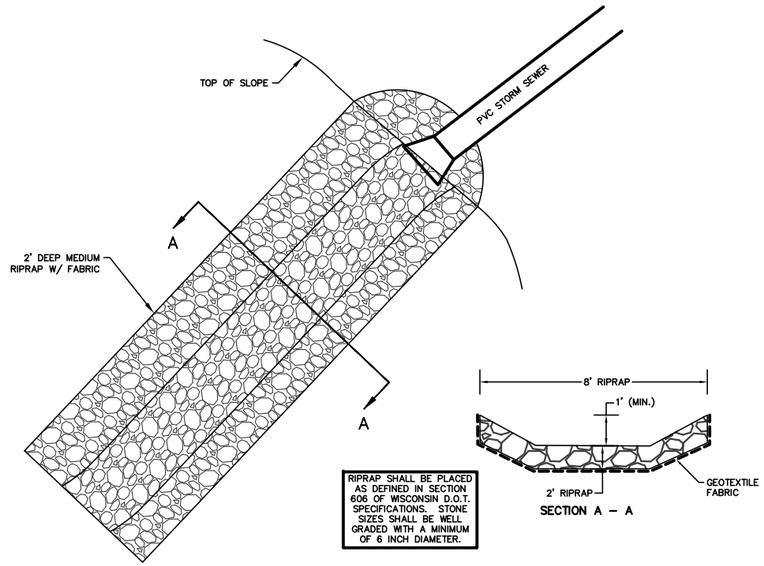
SILT FENCE CONSTRUCTION (SHEET FLOW)



SOUTH SWALE CROSS SECTION



NORTH BERM/SWALE DETAIL



SECTION A - A

RIPRAP SLOPE STABILAZATION DETAIL

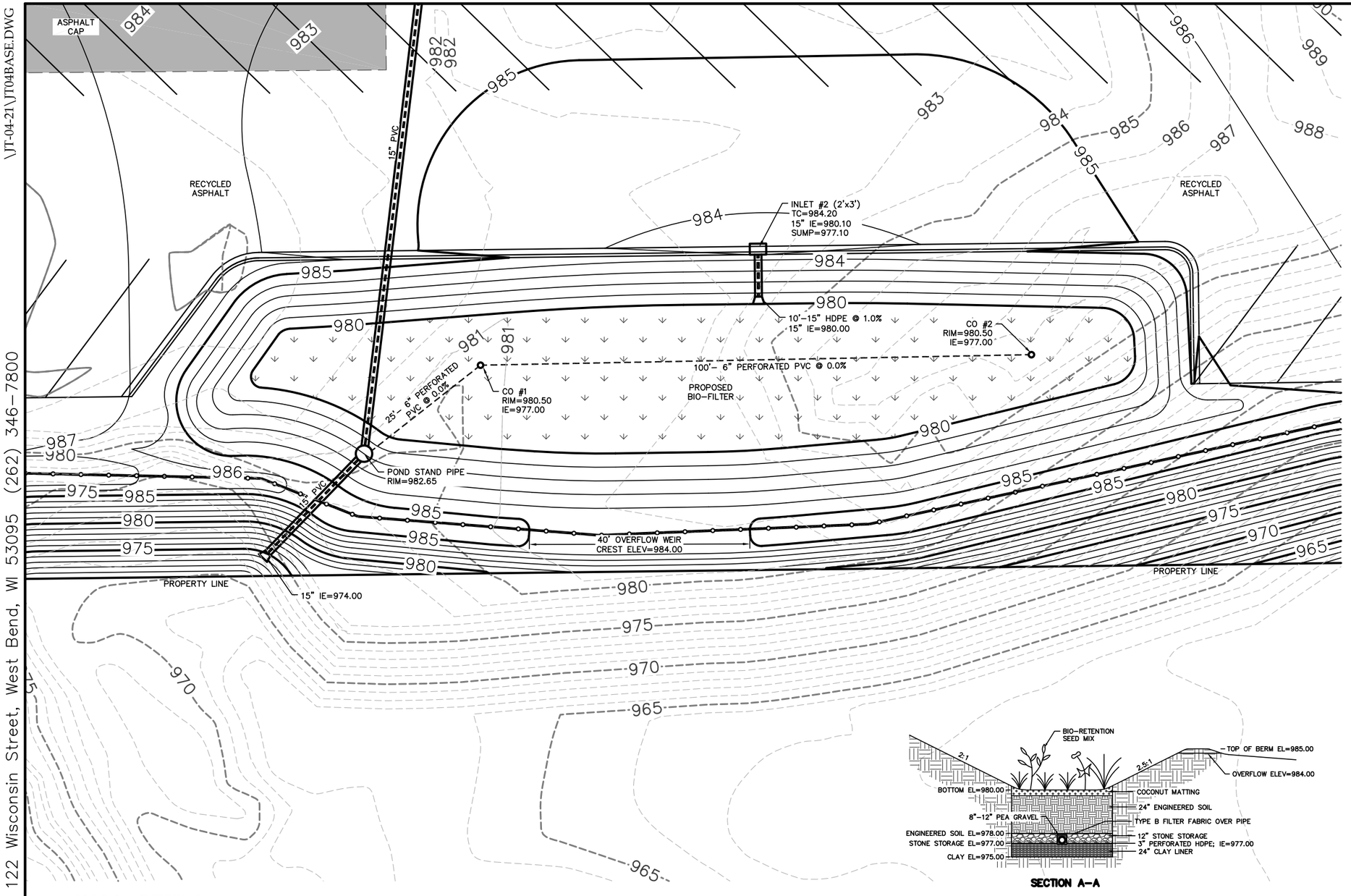
APPLETON AVENUE STORAGE FACILITY
EROSION CONTROL DETAILS
DATED: DECEMBER 1, 2021

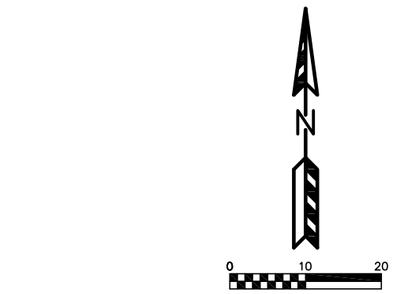
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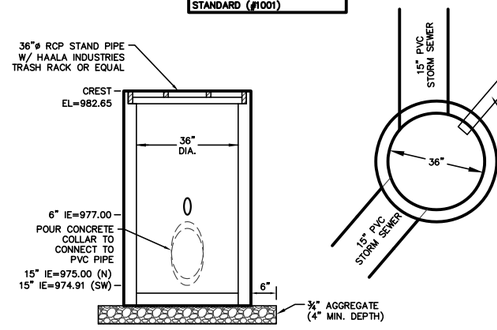
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OUTLET STRUCTURE CONSTRUCTION SHALL CONFORM TO WISCONSIN DNR TECHNICAL STANDARD (#1001)



STAND PIPE DETAIL

BIO-FILTER NOTES:

1. BIO-FILTER BASIN CONSTRUCTION SHALL CONFORM TO WISCONSIN DNR TECHNICAL STANDARD #1004.

2. ESTABLISHMENT - COVER CROPS NEED TO BE APPLIED IN CONJUNCTION WITH THE INITIAL SEEDING OF PERMANENT VEGETATION. WHEN ESTABLISHING TURF TYPE GRASS, USE THE CRITERIA CONTAINED IN THE DNR CONSERVATION PRACTICE STANDARD SEEDING FOR CONSTRUCTION SITE EROSION CONTROL (1059). SOD SHALL NOT BE USED. IF TURF GRASS IS UTILIZED, THE BASIN CANNOT BE USED FOR RECREATIONAL PURPOSES DUE TO COMPACTION CONCERNS.

3. NATIVE SEEDING - NATIVE VEGETATION SHALL BE ESTABLISHED IN CONFORMANCE WITH RECOMMENDATIONS FROM A QUALIFIED NATIVE NURSERY IN THE AREA. IF TREES ARE TO BE USED, SPECIES SHALL BE SELECTED THAT WILL NOT INTERFERE WITH THE FUNCTION OF THE BASIN, OR CAUSE MAINTENANCE PROBLEMS. SECTION IX REFERENCES, LISTS SOURCES THAT PROVIDE SUGGESTED SEED MIXTURES. NATIVE (PRAIRIE) SEEDING SHALL BE COMPLETED IN THE FALL (AS DORMANT SEEDING PRIOR TO FIRST SNOWFALL) OR IN THE SPRING (BETWEEN MAY 1 AND JUNE 20), OR PLUGS SHALL BE USED.

4. FERTILIZER - SOIL TESTING SHALL BE USED TO DETERMINE PROPER APPLICATIONS FOR NUTRIENTS AND LIMING. FERTILIZER APPLICATION SHALL CONFORM TO THE CRITERIA LOCATED IN NRCS CONSERVATION PRACTICE TECHNICAL STANDARD, CRITICAL AREA PLANTING (342) OR WDNR CONSERVATION PRACTICE STANDARD SEEDING FOR CONSTRUCTION SITE EROSION CONTROL (1059).

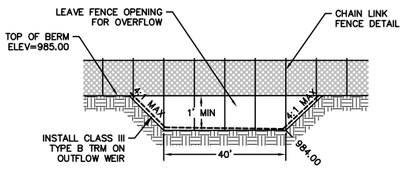
5. MULCH - MULCH SHALL CONFORM TO THE CRITERIA LOCATED IN WDNR CONSERVATION PRACTICE STANDARD MULCHING FOR CONSTRUCTION SITES (1058).

6. BIO-FILTER BASIN SHALL NOT BE INSTALLED UNTIL THE SITE IS STABILIZED.

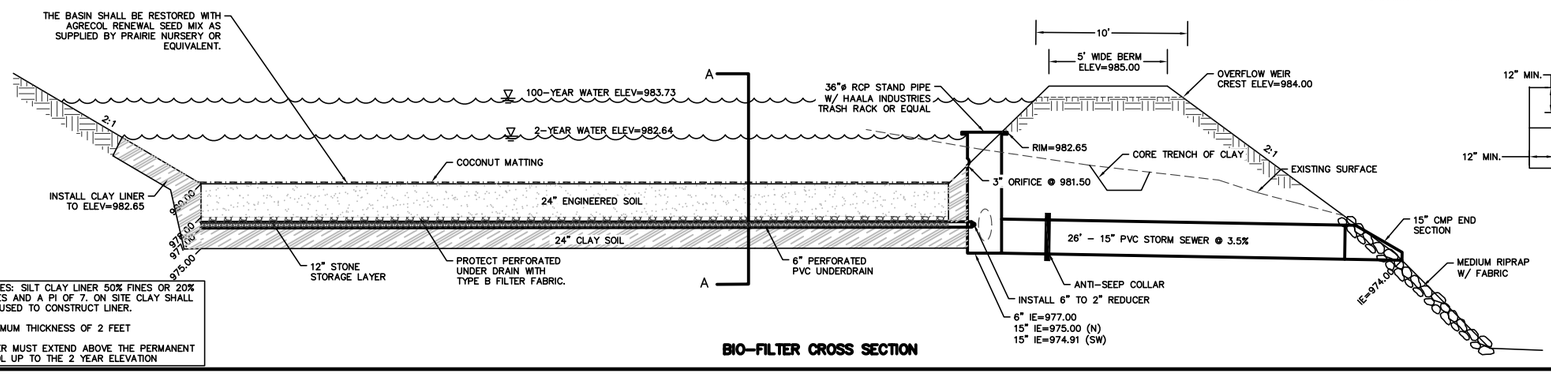
7. ONCE CONSTRUCTION OF THE BIO-FILTER BASIN BEGINS, THE BASIN SHALL BE CORDONED OFF AND PROTECTED FROM COMPACTION FROM HEAVY EQUIPMENT.

8. SEED MIXTURE FOR BIO-FILTER BASIN BOTTOM SHALL BE AGRECOL RENEWAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SATISFACTORY STAND ON ALL SEEDED AREAS FOR ONE YEAR AFTER THE PROJECT'S FINAL ACCEPTANCE.

SECTION A-A



OVERFLOW WEIR CROSS SECTION

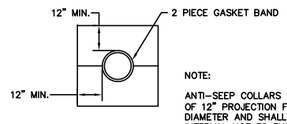


NOTES: SILT CLAY LINER 50% FINES OR 20% FINES AND A PI OF 7. ON SITE CLAY SHALL BE USED TO CONSTRUCT LINER.

MINIMUM THICKNESS OF 2 FEET

LINER MUST EXTEND ABOVE THE PERMANENT POOL UP TO THE 2 YEAR ELEVATION

BIO-FILTER CROSS SECTION



NOTE:

ANTI-SEEP COLLARS SHALL HAVE A MINIMUM OF 12" PROJECTION FROM THE PIPE OUTSIDE DIAMETER AND SHALL BE SPACED AT AN INTERVAL NOT TO EXCEED 12 TIMES THE PROJECTION. COLLARS SHALL NOT BE PLACED CLOSER THAN WITHIN 2" OF A PIPE JOINT.

ANTI-SEEP COLLAR DETAIL

APPLETON AVENUE STORAGE FACILITY

STORMWATER MANAGEMENT PLAN AND DETAILS

DATED: DECEMBER 1, 2021

C-106

QUAM ENGINEERING, LLC
Residential and Commercial Site Design Consultants
122 Wisconsin Street; West Bend, Wisconsin 53095
Phone (262) 346-7800; www.quamengineering.com

CERTIFIED SURVEY MAP (CSM), REZONING, & CONDITIONAL USE PERMIT (CUP) APPLICATIONS

12/13/21 Plan Commission Meeting

DAVID YURK, PAYNE AND DOLAN INC / ROBERT ZIGNEGO

Planning & Zoning Report **Germantown, Wisconsin**

Summary

David Yurk, agent, and Robert Zignego, property owner, are seeking approval of a revised 3-lot Certified Survey Map (CSM), Rezoning from Rs-2 and Rs-3: Single-family Residential to Rs-1: Single-family Residential and A-2: Agricultural, and a Conditional Use Permit (CUP) to allow development within the required 25' wetland setback for the property located north of the Elm Lane and Forest Drive intersection.

Location: Lot 38 of the Harvest Hills Subdivision
North of the Elm Lane /Forest Drive intersection

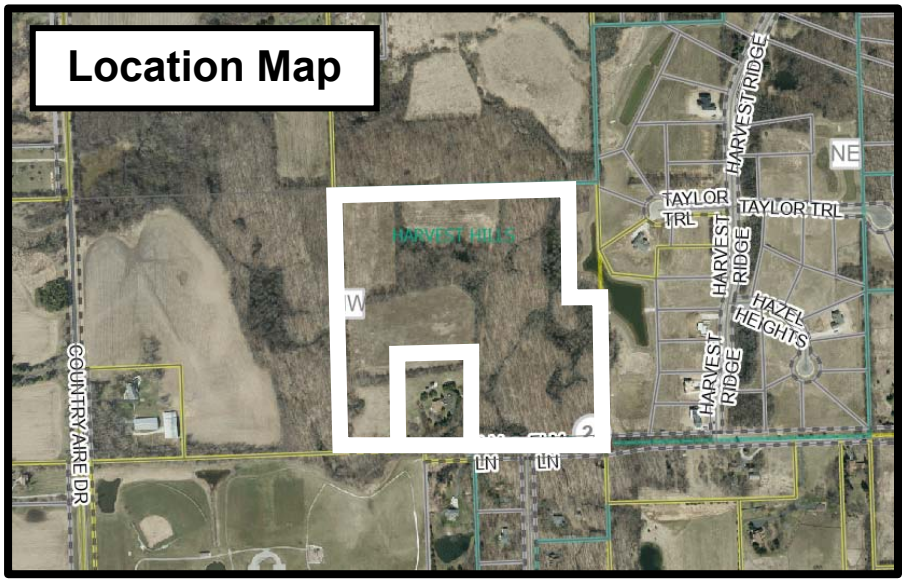
Applicant/
Property Owner:

David Yurk
Payne and Dolan INC
W6830 Design Drive
Greenville, WI 54942

Robert Zignego
N120W17520 Freistadt Road
Mike & Pamela Madrzak
N116W13444 Elm Lane
Germantown, WI

Current Zoning District: Rs-2 & Rs-3: Single-family Residential
Proposed Zoning District: Rs-1 & A-2: Single-family Residential & Agricultural

Adjacent Land Uses		Zoning
North	Natural Area /Open Space	A-2
South	Institutional / Residential	I / Rs-2 / Rs-3
East	Residential	Rs-3
West	Agricultural	A-1



Background

At their November 8, 2021 meeting, the Plan Commission recommended approval of the proposed rezoning of the property as recommended by staff. The Plan Commission voted to postpone the Certified Survey Map (CSM) and Conditional Use Permit (CUP) applications in order to review revised documents at an upcoming meeting. Since then, the applicant has resubmitted the application documents with changes recommended by staff and the Plan Commission. This staff report reflects the revised application.

Proposal

David Yurk, agent, and Robert Zignego, property owner, are seeking approval of a revised 3-lot Certified Survey Map (CSM), Rezoning from Rs-2 and Rs-3: Single-family Residential to Rs-1: Single-family Residential and A-2: Agricultural, and a Conditional Use Permit (CUP) to allow development within the required 25' wetland setback for the property located north of the Elm Lane and Forest Drive intersection.

The purpose of these applications is to create two lots, each buildable for a single-family dwelling, and to enlarge the existing parcel (containing an existing single-family dwelling) owned by Michael & Pamela Madrzak from 3.87 acres to 7.784 acres. It is the intent of Mr. Zignego to maintain ownership of and to construct a single-family dwelling on proposed Lot 1 (24.179 acres), and to sell proposed Lot 2 (5.001 acres) as a buildable lot.

CSM

The proposed CSM includes the following:

Lot 1 – 24.179 acres, buildable for a single-family dwelling
Lot 2 – 5.001 acres, buildable for a single-family dwelling
Lot 3 – 7.784 acres, contains an existing single-family dwelling

Access to Lot 1 and Lot 2 will be off of Elm Lane. A 30' Ingress/egress easement is included on Lot 1 for the purposes of accessing Lot 2. Lot 3 will continue to take access off Elm Lane.

Rezoning

The rezoning requested for each of the lots are listed below. The proposed rezoning was recommended for approval by the Plan Commission as their November 8, 2021 meeting.

<u>Proposed Zoning</u>

Lot 1 – A-2: Agricultural (minimum 10-acre lot size)
Lot 2 – Rs-1: Single-family Residential (minimum 5-acre lot size)
Lot 3 – Rs-1: Single-family Residential (minimum 5-acre lot size)

CUP

As shown on the CSM, proposed Lot 1 contains a significant amount of wetland, which was disturbed with the installation of the driveway that will eventually serve Lots 1 and 2. Proper permits were received from the DNR and the Army Corp of Engineers to cross

the wetland with the driveway, however the property owner did not inquire with the Village of Germantown regarding necessary permits prior to constructing the driveway. The driveway was also constructed prior to obtaining approval of the proposed CUP and CSM. If the proposed driveway route and land division were discussed with Village staff prior to the work being completed, encroachment into the wetland setback may have been avoided.

Although the Village's Shoreland-Wetland Code requires a 25' setback from all DNR-approved delineated wetlands (regardless of size or location), the Village may allow development within the 25' wetland and 75' waterway setbacks with a CUP. However, Section 24.04 of the Code only allows development within these setback areas if additional protection and/or compensation for the affected area(s) is provided at a 1:1 ratio (for "horizontal" development) and a 2:1 ratio (for "vertical" development having impervious surface or a grade change greater than 3' height). Said protection and compensation is typically provided in the form of additional vegetative buffering, invasive species removal, or other measures that are intended to provide additional protection to the actual wetland areas and/or navigable waterway to/from which the setbacks apply.

As detailed in the attached mitigation plan, dated October 7, 2021 and revised November 11, 2021 to include the full extent of the encroachment into the wetlands, the total area impacted by the driveway within the required 25' setback was 5,732 square feet. The submitted plan proposed seeding the sides of the driveway with a natural grass mix in an area equivalent to 5,732 square feet, meeting the required 1:1 mitigation area ratio.

Staff Comment

The setbacks shown on the CSM need to be fixed to reflect the proposed lots, rather than the existing lots. This has been added as a condition of approval and shall be submitted for review and approval prior to the recording of the CSM.

The Ingress/egress easement across Lot 1 is permitted under the Subdivision Code Chapter 18.07(1)(d) Private Streets. This section includes minimum standards for Private Streets that include shared driveways and private lands intended to serve 2 to 15 lots.

Fire Chief Delain has reviewed the proposed driveway and has indicated that a turn-around sufficient for fire apparatus needs to be included on the north end of the driveway. The property owner shall design and construct a turn-around agreed upon and approved by the Fire Chief. This has been added as a condition of approval.

Planning & Zoning Staff support the revised mitigation plan submitted by the applicant. An annual monitoring report will be required for three (3) years as a part of the project. This has been added as a condition of approval.

Village Engineer/Public Works Department
The Village's engineering consultant and Public Works Director have provided a memo dated 11/4/21 in which technical corrections and code requirements were identified by GRAEF surveyor, Burt Naumann. The revised CSM was reviewed by the engineering and all comments have been addressed.

VILLAGE STAFF RECOMMENDATION

APPROVE the proposed 3-lot Certified Survey Map (CSM) for the Zignego/Madrzak property to create two buildable lots and increase the acreage of the existing single-family lot, totaling 37.18 acres into three parcels located north of Elm Lane subject to the following conditions:

1. The setback lines shown on the CSM shall be corrected to reflect the proposed lots rather than the existing lots. These revisions shall be submitted to Planning Staff for review and approval prior to recording the CSM.
2. The Property Owner shall construct a turn-around for fire apparatus on the north end of the private gravel driveway. Said turn-around design shall be agreed upon and approved by the Village Fire Chief and shall be constructed prior to the issuance of any building permits for proposed Lots 1 or 2.

APPROVE a Conditional Use Permit to allow development within the 25' wetland setback areas and the proposed compensation as presented in the Wetland Setback Compensation Plan (dated October 7, 2021 and revised November 11, 2021) pursuant to Section 24.04 of the Shoreland-Wetland Zoning Code and subject to the following conditions:

1. The Property Owner shall prepare and submit an annual monitoring report to the Village and local DNR staff concerning the various management activities proposed in the plan, including the natural grass planting and restoration. Said report shall, at a minimum, detail the type and amount of plantings, all activities carried out in the previous year and the observed success of all previous activities, recommendations for new or different activities needed to ensure success of the mitigation measures and management activities to be carried out, and a list of planned activities for the upcoming year. Said report shall be submitted annually at the end of each year beginning in 2022 for a period of three (3) years.

CERTIFIED SURVEY MAP (CSM), REZONING, & CONDITIONAL USE PERMIT (CUP) APPLICATIONS

11/8/21 Plan Commission Meeting

DAVID YURK, PAYNE AND DOLAN INC / ROBERT ZIGNEGO

Planning & Zoning Report **Germantown, Wisconsin**

Summary

David Yurk, agent, and Robert Zignego, property owner, are seeking approval of a 3-lot Certified Survey Map (CSM), Rezoning from Rs-3: Single-family Residential to Rs-1: Single-family Residential and Rs-2: Single-family Residential, and a Conditional Use Permit (CUP) to allow development within the required 25' wetland setback for the property located north of the Elm Lane and Forest Drive intersection.

Location: Lot 38 of the Harvest Hills Subdivision
North of the Elm Lane /Forest Drive intersection

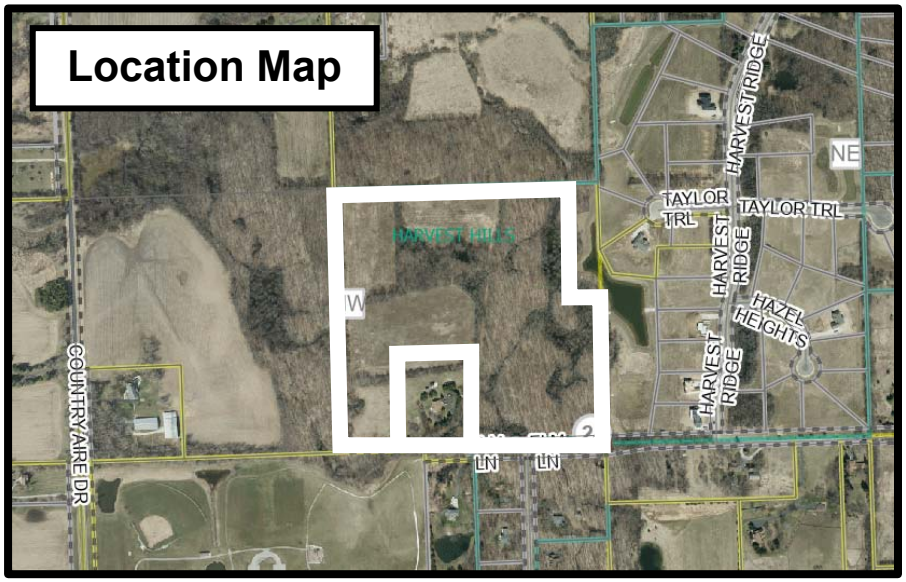
Applicant/
Property Owner:

David Yurk
Payne and Dolan INC
W6830 Design Drive
Greenville, WI 54942

Robert Zignego
N120W17520 Freistadt Road
Mike & Pamela Madrzak
N116W13444 Elm Lane
Germantown, WI

Current Zoning District: Rs-2 & Rs-3: Single-family Residential
Proposed Zoning District: Rs-1 & Rs-2: Single-Family Residential

Adjacent Land Uses		Zoning
North	Natural Area /Open Space	A-2
South	Institutional / Residential	I / Rs-2 / Rs-3
East	Residential	Rs-3
West	Agricultural	A-1



Proposal

David Yurk, agent, and Robert Zignego, property owner, are seeking approval of a 3-lot Certified Survey Map (CSM), Rezoning from Rs-3: Single-family Residential to Rs-1: Single-family Residential and Rs-2: Single-family Residential, and a Conditional Use Permit (CUP) to allow development within the required 25' wetland setback for the property known as Lot 38 of the Harvest Hills Subdivision, located north of the Elm Lane and Forest Drive intersection.

The purpose of these applications is to create two lots, each buildable for a single-family dwelling, and to enlarge the existing parcel (containing an existing single-family dwelling) owned by Michael & Pamela Madrzak from 3.87 acres to 7.844 acres. It is the intent of Mr. Zignego to maintain ownership of and to construct a single-family dwelling on proposed Lot 1 (24.593 acres), and to sell proposed Lot 2 (4.602) as a buildable lot.

CSM

The proposed CSM includes the following:

Lot 1 – 24.593 acres, buildable for a single-family dwelling
Lot 2 – 4.602 acres, buildable for a single-family dwelling
Lot 3 – 7.844 acres, contains an existing single-family dwelling

Access to Lot 1 and Lot 2 will be off of Elm Lane. A 30' Ingress/egress easement is included on Lot 1 for the purposes of accessing Lot 2. Lot 3 will continue to take access off Elm Lane.

Rezoning

The rezoning requested for each of the lots are listed below.

Proposed Zoning

Lot 1 – Rs-1: Single-family Residential (minimum 5-acre lot size)
Lot 2 – Rs-2: Single-family Residential (minimum 2-acre lot size)
Lot 3 – Rs-2: Single-family Residential (minimum 2-acre lot size)

CUP

As shown on the CSM, proposed Lot 1 contains a significant amount of wetland, which was disturbed with the installation of the driveway that will eventually serve Lots 1 and 2. Proper permits were received from the DNR and the Army Corp of Engineers to cross the wetland with the driveway, however the property owner did not inquire with the Village of Germantown regarding necessary permits prior to constructing the driveway. The driveway was also constructed prior to obtaining approval of the proposed CUP and CSM. If the proposed driveway route and land division were discussed with Village staff prior to the work being completed, encroachment into the wetland setback may have been avoided.

Although the Village's Shoreland-Wetland Code requires a 25' setback from all DNR-approved delineated wetlands (regardless of size or location), the Village may allow

development within the 25' wetland and 75' waterway setbacks with a CUP. However, Section 24.04 of the Code only allows development within these setback areas if additional protection and/or compensation for the affected area(s) is provided at a 1:1 ratio (for "horizontal" development) and a 2:1 ratio (for "vertical" development having impervious surface or a grade change greater than 3' height). Said protection and compensation is typically provided in the form of additional vegetative buffering, invasive species removal, or other measures that are intended to provide additional protection to the actual wetland areas and/or navigable waterway to/from which the setbacks apply.

As detailed in the attached mitigation plan, dated October 7, 2021, the total area impacted by the driveway within the required 25' setback was 3,631 square feet. The submitted plan proposed seeding the sides of the driveway with a natural grass mix in an area equivalent to 3,631 square feet, meeting the required 1:1 mitigation area ratio.

Staff Comment

The proposal is consistent with the Future Land Use Map designation of Rural Residential which requires lots to be a minimum of 1 acre in size.

Planning Staff is recommending alternative zoning for these parcels to better align with the intent of each zoning district, to provide greater flexibility in uses (i.e. horses and other agricultural uses/structures), and to allow more square footage for residential accessory structures on the residentially zoned properties (Lots 2 & 3).

Proposed Zoning

Lot 1 – Rs-1: Single-family Residential (minimum 5-acre lot size)
Lot 2 – Rs-2: Single-family Residential (minimum 2-acre lot size)
Lot 3 – Rs-2: Single-family Residential (minimum 2-acre lot size)

Staff Recommended Zoning

Lot 1 – A-2: Agricultural (minimum 10-acre lot size)
Lot 2 – Rs-1: Single-family Residential (minimum 5-acre lot size)*
Lot 3 – Rs-1: Single-family Residential (minimum 5-acre lot size)

*A rezoning to the Rs-1 District would require Lot 2 to be increased in size to a minimum of 5 acres. Staff recommends modifying the CSM so that Lot 2 is a minimum of 5 acres in size.

The Ingress/egress easement across Lot 1 is permitted under the Subdivision Code Chapter 18.07(1)(d) Private Streets. This section includes minimum standards for Private Streets that include shared driveways and private lands intended to serve 2 to 15 lots.

Proper permits were received from the DNR and Army Corp of Engineers to cross the wetland with the driveway, however the property owner did not inquire with the Village

of Germantown regarding necessary permits prior to constructing the driveway. The driveway was also constructed prior to obtaining approval of the proposed CUP and CSM. If the proposed driveway route and land division were discussed with Village staff prior to the work being completed, encroachment into the wetland setback may have been avoided.

Additional information on the proposed mitigation plan is needed. Staff is requesting a detailed drawing of the location of the proposed seeding to be submitted and approved administratively. Further, given the amount of wetland on proposed Lot 1, staff is recommending the proposed lots be reconfigured so that access may be obtained to the buildable areas on Lots 1 & 2 without further encroachment into the required 25' setback from the wetlands on the property. This has been added as a condition of approval for the proposed CSM.

Village Engineer/Public Works Department
The Village's engineering consultant and Public Works Director have provided a memo dated 11/4/21 in which technical corrections and code requirements were identified by GRAEF surveyor, Burt Naumann.

VILLAGE STAFF RECOMMENDATION

APPROVE the proposed 3-lot Certified Survey Map (CSM) for the Zignego/Madrzak property to create two buildable lots and increase the acreage of the existing single-family lot, totaling 37.18 acres into three parcels located north of Elm Lane subject to the following conditions:

1. All technical issues and plan corrections identified by the Village Public Works Director and consultant engineer in a memo dated November 4, 2021 shall be addressed and reflected in a revised CSM submitted and approved by the Public Works Department prior to taking the application to the Village Board for final action.
2. Proposed Lot 2 shall be increased in size to meet the 5-acre minimum in the Rs-1 Single-family Residential District.
3. The proposed lots shall be reconfigured to allow access to the buildable areas on Lots 1 and 2 without additional encroachment within the required 25' setback from the delineated wetlands.

APPROVE rezoning of the 37.18-acre property from Rs-2: Single-family Residential and Rs-3: Single-family Residential to A-2: Agricultural to Rs-1: Single-family Residential, as proposed by Village Staff:

Lot 1 – A-2: Agricultural
Lot 2 – Rs-1: Single-family Residential
Lot 3 – Rs-1: Single-family Residential

APPROVE a Conditional Use Permit to allow development within the 25' wetland setback areas and the proposed compensation as presented in the Wetland Setback Compensation Plan (dated October 7, 2021) pursuant to Section 24.04 of the Shoreland-Wetland Zoning Code and subject to the following conditions:

1. The Property Owner shall prepare and submit an annual monitoring report to the Village and local DNR staff concerning the various management activities proposed in the plan, including the natural grass planting and restoration. Said report shall, at a minimum, detail the type and amount of plantings, all activities carried out in the previous year and the observed success of all previous activities, recommendations for new or different activities needed to ensure success of the mitigation measures and management activities to be carried out, and a list of planned activities for the upcoming year. Said report shall be submitted annually at the end of each year beginning in 2022 for a period of three (3) years.
2. A detailed drawing of the location for the proposed seeding shall be submitted to the Village Planner for review and approval within 30 days of the CUP approval.

The Avenue
275 West Wisconsin Avenue, Suite 300
Milwaukee, WI 53203
414 / 259 1500
414 / 259 0037 fax
www.graef-usa.com

GRAEF

collaborate / formulate / innovate

November 4, 2021

Jeff Retzlaff, Village Planner
Village of Germantown
N112 W17001 Mequon Road
Germantown, WI 53022

SUBJECT: Zignego / Madrzak CSM Review

Certified Survey Map

Applicant or Owner: Robert Zignego / Michael and Pamela Madrzak
Land Surveyor/Firm: David Yurk / Payne & Dolan Inc.

1. Building setback lines are to be mapped and dimensioned.
2. Label document that previously dedicated Elm Lane right of way.
3. The Bearing Reference should be labeled as **S** 01 46 45 E.
4. All existing utility and drainage easements with recording information will be shown and dimensioned.
5. All wetlands will be delineated by an approved and certified wetland specialist.
6. All wetland mapping will be done by a Professional Land Surveyor registered in the State of Wisconsin.
7. The Range identified in the Vicinity Map should be labeled R **20** E.
8. Should stream and wetland setback lines be shown on the Certified Survey Map document, the following note will be added:

   "Development within these setback areas is prohibited unless otherwise allowed pursuant to the provisions of Chapter 24 (Shoreland-Wetland Zoning Code) in the Germantown Municipal Code."

9. Limits and elevation of 100-year flood plain line should be shown, if applicable.
10. On Sheet 1 refer to Exhibit A vs. Detail A.
11. Existing and proposed Zoning should be labeled on the CSM.
12. The word "dedicated" should be included in the 2nd and 5th paragraphs of the Surveyor's Certificate.

13. The bearing in the 5th sentence of the legal description should be labeled as **N** 01 51 27 **W**.

14. The bearing in the 7th sentence of the legal description should be labeled as **S** 01 51 27 **E**.

15. The first paragraph of the Mortgage Certificate on Sheet 6 incorrectly spells Robert.

16. The west line of the parent parcel has a total distance of 1279.04', however when adding up the three distances along that line there is a 2' shortage.

17. There appears be a discrepancy in acreage for Lot 2 and also the total acreage as listed in the legal description.

No further review comments.

Document Approval and Recording

For this CSM to be approved by the Village Board and recorded at the Washington County Register of Deeds, the document must be provided to the Village Clerk's office in a completed format including all original signatures of the owner and lending institution, original seals of the professional land surveyor on the recordable media the Wednesday prior to the scheduled Village Board meeting.

This includes the CADD file.

T:\Engineering\Planning Commission Review\Bob\2020\10\Leszczynski-Schneider CSM.doc08\ Moldmakers-rozite csm docx

Any documents or digital files not submitted by the due date or contain outstanding technical review comments that have not be addressed, will be moved to the next scheduled Village Board meeting agenda.

Document Submittals and Data Conversion
As of October 2005, the Village of Germantown requires a digital copy of all Certified Survey Maps, Condominium Plats and Subdivision Plats in addition to the documents as required by Wisconsin Statute and Village Ordinances as part of the land division approval.

Prior to Recording the Certified Survey Map or Subdivision Plat, The professional land surveyor is responsible for submitting a copy of the AutoCad drawing file (.dwg) of

the document in version 2019 on compact disk (CD) or via email to the Village Surveyor for mapping purposes.

All digital professional land surveyor seals and signatures will be purged from the digital copy prior to submittal.

Note: In 2020, the Village will be upgrading its municipal code to recognize the NAD83 Datum, 2011 adjustment for horizontal control and NAVD88 for vertical control for mapping all land division documents and plan submittals for review.

There are new dossier sheets for all the Public Land Survey System monuments that contain the new coordinate positions and elevations available currently on the State Cartographer's website by using the Survey Control Finder application

Prior to Recording the Certified Survey Map or Final Subdivision Plat, the Village Engineering Department will verify that the boundary markers have been installed as described on the submitted map. All boundary corners are to be clearly marked in the field by the professional land surveyor of record.

Sincerely,



Burt J. Naumann, PLS
Senior Vice President

The Avenue
275 West Wisconsin Avenue, Suite 300
Milwaukee, WI 53203
414 / 259 1500
414 / 259 0037 fax
www.graef-usa.com

GRAEF

collaborate / formulate / innovate

November 4, 2021

Jeff Retzlaff, Village Planner
Village of Germantown
N112 W17001 Mequon Road
Germantown, WI 53022

SUBJECT: Zignego / Madrzak CSM Review

Certified Survey Map

Applicant or Owner: Robert Zignego / Michael and Pamela Madrzak
Land Surveyor/Firm: David Yurk / Payne & Dolan Inc.

1. Building setback lines are to be mapped and dimensioned. ADDED
2. Label document that previously dedicated Elm Lane right of way. ADDED
3. The Bearing Reference should be labeled as **S** 01 46 45 E. REVISED
4. All existing utility and drainage easements with recording information will be shown and dimensioned. NONE IN PARCEL
5. All wetlands will be delineated by an approved and certified wetland specialist. NOTED BY WHOM AND DATE
6. All wetland mapping will be done by a Professional Land Surveyor registered in the State of Wisconsin. DONE BY P.L.S.
7. The Range identified in the Vicinity Map should be labeled R **20** E. REVISED
8. Should stream and wetland setback lines be shown on the Certified Survey Map document, the following note will be added: ADDED SETBACKS ON MAP AND NOTE PAGE #3

   "Development within these setback areas is prohibited unless otherwise allowed pursuant to the provisions of Chapter 24 (Shoreland-Wetland Zoning Code) in the Germantown Municipal Code."

9. Limits and elevation of 100-year flood plain line should be shown, if applicable. NONE IN PARCEL
10. On Sheet 1 refer to Exhibit A vs. Detail A. REVISED
11. Existing and proposed Zoning should be labeled on the CSM. ADDED
12. The word "dedicated" should be included in the 2nd and 5th paragraphs of the Surveyor's Certificate. ADDED

13. The bearing in the 5th sentence of the legal description should be labeled as **N** 01 51 27 **W.** THE S.E. BEARING IS CORRECT AND RUNNING IN THE S.E DIRECTION ON MAP AND LEGAL
14. The bearing in the 7th sentence of the legal description should be labeled as **S** 01 51 27 **E.** THE N.W. BEARING IS CORRECT AND RUNNING IN THE N.W. DIRECTION ON MAP AND LEGAL
15. The first paragraph of the Mortgage Certificate on Sheet 6 incorrectly spells Robert. REVISED
16. The west line of the parent parcel has a total distance of 1279.04', however when adding up the three distances along that line there is a 2' shortage. CORRECTED
17. There appears be a discrepancy in acreage for Lot 2 and also the total acreage as listed in the legal description. CORRECTED

No further review comments.

Document Approval and Recording

For this CSM to be approved by the Village Board and recorded at the Washington County Register of Deeds, the document must be provided to the Village Clerk's office in a completed format including all original signatures of the owner and lending institution, original seals of the professional land surveyor on the recordable media the Wednesday prior to the scheduled Village Board meeting.

This includes the CADD file.

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Any documents or digital files not submitted by the due date or contain outstanding technical review comments that have not be addressed, will be moved to the next scheduled Village Board meeting agenda.

Document Submittals and Data Conversion
As of October 2005, the Village of Germantown requires a digital copy of all Certified Survey Maps, Condominium Plats and Subdivision Plats in addition to the documents as required by Wisconsin Statute and Village Ordinances as part of the land division approval.

Prior to Recording the Certified Survey Map or Subdivision Plat, The professional land surveyor is responsible for submitting a copy of the AutoCad drawing file (.dwg) of

Village of Germantown
...Willkommen

Fee must accompany application
☐ $2,900 with public improvements
☐ $1,960 no public improvements

Paid_____ Date_____

CERTIFIED SURVEY MAP APPLICATION

Pursuant to Section 18.06 of the Municipal Code

Please read and complete this application carefully. **All applications must be signed and dated.**

1 APPLICANT OR AGENT

David Yurk
Payne and Dolan INC
W6830 Design Drive
Greenville WI. 549425
Phone (920) 213-5523
Fax ( )
E-Mail DYurk@walbecgroup.com

PROPERTY OWNER

Robert Zignego
N120W17520 Freistadt Road, Germantown
Mike & Pamela Madrzak
N116W13444 Elm Lane, Germantown
Phone (262) 707-9757 Zignego
PHONE (414) 477-5028

2

PROPERTY ADDRESS OR GENERAL LOCATION	TAX KEY NUMBER
Parcel of land North of the intersection Elm Lane & Forest Drive	GTNV241058, GTNV242992

3 PURPOSE OF LAND SPLIT

Transfer land to Mike and Pamela Madrzak and combine with their parcel, and spilt the remanant into 2 lots. Lot 1 for Zignego house. Lot 2 to potentially sell	Will the land split require rezoning? yes	
	From R3	To R1 & R2

4 READ AND INITIAL THE FOLLOWING:

X I understand that the Certified Survey Map is not valid until recorded at the Washington County Register of Deeds. The Village will record the document and charge the applicant all applicable recording fees.

X I understand that the Map will not be placed on the Village Board agenda until all the technical corrections to the CSM are made, the payment of any outstanding impact fees are paid to the Village Clerk's Department, and the original signed and stamped copy of the Map is submitted on the proper paper.

X I understand that parcels created outside the Sewer Service Area will require a soil test. I also understand that all properties abutting a State Highway will require DOT approval and I will be responsible for securing such approval prior to recording.

X I understand all delinquent property taxes on any of the properties involved shall be paid prior to recording.

5 SIGNATURES -- ALL APPLICATIONS MUST BE SIGNED BY OWNER!

David Yurk 9-1-2021
Applicant Date

Owner 9-1-21
Date

M Madrzak P. MADRZAK 9-01-2021

Village of Germantown
Willkommen

FEES MUST BE PAID AT TIME OF APPLICATION

$200 Plan Commission Consultation
$1,085 Rezoning
$1,240 PDD < 5 acres
$2,095 PDD 5-20 acre site
$3,460 PDD > 20 acre site

Date Paid: _____ Received by:_____

REZONING & PDD APPLICATION

Pursuant to Section 17.51 of the Municipal Code

Please read and complete this application carefully. **All applications must be signed and dated.**

1

APPLICANT OR AGENT	PROPERTY OWNER
David Yurk	Robert Zignego
Payne and Dolan INC.	
W6830 Greenville Drive	N120W17520 Freistadt Road
Greenville WI 54942	Germantown WI. 53022
Phone (920)213-5523	Phone (262) 707-9757
E-Mail DYurk@Walbecgroup.com	E-Mail bob@zignego.com

2

PROPERTY ADDRESS OR GENERAL LOCATION	TAX KEY NUMBER
Parcel of land North of the intersection of Elm Lane and Forest Drive	**GTNV_241058**

3

REZONING REQUEST

FROM	TO
R3	R1 & R2

4

METES AND BOUNDS LEGAL DESCRIPTION OF PROPERTY – REQUIRED

Attach pages as necessary

All of Lot 38 of Harvest Hills, being a part of the Southeast 1/4 of the Northwest 1/4, Section 24, Town 9 North, Range 20 East, Village of Germantown, Washington County, Wisconsin.

5 PURPOSE OF REZONING REQUEST

Briefly describe why the applicant is rezoning the property. Include a description of the proposed use, including any new construction and number of employees, if applicable.
Bob is subdividing his Tax Parcel GTNV_241058 into a 3 Lot CSM. The parcel is curently zoned R3. Lot 1 of the proposed CSM will be rezoned R1. Bob Zignego plans on building a house on that lot in the future. Lot 2 of the proposed CSM will be rezoned R2. Proposed Lot 2 is currently an open field which at some point Zignego plans on selling. Lot 3 incorporates lands that is owned by Mike and Pamela Madrzak. Zignego is selling a lands to the East and West of the Madzrak's parcel to Madzrak. Those lands Zignego are selling to Madzrak needs to be zoned R2 to be combined in the proposed CSM with Madzrak parcel which is currently zoned R2.

6 SUPPORTING DOCUMENTATION:

☐ Plat of Survey (1:100)

☐ Site Plan and elevations for new construction (can be conceptual)

7 READ AND INITIAL THE FOLLOWING:

__X__ I understand that the Village is under no obligation to rezone property and that density and lot coverages provided in the Zoning Code are maximums. Actual build out will depend on myriad factors including topography and other natural conditions, surrounding neighborhood context and the detailed design of a project.

__X__ I understand that Village Staff, Plan Commission and/or Village Board may request additional information to properly evaluate this request and failure to provide such information may in itself by sufficient cause to deny the petition.

__X__ I am aware that this rezoning shall go into effect immediately upon the final approval of the Village Board and its execution of the rezoning ordinance

__X__ I understand that Village Staff is required to post one or more signs along the street frontage of and/or on the property subject of this application that indicate to nearby property owners and the general public that a public hearing of my application will be held before the Village Plan Commission and/or Village Board prior to action taken on this application; I hereby grant Village Staff permission to enter onto the property for the expressed purpose of installing said sign(s) provided Village Staff is responsible for installing, maintaining and removing said signs in a reasonable manner and time frame.

8 SIGNATURES – ALL APPLICATIONS MUST BE SIGNED BY OWNER!

David Yurk
Applicant Date

Owner Date

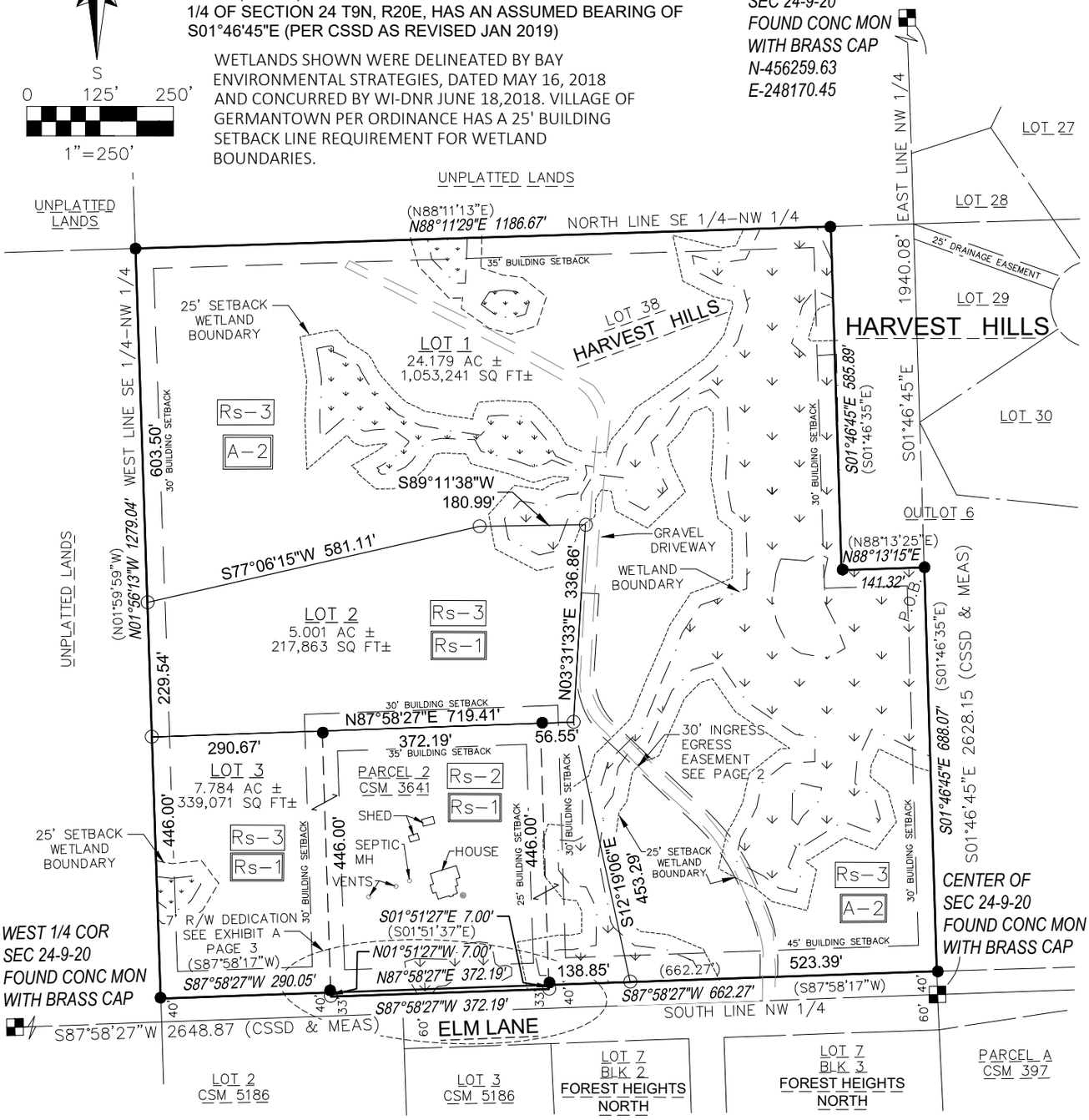
CERTIFIED SURVEY MAP NO - _____

LOT 38 OF HARVEST HILLS, PARCEL 2, CERTIFIED SURVEY MAP NO. 3641, LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 24, TOWNSHIP 9 NORTH, RANGE 20 EAST, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN.

N
W E
S
0 125' 250'
1"=250'

BEARING REFERENCE - BEARINGS ARE REFERENCED TO THE WISC. STATE PLANE COORDINATE SYSTEM, GRID NORTH, SOUTH ZONE (NAD83), WITHIN WHICH THE EAST LINE OF THE NORTHWEST 1/4 OF SECTION 24 T9N, R20E, HAS AN ASSUMED BEARING OF S01°46'45"E (PER CSSD AS REVISED JAN 2019)

WETLANDS SHOWN WERE DELINEATED BY BAY ENVIRONMENTAL STRATEGIES, DATED MAY 16, 2018 AND CONCURRED BY WI-DNR JUNE 18,2018. VILLAGE OF GERMANTOWN PER ORDINANCE HAS A 25' BUILDING SETBACK LINE REQUIREMENT FOR WETLAND BOUNDARIES.



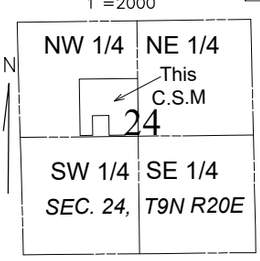
ELM LANE R/W DEDICATED BY HARVEST HILLS FOREST HEIGHTS NORTH CSM'S 5186 AND 3641

LEGEND

- ○ IRON REBAR SET (#6 REBAR X 18", 1.50lbs./LIN. FT.)
- ● IRON PIPE FOUND (1" IRON PIPE UNLESS NOTED)
- Rs-1 EXISITING ZONING DESIGNATION
- Rs-1 PROPOSED ZONING DESIGNATION
- PLSS MONUMENT FOUND
- ( ) RECORDED AS
- WETLANDS
- WELL

VICINITY MAP

1"=2000'



SURVEYOR:
DAVID A. YURK
PAYNE & DOLAN INC.
W6380 DESIGN DRIVE
GREENVILLE, WI. 54945

OWNER Parcel 2, CSM 3641:
MICHAEL MADRZAK & PAMELA MADRZAK
N116W13444 ELM AVE
GERMANTOWN, WI. 53022
PHONE# 414-477-5028
TAX KEY: GTNV_242992
TITLE DEED: DOC#1477063
ZONING: RS2 SINGLE FAMILY RESIDENTIAL

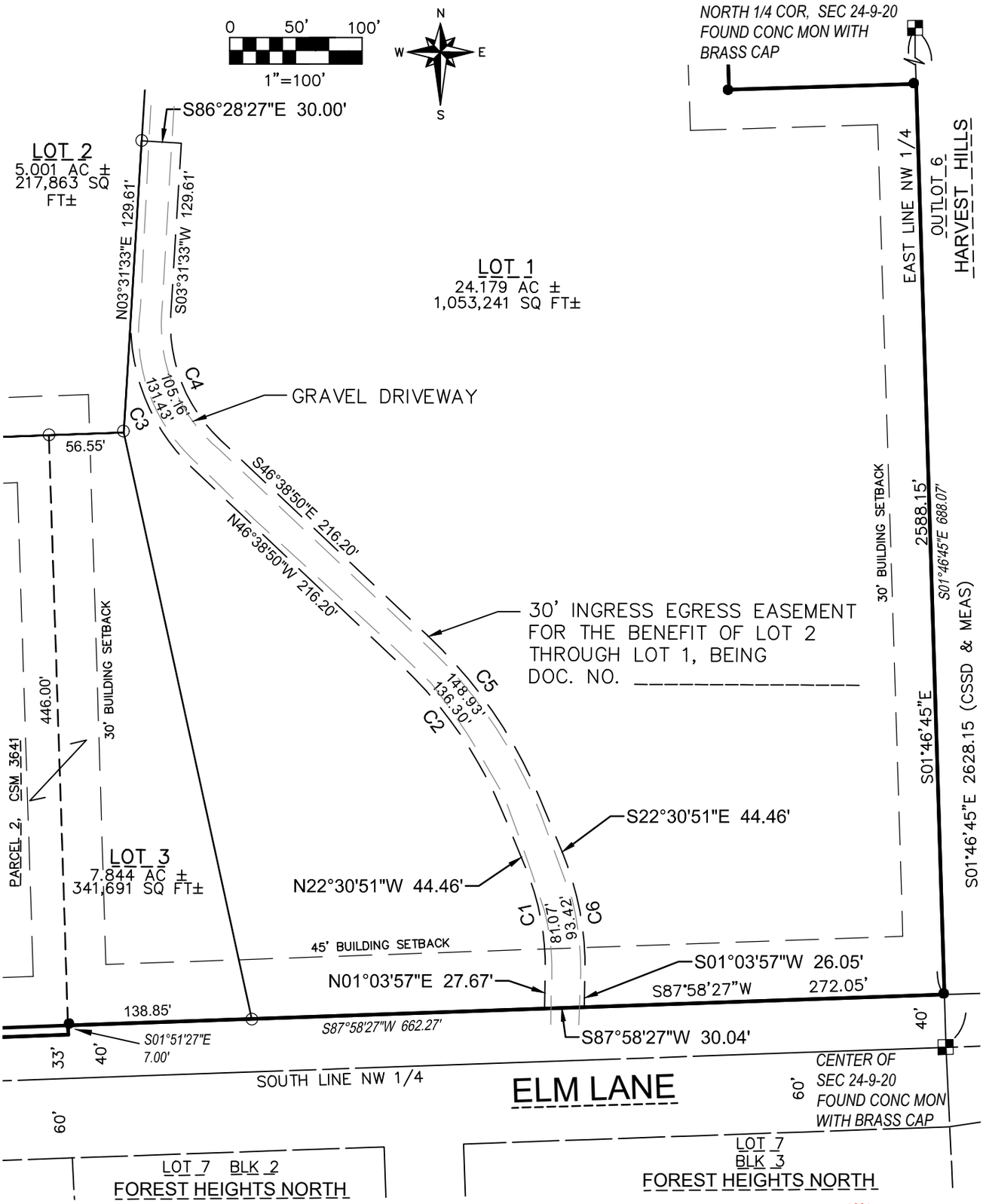
OWNER Lot 38 Harvest Hills:
ROBERT ZIGNEGO
N120W17520 FREISTADT ROAD
GERMANTOWN, WI. 53022
PHONE# 262-707-9757
TAX KEY: GTNV_241058
TITLE DEED: DOC#1533594
ZONING: RS3 SINGLE FAMILY RESIDENTIAL

WISCONSIN
DAVID A. YURK
S-2648
OSHKOSH, WI
LAND SURVEYOR

David A. Yurk, PLS 2648
DATED November 19, 2021 SHEET 1 OF 6

CERTIFIED SURVEY MAP NO - _____

LOT 38 OF HARVEST HILLS, PARCEL 2, CERTIFIED SURVEY MAP NO. 3641, LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 24, TOWNSHIP 9 NORTH, RANGE 20 EAST, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN.



Exterior Curve Table							
Curve #	Length	Radius	Delta	Chord Bearing	Chord	Tangent In	Tangent Out
C1	81.07	196.99	23°34'49"	N10°43'27"W	80.50'	N01° 03' 57"E	N22° 30' 51"W
C2	136.30	323.60	24°07'58"	N34°34'51"W	135.29'	N22° 30' 51"W	N46° 38' 50"W
C3	131.43	150.09	50°10'23"	N21°33'38"W	127.27'	N46° 38' 50"W	N03° 31' 33"E
C4	105.16	120.09	50°10'23"	S21°33'38"E	101.83'	S46° 38' 50"E	S03° 31' 33"W
C5	148.93	353.60	24°07'58"	S34°34'51"E	147.84'	S22° 30' 51"E	S46° 38' 50"E
C6	93.42	226.99	23°34'49"	S10°43'27"E	92.76'	S01° 03' 57"W	S22° 30' 51"E

WISCONSIN
DAVID A. YURK
S-2648
OSHKOSH, WI
LAND SURVEYOR

David A. Yurk, PLS 2648
DATED November 19, 2021

CERTIFIED SURVEY MAP NO - _____

LOT 38 OF HARVEST HILLS, PARCEL 2, CERTIFIED SURVEY MAP NO. 3641, LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 24, TOWNSHIP 9 NORTH, RANGE 20 EAST, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN.

SURVEYOR'S CERTIFICATE

STATE OF WISCONSIN)
:SS
WAUKESHA COUNTY)

I, David A. Yurk, professional land surveyor, certify:

THAT I have surveyed, divided, dedicated and mapped all of Lot 38 of Harvest Hills and Parcel 2, Washington County Certified Survey Map No. 3641, being a part of the Southeast 1/4 of the Northwest 1/4, Section 24, Town 9 North, Range 20 East, Village of Germantown, Washington County, Wisconsin, which is bounded and described as follows.

COMMENCING at the North Quarter Corner of Section 24; thence S01°46'45"E along the East line of the Northwest 1/4 a distance of 1940.08 feet to the point of beginning; thence continuing S01°46'45"E along said East line a distance of 688.07 feet to the Northerly right-of-way line of Elm Lane, thence S87°58'27"W along said Northerly right-of-way line a distance of 662.27 feet to the Easterly line of Parcel 2, Certified Survey Map No 3641, thence S01°51'27"E along said Easterly line a distance of 7.00 feet to the Northerly right-of-way line of Elm Lane; thence S87°58'27"W along said Northerly line a distance of 372.19 feet to the Westerly line of Parcel 2, Certified Survey Map No 3641; thence N01°51'27"E along said Westerly line a distance of 7.00 feet to the Northerly right-of-way line of Elm Lane; thence S87°58'27"W along said Northerly right-of-way line a distance of 290.05 feet to the West line of the Southeast Quarter of the Northwest Quarter of Section 24, thence N01°56'13"W along said West line a distance 1279.04 feet to the North line of the Southeast Quarter of the Northwest Quarter of Section 24, thence N88°11'29"E along said North line a distance 1186.67 feet to the Westerly line of Outlot 6, Harvest Hills; thence S01°46'45"E along said Westerly line a distance of 585.89 feet to a Southerly line of Outlot 6, Harvest Hills; thence N88°13'15"E along said Southerly line a distance of 141.32 feet to the point of beginning. Said described lands contains 37.024 Acres (1,612,780 square feet) more or less of land.

THAT I have made the survey, land division and map by the direction Robert Zignego and that the map is a correct representation of all the exterior boundaries of the land surveyed and the land division thereof made.

THAT I have complied with Chapter 236 of the Wisconsin Statutes and Chapter 18 of the Village of Germantown Code of Ordinances in surveying, dividing, dedicating and mapping of same. Per Wis. Stats. 236.21 (1), this certificate has the same force and effect as an affidavit.

Date: November 19, 2021

David A. Yurk

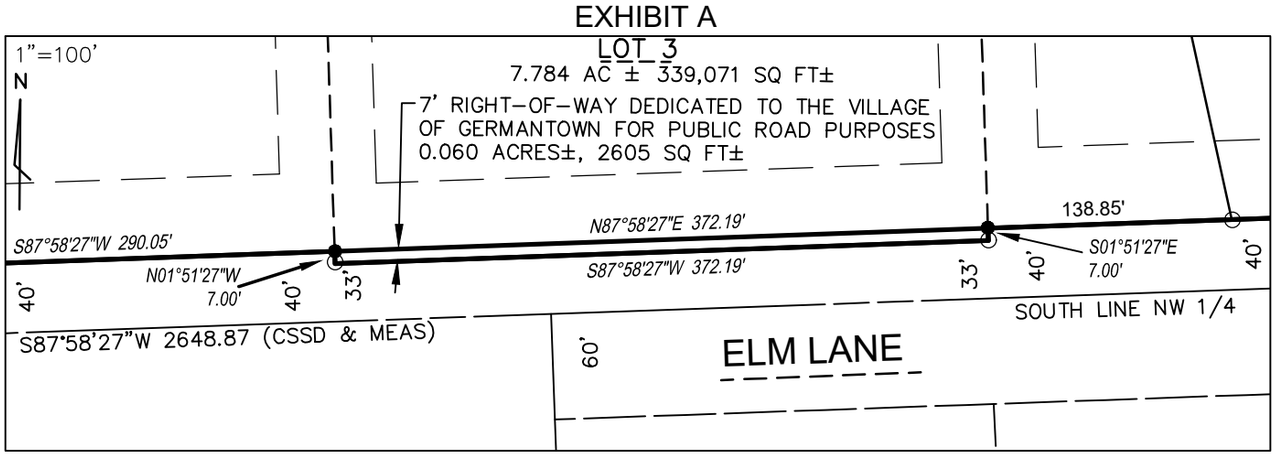
_____

DAVID A. YURK
PROFESSIONAL LAND SURVEYOR S-2648

WISCONSIN
DAVID A. YURK
S-2648
OSHKOSH, WI
LAND SURVEYOR

NOTES:
Development within these wetland setback areas is prohibited unless otherwise allowed pursuant to the provisions of Chapter 24 (Shoreland-Wetland Zoning Code) in the Germantown Municipal Code.

EXHIBIT A



CERTIFIED SURVEY MAP NO - _____

LOT 38 OF HARVEST HILLS, PARCEL 2, CERTIFIED SURVEY MAP NO. 3641, LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 24, TOWNSHIP 9 NORTH, RANGE 20 EAST, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN.

OWNER'S CERTIFICATE

Robert Zignego, as owner, certifies that he caused the land described on this map to be surveyed, divided, mapped as represented on this map in accordance with s. 236.10 and s. 236.12, Wis. Stats. and the requirements of the Village of Germantown to be submitted for approval or objection.

In Witness Where thereof that said Robert Zignego, has caused these presents to be signed

_____,

this _____day of _____, 2021.

STATE OF WISCONSIN}
:SS
WASHINGTON COUNTY}

Personally came before me this _____day of _____, 2021, Robert Zignego, to me known to be the person executed the foregoing instrument, and to me known

[Seal] _____
Notary Public, State of Wisconsin

My commission expires on _____

VILLAGE OF GERMANTOWN PLANNING COMMISSION APPROVAL

This Certified Survey Map is hereby approved by the Planning Commission of the Village of Germantown on this _____ day of _____, 2021.

_____ _____ _____ _____
Dean Wolter , Chairman Date Laura A. Johnston, Secretary Date

VILLAGE OF GERMANTOWN BOARD APPROVAL

This Certified Survey Map, being a division of the Southeast Quarter of the Northwest Quarter, Section 24, Township 9 North, Range 20 East, Village of Germantown, Washington County, Wisconsin, having been approved by the Planning Commission being the same, is hereby approved and the dedication of that part of Elm Lane for public road purposes as shown on Sheets 1 & 3 of 7 is hereby accepted by the Village Board of Tustees of the Village Board of the Village of Germantown on the _____day of _____, 2021.

_____ _____
Dean Wolter, Village President Date

_____
Deanna Braunschweig, Village Clerk Date

Payne+Dolan
A WALBEC COMPANY
www.walbecgroup.com
(920) 757-7559

WISCONSIN
DAVID A. YURK
S-2648
OSHKOSH, WI
LAND SURVEYOR

David A. Yurk

_____
David A. Yurk, PLS 2648
DATED: November 19, 2021

THIS INSTRUMENT WAS DRAFTED DAVID YURK S-2648

CERTIFIED SURVEY MAP NO - _____

LOT 38 OF HARVEST HILLS, PARCEL 2, CERTIFIED SURVEY MAP NO. 3641, LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 24, TOWNSHIP 9 NORTH, RANGE 20 EAST, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN.

OWNER'S CERTIFICATE

Michael Madrzak and Pamela Madrzak owners, certifies that he caused the land described on this map to be surveyed, divided, mapped and dedicated as represented on this map in accordance with s. 236.10 and s. 236.12, Wis. Stats. and the requirements of the Village of Germantown to be submitted for approval or objection.

As owners, we hereby dedicate that part of Elm Lane to the Village of Germantown for public road purposes as represented on sheets 1 & 3 of 6 of this Certified Survey Map

In Witness Where thereof that said Michael Madrzak and Pamela Mardzrak , has caused these presents to be signed

_____, _____,

this _____day of _____, 2021.

STATE OF WISCONSIN}
:SS
WASHINGTON COUNTY}

Personally came before me this _____day of _____, 2021, Michael Madrzak and Pamela Mardzrak, to me known to be the person executed the foregoing instrument, and to me known

[Seal]

_____
Notary Public, State of Wisconsin
My commission expires on _____

CONSENT OF CORPORATE MORTGAGEE

_____ _____, a corporation duly organized and existing under and by virtue of the laws of the State of Wisconsin, morgagee of the above described lands, does hereby consent to the surveying, dividing, mapping and dedication of the land described on this plat, and does hereby consent to the above certificate of Michael Madrzak and Pamela Madrzak, owner OF SAID LANDS

In Witness Where of, _____, has caused these presents to be signed by _____ _____, its President, and countersigned by _____, its Secretary, at _____,Wisconsin and its corporate seal to be hereunto affixed this_____ day of _____, 2021

_____ _____
President Dated Secretary Dated

STATE OF WISCONSIN}
:SS
WASHINGTON COUNTY}

This instrument was acknowledged before me on the _____ day of _____, 2021, by _____, President, and _____, Secretary of the above named corporation, to me known to be the persons who executed the foregoing instrument, and to me known to be such President and Secretary of said corporation, and acknowledged that they executed the foregoing instrument as such officers of said corporation, by its authority.

[Seal]

_____
Notary Public, State of Wisconsin
My commission expires on _____



David A. Yurk, PLS 2648
DATED: November 19, 2021

CERTIFIED SURVEY MAP NO - _____

LOT 38 OF HARVEST HILLS, BEING A PART OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 24, TOWNSHIP 9 NORTH, RANGE 20 EAST, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN.

CONSENT OF CORPORATE MORTGAGEE

_____ _____, a corporation duly organized and existing under and by virtue of the laws of the State of Wisconsin, morgagee of the above described lands, does hereby consent to the surveying, dividing, and mapping of the land described on this plat, and does hereby consent to the above certificate of Robert Zignego owner of said lands.

_____

In Witness Where of, _____, has caused these presents to be signed by _____ _____, its President, and countersigned by _____, its Secretary, at _____,Wisconsin and its corporate seal to be hereunto affixed this_____ day of _____, 2021

_____ _____

President Dated Secretary Dated

STATE OF WISCONSIN}

:SS

WASHINGTON COUNTY}

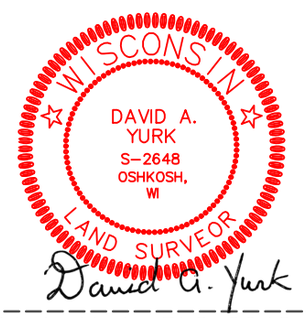
This instrument was acknowledged before me on the _____ day of _____, 2021, by _____, President, and _____, Secretary of the above named corporation, to me known to be the persons who executed the foregoing instrument, and to me known to be such President and Secretary of said corporation, and acknowledged that they executed the foregoing instrument as such officers of said corporation, by its authority.

[Seal]

_____

Notary Public, State of Wisconsin

My commission expires on _____



David A. Yurk, PLS 2648

DATED: November 19, 2021

Payne+Dolan

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www.walbecgroup.com

(920) 757-7559

THIS INSTRUMENT WAS DRAFTED BY DAVID YURK S-2648

ZONING EXHIBIT

LOT 38 OF HARVEST HILLS, PARCEL 2, CERTIFIED SURVEY MAP NO. 3641, LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 24, TOWNSHIP 9 NORTH, RANGE 20 EAST, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN.

BEARING REFERENCE - BEARINGS ARE REFERENCED TO THE WISC. STATE PLANE COORDINATE SYSTEM, GRID NORTH, SOUTH ZONE (NAD83), WITHIN WHICH THE EAST LINE OF THE NORTHWEST 1/4 OF SECTION 24 T9N, R20E, HAS AN ASSUMED BEARING OF N01°46'45"E (PER CSSD AS REVISED JAN 2019)

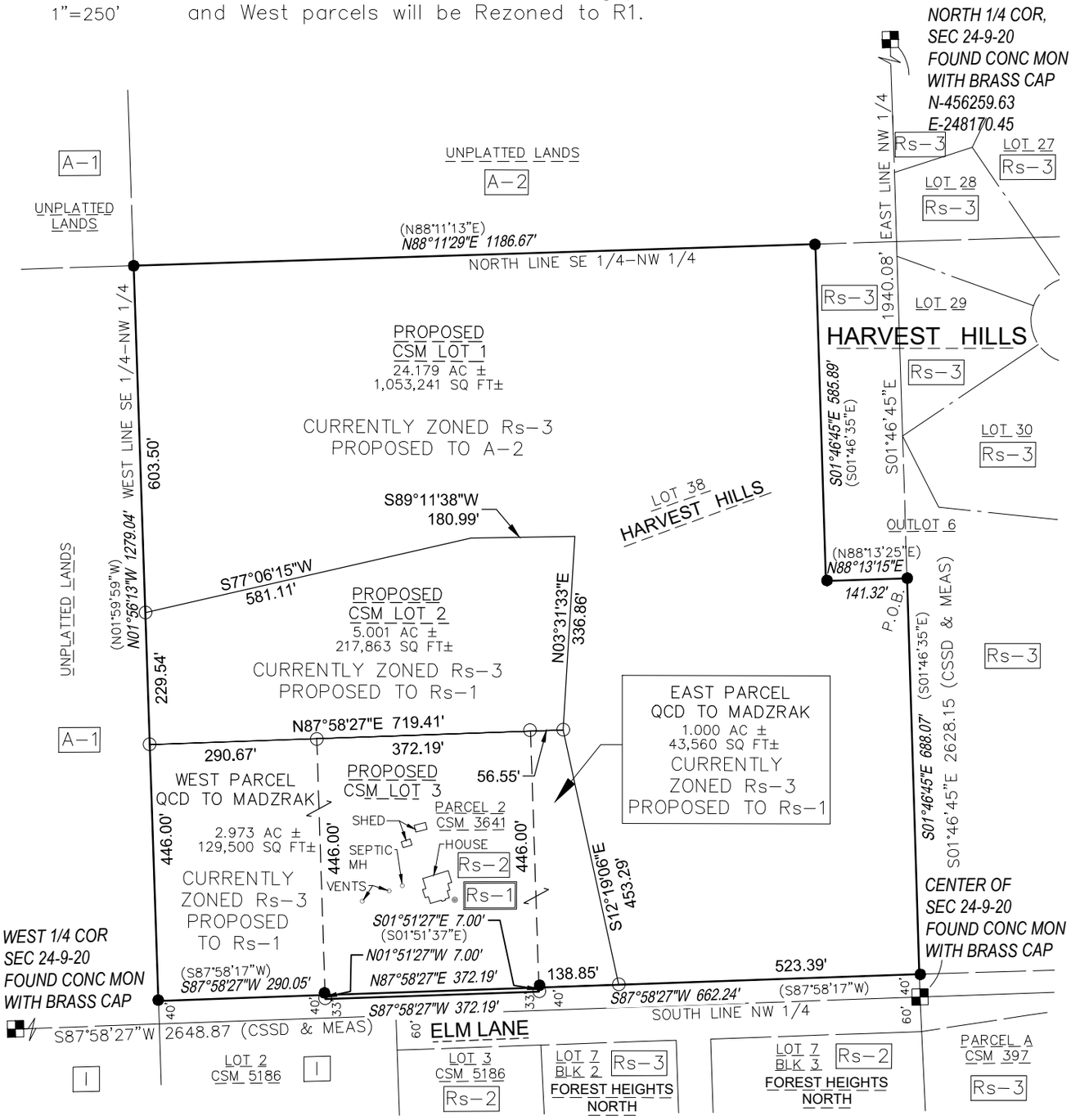
N W E S

0 125' 250'

1"=250'

NOTES:

Bob Zignego is selling to Mike and Pamela Madzrak the West 2.973 acre parcel and the East 1.00 acre parcel adjacent to Mike and Pamela's parcel being Parcel 2, CSM 3641, Tax ID: GTNV_242992. Madrzrak will combine the East and West parcels to his existing parcel into one Parcel via a CSM. Madzrak's existing parcel is zoned R2. The East and West parcels will be Rezoned to R1.

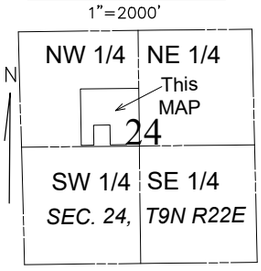


LEGEND

- ○ IRON REBAR SET (#6 REBAR X 18", 1.50lbs./LIN. FT.)
- ● IRON PIPE FOUND (1" IRON PIPE UNLESS NOTED)
- ■ PLSS MONUMENT FOUND
- ( ) RECORDED AS
- Rs-1 PROPOSED ZONING DESIGNATION
- Rs-1 ZONING DESIGNATION
- ⊛ WELL

VICINITY MAP

1"=2000'



SURVEYOR:
DAVID A. YURK
PAYNE & DOLAN INC.
W6380 DESIGN DRIVE
GREENVILLE, WI. 54945

OWNER Parcel 2, CSM 3641:
MICHAEL MADRZAK & PAMELA MADRZAK
N116W13444 ELM AVE
GERMANTOWN, WI. 53022
PHONE# 414-477-5028
TAX KEY: GTNV_242992
TITLE DEED: DOC#1477063
ZONING: RS2 SINGLE FAMILY RESIDENTIAL

OWNER Lot 38 Harvest Hills:
ROBERT ZIGNEGO
N120W17520 FREISTADT ROAD
GERMANTOWN, WI. 53022
PHONE# 262-707-9757
TAX KEY: GTNV_241058
TITLE DEED: DOC#1533594
ZONING: RS3 SINGLE FAMILY RESIDENTIAL

WISCONSIN
DAVID A. YURK
S-2648
OSHKOSH, WI
LAND SURVEYOR

David A. Yurk

David A. Yurk, PLS 2648
DATED November 19, 2021 SHEET 1 OF 1

Proposed lot - does not depict actual property lines

Wisconsin DSPS
Division of Safety and Buildings

SOIL EVALUATION REPORT

In accordance with SPS 385, Wis. Adm. Code

Attach complete site plan on paper not less than 8 ½ x 11 inches in size. Plan must include, but not limited to: vertical and horizontal reference point (BM), direction and Percent slope, scale or dimensions, north arrow, and location and distance to nearest road.

Please print all information.

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

County:	
Washington	
Parcel I.D.:	
241998	
Reviewed by: Mark Finger	Date: 11/28/2018

Property Owner:	Property Location: Govt. Lot SW ¼ S 24 NE¼ S 24 T9 N – R 20 ☒ E (or) ☐ W		
Alan Luther			
342 Hillside Rd	Lot # 41	Block #	Subd. Name or CSM # Harvest Hills
City: Colgate / State: WI / Zip Code: 53017 / Phone Number: ( ) -	☐ City: ☒ Village: ☐ Town: Germantown		Nearest Road: Freistadt Rd

☒ New Construction ☐ Replacement	Use ☒ Residential / Number of bedrooms: 4 ☐ Public or commercial – Describe:	Code derived design flow rate: 600 GPD
Parent material: Glacial Till		Flood Plain elevation if applicable: NA ft.
General comments and recommendations:	Recommended mound system: 2-3'x100' cell Additional Comments on page 3	

404 Boring #

☐ Boring
☒ Pit Ground surface elev. 892.3 ft. Depth to limiting factor 19 in. Soil Application Rate

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	Roots	GPD/ft² Eff#1	GPD/ft² Eff#2
Ap	0-8	10YR 4/3	#	CL	2m sbk	fr	as	1f	0.4	0.6
Bt	8-19	7.5YR 4/4	#	CL	2m sbk	fr	cw	1f	0.4	0.6
BC	19-25	10R 5/4	C1D 7.5YR 6/6, 6/2	SiCL	1m sbk	fr	cw	-	0.2	0.3
C	25-32	10YR 5/4	C1D 7.5YR 6/6, 6/2	SiCL	mass.	fi	-	-	0	0

441 Boring #

☐ Boring
☒ Pit Ground surface elev. 891.4 ft. Depth to limiting factor 19 in. Soil Application Rate

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	Roots	GPD/ft² Eff#1	GPD/ft² Eff#2
Ap	0-10	10YR 3/3	#	CL	2m sbk	fr	as	1f	0.4	0.6
Bt1	10-19	7.5YR 4/4	#	CL	2m sbk	fr	cw	1f	0.4	0.6
BC	19-25	10YR 5/4	C1D 7.5YR 6/6, 6/2	SiCL	1m sbk	fr	cw	-	0.2	0.3
C	25-34	10YR 6/4	C1D 7.5YR 6/6, 6/2	SiCL	mass.	fi	-	-	0	0

* Effluent # 1 = BOD_5 > 30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L * Effluent # 2 = BOD_5 ≤ 30 mg/L and TSS ≤ 30 mg/L

CST Name (Please Print): Dan Vander Leest	Signature:	CST Number: 221049
Address: 824 Egg Harbor Road Sturgeon Bay, WI 54235	Date Evaluation Conducted: November 27 and 28, 2018	Telephone Number: (920) 743 - 4708

451 Boring #

☐ Boring

☒ Pit Ground surface elev. 892.0 ft. Depth to limiting factor 25 in. Soil Application Rate

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	Roots	GPD/ft² Eff#1	GPD/ft² Eff#2
Ap	0-10	10YR 4/3	#	CL	2m sbk	fr	as	1f	0.4	0.6
Bt	10-17	7.5YR 4/4	#	CL	2m sbk	fr	cw	1f	0.4	0.6
BC	17-25	10R 5/4	#	SiCL	1m sbk	fr	cw	-	0.2	0.3
C	25-38	10YR 5/4	C1D 7.5YR 6/6, 6/2	SiCL	mass.	fi	-	-	0	0

452 Boring #

☐ Boring

☒ Pit Ground surface elev. 886.7 ft. Depth to limiting factor 24 in. Soil Application Rate

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	Roots	GPD/ft² Eff#1	GPD/ft² Eff#2
Ap	0-10	10YR 4/3	#	CL	2m sbk	fr	as	1f	0.4	0.6
Bt	10-19	7.5YR 4/4	#	CL	2m sbk	fr	cw	1f	0.4	0.6
BC	19-24	10YR 5/4	#	SiCL	1m sbk	fr	cw	1f	0.2	0.3
C	24-31	10YR 6/4	C1D 7.5YR 6/6, 6/2	SiCL	mass.	fi	-	-	0	0

Boring #

☐ Boring

☐ Pit Ground surface elev. ft. Depth to limiting factor in. Soil Application Rate

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	Roots	GPD/ft² Eff#1	GPD/ft² Eff#2

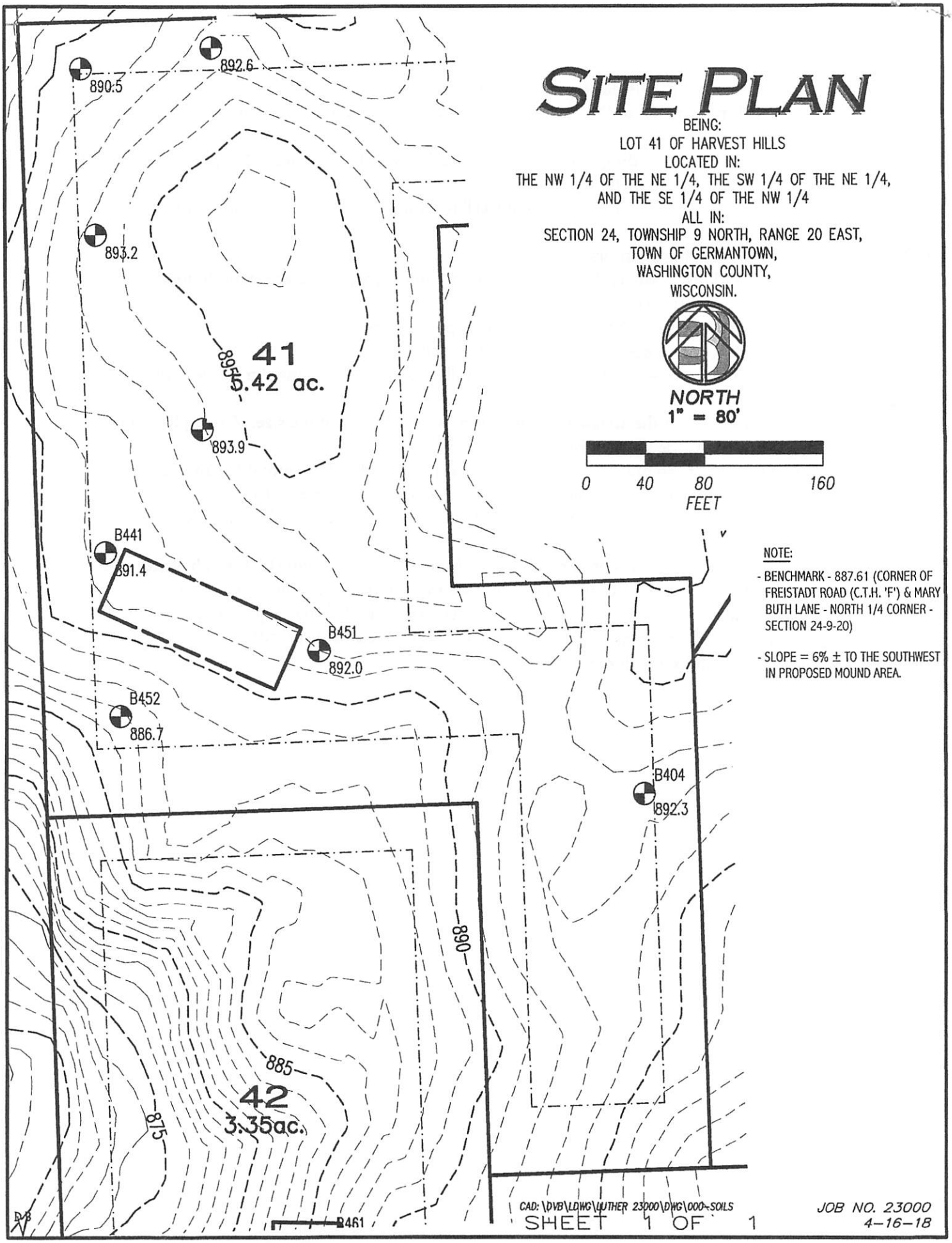
* Effluent # 1 = BOD_5>30 ≤ 220 mg/L and TSS > 30 ≤ 150 mg/L

* Effluent # 2 = BOD_5≤ 30 mg/L and TSS ≤ 30 mg/L

The Department of Commerce is an equal opportunity service provider and employer. If you need assistance to access services or need material in an alternate format, please contact the department at 608-266-3151 or TTY 608-264-8777.

Comments:

1) A linear loading rate of <=4.5 gals/ft/day is required for systems with in situ soils having a soil application rate of <=0.3 gals/ft2/day within 12 inches of the fill material. A suggested linear loading rate of <3 gals/ft/day when possible.
2) With soils having an in situ soil loading rate of >0.3 gals/ft2/day within 12 inches of the fill material, a linear loading rate of <5 gals/ft/day is suggested.
3) Long, narrow systems are required. If more than one cell is required, a minimum of half the basal area is suggested between cells.
4) Bend cells to follow the existing contours
5) Prior to any soil and land disturbance, the proposed mounds and a 25' perimeter surrounding the mounds must be marked and kept undisturbed
6) Locate mounds on shoulder and upper back slope landscape positions.
7) Final grades of mounds to divert surface waters away from the mound.
8) A vegetative cover to prevent erosion and also facilitate soil structure development must be planted as soon as possible.
9) The proposed system shown on the attached site plan is only an estimate of the size. A complete mound design is required to determine the precise sizes.
10) Pretreatment alternatives can only be considered to lower the height of the mound. (min 12" sand with pretreatment) The sand loading and linear loading cannot be increased with pretreatment.
11) The planning of the surrounding wells must be determined prior to individual mound designs to avoid set-back issues.
12) If slopes vary by >1% with the proposed cell areas, an Individual Site Design (ISD) will be required.
13) Remove all organic material prior to plowing. Sites that are wooded must add basal area to the mounds to account for stumps. Remove all loose roots after plowing. It is recommended that large stumps be carefully removed within the basal area. Approval and supervision from the state and/or county is required. An Individual Site Design would also be required with removal of the stumps.



SITE PLAN

BEING:
LOT 41 OF HARVEST HILLS
LOCATED IN:
THE NW 1/4 OF THE NE 1/4, THE SW 1/4 OF THE NE 1/4,
AND THE SE 1/4 OF THE NW 1/4
ALL IN:
SECTION 24, TOWNSHIP 9 NORTH, RANGE 20 EAST,
TOWN OF GERMANTOWN,
WASHINGTON COUNTY,
WISCONSIN.

NORTH
1" = 80'

0 40 80 160
FEET

NOTE:

- BENCHMARK - 887.61 (CORNER OF FREISTADT ROAD (C.T.H. 'F') & MARY BUTH LANE - NORTH 1/4 CORNER - SECTION 24-9-20)
- SLOPE = 6% ± TO THE SOUTHWEST IN PROPOSED MOUND AREA.

CAD: \DVB\LDWG\LUTHER 23000\DWG\000-SOILS

SHEET 1 OF 1

JOB NO. 23000
4-16-18

Village of
Germantown
...Willkommen

Fee must accompany application

~~$1460~~ $2920 Paid [illegible] Date 10/8/21

CONDITIONAL USE PERMIT APPLICATION

Pursuant to Section 17.42 of the Municipal Code

Please read and complete this application carefully. **All applications must be signed and dated.**

1 APPLICANT OR AGENT

Phone ( )

Fax ( )

E-Mail

PROPERTY OWNER

Robert Zignego

N120W17520 Freistadt Rd.

Germantown, WI 53022

Phone (262) 707-9757

2 TO WHOM SHOULD THE PERMIT BE ISSUED?

Robert Zignego

3 PROPERTY ADDRESS

Parcel of land North of the intersection of Elm Lane & Forest Drive

TAX KEY NUMBER

GTNV241058

4 DESCRIPTION OF EXISTING OPERATION

Briefly describe the use as it exists today, including use, size, number of employees, hours of operation, etc. If this permit involves new construction, describe the current status of the property, e.g. "vacant." Use additional pages as necessary.

Vacant land

5 DESCRIPTION OF PROPOSED OPERATION

Write the name of the proposed conditional use exactly as it appears in the Municipal Code.

The construction and maintenance of roads which are necessary for the continuity of the Village street system, the provision of essential utility and emergency services or to provide acces to uses permitted under this subsection

Describe the proposed use, including size, number of employees, hours of operation and extent of any new construction/alterations.

The proposed use is eventually building 2 residential homes on the property. Plans are not finalized yet and the building process has not begun on the homes. The lot needs to be split for the second home to be allowed. Permits for crossing/disturbing the wetlands have both been obatined and approved by the DNR and the Army Corps of Engineers.

6 METES AND BOUNDS LEGAL DESCRIPTION OF PROPERTY – REQUIRED

Attach pages as necessary

7 SUPPORTING DOCUMENTATION:

- ☐ Site Plan and elevations for new construction (can be conceptual)
- ☐ Photos of existing use and/or proposed use operating elsewhere
- ☐ _____
- ☐ _____

8 READ AND INITIAL THE FOLLOWING:

BZ I understand that the Village is under no obligation to issue a Conditional Use Permit and will do so only if the applicant successfully demonstrates that the proposed use is harmonious with the neighborhood and the long range goals of the Village.

BZ I will notify the Village if <u>any</u> aspects of the conditional use changes. I understand that failure to do so may result in the revocation of the CUP.

BZ I understand that a Conditional Use Permit is valid only if the conditions and restrictions of the permit are met. I understand that failure to comply with any aspect of the permit may result in revocation.

BZ I understand that Village Staff is required to post one or more signs along the street frontage of and/or on the property subject of this application that indicate to nearby property owners and the general public that a public hearing of my application will be held before the Village Plan Commission and/or Village Board prior to action being taken on this application; I hereby grant Village Staff permission to enter onto the property for the expressed purpose of installing said sign(s) provided Village Staff is responsible for installing, maintaining and removing said signs in a reasonable manner and timeframe.

9 SIGNATURES – ALL APPLICATIONS MUST BE SIGNED BY OWNER!

Applicant _____ Date _____

Owner _____ Date _____

Payne+Dolan
A WALBEC COMPANY
An Equal Opportunity Employer
W6380 Design Drive | Greenville, WI 54942
920.757.7559 | walbecgroup.com

Bob Zignego Conditional Use Permit
Germantown Tax Parcel# GTNV_241058
October 7, 2021
Revised November 11, 2021

The below narrative summarizes the mitigation practices provided for the wetland setback areas associated with the existing driveway which was constructed this past summer for the Bob Zignego property on Lot 38, Harvest Hills, in the Village of Germantown, known as the Bob Zignego Proposed Certified Survey Map site. The setback requirement follows the guidelines established by Village of Germantown Ordinance No. 23-07 and Section 24.04 of the Village of Germantown Municipal Code.

The mitigation of this site included the construction of a driveway in the summer of 2021 equal to the disturbance area (1:1) for horizontal development. The vertical disturbance did not exceed 1' maximum.

The construction of the driveway removed the topsoil layer (not more than 6 -12" thick") to the top of the clay layer. The contractor moved the topsoil to a different location. The contractor filled in the excavated portion of the driveway with 4" minus rock between 6"-12" of depth and graded the sides of the drive.

Wetland Setback Disturbance

The wetland exhibit map identifies the areas of disturbance within the 25' wetland setback area. The total wetland setback area that was disturbed was 0.08 acres (3631 square feet).

Wetland Mitigation Plan

The driveway is existing. Sides and slopes of the existing driveway will be seeded with a natural grass mix in the spring of 2022. Grass mix to be WisDOT Seed Mix No.75 or equivalent per Section 630 of the WisDOT Standard Specifications, current edition. WisDOT Seed Mix No.75 has wild type forbs and grasses which are native and will bring a more natural vegetation to the area. Seeding will take place in the disturbed areas within the 25' wetland setback from edge of gravel to edge of graded limits or to existing vegetation. This is to ensure 100% complete seed coverage of all bare areas within the setback. Watering of seeded areas will be done during dry weather patterns to ensure nurturing of the planted seeds and grasses.

Summary

Wetland setback area disturbed **0.13 acres (5732 square feet).**
(1:1 Mitigation Area)
Gravel Drive and Native seed restoration **0.13 acres (5732 square feet).**

Mitigation Ration (1:1)
WETLAND MONITERING REPORT: NATIVE GRASSES

MAINTENANCE IN THE FIRST TWO YEARS: MOWING BACK THE WEEDS

Most native grasses grow slowly and require two or more years to reach full development. Annual and biennial weeds are often a problem in the first two years but can be controlled my mowing. Keeping weeds mowed to a height of 6 inches the first year and no more than a height of 12 inches later on if the native grasses grow higher than 6 inches tall. Mow just above the tops of the native grasses. This will prevent the weeds from smothering the smaller grass seedlings. Expect to mow two or three times the first year. Do not allow the weeds to grow over 12 inches tall before mowing or the mowed material can smother the small seedlings.

In the second year, mow in early June at a height of 12 inches. This will knock back annual and biennial weeds. Many native grasses will begin to grow vigorously in the second growing season and some may flower. If weed continue to be a problem later the second year, mow again just above the tops of the native grasses. A flail type mower works best, as it chops up the material so that it dries rapidly without smothering the smaller grass seedlings below. Rotary mowers often lay down the cuttings in piles, which can smother the younger prairie plants.

You can control many weeds using selective herbicides, if desired. You can use broadleaf herbicides to control non-grassy weeds in native grass plantings. Plateau (imazapic) herbicide will control most broadleaf weed, as well as many cool season perennial grasses. Plateau is labeled for use on most warm season grasses.

LONG-TERM MAINTENANCE: CONTROLLED BURNING OR MOWING IN THIRD YEAR

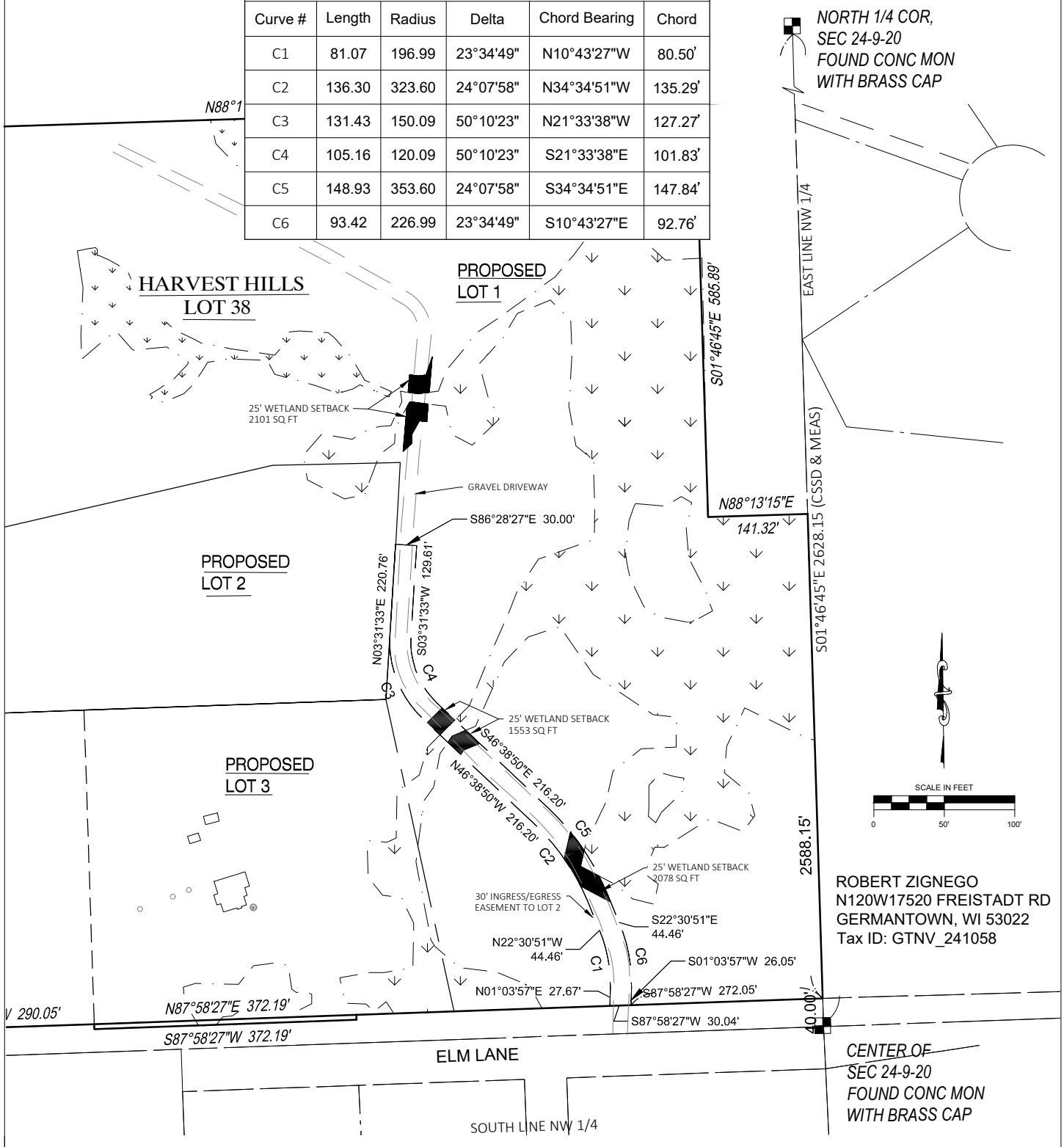
The easiest method of managing warm-season native grasses is to burn them off in mid-spring. This removes all the old debris to make way for new, fresh growth. It also helps prevent invasion of trees and shrubs and controls unwanted cool-season grasses such as quackgrass, bluegrass, bromegrass and fescue. Wait until mid-spring to burn after the cool-season grasses and weed have begun active growth (when they are 4 to 6 inches tall). The fire will setback unwanted cool-season plants while the prairie grasses remain dormant and unharmed underground.

If burning is not an option, mowing and raking the cuttings in mid-spring is a good alternative. The grasses should be cut as closely to the ground as possible, just after the first lawn mowing of the spring. Mow the native grasses right down to the soil if possible, in order to do maximize damage to cool-season grasses and weeds. Rake the cuttings to expose the soil to the warming rays of the sun. These mimics the effect of fire, resulting in a rapid increase in soil temperature that favors the warm-season native grasses.

WETLAND EXHIBIT MAP

PART OF LOT 38, HARVEST HILLS, LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 24, T9N, R20E, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN

Lot Curve Table					
Curve #	Length	Radius	Delta	Chord Bearing	Chord
C1	81.07	196.99	23°34'49"	N10°43'27"W	80.50'
C2	136.30	323.60	24°07'58"	N34°34'51"W	135.29'
C3	131.43	150.09	50°10'23"	N21°33'38"W	127.27'
C4	105.16	120.09	50°10'23"	S21°33'38"E	101.83'
C5	148.93	353.60	24°07'58"	S34°34'51"E	147.84'
C6	93.42	226.99	23°34'49"	S10°43'27"E	92.76'

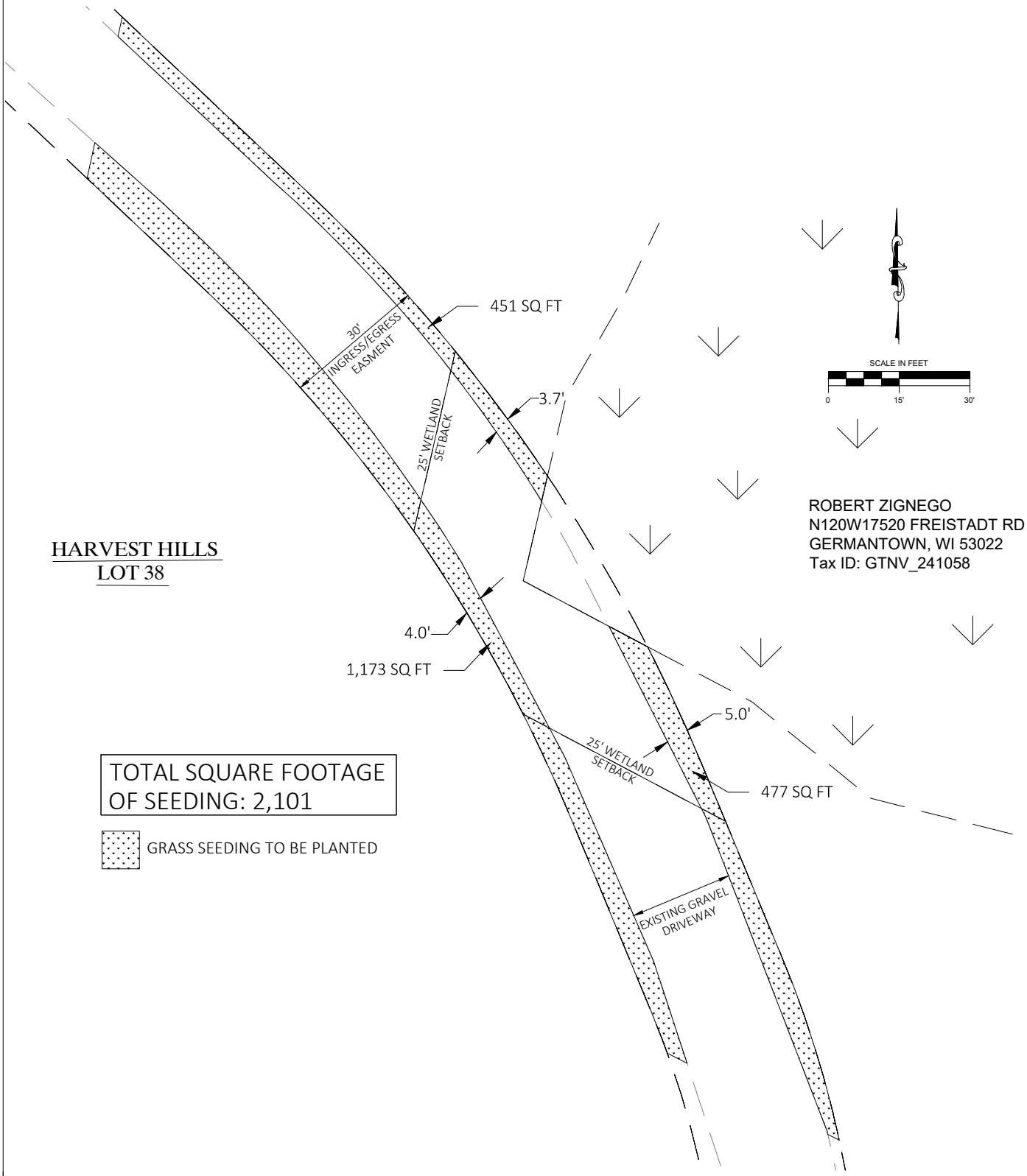


JOB TITLE: ROBERT ZIGNEGO WETLAND EXHIBIT		P&D Job:	490526
		County:	WASHINGTON
		Drawn:	ARS
Date: 1/19/2021	Scale: 1"=200'	Checked:	DAY

Payne+Dolan
A WALBEC COMPANY
www.walbecgroup.com
(920) 757-7559

SEEDING PLAN EXHIBIT MAP AREA #1

PART OF LOT 38, HARVEST HILLS, LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 24, T9N, R20E, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN



TOTAL SQUARE FOOTAGE OF SEEDING: 2,101

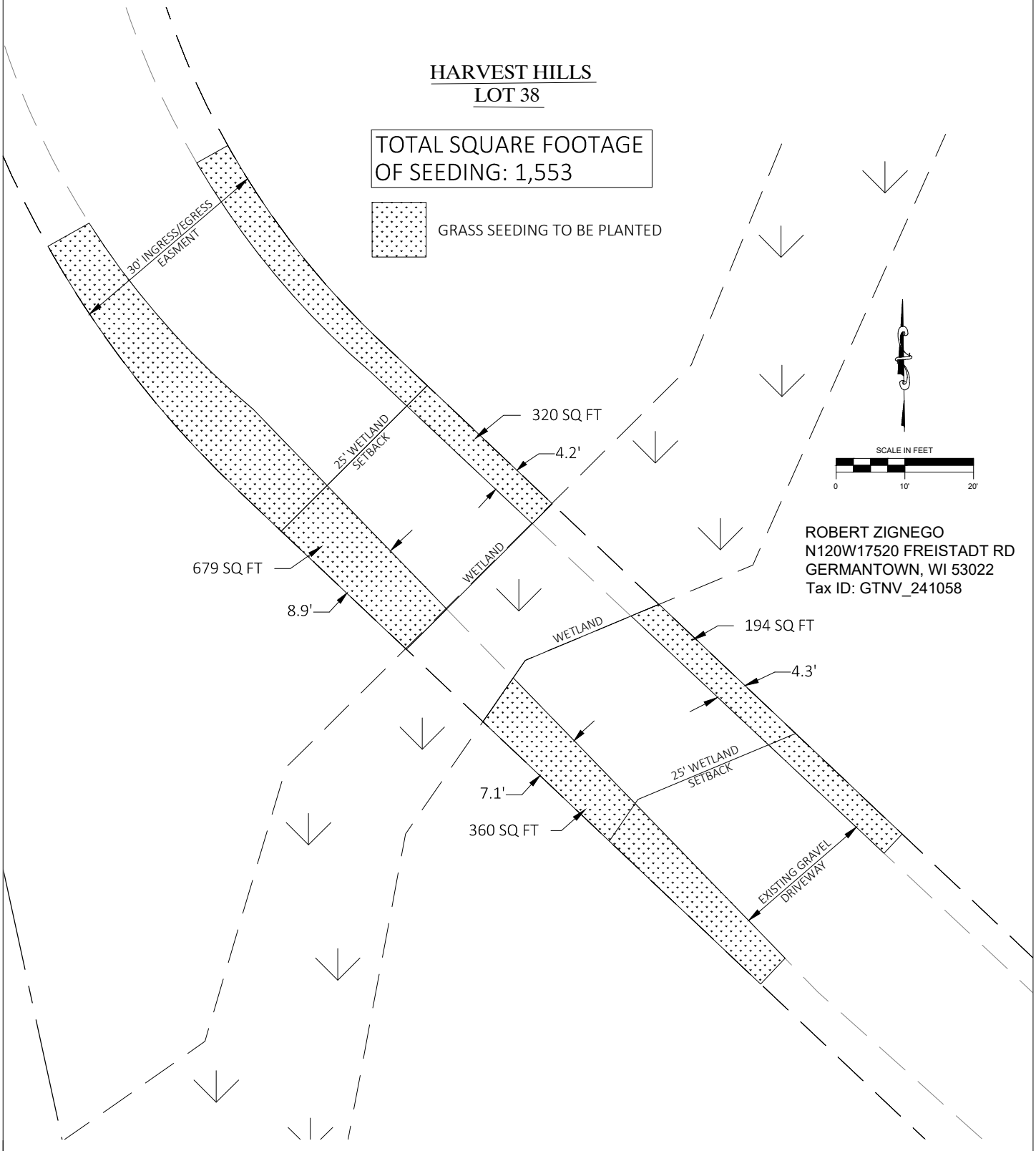
GRASS SEEDING TO BE PLANTED

JOB TITLE: ROBERT ZIGNEGO SEEDING EXHIBIT		P&D Job:	490526
		County:	WASHINGTON
		Drawn:	ARS
Date: 11/30/2021	Scale: 1"=30'	Checked:	DAY

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(920) 757-7559

SEEDING PLAN EXHIBIT MAP AREA #2

PART OF LOT 38, HARVEST HILLS, LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 24, T9N, R20E, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN

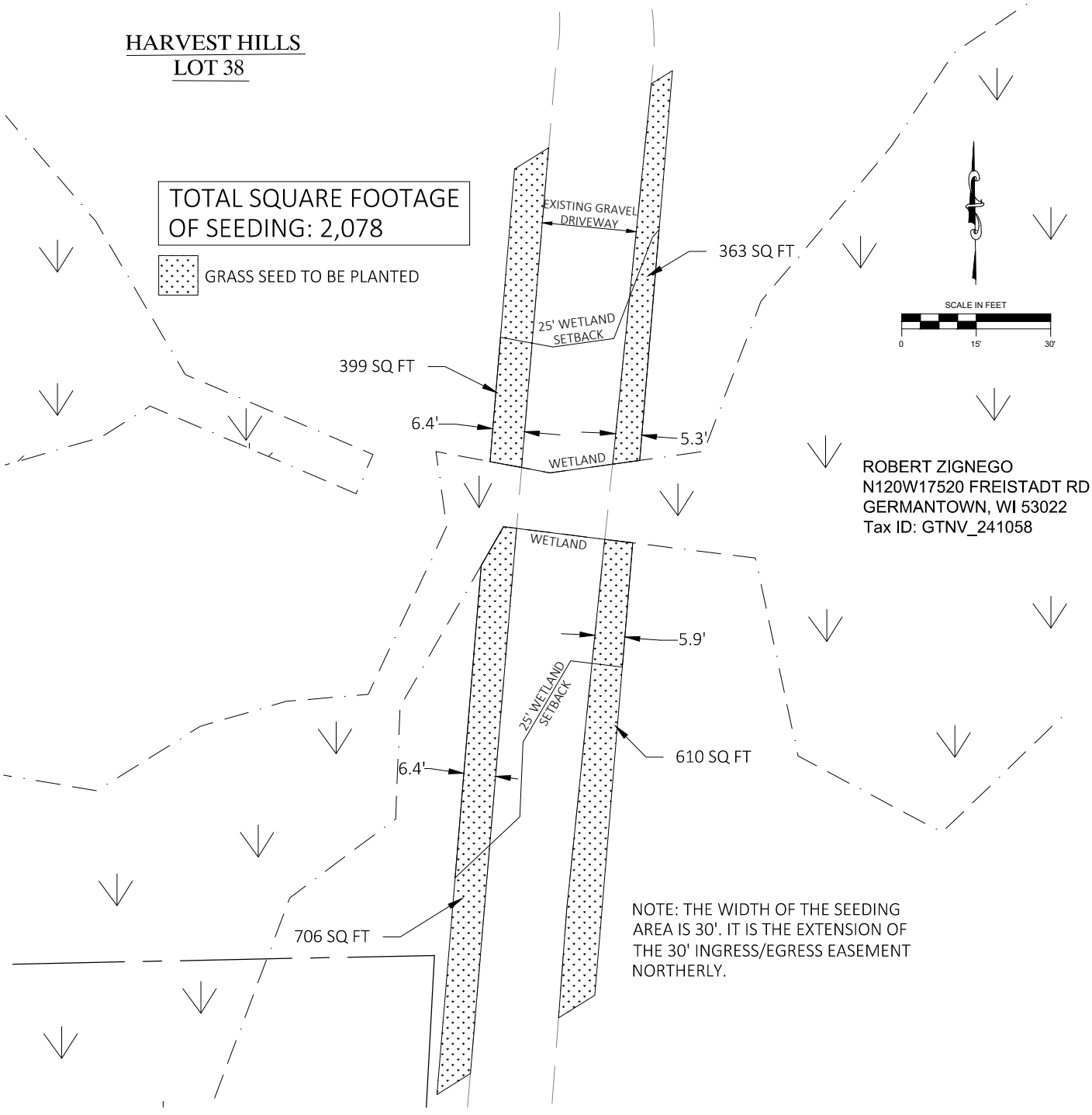


JOB TITLE: ROBERT ZIGNEGO SEEDING EXHIBIT		P&D Job:	490526
		County:	WASHINGTON
		Drawn:	ARS
Date: 11/30/2021	Scale: 1"=20'	Checked:	DAY

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(920) 757-7559

SEEDING PLAN EXHIBIT MAP AREA #3

PART OF LOT 38, HARVEST HILLS, LOCATED IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 24, T9N, R20E, VILLAGE OF GERMANTOWN, WASHINGTON COUNTY, WISCONSIN



JOB TITLE: ROBERT ZIGNEGO SEEDING EXHIBIT		P&D Job:	490526
		County:	WASHINGTON
		Drawn:	ARS
Date: 11/30/2021	Scale: 1"=30'	Checked:	DAY

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630 Seeding

630.1 Description

(1) This section describes preparing seed beds and furnishing and sowing the required seed on slopes, appurtenances, and other areas, and on borrow pits and material disposal sites.

(2) This section also describes furnishing and sowing temporary seed mixture on the slopes and appurtenances of temporary embankments and roadways.

630.2 Materials

630.2.1 Seed

630.2.1.1 General

(1) Use seed within one year of the test date appearing on the label.

(2) Seed mixtures 70, 70A, 75, and 80 contain wild type forbs and grasses. Wild type is defined as seed that is derived directly from native, wild stock, including seed that was wild collected and placed into production or has been harvested directly from native stands.

630.2.1.2 Purity and Germination

(1) Test seed for purity, germination, and noxious weed seed content according to the Rules for Testing Seed, published by the Association of Official Seed Analysts.

(2) Percent live seed (PLS) is determined by multiplying the percent purity times the percent germination. Determine sowing rate and measure mixtures containing PLS as described in CMM 640.3.4 to ensure the correct quantity of viable seed of each species is applied.

630.2.1.3 Inoculation

(1) Inoculate legume seed (white clover, red clover, alsike clover, partridge pea, purple prairie clover, Canada tick-trefoil, and lupine) unless pre-inoculated by the vendor. Follow the inoculation instructions that come with the culture purchases. If applying the seed according to method B, 630.3.3.3, treat seeds requiring inoculation with 5 times the quantity of inoculant recommended in the instructions.

(2) Avoid exposure of the culture or inoculated seed to the sunlight; do not exceed 1/2 hour exposure.

630.2.1.4 Storing Seed

(1) Store seed delivered before use in a way that protects it from damage by heat, moisture, rodents, or other causes. Discard and replace any previously tested and accepted seed that becomes damaged.

630.2.1.5 Seed Mixtures

630.2.1.5.1 Permanent

630.2.1.5.1.1 Composition

(1) Seed mixtures for the right-of-way and easements shall, unless specified otherwise, be composed of seeds of the purity, germination, and proportions, by weight, as given in table 630-1 and table 630-2.

(2) Use seed of the species and varieties listed below. If no variety is listed, there will be no restriction on the variety furnished, except as follows:

1. Pure live seed (PLS) species shall contain no named or improved varieties and be grown in Wisconsin, northern Illinois, northeastern Iowa, or eastern Minnesota. Use out-of-state seed grown in one of the following counties:

1.1 From northern Illinois:

Boone	Bureau	Carroll	Cook	De Kalb	Du Page	Grundy	Henry
Jo Daviess	Kane	Kendall	Lake	La Salle	Lee	McHenry	Ogle
Putnam	Rock Island	Stevenson	Whiteside	Will	Winnebago		

1.2 From northeastern Iowa:

Allamakee	Benton	Black Hawk	Bremer	Buchanan	Cedar	Chickasaw	Clayton
Clinton	Delaware	Dubuque	Fayette	Floyd	Howard	Jackson	Johnson
Jones	Linn	Mitchell	Muscatine	Scott	Winneshiek		

1.3 From eastern Minnesota:

Aitkin	Anoka	Carlton	Carver	Chisago	Dakota	Dodge	Fillmore
Goodhue	Hennepin	Houston	Isanti	Kanabec	La Sueur	Mille Lacs	Mower
Olmsted	Pine	Ramsey	Rice	Scott	Sherburne	Steele	Wabasha
Washington	Winona	Wright					

2. PLS for seed mixtures 70, 70A, 75, and 80 shall be packaged separately by species and clearly labeled with the vendor's name, species common and botanical names, gross weight, percent PLS, year of harvest and any specialized treatments that have been applied to ensure or enhance germination.
3. Minimum percent purity for native for species is 90 percent. If a listed species is not available, substitutions may be made with engineer's approval and must be documented.

(3) Mix native species on the project; clean and debeard seed with awns or excessive hairs before mixing.

SPECIES COMMON NAME	SPECIES BOTANICAL NAME	ACCEPTABLE VARIETIES
Kentucky Bluegrass	Poa pratensis	Low Maintenance
Red Fescue	Festuca rubra	Creeping
Hard Fescue	Festuca ovina	Improved
	var. duriuscula	
Tall Fescue	Festuca arundinacea	Improved turf type
Salt Grass	Puccinella distans	Fult's
	Puccinella distans	Salty
Redtop	Agrostis alba	
Timothy	Phleum pratense	
Canada Wild Rye	Elymus canadensis	
Perennial Ryegrass	Lolium perenne	
Perennial Ryegrass	Lolium perenne	Improved Fine
Annual Ryegrass	Lolium multiflorum	
Alsike Clover	Trifolium hybridum	
Red Clover	Trifolium pratense	
White Clover	Trifolium repens	
Japanese Millet	Echinochola crusgalli	
	var. frumentacea	
Annual Oats	Avena sativa	
Agricultural Rye	Secale cereale	
Winter Wheat	Triticum aestivum	

TABLE 630-1 HIGHWAY SEED MIXTURES

SPECIES	PURITY minimum %	GERMINATION minimum %	MIXTURE PROPORTIONS (in percent)				
			NO.10	NO.20	NO.30	NO.40	NO.60
Kentucky Bluegrass	98	85	40	6	10	35	
Red Fescue	97	85	25	15	30	30	
Hard Fescue	97	85		24	25	20	
Tall Fescue	98	85		40			
Salt Grass	98	85			15		
Redtop	92	85	5				
Timothy	98	90					12
Canada Wild Rye		PLS					10
Perennial Ryegrass	97	90	20	15			
Improved Fine Perennial Ryegrass	96	85			20	15	
Annual Ryegrass	97	90					30
Alsike Clover	97	90					4
Red Clover	98	90					4
White Clover	95	90	10				
Japanese Millet	97	85					20
Annual Oats[1]	98	90					20

[1] Substitute winter wheat for annual oats in fall plantings started after September 1.

TABLE 630-2 NATIVE SEED MIXTURES

SPECIES		SPECIES BOTANICAL NAME	PURITY & GERMINATION minimum %	MIXTURE PROPORTIONS in percent			
				NO. 70	NO. 70A	NO. 75	NO. 80
FORBES	Canada Anemone	*Anemone canadensis*	PLS	2			
	Butterflyweed	*Asclepias tuberosa*	PLS		2		
	New England Aster	*Aster novae-angliae*	PLS	2	2		
	Partridge-pea	*Chamaecrista (Cassia) fasciculata*	PLS		2		
	Purple Prairie Clover	*Dalea (Petalostemum) purpurea*	PLS	2	2	4	
	Canada Tick-trefoil	*Desmodium canadense*	PLS	2			
	Flowering Spurge	*Euphorbia corollata*	PLS		2		
	Wild Geranium	*Geranium maculatum*	PLS	2			
	Western Sunflower	*Helianthus occidentalis*	PLS	3	2		
	Rough Blazingstar	*Liatris aspera*	PLS		2		
	Prairie Blazingstar	*Liatris pycnostachya*	PLS	2			
	Lupine	*Lupinus perennis*	PLS		3		
	Wild Bergamot	*Monarda fistulosa*	PLS	2			
	Horse Mint	*Monarda punctata*	PLS		2		
	Yellow Coneflower	*Ratibida pinnata*	PLS	2	2		
	Blackeyed Susan	*Rudbeckia hirta*	PLS			1	
	Showy Goldenrod	*Solidago speciosa*	PLS	2	2		
	Spiderwort	*Tradescantia ohiensis*	PLS	2	2		
	Golden Alexanders	*Zizia aurea*	PLS	2			
GRASSES	Big Bluestem	*Andropogon gerardi*	PLS	15	15	10	
	Sideoats Grama	*Bouteloua curtipendula*	PLS	15	20	20	25
	Canada Wildrye	*Elymus Canadensis*	PLS	15	15	35	23
	Slender Wheatgrass	*Elymus trachycaulus*	PLS				20
	Junegrass	*Koeleria macrantha*	PLS		5		
	Annual Ryegrass	*Lolium multiflorum*	[1]			10	10
	Switchgrass	*Panicum virgatum*	PLS				10
	Salt Grass	*Puccinella distans*	[1]				2
	Little Bluestem	*Schizachyrium (Andropogon) scoparium*	PLS	15	20	10	10
	Indiangrass	*Sorgastrum nutans*	PLS	15		10	
ALTERNATE FORBES	Sky Blue Aster	*Aster azureus*	PLS	[2]	[2]		
	White Wild Indigo	*Baptisia leucantha*	PLS	[2]	[2]		
	Pale Purple Coneflower	*Echinacea pallida*	PLS	[2]	[2]		
	White Prairie Clover	*Petalostemum candidum*	PLS	[2]	[2]		
	Stiff Goldenrod	*Solidago rigida*	PLS	[2]	[2]		
	Hoary Vervain	*Verbena stricta*	PLS	[2]	[2]		

[1] Provide the minimum purity and germination specified in table 630-1.

[2] The contractor may, if the engineer approves, substitute an alternate forb for a required forb that is not available using the same percentage as specified for the required forb. Use a different alternate forb for each unavailable required forb. Provide documentation showing that a required forb is not available before using an alternate.

630.2.1.5.1.2 Mixture

(1) Use seed mixtures that meet with the engineer's approval and conform to the following:

- No. 10 where average loam, heavy clay, or moist soils predominate.
- No. 20 where light, dry, well-drained, sandy, or gravelly soils predominate and for all high cut and fill slopes generally exceeding 6 to 8 feet, except where using No. 70.
- No. 10 or 20 on all ditches, inslopes, median areas, and low fills, except where using No. 30 or 70.
- No. 30 for medians and on slopes or ditches generally within 15 feet of the shoulder where a salt-tolerant turf is preferred.
- No. 40 in urban or other areas where a lawn type turf is preferred.
- No. 60 only on areas, the contract designates or the engineer specifies. Use it as a cover seeding for newly graded wet areas or as a nurse crop for specified wetland seed mixtures. The contractor shall not apply it to flooded areas.
- Nos. 70 and 70A on slopes and upland areas the contract designates or the engineer specifies. Use seed mixture No. 70 on loamy soils and seed mixture No. 70A on sandy soils.
- No. 75 where native grasses are desired for erosion control.
- No. 80 on inslopes where a salt tolerant seed mix containing native grasses is desired.

630.2.1.5.2 Temporary

(1) Under the Seeding Temporary bid item, use a temporary seed as follows:

SPECIES	% MINIMUM PURITY	% MINIMUM GERMINATION
Annual Oats	98	90
Agricultural Rye	97	85
Winter Wheat	95	90

(2) Use oats in spring and summer plantings. Use winter wheat or rye for fall plantings started after September 1.

630.2.1.5.3 Nurse Crop

(1) If seeding bare soil with either mixture 70, 70A, 75, or 80, include the Seeding Nurse Crop as follows:

SPECIES	% MINIMUM PURITY	% MINIMUM GERMINATION
Annual Oats	98	90
Annual Ryegrass	97	90
Winter Wheat	95	90

(2) When a nurse crop is required for spring seeding before June 15, or if the engineer allows seeding between June 15 and October 15, use annual oats. For fall seeding after October 15, use winter wheat, or annual ryegrass.

630.2.2 Water

(1) Furnish clean water, free of impurities or substances that might injure the seed.

630.3 Construction

630.3.1 General

(1) Perform seeding when and as the engineer directs or allows. Provide protective cover within 24 hours after sowing. The engineer may direct or allow covering with mulch as specified in 627, erosion mat as specified in 628, or using other contract bid items.

(2) If using Nos. 60, 70 and 70A mixtures, do not seed between June 15 and October 15 unless the engineer allows.

630.3.2 Seed Bed Preparation

(1) Complete grading, shouldering, topsoiling, and fertilizing, if part of the work under contract, before permanent seeding, except the contractor may place the fertilizer and seed mixture in one operation if using equipment designed for the purpose.

(2) Just before seeding, work the area being seeded with discs, harrows, or other appropriate equipment to obtain a reasonably even and loose seedbed. Place topsoil as specified in 625.3.3.

630.3.3 Sowing Methods

630.3.3.1 General

(1) Select the method of sowing from either method A, method B, method C, or an appropriate combination of methods A, B, and C. Obtain the engineer's approval for the sowing method and specific procedures used for each seed mixture used before sowing that mixture.

630.3.3.2 Method A

(1) Sow the selected seed mixture using equipment adapted to the purpose, or by scattering it uniformly over the areas to be seeded. Lightly rake or drag to cover the seed with approximately 1/4 inch of soil. After seeding, lightly roll or compact the areas using suitable equipment, preferably the cultipacker type, when the engineer judges the seedbed too loose, or if the seedbed contains clods that might reduce seed germination. The contractor shall not roll slopes steeper than 1:3.

(2) If scattering seed by hand, perform this work with satisfactory hand seeders and only when the air is calm enough to prevent seeds from blowing away.

630.3.3.3 Method B

(1) Sow or spread the seed upon the prepared bed using a stream or spray of water under pressure and operated from an engineer-approved machine designed for that purpose. Place the selected seed mixture and water into a tank, provided within the machine, in sufficient quantities that when spraying the seed on a given area it is uniformly spread at the required application rate. During this process, keep the tank contents stirred or agitated to provide uniform distribution. Spread the tank contents within one hour after adding the seed to the tank. The engineer will reject seed that remains mixed with the water for longer than one hour. The engineer will not require dragging or rolling.

630.3.3.4 Method C

(1) For spring seeding of seed mixtures 70 and 70A into existing ground cover, mow existing vegetation to 4 inches or less in height 2 to 4 weeks before seeding. Ten to 14 days after mowing, spray with vegetation control herbicide conforming to 632.2.12.

(2) For fall seeding of seed mixtures 70 and 70A into existing ground cover, mow existing vegetation to 4 inches or less in height 4 to 6 weeks before seeding. Ten to 14 days after mowing, spray with vegetation control herbicide conforming to 632.2.12. Retreat with vegetation control herbicide 10 to 14 days after initial application if live vegetation persists.

(3) Seed with a rangeland type drill with one or more seed boxes that can be calibrated independently to deliver different sized seeds uniformly at the required rate and equipped with a rear-mounted press wheel for each seed drop tube. If seeding into existing vegetation or thatch, use a rangeland type drill equipped with a no-till attachment that can cut through the vegetation or thatch in front of the V disc and seed drop tube. If the configuration of the area to be seeded allows, apply seed at 1/2 the specified seed rate and apply the second 1/2 in a perpendicular direction.

630.3.4 Borrow Pits and Material Disposal Sites

(1) Seed borrow pits and material disposal sites off the right-of-way. Consult with the landowner or the landowner's agent when selecting the seed mixture.

630.3.5 Seeding Rates

(1) Use the following sowing rate for seeds in pounds per 1000 square feet:

- No. 10 at 1.5 pounds
- No. 20 at 3 pounds
- No. 30 at 2 pounds
- No. 40 at 2 pounds
- No. 60 at an equivalent seeding rate of 1.5 pounds[1]
- No. 70 or 70A at 0.4 pounds
- No. 75 at an equivalent seeding rate of 0.7 pounds[1]
- No. 80 at an equivalent seeding rate of 0.8 pounds[1]
- Temporary seeding at 3 pounds
- Nurse crop seeding at 0.8 pounds

[1] Determine the actual seeding rate by multiplying the equivalent seeding rate by the sum of the unadjusted and adjusted percentages of the various species in the seed mixtures as sown.

(2) The unadjusted percentage equals the minimum percent of purity and germination specified in the table 630-1 and table 630-2.

(3) Obtain the adjusted percentage for each of the PLS species by dividing the specified percentage of the species by the product of the percent of purity and the percent of germination for each of the PLS species as delivered.

630.3.6 Watering

(1) If rainfall is not sufficient, keep seeded areas thoroughly moist. Once the seed has germinated, do not let the top inch of soil dry out until the grass is well established. Maintain soil moisture for 30 days

unless the engineer directs or allows otherwise. Apply water in a manner that precludes washing or erosion.

630.3.7 Establishment Period for Native Seeding

(1) During the growing season after planting seed mixture 70 or 70A, mow all seeded areas twice as the engineer directs. Mow vegetation back to 6 inches when it has reached a height of at least 12 inches.

(2) During the growing season after planting seed mixture 70 or 70A, eradicate the following species from the seeded areas as soon as they become evident:

SPECIES COMMON NAME	SPECIES BOTANICAL NAME
Musk thistle	Carduus nutans
Spotted knapweed	Centaurea maculosa
Canada thistle	Cirsium arvense
Bull thistle	Cirsium vulgare
Field bindweed	Convolvulus arvensis
Leafy spurge	Euphorbia esula
Sweetclover	Melilotus species
Wild parsnip	Pastinaca sativa
Teasel	Dipsacus species
Phragmites	Phragmites australis

(3) Eradicate by hand pulling or by applying a vegetation control herbicide conforming to 632.2.12 to individual plants.

630.4 Measurement

630.4.1 Seeding

(1) The department will measure the Seeding bid items by the equivalent pound acceptably completed, measured based on net weights of seed shipments or weighed on department-approved scales the contractor furnishes. The department will deduct quantities wasted or not actually incorporated in the work according to the contract. The department will determine the equivalent pounds of seed furnished and applied by dividing the actual pounds of seed applied by the sum of the unadjusted and adjusted percentages, determined as specified in 630.3.5, of the various species in the seed mixture sown.

630.4.2 Watering

(1) The department will measure Seed Water by the 1000 gallons acceptably completed, measured as the volume indicated by engineer-approved meters or by the volume of tanks of known capacity.

630.5 Payment

(1) The department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
630.0100 - 0199	Seeding (mixture)	LB
630.0200	Seeding Temporary	LB
630.0300	Seeding Borrow Pit	LB
630.0400	Seeding Nurse Crop	LB
630.0500	Seed Water	MGAL

(2) Payment for the Seeding bid items is full compensation for providing, handling, and storing all seed; for providing the required culture and inoculating seed as specified; and for preparing the seed bed, sowing, covering, and firming the seed. If the landowner does not want the pit or material disposal site seeded, or seeded with any of the mixtures allowed, the department will not pay for fertilization or seeding of those areas.

(3) Payment for Seed Water is full compensation for watering seed.

(4) The department will pay separately for seed covering required under 630.3.1 as follows:

- Under the Mulching bid items as specified in 627.5.
- Under the Erosion Mat and Soil Stabilizer Type A bid items as specified in 628.5.
- Absent the appropriate bid items, as extra work.

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
N7725 Hwy 28
Horicon, WI, 53032

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

April 12, 2021

Robert Zignego
N120W17520 Freistadt Road
Germantown, WI 53022

GP-SE-2021-67-01107

RE: Coverage under the wetland statewide general permit to impact wetlands from residential, commercial and industrial activities, located in the Village of Germantown, Washington County, docket GP-SE-2021-67-01107.

Dear Mr. Zignego:

Thank you for submitting an application for a General Permit to impact wetlands from residential, commercial and industrial activities located in the NW 1/4, SE 1/4, Sec. 24, T. 09, R. 20E, Village of Germantown, Washington County.

You have certified that your project meets the eligibility criteria for this activity. Based upon your signed certification you may proceed with your project. Please take this time to re-read the permit standards and conditions. The eligibility standards can be found on your application checklist or in the statewide general permit (found at http://dnr.wi.gov/topic/waterways/ - keyword: general permits). The permit conditions are attached to this letter. **You are responsible for meeting all general permit eligibility standards and permit conditions.** This includes notifying the Department before starting the project, and submitting photographs within one week of project completion. Please note your coverage is valid for 5 years from the date of the department's determination or until the activity is completed, whichever occurs first.

The Department conducts routine and annual compliance monitoring inspections. Our staff may follow up and inspect your project to verify compliance with state statutes and codes. If you need to modify your project please contact your local Water Management Specialist, Marty Dillenburg at (920) 296-6507 or email marty.dillenburg@wisconsin.gov to discuss your proposed modifications.

The Department of Natural Resources appreciates your willingness to comply with wetland regulations, which help to protect the water quality, fish and wildlife habitat, recreational value and other functions and values wetlands provide to current and future generations. You are responsible for obtaining any other local, state or federal permits that are required before starting your project.

Sincerely,

Marty Dillenburg
Water Management Specialist

Copy to: A.J. Kitchen, Project Manager, US Army Corps of Engineers
Jeff Retzlaff, Director of Community Development, Village of Germantown

You agree to comply with the following conditions:

1. **Application.** You shall submit a complete application package to the Department as outlined in the application materials and section 2 of this permit. If requested, you shall furnish the Department, within a reasonable timeframe, any information the department needs to verify compliance with the terms and conditions of this permit.

2. **Certification.** Acceptance of general permit WDNR-GP1-2017 and efforts to begin work on the activities authorized by this general permit signifies that you have certified the project meets all eligibility standards outlined in Section 1 of this permit and that you have read, understood and have agreed to follow all terms and conditions of this general permit.

3. **Reliance on Applicant's Data.** The determination by this office that a confirmation of authorization is not contrary to wetland water quality standards will be based upon the information provided by the applicant and any other information required by the DNR.

4. **Project Plans.** This permit does not authorize any work other than what is specifically described in the notification package and plans submitted to the Department and you certified is in compliance with the terms and conditions of WDNR-GP1-2017

5. **Expiration.** This WDNR-GP1-2017 expires on April 12, 2026. The time limit for completing work authorized by the provisions of WDNR-GP1-2017 ends 5 years after the date on which the discharge is considered to be authorized under WDNR-GP1-2017 or until the discharge is completed, whichever occurs first.

6. **Other Permit Requirements.** You are responsible for obtaining any other permit or approval that may be required for your project by local zoning ordinances, other local authority, other state permits and by the U.S. Army Corps of Engineers before starting your project.

7. **Authorization Distribution.** You must supply a copy of the permit coverage authorization to every contractor working on the project.

8. **Project Start.** You shall notify the Department before starting construction.

9. **Permit Posting.** You must post a copy of this permit coverage letter at a conspicuous location on the project site prior to the execution of the permitted activity, and remaining at least five days after stabilization of the area of permitted activity. You must also have a copy of the permit coverage letter and approved plan available at the project site at all times until the project is complete.

10. **Permit Compliance.** The department may modify or revoke coverage of this permit if the project is not constructed in compliance with the terms and conditions of this permit, or if the Department determines the project will be detrimental to wetland water quality standards. Any act of noncompliance with this permit constitutes a permit violation and is grounds for enforcement action. Additionally, if any applicable conditions of this permit are found to be invalid or unenforceable, authorization for all activities to which that condition applies is denied.

11. **Construction Timing.** Once wetland work commences, all wetland construction activities must be continuous until the permitted activity is completed and the site is stabilized.

12. **Construction.** No other portion of the wetland may be disturbed beyond the area designated in the submitted plans.

13. **Project Completion.** Within one week of completion of the regulated activity, you shall submit to the Department a statement certifying the project is in compliance with all the terms and conditions of this permit, and photographs of the activities authorized by this permit. This statement must reference the Department-issued docket number, and be submitted to the Department staff member that authorized coverage.

14. **Proper Maintenance.** You must maintain the activity authorized by WDNR-GP1-2017 in good condition and in conformance with the terms and conditions of this permit utilizing best management practices. Any structure or fill authorized shall be properly maintained to ensure no additional impacts to the remaining wetlands.

15. **Site Access.** Upon reasonable notice, you shall allow access to the site to any Department employee who is investigating the project's construction, operation, maintenance or permit compliance with the terms and conditions of WDNR-GP1-2017 and applicable laws.

16. **Erosion and siltation controls.** The project site shall implement erosion and sediment control measures that adequately control or prevent erosion, and prevent damage to wetlands as outlined in NR 151.11(6m), Wis. Adm. Code.

17. **Equipment use.** The equipment used in the wetlands must be low ground weight equipment as specified by the manufacturer specifications.

18. **Invasive Species.** All project equipment shall be decontaminated for removal of invasive species prior to and after each use on the project site by utilizing other best management practices to avoid the spread of invasive species as outlined in NR 40, Wis. Adm. Code. For more information, refer to http://dnr.wi.gov/topic/Invasives/bmp.html.

19. **Federal and State Threatened and Endangered Species.** WDNR-GP1-2017 does not affect the DNR's responsibility to insure that all authorizations comply with Section 7 of the Federal Endangered Species Act, s. 29.604, Wis. Stats and applicable State Laws. No DNR authorization under this permit will be granted for projects found not to comply with these Acts/laws. No activity is authorized which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act and/or State law or which is likely to destroy or adversely modify the critical habitat of a species as identified under the Federal Endangered Species Act.

20. **Special Concern Species.** If the Wisconsin National Heritage Inventory lists a known special concern species to be present in the project area you will take reasonable action to prevent significant adverse impacts or to enhance the habitat for the species of concern.

21. **Historic Properties and Cultural Resources.** WDNR-GP1-2017 does not affect the DNR's responsibility to insure that all authorizations comply with Section 106 of the National Historic Preservation Act and s. 44.40, Wis. Stats. No DNR authorization under this permit will be granted for projects found not to comply with these Acts/laws. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places. If cultural, archaeological, or historical resources are unearthed during activities authorized by this permit, work must be stopped immediately and the State Historic Preservation Officer must be contacted for further instruction.

22. **Preventive Measures.** Measures must be adopted to prevent potential pollutants from entering a wetland or waterbody. Construction materials and debris, including fuels, oil, and other liquid substances, will not be stored in the construction area in a manner that would allow them to enter a wetland or waterbody as a result of spillage, natural runoff, or flooding. If a spill of any potential pollutant should occur, it is the responsibility of the permittee to remove such material, to minimize any contamination resulting from this spill, and to immediately notify the State Duty Officer at 1-800-943-0003.

23. **Suitable fill material.** All fill authorized under this permit must consist of clean suitable soil material, as defined by s. NR 500.03(214), Wis. Admin. Code, free from hazardous substances as defined by s. 289.01(11), Wis. Stats., and free from solid waste as defined by s. 289.01(11) and (33), Wis. Stats.

24. **Standard for Coverage.** Wetland impacts from the project will cause only minimal adverse environmental impacts as determined by the Department.

25. **Transfers.** Coverage under this permit is transferable to any person upon prior written approval of the transfer by the Department.

26. **Limits of State Liability.** In authorizing work, the State Government does not assume any liability, including for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the State in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this WDNR-GP1-2017.

27. **Reevaluation of Decision.** The Department may suspend, modify or revoke authorization of any previously authorized activity and may take enforcement action if any of the following occur:

a. The applicant fails to comply with the terms and conditions of WDNR-GP1-2017.

b. The information provided by the applicant in support of the permit application proves to have been false, incomplete, or inaccurate.

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, ST. PAUL DISTRICT
180 FIFTH STREET EAST, SUITE 700
ST. PAUL, MN 55101-1678

May 11, 2021

Regulatory File No. 2021-00574-AJK

Robert Zignego
N120W17520 Freistadt Road
Germantown, WI 53022

Dear Mr. Zignego:

We are responding to your request for authorization to construct a residential driveway in Germantown. The proposed work is located in Section 24, Township 9 North, Range 20 East, Washington County, Wisconsin.

Project authorization:
The regulated activities associated with this project include Discharge of fill material into 960 square feet of wetland for the purpose of constructing a residential driveway on a private property. We have determined that these activities are authorized by a Nationwide Permit (NWP) or a Regional General Permit (RGP), specifically, NWP 29, Residential Developments. This work is shown on the enclosed figures, labeled 2021-00574-AJK Figures 1-3 of 3.

Conditions of your permit:
You must ensure the authorized work is performed in accordance with the enclosed General Permit terms, General Conditions, and St. Paul District Regional Conditions.

You are also required to complete and return the enclosed Compliance Certification form within 30 days of completing your project. Please email the completed form to the contact identified in the last paragraph.

A change in location or project plans may require re-evaluation of your project. Proposed changes should be coordinated with this office prior to construction. Failure to comply with all terms and conditions of this permit invalidates this authorization and could result in a violation of Section 301 of the Clean Water Act or Section 10 of the Rivers and Harbors Act. You must also obtain all local, State, and other Federal permits that apply to this project.

Water Quality Certification:
You must also comply with the enclosed Water Quality Certification conditions associated with this General Permit.

Permit expiration:
The 2021 NWP is valid until March 14, 2026 unless modified, suspended, or revoked. If the work has not been completed by that time, you should contact this office to verify that the permit is still valid. Furthermore, if you commence or are under contract to commence this activity before the date of General Permit expiration, modification, or revocation, you have 12 months to complete the activity under the present terms and conditions of the General Permit.

Jurisdictional determination:

No jurisdictional determination was requested or prepared for this project. While not required, you may request a jurisdictional determination from the contact identified in the last paragraph.

Contact Information:

If you have any questions, please contact me in our Brookfield office at (651) 290-5729 or by email at anthony.j.kitchen@usace.army.mil.

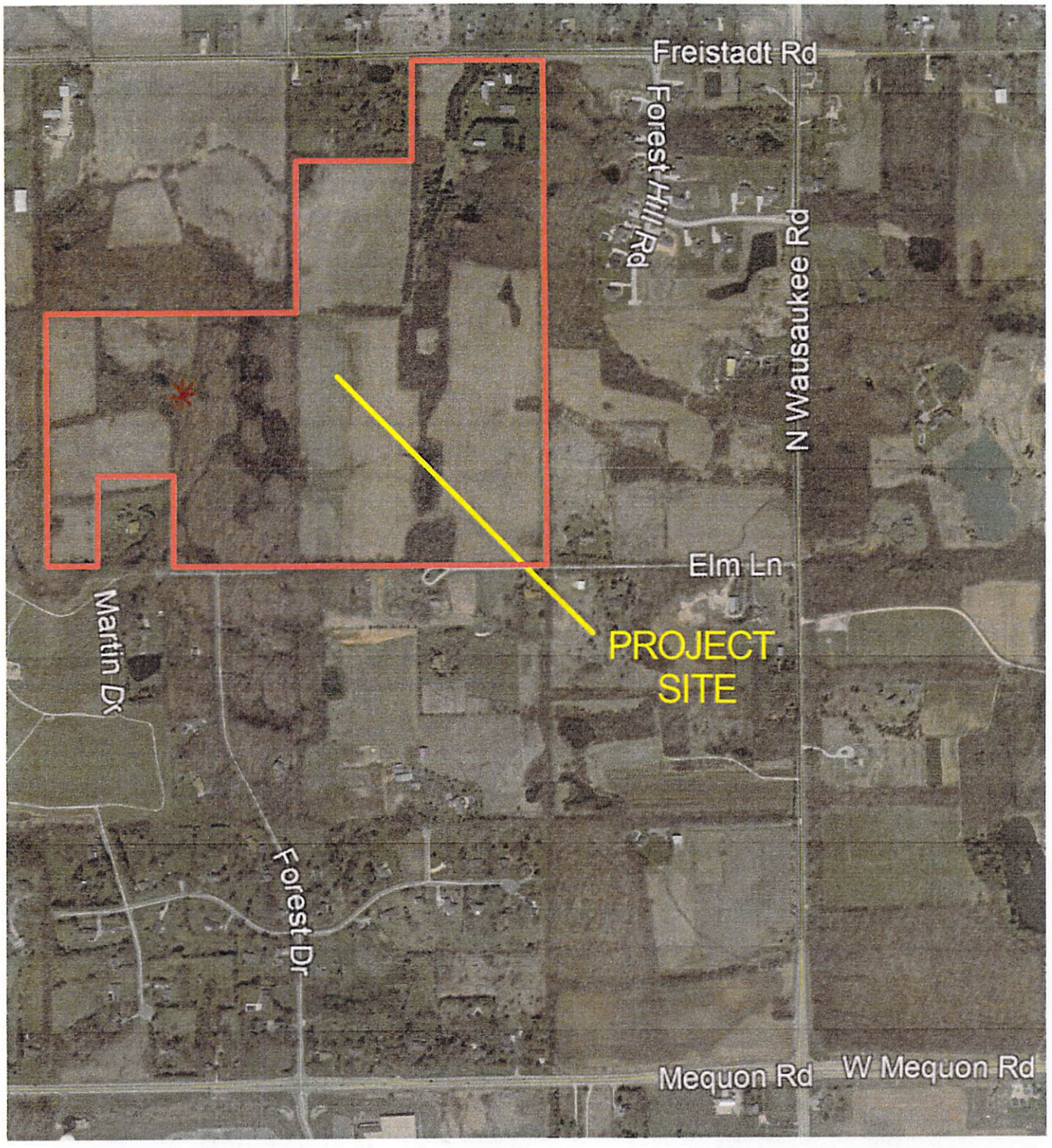
Sincerely,

for A.J. Kitchen
Project Manager

Enclosures

CC: Marty Dillenburg, WI DNR (GP-SE-2021-67-01107)

2021-00574-AJK Figure 1



LEGEND

Approximate Project Site Boundary

Full subdivision

Figure:	Figure 1 - Site Location Map
Site Location:	Luther Property Germantown, Washington, WI
Source:	Google Earth

BAY Environmental STRATEGIES, INC.

N

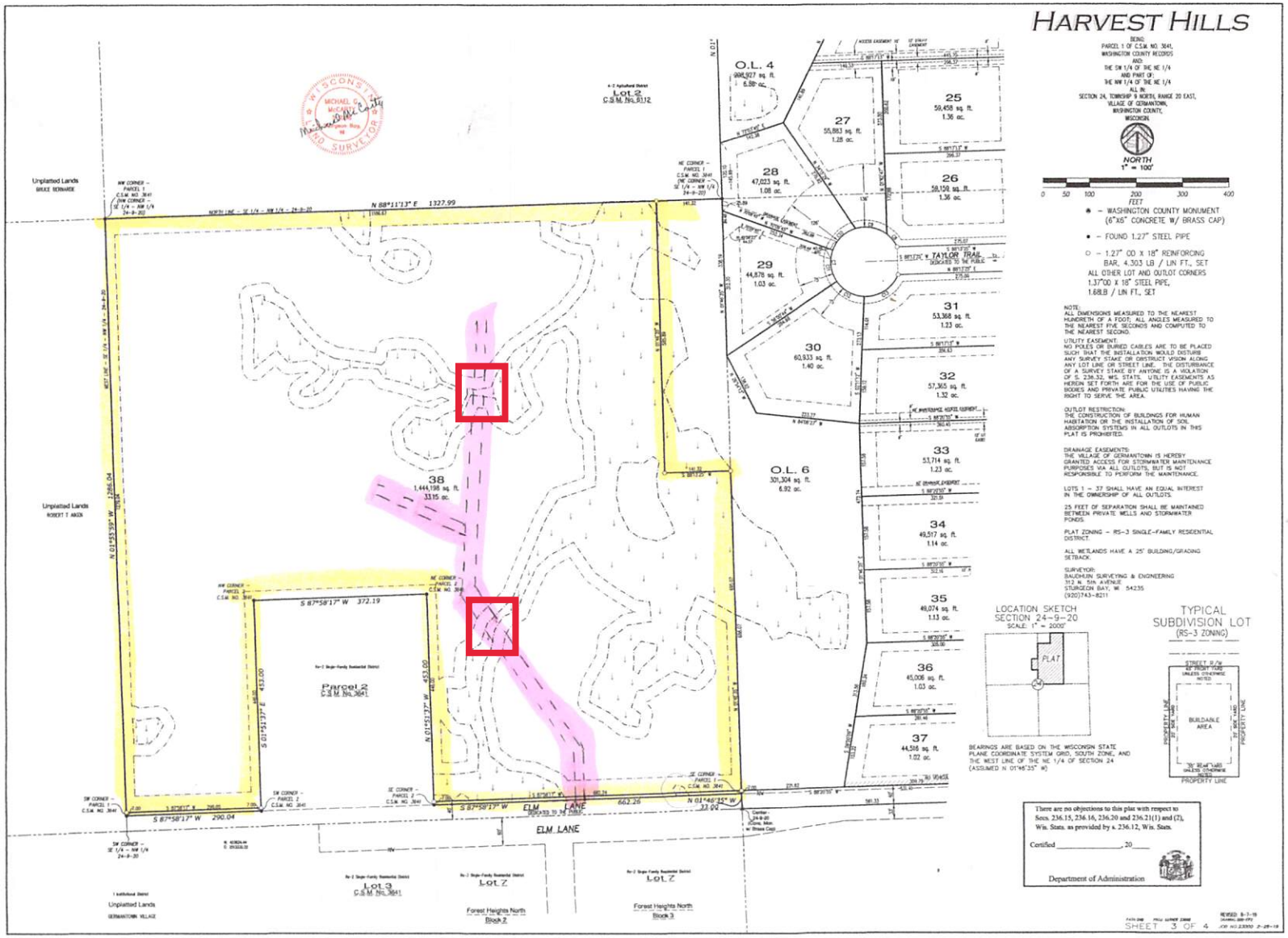
Client: Top Leaf Development

Date: Nov 2017

Scale: Not to Scale

Drawn By: MOL

2021-00574-AJK Figure 2

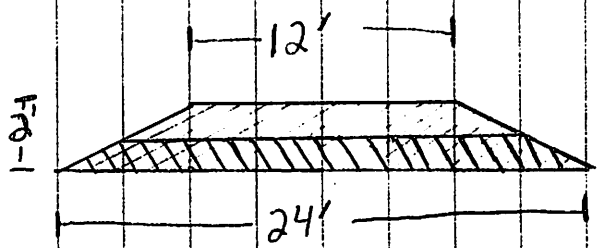


Regulated impacts in red

= Proposed Driveway

2021-00574-AJK Figure 3

Driveway Cross Section



= Gravel

= Breaker Rock

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
N7725 Hwy 28
Horicon, WI, 53032

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

April 12, 2021

Robert Zignego
N120W17520 Freistadt Road
Germantown, WI 53022

GP-SE-2021-67-01107

RE: Coverage under the wetland statewide general permit to impact wetlands from residential, commercial and industrial activities, located in the Village of Germantown, Washington County, docket GP-SE-2021-67-01107.

Dear Mr. Zignego:

Thank you for submitting an application for a General Permit to impact wetlands from residential, commercial and industrial activities located in the NW 1/4, SE 1/4, Sec. 24, T. 09, R. 20E, Village of Germantown, Washington County.

You have certified that your project meets the eligibility criteria for this activity. Based upon your signed certification you may proceed with your project. Please take this time to re-read the permit standards and conditions. The eligibility standards can be found on your application checklist or in the statewide general permit (found at http://dnr.wi.gov/topic/waterways/ - keyword: general permits). The permit conditions are attached to this letter. **You are responsible for meeting all general permit eligibility standards and permit conditions.** This includes notifying the Department before starting the project, and submitting photographs within one week of project completion. Please note your coverage is valid for 5 years from the date of the department's determination or until the activity is completed, whichever occurs first.

The Department conducts routine and annual compliance monitoring inspections. Our staff may follow up and inspect your project to verify compliance with state statutes and codes. If you need to modify your project please contact your local Water Management Specialist, Marty Dillenburg at (920) 296-6507 or email marty.dillenburg@wisconsin.gov to discuss your proposed modifications.

The Department of Natural Resources appreciates your willingness to comply with wetland regulations, which help to protect the water quality, fish and wildlife habitat, recreational value and other functions and values wetlands provide to current and future generations. You are responsible for obtaining any other local, state or federal permits that are required before starting your project.

Sincerely,

Marty Dillenburg
Water Management Specialist

Copy to: A.J. Kitchen, Project Manager, US Army Corps of Engineers
Jeff Retzlaff, Director of Community Development, Village of Germantown

You agree to comply with the following conditions:

1. **Application.** You shall submit a complete application package to the Department as outlined in the application materials and section 2 of this permit. If requested, you shall furnish the Department, within a reasonable timeframe, any information the department needs to verify compliance with the terms and conditions of this permit.

2. **Certification.** Acceptance of general permit WDNR-GP1-2017 and efforts to begin work on the activities authorized by this general permit signifies that you have certified the project meets all eligibility standards outlined in Section 1 of this permit and that you have read, understood and have agreed to follow all terms and conditions of this general permit.

3. **Reliance on Applicant's Data.** The determination by this office that a confirmation of authorization is not contrary to wetland water quality standards will be based upon the information provided by the applicant and any other information required by the DNR.

4. **Project Plans.** This permit does not authorize any work other than what is specifically described in the notification package and plans submitted to the Department and you certified is in compliance with the terms and conditions of WDNR-GP1-2017

5. **Expiration.** This WDNR-GP1-2017 expires on April 12, 2026. The time limit for completing work authorized by the provisions of WDNR-GP1-2017 ends 5 years after the date on which the discharge is considered to be authorized under WDNR-GP1-2017 or until the discharge is completed, whichever occurs first.

6. **Other Permit Requirements.** You are responsible for obtaining any other permit or approval that may be required for your project by local zoning ordinances, other local authority, other state permits and by the U.S. Army Corps of Engineers before starting your project.

7. **Authorization Distribution.** You must supply a copy of the permit coverage authorization to every contractor working on the project.

8. **Project Start.** You shall notify the Department before starting construction.

9. **Permit Posting.** You must post a copy of this permit coverage letter at a conspicuous location on the project site prior to the execution of the permitted activity, and remaining at least five days after stabilization of the area of permitted activity. You must also have a copy of the permit coverage letter and approved plan available at the project site at all times until the project is complete.

10. **Permit Compliance.** The department may modify or revoke coverage of this permit if the project is not constructed in compliance with the terms and conditions of this permit, or if the Department determines the project will be detrimental to wetland water quality standards. Any act of noncompliance with this permit constitutes a permit violation and is grounds for enforcement action. Additionally, if any applicable conditions of this permit are found to be invalid or unenforceable, authorization for all activities to which that condition applies is denied.

11. **Construction Timing.** Once wetland work commences, all wetland construction activities must be continuous until the permitted activity is completed and the site is stabilized.

12. **Construction.** No other portion of the wetland may be disturbed beyond the area designated in the submitted plans.

13. **Project Completion.** Within one week of completion of the regulated activity, you shall submit to the Department a statement certifying the project is in compliance with all the terms and conditions of this permit, and photographs of the activities authorized by this permit. This statement must reference the Department-issued docket number, and be submitted to the Department staff member that authorized coverage.

14. **Proper Maintenance.** You must maintain the activity authorized by WDNR-GP1-2017 in good condition and in conformance with the terms and conditions of this permit utilizing best management practices. Any structure or fill authorized shall be properly maintained to ensure no additional impacts to the remaining wetlands.

15. **Site Access.** Upon reasonable notice, you shall allow access to the site to any Department employee who is investigating the project's construction, operation, maintenance or permit compliance with the terms and conditions of WDNR-GP1-2017 and applicable laws.

16. **Erosion and siltation controls.** The project site shall implement erosion and sediment control measures that adequately control or prevent erosion, and prevent damage to wetlands as outlined in NR 151.11(6m), Wis. Adm. Code.

17. **Equipment use.** The equipment used in the wetlands must be low ground weight equipment as specified by the manufacturer specifications.

18. **Invasive Species.** All project equipment shall be decontaminated for removal of invasive species prior to and after each use on the project site by utilizing other best management practices to avoid the spread of invasive species as outlined in NR 40, Wis. Adm. Code. For more information, refer to http://dnr.wi.gov/topic/Invasives/bmp.html.

19. **Federal and State Threatened and Endangered Species.** WDNR-GP1-2017 does not affect the DNR's responsibility to insure that all authorizations comply with Section 7 of the Federal Endangered Species Act, s. 29.604, Wis. Stats and applicable State Laws. No DNR authorization under this permit will be granted for projects found not to comply with these Acts/laws. No activity is authorized which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act and/or State law or which is likely to destroy or adversely modify the critical habitat of a species as identified under the Federal Endangered Species Act.

20. **Special Concern Species.** If the Wisconsin National Heritage Inventory lists a known special concern species to be present in the project area you will take reasonable action to prevent significant adverse impacts or to enhance the habitat for the species of concern.

21. **Historic Properties and Cultural Resources.** WDNR-GP1-2017 does not affect the DNR's responsibility to insure that all authorizations comply with Section 106 of the National Historic Preservation Act and s. 44.40, Wis. Stats. No DNR authorization under this permit will be granted for projects found not to comply with these Acts/laws. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places. If cultural, archaeological, or historical resources are unearthed during activities authorized by this permit, work must be stopped immediately and the State Historic Preservation Officer must be contacted for further instruction.

22. **Preventive Measures.** Measures must be adopted to prevent potential pollutants from entering a wetland or waterbody. Construction materials and debris, including fuels, oil, and other liquid substances, will not be stored in the construction area in a manner that would allow them to enter a wetland or waterbody as a result of spillage, natural runoff, or flooding. If a spill of any potential pollutant should occur, it is the responsibility of the permittee to remove such material, to minimize any contamination resulting from this spill, and to immediately notify the State Duty Officer at 1-800-943-0003.

23. **Suitable fill material.** All fill authorized under this permit must consist of clean suitable soil material, as defined by s. NR 500.03(214), Wis. Admin. Code, free from hazardous substances as defined by s. 289.01(11), Wis. Stats., and free from solid waste as defined by s. 289.01(11) and (33), Wis. Stats.

24. **Standard for Coverage.** Wetland impacts from the project will cause only minimal adverse environmental impacts as determined by the Department.

25. **Transfers.** Coverage under this permit is transferable to any person upon prior written approval of the transfer by the Department.

26. **Limits of State Liability.** In authorizing work, the State Government does not assume any liability, including for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the State in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this WDNR-GP1-2017.

27. **Reevaluation of Decision.** The Department may suspend, modify or revoke authorization of any previously authorized activity and may take enforcement action if any of the following occur:

a. The applicant fails to comply with the terms and conditions of WDNR-GP1-2017.

b. The information provided by the applicant in support of the permit application proves to have been false, incomplete, or inaccurate.

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

29. Residential Developments. Discharges of dredged or fill material into non-tidal waters of the United States for the construction or expansion of a single residence, a multiple unit residential development, or a residential subdivision. This NWP authorizes the construction of building foundations and building pads and attendant features that are necessary for the use of the residence or residential development. Attendant features may include but are not limited to roads, parking lots, garages, yards, utility lines, storm water management facilities, septic fields, and recreation facilities such as playgrounds, playing fields, and golf courses (provided the golf course is an integral part of the residential development).

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters.

Subdivisions: For residential subdivisions, the aggregate total loss of waters of United States authorized by this NWP cannot exceed 1/2-acre. This includes any loss of waters of the United States associated with development of individual subdivision lots.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 32.) (Authorities: Sections 10 and 404)

Enclosure A

2021 Nationwide Permits (NWP)
St. Paul District Regional Conditions

To qualify for NWP authorization, the prospective permittee must comply with the following regional conditions, as applicable, in addition to any case specific conditions imposed by the division engineer. The St. Paul District Regulatory website will provide current information regarding NWPs and the necessary 401 Water Quality Certifications at https://www.mvp.usace.army.mil/missions/regulatory/nwp/. Every person who wishes to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

The following NWPs have been revoked and are not available for use in St. Paul District: NWPs 12, 21, 48, 50, 55, 56, 57, and 58.

Information on other permits available for use in St. Paul District can be found at: https://www.mvp.usace.army.mil/Missions/Regulatory/Permitting-Process-Procedures/.

Any regulated activity eligible for authorization under a St. Paul District Special Area Management Plan (SAMP) general permit is not eligible for authorization by NWPs.

The following regional conditions are applicable to all 2021 NWPs:

A. **Linear Projects:** No linear utility or linear transportation projects are eligible for authorization by NWPs. These projects will be reviewed for authorization under the St. Paul District's regional general permits or an individual permit.

B. **Temporary Impacts:** All regulated temporary impacts to waters of the U.S. must comply with the following criteria:

   (1) If the temporary impacts in waters of the U.S., including wetlands, that occur as a result of the regulated activity would remain in place for longer than 90 days between May 15 and November 15, a PCN is required.

   (2) Any PCN with temporary impacts must specify how long the temporary impact will remain and include a restoration and re-vegetation plan showing how all temporary fills and structures will be removed and the area restored to preconstruction contours and elevations. Native, non-invasive vegetation must be used unless otherwise authorized by a Corps NWP verification.

C. **PCNs for Apostle Islands National Lakeshore and Madeline Island**: A project proponent must notify the District by submitting a PCN if the regulated activity would result in excavation, fill, or the placement of a new structure within the boundaries of Apostle Islands National Lakeshore and Madeline Island in Wisconsin.

D. **Calcareous fens:**

   WISCONSIN: No work in a calcareous fen is authorized by a NWP unless the Wisconsin Department of Natural Resources (WI DNR) has approved a permit for the proposed regulated activity. Project proponents must provide evidence of an approved permit to the District.

   MINNESOTA: No work in a calcareous fen is authorized by a NWP unless the Minnesota Department of Natural Resources (MN DNR) has approved a calcareous fen management plan specific to a project that otherwise qualifies for authorization by a NWP. Project proponents must provide evidence of an approved fen management plan to the District. A list of known Minnesota calcareous fens can be found at: http://files.dnr.state.mn.us/eco/wetlands/calcareous_fen_list.pdf.

E. **Special Aquatic Resources:** A project proponent must notify the District by submitting a PCN if a regulated activity would occur in any of the following aquatic resources:

(1) State-designated wild rice waters[1,2];

(2) Bog wetland plant communities[1,3];

(3) Fens[1,3];

(4) Coastal plain marshes[1,4];

(5) Interdunal wetlands[1,4];

(6) Great Lakes ridge and swale complexes[1,4];

(7) Aquatic resources within Lake Superior National Estuarine Research Reserve;

(8) Ramsar wetland sites, including: the Horicon Marsh, Upper Mississippi River Floodplain Wetland, Kakagon and Bad River Slough, Door Peninsula Coastal Wetlands, Chiwaukee Illinois Beach Lake Plain, and Lower Wisconsin Riverway. The complete up to date Ramsar list is available at https://rsis.ramsar.org.

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[1] Information about Wisconsin plant community types for 1-6 above may be obtained from: http://dnr.wi.gov/topic/EndangeredResources/Communities.asp?mode=group&Type=Wetland

[2] Information regarding wild rice waters and their extent may be obtained from: https://www.dnr.state.mn.us/wildlife/shallowlakes/wildrice.html and https://gisdata.mn.gov/dataset/biota-wild-rice-lakes-dnr-wld in Minnesota, https://dnr.wisconsin.gov/topic/wildlifehabitat/rice.html in Wisconsin, and an interactive map is provided at: http://maps.glifwc.org/ (under Treaty Resources – Gathering).

[3] Additional information on bog and fen communities can be found at: http://www.mvp.usace.army.mil/missions/regulatory.aspx and in Minnesota at http://www.dnr.state.mn.us/npc/classification.html.

[4] Coastal plain marshes, interdunal wetlands, and Great Lakes ridge and swale complexes are specific to Wisconsin

2021 Nationwide Permit General Conditions

1. Navigation.

(a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers.

(a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species.

(a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties.

(a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she

makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either

some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary,

to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality.

(a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States

for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

_____

(Transferee)

_____

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification.

(a) *Timing*. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to

cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification*: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4)

(i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the

proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification*: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination*:

(1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

US Army Corps of Engineers ®
St. Paul District

COMPLIANCE CERTIFICATION

Regulatory File Number: 2021-00574-AJK

Name of Permittee: Robert Zignego

County/State: Washington County, WI

Date of Issuance: May 11, 2021

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the Corps contact identified in your verification letter within 30 days.

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

By signing below, the permittee is certifying that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the permit, and any required mitigation was completed in accordance with the permit conditions.

_____ _____

Signature of Permittee Date

SITE PLAN REVIEW

12/13/21 Plan Commission Meeting

DJN Family Partnership / Enercon Industries Corporation

Village Planner Report **Germantown, Wisconsin**

Summary

Eric Neuman, MSI General Corp, agent for DJN Family Partnership, property owner, and Enercon Industries Corporation is requesting approval of site development & building plans for Phase 2 of a 52,955 sqft building and parking lot expansion for the existing Enercon facility located at N120 W19349 Freistadt Road in the Germantown Industrial Park.

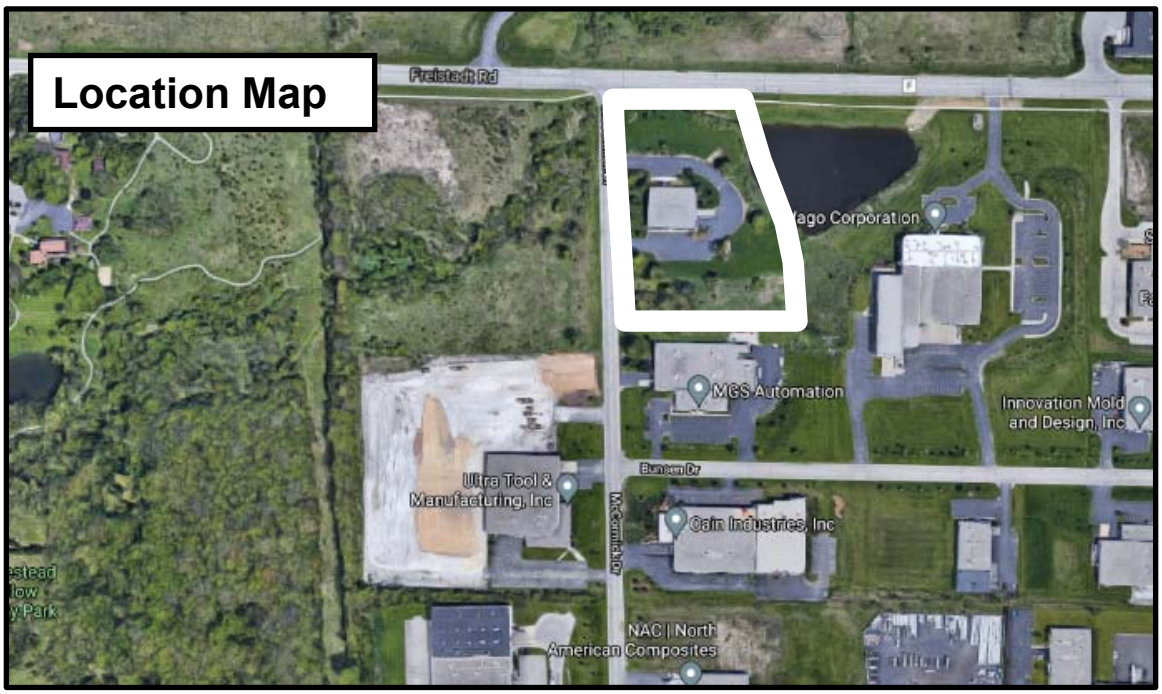
Property Location: N120 W19349 Freistadt Road
(SE corner Freistadt @ McCormick Drive)

Applicant/
Property Owner:

Eric Neuman	DJN Family Partnership
MSI General Corp	494 Hunters Trail
Oconomowoc, WI	Colgate, WI

Current Zoning: M-1: Limited Industrial

Adjacent Land Uses		Zoning
North	Industrial	M-1
South	Industrial	M-1
East	Industrial	M-1
West	Industrial	M-1



Background/Proposal

Eric Neuman, MSI General Corp, agent for DJN Family Partnership, property owner, and Enercon Industries Corporation is requesting approval of site development & building plans for Phase 2 of a 52,955 sqft building and parking lot expansion for the existing Enercon facility located at N120 W19349 Freistadt Road in the Germantown Industrial Park.

Enercon Industries Corporation is an international company based in Wisconsin that manufactures induction cap sealers providing tamper evidence, preventing leaks and preserving freshness with hermetic seals for packagers of food, beverage, pharmaceuticals, health & beauty products, chemicals & petroleum packages. Enercon also manufactures plasma surface treatment equipment, flame treaters & corona surface treaters that clean, etch & functionalize surfaces for a variety of ink, printing, coating, laminating, painting, adhesive & bonding applications for plastics, polymers, films, foils and metals. *[for more information visit their website: www.enerconind.com/index.aspx]*

Recently, Enercon Industries and MGS Automation (property to the south) agreed to relocate their common property line approximately 150' to the south to increase the total land area of the Enercon parcel from 4.18 to 5.96 acres. The purpose for the land area expansion was to create space for the building expansion of the Enercon Industries facility and relocation of their corporate headquarters to this site.

Phase 1 of the proposed expansion was approved in September, 2021, and includes site grading and stormwater management improvements along with construction of new parking areas on the north and south sides of the site. Those improvements are currently under construction. Phase 2 includes construction of the 52,955 sqft building addition along with final grading and landscaping.

The proposed building expansion and site improvements include the following:

- 52,955 sqft building addition (65,050 sqft total)
  - Manufacturing/Warehouse w/ 32' clear height
    - 5 loading docks (2 on west side + 3 on east side)
    - Pre-cast wall panels 38' w/ exposed aggregate texture & smooth reveals
    - Light & dark grey paint
  - 2-story office addition
    - Painted split-faced CMU exterior walls with smooth-faced block accent to match the existing building
    - Re-painted w/ light & dark grey
    - Aluminum-framed anodized windows & door system
    - Concrete patio on west side of the addition for employee access
- New water, sanitary & gas utilities
- Expansion of existing regional storm basin along east property line with on-site storm sewer
- 101 additional parking spaces (137 total)

Parking, Access & Traffic Circulation
Access will continue to be provided to/from McCormick Drive by two (2) driveways: the existing northernmost driveway will remain as is but will serve a larger paved parking area with curb & gutter and 70 parking stalls (vs. 5 existing stalls) for employee/visitor parking and access to the loading dock area that will be re-located to the building addition. The southernmost driveway on McCormick Drive will be relocated further south to serve a new paved parking area with 67 parking stalls (12 additional future stalls) serving employee parking and accessibility around the entire building. A total of 137 parking stalls will be provided on-site after Phase 2 with 12 additional stalls in the future (vs. 134 recommended parking stalls).

Storm Water Management
Between the proposed building and parking lot expansion impervious area will increase to a total of 160,649 sqft or 61.9 percent of this 5.96-acre site (vs. the 80% maximum allowed) leaving 38.1 percent in green/open space. Storm water run-off from the proposed building and parking lot expansion will be conveyed via storm sewer to the existing regional storm water basin located to the east (the “Wago” pond).

Utilities
Existing public water and sanitary sewer will continue to serve the existing building via new connections to the existing service lines from the McCormick Drive right-of-way.

Landscaping
There is a significant amount of existing landscape with many plantings to be preserved to the extent possible. Some existing trees and shrubs will be removed near the existing southernmost driveway that will be relocated further south along McCormick Drive. Also, the existing wooded area south of the existing building will be impacted by the building addition and parking expansion along the south property line.

A significant amount of additional landscaping is also being proposed around the new perimeter of the site, around and within the new parking areas, driveways and foundation plantings around the existing and building addition. Prairie grasses will be planted in the disturbed/filled wetland areas.

Wetland Filling/Artificial Determination
Two small wetland areas were identified on the property, including 4,491 sqft of wetland adjacent to the existing regional storm water basin; and an 8,975 sqft area extending into the site southeast of the proposed building expansion. The WisDNR determined that the 4,491 sqft area is actually an “artificial” wetland that is not subject to regulation. WisDNR also approved the owner’s request t fill the larger area under the statewide general permit.

Lighting
New exterior lighting includes the following:

- (10) 50-70W 6800-9200 Lumen LED pole-mounted fixtures at a height of 23' in the north and south parking lots; and
- (14) 25-50W 2900-6800 Lumen LED building mounted fixtures at a height of 20' around the building perimeter

Signage. No new signage is proposed at this time. Any future proposed signage must meet the requirements of Chapter 17.46 of the Village Zoning Code.

Staff Comments

Planning & Zoning
The proposed 30'x 70' concrete patio on the west side of the building addition is shown at a point approximately 3'-5' from the property/right-of-way line. Notes indicate that a retaining wall will also be installed for the patio. Please be advised that the minimum setback requirement for retaining walls from any property line is a distance equal to the height of the wall. Further, staff will likely be looking for some sort of landscaped buffer between the property line and patio.

Because the proposed expansion includes cutting/filling, grading and expanding the Village's regional stormwater basin onto the Enercon property, it would be prudent for both the property owner and the Village to establish a public drainage easement around those areas of the basin that are/will expanded onto the Enercon property. A related maintenance agreement for the stormwater basin should also be recorded.

Fire Department/Police Department
The Fire Chief has indicated that the fire department connection (FDC) shall be placed on the west side of the building unobstructed and visible from the public right-of-way (McCormick Drive). Contact the Fire Chief to coordinate final FDC location.

Building Inspection Services
State agency (DSPS) approved plans and a $20,000 occupancy bond are required by Inspection Services at the time of building permit application. The Village of Germantown is an authorized delegated agent of DSPS to provide all commercial plan review and inspection services through SAFEBuilt of WI and the Village of Germantown.

Village Forester
No comment.

Public Works Department/Village Engineer

The Public Works Department has identified a few minor plan revisions and technical corrections needed in a December 10, 2021 review memo from the Director of Public Works (copy attached). The following water utility issues and plan corrections will need to be addressed in a revised plan set or supplemental information submitted for review and approval prior to issuance of building permits for the building expansion:

The Water Utility Superintendent is requiring the following:

1. The water tap and gate shall be located using GPS with the survey tag indicating:
    a. Tapping saddle size
    b. Gate valve size
2. All data shall be sent to the Village Engineer/Public Works Dept for submission to the Village's GIS database contractor Ruekert-Mielke (R/M).
3. All costs to be paid by the property owner for uploading, GPS surveying and GIS data work.
4. Occupancy of the building expansion shall be withheld until the required GIS survey data is loaded and active in the Village's GIS system.
5. If a new water lateral is installed the water will not be turned on until a safe "Bac-T" sample test report has been submitted to the Water Utility.
6. If the existing water lateral is abandoned, said abandonment shall be identified in the revised utility plans as "cut and remove existing connection and install new 12" PVC-C900 with two Hymax couplers".
7. The abandoned lateral shall be capped or plugged per Village specifications, including bed and cover with stone chips and slurry back fill.
8. The layout for the new water lateral tap needs to be shown on the revised utility plan indicating "All stainless steel Mechanical joint adaptor outlet connection tapping saddle" and "Epoxy coated resilient wedge MJ gate valve" shall be installed per Village specifications.
9. The size of a new water lateral shall be 8" or 10" (vs. 6" shown in utility plan). The new lateral shall be be C900 PVC with tracer wire per Village specifications.
10. Pressure testing of the water lateral and collecting the "Bac-T" sample shall be observed by SAFEbuilt inspection services. The water sample shall be placed into a chain of custody bag provided by the Village.
11. A minimum two-week notice shall be given for any water shut down. The business south of Enercon could facilitate an after-hours evening or early morning am water shut-off needed for the abandonment. Contact the Water Utility Superintendent with questions.

Right-of-way permits are required for any/all construction conducted in the McCormick and Freistadt Road rights-of-way.

The Village Public Works Department/Village Engineer shall be contacted for inspection purposes prior to construction of the private storm water lateral connection to the Village storm sewer system and/or regional storm basin.

VILLAGE STAFF RECOMMENDATION

APPROVE the site development plans for Phase 2 of a 52,955 sqft building and parking lot expansion for the existing Enercon facility located at N120 W19349 Freistadt Road subject to the following conditions:

1. This approval is for Phase 2 of the proposed building and parking area expansion and is subject to all the conditions and requirements set forth herein and adopted by the Plan Commission. The approval for Phase 1 granted in September 2021 is for the following plans unless superseded by the approved plan sheets listed below for Phase 2, and, pursuant to any subsequent revisions required herein and/or by the Plan Commission or Village Engineer:
    a. Phase 1 Approval
        i. Architectural plan set dated January 4, 2021
        ii. Engineering plan set dated December 28, 2021
        iii. Landscaping plan set dated January 4, 2021
        iv. Exterior Lighting plan set dated January 4, 2021
    b. Phase 2 Approval
        i. Architectural plan set dated October 4, 2021
        ii. Engineering-Construction plan set dated November 29, 2021
        iii. Landscaping plan set dated November 23, 2021
        iv. Exterior Lighting plan set dated November 17, 2021

2. All landscaping, grading, paving, storm water management, utility and other improvements shown on the approved site plans shall be installed as approved prior to issuance of an occupancy permit for the building addition unless a cash bond or letter of credit in an amount equal to 120 percent of the estimated installation and material costs reviewed and approved by the Village is submitted to the Village as necessary to ensure that installation of the proposed features and improvements will be completed within one (1) year after issuance of the occupancy permit.

3. All exterior doors (except primary entrance) shall be clearly marked with reflective 5” or larger letters/numbers to aid emergency personnel access as required by the Police Department.

4. State agency (DSPS) approved plans and a $20,000 occupancy bond are required by Inspection Services at the time of building permit application. The Village of Germantown is an authorized delegated agent of DSPS to provide all commercial plan review and inspection services through SAFEBuilt of WI and the Village of Germantown.

5. All water utility service issues, plan revisions and technical corrections identified in the December 10, 2021, review memo from the Director of Public Works shall be addressed in revised plans and/or supplemental information submitted for review and approval prior to issuance of a building permit for the Phase 2 building expansion.

6. Right-of-way permits are required for any/all construction conducted in the McCormick Drive and Freistadt Road rights-of-way. Contact the Public Works Department/Highway Department for details.

7. The Village Public Works Department/Village Engineer shall be contacted for inspection purposes prior to construction of the private storm water lateral connection to the Village storm sewer system and regional storm water basin.

8. The owner shall prepare and record easements for those existing areas of the regional stormwater basin that already encroach onto the Enercon property and for the expanded regional storm basin area being created on the Enercon property. Said easement documents shall be reviewed and approved by the Village prior to recording. All required easements and a separate stormwater maintenance agreement addressing those areas of the regional basin located on the Enercon property are to be prepared and submitted for Village review and approval prior to issuance of an occupancy permit for the Phase 2 building expansion.

Engineering Department Memorandum

To : Jeffrey W. Retzlaff, AICP, Planning Director/Zoning Administrator

From : Lawrence Ratayczak, P.E., Director of Public Works

Date : December 10, 2021

Re : Enercon Site Development – Phase 2

Water Utility Comments:

1. Not seeing any proposed abandonment on the plan for existing water lateral per our meeting online. This needs to be called out as "cut and remove existing connection, install new 12" PVC-C900 with two Hymax couplers" Cap or plug old lateral, per village spec. bed and cover with stone chips and Slurry back fill.
2. The layout for the new water lateral tap needs to say "All stainless steel Mechanical joint adaptor outlet connection tapping saddle" and "Epoxy coated resilient wedge MJ gate valve" per village spec.
3. From our meeting the size of the new water lateral was to be 8" or 10" print says 6" lateral to be C900 PVC with tracer wire
4. Pressure testing of lateral and pulling the bac-T sample needs to be observed by building inspection, sample will be placed into a chain of custody bag provided by the village.
5. Two week notice for the water shut down, there is a business south of Enercon and could facilitate an after hours late pm or early am water shut off for the abandonment.
6. The water tap and water gate will be GPS'd and the survey tag needs to say:
   - Tapping saddle, size
   - Gate valve, size
   - Sent to the Village Engineering Dept for turning over to R/M
   - Cost to be recovered by the owner for uploading and survey work.
   - No occupancy until GIS is loaded and active.
7. For new water lateral, water will not be turned on until a safe bac-T sample test report is turned over to the Utility.

Engineering Department Memorandum

To : Jeffrey W. Retzlaff, AICP, Planning Director/Zoning Administrator

From : Lawrence Ratayczak, P.E., Director of Public Works

Date : November 2, 2021

Re : Enercon Site Development – Phase 2

Waste Water Utility Comments:

1. Please show sanitary detail and manhole chimney detail on plans.

Village of Germantown ...Willkommen

PAID PRIOR

Fee must accompany application

- ☐ $700 Minor Addition
- ☐ $1,240 Construction <10,000 SF
- ☐ $2,095 Construction 10,000 SF to 50,000
- ☐ $3,460 Industrial Construction >50,000 SF
- ☐ $3,460 Commercial Construction >50,000
- ☐ $200 Plan Commission Consultation
- ☐ $125 Fire Department Plan Review

PAID 8.2.21 DATE 10.8.21

PHASE 2 SUBMITTAL - ENERCON

SITE PLAN REVIEW APPLICATION

Pursuant to Section 17.43 of the Municipal Code

Please read and complete this application carefully. All applications must be signed and dated.

1 **APPLICANT OR AGENT**

ERIC J. NEUMANN
C/O MSI GENERAL CORP.
P.O. Box 7
OCONOMOWOC WI 53066

Phone (414) 333-6800
E-Mail eric@msigeneral.com

PROPERTY OWNER

ENERCON - SEE PRIOR APPLICATION
DJN Family Limited Partnership
494 Hunters Trail
Colgate, WI 53017

Phone (262) 255-6070
E-Mail

2 **PROPERTY ADDRESS**

N120 W19349 FREISTADT ROAD
GERMANTOWN, WI 53022

3 **NEIGHBORING USES** – Specify name and type of use, e.g. Enviro Tech – Industrial, Smith – Residential, etc.

North	South	East	West
INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL

4 **READ AND INITIAL THE FOLLOWING:**

X EM I am aware of the Village of Germantown ordinance requiring fire sprinklers in most new construction.

X EM I understand that all new development is subject to Impact and/or Connection Fees that must be paid before building permits will be issued.

X EM I understand that an incomplete application will be withdrawn from the Plan Commission agenda and that all resubmissions to the Plan Commission are subject to a new application fee.

5 **SIGNATURES** – ALL APPLICATION MUST BE SIGNED BY OWNER!

10-1-2021 — Applicant — Date

10-1-2021 — Owner — Date

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
N7725 Hwy 28
Horicon, WI, 53032

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

July 29, 2021

Eric Neumann
W215 East Wisconsin Ave.
Nashota, WI 53058

EXE-SE-2021-67-02738

Dear Mr. Neumann:

Thank you for continuing to work with the Department of Natural Resources (DNR) on your proposed project. This letter contains important information regarding your DNR permit application to Enercon Artificial Wetland Exemption in Washington County.

We have reviewed your application material and are writing to notify you that **we need additional information to complete your application** and determine if your proposed project will meet applicable legal standards. It is important that we receive clear detailed information about your project requirements and constraints so the permit application file adequately explains your project and allows the DNR to issue a decision that is supported by the file information. **Specifically, we need the following information:**

The following attachments must be included with artificial wetland exemption determination submittals:
A statement/narrative from a qualified professional explaining how the wetland meets the artificial wetland exemption criteria

Please submit the requested information to me as soon as possible so we can determine your application to be complete and continue to the next step in the process. Please be sure to point out any additions or alterations to the project that are different from the original permit application. This is also an opportunity for you to explain how your project will avoid or minimize impacts to wetlands and public waters.

Please note that once your permit application is determined to be complete, the Department is legally required to review and issue a permit decision, which means we will be unable to refund your permit fee. At any time during the review process, you have the right to send us a letter or email requesting your application be withdrawn.

If we do not receive the requested information or hear from you in response to this letter within 30 calendar days from the date of this letter, we may dismiss your application.

If you have any questions, please contact your local Water Management Specialist, Marty Dillenburg at (920) 296-6507 or email marty.dillenburg@wisconsin.gov.

Sincerely,

Marty Dillenburg
Water Management Specialist

Copy to: Paul Martens, Project Engineer

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
N7725 Hwy 28
Horicon, WI, 53032

Tony Evers, Governor
Preston D. Cole, Secretary
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TTY Access via relay - 711

August 3, 2021

Eric Neumann
W215 East Wisconsin Ave.
Nashota, WI 53058

EXE-SE-2021-67-02738

RE: Artificial Wetland Exemption Determination for an area described as a northwest edge, southwest edge, and southern finger of Wetland 1 located in the Village of Germantown, Washington County

Dear Mr. or Ms. Neumann:

This letter is in response to your request for an artificial wetland exemption determination for the above mentioned wetlands.

According to 281.36 (4n), State Statutes, a landscape feature where hydrophytic vegetation may be present as a result of human modification to the landscape or hydrology and for which no definitive evidence exists showing a prior wetland or stream history before August 1, 1991, may be exempt from state wetland regulations. The following types of artificial wetlands cannot be exempted from state wetland regulation:

1) a wetland that serves as a fish spawning area or that is passage to a fish spawning area and

2) a wetland created as a result of a wetland mitigation requirement.

In addition, DNR must also consider whether the artificial wetland is providing significant flood protection to adjacent or downstream properties and infrastructure, and/or significant water quality functions to adjacent or downstream water bodies.

The Department reviewed the following materials to aid in our exemption determination:

- The request narrative
- Historic Maps, including the Original Land Survey Plat, Bordner Survey, USGS topographic Quad maps, and soil mapping.
- Aerial photographs, including the 1937 photograph, a pre-construction photograph, and a post-construction photograph.
- Site photographs that show different angles and views of the wetland

Below is a summary of our findings:

Request Narrative
According to the request narrative, "Historic photos obtained from the Washington County GIS indicates that there was no previous evidence of wetland or pond prior to the year 1990. The Washington County historic photos prior to 1990 indicated the presence of a farmed field. The mapped wetland is a result of human modifications to the landscape from the construction of the surrounding development."

Historic Map Review

- Original Land Survey Plat. The original land survey indicates no wetlands or waterways mapped where the wetlands in question now exist. There is a mapped waterway to the west of the wetlands in question.
- Bordner Survey. The Bordner survey indicates all three wetland portions in question to have been mapped as "grass marsh" and "swamp hardwoods, poor stand."

- USGS Topographic Quad map: The 1892 and 1906 USGS Quad maps indicate the wetlands in question to have been map immediate adjacent to mapped wetlands to the west. The 1959 and later USGS Quad maps indicate no mapped wetlands where the current wetlands are located.
- Soil Maps: The soil maps indicate the southern finger and southwest edge of Wetland 1 to be located within Pella silt loam, 0-2% slopes, a hydric soil type. The northwest edge of Wetland 1 is found in Lamartine silt loam, 0-3% slopes, a non-hydric soil type.

Aerial Photograph Review

- 1937 aerial photograph. The 1937 aerial photograph shows the wetlands to have been located in an un-cropped area with moderate tree coverage. No definitive wetlands can be seen.
- Pre-construction aerial photograph: The 1942 to 1995 aerial photographs show the northwest edge and southwest edge of the current stormwater pond to be uncropped areas with no wetness signatures or definitive wetlands. The southern finger wetland in question consistently showed a small stream or channel from concentrated overland surface water flow coming from the south. The area was never cropped between 1942 and 1995.
- Post-construction aerial photograph: The 1996 to present aerial photographs show the completed construction of a stormwater pond encompassing the northwest and southwest edges of wetlands in question in this wetland exemption request. The 1998 aerial photograph shows mass grading to the south and east of the southern wetland finger for businesses with no direct impacts to the area where the southern finger wetland is located.

Site Photographs

The site photographs show a large, man-made stormwater detention feature surrounded by a heavily vegetated shoreline.

Conclusion:

- **Based upon the information provided above, the wetland identified as the southern finger of Wetland 1 had a wetland history prior to August 1, 1991 and is not exempt from state wetland regulations.**

- Based upon the information provided above, the wetlands identified as the northwest edge and southwest edge of Wetland 1 lacked a wetland history prior to August 1, 1991 and fulfill all artificial wetland exemption standards. **Therefore, the northwest edge and southwest edge of Wetland 1 are exempt from state wetland regulations.**

This letter describes DNR's decision regarding the jurisdictional status of Wetland 1 and is only valid for state jurisdictional purposes. For decisions regarding the federal jurisdictional status of Wetland 1 you will need to contact the U.S. Army Corps of Engineers.

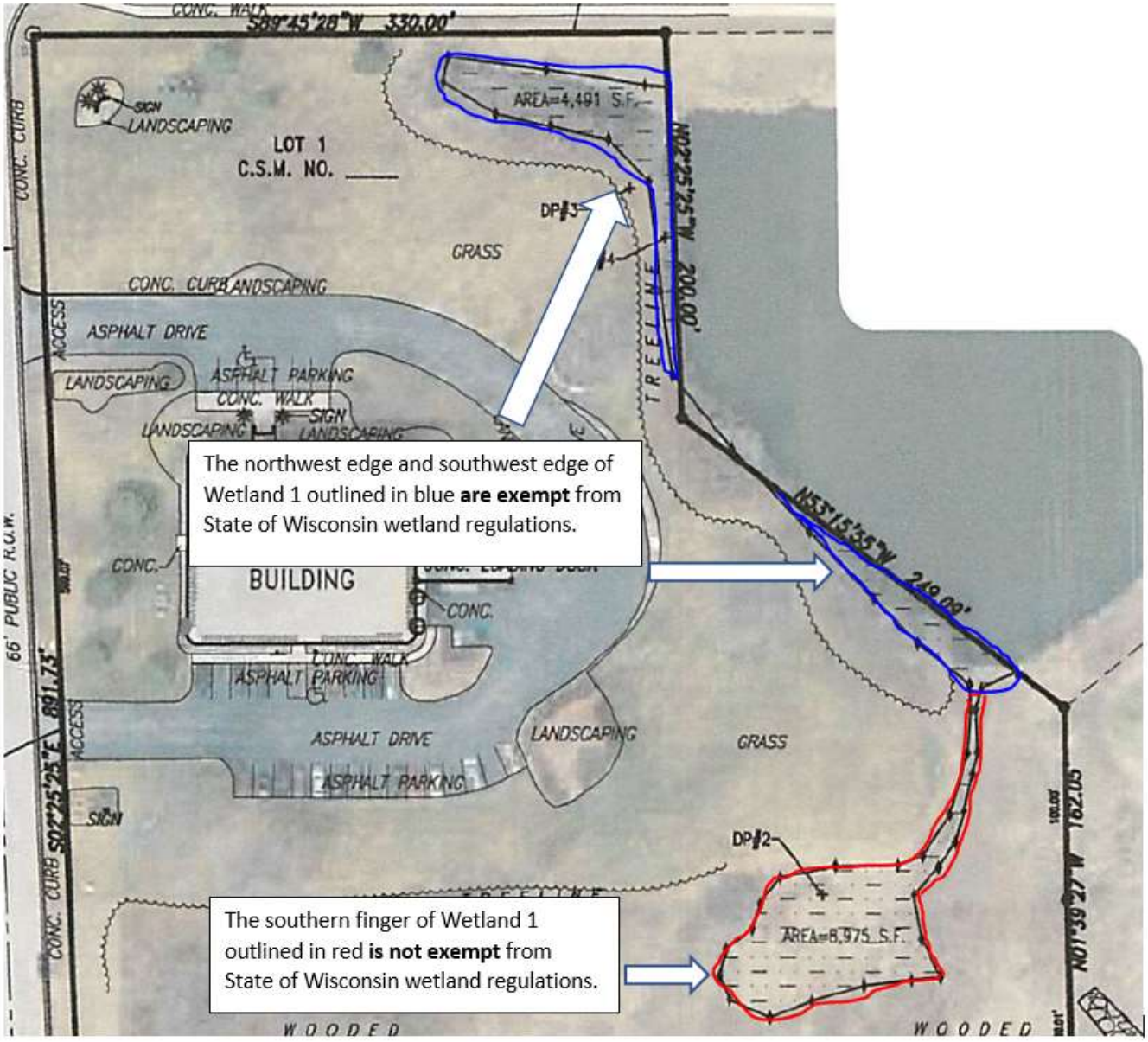
If you have any questions, please call me at (920) 296-6507 or email marty.dillenburg@wisconsin.gov.

Sincerely,



Marty Dillenburg
Water Management Specialist

Copy to: Paul Martens, JSD Professional Services
Jeff Retzlaff, Director of Community Development, Village of Germantown
Chris Jors, Sr. Specialist-Biologist, SEWRPC


CONC. WALK
S89°45'28"W 330.00'
SIGN
LANDSCAPING
LOT 1
C.S.M. NO. _____
AREA=4,491 S.F.
DP#3
GRASS
CONC. CURB
LANDSCAPING
ASPHALT DRIVE
ACCESS
LANDSCAPING
ASPHALT PARKING
CONC. WALK
SIGN
LANDSCAPING
LANDSCAPING
TREELINE
N02°25'25"W 200.00'
The northwest edge and southwest edge of Wetland 1 outlined in blue **are exempt** from State of Wisconsin wetland regulations.
N53°15'35"W 249.09'
CONC.
BUILDING
CONC.
CONC. WALK
ASPHALT PARKING
66' PUBLIC R.O.W.
S02°25'25"E 891.73'
ACCESS
ASPHALT DRIVE
LANDSCAPING
GRASS
ASPHALT PARKING
SIGN
DP#2
AREA=6,975 S.F.
The southern finger of Wetland 1 outlined in red **is not exempt** from State of Wisconsin wetland regulations.
N01°39'27"W 162.05
CONC. CURB
WOODED
WOODED

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
N7725 Hwy 28
Horicon, WI, 53032

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

August 24, 2021

Eric Neumann
W215 East Wisconsin Ave.
Nashota, WI 53058

GP-SE-2021-67-03158

RE: Coverage under the wetland statewide general permit to impact 0.16 acres of wetlands for residential, commercial and industrial activities, located in the Village of Germantown, Washington County, docket GP-SE-2021-67-03158.

Dear Mr. Neumann:

Thank you for submitting an application for a General Permit to impact 0.16 acres of wetlands for residential, commercial and industrial activities located in the NE 1/4, NW 1/4, Sec. 20, T. 09, R. 20E, Village of Germantown, Washington County.

You have certified that your project meets the eligibility criteria for this activity. Based upon your signed certification you may proceed with your project. Please take this time to re-read the permit standards and conditions. The eligibility standards can be found on your application checklist or in the statewide general permit (found at http://dnr.wi.gov/topic/waterways/ - keyword: general permits). The permit conditions are attached to this letter. **You are responsible for meeting all general permit eligibility standards and permit conditions.** This includes notifying the Department before starting the project, and submitting photographs within one week of project completion. Please note your coverage is valid for 5 years from the date of the department's determination or until the activity is completed, whichever occurs first.

The Department conducts routine and annual compliance monitoring inspections. Our staff may follow up and inspect your project to verify compliance with state statutes and codes. If you need to modify your project please contact your local Water Management Specialist, Marty Dillenburg at (920) 296-6507 or email marty.dillenburg@wisconsin.gov to discuss your proposed modifications.

The Department of Natural Resources appreciates your willingness to comply with wetland regulations, which help to protect the water quality, fish and wildlife habitat, recreational value and other functions and values wetlands provide to current and future generations. You are responsible for obtaining any other local, state or federal permits that are required before starting your project.

Sincerely,

Marty Dillenburg
Water Management Specialist

Copy to: Paul Martens, JSD Professional Services
US Army Corps of Engineers
Jeff Retzlaff, Director of Community Development, Village of Germantown

You agree to comply with the following conditions:

1. **Application.** You shall submit a complete application package to the Department as outlined in the application materials and section 2 of this permit. If requested, you shall furnish the Department, within a reasonable timeframe, any information the department needs to verify compliance with the terms and conditions of this permit.

2. **Certification.** Acceptance of general permit WDNR-GP1-2017 and efforts to begin work on the activities authorized by this general permit signifies that you have certified the project meets all eligibility standards outlined in Section 1 of this permit and that you have read, understood and have agreed to follow all terms and conditions of this general permit.

3. **Reliance on Applicant's Data.** The determination by this office that a confirmation of authorization is not contrary to wetland water quality standards will be based upon the information provided by the applicant and any other information required by the DNR.

4. **Project Plans.** This permit does not authorize any work other than what is specifically described in the notification package and plans submitted to the Department and you certified is in compliance with the terms and conditions of WDNR-GP1-2017

5. **Expiration.** This WDNR-GP1-2017 expires on August 24, 2026. The time limit for completing work authorized by the provisions of WDNR-GP1-2017 ends 5 years after the date on which the discharge is considered to be authorized under WDNR-GP1-2017 or until the discharge is completed, whichever occurs first.

6. **Other Permit Requirements.** You are responsible for obtaining any other permit or approval that may be required for your project by local zoning ordinances, other local authority, other state permits and by the U.S. Army Corps of Engineers before starting your project.

7. **Authorization Distribution.** You must supply a copy of the permit coverage authorization to every contractor working on the project.

8. **Project Start.** You shall notify the Department before starting construction.

9. **Permit Posting.** You must post a copy of this permit coverage letter at a conspicuous location on the project site prior to the execution of the permitted activity, and remaining at least five days after stabilization of the area of permitted activity. You must also have a copy of the permit coverage letter and approved plan available at the project site at all times until the project is complete.

10. **Permit Compliance.** The department may modify or revoke coverage of this permit if the project is not constructed in compliance with the terms and conditions of this permit, or if the Department determines the project will be detrimental to wetland water quality standards. Any act of noncompliance with this permit constitutes a permit violation and is grounds for enforcement action. Additionally, if any applicable conditions of this permit are found to be invalid or unenforceable, authorization for all activities to which that condition applies is denied.

11. **Construction Timing.** Once wetland work commences, all wetland construction activities must be continuous until the permitted activity is completed and the site is stabilized.

12. **Construction.** No other portion of the wetland may be disturbed beyond the area designated in the submitted plans.

13. **Project Completion.** Within one week of completion of the regulated activity, you shall submit to the Department a statement certifying the project is in compliance with all the terms and conditions of this permit, and photographs of the activities authorized by this permit. This statement must reference the Department-issued docket number, and be submitted to the Department staff member that authorized coverage.

14. **Proper Maintenance.** You must maintain the activity authorized by WDNR-GP1-2017 in good condition and in conformance with the terms and conditions of this permit utilizing best management practices. Any structure or fill authorized shall be properly maintained to ensure no additional impacts to the remaining wetlands.

15. **Site Access.** Upon reasonable notice, you shall allow access to the site to any Department employee who is investigating the project's construction, operation, maintenance or permit compliance with the terms and conditions of WDNR-GP1-2017 and applicable laws.

16. **Erosion and siltation controls.** The project site shall implement erosion and sediment control measures that adequately control or prevent erosion, and prevent damage to wetlands as outlined in NR 151.11(6m), Wis. Adm. Code.

17. **Equipment use.** The equipment used in the wetlands must be low ground weight equipment as specified by the manufacturer specifications.

18. **Invasive Species.** All project equipment shall be decontaminated for removal of invasive species prior to and after each use on the project site by utilizing other best management practices to avoid the spread of invasive species as outlined in NR 40, Wis. Adm. Code. For more information, refer to http://dnr.wi.gov/topic/Invasives/bmp.html.

19. **Federal and State Threatened and Endangered Species.** WDNR-GP1-2017 does not affect the DNR's responsibility to insure that all authorizations comply with Section 7 of the Federal Endangered Species Act, s. 29.604, Wis. Stats and applicable State Laws. No DNR authorization under this permit will be granted for projects found not to comply with these Acts/laws. No activity is authorized which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act and/or State law or which is likely to destroy or adversely modify the critical habitat of a species as identified under the Federal Endangered Species Act.

20. **Special Concern Species.** If the Wisconsin National Heritage Inventory lists a known special concern species to be present in the project area you will take reasonable action to prevent significant adverse impacts or to enhance the habitat for the species of concern.

21. **Historic Properties and Cultural Resources.** WDNR-GP1-2017 does not affect the DNR's responsibility to insure that all authorizations comply with Section 106 of the National Historic Preservation Act and s. 44.40, Wis. Stats. No DNR authorization under this permit will be granted for projects found not to comply with these Acts/laws. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places. If cultural, archaeological, or historical resources are unearthed during activities authorized by this permit, work must be stopped immediately and the State Historic Preservation Officer must be contacted for further instruction.

22. **Preventive Measures.** Measures must be adopted to prevent potential pollutants from entering a wetland or waterbody. Construction materials and debris, including fuels, oil, and other liquid substances, will not be stored in the construction area in a manner that would allow them to enter a wetland or waterbody as a result of spillage, natural runoff, or flooding. If a spill of any potential pollutant should occur, it is the responsibility of the permittee to remove such material, to minimize any contamination resulting from this spill, and to immediately notify the State Duty Officer at 1-800-943-0003.

23. **Suitable fill material.** All fill authorized under this permit must consist of clean suitable soil material, as defined by s. NR 500.03(214), Wis. Admin. Code, free from hazardous substances as defined by s. 289.01(11), Wis. Stats., and free from solid waste as defined by s. 289.01(11) and (33), Wis. Stats.

24. **Standard for Coverage.** Wetland impacts from the project will cause only minimal adverse environmental impacts as determined by the Department.

25. **Transfers.** Coverage under this permit is transferable to any person upon prior written approval of the transfer by the Department.

26. **Limits of State Liability.** In authorizing work, the State Government does not assume any liability, including for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the State in the public interest.
c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
d. Design or construction deficiencies associated with the permitted work.
e. Damage claims associated with any future modification, suspension, or revocation of this WDNR-GP1-2017.

27. **Reevaluation of Decision.** The Department may suspend, modify or revoke authorization of any previously authorized activity and may take enforcement action if any of the following occur:
a. The applicant fails to comply with the terms and conditions of WDNR-GP1-2017.
b. The information provided by the applicant in support of the permit application proves to have been false, incomplete, or inaccurate.
c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

ALTA/NSPS LAND TITLE SURVEY (WITH TOPOGRAPHY)

CLIENT
MSI General

SITE ADDRESS
N120 W19349 Friestadt Rd., Germantown, Wisconsin.

LEGAL DESCRIPTION
Parcel 3 of Certified Survey Map 4902, recorded on October 30, 1997, in Volume 33 of Certified Survey Maps, on Page 298, as Document No. 760859, being a redivsion of Parcel 1, Certified Survey Map No. 4843, being a part of the Northeast 1/4 and the Northwest 1/4 of the Northeast 1/4 of Section 20, Town 9 North, Range 20 East, in the Village of Germantown, County of Washington, State of Wisconsin.

BASIS OF BEARINGS
Bearings are referenced to the Wisconsin State Plane Coordinate System (South Zone), in which the North line of the NE 1 /4 bears N89°45'28"E.
Horizontal Datum is based on NAVD-1983/2011
Vertical Datum is based on NAVD-1988(12)

TITLE COMMITMENT
This survey was prepared based on Chicago Title Insurance Company Commitment No. CO-4184, effective date of February 29, 2016 which lists the following easements and/or restrictions from schedule B-II:

1, 5, 6, 7, 8 & 9 not survey related.

2. Easements for the purposes and rights incidental thereto, as granted in a document, granted to Wisconsin Electric Power Company, for utility purposes, recorded on August 12, 1964 as Document No. 275309, as assigned by Easement Assignment, recorded on January 2, 2001 as Document No. 873216. No documents provided.

3. One hundred twenty five foot W.E.P.CO. Easement as set forth on Certified Survey Map No. 4553, recorded on August 22, 1995 as Document No. 698154, as also set forth on Certified Survey Map No. 4772, recorded on December 18, 1996 as Document No. 735655, as also set forth on Certified Survey Map No. 4804, recorded on April 4, 1997 as Document No., 742584, as also set forth on Certified Survey Map No. 4843, recorded on July 3 1997 as Document No. 750668, as also set forth on Certified Survey Map No. 4902, recorded on October 30, 1997 as Document No. 760859. Affects property by location, shown.

4. Easements for the purposes and rights incidental thereto, as granted in a Distribution Easement Underground Joint, granted to Wisconsin Electric Power Company and Ameritech- Wisconsin, for utility purposes, recorded on February 23, 1999, as Document No. 815505. No Documents provided.

TABLE "A" ITEMS
3. According to the flood insurance rate map of the County of Washington, Community Panel No. 55131C0357D, effective date of November 20, 2013, this site falls in Zone X (Area of minimal flood hazard).

4. The Land Area of the subject property is 414,554 square feet or 9.5168 acres.

6(b). A zoning report has not been provided.

9. There are 29 regular parking spaces and 2 handicap spaces on this site .

11(a). Evidence of underground utilities existing on or serving the surveyed property as determined by plans and/or reports provided by client. Plans were provided.

16. There is no visible evidence of earth moving, building construction or building additions within recent months.

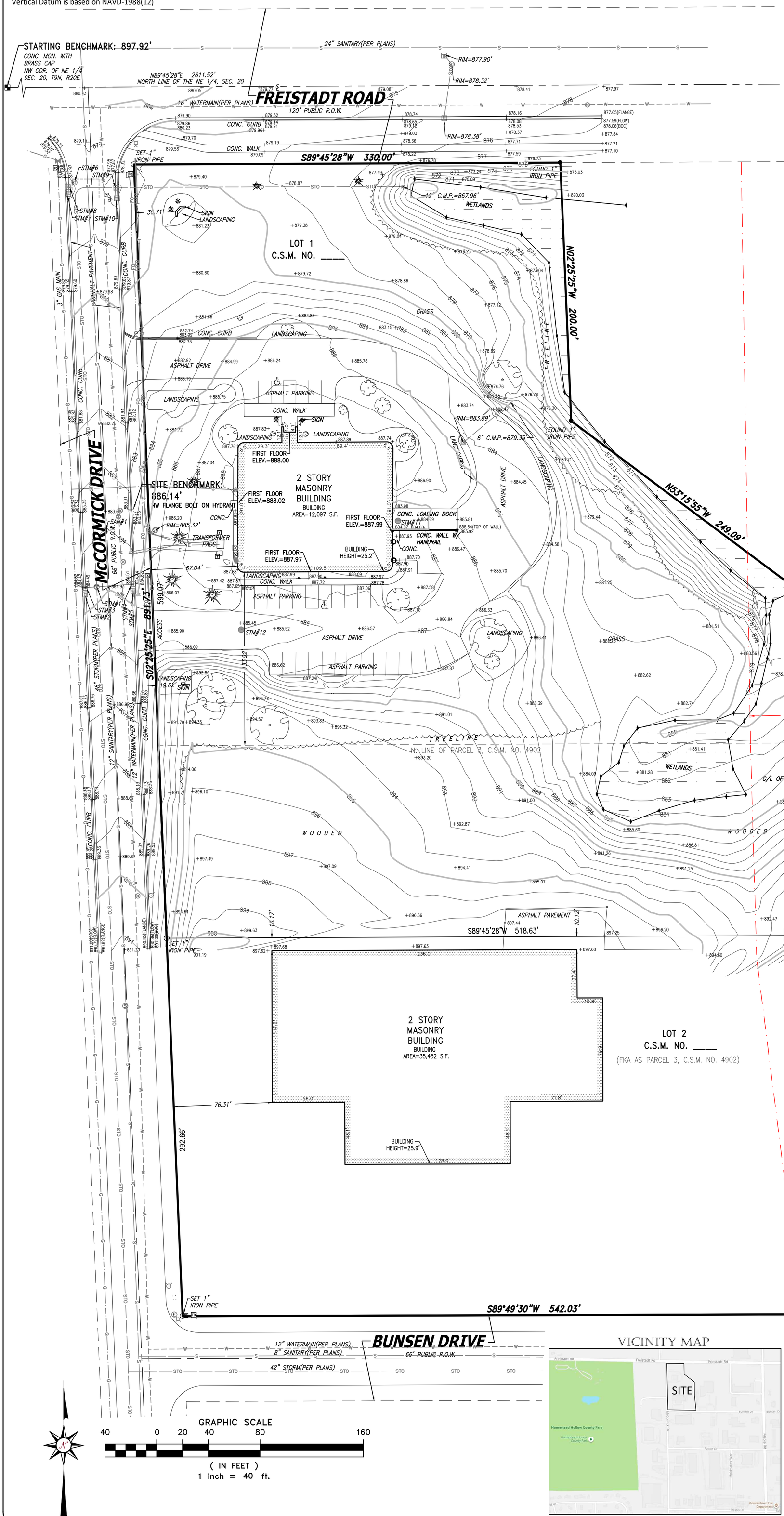
17. There are no changes in street right of way lines either completed or proposed, and available from the controlling jurisdiction. Observable evidence of recent street or sidewalk construction or repairs if any, is shown.

20(a). Location of utilities existing on or serving the surveyed property as determined by markings requested by the surveyor pursuant to a Diggers Hotline One-call center utility locate. Ticket Number 20211619642. However, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. Client understands only utility lines with imbedded electric tracer wires or utilities made of materials capable of electric connectivity can be marked at the surface and located. Depth of utilities may prohibit their location even with electric connectivity.

20(b). The zoning information noted below is taken from the municipal code ordinance. It does not reflect all zoning restrictions that may apply. It is not intended to be used in lieu of a comprehensive zoning report as stated in ALTA Table A item 6(a) nor to be relied on for site development purposes.

Municipal Code: Village of German Town Municipal Code
Site is zoned: M-1 (Limited Industrial District)
Front setback: 30 feet
Side setback: 10 feet
Rear setback: 25 feet
Maximum building height: 45 feet

20(c). Engineering design topography and utility survey: Vertical datum, elevations with 1 foot contour intervals and spot elevations on paved surfaces. Sewer lines will be depicted by location and depths where accessible without confined entry safety procedures and where traffic lanes do not pose a safety hazard accessing sewer data. Pipe sizes will be shown from plans, if available. Watermain and water services will be depicted from surface evidence and available plans. The limits of topography will extend to the centerline of the adjacent streets and 25' onto adjacent properties unless otherwise agreed upon.



LEGEND
- INDICATES FOUND 1" IRON PIPE
- INDICATES SET 1" IRON PIPE
- INDICATES FOUND CHISELED CROSS
- SANITARY MANHOLE
- SANITARY CLEANOUT OR VENT
- SEPTIC TANK ACCESS COVER
- M.I.S. MANHOLE
- UNKNOWN MANHOLE
- STORM MANHOLE
- INLET (ROUND)
- INLET (SQUARE)
- CURB INLET
- STORM SEWER END SECTION
- GAS VALVE
- GAS METER
- WATER VALVE
- HYDRANT
- WATER MANHOLE
- WATER SERVICE CURB STOP
- WELL HEAD
- STAND PIPE
- WALL INDICATOR VALVE
- POST INDICATOR VALVE
- LIGHT POLE
- SPOT/YARD LIGHT
- UTILITY POLE
- GUY POLE
- GUY WIRE
- ELECTRIC MANHOLE
- ELECTRIC PEDESTAL
- ELECTRIC METER
- TELEPHONE MANHOLE
- TELEPHONE PEDESTAL
- CABLE PEDESTAL
- CONTROL BOX
- FIBER OPTIC PEDESTAL/SIGN
- TRAFFIC LIGHT
- COMMUNICATION MANHOLE
- BOLLARD
- SOIL BORING/MONITORING WELL
- WATER SURFACE
- WETLANDS FLAG
- MARSH
- FLAGPOLE
- PARKING METER
- SIGN
- MAILBOX
- RAILROAD CROSSING SIGNAL
- HANDICAP SPACE
- CONIFEROUS TREE
- DECIDUOUS TREE
- SANITARY SEWER
- STORM SEWER
- WATERLINE
- MARKED GAS MAIN
- MARKED ELECTRIC
- OVERHEAD WIRES
- MARKED TELEPHONE
- MARKED CABLE TV LINE
- MARKED FIBER OPTIC
- BURIED ELECTRIC SERVICE
- BOARD FENCE
- CHAIN LINK FENCE
- WIRE FENCE

Project #3776-INVERT INFORMATION

NO.	POINT NO.	TYPE	RIM	DEPTH	DEPTH	DEPTH	
STM#1	5114	MH	884.61	3.7	6.05		*OFFSET
INVERT				880.91	878.56		
SIZE				12"			
DIRECTION				E	N	S	W
TYPE				RCP	Bottom		
SAN#1	5151	MH	883.93	UNABLE TO			
INVERT				OPEN			
SIZE							
DIRECTION							
TYPE							
STM#2	5112	CURB INLET	884.55	3.25			
INVERT				881.3			
SIZE				12"			
DIRECTION				N			
TYPE				RCP			
STM#3	5113	CURB INLET	884.42	3.5	3.5		
INVERT				880.92	880.92		
SIZE				12"	12"		
DIRECTION				5	E		
TYPE				RCP	RCP		
STM#4	5141	CURB INLET	884.44	3.3	3.4		
INVERT				881.14	881.04		
SIZE				12"	12"		
DIRECTION				5	W		
TYPE				RCP	RCP		
STM#5	5140	CURB INLET	884.51	3.25			
INVERT				881.26			
SIZE				12"			
DIRECTION				N			
TYPE				RCP			
STM#6	5266	MH	877.96	6.55			*OFFSET
INVERT				871.41			VAULT
SIZE							
DIRECTION					S	E	
TYPE				BOTTOM			
STM#7	5269	CURB INLET	877.84	4.45			
INVERT				873.39			
SIZE				12"			
DIRECTION				N			
TYPE				RCP			
STM#8	5270	CURB INLET	877.87	4.6	4.6		
INVERT				873.27	873.27		
SIZE				12"	12"		
DIRECTION				5	E		
TYPE				RCP	RCP		
STM#9	5262	CURB INLET	877.5	7.65			*OFFSET
INVERT				869.85			
SIZE							
DIRECTION							
TYPE				BOTTOM			
STM#10	5261	CURB INLET	877.71	4.75			
INVERT				872.96			
SIZE				12"			
DIRECTION				N			
TYPE				RCP			
STM#11	5868	CATCH BASIN	883.95	3			*OFFSET
INVERT				880.95			EAST
SIZE							PLUGGED
DIRECTION							CONC
TYPE				BOTTOM			
STM#1Z	5960	CATCH BASIN	885.14	2.8			
INVERT				882.34			
SIZE				8"			
DIRECTION				NE			
TYPE				PVC			

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

VICINITY MAP

TO: Bunsen Realty LLC, a Wisconsin limited liability company
Chicago Title Insurance Company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 3, 4, 7(a), 7(b)(1), 7(c), 8, 9, 11(a), 19, 20(a), 20(b) and 20(c) of Table A thereof. The field work was completed on May 13, 2021.

Date of Map: May 17, 2021

DANIEL BEDNAR S-2812 GERMANTOWN WI LAND SURVEYOR

Daniel Bednar
Professional Land Surveyor
Registration Number S-2812

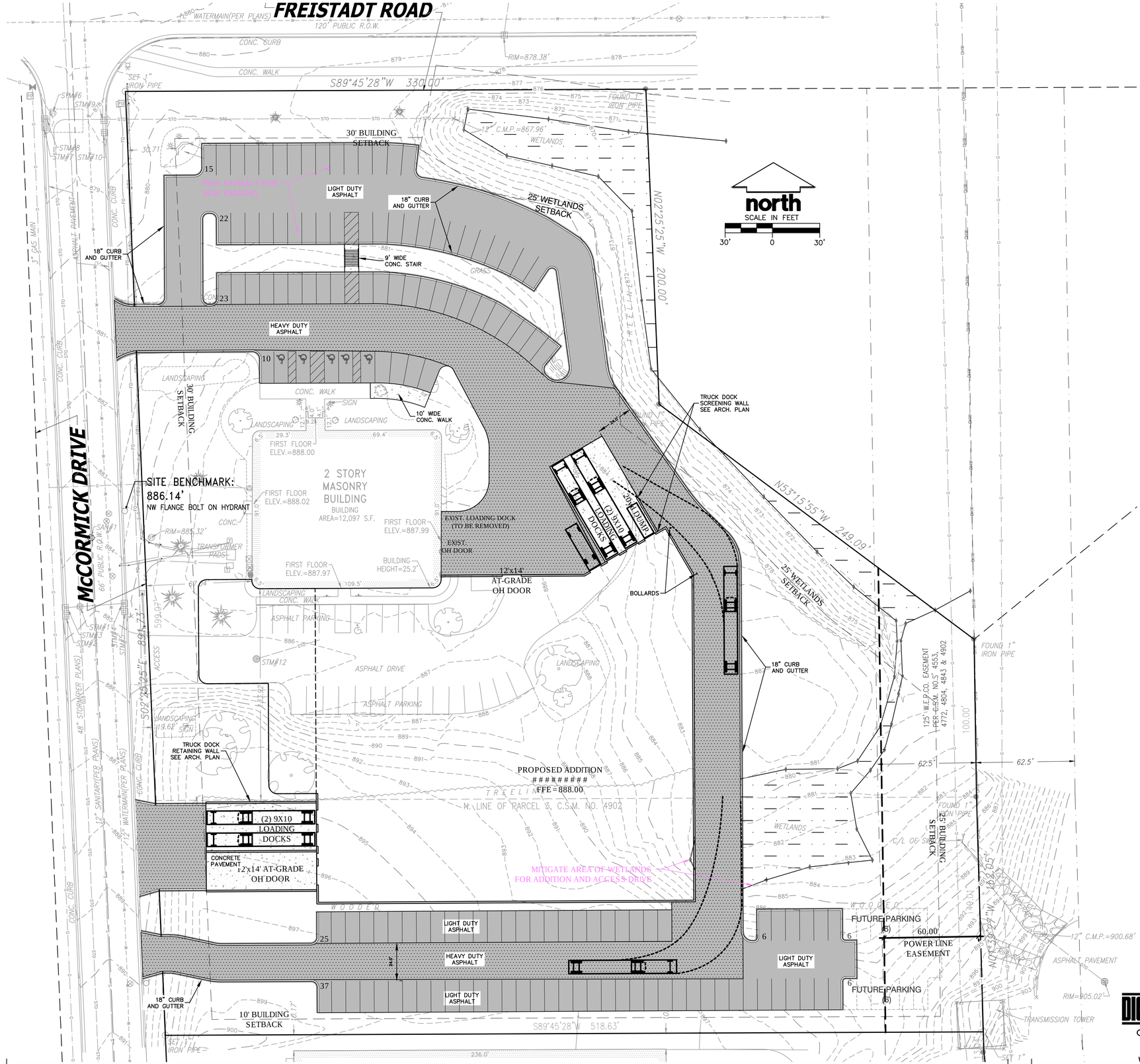
Date	Revision description	

CHAPUT LAND SURVEYS
234 W. Florida Street
Milwaukee, WI 53204
414-224-8068
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This document is an instrument of professional service, and may be protected by the surveyors work product doctrine or surveyor / client privilege. The information shown hereon is intended solely for the use of the client and client directed third parties.

Drawing No. 3776-dmb

CHAPUT LAND SURVEYS



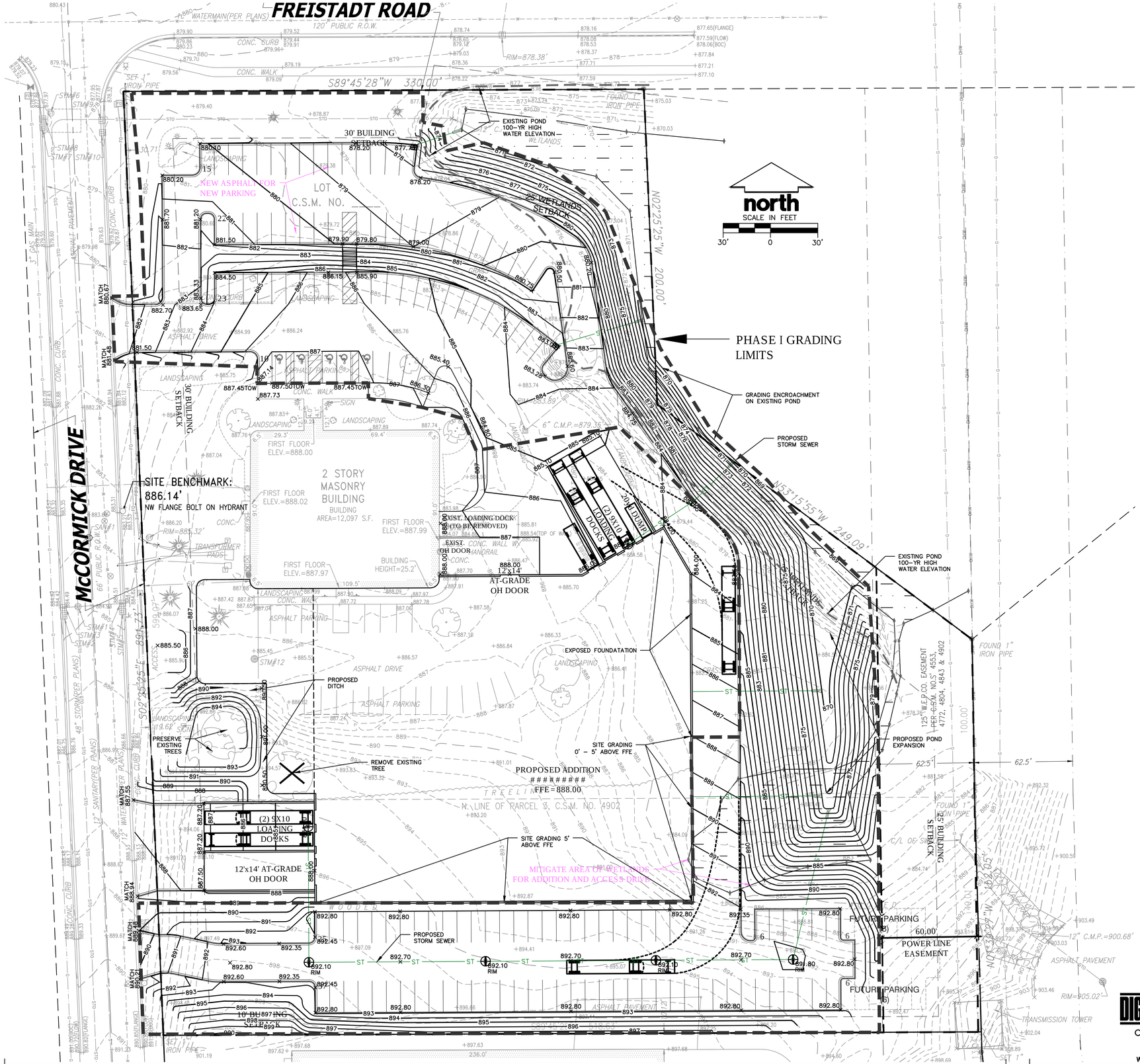
SITE PAVE ID PLAN 1" = 30'-0"

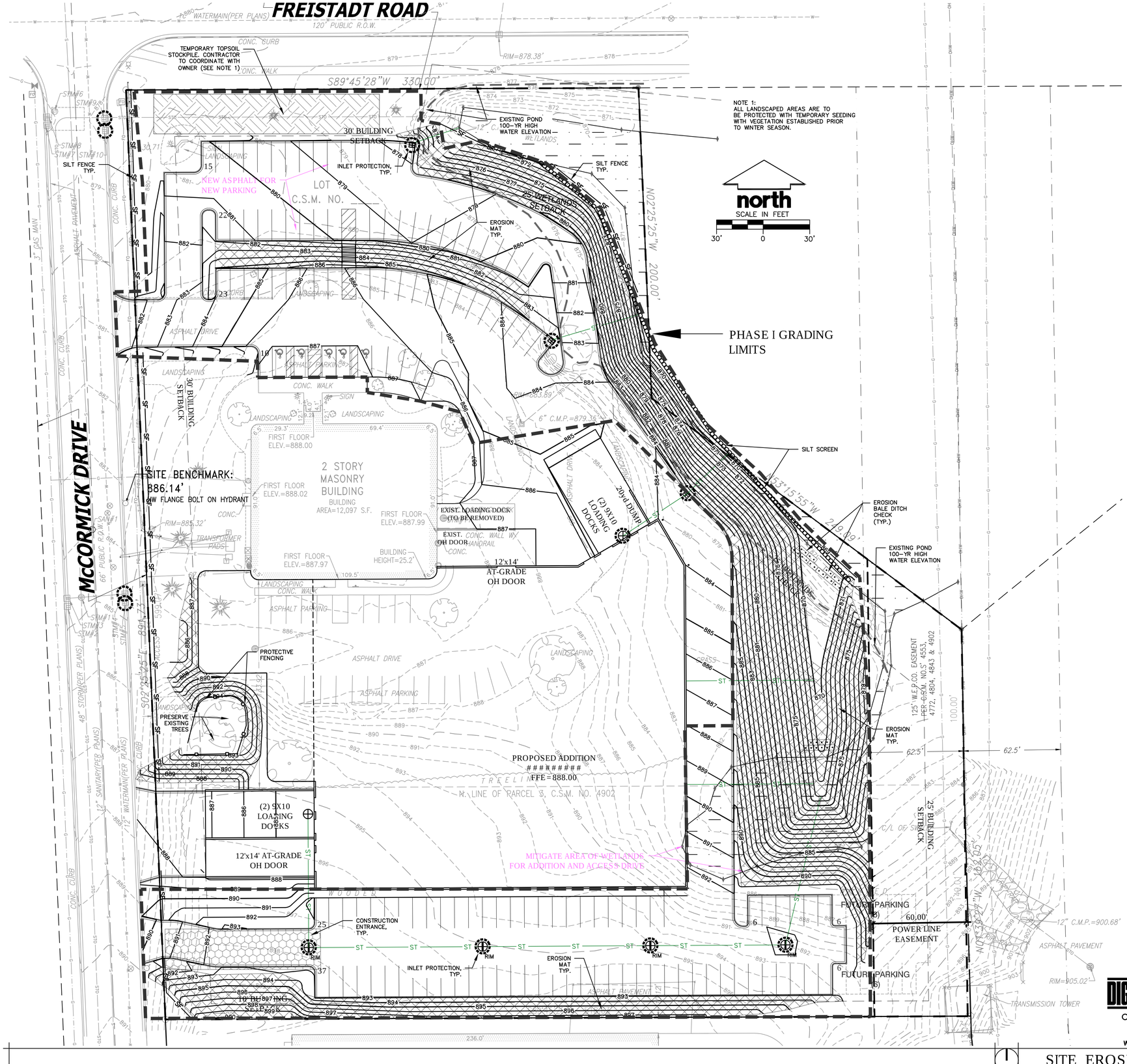
DIGGERS HOTLINE
Call 811 or (800) 242-8511
Milwaukee Area (262) 432-7910
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

JSD Professional Services, Inc.
• Engineers • Surveyors • Planners
MILWAUKEE REGIONAL OFFICE
W238 N1610 BUSSE RD., STE 100
WAUKESHA, WISCONSIN 53188
262.513.0666 PHONE | 262.513.1232 FAX
www.jsdinc.com
JSD JOB NO.: 20-10204
JSD PROJ. MGR.: RWI

MSI GENERAL

M□□□ □□ □□□ □□□ □□


FREISTADT ROAD
120' PUBLIC R.O.W.
McCORMICK DRIVE
66' PUBLIC R.O.W.
WATERMAIN(PER PLANS)
CONC. CURB
CONC. WALK
S89°45'28"W 330.00'
SET 1" IRON PIPE
FOUND 1" IRON PIPE
RIM=878.38'
EXISTING POND 100-YR HIGH WATER ELEVATION
WETLANDS
30' BUILDING SETBACK
25' WETLANDS SETBACK
N02°25'25"W 200.00'
LOT
C.S.M. NO.
NEW ASPHALT FOR NEW PARKING
LANDSCAPING
ASPHALT PARKING
ASPHALT DRIVE
CONC. CURB
MATCH 880.67
MATCH 881.48
PHASE I GRADING LIMITS
GRADING ENCROACHMENT ON EXISTING POND
PROPOSED STORM SEWER
S53°15'55"W 249.09'
EXISTING POND 100-YR HIGH WATER ELEVATION
SITE BENCHMARK:
886.14'
NW FLANGE BOLT ON HYDRANT
2 STORY MASONRY BUILDING
BUILDING AREA=12,097 S.F.
FIRST FLOOR ELEV.=888.00
FIRST FLOOR ELEV.=888.02
FIRST FLOOR ELEV.=887.99
FIRST FLOOR ELEV.=887.97
BUILDING HEIGHT=25.2'
EXIST. LOADING DOCK (TO BE REMOVED)
EXIST. CONC. WALL W/ HANDRAIL
EXIST. OH DOOR
12'x14' AT-GRADE OH DOOR
(2) 9X10 LOADING DOCKS
30' BUILDING SETBACK
SIGN
TRANSFORMER PADS
EXPOSED FOUNDATATION
PROPOSED DITCH
PRESERVE EXISTING TREES
REMOVE EXISTING TREE
PROPOSED ADDITION
#########
FFE=888.00
N. LINE OF PARCEL 3, C.S.M. NO. 4902
SITE GRADING 5" ABOVE FFE
SITE GRADING 0" – 5" ABOVE FFE
MITIGATE AREA OF WETLANDS FOR ADDITION AND ACCESS DRIVE
PROPOSED POND EXPANSION
125' W.E.P.CO. EASEMENT PER C.S.M. NO.S 4553, 4772, 4804, 4843 & 4902
100.00'
62.5'
62.5'
FUTURE PARKING (8)
60.00' POWER LINE EASEMENT
FUTURE PARKING (6)
6" C.M.P.=879.35'
12" C.M.P.=900.68'
RIM=905.02'
TRANSMISSION TOWER
48" STORM(PER PLANS)
12" SANITARY(PER PLANS)
12" WATERMAIN(PER PLANS)
3" GAS MAIN
STM#1
STM#2
STM#3
STM#4
STM#5
STM#6
STM#7
STM#8
STM#9
STM#10
STM#11
STM#12
STM#13
STM#14
STM#15
STM#16
STM#17
STM#18
STM#19
STM#20
STM#21
STM#22
STM#23
STM#24
STM#25
STM#26
STM#27
STM#28
STM#29
STM#30
STM#31
STM#32
STM#33
STM#34
STM#35
STM#36
STM#37
STM#38
STM#39
STM#40



SITE EROSION CONTROL PLAN 1" = 30'-0"

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JSD JOB NO.: 20-10204
JSD PROJ. MGR.: RWI

MSI GENERAL

ISSUE DATES:	
Owner Review:	11.03.2020
Property Acquisition Review:	2.09.2021
Owner Review:	6.09.2021
Bid Set:	
State Submittal / Permit:	
As-Built:	

REVISIONS:

1	--

enercon

PROJECT ADDRESS:

PROJECT NAME
Enercon Technical Center - Addition
STREET ADDRESS
N120 W19349 Freistadt Rd.
CITY/ STATE / ZIP
Germantown, WI 35022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect:	Engineer:	Reviewed By:
BGK	xxx	BGK

Sheet Title:
SITE EROSION CONTROL PLAN

Sheet Number:
C-104

Project Number: P12364

P12364

JSD Professional Services, Inc.
• Engineers • Surveyors • Planners

Milwaukee Regional Office
W238 N1610 Busse Road, Suite 100
Waukesha, WI 53188
262.513.0666

July 16, 2021

Subject: ***Artificial Wetland Exemption Criteria Statement***
Enercon
N120W19349 Freistadt Road
Germantown, WI

To whom it may concern:

The following statement is an explanation how the wetlands meets the artificial wetland exemption criteria.

Historic photos obtained from the Washington County GIS indicates that there was no previous evidence of wetland or pond prior to the year 1990. The Washington County historic photos prior to 1990 indicated the presence of a farmed field. The mapped wetland is a result of human modifications to the landscape from the construction of the surrounding development and also construction of a detention pond for that surrounding development. Please consider the supporting documentation that indicates that the mapped wetland is exempt from the NR 103 Water Quality Standards based on historic records and resultant human activities.

Please feel free to contact me via email at paul.martens@jsdinc.com or by phone at 262.513.0666.

Sincerely,
JSD Professional Services, Inc.



Paul S. Martens, P.E.
Project Engineer


















enercon





PROJECT NAME

ENERCON ADDITION

PROJECT ADDRESS

N120 W19349 Freistadt Rd.
Germantown, WI, 35022

PROJECT LOCATION



SHEET LIST

Sheet Number	Sheet Name	Current Revision	Revision Date
G-001	COVER SHEET		
C-100	ARCHITECTURAL SITE PLAN		
C-101	SITE DEMO PLAN		
C-102	SITE PAVE ID PLAN		
C-103	SITE GRADING & DRAINAGE PLAN		
C-103A	PHASE I GRADING & DRAINAGE PLAN		
C-103B	PHASE II GRADING & DRAINAGE PLAN		
C-103C	PHASE III GRADING & DRAINAGE PLAN		
C-104	SITE EROSION CONTROL PLAN		
C-105	SITE UTILITY PLAN		
C-106	SITE DETAILS		
C-106A	SITE DETAILS		
C-106B	SITE DETAILS		
C-107	SITE PHOTOMETRIC PLAN		
C-108	SITE LIGHTING CUTSHEETS		
L1.1	ENLARGED LANDSCAPE PLAN		
L1.2	ENLARGED LANDSCAPE PLAN		
L1.3	LANDSCAPE DETAILS, NOTES & SCHEDULES		
A-000.1	EXISTING FIRST FLOOR PLAN		
A-000.2	EXISTING SECOND FLOOR PLAN		
A-101	OVERALL FIRST FLOOR PLAN		
A-102	OVERALL SECOND FLOOR PLAN		
A-200.1	EXISTING ELEVATIONS		
A-200.2	EXISTING ELEVATIONS		
A-201	EXTERIOR ELEVATIONS		
A-202	EXTERIOR ELEVATIONS		
A-900	RENDERINGS		

ARCHITECTURAL SYMBOLS

- COLUMN REFERENCE SYMBOL (0)
- ELEVATION REFERENCE SYMBOL (Name / Elevation)
- ELEVATION REFERENCE SYMBOL (1 Ref, A101)
- SECTION REFERENCE SYMBOL (SIM, A, A101)
- DETAIL REFERENCE SYMBOL (SIM, 1, A101)
- ENLARGED AREA REFERENCE SYMBOL (SIM, 1, A101)
- ROOM TAG (Room name, 101)
- DOOR TAG (111A)
- WINDOW TAG (1t)
- WALL TAG (1)
- EQUIPMENT TAG (X####)
- REVISION TAG (1)
- BUILDING ENTRY SYMBOL
- NORTH ARROW

Architectural Symbol
12" = 1'-0"

ARCHITECTS SEAL

ENGINEERS SEAL

63 YEARS OF DESIGN EXCELLENCE

10/4/2021 4:00:27 PM

MSI GENERAL

MSI General Corporation
W215 E. Wisconsin Ave.
Nashotah, WI 53058
Phone: 262-367-3661
Fax: 262-367-7390

WWW.MSIGENERAL.COM
SINGLE SOURCE RESPONSIBILITY ™

ISSUE DATES:	
Steel & Precast Bid Set:	9/14/2021
Bid:	--/--/----
Permit:	--/--/----
Plan Commission:	10/04/2021
State Submittal / Permit:	--/--/----
As Built:	--/--/----

REVISIONS:

enercon

PROJECT NAME
ENERCON ADDITION

STREET ADDRESS
N120 W19349 Freistadt Rd.

CITY/ STATE / ZIP
Germantown, WI, 35022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

ARCHITECT:	ENGINEER:	REVIEWED BY:
ANK/BGK	AGR	BJZ

SHEET TITLE:
COVER SHEET

SHEET NUMBER:
G-001

PROJECT NUMBER: P12364
P12364

LEADERS o ENGINEERS o CONTRACTORS o ARCHITECTS

ALTA/NSPS LAND TITLE SURVEY (WITH TOPOGRAPHY)

CLIENT
MSI General

SITE ADDRESS
N120 W19349 Friestadt Rd., Germantown, Wisconsin.

LEGAL DESCRIPTION
Parcel 3 of Certified Survey Map 4902, recorded on October 30, 1997, in Volume 33 of Certified Survey Maps, on Page 298, as Document No. 760859, being a redivsion of Parcel 1, Certified Survey Map No. 4843, being a part of the Northeast 1/4 and the Northwest 1/4 of the Northeast 1/4 of Section 20, Town 9 North, Range 20 East, in the Village of Germantown, County of Washington, State of Wisconsin.

BASIS OF BEARINGS
Bearings are referenced to the Wisconsin State Plane Coordinate System (South Zone), in which the North line of the NE 1 /4 bears N89°45'28"E.
Horizontal Datum is based on NAVD-1983/2011
Vertical Datum is based on NAVD-1988(12)

TITLE COMMITMENT
This survey was prepared based on Chicago Title Insurance Company Commitment No. CO-4184, effective date of February 29, 2016 which lists the following easements and/or restrictions from schedule B-II:

1, 5, 6, 7, 8 & 9 not survey related.

2. Easements for the purposes and rights incidental thereto, as granted in a document, granted to Wisconsin Electric Power Company, for utility purposes, recorded on August 12, 1964 as Document No. 275309, as assigned by Easement Assignment, recorded on January 2, 2001 as Document No. 873216. No documents provided.

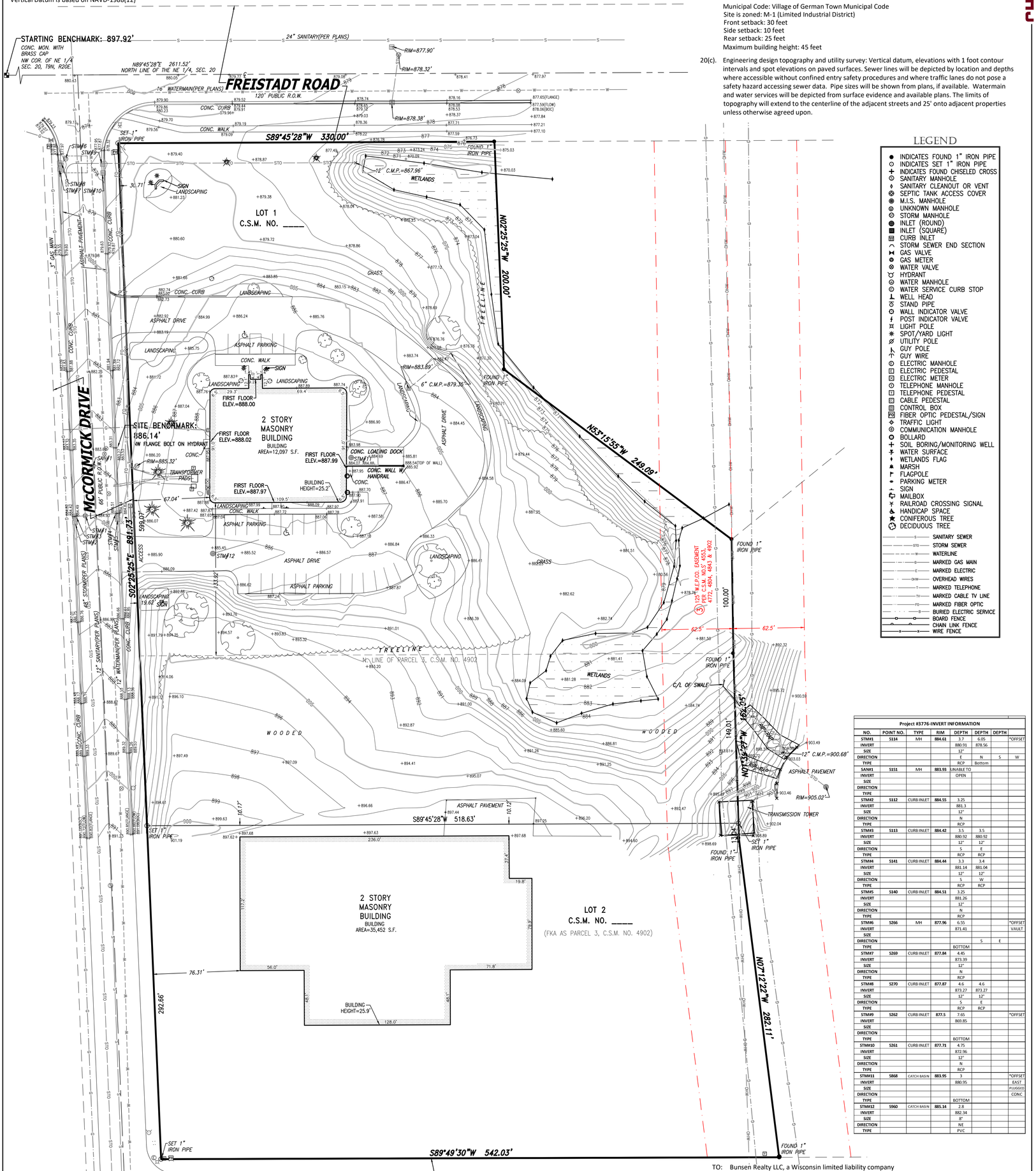
3. One hundred twenty five foot W.E.P.CO. Easement as set forth on Certified Survey Map No. 4553, recorded on August 22, 1995 as Document No. 698154, as also set forth on Certified Survey Map No. 4772, recorded on December 18, 1996 as Document No. 735655, as also set forth on Certified Survey Map No. 4804, recorded on April 4, 1997 as Document No., 742584, as also set forth on Certified Survey Map No. 4843, recorded on July 3 1997 as Document No. 750668, as also set forth on Certified Survey Map No. 4902, recorded on October 30, 1997 as Document No. 760859. Affects property by location, shown.

4. Easements for the purposes and rights incidental thereto, as granted in a Distribution Easement Underground Joint, granted to Wisconsin Electric Power Company and Ameritech- Wisconsin, for utility purposes, recorded on February 23, 1999, as Document No. 815505. No Documents provided.

TABLE "A" ITEMS
3. According to the flood insurance rate map of the County of Washington, Community Panel No. 55131C0357D, effective date of November 20, 2013, this site falls in Zone X (Area of minimal flood hazard).
4. The Land Area of the subject property is 414,554 square feet or 9.5168 acres.
6(b). A zoning report has not been provided.
9. There are 29 regular parking spaces and 2 handicap spaces on this site .
11(a). Evidence of underground utilities existing on or serving the surveyed property as determined by plans and/or reports provided by client. Plans were provided.
16. There is no visible evidence of earth moving, building construction or building additions within recent months.
17. There are no changes in street right of way lines either completed or proposed, and available from the controlling jurisdiction. Observable evidence of recent street or sidewalk construction or repairs if any, is shown.
20(a). Location of utilities existing on or serving the surveyed property as determined by markings requested by the surveyor pursuant to a Diggers Hotline One-call center utility locate. Ticket Number 20211619642. However, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. Client understands only utility lines with imbedded electric tracer wires or utilities made of materials capable of electric connectivity can be marked at the surface and located. Depth of utilities may prohibit their location even with electric connectivity.
20(b). The zoning information noted below is taken from the municipal code ordinance. It does not reflect all zoning restrictions that may apply. It is not intended to be used in lieu of a comprehensive zoning report as stated in ALTA Table A item 6(a) nor to be relied on for site development purposes.

Municipal Code: Village of German Town Municipal Code
Site is zoned: M-1 (Limited Industrial District)
Front setback: 30 feet
Side setback: 10 feet
Rear setback: 25 feet
Maximum building height: 45 feet

20(c). Engineering design topography and utility survey: Vertical datum, elevations with 1 foot contour intervals and spot elevations on paved surfaces. Sewer lines will be depicted by location and depths where accessible without confined entry safety procedures and where traffic lanes do not pose a safety hazard accessing sewer data. Pipe sizes will be shown from plans, if available. Watermain and water services will be depicted from surface evidence and available plans. The limits of topography will extend to the centerline of the adjacent streets and 25' onto adjacent properties unless otherwise agreed upon.



LEGEND
- INDICATES FOUND 1" IRON PIPE
- INDICATES SET 1" IRON PIPE
- INDICATES FOUND CHISELED CROSS
- SANITARY MANHOLE
- SANITARY CLEANOUT OR VENT
- SEPTIC TANK ACCESS COVER
- M.I.S. MANHOLE
- UNKNOWN MANHOLE
- STORM MANHOLE
- INLET (ROUND)
- INLET (SQUARE)
- CURB INLET
- STORM SEWER END SECTION
- GAS VALVE
- GAS METER
- WATER VALVE
- HYDRANT
- WATER MANHOLE
- WATER SERVICE CURB STOP
- WELL HEAD
- STAND PIPE
- WALL INDICATOR VALVE
- POST INDICATOR VALVE
- LIGHT POLE
- SPOT/YARD LIGHT
- UTILITY POLE
- GUY POLE
- GUY WIRE
- ELECTRIC MANHOLE
- ELECTRIC PEDESTAL
- ELECTRIC METER
- TELEPHONE MANHOLE
- TELEPHONE PEDESTAL
- CABLE PEDESTAL
- CONTROL BOX
- FIBER OPTIC PEDESTAL/SIGN
- TRAFFIC LIGHT
- COMMUNICATION MANHOLE
- BOLLARD
- SOIL BORING/MONITORING WELL
- WATER SURFACE
- WETLANDS FLAG
- MARSH
- FLAGPOLE
- PARKING METER
- SIGN
- MAILBOX
- RAILROAD CROSSING SIGNAL
- HANDICAP SPACE
- CONIFEROUS TREE
- DECIDUOUS TREE

- SANITARY SEWER
- STORM SEWER
- WATERLINE
- MARKED GAS MAIN
- MARKED ELECTRIC
- OHHW OVERHEAD WIRES
- MARKED TELEPHONE
- TV MARKED CABLE TV LINE
- FO MARKED FIBER OPTIC
- BURIED ELECTRIC SERVICE
- BOARD FENCE
- CHAIN LINK FENCE
- WIRE FENCE

Project #3776 INVERT INFORMATION

NO.	POINT NO.	TYPE	RIM	DEPTH	DEPTH	DEPTH	
STM#1	S134	MH	884.61	3.7	6.05		*OFFSET
INVERT				880.91	878.56		
SIZE				12"			
DIRECTION				E	N	S	W
TYPE				RCP	Bottom		
SANI#1	S151	MH	883.93	UNABLE TO			
INVERT				OPEN			
SIZE							
DIRECTION							
TYPE							
STM#2	S132	CURB INLET	884.55	3.25			
INVERT				881.3			
SIZE				12"			
DIRECTION				N			
TYPE				RCP			
STM#3	S133	CURB INLET	884.42	3.5	3.5		
INVERT				880.92	880.92		
SIZE				12"	12"		
DIRECTION				S	E		
TYPE				RCP	RCP		
STM#4	S141	CURB INLET	884.44	3.3	3.4		
INVERT				881.14	881.04		
SIZE				12"	12"		
DIRECTION				S	W		
TYPE				RCP	RCP		
STM#5	S140	CURB INLET	884.51	3.25			
INVERT				881.26			
SIZE				12"			
DIRECTION				N			
TYPE				RCP			
STM#6	S266	MH	877.96	6.55			*OFFSET
INVERT				871.41			VAULT
SIZE							
DIRECTION					S	E	
TYPE				BOTTOM			
STM#7	S269	CURB INLET	877.84	4.45			
INVERT				873.39			
SIZE				12"			
DIRECTION				N			
TYPE				RCP			
STM#8	S270	CURB INLET	877.87	4.6	4.6		
INVERT				873.27	873.27		
SIZE				12"	12"		
DIRECTION				S	E		
TYPE				RCP	RCP		
STM#9	S262	CURB INLET	877.5	7.65			*OFFSET
INVERT				869.85			
SIZE							
DIRECTION							
TYPE				BOTTOM			
STM#10	S261	CURB INLET	877.71	4.75			
INVERT				872.96			
SIZE				12"			
DIRECTION				N			
TYPE				RCP			
STM#11	S868	CATCH BASIN	883.95	3			*OFFSET
INVERT				880.95			EAST
SIZE				N			PLUGGED
DIRECTION							CONC
TYPE				BOTTOM			
STM#12	S960	CATCH BASIN	885.14	2.8			
INVERT				882.34			
SIZE				8"			
DIRECTION				NE			
TYPE				PVC			

VICINITY MAP


GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

TO: Bunsen Realty LLC, a Wisconsin limited liability company
Chicago Title Insurance Company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 3, 4, 7(a), 7(b)(1), 7(c), 8, 9, 11(a), 19, 20(a), 20(b) and 20(c) of Table A thereof. The field work was completed on May 13, 2021.

Date of Map: May 17, 2021

DANIEL BEDNAR S-2812 GERMANTOWN WI LAND SURVEYOR

Daniel Bednar
Professional Land Surveyor
Registration Number S-2812

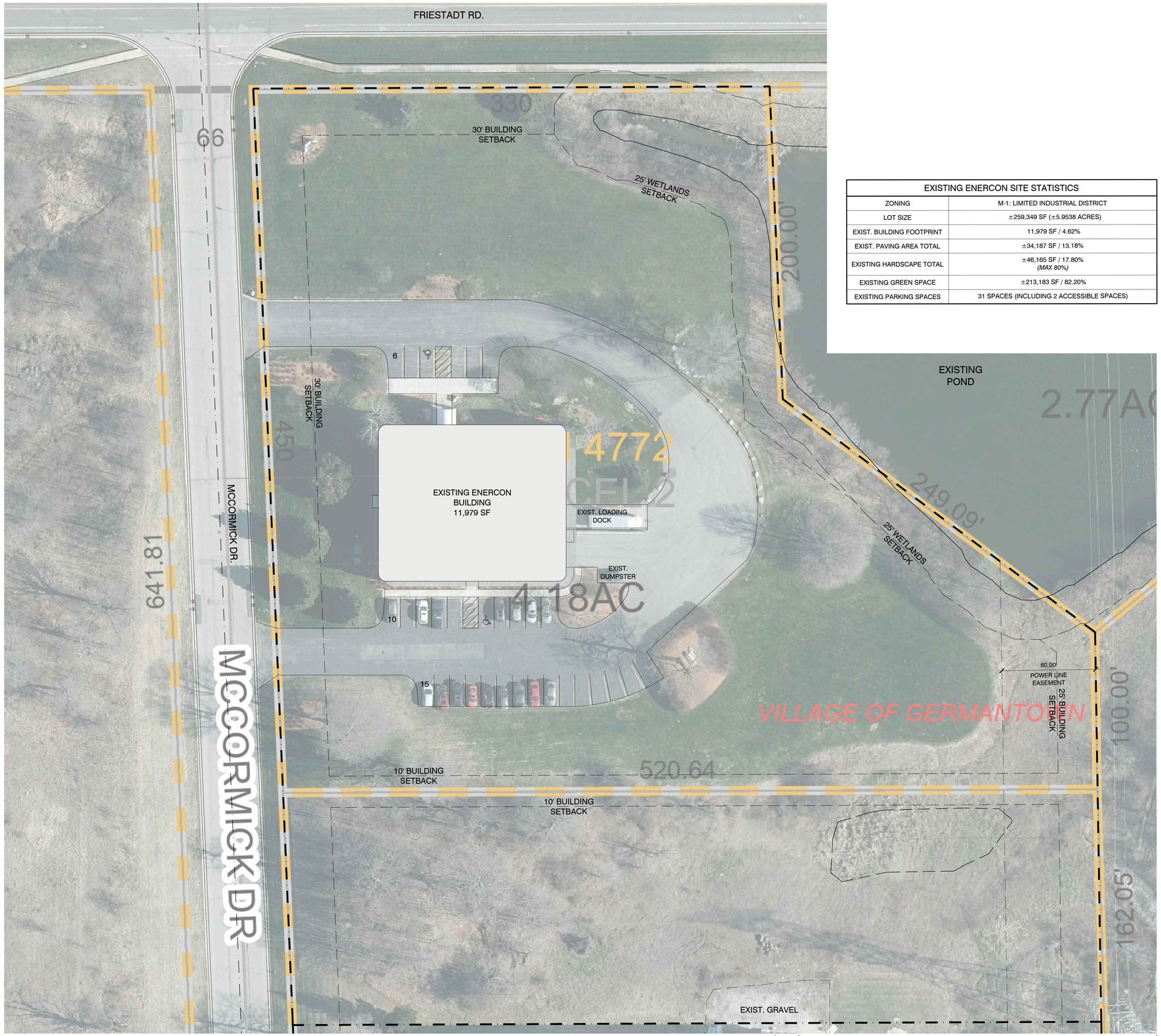
Date	Revision description

CHAPUT LAND SURVEYS
234 W. Florida Street Milwaukee, WI 53204
414-224-8068
www.chaputlandsurveys.com

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Drawing No. 3776-dmb

CHAPUT LAND SURVEYS



EXISTING SITE PLAN 1" = 30'-0"

EXISTING ENERCON SITE STATISTICS	
ZONING	M-1: LIMITED INDUSTRIAL DISTRICT
LOT SIZE	±259,349 SF (±5.9538 ACRES)
EXIST. BUILDING FOOTPRINT	11,979 SF / 4.62%
EXIST. PAVING AREA TOTAL	±34,187 SF / 13.18%
EXISTING HARDSCAPE TOTAL	±46,165 SF / 17.80% *(MAX 80%)*
EXISTING GREEN SPACE	±213,183 SF / 82.20%
EXISTING PARKING SPACES	31 SPACES (INCLUDING 2 ACCESSIBLE SPACES)

MSI GENERAL CORPORATION
P.O. BOX. 7
OCONOMOWOC, WI 53066
PHONE: 262-367-3661

WWW.MSIGENERAL.COM
SINGLE SOURCE RESPONSIBILITY ™

ISSUE DATES:	
Owner Review:	11.03.2020
Property Acquisition Review:	2.09.2021
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Bid Set:	
State Submittal / Permit:	
As-Built:	

REVISIONS:
1 --

PROJECT ADDRESS:

PROJECT NAME
Enercon Technical Center - Addition
STREET ADDRESS
N120 W19349 Freistadt Rd.
CITY/ STATE / ZIP
Germantown, WI 53022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect:	Engineer:	Reviewed By:
BGK	xxx	BGK

Sheet Title:
EXISTING SITE PLAN

Sheet Number:
C-001

Project Number: P12364

P12364

MANAGERS . ENGINEERS . CONTRACTORS . ARCHITECTS



SHEET INDEX

C-101	SITE DEMO PLAN
C-102	SITE PAV ID PLAN
C-103	SITE GRADING PLAN
C-103A	PHASE I GRADING & DRAINAGE PLAN
C-103B	PHASE II GRADING & DRAINAGE PLAN
C-103C	PHASE III GRADING & DRAINAGE PLAN
C-104	SITE EROSION CONTROL PLAN
C-105	SITE UTILITY PLAN
C-106	SITE DETAILS
C-106A	SITE DETAILS
C-106B	SITE DETAILS
C-106C	SITE DETAILS

GENERAL NOTES:

1. REFER TO THE EXISTING CONDITIONS PLAN FOR EXISTING CONDITIONS NOTES AND LEGENDS.
2. EXISTING GRADE SPOT ELEVATIONS SHOWN FOR INFORMATIONAL PURPOSES. DURING CONSTRUCTION MATCH EXISTING GRADES AT CONSTRUCTION LIMITS.
3. JSD PROFESSIONAL SERVICES, INC. (JSD) SHALL BE HELD HARMLESS AND DOES NOT WARRANT ANY DEVIATIONS BY THE OWNER/CONTRACTOR FROM THE APPROVED CONSTRUCTION PLANS THAT MAY RESULT IN DISCIPLINARY ACTIONS BY ANY OR ALL REGULATORY AGENCIES.

DEMOLITION NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) OF ALL STRUCTURES, PADS, WALLS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., IN A LAWFUL MANNER, SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
2. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING FOR ALL FEES AND CHARGES. COORDINATION REQUIRED PRIOR TO CONSTRUCTION.
3. THIS PLAN INDICATES ITEMS ON THE PROPERTY INTENDED FOR DEMOLITION BASED ON THE CURRENT SITE DESIGN THAT HAVE BEEN IDENTIFIED BY A REASONABLE OBSERVATION OF THE EXISTING CONDITIONS THROUGH FIELD SURVEY RECONNAISSANCE, "DIGGER'S HOTLINE" LOCATION, AND GENERAL "STANDARD OF CARE", THERE MAY BE ADDITIONAL ITEMS THAT CAN NOT BE IDENTIFIED BY A REASONABLE ABOVE GROUND OBSERVATION, OF WHICH THE ENGINEER WOULD HAVE NO KNOWLEDGE OR MAY BE A PART OF ANOTHER DESIGN DISCIPLINE. IT IS THE CONTRACTOR'S/BIDDER'S RESPONSIBILITY TO REVIEW THE PLANS, INSPECT THE SITE AND PROVIDE THEIR OWN DUE DILIGENCE TO INCLUDE IN THEIR BID WHAT ADDITIONAL ITEMS, IN THEIR OPINION, MAY BE NECESSARY FOR DEMOLITION. ANY ADDITIONAL ITEMS IDENTIFIED BY THE CONTRACTOR/BIDDER SHALL BE IDENTIFIED IN THE BID AND REPORTED TO THE ENGINEER OF RECORD. JSD PROFESSIONAL SERVICES, INC. (JSD) TAKES NO RESPONSIBILITY FOR ITEMS ON THE PROPERTY THAT COULD NOT BE LOCATED BY A REASONABLE OBSERVATION OF THE PROPERTY OR OF WHICH THEY WOULD HAVE NO KNOWLEDGE.
4. ALL PERIMETER EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO THE START OF DEMOLITION ACTIVITIES. CONTRACTOR SHALL KEEP ALL STREETS, PRIVATE DRIVES AND PAVEMENT FREE AND CLEAR OF ALL CONSTRUCTION RELATED DIRT, DUST AND DEBRIS.
5. CONTRACTOR TO MAINTAIN CONTINUOUS ACCESS TO SURROUNDING PROPERTIES AND REMAINING PARTS OF THE SITE AT ALL TIMES DURING THE DEMOLITION.
6. ALL VEGETATION WITHIN THE EXISTING ISLANDS TO BE REMOVED SHALL BE REMOVED BE REMOVED IN THEIR ENTIRETY.
7. ALL LIGHT POLES TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY, INCLUDING BASE AND ALL APPURTENANCES. SALVAGE FOR RELOCATION. COORDINATE RELOCATION AND/OR ABANDONMENT OF ALL ELECTRIC LINES WITH ELECTRICAL ENGINEER AND OWNER PRIOR TO DEMOLITION.
8. ABANDONED/REMOVED ITEMS SHALL BE DISPOSED OF OFF-SITE UNLESS OTHERWISE NOTED.
9. CONTRACTOR TO REPLACE ALL SIDEWALK AND CURB AND GUTTER ABUTTING THE PROPERTIES, WHICH IS DAMAGED BY THE CONSTRUCTION.
10. VOIDS LEFT BY ANY ITEM REMOVED UNDER ANY PROPOSED PAVEMENT, WALK, ETC. OR WITHIN 24-INCHES THEREOF SHALL BE FILLED AND BACKFILLED WITH GRANULAR MATERIALS AND COMPACTED PER SPECIFICATIONS.
11. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR:
    - 11.1. EXAMINE ALL SITE CONDITIONS RELATIVE TO THE CONDITIONS INDICATED ON THE ENGINEERING DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE DESIGN ENGINEER AND RESOLVED PRIOR TO THE START OF CONSTRUCTION.
    - 11.2. VERIFYING UTILITY ELEVATIONS AND NOTIFYING THE DESIGN ENGINEER OF ANY DISCREPANCIES. NO WORK SHALL BE PERFORMED UNTIL THE DISCREPANCIES ARE RESOLVED.
    - 11.3. NOTIFYING ALL UTILITIES PRIOR TO THE REMOVAL OF ANY UNDERGROUND UTILITIES.
    - 11.4. NOTIFYING THE DESIGN ENGINEER AND LOCAL CONTROLLING MUNICIPALITY 48 HOURS PRIOR TO THE START OF CONSTRUCTION TO ARRANGE FOR APPROPRIATE CONSTRUCTION INSPECTION.
    - 11.5. PERFORMING UTILITY LOCATE OBSERVATIONS (ULO) ON ALL UTILITY CROSSINGS. CONTRACTOR TO REPORT ANY PLAN DISCREPANCIES OR CONFLICTS PRIOR TO THE START OF UTILITY CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE APPROPRIATE UTILITY COMPANIES TO CONDUCT ULO'S.
12. ALL EXISTING UTILITIES TO BE FIELD LOCATED AND FLAGGED BY CONTRACTOR.
13. ANY SANITARY SEWER, SANITARY SEWER SERVICES, WATER MAIN, WATER SERVICES, STORM SEWER, OR OTHER UTILITIES, WHICH ARE TO REMAIN, THAT ARE DAMAGED BY THE CONTRACTORS, SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.
14. CONTRACTOR SHALL NOTIFY JSD OF ANY ROOF LEADERS AND/OR STORM DRAIN LINES ENCOUNTERED DURING DEMOLITION WHICH ARE NOT SHOWN ON THE PLANS PRIOR TO ABANDONMENT OR REMOVAL.
15. CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING THE CONSTRUCTION OF THESE IMPROVEMENTS.
16. ALL DEMOLITION SHALL BE IN ACCORDANCE WITH THE APPROVED MUNICIPALITY RECYCLING PLAN.
17. ANY CONTAMINATED SOILS SHALL BE REMOVED IN ACCORDANCE WITH FEDERAL AND STATE REGULATIONS TO AN APPROVED LANDFILL.
18. SEWER ABANDONMENT SHALL BE IN ACCORDANCE WITH SECTION 3.2.24, OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN WISCONSIN, LATEST ADDITION, AND MUNICIPALITY SPECIFICATIONS.
19. WATER ABANDONMENT SHALL BE IN ACCORDANCE WITH SECTION 4.14.0 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN WISCONSIN, LATEST ADDITION, AND MUNICIPALITY SPECIFICATIONS.
20. BUILDING REMOVALS SHALL BE BY A QUALIFIED CONTRACTOR. CONTRACTOR TO FOLLOW ALL DEMOLITION REGULATIONS, DISCONNECT ALL UTILITIES, OBTAIN ALL APPLICABLE PERMITS AND DISPOSE OF ALL BUILDING MATERIALS IN APPROPRIATE LANDFILLS. DEMOLISHED MATERIALS SHALL NOT BE BURIED ON SITE. IF ENCOUNTERED, ANY CONTAMINATED BUILDING MATERIAL AND/OR SOILS SHALL BE REMOVED AND DISPOSED OF OFF-SITE BY THE CONTRACTOR IN ACCORDANCE WITH APPROPRIATE STATE AND FEDERAL REGULATIONS.
21. CONTRACTOR MAY LIMIT SAW-CUT AND PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, CURB, SIDEWALK, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IT'S REMOVAL AND REPAIR. DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.

DEMOLITION LEGEND

- REMOVE EXISTING ITEM
- REMOVE EXISTING ASPHALT PAVEMENT
- REMOVE EXISTING CONCRETE
- REMOVE EXISTING VEGETATION
- REMOVE EXISTING TREE

north
SCALE IN FEET
30' 0 30'

SITE DEMO PLAN 1" = 30'-0"

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JSD JOB NO.: 20-10204
JSD PROJ. MGR.: RWI

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PROJECT ADDRESS:

PROJECT NAME
Enercon Technical Center - Addition
STREET ADDRESS
N120 W19349 Freistadt Rd.
CITY/ STATE / ZIP
Germantown, WI 53022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

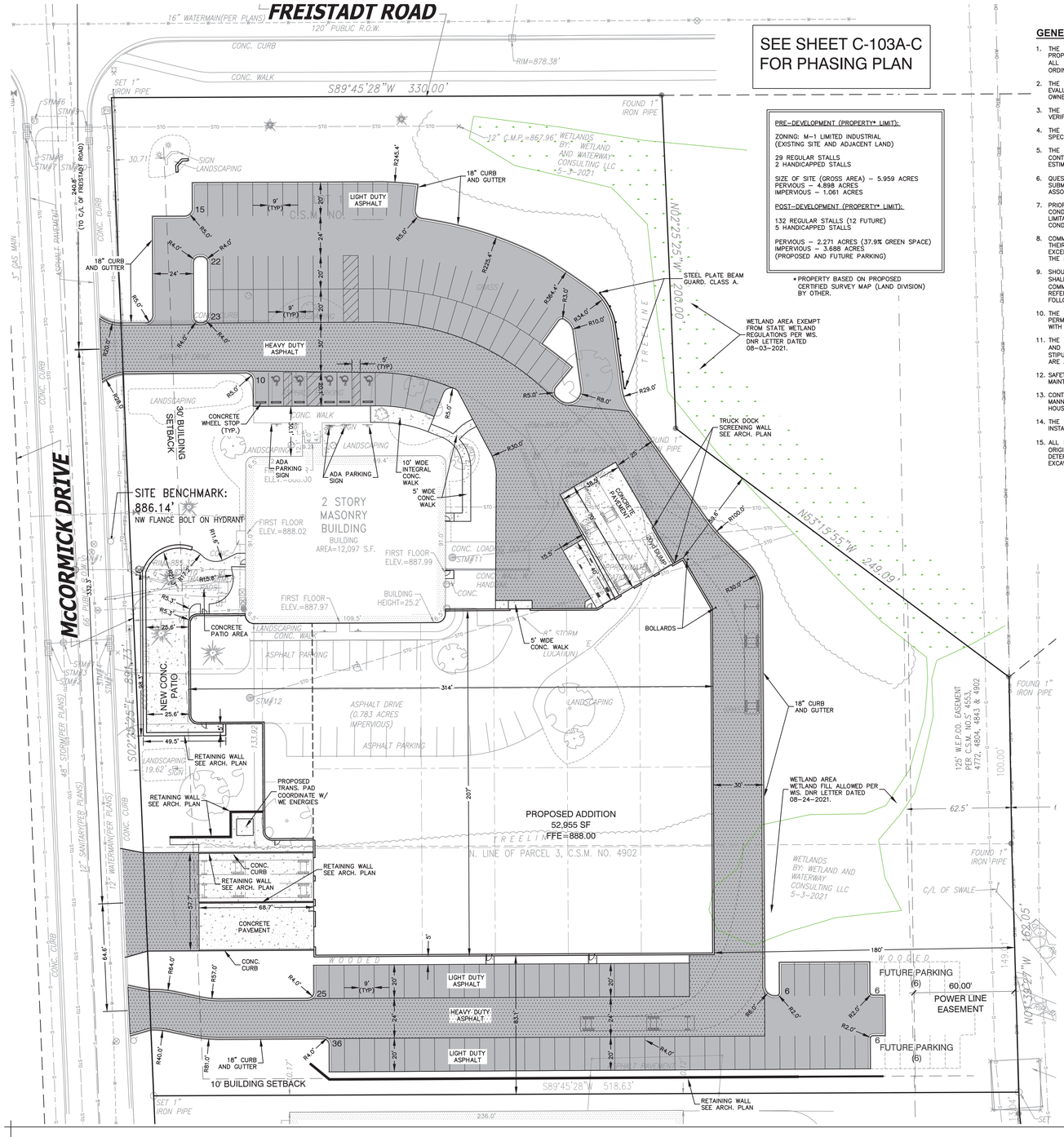
Architect:	Engineer:	Reviewed By:
BGK	xxx	BGK

Sheet Title:
SITE DEMO PLAN

Sheet Number:
C-101

Project Number: P12364
4529

ARCHITECTS . ENGINEERS . CONTRACTORS . MANAGERS



SITE PAVE ID PLAN 1" = 30'-0"

GENERAL NOTES AND SPECIFICATIONS

1. THE INTENTION OF THE PLANS AND SPECIFICATIONS IS TO SET FORTH PERFORMANCE AND CONSTRUCTION MATERIAL STANDARDS FOR THE PROPER EXECUTION OF WORK. ALL WORKS CONTAINED WITHIN THE PLANS AND SPECIFICATIONS SHALL BE COMPLETED IN ACCORDANCE WITH ALL REQUIREMENTS FROM LOCAL, STATE, FEDERAL OR OTHER GOVERNING AGENCY'S LAWS, REGULATIONS, JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., AND THE OWNER'S DIRECTION.
2. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY ADDITIONAL SOILS INVESTIGATIONS THEY FEEL IS NECESSARY FOR THE PROPER EVALUATION OF THE SITE FOR PURPOSES OF PLANNING, BIDDING, OR CONSTRUCTING THE PROJECT AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND UNDERSTAND ALL COMPONENTS OF THE PLANS AND SPECIFICATIONS, INCLUDING FIELD VERIFYING SOIL CONDITIONS, PRIOR TO SUBMISSION OF A BID PROPOSAL.
4. THE CONTRACTOR SHALL PROMPTLY REPORT ANY ERRORS OR AMBIGUITIES DISCOVERED AS PART OF THEIR REVIEW OF PLANS, SPECIFICATIONS, REPORTS AND FIELD INVESTIGATIONS.
5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COMPUTATION OF QUANTITIES AND WORK REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR'S BID SHALL BE BASED ON THEIR OWN COMPUTATIONS AND UNDER NO CIRCUMSTANCES BE BASED ON THE ENGINEER'S ESTIMATE.
6. QUESTIONS/CLARIFICATIONS WILL BE INTERPRETED BY ENGINEER/OWNER PRIOR TO THE AWARD OF CONTRACT. ENGINEER/OWNER WILL SUBMIT OFFICIAL RESPONSES IN WRITING. INTERPRETATIONS PRESENTED IN OFFICIAL RESPONSES SHALL BE BINDING ON ALL PARTIES ASSOCIATED WITH THE CONTRACT. IN NO WAY SHALL WORD-OF-MOUTH DIALOG CONSTITUTE AN OFFICIAL RESPONSE.
7. PRIOR TO START OF WORK, CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL CONDITIONS OF THE SITE, AND SHALL ACCOUNT FOR CONDITIONS THAT AFFECT, OR MAY AFFECT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, LIMITATIONS OF WORK ACCESS, SPACE LIMITATIONS, OVERHEAD OBSTRUCTIONS, TRAFFIC PATTERNS, LOCAL REQUIREMENTS, ADJACENT ACTIVITIES, ETC. FAILURE TO CONSIDER SITE CONDITIONS SHALL NOT BE CAUSE FOR CLAIM OF JOB EXTRAS.
8. COMMENCEMENT OF CONSTRUCTION SHALL EXPLICITLY CONFIRM THAT THE CONTRACTOR HAS REVIEWED THE PLANS AND SPECIFICATIONS IN THEIR ENTIRETY AND CERTIFIES THAT THEIR SUBMITTED BID PROPOSAL CONTAINS PROVISIONS TO COMPLETE THE PROJECT, WITH THE EXCEPTION OF UNFORESEEN FIELD CONDITIONS; ALL APPLICABLE PERMITS HAVE BEEN OBTAINED; AND CONTRACTOR UNDERSTANDS ALL OF THE REQUIREMENTS OF THE PROJECT.
9. SHOULD ANY DISCREPANCIES OR CONFLICTS IN THE PLANS OR SPECIFICATIONS BE DISCOVERED AFTER THE AWARD OF CONTRACT, ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY AND CONSTRUCTION OF ITEMS AFFECTED BY THE DISCREPANCIES/CONFLICTS SHALL NOT COMMENCE, OR CONTINUE, UNTIL A WRITTEN RESPONSE FROM ENGINEER/OWNER IS DISTRIBUTED. IN THE EVENT OF A CONFLICT BETWEEN REFERENCED CODES, STANDARDS, SPECIFICATIONS AND PLANS, THE ONE ESTABLISHING THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.
10. THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS AND LICENSES TO COMPLETE THE PROJECT. OBTAINING PERMITS, OR DELAYS IN OBTAINING PERMITS, IS NOT CAUSE FOR DELAY OF THE CONTRACT OR SCHEDULE. CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS.
11. THE CONTRACTOR SHALL NOTIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND "DIGGER'S HOTLINE" IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS. CONTRACTOR IS RESPONSIBLE TO DETERMINE WHICH ORDINANCES/CODES/RULES/ETC. ARE APPLICABLE.
12. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO INITIATE, INSTITUTE, ENFORCE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND JOB SITE SAFETY PROGRAMS IN CONNECTION WITH THE WORK.
13. CONTRACTOR SHALL KEEP THE JOBSITE CLEAN AND ORDERLY AT ALL TIMES. ALL LOCATIONS OF THE SITE SHALL BE KEPT IN A WORKING MANNER SUCH THAT DEBRIS IS REMOVED CONTINUOUSLY AND ALL RESPECTIVE CONTRACTORS OPERATE UNDER GENERAL "GOOD HOUSEKEEPING."
14. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, JSD, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.
15. ALL FIELD/DRAIN TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE IMMEDIATELY REPORTED TO ENGINEER/OWNER. TILES ORIGINATING OUTSIDE THE PROJECT LIMITS SHALL BE RECONNECTED OR REROUTED TO MAINTAIN DRAINAGE. ENGINEER/OWNER SHALL DETERMINE THE MOST FAVORABLE METHOD OF RE-ESTABLISHMENT OF OFFSITE DRAINAGE. IF TILE IS ENCOUNTERED DURING TRENCH EXCAVATIONS, RE-ESTABLISHING TILE FUNCTIONALITY SHALL BE CONSIDERED AN INCIDENTAL EXPENSE.

PAVING NOTES

1. ALL PAVING SHALL CONFORM TO "STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION AND APPLICABLE VILLAGE OF GERMANTOWN ORDINANCES.
2. CONCRETE PAVING SPECIFICATIONS-

   CODES AND STANDARDS - THE PLACING, CONSTRUCTION AND COMPOSITION OF THE CONCRETE PAVEMENT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 415 AND 416 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, CURRENT EDITION. HEREAFTER, THIS PUBLICATION WILL BE REFERRED TO AS STATE HIGHWAY SPECIFICATIONS.

   CRUSHED AGGREGATE BASE COURSE - THE BASE COURSE SHALL CONFORM TO SECTIONS 301 AND 305, STATE HIGHWAY SPECIFICATIONS. CLEAN RECYCLED CRUSHED CONCRETE MAY BE USED IF APPROVED BY GEOTECH ENGINEER OF RECORD.

   SURFACE PREPARATION - NOTIFY CONTRACTOR OF UNSATISFACTORY CONDITIONS. DO NOT BEGIN PAVING WORK UNTIL DEFICIENT SUBBASE AREAS HAVE BEEN CORRECTED AND ARE READY TO RECEIVE PAVING.
3. ASPHALTIC CONCRETE PAVING SPECIFICATIONS-

   CODES AND STANDARDS - THE PLACING, CONSTRUCTION AND COMPOSITION OF THE ASPHALTIC BASE COURSE AND ASPHALTIC CONCRETE SURFACING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 450, 455, 460 AND 465 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, EDITION OF 2005. HEREAFTER, THIS PUBLICATION WILL BE REFERRED TO AS STATE HIGHWAY SPECIFICATIONS.

   WEATHER LIMITATIONS - APPLY TACK COATS WHEN AMBIENT TEMPERATURE IS ABOVE 50° F (10° C) AND WHEN TEMPERATURE HAS NOT BEEN BELOW 35° F (1° C) FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION. DO NOT APPLY WHEN BASE IS WET OR CONTAINS EXCESS AMOUNTS OF MOISTURE. CONSTRUCT ASPHALTIC CONCRETE SURFACE COURSE WHEN ATMOSPHERIC TEMPERATURE IS ABOVE 40° F (4° C) AND WHEN BASE IS DRY AND WHEN WEATHER IS NOT RAINY. BASE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30° F (-1° C).

   GRADE CONTROL - ESTABLISH AND MAINTAIN REQUIRED LINES AND ELEVATIONS FOR EACH COURSE DURING CONSTRUCTION.

   CRUSHED AGGREGATE BASE COURSE - THE TOP LAYER OF BASE COURSE SHALL CONFORM TO SECTIONS 301 AND 305, STATE HIGHWAY SPECIFICATIONS. CLEAN RECYCLED CRUSHED CONCRETE MAY BE USED IF APPROVED BY GEOTECH ENGINEER OF RECORD.

   BINDER COURSE AGGREGATE - THE AGGREGATE FOR THE BINDER COURSE SHALL CONFORM TO SECTIONS 460.2.7 AND 315, STATE HIGHWAY SPECIFICATIONS.

   SURFACE COURSE AGGREGATE - THE AGGREGATE FOR THE SURFACE COURSE SHALL CONFORM TO SECTIONS 460.2.7 AND 465, STATE HIGHWAY SPECIFICATIONS.

   ASPHALTIC MATERIALS - THE ASPHALTIC MATERIALS SHALL CONFORM TO SECTION 455 AND 460, STATE HIGHWAY SPECIFICATIONS.

   SURFACE PREPARATION - NOTIFY CONTRACTOR OF UNSATISFACTORY CONDITIONS. DO NOT BEGIN PAVING WORK UNTIL DEFICIENT SUBBASE AREAS HAVE BEEN CORRECTED AND ARE READY TO RECEIVE PAVING.

PAVEMENT STRIPING NOTES

1. CONTRACTOR SHALL CONSULT STRIPING COLOR WITH OWNER PRIOR TO CONSTRUCTION.
2. PROVIDE CONTRACTOR GRADE ACRYLIC, STRIPING PAINT FOR NEW ASPHALT OR COATED ASPHALT. ALL STRIPING SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. THOROUGHLY CLEAN SURFACES FREE OF DIRT, SAND, GRAVEL, OIL AND OTHER FOREIGN MATTER. CONTRACTOR RESPONSIBLE TO INSPECT PAVEMENT SURFACES FOR CONDITIONS AND DEFECTS THAT WILL ADVERSELY AFFECT QUALITY OF WORK, AND WHICH CANNOT BE PUT INTO AN ACCEPTABLE CONDITION THROUGH NORMAL PREPARATORY WORK AS SPECIFIED.
4. DO NOT PLACE MARKING OVER UNSOUND PAVEMENTS. IF THESE CONDITIONS EXIST, NOTIFY OWNER. STARTING INSTALLATION CONSTITUTES CONTRACTOR'S ACCEPTANCE OF SURFACE AS SUITABLE FOR INSTALLATION.
5. LAYOUT MARKINGS USING GUIDE LINES, TEMPLATES AND FORMS. STENCILS AND TEMPLATES SHALL BE PROFESSIONALLY MADE TO INDUSTRY STANDARDS. "FREE HAND" PAINTING OF ARROWS, SYMBOLS, OR WORDING SHALL NOT BE ALLOWED. APPLY STRIPES STRAIGHT AND EVEN.
6. PROTECT ADJACENT CURBS, WALKS, FENCES, AND OTHER ITEMS FROM RECEIVING PAINT.
7. APPLY MARKING PAINT AT A RATE OF ONE (1) GALLON PER THREE TO FOUR HUNDRED (300-400) LINEAL FEET OF FOUR (4) INCH WIDE STRIPES. (OR TO MFG. SPECIFICATIONS)
8. BARRICADE MARKED AREAS DURING INSTALLATION AND UNTIL THE MARKING PAINT IS DRIED AND READY FOR TRAFFIC.
9. ALL HANDICAPPED ACCESSIBLE PARKING SHALL BE LOCATED PER 2009 IBC 1106.6

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Enercon

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PROJECT NAME
Enercon Technical Center - Addition
STREET ADDRESS
N120 W19349 Freistadt Rd.
CITY/ STATE / ZIP
Germantown, WI 53022

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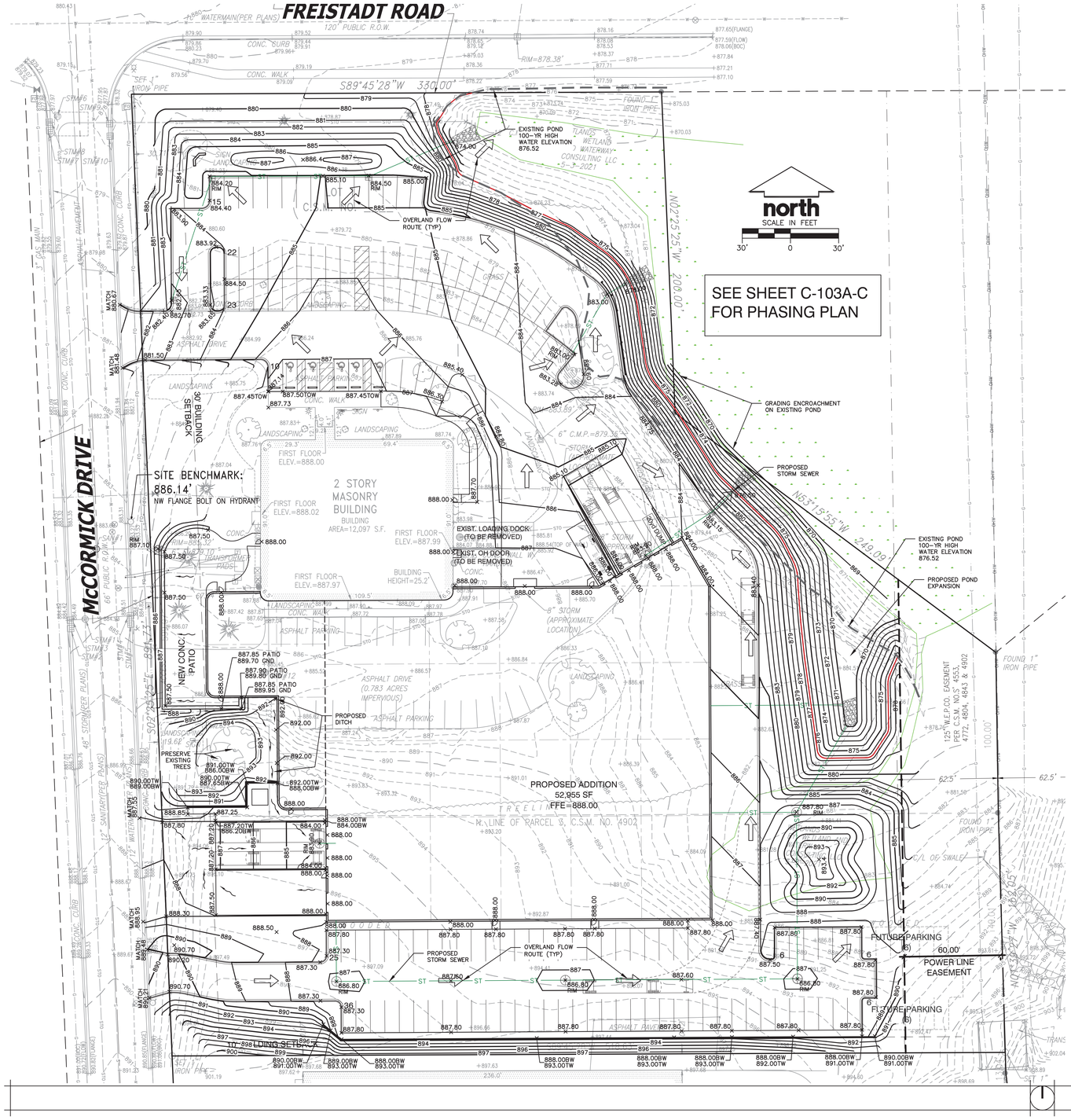
Architect:	Engineer:	Reviewed By:
BGK	xxx	BGK

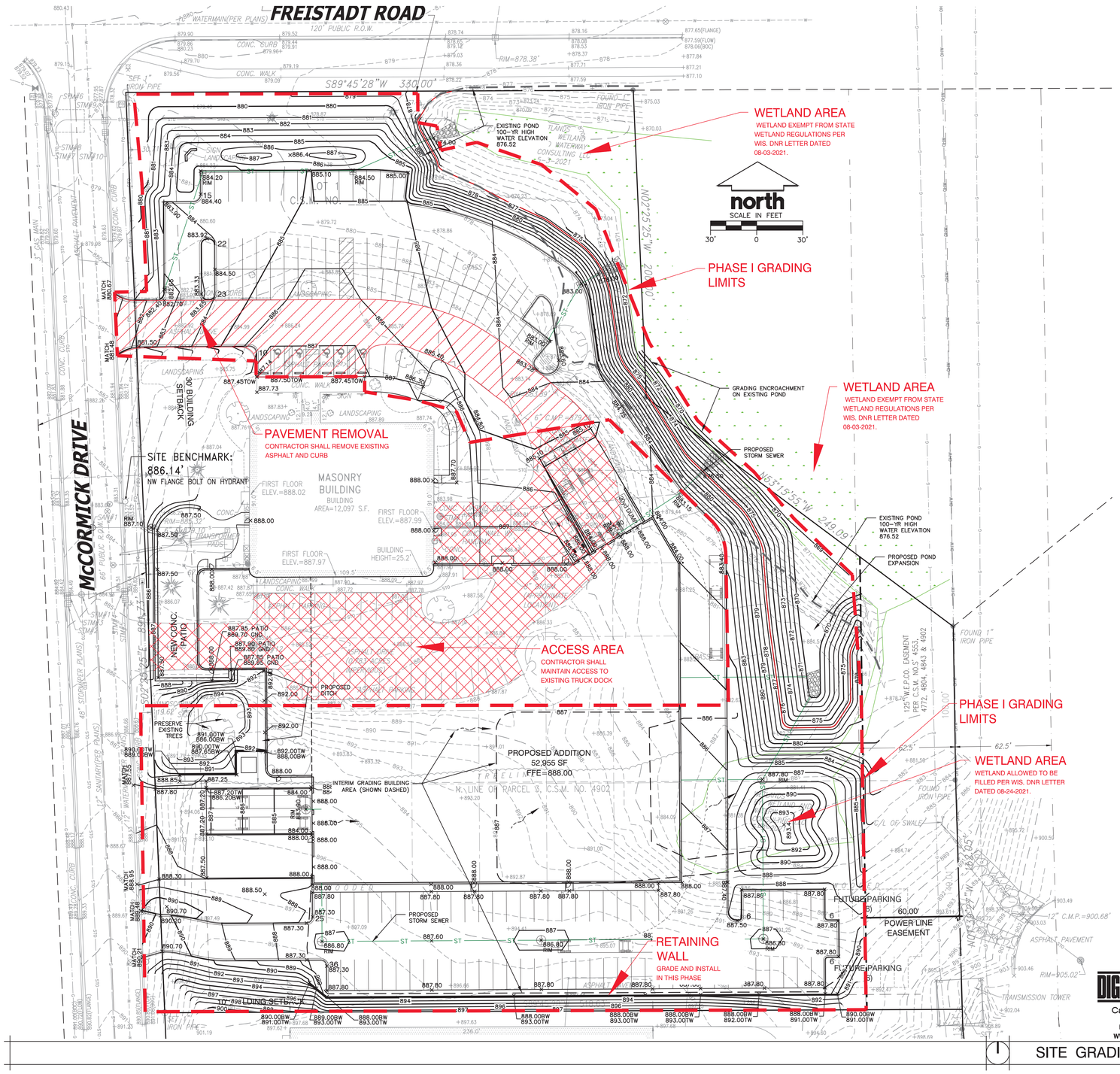
Sheet Title:
SITE PAVE ID PLAN

Sheet Number:
C-102

Project Number: P12364
4529

MANAGERS . ENGINEERS . CONTRACTORS . ARCHITECTS


FREISTADT ROAD
120' PUBLIC R.O.W.
S89°45'28"W 330.00'
N00°14'32"W 200.00'
N53°15'55"W 249.09'
SEE SHEET C-103A-C FOR PHASING PLAN
north
SCALE IN FEET
30' 0 30'
McCORMICK DRIVE
66' PUBLIC R.O.W.
SITE BENCHMARK:
886.14'
NW FLANGE BOLT ON HYDRANT
30' BUILDING SETBACK
2 STORY MASONRY BUILDING
BUILDING AREA=12,097 S.F.
BUILDING HEIGHT=25.2'
FIRST FLOOR ELEV.=888.02
FIRST FLOOR ELEV.=887.99
FIRST FLOOR ELEV.=887.97
EXIST. LOADING DOCK (TO BE REMOVED)
EXIST. OH DOOR (TO BE REMOVED)
PROPOSED ADDITION
52,955 SF
FFE=888.00
PROPOSED DITCH
PROPOSED STORM SEWER
OVERLAND FLOW ROUTE (TYP)
EXISTING POND
100-YR HIGH WATER ELEVATION
876.52
GRADING ENCROACHMENT ON EXISTING POND
PROPOSED POND EXPANSION
"8" STORM (APPROXIMATE LOCATION)
6" C.M.P.=879.14
PRESERVE EXISTING TREES
NEW CONC. PATIO
887.85 PATIO 889.70 GND
887.90 PATIO 889.80 GND
887.85 PATIO 889.95 GND
ASPHALT DRIVE (0.783 ACRES IMPERVIOUS)
ASPHALT PARKING
LANDSCAPING
CONC. WALK
CONC. CURB
SIGN
TRANSFORMER PADS
FOUND 1" IRON PIPE
FOUND 1" IRON PIPE
FOUND 1" IRON PIPE
125'W.E.P.CO. EASEMENT PER C.S.M. NO.S 4553, 4772, 4804, 4843 & 4902
100.00'
62.5'
62.5'
E/L OF SWALE
N. LINE OF PARCEL 3, C.S.M. NO. 4902
PROPERTY LINE
FUTURE PARKING (5)
FUTURE PARKING (5)
60.00' POWER LINE EASEMENT
LANDS NOW OR FORMERLY WETLAND WATERWAY CONSULTING LLC 3-1-2021
LOT 1
LOT 2
CLOSURE
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PROJECT ADDRESS:

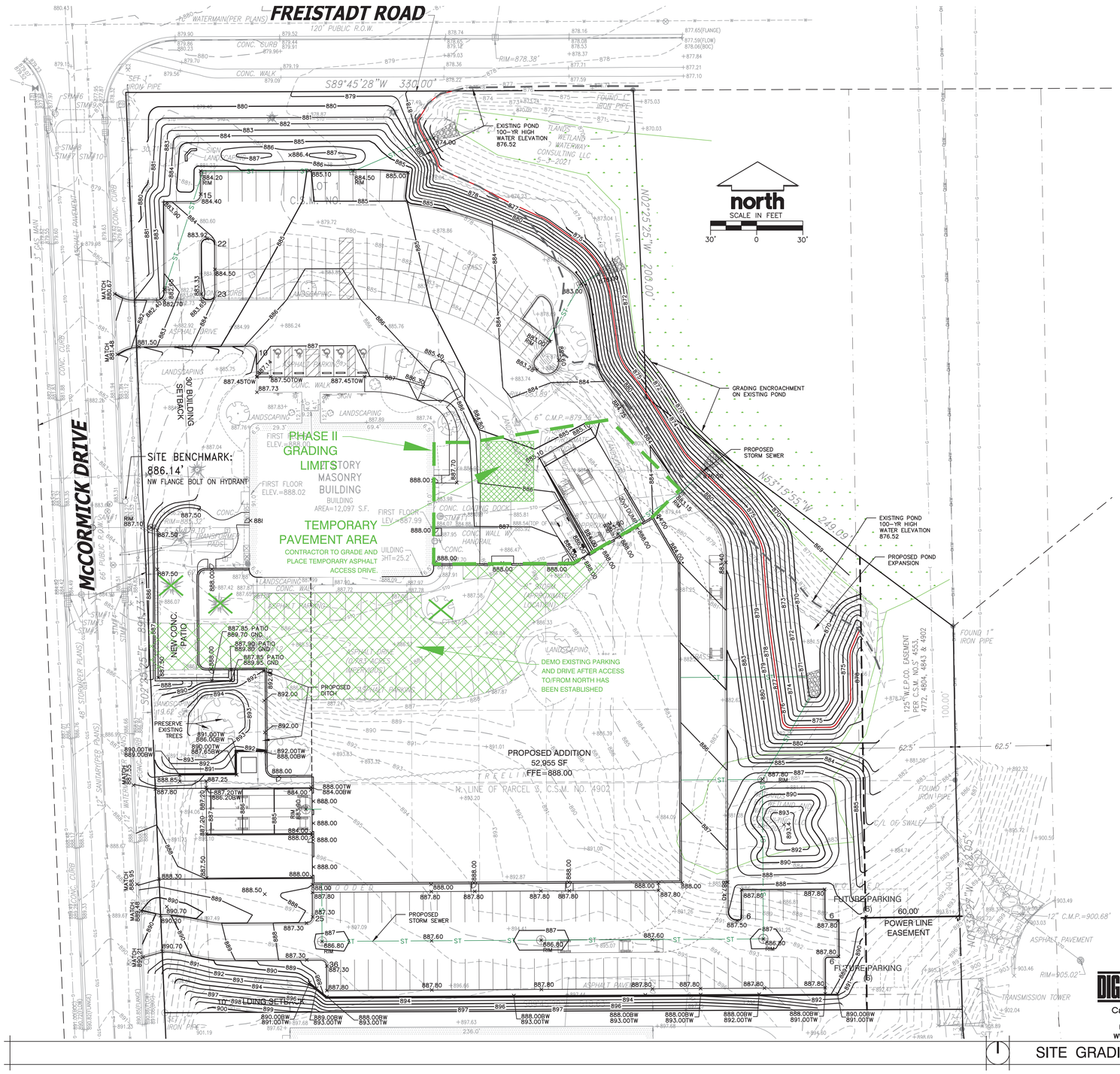
PROJECT NAME
Enercon Technical Center - Addition
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CITY/ STATE / ZIP
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Architect:	Engineer:	Reviewed By:
BGK	xxx	BGK

Sheet Title:
PHASE I GRADING & DRAINAGE PLAN
Sheet Number:
C-103A
Project Number: P12364
4529

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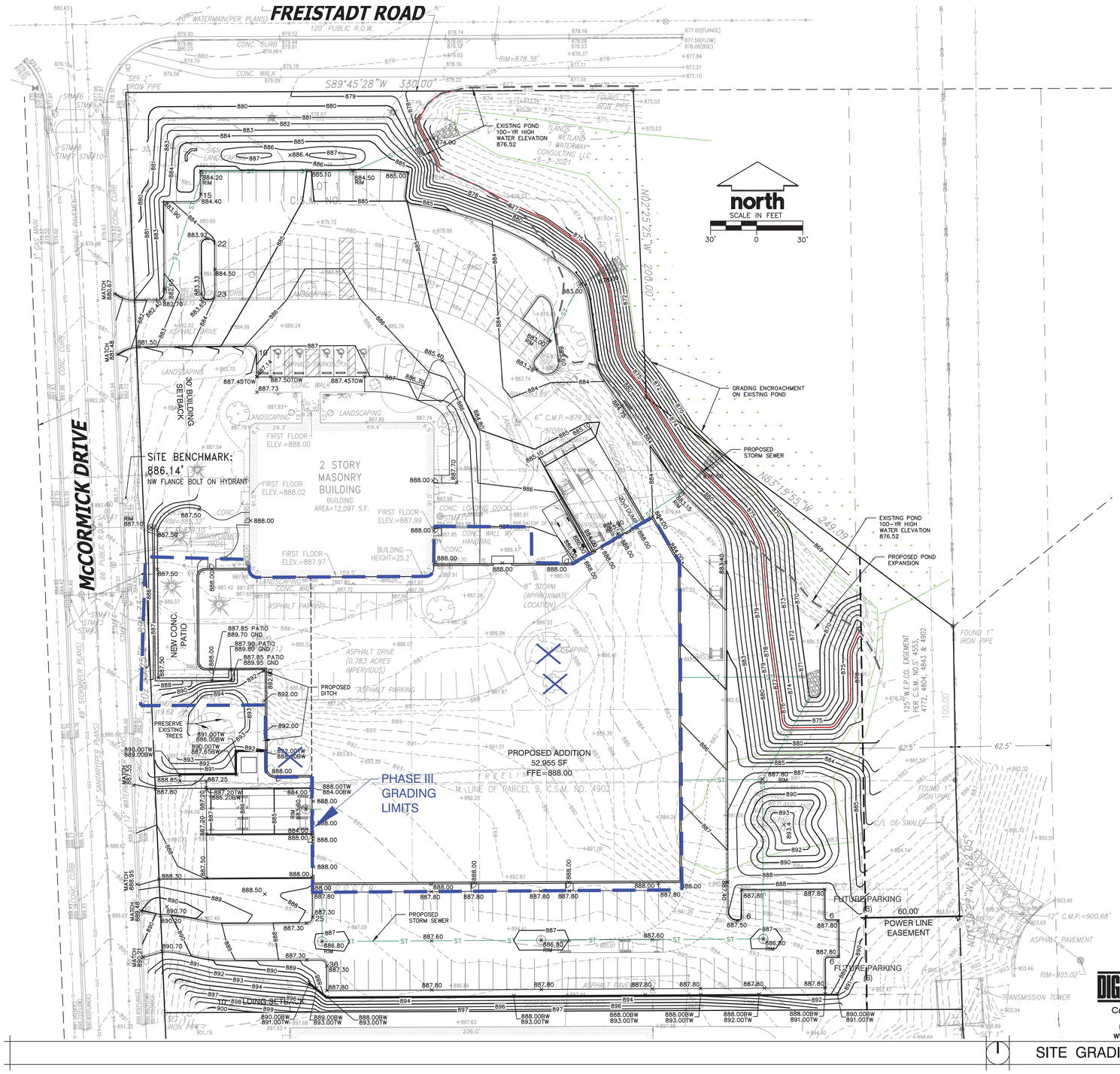
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PHASE II GRADING & DRAINAGE PLAN
Sheet Number:
C-103B
Project Number: P12364
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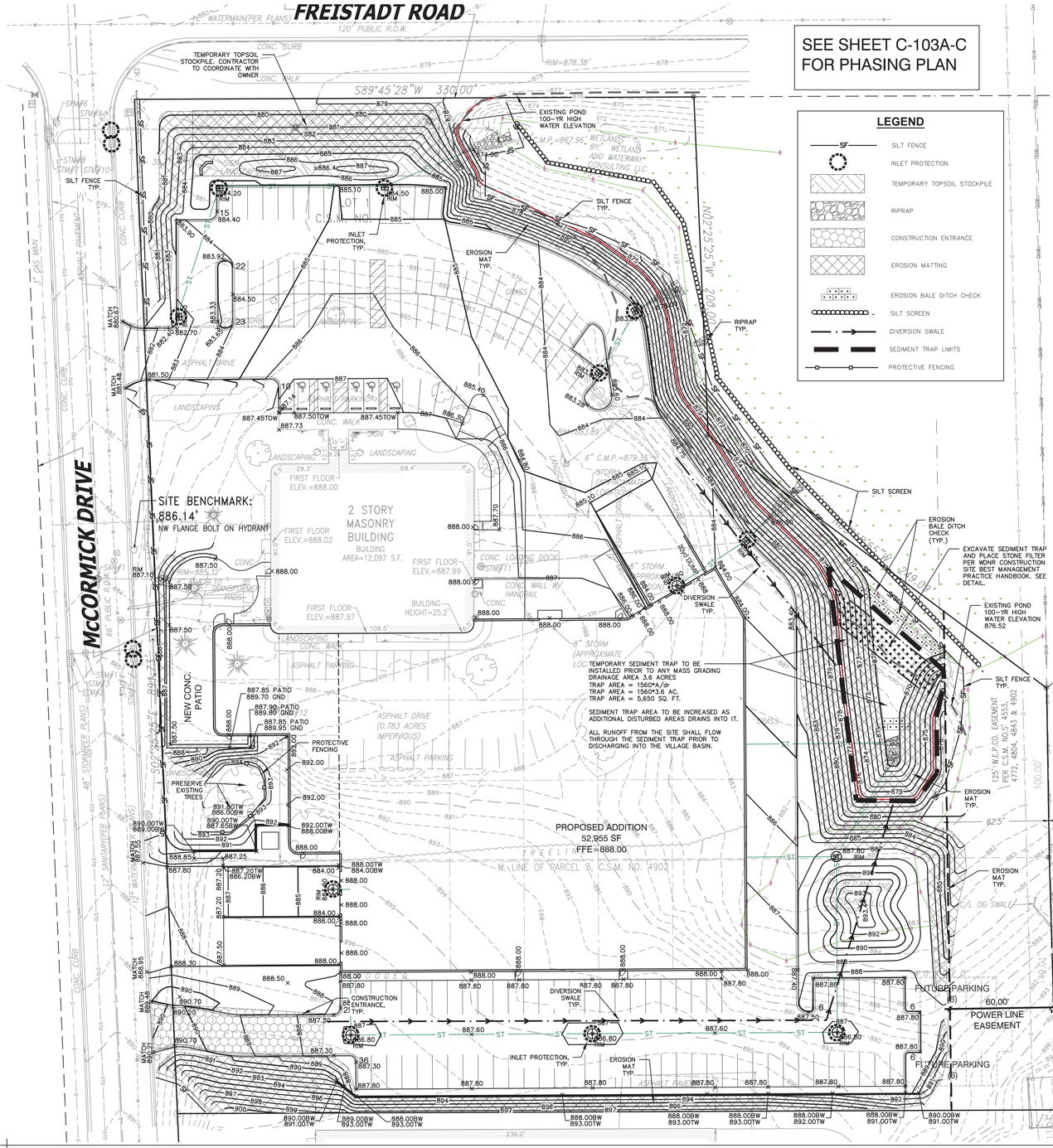
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Sheet Title:
PHASE III GRADING & DRAINAGE PLAN
Sheet Number:
C-103C
Project Number: P12364
4529

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EROSION AND SEDIMENT CONTROL NOTES:

1. ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN WISCONSIN'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) TECHNICAL STANDARDS (REFERRED TO AS BMP'S) AND VILLAGE OF GERMANTOWN ORDINANCE. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMP'S). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF, AND UNDERSTAND, THE BMP'S PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
2. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL CONTROL MEASURES AS DIRECTED BY JSD PROFESSIONAL SERVICES, INC. OR GOVERNING AGENCIES SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
3. MODIFICATIONS TO THE APPROVED EROSION CONTROL PLAN IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMP'S. ALL MODIFICATIONS MUST BE APPROVED BY JSD/MUNICIPALITY PRIOR TO DEVIATION OF THE APPROVED PLAN.
4. INSTALL PERIMETER EROSION CONTROL MEASURES (SUCH AS CONSTRUCTION ENTRANCES, SILT FENCE AND EXISTING INLET PROTECTION) PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE COVER, AS SHOWN ON PLAN IN ORDER TO PROTECT ADJACENT PROPERTIES/STORM SEWER SYSTEMS FROM SEDIMENT TRANSPORT.
5. CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL LOCATIONS OF VEHICLE INGRESS/EGRESS POINTS. CONTRACTOR IS RESPONSIBLE TO COORDINATE LOCATION(S) WITH THE PROPER AUTHORITIES, PROVIDE NECESSARY FEES AND OBTAIN ALL REQUIRED APPROVALS OR PERMITS. ADDITIONAL CONSTRUCTION ENTRANCES OTHER THAN AS SHOWN ON THE PLANS MUST BE PRIOR APPROVED BY THE APPLICABLE GOVERNING AGENCIES PRIOR TO INSTALLATION.
6. PAVED SURFACES ADJACENT TO CONSTRUCTION ENTRANCES SHALL BE SWEPT AND/OR SCRAPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR DUST AFTER THE END OF EACH WORK DAY AND AS REQUESTED BY THE GOVERNING AGENCIES.
7. ALL EXISTING STORM SEWER FACILITIES THAT WILL COLLECT RUNOFF FROM DISTURBED AREAS SHALL BE PROTECTED TO PREVENT SEDIMENT DEPOSITION WITHIN STORM SEWER SYSTEMS. INLET PROTECTION SHALL BE IMMEDIATELY FITTED AT THE INLET OF ALL INSTALLED STORM SEWER. ALL INLETS, STRUCTURES, PIPES, AND SWALES SHALL BE KEPT CLEAN AND FREE OF SEDIMENTATION AND DEBRIS.
8. EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, SANITARY SEWER, WATER MAIN, ETC.) OUTSIDE OF THE PERIMETER CONTROLS SHALL INCORPORATE THE FOLLOWING:
   - PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
   - BACKFILL, COMPACT, AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
   - DISCHARGE TRENCH WATER INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH BMP'S PRIOR TO RELEASE INTO STORM SEWER OR DITCHES.
9. AT A MINIMUM, SEDIMENT BASINS AND NECESSARY TEMPORARY DRAINAGE PROVISIONS SHALL BE CONSTRUCTED AND OPERATIONAL BEFORE BEGINNING OF SIGNIFICANT MASS GRADING OPERATIONS TO PREVENT OFFSITE DISCHARGE OF UNTREATED RUNOFF.
10. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR INSPECTION AND REPAIR DURING CONSTRUCTION. THE OWNER WILL BE RESPONSIBLE IF EROSION CONTROL IS REQUIRED AFTER THE CONTRACTOR HAS COMPLETED THE PROJECT.
11. TOPSOIL STOCKPILES SHALL HAVE A BERM OR TRENCH AROUND THE CIRCUMFERENCE AND PERIMETER SILT FENCE TO CONTROL SILT. IF TOPSOIL STOCKPILE REMAINS UNDISTURBED FOR MORE THAN SEVEN (7) DAYS, TEMPORARY SEEDING AND STABILIZATION IS REQUIRED.
12. EROSION CONTROL MEASURES TEMPORARILY REMOVED FOR UNAVOIDABLE CONSTRUCTION ACTIVITIES SHALL BE IN WORKING ORDER PRIOR TO THE COMPLETION OF EACH WORK DAY.
13. MAINTAIN SOIL EROSION CONTROL DEVICES THROUGH THE DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCES ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.
14. PUMPS MAY BE USED AS BYPASS DEVICES. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS.
15. GRADING EFFORTS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. EROSION AND SEDIMENT CONTROL MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES. ALL DISTURBED AREAS THAT WILL NOT BE WORKED FOR A PERIOD OF THIRTY (30) DAYS REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH TECHNICAL STANDARDS.
16. ALL DISTURBED SLOPES EXCEEDING 4:1 YET LESS THAN 3:1, SHALL BE STABILIZED WITH NORTH AMERICAN GREEN S75BN EROSION MATTING (OR APPROVED EQUAL) AND DISTURBED SLOPES EXCEEDING 3:1 YET LESS THAN 2:1 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN C125BN (OR APPROVED EQUAL) OR APPLICATION OF AN APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. EROSION MATTING AND/OR NETTING USED ONSITE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
17. DURING PERIODS OF EXTENDED DRY WEATHER, THE CONTRACTOR SHALL KEEP A WATER TRUCK ON SITE FOR THE PURPOSE OF WATERING DOWN SOILS WHICH MAY OTHERWISE BECOME AIRBORNE. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING WIND EROSION (DUST) DURING CONSTRUCTION AT HIS/HER EXPENSE.
18. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE VISUALLY INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM ON A DAILY BASIS.
19. QUALIFIED PERSONNEL (PROVIDED BY THE GENERAL/PRIME CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL 0.5-INCH, OR MORE, PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERVAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT. REPORTING SHALL BE IN ACCORDANCE WITH PART IV D.4. (a–f), OF THE NPDES GENERAL PERMIT. CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
20. THE CONTRACTOR SHALL INSPECT AND MAINTAIN SILT SCREEN REMOVING AND DISPOSING ALL CONSTRUCTION SEDIMENT COLLECTED BY THE SILT SCREEN.
21. THE FOLLOWING MAINTENANCE PRACTICES SHALL BE USED TO MAINTAIN, IN GOOD AND EFFECTIVE OPERATING CONDITIONS, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES, AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN. UPON IDENTIFICATION, DEFICIENCIES IN STORMWATER CONTROLS SHALL BE ADDRESSED IMMEDIATELY; THE MAINTENANCE PROCEDURES FOR THIS DEVELOPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO THE BELOW.
   - SILT FENCE – REPAIR OR REPLACE ANY DAMAGED FILTER FABRIC AND/OR STAKES. REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE ABOVE GROUND HEIGHT OF THE FENCE.
   - CONSTRUCTION ENTRANCE – AS NEEDED, ADD STONE TO MAINTAIN CONSTRUCTION ENTRANCE DIMENSIONS AND EFFECTIVENESS.
   - DITCH CHECK (STRAW BALES) – RE-SECURE STAKES; ADJUST OR REPOSITION BALES TO ADDRESS PROPER FLOW OF STORMWATER; AND REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE HEIGHT OF THE BALE.
   - EROSION CONTROL MATTING – REPAIR MATTING IMMEDIATELY IF INSPECTION REVEALS BREACHED OR FAILED CONDITIONS. REPAIR AND RE-GRADE SOIL WHERE CHANNELIZATION HAS OCCURRED.
   - DIVERSION BERM/SWALE – REPLACE OR RE-COMPACT THE CONSTRUCTION MATERIALS AS NECESSARY.
   - INLET PROTECTION – CLEAN, REPAIR OR REPLACE FILTER FABRIC AND/OR STONE WHEN CONTROL MEASURE IS CLOGGED. INLET FILTER BAGS SHALL BE REPLACED ONCE BAG BECOMES ONE-HALF FULL OF SEDIMENT.

ADDITIONAL POLLUTANT CONTROL MEASURES TO BE IMPLEMENTED DURING CONSTRUCTION ACTIVITIES SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING.

- CONSTRUCTION WASTE SHALL BE PROPERLY DISPOSED OF. THIS INCLUDES ALL CONSTRUCTION SITE WASTE MATERIAL, SANITARY WASTE, AND WASTE FROM VEHICLE TRACKING OF SEDIMENTS. THE CONTRACTOR SHALL ENSURE THAT NO MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, BURNED, OR DISCHARGED TO THE WATERS OF THE STATE. VEHICLES HAULING MATERIAL AWAY FROM THE SITE SHALL BE COVERED WITH A TARPAULIN TO PREVENT BLOWING DEBRIS.
- DUST CONTROL SHALL BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING METHODS:
  - A. COVERING 30% OR MORE OF THE SOIL SURFACE WITH A NON-ERODIBLE MATERIAL.
  - B. ROUGHENING THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND. RIDGES SHALL BE AT LEAST SIX (6) INCHES IN HEIGHT.
  - C. FREQUENT WATERING OF EXCAVATION AND FILL AREAS.
  - D. PROVIDING GRAVEL OR PAVING AT ENTRANCE/EXIT DRIVES, PARKING AREAS AND TRANSIT PATHS.
- STREET SWEEPING SHALL BE PERFORMED TO IMMEDIATELY REMOVE ANY SEDIMENT TRACKED ON PAVEMENTS.

CONSTRUCTION SITE SEQUENCING

1. INSTALL PERIMETER SILT FENCE, SILT SCREEN, SEDIMENT TRAP, EXISTING INLET PROTECTION, AND TEMPORARY CONSTRUCTION ENTRANCE.
2. STRIP AND STOCKPILE TOPSOIL, INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE.
3. CONDUCT ROUGH GRADING EFFORTS.
4. INSTALL UTILITY PIPING AND STRUCTURES, IMMEDIATELY INSTALL INLET PROTECTION.
5. COMPLETE FINAL GRADING, INSTALLATION OF GRAVEL BASE COURSES, PLACEMENT OF CURBS, PAVEMENTS, WALKS, ETC.
6. PLACE TOPSOIL AND IMMEDIATELY STABILIZE DISTURBED AREAS WITH EROSION CONTROLS.
7. EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER THAT MEETS OR EXCEEDS THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES DEFINITION OF 'FINAL STABILIZATION'.

CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM 1 AS NEEDED TO COMPLETE CONSTRUCTION IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS.

WINTER CONSTRUCTION SITE EROSION CONTROL

SEE DETAILS SHEET FOR NOTES

north
SCALE IN FEET
30' 0 30'

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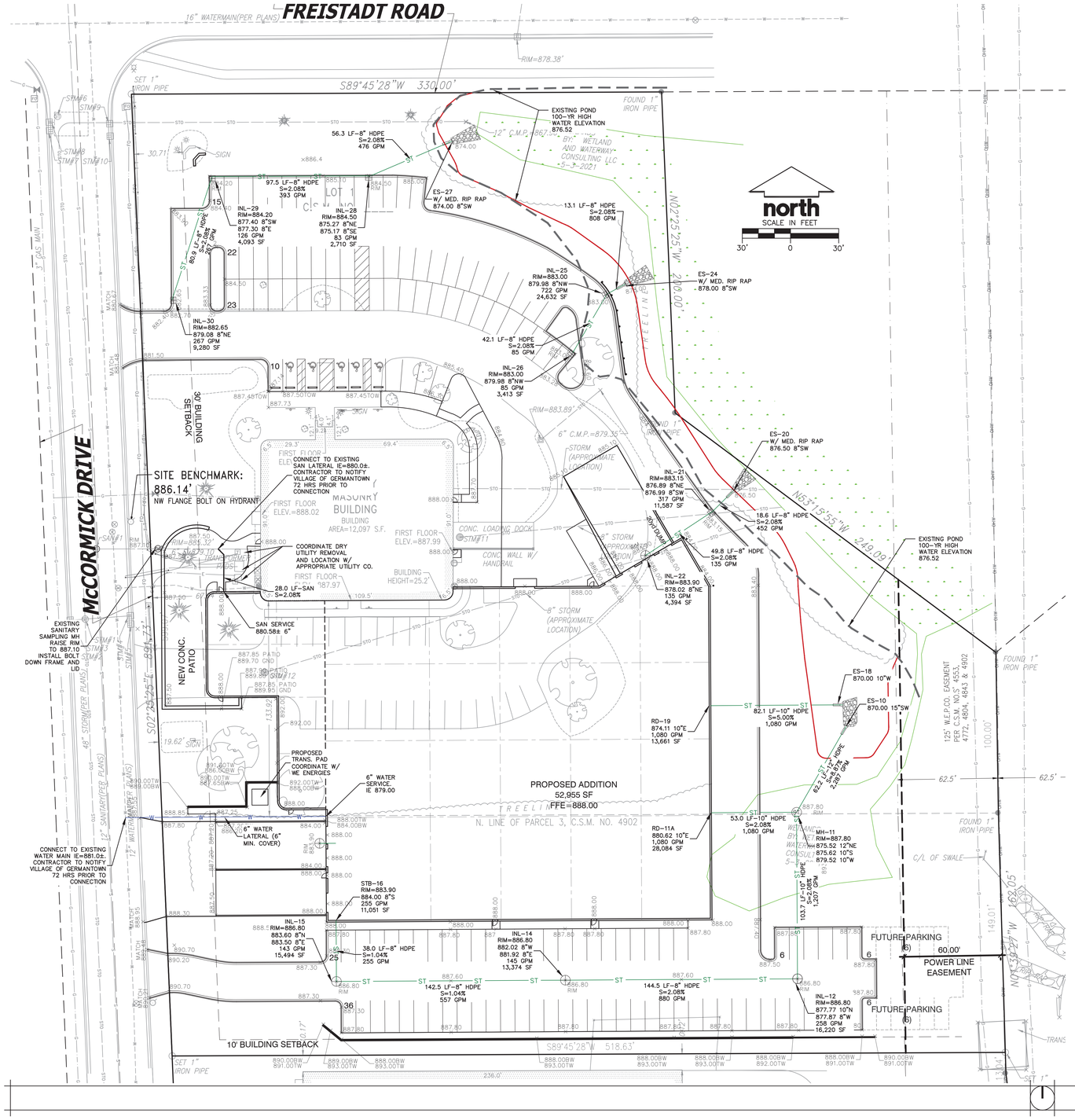
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BGK	xxx	BGK

Sheet Title:
SITE EROSION CONTROL PLAN
Sheet Number:
C-104
Project Number: P12364
4529

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SEE SHEET C-103A-C FOR PHASING PLANS

UTILITY NOTES

1. EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY FOR PROPOSED UTILITY CONNECTIONS AND/OR TO AVOID DAMAGE THERETO. CONTRACTOR SHALL CALL "DIGGER'S HOTLINE" PRIOR TO ANY CONSTRUCTION.
2. ALL UTILITY WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN (WISCONSIN LATEST EDITION AND ADDENDUM) AND ALL STATE AND LOCAL CODES AND SPECIFICATIONS. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE WHICH SPECIFICATIONS AND CODES APPLY, AND TO COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE APPROPRIATE LOCAL AND STATE AUTHORITIES.
3. UTILITY CONSTRUCTION AND SPECIFICATIONS SHALL COMPLY WITH THE VILLAGE OF GERMANTOWN SPECIAL PROVISIONS AND WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES DSPS 382.
4. TRACER WIRES SHALL BE INSTALLED AS NECESSARY IN ACCORD WITH 182.0715(2R) OF THE STATE STATUTES AND VILLAGE OF GERMANTOWN REQUIREMENTS.
5. LENGTHS OF PROPOSED UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLAN. LENGTHS ARE SHOWN FOR CONTRACTOR CONVENIENCE ONLY. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPUTATIONS OF MATERIALS REQUIRED TO COMPLETE WORK. LENGTHS SHALL BE FIELD VERIFIED DURING CONSTRUCTION.
6. CONTRACTOR SHALL ADJUST AND/OR RECONSTRUCT EXISTING UTILITY COVERS (SUCH AS MANHOLE COVERS, VALVE BOX COVERS, ETC.) TO MATCH FINISHED GRADES OF THE AREAS DISTURBED DURING CONSTRUCTION.
7. CONTRACTOR SHALL FIELD VERIFY LOCATIONS, ELEVATIONS, AND SIZES OF PROPOSED UTILITIES AND CHECK ALL UTILITY CROSSINGS FOR CONFLICTS PRIOR TO ATTEMPTING CONNECTIONS AND BEGINNING UTILITY CONSTRUCTION.
8. STORM SEWER SPECIFICATIONS –

   PIPE – REINFORCED CONCRETE PIPE (RCP) SHALL MEET THE REQUIREMENTS OF ASTM CLASS IV (MINIMUM) C–76 WITH RUBBER GASKET JOINTS CONFORMING TO ASTM C–443; HIGH DENSITY DUAL–WALL POLYETHYLENE N–12 CORRUGATED PIPE (HDPE) SHALL BE AS MANUFACTURED BY ADS OR EQUAL WITH WATER TIGHT JOINTS, AND SHALL MEET THE REQUIREMENTS OF AASHTO DESIGNATION M–294 TYPE "S", OR POLYVINYL CHLORIDE (PVC) – CLASS PS46 MEETING AASHTO SF78, AS NOTED.

   INLETS/CATCH BASINS – INLETS/CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FILE NO. 25 OF THE "STANDARD SPECIFICATIONS" WITH A 1'–8" X 2'–6" MAXIMUM OPENING. FRAME & GRATE SHALL BE NEENAH R–1580 WITH TYPE G GRATE, OR EQUAL. CURB FRAME & GRATE SHALL BE NEENAH R–3067, OR EQUAL.

   BACKFILL AND BEDDING – STORM SEWER SHALL BE CONSTRUCTED WITH GRAVEL BACKFILL AND CLASS "B" BEDDING IN ALL PAVED AREAS AND TO A POINT 5 FEET BEYOND THE EDGE OF PAVEMENT. TRENCHES RUNNING PARALLEL TO AND LESS THAN 5 FEET FROM THE EDGE OF PAVEMENT SHALL ALSO REQUIRE GRAVEL BACKFILL. LANDSCAPED AREAS MAY BE BACKFILLED WITH EXCAVATED MATERIAL IN CONFORMANCE WITH SECTION 8.43.5 OF THE "STANDARD SPECIFICATIONS".

   MANHOLE FRAMES AND COVERS – MANHOLE FRAMES AND COVERS SHALL BE NEENAH R–1642 WITH TYPE "B" SELF SEALING LIDS, NON–ROCKING OR EQUAL .

   FIELD TILE CONNECTION – ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE INCLUDED IN THE UNIT PRICE(S) FOR STORM SEWER. TILE LINES CROSSED BY THE TRENCH SHALL BE REPLACED WITH THE SAME MATERIAL AS THE STORM SEWER.
9. FOR STORM SEWER CALCULATIONS, SEE DETAILS SHEET.

LEGEND

S	SANITARY SEWER MANHOLE	SAN	SANITARY SEWER
ST	STORM MANHOLE	W	WATER MAIN
	CATCH BASIN ROUND	ST	STORM SEWER
	CATCH BASIN SQUARE	RD	ROOF DRAIN
	FIRE HYDRANT	G	UNDERGROUND GAS
	WATER VALVE	E	UNDERGROUND ELECTRIC
	GAS VALVE	T	UNDERGROUND TELEPHONE
	LIGHT POLE	FIB	UNDERGROUND FIBER OPTICS
T	TELEPHONE PEDESTAL	OH	OVERHEAD UTILITY
E	ELECTRICAL MANHOLE	SF	SILT FENCE
	SIGN		CONIFEROUS TREE
	POWER POLE		DECIDUOUS TREE
	GUY WIRE		

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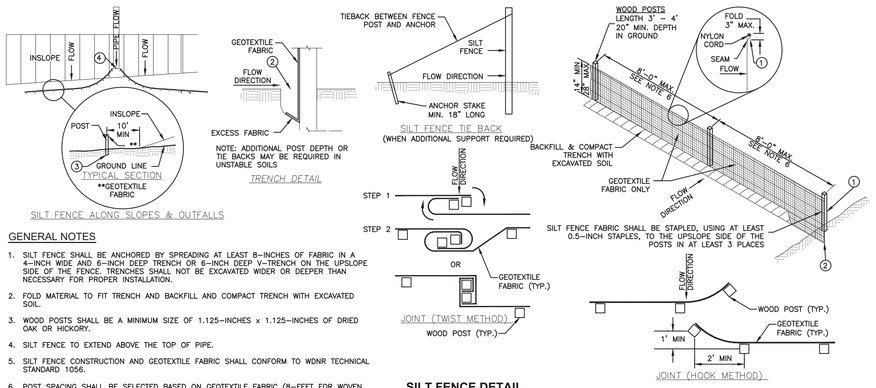
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SITE UTILITY PLAN

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4529

MANAGERS . ENGINEERS . CONTRACTORS . ARCHITECTS

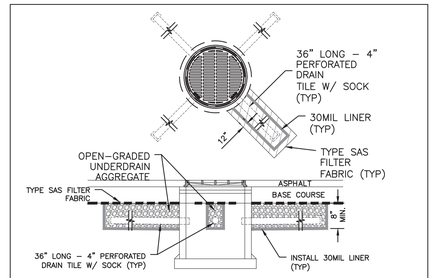


SILT FENCE ALONG SLOPES & OUTFALLS

GENERAL NOTES

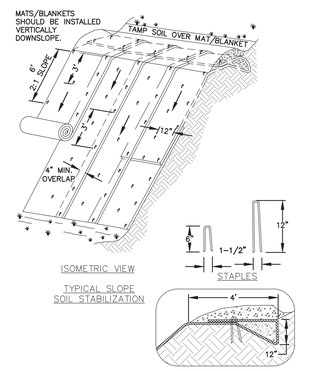
1. SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8–INCHES OF FABRIC IN A 4–INCH WIDE AND 6–INCH DEEP TRENCH OR 6–INCH DEEP V–TRENCH ON THE UPSLOPE SIDE OF THE FENCE. TRENCHES SHALL NOT BE EXCAVATED WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.
2. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1.125–INCHES x 1.125–INCHES OF DRIED OAK OR HICKORY.
4. SILT FENCE TO EXTEND ABOVE THE TOP OF PIPE.
5. SILT FENCE CONSTRUCTION AND GEOTEXTILE FABRIC SHALL CONFORM TO WDNR TECHNICAL STANDARD 1056.
6. POST SPACING SHALL BE SELECTED BASED ON GEOTEXTILE FABRIC (8–FEET FOR WOVEN & 3–FEET FOR NON–WOVEN)

SILT FENCE DETAIL
N.T.S.



NOTE:
1. UNDERDRAINS SHALL BE INSTALLED ON ALL INLET/CATCH BASINS LOCATED WITHIN IMPERVIOUS PAVEMENTS.
2. UNDERDRAIN CONNECTIONS SHALL BE CORED ONSITE OR PRECAST.
3. UNDERDRAIN VERTICAL LOCATION MAY VARY DEPENDING ON STORM SEWER PIPE LOCATION.
4. ALTERNATIVE DESIGN MAY BE SUBSTITUTED IF SHOP DRAWINGS ARE SUBMITTED AND APPROVED BY JSD AND VILLAGE OF GERMANTOWN.

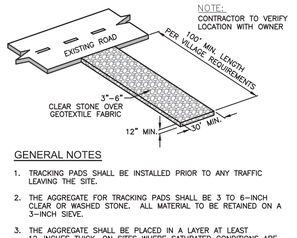
CATCH BASIN UNDERDRAIN DETAIL
N.T.S.



GENERAL NOTES:

1. EROSION MAT CONSTRUCTION SHALL BE IN ACCORDANCE WITH WISCONSIN DNR TECHNICAL STANDARD 1052 "NON–CHANNEL EROSION MAT".
2. ONLY WisDOT EROSION CONTROL PRODUCT ACCEPTABILITY LIST (PAL) APPROVED MATS SHALL BE ALLOWED. REFER TO EROSION CONTROL PLAN FOR EXACT MAT CLASSIFICATION.
3. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
4. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
5. ONLY WisDOT EROSION CONTROL PRODUCT ACCEPTABILITY LIST (PAL) APPROVED MATS SHALL BE ALLOWED. REFER TO EROSION CONTROL PLAN FOR EXACT MAT CLASSIFICATION.

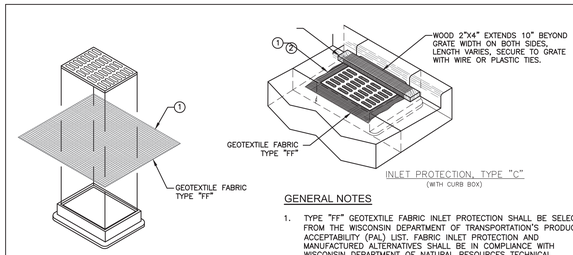
EROSION MATTING
N.T.S.



GENERAL NOTES

1. TRACKING PADS SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE SITE.
2. THE AGGREGATE FOR TRACKING PADS SHALL BE 3 TO 6–INCH CLEAR OR WASHED STONE. ALL MATERIAL TO BE RETAINED ON A 3–INCH SIEVE.
3. THE AGGREGATE SHALL BE PLACED IN A LAYER AT LEAST 12–INCHES THICK. ON SITES WHERE SATURATED CONDITIONS ARE EXPECTED DURING THE LIFE OF THE PAD, THE PAD SHALL BE UNDERLAIN WITH WisDOT TYPE "R" GEOTEXTILE FABRIC TO PREVENT MIGRATION OF UNDERLYING SOILS INTO THE STONE LAYER.
4. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT. THE TRACKING PAD SHALL BE A MINIMUM 100–FEET LONG.
5. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, AT THE END OF EACH WORKING DAY.
6. TRACKING PADS SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24–HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5–INCHES OF RAIN OR MORE DURING A 24–HOUR PERIOD.
7. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED BY SCRAPING OR TOP–DRESSING WITH ADDITIONAL AGGREGATE.

CONSTRUCTION ENTRANCE
N.T.S.



TYPE "B" INSTALLATION NOTES

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHODS TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

GENERAL NOTES

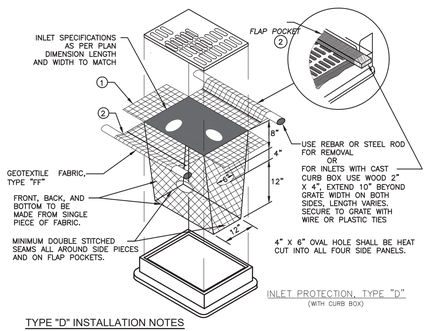
1. TYPE "FF" GEOTEXTILE FABRIC INLET PROTECTION SHALL BE SELECTED FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S PRODUCT ACCEPTABILITY (PAL) LIST. FABRIC INLET PROTECTION AND MANUFACTURED ALTERNATIVES SHALL BE IN COMPLIANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARD 1060.
2. WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKET WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE "C" (WITH CURB BOX), AN ADDITIONAL 18 INCHES OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

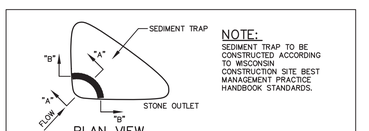
③ FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.

INLET PROTECTION
N.T.S.



TYPE "D" INSTALLATION NOTES

1. DO NOT INSTALL INLET PROTECTION TYPE "D" IN INLETS SHALLOWER THAN 30 INCHES, MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.
2. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE GRATE.
3. THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3 INCHES. WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3 INCHES CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4 INCHES FROM THE BOTTOM OF THE BAG.

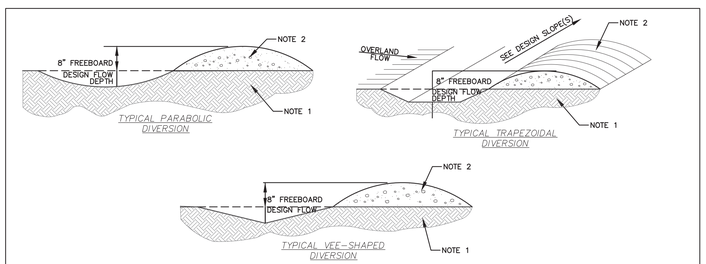


NOTE:
SEDIMENT TRAP TO BE CONSTRUCTED ACCORDING TO WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK STANDARDS.

NOTE:
SEE WDNR CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK FOR DETAILS.

SEDIMENT TRAP
N.T.S.

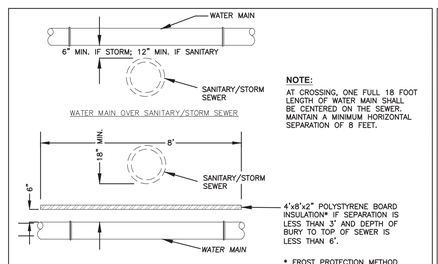
REV. 11–19–2018



GENERAL NOTES:

1. REMOVE ANY EXISTING VEGETATION AND SCARIFY OR BENCH ADJACENT SOILS PRIOR TO PLACING BERM.
2. SIDE SLOPES OF BERM SHALL BE STABILIZED AS SOON AS THEY ARE CONSTRUCTED.
3. BERM SHALL NOT BE CONSTRUCTED OF TOPSOIL.

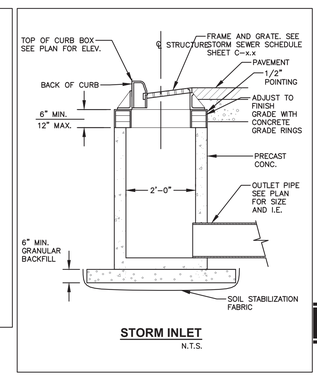
DIVERSION SWALES
N.T.S.



NOTE:
AT CROSSING, ONE FULL 18 FOOT LENGTH OF WATER MAIN SHALL BE CENTERED ON THE SEWER. MAINTAIN A MINIMUM HORIZONTAL SEPARATION OF 8 FEET.

* FROST PROTECTION METHOD TO FOLLOW SPS 382.30(11)(c)

SEWER - WATER MAIN SEPARATION
N.T.S.



STORM INLET
N.T.S.

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www.jsdinc.com
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JSD PROJ. MGR.: RWI

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P.O. BOX. 7
OCONOMOWOC, WI 53066
PHONE: 262-367-3661

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ISSUE DATES:	
Owner Review:	11.03.2020
Property Acquisition Review:	2.09.2021
Owner Review:	6.09.2021
Bid Set:	
State Submittal / Permit:	
As-Built:	

REVISIONS:	
1	Address Village Comments 9.01.2021
2	Address Village Comments 9.23.2021
3	Client/Owner Comments 10.04.2021
3	Client/Owner Revisions 11.29.2021

enercon

PROJECT ADDRESS:

PROJECT NAME
Enercon Technical Center - Addition
STREET ADDRESS
N120 W19349 Freistadt Rd.
CITY/ STATE / ZIP
Germantown, WI 53022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect:	Engineer:	Reviewed By:
BGK	xxx	BGK

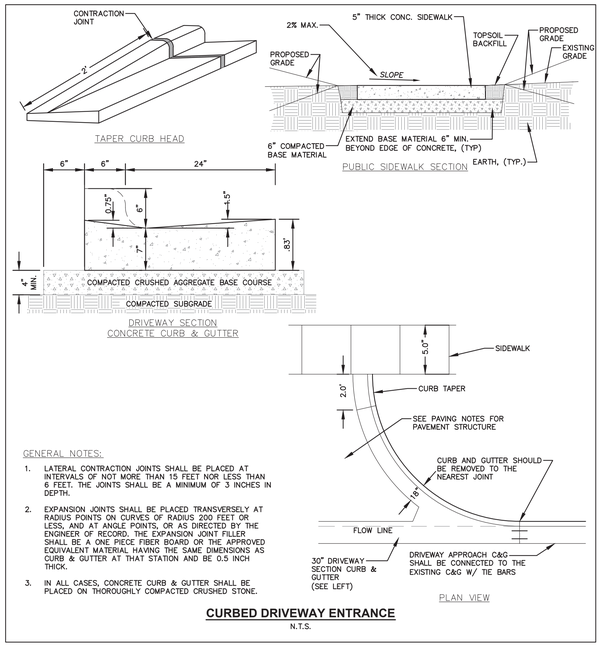
Sheet Title:
SITE DETAILS

Sheet Number:
C-106

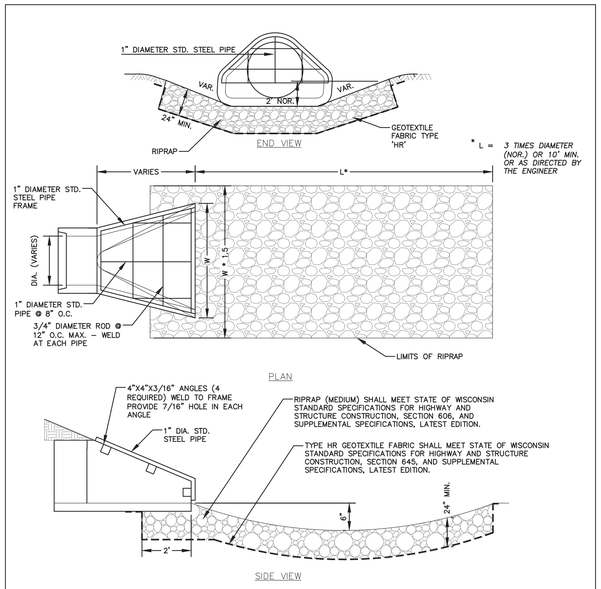
Project Number: P12364
4529

MANAGERS . ENGINEERS . CONTRACTORS . ARCHITECTS

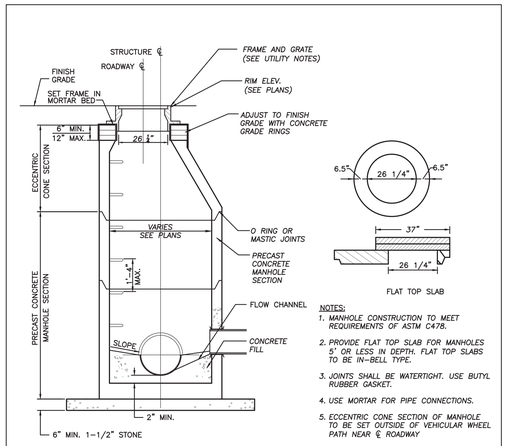
1 SITE DETAILS



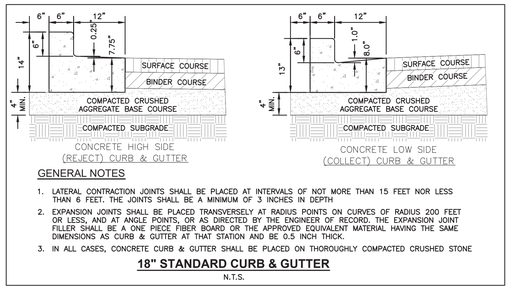
CURBED DRIVEWAY ENTRANCE
N.T.S.



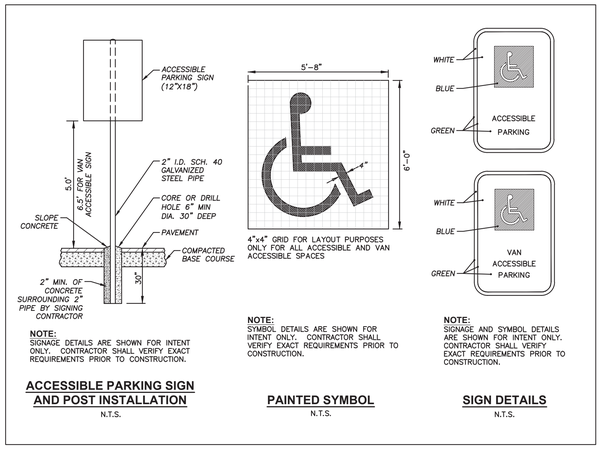
APRON ENDWALL WITH GRATE
N.T.S.

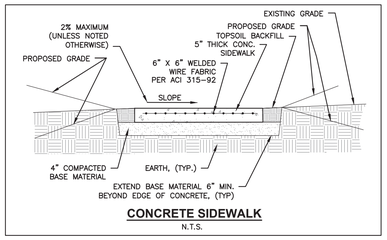


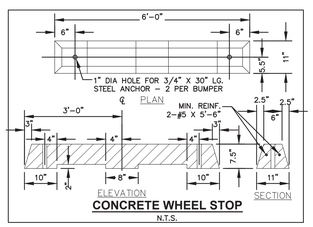
STANDARD STORM INLET/MH DETAIL
N.T.S.

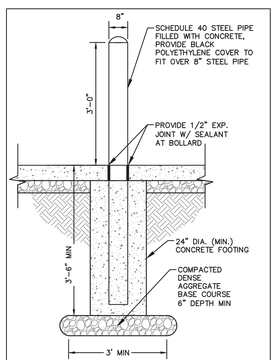


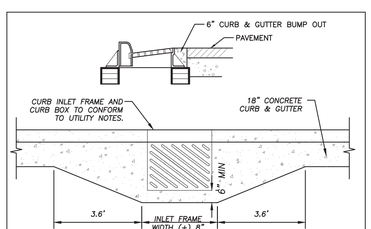
18" STANDARD CURB & GUTTER
N.T.S.











PAVEMENT THICKNESS NOTES

ALL PAVING SHALL CONFORM TO "STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY & STRUCTURE CONSTRUCTION – CURRENT EDITION AND ADDENDUM, APPLICABLE VILLAGE OF GERMANTOWN ORDINANCES, AND THE GEOTECHNICAL ENGINEERING SERVICES REPORT PREPARED BY CGC, INC, DATED MARCH 25, 2021.

**** FINAL PAVEMENT DESIGN TO BE DETERMINED BY OWNER BASED ON GEOTECHNICAL ENGINEER OF RECORD RECOMMENDATIONS. ALL PAVING SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER OF RECORDS RECOMMENDATIONS AS SPECIFIED IN THE SAID GEOTECHNICAL REPORT.**

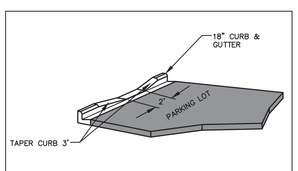
MINIMUM PAVEMENT STRUCTURE

CONCRETE PAVEMENT (TRUCK DOCK, DOLLY PAD, APRON DRIVE–IN ENTRANCE, TRASH PAD)
7" CONCRETE W/ MESH REINFORCEMENT & 12" THICKENED EDGES
6" CRUSHED AGGREGATE BASE COURSE (1–1/4" DENSE GRADED LIMESTONE)
CLEAN RECYCLED CRUSHED CONCRETE MAY BE USED IF APPROVED BY GEOTECH ENGINEER OF RECORD.

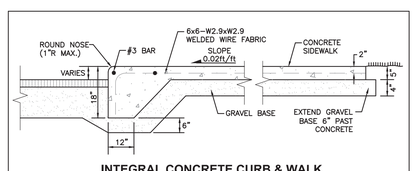
HEAVY DUTY ASPHALT PAVEMENT
5" ASPHALTIC CONCRETE (2 LIFTS)
UPPER LAYER (1.75" SURFACE, SEC. 460, TABLE 461–1, 9.5 mm)
LOWER LAYER (3.25" BINDER, SEC. 460, TABLE 461–1, 12.5 mm)
10" CRUSHED AGGREGATE BASE COURSE (SEC. 301 & 305, 3 in & 1–1/4 in)
CLEAN RECYCLED CRUSHED CONCRETE MAY BE USED IF APPROVED BY GEOTECH ENGINEER OF RECORD.
GEO GRID OVER COMPACTED SUBGRADE

LIGHT DUTY ASPHALT PAVEMENT
4" ASPHALTIC CONCRETE (2 LIFTS)
UPPER LAYER (1.5" SURFACE, SEC. 460, TABLE 461–1, 9.5 mm)
LOWER LAYER (2.5" BINDER, SEC. 460, TABLE 461–1, 12.5 mm)
9" CRUSHED AGGREGATE BASE COURSE (SEC. 301 & 305, 3 in & 1–1/4 in)
CLEAN RECYCLED CRUSHED CONCRETE MAY BE USED IF APPROVED BY GEOTECH ENGINEER OF RECORD.
GEO GRID OVER COMPACTED SUBGRADE

CONCRETE SIDEWALK AND STOOPS
5" CONCRETE
4" CRUSHED AGGREGATE BASE COURSE
CLEAN RECYCLED CRUSHED CONCRETE MAY BE USED IF APPROVED BY GEOTECH ENGINEER OF RECORD.



CURB OPENING
N.T.S.



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OCONOMOWOC, WI 53066
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As-Built:	

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PROJECT ADDRESS:
PROJECT NAME
Enercon Technical Center - Addition
STREET ADDRESS
N120 W19349 Freistadt Rd.
CITY/ STATE / ZIP
Germantown, WI 53022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect:	Engineer:	Reviewed By:
BGK	xxx	BGK

Sheet Title:
SITE DETAILS

Sheet Number:
C-106A

Project Number: P12364
4529

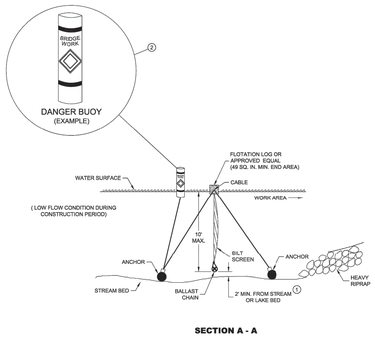
ENGINEERS . MANAGERS . CONTRACTORS . ARCHITECTS

SDD 08E12 Silt Screen

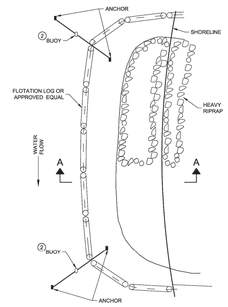
GENERAL NOTES

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

1. 2' MINIMUM SHALL BE MAINTAINED DURING CONSTRUCTION PERIOD.
2. USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



SECTION A - A



PLAN VIEW

SILT SCREEN PLACEMENT DETAIL

SILT SCREEN	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 6/04/02 DATE	/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

SDD 08E12 - 01

SDD 08E12 - 01

SILT SCREEN DETAIL

WINTER CONSTRUCTION SITE EROSION CONTROL

GENERAL:

1. A PROJECT INVOLVING CONSTRUCTION BETWEEN NOVEMBER 1 AND MAY 1WILL REQUIRE MEASURES TO STABILIZE THE SITE OVER WINTER. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, GRAVEL ROAD BASE OR 70 PERCENT MATURE VEGETATIVE COVER OR RIP-RAP BY NOVEMBER 1, THEN THE SITE MUST BE PROTECTED WITH OVER-WINTER STABILIZATION PRACTICES.
2. CONSIDERATIONS: WINTER EXCAVATION AND EARTHWORK ACTIVITIES SHOULD BE LIMITED IN EXTENT AND DURATION TO MINIMIZE POTENTIAL EROSION AND SEDIMENTATION IMPACTS. EXPOSE ONLY AS MUCH AREA AS NECESSARY TO COMPLETE THE WORK AND CAN BE STABILIZED IN 1 DAY PRIOR TO ANY RAIN OR SNOW EVENT. 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.

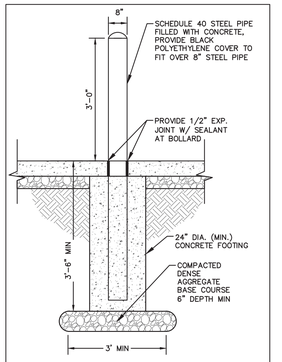
MAINTENANCE REQUIREMENTS:

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 PERFORM REPAIRS AS NEEDED TO ENSURE THEIR CONTINUING FUNCTION.
2. FOR ANY AREA STABILIZED BY TEMPORARY OR PERMANENT SEEDING PRIOR TO NOVEMBER 1, THE CONTRACTOR SHOULD CONDUCT AN INSPECTION IN THE SPRING 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 PERCENT AREA VEGETATED WITH HEALTHY, VIGOROUS GROWTH).
3. SPECIFICATIONS; TO ADEQUATELY PROVIDE SEDIMENT AND EROSION CONTROL DURING COLD WEATHER AND EARLY SPRING RUNOFF, THE FOLLOWING STABILIZATION TECHNIQUES SHALL BE EMPLOYED DURING THE PERIOD FROM NOVEMBER 1 TO MAY 1. 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.
4. II. STABILIZATION AS FOLLOWS SHOULD BE COMPLETED WITHIN 7 DAYS OF ESTABLISHING FINAL GRADE OR THAT WILL OTHERWISE EXIST FOR MORE THAN 14 DAYS:

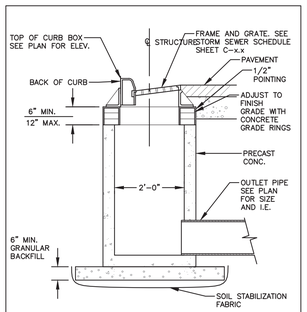
4.1. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE LESS THAN 15 PERCENT WHICH DO NOT EXHIBIT A MINIMUM 70 PERCENT VEGETATIVE GROWTH BY NOVEMBER 1, OR WHICH IS DISTURBED AFTER NOVEMBER 1, SHOULD BE DORMANT SEEDED AT A RATE 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND COVERED WITH 2 TO 3 TONS OF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

4.2. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE GREATER THAN 15 PERCENT WHICH DO NOT EXHIBIT A MINIMUM OF 70 PERCENT 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.

5. ALL STONE COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 1.
6. INSTALLATION OF ANCHORED HAY OR STRAW MULCH SHOULD NOT OCCUR OVER SNOW GREATER THAN 1 INCH IN DEPTH.
7. ALL MULCH APPLIED DURING WINTER SHOULD BE ANCHORED WITH NETTING OR TACKIFIER FROM WISDOT PRODUCT ACCEPTABILITY LIST.
8. STOCKPILES OF SOIL MATERIALS SHOULD BE SEEDED AND MULCHED FOR OVERWINTER 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 SNOWFALL. NO SOIL STOCKPILE SHOULD BE LOCATED WITHIN 25 FEET OF ANY WETLAND OR OTHER WATER RESOURCE AREA. SOIL STABILIZER TYPE A OR EROSION CONTROL BLANKET MAY BE USED IN LIEU OF MULCH.
9. FROZEN MATERIALS SHOULD BE STOCKPILED SEPARATELY AND IN A LOCATION THAT IS AWAY FROM ANY AREA NEEDING TO BE PROTECTED. STOCKPILES OF FROZEN MATERIAL CAN MELT IN THE SPRING AND BECOME UNWORKABLE AND DIFFICULT TO TRANSPORT DUE TO HIGH MOISTURE CONTENT IN THE SOIL.
10. INSTALLATION OF EROSION CONTROL BLANKETS SHOULD NOT OCCUR OVER SNOW OF GREATER THAN 1 INCH IN DEPTH OR OVER FROZEN GROUND.
11. 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 PERCENT VEGETATIVE GROWTH BY NOVEMBER 1, OR WHICH ARE DISTURBED AFTER NOVEMBER 1, SHOULD BE STABILIZED WITH TEMPORARY STONE AND FILTER FABRICOR TEMPORARY SEED AND EROSION CONTROL BLANKETS APPROPRIATE TO THE DESIGN FLOW CONDITIONS.
12. ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 1.
13. SEDIMENT BARRIERS THAT ARE INSTALLED DURING FROZEN CONDITIONS SHOULD CONFORM TO CONSERVATION PRACTICE STANDARD 1071 V.C.1.C 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 BARRIERS.
14. 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 INCH LAYER OF SAND AND GRAVEL WITH A GRADATION CONFORMING TO TABLE 37 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.



CONCRETE BOLLARD
N.T.S.



STORM INLET
N.T.S.

DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES STORM SEWER CALCULATIONS

Project Name: ENERCON TECH. CENTER
Project Location: Germantown
JSD Project Number: 20-10204
Performed by: PSM
Date: 11/22/2021

MILWAUKEE REGIONAL OFFICE
W238N1610 Busse Road, Ste 100
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Ph: (262) 513-0666 Fax: (262) 513-1232

MADISON REGIONAL OFFICE
161 Horizon Drive, Suite 101
Verona, Wisconsin 53593
Ph: (608) 848-5060 Fax: (608) 848-2255

JSD Professional Services, Inc.
• Engineers • Surveyors • Planners

Structure abbreviations are as follows: ES - End Section, MH - Manhole, FI - Field Inlet, TD - Trench Drain, BC - Building Connection, RD - Roof Drain, STB - Stub

PIPE LOCATION		CONTRIBUTING AREA			PIPE FLOW			PIPE DATA				PIPE CAPACITY INFORMATION					DROP	ELEVATIONS			
						TOTAL FLOW						ACTUAL FLOW									
UP STRUCT	DOWN STRUCT	ROOF (SQ FT)	PAVED (SQ FT)	GRASS (SQ FT)	AREA RUNOFF (GPM)	(GPM)	(CFS)	LENGTH (FT)	DIA. (IN)	SLOPE (FT/FT)	Manning's n PVC=0.011 HDPE=0.012 RCP=0.013	REQD DROP	ACTUAL DROP	PARTS FULL	VEL (FPS)	FULL FLOW (CFS)	THRU STRUCT (FT)	RIM/(F/L) UP	INVERT UP	INVERT DOWN	COVER TO CROWN (FT)
STB-16	**INL-15**	0	7048	4003	255	255	0.57	**38.0**	**8**	**0.0104**	**0.012**	0.07	0.40	0.47	3.76	1.33	0.00	**888.00**	**884.00**	**883.60**	3.27
INL-15	**INL-15**	0	7220	8274	302	557	1.24	**142.5**	**8**	**0.0104**	**0.012**	1.28	1.48	0.84	4.35	1.33	0.00	**886.80**	**883.50**	**882.02**	2.56
INL-14	**INL-14**	0	9184	4190	323	880	1.96	**144.5**	**8**	**0.0280**	**0.012**	3.24	4.05	0.80	7.11	2.19	0.00	**886.80**	**881.92**	**877.87**	4.15
INL-12	**MH-11**	0	8081	8139	327	1207	2.69	**103.7**	**10**	**0.0208**	**0.012**	1.33	2.16	0.71	6.96	3.42	0.00	**886.80**	**877.77**	**875.62**	8.11
MH-11	**EW-10**	0	0	0	0	2287	5.10	**62.2**	**12**	**0.0887**	**0.012**	1.08	5.52	0.47	14.38	11.49	0.00	**887.80**	**875.52**	**870.00**	11.18
RD-11A	**INL-11**	28,084	0	0	1080	1080	2.41	**53.0**	**10**	**0.0208**	**0.012**	0.54	1.10	0.66	6.82	3.42	0.00	**886.60**	**880.62**	**879.52**	5.06
RD-19	**ES-18**	41,077	0	0	1580	1580	3.52	**82.1**	**10**	**0.0500**	**0.012**	1.81	4.11	0.63	10.44	5.31	0.00	**885.30**	**874.11**	**870.00**	10.28
INL-22	**INL-21**	0	4394	0	135	135	0.30	**49.8**	**8**	**0.0208**	**0.012**	0.03	1.04	0.25	4.20	1.89	0.00	**883.90**	**878.02**	**876.99**	5.14
INL-21	**ES-20**	0	9716	1871	317	452	1.01	**18.6**	**8**	**0.0208**	**0.012**	0.11	0.39	0.55	5.58	1.89	0.00	**883.15**	**876.89**	**876.50**	5.53
INL-26	**INL-25**	0	2478	935	85	85	0.19	**42.1**	**8**	**0.0208**	**0.012**	0.01	0.88	0.18	3.70	1.89	0.00	**883.00**	**879.25**	**878.37**	3.02
INL-25	**ES-24**	0	22951	1681	722	808	1.80	**13.1**	**8**	**0.0208**	**0.012**	0.25	0.27	0.87	6.17	1.89	0.00	**883.00**	**878.27**	**878.00**	3.99
INL-30	**INL-29**	0	8392	888	267	267	0.59	**80.9**	**8**	**0.0208**	**0.012**	0.17	1.68	0.36	4.82	1.89	0.00	**882.65**	**879.08**	**877.40**	2.83
INL-29	**INL-28**	0	4093	0	126	393	0.87	**97.5**	**8**	**0.0208**	**0.012**	0.44	2.03	0.47	5.31	1.89	0.00	**884.20**	**877.30**	**875.27**	6.17
INL-28	**ES-27**	0	2710	0	83	476	1.06	**56.3**	**8**	**0.0208**	**0.012**	0.37	1.17	0.55	5.58	1.89	0.00	**884.50**	**875.17**	**874.00**	8.60

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MSI GENERAL

MSI GENERAL CORPORATION
P.O. BOX. 7
OCONOMOWOC, WI 53066
PHONE: 262-367-3661

WWW.MSIGENERAL.COM
SINGLE SOURCE RESPONSIBILITY ™

ISSUE DATES:	
Owner Review:	11.03.2020
Property Acquisition Review:	2.09.2021
Owner Review:	6.09.2021
Bid Set:	
State Submittal / Permit:	
As-Built:	
REVISIONS:	
1	Address Village Comments 9.01.2021
2	Address Village Comments 9.23.2021
3	Client/Owner Comments 10.04.2021
3	Client/Owner Revisions 11.29.2021

Enercon

PROJECT ADDRESS:

PROJECT NAME
Enercon Technical Center - Addition
STREET ADDRESS
N120 W19349 Freistadt Rd.
CITY/ STATE / ZIP
Germantown, WI 53022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect:	Engineer:	Reviewed By:
BGK	xxx	BGK

Sheet Title:
SITE DETAILS

Sheet Number:
C-106B

Project Number: P12364

4529

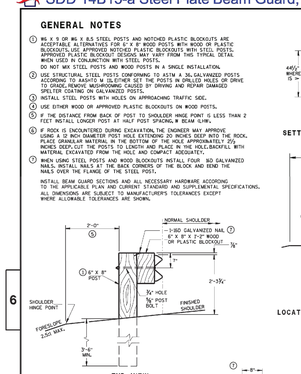
ARCHITECTS . ENGINEERS . MANAGERS . CONTRACTORS

SDD 14B15-a Steel Plate Beam Guard, Class "A", Installation and Elements

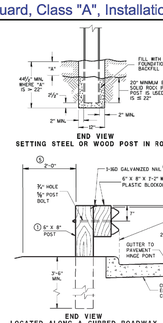
GENERAL NOTES

1. W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE THE STANDARD. AS AN ALTERNATE, 6" x 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS, OR APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS, APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.
   DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.
2. USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36,GALVANIZED POSTS TO CONFORM TO AASHTO M 111. DO NOT USE THE POSTS IN DRILLED HOLES OR DRIVE SLEEVES. REMOVE MISPUNCHINGS CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.
3. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
4. USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.
5. IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).
6. IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 20 INCHES DEEP, CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE, BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.
7. WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 8D GALVANIZED NAILS, INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.

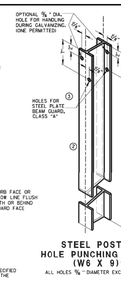


END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION

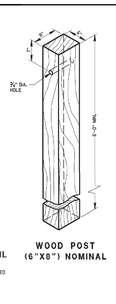


END VIEW
SETTING STEEL OR WOOD POST IN ROCK ⑥

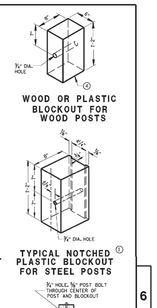
END VIEW
LOCATED ALONG A CURBED ROADWAY



STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) ①
ALL HOLES ⅝" DIAMETER EXCEPT AS NOTED

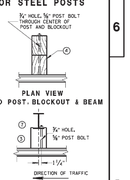


WOOD POST
(6"X8") NOMINAL



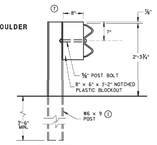
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS

TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS ①

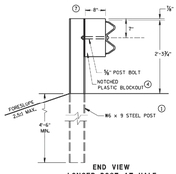


PLAN VIEW
WOOD POST. BLOCKOUT & BEAM

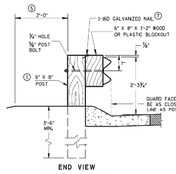
PLAN VIEW
STEEL POST. NOTCHED
PLASTIC BLOCKOUT & BEAM



END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)



END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

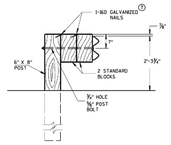
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

STEEL PLATE BEAM GUARD.
CLASS "A".
INSTALLATION & ELEMENTS

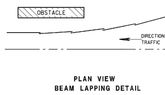
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 15-11a

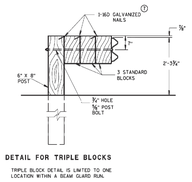
SDD 14B15-c Steel Plate Beam Guard, Class "A", Installation and Elements



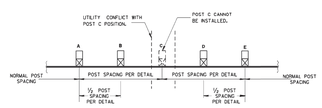
DETAIL FOR DOUBLE BLOCKS
THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED



PLAN VIEW
BEAM LAPPING DETAIL



DETAIL FOR TRIPLE BLOCKS
TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.



POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING FULLY DRIVEN.

DO NOT USE EXTRA BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

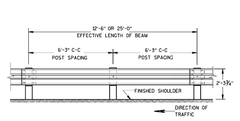
STEEL PLATE BEAM GUARD.
CLASS "A".
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

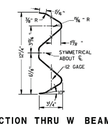
APPROVED
for the SECRETARY
DATE
/s/ Rodney Taylor
"ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR"

S.D.D. 14 B 15-11c

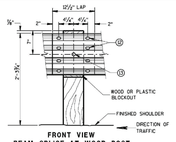
SDD 14B15-b Steel Plate Beam Guard, Class "A", Installation and Elements



FRONT VIEW
POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL

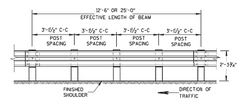
GENERAL NOTES

FURNISH GUARDRAIL DEFLECTORS FROM APPROVED PRODUCTS LIST.

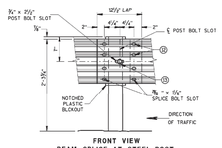
⑥ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.STANT REFLECTORS AT POST #9 AND SPACE EVENLY EVERY 300 FEET (MAX.) TO THE END OF GUARDRAIL RUN,USING A MINIMUM OF 3 REFLECTORS.

⑫ 8 -⅝"-11 X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

⑬ ⅝" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH ⅝" DIA. F844 FLAT WASHER UNDER NUT.

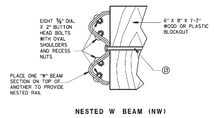


FRONT VIEW
POST SPACING FOR LONGER POST
AT HALF POST SPACING W BEAM (LHW)



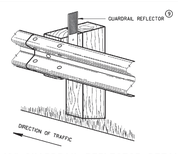
FRONT VIEW
BEAM SPLICE AT STEEL POST

TYPICAL SPLICING DETAILS
OF STEEL PLATE BEAM GUARD

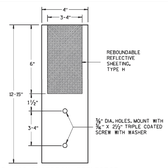


NESTED W BEAM (NW)
USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

* USE DOUBLE SIDED WHITE GUARDRAIL REFLECTORS ON ROADWAYS WITH BI-DIRECTIONAL TRAFFIC AND MEDIANS.USE SINGLE SIDED WHITE (RIGHT SIDE) AND SINGLE SIDED YELLOW (LEFT SIDE) ON ROADWAYS WITH MEDIAN SEPARATION.



4" X 12" GUARDRAIL REFLECTOR DETAIL
AND TYPICAL INSTALLATION *



4"x 12" GUARDRAIL REFLECTOR

STEEL PLATE BEAM GUARD.
CLASS "A".
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 15-11b

DIGGERS HOTLINE
Call 811 or (800) 242-8511
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JSD PROJ. MGR.: RWI

MSI GENERAL

MSI GENERAL CORPORATION
P.O. BOX. 7
OCONOMOWOC, WI 53066
PHONE: 262-367-3661

WWW.MSIGENERAL.COM
SINGLE SOURCE RESPONSIBILITY ™

ISSUE DATES:	
Owner Review:	11.03.2020
Property Aquisition Review:	2.09.2021
Owner Review:	6.09.2021
Bid Set:	
State Submittal / Permit:	
As-Built:	

REVISIONS:	
1	Address Village Comments 9.01.2021
2	Address Village Comments 9.23.2021
3	Client/Owner Comments 10.04.2021
3	Client/Owner Revisions 11.29.2021

enercon

PROJECT ADDRESS:

PROJECT NAME
Enercon Technical Center - Addition
STREET ADDRESS
N120 W19349 Freistadt Rd.
CITY/ STATE / ZIP
Germantown, WI 53022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

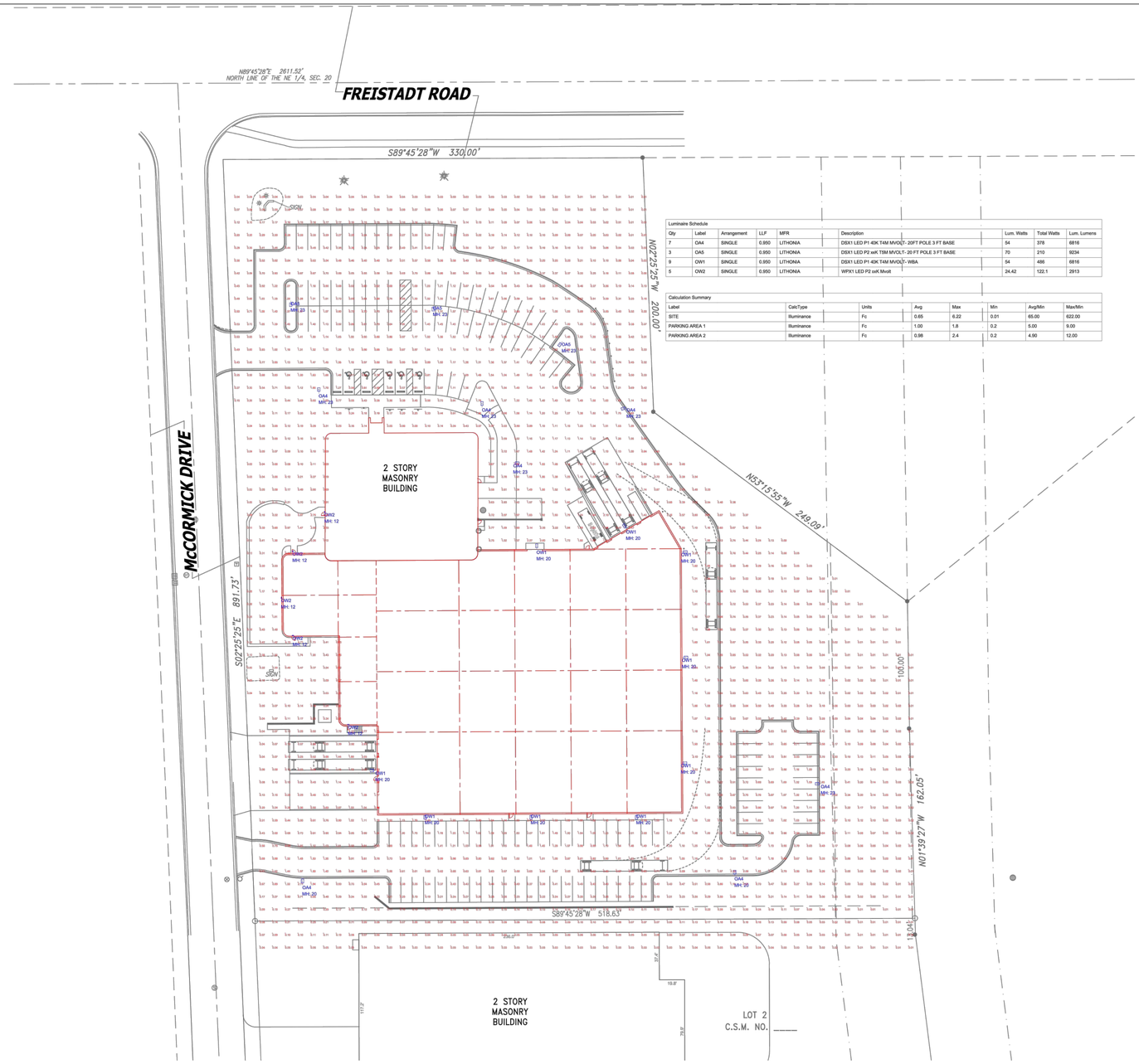
Architect:	Engineer:	Reviewed By:
BGK	xxx	BGK

Sheet Title:
SITE DETAILS

Sheet Number:
C-106C

Project Number: P12364
4529

ENGINEERS . MANAGERS . CONTRACTORS . ARCHITECTS



Luminaire Schedule

Qty	Label	Arrangement	LLF	MFR	Description	Lum. Watts	Total Watts	Lum. Lumens
7	OA4	SINGLE	0.950	LITHONIA	DSX1 LED P1 40K T4M MVOLT- 20FT POLE 3 FT BASE	54	378	6816
3	OA5	SINGLE	0.950	LITHONIA	DSX1 LED P2 40K T5M MVOLT- 20 FT POLE 3 FT BASE	70	210	9234
9	OW1	SINGLE	0.950	LITHONIA	DSX1 LED P1 40K T4M MVOLT- WBA	54	486	6816
5	OW2	SINGLE	0.950	LITHONIA	WPX1 LED P2 40K MVolt	24.42	122.1	2913

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
SITE	Illuminance	Fc	0.65	6.22	0.01	65.00	622.00
PARKING AREA 1	Illuminance	Fc	1.00	1.8	0.2	5.00	9.00
PARKING AREA 2	Illuminance	Fc	0.98	2.4	0.2	4.90	12.00

ENTERPRISE Lighting & Control

#	DATE	COMMENTS

REVISIONS

DRAWN BY : AD

DATE : NOV 19, 2021

SCALE : 1" = 40'- 0"

ENERCON

N120 W19349 FREISTADT RD

GERMANTOWN, WISCONSIN

SITE PHOTOMETRIC PLAN 1" = 30'-0"

MSI GENERAL

MSI GENERAL CORPORATION
P.O. BOX. 7
OCONOMOWOC, WI 53066
PHONE: 262-367-3661

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SINGLE SOURCE RESPONSIBILITY ™

ISSUE DATES:	
Owner Review:	11.03.2020
Property Acquisition Review:	2.09.2021
Plan Commission Submittal:	8.02.2021
Plan Commission Revision:	9.09.2021
Plan Commission Submittal:	10.04.2021
Bid Set:	11.17.2021
State Submittal / Permit:	
As-Built:	

REVISIONS:
1

Enercon

PROJECT ADDRESS:

PROJECT NAME
Enercon Technical Center - Addition
STREET ADDRESS
N120 W19349 Freistadt Rd.
CITY/ STATE / ZIP
Germantown, WI 53022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect:	Engineer:	Reviewed By:
BGK	PIERCE	BGK

Sheet Title:
SITE PHOTOMETRIC PLAN

Sheet Number:
C-107

Project Number: P12364
4529

MANAGERS . ENGINEERS . CONTRACTORS . ARCHITECTS



D-Series Size 1
LED Area Luminaire

Buy American

Catalog Number

Notes

Type OA4, OA5, OW1

Fit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA: 1.01 ft² (0.09 m²)

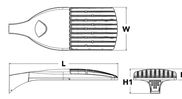
Length: 33" (83.8 cm)

Width: 13" (33.0 cm)

Height H1: 7-1/2" (19.0 cm)

Height H2: 3-1/2"

Weight (max): 27 lbs (12.2 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

Series	LEDs	Color temperature	Distribution				Voltage	Mounting
DSX1 LED	**Forward optics** P1 P4[1] P7[1] P2 P5[1] P8 P3 P6[1] P9[1] **Rotated optics** P10[1] P12[1] P11[1] P13[1,2]	30K 3000 K 40K 4000 K 50K 5000 K	T1S Type I short (Automotive) T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium T4TM Forward throw medium T5S Type V short[3] T5VS Type V very short[3] T5W Type V wide[3] BLC Backlight control[4] LCCO Left corner cutoff[4] RCCO Right corner cutoff[4]				MVOLT[5] 120V - 277V XVOLT (277V-480V)[5,6,8] 120[7] 208[7] 240[7] 277[7] 347[7] 480[7]	**Shipped included** SPA Square pole mounting RPA Round pole mounting[9] WBA Wall bracket[9] SPUMBA Square pole universal mounting adaptor[10] RPUMBA Round pole universal mounting adaptor[9] **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[11]

Control options		Other options	Finish (required)
Shipped installed NLTAIR2 nLight AIR generation 2 enabled[12] PIRHN Network, high/low motion/ambient sensor[14] PER NEMA twist-lock receptacle only (controls ordered separate)[13] PER5 Five-pin receptacle only (controls ordered separate)[13,15] PER7 Seven-pin receptacle only (controls ordered separate)[13,15] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[13] DS Dual switching[16,17,18]	PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[19,20] PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[19,20] PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[19,21] PIRH1FC3V Hi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[19,21] FAO Field adjustable output[20,22]	**Shipped installed** HS House-side shield[23] SF Single fuse (120, 277, 347V)[6] DF Double fuse (208, 240, 480V)[6] L90 Left rotated optics[7] R90 Right rotated optics[7] HA -50°C ambient operations[7] BAA Buy America(n) Act Compliant **Shipped separately** BS Bird spikes[24] EGS External glare shield	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

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Ordering Information

Accessories

Ordered and shipped separately.

BLL12FR 1.5 IES	Photocell - SSL twist-lock (120-277V)[25]
BLL347 1.5 CUL IES	Photocell - SSL twist-lock (347V)[25]
BLL480F 1.5 CUL IES	Photocell - SSL twist-lock (480V)[25]
DSHORT SBK U	Shorting cap[26]
DSX1HS 30C U	House-side shield for P1, P2, P3, P4 and P7[27]
DSX1HS 40C U	House-side shield for P4 and P7[27]
DSX1HS 50C U	House-side shield for P5, P6, P10, P11 and P12[27]
PUMBA DDBXD U[28]	Square and round pole universal mounting bracket (specify finish)[29]
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish)[30]
DSX1EGS DWHGXD U	External glare shield

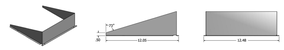
For more control options, visit DTL and ROAM online.

NOTES

1. Not available with P4, P5, P6, P7, P9 and P13.
2. P10, P11, P12 or P13 and rotated optics (L90, R90) only available together.
3. Only available in combination with photocell, is not available with HSSA.
4. Not available with HS.
5. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
6. XVOLT only available for use with P3, P6, P7, P9 and P13.
7. XVOLT works with any voltage between 277V and 480V.
8. Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) available with P8, P8S, P8FIVE3K, P8HIVE3K
9. Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF.
10. Suitable for mounting to round poles between 3.5" and 12" diameter.
11. Universal mounting brackets intended for retrofit on existing, pre-drilled poles only. 1.5 G vibration load rating per ANSI C136.31. Only usable when pole's drill pattern is NOT Lithonia template #8
12. Must order fixture with SPA option. Must be ordered as a separate accessory, see Accessories Information. For use with 2-3/8" diameter mast arm (not included).
13. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. White and natural aluminum colors.
14. Must be ordered with NLTAIR2. For more information on nLight Air 2 visit this link.
15. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting cap included.
16. If RCCO® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Node with integral dimming.
17. DMG not available with PIRHN, PER5, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V, FAO.
18. Dual switching (DS) not available with sensor options, not available with P8, P8S, P8FIVE, P8R or P8RH. Not available P1, P2, P3, P4 or P5.
19. Requires (2) separately switched circuits with isolated neutral.
20. Reference Controls Option Default settings table on page 4.
21. Reference Motion Sensor table on page 4 to see functionality.
22. Not available with other dimming controls options.
23. Reference Shield Option Table on page 3 for more information. Also available as a separate accessory; see Accessories information.
24. Must be ordered with fixture for factory pre-drilling.
25. Requires luminaire to be specified with PER, PER5 or PER7 option. See Control Option Table on page 4.
26. For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template #8.

Options

EGS - External Glare Shield



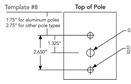
Drilling

HANDHOLE ORIENTATION



Template #8

Top of Pole



Tenon Mounting Slipfitter

Fitter I.D.	Mounting	Tenon O.D.	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side-B	Side-B & D	Side-B & C	Side-B, C & D	Round Pole-Only	Side-A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS

DSX1 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX1 LED	1.013	2.025	1.945	3.038	2.850	3.749

	Drilling Template	Maximum Acceptable Outside Pole Dimension				
SPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3.5"
RPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
SPUMBA	#5	2-7/8"	3"	4"	4"	3.5"	4"
RPUMBA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"

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WPX LED
Wall Packs

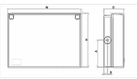
Catalog Number

Notes

Type OW2

Fit the Tab key or mouse over the page to see all interactive elements.

Specifications



Luminaire	Height (H)	Width (W)	Depth (D)	Side Conduit Location A	Side Conduit Location B	Weight
WPX1	8.1" (20.6 cm)	11.1" (28.3 cm)	3.2" (8.1 cm)	4.8" (10.3 cm)	0.6" (1.6 cm)	6.1lbs (2.8kg)
WPX2	9.1" (23.1 cm)	12.3" (31.1 cm)	4.1" (10.5 cm)	4.5" (11.5 cm)	0.7" (1.7 cm)	8.2lbs (3.7kg)
WPX3	9.5" (24.1 cm)	13.0" (33.0 cm)	5.5" (13.7 cm)	4.7" (12.0 cm)	0.7" (1.7 cm)	11.0 lbs (5.0kg)

Introduction

The WPX LED wall packs are energy-efficient, cost-effective, and aesthetically appealing solutions for both HID wall pack replacement and new construction opportunities. Available in three sizes, the WPX family delivers 1,550 to 9,200 lumens with a wide, uniform distribution.

The WPX full cut-off solutions fully cover the footprint of the HID glass wall packs that they replace, providing a neat installation and an upgraded appearance. Reliable IP66 construction and excellent LED lumen maintenance ensure a long service life. Photocell and emergency egress battery options make WPX ideal for every wall mounted lighting application.

Ordering Information

EXAMPLE: WPX2 LED 40K MVOLT DDBXD

Series	Color Temperature	Voltage	Options	Finish
WPX1 LED P1 1,550 Lumens, 11W[1] WPX1 LED P2 2,900 Lumens, 24W WPX2 LED 6,000 Lumens, 47W WPX3 LED 9,200 Lumens, 69W	30K 3000K 40K 4000K 50K 5000K	MVOLT 120V - 277V 347 347V[1]	(blank) None E4WH Emergency battery backup, CEC compliant (4W, 0°C min)[2] E14WC Emergency battery backup, CEC compliant (14W, -20°C min)[2] PE Photocell[3]	DDBXD Dark bronze DWHXD White DBLXD Black **Note: For other options, consult factory.**

Note: The lumen output and input power shown in the ordering tree are average representations of all configuration options. Specific values are available on request.

NOTES

1. All WPX wall packs come with 6kV surge protection standard, except WPX1 LED P1 package which comes with 2.5kV surge protection standard. Add SPD6KV option to get WPX1 LED P1 with 6kV surge protection.
   Sample number: WPX1 LED P1 40K MVOLT SPD6KV DDBXD
2. Battery pack options only available on WPX1 and WPX2.
3. Battery pack options not available with 347V and PE options.

FEATURES & SPECIFICATIONS

INTENDED USE
The WPX LED wall packs are designed to provide a cost-effective, energy-efficient solution for the one-for-one replacement of existing HID wall packs. The WPX1, WPX2 and WPX3 are ideal for replacing up to 150W, 250W, and 400W HID luminaires respectively. WPX luminaires deliver a uniform, wide distribution. WPX is rated for -40°C to 40°C.

CONSTRUCTION
WPX features a die-cast aluminum main body with optimal thermal management that both enhances LED efficacy and extends component life. The luminaires are IP66 rated, and sealed against moisture or environmental contaminants.

ELECTRICAL
Light engine(s) configurations consist of high-efficacy LEDs and LED lumen maintenance of L90/100,000 hours. Color temperature (CCT) options of 3000K, 4000K and 5000K with minimum CRI of 70. Electronic drivers ensure system power factor >90% and THD <20%. All luminaires have 6kV surge protection (Note: WPX1 LED P1 package comes with a standard surge protection rating of 2.5kV. It can be ordered with an optional 6kV surge protection).
All photocell (PE) operate on MVOLT (120V - 277V) input.

Note: The standard WPX LED wall pack luminaires come with field-adjustable drive current feature. This feature allows tuning the output current of the LED drivers to adjust the lumen output (to dim the luminaire).

INSTALLATION
WPX can be mounted directly over a standard electrical junction box. Three 1/2 inch conduit ports on three sides allow for surface conduit wiring. A port on the back surface allows poke-through conduit wiring on surfaces that don't have an electrical junction box. Wiring can be made in the integral wiring compartment in all cases. WPX is only recommended for installations with LEDs facing downwards.

LISTINGS
DLC Qualified to meet U.S. and Canadian standards. Suitable for wet locations. IP66 Rated. DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

WARRANTY
5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25°C.
Specifications subject to change without notice.

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Performance Data

Electrical Load

Luminaire	Input Power (W)	120V	208V	240V	277V	347V
WPX1 LED P1	11W	0.09	0.05	0.05	0.04	0.03
WPX1 LED P2	24W	0.20	0.12	0.10	0.09	0.07
WPX2	47W	0.39	0.23	0.20	0.17	0.14
WPX3	69W	0.58	0.33	0.29	0.25	0.20

Projected LED Lumen Maintenance

Data references the extrapolated performance projections in a 25°C ambient, based on 6,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.94	>0.92	>0.90

HID Replacement Guide

Luminaire	Equivalent HID Lamp	WPX Input Power
WPX1 LED P1	100W	11W
WPX1 LED P2	150W	24W
WPX2	250W	47W
WPX3	400W	69W

Lumen Output

Luminaire	Color Temperature	Lumen Output
WPX1 LED P1	3000K	1,537
	4000K	1,568
	5000K	1,602
WPX1 LED P2	3000K	2,748
	4000K	2,912
	5000K	2,954
WPX2	3000K	5,719
	4000K	5,896
	5000K	6,201
WPX3	3000K	8,984
	4000K	9,269
	5000K	9,393

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Emergency Egress Battery Packs

The emergency battery backup is integral to the luminaire — no external housing or back box is required. The emergency battery will power the luminaire for a minimum duration of 90 minutes and deliver minimum initial output of 550 lumens. Both battery pack options are CEC compliant.

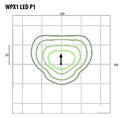
Battery Type	Minimum Temperature Rating	Power (Watts)	Controls Option	Ordering Example
Standard	0°C	4W	E4WH	WPX2 LED 40K MVOLT **E4WH** DDBXD
Cold Weather	-20°C	14W	E14WC	WPX2 LED 40K MVOLT **E14WC** DDBXD

Photometric Diagrams

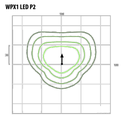
To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WPX LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND
0.1 fc
0.2 fc
0.5 fc
1.0 fc

WPX1 LED P1



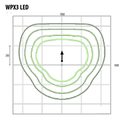
WPX1 LED P2



WPX2 LED



WPX3 LED



Mounting Height = 12 Feet.

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MSI GENERAL CORPORATION
P.O. BOX. 7
OCONOMOWOC, WI 53066
PHONE: 262-367-3661

WWW.MSIGENERAL.COM
SINGLE SOURCE RESPONSIBILITY ™

MANAGERS · ENGINEERS · CONTRACTORS · ARCHITECTS

ISSUE DATES:	
Owner Review:	11.03.2020
Property Acquisition Review:	2.09.2021
Plan Commission Submittal:	8.02.2021
Plan Commission Revision:	9.09.2021
Plan Commission Submittal:	10.04.2021
Bid Set:	11.17.2021
State Submittal / Permit:	
As-Built:	

REVISIONS:

1	-

PROJECT ADDRESS:

PROJECT NAME
Enercon Technical Center - Addition
STREET ADDRESS
N120 W19349 Freistadt Rd.
CITY, STATE / ZIP
Germantown, WI 53022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Architect:	Engineer:	Reviewed By:
BGK	PIERCE	BGK

Sheet Title:
SITE LIGHTING CUTSHEETS

Sheet Number:
C-108

Project Number: P12364
4529

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

DIGGERS HOTLINE

CALL DIGGERS HOTLINE
811 or 1-800-242-8511
MILW. AREA 259-1181
WIS STATUTE 182.0175(1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

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

Economy Prairie Seed Mix

Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses/Sedges/Rushes:		
Andropogon gerardii	Big Bluestem	8.00
Bouteloua curtipendula	Side Oats Grama	32.00
Elymus canadensis	Canada Wild Rye	16.00
Elymus virginicus	Virginia Wild Rye	20.00
Panicum virgatum	Switchgrass	8.00
Schizachyrium scoparium	Little Bluestem	16.00
Spatina pectinata	Prairie Cordgrass	12.00
	Total	**112.00**
Forbs:		
Asclepias tuberosa	Butterfly Weed	2.00
Aster novae-angliae	New England Aster	0.50
Chamaecrista fasciclata	Partridge Pea	8.00
Coreopsis lanceolata	Lance-Leaf (Sand) Coreopsis	2.00
Dalea purpurea	Purple Prairie Clover	4.00
Echinacea purpurea	Purple Coneflower	8.00
Heliopsis helianthoides	Early Sunflower	6.00
Liatris pycnostachya	Prairie Blazing Star	2.00
Monarda fistulosa	Wild Bergamot	1.00
Penstemon digitalis	Foxglove Beard Tongue	0.50
Ratibida pinnata	Yellow Coneflower	4.00
Rudbeckia hirta	Black-eyed Susan	2.00
Rudbeckia subtomentosa	Sweet Black-Eyed Susan	1.00
Solidago rigida	Stiff Goldenrod	1.00
Tradescantia ohioensis	Ohio Spiderwort	4.00
Zizia aurea	Golden Alexanders	2.00
	Total	**48.00**

Approximate area of coverage:	
Total area (SF) of coverage:	19,255
Total area (acres) of coverage:	**0.44**

NATIVE PRAIRIE SEED MIX

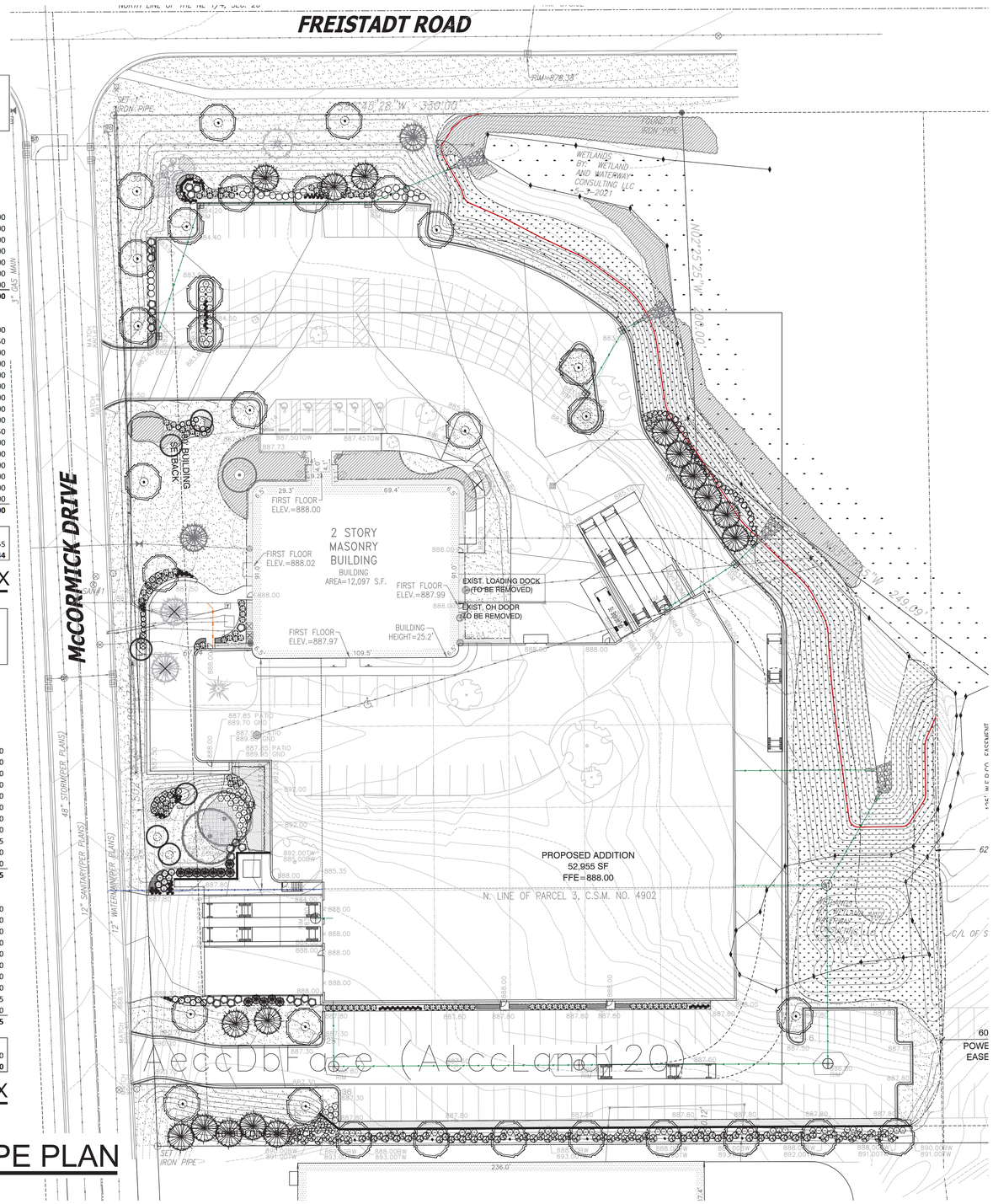
Agrecol LLC
www.agrecol.com
10101 N. Casey Road
Evansville, Wisonsin 53536
Ph: 608-223-3571

Infiltration Swale Seed Mix

Botanical Name	Common Name	PLS Ounces/Acre
Permanent Grasses/Sedges/Rushes:		
Andropogon gerardii	Big Bluestem	10.00
Bromus ciliatus	Fringed Brome	36.00
Carex comosa	Bristly Sedge	5.00
Carex vulpinoidea	Brown Fox Sedge	1.50
Elymus virginicus	Virginia Wild Rye	36.00
Glyceria striata	Fowl Manna Grass	2.00
Panicum virgatum	Switchgrass	3.00
Scirpus atrovirens	Dark-Green Bullrush	0.50
Scirpus cyperinus	Wool Grass	0.25
Sorghastrum nutans	Indian Grass	16.00
Spatina pectinata	Prairie Cordgrass	8.00
	Total	**118.25**
Forbs:		
Alisma subcordatum	Common Water Plantain	2.00
Asclepias incarnata	Marsh (Red) Milkweed	6.00
Aster novae-angliae	New England Aster	2.00
Desmodium canadense	Canada Tick Trefoil	4.00
Ratibida pinnata	Yellow Coneflower	3.00
Rudbeckia hirta	Black-eyed Susan	2.00
Rudbeckia subtomentosa	Sweet Black-Eyed Susan	2.00
Solidago ohioensis	Ohio Goldenrod	1.00
Verbena hastata	Blue Vervain	1.75
Vernonia fasciculata	Ironweed	2.00
	Total	**25.75**

Approximate area of coverage:	
Total area (SF) of coverage of infiltration area:	4,510
Total area (acres) of coverage of infiltration area:	**0.10**

INFILTRATION SWALE SEED MIX



AeccDbFace (AeccLand120)

NORTH

OVERALL LANDSCAPE PLAN

Scale: 1" = 30'0"

HELLER & ASSOCIATES, LLC
LANDSCAPE ARCHITECTURE
P.O. Box 1359
Lake Geneva, Wisconsin 53147-1359
ph 262.639.9733
david@wdavidheller.com
www.wdavidheller.com

PROJECT

ENERCON TECHNICAL CENTER

N120 W19349
Freistadt Road
Germantown, WI

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
8.10.21	FIRST ISSUE
11.23.21	REVISED CIVIL

Information contained herein is based on survey information, field inspection, and believed to be accurate.

SHEET TITLE

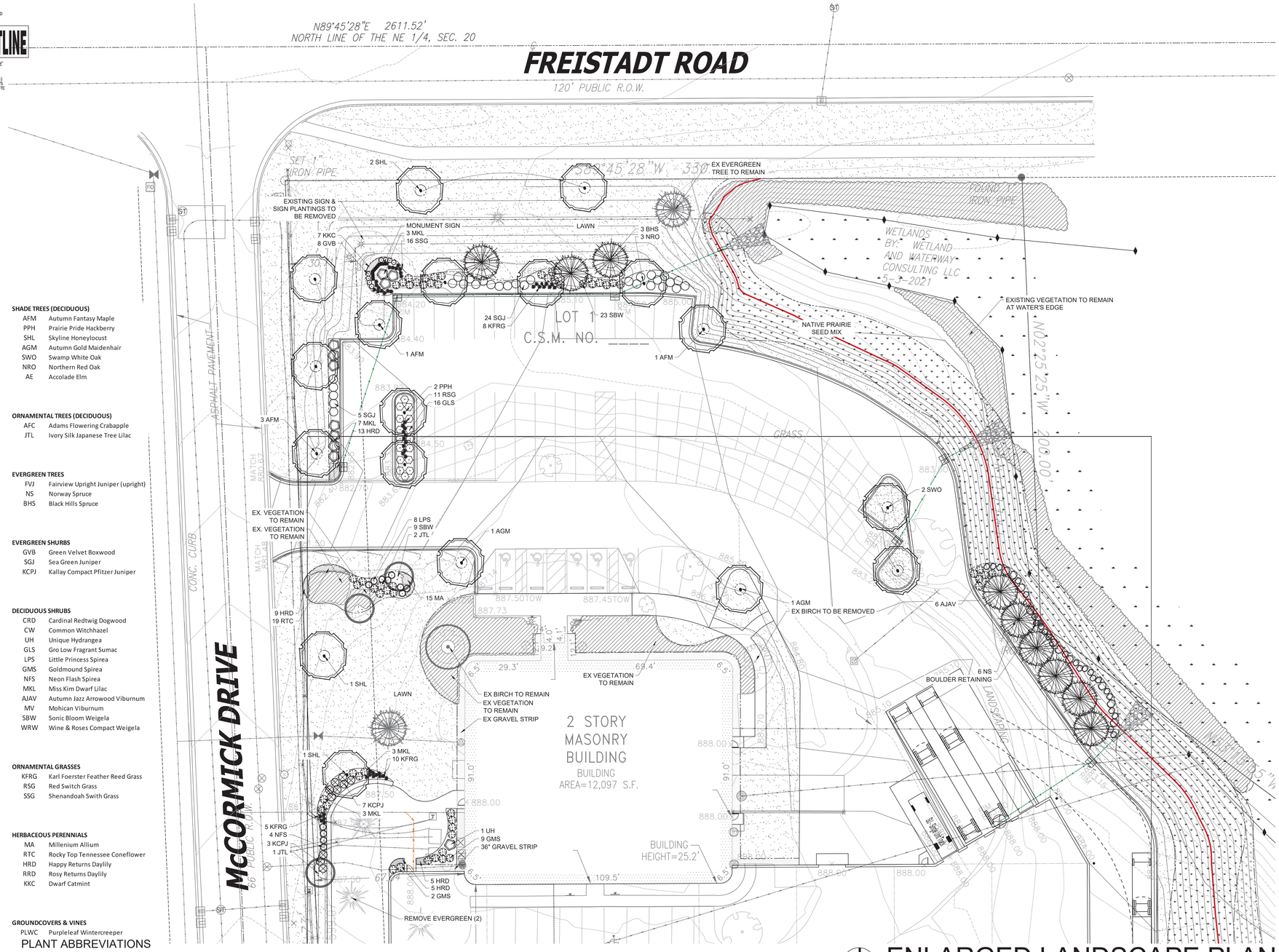
OVERALL LANDSCAPE PLAN

PROJECT MANAGER	WDH
PROJECT NUMBER	21-058
DATE	11.23.21
SHEET NUMBER	L 1.0

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MILW. AREA 259-1181
WIS. STATUTE 182.0175(1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE



SHADE TREES (DECIDUOUS)

AFM	Autumn Fantasy Maple
PPH	Prairie Pride Hackberry
SHL	Skyline Honeylocust
AGM	Autumn Gold Maidenhair
SWO	Swamp White Oak
NRO	Northern Red Oak
AE	Accolade Elm

ORNAMENTAL TREES (DECIDUOUS)

AFC	Adams Flowering Crabapple
JTL	Ivory Silk Japanese Tree Lilac

EVERGREEN TREES

FVJ	Fairview Upright Juniper (upright)
NS	Norway Spruce
BHS	Black Hills Spruce

EVERGREEN SHURBS

GVB	Green Velvet Boxwood
SGJ	Sea Green Juniper
KCPJ	Kallay Compact Pfitzer Juniper

DECIDUOUS SHRUBS

CRD	Cardinal Redtwig Dogwood
CW	Common Witchhazel
UH	Unique Hydrangea
GLS	Gro Low Fragrant Sumac
LPS	Little Princess Spirea
GMS	Goldmound Spirea
NFS	Neon Flash Spirea
MKL	Miss Kim Dwarf Lilac
AJAV	Autumn Jazz Arrowood Viburnum
MV	Mohican Viburnum
SBW	Sonic Bloom Weigela
WRW	Wine & Roses Compact Weigela

ORNAMENTAL GRASSES

KFRG	Karl Foerster Feather Reed Grass
RSG	Red Switch Grass
SSG	Shenandoah Swith Grass

HERBACEOUS PERENNIALS

MA	Millenium Allium
RTC	Rocky Top Tennessee Coneflower
HRD	Happy Returns Daylily
RRD	Rosy Returns Daylily
KKC	Dwarf Catmint

GROUNDCOVERS & VINES

PLWC	Purpleleaf Wintercreeper

PLANT ABBREVIATIONS

NORTH

ENLARGED LANDSCAPE PLAN

Scale: 1" = 20'0"

HELLER & ASSOCIATES, LLC
LANDSCAPE ARCHITECTURE
P.O. Box 1359
Lake Geneva, Wisconsin 53147-1359
ph 262.639.9733
david@wdavidheller.com
www.wdavidheller.com

PROJECT

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ISSUANCE AND REVISIONS

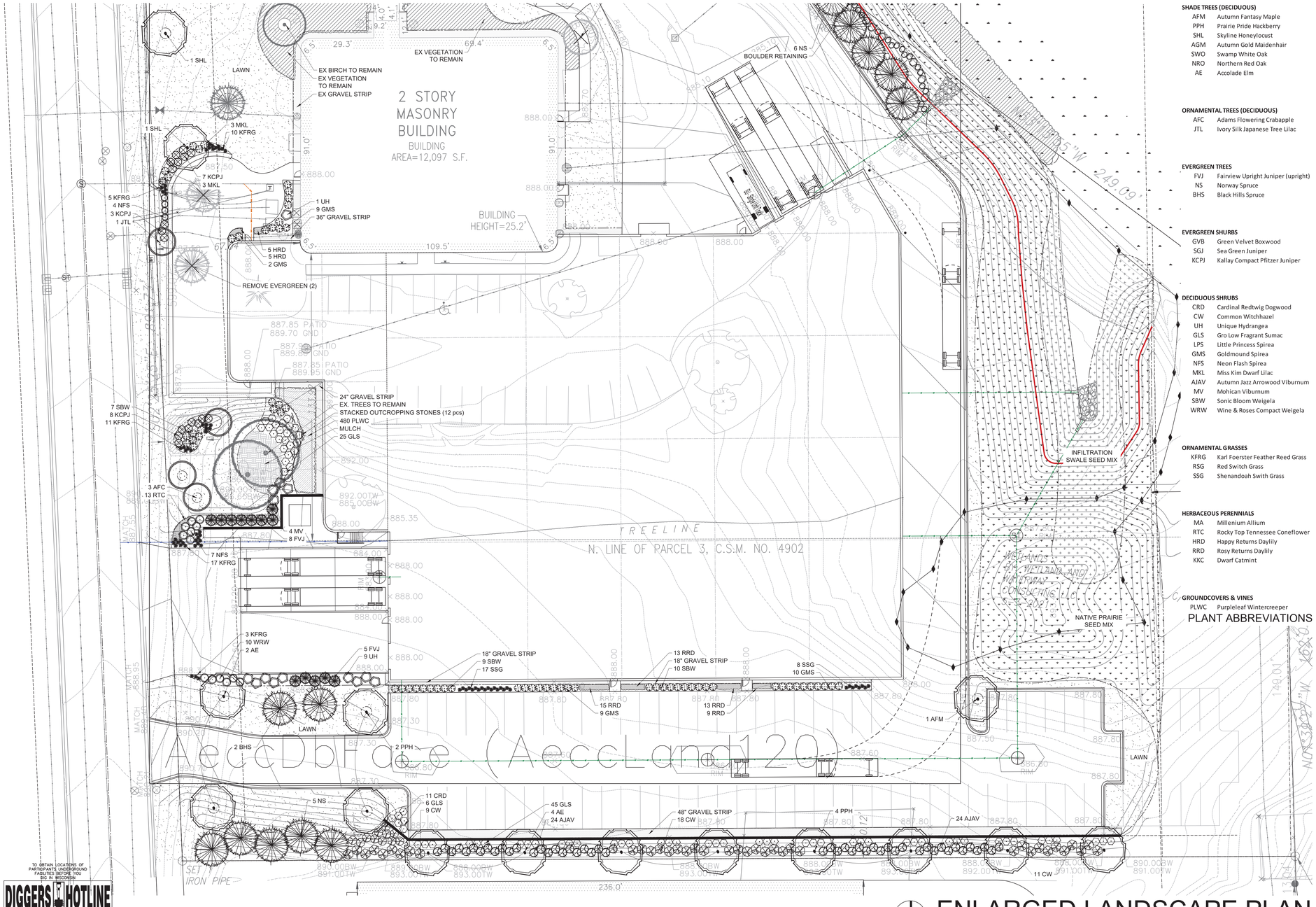
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SHEET TITLE

ENLARGED LANDSCAPE PLAN

PROJECT MANAGER	WDH
PROJECT NUMBER	21-058
DATE	11.23.21
SHEET NUMBER	L 1.1



SHADE TREES (DECIDUOUS)

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AGM	Autumn Gold Maidenhair
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LPS	Little Princess Spirea
GMS	Goldmound Spirea
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AJAV	Autumn Jazz Arrowood Viburnum
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WRW	Wine & Roses Compact Weigela

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RSG	Red Switch Grass
SSG	Shenandoah Swith Grass

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RTC	Rocky Top Tennessee Coneflower
HRD	Happy Returns Daylily
RRD	Rosy Returns Daylily
KKC	Dwarf Catmint

GROUNDCOVERS & VINES

PLWC	Purpleleaf Wintercreeper

PLANT ABBREVIATIONS

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ISSUANCE AND REVISIONS

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SHEET TITLE

ENLARGED LANDSCAPE PLAN

PROJECT MANAGER	WDH
PROJECT NUMBER	21-058
DATE	11.23.21
SHEET NUMBER	L 1.2

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN
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WIS STATUTE 182.0175(1974)
REQUIRES MIN. 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE

NORTH

ENLARGED LANDSCAPE PLAN

Scale: 1" = 20'0"

TO OBTAIN LOCATIONS OF
PARTICIPANTS UNDERGROUND
FACILITIES BEFORE YOU
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REQUIRES MIN. 3 WORK DAYS
NOTICE BEFORE YOU EXCAVATE

1. Contractor responsible for contacting Diggers Hotline (811 or 800-242-8511) to have site marked prior to excavation or planting.

2. 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.

3. 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.

4. 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.

5. Topsoil in Parking Lot Islands (if applicable): All parking lot islands to be backfilled with topsoil to a minimum depth of 12" 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.

6. 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.

7. 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 $\frac{2}{3}$ 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.

8. Shrub Planting: All shrubs to be planted in groupings as indicated on the Landscape Plan. Install with the planting of shrubs a $^{25}/_{75}$ 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 $\frac{2}{3}$ 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.

9. 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.

10. 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.

11. 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):
⅓ CY Peat Moss or Mushroom Compost
¾ CY blended/pulverized Topsoil
⅓ CY composted manure

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

12. Lawn Installation for all sodded turfgrass areas: Contractor to furnish and prepare blended topsoil (2" minimum) and sod bed, removing all debris and stones ½" 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.

13. 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

14. No-Mow seed areas: "No-Mow" fine fescue seed mix with annual rye nurse crop (available at Reinders Landscape Supply 800-785-3301; Prairie Nursery 800-476-9453) or approved equivalent mix from a reputable seed mix provider. Apply at rate recommended by supplier. Prepare seed bed and soil as specified in item #13 above.

15. Native Prairie Seed Mix / Stormwater Seed Mix / Infiltration Swale Seed Mix: Native seed mix(es) as listed on the Plant and Material List or other seeding schedules outlined on the landscape plan set. Seed mixes available from Agrecol Native Seed & Plant Nursery 608-223-3571 or Prairie Nursery 800-476-9453 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.

16. 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.

17. 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 seed mix, native prairie seed mix, stormwater seed mix, and other native seed mixes. Work also includes weeding, edging, mulching (only if required), fertilizing, trimming, sweeping up grass clippings, pruning and deadheading.

18. 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

PLANT KEY	QUANTITY	PLANT MATERIAL PROPOSED BOTANICAL NAME	COMMON NAME	CALIPER/HEIGHT SIZE	ROOT	SPECIFICATION / NOTES	PLANT SPACING
Proposed Landscape Materials							
SHADE TREES (DECIDUOUS)							
AFM	6	Acer xfreemanii 'Autumn Fantasy'	Autumn Fantasy Maple	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting	
PPH	8	Celtis occidentalis 'Prairie Pride'	Prairie Pride Hackberry	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting	
SHL	4	Gleditsia triacanthos 'Skyline'	Skyline Honeylocust	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting	
AGM	2	Ginkgo biloba 'Autumn Gold'	Autumn Gold Maidenhair	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting	
SWO	2	Quercus bicolor	Swamp White Oak	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting	
NRO	3	Quercus rubra	Northern Red Oak	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting	
AE	6	Ulmus 'Morton'	Accolade Elm	2.5"	B&B	Straight central leader, full and even crown. Prune only after planting	
PLANT KEY	**QUANTITY**	**PLANT MATERIAL PROPOSED BOTANICAL NAME**	**COMMON NAME**	**CALIPER/HEIGHT SIZE**	**ROOT**	**SPECIFICATION / NOTES**	**PLANT SPACING**
ORNAMENTAL TREES (DECIDUOUS)							
AFC	3	Malus x 'Adams'	Adams Flowering Crabapple	7-8' H	B&B	Well balanced multi-stemmed tree with minimum four canes, and full appearance	
JTL	3	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	7-8' H	B&B	Well balanced multi-stemmed tree with minimum four canes, and full appearance	
PLANT KEY	**QUANTITY**	**PLANT MATERIAL PROPOSED BOTANICAL NAME**	**COMMON NAME**	**HEIGHT SIZE**	**ROOT**	**SPECIFICATION / NOTES**	**PLANT SPACING**
EVERGREEN TREES							
PVJ	13	Juniperus scopulorum 'Fairview'	Fairview Upright Juniper (upright)	6'	B&B	Evenly shaped tree with branching to the ground	60"
NS	11	Picea abies	Norway Spruce	9-10'	B&B	Evenly shaped tree with branching to the ground	17'
BHS	5	Picea glauca 'densata'	Black Hills Spruce	8-9'	B&B	Evenly shaped tree with branching to the ground	15'
PLANT KEY	**QUANTITY**	**PLANT MATERIAL PROPOSED BOTANICAL NAME**	**COMMON NAME**	**SHRUB SIZE (HEIGHT)**	**ROOT/ CONT.**	**SPECIFICATION / NOTES**	**PLANT SPACING**
EVERGREEN SHURBS							
GVB	8	Buxus 'Green Velvet'	Green Velvet Boxwood	24"	Cont.	Full rounded well branched shrub	24-30"
SGJ	29	Juniperus chinensis 'Sea Green'	Sea Green Juniper	#5 /18"	Cont.	Full rounded well branched shrub	54"
KCPJ	18	Juniperus chinensis 'Kallay'	Kallay Compact Pfitzer Juniper	#5	Cont.	Full rounded well branched shrub	48"
PLANT KEY	**QUANTITY**	**PLANT MATERIAL PROPOSED BOTANICAL NAME**	**COMMON NAME**	**SHRUB SIZE (HEIGHT)**	**ROOT/ CONT.**	**SPECIFICATION / NOTES**	**PLANT SPACING**
DECIDUOUS SHRUBS							
CRD	11	Cornus sericea 'Cardinal'	Cardinal Redtwig Dogwood	36"	Cont.	Full, well rooted plant, evenly shaped	48"
CW	38	Hamamelis virginiana	Common Witchhazel	48"	B&B	Full, well rounded plant with moist rootball and healthy appearance	72"
UH	10	Hydrangea paniculata 'Unique'	Unique Hydrangea	42"	Cont.	Full, well rooted plant, evenly shaped	60"
GLS	92	Rhus aromatica 'Gro-Low'	Gro Low Fragrant Sumac	#3	Cont.	Full, well rooted plant, evenly shaped	42"
LPS	8	Spirea japonica 'Little Princess'	Little Princess Spirea	#3	Cont.	Full, well rooted plant, evenly shaped	30"
GMS	30	Spirea xbumalda 'Goldmound'	Goldmound Spirea	24"	Cont.	Full, well rooted plant, evenly shaped	36"
NFS	11	Spirea xbumalda 'Neon Flash'	Neon Flash Spirea	24"	Cont.	Full, well rooted plant, evenly shaped	60"
MKL	16	Syringa patula 'Miss Kim'	Miss Kim Dwarf Lilac	24"	Cont.	Full, well rooted plant, evenly shaped	60"
AJAV	54	Viburnum dentatum 'Autumn Jazz'	Autumn Jazz Arrowwood Viburnum	42"	Cont.	Full, well rooted plant, evenly shaped	60"
MV	4	Viburnum lantana 'Mohican'	Mohican Viburnum	48"	B&B	Full, well rounded plant with moist rootball and healthy appearance	60"
SBW	58	Weigela florida 'Sonic Bloom'	Sonic Bloom Weigela	24"	Cont.	Full, well rooted plant, evenly shaped	42"
WRW	10	Weigela florida 'Wine & Roses'	Wine & Roses Compact Weigela	24"	Cont.	Full, well rooted plant, evenly shaped	42"
PLANT KEY	**QUANTITY**	**PLANT MATERIAL PROPOSED BOTANICAL NAME**	**COMMON NAME**	**CONTAINER SIZE**		**SPECIFICATION / NOTES**	**PLANT SPACING**
ORNAMENTAL GRASSES							
KFRG	54	Calamagrostis acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass	#1	Cont.	Full, well rooted plant	15-18"
RSG	11	Panicum virgatum 'Rotstrahlbusch'	Red Switch Grass	#1	Cont.	Full, well rooted plant	18"
SSG	41	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	#1	Cont.	Full, well rooted plant	18"
PLANT KEY	**QUANTITY**	**PLANT MATERIAL PROPOSED BOTANICAL NAME**	**COMMON NAME**	**CONTAINER SIZE**		**SPECIFICATION / NOTES**	**PLANT SPACING**
HERBACEOUS PERENNIALS							
MA	15	Allium 'Millenium'	Millenium Allium	#1	Cont.	Full, well rooted plant, evenly shaped	18"
RTC	32	Echinacea purpurea 'Rocky Tops Hybrid'	Rocky Top Tennessee Coneflower	#1	Cont.	Full, well rooted plant, evenly shaped	18"
HRD	45	Hemerocallis 'Happy Returns'	Happy Returns Daylily	#1	Cont.	Full, well rooted plant, evenly shaped	18"
RRD	50	Hemerocallis 'Rosy Returns'	Rosy Returns Daylily	#1	Cont.	Full, well rooted plant, evenly shaped	18"
KXC	7	Nepeta faassenii 'Kit Cat'	Dwarf Catmint	#1	Pot	Full, well rooted plant, evenly shaped	24"
PLANT KEY	**QUANTITY**	**PLANT MATERIAL PROPOSED BOTANICAL NAME**	**COMMON NAME**	**CONTAINER SIZE**		**SPECIFICATION / NOTES**	**PLANT SPACING**
GROUNDCOVERS & VINES							
PLWC	480	Euonymus fortunei 'Coloratus'	Purpleleaf Wintercreeper	3"	Pot	Full, well rooted plant	12"
PLAN KEY	**QUANTITY**	**PLANT MATERIAL PROPOSED SPECIFIED SEED MIX / SOD**		**CONTAINER SIZE**		**SPECIFICATION / NOTES**	**PLANT SPACING**
LAWN	44135	Lawn Establishment Area / Grading Area			SF	Reinder's Deluxe 50 Seed Mix (800-785-3301)	
	69040	Erosion Matting for sloped seeded areas	*see plan for area delineation*		SF	EroTex D575 Erosion Control Blanket (or approved equal)	
	20305	Native Prairie Seed Mix	*see plan for area delineation*		SF	Agrecol, LLC (608-223-3571)	
	4600	Infiltration Basin Seed Mix	*see plan for area delineation*		SF	Agrecol, LLC (608-223-3571)	
Hardscape Materials							
	15	Granite Boulders Retaining Wall	*On-Site Boulders*	30-42"	EA	Exisiting On-Site Boulders to construct retaining wall	
	25	Granite Boulders Retaining Wall	*see plan for location*	24-36"	EA	Supplement Exisiting On-Site Boulders to construct retaining wall	
	12	Outcropping Stone Stacks (Stone Size: 10-14" thick)	*Length: 36-48" Avg Depth: 24-30"*		PIECES		
	28	Heritage River Gravel Mulch	*Area: 2,010 SF*		TONS	2" depth	
	380	Aluminum Edge Restraint (gravel areas)	Permaloc ProSlide 3/16"x5.5" Black Duraflex Finish		LF		
	2010	Landscape Fabric	*SF*		SF		
	100	Shredded Hardwood Mulch (3" depth)	*Area: 20,775 SF*		CY	Bark Mulch; apply Preemergent after installation of mulch	
	66	Soil Amendments (2" depth)	*Area: 20,775 SF*		CY		
	215	Pulverized Topsoil (Lawn Area)	*Area: 69,050 SF*		CY		
	66	Pulverized Topsoil (2" over bed areas)	*Area: 20,775 SF*		CY		

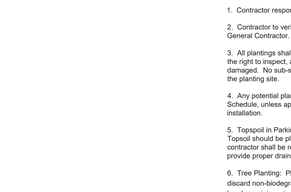
*Landscape counts & quantities are provided as a service to the Landscape Contractor; Landscape Contractor is responsible for verifying these counts and quantities in order to provide a complete landscape installation as outlined on this Landscape Master Plan. In the event that a discrepency occurs between this schedule and the Landscape Master Plan, the Landscape Master Plan including the graphics and notations depicted therein shall govern.

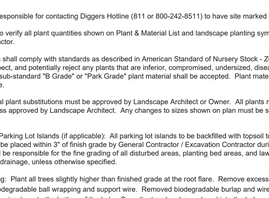
Seed Compositions:

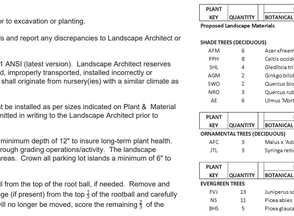
Reinder's Deluxe 50 Seed Mix (800-785-3301): — Seed at rate of 150-200# per acre

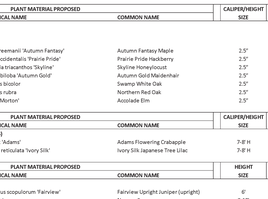
- 30% Kentucky Bluegrass (Sod Quality)
- 15% Newport Kentucky Bluegrass
- 15% Ken Blue Kentucky Bluegrass
- 25% Creeping Red Fescue
- 15% Quebec Perennial Ryegrass
- 10% Fiesta III Perennial Ryegrass

PLANT & MATERIAL SCHEDULE

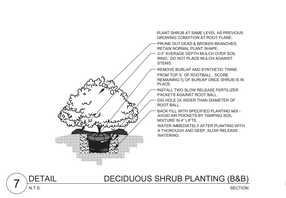


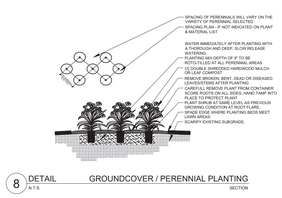


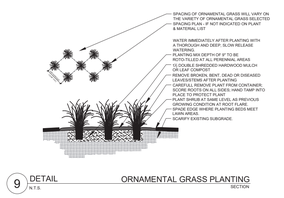


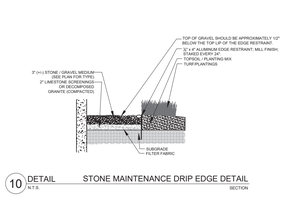


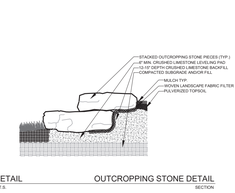












PLANTING & HARDSCAPE DETAILS

HELLER & ASSOCIATES, LLC
LANDSCAPE ARCHITECTURE
P.O. Box 1359
Lake Geneva, Wisconsin 53147-1359
ph 262.639.9733
david@wdavidheller.com
www.wdavidheller.com

PROJECT

ENERCON TECHNICAL CENTER

N120 W19349
Freistadt Road
Germantown, WI

ISSUANCE AND REVISIONS

DATE	DESCRIPTION
8.10.21	FIRST ISSUE
11.23.21	REVISED CIVIL

Information contained herein is based on survey information, field inspection, and believed to be accurate.

SHEET TITLE

LANDSCAPE DETAILS, NOTES, & SCHEDULES

PROJECT MANAGER	WDH
PROJECT NUMBER	21-058
DATE	11.23.21

SHEET NUMBER

L 1.3

PROJECT NAME

ENERCON ADDITION

PROJECT ADDRESS

N120 W19349 Freistadt Rd.
Germantown, WI, 35022

PROJECT LOCATION



SHEET LIST

Sheet Number	Sheet Name	Current Revision	Revision Date
G-001	COVER SHEET		
C-100	ARCHITECTURAL SITE PLAN		
C-101	SITE DEMO PLAN		
C-102	SITE PAVE ID PLAN		
C-103	SITE GRADING & DRAINAGE PLAN		
C-103A	PHASE I GRADING & DRAINAGE PLAN		
C-103B	PHASE II GRADING & DRAINAGE PLAN		
C-103C	PHASE III GRADING & DRAINAGE PLAN		
C-104	SITE EROSION CONTROL PLAN		
C-105	SITE UTILITY PLAN		
C-106	SITE DETAILS		
C-106A	SITE DETAILS		
C-106B	SITE DETAILS		
C-107	SITE PHOTOMETRIC PLAN		
C-108	SITE LIGHTING CUTSHEETS		
L1.1	ENLARGED LANDSCAPE PLAN		
L1.2	ENLARGED LANDSCAPE PLAN		
L1.3	LANDSCAPE DETAILS, NOTES & SCHEDULES		
A-000.1	EXISTING FIRST FLOOR PLAN		
A-000.2	EXISTING SECOND FLOOR PLAN		
A-101	OVERALL FIRST FLOOR PLAN		
A-102	OVERALL SECOND FLOOR PLAN		
A-200.1	EXISTING ELEVATIONS		
A-200.2	EXISTING ELEVATIONS		
A-201	EXTERIOR ELEVATIONS		
A-202	EXTERIOR ELEVATIONS		
A-900	RENDERINGS		

ARCHITECTURAL SYMBOLS

- COLUMN REFERENCE SYMBOL (0)
- ELEVATION REFERENCE SYMBOL (Name / Elevation)
- ELEVATION REFERENCE SYMBOL (1 Ref, A101)
- SECTION REFERENCE SYMBOL (SIM, A, A101)
- DETAIL REFERENCE SYMBOL (SIM, 1, A101)
- ENLARGED AREA REFERENCE SYMBOL (SIM, 1, A101)
- ROOM TAG (Room name, 101)
- DOOR TAG (111A)
- WINDOW TAG (1t)
- WALL TAG (1)
- EQUIPMENT TAG (X####)
- REVISION TAG (1)
- BUILDING ENTRY SYMBOL
- NORTH ARROW

Architectural Symbol
12" = 1'-0"

ARCHITECTS SEAL

ENGINEERS SEAL

63 YEARS OF DESIGN EXCELLENCE

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ISSUE DATES:	
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State Submittal / Permit:	--/--/----
As Built:	--/--/----

REVISIONS:

enercon

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ENERCON ADDITION

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N120 W19349 Freistadt Rd.

CITY/ STATE / ZIP
Germantown, WI, 35022

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

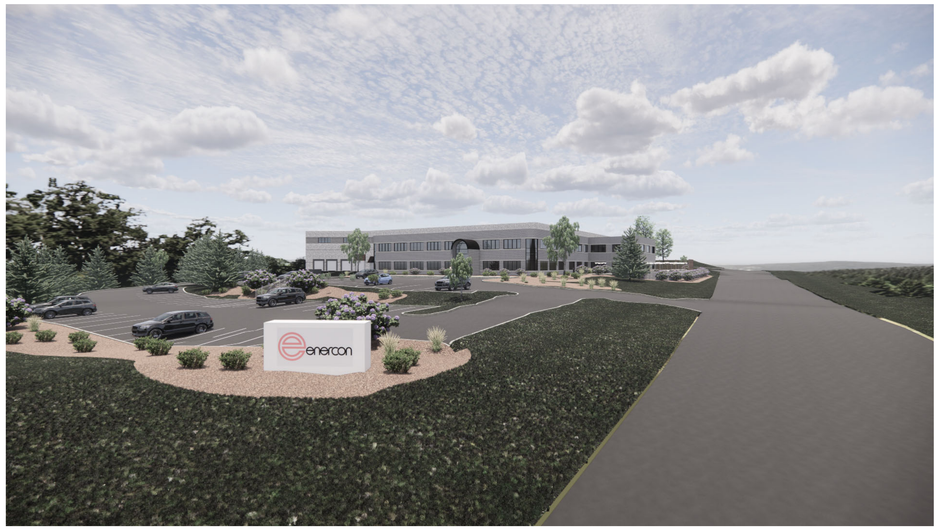
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ANK/BGK	AGR	BJZ

SHEET TITLE:
COVER SHEET

SHEET NUMBER:
G-001

PROJECT NUMBER: P12364
P12364

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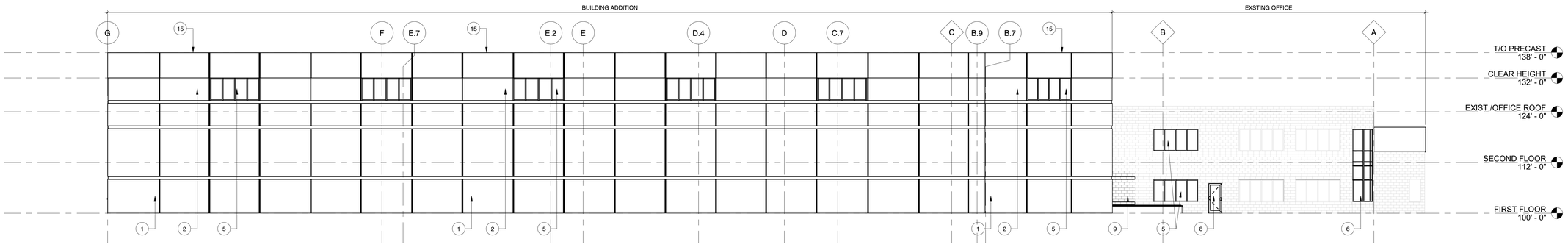
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SHEET TITLE:
RENDERINGS

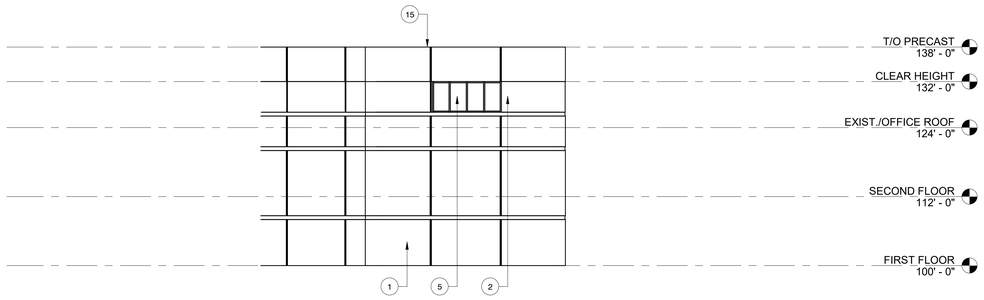
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PROJECT NUMBER: P12364
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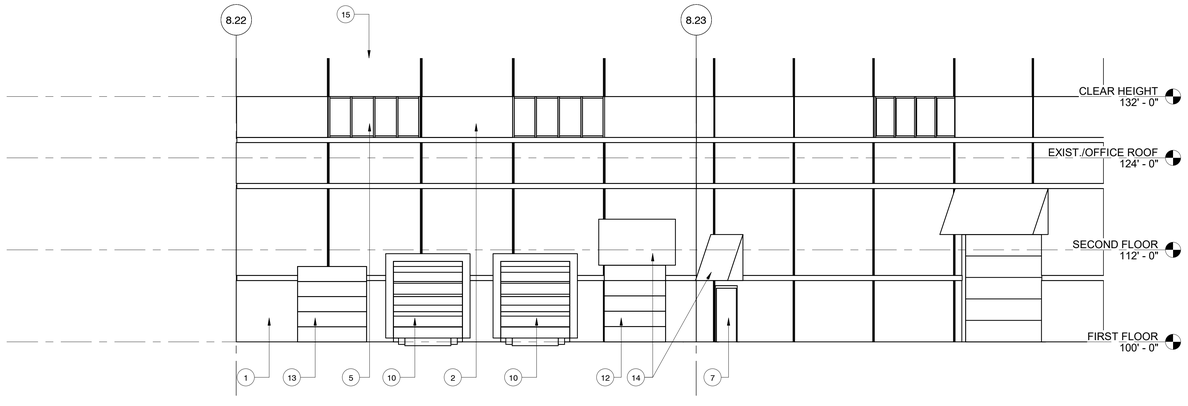
LEADERS IN ENGINEERS & CONTRACTORS & ARCHITECTS



1 East
3/32" = 1'-0"



2 EAST ELEVATION 2
3/32" = 1'-0"



4 SOUTH ELEVATION 2
1/8" = 1'-0"

General Elevation Notes

1. ALL EXISTING CMU TO BE PAINTED
2. NEW ALUMINUM WINDOWS & DOORS TO MATCH AS CLOSELY AS POSSIBLE TO EXISTING DARK BRONZE ALUMINUM DOORS & WINDOWS (VIF)
3. NEW LOW-E GLAZING TO MATCH AS CLOSELY AS POSSIBLE TO EXISTING GREY OR BRONZE TINTED LOW-E GLAZING (VIF)
4. NEW PREFINISHED COPING AND GRAVEL STOP TO MATCH AS CLOSELY AS POSSIBLE TO EXISTING DARK BRONZE COPING (VIF)

ELEVATION KEY NOTES

Number	Description
1	12" THICK INSULATED PRECAST WALL PANEL w/ EXPOSED AGGREGATE TEXTURE AND SMOOTH REVEALS, PAINT LIGHT GREY
2	PRECAST WALL PANEL ACCENT BAND w/ SAND TEXTURE, PAINT DARK GREY
5	ALUMINUM FRAMED WINDOW w/ LOW-E GLAZING TO MATCH EXISTING
6	SEGMENTED ALUMINUM STOREFRONT WINDOW w/ LOW-E GLAZING AND SPANDREL AT FLOOR LINE
7	INSULATED HM DOOR AND FRAME, SEE SCHEDULE
8	ALUMINUM STOREFRONT DOOR TO MATCH EXISTING, SEE SCHEDULE
9	INFILL EXISTING OPENING w/ CMU TO MATCH, PAINT
10	9'x10' OVERHEAD DOOR w/ LOADING DOCK, BUMPERS, DOCK LOCK AND DOCK LEVELER
12	8'x10' OVERHEAD DOOR
13	9'x10' OVERHEAD DOOR
14	ALUMINUM FRAMED AWNING w/ METAL ROOF
15	PREFINISHED METAL COPING TO MATCH EXISTING

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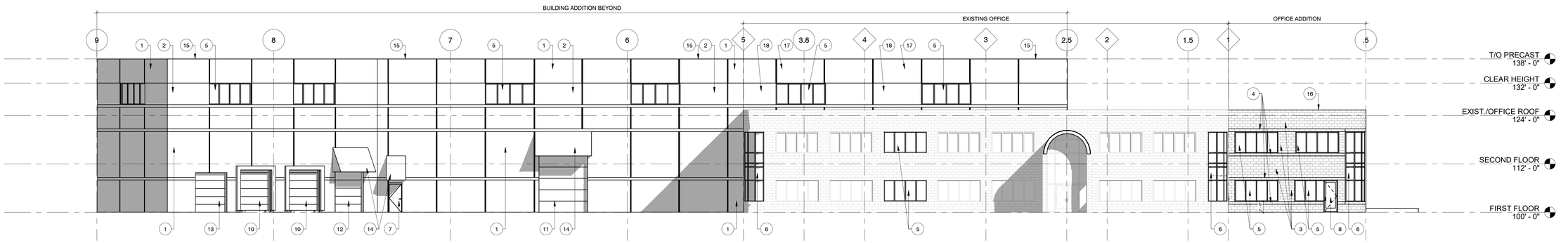
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SHEET NUMBER:
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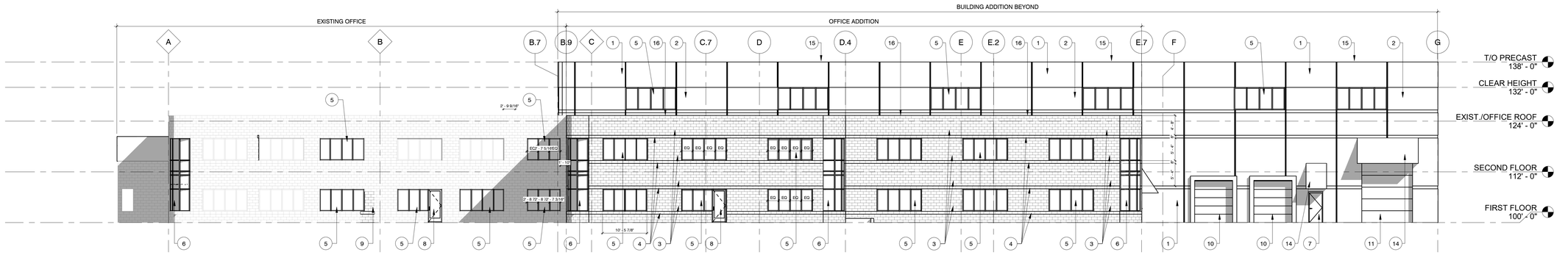
PROJECT NUMBER: P12364
P12364

LEADERS o ENGINEERS o CONTRACTORS o ARCHITECTS

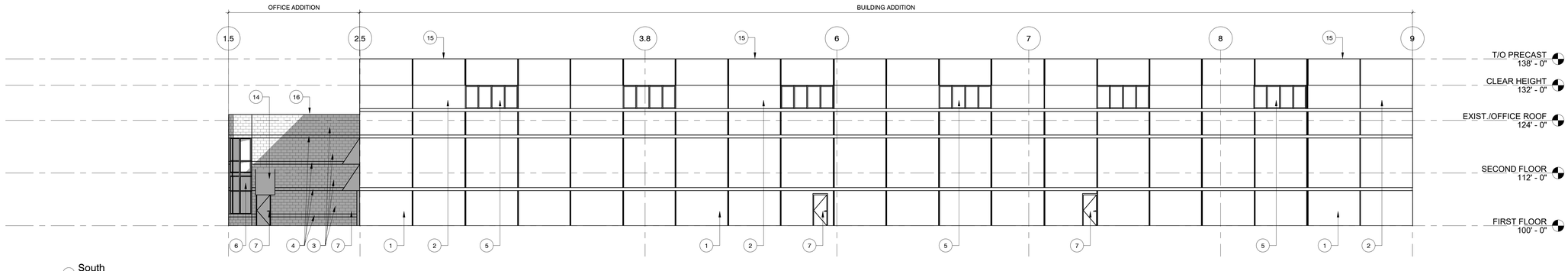
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1 North
3/32" = 1'-0"



2 West
3/32" = 1'-0"



3 South
3/32" = 1'-0"

General Elevation Notes

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3	SPLIT FACED CMU TO MATCH EXISTING, PAINT DARK GREY
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5	ALUMINUM FRAMED WINDOW w/ LOW-E GLAZING TO MATCH EXISTING
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15	PREFINISHED METAL COPING TO MATCH EXISTING
16	PREFINISHED METAL GRAVEL STOP TO MATCH EXISTING
17	EIFS OVER METAL STUDS, PAINT LIGHT GREY
18	EIFS ACCENT BAND OVER METAL STUDS, PAINT DARK GREY

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ARCHITECT:	ENGINEER:	REVIEWED BY:
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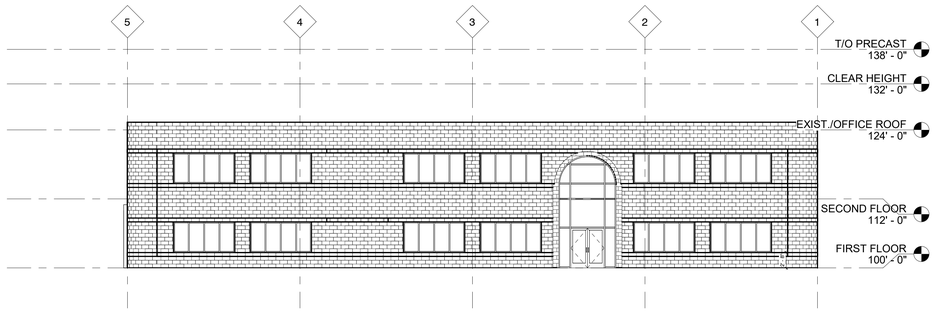
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SHEET NUMBER:
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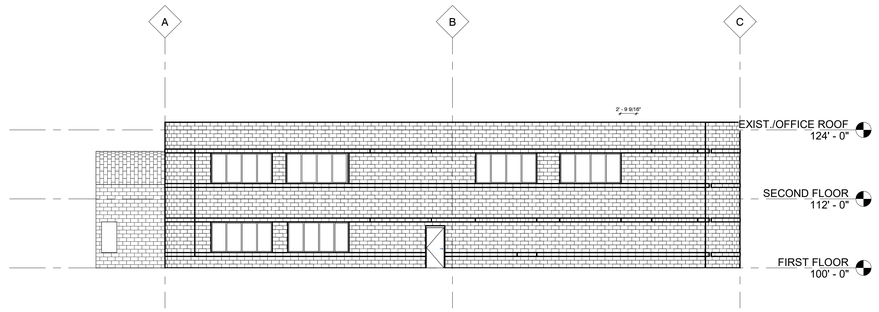
PROJECT NUMBER: P12364
P12364

LEADERS o ENGINEERS o CONTRACTORS o ARCHITECTS

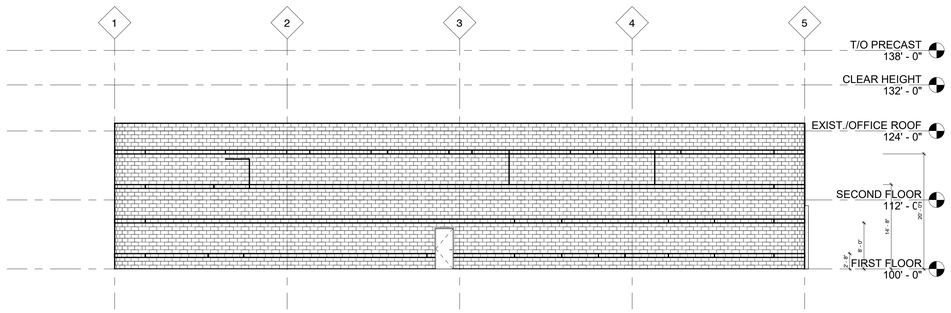
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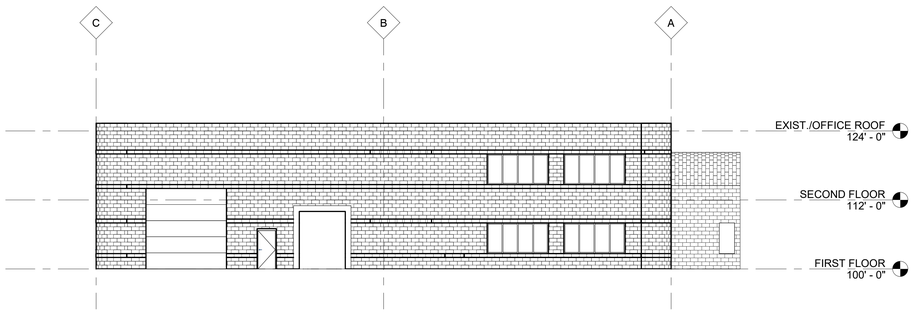
1 NORTH EXISTING
3/32" = 1'-0"



2 WEST EXISTING
3/32" = 1'-0"



3 SOUTH EXISTING
3/32" = 1'-0"



4 EAST EXISTING
3/32" = 1'-0"

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As Built:	--/--/----

REVISIONS:

PROJECT NAME
ENERCON ADDITION

STREET ADDRESS
N120 W19349 Freistadt Rd.

CITY/ STATE / ZIP
Germantown, WI, 35022

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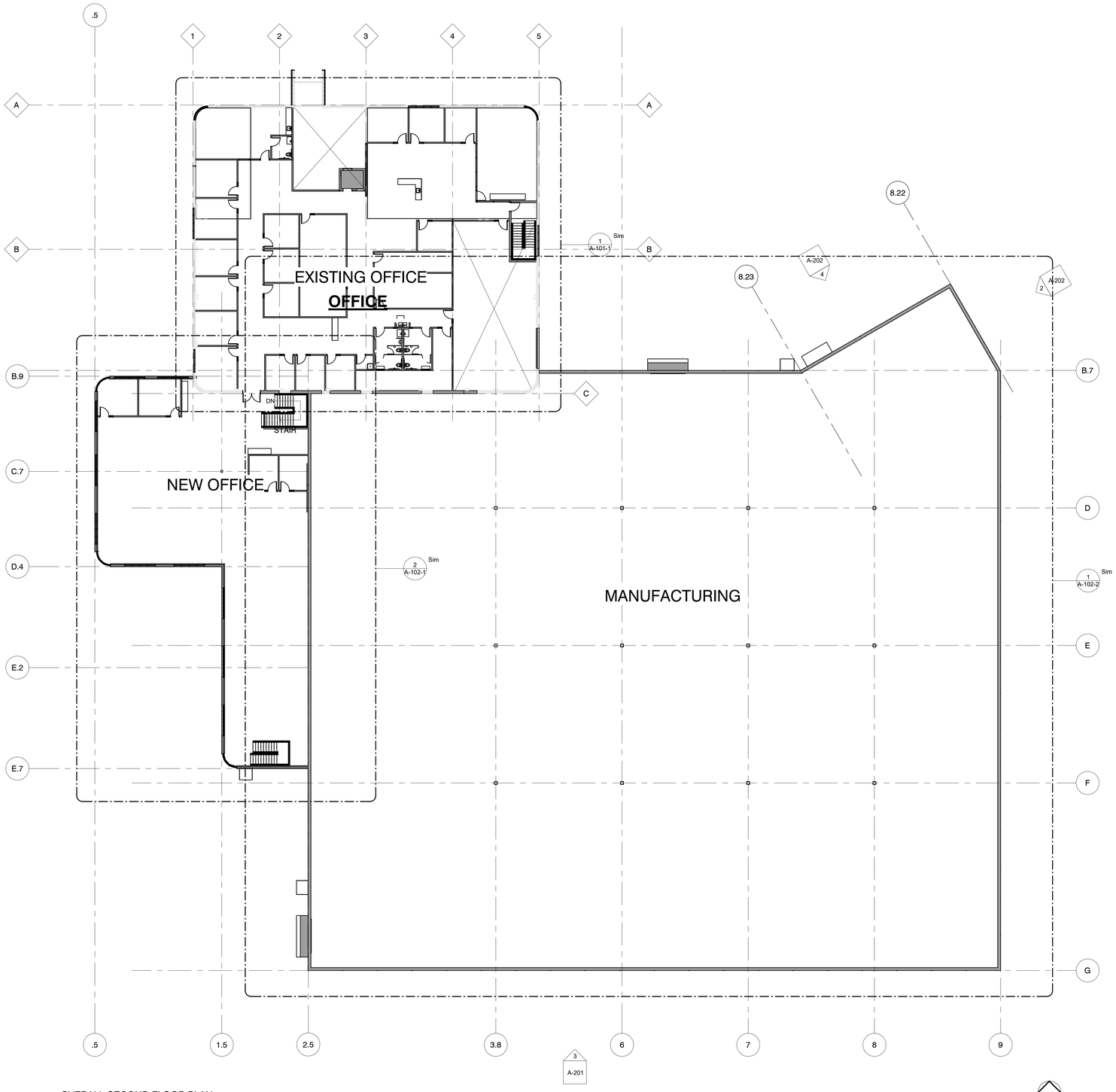
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1 OVERALL SECOND FLOOR PLAN
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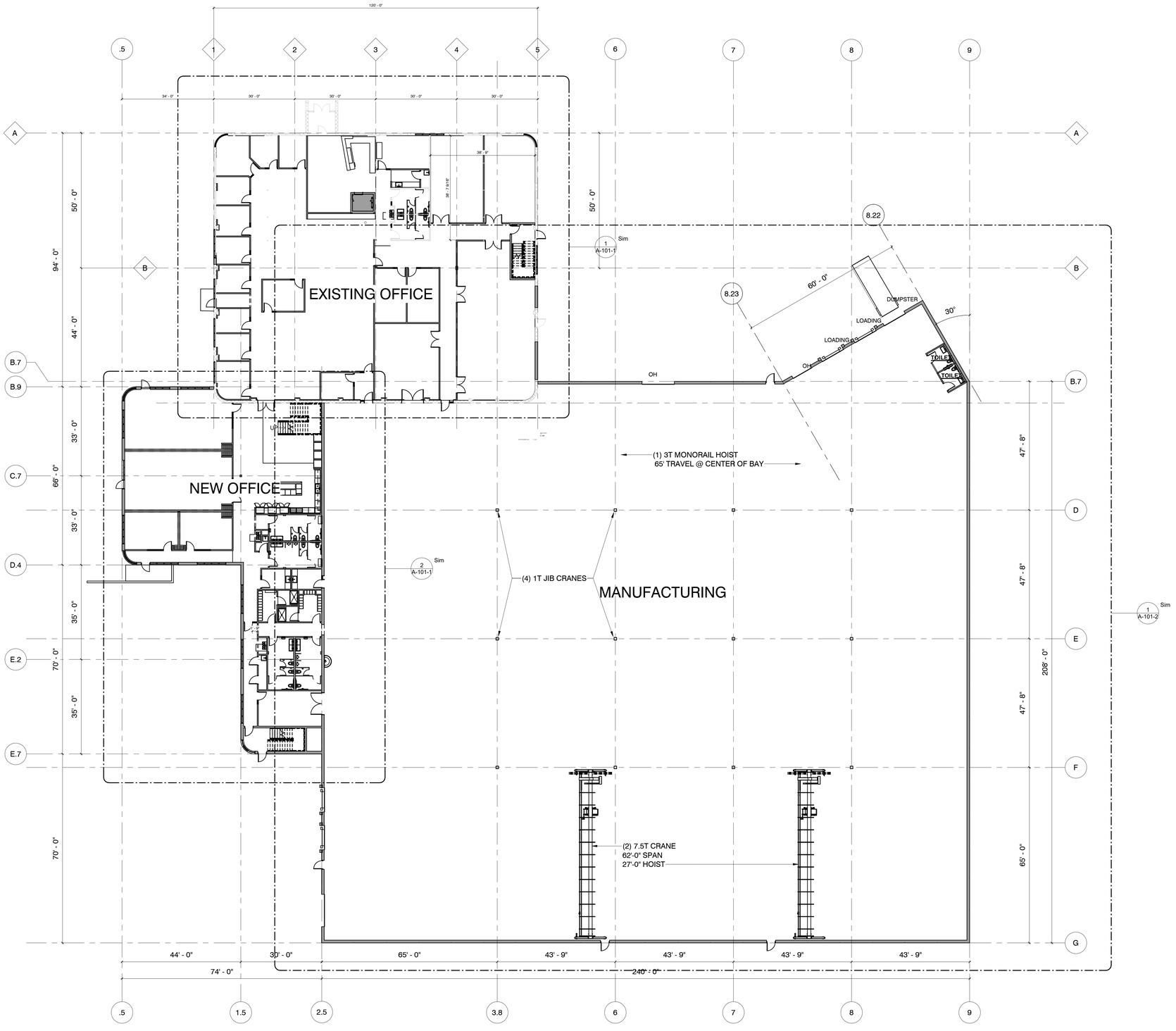
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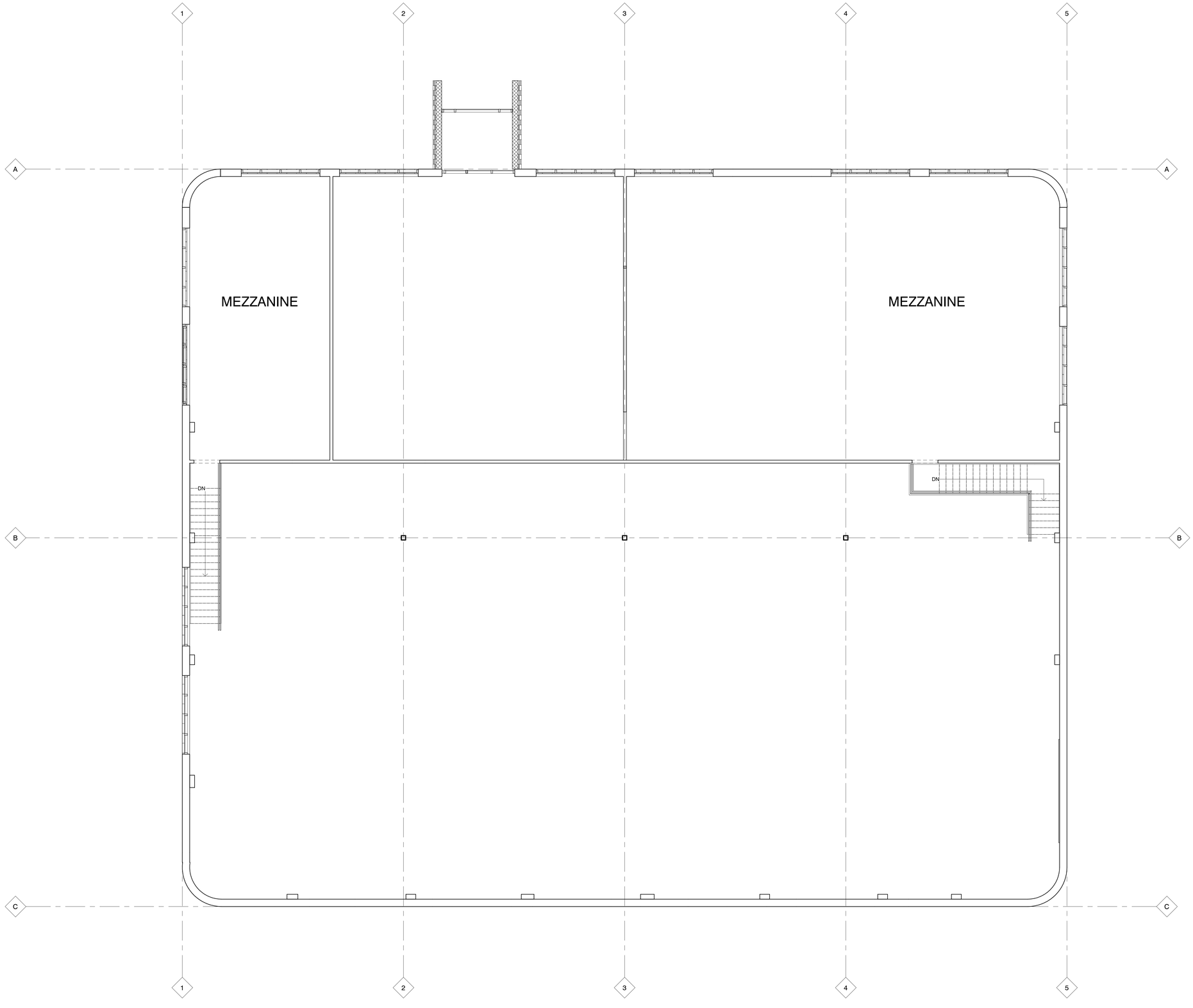
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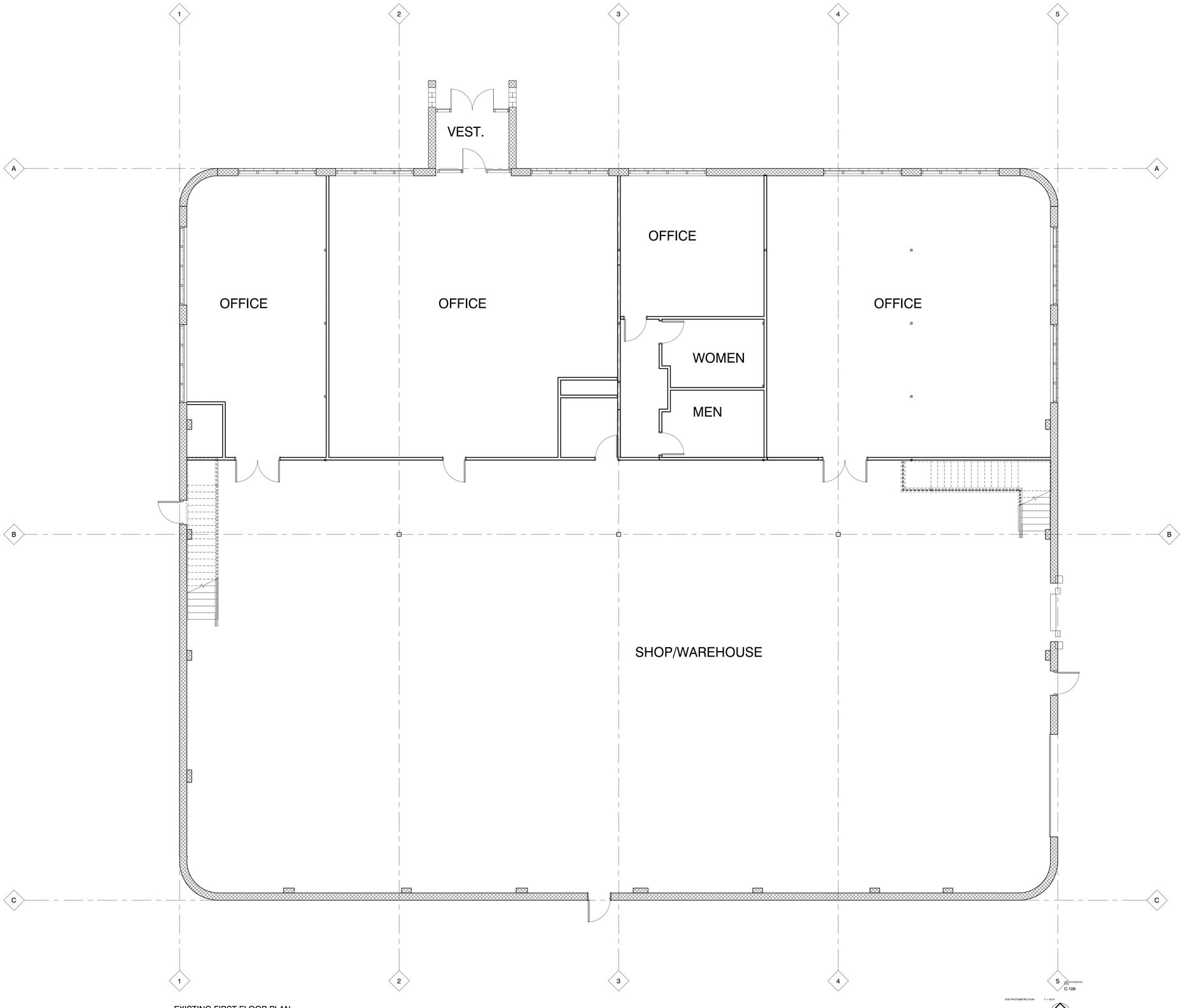
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2021-2026 COMPREHENSIVE OUTDOOR RECREATION PLAN

12/13/21 Plan Commission Meeting

Germantown Community Development Department

Village Planner Report **Germantown, Wisconsin**

As stated in the Introductory section of the 2021-26 Comprehensive Outdoor Recreation Plan (CORP), the purpose of the plan is to guide park and recreation facilities management and development activities for the next five-year period. With an up-to-date, adopted CORP, the Village is eligible to apply for grant funding available through the WisDNR and other similar funding sources. The CORP is also intended to serve as the park & recreation component of the Village's 2050 comprehensive or "master plan" as defined under Chapter 62.23 Wis. Stats.

Under 62.23(3), the Plan Commission is charged with the responsibility of adopting the Village's comprehensive "master plan" either in whole or in parts. In this case, the Plan Commission is asked to adopt the CORP as a free-standing document so the Village can forward it to the WisDNR for review and acceptance to ensure the Village is eligible to apply for grants in the spring 2002 grant cycle.

Portions of the CORP will be included in and formally adopted as the park & recreation component of the overall 2050 Comprehensive Plan.

The Village's new Director of Parks & Recreation, Gil Standridge, will provide a summary presentation of the 2021-2026 CORP to the Plan Commission.



Village of Germantown

Comprehensive Outdoor Recreation Plan 2021-26

Adopted September 2021

Acknowledgments

Parks & Recreation Commission

Phil Hudson – Village Trustee
Scott Coulthurst – Chairperson
Ray Borden – School Board Member
Brian Deples
Wendy Knop
Kim Leukert
Steve Stapelman
Mark Schroeder – Park & Recreation Director

Park & Recreation Staff

Mark Schroeder – Park & Recreation Director
Patti Heinen – Recreation Supervisor
Katie Rodger – Recreation Supervisor
Shannon Lemke – Park & Recreation Secretary
Briana McNeal – Park & Recreation Secretary
Jamie Kargus – Program Coordinator
Mary Fiegel – Senior Coordinator

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GRAEF Consultant Team

Craig Huebner, AICP
Danya Littlefield
Ben Block





September 2021

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1

September 2021

Chapter One
Introduction

Germantown's first Comprehensive Outdoor Recreation Plan (CORP) was developed in 1990 and has been updated four times since then. This CORP update was developed by the Village of Germantown Staff and the Park & Recreation Commission, along with a team of consultants, alongside the Village's overall Comprehensive Planning process from 2019-2021. This plan will guide recreation management and park development for the next five years and enable the Village to apply for grant funding from the Wisconsin Department of Natural Resources (WDNR) and other funding sources.

The purpose of this document is to:

- Create an up-to-date inventory and evaluation of Germantown's existing parks, recent park improvements, and recreational trails.
- Benchmark facilities and services against standards from the County as well as other communities around the country.
- Identify the needs of all community members related to active and passive outdoor recreational opportunities
- Provide a framework for the natural resource element and cultural resource element of the Smart Growth Comprehensive Plan.
- Provides a list of recommendations to the Village to assist with its Capital Improvement Planning (CIP) efforts related to parks and open space.

Planning Context

The Comprehensive Outdoor Recreation Plan for the Village of Germantown incorporates information from past and present planning efforts in the Village, Washington County, the Southeastern Wisconsin Regional Planning Commission (SEWRPC), and the State of Wisconsin. This plan also uses metrics and benchmarking data aggregated by the National Recreation & Park Association (NRPA) to evaluate the Village's own facilities. Some of the key plans, studies, and reports referenced in the making of this plan include:



2019 NRPA Agency Performance Review

National Recreation & Parks Agency



2020 Park and Open Space Plan

Washington County, WI



2019 County Bikeway & Trail Network Plan

Washington County, WI



2015-2019 Village of Germantown Comprehensive Outdoor Recreation Plan

Germantown History, Location, & Population

Originally one square mile, Germantown was formed by incorporating seven separate hamlets (or towns) into the Village of Germantown as we know it today. Germantown got its start as "Town 9" Washington County, Wisconsin Territory in 1836. Germantown was officially incorporated in 1924 and remained a small farming community until 1963, when Milwaukee County annexed a small piece of land from Washington County to build a landfill.

Fearing further annexation by Milwaukee County, the surrounding unincorporated hamlets of Kuhburg, Willow Creek, Meeker Hill, Goldenthal, Rockfield, Dheinsville, and Germantown decided to merge into one incorporated village - and Germantown was born.

At the time of annexation in 1963, the village grew to about 24 square miles. Some of the unincorporated areas wanted to keep their own identity, which is why we have the Town and Village of Germantown. Since 1963, boundaries have continued to change and over time the Village of Germantown has grown to encompass over 34 square miles.

Currently, the Village has a total of 34.4 square miles and a population of approximately 20,590 people in the southeast corner of Washington County, immediately adjacent to Waukesha County on the southern boundary, Ozaukee County on the eastern boundary, and Milwaukee County to the southeast. Germantown is connected to the City of Milwaukee and other major population centers in the region by Highway 41/45 north and south and Highway 167 east and west.

Agricultural Land and Preservation

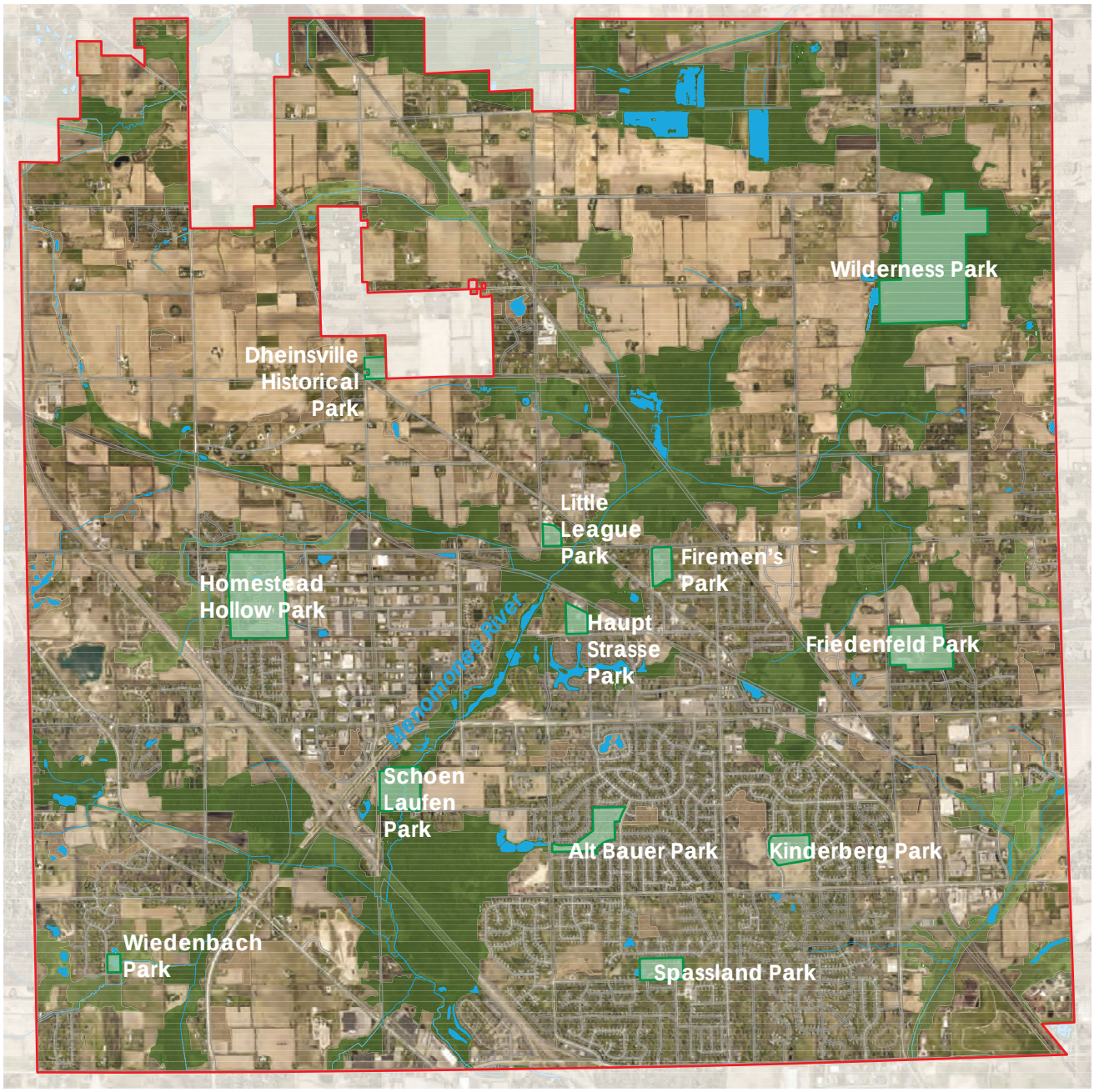
Historically, Germantown was primarily a farming community. In 1970, approximately 70% of the land in Germantown was used for agricultural purposes. However, like most communities in the Milwaukee metropolitan region, Germantown has been continually losing farmland to residential and commercial development.

Most of the remaining farmland in Germantown is located in the northern half of the Village, north of Freistadt Road (CTH F). Currently there is limited development in this area, which is primarily single family residential. The Village Zoning Code includes both A-1 and A-2 Agricultural Districts. The purpose of the A-1 District is to provide for the continuation of general farming and to protect the rural lands from urban development. The purpose of the A-2 District is to provide for, maintain, preserve and enhance lands that were historically used for crop production and are generally best suited to smaller farm units, such as truck farming, horse farming and orchards. Although the number of farms has declined since 1970, the number of nurseries and greenhouses has nearly doubled.

Water Resources

The topography of Germantown is characterized by rolling ground moraine, similar to, but more subdued than, the kettle and kame topography of the Kettle Moraine located to the north and south of Germantown. Germantown's topographic features consist of hills and ridges interspersed with broad undulating plains and poorly drained wetlands. Rivers and streams are defined as watercourses having perennial flow and intermittent streams significant

Village of Germantown



EXISTING FEATURES

- Municipal Boundary
- Park
- Water
- Primary Environmental Corridor
- Secondary Environmental Corridor

enough to have been named. There are four watercourses that meet this definition. The most significant watercourse is the Menomonee River and its north and west branches within the central and south-central portion of the Village. Little Cedar Creek and its southern tributary cuts across the northwestern corner of Germantown and has a combined total of 1.2 miles in the Village; Goldendale Creek, a tributary of the Menomonee River which is located in the western portion of the Village has a length of 2.0 miles in the Village, and Willow Creek which is located in the southwestern corner of the Village has a length of 2.3 miles. Lakes are defined as water bodies having 50 acres or more of surface area. There are no lakes within Germantown. Minor lakes and ponds have less than 50 acres of surface area. There are two water bodies in Germantown that meet this definition. Rockfield Quarry Pond, located immediately south of Rockfield Road and immediately west of CTH G, has 2.6 acres of surface area. There are also a group of man-made minor lakes located in the Lake Park Homes development just south of Main Street which constitute approximately 34 acres of surface area, as well as a quarry pond east of Appleton Avenue.

Floodplains are normally defined as the areas along rivers and streams that are subject to inundation by the 100-year recurrence interval flood event. There is a one percent chance that such an event will be reached or exceeded in severity in any given year. Approximately 30 square miles of Germantown are located within the Menomonee River watershed and the remaining 6 square miles of Germantown, located along the northern and northwestern edges of the Village, are in the Milwaukee River watershed. Comprehensive watershed plans have been completed for both of these watersheds by South East Wisconsin Regional Planning Commission (SEWRPC). Floodplains in Germantown are generally located in environmental corridors along the Menomonee River and its tributaries. These areas are not well-suited to development due to flood hazards, high water tables and inadequate soils.

Greenseams Program

Greenseams is a flood management program that permanently protects key lands containing water absorbing soils. By storing and draining water into the ground naturally, Greenseams helps prevent future flooding while supporting and protecting Metro Milwaukee Sewer District's (MMSD) structural flood management projects - infrastructure investments worth hundreds of millions of dollars.

The program makes voluntary purchases of undeveloped, privately owned properties in areas expected to have major growth in the next 20 years as well as open space along streams, shorelines and wetlands. MMSD hired The Conservation Fund (TCF) to run Greenseams Program. TCF is a national non-profit conservation organization that forges partnerships to protect America's legacy of land and water resources. TCF performs high volume real estate transactions for local land trusts and government agencies throughout the country. All land acquired will remain undeveloped, protecting water and providing the ability to store rain and melting snow. Wetlands maintenance and restoration at these sites will provide further water storage. Greenseams also preserves wildlife habitat and creates recreational opportunities for people living in the region. Where applicable, the properties can be used for hiking, bird watching, and other passive recreation. To date the Fund has purchased twenty-eight properties in Germantown, totaling over 1,034 acres. These properties are of special interest because the majority of the properties are located around Wilderness Park and may improve access to or potentially be part of a larger park in the future.

Germantown Park and Recreation Department History

In 1971, the Germantown High School Athletic Director worked part-time as the Recreation Director. Programs were run by seasonal and part-time employees at various schools. The first full-time Recreation Director was hired in 1980. In 1984, the title of Recreation Director was changed to Park and Recreation Director. The department was a one-person department until 1994, when a Recreation Supervisor was added. In 1995 a full-time secretary was hired. In 1999 a part-time secretary was added. A second full-time Recreation Supervisor position was added in 2007. In 2004, the Senior Center split from the Department and then returned in 2009.

The Department Today

The Department is comprised of a Director, two Recreation Supervisors, a Senior Coordinator, two full-time Secretaries, and many seasonal part-time employees. Routine park maintenance is performed by the Public Works Department, however short and long term capital improvement plans, as well as park acquisition and development projects, are coordinated by the Director. The mission of the Germantown Park & Recreation Department is to enhance the quality of life for all residents of the community through the development and maintenance of park lands and facilities as well as providing a variety of quality recreational programs and special events.

Germantown Park & Recreation Department

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E-Mail: parkrec@village.germantown.wi.us
Website: www.germantownwi.gov





2

Chapter Two
Village Profile

Communities like Germantown, with rural atmosphere and small-town character, are continuing to attract families and businesses from larger municipalities. The result has been an increase in population and a gradual change in the expectations of the community toward higher levels of park and recreation services.

20,590

Population of the Village of Germantown (2019 DOA Estimate)

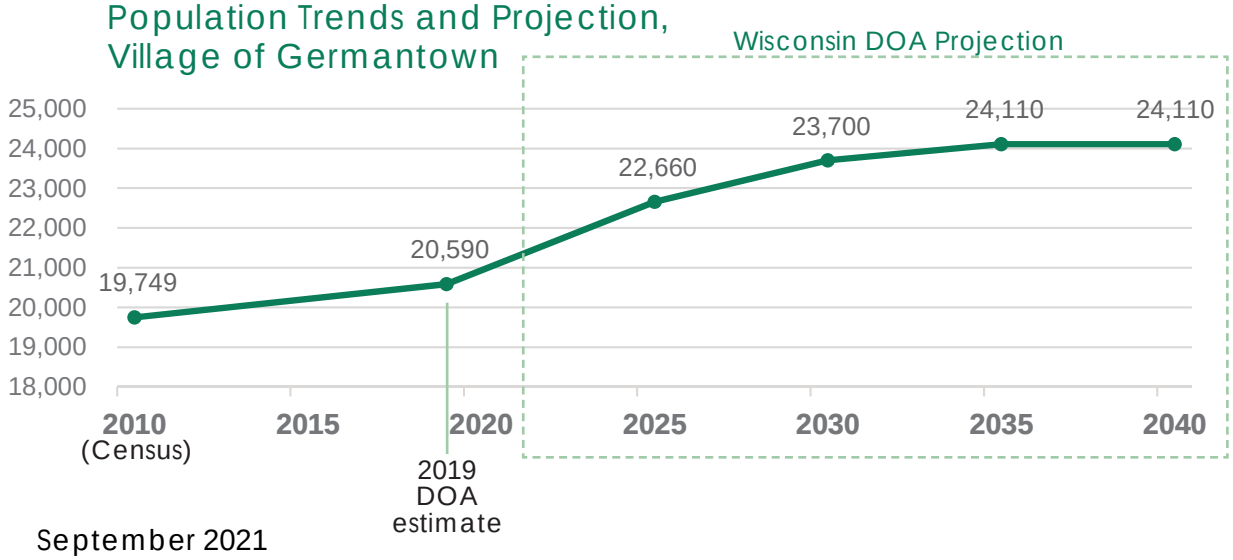
7,967

Households in the Village of Germantown (2018 ACS Estimate)

Average household size in the Village of Germantown **2.5**

25% of the residents of the Village of Germantown are under 19 years old

Population Trends and Projection, Village of Germantown






SCHOEN LALIFEN PARK















The mission of the Germantown Park and Recreation Department is to enhance the quality of life for all residents of the community through the development and maintenance of park lands and facilities as well as providing a variety of quality recreational programs and special events.







3

Chapter Three
Parks & Open Space Inventory

Village of Germantown Parks and Open Space

Most parks receive German names to reflect the German heritage. The Village of Germantown park system consists of ten parks and several public areas. There is a total of 404 acres of park lands, 165 acres of which are designed for active recreation and 239 acres designated as environmental park land, more suitable for active and low-impact recreation. The active-recreation park areas are primarily concentrated in the urbanized, south central portion of the Village. The Village's environmental park areas are mostly located in the rural areas of Germantown. The Village also owns the 10-acre Little League Park, which is maintained in a cooperative effort between the Village and the Little League. The Village of Germantown has a long-term lease agreement with Germantown Little League for their use of this park.

Homestead Hollow Park is a county-owned park located in Germantown. This 105-acre site is located in west-central Germantown, near US Highway 41/45. It was purchased by the Washington County Park System in 1977 and officially opened in 1983. The 105-acre park is an old farmstead. Evidence of this can be seen in its barns which have been converted and updated into shelters that can be reserved. Homestead Hollow Park offers county residents a variety of active and passive recreation opportunities. Facilities found at Homestead Hollow County Park include a trail system, lighted sledding hill, play equipment, basketball court, soccer fields, softball field, park shelters, fishing pond, ice skating rink, and a lighted parking lot. Soccer fields at the northwest part of the park are used by the Germantown Kickers soccer club for games and practices. In 2018, the county constructed & opened the Homestead Howl Dog Exercise Area, which features separate areas for both large and small dogs.

Indoor Recreation Facilities

The Germantown Park & Recreation Department currently operates seven indoor facilities. These facilities are the Survive Alive House, Firestation #1 Community Room in Fireman's Park, the Kinderberg Park indoor shelter, the Senior Center, the Department of Public Works multi-purpose room, and the recently completed Firemen's Park multi-use shelter.

Public School Facilities

The Germantown School District owns and maintains six developed outdoor recreation areas adjacent to schools that add to the Village's recreation base. The school recreation facilities total approximately 50 acres, and are located mostly near the urbanized south central portion of the Village. The school district lands are available only on a limited basis for public use. The Germantown School District and the Village of Germantown have an intergovernmental agreement that allows the Park and Recreation Department to use its buildings per a facility use fee schedule. The Germantown Park and Recreation Department uses these facilities for both active and passive recreation. The School District facilities are a critical component to the Department's operation. Without the cooperative agreement many of the Department programs would not happen.

Park Sites Inventory & Analysis

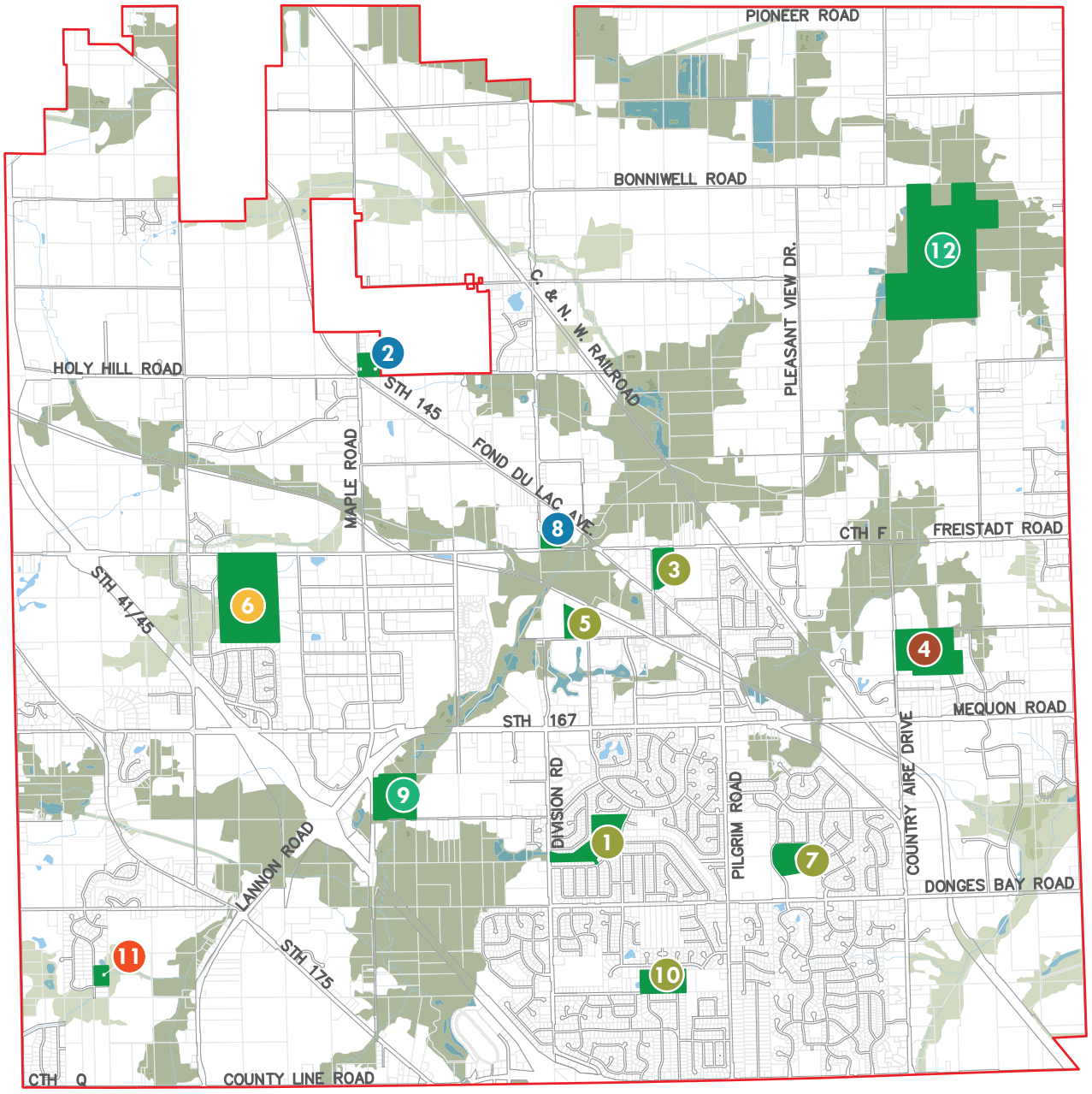
The Village of Germantown park and open space inventory contains 12 sites. Each of the park sites are described in detail starting on page 28. The name, type, size, amenities, summary, and photos of existing conditions are listed.

Germantown has 19.6 acres of park for every 1,000 residents, excluding Homestead Hollow County Park and Little League Park. According to the metrics and benchmarks of peer agencies reported in the NRPA's 2019 Agency Performance Review, the typical park and recreation agency has only 10.1 acres of park land for every thousand residents. Germantown also has 2,059 residents per park site, which is very close to the typical agency, which has one park per every 2,181 residents.

Although Germantown appears to be performing well in comparison with peer agencies around the country, these metrics are slightly inflated by the 200 acres of park land housed within Wilderness Park in the northeastern corner of the Village. During community engagement activities for this CORP update, it became clear that many Germantown residents did not know that Wilderness Park existed. This is not surprising, given that there is no obvious public access point to the park. Arguably, if there is no public access of the park or awareness that it is publicly accessible land, it should not be counted as park land for the purpose of Germantown's metrics. The planning team for this CORP update recommends that the Village of Germantown determine if public access can be provided to Wilderness Park and work to bring awareness of this large environmental area to Germantown residents. Two other types of facilities are not currently part of the Village's Park system, but are often discussed by the public as possible future additions. One is an aquatic center or pool of some type, and the other is a

1. Alt Bauer Park
   Neighborhood Park - 25.6 acres
2. Dheinsville Historical Park
   Special Use Park - 9.5 acres
3. Firemen's Park
   Neighborhood Park - 17 acres
4. Friedenfeld Park
   Community Park - 53 acres
5. Haupt Strasse Park
   Neighborhood Park - 13 acres
6. Homestead Hollow County Park
   Regional Park - 105 acres
7. Kinderberg Park
   Neighborhood Park - 23 acres
8. Little League Park
   Special Use Park - 10 acres
9. Schoen Laufen Park
   Environmental Park - 39 acres
10. Spassland Park
    Neighborhood Park - 20 acres
11. Wiedenbach Park
    Playlot Park - 4 acres
12. Wilderness Park
    Environmental Park - 200 acres

Village of Germantown Parks



EXISTING FEATURES

- Municipal Boundary
- Park
- Water
- Primary Environmental Corridor
- Secondary Environmental Corridor



Germantown's Parks
By the numbers

19.6 Acres of park per 1,000 residents

2,059 Germantown residents per park

11 Full time equivalent (FTE) staff, with a mixture of full-time and part-time/seasonal employees

11 Playgrounds in Parks and schoolgrounds

21 Soccer fields in Parks and schoolgrounds

6 Baseball fields and 3 softball fields in Parks and on schoolgrounds

community center. Both of these types of facilities are costly to build, program, staff, and maintain, but can provide great benefits to residents. According to the NRPA's 2019 Agency Performance Review, 57.9% of agencies provide a community center to residents, at a rate of about 1 center per 28,750 residents per facility. About 52.3% of all agencies provide an outdoor pool, and 70% of agencies provide some sort of aquatics programming to residents.

When considering adding future facilities, the Village of Germantown Park & Recreation Department must weigh the cost and the benefits to the community, both in terms of upfront capital investment and ongoing staffing and maintenance.

Facilities Analysis

The Village of Germantown offers a wide range of park, sports, and recreation facilities to Germantown residents and visitors. Within the park properties trails and shelters allow residents different ways to engage with park land. A wide variety of sports fields and courts in the Village allow leagues and sports organizations to use the parks for practice and tournament play while also providing space for community residents to recreate. Recently, a few tennis courts were converted to pickleball courts to accommodate changing desires of the Germantown community. Highlights of Germantown's facilities include the Gehl's Performing Arts Pavilion in Firemen's Park that was constructed in 2018, the Festehalle in Dheinsville Park that was constructed in 2020, the Germantown Senior Center, and the new Firemen's Park shelter which was completed in June of 2021.

In the future, Germantown could consider adding or expanding the following facility types in the Village, which are noted by the NRPA as key categories

offered by the majority of park and recreation agencies nation-wide:

- *Outdoor Swimming Pool* (offered by 52% of peer communities)
- *Community Center* (offered by 57% of peer communities).
- *Indoor recreation center (including indoor gym and fitness centers)* (offered by 55% of peer communities).

In addition, the following types of facilities may need to be expanded in Germantown:

- A Village Dog Park - residents have expressed a desire for additional dog park options.
- Basketball courts, volleyball courts, multi-use courts, and youth baseball/softball fields.

A complete list of the facilities provided by the Village can be found in the Appendix and are also listed on each park page beginning on page 28.

Arguably more important than a comparison to Germantown's peer communities is a self-assessment of the Village's facilities by those who use them most - the residents. With this in mind, the planning team asked individuals, community groups, and athletic organizations throughout this planning process the following question: "Are Germantown's current Park & Recreation facilities meeting your needs?" While the results of the community engagement process are outlined in more detail in the "Community Needs Assessment" section of this plan, one key priority with regards to Germantown's park and recreation facilities was 'maintenance and upkeep' of facilities. Several different types of user groups noted that maintenance issues with existing facilities can sometimes prevent residents from benefiting fully from Germantown's existing facilities - for example, drainage issues on sports fields and on trails within parks.

Programming Analysis

Park & Recreation Department programming plays an important role in the Germantown community. Programs provide essential recreation and socialization services to youth, adults, and older adults, encouraging engagement with park facilities and facilitating active lifestyles. The events and classes that are provided by the Park & Recreation Department foster a sense of community and belonging in Germantown.

Germantown's Recreation Division offered 854 program sessions with a total of 9,537 registered attendees in 2019 across five major program areas: Youth Enrichment, Youth Sports, Family, Adult Enrichment, and Adult Sports. The Germantown Senior Center offers educational, health, fitness, and entertainment programming to older adults in the community; 176 class sessions, 79 trips, and 103 free program sessions were offered in 2019. Germantown also offers five programs through the Kids Klub, including Summer Kids Klub, Before and After School programming at four public and one private elementary school as well as Tyke Site for Pre-K children, and an off-site Adventure program for 5th-7th graders.

According to our review of the NRPA's 2019 Agency Performance Review of programming in agencies nation-wide, Germantown's offerings seem to be in line with peer communities. The NRPA notes that Park and Recreation agencies are committed to serving all members of their communities; most communities offer programming for children and older adults, as Germantown does. Most communities also offer after-school care but fewer offer before-school care for school-aged children; Germantown offers both.

In fact, Germantown offers programming in most of the areas recommended by the

NRPA, including team sports, themed special events, social recreational events, health & wellness education, fitness classes, individual sports, safety training, racquet sports, trips and tours, and martial arts. Germantown offers aquatics through the school district, including swim lessons and open swim times. In the future, Germantown could consider adding or expanding programming in the following areas, which are noted by the NRPA as key categories offered by the majority of park and recreation agencies nation-wide:

- *Cultural crafts* (offered by 60% of peer communities)
- *Natural & cultural history* (offered by 55% of peer communities)

Staffing Analysis

As of the writing of this plan, the Village employs six full-time Park & Recreation administration staff. There are also three full-time employees whose positions fall under the Parks Division at the Department of Public Works. While performing parks duties, these employees also handle building & public works related duties as needed. Finally, the Parks Division employs approximately 10-12 seasonal positions in the summer. This translates to roughly 11-12 full-time staff equivalents (FTEs), with a mix of full-time and part-time staff.

In comparison to peer communities, Germantown staffing is below the median FTEs for communities with 250 acres of parks or fewer (16.5 FTEs nation-wide) according to the NRPA's 2019 Agency Performance Review. Though Germantown residents have access to many more acres than 250, the Parks Division maintains just over 200 acres of active park lands. If the Wilderness Park is to be used as accessible park land in the future, or if new parks are added as Germantown grows, Germantown would need to evaluate the need to add more staff to accommodate the additional maintenance and programming that would be needed.

Park and Recreation FTEs in Germantown also seem to be lower than peer communities with similar populations. Communities with 20,000 - 49,999 people employee a median of 28.4 FTEs and a lower quartile median of 15.3 FTEs. Germantown is just over the population threshold of 20,000, but our 11-12 FTE count is below even the lower quartile median for similarly-sized communities. As Germantown's population continues to grow and new neighborhoods and housing are developed in the future, Germantown should consider adding additional Park & Recreation Department staff to accommodate increased programming & maintenance needs in the existing parks and any new park land that might be acquired and developed in the future.

Budget Analysis

The Park and Recreation Department manages two budgets: the Recreation budget and the Senior Center budget. The Recreation budget encompasses the operation of recreation programs, special events, rentals, full-time and part-time staffing, office operations, sprayground, and miscellaneous park expenditures. Revenues are generated through program fees, sponsorships, donations, advertising, fundraisers, grants, and rental fees. The Senior Center budget is used for the operation of the Senior Center, programs, special events, pick-up service, meal program and many other functions. Revenues are generated through program fees, advertising, fundraisers, grants, and rental fees. The Parks budget goes towards operational maintenance of all parks, playgrounds, forestry, equipment repairs, mowing, and buildings.

In 2019, Germantown's Park & Recreation Department expenditures across the

Recreation Division, the Senior Center, and the Parks Division was just under $1,859,000.00. This equates to about $90 per capita on an annual basis. This lens of analysis of Germantown's expenditures puts the Village in line or slightly below peer communities of a similar size; the NRPA reports that agencies serving jurisdictions with fewer than 20,000 people have a median operating expenditure of $95.67 per capita. Budget is a complicated point of comparison for park and recreation agencies, and normalizing expenditures by population and density can produce results when compared with Germantown. For example, more populous jurisdictions nation-wide are able to spend less per resident on an annual basis, but more dense communities typically spend more per capita.

A note on evaluating Germantown's parks using "standards"

Prior versions of the Village of Germantown's Comprehensive Outdoor Recreation Plan evaluated parks and facilities using benchmarks based on a set of "standards" developed by the National Recreation and Park Association (NRPA). These standards were used to determine the facilities and total park area needed in the Village within each park category. The standards were last updated in 1995, and the NRPA has since moved away from using a "one size fits all" approach to evaluating communities' parks and facilities. Instead, the NRPA publishes an annual report with metrics that allows communities to benchmark their parks and facilities against their peers. Metrics from the 2019 NRPA Agency Performance Review are used on these pages as a comparison point for the Village of Germantown's parks and facilities.

Though NRPA recommends moving away from using these standards, the updated **Park Size Standard and Acreage Classification** and **Facility Inventory & Standards** tables are still included in this CORP in the Appendix for reference purposes.

In 2020, Washington County published its own Park and Open Space Plan, which included an additional set of standards for general use outdoor recreation sites. These standards are meant to ensure that the public sector provides sufficient size and number of sites to meet the demands of the resident population. The standards, found in Appendix D of the report, are designed to evaluate park access at a regional and multi-community level instead of at the municipal level. However, it does appear that the Village of Germantown has enough acres of park and open space to meet the Washington County standards.

Trails and Connections

Trail Standards

Another standard listed by SEWRPC is for open space lands to accommodate recreation corridors for trail systems on a regional basis. The Bugline Trail in Waukesha County is the nearest regional trail. While neighborhood parks and residential subdivisions currently have trails, they are small and typically serve only nearby residents. Germantown's primary trails are located in Alt Bauer Park (1.28 miles), Friedenfeld Park (1.59 miles), Kinderberg Park (1.05 miles), Schoen Laufen Park (1.19 miles), Spassland Park (.68 miles) and Homestead Hollow County Park (4.4 miles). These trails are used by residents, but they do not constitute a regionally-scaled trail system. A community trail system would link parks, promote greater accessibility and connectivity within the Village and potentially become a regional amenity.

Regional Trail Planning

In 2019, Washington County developed a Bikeway and Trail Network Plan. The plan was created in cooperation with representatives from many of the County's municipalities, including Germantown. The Bicycle & Pedestrian Connections Map shown at right incorporates many of those recommendations, ensuring that the trail development that Germantown undertakes in the coming years will be connected to other regional efforts.

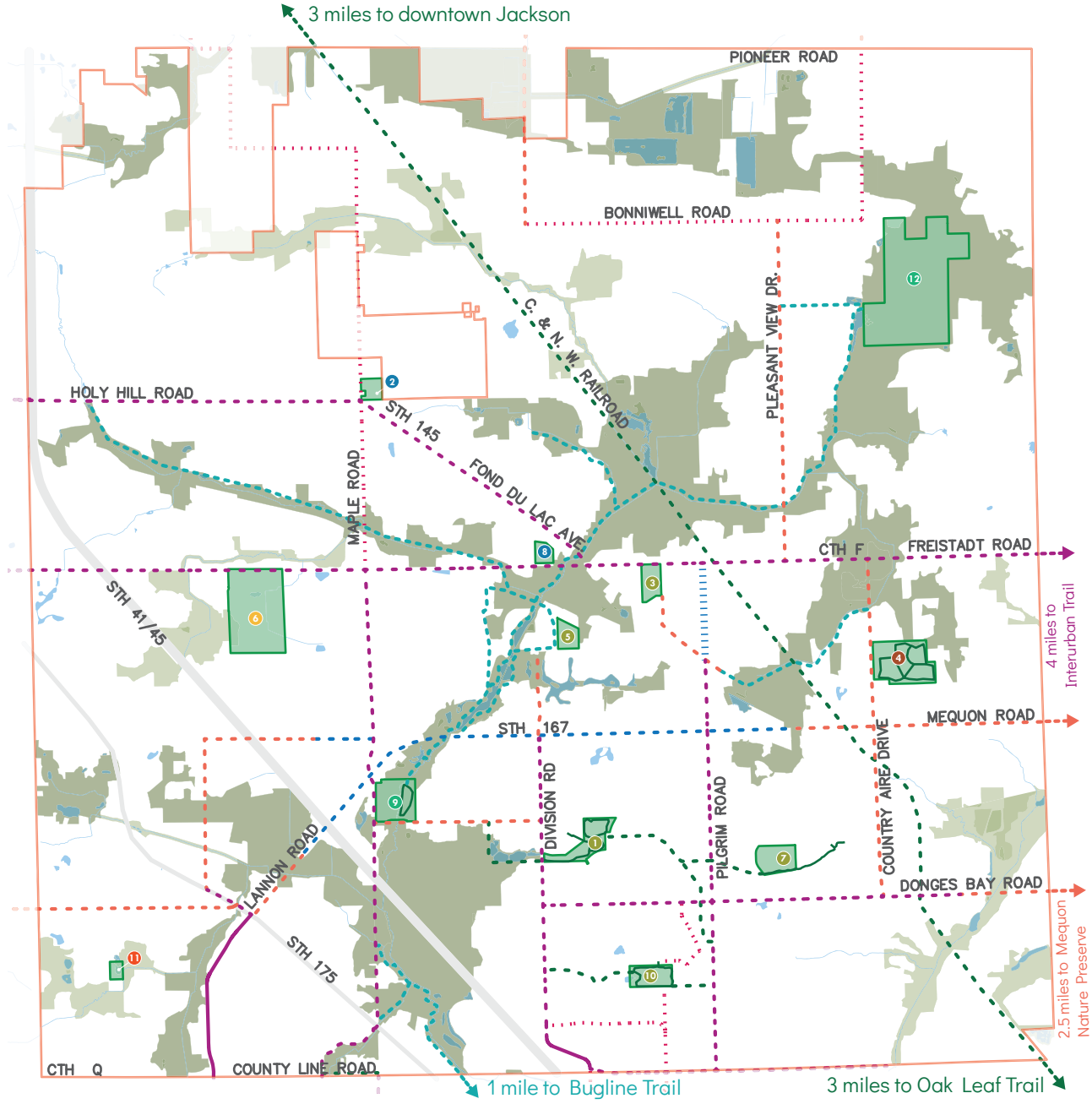
Local Priorities

In addition to the regional trail network connections, the Village of Germantown has identified several local priorities for trail connections. These include a River Trail along the Menomonee River and shared use paths that connect individual parks. Germantown has also identified areas with the potential for bike lanes, traffic calming, and minor enhancements that would make traveling in Germantown safer by bike and on foot.

1. Alt Bauer Park
   Neighborhood Park - 25.6 acres
2. Dheinsville Historical Park
   Special Use Park - 9.5 acres
3. Firemen's Park
   Neighborhood Park - 17 acres
4. Friedenfeld Park
   Community Park - 53 acres
5. Haupt Strasse Park
   Neighborhood Park - 13 acres
6. Homestead Hollow County Park
   Regional Park - 105 acres
7. Kinderberg Park
   Neighborhood Park - 23 acres
8. Little League Park
   Special Use Park - 10 acres
9. Schoen Laufen Park
   Environmental Park - 39 acres
10. Spassland Park
    Neighborhood Park - 20 acres
11. Wiedenbach Park
    Playlot Park - 4 acres
12. Wilderness Park
    Environmental Park - 200 acres

"Expanding and improving the trail system" was the park initiative that received the most votes at the October 2019 public meeting!

Bicycle & Pedestrian Connections



PROPOSED BIKEWAY + TRAIL NETWORK

Municipal Boundary	Primary Environmental Corridor	Water
Park	Secondary Environmental Corridor	
Existing Shared Use Path	Potential Shared Use Path	Potential Bike Lane
Existing Sidepath	Potential Sidepath	Potential Minor Enhancements
Potential River Trail	Potential Paved Shoulder	Potential Traffic Calming

Catalog of Trail Types



Shared Use Path

A shared use path can accommodate many different types of users - bikers, walkers, runners, roller bladers, etc - and can be found in urban, suburban, and rural areas alike.



Sidepath

A sidepath is typically a type of multi-use trail that follows closely alongside of an existing roadway. This type of trail is typically found in suburban or rural areas.



River Trail

A river trail is simply a shared use path, accommodating pedestrians, cyclists, roller bladers, and runners, that follows alongside a riverway and through the park/ conservation land that surrounds these riparian areas. In Germantown, residents have expressed that a river trail along the watercourses should be a Village priority.



Bike Lane

A bike lane is a defined and marked area on the roadway for cyclists to travel. Bike lanes can be striped only (as shown above), or painted green for greater visibility.



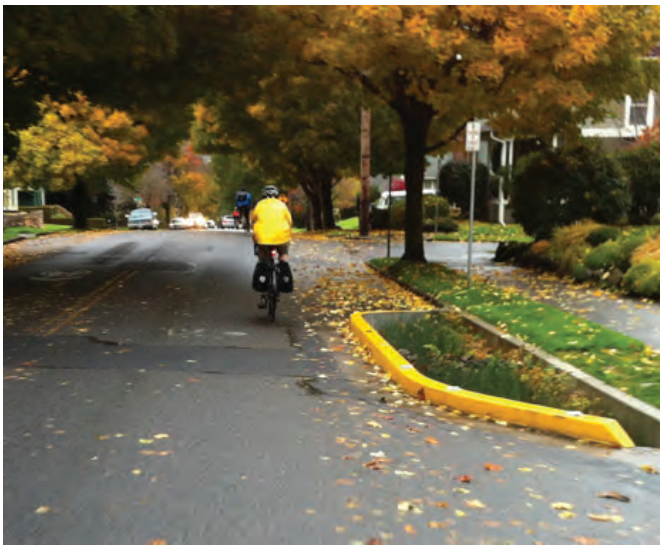
Paved Shoulder

Ensuring that rural and suburban roadways are designed with paved shoulders allows cyclists and walkers to safely navigate streets with light traffic.



Minor Enhancements

Minor enhancements to roadways, such as signage, ensuring drive lanes are marked, and pavement is smooth enough for bike travel, helps keep Germantown's roads safe for all.



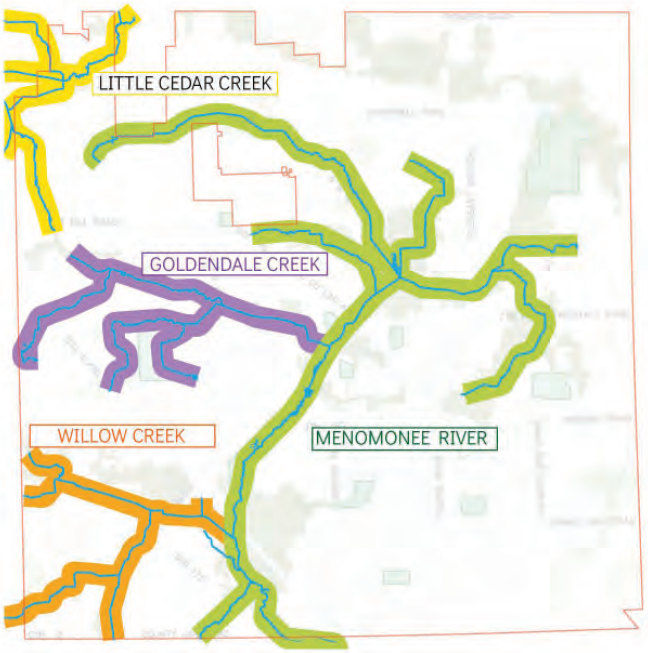
Traffic Calming

Bumpouts, raised intersections, and small traffic circles are examples of tools that can be used to flow vehicular traffic, making streets safer for cyclists and pedestrians.

Priority Highlight: the Menomonee River Trail

There are four main watercourses that fall within the Village of Germantown:

- Menomonee River
- Goldendale Creek
- Willow Creek
- Little Cedar Creek



Each of these watercourses and their adjacent environmental corridors are focus areas for the Village to implement future trails and public access. As part of this Plan, a priority recommendation is to create a "village-wide trail system plan" that identifies the exact location, facility type, acquisition needs, and priorities for river trails (see page 61). The map to the right shows the potential Menomonee River Trail (yellow) and the Goldendale Creek Loop Trail (red).

Menomonee River Trail Planning Considerations

- Primary trail type would be off-road
- Stretch south of Schoen Laufen Park could include sidepath along Maple Road
- Existing Blackstone Creek property should include dedicated park land
- Canoeing/kayaking access should be prioritized for this trail
- Coordination with Village of Menomonee Falls and connection to Bugline Trail will be important
- Document existing bridges and evaluate increased clearance heights for kayak/canoe passage
- Begin conversations with land owners that touch the Menomonee River to negotiate public access easements or acquisition opportunities (See Appendix - Exhibit B for existing land ownership map)

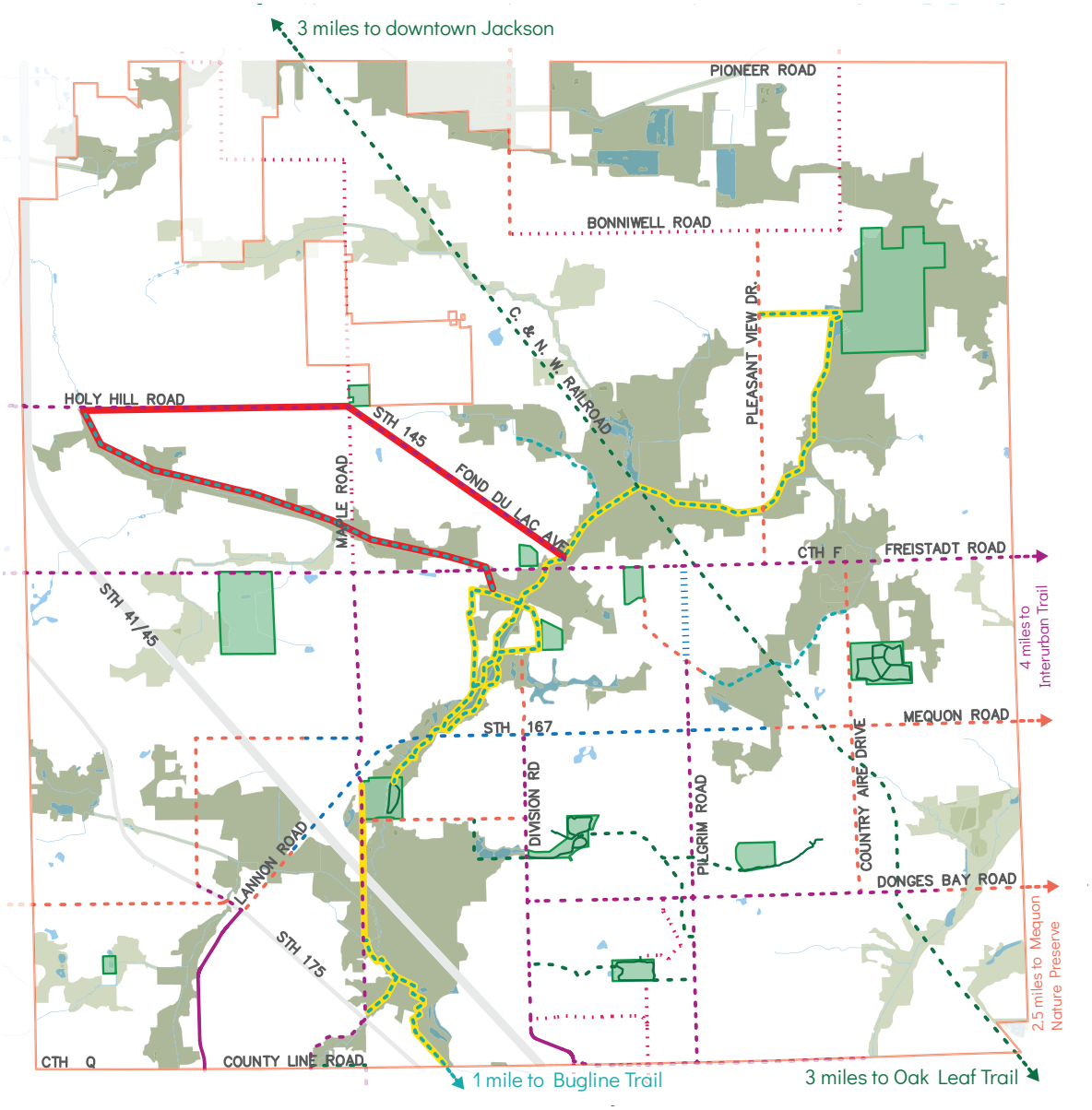
Goldendale Creek Loop Trail Planning Considerations

- Trail types could include a combination of off-road (along Goldendale Creek) and sidepath or off-street trail parallel to Holy Hill Road and Fond du Lac Avenue)
- This potential trail loop would act as a recreational amenity to planned industrial park users and future residential subdivisions

Planning Considerations for all Watercourse Trails

- Incorporate wayfinding, educational, and other interpretive trail signage
- Accommodate multiple user types including walkers, runners, bikers, cross-country skiers
- Support recreational private/semi-private uses/businesses along trails such as recreational equipment rental stores, coffee shops, restaurants, visitor's center, etc.

River Trails



PROPOSED BIKEWAY + TRAIL NETWORK

- Municipal Boundary
- Park
- Primary Environmental Corridor
- Secondary Environmental Corridor
- Water
- Existing Shared Use Path
- Existing Sidepath
- Potential River Trail
- Potential Shared Use Path
- Potential Sidepath
- Potential Paved Shoulder
- Potential Bike Lane
- Potential Minor Enhancements
- Potential Traffic Calming
- Proposed Menomonee River Trail
- Proposed Goldendale Creek Loop Trail



The Menomonee River Corridor at Blackstone Creek Golf Course



The Menomonee River Corridor

Service Area Analysis

A park's service area – the radius of area it provides service to without significant barriers – is ONE element in the evaluation of the Village's Park and Open Space system. This analysis depicts which residential areas are and are not served by the different park categories. It is important to note that while specific service radii are identified for different park types, a residence located outside of a service area does not necessarily mean that the residence is lacking adequate access to park space. It could be argued that all existing residential subdivisions within the village are adequately served by park space.

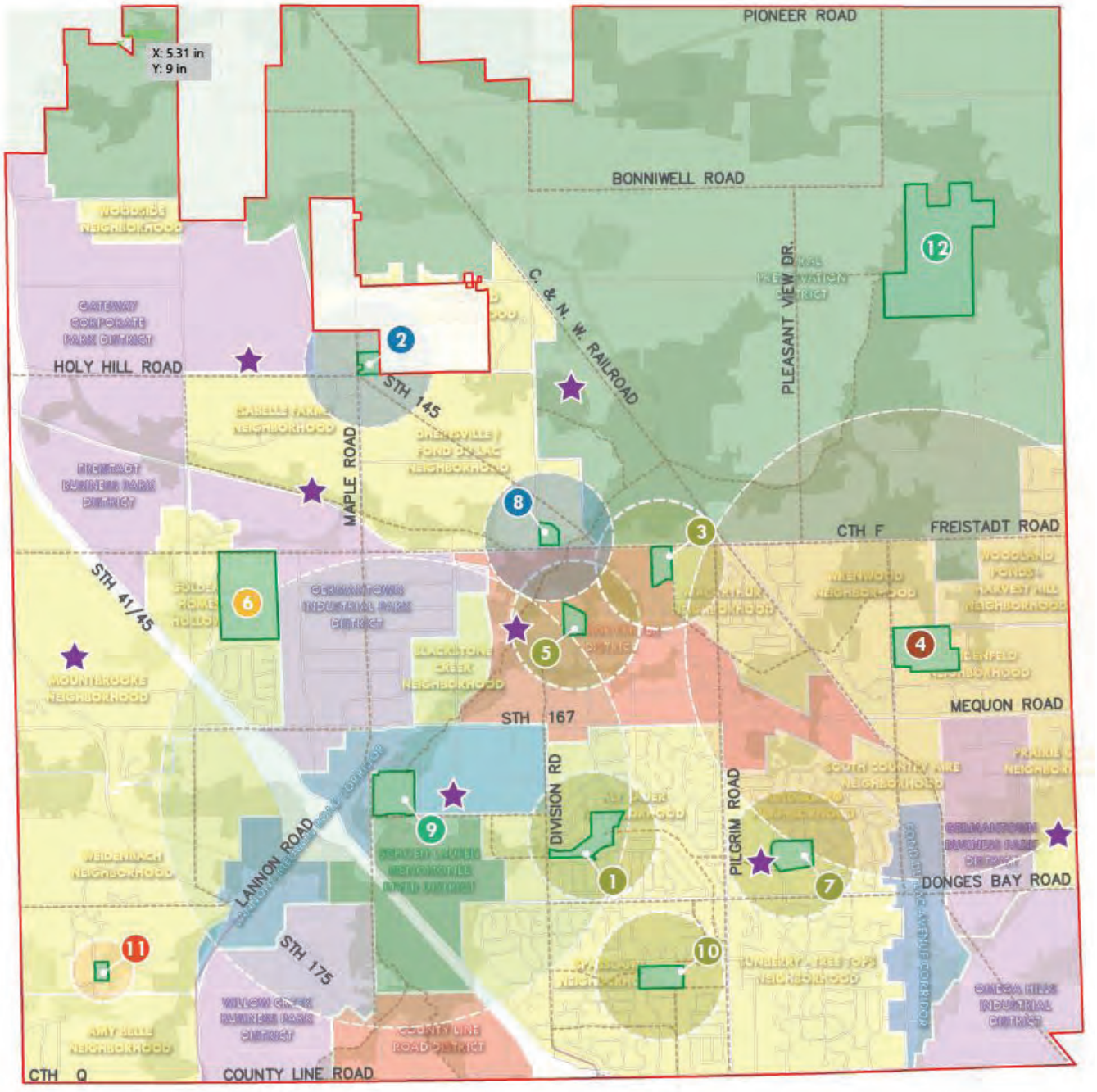
Neighborhood parks are the backbone of the system so nearly all residential areas should have direct access to a park. Some areas may be too small or have too few people to require a neighborhood park. These areas should at least be serviced by a playlot park or nearby access to a trail.

The older residential neighborhoods around Main Street and land south of Mequon Road are well-served by existing parks. While the existing parks may require upgrades or improvements, the purchase or dedication of additional lands in the south central portion of the Village is not a short-term priority for the Village unless the additional land will allow the Village to fulfill a noted deficiency in facilities, such as the community desire for a Youth Sports Complex.

Future residential growth in the Village is expected in the northwestern part of the Village. The Village should consider adding park and/or trail facilities in this area to accommodate the needs of new residents, and ensure that they too have access to park space.

1. Alt Bauer Park
   Neighborhood Park - 1/2 mile service radius
2. Dheinsville Historical Park
   Special Use Park - 1/2 mile service radius
3. Firemen's Park
   Neighborhood Park - 1/2 mile service radius
4. Friedenfeld Park
   Community Park - 3.5 mile service radius
5. Haupt Strasse Park
   Neighborhood Park - 1/2 mile service radius
6. Homestead Hollow County Park
   Regional Park - 12.5 mile service radius
7. Kinderberg Park
   Neighborhood Park - 1/2 mile service radius
8. Little League Park
   Special Use Park - 1/2 mile service radius
9. Schoen Laufen Park
   Environmental Park - 3.5 mile service radius
10. Spassland Park
    Neighborhood Park - 1/2 mile service radius
11. Wiedenbach Park
    Playlot Park - 1/4 mile service radius
12. Wilderness Park
    Environmental Park - 12.5 mile service radius

Service Area Diagram



The Service Area Diagram above includes existing park locations as they relate to the 2050 Future Land Use Map - Neighborhoods, Districts, and Corridors. As the map shows, the majority of neighborhoods (yellow) are served by an existing park. Those areas not served by a public park should look to include new park land, privately shared open space, or have planned trail connections that would connect residential areas to existing parks or river corridors.

★ = Potential Future Park or Shared Open Space



Alt Bauer (Old Farmer) Park is a 21-acre neighborhood park located near the center of the urbanized area in south central Germantown. This park is noted for its large natural woodland and grassland area. A storm drainage ditch (Jefferson Ditch) way runs through the park dividing it into two areas. A trail system links many of the park facilities, and provides access points from surrounding subdivisions.

What's in the Park?

- Basketball Court (2015)
- Paved & Gravel Pathways
- Tennis Courts (3) (2017)
- Picnic Tables
- Playground Structure (2016)
- Drinking Fountain
- Small Parking Lot
- Bridge (1999)





Voices from the community

What does this park need?

- Connect to Kinderberg Park through a path along the drainage way
- Remove the buckthorn, especially on the corner of the Basketball court, and create better visibility going around that corner
- Covered pavilion/shaded area





Dheinsville Park, also known as the Historic Dheinsville Settlement, is a historical park located in the northwest part of Germantown. The land was purchased in 1994 with monies from the Village of Germantown and the Germantown Historical Society (GHS), with improvements funded by the Jeffris Family Foundation. The Village constructed a parking lot and pathways in 2000 and refurbished several buildings on the property.

In 2020, the Village and GHS partnered to complete construction of the Muehl Family Festhalle, an 80' x 140' open air pavilion that will be available for community rental use and will be home to the annual Oktoberfest celebration.

What's in the Park?

- Muehl Family Festhalle (2020)
- Bast Bell Museum
- Permanent Restrooms
- Wolf Haus
- Picnic Tables
- Historical Society Office
- Soccer Field (1999)
- Gazebo Shelter
- Community Garden (2013)
- Paved Parking Lot Pathways (2021)
- Archery Range (2012)





Voices from the community

What does this park need?

- Heirloom farm and plants - history integrated with the existing community garden
- More parking for Oktoberfest
- Digital access/archive historical records
- Scout badge program
- Historic scavenger hunt/engagement activity



Firemen's Park is a 17-acre neighborhood park located near the northernmost edge of the urbanized area in central Germantown. The park is located west of and adjacent to Kennedy Middle School. The park was originally purchased and developed by the Germantown Volunteer Fire Company, and in 1991 the Village of Germantown purchased the park. The Germantown Senior Center is located on the northwest corner of the Park.

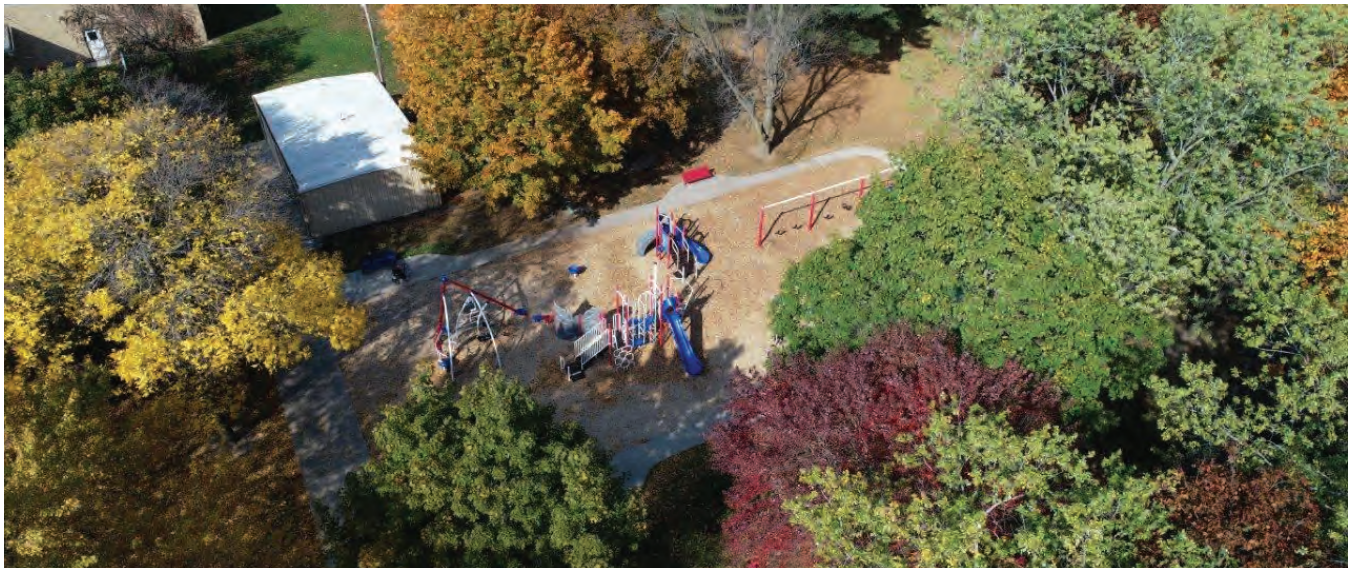
Fireman's Park is heavily used by community residents and serves as a community park. However, the park was not intended to be used so widely, and lacks many of the amenities recommended for a community park.

There is an open air shelter located in the center of the park, which was expanded in 1992. The park's facilities are connected by paved pathways. The ball field on Crusader Court is owned by the Germantown Little

What's in the Park?

- Two Baseball Diamonds
- Playground (2013)
- Gehl's Performing Arts Pavilion (2018)
- Soccer Fields
- Permanent Restrooms (2)
- Bleachers
- Drinking Fountain
- Off Street Parking
- Paved Pathways
- Veterans Memorial
- Outdoor Shelter
- Picnic Tables
- Senior Center
- Fireman's Park Multi-purpose Shelter (2021)





League. One permanent restroom facility is located within the Germantown Little League concession/restroom building, and one is located between the picnic area and firehouse. The playground structure was replaced in 2013.

The Village completed Phase 1 Site Improvements (sewer, water, electrical, pathway lighting) for the future multi-purpose shelter in June 2020. Plans were completed in August 2020 for the 3,800 square foot facility. Construction began in Fall 2020. The shelter construction was completed in June 2021.

Voices from the community

What does this park need?

- ADA friendly seating closer to the stage of the Gehl's Performing Arts Pavilion
- Updated ball diamonds
- Signage or landscaping to distinguish private property at the southern edge of the park
- Flat space for a "Mai Fest" tent



Friendenfeld Park (Peaceful Walk) is 53 acre community park/sports complex located in the west central part of the Village. The Park's primary focus is youth athletics including: the Germantown Soccer Club, Germantown Hawks Football Club, Germantown Junior Warhawks Baseball, and the Department's flag football program. Playground was installed in 2010. Parking lot and pathways were paved in 2007 using park impact fees and private funds.

What's in the Park?

- Flag Football Fields (3)
- Concession Stand/Press Box
- Baseball Diamond
- Paved and Gravel Pathways
- Regulation Football Field
- Retention Ponds
- Practice Football Fields (3)
- Parking Lots
- Soccer Fields (6)
- Bleachers
- Playground
- Storage Shed





Voices from the community

What does this park need?

- More parking (3 comments)
- Drainage on side football fields needs improvement - there is standing water on the fields often
- Add softball fields
- Central baseball/softball complex with lights
- Bathrooms (4 comments)
- Community center



Haupt Strasse (Main Street) Park is a 13-acre neighborhood park located about one quarter mile west of Firemen's Park in central Germantown. Haupt Strasse Park's main features are a single lighted softball diamond, skate park, and four pickle ball courts. The skate park was installed in 2003, replacing one of the tennis courts. The park shelter was constructed in 1997. There is a paved pathway to the playground structure.

What's in the Park?

- Lighted Softball Field
- Skate Park
- Pickleball Courts (4) (2017)
- Playground Structure (2018)
- Soccer Fields (2)
- Parking Lot
- Shelter
- Bleachers
- Port-a-John
- Sand Volleyball Court



Voices from the community

What does this park need?

- Back stop needs to be updated
- Covered dugouts
- Address drainage issues





Kinderberg (Children's Hill) Park is a 23 acre neighborhood park purchased in 1992 by the Village. The property is off of Donges Bay Road west of Heritage Hills Subdivision. In spring of 1995 the Village completed negotiations with the Germantown School District for a land swap with Spassland Park. The sprayground was completed in 2005 and is the only public outdoor aquatic amenity in the community.

What's in the Park?

- Baseball Field
- Sprayground
- Soccer Fields (2)
- Multi-purpose Indoor/Outdoor Shelter
- Tennis Courts (4)
- Basketball Court (2017)
- Permanent Restrooms
- Ice Rink
- Sledding Hill
- Playground Structure (1999)
- Paved Pathways
- Bleachers





Voices from the community

What does this park need?

- Building to warm participants on the sledding hill
- Bring back and maintain an ice skating rink
- Handicap parking
- Outbuilding needs to be larger to store more equipment
- Lights on the sledding hill
- Fenced in dog park/off leash area
- a bocce court





Little League Park is a 10-acre baseball complex. The land is leased to the Germantown Little League by the village. All facilities have been developed and maintained by the Germantown Little League.

What's in the Park?

- 3 baseball fields
- Concessions & Restroom building
- Parking



Voices from the community

What does this park need?

- Drainage
- Weed control
- More Diamond Mix



Schoen Laufen (Beautiful Walk) Park is located along the Menomonee River at the corner of Maple Road and Lilac Lane. The park is divided into two by the Menomonee River. The acquisition of this park site was initiated in response to the Village's 1990 Comprehensive Outdoor Recreation Plan. Schoen Laufen Park gives residents access to the Menomonee River, a wooded area with nature trails and spring ephemerals and begins implementation of a multi-purpose trail development along the river corridor.

What's in the Park?

- Shelter
- Gravel Pathways
- Parking Lot
- Port-A-John



Voices from the community

What does this park need?

- Loved the growth of the native plants which were allowed to flourish this summer. Please continue!
- Dog waste on trail is an issue
- Additional native plantings
- Kayak launch
- Outdoor education area
- Security camera in parking lot





Spassland (Play Land) Park is located in southern Germantown, north of and adjacent to County Line School. County Line School's 10-acre outside recreation area adds to Spassland Park's effectiveness as a neighborhood park. This park was leased from the Germantown School District until the Village acquired the park in 1995 via a land swap for a 15 acre parcel adjacent to Kinderberg Park. The park is served by two parking lots. Most facilities are connected with an accessible paved pathway.

What's in the Park?

- Disc Golf Course (9 holes)
- Paved Pathways
- Shelter
- Tennis Courts (2) – *2019*
- Playground Structure – *2018*
- Parking Lots (2)
- Basketball Courts (2)
- Permanent Restrooms
- Sand Volleyball Courts (2)
- Fitness Equipment – *2014*





Voices from the community

What does this park need?

- Drainage is needed along the trail and in the grass
- The disc golf course is un-useable because drainage is so poor
- Rain Gardens
- Redo/refinish the basketball courts





Weidenbach Park (Meadow by the Brook) is a four-acre play lot serving a small residential neighborhood in the southwest corner of the Village. The park serves as both an active and passive recreation area and features a one acre pond. The pond provides fishing but swimming and ice skating are not allowed. There is a small lighted paved parking lot and a paved pathway connecting the facilities.

A new modular playground structure was installed in 2020.

What's in the Park?

- Fishing Pond
- Basketball Court
- Fishing Pier
- Baseball Backstop
- Playground Structure
- Parking Lot
- Paved Pathways
- Port-a-John



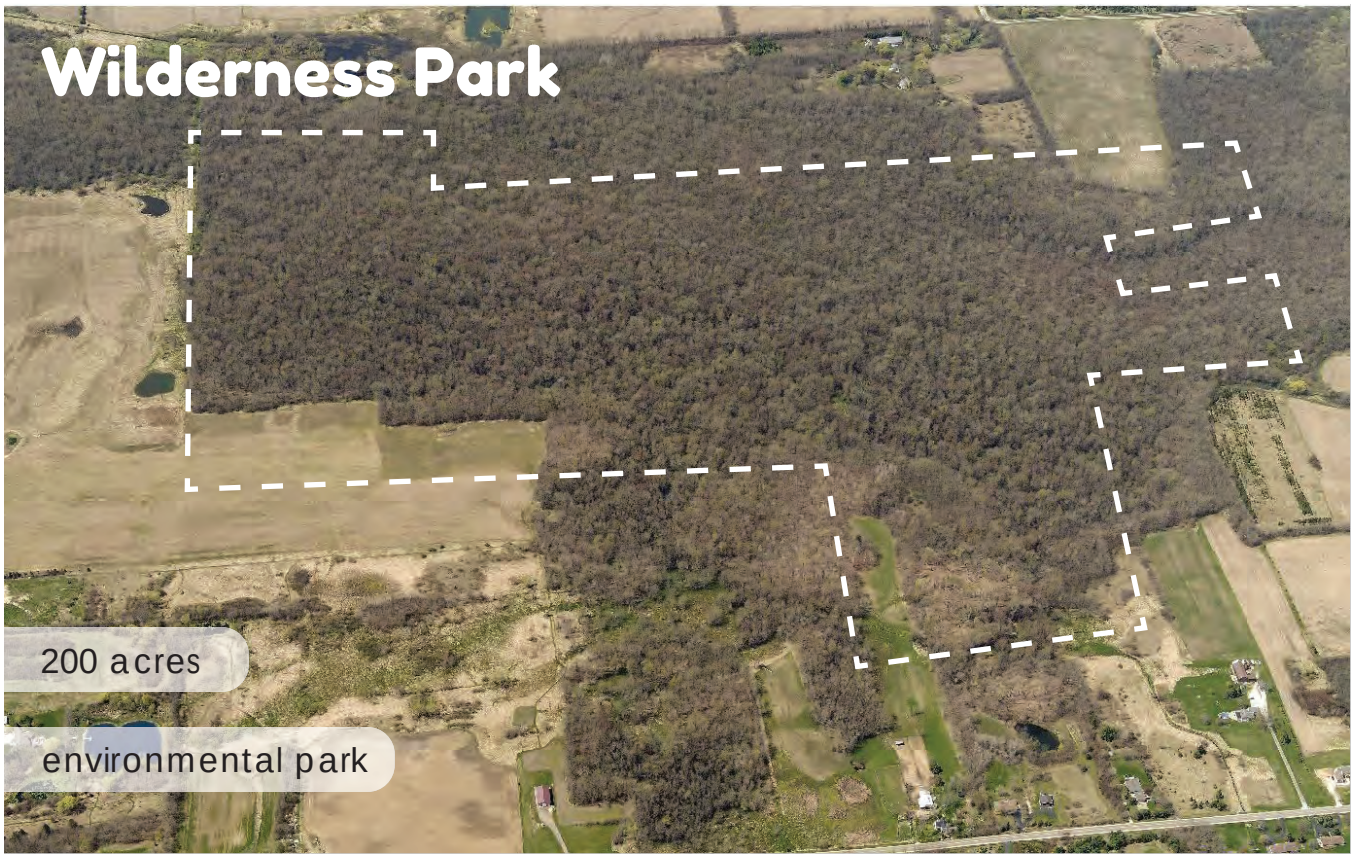


Voices from the community

What does this park need?

- Do not cut down the plants surrounding the lagoon – expect to find cattails and swamp milkweed around a pond. It also acts as a natural fence
- More picnic tables
- Another bench
- Awareness that this park exists!





Wilderness Park is located in the north eastern corner of Germantown, in the headwaters of the Little Menomonee River. The Conservation Fund on behalf of the Milwaukee Metropolitan Sewer District has been purchasing land around the property as part of the Greenseams Program (see page 4).

What's in the Park?

The wilderness area does not have any facilities, amenities, trails, nor does it have a public access point.



Voices from the community

What does this park need?

- Nature/walking trail similar to trails @ Homestead Hollow (4 comments)
- X-country ski trails with planned activities
- Mountain biking trails
- Allow dog walking
- Parking lot
- Eco-park/education
- Geo-caching
- Birding/Bird banding
- Beekeeping (partner w/ Mequon Nature Preserve)


Inspiration Board
Playgrounds
1. THEME-SPECIFIC PLAY EQUIPMENT
2. MUSICAL PLAY EQUIPMENT
3. NATURALIZED PLAYGROUND
4. SAND AREAS
5. RECYCLED RUBBER SURFACE
6. ADA-ACCESSIBLE PLAY EQUIPMENT
7. OTHER
Put a sticker on the photos that you like
Inspiration Board
Field & Court Sports
Inspiration Board
Winter Activities
Inspiration Board
Active + Passive Recreation
Sustainable Eco-Park

4

Chapter Four
Community Needs Assessment

Throughout the Comprehensive Outdoor Recreation planning process, residents and leaders of the Village of Germantown have had the chance to weigh in on the Park & Recreation system and their priorities for the future. Key opportunities for community input included:

- Park and Recreation questions on the **Village-wide Survey** in 2019 allowed residents the ability to express their overall impression of the park land in the Village.
- A **Park Planning Party** community open house in October of 2019, which allowed participants the opportunity to comment on facility and maintenance needs within each park, express desires for new facilities using inspiration boards, discuss the park and trail system as a whole with interactive mapping exercises, and give feedback through a live, digital poll.
- Three **Stakeholder Focus Groups** were conducted with Germantown residents in October 2020 to discuss community desires from multiple perspectives, including sports organizations, community groups, and families of all ages.
- The **Park & Recreation Commission** provided key input and review of the planning process to determine Village priorities and guide next steps.

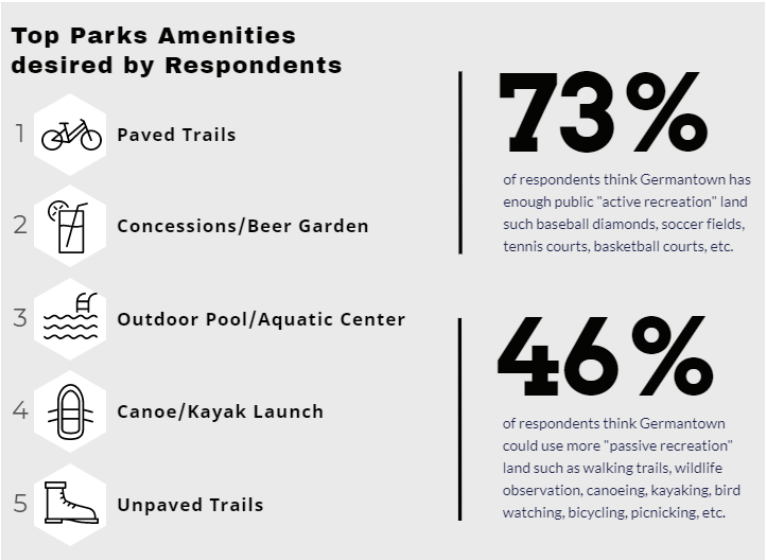
The community needs, priorities, and details that resulted from these engagement activities and community conversations are woven throughout this plan. The key lessons learned and needs identified throughout this engagement process are summarized in this section.

Land & Facilities

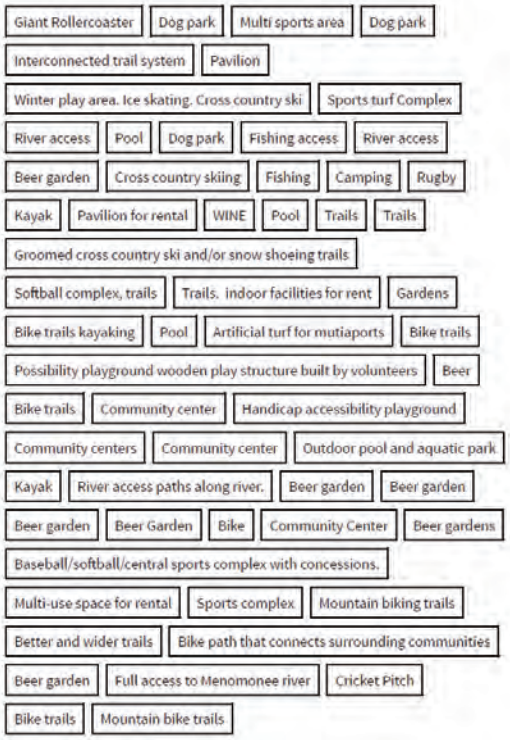
Two questions that were asked of community members throughout the planning process were "Do you think Germantown has enough public active recreation land such as baseball diamonds, soccer fields, tennis courts, basketball courts, etc.?" and "Do you think Germantown has enough passive recreation land such as walking, trails, wildlife observation, canoeing, kayaking, bird watching...etc?" The answers to these questions differed depending on where and when it was asked to community members. At the Park Planning Party open house in October of 2019, 64% of respondents said that the Village did not have enough active recreation land, and 86% of respondents said the Village did not have enough passive recreation land. The results of the Village-wide survey show a different view of community opinion. In that forum, 73% of respondents stated that Germantown has enough active recreation land.

This discrepancy could be due to the differing viewpoints that community members have about recreation land based on the activities that they take part in within the Germantown Community. While the overall community may not see a need for additional sports fields, those who coordinate active recreation activities are more intimately familiar with the land needs of those activities. It is possible that the respondents at the Park Planning Party open house represented a range of sports groups that felt as though their facility needs were not entirely met by Germantown's existing active recreation land.

However, the Stakeholder Focus groups



▲ Results from the Village-wide survey show that most respondents believe that Germantown has enough active recreation land. The top amenities desired by respondents listed here were essentially the same as those listed by respondents at the Park Planning Party open house, but in a different order.



▲ Community members weighed in on park and recreation facilities and amenities that they would like to see in Germantown during the Park Planning Party open house.

revealed that most sports organization representatives generally feel that they have sufficient space and facilities for their organization's needs, though baseball and soccer representatives mention that space and facilities could be expanded to better serve their programming. These stakeholders pointed to a different issue with the active sports facilities in Germantown: that the quality of the space available for sports organization use is not always suitable or ideal due to issues with maintenance, especially drainage. Issues with quality and maintenance of existing facilities may be one reason for widely differing opinions regarding Germantown's active recreation land needs.

The Sports Organization stakeholders also emphasized that a destination game and tournament space for hosting visiting teams is a community desire and economic development opportunity, and that a **Youth Sports Complex** would be well-used in the Village. A feasibility study for a potential Youth Sports Complex is recommended as a next step in Chapter Six: Capital Improvement Recommendations to further plan the exact programmatic elements needed for the facility to be successful in Germantown.

Park facilities and amenities that were identified as areas of need were beer gardens and concessions; canoe/kayak launch and water access; pathways and trails, both paved and unpaved; restroom facilities; cross country ski trails; and an outdoor pool / aquatic center. As seen in the graphic above, this list of top priorities is very similar to the list of priority amenities identified by the Village-wide survey.

Stakeholder focus groups also focused in on an outdoor Aquatic Center as a community desire, as well as more permanent restroom facilities throughout the park network. Stakeholder groups also discussed an expanded trail network as a community need, which is further detailed in the section below.

Trail Network

Germantown residents identified the expansion of the Village's trail network as one of the top community needs, both through the Village survey and at the Park Planning Party open house. Stakeholder groups provided even more detail about this need, expressing a desire to connect to other area trail system such as the Bugline or the Oak Leaf Trails and a desire for more hiking-style trails. Participants saw the expansion of the trail network not only as an expanded opportunity for recreation, but also as a wider transportation and connectivity issue. Some stakeholders also identified the economic development benefits of a trail network, expressing that an expanded trail network could connect Germantown businesses to new customers. Participants also noted that connecting park properties was an exciting opportunity for the Village.

It is possible that focusing on land acquisition that will help the Village expand the trail network, including a mixture of paved and ADA-accessible mixed use trails and unpaved trails through environmental areas will fulfill the community's desire for more **passive recreation land**. More information about planning for an expanded trail network, especially along the river corridors, is included on page 22 of this plan.

Village Center Park/Plaza

One potential gap in the Village's open space network is the lack of a featured park, plaza, or open space close to the Village Center that could function as a center of mixed-use development and urban activity in the Village. While Haupt Strasse Park is located at the western end of Main Street, it primarily serves as a neighborhood park with a few active recreation uses, including pickleball, a baseball field with lights, and the Haupt Strasse Skate Park.

Stakeholders saw the opportunity for an open space that was more urban in character and integrated with development along Mequon Road as a key opportunity for the Village, one that could support a wide-variety of park and recreation uses, including potentially an urban splashpad experience, with passive recreation opportunities such as outdoor seating that could compliment restaurants and other Village Center uses. Further discussion regarding the need and desire for an urban open space in the Village Center of Germantown should be focused around providing an experience that is unique and different than the opportunities found in other parks in the Village, and on ensuring that future urban open space is walkable both to restaurants and housing close to the Village Center and to the wider network of Germantown parks.

Outdoor Aquatic Facility

Community members identified an outdoor pool/aquatic center as one of the Village's primary needs in both the Village-wide survey and through the Park Planning Party open house. Though Germantown currently offers some limited aquatics programming through the school district at the indoor high school pool, the community members have expressed a need for an outdoor aquatic experience that serves as a true community amenity. Attendees of the Park Planning Party open house also noted that a pool would be an amenity they would like to see as part of a potential future community center. When asked how important it is that Germantown have an outdoor aquatics center, 13 open house attendees indicated that it was somewhat important, and 10 indicated

that it was very important. Community members also specifically called out a pool as a feature that other communities have that they would like to see in the Village.

In the stakeholder focus group sessions, participants provided more detail about why an outdoor pool in the Village was of interest to them. Residents expressed that an outdoor pool serves a recreation need for a wide range of ages within the Village, including preteens and teenagers who are too old to be interested in a splashpad. Stakeholders noted that there are not many activities within the Village that are suitable for teenagers to do with their peers. Stakeholders also shared that their families and friends regularly buy memberships to outdoor pool facilities in nearby communities, but that they wish that there were more opportunities to swim close by.

In the stakeholder focus groups, residents also discussed the possibility of expanding the Kinderberg Park splashpad or adding an entirely new splashpad as one way to meet the need of an outdoor aquatic experience, with the understanding that this will likely not meet the needs of every age group in Germantown nor allow for the widest range of aquatics programming.

General Park Upgrades & Maintenance

As noted elsewhere in this plan, community members identified general park upgrades and maintenance as a strong desire and need within the community.

Winter Activities

Stakeholders noted that there is a need for more winter activity options in Germantown. Ideas included a groomed cross country ski trails and skating. The group noted that warming shelters and a system of equipment rental would also be needed.

Community Center

Stakeholders noted that there is currently no indoor multipurpose room in the community for winter programming, nor is there a centralized place for kid's programming, both of which were noted as community needs. Stakeholders also noted that a community center would potentially allow the community to expand programming offerings and the schedule of when programming is offered without coordinating with the school district for limited indoor space.



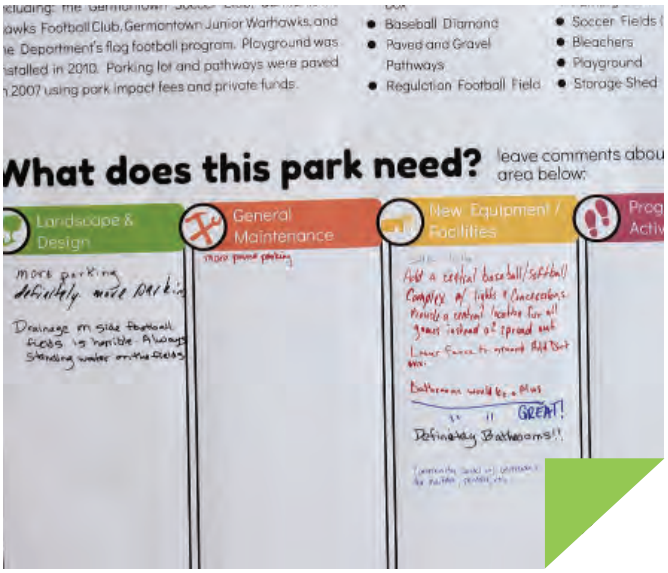





could a sidewalk fit on North side?
awesome
wooden path




In the next five years,


Baseball Diamond
Paved and Gravel Pathways
Regulation Football Field
Soccer Fields
Bleachers
Playground
Storage Shed
What does this park need?
leave comments abou
area below:
Landscape & Design
General Maintenance
New Equipment / Facilities
Prog
Activ
GREAT!
Definately Bathrooms!!



5

Chapter Five
Goals & Objectives

The Goals set forth for the next five years reflect the Village's past five years of experience working with their comprehensive park plan. The goals are program and policy-oriented, not specific to any one park or facility. This allows for the objectives to be implemented by the Park and Recreation Commission throughout the community, with specific park projects listed under the capital projects as implementation steps to meet the specific goals.

The goals and objectives are not listed in any specific order, nor do they highlight any specific timing unless stated. All of these goals are important. They interact to form the basis of the Village of Germantown's policy toward park and recreation planning, facility usage, and inter-governmental cooperation. Together, these statements provide the foundation for the priorities, recommendations and capital plans recommended later in the Plan. These statements are the focus of the Plan and represent the best intentions of the Commission members and citizens of Germantown based on the community feedback received.

The long-range vision of the Germantown Park and Recreation Department considers neighborhood parks as the back bone of the system. These parks are the social and daily recreation centers for residents.

In prior plans, the Goals and Objectives section noted that:

- the purchase of a community park would serve a very important role for the Village for large group gatherings and organized athletics complexes.
- preservation and acquisition of environmentally sensitive areas is significant as land becomes more flood-prone and water filtration becomes more difficult.
- the development of a community pathway system will tie the park and open space system together as well as residential neighborhoods, schools and businesses. Extensions of this pathway system will connect the village with regional trails.

These primary goals from previous plan version - new community parks, preservation of environmentally sensitive areas, and the development of a community pathway system – remain goals of the Village and Department today. However, new priorities have joined their ranks as well.

Goals and objectives on the pages below that represent the Village's priorities for the 2021-2026 plan are identified with a P.

Village of Germantown Comprehensive Outdoor Recreation Plan Goals & Objectives

1		Establish a Village-wide system of open spaces, parks and recreational facilities that will economically provide Germantown residents of all ages with adequate, convenient, varied and high-quality recreational opportunities on a year-round basis.
	1.1	Expand recreational programming to meet the needs and interests of pre-school, teens, older adults, and special needs populations.
	1.2	Explore the feasibility of developing an indoor recreational facility, where sport courts and space for classroom type activities are housed.
P	1.3	Explore the feasibility of developing an outdoor aquatic experience (i.e. aquatic center and/or community splashpad).
	1.4	Continue collecting public input on park issues at public informational meetings.
2		Acquire and maintain an adequate amount of active and passive recreational lands to meet future recreational needs.
P	2.1	Pursue an Outdoor Sports Complex Feasibility Study that identifies a potential location and design for active recreation facilities.
P	2.2	Cooperate with other public and private agencies to identify and acquire recreational lands, with an emphasis on river corridors for trail plan implementation.
	2.3	As part of any future development plans at Blackstone Creek, require a development agreement that includes dedication of land for purposes of a public park.
	2.4	Identify additional land needs and priorities using feedback from residents and benchmark metrics from peer agencies and Washington County.
	2.5	Seek public/private grant monies for land acquisition.
	2.6	Establish criteria for acceptance of property in lieu of Impact Fee Assessments.

P	2.7	Develop park master plans for each park based on community needs, as well as accepted Park & Recreation standards. Prioritize Friedenfeld Park for a master planning process within the 5 year planning period.

3 Provide adequate facilities at all parks within the Village's park system to meet the diverse needs and interests of Germantown's residents.

	3.1	Identify facility and programming needs in the Village through resident feedback and surveys, and by referencing metrics and standards from Washington County and peer agencies nationally.
	3.2	Monitor park facility and recreational program usage and condition on an ongoing basis.

4 Coordinate development efforts and the use of recreational facilities between the Village of Germantown, local schools, places of worship, and Washington County.

	4.1	Work with community groups and organizations on collaborative programming.
	4.2	Continue to work with the Germantown School District to utilize facilities (indoor and outdoor) for park and recreation activities.
	4.3	Continue to partner with local churches as potential locations for community recreation programs and events.
	4.4	Continue to partner with Washington County for use of Homestead Hollow Park for community recreation programs and events.
	4.5	Continue to facilitate community use of the Senior Center, Firemen's Park Community Building (former fire station), and park shelters.
	4.6	Continue to explore private facilities in the community as potentials spaces for recreation program use.

5 Encourage the preservation and acquisition of environmentally sensitive and historically significant areas.

P	5.1	Work with public and private agencies to obtain access to the Menomonee River throughout Germantown.
P	5.2	Encourage the preservation of prime environmental corridors throughout the Village and development of linear park and trail systems, and acquire land on a case-by-base basis to maintain these corridors.

5.3	Assist the Germantown Historical Society in the continued development of Dheinsville Park.

6 Provide residents with safe and accessible facilities and recreation equipment throughout the Village's park system.

6.1	Conduct an annual inspection tour of parks to identify safety and ADA accessibility issues and work to correct all issues in a timely manner.
6.2	Ensure that new park facilities and play equipment are designed and installed to meet ADA accessibility guidelines and standards.
6.3	Explore the planning and construction of an inclusive and fully-accessible playground facility to meet the needs of the entire community.
6.4	Perform feasibility analysis for existing field and playground surfaces/ materials and explore the use of sustainable synthetic turf options.

7 Use all available financial tools to further enhance the quality of the Village park system.

7.1	Update the Impact Fee Ordinance on a continual basis.
7.2	Monitor park land dedication ordinances to provide quality recreation lands.
7.3	Explore funding park facilities and programming through community donations and "Friends of the Parks" groups.
7.4	Develop a gift catalog as a fundraising tool.
7.5	Apply for funds with State and Federal grant programs whenever possible. Utilize 2019 Washington County Bikeway & Trail Network Plan - Grant Opportunities (page 112).

8 Coordinate subdivision review with all departments responsible for providing or maintaining adequate park facilities to ensure that adequate park facilities are provided to future Village residents.

8.1	Update Capital Improvements Program based on recommendations of the updated (and adopted by the Village Board) Comprehensive Outdoor Recreation Plan.

	8.2	Review preliminary plans when Plan Commission applications are presented to identify land for public recreation, as well as opportunities for trail/pathway linkages.
	8.3	Coordinate potential park land dedication with Public Works Department so that utility systems are adequately considered.

9 Continue a village-wide urban forestry program which replaces unsafe or diseased trees and improves the aesthetic nature of existing public lands.

	9.1	Complete the Village-wide tree inventory and work to keep it up-to-date in the future.
	9.2	Recommend budget allocations to help minimize the impact of the emerald ash borer and loss of ash trees using the best scientific advice and lowest cost to the community.
	9.3	Recommend a budget allocation of $2 per capita for Forestry maintenance, and planting.
	9.4	Continue to utilize the services of a certified arborist.
	9.5	Continually review the Urban Tree Ordinance and Street Tree Plan.
	9.6	Continue to organize an annual Arbor Day proclamation and ceremony.
	9.7	Work with the Public Works Committee to identify future street tree locations in coordination with trail systems, sidewalk system and drainage ways.
	9.8	Apply for DNR Urban Forestry Grants to assist in the management of the Village Urban Forest.

P 10 Create a village-wide Trail System Plan that identifies location, facility type, and priorities for trails.

	10.1	Identify and develop a system of trails that provides links between current and future recreation lands and provides opportunities for pedestrians, bicycles, snowmobiles, horseback or cross country skiing activities in the Village.
	10.2	As the trail system is developed, purchase lands or secure easements so that the trail network is publicly controlled.
	10.3	Ensure that the primary routes within the trail system in the Village of Germantown are ADA accessible.

10.4	Pursue funding opportunities through State & Federal grant programs.
10.5	Reference the recommendations in the Washington County Bikeway and Trail Network Plan when developing a Village-wide trail system.

11 Ensure that operations and maintenance of the park, open space and trail system is supported through appropriate levels of staffing and funding.

11.1	Recognize the resources required for long term, quality management and maintenance of the park and open space system and ensure that the system is realistic and affordable for the Village.
11.2	Ensure that the parks, open space, and trails are managed and maintained in an environmentally responsible and cost-effective manner to limit operating costs where feasible.
11.3	Evaluate maintenance staffing levels and recommend increases as required to ensure the proper care of new and existing park facilities.

12 Transform Village of Germantown parks into sustainable public spaces using environmental design and management practices.

12.1	Where feasible, reduce adverse impacts associated with site pollutants by incorporating features such as bioswales, rain gardens, infiltration strips, and associated storm water management facilities.
12.2	Utilize recycled materials where feasible and cost effective in the design and construction of park landscape features.
12.3	Make use of water-wise landscape maintenance principles, such as using low water demand vegetation, and installing efficient irrigation systems.
12.4	Explore the possibility of converting open grass areas into native landscaping and/or “no-mow” areas.
12.5	Where practical, minimize night light pollution related to park lighting by selecting appropriate fixtures and timing systems.







6

Chapter Six
Capital Improvement Recommendations

Overall the existing park facilities are in good condition. However, maintenance of the parks is an ongoing process, and capital improvements are required to bring the parks up to standards proposed in this plan. Maintenance projects are completed by the Village DPW staff or contracted out with money from the parks and recreation operation budget. Capital improvement projects go through the Village budgeting process and are subject to review by the Village Board each year.

This section of the plan is intended to be used by the staff, Park and Recreation Commission and Village Board for the planning and maintenance of park and facility improvements. All future improvement projects and decisions should be guided by these recommendations to ensure that the parks system reaches its full potential.

The following paragraphs identify projects that are recommended for possible inclusion in the 2021 – 2026 CIP Budget.

2021 CIP Budget – these items were approved for the 2021 CIP Budget

- Dheinsville Park parking lot and trail paving - $80,000
- Kinderberg Park Splashpad/Playground Feasibility Study - $15,000
- Total Cost = $95,000

2022 CIP Budget –

- Village-Wide Trail/Pathway Network Plan - $30,000
- Land Acquisition – Community Park (location TBD) – costs partially offset by grant funding – funds available for nature-based outdoor recreation opportunities - $1,000,000 (based on 40 acres @$25,000/acre)
- Dheinsville Park Festhalle – Bird Netting System (materials and installation) - $35,000
- Kinderberg Park – resurface tennis courts - $30,000
- Baseball Diamond Facility – upgrades at Haupt Strasse and Friedenfeld Parks (infield construction and fencing upgrades) - $40,000
- Total Cost = $1,135,000

2023 CIP Budget –

- Kinderberg Park Playground - $225,000 (replace year 2000 equipment)
- Community Park Master Plan & Phase 1 Development – costs TBD by Park Master Plan, costs partially offset by community fundraising - $2,000,000
- Trail/Pathway System Implementation – Phase 1 - $100,000
- Firemen's Park – parking area by Gehl's Pavilion/new park shelter - $75,000
- Total Cost = $2,400,000

(2024-2026 CIP Budget on following page)

2024 CIP Budget –

- Community Park Development – Phase 2 Development - $750,000
- Community Splashpad & All-Inclusive Playground - $1,000,000
- Trail/Pathway System Implementation – Phase 2 - $100,000
- Total Cost = $1,850,000

2025 CIP Budget –

- Community Park Development – Phase 3 Development - $500,000
- Friedenfeld Park Master & Design Development Plans - $30,000
- Trail/Pathway System Implementation – Phase 3 - $100,000
- Total Cost = $630,000

2026 CIP Budget –

- Friedenfeld Park Utilities & Restroom/shelter Building - $1,500,000
- Trail/Pathway System Implementation – Phase 4 - $100,000
- Total Cost = $1,600,000

	Maintenance	Capital Improvements
Alt Bauer Park	▷ Add crushed aggregate around tennis courts ▷ Improve tree and planting beds ▷ Add more picnic tables to park ▷ Evaluate park signage consistency	▷ Establish prairies in suitable areas to reduce turf maintenance ▷ Resurfaced gravel pathways with asphalt
Dheinsville Historic Park	▷ Install tree screening on north end of the property ▷ Improve tree and planting beds	▷ Install playground equipment ▷ Install a restroom screening structure ▷ Establish prairies in suitable areas to reduce turf maintenance ▷ Historical Society to continue buildings renovations
Firemen's Park	▷ Maintain and improve tree and planting beds	▷ Construct a parking lot north of the Fire Station ▷ Complete upgrades to Fire Station #1 for community use
Friedenfeld Park	▷ Improve tree and planting beds ▷ Establish prairies in areas to reduce turf maintenance	▷ Create Park Master Plan » Install permanent restrooms and shelter » Replace gravel pathways with asphalt » Install drainage system for tackle football practice field. Explore synthetic turf surface for the football field. » Install split rail fence or ballads & gates to eliminate vehicle traffic on turf » Install overflow parking lot for heavy usage days » Develop north east portion of park for athletic usage
Haupt Strasse Park	▷ Remove benches and replace with picnic tables around skate park ▷ Improve tree and planting beds	▷ Add permanent restrooms ▷ Establish prairies in suitable areas to reduce turf maintenance ▷ Add a basketball court ▷ Resurface existing parking lot ▷ Replace existing shelter ▷ Expand or renovate skate park

	Maintenance	Capital Improvements
Kinderberg Park	▷ Repair or replace broken playground curbing ▷ Improve tree and planting beds ▷ Repair damage in pathways ▷ Remove wind screens between tennis courts ▷ Have contractor evaluate leaning poles between tennis courts ▷ Remove benches & add picnic tables ▷ Establish prairies in areas to reduce turf maintenance	▷ Replace playground equipment ▷ Install shade structure over sprayground ▷ Resurface tennis courts ▷ Sprayground feasibility study to determine needed facility upgrades and possible relocation within the community
Schoen Laufen Park	▷ Repair fire ring ▷ Remove down trees in river ▷ Improve tree and planting beds	▷ Add a pedestrian bridge and trail system on the west side of the river ▷ Resurface parking lot
Spassland Park	▷ Improve tree and planting beds ▷ Crack fill tennis & basketball courts ▷ Establish turf in areas where trees and shrubs were removed ▷ Remove benches and replace with picnic tables ▷ Edge volleyball courts and add picnic tables ▷ Seal coat pathways and parking lot	▷ Replace basketball hoops, backboards and structure ▷ Correct drainage by creating a swale across the site that ends in the wetland ▷ Resurface parking lots ▷ Establish prairies in suitable areas to reduce turf maintenance
Weidenbach Park	▷ Repair fishing pier ▷ Work with DNR to declare fishing pond as an urban fishery ▷ Improve tree and planting beds ▷ Develop an aquatic management plan for water quality and eliminate nuisance plants	▷ Resurface parking lot ▷ Resurface basketball court
Wilderness Park		▷ Create Park Master Plan » Identify, develop, and advertise public access points to the park » Add a trail network and public access point » Provide amenities that support environmental education programming

What have we accomplished...
since the last plan?

In Alt Bauer Park...

- Trimmed the tree canopy around the tennis courts to reduce maintenance concerns and extend longevity of court surface.
- Replaced playground equipment in 2016.
- Resurfaced the tennis courts in 2017.
- Installed an entrance sign at Old Farm Road & Division Road in 2020.
- Removed and installed new benches on concrete pads around playground area in 2016.
- Resurfaced the basketball courts and the parking lot in 2015.

In Dheinsville Historic Park...

- Constructed the new Festhalle open air shelter in 2020.
- Paved parking lot and pathways in 2021.

In Firemen's Park...

- Constructed the Gehl's Performing Arts Pavilion in 2018.
- Renovated the Fire Station offices into community recreation space, and upgraded service bays to storage for park and recreation equipment and supplies.
- Constructed 3,800 sq ft multi-purpose park shelter building in 2021.

In Friedenfeld Park...

- Installed concrete playground curbing/ walkway.
- Installed new benches on concrete pads.
- Upgraded the irrigation system in the practice football fields and soccer fields.

In Haupt Strasse Park...

- Renovated tennis courts into 4 pickleball courts in 2017.
- Moved the skatepark entrance from the park side (north) to the street side (south).
- Added a crosswalk near the playground equipment.
- Added an ADA accessible pathway from the playground equipment to the parking lot in 2018.
- Replaced playground equipment in 2018.

In Kinderberg Park...

- Constructed a new basketball court facility in 2017.
- Installed standing seam metal roof on park shelter in 2020.

In Schoen Laufen Park...

- Opened up views to the river by cutting and removing vegetation, including the removal of ash trees.
- Installed standing seam metal roof on park shelter in 2018.

In Spassland Park...

- Built a dumpster enclosure.
- Installed outdoor fitness equipment in 2015.
- Resurfaced the tennis courts in 2019.
- Replaced playground equipment in 2018.

In Weidenbach Park...

- Replaced playground equipment in 2020.



Appendix

Table A1: Park Size Standard and Acreage Classification, 2020

Park	Acres per Park	Current Acres in Germantown's Park system (2020) per park category	2020 Recommended Acres per park category*	2025 Projected Recommended Acres per park category **
Playlot (standard size: 1-2 acres; standard acres: .5/1,000 residents)				
Weidenbach	4	4	10.3	11.3
Neighborhood (standard size: 10-25 acres; standard acres: 3/1,000 residents)				
Alt Bauer	25.6	98.6	61.8	67.9
Firemen's	17			
Haupt Strasse	13			
Kinderberg	23			
Spassland	20			
Community (standard size: 25-150 acres; standard acres: 8/1,000 residents)				
Friedenfeld	53	53	164.7	181.3
Regional (standard size: 100+ acres; standard acres: 10/1,000 residents)				
Homestead Hollow County Park	105	105	206	227
Special Use (variable size and amount)				
Dheinsville	9.5	19.5	–	–
Little League	10			
Environmental (variable size and amount)				
Schoen Laufen	39	239	–	–
Wilderness	200			
TOTAL Acres	519			

*2020 Recommended Acres based on an estimated population of 20,590

**2025 Projected Recommended Acres based on a projected population of 22,660

▲ Recommended acres are based on the 1995 NRPA park standards, as interpreted in the Village of Germantown's 1997 Comprehensive Outdoor Recreation Plan. As these standards are widely considered outdated, this table is included for reference only, but should ***not*** be used to exclusively evaluate Germantown's level of service.

Table A2: Facility Inventory & Standards

	"Standard" facilities (Based on 1997 Plan / NRPA 1995 standards)	Existing Facilities in Parks	Existing Facilities on Schoolgrounds	Total Existing Facilities	2020 Facility Needs*	2025 Projected Facility Needs**
Baseball						
Official	1/5,000	2	2	4	4	5
Little League	1/2,250	5	0	5	9	10
Softball	1/5,000	1	2	3	4	5
Practice ballfield (backstop)	1/1,400	3	3	6	15	16
Soccer	1/1,000	17	4	21	21	23
Football						
Tackle	1/15,750	1	1	2	1	1
Practice area	1/2,250	5	2	7	9	10
Sand Volleyball	1/4,000	3	0	3	5	6
Basketball	1/2,250	5	0	5	9	10
Tennis	1/1,750	9	8	17	12	13
Ice Skating	1/5,250	1	0	1	4	4
Sledding	1/8,000	1	0	1	3	3
Bank Fishing	1/5,250	2	0	2	4	4
Modular Play Equipment	1/1,750	7	4	11	12	12
Picnic Shelter	1/1,750	10	0	10	12	13
Trails (miles)	.16/1,000	5.79	0	5.79	3.29	3.63
Horseshoe Pit	1/5,225	0	0	0	4	4
Restrooms	–	5	0	5		
Skatepark	–	1	0	1		
Archery range	–	1	0	1		
Bandshell	–	1	0	1		
Pickleball Courts	–	4	0	4		

*2020 Recommended Acres based on an estimated population of 20,590

**2025 Projected Recommended Acres based on a projected population of 22,660

Exhibit B: Menomonee River Land Ownership Map

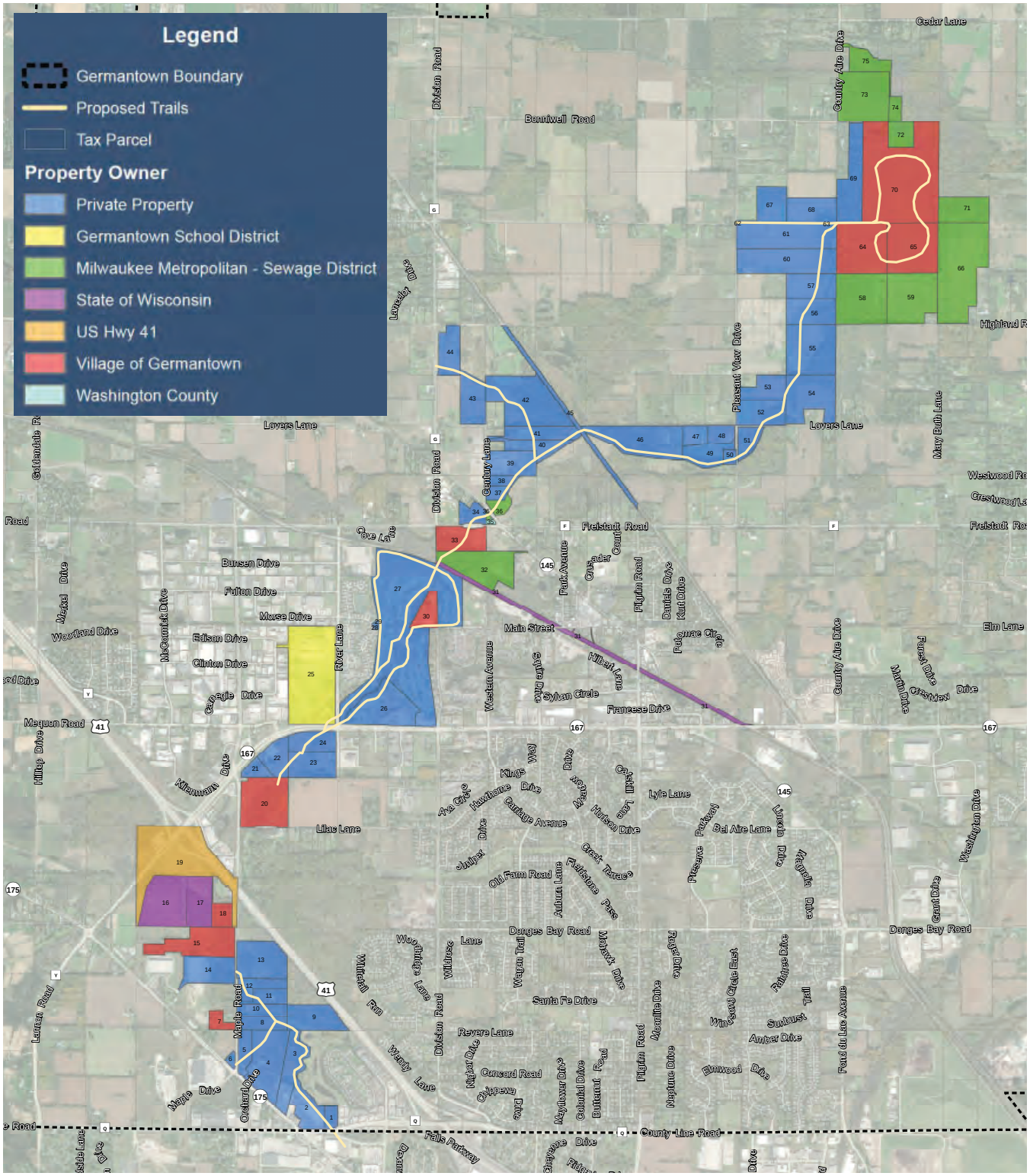

Legend
Germantown Boundary
Proposed Trails
Tax Parcel
Property Owner
Private Property
Germantown School District
Milwaukee Metropolitan - Sewage District
State of Wisconsin
US Hwy 41
Village of Germantown
Washington County
Cedar Lane
Bonniwell Road
Division Road
County Aire Drive
Pleasant View Drive
Lovers Lane
Century Lane
Freistadt Road
Bunsen Drive
Fulton Drive
Morse Drive
Edison Drive
Clinton Drive
Main Street
Western Avenue
Sylvan Circle
Francese Drive
Hilbert Lane
Park Avenue
Flyfin Road
Daniels Drive
Elm Lane
Meguon Road
Woodland Drive
Lilac Lane
Lyle Lane
Bel Aire Lane
Old Farm Road
Donges Bay Road
Santa Fe Drive
Revere Lane
Concord Road
Division Road
Maple Road
Lemon Road
Falls Parkway
County Line Road
Cheyenne Drive
Amber Drive
Sunburst Trail
Elmwood Drive
Neptune Drive
Mayflower Drive
Colonial Drive
Butternut Road
Chippewa Lane
Wagon Trail
Whitetail Run
Wildrose Lane
Hawthorne Drive
Carriage Avenue
Morrison Drive
Great Terrace
Fieldstone Pass
Auburn Lane
Presence Parkway
Ridgeview Drive
Ford du Lee Avenue
Washington Drive
Grant Drive
Martin Drive
Crestview Drive
Mary Ruth Lane
Highland Road
Westwood Road
Crestwood Lane
Freistadt Road
Woodland Drive
Meskel Drive
McCamish Drive
River Lane
Hillcrest Drive
Kiemann Drive
Juniper Drive
Kings Way
Ava Grace Drive
Maple Drive
Orchard Drive
Lesley Drive
Century Lane
Crusader Court
Pelham Circle
Kurt Drive
Lovell Lane
Lovell Terrace
Lovell Parkway
Lovell Drive
Lovell Avenue
Lovell Lane
Lovell Drive
Lovell Avenue
Lovell Lane
Lovell Drive
Lovell Avenue
Lovell Lane

Table B: Menomonee River Land Ownership

Map ID	Tax Key	Municipality	Owner Name	Owner Address	Owner City	Owner State	Owner ZIP	Parcel Address
1	GTNV_333999	VILLAGE OF GERMANTOWN	MARSHALL PEEBLES	PO BOX 565	BUTLER	WI	53007-0000	N96W18058 COUNTY LINE RD
2	GTNV_333998	VILLAGE OF GERMANTOWN	MFF MORTGAGE BORROWER 18 LLC	512 LAUREL ST	BRAINERD	MN	56401-	N96W18200 COUNTY LINE RD
3	GTNV_333968	VILLAGE OF GERMANTOWN	L&D INVESTMENT CO	5400 S 27TH ST	MILWAUKEE	WI	53221-0000	W184N9676 APPLETON AVE
4	GTNV_333963	VILLAGE OF GERMANTOWN	MENARD INC	4777 MENARD DR	EAU CLAIRE	WI	54703-0000	W186N9754 APPLETON AVE
5	GTNV_333964	VILLAGE OF GERMANTOWN	WAUWATOSA SAVINGS BANK	11200 W PLANK CT	WAUWATOSA	WI	53226-3250	W188N9820 APPLETON AVE
6	GTNV_324959	VILLAGE OF GERMANTOWN	GT REAL ESTATE OF	1451 S 108TH ST	WEST ALLIS	WI	53214-0000	W188N9875 MAPLE RD
7	GTNV_321976	VILLAGE OF GERMANTOWN	VILLAGE OF GERMANTOWN	N112W17001 MEQUON RD	GERMANTOWN	WI	53022-	MAPLE RD
8	GTNV_332995	VILLAGE OF GERMANTOWN	KARL O BUEHRER	W188N10050 MAPLE RD	GERMANTOWN	WI	53022-0000	MAPLE RD
9	GTNV_332996	VILLAGE OF GERMANTOWN	KARL O BUEHRER	W188N10050 MAPLE RD	GERMANTOWN	WI	53022-0000	MAPLE RD
10	GTNV_332994	VILLAGE OF GERMANTOWN	KARL O BUEHRER	W188N10050 MAPLE RD	GERMANTOWN	WI	53022-0000	W188N10050 MAPLE RD
11	GTNV_332993	VILLAGE OF GERMANTOWN	JIMMY LEWIS POTEET	W188N10106 MAPLE RD	GERMANTOWN	WI	53022-0000	W188N10106 MAPLE RD
12	GTNV_332992	VILLAGE OF GERMANTOWN	KEVIN J MOLES, BETTY MOLES	345 PARKER CIR	LAWRENCE	KS	66049-0000	MAPLE RD
13	GTNV_332991	VILLAGE OF GERMANTOWN	KARL PHILLIP STANGEL, CAROL MCCARTY	43 HARRISON AVE	HIGHLAND PARK	NJ	08904-0000	MAPLE RD
14	GTNV_321972	VILLAGE OF GERMANTOWN	BV RYAN WILLOW CREEK I OWNER LLC	533 S THIRD ST STE 100	MINNEAPOLLIS	MN	55415-	N102W19300 WILLOW CREEK WAY
15	GTNV_321975	VILLAGE OF GERMANTOWN	VILLAGE OF GERMANTOWN	N112W17001 MEQUON RD	GERMANTOWN	WI	53022-	MAPLE RD
16	GTNV_294994	VILLAGE OF GERMANTOWN	STATE OF WISCONSIN	141 NW BARSTOW ST	WAUKESHA	WI	53188-0000	LANNON RD
17	GTNV_294995	VILLAGE OF GERMANTOWN	STATE OF WISCONSIN	141 NW BARSTOW ST	WAUKESHA	WI	53188-0000	LANNON RD
18	GTNV_294985	VILLAGE OF GERMANTOWN	VILLAGE OF GERMANTOWN	N112W17001 MEQUON RD	GERMANTOWN	WI	53022-	MAPLE RD
19	GTNV_294999	VILLAGE OF GERMANTOWN	U S HIGHWAY 41	PO BOX 798	WAUKESHA	WI	53187-0798	W195N10653 LANNON RD
20	GTNV_282984	VILLAGE OF GERMANTOWN	VILLAGE OF GERMANTOWN	P O BOX 337	GERMANTOWN	WI	53022-0000	N108W18500 LILAC LN
21	GTNV_282988	VILLAGE OF GERMANTOWN	APEX HOTEL INVESTMENTS LLC	311 PRESERVE WAY	COLGATE	WI	53017-	W188N11020 MAPLE RD
22	GTNV_282989	VILLAGE OF GERMANTOWN	WILLOW VIEW INVESTMENTS LLC	311 PRESERVE WAY	COLGATE	WI	53017-	N111W18611 MEQUON RD
23	GTNV_282995	VILLAGE OF GERMANTOWN	JOHN G WEIDMANN, KIM M WEIDMANN	N112W18025 MEQUON RD	GERMANTOWN	WI	53022-0000	N112W18025 MEQUON RD
24	GTNV_282994	VILLAGE OF GERMANTOWN	JOHN G WEIDMANN, KIM M WEIDMANN	N112W18025 MEQUON RD	GERMANTOWN	WI	53022-0000	RIVER LN
25	GTNV_213961	VILLAGE OF GERMANTOWN	GERMANTOWN SCHOOL DISTRICT	N104W13840 DONGES BAY RD	GERMANTOWN	WI	53022-	W180N11501 RIVER LN
26	GTNV_214988	VILLAGE OF GERMANTOWN	PHW GERMANTOWN INC	2845 HAMLIN AVE NORTH	ROSEVILLE	MN	55113-	N112W17500 MEQUON RD
27	GTNV_211979	VILLAGE OF GERMANTOWN	ROMANO & SCHMIDT LLC	PO BOX 226	GERMANTOWN	WI	53022-	MEQUON RD
28	GTNV_214001	VILLAGE OF GERMANTOWN	JOHN R CASANOVA, ANNA M CASANOVA	W177N11586 BLACKSTONE CIR	GERMANTOWN	WI	53022-	W177N11586 BLACKSTONE CIR
29	GTNV_211034	VILLAGE OF GERMANTOWN	LUCAS W PLESE, JENNIFER S PLESE	W177N11606 BLACKSTONE CIR	GERMANTOWN	WI	53022-	W177N11606 BLACKSTONE CIR
30	GTNV_211999	VILLAGE OF GERMANTOWN	VILLAGE OF GERMANTOWN	N122W17177 FOND DU LAC AVE	GERMANTOWN	WI	53022-0000	N116W17230 MAIN ST
31	GTNV_224999	VILLAGE OF GERMANTOWN	STATE OF WISCONSIN		WAUKESHA	WI	53188-0000	
32	GTNV_222980	VILLAGE OF GERMANTOWN	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT	260 W SEEBOTH ST	MILWAUKEE	WI	53204-0000	FOND DU LAC AVE
33	GTNV_222981	VILLAGE OF GERMANTOWN	VILLAGE OF GERMANTOWN	N122W17177 W FOND DU LAC AVE	GERMANTOWN	WI	53022-0000	MAIN ST
34	GTNV_153971	VILLAGE OF GERMANTOWN	ALLAN E DOBBERFUHL	W169N12143 FOND DU LAC AVE	GERMANTOWN	WI	53022-0000	W169N12143 FOND DU LAC AVE
35	GTNV_153999	VILLAGE OF GERMANTOWN	WASHINGTON COUNTY	432 E WASHINGTON ST	WEST BEND	WI	53095-7986	
36	GTNV_153997	VILLAGE OF GERMANTOWN	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT	260 W SEEBOTH ST	MILWAUKEE	WI	53204-1440	CENTURY LN
37	GTNV_153996	VILLAGE OF GERMANTOWN	EVERETT D HOWARD, BONNIE L HOWARD	W168N12172 CENTURY LN	GERMANTOWN	WI	53022-0000	W168N12172 CENTURY LN
38	GTNV_153995	VILLAGE OF GERMANTOWN	MARK S REINERT, JENNIFER A REINERT ET AL	W168N12196 CENTURY LN	GERMANTOWN	WI	53022-0000	W168N12184 CENTURY LN
39	GTNV_153979	VILLAGE OF GERMANTOWN	LITTLE ACRES LLC	W168N12276 CENTURY LN	GERMANTOWN	WI	53022-0000	W168N12276 CENTURY LN
40	GTNV_153972	VILLAGE OF GERMANTOWN	CRAIG D OSTOVICH, DIANA JO OSTOVICH	W168N12338 CENTURY LN	GERMANTOWN	WI	53022-0000	W168N12338 CENTURY LN
41	GTNV_153977	VILLAGE OF GERMANTOWN	DAVID C KONTZ	W168N12340 CENTURY LN	GERMANTOWN	WI	53022-	W168N12340 CENTURY LN
42	GTNV_152988	VILLAGE OF GERMANTOWN	JAN A LUCAS, MILWAUKEE METROPOLITAN SEWERAGE	503 S COMANCHE LN	WAUKESHA	WI	53188-0000	CENTURY LN
43	GTNV_152998	VILLAGE OF GERMANTOWN	MAHMOOD MIRHOSEINI REVOCABLE TRUST	N124W16826 LOVERS LN	GERMANTOWN	WI	53022-	N124W16826 LOVERS LN
44	GTNV_152995	VILLAGE OF GERMANTOWN	JILL CAYTON	N124W17116 LOVERS LN	GERMANTOWN	WI	53022-	CTY HWY G
45	GTNV_154999	VILLAGE OF GERMANTOWN	FOX VALLEY & WESTERN LTD	ONE O'HARE CENTRE STE 9000	ROSEMONT	IL	60017-0000	
46	GTNV_143988	VILLAGE OF GERMANTOWN	FRANK M LAUFER, CHERYL S LAUFER	W148N12345 PLEASANT VIEW DR	GERMANTOWN	WI	53022-0000	W148N12345 PLEASANT VIEW DR
47	GTNV_143980	VILLAGE OF GERMANTOWN	MICHELE A MOSS, STEVEN J MOSS	W148N12353 PLEASANT VIEW DR	GERMANTOWN	WI	53022-	W148N12353 PLEASANT VIEW DR
48	GTNV_143981	VILLAGE OF GERMANTOWN	CHARLES R NICKEL, REBEKAH S NICKEL	W148N12337 PLEASANT VIEW DR	GERMANTOWN	WI	53022-	W148N12337 PLEASANT VIEW DR
49	GTNV_143982	VILLAGE OF GERMANTOWN	ROBERT M SNOW, LORI A SNOW	W148N12301 PLEASANT VIEW DR	GERMANTOWN	WI	53022-	W148N12301 PLEASANT VIEW DR
50	GTNV_143990	VILLAGE OF GERMANTOWN	FRANK BLAU	W148N12297 PLEASANT VIEW DR	GERMANTOWN	WI	53022-0000	W148N12297 PLEASANT VIEW DR
51	GTNV_144987	VILLAGE OF GERMANTOWN	JOSEPH P CARRUTH, NANCY J CARRUTH	W148N12340 PLEASANT VIEW DR	GERMANTOWN	WI	53022-	W148N12340 PLEASANT VIEW DR
52	GTNV_141998	VILLAGE OF GERMANTOWN	ROBERT LANGRECK, BETTY LANGRECK	W148N12470 PLEASANT VIEW DR	GERMANTOWN	WI	53022-0000	W148N12470 PLEASANT VIEW DR
53	GTNV_141991	VILLAGE OF GERMANTOWN	DEAN A KIND, JULIE B KIND	PO BOX 436	GERMANTOWN	WI	53022-0000	W148N12534 PLEASANT VIEW DR
54	GTNV_141999	VILLAGE OF GERMANTOWN	JOHN E PERRY, BRENDA L PERRY	N124W14106 LOVERS LN	GERMANTOWN	WI	53022-	LOVERS LN
55	GTNV_141995	VILLAGE OF GERMANTOWN	SCOTT W SOMMER, GEORGENE D SOMMER	W148N12696 PLEASANT VIEW DR	GERMANTOWN	WI	53022-0000	PLEASANT VIEW DR
56	GTNV_114999	VILLAGE OF GERMANTOWN	SCOTT W SOMMER	W148N12696 PLEASANT VIEW DR	GERMANTOWN	WI	53022-0000	PLEASANT VIEW DR
57	GTNV_114997	VILLAGE OF GERMANTOWN	RICHARD GERSCHKE TRUST	6305 W SPENCER PL	MILWAUKEE	WI	53218-	PLEASANT VIEW DR
58	GTNV_123998	VILLAGE OF GERMANTOWN	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT	260 W SEEBOTH ST	MILWAUKEE	WI	53204-1446	HIGHLAND RD
59	GTNV_123999	VILLAGE OF GERMANTOWN	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT	260 W SEEBOTH ST	MILWAUKEE	WI	53204-1446	HIGHLAND RD
60	GTNV_114995	VILLAGE OF GERMANTOWN	RICHARD GERSCHKE TRUST	6305 W SPENCER PL	MILWAUKEE	WI	53218-	W148N13004 PLEASANT VIEW DR
61	GTNV_114993	VILLAGE OF GERMANTOWN	RICHARD GERSCHKE TRUST	6305 W SPENCER PL	MILWAUKEE	WI	53218-	PLEASANT VIEW DR
62	GTNV_111999	VILLAGE OF GERMANTOWN	WALTER J WOLF, GARY J WOLF ET AL	1931 FIELDCLIFFE DR	RICHFIELD	WI	53076-	PLEASANT VIEW DR
63	GTNV_114992	VILLAGE OF GERMANTOWN	ARLENE WOLF, ARLENE KOHL ET AL	3367 MOUNT LN	HUBERTUS	WI	53033-	PLEASANT VIEW DR
64	GTNV_123997	VILLAGE OF GERMANTOWN	VILLAGE OF GERMANTOWN	N122W17177 FOND DU LAC AVE	GERMANTOWN	WI	53022-0000	HIGHLAND RD
65	GTNV_123996	VILLAGE OF GERMANTOWN	VILLAGE OF GERMANTOWN	N122W17177 FOND DU LAC AVE	GERMANTOWN	WI	53022-0000	HIGHLAND RD
66	GTNV_124998	VILLAGE OF GERMANTOWN	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT	260 W SEEBOTH ST	MILWAUKEE	WI	53204-1446	HIGHLAND RD
67	GTNV_111988	VILLAGE OF GERMANTOWN	DON W DUSSAULT	2159 S 80TH ST	WEST ALLIS	WI	53219-0000	PLEASANT VIEW DR
68	GTNV_111998	VILLAGE OF GERMANTOWN	WALTER J WOLF, GARY J WOLF ET AL	1931 FIELDCLIFFE DR	RICHFIELD	WI	53076-	BONNIWELL RD
69	GTNV_122995	VILLAGE OF GERMANTOWN	DANIEL LIEDTKE	N136W13835 BONNIWELL RD	GERMANTOWN	WI	53022-	N136W13835 BONNIWELL RD
70	GTNV_122999	VILLAGE OF GERMANTOWN	VILLAGE OF GERMANTOWN	N122W17177 FOND DU LAC AVE	GERMANTOWN	WI	53022-0000	N136W13801 BONNIWELL RD
71	GTNV_121998	VILLAGE OF GERMANTOWN	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT	260 W SEEBOTH ST	MILWAUKEE	WI	53204-1446	WASAUKEE RD
72	GTNV_122993	VILLAGE OF GERMANTOWN	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT	260 WEST SEEBOTH ST	MILWAUKEE	WI	53204-1446	
73	GTNV_013997	VILLAGE OF GERMANTOWN	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT	260 W SEEBOTH ST	MILWAUKEE	WI	53204-0000	COUNTRY AIRE DR
74	GTNV_013998	VILLAGE OF GERMANTOWN	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT	260 W SEEBOTH ST	MILWAUKEE	WI	53204-0000	COUNTRY AIRE DR
75	GTNV_013985	VILLAGE OF GERMANTOWN	MILWAUKEE METROPOLITAN SEWERAGE DISTRICT	260 W SEEBOTH ST	MILWAUKEE	WI	53204-0000	COUNTRY AIRE DR

Table C: Likely Funding Sources

Funding Name	Description/Eligible Projects	Funding Entity & Link
Knowles-Nelson Stewardship Local Assistance Grant Programs ▷ Aids for the Acquisition and Development of Local Parks (ADLP); ▷ Urban Green Space (UGS) grants; ▷ Urban Rivers (UR) grants; ▷ Acquisition of Development Rights (ADR)	▷ Support nature-based outdoor recreation activities ▷ Land acquisition for parks & trails, including riverfront property	▷ State (WDNR) ▷ https://dnr.wisconsin.gov/topic/Stewardship/ApplyLUG
Federal Recreation Grant Programs ▷ Land and Water Conservation Fund (LWCF) ▷ Recreational Trails Program (RTP)	▷ LWCF grants support land acquisition and development of high-quality outdoor recreation amenities in local communities. ▷ RTP grants support maintenance and restoration of existing trails; ▷ development and rehabilitation of trailside and trail head facilities and trail linkages; ▷ construction of new trails (with certain restrictions on federal lands); and ▷ acquisition of property for trails.	▷ Federal (WDNR) ▷ https://dnr.wisconsin.gov/topic/Stewardship/FederalLUG
Federal Transportation Alternatives Program (TAP)	▷ On or off-road facilities	▷ State (WisDOT) ▷ https://wisconsindot.gov/Pages/doing-bus/local-gov/astnce-pgms/aid/tap.aspx
Federal Congestion Mitigation and Air Quality Improvement Program (CMAQ)	▷ Encourages transportation alternatives in southeast Wisconsin that improve air quality such as public transit enhancements, bicycle/pedestrian facilities, ride sharing programs and facilities, and technologies that improve traffic flow and vehicle emissions.	▷ State (WisDOT) ▷ https://wisconsindot.gov/Pages/doing-bus/local-gov/astnce-pgms/aid/cmaq.aspx
Fund For Lake Michigan (FFLM)	▷ Projects that have near-term, direct and quantifiable impacts on water quality in the Lake Michigan watershed. This includes projects such as wetland restoration, stormwater management, stream bank repair, and general water quality improvements.	▷ Non-profit ▷ https://fundforlakemichigan.org/

Additional Funding Sources to Explore:

WisDOT	▷ https://wisconsindot.gov/Pages/doing-bus/local-gov/astnce-pgms/aid/default.aspx
WDNR	▷ https://dnr.wisconsin.gov/aid/Grants.html

September 2021