



MEETING OF TOWN OF VERONA PLAN COMMISSION

Thursday February 15, 2024, 6:30 p.m.

Town Hall Community Room

7669 County Highway PD, Verona WI

1. Call to Order/Approval of Meeting Agenda
2. Public Comment - Opportunity for comment from persons in attendance on items not listed below over which this governing body has jurisdiction. Comments on matters not listed on this agenda could be placed on a future Plan Commission meeting agenda. If the Chair or staff have received written comments for items not on the agenda, these may be read.
3. Approval of Minutes from January 18th, 2024
4. Discussion and Possible Action: Land Use Application 2023-01 Sugar River Road Properties Concept Plan Review and Rezone
 - a. Staff report
 - b. Applicant comments
 - c. Public comment
5. Discussion and Possible Action: Land Use Application 2024-02 Riverside Vista (062/0608-303-9000-8 east of 7906 Riverside Road) Preliminary Plat, Declaration of Covenants and Developer's Agreement
 - a. Staff report
 - b. Applicant comments
 - c. Public comment
6. Discussion and Possible Action: Resolution 2024-01 Discontinuance of a Portion of Hidden River Road
7. Discussion: Comprehensive Plan Amendments Update
8. Other

9. Next Meeting: March 21st, 2024

10. Adjourn

Per Resolution 2016-2 agendas are posted at the Town Hall and online at www.town.verona.wi.us. Go to www.town.verona.wi.us and sign up for the Town List Serve to receive notices via email. If anyone having a qualifying disability as defined by the American With Disabilities Act, needs an interpreter, materials in alternate formats or other accommodations to access these meetings, please contact the Town of Verona office @ 608-807-4466. Please do so at least 24 hours prior to the meeting so that proper arrangements can be made. Notice is also given that a possible quorum could occur at this meeting for the purposes of information gathering only, of the Town Board, Natural and Recreational Areas Committee, and/or Public Works Committee.

Posted: 02/09/2024, Mark Geller, Chair, Town of Verona Plan Commission

Town of Verona Plan Commission Meeting Minutes - DRAFT

January 18, 2023 6:30pm

Town Hall Community Room

7559 County Highway PD, Verona WI

Members Present: Mark Geller, Lori Lukens, Tom Mathies, Sarah Slack, Haley Saalsaa-Miller

Staff: Sarah Gaskell, Administrator

1. Call to Order/Approval of Meeting Agenda – Geller called the meeting to order at 6:40 pm. Motion to approve the agenda by Slack, second by Lukens. Motion carried by voice vote.
2. Public Comment - none
3. Approval of Minutes from October 16th, 2023 – Motion to approve by Lukens, second by Miller. Motion carried by voice vote.
4. Discussion and Possible Action: Land Use Application 2023-01 Sugar River Road Properties Concept Plan Review and Rezone
 - a. Staff report – as provided in packet
 - b. Applicant comments – Ron Klass, D’Onofrio and Associates
 - Agent has a long history with the Town – Deer Haven, Fox Hill and Woods at Watch Hill
 - Project in alignment with the goals of the Town’s Comprehensive Plan
 - Design team has been working on the project for 18 months to address town and public comments and concerns
 - Conservation design exceeds minimum open space requirements
 - Design features: restored prairies and walking paths, preservation of large, wooded lot as open space, landscape requirements, ridgeline height restrictions, strong HOA covenants
 - c. Public comment
 - Sherry Combs, 7454 Valley Road – comments sent by email; see attachment
 - Cheryl Mellenthin, 2105 Sugar River Road – shares Sherry’s Combs’ concerns; Traffic Impact Analysis questions – bike traffic, farm vehicles; entrance has flooded in the past; verbiage used by commissioners is unclear
 - Tom Poast, 1990 Hidden River Road; Lots 19-22 are only 150’ wide; how will residents of the development be kept off of his property; trees hanging over his field on western edge
 - Dusty Poast, 1990 Hidden River Road; will be requesting enforcement of Wisconsin Fence Law
 - Jane Barnett, 2273 Sugar River Road; thanked PC for work done to date but more must be considered; traffic study concerns; sight line issues; flooding issues; wildlife use of road not considered; wants a robust stewardship plan for the development
 - Dave Lonsdorf, 1717 Beach Road; trail placement in NW corner runs with the grade and will erode; half of wooded lots will be destroyed by homes being placed there; flooding concerns; minimizing carbon footprint should be encouraged
 - Jeff Hartmann 2313 Sugar River Road; how does future mailbox location affect the current residents; would like more information on the phasing plan for the development roads
 - d. Commissioner Comments

Concept Plan

- Flooding concerns:
 - Chief Machotka in attendance – he does not have any issue with response times; challenges re flooding exist everywhere; Addition of new neighborhoods in the town has not increased call volume
- Floodplain concerns – if entrance is determined to be in the floodplain, what's next; applicant stated there a number of alternatives including rebuilding the intersection of the access with Sugar River Road
- Design speed of roads is preferred to be 25mph
- County documentation of manure management plan would be helpful
- Lots 19-22 may need to be shifted to accommodate 300' distance for well placement
- Phasing of road construction
- Mailbox locations should be examined to minimize inconvenience to current residents (location likely dictated by USPS)
- Better explanation of the methods employed in the Traffic Impact Analysis
- Path alignment in Outlot 8 – address potential erosion concerns due to grade
- Would like to review floodplain study once completed
- Application needs to include vision triangle, floodplain, slopes between 12 and 20%, existing wells and septic fields
- Generally supportive of the design
- Design changes made to date are favorable and reflective of the Comprehensive Plan
-

Rezone

- More specific information is needed like a map

No action taken.

5. Discussion and Possible Action: 2023 OA-068 Amending Chapter 10 of the Dane County Code of Ordinances Regarding the Review Process for Conditional Use Permits and Rezones

Discussion by Plan Commission. Motion by Geller, second by Mathies to recommend approval of 2023 OA-068 Amending Chapter 10 of the Dane County Code of Ordinances Regarding the Review Process for Conditional Use Permits and Rezones
Motion carried by voice vote.

6. Discussion and Possible Action: Land Use Application 2024-01 Rezone of Cross County Circle submitted by Town of Verona to correct a zoning oversight

Discussion by Plan Commission. Motion by Slack, second by Lukens to recommend approval of Land Use Application 2024-01 Rezone of 2744 Cross County Circle to correct a zoning clerical error.
Motion carried by voice vote.

7. Other

8. Next Meeting: February 15th, 2024

9. Adjourn –Motion by Geller, second by Mathies. Motion carried by voice vote. Meeting adjourned at 8:17 pm.

Submitted by Sarah Gaskell, Town Planner/Administrator

Sherry Combs Comments for 1/17/24 Plan Commission Meeting--Sugar River Proposal

1. I have concerns about the information or more correctly the continued lack of information submitted for the proposed Sugar River Road subdivision. It is interesting to compare the almost overwhelming amount of detailed information submitted for the initial Riverside Rd/Spring Rose Rd proposed development to the minimal supplied 9 months after the initial proposal. Why is this minimal approach acceptable? Aren't the rules of what information must be addressed contained in TOV documents? Minimizing information creates a lack of transparency as to what will actually be put in place. The burden of identifying potential problems is shifted to others when insufficient information is intentionally submitted. Lack of transparency is not good business.
2. The 50 plus page traffic study based on a single observation day does not do justice to the concerns that have been previously expressed. The observation was done right after the Ironman Race—bicyclists were not riding that soon after the race, so those numbers were under-represented. It also was after third crop hay and before grain harvest when little/no farm equipment was moving. A single point in time is not statistically important nor representative. The blind corner that is proposed as the entrance/exit is a safety concern under many situations that may not have been observed on that one day. Has fire and EMS been contacted and if so, what are their concerns?
3. The audience has brought to the Plan Commissions attention many questions and concerns about this project. What assurance do we have that these concerns have been considered by the Plan Commission? Will our questions be answered? How is the developer incorporating these concerns into his plans? Nothing seems to have changed—the same no conservation plat is now plopped onto an elevation map with no redesign. How has the need for manure application to adjacent land been addressed in the design? How will runoff from the entrance road into the subdivision be handled to prevent runoff downhill into the wetland/Sugar River? Houses placed on the ridge may be restricted to 1 story—why is it 'may' and under what circumstances will that be enforced?
4. It is difficult to follow the discussion of the Plan Commission members during real time because of being unfamiliar with the technical and specific language of building, platting, etc. Every profession has language specific to itself. But in order for those discussions to be meaningful to a broader audience, either less technical, specific language should be used or a glossary developed that defines the technical terms used. I'm sure other audiences attending Plan Commission meetings would benefit from such a glossary. I would like to ask the Town of Verona to construct such a glossary to help its residents better understand meeting proceedings.

I think most of us living in the surrounding area want to have honest, complete information presented at these meetings. Having to read between the lines and guess at the real meaning

makes it difficult to properly assess the proposal. Transparency is important. We would like to know that our concerns are being considered. How can that happen if complete information is not submitted or some design changes shown or reasons that changes can't happen be addressed?



TOWN OF VERONA
APPLICATION FOR LAND USE CHANGE

2023-01

Please review the Town of Verona Comprehensive Land Use Plan and Subdivision and Development Ordinance 05-04 (found on the Town website: www.town.verona.wi.us) and Dane County Ordinances Chapter 10 – Zoning, Chapter 11 – Shoreland, Shoreland-Wetland and Inland-Wetland Regulations, and Chapter 75 – Land Division and Subdivision Regulations prior to application. A pre-application meeting or initial review should be scheduled with Town Staff and/or Plan Commission Chair if you have any questions or concerns and to determine the fees associated with the application.

Proposed land use change for (property address/legal description): _____

2313, 2325, & 2191 SUGAR RIVER ROAD
MISHAPACHA, SUGAR RIVER INVESTORS, SWEETWATER

Please check all that apply:

- comprehensive plan amendment – please see specific submittal requirement
- rezone petition
 - current zoning category _____
 - new zoning category _____
- conditional use permit
conditional use requested _____
- certified survey map
- preliminary plat
- final certified survey map
- concept plan
- site plan
- request for Town road access

Property Owner Phone MULTIPLE

Address _____ E-Mail _____

Applicant, if different from the property owner RON KLAAS, D'ONOFRIO KOTKE

Applicant's Phone (608) 833-7530 E-mail RKLAAS@DONOFRIO.CC

If the applicant is different from property owner, please sign below to allow the agent to act on behalf of property owner.

I hereby authorize _____
to act as my agent in the application process for the above indicated land use change.

Signature _____ Date _____

Description of Land Use Change requested: (use reverse side if additional space is needed)

DEVELOP SINGLE FAMILY NEIGHBORHOOD

I certify that all information is true and correct. I understand that failure to provide all required information and any related fees will be grounds for denial of my request.

Applicant Signature [Signature] Date 5-10-23

Print Name RONALD R KLAAS

RETURN COMPLETED APPLICATION TO MAP/PLAN AND ANY OTHER INFORMATION VIA EMAIL TO:
Sarah Gaskell, Administrator, Town of Verona
7669 County Highway PD, Verona, WI 53593
sgaskell@town.verona.wi.us
(608) 845-7187

OFFICE USE ONLY
Application # _____
Fee _____
Paid by _____
Date _____ Check # _____
Receipt # _____

Sugar River Road Properties

Sugar River Road Properties would like the Town to complete a conceptual review for a single family home project in the Town of Verona. There are four properties within this area that could someday be developed, with a total ownership of over 250 acres. The location of the project within the Town, along with the designated land use, can be seen on the attached "Future Land Use" map from the Town's Comprehensive Plan.

Along with this narrative, there are 4 maps that are being provided per the Town guidelines;

1. Context Map
2. Existing Conditions
3. Neighborhood Plan for all 4 properties
4. Concept plan for the lands to initially be platted

As can be seen by the Comp Plan map and the Context Map, the project is located in the west central portion of the Town, in an area designated for Rural Residential. There are scattered residential lots near the project, and the new Twin Rock residential development is about a half mile to the west. Most of the area around the project is farmland.

The Existing Conditions Map shows the project area to have 4 residences. There are approximately 80 acres of woods at the south end, and the remaining land is currently being farmed. There is a small triangle of wetlands in the NW corner, and that triangle along with a small area at the Sugar River Road connection point are within the 100 year flood plain. There are no historical features and no known archeological sites mapped in the project area.

Although not all of the property is being proposed for development at this time, the Town asked that an overall Neighborhood Plan be developed to see how it would all fit together in the future. This plan illustrates how a second access point will be established on Sugar River Road, and how there would be a connected greenspace throughout with a series of stormwater management basins.

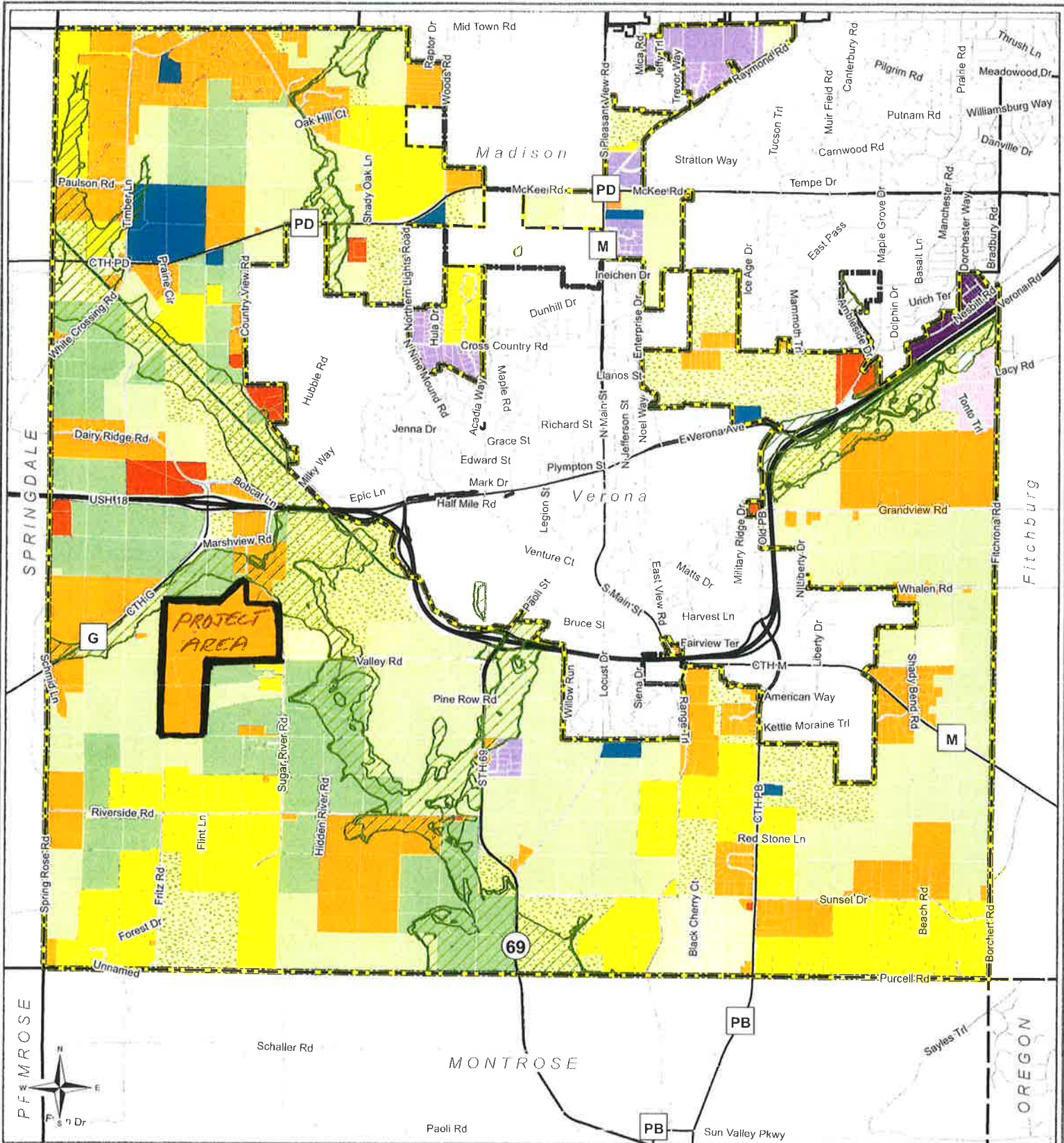
The fourth map is the Concept Plan for the lands that would initially be developed. The southwesterly 40 acres is not being developed at this time, nor is the property in the NE corner (36.7 acres) along Sugar River Road. The project is being proposed as a Conservation Subdivision per the Town's Land Division Ordinance. This requires a minimum of 30% open space, and allows a minimum lot size of 1.3 acres. The open space will consist of stormwater basins, hiking trails, and prairie areas in the current farmed areas in the north portion along with the existing woods to the south.

Stormwater Management will meet the DNR and Dane County requirements, whereby peak flows cannot exceed existing runoff. Infiltration and sediment reduction standards must be met as well. Stormwater basins will be incorporated throughout the project, and the open space areas will be converted to prairie instead of corn field.

Traffic is expected to primarily go north on Sugar River Road to Marshview Road and County G, and then to Hwy 151. Some traffic would likely use Valley Road for accessing Hwy 151 and other points south on Hwy 69. It is anticipated that the Town's road maintenance program will include Sugar River Road within the next several years.

Setbacks for the homes will far exceed Dane County standards. Front setbacks will be a minimum of 50', and rear setbacks will be 100'. Side yards will be 50' on the majority of lots, which provides a minimum of 100' between homes. Green space will be incorporated in many instances along the borders with adjacent farmlands to provide additional buffer. For the lots on the ridge (on the upper area of the existing driveway), there will be a limitation on how high the roof peak can be in order to help reduce the visual impact from surrounding lands. Building envelopes in the woods are limited to 30,000 sf or less.

The roads within the project will be built to Town Road standards by the Developer and dedicated to the Town. Road maintenance will be by the Town, and trash pickup handled with curbside pickup. Verona Area Fire and EMS will provide emergency services, and the Dane County Sheriff's Office will patrol the area. We will work with local phone companies to provide high speed internet service.



Map 9.6: Future Land Use

Town of Verona

- | | | | |
|--|--------------------------------|--|---|
| | Trail | | Urban Residential: SFR Neighborhoods Public Septic |
| | Farmland Preservation | | Urban Residential: SFR Neighborhoods Private Septic |
| | Transitional Agricultural | | Urban Mixed Use Neighborhood |
| | Natural/Recreational Resources | | Institutional |
| | Rural Residential, 8+ acres | | Commercial |
| | Rural Residential, 4-8 acres | | Utilities |
| | Rural Residential, 2-4 acres | | Environmental Respires Protection Corridor |

Date Created: 8/20/2018
Date Amended: 11/16/2018

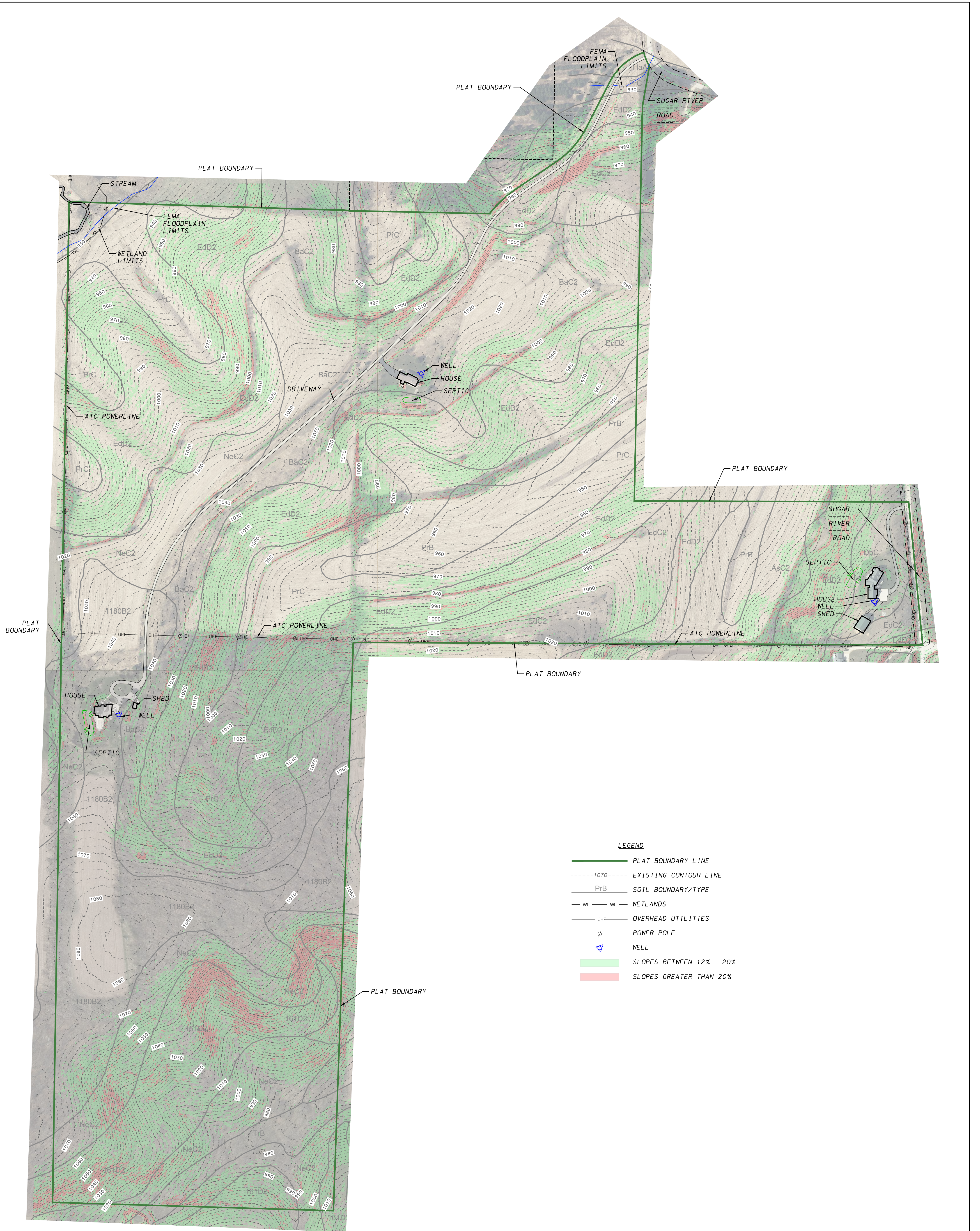
Scale: 0, 0.5, 1 Miles

Note: see Cities authorities on the subject Town of Verona lands



vierbicher
planners engineers advisors

REDSBURG - MADISON - PRAIRIE DU CHIEN - MILWAUKEE METRO
999 Fourier Drive, Suite 201, Madison, WI 53717
Phone: (608) 826-0532 Fax: (608) 826-0530



DATE: 02-05-24
 REVISED:
 FN: 22-07-109
 Sheet Number:
 1 of 1

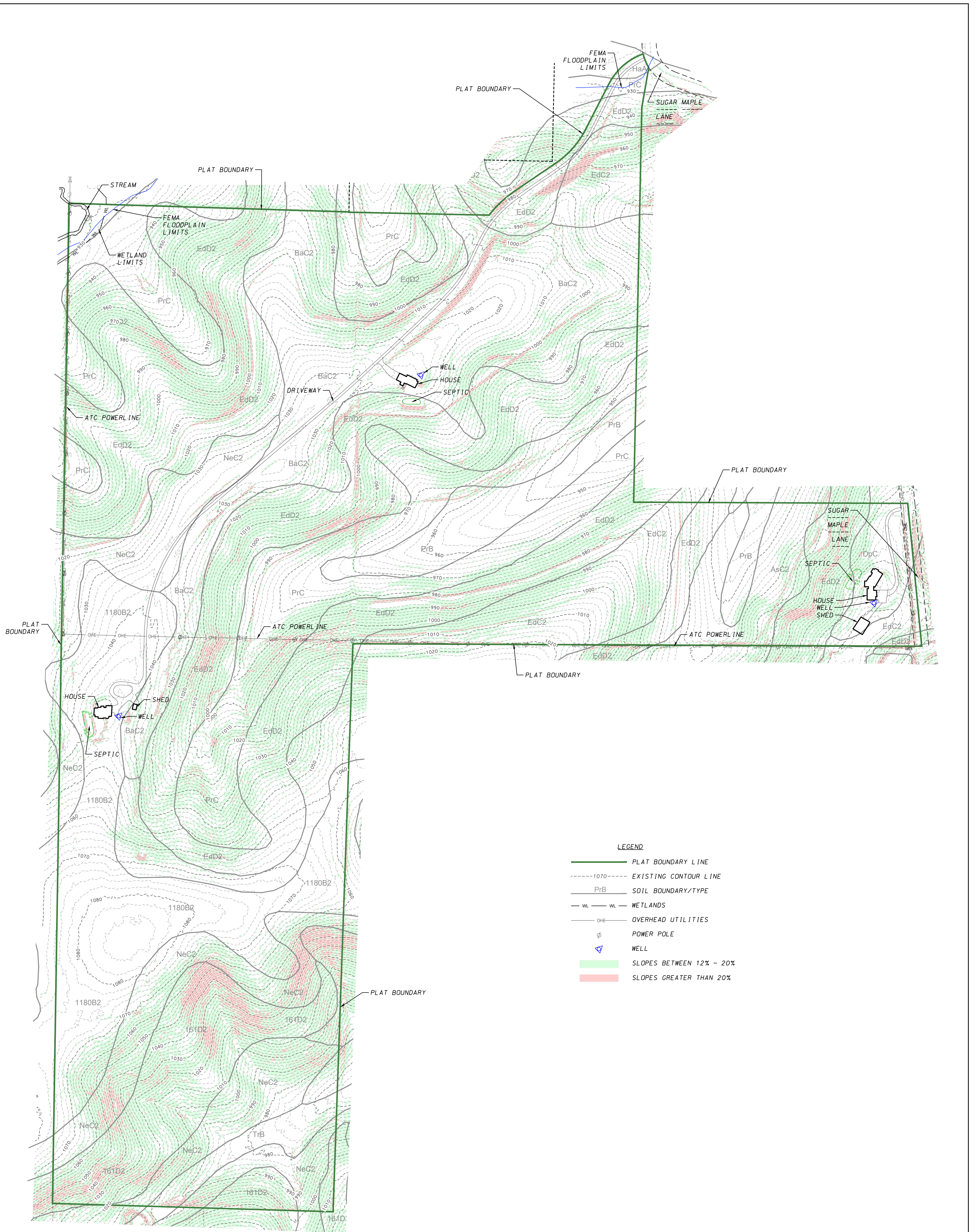
SCALE: 1" = 200'
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EXISTING CONDITIONS MAP

SUGAR RIVER ROAD PROPERTIES

TOWN OF VERONA, DANE COUNTY, WISCONSIN

D'ONOFRIO KOTTKE AND ASSOCIATES, INC.
 7530 Westward Way, Madison, WI 53717
 Phone: 608.833.7530 • Fax: 608.833.1089
 YOUR NATURAL RESOURCE FOR LAND DEVELOPMENT



DATE: 02-02-24
 REVISED:

FN: 22-07-109

Sheet Number:
 1 of 1

SCALE: 1" = 200'
 (PAGE SIZE: 24x36)

EXISTING CONDITIONS MAP

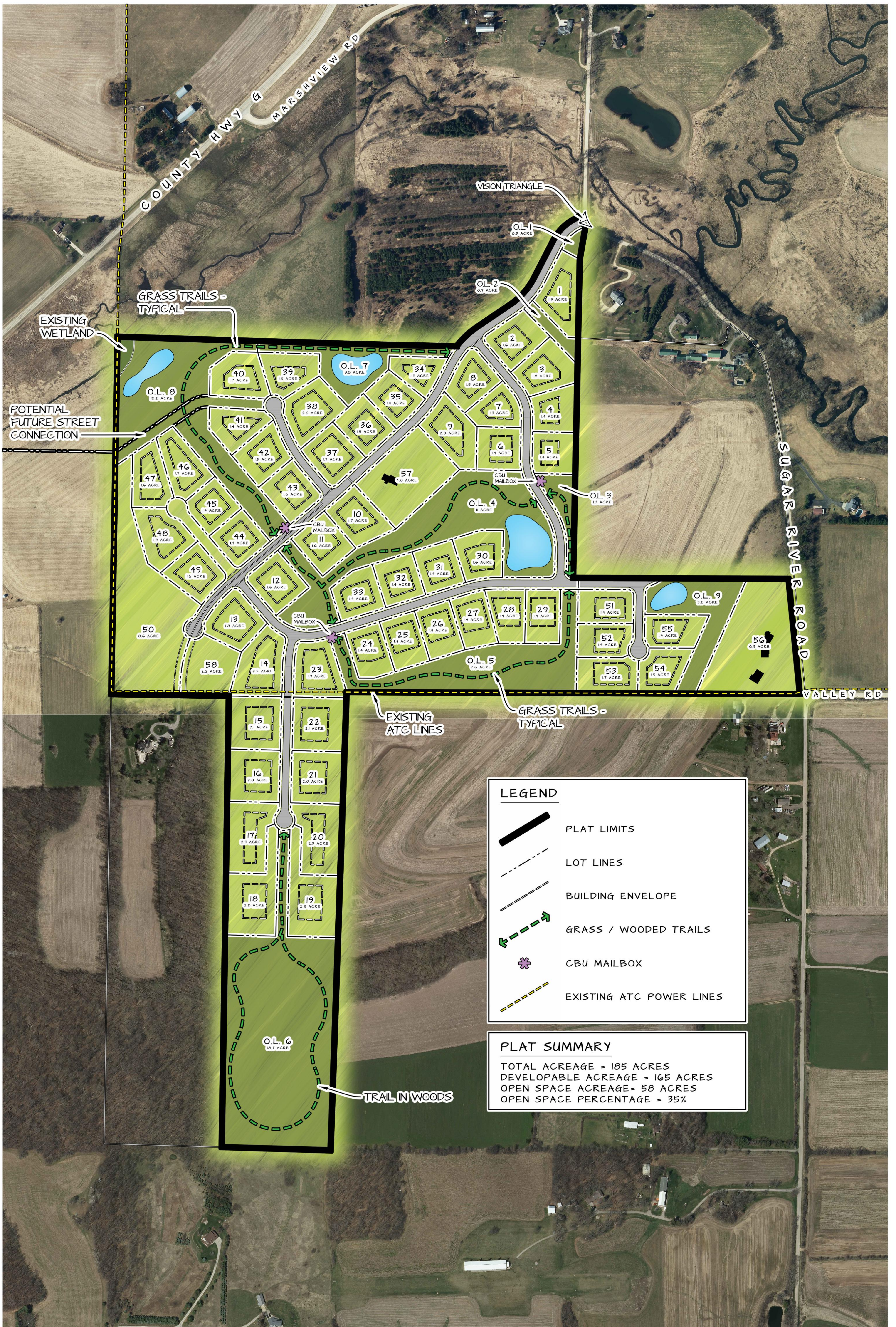
SUGAR RIVER ROAD PROPERTIES

TOWN OF VERONA, DANE COUNTY, WISCONSIN

D'ONOFRIO KOTTKE AND ASSOCIATES, INC.

7530 Westward Way, Madison, WI 53717
 Phone: 608.833.7530 • Fax: 608.833.1089
 YOUR NATURAL RESOURCE FOR LAND DEVELOPMENT

Feb 05, 2024 - 8:42am U:\User\2207109\Drawings\2207109 Existing Conditions Map.dwg 24x36



LEGEND

- PLAT LIMITS
- LOT LINES
- BUILDING ENVELOPE
- GRASS / WOODED TRAILS
- CBU MAILBOX
- EXISTING ATC POWER LINES

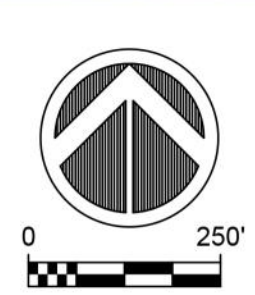
PLAT SUMMARY

TOTAL ACREAGE = 185 ACRES
 DEVELOPABLE ACREAGE = 165 ACRES
 OPEN SPACE ACREAGE = 58 ACRES
 OPEN SPACE PERCENTAGE = 35%

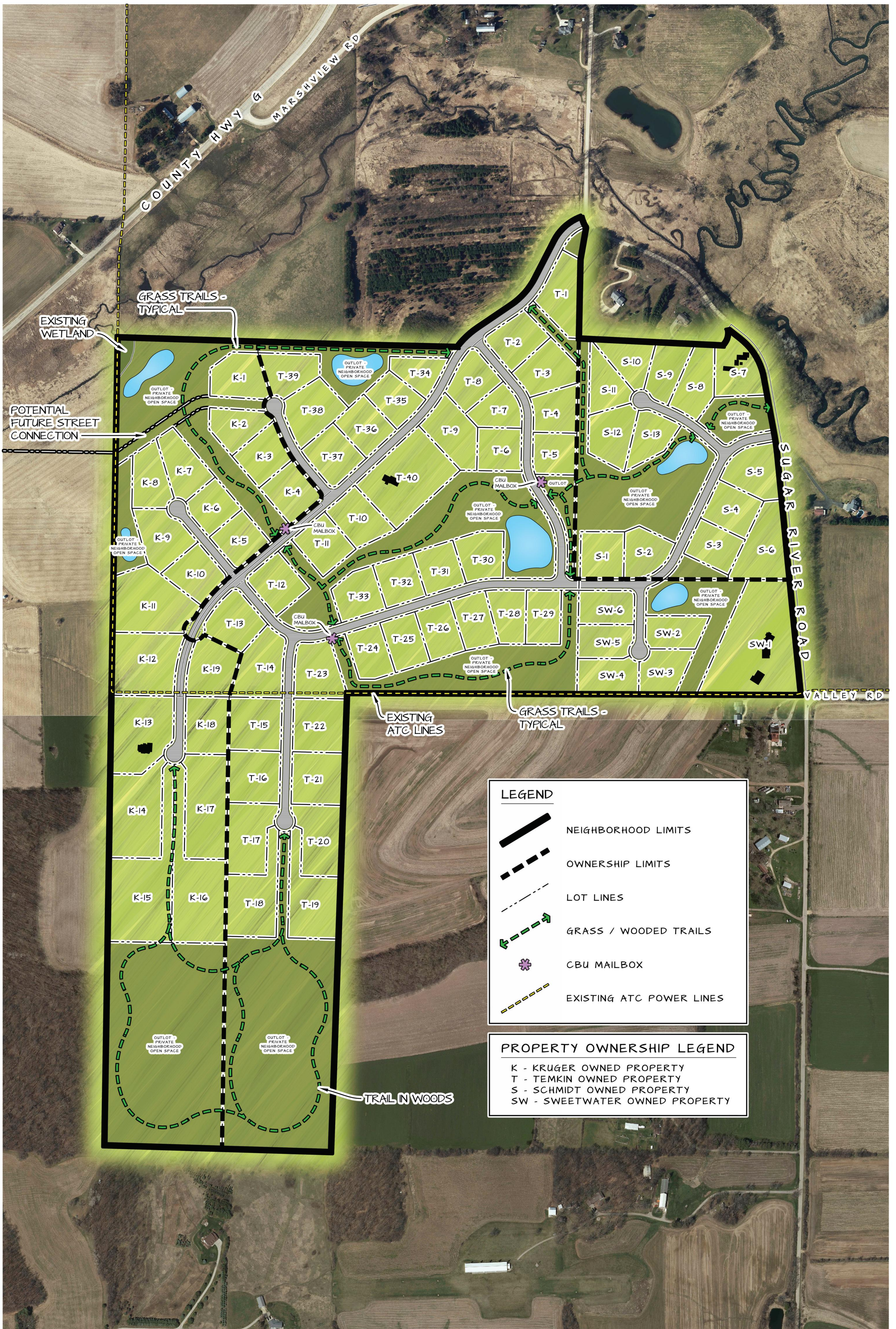
SUGAR RIVER ROAD PROPERTIES

CONCEPTUAL PLAT
 TOWN OF VERONA, WISCONSIN

FEBRUARY 7, 2024 22-07-109



D'ONOFRIO KOTTKE AND ASSOCIATES, INC.
 7530 Westward Way, Madison, WI 53717
 Phone: 608.833.7530 • Fax: 608.833.1089
 YOUR NATURAL RESOURCE FOR LAND DEVELOPMENT



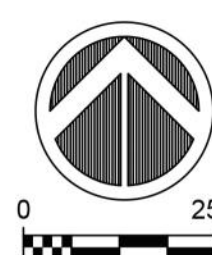
SUGAR RIVER ROAD PROPERTIES

POTENTIAL FUTURE NEIGHBORHOOD BUILD-OUT

TOWN OF VERONA, WISCONSIN

JANUARY 12, 2024

22-07-109

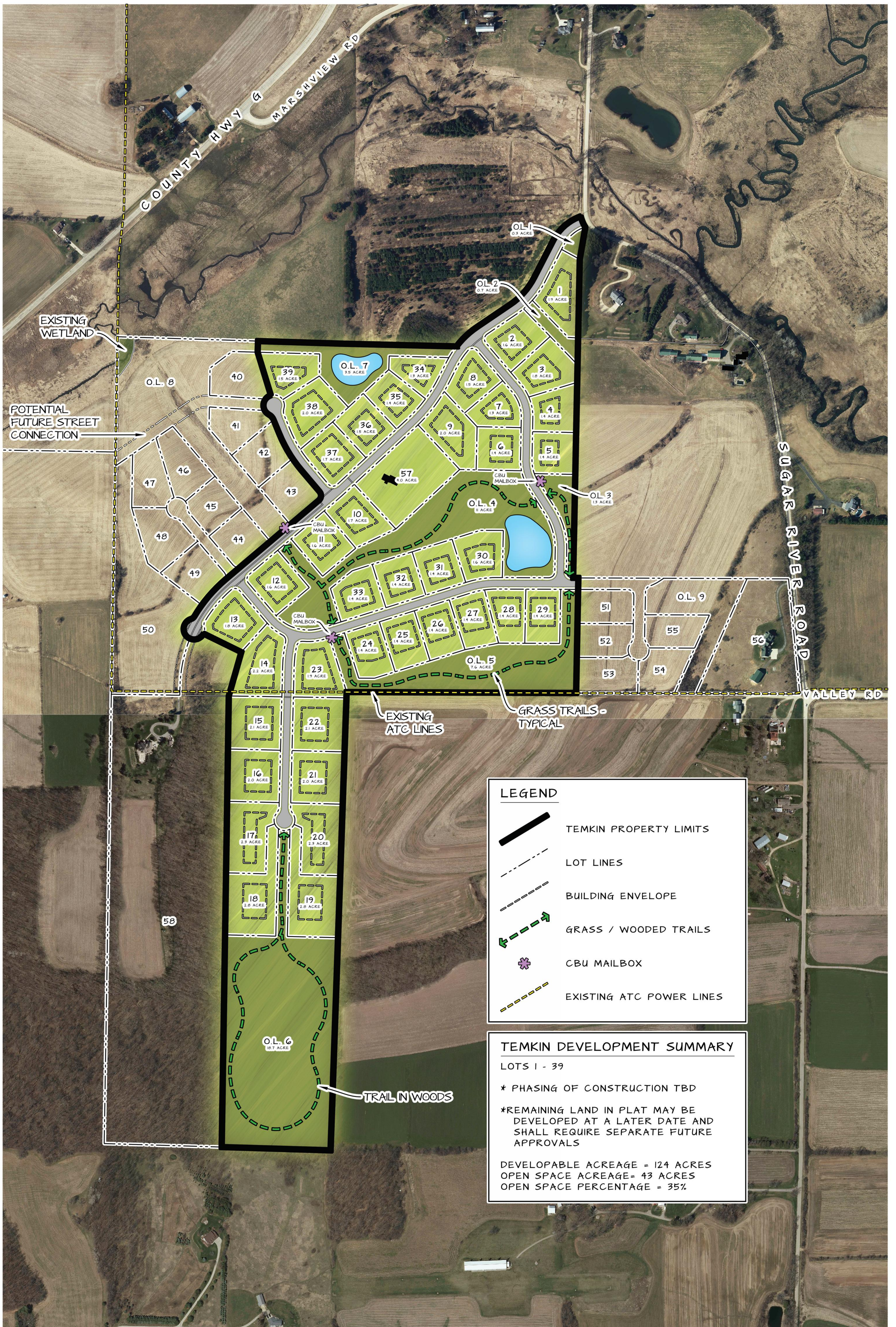


D'ONOFRIO KOTTKE AND ASSOCIATES, INC.

7530 Westward Way, Madison, WI 53717

Phone: 608.833.7530 • Fax: 608.833.1089

YOUR NATURAL RESOURCE FOR LAND DEVELOPMENT



LEGEND

- TEMKIN PROPERTY LIMITS
- LOT LINES
- BUILDING ENVELOPE
- GRASS / WOODED TRAILS
- CBU MAILBOX
- EXISTING ATC POWER LINES

TEMKIN DEVELOPMENT SUMMARY

LOTS 1 - 39

- * PHASING OF CONSTRUCTION TBD
- * REMAINING LAND IN PLAT MAY BE DEVELOPED AT A LATER DATE AND SHALL REQUIRE SEPARATE FUTURE APPROVALS

DEVELOPABLE ACREAGE = 124 ACRES
 OPEN SPACE ACREAGE = 43 ACRES
 OPEN SPACE PERCENTAGE = 35%

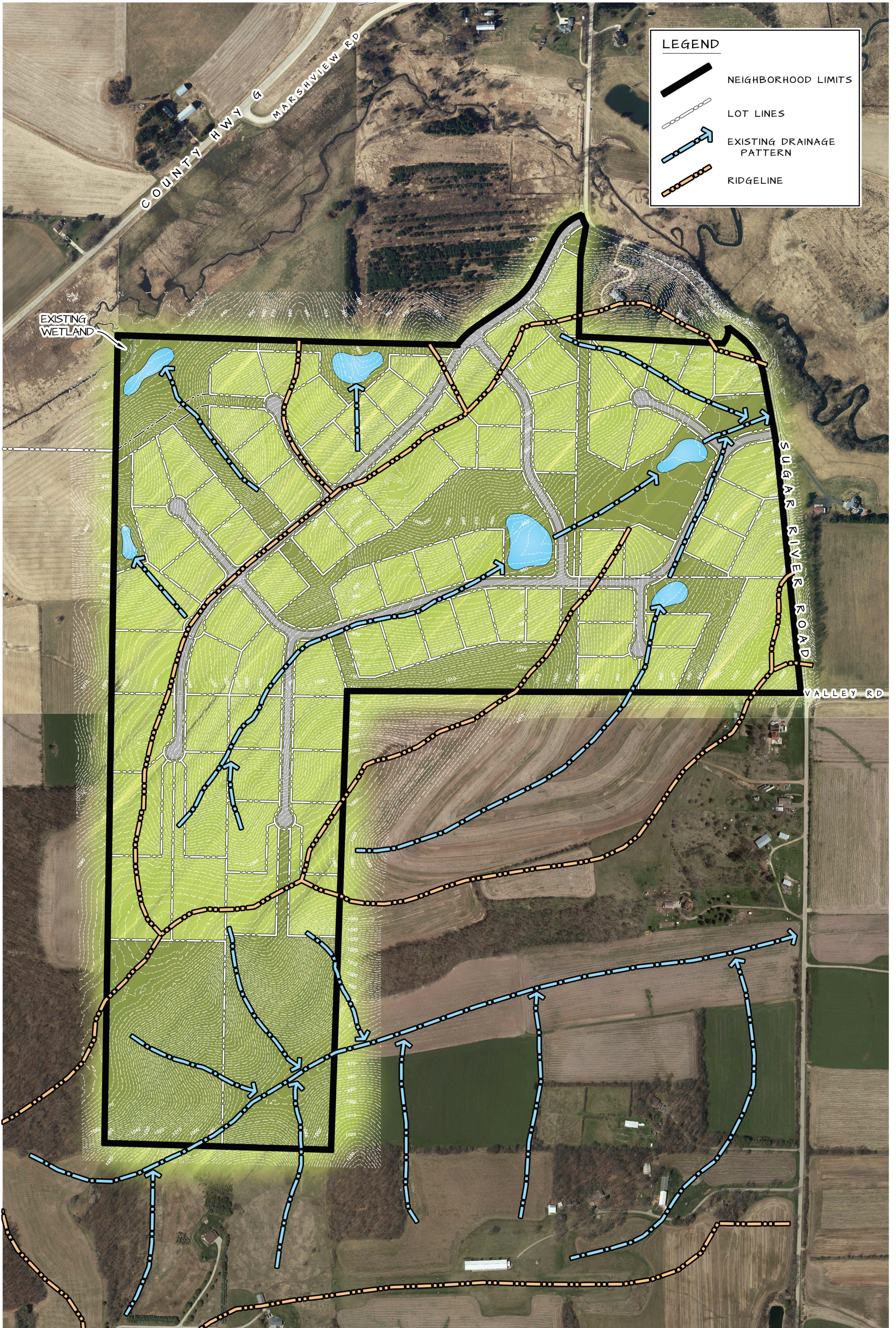
SUGAR RIVER ROAD PROPERTIES

TEMKIN PROPERTY
 TOWN OF VERONA, WISCONSIN

JANUARY 12, 2024 22-07-109



D'ONOFRIO KOTTKE AND ASSOCIATES, INC.
 7530 Westward Way, Madison, WI 53717
 Phone: 608.833.7530 • Fax: 608.833.1089
 YOUR NATURAL RESOURCE FOR LAND DEVELOPMENT



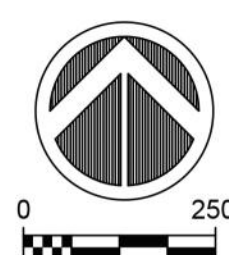
SUGAR RIVER ROAD PROPERTIES

EXISTING DRAINAGE PATTERN MAP

TOWN OF VERONA, WISCONSIN

JANUARY 12, 2024

22-07-109



D'ONOFRIO KOTTKE AND ASSOCIATES, INC.

7530 Westward Way, Madison, WI 53717

Phone: 608.833.7530 • Fax: 608.833.1089

YOUR NATURAL RESOURCE FOR LAND DEVELOPMENT

Planning Report

Town of Verona

February 15th, 2024

2313, 2325, 2191 Sugar River Road

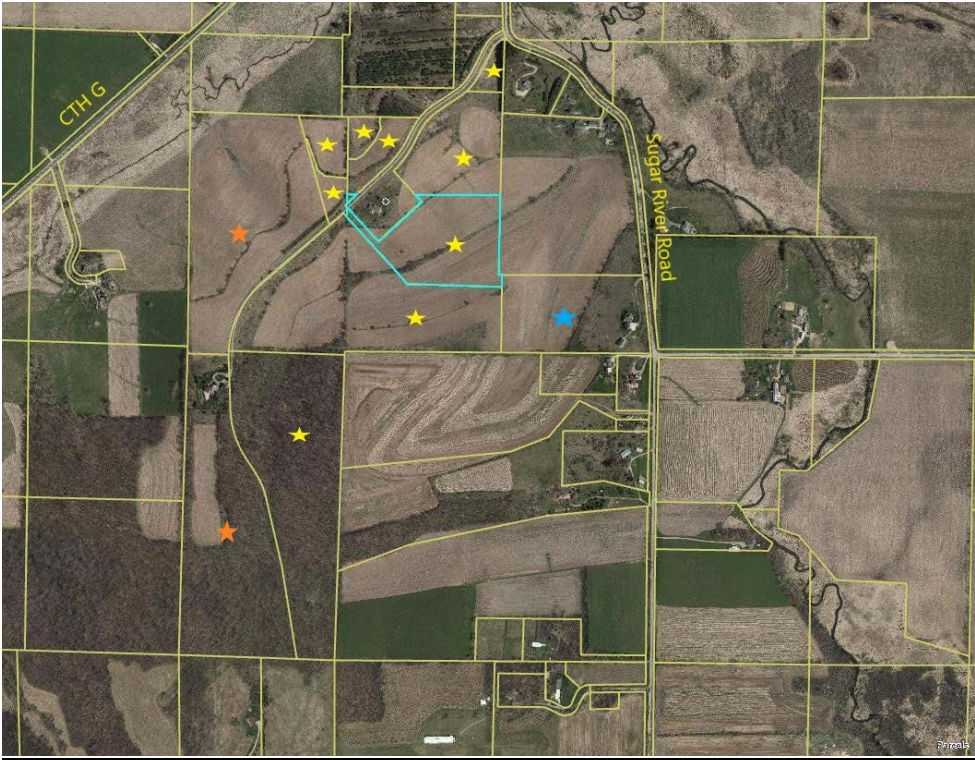
Summary: The property owners are seeking approval of the Concept Plan and subsequent rezone for a new Conservation Subdivision Plat. The properties to be platted total approximately 210 acres located in the southwest portion of the town.

Property Owners: Mishpacha Deux LLC, Sugar River Investors, Sweetwater LLC

- Parcels:**
- 062/0608-203-8513-0
 - 062/0608-203-8723-0
 - 062/0608-203-9003-0
 - 062/0608-301-8375-0
 - 062/0608-301-8250-0
 - 062/0608-203-9700-2
 - 062/0608-301-8001-1
 - 062/0608-301-8125-2
 - 062/0608-203-9110-0

Applicant: Ron Klass
D’Onofrio Kottke

Location Map



Comprehensive Plan Guidance:

These lands were identified in the Comprehensive Plan as an area for future development. The proposed parcels are in the RR 2-4-acre Future Land Use Category on Map 9.6: Future Land Use. Some rezones will be required as a condition of final plat approval.

Current and Proposed Zoning: Current zoning varies but the majority of the acreage is zoned AT-35, with two RM-16 parcels and two RR-2 spot zones and one RR-4 parcel. The proposed rezones would be to SFR-1, SFR-2, RR-4, RM-8, and NR-C. The existing RR-4 and the AT-35/RR-2 spot zones would remain unchanged.

Extra-territorial Review/Boundary Agreement Authority: Joint Committee provisions for review apply to only “land remaining in the Town and located in Areas A, B, and D.” These parcels are in Area C and are therefore not subject to review/approval by the JPC.

Surrounding Land Use and Zoning: The proposed development parcels are surrounded by FP, AT, NR-C, RR-8, RR-4 and RR-2 zoning land categories. The majority of the surrounding parcels are currently farmed.

Site Features: Features include rolling topography, a prominent ridgeline, and a 36-acre wooded area.

Driveway Access: Access to the parcels is via an existing driveway off Sugar River Road. This driveway will be incorporated into the plat as a Town Road and improved as required.

Other:

Concept Plan Highlights:

- The plan utilizes the conservation design option for an infiltration rate of 90+% (this project is subject to the guidelines of the March 2022 Land Division and Development Ordinance due to date of application submission).
- The neighborhood concept plan map depicts the overall design for the entire area, with approval from adjacent landowners. The preliminary plat includes only the properties depicted on the proposed Plat map.
- A trail system has been designed to connect the open spaces, which will consist of the stormwater system, woodlands and restored prairie areas.
- New residential structures located on the ridgeline lots may be restricted to a single-story height to minimize visual impact.
- Smallest lot size is 1.3 acres, largest is 2.8 acres for new development lots.
- The existing residences in the Proposed Plat Area will be included in the plat per county requirements but will not be subject to inclusion in the HOA Covenants for the development

The required neighborhood meeting was held on May 3rd, 2023 and the attendee list and comments have been provided to the Town.

The Plan Commission discussed the Concept Plan at their May 18th 2023 meeting. Commissioner comments on the draft were as follows:

- Proposed intersection appears to be in a flood zone – further investigation is necessary via emergency management personnel
- shoreland zoning issues

-
- more connectivity of green space
 - change the access to the wooded area to provide for machinery access if needed
 - define what the ridgeline is
 - wants trees included in landscape plan for screening purposes – consistent with rural character
 - Is one access point sufficient
 - mailbox location could cause congestion issues
 - cul-de-sacs could be hammerhead for future connections
 - Access concerns and possible floodplain issues
 - impact on current manure spreading should be considered
 - concept plan is consistent with the comp plan and future land use map
 - access is public – would provide a place for local residents to walk
 - more connectivity of trail system
 - addition of trees and prairie restoration

The Plan Commission also discussed the Concept Plan at their August 22nd 2023 meeting. Commissioner comments were as follows:

- connectivity is an issue and there should be more than one way to access adjacent roads
- consideration of the required setbacks between actively farmed fields where manure is spread and private wells
- concern regarding storm water management for proposed lots 15-22
- request for more information on the potential impact to adjacent existing agricultural use of manure spreading

Updates/edits to the Concept Plan since August 2023:

- greater connectivity of green space
- completion of the traffic impact analysis
- research on floodplain and waterway issues
- research on location of wells adjacent to manure spreading operations
- change in access to Outlot 6 (wooded area)
- depiction of wetland
- inclusion of all parcels in the plat, including existing residential parcels

The Plan Commission discussed the Concept Plan Rezone at their January 18th 2024 meeting. Commissioner comments were as follows:

Concept Plan

- Application needs to include vision triangle, floodplain, slopes between 12 and 20%, existing wells and septic fields on the existing conditions map
- Generally supportive of the design
- Design changes made to date are favorable and reflective of the Comprehensive Plan

Rezone

- More specific information is needed like a map depicting the proposed changes

Staff Comments: Staff has met several times with the applicant to address both public and commissioner concerns. Staff has additionally consulted with the Verona Fire Department and the Land Conservation Division staff regarding site access and impact to adjacent agricultural uses.

Note: This application was submitted under the March 2022 Land Division and Development Ordinance and therefore uses the standards outlined in that iteration for determining average and minimum lot sizes. They are listed below for reference.

Table 8.1: Conservation Subdivision Lot/Unit Size for less than 100% Infiltration Rates

Density Comp. Plan*	Maximum # Lots/Units	Average Lot/Unit size	Minimum Lot/Unit size
1 house/2-4 acres	Gross area/2	1.5 acres	1.3 acres
1 house/4-8 acres	Gross area/4	1.5 acres	1.3 acres
1 house/8-16 acres	Gross area/8	1.5 acres	1.3 acres

TOWN OF VERONA
APPLICATION FOR LAND USE CHANGE

Please review the Town of Verona Comprehensive Land Use Plan and Subdivision and Development Ordinance 05-04 (found on the Town website: (www.town.verona.wi.us) and Dane County Ordinances Chapter 10 – Zoning, Chapter 11 – Shoreland, Shoreland-Wetland and Inland-Wetland Regulations, and Chapter 75 – Land Division and Subdivision Regulations prior to application. A pre-application meeting or initial review should be scheduled with Town Staff and/or Plan Commission Chair if you have any questions or concerns and to determine the fees associated with the application.

Proposed land use change for (property address/legal description): Lot 4 and part of Lots 2 and 3, Certified Survey Map No. 8957

and part of the West 1/2 of the SW1/4 of Section 20 and part of the East 1/2 of the SE1/4 of Section 19, all in T6N, R8E, Town of Verona, Dane County, WI.

Please check all that apply:

- comprehensive plan amendment – please see specific submittal requirement**
- rezone petition**
 - current zoning category AT-35
 - new zoning category SFR-1, SFR-2, NR-C
- conditional use permit**
 - conditional use requested _____
- certified survey map**
- preliminary plat**
- final certified survey map**
- concept plan**
- site plan**
- request for Town road access**

Property Owner Phone _____

Address 1622 Lindale Lane, Green Bay, WI 54313 E-Mail _____

Applicant, if different from the property owner _____

Applicant's Phone _____ E-mail _____

If the applicant is different from property owner, please sign below to allow the agent to act on behalf of property owner.

I hereby authorize _____
to act as my agent in the application process for the above indicated land use change.

Signature

Date

Description of Land Use Change requested: (use reverse side if additional space is needed)

Rezoning the property from AT-35 to SFR-1, SFR-2 and NR-C for a new subdivision.

I certify that all information is true and correct. I understand that failure to provide all required information and any related fees will be grounds for denial of my request.

Applicant Signature

Date

Print Name

RETURN COMPLETED APPLICATION TO MAP/PLAN AND ANY OTHER INFORMATION VIA EMAIL TO:

Sarah Gaskell, Administrator, Town of Verona
7669 County Highway PD, Verona, WI 53593
sgaskell@town.verona.wi.us
(608) 845-7187

OFFICE USE ONLY

Application # _____
Fee _____
Paid by _____
Date _____ Check # _____
Receipt # _____

TOWN OF VERONA
APPLICATION FOR LAND USE CHANGE

Please review the Town of Verona Comprehensive Land Use Plan and Subdivision and Development Ordinance 05-04 (found on the Town website: (www.town.verona.wi.us) and Dane County Ordinances Chapter 10 – Zoning, Chapter 11 – Shoreland, Shoreland-Wetland and Inland-Wetland Regulations, and Chapter 75 – Land Division and Subdivision Regulations prior to application. A pre-application meeting or initial review should be scheduled with Town Staff and/or Plan Commission Chair if you have any questions or concerns and to determine the fees associated with the application.

Proposed land use change for (property address/legal description): Part of Lot 1, Certified Survey Map No. 8957, Certified Survey Map No. 8957, located in the East 1/2 of the SE1/4 of Section 19 and in the NE1/4 of the NE1/4 of Section 30, T6N, R8E, Town of Verona, Dane County, Wisconsin

Please check all that apply:

- comprehensive plan amendment – please see specific submittal requirement**
- rezone petition**
 - current zoning category RM-16, RR-2
 - new zoning category SFR-1, RM-8
- conditional use permit**
 - conditional use requested _____
- certified survey map**
- preliminary plat**
- final certified survey map**
- concept plan**
- site plan**
- request for Town road access**

Property Owner Phone 608-255-5060

Address 150 E. Gilman Street, Ste 1600, Madison, WI 53703 E-Mail dkruger@fioreco.com

Applicant, if different from the property owner _____

Applicant's Phone _____ E-mail _____

If the applicant is different from property owner, please sign below to allow the agent to act on behalf of property owner.


I hereby authorize _____
to act as my agent in the application process for the above indicated land use change.

Signature Date

Description of Land Use Change requested: (use reverse side if additional space is needed)

The request is to rezone the property from RM-16 and RR-2 to SFR-1 and RM-8 for a proposed subdivision.

I certify that all information is true and correct. I understand that failure to provide all required information and any related fees will be grounds for denial of my request.

 1-11-24
Applicant Signature Date

Print Name Sugar River Investors, LLC By: David Kruger

RETURN COMPLETED APPLICATION TO MAP/PLAN AND ANY OTHER INFORMATION VIA EMAIL TO:
Sarah Gaskell, Administrator, Town of Verona
7669 County Highway PD, Verona, WI 53593
sgaskell@town.verona.wi.us
(608) 845-7187

OFFICE USE ONLY
Application # _____
Fee _____
Paid by _____
Date _____ Check # _____
Receipt # _____

TOWN OF VERONA
APPLICATION FOR LAND USE CHANGE

Please review the Town of Verona Comprehensive Land Use Plan and Subdivision and Development Ordinance 05-04 (found on the Town website: (www.town.verona.wi.us) and Dane County Ordinances Chapter 10 – Zoning, Chapter 11 – Shoreland, Shoreland-Wetland and Inland-Wetland Regulations, and Chapter 75 – Land Division and Subdivision Regulations prior to application. A pre-application meeting or initial review should be scheduled with Town Staff and/or Plan Commission Chair if you have any questions or concerns and to determine the fees associated with the application.

Proposed land use change for (property address/legal description): 2191 Sugar River Road

Part of the SE1/4 of the SW1/4 of Section 20, T6N, R8E, Town of Verona, Dane County, Wisconsin

Please check all that apply:

- comprehensive plan amendment – please see specific submittal requirement
- rezone petition
 - current zoning category RM-16
 - new zoning category SFR-1, RR-4, NR-C
- conditional use permit
 - conditional use requested _____
- certified survey map
- preliminary plat
- final certified survey map
- concept plan
- site plan
- request for Town road access

Property Owner Phone (314) 503-6948

Address 2191 Sugar River Road, Verona, WI 53593 E-Mail dansarbacker@gmail.com

Applicant, if different from the property owner _____

Applicant's Phone _____ E-mail _____

If the applicant is different from property owner, please sign below to allow the agent to act on behalf of property owner.

I hereby authorize _____
to act as my agent in the application process for the above indicated land use change.

Signature Date

Description of Land Use Change requested: (use reverse side if additional space is needed)
Rezone the property to RM-16 to SFR-1 and RR-4 for a new subdivision.

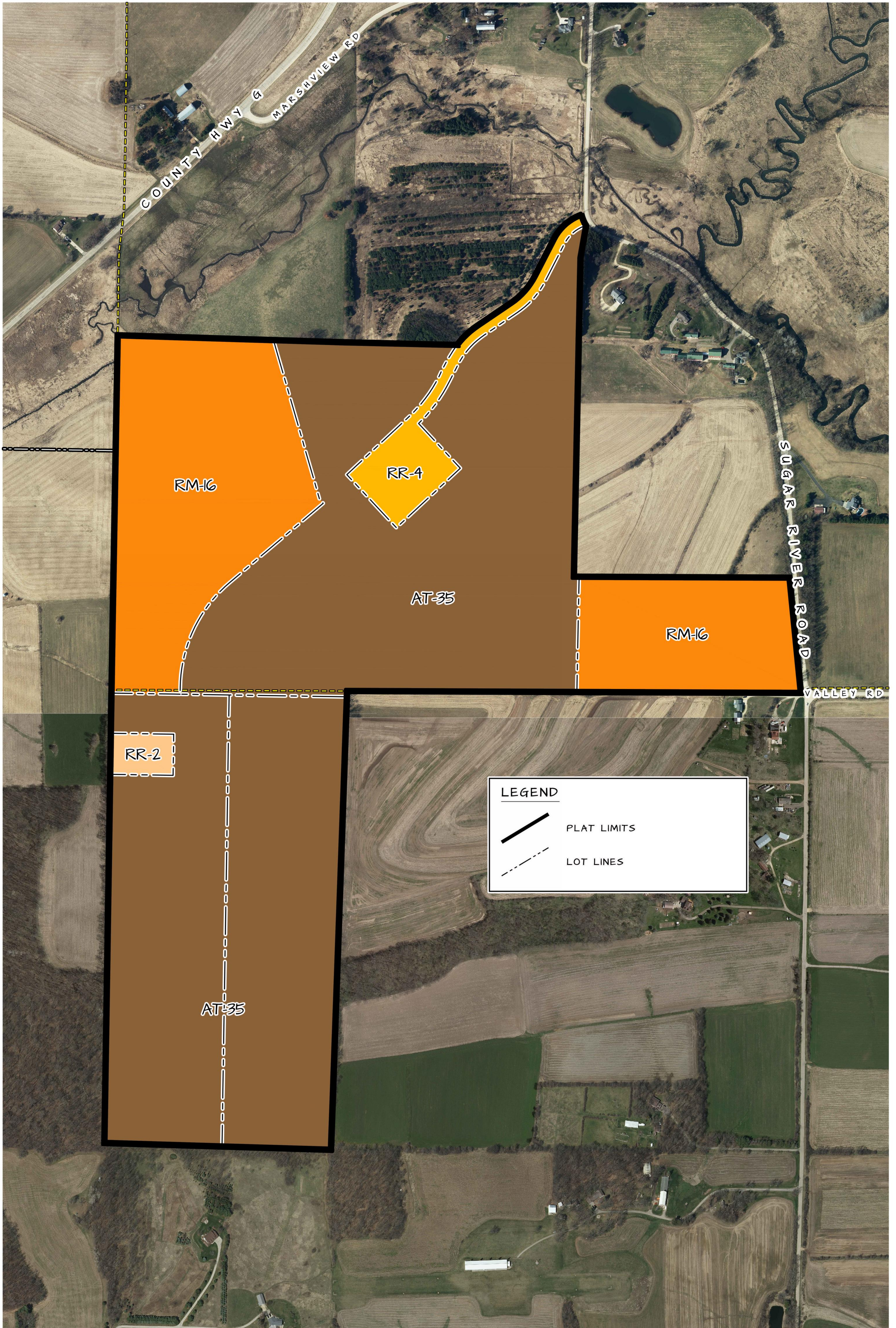
I certify that all information is true and correct. I understand that failure to provide all required information and any related fees will be grounds for denial of my request.

[Signature] _____ 11 Jan 2024
Applicant Signature Date

Print Name Sweetwater LLC by: Dan Sarbacker

RETURN COMPLETED APPLICATION TO MAP/PLAN AND ANY OTHER INFORMATION VIA EMAIL TO:
Sarah Gaskell, Administrator, Town of Verona
7669 County Highway PD, Verona, WI 53593
sgaskell@town.verona.wi.us
(608) 845-7187

OFFICE USE ONLY
Application # _____
Fee _____
Paid by _____
Date _____ Check # _____
Receipt # _____



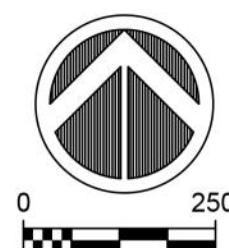
SUGAR RIVER ROAD PROPERTIES

EXISTING ZONING MAP

TOWN OF VERONA, WISCONSIN

FEBRUARY 5, 2024

22-07-109

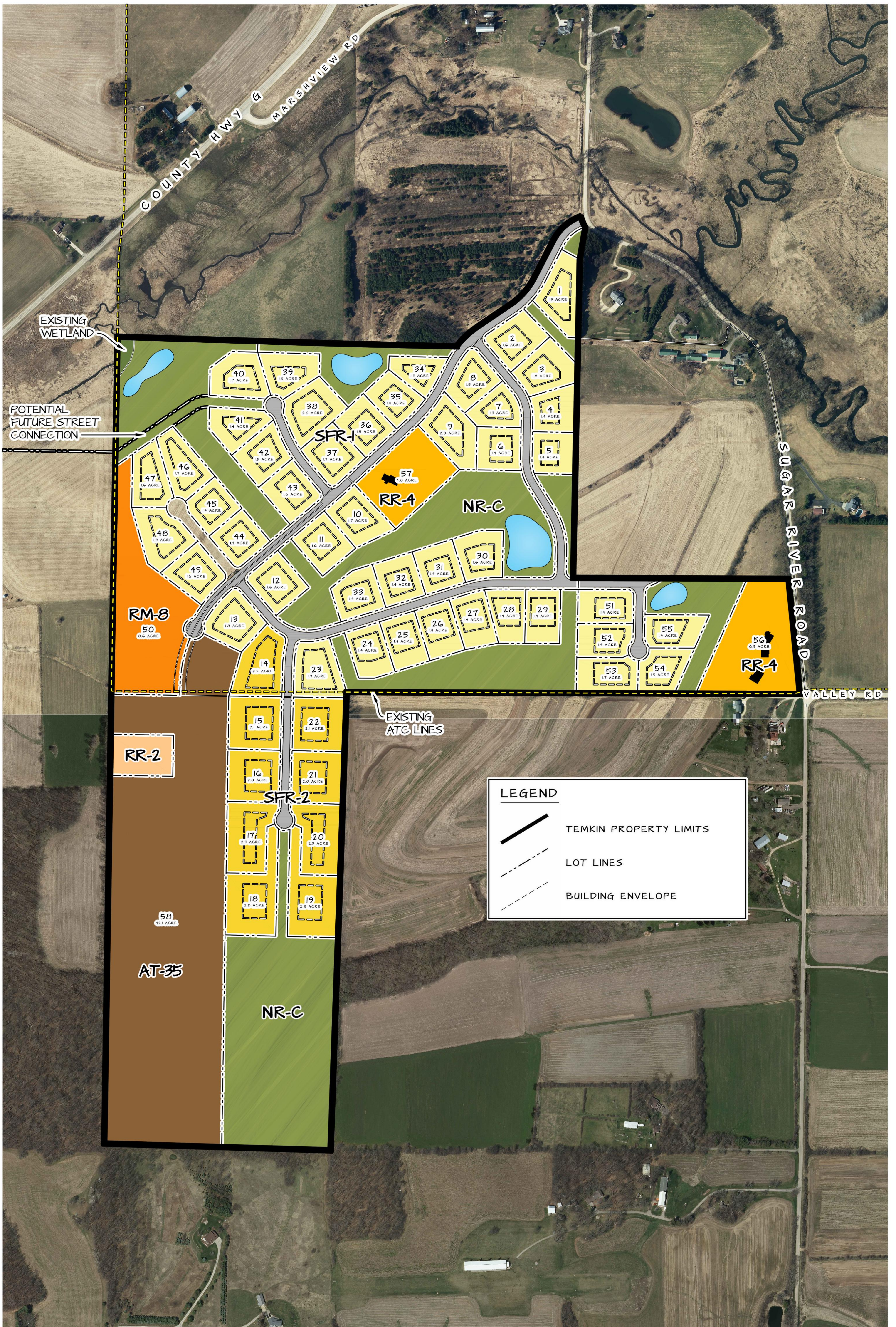


D'ONOFRIO KOTTKE AND ASSOCIATES, INC.

7530 Westward Way, Madison, WI 53717

Phone: 608.833.7530 • Fax: 608.833.1089

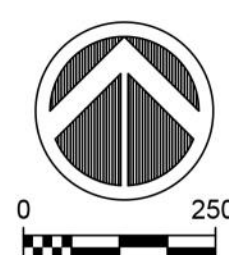
YOUR NATURAL RESOURCE FOR LAND DEVELOPMENT



SUGAR RIVER ROAD PROPERTIES

REZONING MAP
TOWN OF VERONA, WISCONSIN
FEBRUARY 5, 2024

22-07-109



D'ONOFRIO KOTTKE AND ASSOCIATES, INC.

7530 Westward Way, Madison, WI 53717
Phone: 608.833.7530 • Fax: 608.833.1089

YOUR NATURAL RESOURCE FOR LAND DEVELOPMENT

ZONING EXHIBIT



HOUSE
AREA
SOUTH OF
THIS LINE

D'ONOFRIO KOTTKE AND ASSOCIATES, INC.

7530 Westward Way, Madison, WI 53717
 Phone: 608.833.7530 • Fax: 608.833.1089
 YOUR NATURAL RESOURCE FOR LAND DEVELOPMENT



0 300
 Scale 1" = 300'

SHEET 1 OF 1

DATE: 08-11-21
 F.N.: 21-07-108

RM-8 (Rural Mixed Use, 8-16 Acres) Zoning District

Zoning district for agricultural and other rural uses – CH. 10-Zoning, [Section 10.233](#)

Permitted Uses 10.233(2)

- Agricultural uses
- Agricultural accessory Uses (except those listed as conditional uses below)
- Agricultural entertainment under 10 days/year
- Agricultural accessory buildings
- Farm related exhibitions, up to 5 days/year
- Single family residential – one per parcel
- Residential accessory structures
- Seasonal storage of recreational equipment and motor vehicles (not owner's or occupant's) in existing buildings
- Undeveloped natural resources and open space areas
- Home occupations
- Utility services
- Incidental room rental
- Community living arrangements for fewer than 9 persons
- Foster homes for less than five children
- Utility services associated with a permitted use
- Transportation, utility or communication uses required by law

Conditional Uses 10.233(3)

- Agricultural entertainment activities occurring 10 days/year or more
- Attached accessory dwelling units
- Cemeteries
- Community living arrangements for 9 or more persons
- Domestic pet animal boarding
- Electric generating facilities that use renewable energy
- Farm related exhibitions, sales or events exceeding 5 days a year
- Governmental, institutional, religious, or nonprofit community uses
- Large animal boarding
- Limited family business
- Limited farm business
- Migrant farm labor camps certified under s. 103.92, Wis. Stats.
- Property maintenance sheds (600 sq. ft. or less)
- Recreational racetracks
- Sanitary facilities in agricultural accessory buildings
- Tourist or transient lodging
- Veterinary clinics
- Transportation, communications, pipeline, electric transmission, utility, or drainage uses, not required by law

Setbacks and Height requirements for Structures 10.233(5-6)

Front setback for all structures from Highway centerline / right-of-way line (whichever is greater)

State or Federal Highway: 100/42 feet minimum
County Highway: 75/42 feet minimum
Town Road: 63/30 feet minimum
Subdivision streets platted prior to ordinance: 20 feet minimum
All other streets: 30 feet minimum from right-of-way

Maximum Height:

Residences: 2½ stories or 35 feet maximum
Accessory buildings: 35 feet maximum
Agricultural buildings: No height requirement

Residences:

Side yard: 25 feet total, with no single side less than 10 feet minimum

Rear yard: 50 feet minimum

Uncovered decks/porches: 38 feet minimum

Rear and side yards:

Not housing livestock: 10-feet

Housing livestock:

100 feet from Residential or Hamlet zoning districts
50 feet from Rural Residential zoning districts
10 feet from all other zoning districts

Lot Area and Width 10.233(4)

Minimum: 8 acres

Maximum: less than 16 acres, excluding right-of-way

Minimum lot width: 100 feet

Lot Coverage 10.233(7)

All buildings and structures: 10% of lot

RM-8 (Rural Mixed Use, 8-16 Acres) Zoning District

Zoning district for agricultural and other rural uses – CH. 10-Zoning, [Section 10.233](#)

Accessory Buildings Requirements 10.102(2)(a)

Any number of detached accessory buildings associated with a permitted or conditional residential use is permitted, provided that the following conditions are met:

- Except for agricultural accessory buildings, or property maintenance sheds approved by conditional use permit, a principal building must exist or be under construction prior to the construction of an accessory building.
- Except as allowed under an approved CUP, sanitary fixtures are prohibited in accessory buildings.
- No living spaces are allowed in accessory buildings.

NOTE: A Zoning Permit is required for every building larger than 120 square feet in size. Zoning Permits are not required for accessory buildings equal to or less than 120 square feet on non-permanent foundations, provided they meet setback, height, and lot coverage requirements.

Livestock 10.004(85); 10.233(2)

- There is no numerical limit on the number of livestock. However, all livestock use must comply with a farm soil and water conservation plan meeting the standards of NR 151, Wisconsin Administrative Code and approved by the Department of Land and Water Resources.

Incidental Room Rental 10.004(72)

Rental or leasing of rooms within a single-family residence is permitted provided all of the following are met:

- ✓ All rooms offered for rent are within, and share a main building entrance, the landowner's primary residence
- ✓ No more than two bedrooms are offered for rent
- ✓ One off-street parking space is provided for each rental room.

Limited Family Business 10.004(83)

A small family-run commercial operation, accessory to a permitted principle use, that takes place entirely within an accessory building. All employees, except up to one or one full-time equivalent, must be a member of the family residing on the premises.

Town of Verona Plan Commission Meeting Minutes

Thursday, August 19, 2021

6:30pm Zoom meeting

Members Present: Doug Maxwell, Sarah Slack, Haley Saalsaa-Miller, Deb Paul, Tom Mathies

Staff: Sarah Gaskell, Administrator

Other: Dan Sarbacker, Lindsey Krueger, Dale Malner, Jeff Schleicher, Kirsten Witte, Lee and Becky Stilwell, Mason Swanson, Mona Cassis, Noa Prieve, Rosemary Bodolay, Susan and Hans Pigorsch, Barbara and Harvey Tempkin, Jane Barnett, Mark Geller, Bret Saalsaa, Heidi Disch, Jim Herkert, Dave Lonsdorf, Ron Klaas, Adam Carrico, Marge Stench, Bennet Davis, Doug Wolf

1. Call to Order/Approval of Meeting Agenda – Maxwell called the meeting to order at 6:32 pm. Motion to approve the agenda by Saalsaa Miller, second by Slack. Motion carried by voice vote.
2. Public Comment – none.
3. Approval of minutes from 6/17/2021. Motion to approve minutes by Paul, second by Saalsaa-Miller. Motion carried by voice vote.
4. Discussion and Possible Action: Land Use Application 2021-11 submitted by Sugar River Investors, LLC for a rezone from AT-35 to RM-16 for 38.4-acre parcel 062/0608-301-8001-1 located at 2325 Sugar River Road, Verona WI
 - a. Discussion included RM-16 allowable uses, future lot splits, consistency with surrounding land uses
 - b. Motion to recommend approval of Land Use application 2021-11 by Doug Maxwell, second by Tom Mathies subject to the following condition:
 - i. The **conditional** uses of this parcel be limited to those of the RR-16 zoning category
Motion carried by voice vote.
5. Discussion and Possible Action: Land Use Application 2021-06 submitted by Noa Prieve on behalf of Stilwell Trust, 6411 Sunset Drive, for a 4-unit Condo Plat Concept Approval and Rezone (parcel number 062/060-364-8990-2 (20.3-acres)). The proposed zoning would change from RM-16 to MFR-08.
 - a. Discussion included preservation of rural viewshed, creation of private driveway access agreements between neighbors and HOA, definition of limited common elements, changing the placement of building envelope on Lot 3, providing field access for the property to the south, removal of public road dedication from the plat, Ice Age Trail dedication on east and south boundary of property, and addition of utility easements to the plat; applicant is asked to consider changes for the preliminary plat
 - b. Motion to recommend approval of land use application 2021-06 for zoning change from RM-16 to MFR-08 and the plat concept plan for four units by Maxwell, second by Mathies subject to final plat plan approval and with a deed restriction for single family homes.
Motion carried 5-0.
6. Discussion and Possible Action: Land Use Application 2021-12 submitted by D’Onofrio

Kottke on behalf of Mishpacha LLC (Harvey Temkin), 2325 Sugar River Road, for a CSM and Rezone creating a 7-acre lot to be rezoned to RR-4. This CSM involves parcel numbers 0608-203-9002-7, 0608-203-8722-8, 0608-203-8512-2, and 0608-202-9375-8.

- a. Discussion items included upgrading existing driveway to meet code for fire truck access, dedication of Road ROW, future land use of the driveway, maximum number of users of shared driveway easement, removal of the word preliminary and reference to City of Verona
- b. Motion to recommend approval of the CSM dated 12 Aug 2021 for land use application 2021-12 with the following conditions by Mathies, second by Saalsaa-Miller:
 - i. Removal of the word “preliminary” from CSM
 - ii. Addition of dedication of road ROW on Sugar River Road
 - iii. Removal of City of Verona as an approving authority
 - iv. Removal of note #4 concerning dedication of ROW, if adjacent parcel is approved for a subdivision
 - v. Town agrees to accept the ROW dedication associated with Sugar River RoadMotion carried 5-0.

7. Discussion and Possible Action: Land Use Application 2021-06 submitted by Twin Rock LLC for Preliminary Plat and Neighborhood Association Declaration Approval for property near 2528 Spring Rose Road (062/0608-183-8681-0 and 0-608-183-31809)
 - a. Discussion included requested changes from last iteration; mailbox placement, trail surface, shared access for lots 1 and 2 on Spring Rose Road and recommended changes to the draft covenants
 - b. Motion to approve recommendation of the Preliminary Plat by Paul, second by Mathies subject to the following conditions:
 - i. Approval of a developer’s agreement
 - ii. Shared driveway between Lot 1 and 2Motion carried 4-0 with Saalsaa-Miller abstaining.

8. Commissioner Comments - None

9. Other - None

10. Next Meetings: Thursday, September 9 and 16 2021

11. Adjourn – 11:02 pm

Submitted by Sarah Gaskell, Town Planner/Administrator

**Town of Verona
Town Board Meeting
Tuesday, September 7, 2021 6:30 p.m.**

Town Board Members Present: Geller, Mathies, Lonsdorf, Wiederhoeft and Maxwell

Staff Present: Administrator/Planner Gaskell and Public Works Director Barnes

Others Present: Mike and Pat Ehly, Jamie Lindau, Megan Lindau, Paul Kirsop, Mona Cassis, Susan Pigorsch, Rosemary Bodolay, Jeanne Powles, Jim Wiederhoeft

- 1) Call to Order/Approval of the Agenda – Chair Geller called the meeting to order at 6:30 pm. Motion by Wiederhoeft to approve the agenda, second by Lonsdorf. Motion carried by voice vote.
- 2) Pledge of Allegiance
- 3) Public Comment – Mike Ehly spoke regarding brush collection. Chair Geller advised that this will be a topic for town board discussion at a later meeting. Susan Pigorsch spoke about the Ad Hoc Committee report and its recommendations.
- 4) Approval of minutes from July 5, 2021 Town Board Meeting; Motion by Lonsdorf to approve minutes from June 1, 2021, second by Wiederhoeft. Maxwell requests a change to page 3, item 8; b 2.5% increase should add per year. Section G 3.5% the word increase should be added. Wiederhoeft stated that the next sentence should be corrected for a grammatical error. Motion carried by voice vote.
- 5) Staff Reports
 - a. Administrator/Planner Report – Gaskell stated that August and September reports are included in the packet. Senior Center agreement has been signed and services will begin on January 1, 2022. Open house is scheduled for September 25th from 11 am to 1 pm. Welcome packet will go out to anyone that moved in after January 1, 2020 and will be distributed to new residents going forward.
 - b. Public Works Director Report – Barnes report was included in packet.
- 6) Committee Reports
 - A. Plan Commission:
 - i. Discussion and Possible Action: Site Plan Approval for Final Phase of Construction for the Madison-Verona Self Storage facility located at 4201 Maple Grove Road, submitted by Jamie and Cameron Lindau. Discussion by board. Motion by Maxwell to approve the construction and landscaping plan for the final build out of the self-storage unit as shown on the revised plan of July 27,2021 for project no. 52104. Seconded by Mathies. Motion carried by voice vote.
 - ii. Discussion and Possible Action: Land Use Application 2021-11 submitted by Sugar River Investors, LLC for a rezone from AT-35 to RM-16 for 38.4 acre parcel 062/0608-301-8001-1 located at 2325 Sugar River Road, Verona, WI. Discussion by board. Motion by Maxwell to approve Land Use Application 2021-11 for a rezone

from AT-35 and RR-2 to RM-16 for parcel no 062-608-301-8001-1 with the following conditions:

- 1) That the conditional uses of the property be limited to those of RR-16 zoning category
- 2) That the house and accessory buildings be located south of the diagonal line shown on CSM 8957 dated Aug 11, 2021.

Seconded by Mathies. Motion carried by voice vote.

- iii. Discussion and Possible Action: Land Use Application 2021-06 submitted by Noa Prieve on behalf of Stilwell Trust, 6411 Sunset Drive, for a 4-unit Condo Plat Concept Approval and Rezone (parcel number 062/0608-364-8990-2 (20.3 acres). Discussion by board. Motion by Maxwell to approve Land Use Application 2021-10 for a 4-unit condo plat concept plan and a rezone of parcel no. 062-608-364-8990-2 from RM-16 to MFR-08 with the following conditions:

- 1) That the final plat is approved and filed with Dane County
- 2) That deed be filed to restrict each unit to a single-family residence

Seconded by Mathies. Motion carried by voice vote.

- iv. Discussion and Possible Action: Land Use Application 2021-12 submitted by D’Onofrio Kottke on behalf of Mishpacha LLC (Harvey Temkin) of 2313 Sugar River Road for a CSM and Rezone. Discussion by board. Motion by Maxwell to approve Land Use Application 2021-12 for a CSM creating a 7-acre lot and a rezone from RR-2 to RR-4 with the following conditions:

- 1) That the Town accept the ROW dedication on Sugar River Road.
- 2) That satisfactory language be approved by the Town’s attorney for the potential dedication of the road in whole or part to the Town. This language would be added to the CSM or filed in a separate document.
- 3) That the driveway meets the safety standards required by the fire department.

Seconded by Mathies. Motion carried by voice vote.

- v. Discussion and Possible Action: Land Use Application 2020-06 submitted by Twin Rock LLC for Preliminary Plat and Neighborhood Association Declaration Approval for property near 2528 Spring Rose Road (062/0608-183-8681-0 and 0-608-183-3180-9). Discussion by board. Motion by Maxwell to approve land use application 2020-06 For the preliminary plat for the property near 2528 Spring Rose Road parcel no. 062-608-183-8681-0 and 062-608-183-3180-9 with the following conditions:

- 1) That the Declaration of Covenants is approved
- 2) That the Development Agreement is approved

Seconded by Mathies. Motion carried by voice vote.

B. Public Works:

- i. Discussion and Possible Action: Town Road Speed Limit Recommendation for Paulson Road and Woods Road to be changed from 55 miles per hour to 45 miles per hour. Discussion by board. Motion by Lonsdorf to table. Second by Mathies. Motion carried by voice vote.
- ii. Discussion and Possible Action: Resolution 2021-07 to Rename a Portion of Stony Ridge Circle and Name a New Roadway Constructed as a Result of the County Trunk Highway M Project. Discussion by board. Motion by Lonsdorf to approve resolution to rename a portion of Ridge Circle and name a new roadway constructed as a result of the County Trunk Highway "M" Project. Second by Mathies. Motion carried by voice vote.

C. Ordinance Committee: no update.

D. Financial Sustainability Committee: Mathies stated meeting was held at the end of July. Reviewed 6-month spending in comparison to budget. Committee will be focusing on next year's budget and 5-year budget projections.

E. Natural and Recreational Areas Committee: Lonsdorf reviewed proposed priorities for 2021-2022.

- i. Discussion and Possible Action: Finalization of Committee Goals. Mathies would like to see stormwater management of the pond at town hall added to their list along with Goose Lake. Maxwell would like the committee to review locations of future subdivisions. Discussion by board to approve listed goals.

F. EMS Commission: Lonsdorf was not able to attend. Discussion was regarding preliminary budget and equalized values.

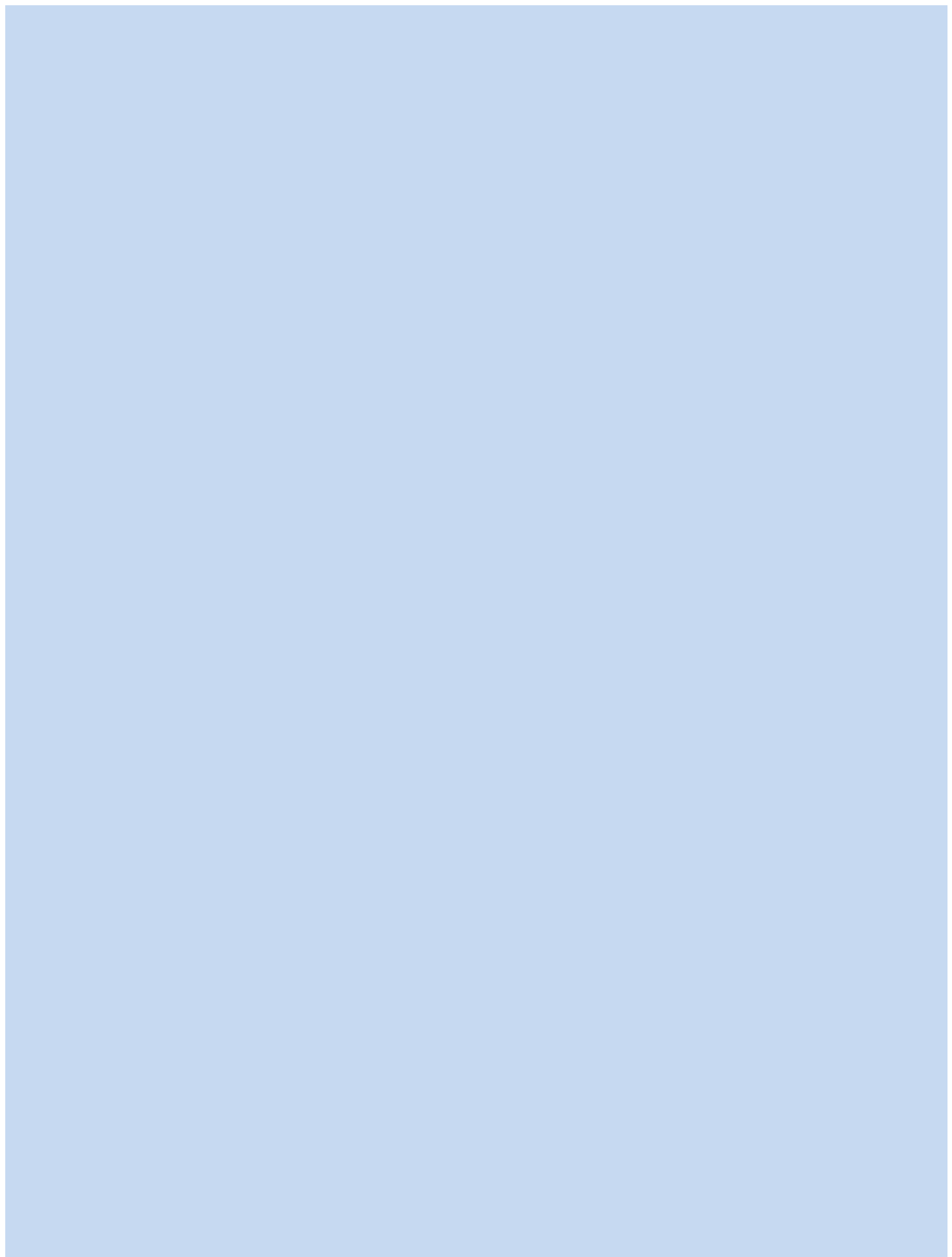
G. Senior Services Committee: Geller stated that Board of Directors continue to meet frequently. Letter will be going out to residents regarding continuing of services.

H. Town Chair's Business: Geller relayed details of the quarterly EPIC meeting. They are currently constructing three new buildings.

I. Supervisor Announcements: No updates

7) Old Business - none

8) New Business



TOWN OF VERONA
APPLICATION FOR LAND USE CHANGE

Please review the Town of Verona Comprehensive Land Use Plan and Subdivision and Development Ordinance 05-04 (found on the Town website: www.town.verona.wi.us) and Dane County Ordinances Chapter 10 – Zoning, Chapter 11 – Shoreland, Shoreland-Wetland and Inland-Wetland Regulations, and Chapter 75 – Land Division and Subdivision Regulations prior to application. A pre-application meeting or initial review should be scheduled with Town Staff and/or Plan Commission Chair if you have any questions or concerns and to determine the fees associated with the application.

Proposed land use change for (property address/legal description): A parcel of land located in part of the Southwest 1/4 of the Southwest 1/4 of Section 30, T6N, R8E, Town of Verona, Dane County, Wisconsin.

Please check all that apply:

- comprehensive plan amendment – please see specific submittal requirement**
- rezone petition**
current zoning category _____
new zoning category _____
- conditional use permit**
conditional use requested _____
- certified survey map**
- preliminary plat**
- final certified survey map**
- concept plan**
- site plan**
- request for Town road access**

Property Owner Phone 608-444-4407

Address 1827 Locust Dr, Verona, WI 53593 E-Mail jcoonsconstruction@gmail.com

Applicant, if different from the property owner _____

Applicant's Phone _____ E-mail _____

If the applicant is different from property owner, please sign below to allow the agent to act on behalf of property owner.

I hereby authorize _____
to act as my agent in the application process for the above indicated land use change.

Signature _____ Date _____

Description of Land Use Change requested: (use reverse side if additional space is needed)

Submittal of Preliminary Plat based on prior approved Concept Plan and Rezone.

I certify that all information is true and correct. I understand that failure to provide all required information and any related fees will be grounds for denial of my request.

Applicant Signature  Date 2/1/2024

Print Name Jim Coons

RETURN COMPLETED APPLICATION TO MAP/PLAN AND ANY OTHER INFORMATION VIA EMAIL TO:
Sarah Gaskell, Administrator, Town of Verona
7669 County Highway PD, Verona, WI 53593
sgaskell@town.verona.wi.us
(608) 845-7187

OFFICE USE ONLY
Application # _____
Fee _____
Paid by _____
Date _____ Check # _____
Receipt # _____



8177 County Highway G
Verona, WI 53593
(608) 832-6352
carricoengineering.com

February 5, 2024

Chairman and Members of the Town Plan Commission
Town of Verona
7669 County Highway PD
Verona, WI 53593

RE: Preliminary Plat Submittal
Riverside Vista, Town of Verona

Dear Chair Geller, Plan Commission Members and Town Staff:

On behalf of Mr. Jim Coons, please accept the accompanying submitted material for discussion at the scheduled Plan Commission meeting on Thursday February 15, 2024.

This submittal reflects the concept plan that was approved by the Town Board at the meeting on December 5, 2023. The property lines, lot and outlot sizes and right-of-way for the proposed town road have not changed for this preliminary plat submittal. We look forward to hearing the Town's input and addressing any concerns and/or comments you may have.

Along with the submittal of the preliminary plat, we are submitting preliminary engineering drawings for the project, the draft HOA Covenants, the draft Development Agreement, the draft stormwater report, the draft Stewardship Plan, an exhibit showing the proposed building envelopes and a narrative.

We look forward to a discussion with you regarding the development on February 15.

Thank you,

A handwritten signature in black ink, appearing to read "Adam L Carrico".

Adam L Carrico, PE

Enclosure: Preliminary Plat Submittal Materials

cc: Jim Coons – via email
Noa Prieve – via email

K:\Carrico Engineering\Projects\2023\230019 Coons Construction - Town of Verona Land\Design Development\Preliminary Plat\Working Documents\2024-02-05_Letter to Plan Commission.docx

Planning Report

Town of Verona

November 9, 2023

Riverside Road and Spring Rose Road – Riverside Vista **062/0608-303-9000-8**

Summary: The property owner is applying for a Concept Plan Review and rezone to create a 38.68-acre neighborhood comprised of 17 lots and open space, rezoned from AT-35 to SFR-1 and NR-C.

Property Owner: Coons Construction

Property Address: SEC 30-6-8 FR SW1/4SW1/4 EXC CSM 1281 (NE corner of
Riverside Road and Spring Rose Road
Verona WI 53593

Applicant: Adam Carrico
Carrico Engineering
8177 County Road G
Verona WI 53593

Location Map



Comprehensive Plan Guidance:

Land is currently zoned AT-35 and is shown as RR 2-4 on the Future Land Use Map from the Comprehensive Plan. The plat and subsequent rezones are consistent with the future land use for this parcel. The proposed design utilizes the Land Division and Development Ordinance Conservation Subdivision guidelines for developments with 100% and 35% Open Space.

Current and Proposed Zoning: The current zoning is AT-35. The new zoning would be a combination of SFR-1 and NR-C. The rezone is for the proposed plat where the open space will remain as NR-C and the new single-family lots are rezoned to SFR-1 and SFR-2.

Extra-territorial Review/Boundary Agreement Authority: Joint Committee provisions for review apply to “land remaining in the Town and located in Areas A, B, and D.” This parcel is in Area C and is not subject to review/approval of the JPC.

Surrounding Land Use and Zoning: The property is located on the border of the Towns of Verona and Springdale. The lands to the north as east contain residences surrounded by wooded and farmed acreage and the parcels to the south are wooded residential lots.

Site Features: There is a large woodlot on the parcel but it is not of significant quality.

Driveway Access: Access to the site will be provided via a new town road.

Staff Comments: The Plan Commission recommended approval of the concept plan and subsequent rezone at their November 2023 meeting. The proposed design meets all of the requirements of the Land Division and Development Ordinance for a Conservation Subdivision. The Town Board approved the concept plan and rezone with conditions at their December 5th 2023 regular board meeting.

February 15th, 2024

Summary: The property owner is applying for a Preliminary Plat, Developer’s Agreement and Declaration of Covenants Approval.

Materials Submitted for Preliminary Plat Review

1. Letter to Plan Commission
2. Land Use Application - 2023-06a
3. **Preliminary Plat Narrative***
4. Preliminary Plat with Contours
5. **Preliminary Plat – No contours**
6. **Building Envelope Exhibit**
7. Preliminary Stormwater Report
8. **Draft Stewardship Plan**

- 9. Preliminary Engineering Drawings
- 10. Development Agreement**
- 11. Declaration of Covenants**

Preliminary Plat

- All requirements for the Preliminary Plat drawing have been provided
- There are no changes to the property lines and ROW lines from the approved concept plan

Building Envelope Exhibit

- This map is provided to illustrate the County requirements for zoning setbacks for primary structures, and the proposed building envelopes which incorporate the actual setbacks as provided in the Declaration of Covenants and below:

SETBACKS
(The below Setbacks are measured in feet)

Lot Number	Front	Rear	Left Side	Right Side
1	35	50	35	35
2	45	50	35	35
3	50	50	25	30
4	40	50	25	25
5	35	50	25	25
6	30	50	25	25
7	40	50	25	25
8	35	50	25	25
9	30	50	25	25
10	40	50	25	25
11	60	50	25	25
12	45	50	25	25
13	50	50	25	25
14	50	50	25	25
15	50	50	25	25
16	45	50	25	25
17	40	50	25	25

The building envelope as defined by the TOV Land Division and Development Ordinance is *“the area of the lot identified as delineating the allowed limits of clearing and grading, and within which all structures and any well and septic systems with the tank and leach field, shall be located.”*

The intent of the definition in the ordinance was to limit the amount of potential disturbance to a lot, especially those lots that contain existing woodlands or prairie cover. Dane County ordinances allow for the placement of leach fields within 5 feet of property boundaries and typically, the placement of a mound system is dictated by topography. Septic plans typically

must account for an area approximately 30 feet by 120 feet for a mound system. This includes a 10-foot-wide leach area underground. Therefore, it is difficult to place mound systems within a small building footprint area where topography is challenging such as in Riverside Vista. For this plat, with the building envelope requirement to include area for up to two leach fields plus area for a primary residence, the applicant is proposing that for many lots, the building envelope be within 5 feet of some property lines. The building envelopes for Lots 10-17 have been moved to be outside of the small, wooded areas on those lots to ensure that wooded areas are not disturbed by leach fields on these lots. To accommodate the Town's desire for rural, conservation subdivision design, the applicant has proposed increased front and side yard setbacks. This allows for increased space between primary residences, staggered building placement from the roadway and flexibility of leach field placement.

Lots 1-3 have building envelopes of exactly 30,000 to adhere to the Land Division and Development Ordinance. The table on page 4 of the Preliminary Plat Submittal Summary document depicts the actual proposed sizes of the building envelope for each lot.

Draft Stewardship Plan

The applicant's qualified professional ecological service firm, Sparrow Land Planning, has been approved by Town staff. The stewardship plan outlines the restoration, management and maintenance practices for Outlot 1, which is comprised of a woodlot and an eventual restored prairie. The Development Agreement will include specific details on the establishment of these open spaces.

The wooded area will be mowed annually to remove any vegetated growth. Removal of wooded vegetation will be on an as needed basis.

The Prairie will be managed via three site visits per year for the first three growing seasons. Trails in the prairie will be mowed bimonthly. The prairie will be burned in year 4 by a specialist.

Stormwater Facility Management will be accomplished via yearly inspections by a professional Engineer.

Development Agreement

This document outlines the obligations of both parties, the Town and the Developer with relation to the standards and conditions of the development of the property. This includes any required public and private improvements, specifics for road construction, assignment of financial obligations, and insurance requirements. This document has yet to be reviewed by the Town Attorney.

Declaration of Covenants

This document outlines the covenants, conditions, and restrictions as they may apply to the development to ensure that "Riverside Vista becomes and remains a high-quality residential community." Specific to the Land Division and Development Ordinance requirements of a Conservation subdivision as listed on page 35, this document defines the responsibilities of the Homeowners Association for the management and maintenance of the Common Open Space. This document has yet to be reviewed by the Town Attorney.

Riverside Vista

Preliminary Plat Submittal

We look forward to input from the Town of Verona staff, Plan Commission members, Town Board Members and the community. We believe this exciting new development in the Town of Verona will create a high-quality residential neighborhood that will enhance the Town of Verona.

General narrative on submittal items to note:

Preliminary Plat

- Two versions of the preliminary plat are being submitted for review. These two versions are identical with the exception of existing contours removed from one version for clarity in review.
- Please note that language has been added to the "Notes" section to indicate driveway access requirements and joint access requirements.
- Dane County Zoning required setbacks for primary structures are indicated on the preliminary plat along with proposed building envelopes. An exhibit and further narrative below are included regarding building envelopes.
- All proposed property lines and right-of-way lines are unchanged from the approved Concept Plan.

Preliminary Engineering Drawings

- Preliminary engineering drawings are included that indicate the proposed road layout with plan and profile drawings and cross sections.
 - Care was taken when designing the roadway, drainage patterns and back slopes to create a safe roadway into the proposed development by following Town of Verona, Dane County and Wisconsin Department of Transportation guidelines. Additionally, the roadway was designed in a manner in which drainage is appropriate and such that driveways to each of the lots that gain access to the new town road be able to follow Town Ordinance for driveway design and construction.

- The stormwater facility sizing was done such that the smallest basins possible were designed in order to meet Town, County and WDNR Ordinances/Statutes while limiting the disturbance with the outlet.
 - With this design, we are able to not only meet the 100% infiltration standards of the Town for a Conservation Subdivision with the smallest allowable lot sizes, but also meet the County and WDNR standards for peak rate control, sediment control and thermal control.
- The grading is balanced on the site where no fill material will be required to be hauled in or trucked away from the site.

Declaration of Covenants

- This document was prepared by Mr. Coons' attorney, Robert Proctor and Adam Carrico and based on a previously approved development in the Town of Verona with additions and subtractions specific to Riverside Vista.
- Setbacks are discussed and shown in a table starting on Page 6 of the document. An exhibit and further narrative below are included regarding building envelopes.

Preliminary Stormwater Report

- The preliminary stormwater report includes the modeling that has been completed based on the design of the site and the assumptions made. The post-developed conditions assume a complete build-out of the development with new town road and 17 new homes constructed.
 - Assumptions were made for total impervious surfaces for each lot including 6,000 sq. ft. of roof area, 3,000 sq. ft. for driveway and 3,000 sq. ft. for sidewalk, patios, decks, etc. for a total of 12,000 sq. ft. of impervious surfaces for each lot.
 - These totals are based on many floor plans of larger homes that have been constructed in the past few years. While it is not an exact science, we believe that this would tend to be an average for rural homes on lots of this size. Some homes may be slightly over, while some may be slightly under. For example, a two-story home will typically have a little less roof area than and single-story home.
- Additional exhibits, recorded stormwater maintenance agreement, calculations for riprap sizing, shear stress, maps, etc. will be included in the final report that will be submitted to the Town and County with the Final Plat and Final Engineering drawings.

Open Space Stewardship Plan

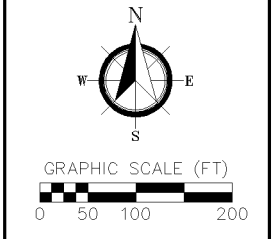
- The initial draft of the stewardship plan was created by Carrico Engineering for input from the Town of Verona staff, Plan Commission and Town Board. The developer has procured the services of a reputable ecological specialist, Sparrow Land Planning to complete the Stewardship Plan that will be revised and submitted prior to the Final Plat being recorded per the Subdivision Ordinance. Sparrow Land Planning was approved as an ecological specialist by the Town of Verona Staff in February 2024.

Building Envelope Exhibit

- In addition to the preliminary plat which shows the County zoning setbacks for a primary structure and proposed building envelope, we have included an exhibit showing all of these together along with the proposed increased setbacks as indicated in the table of the Covenants.

- We understand the intent of the Town's ordinance to create a building envelope to limit the overall disturbance of natural areas such as wooded lots and existing natural prairies.
- The preliminary plat and as shown in the submitted exhibit shows the building envelopes that are typically a little larger, except for Lots 1, 2 and 3.
 - Lots 1, 2 and 3 are completely wooded. The building envelopes for these lots is limited to 30,000 sq. ft. per the Ordinance.
- The definition of a building envelope per the Town's Ordinance states that a building envelope is the area of the lot identified as delineating the allowed limits of clearing and grading, and within which all structures and any well and septic systems with the tank and leach field, shall be located. Furthermore, the setback section of the Conservation Subdivision 8.2(2) indicates that setbacks for each lot will be determined to provide for protection of natural areas and flora, and to reflect rural design characteristics within the subdivision.
- With the building envelope required on the plat and to include area for up to two leach fields plus area for a primary residence, we are proposing on many lots for the building envelope to be within 5 feet of some property lines. Additionally, we have moved the building envelopes for Lots 10-17 to be outside of the small wooded areas on these lots to ensure that the wooded areas are not disturbed by leach fields on these lots.
 - The neighbor to the east expressed concern with removal of the trees in between Riverside Vista and their home. While much of the trees are on their property line, there is an area at the backs of these lots that contain trees. This will be protected by shifting the building envelope outside of the wooded area.
- The owners will still need to adhere to Dane County zoning regulations as far as primary residence setbacks. Therefore, no owner would be able to construct a residence within 5 feet of a property line up to the building envelope. However, the leach field could be placed within 5 feet of a property line per Wisconsin Statutes.
 - Septic leach field placement is mainly reliant on topography. Per a local septic designer, a plan must account for an area approximately 30 feet by 120 feet for a mound system. This includes a 10 foot wide leach area underground. Therefore, it is difficult to place mound systems within a small building footprint area where topography is challenging such as in Riverside Vista.
- To ensure that future primary residences still meet the Town's requirements to reflect rural design, we are proposing additional/increased front and side yard setbacks for the primary residences as per the Covenants documents. This will ensure that primary residences be placed in a location on the lots that the topography dictates, but not close to their neighbors and staggered from the new town road. Finally, this allows for some flexibility to place leach fields on the lots where best suited.
- Lots 1-3 have been given building envelope sizes exactly 30,000 sq. ft., which is the maximum for a wooded lot. The wooded areas of lots 4-9 are mostly less than 20,000 sq. ft., with the exception of Lot 7 which has 21,426 sq. ft. of wooded area within the building envelope. This will ensure that no more than 30,000 sq. ft. of wooded area is disturbed/cleared for the building of a house or septic field. It should be noted that the non-wooded areas of lots 4-9 are primarily made up of a hay field which appears to be planted with alfalfa that has been inundated with weeds. Therefore, this is not really a pristine natural prairie area.
- A table has been created based on the attached exhibit to indicate the total areas of each lot's building area:

Riverside Vista Setbacks and Building Envelopes				
Size (sq. ft.)				
Lot #	Dane County Zoning Primary Residence Setbacks	Building Envelope on Preliminary Plat for Primary Residence, Well and Two Septic Leach Fields	Area of Building Envelope on Preliminary Plat for Primary Residence, Well and Two Septic Leach Fields that is Wooded	Neighborhood Covenants Primary Residence Setbacks
1	35,644	30,000	30,000	25,923
2	35,467	30,000	30,000	24,306
3	32,510	30,000	30,000	23,358
4	31,403	40,434	10,179	25,279
5	32,976	42,731	15,195	26,983
6	28,262	46,771	12,957	22,953
7	32,463	41,002	21,426	25,619
8	33,713	41,028	19,989	27,114
9	34,871	46,649	17,800	25,940
10	32,070	46,518	0	25,435
11	49,252	55,956	0	36,299
12	54,819	59,129	0	44,534
13	42,009	44,362	0	32,246
14	32,170	35,351	0	24,194
15	32,529	33,353	0	24,129
16	32,550	34,494	0	24,474
17	34,333	43,852	0	29,432



Building Envelope Exhibit
Riverside Vista
Town of Verona
Dane County, Wisconsin

Revisions No.	Date	Description

Scale:	AS SHOWN
Date:	2/5/2024
Drawn By:	ALC
Project No:	230019
Sheet No:	1 of 1



PRELIMINARY STORMWATER REPORT
RIVERSIDE VISTA
Town of Verona, Wisconsin

Prepared For:

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Jim Coons
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Verona, WI 53593

Prepared By:

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Prepared On:
February 7, 2024

Revised On:

Project # 230019

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Table of Contents

<u>Description</u>	<u>Page #</u>
Section 1: Narrative	
1.1 Introduction to Project.....	3
1.2 Soils Description.....	4
1.3 Design Criteria.....	5
1.4 Summary of Results.....	5
1.5 Conclusions.....	7
1.6 Permits.....	8
Section 2: Maps	
2.1 Location Map.....	10
2.2 Aerial Map.....	11
2.3 WDNR Surface Water Map - Wetland.....	12
2.4 WDNR Surface Water Map - Floodplain.....	13
2.5 Thermal Location Map.....	14
Section 3: Soils Information	
3.1 USDA NRCS Soils Map.....	16
3.2 Soil Test Pit Information.....	17
Section 4: Peak Storm Control Calculations	
4.1 Peak Flow Pre-Developed Conditions.....	21
4.2 Peak Flow Post-Developed Conditions – No Controls.....	31
4.3 Peak Flow Post-Developed Conditions – With Controls.....	41
4.4 Peak Flow Post-Developed Conditions – With Offsite Drainage.....	41
Section 5: Sediment Reduction Calculations.....	67
Section 6: Infiltration Calculations.....	75
Section 7: Erosion Control Calculations.....	78
Section 8: Shear Stress Calculations.....	81
Section 9: Culvert and Riprap Sizing Calculations.....	81
Section 10: Exhibits	
10.1 Waterway Review Letter from Dane County	
10.2 Stormwater Maintenance Agreement	
10.3 Pre-Developed Drainage Map	
10.4 Post-Developed Drainage Map	
10.5 Swale and Culvert Drainage Map	
10.6 Construction Plans	

Section 1 – Narrative

1.1 Introduction

Riverside Vista is located in the Town of Verona northeast of the intersection of Riverside Road and Spring Rose Road. The development is comprised of an existing parcel of undeveloped land of approximately 34.869 acres (excluding right-of-way) with a mix of hay field and wooded areas. For stormwater management modeling purposes the project area is defined as 38.881 acres which includes the subject property (34.87 acres) plus offsite areas (4.012 acres) where runoff is conveyed to the proposed stormwater features.

Much of the site drains overland to the north-northwest where the proposed stormwater features are to be located within Outlot 1. A small portion of the runoff from the property is conveyed to the northeast to a mapped waterway/drainage ditch. This waterway was assessed by Dane County and determined to not be navigable. Therefore shoreland zoning rules are not in affect for the property. Additionally, a small portion of runoff from the property is conveyed westerly to a roadside ditch along Spring Rose Road and to the south offsite. These two areas are included in the modeling, but not routed to the stormwater facilities.

The proposed development would divide the parcel into 17 single-family residential homesites ranging in size from 1.20 to 1.89 acres and 1 large outlot of 12.21 acres. The stormwater facility is planned for the northwest end of the outlot. Access to the outlot is provided from the western side of the proposed cul-de-sac bulb via a 30-foot wide strip of land that is part of the outlot.

General Stormwater Management Design

Stormwater modeling is based on the pre-developed site and post-developed site as shown in the exhibits located in Section 10 of this report. All post-developed conditions are based on planned new impervious. All pre-developed conditions are based on topographic survey and on-site field observation.

All proposed features for the project are based on surface area measurements of the designed roadway and assumptions made for new impervious surface totals for each lot. Assumptions for each lot are as follows: 12,000 sq. ft. of total impervious surfaces for lots 4-17 and 12,900 sq. ft. of total impervious surfaces for lots 1-3. The increased impervious surfaces for lots 1-3 account for the possibility of a 900 sq. ft. accessory building on these lots. The breakdown of the 12,000 sq. ft. of impervious is as follows: 6,000 sq. ft. for roof, 3,000 sq. ft. for driveway and 3,000 sq. ft. for sidewalk, patio, and decks. The remainder of each lot area has been modeled as grassland.

Roof and sidewalk/patio/deck areas have been modeled as “disconnected” or “draining to a pervious area” rather than “directly connected” due to the lot sizes and that runoff from these areas is anticipated to be conveyed via sheet flow for over 100 feet before channelized conveyance to stormwater facilities. Driveway and roadway impervious areas were modeled as “directly connected” as runoff from these areas will typically be picked up via channelized flow to the stormwater facilities. All

disconnected and pervious areas were modeled as “clayey” soil types, normal compaction and not lowered by one permeability class as deep tilling will be performed on disturbed areas as shown on the plans.

The following table is a breakdown of impervious and pervious surface totals for the entire project area. A breakdown of surface types by individual drainage areas is available in the Peak Storm Control Calculations – Post-developed Conditions w/controls part of the report in Section 4.

Table 1: Surface Totals for Project Area

	Square Feet	Acres
Roof	104,700	2.404
Driveway	51,000	1.171
Sidewalk/Patio/Deck	51,000	1.171
Roadway	48,141	1.105
Water Surface	26,000	0.597
Grass Cover	701,249	16.098
Woodland	663,395	15.229
Cropland	48,159	1.106
Totals:	1,693,644	38.881

The site meets the definition of new development as defined in Chapter 14 of the Dane County Ordinances. The site is required to meet performance standards for: erosion control, total suspended solids removal, infiltration, thermal control and peak flow discharge. It should be noted that the proposed plat is a “Conservation Subdivision” by Town of Verona standards. In order to meet the criteria for a Conservation Subdivision with the smallest allowable lot sizes, the site must meet 100% infiltration standards.

The goals for the site will be met with the construction of a forebay and dry detention basin along with overall density and conveyance of stormwater runoff for a portion of the site through an existing swale in the wooded area of the outlot.

1.2 Soils Description

Subsurface soils are made up of silt loams where the majority of the area is Newglarus silt loam. Over 95% of the site has a hydrological soil rating of C and was used for modeling for pre- and post-developed conditions. For peak rate control, the post-developed model did not have the site lowered by one permeability class as deep tilling is proposed and indicated on the plans as a requirement to the disturbed areas that will remain pervious to break up any hard pan that may be compacted during construction.

Soil test pits were conducted on December 14, 2023 and are included in Section 3.2 of this report.

1.3 Design Criteria

For this report, pre-developed conditions refer to the site conditions before any construction took place for the proposed development. Post-developed conditions refer to the site when the site is completed and all homes are constructed. The Stormwater goals the site will be required to meet are summarized below:

Table 2 – Stormwater Management Requirements

Stormwater Management Requirements	
Requirement	Goal
Peak Runoff Rate Control	Pre-Developed to Post-Developed 1, 2, 10, 100 and 200-year, 24-hour events
Sediment Control: TSS	80% TSS Removal
Infiltration	Infiltrate 100% of Pre-Developed Infiltration Volume
Oil/Grease	NA – Exempt – Residential Development
Thermal Control	Reduce temperature of runoff using Best Management Practices

Table 3 – Design Inputs

Design Inputs	
	Peak Runoff Rate Control (Town of Verona) (Dane County)
Rainfall (24-hour design storm) MSE4 Distribution	1-year = 2.49 inches 2-year = 2.84 inches 10-year = 4.09 inches 100-year = 6.66 inches 200-year = 7.53 inches
Pre-developed Runoff Curve Number (HSG C)	Woodland = 70 Grassland = 71 Cropland = 78

1.4 Summary of Results

Peak Rate Control (See Section 4 for design calculations)

The County requires new development sites to design Stormwater management practices to maintain post-development peak runoff discharge rates for the 1, 2, 10, 100 and 200-year, 24-hour design storms, so as not to exceed those rates for each respective design storm under pre-developed conditions.

Peak runoff control will be handled onsite with the construction of a forebay and dry detention basin along with an existing swale through the wooded area of the outlot. Table 4 illustrates the overall pre-developed and post-developed peak runoff rates for the project. The calculations were performed with HydroCAD v 10.20-4a and are located in Section 4 of this report. The modeling indicates that the design stormwater facility will reduce discharge flow rates from the site by approximately 50% through the 10-yr, 24-hr storm event.

Table 4 - Peak Runoff Control

Storm Event (year)	Pre-Developed (cfs)	Post-Developed w/o Controls (cfs)	Post-Developed w/Controls (cfs)
1	11.16	15.76	5.18
2	16.49	21.72	7.36
10	39.72	45.97	21.10
100	97.05	103.06	93.09
200	118.02	123.35	113.78

Table 5 summarizes the routing through the forebay. This table includes the HydroCAD model of the entire drainage area for the forebay along with offsite areas that drain through the site to ensure that the basin, as designed, can handle stormwater runoff through the 200-yr, 24-hr storm event. Runoff through the basin is maintained through the overflow spillway and does not overtop the berm through the 200-yr, 24-hr storm event.

Table 5 – Forebay Routing Including Offsite Drainage

Storm Frequency (Year)	Post-Developed Inflow (CFS)	Routed Through Forebay		
		Discharge Primary Outlet Riprap Lined Overflow Spillway (CFS)	Elevation (Feet)	Volume (CF)
1	8.59	8.47	1033.25	1,421
2	11.58	11.44	1033.31	1,768
10	23.64	23.36	1033.49	3,020
100	51.41	50.83	1033.84	5,730
200	61.16	60.50	1033.95	6,641

Table 6 summarizes the routing through the dry detention basin. This table includes the HydroCAD model of the entire drainage area for the dry detention basin along with offsite areas that drain through the site to ensure that the basin, as designed, can handle stormwater runoff through the 200-yr, 24-hr storm event. Runoff through the basin is maintained through the primary outlet through the 2-yr, 24-yr storm event, through primary and overflow spillway in subsequent events and does not overtop the berm through the 200-yr, 24-hr storm event.

Table 6 – Dry Detention Basin Routing Including Offsite Drainage

Storm Frequency (Year)	Post-Developed Inflow (CFS)	Routed Through Dry Detention Basin			
		Discharge Primary Outlet PVC Pipe to Riprap (CFS)	Discharge Secondary Overflow of Wet Basin (CFS)	Elevation (Feet)	Storage Volume (CF)
1	13.15	0.87	0.00	1026.45	49,570
2	18.65	1.68	0.00	1027.31	63,517
10	41.42	1.84	22.42	1028.32	82,248
100	95.46	1.92	91.84	1028.84	92,934
200	114.74	1.93	111.49	1028.96	95,487

Sediment Control

The site is required to reduce by 80%, the total suspended solids load based on the average annual rainfall record. Forebay efficiency was modeled using WinSLAMM 10.4.1. Dry basin efficiency was calculated using Stoke's Law to determine critical settling velocity. One-year peak flow rate, peak elevation, storage volume and the outlet invert were modeled using HydroCAD. See Section 4 of this report for complete HydroCAD calculations. All calculations include flow from offsite; however, tss loading was stripped from these offsite areas. Offsite volume was included in the HydroCAD model for the Stoke's Law worksheets as well.

The forebay is designed to achieve at least 40% sediment removal efficiency prior to draining to the dry detention basin. The dry detention basin is designed to achieve at least 80% sediment removal efficiency as per the Stoke's Law worksheet. See Section 5 of this report for WinSLAMM data for the forebay and Stoke's Law exhibit for the dry basin.

Table 7 – Total Suspended Solids Reduction Summary – Bioretention Basin

BMP	No Controls	After Stormwater Controls	% Reduction
Forebay	1,869 lbs.	730.2 lbs.	60.93%

Infiltration

Per Dane County standards, the site is required to infiltrate 90% of the pre-developed infiltration volume based on the average annual rainfall. However, in order to meet one of the requirements of a "Conservation Subdivision" for the Town of Verona Subdivision Ordinance, the site is required to infiltrate 100% of the pre-developed infiltration volume based on the average annual rainfall. The site infiltrates the post-developed runoff volume at a rate equivalent to 100.49% of the pre-developed infiltration volume. The calculations were completed with WinSLAMM 10.4.1 and are located in Section 6 of this report. Table 8 illustrates the WinSLAMM output for infiltration.

Table 8 – Infiltration Volume

Annual Pre-developed Total Loss (in/Yr)	Post-Developed Total Loss(in/Yr)	% Annual Total Loss
26.64	26.77	100.49

Erosion Control (See Section 7)

The site meets the County's erosion control requirements with the use of perimeter silt fencing, stone tracking pad, stabilized outlets, seeding, properly anchored mulch or erosion mat placement and scheduling. The USLE worksheets are located in section 7 of this report.

Swale and Ditch Calculations / Shear Stress Calculations (See Section 8)

Swale and ditch calculations were modeled using HydroCAD. Section 8 contains information regarding these calculations. Shear stress for swales and ditches were also calculated. Channel erosion matting is specified and shown on the overall grading and erosion control plan.

Thermal Control

The site is located within a thermally sensitive area, based on Dane County mapping. Therefore, this stormwater management design is required to reduce the temperature of runoff using Best Management Practices (BMPs). The BMPs proposed for this site will meet the County's requirements to mitigate the temperature of post-construction stormwater runoff. A dry detention basin with riprap outlet structure is proposed to meet the requirement.

1.5 Conclusions

This Riverside Vista Stormwater Management Plan will meet the Town and the County's new development performance standard requirements for erosion control, peak runoff rate control, total suspended solids reduction, infiltration and thermal control with the construction of the forebay and dry detention basin.

1.6 Permits

The following is a list of the anticipated development permits anticipated:

- ✓ Dane County – Erosion Control/Land Disturbing Permit Application
- ✓ Dane County – Storm Water Runoff Control Permit Application
- ✓ WDNR – NOI
- ✓ Town of Verona – Application for Permit to Work in Town Road Right-of-Way

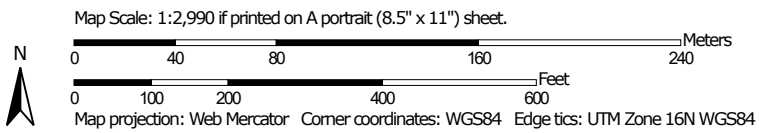
Section 2: Maps

Section 3: Soils Information

Hydrologic Soil Group—Dane County, Wisconsin



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 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: Dane County, Wisconsin
 Survey Area Data: Version 22, Sep 8, 2023

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

Date(s) aerial images were photographed: Jun 13, 2020—Jun 18, 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
1180D2	Newglarus-Dunbarton silt loams, 12 to 20 percent slopes, moderately eroded	C	15.3	44.4%
BaB2	Basco silt loam, 2 to 6 percent slopes, eroded	D	0.6	1.7%
NeB2	Newglarus silt loam, moderately deep, 2 to 6 percent slopes, moderately eroded	C	0.9	2.6%
NeC2	Newglarus silt loam, moderately deep, 6 to 12 percent slopes, moderately eroded	C	16.7	48.7%
TrB	Troxel silt loam, 0 to 3 percent slopes	B	0.9	2.6%
Totals for Area of Interest			34.4	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

Division of Industry Services

in accordance with SPS 382,365 and 385, Wis. Adm. Code

Attach complete site plan on paper not less than 8 1/2 x 11" in size. Plan must include, but not limited to: vertical and horizontal reference point (BM), direction and % slope, scale or dimensions, north arrow, location & 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	DANE
Parcel I.D.	062/0608-303-9000-8
Reviewed by	Date

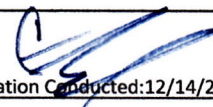
Property Owner COONS CONSTRUCTION OF VERONA LLC	Property Location SW 1/4, SW 1/4, S 30, T 6 N, R 8 E
Property Owner's Mailing Address 1827 LOCUST DR	Lot # Subd. Name or CSM#
City State Zip Code Phone Number VERONA WI 53593	<input type="checkbox"/> City <input checked="" type="checkbox"/> Town Nearest Road VERONA RIVERSIDE RD
Drainage area: <u>TBD</u> <input type="checkbox"/> sq.ft. <input type="checkbox"/> acres Optional: Test Site Suitable for (check all that apply) <input type="checkbox"/> Irrigation <input type="checkbox"/> Bioretention trench <input type="checkbox"/> Trenches <input type="checkbox"/> Rain garden <input type="checkbox"/> Grassed swale <input type="checkbox"/> Reuse <input type="checkbox"/> Infiltration trench <input type="checkbox"/> SDS (>15'wide) <input type="checkbox"/> Other _____	Hydraulic Application Test Method: <input checked="" type="checkbox"/> Morphological Evaluation <input type="checkbox"/> Double-Ring Infiltrometer <input type="checkbox"/> Other (specify) _____ Site Considerations:

Observed Boring Pit * horizon is colluvial overburden

1 #	Horizon	Depth inches	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence (Moist)	Boundary	% Rock Fragmts	Hydraulic App. Rate Inches/Hr.
	Ap1*	0-15	10YR3/2		sil	2mgr	fr	cs	3	0.13
	Ap2*	15-24	10YR3/2		cb sil	2fsbk	fr	cs	18	0.13
	Ap3	24-30	10YR2/2		sil	1fsbk	fr	cs	5	0.13
	Bt	30-55	10YR4/4		sicl	1fsbk	fi	cw	10	0.04
	C1	55-88	10YR4/4		cb scl	0mass	fi	cw	20	0.11
	C2	88-110	5YR4/6		cb sic	0mass	fi		23	0.07

Observed Boring Pit * horizon is colluvial overburden

2 #	Horizon	Depth inches	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence (Moist)	Boundary	% Rock Fragmts	Hydraulic App. Rate Inches/Hr.
	Ap1*	0-18	10YR3/2		sil	2fsbk	fr	cs	4	0.13
	Ap2	18-27	10YR2/2		sil	2fsbk	fr	cs	2	0.13
	Bt	27-39	10YR4/4		sicl	1fsbk	fi	cw	3	0.04
	C1	39-89	10YR4/4		sicl	0mass	fi	cw	6	0.04
	C2	89-122	5YR4/6		cb sic	0mass	fi		15	0.07

CST Name CLAY VANDERLEEST	Signature: 	CST Number 1190689
Address N7803 TOPPE RD WATERLOO, WI 53594	Date Evaluation Conducted: 12/14/2023	Telephone No. (608) 509-2855

Obser. Boring

* horizon is colluvial overburden. 10YR5/4 silt coats on peds in Ap2 horizon

3	#	<input checked="" type="checkbox"/> Pit	Ground surface elev. 1025.87'	Depth to limiting factor N/A				Hydraulic App. Rate Inches/Hr.	
Horizon	Depth inches	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr.Sz.Sh.	Consistence (Moist)	Boundary	% Rock Fragmts	
Ap1*	0-24	10YR3/2		sil	2fsbk	fr	cs	2	0.13
Ap2	24-39	10YR2/2		sil	2fsbk	fr	cs	1	0.13
Ap3	39-44	10YR2/2		sil	1fsbk	fr	cs	1	0.13
Bt	44-57	10YR4/4		sicl	1fsbk	fi	cw	5	0.04
C1	57-84	10YR4/4		sicl	0mass	fi	cw	10	0.04
C2	84-114	5YR4/6		cb sic	0mass	fi		17	0.07

Obser. Boring

* >50% limestone bedrock cobble

4	#	<input checked="" type="checkbox"/> Pit	Ground surface elev. 1021.30'	Depth to limiting factor 56"				Hydraulic App. Rate Inches/Hr.	
Horizon	Depth inches	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr.Sz.Sh.	Consistence (Moist)	Boundary	% Rock Fragmts	
Ap	0-13	10YR3/2		sil	2mgr	fr	cs	2	0.13
Bt1	13-25	10YR4/3		sicl	2fsbk	fi	cs	2	0.04
Bt2	25-40	10YR4/4		sicl	1fsbk	fi	cw	5	0.04
C	40-56	5YR4/6		sic	0mass	fi	cw	16	0.07
R	56+		*						

Obser. Boring

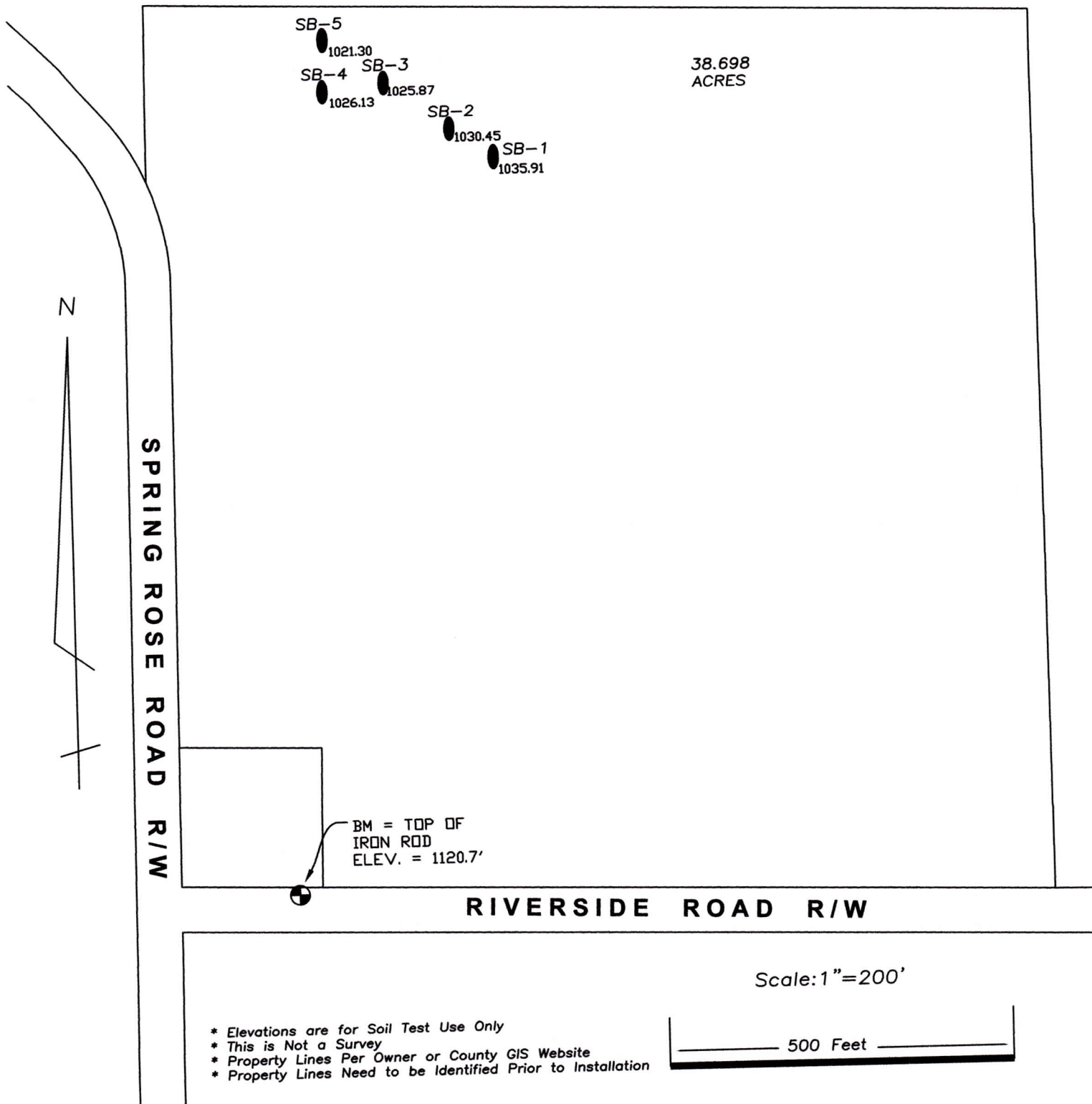
* horizon is colluvial overburden. 10YR5/4 silt coats on peds in Ap2 horizon

5	#	<input checked="" type="checkbox"/> Pit	Ground surface elev. 1026.13'	Depth to limiting factor N/A				Hydraulic App. Rate Inches/Hr.	
Horizon	Depth inches	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr.Sz.Sh.	Consistence (Moist)	Boundary	% Rock Fragmts	
Ap1*	0-20	10YR3/2		sil	2fsbk	fr	cs	2	0.13
Ap2	20-34	10YR2/2		sil	2fsbk	fr	cs	2	0.13
Ap3	34-45	10YR2/2		sil	1fsbk	fr	cs	3	0.13
Bt	45-74	10YR4/4		sicl	1fsbk	fi	cw	5	0.04
C1	74-98	10YR4/4		sicl	0mass	fi	cw	8	0.04
C2	98-110	10YR2/1		sic	0mass	fi		15	0.07

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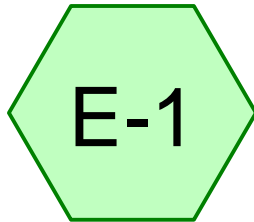
COONS CONSTRUCTION OF VERONA LLC

PAGE 3 OF 3

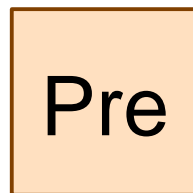


Section 4: Peak Storm Control Calculations

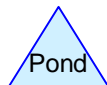
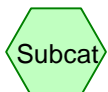
4.1 Peak Flow Pre-Developed Calculations



Pre-Developed



Pre Developed



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MSE 24-hr 4 1-Year Rainfall=2.49"

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Page 2

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E-1: Pre-Developed

Runoff Area=36.538 ac 0.00% Impervious Runoff Depth=0.49"
Flow Length=942' Tc=32.0 min CN=71 Runoff=11.16 cfs 1.480 af

Reach Pre: Pre Developed

Inflow=11.16 cfs 1.480 af
Outflow=11.16 cfs 1.480 af

Total Runoff Area = 36.538 ac Runoff Volume = 1.480 af Average Runoff Depth = 0.49"
100.00% Pervious = 36.538 ac 0.00% Impervious = 0.000 ac

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Page 3

Summary for Subcatchment E-1: Pre-Developed

Runoff = 11.16 cfs @ 12.52 hrs, Volume= 1.480 af, Depth= 0.49"
Routed to Reach Pre : Pre Developed

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 1-Year Rainfall=2.49"

Area (ac)	CN	Description
* 23.076	71	>75% Grass cover, Good, HSG C
13.462	70	Woods, Good, HSG C
36.538	71	Weighted Average
36.538		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.9	300	0.1193	0.19		Sheet Flow, Through Wooded Area Woods: Light underbrush n= 0.400 P2= 2.84"
3.0	284	0.0977	1.56		Shallow Concentrated Flow, Through Wooded Area Woodland Kv= 5.0 fps
2.1	358	0.0464	2.89	37.63	Trap/Vee/Rect Channel Flow, Wooded Swale Bot.W=5.00' D=1.00' Z= 8.0 '/' Top.W=21.00' n= 0.080 Earth, long dense weeds
32.0	942	Total			

Summary for Reach Pre: Pre Developed

Inflow Area = 36.538 ac, 0.00% Impervious, Inflow Depth = 0.49" for 1-Year event
Inflow = 11.16 cfs @ 12.52 hrs, Volume= 1.480 af
Outflow = 11.16 cfs @ 12.52 hrs, Volume= 1.480 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

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MSE 24-hr 4 2-Year Rainfall=2.84"

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Page 4

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E-1: Pre-Developed

Runoff Area=36.538 ac 0.00% Impervious Runoff Depth=0.67"
Flow Length=942' Tc=32.0 min CN=71 Runoff=16.49 cfs 2.040 af

Reach Pre: Pre Developed

Inflow=16.49 cfs 2.040 af
Outflow=16.49 cfs 2.040 af

Total Runoff Area = 36.538 ac Runoff Volume = 2.040 af Average Runoff Depth = 0.67"
100.00% Pervious = 36.538 ac 0.00% Impervious = 0.000 ac

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MSE 24-hr 4 10-Year Rainfall=4.09"

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Page 5

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E-1: Pre-Developed

Runoff Area=36.538 ac 0.00% Impervious Runoff Depth=1.46"
Flow Length=942' Tc=32.0 min CN=71 Runoff=39.72 cfs 4.433 af

Reach Pre: Pre Developed

Inflow=39.72 cfs 4.433 af
Outflow=39.72 cfs 4.433 af

Total Runoff Area = 36.538 ac Runoff Volume = 4.433 af Average Runoff Depth = 1.46"
100.00% Pervious = 36.538 ac 0.00% Impervious = 0.000 ac

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MSE 24-hr 4 100-Year Rainfall=6.66"

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Page 6

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E-1: Pre-Developed

Runoff Area=36.538 ac 0.00% Impervious Runoff Depth=3.44"
Flow Length=942' Tc=32.0 min CN=71 Runoff=97.05 cfs 10.471 af

Reach Pre: Pre Developed

Inflow=97.05 cfs 10.471 af
Outflow=97.05 cfs 10.471 af

Total Runoff Area = 36.538 ac Runoff Volume = 10.471 af Average Runoff Depth = 3.44"
100.00% Pervious = 36.538 ac 0.00% Impervious = 0.000 ac

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MSE 24-hr 4 200-Year Rainfall=7.53"

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Page 7

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E-1: Pre-Developed

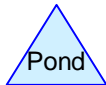
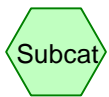
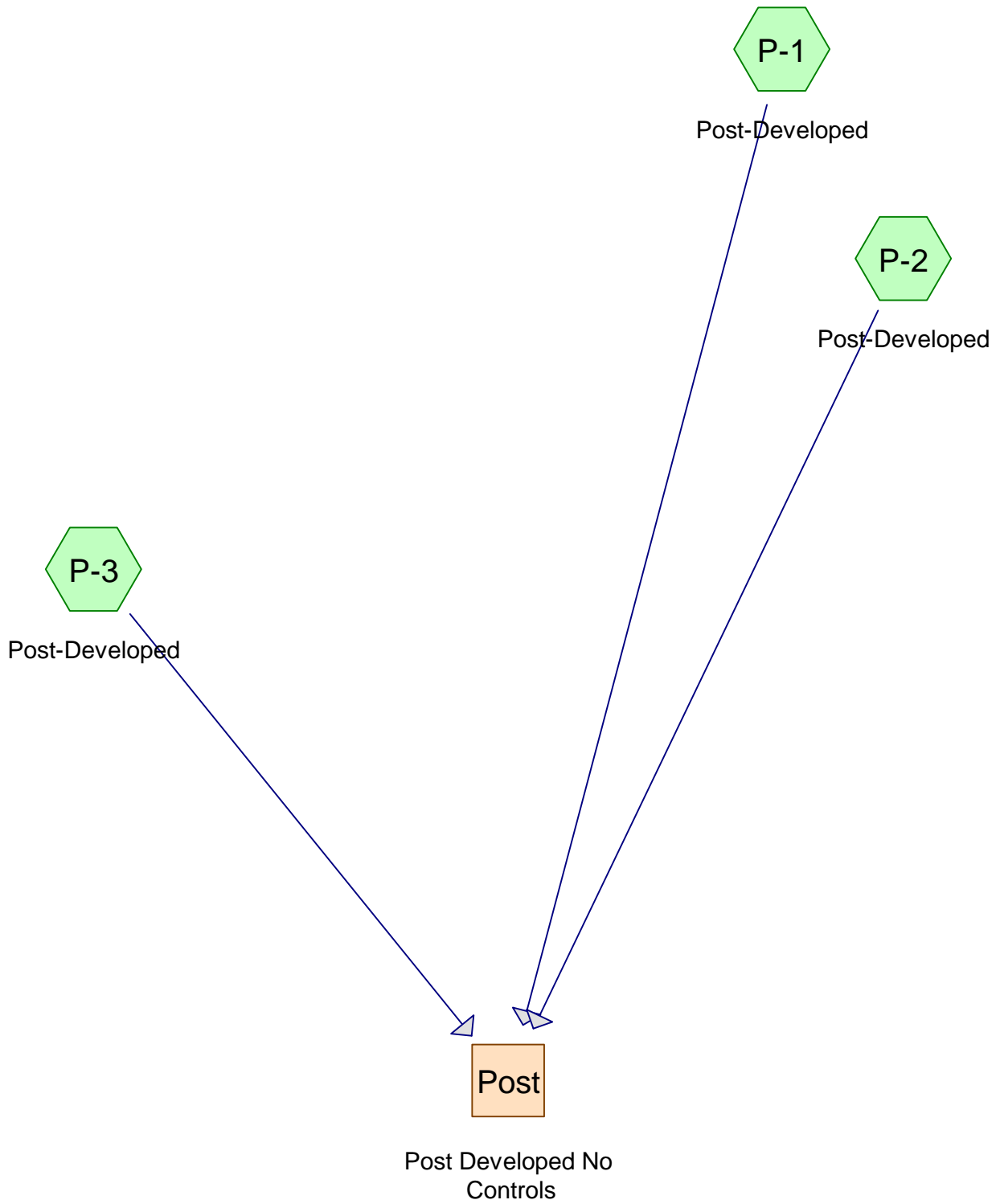
Runoff Area=36.538 ac 0.00% Impervious Runoff Depth=4.17"
Flow Length=942' Tc=32.0 min CN=71 Runoff=118.02 cfs 12.708 af

Reach Pre: Pre Developed

Inflow=118.02 cfs 12.708 af
Outflow=118.02 cfs 12.708 af

Total Runoff Area = 36.538 ac Runoff Volume = 12.708 af Average Runoff Depth = 4.17"
100.00% Pervious = 36.538 ac 0.00% Impervious = 0.000 ac

4.2 Peak Flow Post-Developed Calculations No Controls



Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P-1: Post-Developed Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=0.73"
Flow Length=706' Tc=23.7 min CN=77 Runoff=7.92 cfs 0.776 af

Subcatchment P-2: Post-Developed Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=0.60"
Flow Length=584' Tc=33.0 min CN=74 Runoff=7.15 cfs 0.892 af

Subcatchment P-3: Post-Developed Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=0.56"
Tc=6.0 min CN=73 Runoff=5.13 cfs 0.285 af

Reach Post: Post Developed No Controls Inflow=15.76 cfs 1.953 af
Outflow=15.76 cfs 1.953 af

Total Runoff Area = 36.538 ac Runoff Volume = 1.953 af Average Runoff Depth = 0.64"
84.35% Pervious = 30.819 ac 15.65% Impervious = 5.719 ac

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MSE 24-hr 4 1-Year Rainfall=2.49"

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Page 3

Summary for Subcatchment P-1: Post-Developed

Runoff = 7.92 cfs @ 12.36 hrs, Volume= 0.776 af, Depth= 0.73"
 Routed to Reach Post : Post Developed No Controls

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 MSE 24-hr 4 1-Year Rainfall=2.49"

Area (ac)	CN	Description
1.033	98	Roofs, HSG C
* 0.620	98	Driveways, HSG C
* 0.517	98	Sidewalks/Patios/Decks, HSG C
0.566	92	Paved roads w/open ditches, 50% imp, HSG C
0.138	98	Water Surface, HSG C
* 6.521	71	>75% Grass cover, Good, HSG C
2.177	70	Woods, Good, HSG C
* 1.121	71	Pasture/grassland/range, Good, HSG C
12.693	77	Weighted Average
10.102		79.59% Pervious Area
2.591		20.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.9	300	0.0719	0.23		Sheet Flow, Through Small Wooded Area and Lawn
					Grass: Dense n= 0.240 P2= 2.84"
1.5	406	0.0874	4.43		Shallow Concentrated Flow, Through lawn
					Grassed Waterway Kv= 15.0 fps
0.3					Direct Entry, Road Ditch, Culvert and Grassed Waterway
23.7	706	Total			

Summary for Subcatchment P-2: Post-Developed

Runoff = 7.15 cfs @ 12.51 hrs, Volume= 0.892 af, Depth= 0.60"
 Routed to Reach Post : Post Developed No Controls

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 MSE 24-hr 4 1-Year Rainfall=2.49"

Area (ac)	CN	Description
1.095	98	Roofs, HSG C
* 0.344	98	Driveways, HSG C
* 0.517	98	Sidewalks/Patios/Decks, HSG C
0.185	92	Paved roads w/open ditches, 50% imp, HSG C
0.459	98	Water Surface, HSG C
* 4.141	71	>75% Grass cover, Good, HSG C
10.410	70	Woods, Good, HSG C
* 0.607	71	Pasture/grassland/range, Good, HSG C
17.758	74	Weighted Average
15.251		85.88% Pervious Area
2.508		14.12% Impervious Area

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MSE 24-hr 4 1-Year Rainfall=2.49"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.9	300	0.1193	0.19		Sheet Flow, Through Wooded Area Woods: Light underbrush n= 0.400 P2= 2.84"
6.1	284	0.0977	0.78		Shallow Concentrated Flow, Through Wooded Area Forest w/Heavy Litter Kv= 2.5 fps
33.0	584	Total			

Summary for Subcatchment P-3: Post-Developed

Runoff = 5.13 cfs @ 12.14 hrs, Volume= 0.285 af, Depth= 0.56"
Routed to Reach Post : Post Developed No Controls

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 1-Year Rainfall=2.49"

Area (ac)	CN	Description
0.275	98	Roofs, HSG C
* 0.207	98	Driveways, HSG C
* 0.138	98	Sidewalks/Patios/Decks, HSG C
* 3.273	71	>75% Grass cover, Good, HSG C
2.194	70	Woods, Good, HSG C
6.087	73	Weighted Average
5.467		89.81% Pervious Area
0.620		10.19% Impervious Area

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

Summary for Reach Post: Post Developed No Controls

Inflow Area = 36.538 ac, 15.65% Impervious, Inflow Depth = 0.64" for 1-Year event
Inflow = 15.76 cfs @ 12.42 hrs, Volume= 1.953 af
Outflow = 15.76 cfs @ 12.42 hrs, Volume= 1.953 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P-1: Post-Developed Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=0.96"
 Flow Length=706' Tc=23.7 min CN=77 Runoff=10.69 cfs 1.017 af

Subcatchment P-2: Post-Developed Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=0.81"
 Flow Length=584' Tc=33.0 min CN=74 Runoff=10.05 cfs 1.196 af

Subcatchment P-3: Post-Developed Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=0.76"
 Tc=6.0 min CN=73 Runoff=7.20 cfs 0.386 af

Reach Post: Post Developed No Controls Inflow=21.72 cfs 2.599 af
 Outflow=21.72 cfs 2.599 af

Total Runoff Area = 36.538 ac Runoff Volume = 2.599 af Average Runoff Depth = 0.85"
84.35% Pervious = 30.819 ac 15.65% Impervious = 5.719 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P-1: Post-Developed Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=1.88"
Flow Length=706' Tc=23.7 min CN=77 Runoff=21.76 cfs 1.991 af

Subcatchment P-2: Post-Developed Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=1.66"
Flow Length=584' Tc=33.0 min CN=74 Runoff=22.00 cfs 2.460 af

Subcatchment P-3: Post-Developed Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=1.59"
Tc=6.0 min CN=73 Runoff=15.72 cfs 0.808 af

Reach Post: Post Developed No Controls Inflow=45.97 cfs 5.259 af
Outflow=45.97 cfs 5.259 af

Total Runoff Area = 36.538 ac Runoff Volume = 5.259 af Average Runoff Depth = 1.73"
84.35% Pervious = 30.819 ac 15.65% Impervious = 5.719 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P-1: Post-Developed Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=4.06"
Flow Length=706' Tc=23.7 min CN=77 Runoff=47.15 cfs 4.296 af

Subcatchment P-2: Post-Developed Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=3.75"
Flow Length=584' Tc=33.0 min CN=74 Runoff=50.68 cfs 5.545 af

Subcatchment P-3: Post-Developed Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=3.64"
Tc=6.0 min CN=73 Runoff=35.90 cfs 1.848 af

Reach Post: Post Developed No Controls Inflow=103.06 cfs 11.690 af
Outflow=103.06 cfs 11.690 af

Total Runoff Area = 36.538 ac Runoff Volume = 11.690 af Average Runoff Depth = 3.84"
84.35% Pervious = 30.819 ac 15.65% Impervious = 5.719 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P-1: Post-Developed Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=4.85"
 Flow Length=706' Tc=23.7 min CN=77 Runoff=56.05 cfs 5.125 af

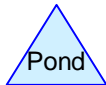
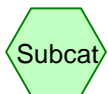
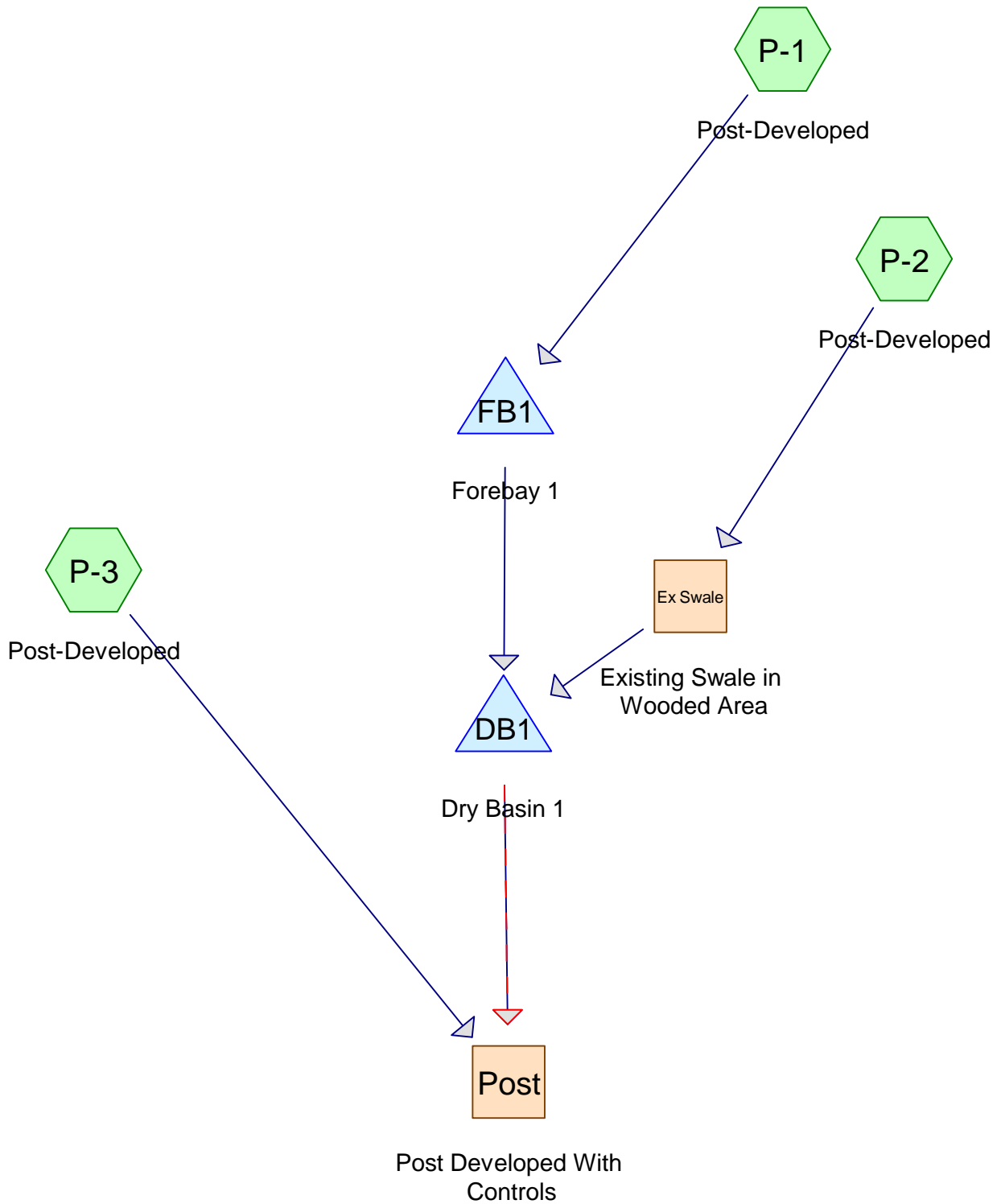
Subcatchment P-2: Post-Developed Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=4.51"
 Flow Length=584' Tc=33.0 min CN=74 Runoff=60.95 cfs 6.670 af

Subcatchment P-3: Post-Developed Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=4.40"
 Tc=6.0 min CN=73 Runoff=43.08 cfs 2.230 af

Reach Post: Post Developed No Controls Inflow=123.35 cfs 14.025 af
 Outflow=123.35 cfs 14.025 af

Total Runoff Area = 36.538 ac Runoff Volume = 14.025 af Average Runoff Depth = 4.61"
84.35% Pervious = 30.819 ac 15.65% Impervious = 5.719 ac

4.3 Peak Flow Post-Developed Calculations With Controls



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MSE 24-hr 4 1-Year Rainfall=2.49"

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Page 2

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P-1: Post-Developed

Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=0.73"
Flow Length=706' Tc=23.7 min CN=77 Runoff=7.92 cfs 0.776 af

Subcatchment P-2: Post-Developed

Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=0.60"
Flow Length=584' Tc=33.0 min CN=74 Runoff=7.15 cfs 0.892 af

Subcatchment P-3: Post-Developed

Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=0.56"
Tc=6.0 min CN=73 Runoff=5.13 cfs 0.285 af

Reach Ex Swale: Existing Swale in Wooded Avg. Flow Depth=0.22' Max Vel=1.27 fps Inflow=7.15 cfs 0.892 af
n=0.100 L=930.0' S=0.0587 '/ Capacity=1,364.99 cfs Outflow=6.21 cfs 0.892 af

Reach Post: Post Developed With Controls

Inflow=5.18 cfs 1.948 af
Outflow=5.18 cfs 1.948 af

Pond DB1: Dry Basin 1

Peak Elev=1,026.14' Storage=44,747 cf Inflow=12.01 cfs 1.668 af
Primary=0.84 cfs 1.663 af Secondary=0.00 cfs 0.000 af Outflow=0.84 cfs 1.663 af

Pond FB1: Forebay 1

Peak Elev=1,033.24' Storage=1,339 cf Inflow=7.92 cfs 0.776 af
Outflow=7.80 cfs 0.776 af

Total Runoff Area = 36.538 ac Runoff Volume = 1.953 af Average Runoff Depth = 0.64"
84.35% Pervious = 30.819 ac 15.65% Impervious = 5.719 ac

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Page 3

Summary for Subcatchment P-1: Post-Developed

Runoff = 7.92 cfs @ 12.36 hrs, Volume= 0.776 af, Depth= 0.73"
 Routed to Pond FB1 : Forebay 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 MSE 24-hr 4 1-Year Rainfall=2.49"

Area (ac)	CN	Description
1.033	98	Roofs, HSG C
* 0.620	98	Driveways, HSG C
* 0.517	98	Sidewalks/Patios/Decks, HSG C
0.566	92	Paved roads w/open ditches, 50% imp, HSG C
0.138	98	Water Surface, HSG C
* 6.521	71	>75% Grass cover, Good, HSG C
2.177	70	Woods, Good, HSG C
* 1.121	71	Pasture/grassland/range, Good, HSG C
12.693	77	Weighted Average
10.102		79.59% Pervious Area
2.591		20.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.9	300	0.0719	0.23		Sheet Flow, Through Small Wooded Area and Lawn
					Grass: Dense n= 0.240 P2= 2.84"
1.5	406	0.0874	4.43		Shallow Concentrated Flow, Through lawn
					Grassed Waterway Kv= 15.0 fps
0.3					Direct Entry, Road Ditch, Culvert and Grassed Waterway
23.7	706	Total			

Summary for Subcatchment P-2: Post-Developed

Runoff = 7.15 cfs @ 12.51 hrs, Volume= 0.892 af, Depth= 0.60"
 Routed to Reach Ex Swale : Existing Swale in Wooded Area

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 MSE 24-hr 4 1-Year Rainfall=2.49"

Area (ac)	CN	Description
1.095	98	Roofs, HSG C
* 0.344	98	Driveways, HSG C
* 0.517	98	Sidewalks/Patios/Decks, HSG C
0.185	92	Paved roads w/open ditches, 50% imp, HSG C
0.459	98	Water Surface, HSG C
* 4.141	71	>75% Grass cover, Good, HSG C
10.410	70	Woods, Good, HSG C
* 0.607	71	Pasture/grassland/range, Good, HSG C
17.758	74	Weighted Average
15.251		85.88% Pervious Area
2.508		14.12% Impervious Area

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Page 4

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.9	300	0.1193	0.19		Sheet Flow, Through Wooded Area
					Woods: Light underbrush n= 0.400 P2= 2.84"
6.1	284	0.0977	0.78		Shallow Concentrated Flow, Through Wooded Area
					Forest w/Heavy Litter Kv= 2.5 fps
33.0	584	Total			

Summary for Subcatchment P-3: Post-Developed

Runoff = 5.13 cfs @ 12.14 hrs, Volume= 0.285 af, Depth= 0.56"
 Routed to Reach Post : Post Developed With Controls

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 MSE 24-hr 4 1-Year Rainfall=2.49"

Area (ac)	CN	Description
0.275	98	Roofs, HSG C
* 0.207	98	Driveways, HSG C
* 0.138	98	Sidewalks/Patios/Decks, HSG C
* 3.273	71	>75% Grass cover, Good, HSG C
2.194	70	Woods, Good, HSG C
6.087	73	Weighted Average
5.467		89.81% Pervious Area
0.620		10.19% Impervious Area

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

Summary for Reach Ex Swale: Existing Swale in Wooded Area

Inflow Area = 17.758 ac, 14.12% Impervious, Inflow Depth = 0.60" for 1-Year event
 Inflow = 7.15 cfs @ 12.51 hrs, Volume= 0.892 af
 Outflow = 6.21 cfs @ 12.67 hrs, Volume= 0.892 af, Atten= 13%, Lag= 9.7 min
 Routed to Pond DB1 : Dry Basin 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 Max. Velocity= 1.27 fps, Min. Travel Time= 12.2 min
 Avg. Velocity= 0.51 fps, Avg. Travel Time= 30.5 min

Peak Storage= 4,559 cf @ 12.67 hrs
 Average Depth at Peak Storage= 0.22' , Surface Width= 23.60'
 Bank-Full Depth= 4.00' Flow Area= 208.0 sf, Capacity= 1,364.99 cfs

20.00' x 4.00' deep channel, n= 0.100 Earth, dense brush, high stage
 Side Slope Z-value= 8.0 ' / ' Top Width= 84.00'
 Length= 930.0' Slope= 0.0587 ' / '
 Inlet Invert= 1,083.37', Outlet Invert= 1,028.80'

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Page 5



Summary for Reach Post: Post Developed With Controls

Inflow Area = 36.538 ac, 15.65% Impervious, Inflow Depth > 0.64" for 1-Year event
 Inflow = 5.18 cfs @ 12.14 hrs, Volume= 1.948 af
 Outflow = 5.18 cfs @ 12.14 hrs, Volume= 1.948 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Summary for Pond DB1: Dry Basin 1

Inflow Area = 30.451 ac, 16.74% Impervious, Inflow Depth = 0.66" for 1-Year event
 Inflow = 12.01 cfs @ 12.53 hrs, Volume= 1.668 af
 Outflow = 0.84 cfs @ 17.12 hrs, Volume= 1.663 af, Atten= 93%, Lag= 275.5 min
 Primary = 0.84 cfs @ 17.12 hrs, Volume= 1.663 af
 Routed to Reach Post : Post Developed With Controls
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Reach Post : Post Developed With Controls

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 Peak Elev= 1,026.14' @ 17.12 hrs Surf.Area= 14,892 sf Storage= 44,747 cf

Plug-Flow detention time= 669.4 min calculated for 1.663 af (100% of inflow)
 Center-of-Mass det. time= 667.4 min (1,555.9 - 888.5)

Volume	Invert	Avail.Storage	Storage Description
#1	1,022.00'	2,296,353 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,022.00	5,836	0	0
1,023.00	8,817	7,327	7,327
1,024.00	10,950	9,884	17,210
1,025.00	12,732	11,841	29,051
1,026.00	14,619	13,676	42,727
1,027.00	16,611	15,615	58,342
1,028.00	18,706	17,659	76,000
1,029.00	22,000	20,353	96,353
1,129.00	22,000	2,200,000	2,296,353

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Page 6

Device	Routing	Invert	Outlet Devices
#1	Primary	1,022.00'	6.0" Round Culvert L= 60.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,022.00' / 1,020.00' S= 0.0333 '/ Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Device 1	1,022.00'	4.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	1,027.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,028.00'	45.0' long x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.84 cfs @ 17.12 hrs HW=1,026.14' TW=0.00' (Dynamic Tailwater)

- ↑ **1=Culvert** (Passes 0.84 cfs of 1.47 cfs potential flow)
- ↑ **2=Orifice/Grate** (Orifice Controls 0.84 cfs @ 9.59 fps)
- ↑ **3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,022.00' TW=0.00' (Dynamic Tailwater)

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

Summary for Pond FB1: Forebay 1

Inflow Area = 12.693 ac, 20.41% Impervious, Inflow Depth = 0.73" for 1-Year event
 Inflow = 7.92 cfs @ 12.36 hrs, Volume= 0.776 af
 Outflow = 7.80 cfs @ 12.41 hrs, Volume= 0.776 af, Atten= 2%, Lag= 2.6 min
 Primary = 7.80 cfs @ 12.41 hrs, Volume= 0.776 af
 Routed to Pond DB1 : Dry Basin 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 Peak Elev= 1,033.24' @ 12.41 hrs Surf.Area= 6,094 sf Storage= 1,339 cf

Plug-Flow detention time= 5.2 min calculated for 0.776 af (100% of inflow)
 Center-of-Mass det. time= 5.1 min (869.5 - 864.4)

Volume	Invert	Avail.Storage	Storage Description
#1	1,033.00'	918,733 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,033.00	5,150	0	0
1,034.00	9,116	7,133	7,133
1,134.00	9,116	911,600	918,733

Device	Routing	Invert	Outlet Devices
#1	Primary	1,033.00'	25.0' long x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=7.79 cfs @ 12.41 hrs HW=1,033.24' TW=1,022.97' (Dynamic Tailwater)

- ↑ **1=Broad-Crested Rectangular Weir** (Weir Controls 7.79 cfs @ 1.31 fps)

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2024-02-05_Riverside Vista_Post-Developed

MSE 24-hr 4 2-Year Rainfall=2.84"

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Page 7

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P-1: Post-Developed

Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=0.96"
Flow Length=706' Tc=23.7 min CN=77 Runoff=10.69 cfs 1.017 af

Subcatchment P-2: Post-Developed

Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=0.81"
Flow Length=584' Tc=33.0 min CN=74 Runoff=10.05 cfs 1.196 af

Subcatchment P-3: Post-Developed

Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=0.76"
Tc=6.0 min CN=73 Runoff=7.20 cfs 0.386 af

Reach Ex Swale: Existing Swale in Wooded Avg. Flow Depth=0.28' Max Vel=1.44 fps Inflow=10.05 cfs 1.196 af
n=0.100 L=930.0' S=0.0587 '/ Capacity=1,364.99 cfs Outflow=8.98 cfs 1.196 af

Reach Post: Post Developed With Controls

Inflow=7.36 cfs 2.592 af
Outflow=7.36 cfs 2.592 af

Pond DB1: Dry Basin 1

Peak Elev=1,027.11' Storage=60,105 cf Inflow=17.16 cfs 2.214 af
Primary=1.64 cfs 2.206 af Secondary=0.00 cfs 0.000 af Outflow=1.64 cfs 2.206 af

Pond FB1: Forebay 1

Peak Elev=1,033.29' Storage=1,663 cf Inflow=10.69 cfs 1.017 af
Outflow=10.52 cfs 1.017 af

Total Runoff Area = 36.538 ac Runoff Volume = 2.599 af Average Runoff Depth = 0.85"
84.35% Pervious = 30.819 ac 15.65% Impervious = 5.719 ac

2024-02-05_RiversideVista_Post_Dev

2024-02-05_Riverside Vista_Post-Developed

MSE 24-hr 4 10-Year Rainfall=4.09"

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Page 8

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P-1: Post-Developed

Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=1.88"
Flow Length=706' Tc=23.7 min CN=77 Runoff=21.76 cfs 1.991 af

Subcatchment P-2: Post-Developed

Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=1.66"
Flow Length=584' Tc=33.0 min CN=74 Runoff=22.00 cfs 2.460 af

Subcatchment P-3: Post-Developed

Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=1.59"
Tc=6.0 min CN=73 Runoff=15.72 cfs 0.808 af

Reach Ex Swale: Existing Swale in Wooded Avg. Flow Depth=0.45' Max Vel=1.93 fps Inflow=22.00 cfs 2.460 af
n=0.100 L=930.0' S=0.0587 '/' Capacity=1,364.99 cfs Outflow=20.67 cfs 2.460 af

Reach Post: Post Developed With Controls

Inflow=21.10 cfs 5.250 af
Outflow=21.10 cfs 5.250 af

Pond DB1: Dry Basin 1

Peak Elev=1,028.28' Storage=81,302 cf Inflow=38.48 cfs 4.452 af
Primary=1.83 cfs 3.155 af Secondary=17.60 cfs 1.288 af Outflow=19.43 cfs 4.442 af

Pond FB1: Forebay 1

Peak Elev=1,033.47' Storage=2,829 cf Inflow=21.76 cfs 1.991 af
Outflow=21.45 cfs 1.991 af

Total Runoff Area = 36.538 ac Runoff Volume = 5.259 af Average Runoff Depth = 1.73"
84.35% Pervious = 30.819 ac 15.65% Impervious = 5.719 ac

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2024-02-05_Riverside Vista_Post-Developed

MSE 24-hr 4 100-Year Rainfall=6.66"

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Page 9

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P-1: Post-Developed

Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=4.06"
Flow Length=706' Tc=23.7 min CN=77 Runoff=47.15 cfs 4.296 af

Subcatchment P-2: Post-Developed

Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=3.75"
Flow Length=584' Tc=33.0 min CN=74 Runoff=50.68 cfs 5.545 af

Subcatchment P-3: Post-Developed

Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=3.64"
Tc=6.0 min CN=73 Runoff=35.90 cfs 1.848 af

Reach Ex Swale: Existing Swale in Wooded Avg. Flow Depth=0.74' Max Vel=2.56 fps Inflow=50.68 cfs 5.545 af
n=0.100 L=930.0' S=0.0587 '/ Capacity=1,364.99 cfs Outflow=48.82 cfs 5.545 af

Reach Post: Post Developed With Controls

Inflow=93.09 cfs 11.678 af
Outflow=93.09 cfs 11.678 af

Pond DB1: Dry Basin 1

Peak Elev=1,028.80' Storage=92,014 cf Inflow=89.21 cfs 9.841 af
Primary=1.91 cfs 3.550 af Secondary=84.97 cfs 6.280 af Outflow=86.88 cfs 9.830 af

Pond FB1: Forebay 1

Peak Elev=1,033.79' Storage=5,323 cf Inflow=47.15 cfs 4.296 af
Outflow=46.57 cfs 4.296 af

Total Runoff Area = 36.538 ac Runoff Volume = 11.690 af Average Runoff Depth = 3.84"
84.35% Pervious = 30.819 ac 15.65% Impervious = 5.719 ac

2024-02-05_RiversideVista_Post_Dev

2024-02-05_Riverside Vista_Post-Developed

MSE 24-hr 4 200-Year Rainfall=7.53"

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Page 10

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment P-1: Post-Developed

Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=4.85"
Flow Length=706' Tc=23.7 min CN=77 Runoff=56.05 cfs 5.125 af

Subcatchment P-2: Post-Developed

Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=4.51"
Flow Length=584' Tc=33.0 min CN=74 Runoff=60.95 cfs 6.670 af

Subcatchment P-3: Post-Developed

Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=4.40"
Tc=6.0 min CN=73 Runoff=43.08 cfs 2.230 af

Reach Ex Swale: Existing Swale in Wooded Avg. Flow Depth=0.82' Max Vel=2.71 fps Inflow=60.95 cfs 6.670 af
n=0.100 L=930.0' S=0.0587 '/ Capacity=1,364.99 cfs Outflow=58.94 cfs 6.670 af

Reach Post: Post Developed With Controls

Inflow=113.78 cfs 14.013 af
Outflow=113.78 cfs 14.013 af

Pond DB1: Dry Basin 1

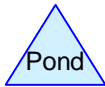
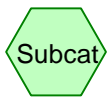
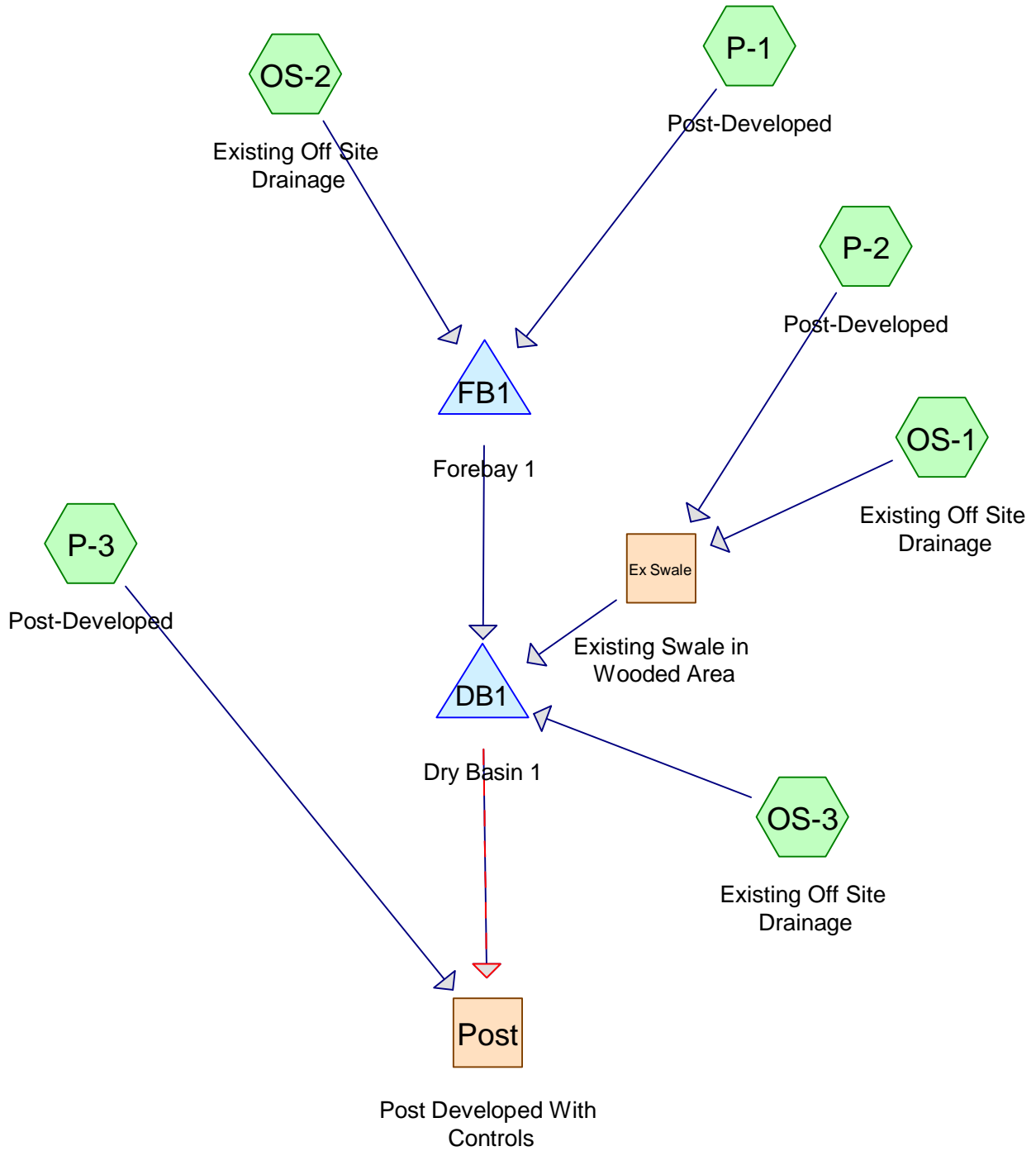
Peak Elev=1,028.92' Storage=94,512 cf Inflow=107.23 cfs 11.795 af
Primary=1.93 cfs 3.625 af Secondary=103.89 cfs 8.158 af Outflow=105.81 cfs 11.784 af

Pond FB1: Forebay 1

Peak Elev=1,033.89' Storage=6,167 cf Inflow=56.05 cfs 5.125 af
Outflow=55.45 cfs 5.125 af

Total Runoff Area = 36.538 ac Runoff Volume = 14.025 af Average Runoff Depth = 4.61"
84.35% Pervious = 30.819 ac 15.65% Impervious = 5.719 ac

4.4 Peak Flow Post-Developed Calculations With Controls and Offsite Drainage



Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment OS-1: Existing Off Site Drainage Runoff Area=0.352 ac 27.13% Impervious Runoff Depth=0.99"
 Flow Length=584' Tc=33.0 min CN=82 Runoff=0.26 cfs 0.029 af

Subcatchment OS-2: Existing Off Site Drainage Runoff Area=1.906 ac 4.28% Impervious Runoff Depth=0.73"
 Flow Length=771' Tc=38.4 min CN=77 Runoff=0.90 cfs 0.117 af

Subcatchment OS-3: Existing Off Site Drainage Runoff Area=0.085 ac 0.00% Impervious Runoff Depth=0.45"
 Flow Length=300' Slope=0.1244 '/ S=0.0587 '/ Tc=17.6 min CN=70 Runoff=0.03 cfs 0.003 af

Subcatchment P-1: Post-Developed Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=0.73"
 Flow Length=706' Tc=23.7 min CN=77 Runoff=7.92 cfs 0.776 af

Subcatchment P-2: Post-Developed Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=0.60"
 Flow Length=584' Tc=33.0 min CN=74 Runoff=7.15 cfs 0.892 af

Subcatchment P-3: Post-Developed Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=0.56"
 Tc=6.0 min CN=73 Runoff=5.13 cfs 0.285 af

Reach Ex Swale: Existing Swale in Wooded Avg. Flow Depth=0.23' Max Vel=1.28 fps Inflow=7.41 cfs 0.921 af
 n=0.100 L=930.0' S=0.0587 '/ Capacity=1,364.99 cfs Outflow=6.45 cfs 0.921 af

Reach Post: Post Developed With Controls Inflow=5.19 cfs 2.096 af
 Outflow=5.19 cfs 2.096 af

Pond DB1: Dry Basin 1 Peak Elev=1,026.45' Storage=49,570 cf Inflow=13.15 cfs 1.817 af
 Primary=0.87 cfs 1.811 af Secondary=0.00 cfs 0.000 af Outflow=0.87 cfs 1.811 af

Pond FB1: Forebay 1 Peak Elev=1,033.25' Storage=1,421 cf Inflow=8.59 cfs 0.893 af
 Outflow=8.47 cfs 0.893 af

Total Runoff Area = 38.881 ac Runoff Volume = 2.102 af Average Runoff Depth = 0.65"
84.84% Pervious = 32.985 ac 15.16% Impervious = 5.896 ac

2024-02-05_RiversideVista_Post_Dev_With_Offsite

MSE 24-hr 4 1-Year Rainfall=2.49"

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Page 3

Summary for Subcatchment OS-1: Existing Off Site Drainage

Runoff = 0.26 cfs @ 12.50 hrs, Volume= 0.029 af, Depth= 0.99"
 Routed to Reach Ex Swale : Existing Swale in Wooded Area

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 MSE 24-hr 4 1-Year Rainfall=2.49"

Area (ac)	CN	Description
0.191	92	Paved roads w/open ditches, 50% imp, HSG C
* 0.161	71	>75% Grass cover, Good, HSG C
0.352	82	Weighted Average
0.256		72.87% Pervious Area
0.095		27.13% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.9	300	0.1193	0.19		Sheet Flow, Through Wooded Area
					Woods: Light underbrush n= 0.400 P2= 2.84"
6.1	284	0.0977	0.78		Shallow Concentrated Flow, Through Wooded Area
					Forest w/Heavy Litter Kv= 2.5 fps
33.0	584	Total			

Summary for Subcatchment OS-2: Existing Off Site Drainage

Runoff = 0.90 cfs @ 12.59 hrs, Volume= 0.117 af, Depth= 0.73"
 Routed to Pond FB1 : Forebay 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 MSE 24-hr 4 1-Year Rainfall=2.49"

Area (ac)	CN	Description
0.163	92	Paved roads w/open ditches, 50% imp, HSG C
* 1.106	78	Row crops, straight row, Good, HSG C
* 0.250	71	>75% Grass cover, Good, HSG C
0.387	70	Woods, Good, HSG C
1.906	77	Weighted Average
1.824		95.72% Pervious Area
0.081		4.28% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
34.3	300	0.0648	0.15		Sheet Flow, Through Dense Prairie and Wooded Area
					Woods: Light underbrush n= 0.400 P2= 2.84"
3.8	471	0.0861	2.05		Shallow Concentrated Flow, Through Wooded Area then Lawns
					Short Grass Pasture Kv= 7.0 fps
0.3					Direct Entry, Through Road Ditch, Culvert then Lawn
38.4	771	Total			

2024-02-05_RiversideVista_Post_Dev_With_Offsite

MSE 24-hr 4 1-Year Rainfall=2.49"

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Page 4

Summary for Subcatchment OS-3: Existing Off Site Drainage

Runoff = 0.03 cfs @ 12.30 hrs, Volume= 0.003 af, Depth= 0.45"
 Routed to Pond DB1 : Dry Basin 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 MSE 24-hr 4 1-Year Rainfall=2.49"

Area (ac)	CN	Description
0.061	70	Woods, Good, HSG C
* 0.024	71	>75% Grass cover, Good, HSG C
0.085	70	Weighted Average
0.085		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.6	300	0.1244	0.28		Sheet Flow, Through Wooded Area and then Prairie Grass: Dense n= 0.240 P2= 2.84"

Summary for Subcatchment P-1: Post-Developed

Runoff = 7.92 cfs @ 12.36 hrs, Volume= 0.776 af, Depth= 0.73"
 Routed to Pond FB1 : Forebay 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 MSE 24-hr 4 1-Year Rainfall=2.49"

Area (ac)	CN	Description
1.033	98	Roofs, HSG C
* 0.620	98	Driveways, HSG C
* 0.517	98	Sidewalks/Patios/Decks, HSG C
0.566	92	Paved roads w/open ditches, 50% imp, HSG C
0.138	98	Water Surface, HSG C
* 6.521	71	>75% Grass cover, Good, HSG C
2.177	70	Woods, Good, HSG C
* 1.121	71	Pasture/grassland/range, Good, HSG C
12.693	77	Weighted Average
10.102		79.59% Pervious Area
2.591		20.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
21.9	300	0.0719	0.23		Sheet Flow, Through Small Wooded Area and Lawn Grass: Dense n= 0.240 P2= 2.84"
1.5	406	0.0874	4.43		Shallow Concentrated Flow, Through lawn Grassed Waterway Kv= 15.0 fps
0.3					Direct Entry, Road Ditch, Culvert and Grassed Waterway
23.7	706	Total			

2024-02-05_RiversideVista_Post_Dev_With_Offsite

MSE 24-hr 4 1-Year Rainfall=2.49"

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Page 5

Summary for Subcatchment P-2: Post-Developed

Runoff = 7.15 cfs @ 12.51 hrs, Volume= 0.892 af, Depth= 0.60"
 Routed to Reach Ex Swale : Existing Swale in Wooded Area

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 MSE 24-hr 4 1-Year Rainfall=2.49"

Area (ac)	CN	Description
1.095	98	Roofs, HSG C
* 0.344	98	Driveways, HSG C
* 0.517	98	Sidewalks/Patios/Decks, HSG C
0.185	92	Paved roads w/open ditches, 50% imp, HSG C
0.459	98	Water Surface, HSG C
* 4.141	71	>75% Grass cover, Good, HSG C
10.410	70	Woods, Good, HSG C
* 0.607	71	Pasture/grassland/range, Good, HSG C
17.758	74	Weighted Average
15.251		85.88% Pervious Area
2.508		14.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.9	300	0.1193	0.19		Sheet Flow, Through Wooded Area
					Woods: Light underbrush n= 0.400 P2= 2.84"
6.1	284	0.0977	0.78		Shallow Concentrated Flow, Through Wooded Area
					Forest w/Heavy Litter Kv= 2.5 fps
33.0	584	Total			

Summary for Subcatchment P-3: Post-Developed

Runoff = 5.13 cfs @ 12.14 hrs, Volume= 0.285 af, Depth= 0.56"
 Routed to Reach Post : Post Developed With Controls

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 MSE 24-hr 4 1-Year Rainfall=2.49"

Area (ac)	CN	Description
0.275	98	Roofs, HSG C
* 0.207	98	Driveways, HSG C
* 0.138	98	Sidewalks/Patios/Decks, HSG C
* 3.273	71	>75% Grass cover, Good, HSG C
2.194	70	Woods, Good, HSG C
6.087	73	Weighted Average
5.467		89.81% Pervious Area
0.620		10.19% Impervious Area

2024-02-05_RiversideVista_Post_Dev_With_Offsite

MSE 24-hr 4 1-Year Rainfall=2.49"

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Page 6

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

Summary for Reach Ex Swale: Existing Swale in Wooded Area

Inflow Area = 18.110 ac, 14.37% Impervious, Inflow Depth = 0.61" for 1-Year event
 Inflow = 7.41 cfs @ 12.51 hrs, Volume= 0.921 af
 Outflow = 6.45 cfs @ 12.67 hrs, Volume= 0.921 af, Atten= 13%, Lag= 9.5 min
 Routed to Pond DB1 : Dry Basin 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 Max. Velocity= 1.28 fps, Min. Travel Time= 12.1 min
 Avg. Velocity = 0.51 fps, Avg. Travel Time= 30.6 min

Peak Storage= 4,675 cf @ 12.67 hrs
 Average Depth at Peak Storage= 0.23' , Surface Width= 23.68'
 Bank-Full Depth= 4.00' Flow Area= 208.0 sf, Capacity= 1,364.99 cfs

20.00' x 4.00' deep channel, n= 0.100 Earth, dense brush, high stage
 Side Slope Z-value= 8.0 '/' Top Width= 84.00'
 Length= 930.0' Slope= 0.0587 '/'
 Inlet Invert= 1,083.37', Outlet Invert= 1,028.80'



Summary for Reach Post: Post Developed With Controls

Inflow Area = 38.881 ac, 15.16% Impervious, Inflow Depth > 0.65" for 1-Year event
 Inflow = 5.19 cfs @ 12.14 hrs, Volume= 2.096 af
 Outflow = 5.19 cfs @ 12.14 hrs, Volume= 2.096 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Summary for Pond DB1: Dry Basin 1

Inflow Area = 32.794 ac, 16.09% Impervious, Inflow Depth = 0.66" for 1-Year event
 Inflow = 13.15 cfs @ 12.53 hrs, Volume= 1.817 af
 Outflow = 0.87 cfs @ 17.55 hrs, Volume= 1.811 af, Atten= 93%, Lag= 301.4 min
 Primary = 0.87 cfs @ 17.55 hrs, Volume= 1.811 af
 Routed to Reach Post : Post Developed With Controls
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Reach Post : Post Developed With Controls

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

2024-02-05_RiversideVista_Post_Dev_With_Offsite

MSE 24-hr 4 1-Year Rainfall=2.49"

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Page 7

Peak Elev= 1,026.45' @ 17.55 hrs Surf.Area= 15,523 sf Storage= 49,570 cf

Plug-Flow detention time= 708.5 min calculated for 1.811 af (100% of inflow)

Center-of-Mass det. time= 706.6 min (1,594.4 - 887.8)

Volume	Invert	Avail.Storage	Storage Description
#1	1,022.00'	2,296,353 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,022.00	5,836	0	0
1,023.00	8,817	7,327	7,327
1,024.00	10,950	9,884	17,210
1,025.00	12,732	11,841	29,051
1,026.00	14,619	13,676	42,727
1,027.00	16,611	15,615	58,342
1,028.00	18,706	17,659	76,000
1,029.00	22,000	20,353	96,353
1,129.00	22,000	2,200,000	2,296,353

Device	Routing	Invert	Outlet Devices
#1	Primary	1,022.00'	6.0" Round Culvert L= 60.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,022.00' / 1,020.00' S= 0.0333 1/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Device 1	1,022.00'	4.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	1,027.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	1,028.00'	45.0' long x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.87 cfs @ 17.55 hrs HW=1,026.45' TW=0.00' (Dynamic Tailwater)

- ↑ 1=Culvert (Passes 0.87 cfs of 1.53 cfs potential flow)
- ↑ 2=Orifice/Grate (Orifice Controls 0.87 cfs @ 9.97 fps)
- ↑ 3=Orifice/Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,022.00' TW=0.00' (Dynamic Tailwater)

- ↑ 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond FB1: Forebay 1

Inflow Area = 14.599 ac, 18.31% Impervious, Inflow Depth = 0.73" for 1-Year event
 Inflow = 8.59 cfs @ 12.38 hrs, Volume= 0.893 af
 Outflow = 8.47 cfs @ 12.42 hrs, Volume= 0.893 af, Atten= 1%, Lag= 2.2 min
 Primary = 8.47 cfs @ 12.42 hrs, Volume= 0.893 af
 Routed to Pond DB1 : Dry Basin 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
 Peak Elev= 1,033.25' @ 12.42 hrs Surf.Area= 6,148 sf Storage= 1,421 cf

Plug-Flow detention time= 4.8 min calculated for 0.893 af (100% of inflow)

2024-02-05_RiversideVista_Post_Dev_With_Offsite

MSE 24-hr 4 1-Year Rainfall=2.49"

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Page 8

Center-of-Mass det. time= 4.8 min (871.0 - 866.2)

Volume	Invert	Avail.Storage	Storage Description
#1	1,033.00'	918,733 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,033.00	5,150	0	0
1,034.00	9,116	7,133	7,133
1,134.00	9,116	911,600	918,733

Device	Routing	Invert	Outlet Devices
#1	Primary	1,033.00'	25.0' long x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=8.47 cfs @ 12.42 hrs HW=1,033.25' TW=1,023.08' (Dynamic Tailwater)
 ↳ **1=Broad-Crested Rectangular Weir** (Weir Controls 8.47 cfs @ 1.35 fps)

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment OS-1: Existing Off Site Drainage Runoff Area=0.352 ac 27.13% Impervious Runoff Depth=1.25"
 Flow Length=584' Tc=33.0 min CN=82 Runoff=0.33 cfs 0.037 af

Subcatchment OS-2: Existing Off Site Drainage Runoff Area=1.906 ac 4.28% Impervious Runoff Depth=0.96"
 Flow Length=771' Tc=38.4 min CN=77 Runoff=1.22 cfs 0.153 af

Subcatchment OS-3: Existing Off Site Drainage Runoff Area=0.085 ac 0.00% Impervious Runoff Depth=0.63"
 Flow Length=300' Slope=0.1244 '/ Tc=17.6 min CN=70 Runoff=0.05 cfs 0.004 af

Subcatchment P-1: Post-Developed Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=0.96"
 Flow Length=706' Tc=23.7 min CN=77 Runoff=10.69 cfs 1.017 af

Subcatchment P-2: Post-Developed Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=0.81"
 Flow Length=584' Tc=33.0 min CN=74 Runoff=10.05 cfs 1.196 af

Subcatchment P-3: Post-Developed Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=0.76"
 Tc=6.0 min CN=73 Runoff=7.20 cfs 0.386 af

Reach Ex Swale: Existing Swale in Wooded Avg. Flow Depth=0.29' Max Vel=1.46 fps Inflow=10.38 cfs 1.233 af
 n=0.100 L=930.0' S=0.0587 '/ Capacity=1,364.99 cfs Outflow=9.31 cfs 1.233 af

Reach Post: Post Developed With Controls Inflow=7.37 cfs 2.786 af
 Outflow=7.37 cfs 2.786 af

Pond DB1: Dry Basin 1 Peak Elev=1,027.31' Storage=63,517 cf Inflow=18.65 cfs 2.407 af
 Primary=1.68 cfs 2.400 af Secondary=0.00 cfs 0.000 af Outflow=1.68 cfs 2.400 af

Pond FB1: Forebay 1 Peak Elev=1,033.31' Storage=1,768 cf Inflow=11.58 cfs 1.170 af
 Outflow=11.44 cfs 1.170 af

Total Runoff Area = 38.881 ac Runoff Volume = 2.793 af Average Runoff Depth = 0.86"
84.84% Pervious = 32.985 ac 15.16% Impervious = 5.896 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment OS-1: Existing Off Site Drainage Runoff Area=0.352 ac 27.13% Impervious Runoff Depth=2.28"
 Flow Length=584' Tc=33.0 min CN=82 Runoff=0.61 cfs 0.067 af

Subcatchment OS-2: Existing Off Site Drainage Runoff Area=1.906 ac 4.28% Impervious Runoff Depth=1.88"
 Flow Length=771' Tc=38.4 min CN=77 Runoff=2.48 cfs 0.299 af

Subcatchment OS-3: Existing Off Site Drainage Runoff Area=0.085 ac 0.00% Impervious Runoff Depth=1.39"
 Flow Length=300' Slope=0.1244 '/ S Tc=17.6 min CN=70 Runoff=0.12 cfs 0.010 af

Subcatchment P-1: Post-Developed Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=1.88"
 Flow Length=706' Tc=23.7 min CN=77 Runoff=21.76 cfs 1.991 af

Subcatchment P-2: Post-Developed Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=1.66"
 Flow Length=584' Tc=33.0 min CN=74 Runoff=22.00 cfs 2.460 af

Subcatchment P-3: Post-Developed Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=1.59"
 Tc=6.0 min CN=73 Runoff=15.72 cfs 0.808 af

Reach Ex Swale: Existing Swale in Wooded Avg. Flow Depth=0.46' Max Vel=1.95 fps Inflow=22.60 cfs 2.527 af
 n=0.100 L=930.0' S=0.0587 '/ S Capacity=1,364.99 cfs Outflow=21.26 cfs 2.527 af

Reach Post: Post Developed With Controls Inflow=25.99 cfs 5.626 af
 Outflow=25.99 cfs 5.626 af

Pond DB1: Dry Basin 1 Peak Elev=1,028.32' Storage=82,248 cf Inflow=41.42 cfs 4.827 af
 Primary=1.84 cfs 3.209 af Secondary=22.42 cfs 1.609 af Outflow=24.26 cfs 4.818 af

Pond FB1: Forebay 1 Peak Elev=1,033.49' Storage=3,020 cf Inflow=23.64 cfs 2.290 af
 Outflow=23.36 cfs 2.290 af

Total Runoff Area = 38.881 ac Runoff Volume = 5.635 af Average Runoff Depth = 1.74"
84.84% Pervious = 32.985 ac 15.16% Impervious = 5.896 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment OS-1: Existing Off Site Drainage Runoff Area=0.352 ac 27.13% Impervious Runoff Depth=4.60"
 Flow Length=584' Tc=33.0 min CN=82 Runoff=1.22 cfs 0.135 af

Subcatchment OS-2: Existing Off Site Drainage Runoff Area=1.906 ac 4.28% Impervious Runoff Depth=4.06"
 Flow Length=771' Tc=38.4 min CN=77 Runoff=5.40 cfs 0.645 af

Subcatchment OS-3: Existing Off Site Drainage Runoff Area=0.085 ac 0.00% Impervious Runoff Depth=3.34"
 Flow Length=300' Slope=0.1244 '/ S Tc=17.6 min CN=70 Runoff=0.30 cfs 0.024 af

Subcatchment P-1: Post-Developed Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=4.06"
 Flow Length=706' Tc=23.7 min CN=77 Runoff=47.15 cfs 4.296 af

Subcatchment P-2: Post-Developed Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=3.75"
 Flow Length=584' Tc=33.0 min CN=74 Runoff=50.68 cfs 5.545 af

Subcatchment P-3: Post-Developed Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=3.64"
 Tc=6.0 min CN=73 Runoff=35.90 cfs 1.848 af

Reach Ex Swale: Existing Swale in Wooded Avg. Flow Depth=0.75' Max Vel=2.58 fps Inflow=51.91 cfs 5.680 af
 n=0.100 L=930.0' S=0.0587 '/ S Capacity=1,364.99 cfs Outflow=50.02 cfs 5.680 af

Reach Post: Post Developed With Controls Inflow=100.04 cfs 12.482 af
 Outflow=100.04 cfs 12.482 af

Pond DB1: Dry Basin 1 Peak Elev=1,028.84' Storage=92,934 cf Inflow=95.46 cfs 10.645 af
 Primary=1.92 cfs 3.580 af Secondary=91.84 cfs 7.054 af Outflow=93.75 cfs 10.633 af

Pond FB1: Forebay 1 Peak Elev=1,033.84' Storage=5,730 cf Inflow=51.41 cfs 4.941 af
 Outflow=50.83 cfs 4.941 af

Total Runoff Area = 38.881 ac Runoff Volume = 12.493 af Average Runoff Depth = 3.86"
84.84% Pervious = 32.985 ac 15.16% Impervious = 5.896 ac

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment OS-1: Existing Off Site Drainage Runoff Area=0.352 ac 27.13% Impervious Runoff Depth=5.41"
 Flow Length=584' Tc=33.0 min CN=82 Runoff=1.43 cfs 0.159 af

Subcatchment OS-2: Existing Off Site Drainage Runoff Area=1.906 ac 4.28% Impervious Runoff Depth=4.85"
 Flow Length=771' Tc=38.4 min CN=77 Runoff=6.43 cfs 0.770 af

Subcatchment OS-3: Existing Off Site Drainage Runoff Area=0.085 ac 0.00% Impervious Runoff Depth=4.06"
 Flow Length=300' Slope=0.1244 '/ S Tc=17.6 min CN=70 Runoff=0.37 cfs 0.029 af

Subcatchment P-1: Post-Developed Runoff Area=12.693 ac 20.41% Impervious Runoff Depth=4.85"
 Flow Length=706' Tc=23.7 min CN=77 Runoff=56.05 cfs 5.125 af

Subcatchment P-2: Post-Developed Runoff Area=17.758 ac 14.12% Impervious Runoff Depth=4.51"
 Flow Length=584' Tc=33.0 min CN=74 Runoff=60.95 cfs 6.670 af

Subcatchment P-3: Post-Developed Runoff Area=6.087 ac 10.19% Impervious Runoff Depth=4.40"
 Tc=6.0 min CN=73 Runoff=43.08 cfs 2.230 af

Reach Ex Swale: Existing Swale in Wooded Avg. Flow Depth=0.83' Max Vel=2.73 fps Inflow=62.38 cfs 6.829 af
 n=0.100 L=930.0' S=0.0587 '/ S Capacity=1,364.99 cfs Outflow=60.35 cfs 6.829 af

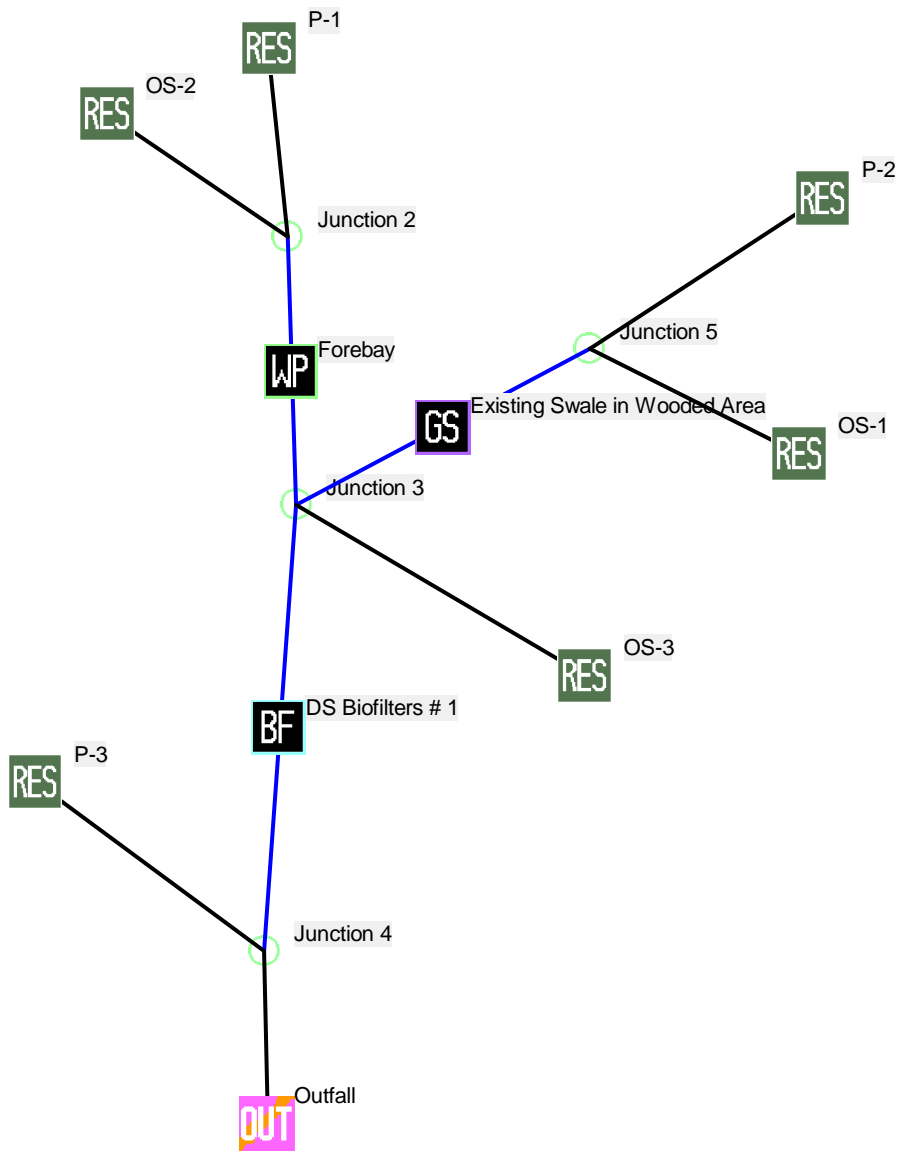
Reach Post: Post Developed With Controls Inflow=121.30 cfs 14.970 af
 Outflow=121.30 cfs 14.970 af

Pond DB1: Dry Basin 1 Peak Elev=1,028.96' Storage=95,487 cf Inflow=114.74 cfs 12.752 af
 Primary=1.93 cfs 3.653 af Secondary=111.49 cfs 9.088 af Outflow=113.42 cfs 12.741 af

Pond FB1: Forebay 1 Peak Elev=1,033.95' Storage=6,641 cf Inflow=61.16 cfs 5.894 af
 Outflow=60.50 cfs 5.894 af

Total Runoff Area = 38.881 ac Runoff Volume = 14.982 af Average Runoff Depth = 4.62"
84.84% Pervious = 32.985 ac 15.16% Impervious = 5.896 ac

Section 5: Sediment Reduction Calculations



Data file name: K:\Carrico Engineering\Projects\2023\230019 Coons Construction - Town of Verona Land\Design Development\Stormwater and Erosion Control\Modeling\Infiltration Modeling\2024-01-26_RiversideVista_Post_Dev.mdb
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Madison WI 1981.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.ppd
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
If Other Device Pollutant Load Reduction Values = 1, Off-site Pollutant Loads are Removed from Pollutant Load % Reduction calculations
Seed for random number generator: -42
Study period starting date: 01/01/81 Study period ending date: 12/31/81
Date: 02-05-2024 Time: 12:20:17
Site information:

LU# 1 - Residential: P-1 Total area (ac): 12.693
1 - Roofs 1: 1.033 ac. Pitched Disconnected Normal Clayey Low Density Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.620 ac. Connected Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.517 ac. Disconnected Normal Clayey Low Density Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
37 - Streets 1: 0.566 ac. Smooth Street Length = 0.334 curb-mi Street Width (assuming two curb-mi per street mile) = 27.96108 ft
Default St. Dirt Accum. Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 6.521 ac. Normal Clayey Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
46 - Large Landscaped Areas 2: 1.121 ac. Normal Clayey Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
57 - Undeveloped Areas 1: 2.177 ac. Normal Clayey Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
70 - Water Body Areas: 0.138 ac. Source Area PSD File:

LU# 2 - Residential: P-3 Total area (ac): 6.087
1 - Roofs 1: 0.275 ac. Pitched Disconnected Normal Clayey Low
Density Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.207 ac. Disconnected Normal Clayey Low Density
Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.138 ac. Disconnected Normal Clayey Low Density
Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 3.273 ac. Normal Clayey Source Area PSD
File: C:\WinSLAMM Files\NURP.cpz
57 - Undeveloped Areas 1: 2.194 ac. Normal Clayey Source Area PSD File:
C:\WinSLAMM Files\NURP.cpz

LU# 3 - Residential: P-2 Total area (ac): 17.758
1 - Roofs 1: 1.095 ac. Pitched Disconnected Normal Clayey Low
Density Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
25 - Driveways 1: 0.344 ac. Connected Source Area PSD File: C:\WinSLAMM
Files\NURP.cpz
31 - Sidewalks 1: 0.517 ac. Disconnected Normal Clayey Low Density
Source Area PSD File: C:\WinSLAMM Files\NURP.cpz
37 - Streets 1: 0.185 ac. Smooth Street Length = 0.109 curb-mi Street
Width (assuming two curb-mi per street mile) = 28.00459 ft
Default St. Dirt Accum. Source Area PSD File: C:\WinSLAMM
Files\NURP.cpz
45 - Large Landscaped Areas 1: 4.141 ac. Normal Clayey Source Area PSD
File: C:\WinSLAMM Files\NURP.cpz
51 - Small Landscaped Areas 1: 0.607 ac. Normal Clayey Source Area PSD
File: C:\WinSLAMM Files\NURP.cpz
57 - Undeveloped Areas 1: 10.410 ac. Normal Clayey Source Area PSD File:
C:\WinSLAMM Files\NURP.cpz
70 - Water Body Areas: 0.459 ac. Source Area PSD File:

LU# 4 - Residential: OS-2 Total area (ac): 1.906
37 - Streets 1: 0.163 ac. Smooth Street Length = 0.096 curb-mi Street
Width (assuming two curb-mi per street mile) = 28.01563 ft
Default St. Dirt Accum. Source Area PSD File: C:\WinSLAMM
Files\NURP.cpz OD-CP#6
45 - Large Landscaped Areas 1: 1.106 ac. Normal Clayey Source Area PSD
File: C:\WinSLAMM Files\NURP.cpz OD-CP#7
51 - Small Landscaped Areas 1: 0.250 ac. Normal Clayey Source Area PSD
File: C:\WinSLAMM Files\NURP.cpz OD-CP#8
57 - Undeveloped Areas 1: 0.387 ac. Normal Clayey Source Area PSD File:
C:\WinSLAMM Files\NURP.cpz OD-CP#9

LU# 5 - Residential: OS-1 Total area (ac): 0.352
37 - Streets 1: 0.191 ac. Smooth Street Length = 0.113 curb-mi Street
Width (assuming two curb-mi per street mile) = 27.88938 ft
Default St. Dirt Accum. Source Area PSD File: C:\WinSLAMM
Files\NURP.cpz OD-CP#4

51 - Small Landscaped Areas 1: 0.161 ac. Normal Clayey Source Area PSD
 File: C:\WinSLAMM Files\NURP.cpz OD-CP#5

LU# 6 - Residential: OS-3 Total area (ac): 0.085
 51 - Small Landscaped Areas 1: 0.024 ac. Normal Clayey Source Area PSD
 File: C:\WinSLAMM Files\NURP.cpz OD-CP#10
 57 - Undeveloped Areas 1: 0.061 ac. Normal Clayey Source Area PSD File:
 C:\WinSLAMM Files\NURP.cpz OD-CP#11

Control Practice 1: Wet Detention Pond CP# 1 (DS) - Forebay
 Particle Size Distribution file name: Not needed - calculated by program
 Initial stage elevation (ft): 5
 Peak to Average Flow Ratio: 3.8
 Maximum flow allowed into pond (cfs): No maximum value entered
 Outlet Characteristics:

Outlet type: Broad Crested Weir
 1. Weir crest length (ft): 25
 2. Weir crest width (ft): 20
 3. Height from datum to bottom of weir opening: 4

Pond stage and surface area

(cfs)	Entry Number	Stage (ft)	Pond Area (acres)	Natural Seepage (in/hr)	Other Outflow
	0	0.00	0.0000	0.00	
0.00	1	0.01	0.0386	0.00	
0.00	2	0.10	0.0400	0.00	
0.00	3	1.00	0.0545	0.00	
0.00	4	2.00	0.0733	0.00	
0.00	5	3.00	0.0946	0.00	
0.00	6	4.00	0.1182	0.00	
0.00	7	5.00	0.2093	0.00	

Control Practice 2: Biofilter CP# 1 (DS) - DS Biofilters # 1
 1. Top area (square feet) = 20245
 2. Bottom area (square feet) = 3957
 3. Depth (ft): 8.5
 4. Biofilter width (ft) - for Cost Purposes Only: 10
 5. Infiltration rate (in/hr) = 0.13

Control Practice 5: Other Device CP# 2 (SA) - SA Device, LU# 5 , SA# 51

Fraction of drainage area served by device (ac) = 1.00

Particulate Concentration reduction fraction = 1.00

Filterable Concentration reduction fraction = 0.00

Runoff volume reduction fraction = 0

Control Practice 6: Other Device CP# 3 (SA) - SA Device, LU# 4 , SA# 37

Fraction of drainage area served by device (ac) = 1.00

Particulate Concentration reduction fraction = 1.00

Filterable Concentration reduction fraction = 0.00

Runoff volume reduction fraction = 0

Control Practice 7: Other Device CP# 4 (SA) - SA Device, LU# 4 , SA# 45

Fraction of drainage area served by device (ac) = 1.00

Particulate Concentration reduction fraction = 1.00

Filterable Concentration reduction fraction = 0.00

Runoff volume reduction fraction = 0

Control Practice 8: Other Device CP# 5 (SA) - SA Device, LU# 4 , SA# 51

Fraction of drainage area served by device (ac) = 1.00

Particulate Concentration reduction fraction = 1.00

Filterable Concentration reduction fraction = 0.00

Runoff volume reduction fraction = 0

Control Practice 9: Other Device CP# 6 (SA) - SA Device, LU# 4 , SA# 57

Fraction of drainage area served by device (ac) = 1.00

Particulate Concentration reduction fraction = 1.00

Filterable Concentration reduction fraction = 0.00

Runoff volume reduction fraction = 0

Control Practice 10: Other Device CP# 7 (SA) - SA Device, LU# 6 , SA# 51

Fraction of drainage area served by device (ac) = 1.00

Particulate Concentration reduction fraction = 1.00

Filterable Concentration reduction fraction = 0.00

Runoff volume reduction fraction = 0

Control Practice 11: Other Device CP# 8 (SA) - SA Device, LU# 6 , SA# 57

Fraction of drainage area served by device (ac) = 1.00

Particulate Concentration reduction fraction = 1.00

Filterable Concentration reduction fraction = 0.00

Runoff volume reduction fraction = 0

Basin - Sediment Trapping Efficiency Worksheet - Stokes Law

Project: Riverside Vista - Dry Detention Basin
 Designer: Adam Carrico, PE (Carrico Engineering)

Basin Routing and Hydrology

1 Year Peak Flow Rate	0.87 cfs
1 Year Peak Elevation	1026.45 ft
Storage Volume at 1 yr Peak Elevation	55,268 cf
Outlet Invert Elevation	1022 ft

Settling Calculations

Settling Time (Peak Volume/Peak Discharge)	63,526 s
Settling Distance (Peak Elevation - Outfall Invert)	4.45 ft
Critical Settling Velocity (Settling Distance/ Settling Time)	0.000070 ft/s

Particle Settling Velocities

5 Micron Particle Settling Velocity - 80%	0.000073 ft/s
9 Micron Particle Settling Velocity - 60%	0.00023 ft/s
20 Micron Particle Settling Velocity - 40%	0.0012 ft/s

Results

Basin is designed to achieve 80% sediment removal efficiency

Large Volume Conversion

acre-ft	cubic ft
20	871200

Settling Time

Seconds	minutes	hours
63,526	1059	17.6

Proximity Check

-0.000003
 -0.000160
 -0.001130

Section 6: Infiltration Calculations

Post-Developed Conditions

Stay On: 26.77 inches

Required to Infiltrate 100% of 26.64 inches or 26.64 inches minimum

Achieving 26.77 inches → Performance Standard Met

Element Name:

Land Uses				Junctions			
Runoff Volume (cf)				Part: Solids Yield (lbs)			
Data File: K:\Carrico Engineering\Projects\2023\230019 Coons Construction - Town of Verona Land\Design Development\Stc							
Rain File: WisReg - Madison WI 1981.RAN							
Date: 02-05-24 Time: 12:32:23 PM							
Site Description:							
Runoff Volume Total (cf) at the Outfall							
Rain Number	Start Date	Rain Total (in)	Outfall Total (cf)	Rv	Total Losses (in.)	Calculated CN*	Event Peak Flow (cfs)
73	08/28/81	0.04	0.4040	0.000	0.04	98.1	0.000
74	08/31/81	0.03	2.765	0.001	0.03	98.6	0.000
75	08/31/81	1.52	21870	0.102	1.37	74.0	0.259
76	09/07/81	0.89	7864	0.063	0.83	80.3	0.220
77	09/11/81	0.08	18.57	0.002	0.08	96.5	0.000
78	09/16/81	0.03	2.679	0.001	0.03	98.6	0.000
79	09/21/81	0.45	467.5	0.007	0.45	84.4	0.030
80	09/24/81	0.90	6226	0.049	0.86	78.9	0.047
81	09/26/81	0.12	6.654	0.000	0.12	94.6	0.000
82	09/28/81	0.10	24.82	0.002	0.10	95.6	0.000
83	09/29/81	0.16	44.76	0.002	0.16	93.3	0.000
84	09/30/81	0.36	1689	0.033	0.35	89.5	0.133
85	10/01/81	0.01	0.002598	0.000	0.01	99.5	0.000
86	10/04/81	0.15	41.35	0.002	0.15	93.6	0.000
87	10/05/81	0.04	7.745	0.001	0.04	98.2	0.000
88	10/05/81	0.02	1.460	0.001	0.02	99.1	0.000
89	10/09/81	0.14	38.21	0.002	0.14	94.0	0.000
90	10/13/81	1.20	12818	0.076	1.11	76.3	0.140
91	10/15/81	0.02	0.01965	0.000	0.02	99.0	0.000
92	10/17/81	0.95	9843	0.073	0.88	80.1	0.155
93	10/18/81	0.06	2.949	0.000	0.06	97.2	0.000
94	10/21/81	0.06	12.54	0.001	0.06	97.3	0.000
95	10/21/81	0.01	0.5795	0.000	0.01	99.5	0.000
96	10/24/81	0.01	0.5796	0.000	0.01	99.5	0.000
97	10/31/81	0.01	0.5799	0.000	0.01	99.5	0.000
98	11/05/81	0.04	7.736	0.001	0.04	98.2	0.000
99	11/15/81	0.07	15.19	0.002	0.07	96.9	0.000
100	11/18/81	0.05	10.09	0.001	0.05	97.8	0.000
101	11/19/81	0.26	127.0	0.003	0.26	89.8	0.001
102	11/23/81	0.18	50.88	0.002	0.18	92.5	0.000
103	11/25/81	0.89	5137	0.041	0.85	78.3	0.052
104	11/30/81	0.37	310.9	0.006	0.37	86.6	0.006
105	12/03/81	-	-	-	-	-	-
106	12/14/81	-	-	-	-	-	-
107	12/20/81	-	-	-	-	-	-
108	12/26/81	-	-	-	-	-	-
109	12/31/81	-	-	-	-	-	-
Minimum:		0.00	0	0.000	0.01	71.1	0.000
Maximum:		2.59	76410	0.209	2.05	99.5	1.174
Average:		0.26	2692	0.015	0.25	75.8	0.602
Total:		28.81	293434				

* Note: NRCS does not recommend using CN method for rains < 0.5 in.
See 'PreDevelopment Areas and CN' Help for more info.

Land Use #	Land Use Type	Land Use Label	Land Use Area (acres)
1	Residential	P-1	12.693
2	Residential	P-3	6.087
3	Residential	P-2	17.758
4	Residential	OS-2	1.906
5	Residential	OS-1	0.352
6	Residential	OS-3	0.085

CP #	Control Practice Type	Control Practice Name or Location
1	Wet Detention Pond	Forebay
2	Biofilter	DS Biofilters # 1
3	Grass Swales	Existing Swale in Wooded Area
4	Other Device	SA Device, LU# 5 ,SA# 37
5	Other Device	SA Device, LU# 5 ,SA# 51
6	Other Device	SA Device, LU# 4 ,SA# 37
7	Other Device	SA Device, LU# 4 ,SA# 45
8	Other Device	SA Device, LU# 4 ,SA# 51
9	Other Device	SA Device, LU# 4 ,SA# 57
10	Other Device	SA Device, LU# 6 ,SA# 51
11	Other Device	SA Device, LU# 6 ,SA# 57

Current File Data Entered | Total Area = 38.881 acres | Upstream Drainage Area = 0.000 acres | Icon Number | Index Number = | Icons Left = | Start Date: 01/01/81 | End Date: 12/31/81 | X

Section 7: Erosion Control Calculations

Section 8: Shear Stress Calculations

Section 9: Culvert and Riprap Sizing Calculations

Project Name: Riverside Vista Culverts
 Exhibit: Culvert Sizing Worksheet
 Date: February 5, 2024
 Title: Storm Sewer Sizing
 Storm Event: 25
 Mannings Number:

CMP General 0.025
 HDPE Corrugated 0.020
 HDPE Smooth 0.013
 RCP 0.011
 PVC 0.010

C (Pervious): 0.25
 C (Impervious): 0.95
 500 Year / 24 Hr Max. Rainfall = 500 8.94 inches
 200 Year / 24 Hr Max. Rainfall = 200 7.53 inches
 100 Year / 24 Hr Max. Rainfall = 100 6.66 inches
 50 Year / 24 Hr Max. Rainfall = 50 5.8 inches
 25 Year / 24 Hr Max. Rainfall = 25 5.01 inches
 10 Year / 24 Hr Max. Rainfall = 10 4.09 inches
 5 Year / 24 Hr Max. Rainfall = 5 3.49 inches
 2 Year / 24 Hr Max. Rainfall = 2 2.84 inches
 1 Year / 24 Hr Max. Rainfall = 1 2.49 inches

Pipe Number	Pipe Run		Length (ft.)	Pipe Diameter (inches)	Slope (%)	Pipe Area (sq. ft.)	Hydraulic Radius (ft.)	Drainage Areas					Runoff Coef. c	Area x C		Time of Conc.		Rainfall Intensity (in/hr)	Total Runoff (cfs)	Design Capacity (cfs)	Percent Full (%)	Flow Factor	Flow Factor	Velocity (ft/sec)	HGL Slope (%)	Total Loss (ft.)	Upstream Rim Elev. (ft.)	10-Year HGL (ft.)	
	From	To						Imp.	Imp.	Perv.	Perv.	Total		Increment	Total	To Structure (min.)	Pipe (min.)												
P1	Area 1	Culvert	40	15	2.00	1.23	0.313	0.488	21,275	1,174	51,138	1,662	0.46	0.76	0.76	15.00	0.14	5.41	4.10	5.95	68.8%								
P2	Area 2	Culvert	50	18	1.00	1.77	0.375	1.319	57,450	5,369	233,857	6,687	0.39	2.60	2.60	20.00	0.12	4.56	11.83	12.45	95.0%								

NOTES:

$Q(\text{full}) = \frac{1.49 R^{2/3} S^{1/2} A}{n}$

Hydraulic Radius (R) = Area / Wetted Perimeter

S = slope of pipe

A = area of pipe

n = manning's number

$HGL \text{ Slope} = \frac{Q^2 n^2}{2.22 R^{4/3} A^2}$

Total Loss = $Q^2 n^2 L \frac{z^2 R^{4/3} A^2}{i} = 1.486$

$i = PR / Tc$

Headloss = $f (L/D)(V^2/2g)$

D = pipe diameter, ft.
 F = friction factor

Section 10: Exhibits

10.1 Waterway Review Letter from Dane County



Joe Parisi
Dane County Executive

Dane County Planning & Development

Division of Zoning

August 2, 2023

R & J ACRES LLC
8982 COUNTY HIGHWAY G
MT HOREB WI 53572

RE: Navigability Determination –Spring Rose Rd & Riverside Rd, Section 30, Town of Verona
Parcel: 0608-303-9000-8

The Dane County Zoning Division has processed your request for a navigability determination for an intermittent stream mapped on your property.

Before conducting the site inspection, the County G.I.S., aerial photography, and the Wisconsin Surface Water Data Viewer were used to determine the type and approximate location of the waterway. The map shows that there is an intermittent stream flowing north and northwest through the property. An intermittent stream is one that has a periodic or recurrent flow.

A site inspection was conducted on August 2, 2023. It was observed that no define bed or banks exist throughout the entire property.

After further review of the waterway, it has been determined is NOT navigable at any point up-stream of its intersection with County Highway G. Downstream evaluation from this point of intersection was out of scope with this determination and is therefore considered navigable. The enclosed map shows the portion determined to be non-navigable.

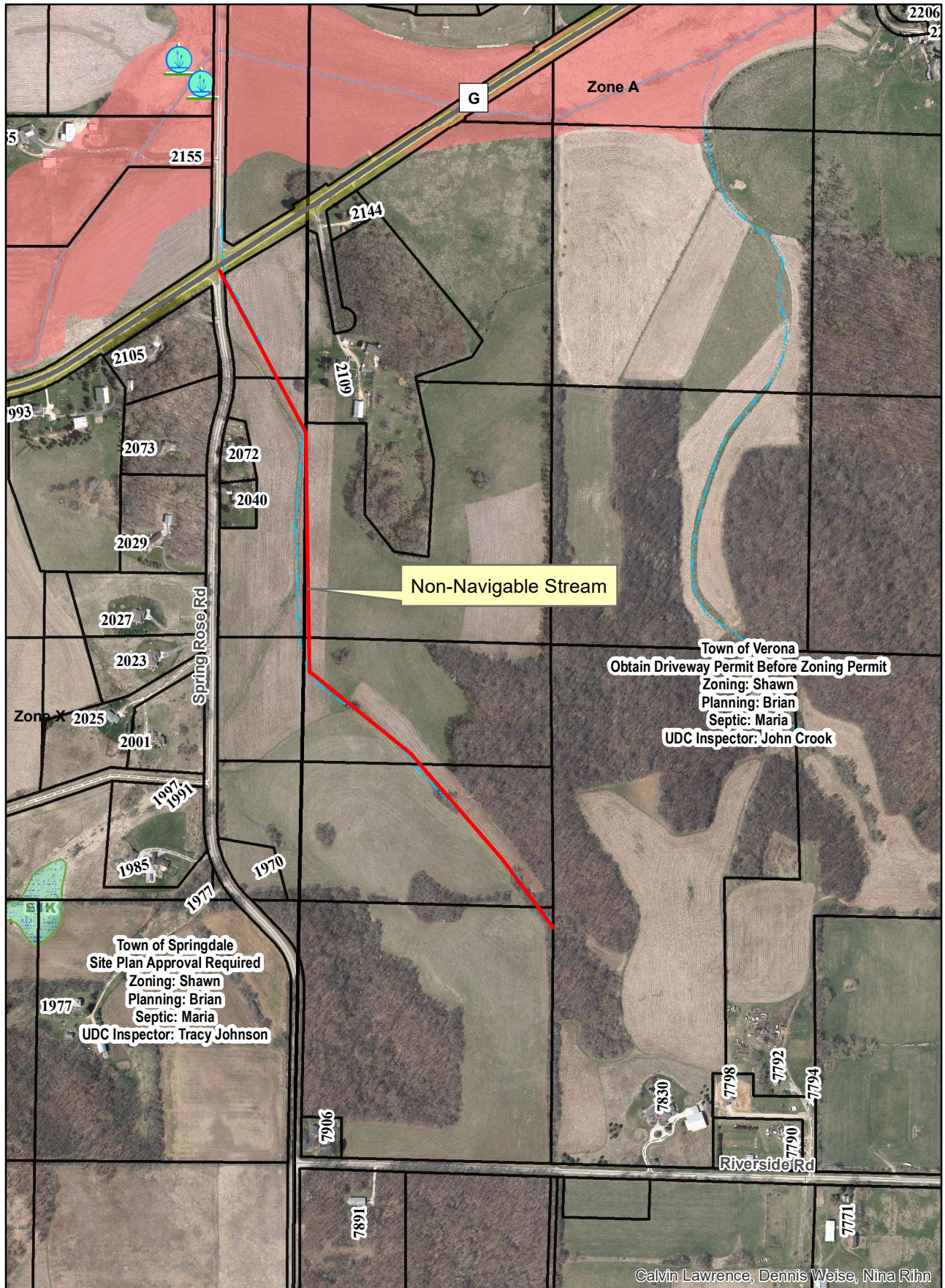
This letter serves as notice that the future development that will occur on the above-described parcel is not within the Shoreland Zoning District as defined under Chapter 11, Dane County Code of Ordinances.

I hope you find this information helpful. If you have any questions regarding this matter, or if I may be of further assistance, please feel free to contact me directly.

Sincerely,

Hans Hilbert
Assistant Zoning Administrator

Cc:
Land & Water Resources
Jim Coon, Coons Construction



Non-Navigable Stream

Town of Verona
Obtain Driveway Permit Before Zoning Permit
Zoning: Shawn
Planning: Brian
Septic: Maria
UDC Inspector: John Crook

Town of Springdale
Site Plan Approval Required
Zoning: Shawn
Planning: Brian
Septic: Maria
UDC Inspector: Tracy Johnson

10.2 Stormwater Maintenance Agreement

10.3 Pre-Developed Drainage Map

10.4 Post-Developed Drainage Map

10.5 Swale Drainage Map

10.6 Construction Plans



PRELIMINARY STEWARDSHIP PLAN
RIVERSIDE VISTA
Town of Verona, Wisconsin

Prepared For:

Coons Construction of Verona, LLC
Jim Coons
1827 Locust Drive
Verona, WI 53593

Prepared By:

Carrico Engineering and Consulting, Inc.
8177 County Road G
Verona, WI 53593

Prepared On:
February 7, 2024

Revised On:

Project # 230019

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Table of Contents

Description Page #

Section 1: Narrative

1.1	Introduction	3
1.2	Existing Conditions	3
1.3	Proposed End State.....	3
1.4	Proposed Restoration Measures.....	4
1.5	Managing and Maintenance of the Open Space.....	4
1.6	Total Estimated Costs of Maintenance for Budgeting.....	6

Section 2: Exhibits

2.1	Photos of Existing Conditions	
2.2	Outlot Trail System Map	
2.3	Recorded Stormwater Maintenance Agreement	

Section 1 – Narrative

1.1 Introduction

Riverside Vista is located in the Town of Verona northeast of the intersection of Riverside Road and Spring Rose Road. The development is comprised of 17 single-family residential homesites ranging in size from 1.20 to 1.89 acres and 1 large outlot of 12.21 acres. The Outlot is the basis for this Stewardship Plan.

The goal of this plan is to provide a framework for the Homeowner's Association to properly maintain the open space into perpetuity for the enjoyment of current and future homeowners. The stormwater maintenance area is included in the maintenance within the Stewardship plan and shall be maintained in accordance with the recorded stormwater maintenance agreement.

The outlot is owned by the members of the Homeowner's Association whereas the Association is responsible for the costs of maintenance according to this Stewardship Plan as per the Homeowner's Association Covenants. Maintenance costs shall be budgeted for according to the budget section of this document and as per the Covenants.

As per the Covenants, the Board of Directors shall appoint three Association Members to serve on a Stewardship Plan committee and serve two-year terms. The Committee shall use this document as a guide for maintaining the open space. Decisions on the plan and budget shall be subject to the Covenants.

1.2 Existing Conditions

The pre-developed state of the open space includes mainly wooded areas. The entire outlot is 532,056 sq. ft. (12.21 acres) where approximately 467,525 sq. ft. (10.73 acres) is wooded and approximately 8,000 sq. ft. (0.18 acres) is the stormwater basin.

The open space that is part of this plan that is not currently wooded is approximately 56,531 sq. ft. (1.30 acres).

Currently, the wooded area is primarily made up of non-high value trees such as boxelder, elm, etc. as the wooded area was logged at some point in the distant past. Additionally, the field area of the open space is currently a hay field that appears to have been planted several years ago with alfalfa but is now somewhat inundated with weeds.

See Exhibit 2.1 for photos of the existing state of the open space.

1.3 Proposed End State

The post-developed state of the outlot is intended to primarily focus on the trail(s) within the wooded area. The field area is not a significant portion of the open space and additionally serves as a drainage way from the development's road and residential lots to the stormwater facilities.

The Developer is a contractor and intends to utilize company equipment to clear and grub the trail system within the wooded area as depicted in Exhibit 2.2 of this document. Other than clearing an earthen path for the trail system and clearing/grubbing for the construction of the stormwater basins, there are no plans to alter the wooded area in any way. The goal is to keep the wooded area in its natural state.

In addition to the trail system within the wooded area, the open space field is planned to be planted with floristic prairie seed.

A shelter is planned at the northeast end of the open space with mowed trails within the planted prairie to reach the shelter.

1.4 Proposed Restoration Measures

As per Section 1.3, the developer shall bear the cost to create the trail network within the wooded area. The schedule for completion of the trail network is summer/fall of 2024.

Restoration of the open field area is planned to occur following the construction of the road and stormwater facilities. With the current open field inundated with weeds, the plan is to apply one application of glyphosate/surfactant, Ranger Pro prior to planting of the prairie. Additionally, mowed trails as shown on the Outlot Trail System Map will be implemented once the prairie is established and able to be mowed. The schedule for this task is subject to change depending on approvals for the development.

Finally, the gazebo/shelter will be constructed by the developer in the northeast corner of the open space of materials appropriate for an exterior park shelter. Construction of the shelter is planned for the Fall of 2024.

1.5 Managing and Maintenance of the Open Space

The following section describes the ongoing management and maintenance plan for the open space within Outlot 1 of Riverside Vista along with yearly estimates based on current year pricing. This plan may need to be revised in future years to adjust estimated pricing to current levels.

Managing and Maintenance of the Wooded Area

The trail system is the main focal point of the wooded area. There will be minor maintenance items to perform on a yearly basis for the trail system to operate as intended. The following is a list of anticipated tasks and estimates:

Mowing of vegetated growth within the trail system (yearly).....	\$500.00
Herbicide application within trail system (yearly)	\$500.00
Removal of downed or intrusive trees within trail system (as needed)	\$2,000.00
<hr/>	
Total Per Year	\$3,000.00

Managing and Maintenance of Prairie

Year 1

Site visit by ecological specialist three times during the first growing season. The field will be mowed using an all-wheel drive tractor and batwing mower. These three ecological mowing visits will be timed to control the weeds before they set seed while allowing sunlight down to developing native seedlings. Additionally, bimonthly mowing, at minimum, of the prairie trails beginning in May and ending in October are necessary to maintain walkability.

Three Mowing Visits (3 x \$500.00) \$1,500.00
Bimonthly mowing of Prairie Trails (12 x \$125.00..... \$1,500.00

Year 2

Site visit by ecological specialist three times during the second growing season. The field will be mowed 1-2 times depending on the density of the remaining weeds. The remaining visit(s) will be used to spot treat any pockets of invasive species with herbicide. Additionally, bimonthly mowing, at minimum, of the prairie trails beginning in May and ending in October are necessary to maintain walkability.

Three Visits (3 x \$600.00) \$1,800.00
Bimonthly mowing of Prairie Trails (12 x \$125.00..... \$1,500.00

Year 3

Site visit by ecological specialist three times during the third growing season. The field may be spot mowed if any large patches of weeds exist. The remaining visits will be spent targeting individual invasive species with herbicide. Additionally, bimonthly mowing, at minimum, of the prairie trails beginning in May and ending in October are necessary to maintain walkability.

Three Visits (3 x \$650.00) \$1,950.00
Bimonthly mowing of Prairie Trails (12 x \$125.00..... \$1,500.00

Year 4

Prescribed prairie burn by specialist. A specialist will contact necessary agencies prior to the burn, obtain proper permits and set up appropriate signs if applicable on the day of the burn. Additionally, bimonthly mowing, at minimum, of the prairie trails beginning in May and ending in October are necessary to maintain walkability.

Prescribed Burn..... \$2,000.00
Bimonthly mowing of Prairie Trails (12 x \$125.00..... \$1,500.00

Future Years

Yearly site visit to determine mowing, spot herbicide treatment or prescribed burn necessary to maintain the prairie. This estimate includes an estimate for a site visit and for prescribed maintenance activity. Additionally, bimonthly mowing, at minimum, of the prairie trails beginning in May and ending in October are necessary to maintain walkability.

Year 5 and Yearly Beyond	\$1,000.00
Bimonthly mowing of Prairie Trails (12 x \$125.00.....	\$1,500.00

Maintenance and Inspection of Stormwater Management Facility

As per the recorded stormwater maintenance agreement, a licensed professional engineer shall inspect the facility yearly. Maintenance for the stormwater facility is subject to the recommendations of the professional engineer based on the stormwater maintenance agreement. This estimate is provided as a basis for the HOA to budget for yearly inspection and maintenance costs.

Yearly Inspection by Professional Engineer	\$650.00
Estimated Yearly Maintenance for Budgeting	\$500.00
<hr/>	
Total	\$1,150.00

1.6 Total Estimated Yearly Maintenance Costs for Budgeting Purposes

Year 1.....	\$7,150.00
Year 2.....	\$7,450.00
Year 3.....	\$7,600.00
Year 4.....	\$7,650.00
Year 5 and Beyond.....	\$6,650.00

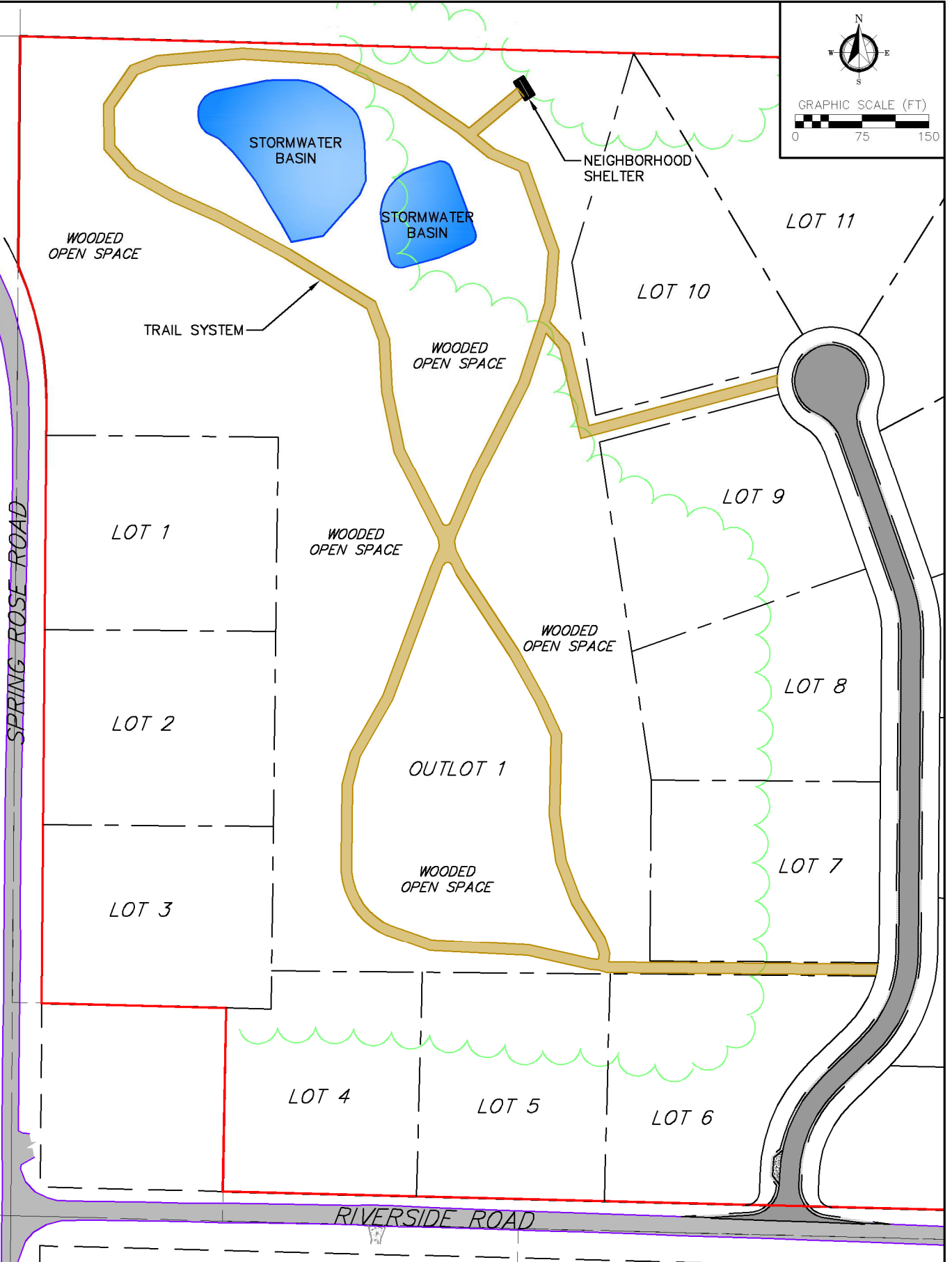
Exhibit 2.1 – Existing Conditions Photos







Exhibit 2.2 – Outlot Trail System Map



Carrico
Engineering

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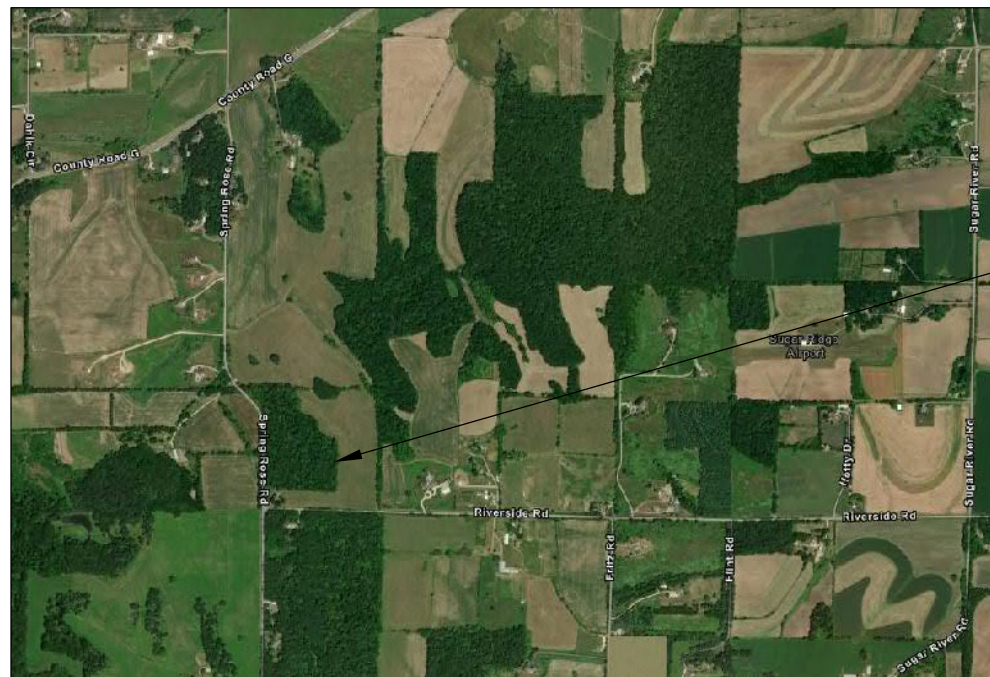
Outlot Trail System Map

SCALE	AS SHOWN	SHEET 1 OF 1
DATE	2/5/2024	
DRAFTER	ALC	
PROJECT NO.	230019	
REV		

Exhibit 2.3 – Recorded Stormwater Maintenance Agreement

RIVERSIDE VISTA IMPROVEMENT PLANS

TOWN OF VERONA, DANE COUNTY, WISCONSIN



PROJECT LOCATION

INDEX

SHEET NO.	STATIONS	DESCRIPTION
1		TITLE SHEET
2		GENERAL NOTES AND LEGENDS
3		EXISTING CONDITIONS PLAN
4		SITE PLAN
5		OVERALL GRADING AND EROSION CONTROL PLAN
6		INTERSECTION, CUL-DE-SAC & STORMWATER AREA GRADING PLAN
7	STA 0+00 - 5+50	PLAN AND PROFILE - RIVERSIDE VISTA WAY
8	STA 5+50 - 11+00	PLAN AND PROFILE - RIVERSIDE VISTA WAY
9	STA 20+00 - 25+00	PLAN AND PROFILE - STORMWATER BASINS
10	STA 1+00 - 5+00	CROSS SECTIONS
11	STA 5+50 - 8+00	CROSS SECTIONS
12	STA 8+50 - 9+50	CROSS SECTIONS
13	STA 10+00 - 10+50	CROSS SECTIONS
14		CONSTRUCTION DETAILS
15		CONSTRUCTION DETAILS
16		CONSTRUCTION DETAILS
17		CONSTRUCTION DETAILS



DIAL 811 OR (800) 242-8511

www.DiggersHotline.com

THE LOCATION OF ANY AND ALL EXISTING UTILITIES, INCLUDING UNDERGROUND AND OVERHEAD, SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ANY UTILITIES, WHETHER DEPICTED ON THE PLANS OR NOT, BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES THAT ARISE BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PROTECT ANY AND ALL UTILITIES.



Revisions		Revisions	
No.	Date	Description	No.

Scale:	AS SHOWN
Date:	2/5/2024
Drawn By:	ALC
Project No:	230019
Sheet No:	1 of 17

RIVERSIDE VISTA IMPROVEMENT PLANS

TOWN OF VERONA, DANE COUNTY, WISCONSIN

Revisions		Revisions	
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Scale: **AS SHOWN**

Date: **2/5/2024**

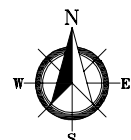
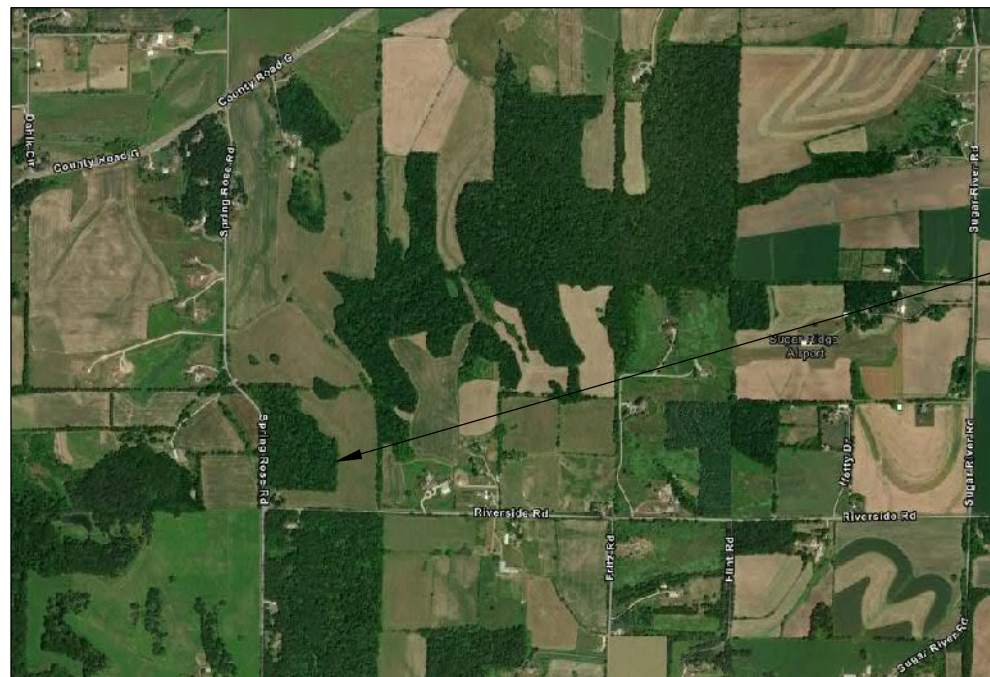
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Project No: **230019**

Sheet No: **1 of 17**

INDEX

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Digitally signed by Adam Carrico
DN: cn=Adam Carrico, c=US, o=Carrico Engineering
email=adam@carricoengineering.com
Reason: I am the author of this document
Date: 2024.02.04 23:31:13 -0600

PROJECT INFORMATION

AGENCIES:

TOWN OF VERONA
7669 COUNTY HIGHWAY PD
VERONA, WI 53593
(608) 845-7187

DANE COUNTY LAND & WATER
RESOURCES
5201 FEN OAK DR
MADISON, WI 53718
(608) 224-3730

EMERGENCY - FIRE, RESCUE,
AMBULANCE, POLICE
DIAL 911

VERONA FIRE DEPARTMENT
101 LINCOLN ST
VERONA WI 53593
(608) 845-9401

DANE COUNTY SHERIFF
115 W DOTY ST
MADISON, WI 53703
(608) 266-4948

UTILITIES:

ELECTRIC COMPANY
ALLIANT ENERGY
KRYSTAL MCDERMOTT
(608) 842-1741

TELEPHONE/INTERNET
TDS TELECOM
JERRY MYERS
(608) 664-4404

NATURAL GAS
MADISON GAS & ELECTRIC
JOHN WICHERN
(608) 252-1563

OWNER:

COONS CONSTRUCION OF VERONA
VERONA, WI

ENGINEER:

CARRICO ENGINEERING
8177 COUNTY ROAD G
VERONA, WI 53593
(608) 832-6352

SURVEYOR:

WILLIAMSON SURVEYING &
ASSOCIATES, LLC.
104A WEST MAIN ST
WAUNAKEE, WI 53597
(608) 255-5705

GENERAL NOTES

1. TOPOGRAPHIC SURVEY AND UTILITIES SHOWN ARE FROM SURVEY PREVIOUSLY COMPLETED BY OTHERS COMBINED WITH GIS LIDAR DATA.
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK AND DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER PRIOR TO STARTING WORK.
3. CONTRACTOR SHALL KEEP ADJACENT ROADS AND PRIVATE PROPERTY FREE AND CLEAR OF CONSTRUCTION RELATED EQUIPMENT, DIRT, DUST AND DEBRIS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION OR GRADING AROUND ANY EXISTING UTILITY LINES AND UTILITY PEDESTALS WITH UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.
5. ALL SAWCUTTING SHALL BE FULL DEPTH TO PROVIDE A CLEAN EDGE TO MATCH NEW PAVEMENT ROAD ENDS AND DRIVEWAYS.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY TRAFFIC CONTROL AND SAFETY MEASURES DURING CONSTRUCTION.
7. ALL TREES REQUIRED TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY AND STUMPS SHALL BE GROUND TO PROPOSED SUBGRADE OR AT LEAST 4" BELOW FINISHED GRADE WHERE NOT IN ROAD BED AREA. CONTRACTOR TO COORDINATE WITH LANDOWNER PRIOR TO ANY REMOVALS.
8. CONTRACTOR SHALL PROVIDE TREE PROTECTION FENCING PRIOR TO CONSTRUCTION FOR ANY TREES REMAINING THAT ARE NEAR DISTURBANCE LIMITS. MAINTAIN FENCING THROUGHOUT CONSTRUCTION. TREE PROTECTION FENCING SHALL BE EITHER CHAIN LINK FENCE SECTIONS THAT ARE INSTALLED ON GRADE WITH "FEET" OR WOOD OR PLASTIC SNOW FENCE.
9. TREE PROTECTION SHALL BE REQUIRED WHENEVER THERE WILL BE CONSTRUCTION ACTIVITY THAT COULD RESULT IN DISTURBANCE WITHIN THE CRITICAL ROOT RADIUS OF A TREE THAT IS TO BE SAVED OR WHENEVER THERE IS THE POTENTIAL FOR DAMAGE TO BRANCHES OF PLATS THAT ARE TO BE SAVED DURING CONSTRUCTION.
10. ALL PROPOSED STORM SEWER LENGTHS ON PLANS INCLUDE ENDWALL IN LENGTH WHERE ENDWALL IS CALLED OUT.

LEGENDS

TOPOGRAPHIC SYMBOL & LINEWORK LEGEND

	BENCHMARK
	FOUND 1" Ø IRON PIPE
	SET P.K. NAIL / CONTROL POINT
	EXISTING POST
	EXISTING SIGN
	EXISTING ELECTRICAL TRANSFORMER
	EXISTING TELEPHONE PEDESTAL
	EXISTING CONIFEROUS TREE
	EXISTING DECIDUOUS TREE
	EXISTING BORING LOCATION
	EXISTING BURIED TELEPHONE LINE
	EXISTING GENERAL FENCE
	EXISTING GAS LINE
	EXISTING STORM PIPE
	EXISTING EDGE OF TREES
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING ASPHALT PAVEMENT

SITE PLAN LEGEND

	PROPERTY BOUNDARY
	PROPOSED PROPERTY LINE
	PROPOSED RIGHT-OF-WAY LINE
	PROPOSED ASPHALT PAVEMENT
	PROPOSED GRAVEL SHOULDER
	PROPOSED SIGN

DEMOLITION LEGEND

	SAWCUT
	UTILITY REMOVAL
	ASPHALT REMOVAL

UTILITY LEGEND

	PROPOSED STORM PIPE
	PROPOSED STORM END WALL
	PROPOSED STORM STRUCTURE
	PROPOSED STORM CLEAN OUT

GRADING & EROSION CONTROL LEGEND

	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	SILT FENCE
	DISTURBED LIMITS
	PROPOSED SLOPE ARROW & PERCENT
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	PROPOSED DITCH CHECK - SEE PLANS FOR TYPE
	PROPOSED EMAT, CLASS I, TYPE B
	PROPOSED EMAT, PERMANENT STORMWATER BASIN OUTLET PROTECTION
	PROPOSED STONE TRACKING PAD
	PROPOSED RIP RAP
	INLET PROTECTION

ABBREVIATIONS

EP	= EDGE OF PAVEMENT
EG	= EDGE OF GRAVEL
EW	= END WALL
FI	= FIELD INLET
R/W	= RIGHT-OF-WAY

General Notes and Legends
Riverside Vista
Town of Verona
Dane County, Wisconsin

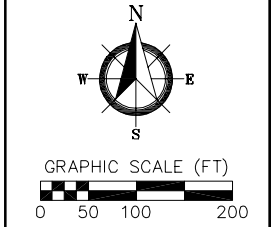


Revisions		Revisions	
No.	Date	Description	Date

Scale:	AS SHOWN
Date:	2/5/2024
Drawn By:	ALC
Project No:	230019
Sheet No:	2 of 17

TOWN OF SPRINGDALE

TOWN OF VERONA



PARCEL 060725400110
1970 SPRING ROSE ROAD

PARCEL 060830386853

PARCEL 060725495005

PARCEL 060725495309

TOWN OF SPRINGDALE

PARCEL
060830390008
1,591,613 SQ. FT.
36.54 ACRES

TOWN OF VERONA

PARCEL 060830395500
7830 RIVERSIDE ROAD

PARCEL 060830392300
7906 RIVERSIDE ROAD

PARCEL 060736180002

PARCEL 060831286800
7891 RIVERSIDE ROAD

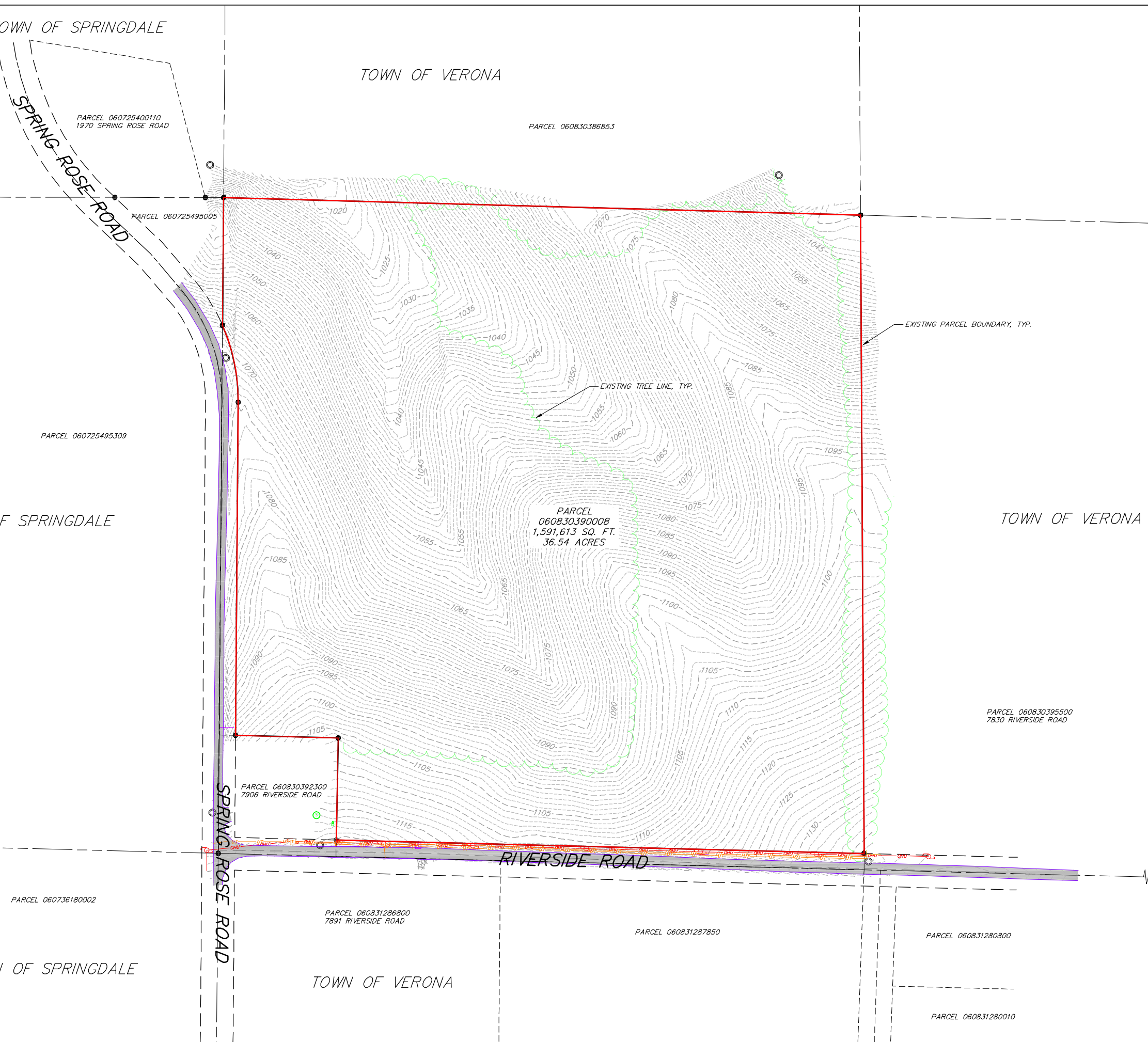
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PARCEL 060831280800

TOWN OF SPRINGDALE

TOWN OF VERONA

PARCEL 060831280010



Revisions		Revisions	
No.	Date	Description	Date

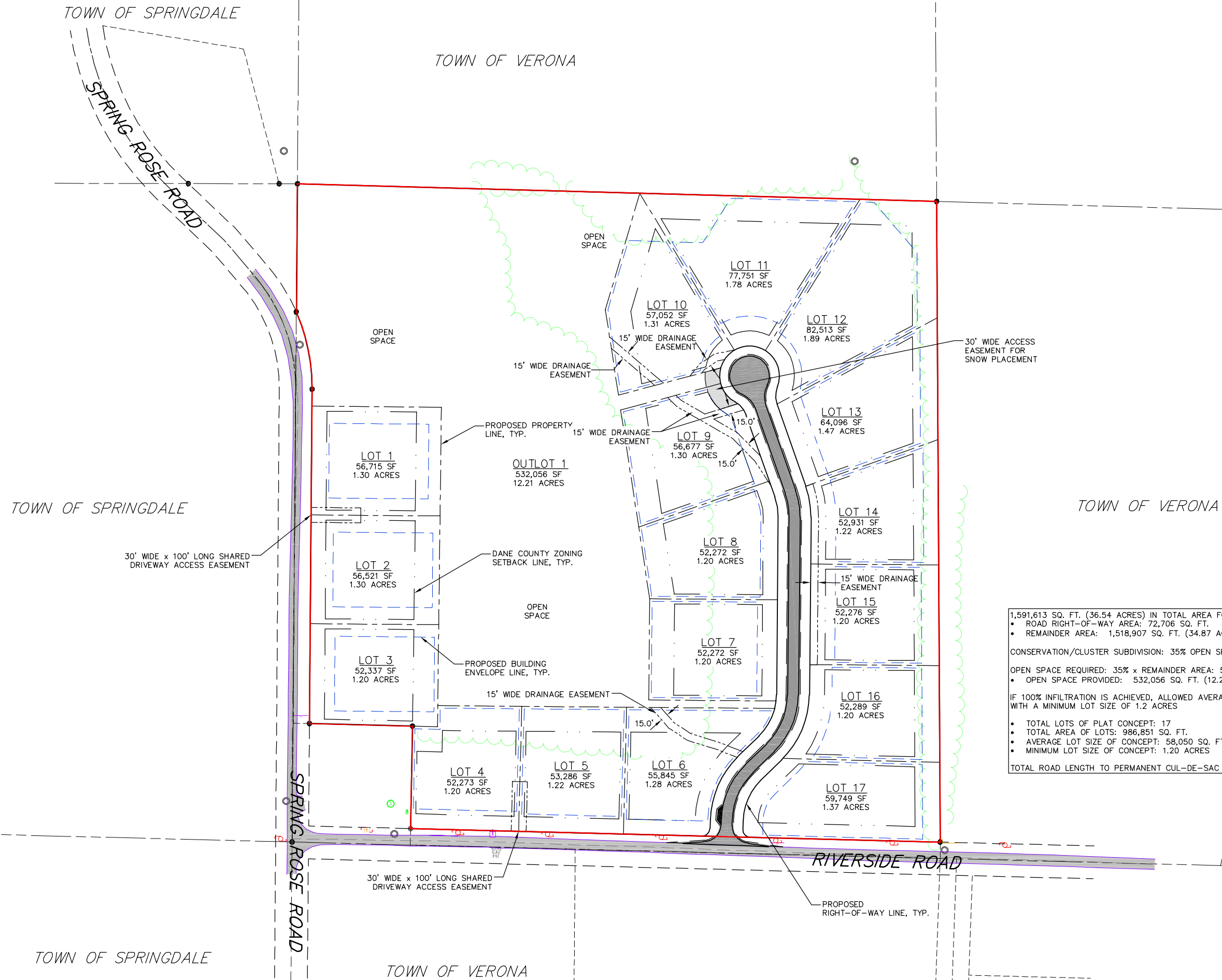
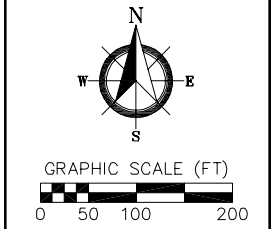
Scale: AS SHOWN

Date: 2/5/2024

Drawn By: ALC

Project No: 230019

Sheet No: 3 of 17



1,591,613 SQ. FT. (36.54 ACRES) IN TOTAL AREA FOR PLAT

- ROAD RIGHT-OF-WAY AREA: 72,706 SQ. FT.
- REMAINDER AREA: 1,518,907 SQ. FT. (34.87 ACRES)

CONSERVATION/CLUSTER SUBDIVISION: 35% OPEN SPACE

OPEN SPACE REQUIRED: 35% x REMAINDER AREA: 531,618 SQ. FT. (12.20 ACRES)

- OPEN SPACE PROVIDED: 532,056 SQ. FT. (12.21 ACRES) OR 35.03%

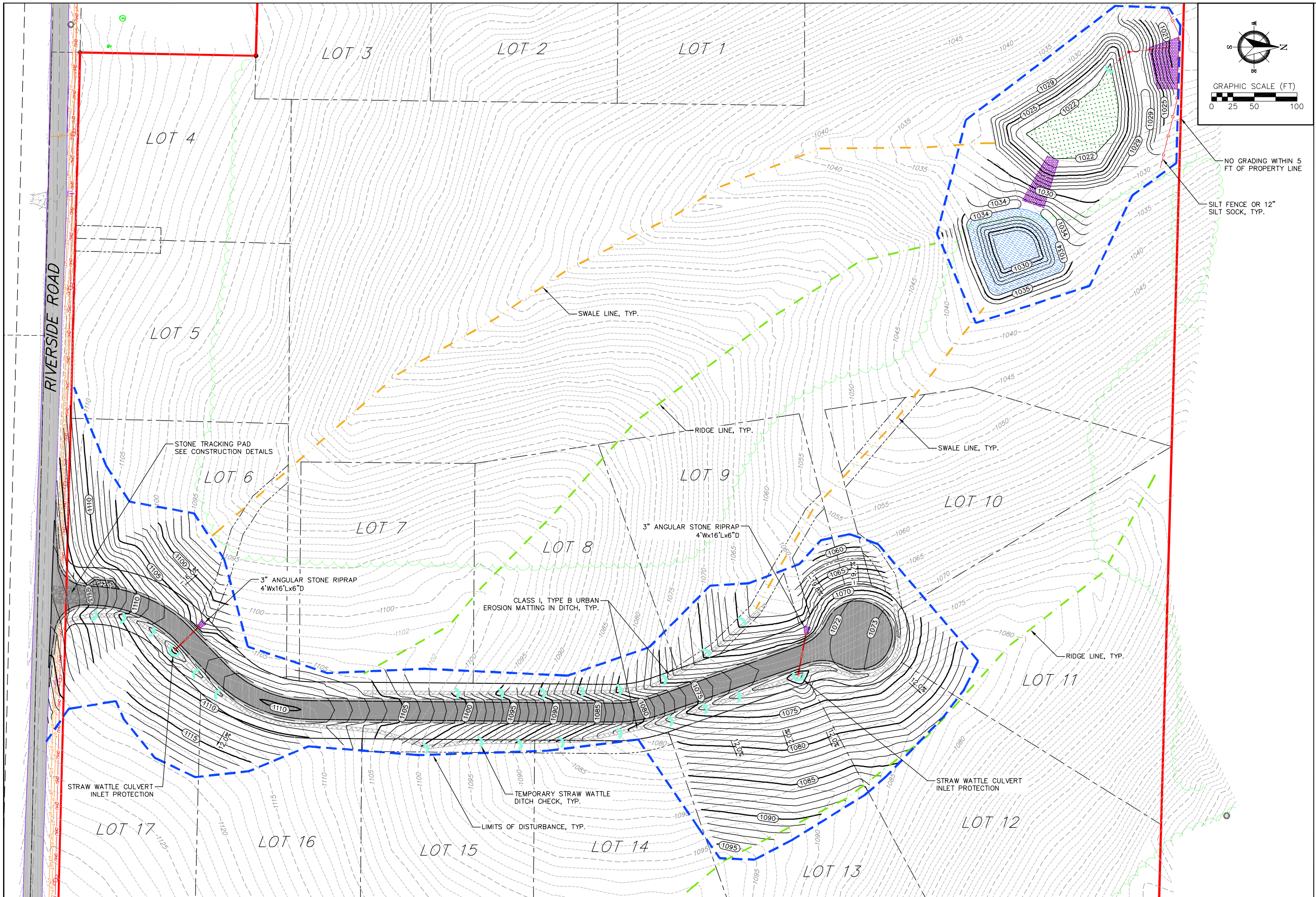
IF 100% INFILTRATION IS ACHIEVED, ALLOWED AVERAGE LOT SIZE OF 1.3 ACRES WITH A MINIMUM LOT SIZE OF 1.2 ACRES

- TOTAL LOTS OF PLAT CONCEPT: 17
- TOTAL AREA OF LOTS: 986,851 SQ. FT.
- AVERAGE LOT SIZE OF CONCEPT: 58,050 SQ. FT. (1.33 ACRES)
- MINIMUM LOT SIZE OF CONCEPT: 1.20 ACRES

TOTAL ROAD LENGTH TO PERMANENT CUL-DE-SAC BULB: 984 FT

Revisions		Revisions	
No.	Date	Description	Date

Scale:	AS SHOWN
Date:	2/5/2024
Drawn By:	ALC
Project No:	230019
Sheet No:	4 of 17

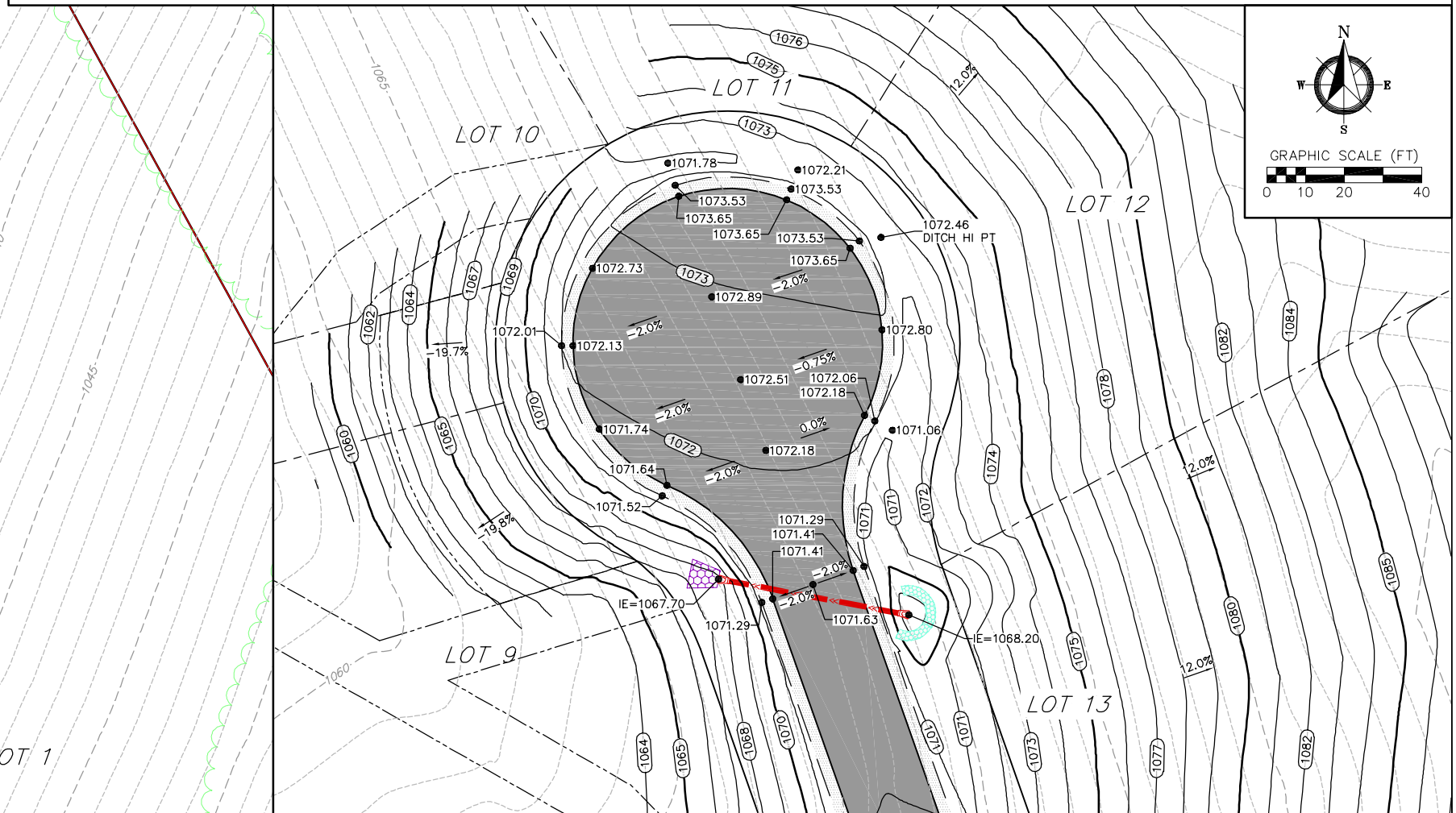
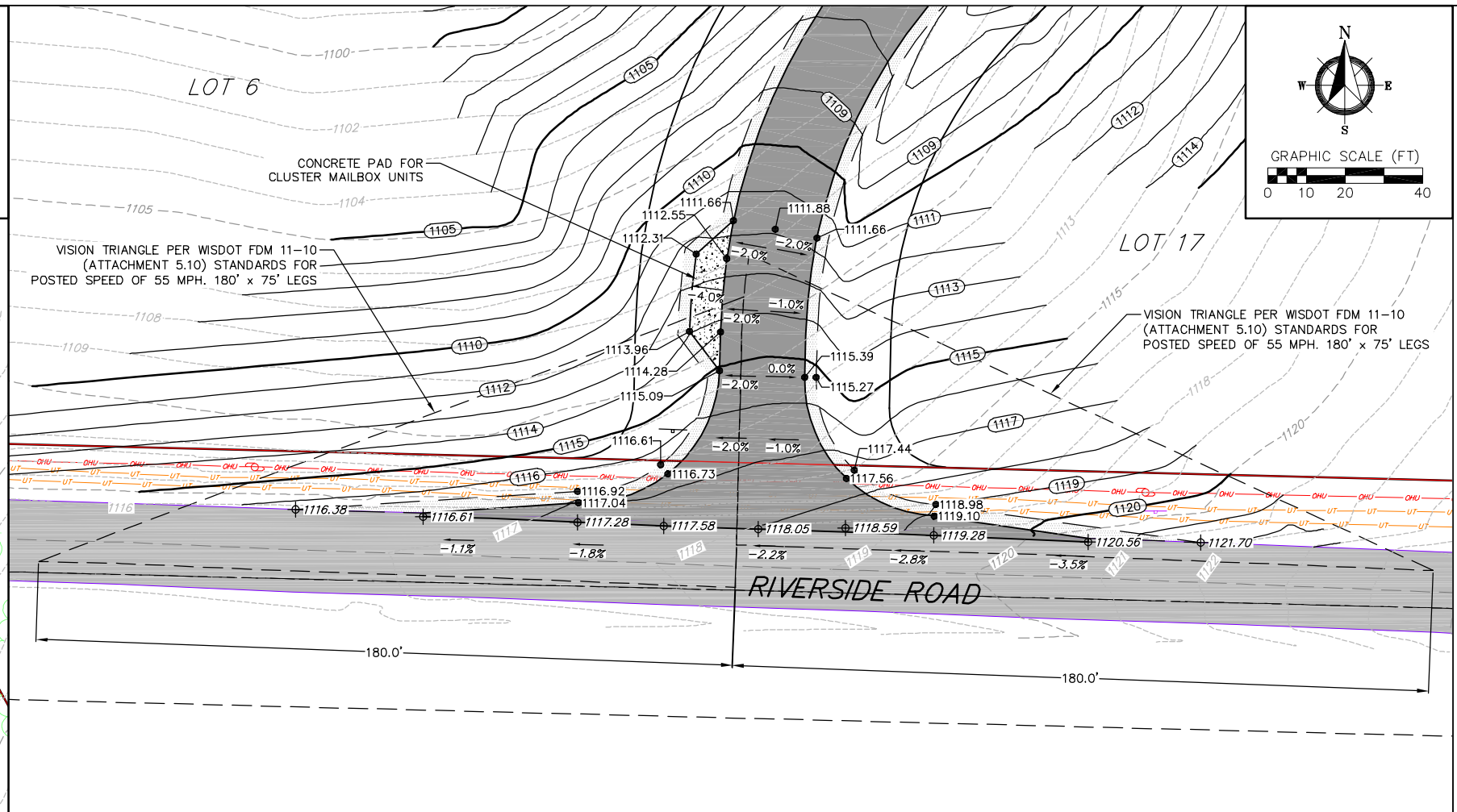
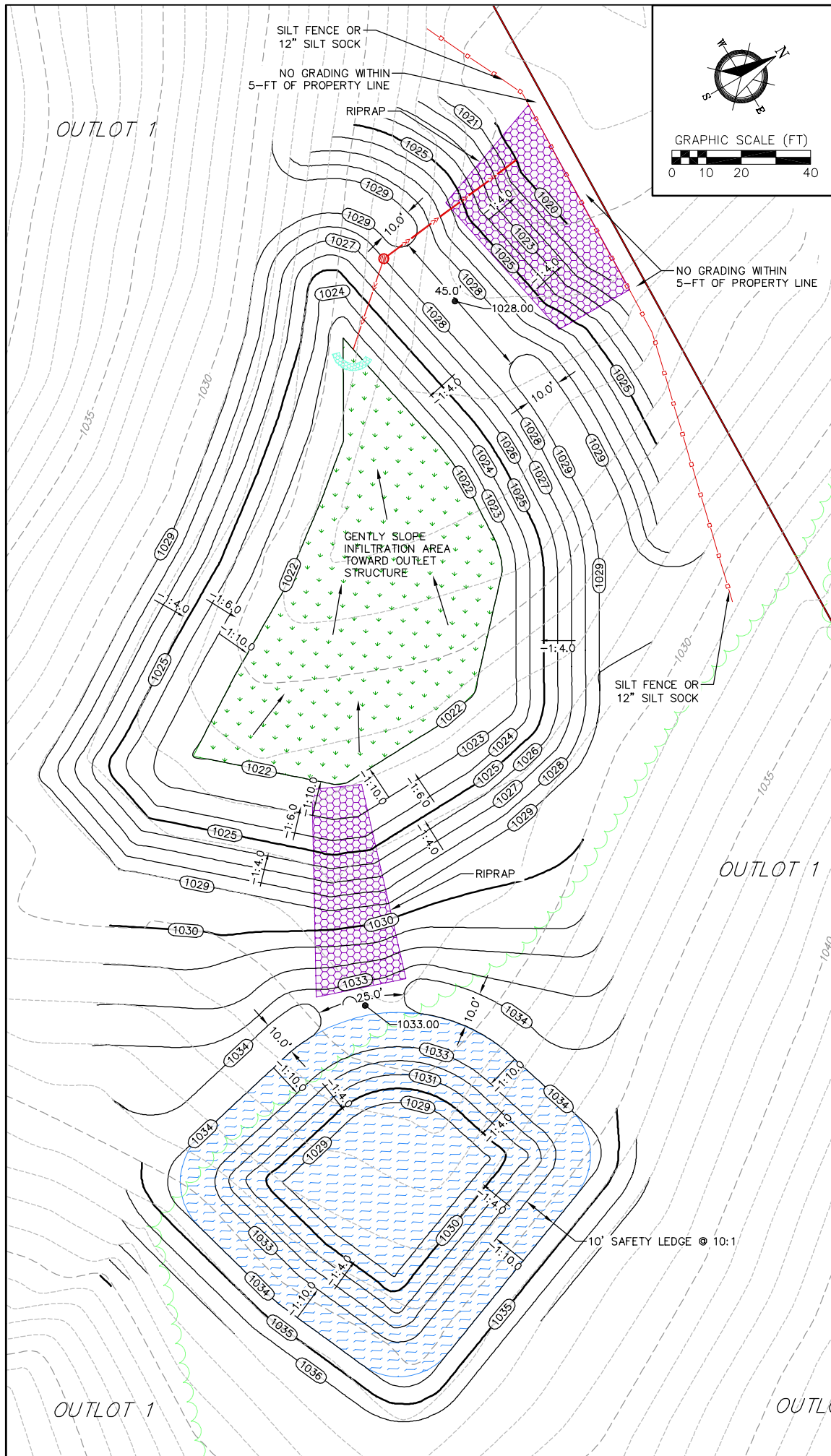


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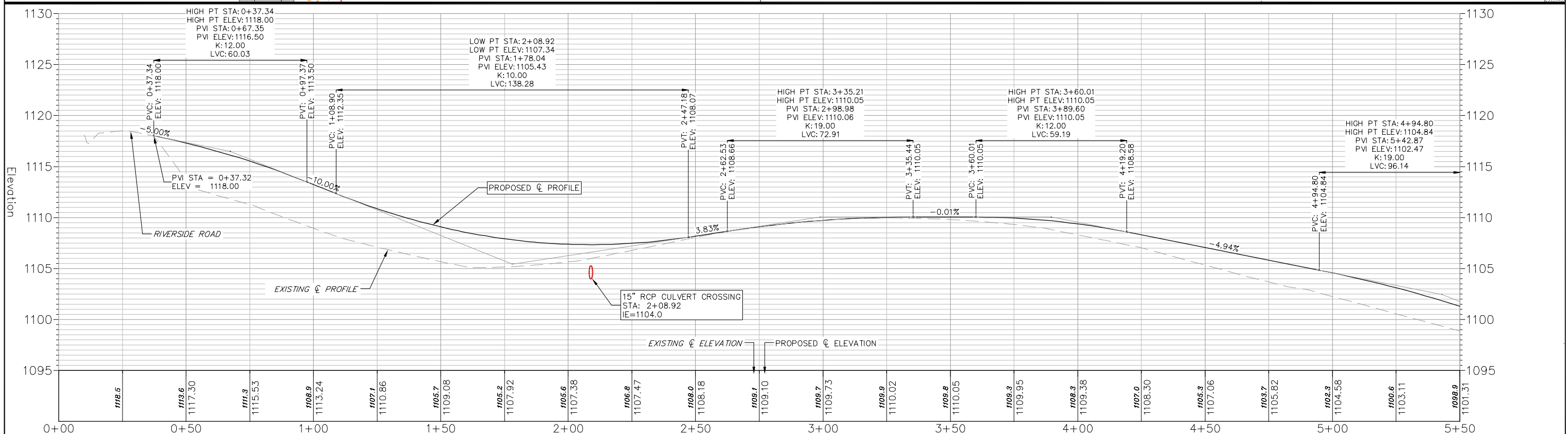
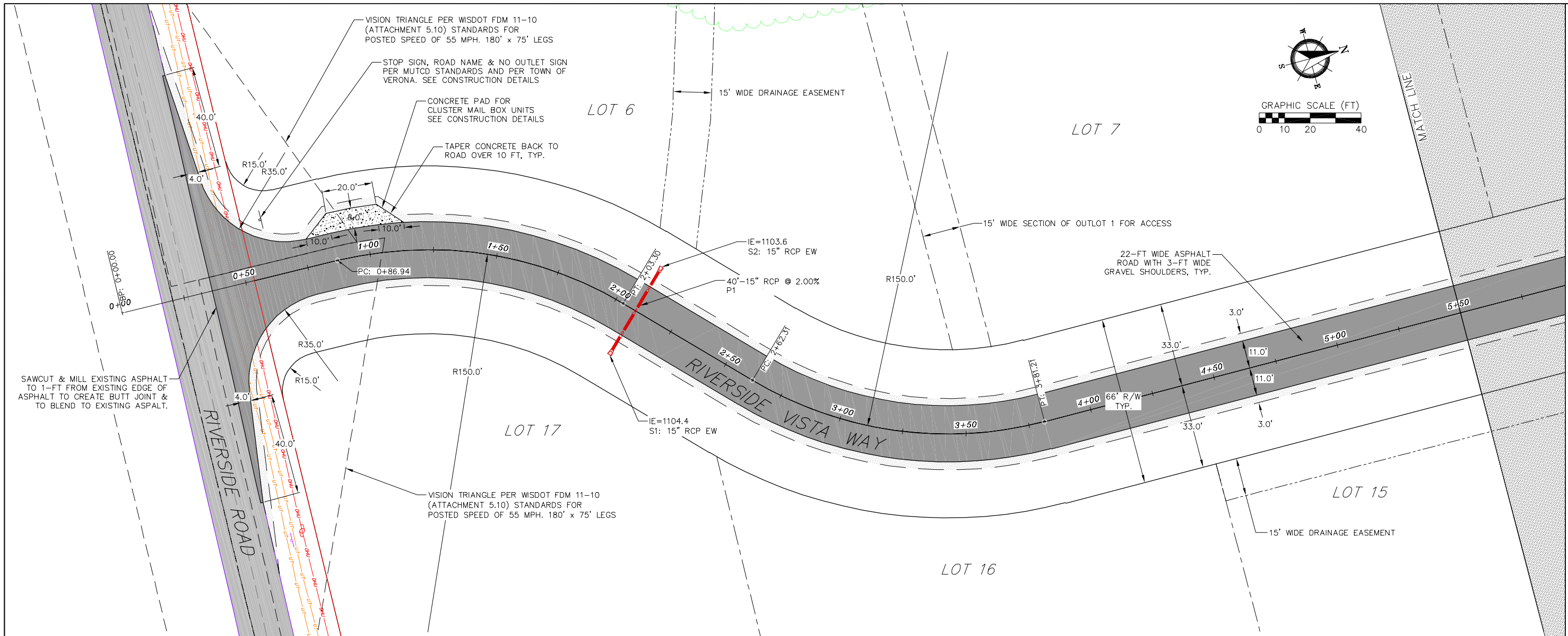
Overall Grading and Erosion Control Plan
 Riverside Vista
 Town of Verona
 Dane County, Wisconsin

Revisions		Revisions	
No.	Date	No.	Date

Scale:	AS SHOWN
Date:	2/5/2024
Drawn By:	ALC
Project No:	230019
Sheet No:	5 of 17



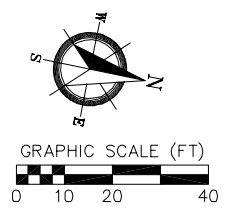
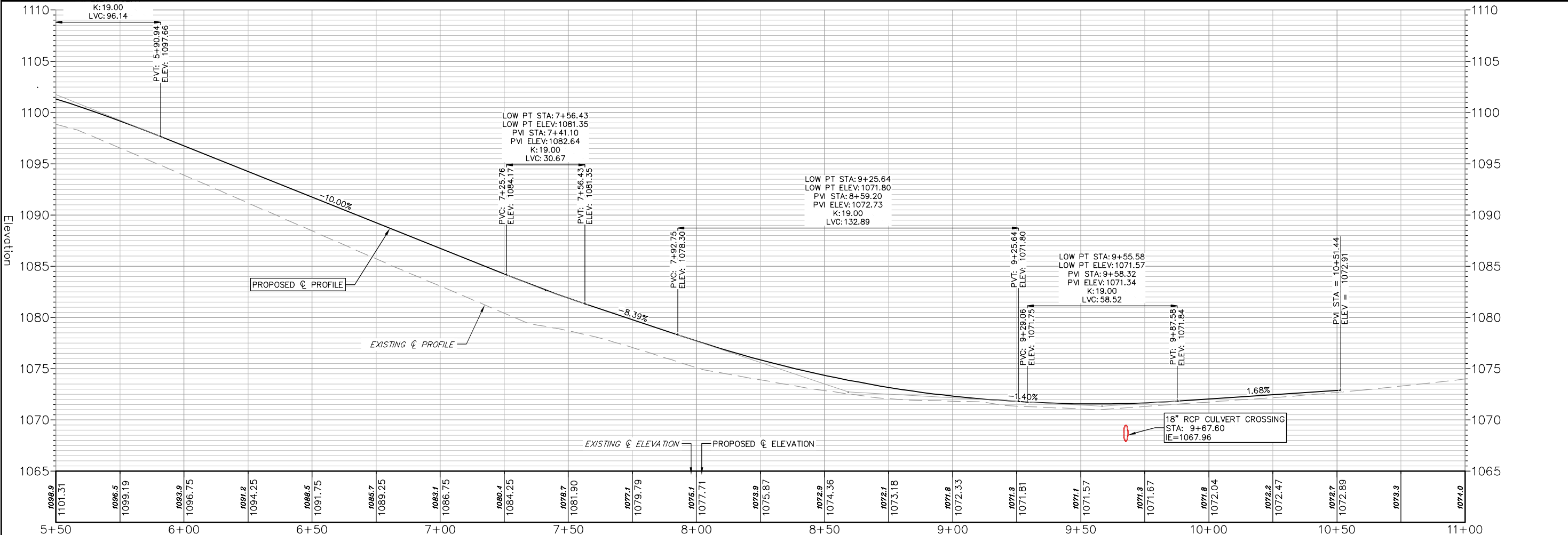
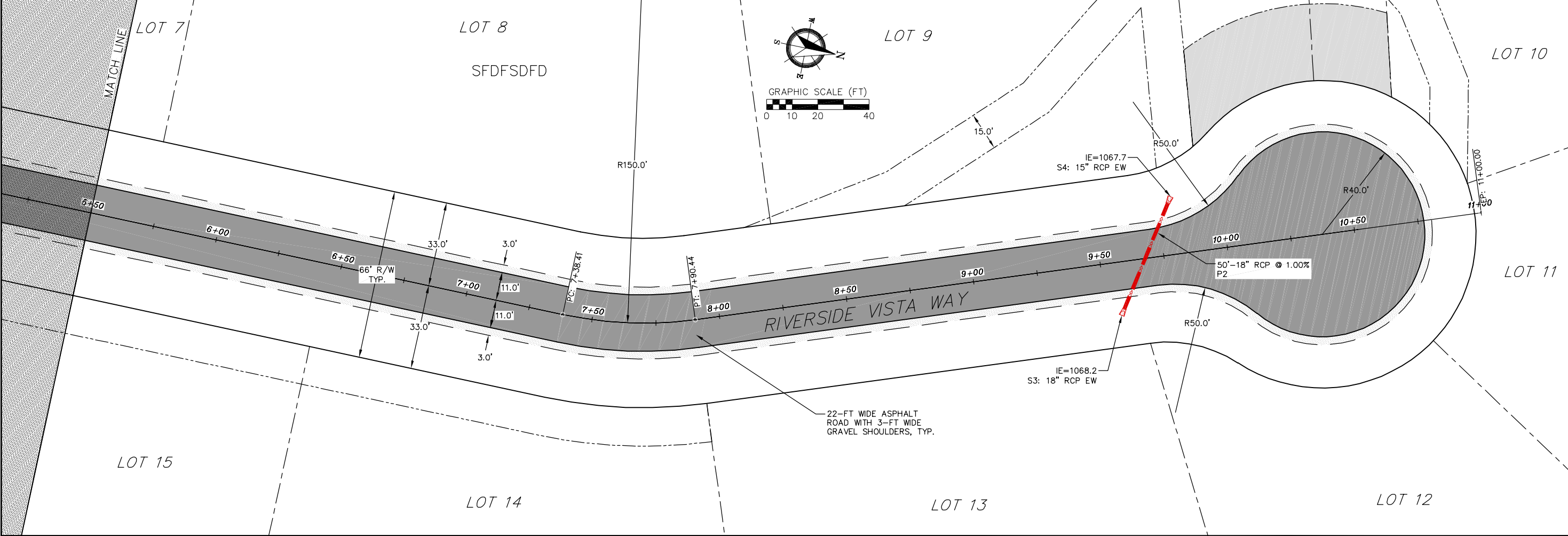
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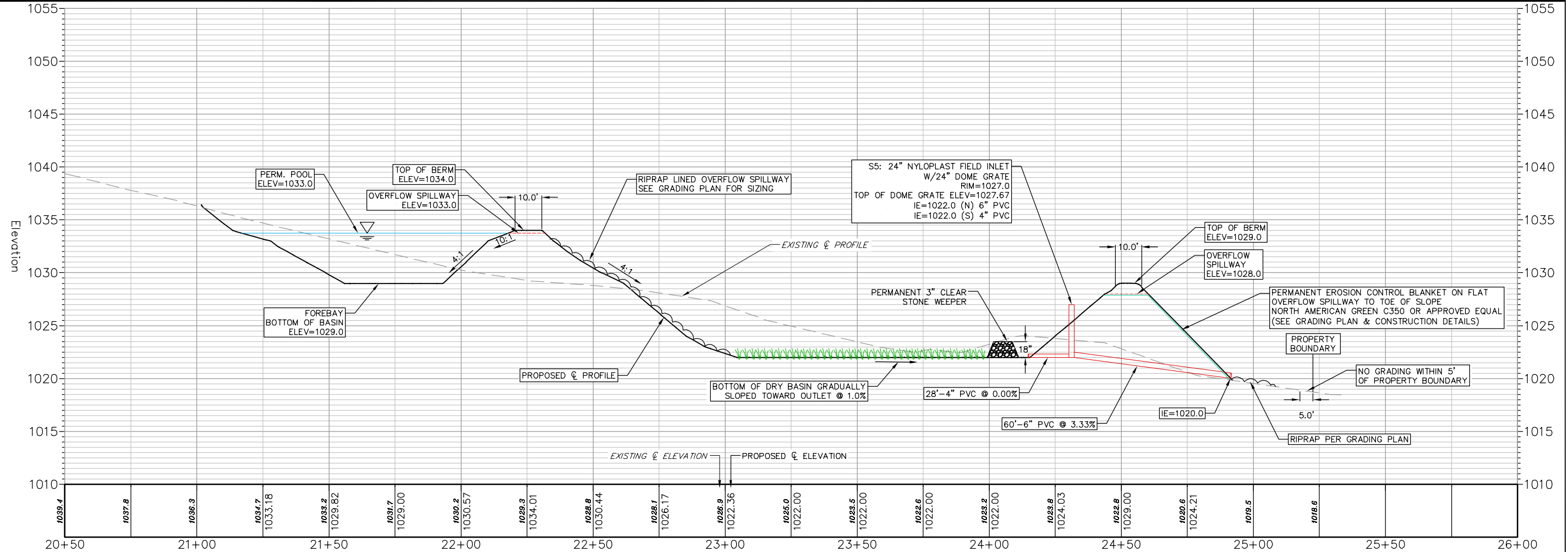
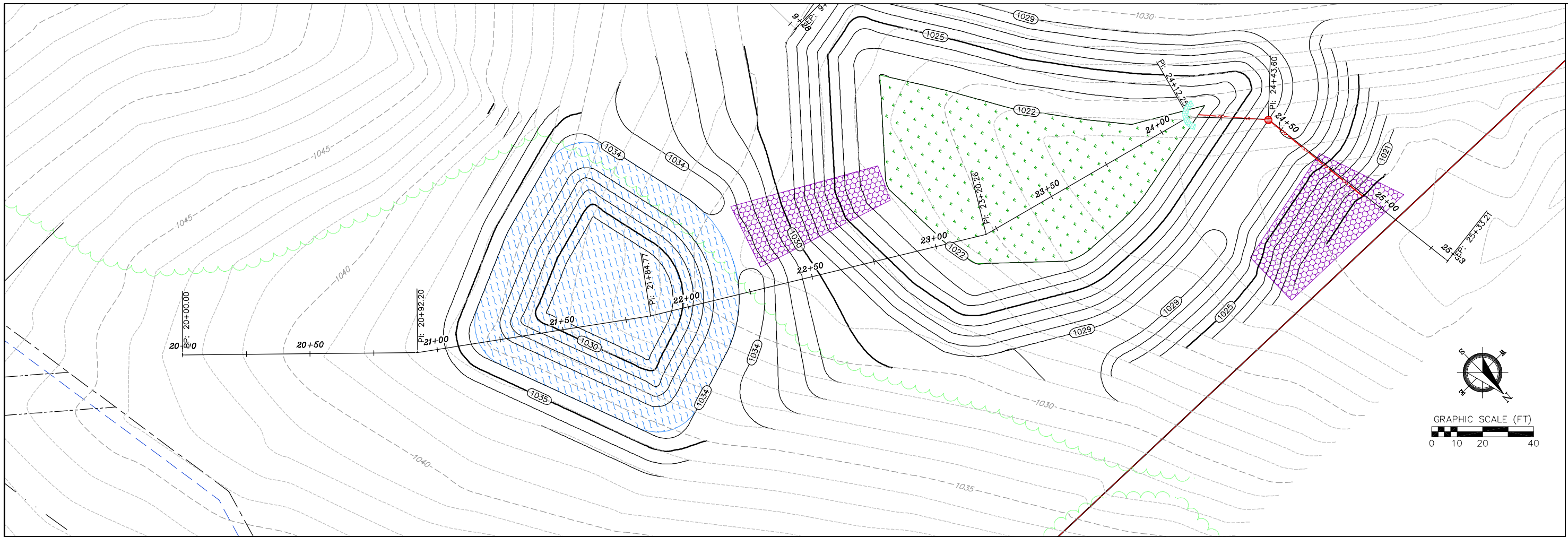
Riverside Vista Way Plan and Profile
 Riverside Vista
 Town of Verona
 Dane County, Wisconsin

Revisions		Revisions	
No.	Date	No.	Date

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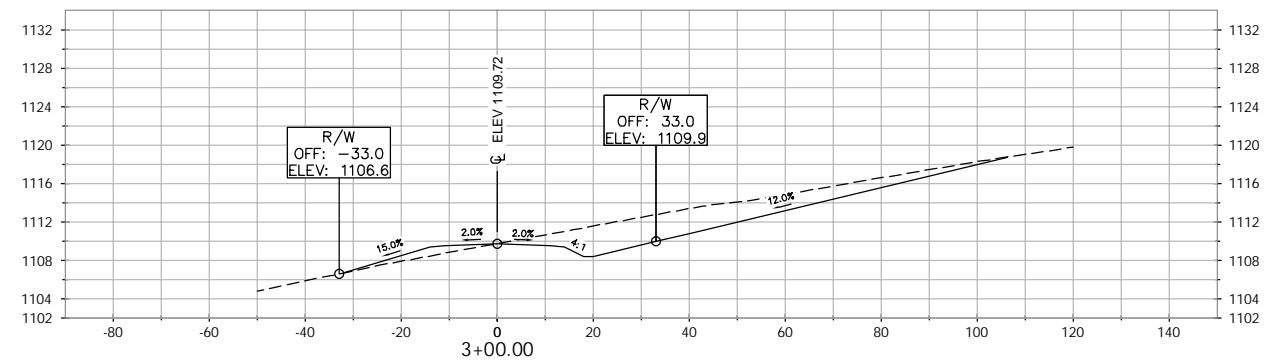
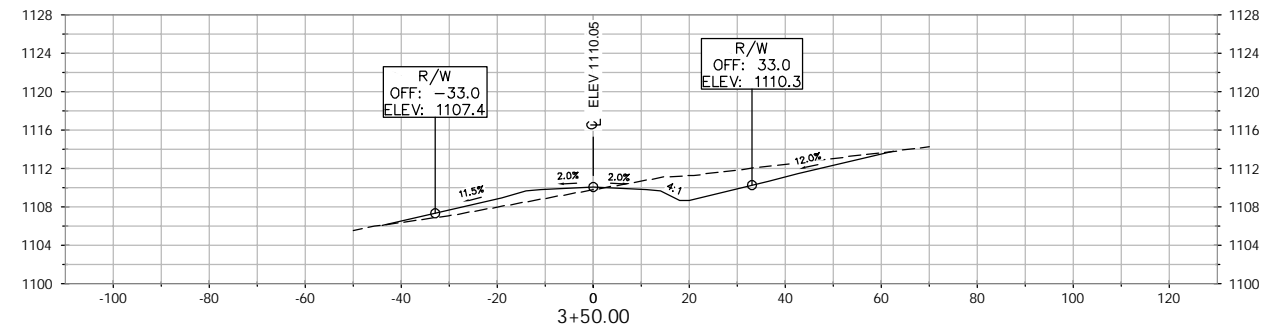
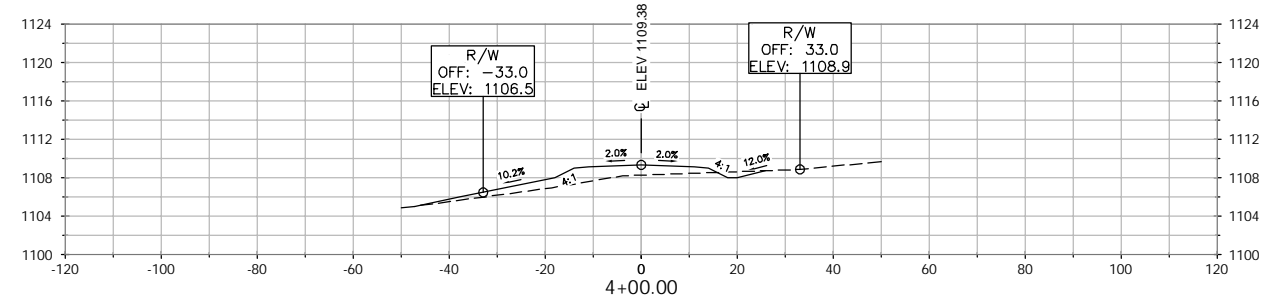
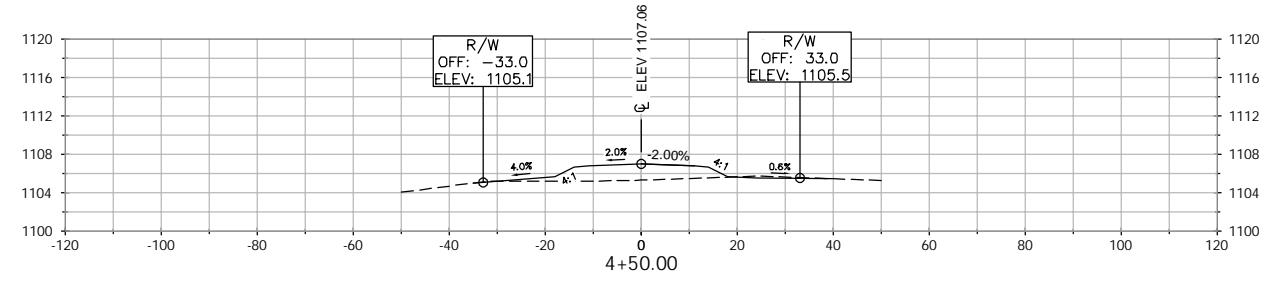
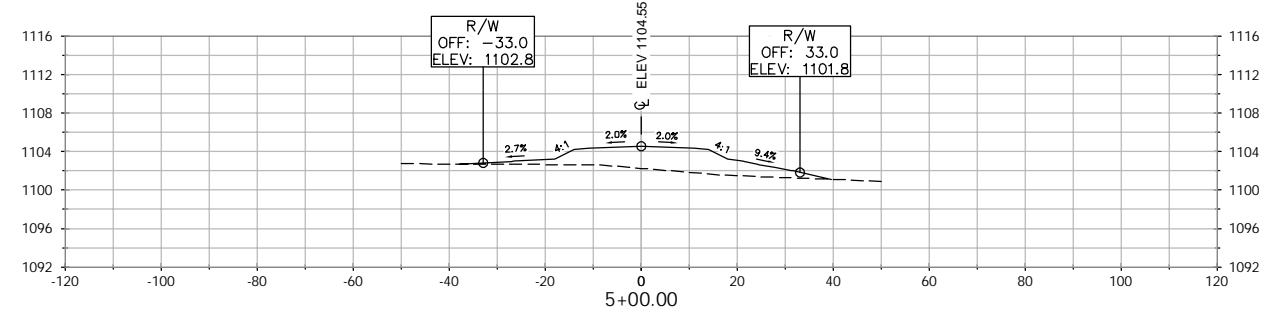
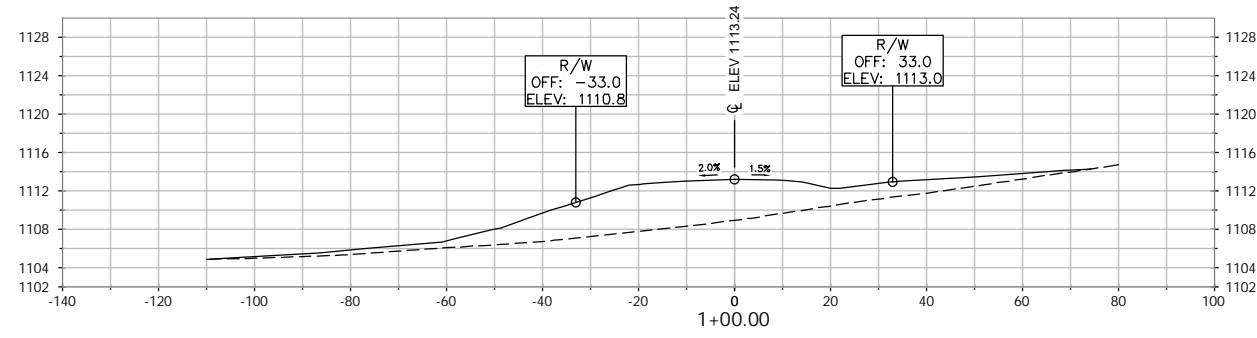
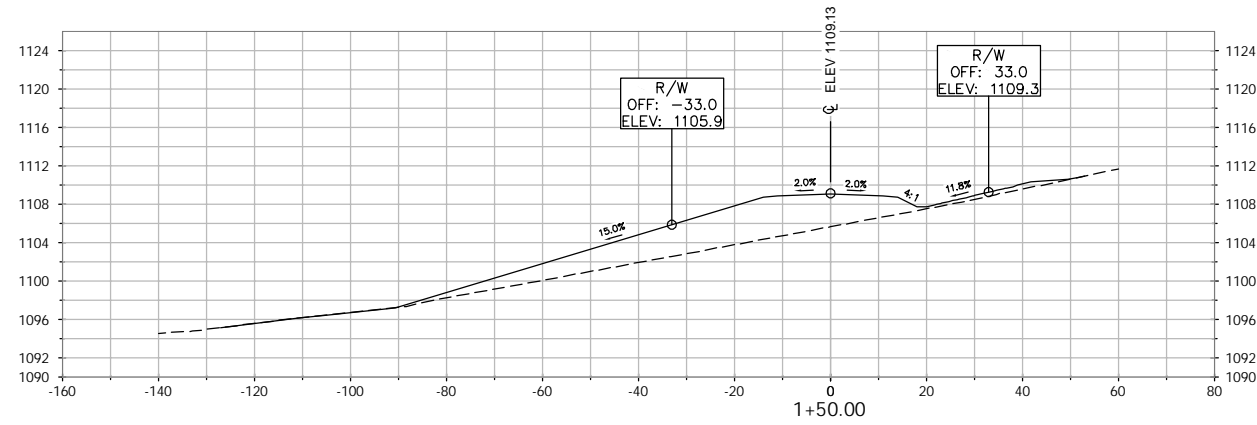
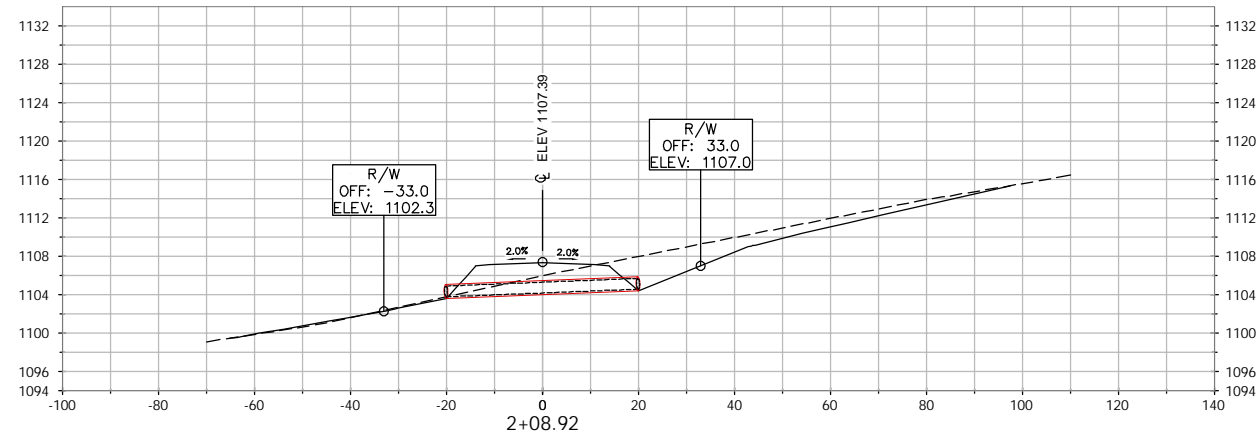
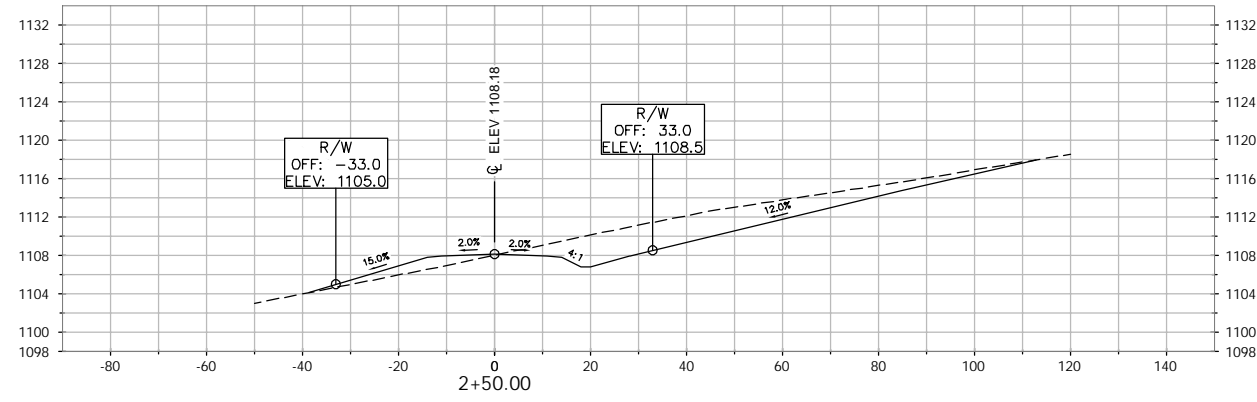
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Stormwater Basin Plan and Profile
 Riverside Vista
 Town of Verona
 Dane County, Wisconsin

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Date:	2/5/2024
Drawn By:	ALC
Project No:	230019
Sheet No:	9 of 17

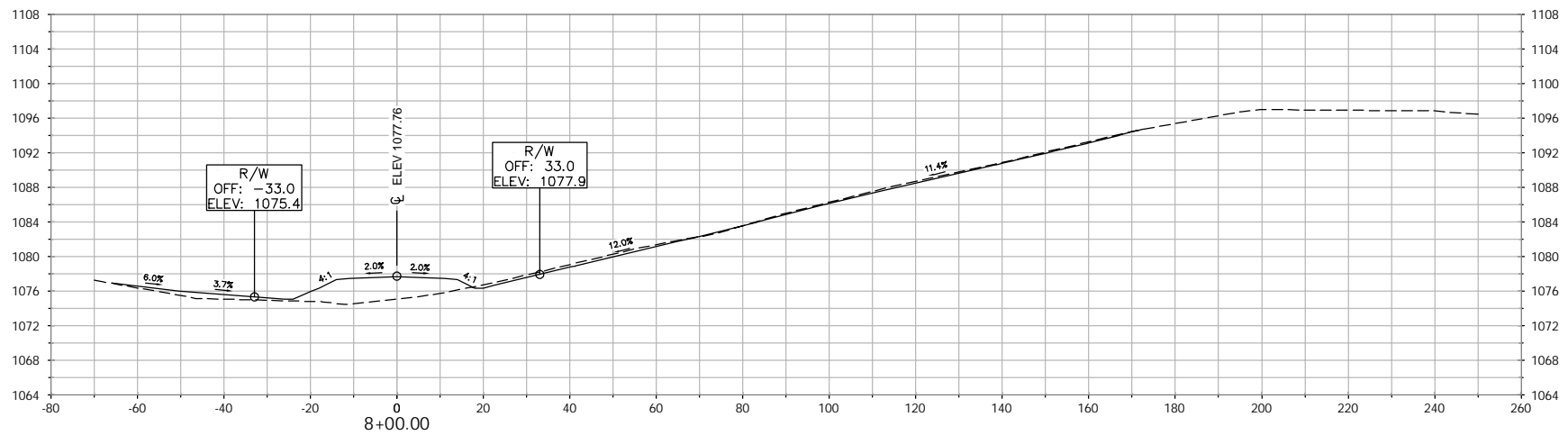
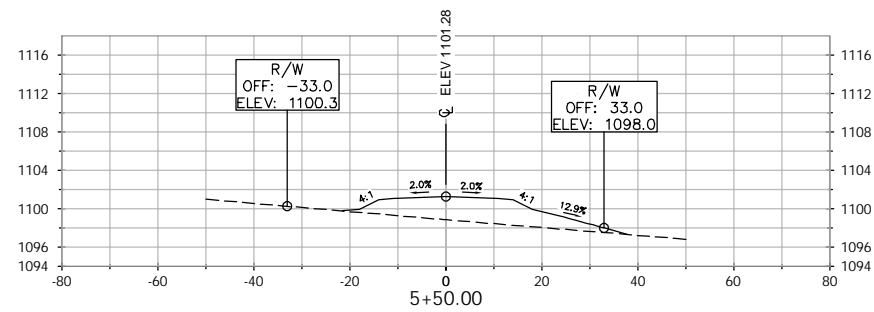
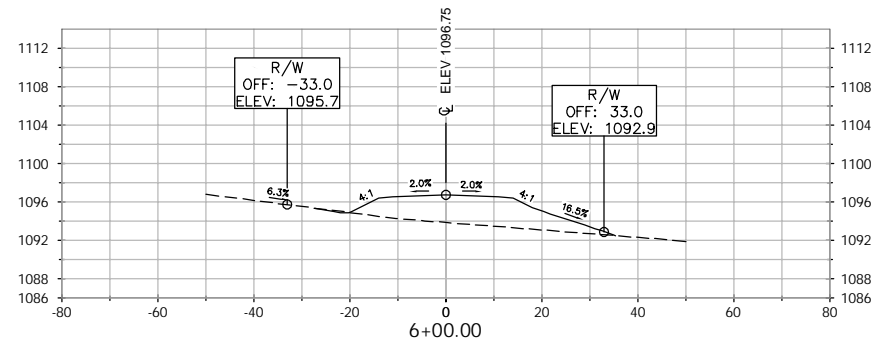
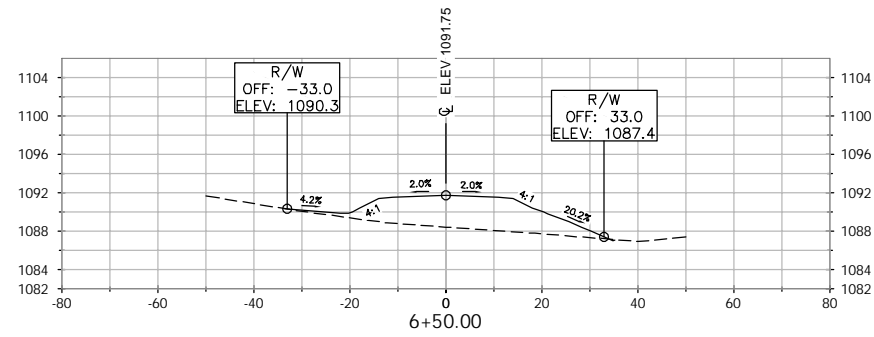
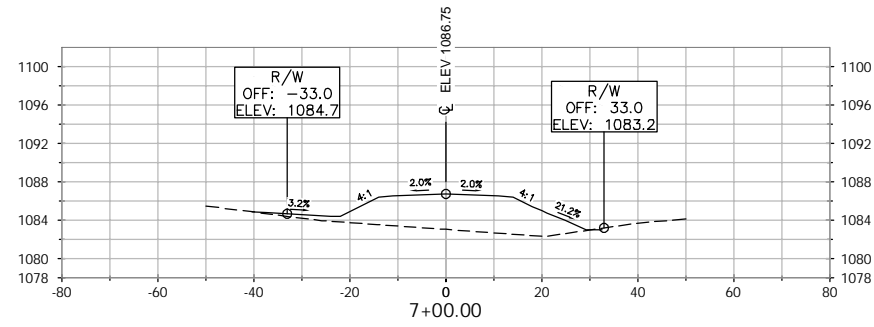
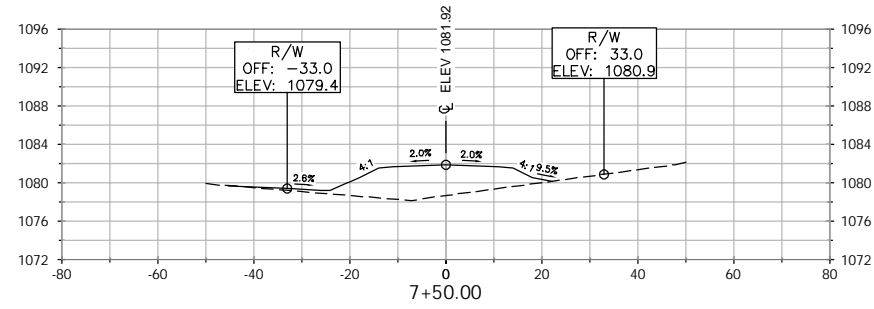


1" = 20' HORIZ. (24"x36")
1" = 10' VERT. (24"x36")

1" = 40' HORIZ. (11"x17")
1" = 20' VERT. (11"x17")

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No.	Date	Description	Date

Scale:	AS SHOWN
Date:	2/5/2024
Drawn By:	ALC
Project No:	230019
Sheet No:	10 of 17



Revisions		Revisions	
No.	Date	Description	No.

Scale:	AS SHOWN
Date:	2/5/2024
Drawn By:	ALC
Project No:	230019
Sheet No:	11 of 17

Cross Sections - Riverside Vista Way
Riverside Vista
Town of Verona
Dane County, Wisconsin

Revisions		Revisions	
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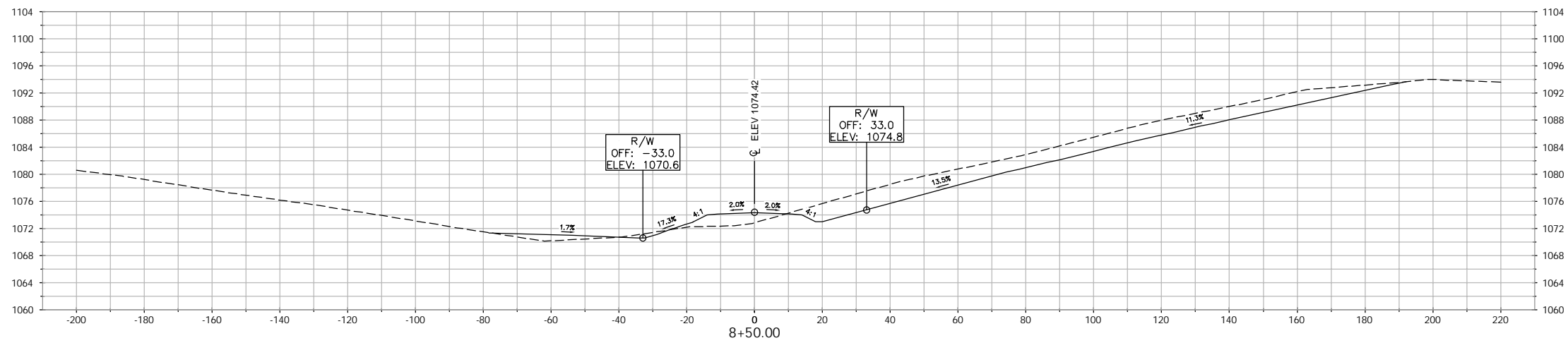
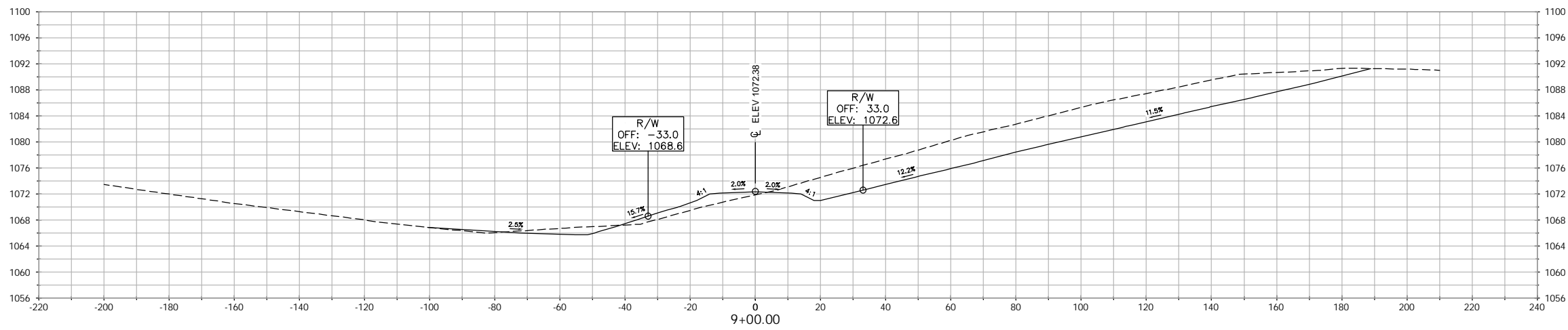
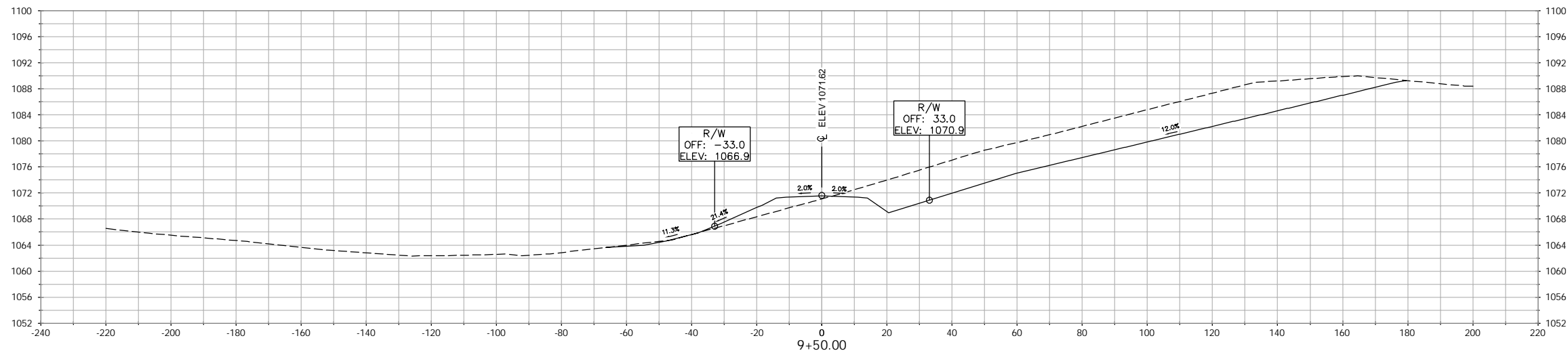
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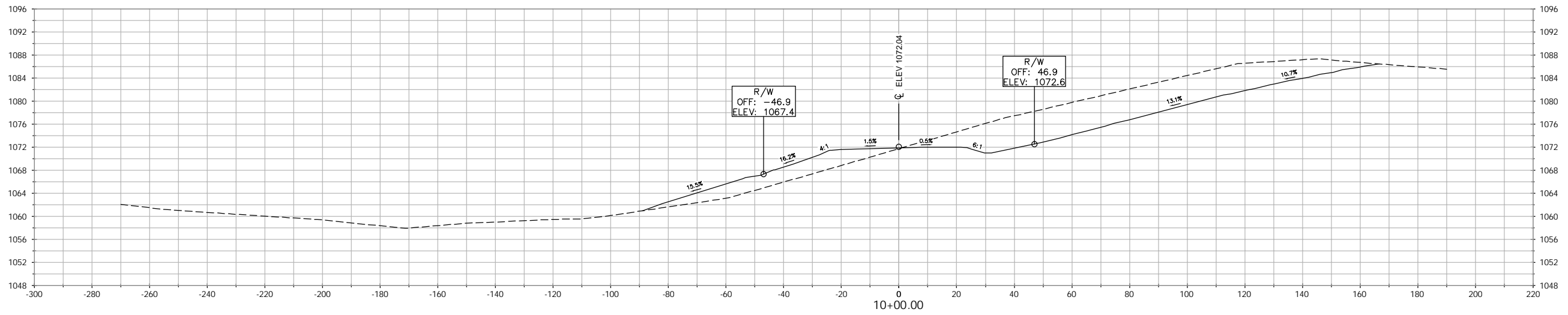
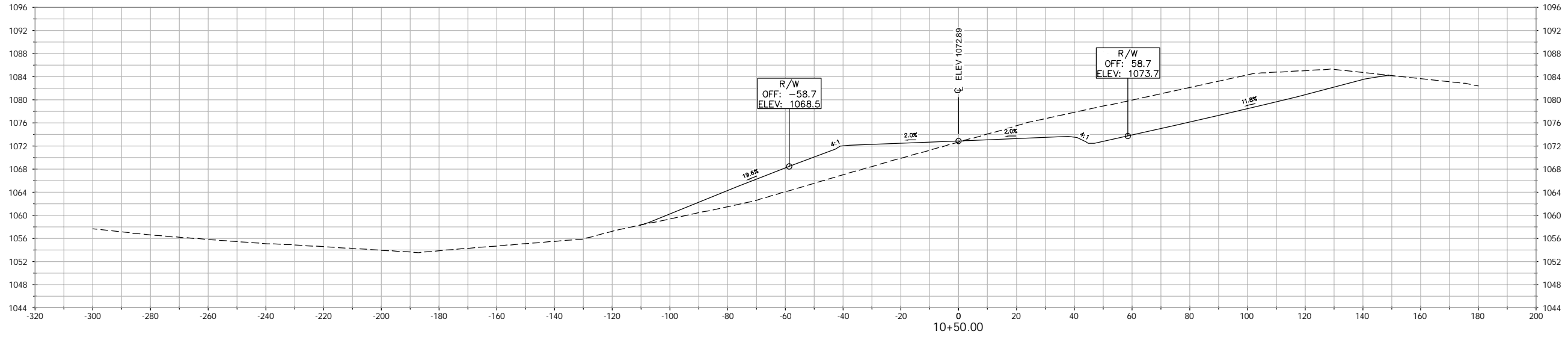
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Project No: 230019

Sheet No: 12 of 17





1" = 20' HORIZ. (24"x36")
 1" = 10' VERT. (24"x36")
 1" = 40' HORIZ. (11"x17")
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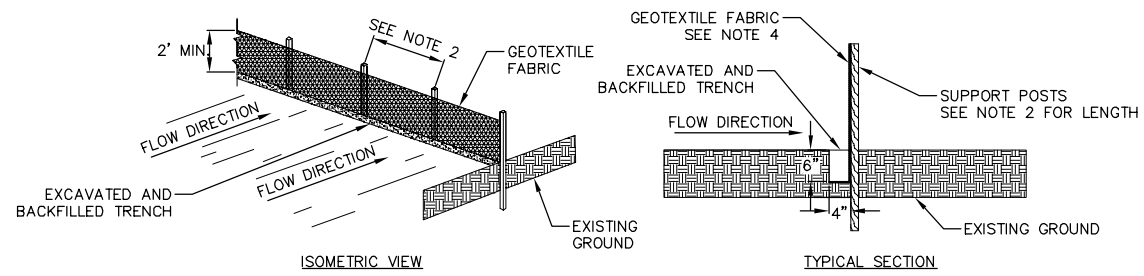
Cross Sections - Riverside Vista Way
 Riverside Vista
 Town of Verona
 Dane County, Wisconsin

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Drawn By:	ALC
Project No:	230019
Sheet No:	13 of 17

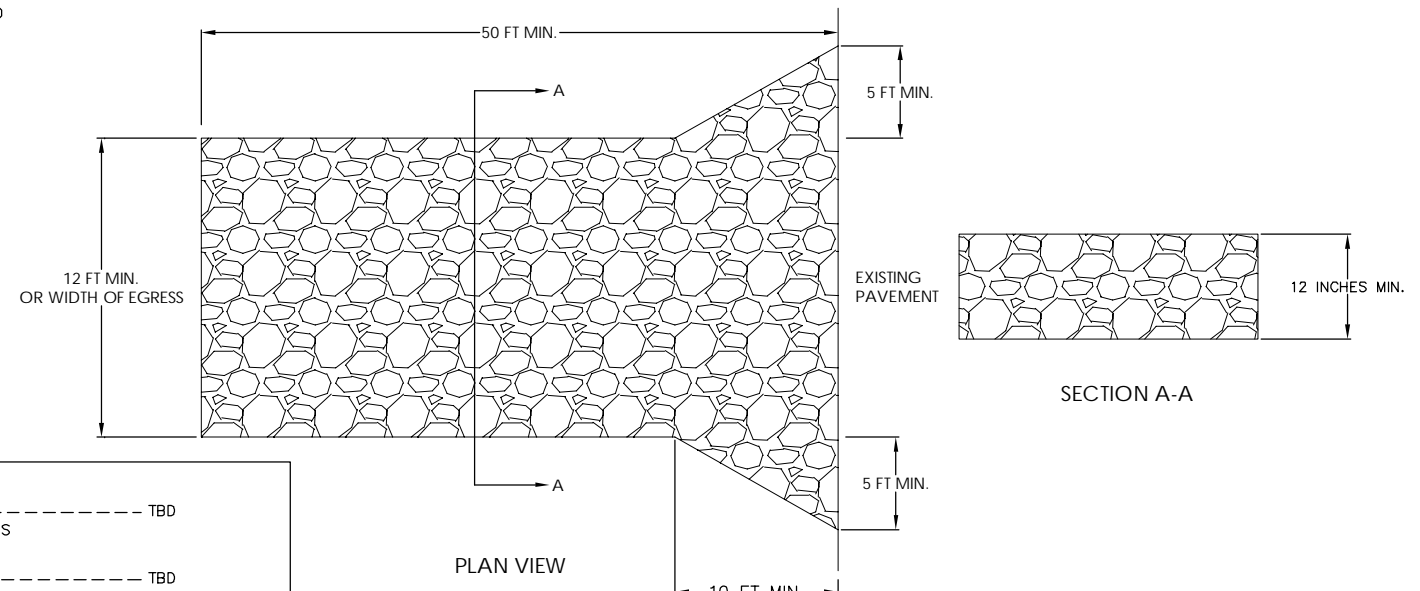
EROSION CONTROL MEASURES

1. EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE TOWN OF VERONA EROSION CONTROL ORDINANCE, CHAPTER 11 AND 14 OF THE DANE COUNTY ORDINANCES AND CHAPTER NR 216 OF THE WISCONSIN ADMINISTRATIVE CODE.
2. CONSTRUCT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH WISCONSIN DNR TECHNICAL STANDARDS (<http://dnr.wi.gov/runoff/stormwater/techstds.htm>) AND WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK.
3. INSTALL SEDIMENT CONTROL PRACTICES (TRACKING PAD, PERIMETER SILT FENCE, SEDIMENT BASINS, ETC.) PRIOR TO INITIATING OTHER LAND DISTURBING CONSTRUCTION ACTIVITIES.
4. THE CONTRACTOR IS REQUIRED TO MAKE EROSION CONTROL INSPECTIONS AT THE END OF EACH WEEK AND WHEN 0.5 INCHES OF RAIN FALLS WITHIN 24 HOURS. INSPECTION REPORTS SHALL BE PREPARED AND FILED AS REQUIRED BY THE DNR AND/OR THE TOWN OF VERONA. ALL MAINTENANCE WILL FOLLOW AN INSPECTION WITHIN 24 HOURS.
5. 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. 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.
6. A 3" CLEAR STONE TRACKING PAD SHALL BE INSTALLED AT THE END OF ROAD CONSTRUCTION LIMITS TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE ADJACENT PAVED PUBLIC ROADWAY. SEDIMENT TRACKING PAD SHALL CONFORM TO WISCONSIN DNR TECHNICAL STANDARD 1057. SEDIMENT REACHING THE PUBLIC ROAD SHALL BE REMOVED BY STREET CLEANING (NOT HYDRAULIC FLUSHING) BEFORE THE END OF EACH WORK DAY.
7. CHANNELIZED RUNOFF: FROM ADJACENT AREAS PASSING THROUGH THE SITE SHALL BE DIVERTED AROUND DISTURBED AREAS IF POSSIBLE.
8. STABILIZED DISTURBED GROUND: ANY SOIL OR DIRT PILES WHICH WILL REMAIN IN EXISTENCE FOR MORE THAN 7-CONSECUTIVE DAYS, WHETHER TO BE WORKED DURING THAT PERIOD OR NOT, SHALL NOT BE LOCATED WITHIN 25-FEET OF ANY ROADWAY, PARKING LOT, PAVED AREA, OR DRAINAGE STRUCTURE OR CHANNEL (UNLESS INTENDED TO BE USED AS PART OF THE EROSION CONTROL MEASURES). TEMPORARY STABILIZATION AND CONTROL MEASURES (SEEDING, MULCHING, TARPING, EROSION MATTING, BARRIER FENCING, ETC.) ARE REQUIRED FOR THE PROTECTION OF DISTURBED AREAS AND SOIL PILES, WHICH WILL REMAIN UN-WORKED FOR A PERIOD OF MORE THAN 14-CONSECUTIVE CALENDAR DAYS. THESE MEASURES SHALL REMAIN IN PLACE UNTIL SITE HAS STABILIZED.
9. 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.
10. SITE DE-WATERING: WATER PUMPED FROM THE SITE SHALL BE TREATED BY TEMPORARY SEDIMENTATION BASINS OR OTHER APPROPRIATE CONTROL MEASURES. SEDIMENTATION BASINS SHALL HAVE A DEPTH OF AT LEAST 3 FEET, BE SURROUNDED BY SNOWFENCE OR EQUIVALENT BARRIER AND HAVE SUFFICIENT SURFACE AREA TO PROVIDE A SURFACE SETTLING RATE OF NO MORE THAN 750 GALLONS PER SQUARE FOOT PER DAY AT THE HIGHEST DEWATERING PUMPING RATE. WATER MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE, A NEIGHBORING SITE, OR THE BED OR BANKS OF THE RECEIVING WATER. POLYMERS MAY BE USED AS DIRECTED BY DNR TECHNICAL STANDARD 1061 (DE-WATERING).
11. SEE DETAIL SHEETS AND GRADING AND EROSION CONTROL PLAN FOR RIP-RAP SIZING. IN NO CASE WILL RIP-RAP BE SMALLER THAN 3" TO 6".
12. USE DETENTION BASINS AS SEDIMENT BASINS DURING CONSTRUCTION (DO NOT USE INFILTRATION AREAS). AT THE END OF CONSTRUCTION, REMOVE SEDIMENT AND RESTORE PER PLAN.
13. RESTORATION (SEED, FERTILIZE AND MULCH/MATting) SHALL BE PER SPECIFICATIONS ON THIS SHEET UNLESS SPECIAL RESTORATION IS CALLED FOR ON THE DETENTION BASIN DETAIL SHEET.
14. AFTER DETENTION BASIN GRADING IS COMPLETE, THE BOTTOM OF DRY BASINS SHALL RECEIVE 6" TOPSOIL AND SHALL BE CHISEL-PLOWED TO A MINIMUM DEPTH OF 12" PRIOR TO RESTORATION.
15. SEED, FERTILIZER AND MULCH/MATting SHALL BE APPLIED WITHIN 7 DAYS AFTER FINAL GRADE HAS BEEN ESTABLISHED. IF DISTURBED AREAS WILL NOT BE RESTORED IMMEDIATELY AFTER ROUGH GRADING, TEMPORARY SEED SHALL BE PLACED.
16. FOR THE FIRST SIX WEEKS AFTER RESTORATION (E.G. SEED & MULCH, EROSION MAT) OF A DISTURBED AREA, INCLUDE SUMMER WATERING PROVISIONS OF ALL NEWLY SEEDED AND MULCHED AREAS WHENEVER 7 DAYS ELAPSE WITHOUT A RAIN EVENT.
17. SEDIMENT SHALL BE CLEANED FROM DITCHES IF ACCUMULATED AFTER EACH RAINFALL AND PRIOR TO PROJECT ACCEPTANCE.
18. ACCUMULATED CONSTRUCTION SEDIMENT SHALL BE REMOVED FROM ALL PERMANENT BASINS TO THE ELEVATION SHOWN ON THE GRADING PLAN FOLLOWING THE STABILIZATION OF DRAINAGE AREAS.
19. ALL CONSTRUCTION ENTRANCES SHALL HAVE TEMPORARY ROAD CLOSED SIGNS THAT WILL BE IN PLACE WHEN THE ENTRANCE IS NOT IN USE AND AT THE END OF EACH DAY.
20. ANY PROPOSED CHANGES TO THE EROSION CONTROL PLAN MUST BE SUBMITTED AND APPROVED BY DANE COUNTY WATER RESOURCES ENGINEERING OR PERMITTING MUNICIPALITY.
21. THE TOWN OF VERONA, DANE COUNTY, OWNER AND/OR ENGINEER MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AT ANY TIME DURING CONSTRUCTION.
22. NO GRADING SHALL BE ALLOWED WITHIN 5 FEET OF A PROPERTY LINE UNLESS AUTHORIZED BY PERMITTING AUTHORITY.



- NOTES:**
1. THE GEOTEXTILE FABRIC SHALL BE PLACED IN THE EXCAVATED TRENCH, BACKFILLED AND COMPACTED TO THE EXISTING GROUND SURFACE.
 2. TRENCH SHALL BE A MINIMUM OF 4" WIDE AND 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
 3. WOOD POSTS SHALL BE A MINIMUM OF 1-1/8" x 1-1/8" OAK OR HICKORY AND 4 FEET LONG.
 4. WOOD POST SPACING SHALL BE A MAXIMUM OF 3' FOR NON-WOVEN GEOTEXTILE FABRIC IS USED AND A MAXIMUM OF 8' IF WOVEN GEOTEXTILE FABRIC IS USED.
 5. THE GEOTEXTILE FABRIC SHALL BE ATTACHED DIRECTLY TO THE UPSLOPE SIDE OF WOODEN POSTS WITH 0.5 INCH STAPLES IN AT LEAST 3 PLACES.
 6. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY, USE ONE OF THE FOLLOWING TWO METHODS:
 - 6.A. TWIST METHOD: OVERLAP THE END POSTS AND TWIST OR ROTATE AT LEAST 180 DEGREES.
 - 6.B. HOOK METHOD: HOOK THE END OF EACH SILT FENCE LENGTH.

1 SILT FENCE NOT TO SCALE



- NOTES:**
1. THE TRACKING PAD SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION TRAFFIC LEAVING THE SITE.
 2. STONE TRACKING PAD SHALL BE INSTALLED PER WISCONSIN DNR TECHNICAL STANDARD 1057.
 3. TRACKING PAD SHALL BE A MINIMUM LENGTH OF 50 FEET. TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT OR A MINIMUM OF 12 FEET IN WIDTH. TRACKING PAD SHALL BE A MINIMUM DEPTH OF 12 INCHES OF 3 INCH TO 6 INCH CLEAR OR WASHED STONE.
 4. TRACKING PAD SHALL BE FLARED PER PLAN
 5. ON SITES WITH A HIGH WATER TABLE, OR WHERE SATURATED CONDITIONS ARE EXPECTED DURING THE LIFE OF THE PRACTICE, STONE TRACKING PADS SHALL BE UNDERLAIN WITH A WISCONSIN DOT TYPE R GEOTEXTILE FABRIC TO PREVENT MIGRATION OF UNDERLYING SOIL INTO THE STONE.
 6. SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY FROM TRACKING PADS OR CONVEYED UNDER AND AROUND THEM BY USING A VARIETY OF PRACTICES, SUCH AS CULVERTS, WATER BARS OR OTHER SIMILAR PRACTICES.

2 TRACKING PAD NOT TO SCALE

CONSTRUCTION SEQUENCE:

1. INSTALL SILT FENCE AND TRACKING PAD
2. CLEAR AND GRUB AREA FOR STORMWATER BASINS
3. STRIP TOPSOIL - STORMWATER AREA
4. ROUGH GRADE - STORMWATER AREA
5. STRIP TOPSOIL-ROADS, DITCHES & OTHER DISTURBED AREAS
6. ROUGH GRADE-ROADS, DITCHES & OTHER DISTURBED AREAS
7. CONSTRUCT ROAD CULVERTS
8. CONSTRUCT UNDERGROUND UTILITIES
9. PLACE AGGREGATE ON ROADS & COMPACT
10. FINAL GRADING
11. RESPREAD TOPSOIL
12. DEEP TILL-DISTURBED AREAS*
13. SEED, FERTILIZE, MULCH/MATting PER PLAN
14. TOUCH UP ROAD AGGREGATE & COMPACT PRIOR TO ASPHALT CONSTRUCTION
15. ASPHALT CONSTRUCTION
16. FINAL SHOULDERING AND RESTORATION
17. EROSION CONTROL FEATURES AFTER DISTURBED AREAS ARE STABILIZED/VEGETATED

*SEE DETAIL 6/SHEET 16 FOR DEEP TILLING DETAIL & NOTES

CONSTRUCTION SCHEDULE:

1. INSTALL EROSION CONTROL MEASURES & START GRADING FOR SITE INCLUDING ROADS AND STORMWATER	TBD
2. TBD	TBD
3. TBD	TBD
4. TBD	TBD
5. TBD	TBD

SEEDING RATES:

TEMPORARY:

1. USE ANNUAL OATS AT 3.0 LB./1,000 S.F. FOR SPRING AND SUMMER PLANTINGS.
2. USE WINTER WHEAT OR RYE AT 3.0 LB./1,000 SF FOR FALL PLANTINGS STARTED AFTER SEPTEMBER 15.
3. SEE DRY DETENTION BASIN DETAIL FOR SEEDING OF DRY DETENTION BASINS.

PERMANENT:

1. USE WISCONSIN D.O.T. SEED MIX #40 AT 2 LB./1,000 S.F.

FERTILIZING RATES:

TEMPORARY AND PERMANENT:

USE WISCONSIN D.O.T. TYPE A OR B AT 7 LB./1,000 S.F.

MULCHING RATES:

TEMPORARY AND PERMANENT:

USE 1/2" TO 1-1/2" STRAW OR HAY MULCH, CRIMPED PER SECTION 607.3.2.3, OR OTHER RATE AND METHOD PER SECTION 627, WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION

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(608) 832-6352 | carricoengineering.com

Construction Details
Riverside Vista
Town of Verona
Dane County, Wisconsin

Revisions		Revisions	
No.	Date	No.	Date

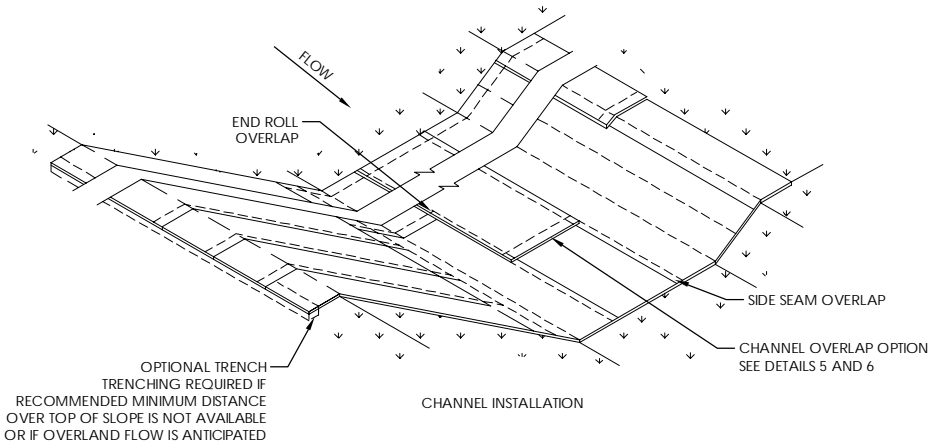
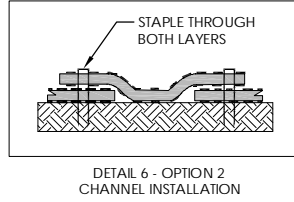
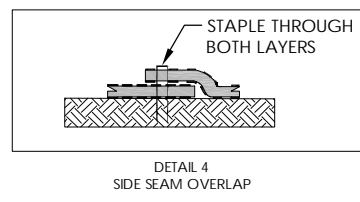
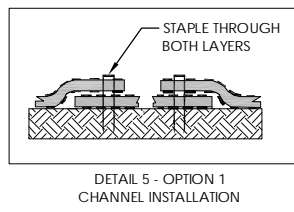
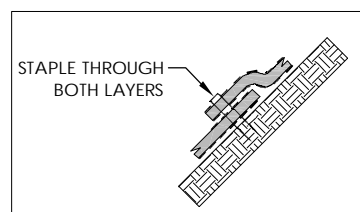
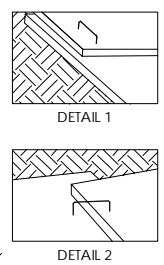
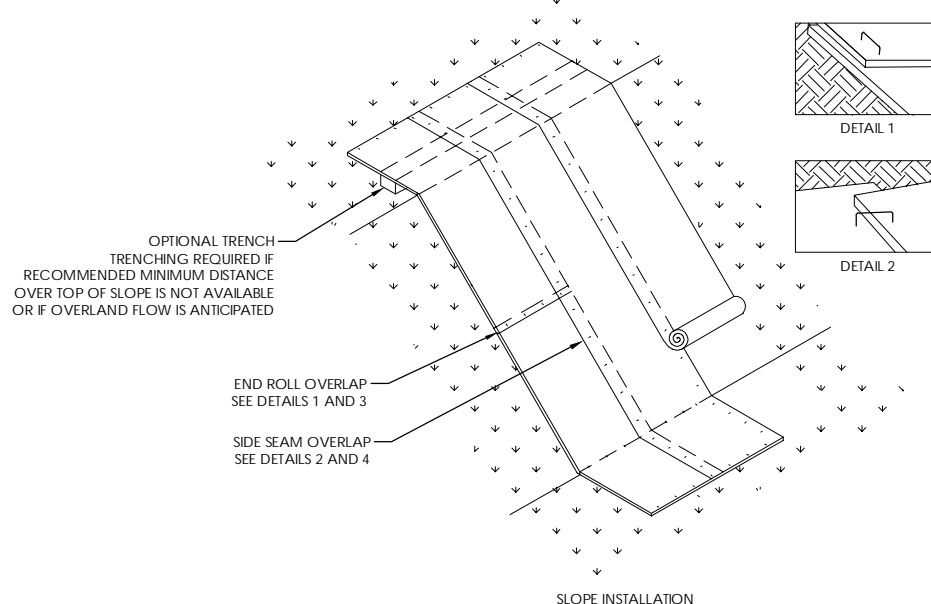
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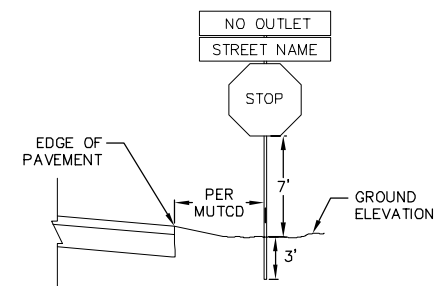
Sheet No: **14 of 17**



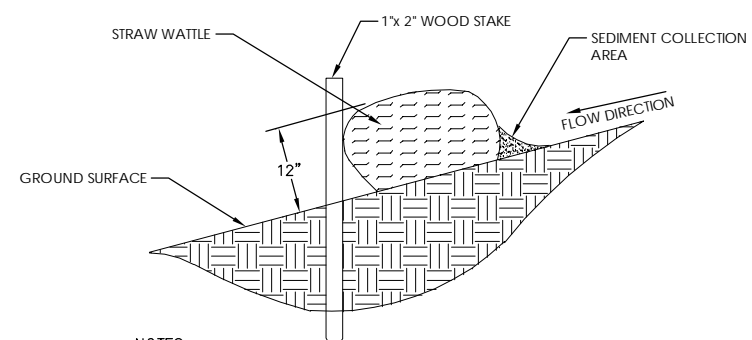
- NOTES:**
1. STAPLE PATTERNS ARE DEPENDENT UPON SLOPE CONDITIONS AND MANUFACTURER'S RECOMMENDATIONS.
 2. STAPLES OF 11 GAUGE OR HEAVIER SHALL BE USED TO HOLD MATS AND NETS IN PLACE.
 3. STAPLES SHALL BE U-SHAPED WITH A 1-INCH TO 2-INCH CROWN.
 4. STAPLE LENGTHS ARE DETERMINED BASED ON SOIL CONDITION, BUT SHALL NOT BE LESS THAN 6 INCHES LONG. SEE WDNR TECHNICAL STANDARD 1052 FOR FURTHER LENGTH REQUIREMENTS.
 5. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR BOTH END AND EDGE OVERLAP LENGTH.
 6. CONSIDER THE USE OF BIODEGRADABLE STAPLES IN LOCATIONS WHERE WIRE STAPLES ARE DETERMINED TO BE A RISK.

1 EROSION MAT
15 NOT TO SCALE

- SIGNAGE NOTES:**
1. ALL SIGNS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 2. SIGNS SHALL BE A DISTANCE OF 7' FROM GROUND LEVEL TO THE BOTTOM OF THE SIGN MOUNTED ON THE POST.
 3. STREET NAME SIGNS SHALL HAVE WHITE LETTERS AND GREEN BACKGROUND.
 4. SIGN POSTS SHALL BE 2" GALVANIZED SQUARE TUBE AND 12 FT LONG. MOUNT SIGN AT TOP OF THE POST, AND INSTALL POSTS 3' DEEP AND MIX 1/2 BAG OF 80 LB SAKRETE CONCRETE, POURING IT AROUND THE POST BELOW THE GROUND BEFORE COVERING WITH 8" OF TOPSOIL.
 5. VERIFY AND CONFIRM ALL SIGNS WITH TOWN OF VERONA ENGINEER PRIOR TO PURCHASING AND/OR INSTALLING.

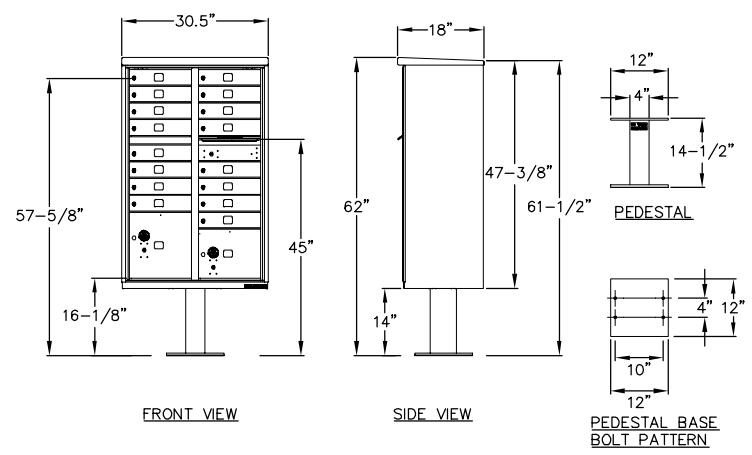
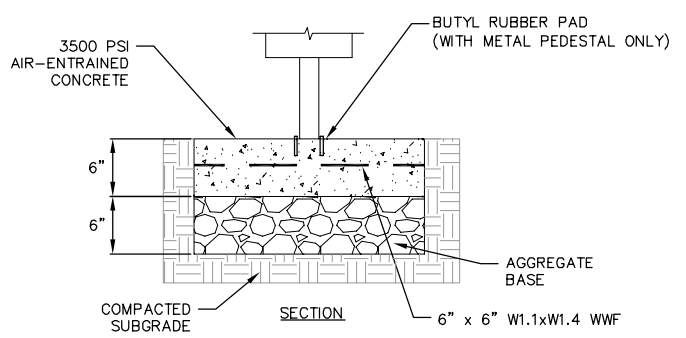
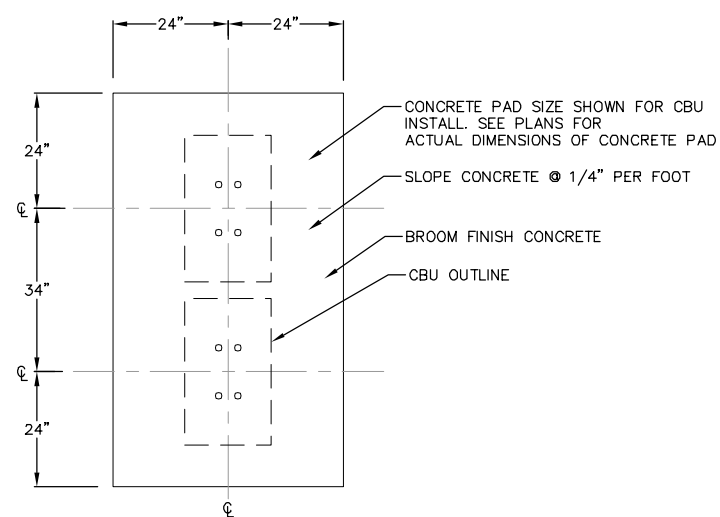


2 ROAD SIGN DETAIL
15 NOT TO SCALE



- NOTES:**
- WATTLES SHALL BE PLACED AS SOON AS GRADING IS DONE SUCH THAT RUNOFF IS ABLE TO BE CONDUCTED OR CONVEYED WITHIN DITCH.
 - STAKE DOES NOT NEED TO PIERCE WATTLE, BUT MAY BE DRIVEN AT AN ANGLE TO SECURE WATTLE ALLOWING WATTLE TO BE MOVED AND POSSIBLY REUSED

3 STRAW WATTLE DETAIL
15 NOT TO SCALE



- NOTES:**
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 PSI @28 DAYS, CONTAIN 4% MIN. - 6% MAX. AIR ENTRAINMENT AND BE PLACED WITH A 3.50 - 4.50 SLUMP IN ACCORDANCE WITH ACI 301
 2. WELDED WIRE FABRIC SHALL BE PER ASTM A185/A185M
 3. EXPANSION BOLTS SHALL BE EQUIVALENT TO THE FOLLOWING PROVIDERS:
 - 3.1. HILTI KWIK BOLT II (WWW.US.HILTI.COM) 1/2" DIAMETER x 5-1/2" OVERALL LENGTH. GALVANIZED, CATALOG # 00-453-696. KB II 12-512, STAINLESS STEEL; CATALOG # 000-454-744. ENSURE THAT THE MINIMUM EMBEDMENT IN CONCRETE IS AT LEAST 3-1/2".
 - 3.2. ITW RAMSET REDHEAD TRUBOLT GALVANIZED (WWW.RAMSET-REDHEAD.COM), 1/2" DIAMETER x 7" OVERALL LENGTH; CATALOG NUMBER: WS-1270G. ENSURE THAT THE MINIMUM EMBEDMENT IN CONCRETE IS AT LEAST 4-1/8".
 - 3.3. RAWL STUD GALVANIZED (WWW.RAWL.COM), 1/2" DIAMETER x 5-1/2" OVERALL LENGTH; CATALOG NUMBER: 7724. ENSURE THAT THE MINIMUM EMBEDMENT IN CONCRETE IS AT LEAST 4".
 4. A 3-CBU CONFIGURATION IS DEPICTED. A 2 OR 4-CBU CONFIGURATION MAY BE USED AS LONG AS THEY ARE ARRANGED IN GROUPS SUCH THAT THE OVERALL DIMENSION OF THE CONCRETE BASE DOES NOT EXCEED 16 FEET.

4 CBU MAILBOX & CONCRETE PAD DETAIL
15 NOT TO SCALE

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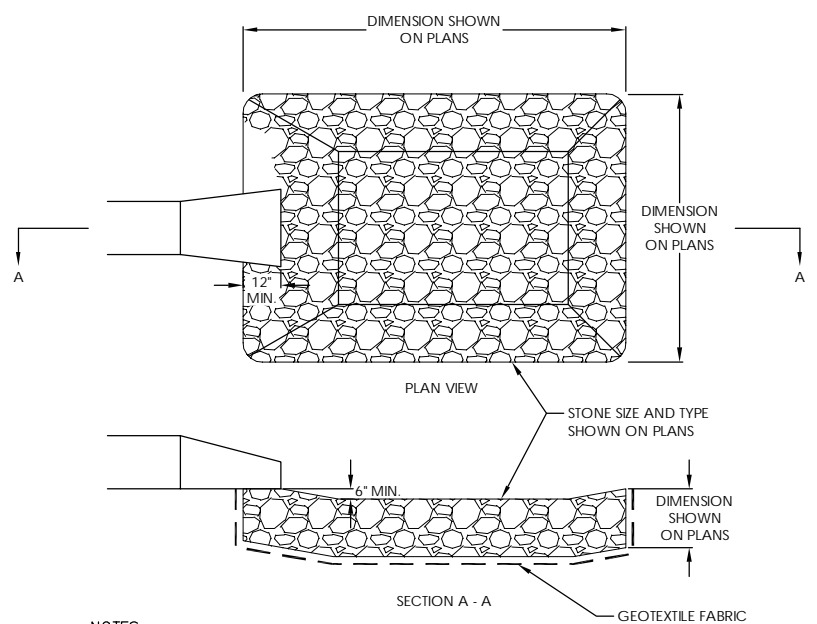
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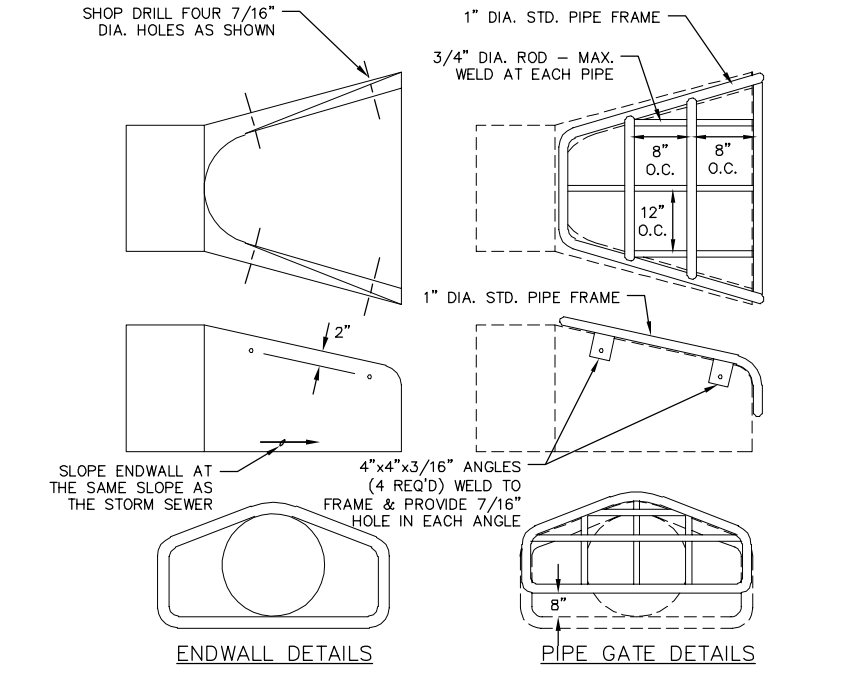
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Sheet No: 15 of 17



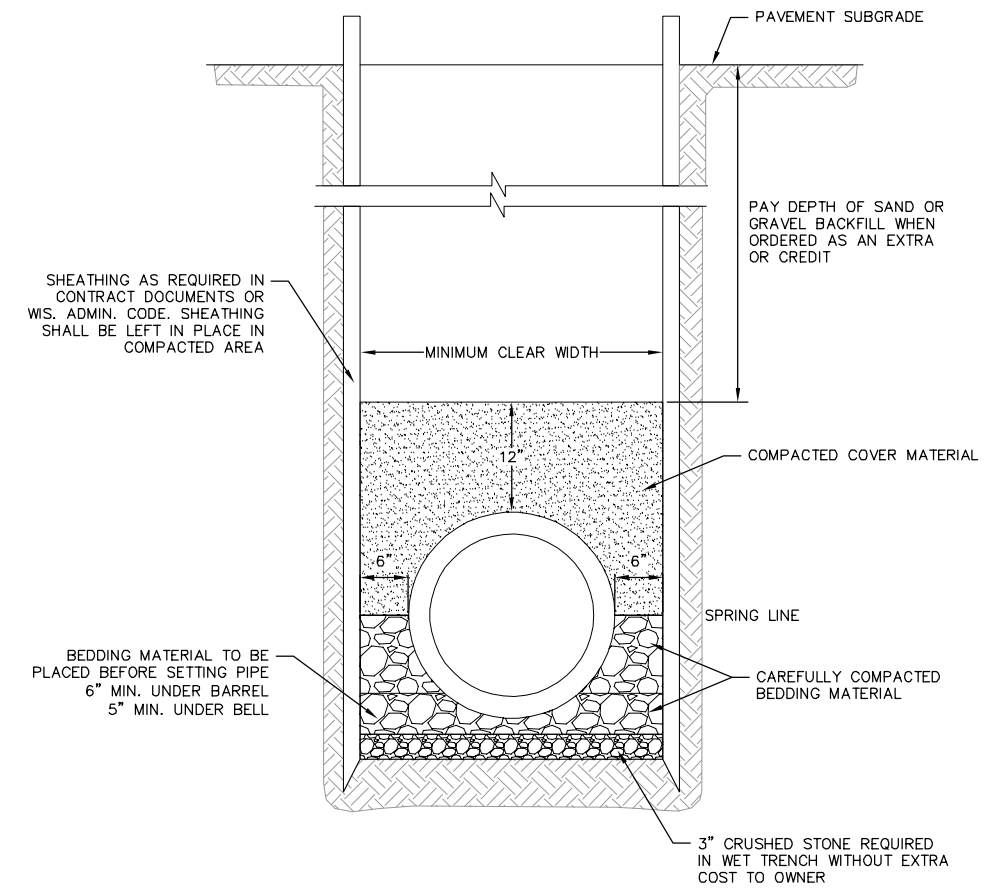
- NOTES:**
- RIPRAP DETAIL FOR DRY BASIN OUTLET PIPES AND EMERGENCY SPILLWAYS AND BIORETENTION BASIN OUTLET PIPE AND EMERGENCY SPILLWAY.
 - SEE GRADING AND EROSION CONTROL PLAN FOR DIMENSIONS, STONE SIZE AND DEPTH
 - GEOTEXTILE FABRIC SHALL BE MIRAFI 140 N OR APPROVED EQUAL

1 RIPRAP DETAIL
16 NOT TO SCALE

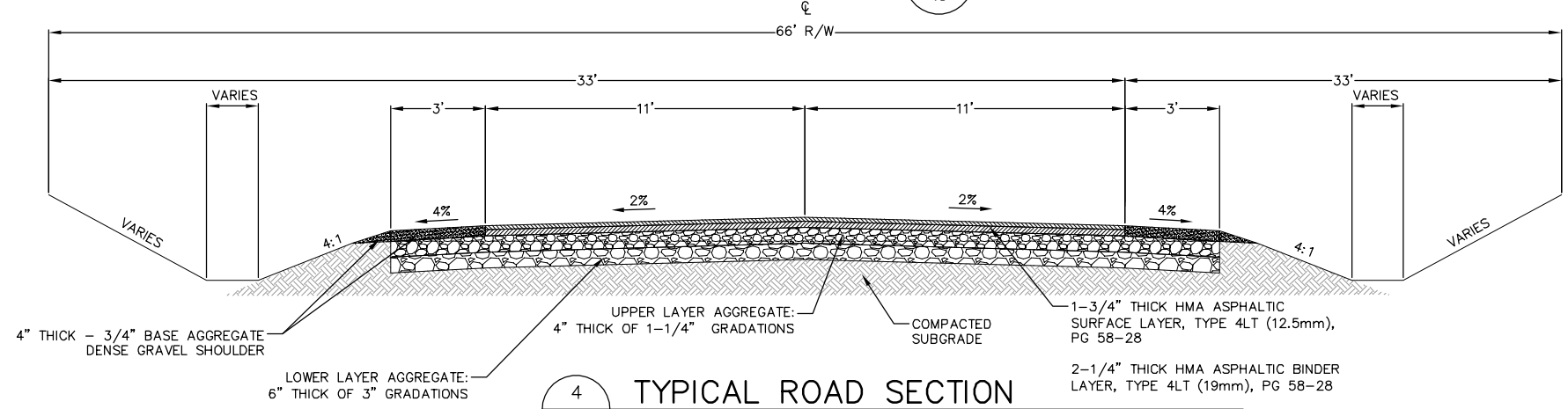


- NOTES:**
- THE CONTRACTOR SHALL BOLT THE PIPE GATE TO THE CONCRETE ENDWALL WITH FOUR 3/8"x6" MACHINE BOLTS WITH NUTS ON INSIDE WALL.
- PAINTING SPECIFICATIONS:**
- THE PIPE GATE SHALL RECEIVE THE FOLLOWING PREPARATION & PAINTING. THE FIRST COAT SHALL BE RUS-OLEUM X-60 RED BARE METAL PRIMER OR APPROVED EQUAL. THE SECOND COAT SHALL BE RUS-OLEUM 960 ZINC CHROMATE PRIMER OR APPROVED EQUAL. THE THIRD COAT SHALL BE RUS-OLEUM 1282 HIGH GLOSS METAL FINISH OR APPROVED EQUAL.
- PREPARATION STEPS:**
- BARE METAL SURFACES - TREAT WITH THE THREE-COAT PAINTING SYSTEM LISTED AFTER A THOROUGH SCRAPING, WIRE BRUSHING & CLEANING.
 - EACH COAT OF PAINT SHALL BE APPLIED OVER THE ENTIRE GATE SURFACE.
 - ALLOW 24-48 HOURS DRYING TIME AT 60° OR ABOVE BETWEEN COATS.

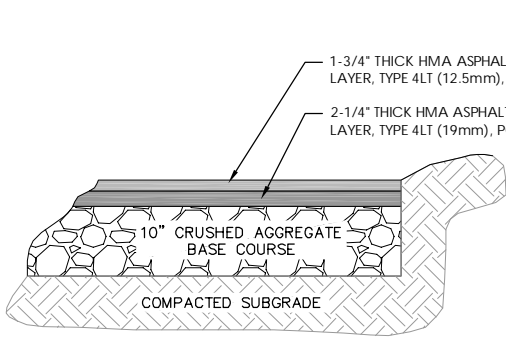
2 STANDARD ENDWALL DETAIL
16 NOT TO SCALE



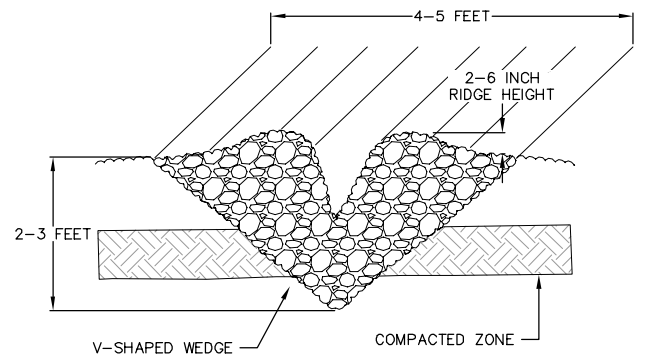
3 CLASS B BEDDING COMPACTED SECTION
16 NOT TO SCALE



4 TYPICAL ROAD SECTION
16 NOT TO SCALE

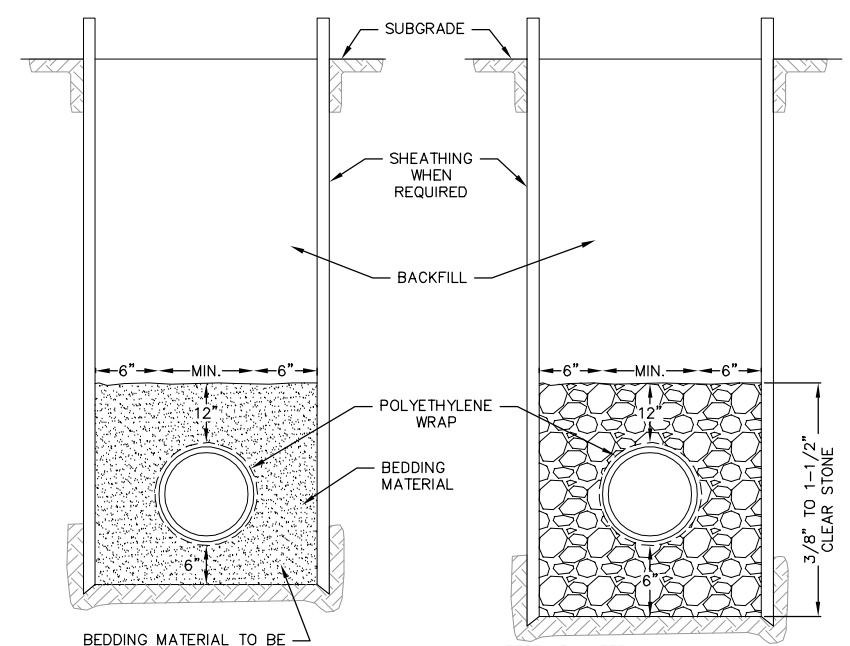


5 SITE PAVEMENT
16 NOT TO SCALE



6 DEEP TILLING DETAIL
16 NOT TO SCALE

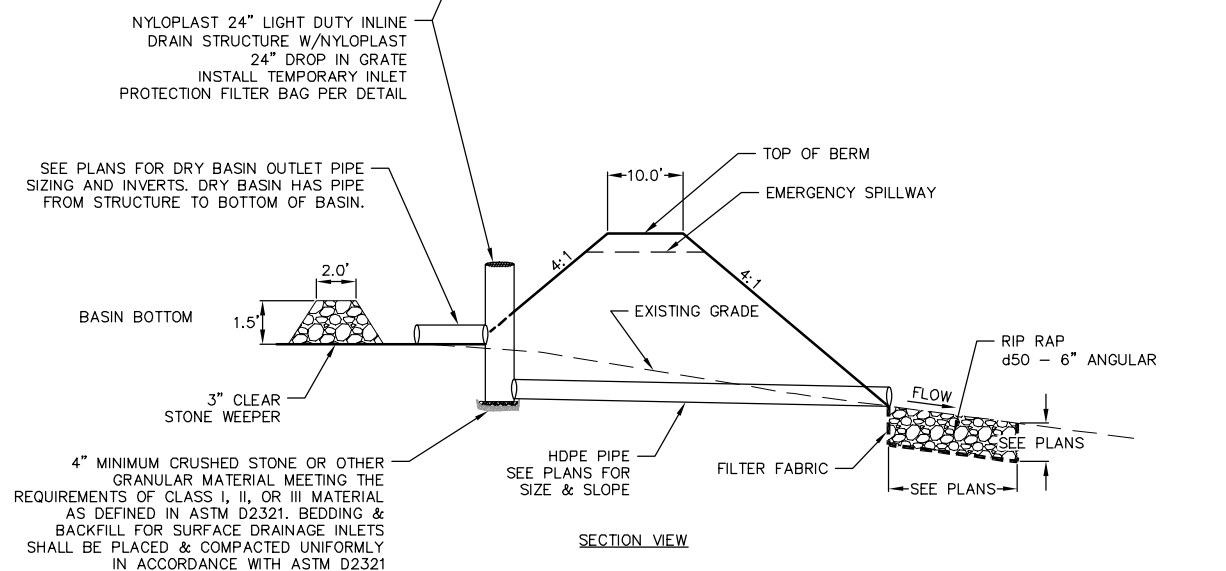
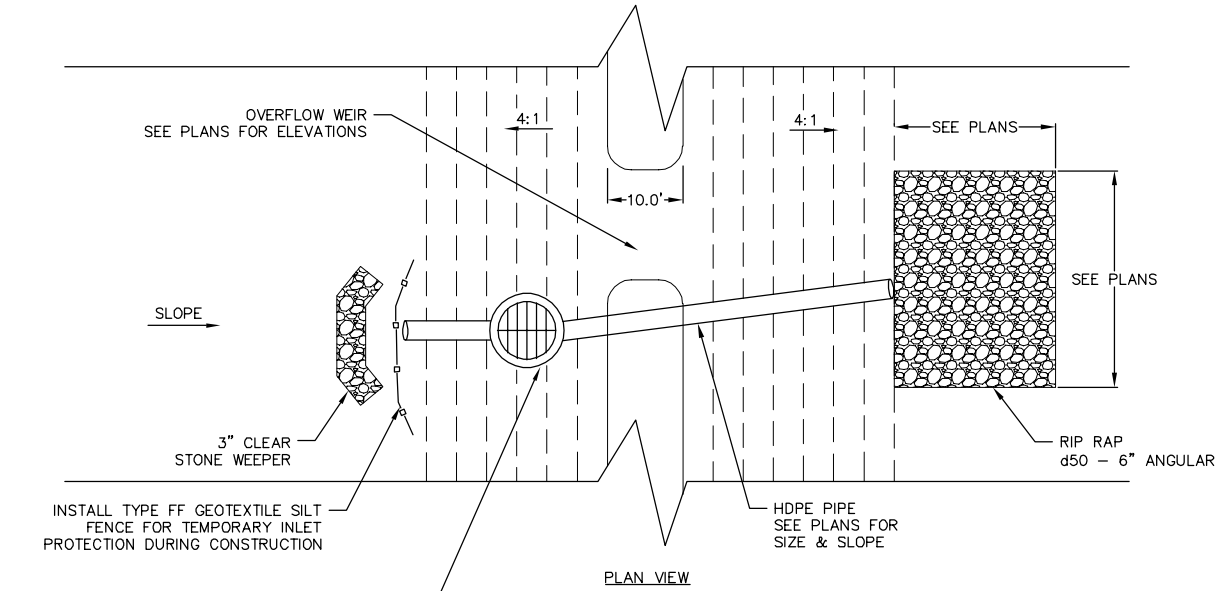
- NOTES:**
- DEEP TILLING SHALL OCCUR ON DISTURBED GROUND PRIOR TO SEEDING.
 - DISTURBED SOILS SHALL BE RIPPED AT LEAST 1 TO 2 INCHES BELOW THE HARDPAN LAYER OR COMPACTED ZONE.
 - DEEP TILLING SHALL BE COMPLETED WHEN SOILS ARE DRY AS IT MORE EFFECTIVELY BREAKS UP THE SOIL AND LEAVES LARGER RIDGES ON THE SURFACE.
 - SHANKS SHALL BE SPACED 4-5 FEET APART.
 - DEEP TILLING SHALL BE PERFORMED ON THE CONTOUR.
 - CONTRACTOR SHALL INSPECT DEEP TILLAGE AREA AFTER EACH STORM EVENT FOR SIGNS OF EROSION, WITH NECESSARY REPAIRS MADE IMMEDIATELY.



7 STANDARD TRENCH SECTION
16 NOT TO SCALE

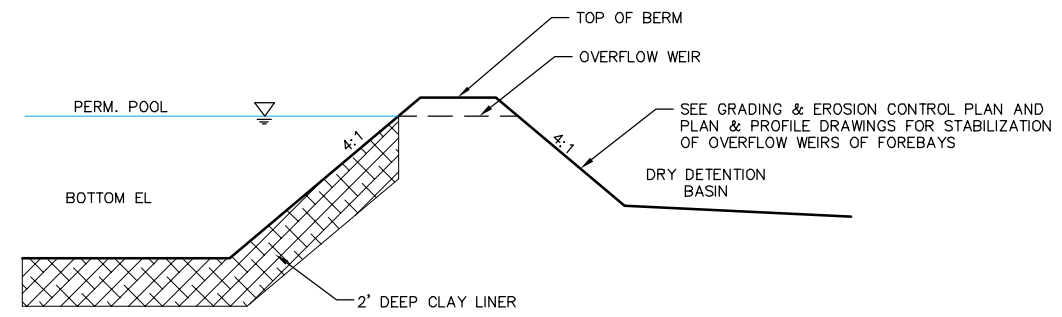
Revisions	No.	Date	Description

Scale:	AS SHOWN
Date:	2/5/2024
Drawn By:	ALC
Project No:	230019
Sheet No:	16 of 17

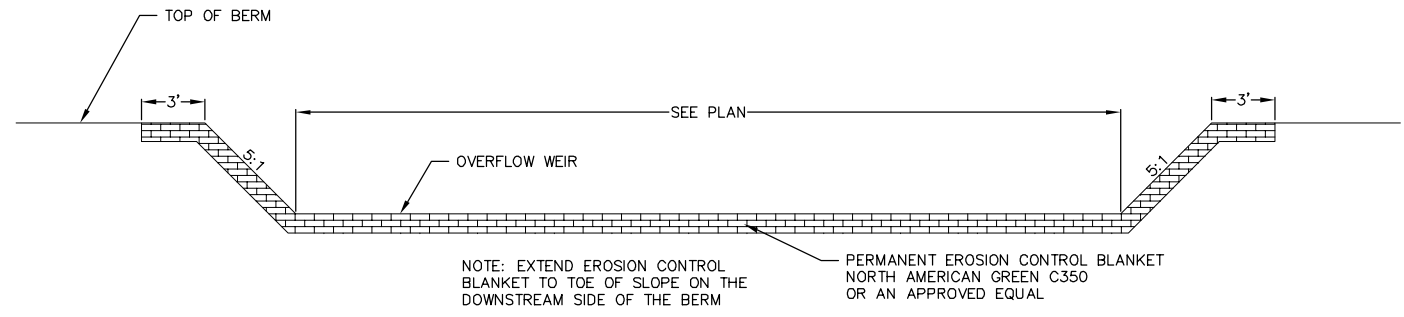


- NOTES:
- SEE BASIN PLAN & PROFILE SHEETS FOR ALL TOP OF BERM ELEVATIONS, OVERFLOW WEIR LENGTH & ELEVATIONS, RIM ELEVATIONS FOR STRUCTURES, INVERT ELEVATIONS AND RIP RAP SIZING.
 - BOTTOM OF DRY BASINS SHALL BE SLOPED TOWARD THE OUTLET TO ENSURE PROPER DRAINAGE AND PREVENT STANDING WATER.
 - BOTTOM OF THE BASINS SHALL BE SEEDED WITH VEGETATION THAT IS TOLERANT OF INUNDATION. SEED MIX SHALL BE AGRECOL RAINWATER RENEWAL MIX OR SIMILAR MIX APPROVED BY ENGINEER PLANTED AT 8 PLS (PURE LIVE SEED) LBS/ACRE.

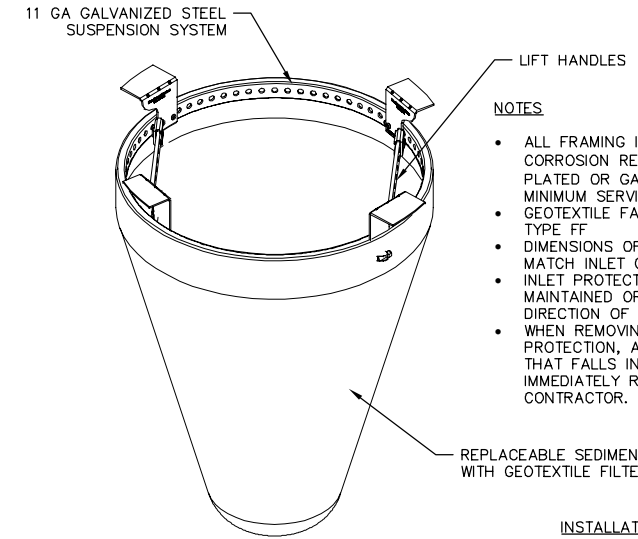
1 DRY DETENTION BASIN DETAIL
17 NOT TO SCALE



2 FOREBAY DETAIL
17 NOT TO SCALE



3 OVERFLOW WEIR
17 NOT TO SCALE



- NOTES:
- ALL FRAMING IS CONSTRUCTED OF CORROSION RESISTANT STEEL (ZINC PLATED OR GALVANIZED) FOR 7-YR MINIMUM SERVICE LIFE.
 - GEOTEXTILE FABRIC SHALL BE WisDOT TYPE FF
 - DIMENSIONS OF TOP OF FILTER TO MATCH INLET GRATE
 - INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.
 - WHEN REMOVING OR MAINTAINING INLET PROTECTION, ANY TRAPPED MATERIAL THAT FALLS INTO THE INLET SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.

INSTALLATION

1. REMOVE GRATE
2. DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING
3. REPLACE GRATE

4 INLET PROTECTION DETAIL
17 NOT TO SCALE

Revisions		Description	
No.	Date	No.	Date

Scale: AS SHOWN

Date: 2/5/2024

Drawn By: ALC

Project No: 230019

Sheet No: 17 of 17

DEVELOPMENT AGREEMENT
RIVERSIDE VISTA

This Developers Agreement (“Agreement”) is dated this ___ day of _____, 2024, between the Town of Verona, Wisconsin, a body corporate and politic (“Town”), and Coon Construction Town of Verona, LLC, (“Developer”).

RECITALS

A. The Developer owns certain undeveloped real estate located in the Town, which is legally described in Exhibit A (“Property”). The Developer wishes to develop the Property as a subdivision as described in the Declaration of Covenants, Conditions, and Restrictions attached hereto as Exhibit B (“Declaration”) and depicted in the Plat attached as Exhibit C (the “Plat”).

B. The Town has determined that the development of the Property, as shown in the Declaration and Plat (the “Development”), is consistent with and promotes the achievement of the goals and objectives of the Town’s comprehensive plan and is otherwise in the public interest.

C. The parties have entered into this Agreement to describe the terms and conditions under which the development of the Property will be implemented.

D. The Developer wishes to install private improvements to serve the Development. The Town requires that the Developer enter into an agreement with the Town regarding the installation of these improvements before the commencement of construction.

E. The parties intend to be mutually bound by this Agreement per the terms and conditions described herein.

NOW, THEREFORE, in consideration of the above recitals, which are contractual and other good and valuable consideration mutually acknowledged, it is agreed as follows:

ARTICLE I. INTERPRETATION AND GENERAL STANDARDS

Section 1.01 Agreement Interpretation. All questions concerning the interpretation or clarification of this Agreement or applicable Town ordinances, including the discovery of conflicts, discrepancies, errors, or omissions, or the acceptable performance thereunder by the Developer, shall be immediately submitted in writing to the Town for resolution. At all times, the Developer shall proceed with the work implementing the Development in accordance with the determinations, instructions, and clarifications of the Town, but all such decisions, instructions, and clarifications by the Town shall be entirely consistent with the terms of this Agreement.

Section 1.02 Standards and Codes. Whenever references are made in this Agreement to standards or ordinances under which the Development is to be performed, the latest revision of the Town’s Ordinances shall apply unless otherwise expressly stated. In case of conflict between any referenced standard or code on the one hand and any provision of this Agreement on the other hand, the more stringent requirement shall govern. All applicable laws, ordinances,

statutes, rules, regulations, or orders in effect when the relevant work under this Agreement is performed shall apply to the Developer and its contractors, employees, representatives, and subcontractors. The Developer shall procure and pay for all permits, licenses, certifications, and other applicable governing authority requirements and inspections and shall furnish any documentation, bonds, security, or deposits required to permit any work within the Development. Notwithstanding the foregoing, the parties acknowledge that any change to the laws, ordinances, statutes, rules, regulations, or orders by the Town during the term of this Agreement shall affect the Town as a whole and not only this Development or the Developer.

Section 1.03 Developer is an Independent Contractor. Notwithstanding any other provisions of this Agreement to the contrary, the Developer is an independent contractor, and nothing herein shall be construed to make the Developer, its contractors, or consultants' agents of the Town, or the Town, its employees, agents, or consultants' agents of the Developer. However, this does not limit the Town's regulatory control over the Developer regarding the quality of the required work. Furthermore, nothing contained in this Agreement shall be construed as creating any contractual relationship with the Town's consultants (planning, engineering, financial, and legal) or any persons or entities other than the Town and the Developer.

ARTICLE II. REQUIRED IMPROVEMENTS

Section 2.01 Public Improvements. The Developer shall complete the construction of all public improvements described in par. 2.01(a) in material compliance with all Town standards and plans and specifications (the "Plans") prepared by the Developer's engineer and approved by the Town Board and all other regulatory agencies having jurisdiction over the private improvements, all at the Developer's sole expense unless otherwise agreed by the parties. No work shall commence within dedicated rights-of-way or other public lands until such Plans have been approved. The following provisions govern the design and construction of the private improvements:

(a) Improvements Required. The required public improvements (the "Improvements") shall include the construction of the proposed road as shown on the plat, including all intersection improvements, cluster mailbox parking lane, street name and regulatory signage and culvert markers, all of which shall be dedicated to the Town upon Acceptance.

(b) Control of Fugitive Emissions. Developer shall use control practices during construction to minimize fugitive dust consistent with those used by developers on similar developments in the Town.

(c) Noxious Weeds/Landscape Maintenance. Developer shall maintain grasses at a reasonable height and control noxious weeds on all private lots until they are owned by a party other than the developer.

(d) Damage to Town Roads. The Developer shall be responsible for repairing

all damage to Town roads caused exclusively by the Developer's construction activities and shall clean any mud or debris from the Town roads adjacent to the Plat during the construction of the Improvements until acceptance by the Town.

(e) Permits. Developer shall obtain all required governmental permits for work within the public right-of-way before the commencement of such work and shall comply with all conditions of such permits.

(f) Intersection Design. Developer shall ensure that the design of the proposed intersections and cul-de-sac bulb complies with the plans approved by the Town of the Town's traffic engineer, which shall be developed to maximize traffic safety and maximize visibility for vehicle operators approaching the intersection from all directions. All signs shall be installed in accordance with the Wisconsin Department of Transportation Wisconsin Manual on Uniform Traffic Control Devices (WMUTCD) and adopted by the Town of Verona Board.

(g) The Developer shall make such Improvements to the public roads or right-of-way areas, including the installation of additional or different traffic control signage or pavement markings as determined reasonably necessary by the Town Board or Town Staff to assure traffic safety in the intersection and intersection approach areas. The traffic control signage will be installed before the first building permit is issued by the Town. Under no circumstances shall the Developer be required to install traffic signals as part of the Development.

(h) Utilities: The Developer shall install public utilities, such as gas, electrical power, telephone, and data transmission, to make adequate service available to each lot. All utility services shall be underground unless the Town Board approves overhead installations. Developer is responsible for making all arrangements with the utility companies and paying all costs associated with utility extensions.

Section 2.02 Specifics for Road Construction. All roads shall be constructed to Town standards: The paved surface of all roads in the Development shall be 22-foot wide and be constructed with the following minimum pavement specifications: 10" inches of crushed aggregate base course, firmly compacted, over a firm base of appropriate composition, and 4" inches of asphalt pavement applied in two lifts consisting of 2 ¼" binder course and 1 ¾" finish surface course, and 36-inch wide shoulder on both sides of the road. Shoulder materials shall be 4 inches thick of compacted in-place three-quarter inch crushed aggregate base course approved by Town Staff, over a minimum of ten inches of compacted in-place crushed state-approved aggregate base. The shoulder elevation shall match the grade of the pavement. Until such time as the upper course of asphalt is in place, an interim shoulder with an elevation equal to the height of the lower course of asphalt shall be installed. Before the asphalt is applied the base shall be proof rolled to determine the firmness of the base. The proof-rolling shall be coordinated with the Town Staff to allow for observation of the test by the Town.

Section 2.03 Private Improvements. The Developer shall complete the construction of all private improvements described in par. 2.03(a) in material compliance with all Town standards and plans and specifications (the "Plans") prepared by the Developer's engineer and approved by the Town Board and all other regulatory agencies having jurisdiction over the private improvements, all at the Developer's sole expense unless otherwise agreed by the parties. No work shall commence within dedicated rights-of-way or other public lands until such Plans have been approved. The following provisions govern the design and construction of the private improvements:

(a) Improvements Required. The required private improvements (the "Improvements") shall include the construction of stormwater management facilities as per the Plans and as approved by the Dane County Water Resources Engineering Division along with the construction of the items shown in the Stewardship Plan.

(b) Control of Fugitive Emissions. Developer shall use control practices during construction to minimize fugitive dust consistent with those used by developers on similar developments in the Town.

(c) Noxious Weeds/Landscape Maintenance. Developer shall maintain grasses at a reasonable height and control noxious weeds on all private lots until they are owned by a party other than the developer.

(d) Damage to Town Roads. The Developer shall be responsible for repairing all damage to Town roads caused exclusively by the Developer's construction activities and shall clean any mud or debris from the Town roads adjacent to the Plat during the construction of the Improvements until acceptance by the Town.

(e) Permits. Developer shall obtain all required governmental permits for work within the public right-of-way before the commencement of such work and shall comply with all conditions of such permits.

Section 2.04 Time of Completion of Improvements

(a) No construction activity may commence until this Agreement has been executed, the Developer has provided Security to the Town for the construction of the Public Improvements in the form of a letter of credit for 115% of the estimated cost for all public Improvements, including filling and grading, the crushed aggregate base, asphalt paving, appropriate shoulders, culverts, and restoration. Additionally, the Developer, or its contractors, shall have obtained the appropriate County and WDNR permits, certificates of liability insurance for any and all activities related to the construction and installation of public Improvements, and the Town Staff have given written authorization to start work. The letter of credit shall be in effect until the later of (a) 24 months; or (b) until the Improvements have been accepted by the Town. If the letter of credit expires and all Improvements have not been accepted by the Town, no building permits or occupancy permits will be issued by the Town until an appropriate letter of credit is

provided to the Town for the uncompleted required road construction. The letter of credit can be reduced periodically to cover 115% of only the remaining Public Improvement work to be completed.

(b) No building permits authorizing construction on any private lots will be issued by the Town until the base course of asphalt on the public roads is completed and all regulatory signage has been installed and inspected by the Town.

(c) The construction of all Improvements (except for surface asphalt) and placement of all survey stakes shall be completed within 12 months from the date of initial construction start date unless an extension is approved by Town staff. The surface asphalt shall be placed no later than 12 months after the binder asphalt is placed. The developer shall have the option of delaying the installation of the final surface course of pavement for up to an additional 24 months provided that the Developer provides reasonable additional security effective for the period of the approved extension plus 90 days, provided, however, if the extended deadline expires after October 15 of any year, the Security shall remain in effect until at least June 1 of the following year. If the Town receives notice of the intention to terminate the letter of credit prior to completion of the final surface course pavement, such notice shall be considered a failure to complete the Improvements in accordance with this agreement and shall entitle the Town to immediately draw against the letter of credit.

(d) Starting and Completion Dates. The Developer shall provide a schedule of construction setting forth the approximate dates of commencement and completion of construction for all Improvements. The Developer agrees that no work shall be scheduled for the Improvements, and no construction shall commence without the Town's written approval of the starting date. Any deviation from this schedule will require the approval of the Town Administrator. The timing in this agreement relates only to the Improvements, and all parties acknowledge that the Developer shall have no obligations or commitments for the sale of individual lots or construction of homes or improvements thereon.

Section 2.05 Cluster Mailbox Units. The Developer shall install cluster-box units or other centralized mail depositories within the proposed road according to the Plans and as approved by the United States Postal Service. A parking lane shall be added and shown on the Plans to allow for the retrieval of mail without obstructing traffic flow. A letter from the U.S. Postal Service indicating that it has approved the cluster-box units or other mailboxes is required. The Town will not issue any occupancy permits until the mailboxes and parking lane are installed.

Section 2.06 Hours of Construction. All work within the public right-of-way, stormwater management features, and outdoor work on individual homes shall be done between 7:00 am and 7:00 pm Monday through Friday and 8:00 am to 5:00 pm on Saturday. No outside work is permitted on Sunday. The work shall be sequenced to minimize the length and extent of excavations or other obstructions to travel within the roadways. Appropriate warning signs shall always be maintained during construction within public rights-of-way.

Section 2.07 Plat Road Maintenance. The Developer shall maintain all roads within the Plat in a condition that allows for safe travel at all times after the first asphalt layer is installed until the binding coat of the plat road is accepted by the Town Board, including the prompt removal of snow, ice and obstructions from such roadways. The Developer may assign its obligation under this section to a Homeowners' Association provided that no such assignment shall relieve the Developer of its obligations hereunder unless the form of the assignment is approved by the Town Attorney. Such approval will require that the Town can enforce the obligations against the Association, perform any required work upon default of the Association and recover its costs through direct charges against the lots within the Development.

Section 2.08 Stormwater Management Facilities. The Developer shall prepare and record a stormwater maintenance agreement assuring sufficient inspection and maintenance tasks to maintain the operation of all stormwater management facilities per their design specifications, subject to the approval of Dane County. The Developer shall provide a copy of the recorded maintenance agreement or appropriate deed restriction to the Town within five (5) days after receipt of the recorded instrument. Except as may be subsequently approved by the Town and Dane County, the cost and the responsibility to maintain on-site stormwater management facilities within the Development shall be the responsibility of the Homeowner's Association in perpetuity.

Section 2.09 Public Improvement Requirements. All work within any public right-of-way shall be subject to the following requirements and restrictions:

(a) Approval of Contractors. The Developer shall select all contractors, subcontractors, and material suppliers performing services or providing materials for such work.

(b) Standards. The Improvements shall be constructed in material compliance with the Plans. If construction of the Improvements does not commence within one year of plan approval, plans for such Improvements shall be resubmitted for review and approval by the Town Administrator. Through designated agents, the Town may provide construction observation during the construction of the Improvements. Construction observation shall not relieve the Developer of any obligation under this Agreement, nor shall the observation impose any obligations or liability upon the Town, its officers, agents, or consultants with respect to the Improvements. Notwithstanding the foregoing, the Developer may rely upon approvals from the Town and confirmation that the submittals in question are in compliance with the Town's requirements.

(c) Acceptance of Work. The Developer agrees that the Town Board or Town Administrator will not accept the Improvements until:

(i) satisfactory completion of all required Improvements as specified in this Agreement, including any work necessary to adequately address the issues outstanding at the time of conditional approval of the Improvements;

- (ii) all outstanding charges to be paid by the Developer under Town Ordinances or as required by this Agreement and related to the Development have been paid in full;
- (iii) restrictive covenants required under Article IV have been approved by the Town Board and recorded in the Office of the Dane County, Wisconsin Register of Deeds;
- (iv) all easements required by this Agreement have been recorded;
- (v) affidavits and lien waivers are received by the Town Administrator verifying that all contractors providing work, services, or materials in connection with the Improvements have been paid in full for all such work, services, and materials;
- (vi) the Town Board has received evidence satisfactory in its reasonable discretion that no liens or other encumbrances (except those approved in writing by the Town) encumber the Improvements; and
- (vii) the Town Staff has determined that all Improvements have been constructed and installed in a good and workmanlike manner and remain in such condition at the time acceptance is requested; and
- (viii) the Town has been provided with a complete set of "as built" plans for all Improvements.

(d) Contractor Insurance. The Developer shall ensure that the general contractor maintains insurance per the schedule in this section at all times during the construction of the Improvements and, with respect to products/completed operations coverage, for a period of 3 years after Acceptance. The Developer shall require the general contractor to provide the Town's Administrator with a current certificate of insurance to evidence compliance with this Agreement. The Developer shall require that each Contractor who is not covered by the general contractor's insurance policy, as determined by the general contractor's certificate of insurance, also provide a current certificate of insurance to the Town's Administrator. Insurance certificates shall list the Town of Verona as additional insureds, and the required policies shall provide such additional insured coverage on a primary, non-contributory basis and include a waiver of subrogation rights. The certificate(s) shall evidence coverage with limits no less than the following:

- (i) Workers' Compensation per applicable state and federal law, and in the amount of \$500,000 for employer's liability.
- (ii) Commercial General Liability Insurance, which shall also include

completed operations and product liability coverages and shall not exclude coverage for property under the care, custody, and control of the Contractor, in the following amounts:

- 1) General Aggregate (except Products/Completed Operations): \$1,000,000.
- 2) Products/Completed Operations: \$1,000,000.
- 3) Personal and Advertising Injury: \$1,000,000.
- 4) Each Occurrence (Bodily Injury and Property Damage): \$1,000,000. Property damage liability insurance shall provide Explosion, Collapse, and Underground Coverages where applicable.
- 5) Excess Liability—General Aggregate: \$1,000,000.
- 6) Excess Liability—Each Occurrence: \$1,000,000.

(iii) Automobile Liability: Either:

- 1) Bodily Injury—Each Person: \$1,000,000; Bodily Injury—Each Accident: \$1,000,000; and Property Damage--\$500,000, OR
- 2) Combined Single Limit (Bodily Injury and Property Damage)—Each Accident: \$1,000,000.

(iv) Umbrella policy (pay on behalf form), with limits of \$2,000,000 for bodily injury, personal injury, and property damage on a combined basis.

(e) Gauranty of Improvements. The Developer agrees to guaranty the Public Improvement and road constructed or installed under this Agreement against defects in workmanship or materials for a period of one (1) year from the date of acceptance by the Town Board.

(f) Pre-Construction Meeting. A pre-construction meeting to be held at the Town Hall shall be scheduled among the Developer, the contractors and appropriate Town staff and consultants prior to the commencement of any construction on the Public Improvements. The Developer shall, prior to such meeting, notify all utilities of the planned construction and the date and location of the pre-construction meeting and coordinate the meeting time with the Town Administrator.

Section 2.10 Indemnification. The Developer shall and shall require all Contractors engaged in the construction of the Improvements to indemnify and hold the Town harmless from and against any and all claims, losses, damages, costs, and expenses which such Contractors may or might incur, or which the Town might incur by the act or omission of the Contractors or their agents, in connection with the construction of the Improvements. Such indemnification and hold harmless clauses shall be in a form and content acceptable to the Town Attorney and shall be included in each agreement that the Developer has with any Contractor. The provisions of this section shall continue in effect following the expiration or termination of this Agreement and apply to all acts or omissions of such Contractors occurring while this Agreement is in effect.

Section 2.11 Development Regulations. Nothing in this Agreement relieves the Developer from any obligations to obtain all necessary approvals and to follow all applicable local, state, and federal requirements to proceed with the contemplated projects within the Development. The Development shall comply with all applicable Town, County, and State ordinances, and nothing in this Agreement obligates the Town to grant variances, exceptions, conditional use approvals, rezoning or other Town approvals, or otherwise waive applicable Town requirements. Except as provided by law or as expressly provided in this Agreement, no vested rights shall inure to the Developer by virtue of this Agreement. Nor does the Town warrant that the Developer is entitled to any other approvals required for development of any part of the Development solely because of this Agreement.

ARTICLE III. FINANCIAL OBLIGATIONS

Section 3.01 Developer to Reimburse Town Costs Incurred. The Developer shall reimburse the Town for all costs incurred by the Town for design review, construction observation, testing, and associated legal and real estate fees for the Improvements. The amount payable to the Town by the Developer under this paragraph shall include all of the following:

(a) The cost of the Town's engineer, Town Staff, and attorneys for time engaged in (1) the preparation, review, evaluation, alteration, approval, and enforcement of the plans, this Agreement, or any other plans or agreements connected with the Development or the Improvements; (2) the construction, observation, coordination and materials testing, or inspection of the Improvements or any activity associated with their construction; (3) the enforcement of this Agreement or any Town ordinance or other regulation relating to the Improvements; and (4) any other activity that is reasonably necessary and associated with the construction of the Improvements. The Developer's reimbursement obligation is based on the actual amount properly charged to the Town under the usual arrangement with the engineers, Town staff, or attorneys have with the Town. Rates for all engineers, Town staff, or attorneys who shall be performing services on behalf of the Town are set forth on Exhibit D.

(b) The cost of Town employees' time while engaged in any of the activities described in par. (a) based on the hourly rate (or hourly rate equivalent) paid to the employee multiplied by a factor determined by the Town Administrator to represent the

Town's cost for statutory expense benefits, insurance, sick leave, holidays, vacation and similar benefits, overhead and supervision, but not to exceed a factor of 2.0.

(c) The Developer shall reimburse the Town for Town equipment employed in any activity described in this Agreement, the cost of mileage reimbursed to Town employees, and the actual costs of Town materials incorporated into the Improvements plus a restocking and handling fee not to exceed ten percent (10%) of the cost of Town materials.

(d) Interest shall be charged on any amount not being disputed in good faith by the Developer and not paid to the Town within thirty (30) days of the invoice date at the prime rate plus one percent (1%). All amounts assessed against Developer hereunder shall be submitted to Developer in an invoice form along with written evidence of all charges for any third parties. Such invoices shall include details regarding hours, rates, and services provided for each charge.

Section 3.02 Escrow Deposit.

(a) Deposit Required. The Developer shall deposit with the Town, in escrow, the sum of \$15,000 prior to commencement of the Development. The Town Clerk/Treasurer shall draw upon the escrowed funds on a monthly basis to reimburse the Town for the fees and expenses consistent with Section 3.01 that the Town has incurred in connection with the Development. The Deposit(s) required herein shall not relieve the Town's obligation to provide detailed invoices for all amounts under Section 3.01, above.

(b) Escrow Replacement. In the event that the escrow deposit falls below fifty percent (50%) of the original amount required to be deposited, the Clerk/Treasurer may require the applicant to restore the escrow balance to the original amount required hereunder.

(c) Refunds. In the event that funds remain in escrow over and above the Town's recoverable expenses after construction and acceptance of the Improvements by the Town Board, the remaining balance shall be refunded to the Developer within 60 days of the acceptance of the Improvements by the Town Board.

(d) Interest. The escrow account shall not bear interest for the benefit of the applicant.

(e) Accounting. An accounting of all expenses incurred by the Town in connection with the Development and the status of the escrow shall also be provided to the applicant upon request or periodically. Any dispute with respect to the propriety or amount of any withdrawal shall be subject to appeal to the Town Board.

(f) Default. If the Developer defaults in restoring the escrow account within

30 days of being notified, the Town will not issue any building permits and/or occupancy permits for the Development until the default is cured.

Section 3.03 Fire Service Fees. The Developer shall pay the established fire service fees allocable to the Property in the aggregate of the number of building lots times \$310/building lot (or any adjusted fee in effect at the time of payment) prior to commencement of the construction of the first residential dwelling. No building permit will be issued until this fee is paid in full.

Section 3.04 Security for Performance. The Developer agrees to provide security for its obligations under this Agreement in the form of a letter of credit. Such letter of credit shall be in accordance with the following terms and conditions:

(a) The Developer shall furnish the Town with an irrevocable letter of credit for the length of time that the work on the public improvement in the road right-of-way) is anticipated but not less than 24 months. The letter of credit shall be in an amount equal to 115% of the costs of completion of all Improvements in the road right-of-way, as estimated by the Town Engineer based upon the unit costs provided by the Developer and confirmed by the Town Engineer, to secure Developer's performance of all obligations relating to the Improvements in the road right-of-way under this Agreement. The letter of credit shall be issued by a lending institution with an office in Dane County, unless otherwise approved by the Town Administrator, and shall be delivered to the Town prior to the commencement of any work on the Improvements. The letter of credit shall identify the Town of Verona as beneficiary, shall identify the name of the Development and its owner, and reference this agreement and shall be approved as to form by the Town Administrator.

The letter of credit shall provide that no amendment to the terms of this Agreement, waiver of any of the Town's rights under the Agreement, any extension of time for Developer's performance or other modification of the rights of the parties shall release or otherwise limit the application of the letter of credit or the obligations of the surety. The letter of credit shall provide that any litigation relating to the letter of credit shall be venued in Dane County, Wisconsin. The Town's right to draw on the letter of credit shall be conditioned only upon certification by the Town Administrator that Developer is in default of one or more obligations under the Agreement or that the Town otherwise has the right to draw on the letter of credit hereunder and the presentment of a sight draft to the Surety for payment, along with the letter(s) of credit. Notwithstanding the foregoing, in the event the Town shall draw on the letter of credit while obligations of the Developer hereunder remain unsatisfied, but not yet overdue, the Town shall not be required to surrender the letter of credit as a condition of the draw.

(b) In the event the Developer fails to complete all required Improvements in compliance with this Agreement, or to promptly repair or replace any Improvements as required during the guaranty period, and provided the Town has given Developer written notice of the same and Developer has not taken steps to cure such issues within thirty (30) days of receipt of such notice, the Town may draw on such letter of credit and

perform or have performed all necessary work, and supply or have supplied all necessary equipment, goods, materials or services, to complete, repair or replace all or any part of some or all of the required Improvements in satisfactory form. As used in this paragraph, "promptly" shall mean that repair or replacement is undertaken without delay, and completed as soon as reasonably practicable thereafter.

(c) After construction and Acceptance of the Improvements by the Town, the Developer's letter of credit will be reduced to 10% of the estimated cost of the Improvements for the period of the guarantees provided under Article II of this Agreement.

(d) In the event the original letter of credit would, by its terms, expire prior to the completion of all of Developer's obligations hereunder and the expiration of all guaranty periods, or if the guaranty period is extended due to repairs of defects as provided in Article II of the Agreement, the Town shall have the right to draw up to 115% of the estimated cost for any remaining work under a guaranty as provided in Article II, unless at least thirty (30) days prior to the date of expiration, the letter of credit is extended, or a new letter of credit is issued, and delivered to the Town to cover the remaining work and guaranty period for the amount of the most recent letter of credit. It is the intent of this paragraph that if, at any time prior to the release of the letter of credit by the Town under paragraph (e), the remaining term of any required letter of credit is less than thirty (30) days, the Town may draw on the letter for 115% of the anticipated cost of satisfying any outstanding obligations secured thereby. Any amounts so drawn which are not used to pay for satisfaction of Developer's obligations under this Agreement shall be promptly refunded to the surety after all work has been completed and all Town expenses have been paid.

(e) If, upon the expiration of the guaranty periods, the Town shall determine that all Improvements remain in a condition consistent with the Developer's guaranty and that the Town has no other claims against the Developer secured by the letter of credit, the Town shall, upon the request of the Developer, release the letter of credit and the surety from any further obligation under this Agreement. Notwithstanding the foregoing, neither the reduction in, or expiration or release of, the letter of credit, shall relieve the Developer of any obligations hereunder.

(f) Notwithstanding any other provision to the contrary, the Developer's obligation to maintain a letter of credit shall not extend beyond 14 months from the date of substantial completion of all Improvements as defined in, Wis. Stats. §236.13(2)(am2).

ARTICLE IV. RESTRICTIVE COVENANTS

Section 4.01 Recording of Land Use Restrictions.

(a) The Developer shall record deed restrictions, homeowner's association declarations, and homeowner association bylaws for the Plat as provided in this section prior to commencement of work on the Development. The deed restrictions are subject to the prior written approval of the Town Board. All required deed restrictions or provisions in homeowner association declarations establishing required obligations or restrictions hereunder shall provide by their terms that they may not be amended, terminated, or otherwise altered without the written approval of the Town Board and that the Town may enforce them through legal or equitable remedies.

(b) Deed restrictions and/or homeowner's association declaration shall ensure the maintenance of all stormwater management facilities is accomplished as and when necessary to maintain the functioning of the facilities according to their design specifications. Such maintenance may be delegated to the Home Owners' Association owning the common areas of the Development, but shall also provide that in the event such maintenance is not completed as required, the Town shall have the right to accomplish the maintenance and charge the cost thereof to the Association or individual lot owners.

(c) Deed restrictions or homeowner's association declarations shall designate and grant perpetual easements to the Town and County for purposes of inspection of all stormwater management facilities, on-site wastewater treatment systems, and potable water supplies.

(d) Deed restrictions or homeowner's association declaration shall restrict the use of the lots to single-family residential uses on individual lots of not less than 1.5 acres in accordance with the terms of the applicable rezoning approval for the Development.

ARTICLE V. GENERAL PROVISIONS

Section 5.01 Nothing set forth in this Agreement shall be construed as, nor is intended to be, a waiver or release of any obligations imposed upon the Developer or the Town by the Ordinances or any statutes or regulations applicable to the Improvements.

Section 5.02 Anywhere that an approval or consent of the Town is required hereunder, such approval or consent shall not be unreasonably withheld, conditioned, or delayed.

Section 5.03 This Agreement shall be binding upon the Developer (jointly and severally if more than one) and upon the successors and assigns of the parties. This Agreement may not be assigned without the prior written consent of the Town Board, which consent may be withheld, conditioned, or delayed in the Town's sole discretion.

Section 5.04 The Developer represents that it is, or before the commencement of any

work on the Development will be, the lawful owner of the Development and lawfully seized and possessed of the Development.

Section 5.05 In the event of any breach by the Developer of this Agreement, whether or not subsequently cured, the Developer shall pay, in addition to any damages or other relief obtained by the Town, all of the Town's costs and expenses, including reasonable attorneys' fees, relating to such breach, all of which shall be due and payable as incurred and shall be added to any judgment obtained by the Town.

Section 5.06 No approval by the Town or the Town Attorney or any other person acting on behalf of the Town shall be construed as a waiver of any of the Ordinance requirements or any statute or regulation governing the Improvements. The Developer acknowledges that other than those approval powers expressly delegated by this Agreement, approvals or waivers by the Town are legally unenforceable unless made pursuant to formal action by the Town's governing body.

Section 5.07 It is understood that the Developer has selected and appointed all its contractors, and the Town shall have no responsibility whatsoever for the Developer's contractors or the quality of the materials or workmanship provided by such contractors. No authority granted herein to the Town in connection with the review or approval of the contractors or the improvements shall be deemed to create any liability whatsoever on the part of the Town or its agents.

Section 5.08 This Agreement is intended solely to regulate the obligations of the parties concerning one another. Nothing in this Agreement is intended to create, admit, or imply any liability to any third party nor to provide any benefit to any person, firm, corporation, or governmental or non-governmental entity not a party to this Agreement.

Section 5.09 Nothing in this Agreement constitutes a waiver of the Town's sovereign immunity under applicable law. All rights are reserved. The Developer acknowledges and agrees that nothing in this Agreement provides any vested right or assurance that any future agreements will be reached between the parties, whether or not necessary to implement the Development contemplated by this Agreement.

Section 5.10 In no event and under no circumstances shall the Town be liable under this Agreement to Developer for consequential, incidental, indirect, special, or punitive damages, and Developer waives any claim to such damages. By way of example, and not limitation, "consequential damages" include lost profits or income, the cost of replacement financing, damage to reputation, lost business opportunities, and loss of property values or anticipated property value increases. This limitation shall be effective regardless of the theory of liability and regardless of any breach or claim of breach.

Section 5.11 Any notice required hereunder shall be given in writing, signed by the party giving notice, personally delivered or mailed by certified or registered mail, return receipt requested, to the following:

To the Town: Town of Verona
 Attn: Town Administrator
 7669 CTH PD
 Verona, WI 53593

To the Developer: Coons Construction of Verona, LLC
 Attn: James T. Coons
 1827 Locust Drive
 Verona, WI 53593

Section 5.12 If one or more of the provisions contained in this Agreement shall, for any reason, be held to be invalid, illegal, or unenforceable, such invalidity, illegality, or unenforceability shall not affect any other provision. If any such provision is held invalid as applied to any property or circumstances, such determination shall not affect the applicability of such provision to any other property or circumstances.

Section 5.13 This Agreement may be executed in any number of counterparts, each of which shall be deemed an original. A facsimile signature is deemed the equivalent of an original signature.

Section 5.14 Either party may record a copy of this Agreement or a memorandum of this Agreement with the Register of Deeds for Dane County, Wisconsin.

Section 5.15 The Developer understands and acknowledges that as a governmental entity, the Town cannot surrender its governmental authority by contract, and nothing in this Agreement shall be construed to preclude or limit the exercise by the Town of any governmental authority vested in it by law.

Section 5.16 The parties acknowledge that this Agreement is the product of negotiations among the parties and that, before the execution hereof, each party has had a complete and adequate opportunity to have this Agreement reviewed by and to obtain the advice of its own legal counsel. Nothing in this Agreement shall be construed more strictly for or against any party because that party's attorney drafted this agreement or any part hereof.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date and year first above written.

TOWN OF VERONA

By: _____

Mark Geller
Town Chairperson

Date: _____

Teresa Withee
Town Clerk/Treasurer

Date: _____

COONS CONSTRUCTION OF VERONA, LLC

By: _____

James T. Coons, Member

Date: _____

RIVERSIDE VISTA

DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS FOR LOTS 1 THROUGH 17 INCLUSIVE, AND OUTLOT 1, PLAT OF RIVERSIDE VISTA

This document was drafted by and should be returned to:
Robert C. Procter, Esq.
Axley Brynelson, LLP
2 East Mifflin Street, Suite 200
Post Office Box 1767
Madison, WI 53701-1767

Tax Parcel Identification Numbers

RIVERSIDE VISTA

THIS RIVERSIDE VISTA DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS is made effective as of _____, 2024, by Coons Construction of Verona, LLC.

RECITALS:

A. Developer is the owner of Lots 1 through 17 and Outlot 1, Riverside Vista, as recorded on _____, 202__, in the office of the Dane County Register of Deeds, Volume ___-_____, pages _____, Document No. _____. A copy of the Plat is attached as Exhibit A.

B. Developer desires to subject the Property to certain covenants, conditions, restrictions, and easements to ensure that Riverside Vista becomes and remains a high-quality residential community.

COVENANTS, CONDITIONS, AND RESTRICTIONS:

NOW, THEREFORE, the Developer declares the Property shall be owned, held, and occupied subject to the following covenants, conditions, restrictions, and easements.

ARTICLE 1 STATEMENT OF PURPOSE

Riverside Vista is an innovative plan for a high-quality residential community that blends with the countryside and preserves the natural character of the existing landscape. The purpose of this Declaration is to assist lot owners in achieving a compatible and attractive arrangement of high-quality homes that will retain and enhance the value of their investment.

ARTICLE 2 DEFINITIONS

The following definitions shall apply to this Declaration:

2.1 "Association" shall mean the Riverside Vista Homeowners Association, Inc., a Wisconsin nonprofit, nonstock corporation, its successors and assigns.

2.2 "Board" shall mean the Association's Board of Directors.

2.3 "Committee" shall mean the Architectural Control Committee established under Section 3.3.

2.4 "Common Open Space" shall mean Outlot 1.

2.5 "Declaration" shall mean this Riverside Vista Declaration of Covenants, Conditions, and Restrictions.

2.6 "Developer" shall mean Coons Construction of Verona, LLC, and its successors and assigns.

2.7 "Development" shall mean all of the Lots and the Outlot subject to this Declaration.

2.8 "Lot" or "Lots" shall mean a plated lot or lots shown on the Plat, but not the Outlot.

2.9 "Outlot" shall mean the platted Outlot 1 as shown on the Plat.

2.10 "Owner" shall mean and refer to the record Owner, whether one or more persons or entities of the fee simple title to a platted Lot within the Property, except that as to any such Lot which is the subject of a land contract wherein the purchaser is in possession, the term "Owner" shall refer to such person instead of the vendor.

2.11 "Plat" shall mean the Plat of Riverside Vista.

2.12 “Property” shall mean the real estate legally described in paragraph A of the Recitals.

2.13 “Town” shall mean the Town of Verona.

ARTICLE 3
PROTECTIVE COVENANTS, ARCHITECTURAL CONTROL

3.1 General Purpose, Standards, Variances.

A. *General Purpose.* The general purpose of the covenants, conditions, and restrictions set forth in Article 3 (the “Protective Covenants”) is to assure that the Development will become and remain an attractive community; to ensure the most appropriate development and improvement of each Lot; to guard against the erection of poorly designed or proportioned structures; to obtain harmonious improvements and use of material and color schemes; to ensure the highest and best residential development of the Property; and to encourage and secure the construction of attractive residential structures.

B. *Standard of Review.* It is the intent of these Protective Covenants to create reasonable restrictions that are enforced in a reasonable manner. In any enforcement action, the court or arbitrator shall interpret and enforce these Protective Covenants in a manner that will impose a reasonable result balancing the cost to the Lot Owner(s) subject to the enforcement action and the impact to the Development.

C. *Variances.* The Committee shall grant variances from any provision of this Declaration where such variance is not inconsistent with the intent and spirit of this Declaration, and such variance is reasonable and does not have a significant, negative impact on the aesthetics or property values of the Development or other Lots. The granting or denial of any variance shall be subject to the Standard of Review set forth under Section 3.1B.

D. *Inspections.* The Committee and its designated representatives shall have the right to inspect the construction of any improvements to any Lot during regular business hours, without notice, to ensure that all construction is performed in accordance with the plans and specifications previously approved by the Committee.

E. *Architectural Control.* No building or other improvement shall be erected, placed or Significantly Altered on any Lot until its construction plans and specifications shall have been approved in writing by the Architectural Control Committee (the “Committee”). The term “Significantly Altered” shall mean any remodeling, addition, or improvement that increases the square footage of the existing improvements by more than fifteen percent (15%) within a three (3) year period (for example, three separate improvements of five percent within three years).

F. *Public Easements Affecting Lots.* "Public Easements" means (i) the platted public drainage easement on Lot 6, the platted public drainage easement on Lot 14 and Lot 15, the platted public drainage easements on Lot 9, the platted public drainage easements on Lot 10, the platted public access easement for plowed snow placement on Lot 9; and (ii) all public utility easements shown on the Plat.

3.2 Architectural Control Committee.

A. *Establishment Duties, Membership.*

1. There shall be an Architectural Control Committee, which shall have the rights and obligations set forth in this Declaration for the Committee and any powers necessary to exercise those rights.

2. The Committee shall initially consist solely of the Developer so long as the Developer owns any interest in any Lot. The Developer may at any time, at its sole discretion, appoint up to three (3) Owners to serve as the Committee, with the decisions rendered by the majority to be binding. Notwithstanding the foregoing provisions, at such time as the Developer no longer owns any Lot subject to this Declaration, the Board shall appoint the members and fill vacancies on the Committee. After the Committee has been turned over to the Association, the Board shall determine the number of Committee members, the length of terms, and any other procedures as to the process that are not inconsistent with this Declaration, including, without limitation, disbanding the Committee if the Association no longer wishes to continue it.

B. *Submission for Approval.* An Owner desiring to construct a building or otherwise construct any improvements within a Lot shall submit to the Committee, for its written approval, construction plans and specifications for all improvements and a site plan showing the location of all contemplated improvements. The Committee may appoint a qualified designee to conduct the initial review of submissions and make recommendations to the Committee. The items submitted to the Committee or the Committee's designee shall include:

1. Construction details for all buildings, structures, fences, walls, and other improvements.

2. Elevation drawings of any building.

3. Proposed facades of any building, including the style, color, and location of eaves and windows.

4. A description of materials to be used in any building or improvement.

5. A detailed site plan showing the building footprint and driveway, the location of all structures with respect to topography and finish grade elevation, the top of the foundation structure in relation to the nearest street or curb elevation, and the proposed water drainage patterns.

6. The color scheme of all improvements.

7. All exterior lighting.

8. Detailed landscape plans and specifications which shall show trees to be removed, existing trees, their species, size, and location, and the size and location of proposed trees, shrubs, fences, berms, walls, patios, family gardens, planting beds, and other landscape materials (the plan shall show the percentage of cleared trees).

9. Such other materials as the Committee may deem necessary are reasonably related to the Committee's review.

C. *Approval of the Committee.* In the event the Committee does not affirmatively approve or reject any matter that must be submitted to it for approval within 30 (30) days after all necessary information has been delivered in writing, then such approval shall be deemed granted. No such time limit shall apply to the Developer when acting as the Committee. A submission will not be complete, and the 30-day approval time shall not commence until all documents required in Section 3.2 have been submitted.

D. *Standards.* Subject to the standard of review set forth in Section 3.1B, the Committee shall have the right to reject any plans and specifications or site plans, which:

1. are not in conformity with any of the restrictions set forth in this Declaration;

2. are not desirable for aesthetic reasons;

3. are not in harmony with buildings located on the surrounding Lots;

4. have exterior lighting, exterior signs, exterior television antennae, fencing or landscaping that are not desirable for aesthetic reasons; or

5. are not in conformity with the general purposes of this Declaration.

E. *Occupancy.* No structure shall be occupied until: (i) the Town of Verona has issued an occupancy permit, (ii) it has been approved by the Committee pursuant to this Section, and (iii) it has been constructed in accordance with the plans as approved by the Committee.

F. *Fees.* The Committee, by majority vote, shall from time to time adopt a fee schedule designed to defray the Committee's out-of-pocket costs, including the fee of any designee appointed by the Committee, incurred in connection with its review of any preliminary or final development plan, or of any resubmission of any such plans, and such fee may be adjusted at any time by the Committee.

G. *Approval of Contractors.* For each building erected or placed on any Lot subject to this Declaration, the prime contractor or builder to be hired for the construction of such building shall be approved in writing by the Committee prior to the commencement of any construction. Such approval may be withheld for reasons such as the proposed contractor's or builder's financial status or building reputation.

H. *Liability of Committee.* The Committee and its designee or its individual members shall not be liable under any circumstances for any damage, loss, or prejudice suffered or claimed on account of:

1. The approval or disapproval of any plans and specifications, whether or not defective;
2. The construction or performance of any work, whether or not pursuant to approved plans and specifications; or
3. The development of any property within the Development.

3.3 Architectural Restrictions.

A. *Front, Side and Rear Yard Requirements.* Any improvement intended for occupancy (a "Dwelling") or any parts thereof shall be built and sited in conformance with the applicable zoning code and this provision. No Dwelling or other building shall be constructed within the following Setbacks from the front, side, and rear Lot boundaries. The front of each Lot shall be the portion that abuts the applicable Private Road. All setbacks shown are minimums.

SETBACKS

(The below Setbacks are measured in feet)

Lot Number	Front	Rear	Left Side	Right Side
1	35	50	35	35
2	45	50	35	35
3	50	50	25	30
4	40	50	25	25
5	35	50	25	25
6	30	50	25	25
7	40	50	25	25
8	35	50	25	25
9	30	50	25	25
10	40	50	25	25
11	60	50	25	25
12	45	50	25	25
13	50	50	25	25
14	50	50	25	25
15	50	50	25	25
16	45	50	25	25
17	40	50	25	25

B. *Floor Area Minimums.* Each Dwelling constructed on a Lot shall have a minimum of floor area of finished living space of 2,000 square feet for a one-story house (i.e., ranch style) and 2,500 square feet for a multi-story or split-level house. The garage shall have a minimum floor area of 1,100 square feet. The above minimum floor area requirements may be waived by the Committee if, in the Committee's reasonable judgment, the proposed architecture and quality of the Dwelling is such as to present an attractive appearance compatible with the Dwellings within the Development.

C. *Building Materials.* The following standards shall be adhered to in relation to all designs and construction to preserve the initial and improved beauty of the Lots:

1. All chimneys in the front of the Dwelling must be constructed of brick, stone or stucco.
2. All chimneys and flues shall be fully enclosed.
3. No T1-11 siding (Oriented Strand Board or plywood) shall be allowed.

4. All fascia must be at least ¾" x ten (10) inches in width. Aluminum fascia is not permitted.

5. All roofing shall be of laminated architectural grade textured fiberglass, asphalt shingles, wood shakes, or other acceptable materials. No standard 3-in-1 shingles shall be allowed.

6. LP® SmartSide® Trim & Siding or a brand of equal quality, including fiber cement lap siding and trim may only be used on the rear and side elevations of a Dwelling. Vinyl and aluminum siding are not permitted. Brick, stone, or other similar inorganic materials are required on the balance of the front elevation; *provided, however*, the Committee may grant a variance if the specific design style does not require brick, stone, etc. and the house is otherwise consistent with the standards set forth in this Declaration.

7. All windows that are not in masonry or stucco areas must be wrapped in wood or a simulated wood material with a minimum width of six (6) inches.

It is the intent of the Developer to reasonably require coordination of trim, siding, and roofing colors to provide the most aesthetic combination for a particular Dwelling as well as for the overall development of the Lots. Applicants should consider the color, materials, and design of nearby Dwellings.

D. *Building Elevations.* All elevations of the building shall be designed in a consistent and coherent architectural manner. Changes in material, color, and/or texture shall occur at points relating to the building's massing, fenestration, and overall design concept. The Committee shall be entitled to reject any plans which would result in fenestration or length of building walls that would be incompatible with neighboring structures, which would not harmonize with the natural surroundings or that would violate any of the standards set forth in Section 9.3.

E. *Building Location.* All buildings should be sited on the Lot to present their most desirable face to the street and, where possible, should be related to buildings on adjoining Lots. Wherever reasonably possible, buildings shall be placed within building envelopes to create a staggering effect to maintain and preserve view corridors. The use of front porches by Owners is encouraged.

F. *Utilities.* All utilities serving any building or site shall be underground. No building or other improvement or trees shall be erected, placed, or planted within any utility easement.

G. *Wells & Septic Systems.* It is intended that each Lot be served by its own well and septic system.

H. *General.* All buildings, dwellings, garages, outbuildings, satellite dishes, fences, walls, basketball hoops, lawn ornaments, tennis courts, swimming pools or other structures constructed or erected on any Lot must be approved prior to construction, in writing, by the Committee, as to placement, landscaping, materials, colors and design. No wind-powered electric generators or radio receiving or transmitting antennae may be placed on a Lot without approval of the Committee. Satellite dishes and exterior television antennas must be properly screened from view. The maximum allowable impervious surface per lot is 12,000 square feet for Lots 4 through 17. The maximum allowable impervious surface per lot is 12,900 square feet for Lots 1 through 3. Any additional impervious surface installed is subject to additional stormwater features such as a rain garden within the Lot and must be approved by Dane County Land and Water Resources.

I. *Fencing.* Fences over four (4) feet in height shall not be allowed except for screening of service areas or swimming pools. All other fences shall only be permitted with prior written consent of the Committee. Chain link fencing is strictly prohibited. As part of its consent, the Committee may require installing and maintaining landscape materials for screening and aesthetic purposes.

J. *Partition Fences.* If requested by adjacent landowner, for any Lot which abuts upon or is adjacent to land used for agricultural, farming or grazing purposes, the Owner, at its sole cost and expense and in equal shares with adjacent landowner requesting fence, shall erect, keep and maintain partition fences so long as either party continues to so occupy the lands, satisfying the requirements of the Wisconsin Statutes for a legal and sufficient fence between such land and the Lot. The occupants of the lands may agree to the use of markers instead of fences. Such fences or markers shall be kept in good repair.

K. *Mailboxes.* The Loted States Postal Service requires a centralized cluster of mailbox units for mail delivery, which the Developer will install. At the closing of the initial sale of each Lot, each initial purchaser from the Developer shall reimburse the Developer \$350.00 for that Lot's portion of the centralized cluster mailbox unit cost.

L. *Construction Deadline.* Each Dwelling erected shall have its entire external construction completed within twelve (12) months from the date of issuance of the building permit except for delays in completion due to strike, war, or act of God.

M. *Landscaping.* The following guidelines shall be followed for each Lot in the Development:

1. Landscape plans shall be developed to enhance the ambiance of each Lot. The plan should pay particular attention to street-side foundation plantings and should adapt to the surrounding topography of the Lot. For Lots 1, 2, and 3, no Lot owner shall clear more than 30,000 square feet of the existing trees from the Lot.

2. The landscaping plan for each Lot shall achieve a minimum of 700 landscaping points as determined by the following point schedule:

Landscaping Element	Point Value
Canopy Tree (a tree caliper of 2 to 3 inches measured at 18 inches above the soil level):	125
Canopy Tree (a tree caliper of 3 to 4 inches measured at 18 inches above the soil level):	150
Canopy Tree (a tree caliper greater than 4 inches measured at 18 inches above the soil level):	200
Canopy Tree or Small Tree (a tree caliper of 1 to 2 inches caliper at 18 inches (i.e., Crab, Hawthorn)):	100
Evergreen Tree (4 feet to 6 feet in height from the base of the trunk):	100
Prairie Plantings (250 square-feet minimum)	150
Large Deciduous Shrub (3-year transplant – 36-inch minimum measured from the base of the trunk):	20
Small Deciduous Shrub (3-year transplant – 18-inch minimum measured from the base of the trunk):	10
Decorative Wall (rock, brick per face foot):	5

3. Except in such cases that factors beyond the control of the Owner prevent timely planting, all plantings required to be placed upon the Lot shall be planted within 30 (60) days of occupancy of the Dwelling or upon completion of construction, whichever comes first, except that sodding, seeding, and planting new vegetation shall not be required during any period in which weather conditions restrict the ability to complete the planting or threaten the viability of the new vegetation.

4. No planting shall be permitted within an easement of record which may damage or interfere with the installation and maintenance of utilities, or which may alter the direction, or impede the flow of surface water in drainage channels within the easement.

5. No Owner shall grade or obstruct any swale or drainage way whether in an easement or not, which is in existence at the time of construction so as to impede the flow of surface water from other Lots through such swale or drainage way. The elevation of a Lot shall not be changed so as to materially affect the surface elevation, grade, or drainage pattern of the surrounding Lots.

6. All yards must be fertilized and sodded, or fertilized, seeded and mulched. This requirement includes the area within the street right of way. Natural prairie plantings are allowed within right of way provided the plants are less than 2.5 feet in height. In-ground lawn irrigation systems are permissible.

7. Sight Distance at Intersections. No fence, wall, hedge or shrub planting which obstructs sight lines at elevations between thirty inches (30") and seventy-two inches (72") above the roadways may be placed or permitted to remain on any corner Lot within the triangular area as shown as the "Vision Triangle Detail" on the Plat. No tree is permitted to remain within such distances of such intersections unless the foliage line is maintained at sufficient height to prevent obstruction of such sight lines.

8. Maintenance of Landscaping. The maintenance of the plantings and yard areas is the responsibility of the Owner. Any trees or shrubs which die must be removed by the Owner and replaced with a like variety of the same size as the original plant at the time of planting so as to maintain the original landscaping elements and to maintain the minimum amount of Landscape Points required as set forth in Section 3.3.J.2 above. The use of plantings in excess of those required above is encouraged.

N. *Roads and Driveways.* All driveways from the apron of any Lot to any private street shall be paved within eighteen (18) months from the date of issuance of the building permit. All driveways shall have sufficient space to allow for parking of no fewer than two cars.

9. Developer must install the binder course of asphalt for the public road within one (1) year after commencement of road construction. The surface course of asphalt may be applied at a such time as approved by the Town, anticipated to be one (1) year after the installation of the binder course. Building permits for the subdivision will be allowed after the road base course is placed and road surface has been proof rolled.

10. Any Owner who constructs a driveway before the final asphalt layer (surface course) is placed on the public road adjoining the Owner's Lot must construct the driveway to match the future finished street elevation. The three (3) feet of driveway adjacent to the public road may not be installed until the surface course is placed unless said three (3) foot section adjacent to the public road is installed as asphalt.

11. Before the surface course is placed on the public road, the Town's snowplows may damage driveways that have been placed above the elevation of the binder course of asphalt. The Town will not be liable for the repair of any such damage. Any such damage must be repaired at the sole expense of the Owner.

Furthermore, an Owner will be liable for any damage done to Town snow removal equipment if the Owner's driveway is constructed incorrectly.

12. The general location of driveways for the Subdivision will be subject to the Town's prior approval. Owner or owner's representative must obtain a driveway permit from the Town prior to commencing construction of driveway. Driveways must be concrete, or brick; except the last three (3) feet per Section 3.3.L.10 and each Owner must install the Owner's driveway within thirty (30) days after completion of construction of the Owner's house, unless not permitted by weather conditions. In all events, each Owner's driveway must be completed within eighteen (18) months from the issuance of the Owner's building permit. Each Owner must comply with any driveway ordinance of the Town from time-to-time in effect and must obtain from the Town any driveway permit required by such an ordinance before any driveway is constructed or any culvert

13. All driveways shall have sufficient space to allow for parking of no fewer than two cars.

14. Lots 1, 2, 3, 4, and 5 shall access the existing public road and are not subject to Sections 3.3.L.9-11.

O. *Swimming Pools.* No above-ground swimming pools shall be allowed.

P. *Mobile and Other Manufactured Homes.* Mobile and manufactured homes are not permitted. The Committee shall make exceptions for modular or open-panel construction homes that have prefabricated components if size, elevation, and building material requirements are met and the finished quality of the improvements will be comparable to a stick-built house constructed on the building site, piece by piece and compatible with other homes within the Lots.

3.4 Use Restrictions.

A. *Single-Family Residences.* The Lots shall each be used as a single-family residential Dwelling. "Single-family Residential" shall have the meaning set forth under the applicable Dane County zoning ordinance. No structures shall be erected, altered, placed, or permitted to remain on any Lot or part other than one detached single-family Dwelling, not to exceed two stories in height. No business, whether for profit, including, without limitation, any daycare center, animal boarding business, products distributorship, manufacturing facility, sales office, or professional practice, may be conducted from any Dwelling with the following exceptions:

1. An Owner may maintain his or her personal or professional library in his or her Dwelling.

2. An Owner may keep his or her personal business or professional records or accounts in his or her Dwelling.

3. An Owner may conduct his or her personal business or professional telephone calls or correspondence from his or her Dwelling.

Nothing in this Section shall authorize the maintenance of an office at which customers or clients customarily call.

B. No Licensing of a Building. No Owner, directly or indirectly, shall obtain or maintain a license to operate a tourist room house or bed and breakfast in any house or structure on any Lot.

C. Restrictions on Advertising a Building for Rental or Lease. No Owner shall advertise through and form of media or communication, the availability of a house on a Lot (or any portion thereof) for rent or lease except for a lease permitted under Section 6.11 of this Declaration. Advertising on any short-term rental internet site including, but not limited to, VRBO, Airbnb, HomeAway, Expedia, ShortTermHousing.com, and Craig's List is expressly prohibited.

D. Leasing or Renting of a Building. Except as provided in this Section 3.4.D., no house on any Lot (or any portion thereof) may be leased or rented. An Owner may lease its house to a single Family for a period of not less than twelve (12) consecutive months. Prior to the beginning of the lease term, the Owner shall provide to the Association a copy of the lease together with a list identifying the names of each tenant that will be occupying the house during the term of the lease. An Owner who sells their Lot may enter into a leaseback arrangement with the new owner of the Lot; provided, the lease term does not extend beyond one hundred twenty (120) days from the date fee simple title to the Lot is conveyed to the new owner. No later than five (5) days after the Lot is conveyed, the new owner shall provide the Association with copies of the executed deed and lease.

E. Enforcement. Any Owner who violates any of the terms of Sections 3.4.B. through 3.4.D. of this Declaration shall pay the Association immediately upon written demand the greater of (i) \$1,000.00 or (ii) 150% of the daily rental amount (prorated if necessary) paid by the tenant or renter for each day such provisions are violated. The Owner shall also pay the Association's actual attorney fees it incurred in enforcing the terms of this Amendment. The Owner consents to the Association placing on their Lot a lien for the amount owed to the Association.

F. *Signs.* No commercial or business sign of any kind shall be displayed on any Lot except one professional sign of not more than six square feet advertising the Lot for sale during the hours of open house showings only, or signs provided and allowed exclusively by Developer for builders or licensed real estate brokers during the initial construction and sales periods and for the resale of any Lot or Dwelling. The Developer

reserves the right to erect signs, gates, or other entryway features surrounded with landscaping at the entrances to the Development and to erect appropriate signage for the sales of Lots. This provision shall not be construed to prohibit signs associated with elections or other matters of public interest.

G. *Garbage and Refuse Disposal.* No Lot shall be used or maintained as a dumping ground for rubbish, trash, garbage, or waste. Yard waste shall be stored only in suitable containers. All equipment for storing or disposing of such waste material shall be kept clean and sanitary and suitably screened from view from the street.

H. *Storage and Parking.* Outdoor storage of vehicles, boats, or any other personal property shall not be permitted. Parking service vehicles owned or operated by the Lot owners and their families is prohibited unless they are kept in garages. The storage of automobiles, boats, travel trailers, mobile homes, campers, snowmobiles, motorcycles, or any other recreational vehicles is prohibited unless kept inside the garage. No firewood or wood pile shall be kept outside a structure unless it is neatly stacked, placed in a rear yard or a side yard not adjacent to a street, and screened from street view by plantings or a fence approved by the Committee. Nothing set forth in this Section shall prohibit temporary storage of moving vehicles for loading or unloading for more than sixteen (16) hours. No cars or other equipment may be parked in any yard at any time.

I. *Nuisance Prohibited.* No noxious or offensive trade or activity shall be carried on, which may be or will become a nuisance to the neighborhood. All areas of the Lot not used as a building site or lawn or under cultivation (such as a vegetable garden) shall be so cultivated or tended as to be kept free from noxious weeds. The Owner of each Lot shall be responsible for maintaining the Lot in a neat appearance. This covenant should not be construed to prevent a family garden or orchard, provided that all vegetable gardens and orchards shall be in the rear yard and provided that such gardens shall be pursuant to plans previously approved by the Committee under Section 9.3.

J. *Pets and Animals.* No commercial boarding shall be allowed. Kennels shall be inside the Dwelling unless otherwise approved in writing by the Committee. Each Owner should review the applicable municipal ordinances relating to the ownership of animals.

K. *Antennae / Solar Panels / Miscellaneous Fixtures.* Except to the extent that this Section conflicts with any federal law or regulation, no exterior antennas or satellite dishes greater than twenty (20) inches in diameter shall be permitted on any structure or Lot unless approved in writing in advance by the Developer or the Committee. Solar panels, windmills, walls, or fences shall be subject to be screened from public view to the extent reasonably possible and require approval from the Committee. All exterior lighting on the Property shall be designed and operated to contain the light, to the extent reasonably possible, within the Lot on which the light is located. Exterior lighting is subject to the Town of Verona Dark Sky Ordinance.

L. *Outside Clothesline.* Clothesline poles shall not be permitted on any Lot. A Lot may have a retractable close line that retracts to the dwelling and shall remain retracted when not in use.

M. *Firearms.* No person shall discharge a firearm within any Lot or on any Common Elements. No hunting will be allowed within the Subdivision.

N. *Exterior Lighting.* Any exterior lighting must be regulated by a timer with a consistent daily shut-off.

O. *Amplified Sound.* No amplified sound systems may be used outdoors within any Lot or on any Common Element.

P. *Fireworks.* The use of fireworks is subject to the Town of Verona fireworks ordinance. Each Lot Owner shall review the applicable Town ordinances before the use of fireworks.

ARTICLE 4 ASSOCIATION

4.1 Association Member and Board of Directors.

A. *Members.* The Owner of Lots within the Plat, excluding the Outlots, shall be a member of the Association. Each such platted Lot shall have one (1) vote only in the affairs of the Association. Where more than one person holds an Ownership interest in any Lot, all persons holding such interest shall be members, but such Lot shall have only one (1) vote. The consent or agreement of the majority of the Owners of any such Lot shall be deemed to be the consent or agreement of the Owner of any such Lot.

B. *Rights.* The members shall have such rights as are set forth in the Articles of Incorporation, the Declaration, the Bylaws of the Association ("*Bylaws*"), and any rules or regulations adopted under the Bylaws, as amended from time-to-time and as may be provided by the laws of the State of Wisconsin. Ownership of a Lot will signify the acceptance and ratification of the Articles of Incorporation, Declaration, Bylaws and any rules and regulations adopted under the Bylaws by the Owner(s) of a Lot. Each prospective purchaser of a Lot is strongly urged to request and review a copy of the most up-to-date Association documents prior to purchasing a Lot.

C. *Developer Control.* Notwithstanding anything contained in this Declaration to the contrary, the Developer shall totally govern the affairs of the Association until the Developer has sold all of the Lots and has no ownership interest in the Property. The Developer shall turn over control of the Association to the Lot Owners at the earlier of (i) the conveyance of all of its ownership interest in the Lots or (ii) 30 (30) days after the Developer's election to waive its right of control.

D. *Board of Directors.* Subject to Section 4.1(c), the Board shall manage the affairs of the Association. The Board shall be selected in the manner and shall have such duties, powers, and responsibilities as are set forth herein, in the Articles of Incorporation and Bylaws of the Association, as amended from time-to-time, and as may be provided by the laws of the State of Wisconsin, subject to the rights of Developer as set forth in such instruments. The Bylaws shall provide that if Developer and its successor as developer, if any, no longer owns any interest in any Lots within the Property, then Developer shall transfer control of the Association to the Owners of the Lots within the Property, who shall proceed to elect the Directors.

4.3 Assessments.

A. *Creation of Lien and Personal Obligation of Assessments.* The Developer hereby covenants, and each Owner of any Lot within the Property, by acceptance of a deed therefor, whether it shall be so expressed in such deed, is deemed to covenant and agree to pay the Association all assessments in the amount and manner hereinafter provided. All such assessments, together with interest thereon and costs of collection thereof as hereinafter provided, shall be a charge on the land and a continuing lien upon the Lot (but not any Outlot) against which each such assessment is made. Each such assessment, along with interest thereon and costs of collection thereof, shall also be the personal obligation of the person who was the Owner of such Lot when the assessment became due and payable.

B. *Creation of Assessments.* Assessments shall be determined, established, and collected in the following manner:

1. *Budget.* In December of each year, the Board shall determine a budget for the ensuing calendar year, which shall include the costs to be incurred by the Association in connection with the maintenance, improvement, and operation of Common Open Space, payment of taxes and insurance, and other costs connected therewith, including a reasonable reserve for depreciation and any financial assistance to be provided to the Design Review Committee under Section 3.3 above (the "*Association Expenses*").

2. *Declaration of Assessments.* The Board shall declare assessments so levied due and payable 30 (30) days from the date of such levy, which assessments shall be due and payable from the Lot owner on a prorated basis from the date the Lot is conveyed to a third party by the Developer or the date a building permit is issued for such Lot by the Town, whichever comes first, through December 31 of the applicable year. The Board shall notify each Owner of the action taken by the Board, the amount of the assessment against the Lot owned by such Owner, and the date such assessment becomes due and payable. Such notice shall be mailed to the Owner at the last known post office address by Loted States mail, with prepaid postage, or delivered to the Owner.

3. *Collection of Assessments.* In the event any assessment levied against any Lot remains unpaid for a period of sixty (60) days from the date of the levy, the Board may, at its discretion, file a claim for a maintenance lien against the Lot for which payment is not made, and upon compliance with the provisions of Section 779.70, Wisconsin Statutes, or other applicable authority, such claim shall be and become a lien against such Lot. The claim shall thereafter accrue interest at the rate of interest payable upon legal judgments in the State of Wisconsin, and the Board may exercise such remedies to collect such claim as may be afforded by law. The Owner of the subject Lot shall be responsible for all costs of collection incurred by the Association in connection therewith. No Owner may waive or otherwise escape liability for the assessment provided for herein by non-use of Common Open Space or abandonment of his / her / its Lot.

4. *Joint and Several Liability of Grantor and Grantee.* Upon a voluntary conveyance, the grantee of a Lot shall be jointly and severally liable with the grantor for all unpaid assessments as provided in this Article up to the time of the conveyance, without prejudice to the grantee's right to recover from the grantor the amount paid by the grantee therefor. However, any such grantee shall be entitled to a statement from the Association setting forth the amount of such unpaid assessments, and any such grantee shall not be liable for, nor shall the Lot conveyed be subject to a lien for, any unpaid assessment against the grantor pursuant to this Article more than the amount therein set forth. If the Association does not provide such a statement within ten (10) business days after the grantee's request, it is barred from claiming any lien that is not filed prior to the request for assessments owed by the grantor.

ARTICLE 5

COMMON OPEN SPACE STEWARDSHIP PLAN

5.1 Common Open Space. The Development is a Conservation Subdivision under the Town's Land Division and Development Ordinance. The Subdivision includes Common Open Space intended to be permanently protected and enjoyed by the Lot Owners. The Common Open Space is a woodland forest with other natural features.

5.2 Stewardship Plan Committee. Establishment Duties, Membership:

C. There shall be a Stewardship Plan Committee, which shall have the rights and obligations set forth in this Declaration for the Committee and any powers necessary to exercise those rights. All decisions of the Stewardship Plan Committee are subject to approval by the Board.

D. The Committee shall initially consist solely of the Developer so long as the Developer owns any interest in any Lot. The Developer may at any time, at its sole discretion, appoint up to three (3) Owners to serve as the Stewardship Plan Committee for a period of two (2) years, with the decisions rendered by the majority to be binding,

subject to approval by the Board. Notwithstanding the foregoing provisions, at such time as the Developer no longer owns any Lot subject to this Declaration, the Board shall appoint the members and fill vacancies on the Committee. After the Committee has been turned over to the Association, the Board shall determine the number of Committee members, the length of terms, and any other procedures as to the process that are not inconsistent with this Declaration, including, without limitation, disbanding the Committee if the Association no longer wishes to continue it.

5.3 Maintenance of Common Open Space. The Association shall have a Town approved ecological firm prepare a Stewardship Plan for the Open Space and comply with the requirements set forth in the Stewardship Plan.

5.4 Ownership of Common Open Space. The Developer shall initially own the Common Open Space until it is conveyed to the Association. The Developer shall convey the Common Open Space to the Association no later than the date that the Developer turns over control of the Association to the Lot Owners, provided, however, that the Developer shall have the right to convey the Common Open Space to the Association prior to the turnover of control of the Association.

5.5 Town Remedies for Default. If the Association fails to maintain the Outlot or the stormwater facilities in the manner required by this Declaration or any ordinance of the Town, the Town shall have the right to give the Association written notice of default. The Association shall have 30 days after the giving of the written notice in which to cure the default or, if the default cannot be cured within the 30 days, to cure the default within a reasonable time, provided that the Association promptly commences and diligently pursues cure of the default. If the Association does not timely cure the default, the Town shall have the right to (i) assume maintenance of non-compliant Outlot(s) or stormwater facilities and assess, on an equal basis, the cost of such maintenance to each Lot, (ii) exercise any right under applicable law to seek involuntary dissolution of the Association, or (iii) exercise both preceding remedies. Any assessments made by the Town shall constitute a lien against each Lot and be included in the tax bill for each Lot. The Town shall not be subject to any limits on assessments which may be imposed upon the Association in the Association's bylaws. These remedies of the Town shall be in addition to all other rights and remedies available to the Town under applicable law. ALL OWNERS OF AFFECTED LOTS HEREBY WAIVE NOTICE AND PROTEST OF ANY TAX, ASSESSMENT, OR SPECIAL CHARGES LEVIED BY THE TOWN AGAINST SUCH LOTS PURSUANT TO THIS DECLARATION.

ARTICLE 6
AMENDMENTS

Except as otherwise provided herein, this Declaration may only be amended by the written consent of the Owners owning more than 50% of the Lots. No amendment to this Declaration shall be effective until an instrument containing the amendment and stating that the required consents or votes were duly obtained, signed on behalf of the Association, and duly acknowledged or authenticated is recorded with the Dane County Register of Deeds. For this

provision and Declaration purposes, each Lot shall have one (1) vote. No amendment to the Declaration affecting the status or rights of the Developer may be adopted without the written consent of the Developer.

ARTICLE 7
GENERAL

7.1 Assignability of Developer's Rights. The Developer reserves the right to assign its rights, powers, and obligations by a written record instrument to any other party who assumes such rights, powers, and obligations. Upon recording any such assignment, such assignee shall become the "*Developer*" under this Declaration and shall succeed to all such rights, powers, and obligations. Such amendment needs to be signed only by the assignor and the assignee named therein.

7.2 Warranties. The Developer has made no warranty or representation in connection with the Development, except as specifically set forth in this Declaration. No person shall rely upon any warranty or representation unless contained in this Declaration.

[THE REMAINING PORTION OF THIS PAGE IS PURPOSELY LEFT BLANK]

IN WITNESS WHEREOF, this Declaration has been executed on this _____, 2024.

COONS CONSTRUCTION OF VERONA, LLC

By: _____
James T. Coons, Member

ACKNOWLEDGMENT

STATE OF WISCONSIN)
) SS.
COUNTY OF DANE)

This instrument was acknowledged by me on _____ by James T. Coons as Member of Coons Construction of Verona, LLC.

Notary Public, State of Wisconsin
My Commission is permanent.

EXHIBIT A
Riverside Vista Plat
See attached

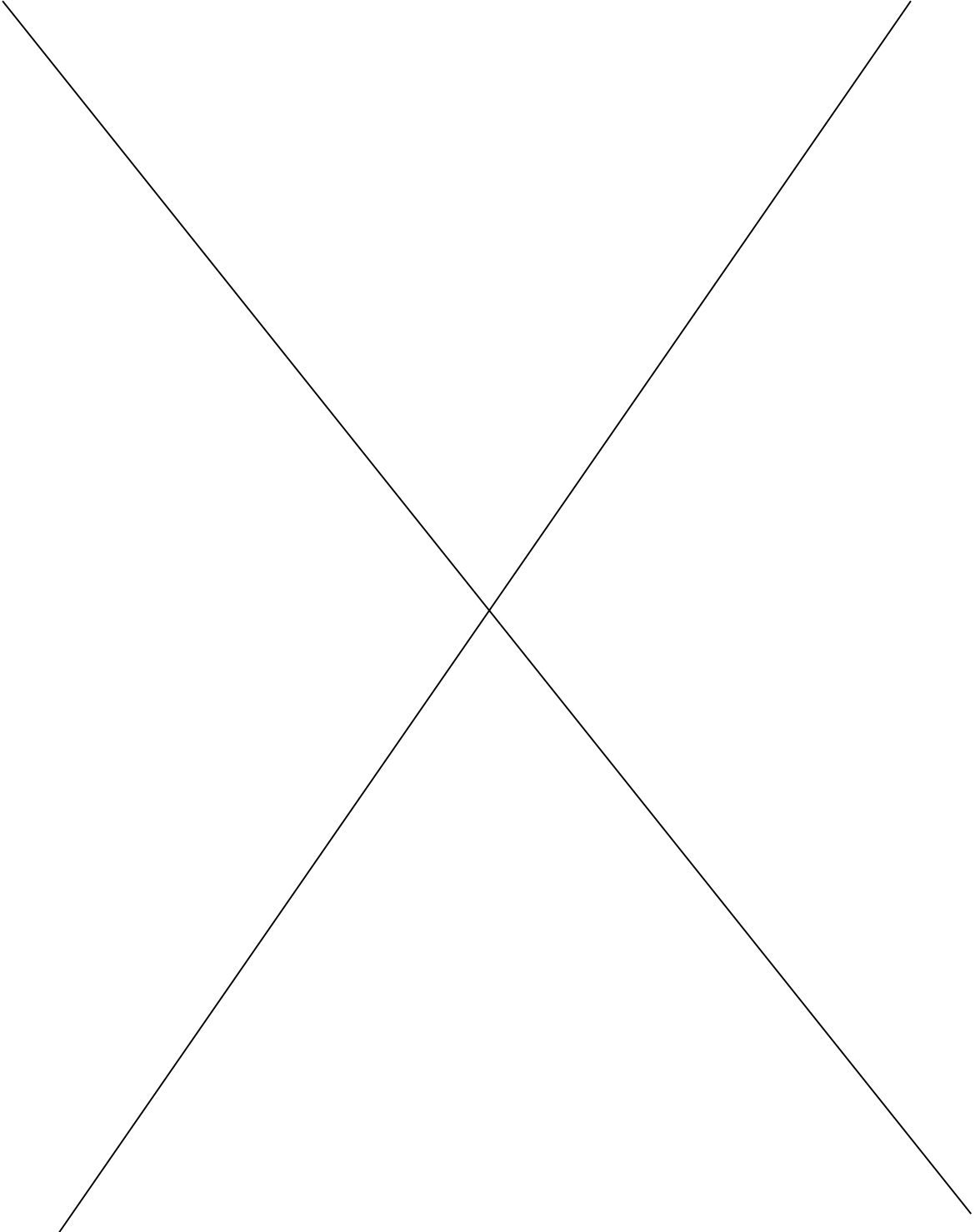


EXHIBIT A

TOWN OF VERONA

TO: Town Board of Supervisors

DATE: February 2, 2024

FROM: W. Christopher Barnes, Public Works Director

SUBJECT: Hidden River (South) Proposed Right of Way Discontinuance

In concurrence with Public Works Committee, town staff has been pursuing the road vacation of appropriate town highways. Recent activities on Hidden River (South) make it an excellent candidate for vacation of the right of way and discontinuation of the town highway. For historical perspective, in 1990 the State of Wisconsin Highway Department (WISDOT) requested all towns review and submit candidates for single purpose roads. Single Purpose Road are defined by WISDOT as:

- 1-A stub-end road that serves only one property.
- 2-The extremity of a stub end road that lies entirely within the boundaries of the last parcel served.
- 3-A stub end road that serves parcels of land that also abut on and have legal access to another public road.

In 1990, 16 town roads were considered by WISDOT as single purpose roads. Over the years the town has discontinued a number of single purpose roads i.e., Oak Grove Road, Hefty Road, Littleton Road and a portion of Wesner Road.

Hidden River (South) is a gravel road which serves two properties. Both properties have legal access to other public roads. There are no residences located on the road and the typical use is agricultural by the two abutting property owners. In August of 2023, the town completed the re-graveling and restoration of the road to a like-new condition. A review of town and county records provide no indication that the road was ever formally accepted by the town.

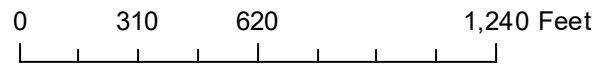
On September 19, 2023, the Public Works Committee reviewed the proposed vacation and passed a motion to recommend the discontinuance of Hidden River (South) and request the Town Board to initiate the discontinuance process. On December 5, 2023 the Board introduced resolution 2024-01 and set a public hearing for February 6, 2024. On December 19th, 2023 the *Lis Pendens* for this discontinuance. was recorded for this action. On January 4, 2024 the two adjacent property owners were notified of the proposed discontinuance. Contact was made with both of the owners to answer questions regarding the process. Public notices for the public hearing for the vacation

were published on January 18, 25, and February 1, 2024. The attached documents have been reviewed and approved by the town attorney. If you have any questions, please let me know.

Hidden River Road



September 5, 2023



Tie Sheet Corners

Parcels

QQ Sections

Sections

Within Plat

Plat Boundaries



RESOLUTION 2024-01

A RESOLUTION TO VACATE A SEGMENT OF HIDDEN RIVER ROAD IN THE TOWN OF VERONA

WHEREAS, the Town of Verona has the power to discontinue the whole or part of any public way within the Town limits pursuant to Wis. Stats. §66.1003 when the public interest requires it; and

WHEREAS, the portion of the public way, Hidden River Road south of Riverside Road as shown on Exhibit A attached hereto serves only two undeveloped properties; and

WHEREAS, vacation of the portion of the public way shown on Exhibit A will not result in a landlocked parcel or property; and

WHEREAS, the Town Board has held a public hearing to consider public comments on the proposed vacation of the road segment legally described below and depicted in Exhibit A, and hereby determines that it is in the public interest to vacate and discontinue that segment of Hidden River Road;

NOW, THEREFORE, BE IT RESOLVED, by the Town of Verona Board of Supervisors that the portion of the following described public right-of-way is hereby vacated and discontinued:

A 66' wide roadway with 33' on either side of the centerline located in part of the Northeast ¼ of Section 32, Township 6 North, Range 8 East in the Town of Verona, the centerline being more particularly described as follows:

Commencing at the Northeast corner of said Section 32; thence westerly 1336 feet more or less along the North line of the Northeast ¼ of said 32 to the intersection of the northerly extension of the centerline of Hidden River Road to the south; thence southerly 33 feet along the northerly extension of the centerline of said Hidden River Road to a point on the southerly right-of-way of Riverside Road and being the Point of Beginning; thence continuing southerly 817 feet more or less along the centerline of said Hidden River Road to the termination of the said road.

BE IT FURTHER RESOLVED, that all easements and rights incidental to the easements that belong to any county, school district, town, village, city, utility, or person that relate to any underground or over ground structures improvements, or services and all rights of entrance, maintenance, construction, and repair of the structures, improvements, or services shall continue. The Town of Verona does not consent to the discontinuance of any such easements and rights.

Adopted by the Verona Town Board this 6th day of February, 2024.

Mark Geller, Chairperson

Attest:

Teresa Withee, Clerk