Riley-Purgatory-Bluff Creek Watershed District

Board of Managers Workshop and Regular Meeting

Wednesday, August 2, 2017
5:30pm Board Workshop
7:00pm Regular Board Meeting
DISTRICT OFFICE
18681 Lake Drive East
Chanhassen

Agenda

1. Call to Order

2. **Board Workshop - 10 Year Plan and 2018 Budget** **Information**

3. **Approval of the Agenda** (Additions/Corrections/Deletion)

4. CAC Stormdrain Sub-committee Presentation **Action**

5. Groundwater Presentation **Information**

6. Matters of general public interest

   Welcome to the Board Meeting. Anyone may address the Board on any matter of interest in the watershed. Speakers will be acknowledged by the President; please come to the podium, state your name and address for the record. Please limit your comments to no more than three minutes. Additional comments may be submitted in writing. Generally, the Board of Managers will not take official action on items discussed at this time, but may refer the matter to staff for a future report or direct that the matter be scheduled on a future agenda.

7. **Reading and approval of minutes** **Action**

   Board of Manager Meeting, July 12, 2017

8. **Consent Agenda**
   (The consent agenda is considered as one item of business. It consists of routine administrative items or items not requiring discussion. Any manager may remove an item from the consent agenda for action.)
   a. Accept Staff Report
   b. Accept Engineer's Report (with attached Inspection Report)
   c. Approve Permit Modification request for Permit 2016-026: Foxwood Development

d. Approve Permit Modification request for Permit 2016-030: IDI Distribution
e. Approve Permit 2017-037: The Venue with staff recommendations
f. Approve Review Extension Period for Permit 2017-039: Mission Hills Senior Living
g. Approve funding for Master Water Steward capstone project

9. Citizen Advisory Committee **Information**

10. Action Items **Action**
    a. Accept June Treasurer's Report
    b. Approve Paying of the Bills
    c. Approve Permit 2017-032: Purgatory Creek Channel Stabilization @ Bluestem
        i. Approve variance request
        ii. Approve permit with staff recommendations

11. Discussion Items **Information**

    a. Upcoming Meeting

12. Upcoming Events **Information**

- Project WET workshop, Nine Mile Creek Watershed District, 8:30am
- Citizen Advisory Committee, District Office, August 21st, 6:30pm
- Scenic Heights Informational Meeting, August 23rd, 6:30pm
- Board of Managers Public Hearing, Regular Meeting and Workshop, September 6th, 5:30pm, 18681 Lake Drive East, Chanhassen

Storm Drain Sub-Committee: Initial recommendations

Matt Lindon and Sharon McCotter
RPBC Watershed Board of Managers Meeting
August 2, 2017

1

Purpose

- Gain managers approval to go forward with the 5 recommendations in this deck
- Gain managers approval to use limited staff time for consulting and potentially to help with development of collateral/marketing pieces
- Learn how managers would like to receive updates on the initiatives; are CAC minutes enough?
- No funding requests at this time

2

Recommendations

Cities involved	Opportunity	CAC members
Shorewood	Fall leaf clean-up with compost options	Sharon and Matt
Chanhassen	Fall leaf clean-up without compost options	Sharon and Matt
Chanhassen	Pilot storm drain stencil marking program *	Matt and Sharon
Shorewood (w/Mtka help)	Education on impact of grass clippings **	Dorothy
Minnetonka	Establish an Adopt-a-Drain program ***	David and Anne

* Information from this pilot will be used in storm drain marking comparison work

** Minnetonka has a grass clippings awareness program with door hangers and leaf drop off that could possibly be utilized

*** Pilot drain monitoring program that could tie with future state program; explore using existing Volgistics computer program currently used to track volunteers

3

Next steps upon approval

- Fall clean-ups
  - Utilize existing materials to create a draft outline for fall clean-up
  - Schedule meetings with Krista and Paul to review draft for fall clean-up; get their input; review plan with Michelle; finalize plans
- Stenciling pilot
  - Meet with Krista to discuss extent of the stenciling pilot
  - Draft plan; review plan with Michelle; finalize plans
- Follow-up with cities
  - Warm hand-off/introduction for Dorothy, David and Anne via email
- Continue to pursue contact with Eden Prairie, Bloomington and Deephaven

4

Appendix

5

Background

Committee Goals

- Grow citizen involvement and foster sense of ownership in Stormwater drain protection through the watershed district
- Reduce storm water pollutant loading in residential curbed stormwater drains
- Work with existing city Stormwater drain programs/policies to make cohesive comprehensive residential curbside storm drain BMP's guidance
- Craft a sustainable program that compliments city goals
- To incorporate our efforts into other Minneapolis/St. Paul Metro/County Stormwater initiatives such as Adopt-a-Storm-Drain

Committee Framework

- Create a three year plan
- Highlight seasonal needs (focus first on drain clean-ups)
  - Winter – Reduce salt use
  - Spring – Storm drain clean-out
  - Summer – Grass clippings
  - Fall – Leaf clean out

6

High level project timeline

May
- ✓ Define sub-committees goals and report to CAC
- ✓ Draft project plan
- ✓ Draft survey questions for cities and begin collecting input

June
- Finalize input from cities and build table with baseline data (in progress)
- ✓ Review baseline data and any assistance requests received from cities
- Start building draft for fall leaf clean-up (test and learn)
- Review drain marking options, pro's and con's

July
- Complete pre-planning for fall leaf clean-up test and learn
- ✓ Provide committee update to CAC
- Refine and adjust program and cleanup recommendations

August
- Present recommendations at August Board of Managers meeting
- Work on fall clean up test and learn

7

Survey parameters

- Conducted either F2F or phone interview with:
  - Chanhassen – Krista Spreiter – Natural Resources Technician
  - Minnetonka – Jo Colleran – Environmental Coordinator
  - Shorewood – Paul Hornby – Municipal Senior Project Manager
- Still pursuing Eden Prairie, Bloomington and Deephaven
- Recommendations will be for the three cities that have participated thus far
- If interviews with the three remaining cities offer opportunities to couple initiatives we will attempt to include; otherwise look at expanding next year
- 10 questions (at end of deck) - current initiatives and future plans:
  - Salt use
  - Storm drain clean-outs
  - Storm drain marking
  - Grass clippings

8

Overview of survey results

- Winter - Salt use
  - All three cities are actively involved in required education for homeowners, commercial owners, city workers and those in the industry
  - No immediate need for help with salt use education
- Spring – Storm drain clean-out
  - Because there are already numerous Earth Day activities even if they don't occur in each of the cities, a Spring clean-out would be a lower priority than a Fall clean-out
- Summer – Grass clippings
  - Utilize best practice program at Minnetonka with Chanhassen (if interested) and Shorewood
- While some overall needs are similar, each city is in a different place with resources, maturity of programs, and specific needs for their city

9

Survey questions for cities

1. Describe the homeowner or community programs/communication you currently have in place to reduce salt use i.e. seminars on low salt usage, incentives
2. How do you measure the success of those programs/communication?
3. What future plans might you have for modifying the existing programs in this area?
4. Describe the homeowner or community programs/communication you currently have around storm drain clean-outs. Spring? Fall? Or both?
5. (If a storm drain marking program is mentioned) How did you determine what type of storm drain marking (plaques, stenciling, etc.) you wanted to propagate?

10

Survey questions for cities

6. How do you measure the success of those programs/communication?
7. What future plans might you have for modifying the existing programs or adding new programs in this area?
8. Describe the homeowner or community programs/communication you currently have in place around grass clippings.
9. How do you measure the success of those programs/communication?
10. What future plans might you have for modifying the existing or adding new programs in this area?

11

RILEY
PURGATORY
BLUFF CREEK
WATERSHED DISTRICT

18681 Lake Drive East
Chanhassen, MN 55317
952-607-6512
www.rpbcwd.org

July 26, 2017

To: The RPBCWD Board of Manager
Re: CAC Stormdrain Subcommittee Presentation

I am writing in support of the projects (fall clean-ups and stenciling pilot) proposed by the Citizen Advisory Committee's storm drain subcommittee. The subcommittee has invested considerable time and research in identifying stormdrain stewardship initiatives they could undertake that would complement the current efforts of both local cities, and the watershed district. Staff support the request for staff time in assisting with planning and logistics, and have identified this as a project that the District's high-school Master Water Steward could engage in as well. The fall cleanups may also require additional in-kind support (gloves, bags, etc), that would fall within typical District event costs.

If you have any questions regarding this recommendation, please let me know.

Sincerely,

Michelle Jordan
Community Outreach Coordinator

MEETING MINUTES

Riley-Purgatory-Bluff Creek Watershed District

July 12, 2017, Board of Managers Plan Workshop and Monthly Meeting

PRESENT:

Managers:	Mary Bisek, Secretary	
	Richard Chadwick	
	Jill Crafton, Treasurer	
	Perry Forster, President	
Staff:	Claire Bleser, District Administrator	
	Zach Dickhausen, Water Resources Technician	
	Terry Jeffery, Project and Permit Coordinator	
	Michelle Jordan, Community Outreach Coordinator	
	Josh Maxwell, Water Resources Coordinator	
	Louis Smith, Attorney (Smith Partners)	
	Scott Sobiech, Engineer (Barr Engineering Company)	
Other attendees:	Paul Bulger, CAC; Eden Prairie Resident	Ryan Suler, Timberland Partners*
	Pete Iverson, CAC	Laurie Susla, LLCA
	David Knaeble, Civil Site Group*	Eric Toft, Eden Prairie Resident*
	Dorothy Pederson, CAC	David Ziegler, CAC

* Indicates attendance at the board meeting only

1. Plan Workshop

President Forster called to order the Wednesday, July 12, 2017, Board of Managers Plan Workshop at 5:42 p.m. in the District Office, 18681 Lake Drive East, Chanhassen, MN 55317.

Administrator Bleser summarized the items that will be covered in the workshop, including a general overview of draft plan revisions and receiving comments, an update on the watershed's legal boundaries, a second look at the draft 10-year plan implementation table with its revisions, and the District's permitting program.

Administrator Bleser asked each manager to provide comments on the draft plan. She recorded the managers' feedback and collected their paper comments.

Administrator Bleser moved on to the discussion about the watershed's legal boundaries. She displayed a PowerPoint slide showing parcels that, based on hydrology, could be allocated to other Districts and parcels that could be allocated to the RPBCWD. She noted that these proposed changes would lead to a gain in tax base for the District. She reminded the Board that last month it passed a resolution in support of the boundary change. Administrator Bleser said that the next step is to develop the resolution for the other three watershed districts, Minnehaha Creek, Nine Mile Creek, and Lower Minnesota River, to present to their respective Boards for adoption. Administrator Bleser said that after the watersheds adopt the resolution, the RPBCWD would adopt a formal resolution, with supporting documentation, to bring to present to the Minnesota Board of Water and Soil Resources (BWSR) to order those boundary changes. She said that she would meet with and provide to the other

three watershed districts the draft resolution and ask them to seek adoption of the resolution at their August meetings. Administrator Bleser said that in September she would have a resolution in front of the Board to order petitioning BWSR to take action to formalize the boundary changes.

Administrator Bleser handed out the RPBCWD Draft Implementation Table 2019-2028 (draft 7-12-17). She reviewed the updates made to the table including moving the Lotus Lake alum treatment project to 2018 and moving ahead the Minnetonka road project by five years. She responded to questions. Administrator Bleser said that her next steps including meeting one-on-one with each of the District's cities and partners, such as the Three Rivers Park District, to walk them through this table and discuss their interest in partnering.

Terry Jeffery commented that staff would like manager feedback on the staff report format and information. He collected feedback from the managers. Mr. Jeffery discussed the staff's evaluation process of the District's permitting program. He said that the staff is first looking at efficiencies and ways to improve efficiencies. Mr. Jeffery talked also about evaluating the District's program for unintended consequences of the District's rules. He provided examples. Mr. Jeffery said that staff would bring in front of the Board a draft of modifications of the District's rules for comment and then would bring a revision back to the Board in October, release for public comment in November, and release for 45-day review in January.

Administrator Bleser noted that rather than assuming the District's next 10-year plan will be approved right away, staff recommends starting the plan amendment process for 2018 projects. She said staff will bring these draft plan amendments in front of the Board.

Administrator Bleser listed the revisions staff will be making to the draft plan based on the feedback provided at this workshop.

Manager Crafton moved to adjourn the workshop. Manager Chadwick seconded the motion. Upon a vote, the motion carried 4-0 [Manager Yetka absent from vote]. President Forster adjourned the Plan Workshop at 6:57 p.m.

2. Monthly Board Meeting Call to Order

President Forster called to order the Wednesday, July 12, 2017, Board of Managers Monthly Meeting at 7:08 p.m. in the District Office, 18681 Lake Drive East, Chanhassen, MN 55317. He noted that immediately prior to this monthly meeting the Board held a plan workshop.

3. Approval of the Agenda

President Forster requested moving ahead in the agenda item 8e – Approve Permit 2017-044: Toft Shoreline Naturalization Exception with Staff Recommendations - so that the item is directly after item 8c - Order Lake Susan Park Pond Project.

Manager Crafton moved to approve the agenda as amended. Manager Chadwick seconded the motion. Upon a vote, the motion carried 4-0 [Manager Yetka absent from vote].

4. Matters of General Public Interest

President Forster explained the procedure for bringing forward matters of general public interest and opened the floor.

Ms. Laurie Susla of Dakota Drive, Chanhassen, thanked President Forster and Manager Chadwick for coming to

the Lotus Lake Conservation Alliance (LLCA) Question and Answer meeting on June 20th. Ms. Susla presented PowerPoint slides with photos of Lotus Lake and questions by the LLCA about the lake, its water quality, and planned projects. She talked about lake issues and showed a short video about algae on the lake. Ms. Susla noted that she has seven pages of questions she collected at the LLCA meeting and remarked that she would like to consolidate the questions and submit them to the Board for Board response. The Board agreed that the LLCA can submit the questions to the Board.

President Forster called for additional comments. Upon hearing none, he moved on to the next agenda item.

5. Reading and Approval of Minutes

a. June 7, 2017, RPBCWD Board of Managers Plan Workshop and Monthly Meeting

Manager Chadwick noted a correction to be made on page 4 to correctly reference the annual audit being issued May 2017. Manager Crafton pointed out that on page 5 under 12a the word "in" should be replaced with "is.' President Forster requested the addition of a comma on page 1, item 1, paragraph 3, after "PowerPoint slides." He also noted the need to insert commas on page 3 under item 5, paragraph 1, so the sentence reads, "Mr. Modrow, with the City of Eden Prairie, provided…" Manager Bisek requested a spelling correction on page 5. Manager Crafton requested a grammatical edit on page 3, item 4, paragraph 4 to correct a run-on sentence.

Manager Chadwick moved to accept the minutes as amended. Manager Crafton seconded the motion. Upon a vote, the motion carried 4-0 [Manager Yetka absent from vote].

6. Consent Agenda

President Forster pointed out that there is a new version of Permit 2017-040: Basin 05-12-C Pond Clean-out with staff recommendations. He explained that the address listed in the original permit was incorrect and the new version has the correct address.

President Forster read aloud the Consent Agenda items: a. Accept Staff Report; b. Accept Engineer's Report (with attached inspection report); c. Approve Salary Adjustment for Community Outreach Coordinator with Updated Community Outreach Coordinator Job Description d. Approve Permit 2017-024: Prairie Bluff Senior Living with staff recommendations; e. Approve Permit 2017-038: West Park Subdivision and Site Plan Review with Staff Recommendations; f. Approve Purgatory Creek Restoration at Highway 101 Pay Application #3; g. Approve Permit 2017-040: Basin 05-12-C Pond Cleanout with Staff Recommendations; h. Approve Lotus Lake Alum Feasibility Task Order, i. Approve staff recommendations for Single Family Homeowner Cost-Share Applications: (i) 8583 Red Oak Drive, Eden Prairie (lake buffer); (ii) 7935 S. Bay Curve, Eden Prairie (lake buffer); iii. 8513 Red Oak Drive, Eden Prairie (lake buffer); iv. 17689 Sheffield Lane, Eden Prairie (wetland buffer); v. 4557 Timber Woods Lane, Minnetonka (pond buffer); j. Approve Task Order 24: Silver Lake Phase I.

Manager Crafton moved to approve the Consent Agenda as presented. Manager Bisek seconded the motion. Upon a vote, the motion carried 4-0 [Manager Yetka absent from vote].

7. Citizen Advisory Committee (CAC)

Ms. Pederson stated that the CAC is looking forward to receiving the draft 10-year plan. She reported that the CAC has been working on the adopt-a-storm drain project and will have a formal presentation on it this month about how the project will roll out. Ms. Pederson said that the Committee is trying to brainstorm other smaller

projects. She said that this month a couple of CAC members resigned from the Committee as it was not a fit for their volunteer interests.

8. Action Items

a. Accept May Treasurers Report

Manager Crafton provided an updated on the 2017 budget to-date. She responded to questions. She moved to accept the Treasurer's Report as presented. Manager Chadwick seconded the motion. Upon a vote, the motion carried 4-0 [Manager Yetka absent from vote].

b. Approve Paying of Bills

Manager Crafton reported that Administrator Bleser went through the bills in accordance with the District's internal controls and procedures for financial management and recommended paying the bills as outlined on page 2 of the Treasurer's Report. Manager Crafton said she went through the bills, too, and concurs with Administrator Bleser. Manager Crafton moved to pay the bills. Manager Bisek seconded the motion. Upon a vote, the motion carried 4-0 [Manager Yetka absent from vote].

c. Order Lake Susan Park Pond Project

Administrator Bleser stated that the Board packet has a memo about ordering the project. She reported that staff has discussed the project with the City of Chanhassen but that the District wasn't successful in getting Emerson on board with the project. Administrator Bleser explained that staff still recommends project option 4A, the pump filter and reuse system. She pointed out that option 4A would require $80,000 in additional project funding over the funding already levied and that the $80,000 would be levied in 2018. Administrator Bleser reminded the Board that it already held a public hearing on the project and the CAC reviewed the project and recommended 4A or 4B. She said that to move forward with project design and to levy the $80,000, the Board needs to order the project. Administrator Bleser said that in front of the Board is Resolution 2017-04, which outlines the project, its anticipated outcomes, and its total estimated cost of $480,000, based on the feasibility study by Barr Engineering Company and submitted in March 2017.

Manager Chadwick remarked that he is concerned with the cost of this project and its cost-benefit. He asked if the watershed and City could together approach the watershed. There was discussion.

Manager Crafton moved to approve Resolution 2017-040 to Order the Lake Susan Park Pond Project Phase II. Manager Bisek seconded the motion. Upon a vote, the motion carried 3-1 [Manager Chadwick voted against the motion; Manager Yetka absent from vote].

Manager Crafton moved to order Task Order 13b: Lake Susan Watershed Treatment and Storm water Reuse Enhancements Design and Construction Administration and to approve levying $80,000 in 2018 for scenario 4A for the Lake Susan Park Pond Project. Manager Bisek seconded the motion. Upon a vote, the motion carried 3-1 [Manager Chadwick voted against the motion; Manager Yetka absent from vote].

d. Approve Permit 2017-044: Toft Shoreline Naturalization Exception with Staff Recommendations

Mr. Jeffery described the property and the existing conditions, as outlined in detail in the Board packet. He talked about the project's goal of restoring the shoreline to near-natural condition, and he described the proposed project components. Mr. Jeffery stated that staff recommends approval of the permit with the conditions as described and the staff recommendation of waiving the permit fee and only considering

the 85-foot portion of the shoreline where rip rap will be placed for calculating the financial assurance. Mr. Jeffery and the applicant responded to questions.

Manager Crafton moved to approve permit 2017-044 with the conditions recommended by staff. Manager Chadwick seconded the motion. Upon a vote, the motion carried 4-0 [Manager Yetka absent from vote].

e. Approve Permit 2017-030: Elevate and Variance Request

Engineer Sobiech described the location in Eden Prairie of the proposed project and explained that the applicant proposes to remove the two existing structures on the two-parcel property. He said that the applicant proposes to construct an apartment building and 12,00-square feet of commercial development plus associated parking. Engineer Sobiech described the permit review. He talked about the applicant's variance request from the low-floor requirement of three feet of free board.

Engineer Sobiech went through the variance request, described the site constraints, and the Engineer's recommendations and conditions. Engineer Sobiech recommended approval of the variance request with the condition that the applicant provides written indemnification of the RPBCWD of all claims and actions for flood damage to the property and recording on the title the non-compliant elevation. He pointed out that the variance would only affect the applicant's property.

Manager Crafton moved to approve the variance for permit 2017-030 Elevate based on the Engineer's findings and conditions as detailed in the Engineer's report. Manager Chadwick seconded the motion. Upon a vote, the motion carried 4-0 [Manager Yetka absent from vote].

Manager Bisek moved to approve permit 2017-030 Elevate contingent on the Engineer's recommendation and conditions as described by the Engineer including documentation for approval for the right to flow water to the offsite storm water management facility and indemnification against claims against the RPBCWD. Manager Crafton seconded the motion. Upon a vote, the motion carried 4-0 [Manager Yetka absent from vote].

f. Approve Permit 2015-016 (Expired): Blossom Hills Letter of Credit Reduction

Mr. Jeffery explained that this permit has expired. He said that the applicant had provided the $43,700 letter of credit as required by the permit. Mr. Jeffery described the worked that has been completed by the permit owner. Mr. Jeffery listed the information that the permit holder has provided the District regarding the work completed. He also reported that staff visited the site on July 6, 2017, and he described what staff observed. Mr. Jeffery stated that staff recommends a reduction in the letter of credit, holding half of the restoration fund to ensure vegetation is established and that upon project completion the silt fence is removed. Mr. Jeffery said that Pentom is producing a new letter of credit in the amount of $5,005 at which time the District would release the existing letter of credit. Mr. Jeffery responded to questions.

Manager Crafton moved approval of reduction of financial assurance for Permit 2015-016 from $43,700 to $5,005. Manager Chadwick seconded the motion. Upon a vote, the motion carried 4-0 [Manager Yetka absent from vote].

9. Discussion Items

a. Governor's 25 x 25 Conferences Minnesota

President Forster said that he suggested to Administrator Bleser that RPBCWD, Nine Mile Watershed District, Minnehaha Watershed District, and the Lower Minnesota River Watershed District may be interested in hosting one of the conferences because right now the nearest one is in Mankato. He said

he would like the RPBCWD to take the lead to try to coordinate hosting one of these conferences in this area. Manager Crafton noted that the two Isaac Walton League chapters in Bloomington are trying to do this and can coordinate with the District.

b. Upcoming Meetings

President Forster noted there is a closed meeting here at the District office at 7 p.m. on Monday, July 17, and the meeting will be public noticed.

10. Upcoming Events

- Citizen Advisory Committee, Monday, July 17, 6:30 p.m., District Office, 18681 Lake Drive East, Chanhassen
- Save the Date: Watershed Tour – 10 Year Plan highlight. Monday, July 31, District Office, 18681 Lake Drive East, Chanhassen
- Board of Managers Regular Meeting and Workshop, Wednesday, August 2, 5:30 p.m. , District Office, 18681 Lake Drive East, Chanhassen
- Citizen Advisory Committee, Monday, August 21, 6:30 p.m., District Office, 18681 Lake Drive East, Chanhassen

11. Adjourn

Manager Crafton moved to adjourn the meeting of the Board of Managers. Manager Chadwick seconded the motion. Upon a vote, the motion carried 4-0 [Manager Yetka absent from vote]. The meeting adjourned at 8:08 p.m.

Respectfully submitted,

_____

Mary Bisek, Secretary

RPBCWD Staff Report

July 12, 2017

Administrative

10-Year Plan
Staff continues to work on the 10-year plan. Staff is also preparing a launch scheme to introduce the new plan to all of our new stakeholders.

Aquatic Invasive Species
Staff received the zebra mussel veliger sampling results back from RMB environmental labs and no zebra mussel veligers were detected.

Budget
Administrator Bleser is working on a budget proposal for 2018.

City Engagement
Staff Jeffery and Administrator Bleser are coordinating a meeting with Public Works Directors and City Engineers to discuss:

a.) help with potential shortfalls in the BWSR Road Replacement Program,
b.) address water conservation, and
c.) to manage and mitigate flooding.

Staff Jeffery and Engineer Sobiech met with members of the Eden Prairie Engineering department to discuss future improvements to Duck Lake Road and to Preserve Boulevard. Both projects are in the initial planning phases. Staff indicated to Eden Prairie that Prairie View Elementary School has been identified as a possible location for stormwater best management practices and the opportunity exists for collaboration. Preliminary plans will be provided at a future date.

Staff Jeffery will be meeting with Chanhassen City Engineer/Public Works Director and the new Water Resources Coordinator for Chanhassen on Friday, August 4th to discuss possible collaborative opportunities.

Site Visits
Staff visited the street reconstruction site on Lake Susan Hills Road and noticed one of the inlet protection silt bags was torn and not functioning. Staff contacted the City of Chanhassen to resolve the issue.

Data Request
We had several data requests this month pertaining to information about our 10-year plan as well information from our last board meeting.

Grants
The District will be applying for Clean Water Funds this year. We will try and get fund for the Lower Riley Creek restoration project.

Office
Our office signage is up!

Permitting
Please find below permits that were issued administratively in June and July.

2017-054 4238 Heathcote Rd Deephaven	pool addition
2017-051_Leroy Street Deephaven	building addition
2017-050 8516 Ellet Circle EP	single family home
2017-049 8514 Ellet Circle EP	single family home
2017-048 Dell Road Overlay Project EP	mill and overlay
2017-046 Edenvale Trail Improvement EP	trail improvement
2017-043 Flying Cloud Drive Trail Improvement EP	trail improvement
2017-042 8560 Ellet Circle EP	single family home
2017-041 MNDOT SP 2706-221 Shorewood	turn lane
2017-035 9401 Kiowa Trail Sand Blanket Chan	sand blanket

It is noteworthy that the District has already received 59 applications in 2017. This is 10 more than were received in all of 2016 and only 3 shy of the total number of applications received in 2015. In addition to the 2017 permits, 3 more permits have been processed this year that were modifications or re-issuance of permits first applied for in the previous two years. This brings the total processed permits thus far in 2017 to 62.

Citizens Advisory Committee

July meeting
The citizens advisory committee met for their monthly meeting on July 17. Meeting minutes are included in the board packet. The stormdrain sub-committee will be presenting to the board at the meeting. Staff have included a memo of support for their project ideas in the packet as well.

Technical Advisory Committee

No additional updates.

Programs and Projects

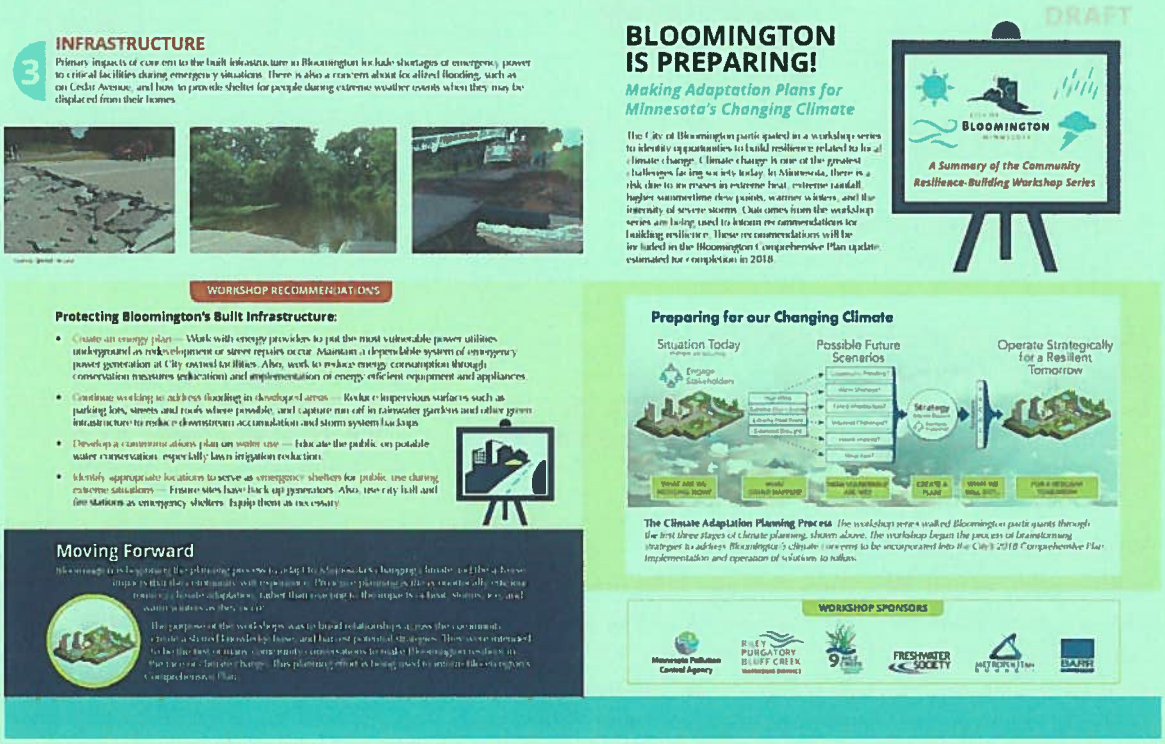
District-Wide

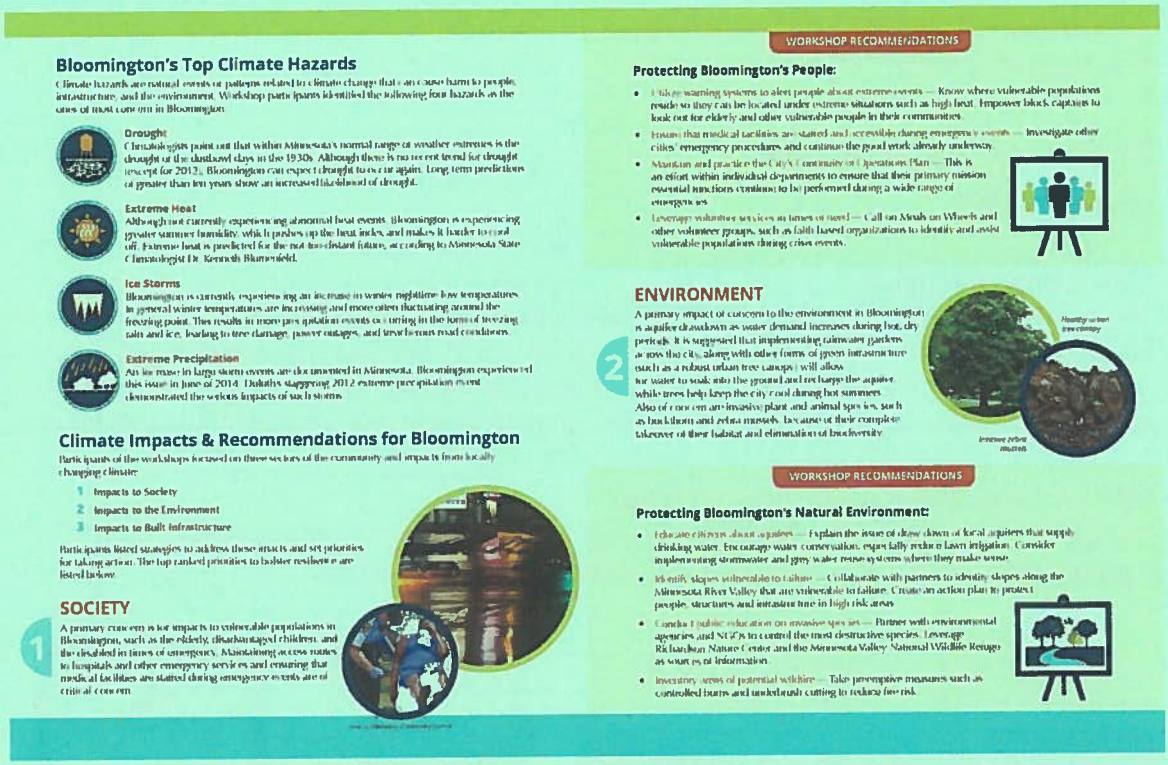
Cost-share program

Third round applications are being accepted with a deadline of August 15. Staff Jordan and Intern Henderson have worked on a Cost-Share photo book. The book has examples of cost-share projects that have been implemented in the district. It is meant to help give community members an idea of what these types of project might look like, and what goes into creating one.

MPCA Community Resiliency Grant

The City of Bloomington has asked that we present the findings from the workshop to their environmental commission. NMCWD will be leading the presentation.





Total Maximum Daily Load

No additional updates.

Data Collection (J. Maxwell)

Rice Marsh Aeration

No additional information. Staff will pulse the unit once a month to make sure lines remain clear. Barr Engineering will repair the motor that went down this year and the District has purchased another one as a back up.

Summer Field Season

Staff began regular lake and creek sampling near the end of April which has continued through July. In addition to monthly zooplankton collection, staff has added phytoplankton sampling once a month to gauge harmful algae levels and overall health of the lake. Lake level sensors have were checked in June and were all operational except for the sensor located on Lake Idlewild. The sensors internal battery had been depleted so staff ordered an external battery pack which can be connected directly to the sensor. The auto sampling unit placed on the northwest side of Rice Marsh Lake (same place as last year) to collect additional nutrient data entering the lake, had some issues early on, but appears to be working now. Staff also placed a unit on Riley Creek under Highway 101 to gauge nutrient and suspended solid concentrations to assess loading rates to Lake Susan. Both units have been triggered by rainfall events multiple times due to the rain we have had in July. The spent lime treatment system monitoring equipment was put online the first week of June. Staff will be working on the solar panel which has been having some

issues. Additionally, a stop log was removed to see if water levels would bounce enough to trigger the auto sampling units currently on site. As of now the District is collecting grab samples once a week to ensure the unit is functioning well.

Carp Management

The barrier was opened on March 3rd to allow northern pike to move up into the recreational area to spawn and return to Staring Lake. The barrier was closed on April 4th as temperatures reached above 10 degrees Celsius on multiple days prior to closing. The floating trap net was deployed April 11th to capture fish for education and outreach events and gauge carp movement. The City of Eden Prairie opened, cleaned, and closed the fish barrier multiple times this spring due to high water levels in the Purgatory Recreational Area this spring and have currently been cleaning it every Friday. Fish species captured included mainly northern pike, black crappie, freshwater drum, bigmouth buffalo, bluegills, largemouth bass, and black bullheads. The first carp was captured on April 21st and the kill count is up to about 160 carp so far. We had hoped a larger number of fish would have been captured by the trap net, but as an experimental gear we were unsure of how many would be captured. At one point we did have 300-500 fish trapped between the fish barrier and the net however the net became overcome with a large rain event and the fish escaped by the time we could arrange the use of a backpack electrofisher. Staff has been looking into the purchase of such a unit to prevent the situation from occurring in the future. Staff have been tracking carp movement via telemetry this spring, but were not able to get out last month. Staff have found two carp in the net that had been tagged last year, but they lost their tags, so more care will be taken this year to ensure limited tag loss. Staff reached out to the SMSC Organics Recycling Facility in Shakopee, MN with regards to the disposal of carp captured; the facility is allowing the District to bring carp to facility to be composted, waiving any organics disposal fees. Staff will bring excessive numbers of carp caught to the recycling facility. Staff placed the net on the upstream side of the barrier this month as most fish seen were trying to move down to STaring and very few fish were moving upstream. Staff will monitor the net to see if it works well on the upstream side of the barrier. Regular carp monitoring including electrofishing and fyke netting will begin at the end of July.

The City of contacted the District in June after receiving an inquiry from residents located near Pond A and Pond B about carp found in the ponds. Staff went out to check for tagged fish in both ponds and Neil Lake to see if they were from Staring Lake (most likely). Staff have hypothesized that since the carp were prevented from accessing the Purgatory Recreational Area to spawn, they moved downstream from Staring and accessed the ponds. It is unknown whether the carp in the ponds would be successful at spawning due to the high salinity concentrations, shallow depths, and high water temperatures, but staff will continue to monitor the ponds. If successful recruitment occurs, the District may want to look into placing a fitted gate on the outlet culvert from the ponds.

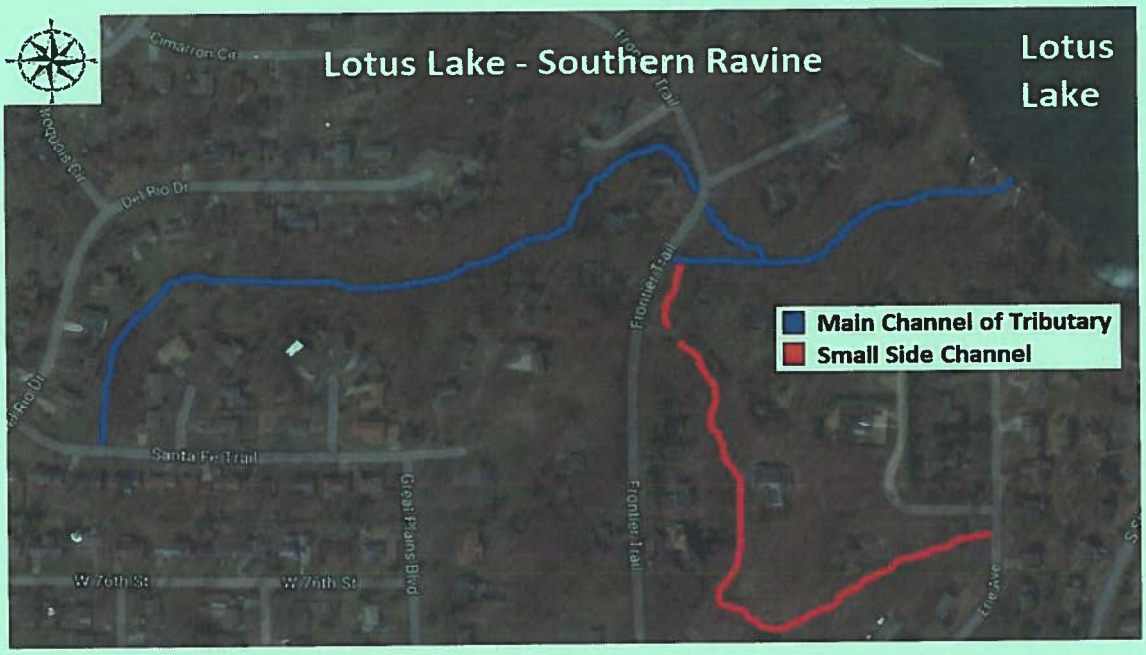
Creek Restoration Action Strategy

Staff has been collecting bank pin data and will hopefully finish collecting the data by months end. Staff will be replacing "lost" bank pins with an additional placement of pins on the south side of Silver Lake to assess erosion rates. Also this month staff went out and collected cross sections of riffles and pools located in the stream section downstream of the proposed restoration

site on the southern Bluff Creek tributary. These reference cross sections of the stabilized reach will allow BARR to design a channel that will be stable for the upper section of which is to be restored. Maxwell utilized his most recent MNDNR stream training class for collecting the data which will be a cost savings for the District. Staff will also be surveys of reference reaches downstream of the proposed Riley Creek restoration site.

District and Barr staff reviewed the spring creek walks from the Lotus southern and middle ravines located on the west side of Lotus Lake to assess the current status. The most northern ravine creek walk is planned for this fall. Both the mainstem channel of the tributary and the small intermittent side channel of the southern ravine were lumped together and scored, while the middle ravine had only a single channel and was scored. Both overall scored fairly stable with fair habitat scores similar to what was scored based on scores previously based on photos:

*Southern Ravine: CRAS Erosion Score - 3 - 65 - Good, CRAS Habitat Score - 5 - 45.95 - Fair
*Middle Ravine: CRAS Erosion Score - 3 - 75 - Good, CRAS Habitat Score - 5 - 40.8 - Fair



Staff did notice that the small intermittent side tributary did have some erosion areas that would be great locations for cost share projects (Photo 1 & 2). Maintenance of the few instream structures present and the stormwater culvert at the most upstream location of the side channel were also identified, but overall impacts of such maintenance are unknown (Photo 2). The main stream channel of the southern tributary and the middle stream channel was considered in good shape with limited to no worthwhile projects available.

Photo 1: Side channel moving through mowed yard.

Photo 2: SW culvert top of side channel, mowed grass to edge.

Barr Engineering and District staff have completed an updated edition of the CRAS (located on website) and have been working on a future publication for a professional journal. Additionally, staff have been working on a final creek walk summary book to have on hand to easily reference stream section data.

University of Minnesota Grant
19 July 2017
Ray Newman, University of Minnesota, with input from TJ Ostendorf
Riley Purgatory Bluff Creek Watershed District (RPBCWD) Aquatic Plant progress report for July 2017.

Peak curlyeaf surveys were completed on all lakes and most data have been entered. Preliminary observations suggest lake-wide control of curlyleaf in Riley, Susan and Staring and good control in Mitchell. Milfoil herbivore surveys have been conducted in Riley and Susan in June and July and in Mitchell in July and no herbivores were found. Milfoil is below detection in Susan (thus none was found in herbivore surveys) and living milfoil was not found after the milfoil herbicide treatment Riley.
Curlyleaf in Staring dropped from 50% occurrence in May to <20% after endothall treatment in June and these occurrences typically represented a few remaining stems at very low abundance. Water clarity has declined in Staring to <1 m Secchi depth but some native taxa such as Canada waterweed, Chara and sago pondweed are persisting in addition to coontail.
The Riley 21 June herbicide treatments to control milfoil with triclopyr (west side blocks) and 2,4-d (east side blocks) also appeared to be effective. No viable milfoil was found lakewide during the July herbivore survey.
Herbicide residue samples for endothall and 2,4-d have been sent off for analysis and results are expected in August.
Plans for the rest of July include sample processing, data entry and herbivore surveys and plant surveys will be conducted in August. .
Melaney Dunne successfully defended her MS thesis on 29 June; revisions are being completed and the thesis should be submitted to the graduate school by the end of the summer.

WOMP Station - Metropolitan Council
No new information. Staff have visited the WOMP stations twice this month and have been using the Met Council's new procedures.

Service Learners
No new update.

Volunteering
Volunteers are being recruited to help with water quality and fisheries monitoring this summer and fall. On July 20, District staff Dickhausen was accompanied by community volunteer, Kelly Regan, during regular lake monitoring and sample collection. Regan, a repeat volunteer, helped collect water samples and lake profiles on Staring Lake and Lake Riley, as well as carry out boat decontamination. Since March, volunteers have contributed over 50 hours to district projects and programs (this does not include additional hours contributed by Master Water Stewards).

Other Projects
The District has been partnering with the City of Minnetonka in taking residual water samples on Spring Crest Pond in Minnetonka. The City has been carrying out weekly chemical treatments on the pond. Staff Dickhausen has been meeting Minnetonka City staff, Nick Atherton, at the pond every Friday since May 31 to collect water samples and a pond water column profile. As of now, this sampling will continue through the end of the treatment schedule.

Education and Outreach (M. Jordan)

Adopt a Dock Program
Volunteers continue to check their plates. No suspicious mussels have been found. MCWD staff have invited staff Jordan out to zebra mussel samples, which will be used in training volunteers.

AIS Jr Inspector
District staff Jordan presented the AIS Jr Inspector program to over 200 students in the Minnetonka Schools Explorers club on July 24 and 25. On July 24th, staff was at Excelsior Elementary, which is in Minnehaha Creek Watershed District, and had the assistance of MCWD staff in putting on the program. On the 25th, staff was at Clear Springs Elementary, which is in this watershed, and was accompanied by Intern Hendersen. Students ranged from kindergarten to 5th grade. Three students had participated in the activity on a previous occasion, and displayed material retention when asked questions by staff.


Conservation Corps Day at Staring Lake
District staff Maxwell and University of Minnesota staff Ray Newman led an educational event at the Staring Lake Outdoor Center on July 10th, 2017. Approximately 13 students from the Conservation Corps ranging from high school students to college students attended the event. The students were broken up into 3 groups - water quality, plant management, and fish management. Each station allowed hands on experience of the adaptive management strategy that have been occurring on Staring Lake. Maxwell led the fish management section where fyke nets were pulled and fish were worked up. Many of the attendees indicated that it was the highlight of the day.

Earth Day Mini Grants
Another recipient submitted their project report. This project was at Cedar Ridge Elementary, and included installing a rain barrel and garden, to show how rainwater can be reused.

First Lego League
Staff were contacted by a First Lego League coach about doing a presentation. The First Lego League mission is to "inspire young people to be science and technology leaders and innovators, by engaging them in exciting Mentor-based programs that build science, engineering, and technology skills, that inspire innovation, and that foster well-rounded life capabilities including self-confidence, communication, and leadership." (http://www.firstlegoleague.org/) Student teams must design a solution to a real-world problem, as well as compete in a robotics competition. This year's theme is "Hydrodynamics", and the project topics must relate in some way to water and its connection to humans. On July 18, 7 students (6-8th graders) and their coaches and parents visited the watershed district office. Staff gave them a tour, and a presentation on our changing landscape and stormwater pollution. The students, and their

parents, had many good questions. Staff invited them to reach out as they are choosing their project topic for additional help and support.

Lakes and Creeks Water Quality Report
No new updates.

Master Water Stewards Program
One of the 2016 steward projects was highlighted on the summer watershed tour. The 2017 high-school student steward has begun her volunteer internship at the watershed district. Another 2017 steward team has submitted their capstone project for funding approval. Please see application in board packet. The district hosted an informational session for community members interested in the 2018 stewards cohort, and continues to recruit.

Minnetonka Pollinator Field Day
Two Master Water Steward volunteers represented the watershed district at the July 12th pollinator field day event in Minnetonka. The event had educational activities around pollinators and water quality, as well as native plant vendors.

Project WET
Planning continues, and registrations are being collected for the August 10th workshop.

Summer Watershed Tour
Staff has been working on the watershed tour. This year the tour will focus on the goals for our next 10-year plan. Over 60 participants have registered for the tour.

Website & Newsletter
Staff Jordan and Staff Jeffery have been working on the District website. The District is working on updating the website to make the user interface more friendly.

Winter & Turf Maintenance Training
The level II Smart Salt workshop has been rescheduled for September 13th.

Bluff Creek One Water

Chanhassen High School
Staff Jeffery and District Engineer Sobiech have met with one of the bidders on the project to determine how can the design be changed to lower the cost of the project.

Bluff Creek
No new updates.

Riley Creek One Water

Lake Susan Park Pond
Working with all of our partners to determine contribution and if additional funds needed to complete the project.

Riley Creek
The City of Eden Prairie is committing $300,000 to the project. Lower Minnesota River Watershed District will be contributing $150,000. Jeff Weiss from BARR engineering who is leading the project met with staff to discuss updates on design and next steps. Staff is calling a meeting with the City of Eden Prairie to discuss logistical elements.

Lake Riley CLP Treatment
No new updates.

Lake Riley Water Quality Project (Alum)
No new updates.

Lake Susan CLP Treatment
No new updates.

Purgatory Creek One Water

Fire Station 2
The cistern signage is being finalized, as well as logistics for the capture and reuse system.

Purgatory Recreational Area Berm
Numerous common carp have been captured and removed trying to get up and over the berm.

Purgatory Creek at 101
No new updates

Mitchell Lake Plant Management
No new updates

Red Rock Lake Plant Management
No new updates

Scenic Heights School Forest
An info session for the community around Scenic Heights school has been scheduled for August 23rd. Staff have been working on the interpretive signage that will be posted during the project, and working with the District's web designer to create a page about the project.

STEWARDSHIP FOR HEALTHY HABITAT AND CLEAN WATER

Scenic Heights Elementary school is embarking on an exciting project this fall. Together with ten partner organizations, including the Riley Purgatory Bluff Creek Watershed District, they will be restoring the beloved school forest to healthy native habitat.

Over the past 15 years, hundreds of volunteers have donated thousands of hours to caring for the forest. And now with the help of the project partners, we'll be able to build on that foundation and realize the vision of a healthy, diverse forest classroom.

Please join us Wednesday, **August 23rd, 6:30 pm**, at **Scenic Heights Elementary** (5650 Scenic Heights Dr, Minnetonka) to learn more about the project, and find out how you can be a part of caring for the school forest now, and in the future.

Sincerely,
Administrator Claire Bleser
Riley Purgatory Bluff Creek Watershed District

RSVP to Michelle: mjordan@rpbcwd.org
952-607-6481
rpbcwd.org

Staring Lake Plant Management
Herbicide treatment is completed.

Professional Workgroups and Continuing Education

No new updates

resourceful. naturally.
engineering and environmental consultants

BARR

Memorandum

To: Riley-Purgatory-Bluff Creek Watershed District Board of Managers and District Administrator
From: Barr Engineering Co.
Subject: Engineer's Report Summarizing July 2017 Activities for August 2, 2017, Board Meeting
Date: July 24, 2017

The purpose of this memorandum is to provide the Riley-Purgatory-Bluff Creek Watershed District (RPBCWD) Board of Managers and the District Administrator with a summary of the activities performed by Barr Engineering Co., serving in the role of District Engineer, during July 2017.

General Services

a. Adjusted proposed RPBCWD boundary revisions in response to Lower MN River Watershed District, Minnehaha Creek Watershed District and Nine Mile Creek Watershed District comments. Prepared revised boundary map for consideration of the Board of Managers at the July 12th workshop. Provided compiled materials for each adjacent watershed district to Administrator Bleser for distribution to other watershed districts.

b. Compiled and posted the Riley, Purgatory, and Bluff Creek hydrologic and hydraulic models (PCSWMM) to FTP site for Hennepin County Regional Railroad use in their vulnerability assessments.

c. Assisted Administrator Bleser and Permit Coordinator Jeffery with preparation for 10-year plan update and potential rule revision update to Board of Manager's at July 12th workshop.

d. Participated in July 12, 2017 regular Board meeting and workshop.

e. Prepared Engineer's Report for engineering services performed during July 2017.

f. Regular and frequent communication and coordination with Administrator Bleser discussing Lake Susan Park Pond project, Silver Lake task order development, Board workshop, meeting agenda, and status updates for various task orders.

g. Project management, webmap data management, and overall coordination of active task orders.

Permitting Program

a. *Permit 2016-030: IDI Distribution Building Expansion* – Expansion of existing building and northern parking lot. Stormwater management facilities, including pervious pavers, a filtration basin with underlying infiltration, and a water reuse system will be constructed to provide volume control, water quality, and rate control for runoff prior to discharging offsite. The site is located at 8303 Audubon Road, Chanhassen, MN. Analyzed a revised permit modification resubmittal on June 6, 2017 where the applicant proposed to replace the biofiltration basin with an underground stormwater chamber including underlying infiltration. The modification request is considered complete as of the June 6th submittal. Reviewed several rounds of

submittal information and draft a staff report for Manager consideration at their August 2nd meeting.

b. *Permit 2016-043*: Bongards Redevelopment: This project involves expansion of an existing building and adjacent parking lot at Bongards Creamery at 8330 Commerce Drive, Chanhassen. The project will trigger Rules C and J. Permit was conditionally approved at the December 7, 2016 meeting. Responded to questions from applicant's engineer about potential modifications based on City's requirement to demonstrate proof of parking and coordinated with Permit Coordinator Jeffery.

c. *Permit 2017-010*: Riley Lake Park: This project involves construction of site improvements at Riley Lake Park and the public boat launch. The project will trigger Rules B, C, E, F, G, and J. Reviewed submittal and provided comments to applicant. Reviewed information in support of fulfilling conditional approval items, including relocating one BMP due to soil condition to provide the approved abstraction amount.

d. *Permit 2017-024*: Prairie Bluffs Senior Living: This project involves construction of a senior living facility, parking lot, and landscaping at 10280 Hennepin Town Road in Eden Prairie. The project will trigger Rules C, D, and J. Notified applicant of Board's conditional approval at July 12th meeting.

e. *Permit 2017-029*: Elevate Apartments: This project involves construction of 222 apartments combined with approximately 12,000 square feet for commercial retail and associated site infrastructure located near the intersection of Prairie Center Drive and Highway 212. Stormwater reuse, green roof, permeable pavement and a tree trench system will provide storm water quantity, volume and quality control. . Notified applicant of Board's conditional approval at July 12th meeting.

f. *Permit 2017-034*: Park Road: This project involves mill and overlay of Park Road in Chanhassen and the replacement of the Riley Creek culvert crossing. Reviewed revised submittal information received on July 13th and provided comments to applicant of additional items to address prior to staff drafting recommendation for Board consideration.

g. *Permit 2017-047:* Fawn Hill: This project involves construction of an approximately 5.4 acre, 10 lot residential development in Chanhassen. The project will trigger Rules C, D, and J. Applicant was notified on July 5th that the application was incomplete because the submittal did not include information to address stormwater management or wetland buffers. Several phone conversations with the applicants engineer related to stormwater management volume abstraction criteria.

h. Performed erosion control inspections of active sites during the week of July 14th (see attached inspection report).

i. Conversations with several project engineers/developers about permit requirements for potential development and redevelopment projects.

Data Management/Sampling/Equipment Assistance

a. Refined database and beta user interface to collect field and stream data with a hand-held electronic device (ie I-Pad, Smartphone, etc.) from the field. Training and tool launch anticipated early August 2017.Testing this tool will begin in early July.

b. Uploaded and verified 13 laboratory reports to EQuIS.

Task Order 6: WOMP Station Monitoring

Purgatory Creek Monitoring Station at Pioneer Trail

a. Download and review data.

b. Storm event sampling – set station for sampling; collect, prep, and deliver sample to lab.

Purgatory Creek Monitoring Station at Valley View Rd

a. Downloaded and reviewed data.

b. Storm event sampling – set station for sampling; collect, prep, and deliver sample to lab.

Task Order 7b: Purgatory Creek Stabilization near Hwy 101—Construction

a. Construction of this project is substantially complete. Project close-out items and the vegetation warranty period remain.

Task Order 13a: Lake Susan Watershed Treatment and Stormwater Reuse Enhancements

a. Discussion with Administrator Bleser and Project Manager Jeffery about questions from Emerson and task order development.

Task Order 14b: Lower Riley Creek Final Design

a. At the direction of Administrator Bleser, project was put on hold until early July as potential project funding was coordinated with the city of Eden Prairie.

b. Met with Administrator Bleser and District Staff to discuss project and determine tasks for which District staff can provide assistance.

c. Completed on-site meeting with District staff to review task objectives for a channel survey and help them get started.

Task Order 16: Watershed Management Plan Refresh

a. Met with Administrator Bleser on July 19th and July 21st to go over status of various subsections of the draft Plan document.

b. Continued work on draft of the 2017 Watershed Management Plan document, including revisions to sections addressing issues and stakeholder involvement and associated appendices.

c. Revised draft text and tables of the implementation section.

d. Revised watershed sections (formerly "One Water" sections) text.

e. In the next month, Barr staff will continue drafting text of the plan document, including associated tables and figures. Barr will provide Administrator Bleser draft sections as they are completed.

Task Order 18: MPCA Resiliency Grant

a. Presented results for the Community Resilience Workshop series in an open public meeting at Discovery Point in Eden Prairie.

b. Completed the development of a four-page graphical workshop reports for the participating cities of Hopkins, while finalizing reports for Bloomington and Edina. The reports highlight the specific concerns workshop participants have about the impacts of climate change in their communities along with the actions they believe to be most appropriate. Community actions addressed three different areas including impacts to infrastructure, environment and people. These recommended actions will be incorporated into each city's Comprehensive Plan to be completed in 2018.

Task Order 19: Chanhassen High School Stormwater Reuse Design

a. Participated in a value engineering exercise on July 19th with Peterson to identify potential cost reduction measures such as radio communications, replacing school district requested building with prepackaged system, reducing intake size, potentially removing UV treatment system, allowing additional equipment procurement time, and adjusting system location.

Task Order 20: Hyland Lake UAA Update

a. Updated P8 and in-lake models based on updated outlet information for both the lake and Colorado Pond.

b. Continued working on the report text, figures and tables.

Task Order 21: Bluff Creek Feasibility Study

a. Met with Administrator Bleser and District Staff to discuss project and determine tasks for which District staff can provide assistance.

b. Completed on-site meeting with District staff to review task objectives for a channel survey and help them get started.

Task Order 22: Groundwater Assessment

a. Revised draft report based on feedback provided by District staff.

Task Order 23: Scenic Heights School Forest Restoration

a. Finalizing design on the forest restoration plans and specifications, including the redesign of the failed flared end section draining into the pond on site. Project scheduling for bidding and construction has been outlined and will be discussed at upcoming meetings.

b. Conducted wetland delineation and prepared delineation report for City review.

c. Created and provided staff with interpretive signage concepts including various renderings of the project site using aerial photography and Photoshop renderings from the trails in Purgatory Park.

resourceful. naturally.
engineering and environmental consultants

BARR

To: RPBCWD Board of Managers

From: Dave Melmer

Subject: July 14, 2017—Erosion Inspection

Date: July 24, 2017

Project: 23/27-0053.14 PRMT 9016

Barr staff has inspected construction sites in the Riley Purgatory Bluff Creek Watershed District for conformance to erosion and sediment control policies. Listed below are construction projects and the improvement needed for effective erosion control. The sites were inspected from July 14, 2017.

Site Inspections

2015-005	**CSAH 101 Mntka**	**2017-07-17**
	Eastern side streets have had final top coat laid-vegetation is established-catch basin protection has been removed in many areas. BMP's look good. Site is inspected and well maintained by contractor/site inspector. Construction is completed at creek crossing-BMP's look good at this location. Curb/gutter/side walk installation complete for entire site. Center median installations underway. All vegetation is growing.	
2015-008	**3520 Meadow Lane**	**2017-07-17**
	Site BMP's are adequate. Silt fence is down in some areas on west side--will not affect site runoff. Site cleanup and house painting underway. (July-2017)	
2015-010	**Children's Learning Adventure**	**2017-07-14**
	Building construction complete. Inlet protection has been removed. Site BMP's look good. Parking lot curb/gutter installation complete. Asphalt has been installed. Landscaping is complete. Sod was installed and application of spray tac to exposed soils. Vegetation growing thru mats and in spray-tac'd areas. Pond slope to west has failed-- causing slope erosion to pond downstream. Site representative was notified of Corrective Action--has been repaired and improved. Some silt fences have been removed. One section of silt fence still in place and sand bags at north outlet still in place. Site representative was notified that silt fence and sand bags can be removed.	
2015-014	**12420 Sunnybrook Road**	**2017-07-14**
	Site has been surveyed. No construction has started.	

2015-016	**Blossom Hill**	**2017-07-14**
	Construction on home site at NW corner continues. BMP' look good look ok for unsold lots.	
2015-035	**LaMettry's Chanhassen**	**2017-07-14**
	Building construction continues on south site. Parking lot on north lot has been paved. North slope grading and landscaping complete....swale BMP' look good- north slope has erosion control mat over entire area-vegetation growing. BMP's are good.	
2015-036	**Saville West Subdivision**	**2017-07-17**
	Silt fence and fence installed at one building site. No earthwork has begun to date. Trees have been tagged along street side and trees/brush has been cleared near power lines. Wetland has been delineated. Utility flags installed along with some site surveying. (July-2017)	
2015-037	**Purgatory Creek at Hwy 101 Restoration**	**2017-07-17**
	Permanent BMP's are in place. Erosion mats are installed and stream stabilization complete. Exposed soils have been covered with spray tac-some areas have vegetation established. Walked entire stream reach. Site is stable. No temporary BMP's observed. This will be the last field inspection for this permit.	
2015-038	**Improvements to Field 8 at Miller Park**	**2017-07-17**
	BMP's look good. Site construction complete. Soils have been covered---vegetation is growing. All BMP's have been removed with exception of bio-logs at infiltration area.	
2015-048	**Pagel II Ice Facility Addition**	**2017-07-17**
	Construction of building foundation/walls complete. Silt fences in place. Parking lot paved and staging area dismantled. Site BMP's look good. Site grading complete. Slope on south side of building -- has erosion mats installed and silt fences at toe of slope. Catch basin protection installed. Upper area graded and BMP's removed.	
2015-050	**Arbor Glen Chanhassen**	**2017-07-14**
	No construction has started.	
2015-053	**RBSC Chanhassen LLC**	**2017-07-14**
	No construction has begun. Site was being used as lay down yard for Hwy. 5 construction. Demobilization is complete. Catch basin protection still in place. Exposed soils have been covered and now vegetation is established.	

2015-056	**Oster Property**	**2017-07-14**
	Construction complete. Silt fences /bio-logs have been removed. Vegetation mats and wood chips have been installed on all bare soils. All other BMP's look good. Vegetation growth but sparse in areas. (July-2017)	
2015-058	**Prairie Center Clinic Addition**	**2017-07-14**
	Construction complete on building. Some BMP's have been removed for landscaping. Vegetation growing in some areas. Prep for final parking lot top coat complete. Landscaping and seeding complete. BMP's are still in place.	
2015-060	**Optum Parking Expansion**	**2017-07-14**
	Construction complete. BMP's have been removed. East parking lot is complete and stable-catch basin protection has been removed. Asphalt on west lot is complete and curb-gutter have been installed. Vegetation mats installed (fall-2016)-vegetation has sprouted and is growing. Overall site conditions are good. Site should be stable in August.	
2016-004	**Round Lake Park Improvements**	**2017-07-17**
	BMP's look good. Site construction complete--parking lot/lots- curb gutter and asphalt has been installed. (November). Asphalt top coat complete. Vegetation has sprouted/growing. All temporary BMP's have been removed with exception of BMP's at infiltration areas.	
2016-006	**Soccer Field 10 at Miller Park**	**2017-07-17**
	BMP's look good. Site construction complete. Vegetation established. Site is stable. BMP's still in place.	
2016-012	**Minnetonka HS Parking Additions**	**2017-07-17**
	Construction is complete. Parking lot curb/gutter installed-asphalt is in place. BMPs have been removed. All exposed soils have been spray-tac'd and vegetation has started growing. Areas of bare soil exposed --no vegetation will grow. Site representative was notified concerning bare soils--they will be addressing the lack of vegetation growth. No activity on addressing lack of vegetation to date.	
2016-014	**Chanhassen Chick-Fil-A**	**2017-07-14**
	Construction complete. Landscaping complete. Parking lot construction complete. Temporary BMP's have been removed. Vegetation mats installed-vegetation has sprouted. Sod installed at street side of project.	

2016-015	**18321 Heathcote Lane**	**2017-07-17**
	Silt fences installed/in good condition. Rock/gravel entrance is good. BMP's look good. House construction continues. (July-2017)	
2016-017	**SWLRT**	**2017-07-14**
	No construction observed to date.	
2016-018	**6830 Utica Terrace**	**2017-07-14**
	House construction complete. Silt fences/bio-logs have been removed. Rock walls are complete. Landscaping complete. Yard has been seeded and is growing. Downstream catch basin protection has been removed.	
2016-019	**Powers Ridge Lot 2**	**2017-07-14**
	No construction has begun to date.	
2016-021	**Cedar Hills Park**	**2017-07-14**
	Construction continues. Entrance prepped for installation. Silt fences have been installed. Work near creek is complete-foot bridge installed. BMP's look good. Walking path location has been surveyed and marked--rock base installed.	
2016-024	**Bandimere Park Improvements**	**2017-07-14**
	Construction complete. Silt fences in place. BMP's are good. Sprayed tac and landscaping completed. Ice rink installation completed. Vegetation growing/some bare areas. (July-2017)	
2016-025	**18374 Heathcote Lane**	**2017-07-17**
	Construction of additions complete. Driveway installed and landscaping complete. Site is stable. Bio-logs can be removed. Site representative was notified that BMP's can be removed- one log still in place to date-June, 2017. Still in place as of current inspection.	
2016-026	**Foxwood Development**	**2017-07-14**
	Multiple house construction has begun-BMP's look good- silt fences and rock entrances installed/ good perimeter control. Curb and gutter have been installed/road has been installed. Catch basin protection installed.	
2016-030	**IDI Distribution Building Expansion**	**2017-07-14**
	Construction of addition complete. Catch basin protection has been installed. Silt fences on north side installed. Some over topping of	

	first row of silt fence- 2 additional fences have been installed. Rock entrance installed at new entrance has been refreshed. Catch basin protection at Basin east southeast of entrance has been installed. Stockpiles of dirt have been removed--silt fences still in place. Boulders onsite for installation. BMP's look good.	
2016-032	**County Highway 61**	**2017-07-14**
	No construction started.	
2016-033	**Anderson Lakes-Purgatory Trail**	**2017-07-14**
	No construction observed to date.	
2016-036	**Collegeview Drive Sidewalk**	**2017-07-14**
	Sod has been installed. All temporary BMP's have been removed. Site is stable. This will be last field inspection for this permit.	
2016-037	**Prestige Day Care**	**2017-07-14**
	Earthwork and construction continues. Perimeter control silt fence in place, Rock entrance installed. Site looks good. July-2107	
2016-038	**Optum Technology Drive Improvements**	**2017-07-14**
	Hillside has been scraped--And covered with erosion mats. BMP's installed and are good. Vegetation has sprouted and growing-sparse in some areas. July-2017.	
2016-039	**Powers Ridge Senior Apartments**	**2017-07-14**
	Construction continue. BMP's are good. Slight tracking to street. Rock entrance has been upgraded.	
2016-040	**18995 Minnetonka Blvd**	**2017-07-17**
	Construction of house continues. Silt fence in place. Slopes with vegetation mats have growth. Southwest corner has more BMP's to control sediment erosion. BMP's installed are adequate.	
2016-041	**Chanhassen West Water Treatment Plant**	**2017-07-14**
	Silt fences have been installed on site. Construction continues. Rock entrance good. BMP's look good to date. Minor tracking to street observed. (July)	
2016-042	**18663 St. Mellion Place--Eden Prairie (Bear Path)**	**2017-07-14**
	Open CA(s): Some erosion on hill is causing silt fence to fill.-- will monitor. Silt fences in some areas are overtopped or down.	

	Homeowner notified. Deadline: 8/13/2017 Construction continues. Most BMP's are good. Silt fence in one small area is at 40% of height. Some erosion on hill is causing silt fence to fill.-- will continue to monitor.	
2016-043	**Bongards Redevelopment** BMP's are adequate. Parking lot base installed-- catch basins installed and protected--pavement installation still needs to be completed. (July)	**2017-07-14**
2016-044	**Dell Rd & Riley Creek Repair Project** Construction complete. BMP's are good. Observed some erosion near newly beehive catch basin-city is aware of erosion and will repair. (May). Repairs have been made. Vegetation is growing. July-2017-->more erosion where water flows to catch basin. Some other method (rip-rap) in this area is need to slow flow. Site representative will be contacted.	**2017-07-14**
2016-045	**MCES Blue Lake Interceptor Rehab** No construction observed to date.	**2017-07-14**
2016-046	**Lifetime Fitness Chanhassen** Building construction complete. Parking lot area complete. South hillside slope is being graded for vegetation application.	**2017-07-14**
2016-047	**9507 Sky Lane Eden Prairie** Construction continues. Silt fences down in some areas but secondary containment is good. Catch basin protection needs to be maintained --it's not installed-- just laying over CB. (street side CB). Catch basin between properties has been protected. Minor tracking to street. Site representative was notified and correction made after June inspection.	**2017-07-14**
2016-FT02	**Mitchell and McCoy Lake Outlet Sediment Removal** Site construction complete. Bio-log still in place. Vegetation established.	**2017-07-17**
2017-001	**Kopesky 2nd Addition** No recent activity to date.	**2017-07-14**
2017-002	**7012 Dakota Ave** BMP's installed. Bio-log perimeter installed. House tear down	**2017-07-17**

	complete. New house construction underway. Site in good condition.	
2017-003	**18761 Heathcote Dr Building Addition**	**2017-07-17**
	House construction continues. BMP's are adequate for stockpile-silt fence would've been best--bio-logs are working. Minor tracking to street observed. Pool installation complete with additional silt fence installed and working good. Landscaping underway.	
2017-004	**9627 Sky Lane Eden Prairie**	**2017-07-14**
	Minor tracking to street. BMP's have been installed. Driveway installed and landscaping/earthwork is continues. Catch basin protection in front of property has been removed. BMP's look good. (July)	
2017-005	**9527 Sky Lane Eden Prairie**	**2017-07-14**
	Construction continues. Silt fences down in some areas but secondary containment is good. Catch basin protection needs to be maintained --it's not installed-- just laying over CB. (street side CB). Catch basin between properties has been protected. Minor tracking to street. Site representative will be notified- was notified after June inspection.	
2017-006	**6687 Horseshoe Curve Chanhassen**	**2017-07-17**
	No activity observed to date.	
2017-007	**Cedarcrest Stables**	**2017-07-14**
	No activity observed to date.	
2017-008	**Prairie Meadows Site Renovation**	**2017-07-14**
	Construction continues. BMP's in place. Site looks good. Some minor tracking to street- catch basin protection is installed. East site access is adequate -- may require more rock as construction continues.	
2017-009	**Emerson Chanhassen East Renovation**	**2017-07-14**
	Construction continues. BMP's installed. Rock entrance in place.	
2017-010	**Riley Lake Park Renovations**	**2017-07-14**
	BMP's in place. Brushing and site demo underway.	
2017-011	**Galpin Blvd Watermain Improvements**	**2017-07-14**
	Construction has begun. Bio-logs are being used for erosion control	

	where needed. BMP's are adequate.	
2017-012	**9667 Sky Lane**	**2017-07-14**
	BMP's look good. Minor tracking to street. Dirt stockpile in backyard does not have protection but is surrounded by sod and area is flat. (July)	
2017-014	**3410 Groveland Lane**	**2017-07-17**
	Landscaping complete. Site is stable. All BMP's have been removed. This will be last field inspection for this permit.	
2017-015	**9995 Lawson Lane**	**2017-07-14**
	Construction complete. Landscaping and sod installed. BMP's are still in place. Site is stable.	
2017-016	**9982 Windsor Terrace**	**2017-07-14**
	Construction complete. Landscaping and sod installed. All temporary BMP's have been removed. Site is stable. This will be last field inspection for this permit.	
2017-018	**Bloomington 2017-102 Street Maint**	**2017-07-14**
	No activity observed to date.	
2017-019	**Bloomington 2017-110 Trail Improvements**	**2017-07-14**
	Construction complete. Catch basin protection in place. Hydro-seeding complete. Some minor debris in curb. No vegetation growth observed to date.	
2017-020	**8512 Ellet Circle**	**2017-07-17**
	BMP's installed. Driveway installed along with sidewalk on south side of house. Vegetation and sod installed. Site is stable. Bio-logs still in place on south side of property.	
2017-021	**8544 Ellet Circle**	**2017-07-17**
	BMP's installed. Construction continues. Some minor tracking to street observed. Landscaping underway.	
2017-022	**Chanhassen High School Stormwater Reuse**	**2017-07-14**
	No activity observed to date.	

2017-023	**Eden Prairie Assembly of God**	**2017-07-17**
	Site has been surveyed. No construction activity to date.	
2017-024	**Prairie Bluffs Senior Living**	**2017-07-14**
	No activity observed to date.	
2017-025	**735 Pleasantview Road**	**2017-07-17**
	Construction continues. BMP's installed. Bio-logs for perimeter control--adequate. Some landscaping underway.	
2017-026	**6135 Ridge Road**	**2017-07-17**
	Site has been cleared and surveyed. BMP's installed --silt fence for erosion perimeter control. No additional activity to date.	
2017-029	**Tweet Pediatric Dentistry**	**2017-07-14**
	Construction continues. BMP's are installed and good.	
2017-030	**Elevate**	**2017-07-14**
	No site activity to date.	
2017-031	**Lion's Tap**	**2017-07-14**
	No site activity to date.	
2017-032	**11193 Bluestem Lane**	**2017-07-14**
	Survey markers observed. Eroded area is fenced off. No construction observed to date.	
2017-038	**West Park**	**2017-07-14**
	No construction observed to date.	
2017-044	**17064 Weston Bay Road**	**2017-07-17**
	No site activity to date.	

Please contact me at 952.832-2687 or dmelmer@barr.com if you have questions on the projects listed above or any additional items that need to be addressed for the erosion control inspections.

resourceful. naturally.
engineering and environmental consultants

BARR

Memorandum

To: Riley Purgatory Bluff Creek Watershed District Board of Managers
From: Scott Sobiech, Barr Engineering Company
Subject: Modification for Permit Application 2016-026: Foxwood Development
Date: July 11, 2017
Project: 23270053.14

Project Description

Permit No: 2016-026

Received complete: July 18, 2016 (Conditionally approved at August 3, 2016 regular meeting)

Applicant: Jim Wilson and Paul Paulson
Consultant: Mark Rausch, Alliant Engineering
Project: Construction of a residential redevelopment (single-family homes), including mass grading and utility installation. Stormwater management facilities, including three infiltration basins, will be constructed to provide volume control, water quality, and rate control for runoff prior to discharging offsite.
Location: 9150 and 9250 Great Plains Blvd, Chanhassen
Reviewer: Scott Sobiech, Barr Engineering

Rules: Applicable rules to modification checked

	Rule B: Floodplain Management		Rule H: Appropriation of Public Waters
X	Rule C: Erosion and Sediment Control		Rule I: Appropriation of Groundwater
X	Rule D: Wetland and Creek Buffers	X	Rule J: Stormwater Management
	Rule E: Dredging and Sediment Removal		Rule K: Variances and Exceptions
	Rule F: Shoreline/Streambank Stabilization		Rule L: Permit Fees
X	Rule G: Waterbody Crossings[1]		Rule M: Financial Assurances

Background

At the August 3, 2016 RPBCWD Board meeting the Managers conditionally approved the permit application for the Foxwood Development in Chanhassen. The project is the redevelopment of land for single-family homes (46 lots), with associated mass grading and utility and infrastructure installation. Stormwater management facilities, including three infiltration basins will be constructed to provide volume control, water quality, and rate control for

[1] The original application included a proposed waterbody crossing that was approved by the District; the additional land-disturbing activities proposed include no additional waterbody crossings or structures, therefore this report includes no additional analysis or findings under Rule G.

runoff prior to discharging offsite. The project is located west of Great Plains Boulevard/TH 101 about 1400 feet south of Lyman Boulevard in Chanhassen.

The applicant is seeking a permit modification because they would like to shift the previously approved temporary cul-de-sac in the southeast area of the site approximately 75 feet southeast into the neighboring property to allow for future access. The shifting of the cul-de-sac results in 0.152 acres of additional impervious surface (beyond the 6.34 acres of impervious approved under the original application) requiring stormwater management, erosion control modifications, and additional wetland buffer for wetland 3, which is downgradient of the additional work. Because some of the proposed work extends onto the neighboring property the applicant entered into a property exchange agreement to obtain the necessary property rights to conduct the proposed work.

Rule C: Erosion and Sediment Control

Because the project will alter an additional 0.57 acres of surface area, the applicant has modified the erosion control plan to account for the new total of 20.5 acres (892,980 square feet) of surface area disturbance.

The updated erosion control plan prepared by Alliant Engineering includes installation of silt fence, inlet protection for storm sewer catch basins, rock construction entrance, placement of a minimum of 6 inches of topsoil, decompaction of pervious areas compacted during construction, and retention of native topsoil onsite. The proposed project conforms to the erosion and sediment control requirements of Rule C.

Rule D: Wetland and Creek Buffers

Because the permitted work triggered RPBCWD Rules G and J and the proposed additional work includes land-disturbing activities upgradient from a medium-value wetland on the property (Wetland 3), buffer must be provided adjacent to the portion of Wetland 3 downgradient from the additional disturbance, Rule D, Subsections 2.1a and 3.1. (The proposed additional work does include draining or filling in Wetland 3 or any other wetland.)

The applicant previously provided a wetland delineation report, including type and boundary determination, based on a field investigation conducted on October 2, 2015. A MNRAM for the site has been completed, and the value for Wetland 3 was determined in accordance with Rule D, Appendix D1 as summarized in the below table.

Wetland ID	RPBCWD Wetland Value	Require Minimum Width[1] (ft)	Require Average Width[1] (ft)	Provided Minimum Width (ft)	Provided Average Width (ft)
Wetland 3	Medium	20	40	20	40

[1] Average and minimum required buffer width based on Rule D, Subsection 3.1.a.

The applicant proposed wetland buffers for the wetland which meet the average and minimum widths identified in Rule D, Subsection 3.1. The Applicant is proposing revegetating disturbed areas within the proposed buffer with native vegetation in conformance with Rule D, Subsection 3.2. A note is included on the plan sheet indicating the

project will be constructed so as to minimize the potential transfer of aquatic invasive species (e.g., zebra mussels, Eurasian watermilfoil, etc.) to the maximum extent possible conforming to Rule D, Subsection 3.5.

To conform to the RPBCWD Rule D the following revisions are needed:

D1. Buffer areas and maintenance requirements must be documented in a declaration approved by RPBCWD and recorded, after approval, in accordance with Rule D, Subsection 3.4. The maintenance declaration recorded for purposes of the permit 2016-026 must be amended to include an exhibit clearly showing the buffer area and monument locations for the additional buffer required because of the proposed modification. A draft has been provided for review; on approval of the RPBCWD administrator, the amendment must be recorded.

Rule J: Stormwater Management

Under the common scheme of development provision in paragraph 2.5 of Rule J, activity subject to the rule on a adjacent parcels under common or related ownership is considered in the aggregate, and the requirements applicable to the activity under this rule will be determined with respect to all development that has occurred on the site or on adjacent sites under common or related ownership. Because the project, as proposed to be modified, will alter a total 20.5 acres (892,980 square feet) of surface area and increased the imperviousness of the entire site by more than 50%, the redevelopment framework in the RPBCWD's Stormwater Management Rule (subsection 2.3) requires that the rule criteria apply to the entire site. To meet the aggregate stormwater management requirements, the developer is proposing construction of three infiltration basins to provide the rate control, volume abstraction, and water quality management on the site. Sediment forebays will provide pretreatment for the infiltration basins. In its modification request, the applicant proposes to enlarge infiltration basin 2 to account for the additional imperious surface created by shifting the cul-de-sac location.

Rate Control

In order to meet the rate control criteria listed in Subsection 3.1.a, the 2-, 10-, and 100-year post development peak runoff rates must be equal to or less than the existing discharge rates at all locations where stormwater leaves the site.

The Applicant used a HydroCAD hydrologic model to simulate runoff rates for pre- and post-development conditions for the 2-, 10-, and 100-year frequency storm events using a nested rainfall distribution, and a 100-year frequency, 10-day snowmelt event. The existing and proposed 2-, 10-, and 100-year frequency discharges from the discharge point from the site affected by the additional proposed imperviousness are summarized in the table below. The proposed project modification conforms to RPBCWD Rule J, Subsection 3.1.a.

Modeled Discharge Location	2-Year Discharge (cfs)		10-Year Discharge (cfs)		100-Year Discharge (cfs)		10-Day Snowmelt (cfs)	
	Ex	Prop	Ex	Prop	Ex	Prop	Ex	Prop
Wetland 3	14.2	13.5	36.9	31.5	108.0	91.7	6.3	5.4

Volume Abstraction

Subsection 3.1.b and 2.3 of Rule J requires the abstraction onsite of 1.1 inches of runoff from all impervious surfaces on the parcel. An abstraction volume of 26,665 cubic feet is required from the new total proposed site impervious surface area of 6.678 acres (290,893 square feet) for volume retention. The Applicant continues to rely on the three infiltration basins with pretreatment of runoff provided by forebays for compliance. Soil borings performed by Haugo Geotechnical Services show that soils in the project area are silty sand for Infiltration Basin 1 and sandy lean clay for Infiltration Basins 2 and 3; the MN Stormwater Manual indicates an infiltration rate of 0.45 in/hr for the silty sand and 0.06 inches per hour for the sandy lean clay are appropriate. Soil borings performed by Haugo Geotechnical Services show no groundwater to a boring depth of 21 feet. This indicates that groundwater is at least 3 feet below the bottom of the proposed infiltration basins (Rule J, Subsection 3.1.b.ii). In its modification request, the applicant proposes to enlarge infiltration basin 2 to account for the additional imperious surface created by shifting the cul-de-sac location. The table below summarizes the new total volume abstraction on the site. The proposed project, as revised, remains in conformance with Rule J, Subsection 3.1.b.

Required Abstraction Depth (inches)	Required Abstraction Volume (cubic feet)	Provided Abstraction Volume (cubic feet)
1.1	26,665	39,385

Water Quality Management

Subsection 3.1.c of Rule J requires the Applicant provide for at least 60 percent annual removal efficiency for total phosphorus (TP), and at least 90 percent annual removal efficiency for total suspended solids (TSS) from site runoff. The Applicant is proposing three infiltration basins and the use of vegetated buffers to achieve the required TP and TSS removals. Sediment forebays will provide pretreatment for the infiltration basins. In its modification request, the applicant proposes to enlarge infiltration basin 2 to provide water quality treatment of the additional imperious surface created by shifting the cul-de-sac location. A P8 water quality model was developed to estimate the TP and TSS loading from the watersheds and the removal capacity of the proposed infiltration BMPs. The results of this modeling are summarized below. The engineer concurs with the modeling, and finds that the proposed project is in conformance with Rule J, Subsection 3.1.c.

Pollutant of Interest	Required Removal	Provided Removal
Total Suspended Solids (TSS)	90%	90%
Total Phosphorus (TP)	60%	82%

Maintenance

Subsection 3.7 of Rule J requires the submission of maintenance plan. All stormwater management structures and facilities must be designed for maintenance access and properly maintained in perpetuity to assure that they continue to function as designed.

J1. Because the applicant proposes to modify infiltration basin 2 as part of the modification request, the permit applicant must amend the previously approved maintenance and inspection declaration. Once approved by RPBCWD, the declaration must be recorded on the deed for the property and a stamped copy of the declaration provided to the RPBCWD after recordation.

Rule L: Permit Fee:

Fees for the project are:

Rule C & J $3,000

The RPBCWD permit fee schedule adopted in December 2015 indicates that costs of site inspections, analysis of the proposed activities, services of consultants and compliance assurance in excess of $5,000 for properties greater the 10 acres will be charged to the permit applicant. The review of this permit application has resulted in $5,541.50 of consultant time.

L1. In accordance with the adopted RPBCWD permit-fee schedule, because the engineer and legal time to review this permit exceeded $5,000 the applicant must submit an additional permit fee of $541.50 for excess cost recovery.

Findings

1. The request for a permit modification includes the information necessary, plan sheets and erosion control plan for review.
2. The project, as proposed to be modified, will continue to conform to Rules C and J, if the rule specific permit conditions listed for Rule J are met.
3. The project as proposed to be modified, will conform to Rule D if the Rule Specific Permit Conditions listed above are met.

Recommendation:

Approval of permit modification request, contingent upon:

1. Continued compliance with General Requirements and stipulations of the original approval.
2. Receipt in recordation of an amendment to maintenance declaration for the wetland buffers and stormwater management facilities. A draft must be approved by the District prior to recordation.
3. Receipt of an additional permit fee of $541.50 for excess cost recovery.

Board Action

It was moved by Manager _____, seconded by Manager _____ to approve the requested modification for permit No. 2016-026 with the conditions recommended by staff.

VICINITY MAP

SCALE: 1" = 3000'

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED RETAINING WALL
- DIRECTION OF DRAINAGE
- PROPOSED CATCH BASINS
- PROPOSED STORM SEWER
- PROPOSED EASEMENT
- PROPERTY LINE
- SETBACK LINE
- LOT LINE
- RIGHT-OF-WAY
- EXISTING VEGETATION LIMITS (APPROX.)
- EXISTING TREE TO REMAIN
- TREE PROTECTION LIMITS
- PROPOSED SILT FENCE (PPE GRADING)
- PROPOSED SILT FENCE (POST GRADING)
- INLET PROTECTION
- DND — DO NOT DISTURB AREAS
- TEMPORARY DRAINAGE ROUTING DURING MASS GRADING
- ROCK CONSTRUCTION ENTRANCE
- EROSION CONTROL BLANKET (SLOPES 3:1 OR STEEPER)
- TURF REINFORCEMENT MAT

NOTE TO CONTRACTOR:

THE MASS GRADING CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ALL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS) AS SHOWN IN THE RAMA PRESERVE MASS GRADING SWPPP (EXCEPT FOR POST GRADE BMPS NEEDED AFTER UTILITY CONSTRUCTION ACTIVITY). THE BMPS ARE TO BE INSTALLED AT A MINIMUM AS SHOWN IN THE PLAN. IF CONDITIONS ARISE, ADDITIONAL BMP SUPPLEMENTATION TO PREVENT SITE EROSION OR SEDIMENT TRANSPORT MAY BE NECESSARY. THE MASS GRADING CONTRACTOR IS RESPONSIBLE FOR ALL BMPS REQUIRED TO COMPLETE THE MASS GRADING ACTIVITIES AND SUBSEQUENT TEMPORARY SOIL STABILIZATION NECESSARY TO PREPARE SITE FOR STREET AND UTILITY CONSTRUCTION AND HOME BUILDING. AT THE COMPLETION OF MASS GRADING WORK AND SATISFACTORY SITE SOIL STABILIZATION, THE DEVELOPER AND MASS GRADING CONTRACTOR SHALL COORDINATE THE TRANSFER OF NPDES PERMIT RESPONSIBILITIES TO THE STREET AND UTILITY CONTRACTOR AND THE CITY.

THE STREET AND UTILITY CONTRACTOR AND CITY WILL THEN ASSUME THE RESPONSIBILITY TO PROVIDE INSPECTION AND MAINTENANCE OF ANY IN-PLACE BMPS AS WELL AS INSTALL THE ADDITIONAL BMPS REQUIRED IN THE STREET AND UTILITY CONSTRUCTION DOCUMENT SWPPP UPON COMPLETION OF STREET AND UTILITY CONSTRUCTION, THE STREET AND UTILITY CONTRACTOR SHALL REMOVE ANY BMPS INSTALLED DURING THE STREET AND UTILITY PHASE THAT ARE NO LONGER REQUIRED AND COORDINATE THE TRANSFER OF NPDES PERMIT RESPONSIBILITIES BACK TO THE DEVELOPER OR TERMINATE THE PORTION OF THE NPDES PERMIT TRANSFERRED TO THE CITY AND THEIR CONTRACTOR

EROSION CONTROL RESPONSIBLE PARTY:

FOXWOOD, LLC
GONYEA HOMES & REMODELING
1000 BOONE AVENUE NORTH, SUITE 400
GOLDEN VALLEY, MN 55427
CONTACT: BILL FOFFMAN
PH: 763-432-4500
EM: billcoffman@cbburnet.com

CONSTRUCTION SEQUENCING:

MASS GRADING PHASE

1 INSTALL STABILIZED CONSTRUCTION ENTRANCES
2 PREPARE TEMPORARY PARKING AND STORAGE AREA
3 INSTALL THE PPE-GRADING SILT FENCES AND INLET PROTECTION BMPs ON THE SITE
4 CONSTRUCT ALL PPE-GRADING EROSION AND SEDIMENTATION CONTROL BMPs
7 DECOMPACT PERVIOUS AREA SOILS THROUGH SOIL AMENDMENT OR DEEP RIPPING TO AN 18" DEPTH
8 COMPLETE MASS GRADING AND INSTALL TEMPORARY AND PERMANENT SEEDING AND PLANTING
9 CONSTRUCT POST-GRADING SILT FENCE ON THE SITE

STREET & UTILITY PHASE

1 INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS
2 INSTALL RIP RAP AROUND OUTLET STRUCTURES
3 INSTALL INLET PROTECTION AROUND ALL STORM SEWER STRUCTURES
4 PREPARE SITE FOR PAVING
5 PAVE SITE
6 INSTALL INLET PROTECTION DEVICES
7 INSTALL POST STREET AND UTILITY SILT FENCE
8 REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (ONLY IF SITE IS STABILIZED), IF REQUIRED BY THE CONTRACT

SWPPP BMP QUANTITIES (PER PLAN):

DISTURBED AREA	20.5 AC
SILT FENCE	8,929 LF
INLET PROTECTION	45 EA
BIOROLL	TBD W/ FINAL PLANS
EROSION CONTROL BLANKET	4,457 SY
SEED/SOD POST GRADING AREA	20.5 AC (INC. TEMP AND PERMANENT AREA)
6" TOPSOIL RESPREAD AREA	13,955 CF ±

NOTE:

1 SEE SHEET 17 FOR ALL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.

2 ALL DISTURBED AREAS NOT LOCATED IN PAVEMENT OR TREATMENT AREAS SHALL BE DECOMPACTED AND LOOSENED TO A MINIMUM DEPTH OF 18 INCHES

3 PER THE RPBCWD RULES, INSPECTION RATE FOR ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE EVERY DAY WHERE WORK IS PERFORMED ON THE SITE AND AT LEAST WEEKLY UNTIL LAND DISTURBING ACTIVITY HAS CEASED AND VEGETATIVE COVER HAS BEEN ESTABLISHED MEETING FINAL STABILIZATION CRITERIA

SEDIMENT BARRIERS
1 SILT FENCE (MnDOT 3886)
2 CURB LOG
3 ROCK WEEPER

INLET PROTECTION DEVICES
1 WACO (MnDOT TYPE A & C)
2 INTRASAFE STORM DRAIN/CULVERT
3 SILT SACK (MnDOT TYPE A)
4 DANDY BAG (MnDOT TYPE B)

ANTI-TRACKING CONTROL
1 2" CRUSHED CLEAR ROCK (LAND DEVELOPMENT)

TEMPORARY SEED MIX
1 MnDOT-100 (DATS 20-120 DAY STABILIZATION)
2 MnDOT-150 (1-2 YEAR STABILIZATION)

PERMANENT SEED MIX/STABILIZATION
1 MnDOT 270 (RESIDENTIAL TURF)
2 SOD

STABILIZATION BMP'S
1 STRAW/HAY MnDOT TYPE 1 MULCH
2 EROSION CONTROL BLANKET MnDOT CAT 3
3 HYDROMULCH MnDOT TYPE 5
4 TURF REINFORCEMENT MAT SC250 NORTH AMERICAN GREEN OR EQUAL-MNDOT CAT 6

GRADING ACTIVITY
1 CONCRETE WASHOUT IS DONE BY TRUCK WITH A MOBILE WASHOUT SYSTEM PROVIDED AND COMPLETED BY THE CONCRETE CONTRACTOR.

ACTIVE SWPPP SCHEDULE

CONSTRUCTION SEQUENCE	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
MULCH BERM													
FIBER ROLLS / MULCH SOCKS													
SILT FENCE													
TEMPORARY MULCH COVER													
TEMPORARY HYDROMULCH													
EROSION CONTROL BLANKET													
ROCK DRIVEWAY / ROCK PADS													
INLET PROTECTION DEVICES													
PAVEMENT (DRIVEWAY/ROADS)													
SOD													
STOCKPILES													

NOTE: CONTRACTOR, GENERAL CONTRACTOR OR SWPPP INSPECTOR TO COMPLETE TABLE AS GRADING PROGRESSES

GONYEA
HOMES & REMODELINGS
1000 BOONE AVE N. SUITE 400
GOLDEN VALLEY, MN 55427
OFFICE 763-432-4500
FAX 763-432-4501

ALLIANT ENGINEERING
233 Park Ave S, Ste 300
Minneapolis, MN 55415
612.758.3080 MAIN
612.758.3099 FAX
www.alliant-inc.com

FOXWOOD
9150 GREAT PLAINS BLVD.
CHANHASSEN, MINNESOTA 55317

CONSTRUCTION DOCUMENTS

EROSION AND SEDIMENT CONTROL PLAN

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed PROFESSIONAL ENGINEER under the laws of the State of MINNESOTA

MARK RAUSCH, PE
4-11-17 41486
Date License No.

QUALITY ASSURANCE/CONTROL

BY	DATE

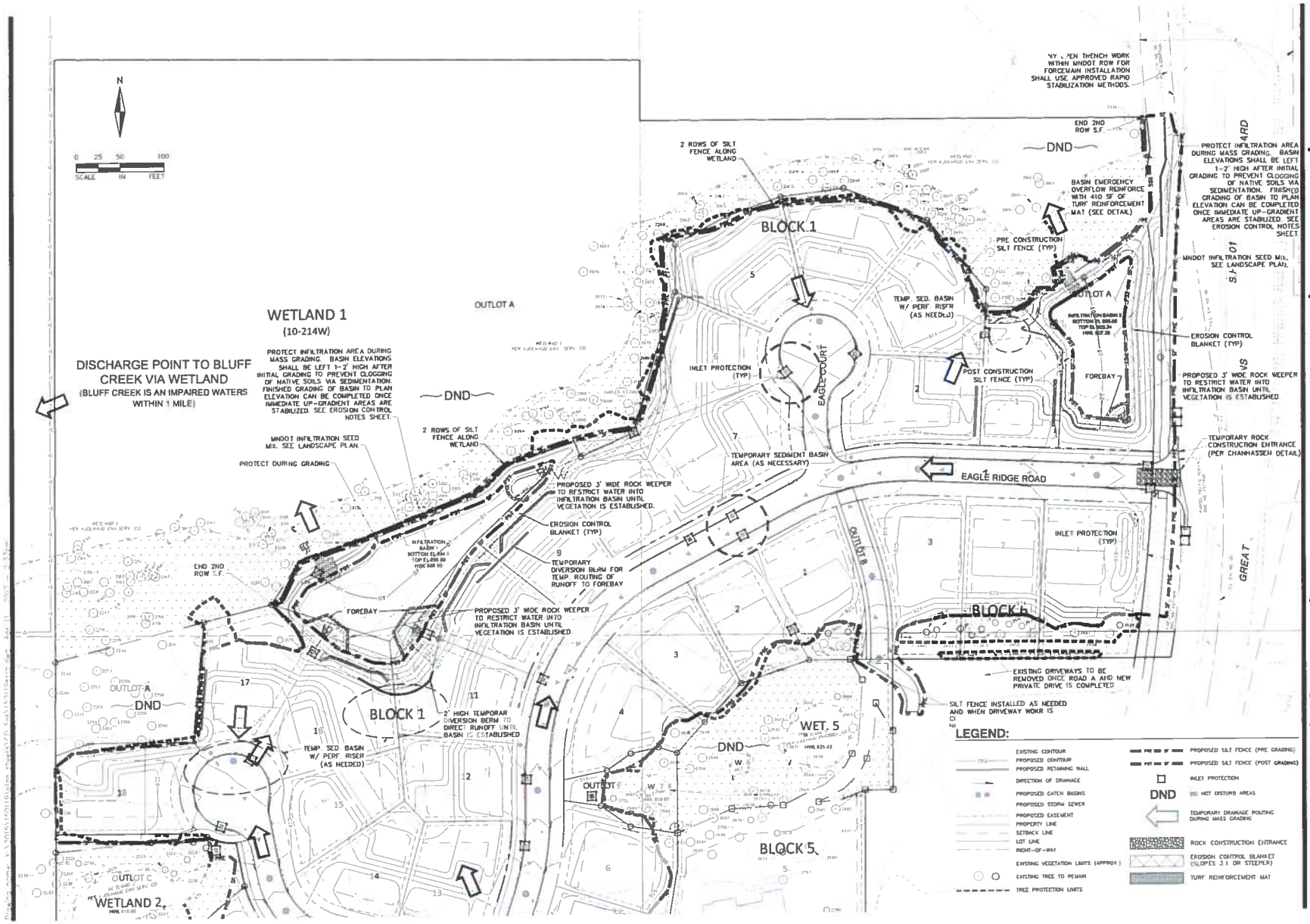
DATE	ISSUE
6-30-16	WATERSHED SUBMITTAL
7-18-16	WATERSHED RESUBMITTAL
8-17-16	CONSTRUCTION SET
8-29-16	CITY COMMENTS
9-23-16	TEMP. CDS RELOCATION
10-10-16	UTILITY REVISIONS
10-25-16	FORCEMAIN UPDATE
10-31-16	STORM (12" TO 15" REVS)
12-7-16	TH 101 FINAL INSTALL NOTES
4-11-17	REVISIONS PER WCD 3 & #2

PROJECT TEAM DATA

DESIGNED:	MPR
DRAWN:	ELL
PROJECT NO:	215-0119

15

SHEET 15 of 48



GONYEA
HOMES & REMODELINGS
1000 BOONE AVE N. SUITE 400
GOLDEN VALLEY, MN 55427
OFFICE 763-432-4500
FAX 763-432-4501

ALLIANT ENGINEERING
233 Park Ave S, Ste 300
Minneapolis, MN 55415
612.758.3080 MAIN
612.758.3099 FAX
www.alliant-inc.com

FOXWOOD
9150 GREAT PLAINS BLVD.
CHANHASSEN, MINNESOTA 55317

CONSTRUCTION DOCUMENTS

EROSION AND SEDIMENT CONTROL PLAN

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed PROFESSIONAL ENGINEER under the laws of the State of MINNESOTA

MARK RAUTEN, PE
4-11-17 43180
Date License No.

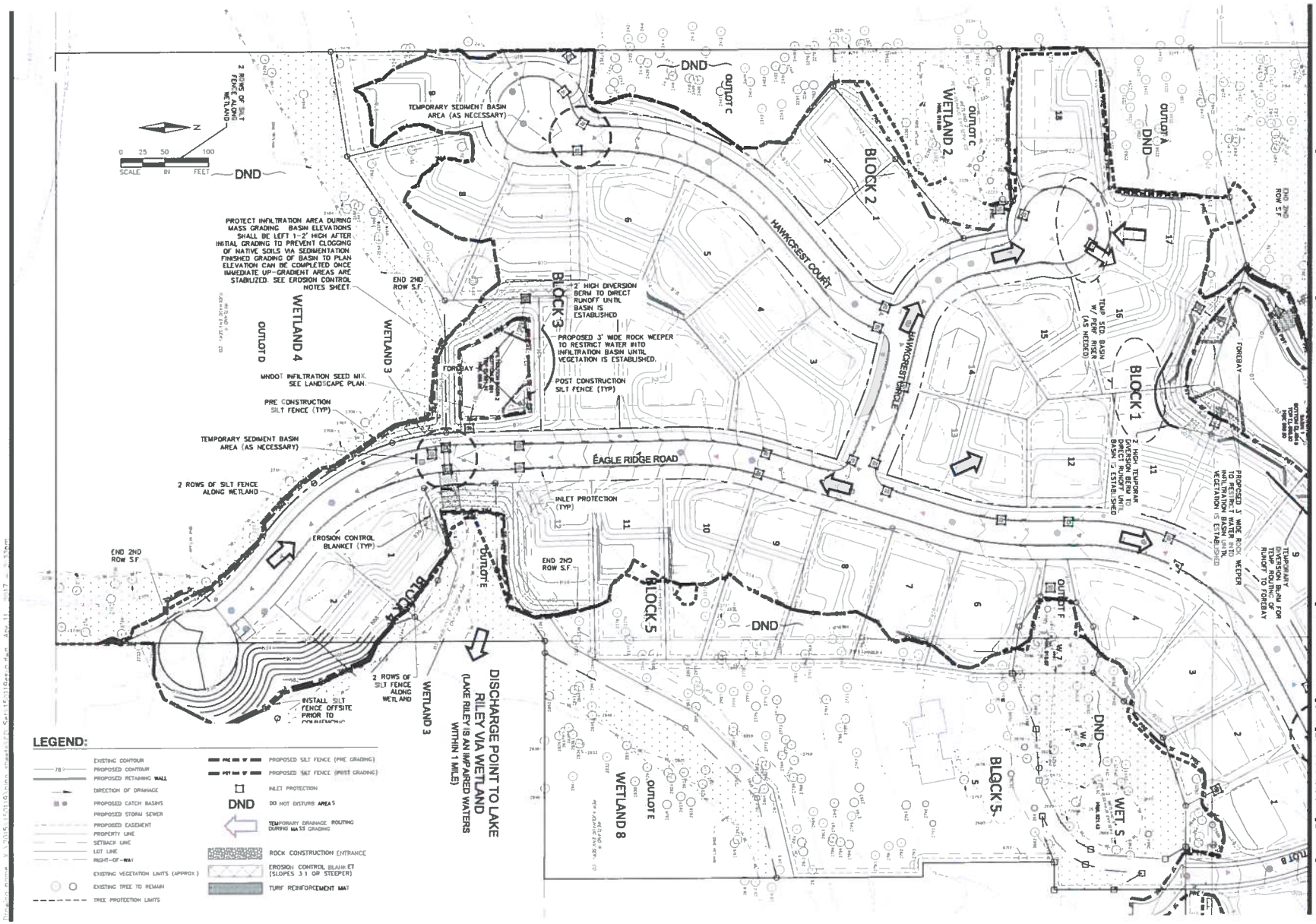
QUALITY ASSURANCE/CONTROL

BY	DATE	ISSUE
	6-30-16	WATERSHED SUBMITTAL
	7-18-16	WATERSHED RESUBMITTAL
	8-10-16	CONSTRUCTION SET
	9-29-16	CITY COMMENTS
	9-23-16	TEMP CCS RELOCATION
	10-10-16	UTILITY REVISIONS
	10-25-16	FORCEMAIN UPDATE
	10-31-16	STORM (12" TO 15") REVS
	12-7-16	TH 101 TRAIL INSTALL NOTES
	4-11-17	WATERSHED REV-WET 2 & W2

PROJECT TEAM DATA
DESIGNED: MPR
DRAWN: EJL
PROJECT NO: 215-0119

16

SHEET 16 of 48



GONYEA
HOMES & REMODELINGS
1000 BOONE AVE N. SUITE 400
GOLDEN VALLEY, MN 55427
OFFICE 763-432-4500
FAX 763-432-4501

ALLIANT
233 Park Ave S, Ste 300
Minneapolis, MN 55415
612.758.3080 MAIN
612.758.3099 FAX
www.alliant-inc.com

FOXWOOD
9150 GREAT PLAINS BLVD.
CHANHASSEN, MINNESOTA 55317

CONSTRUCTION DOCUMENTS

EROSION AND SEDIMENT CONTROL PLAN

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed PROFESSIONAL ENGINEER under the laws of the State of MINNESOTA

MARK BAUS, PE
6-11-17 — 21480
Date — License No.

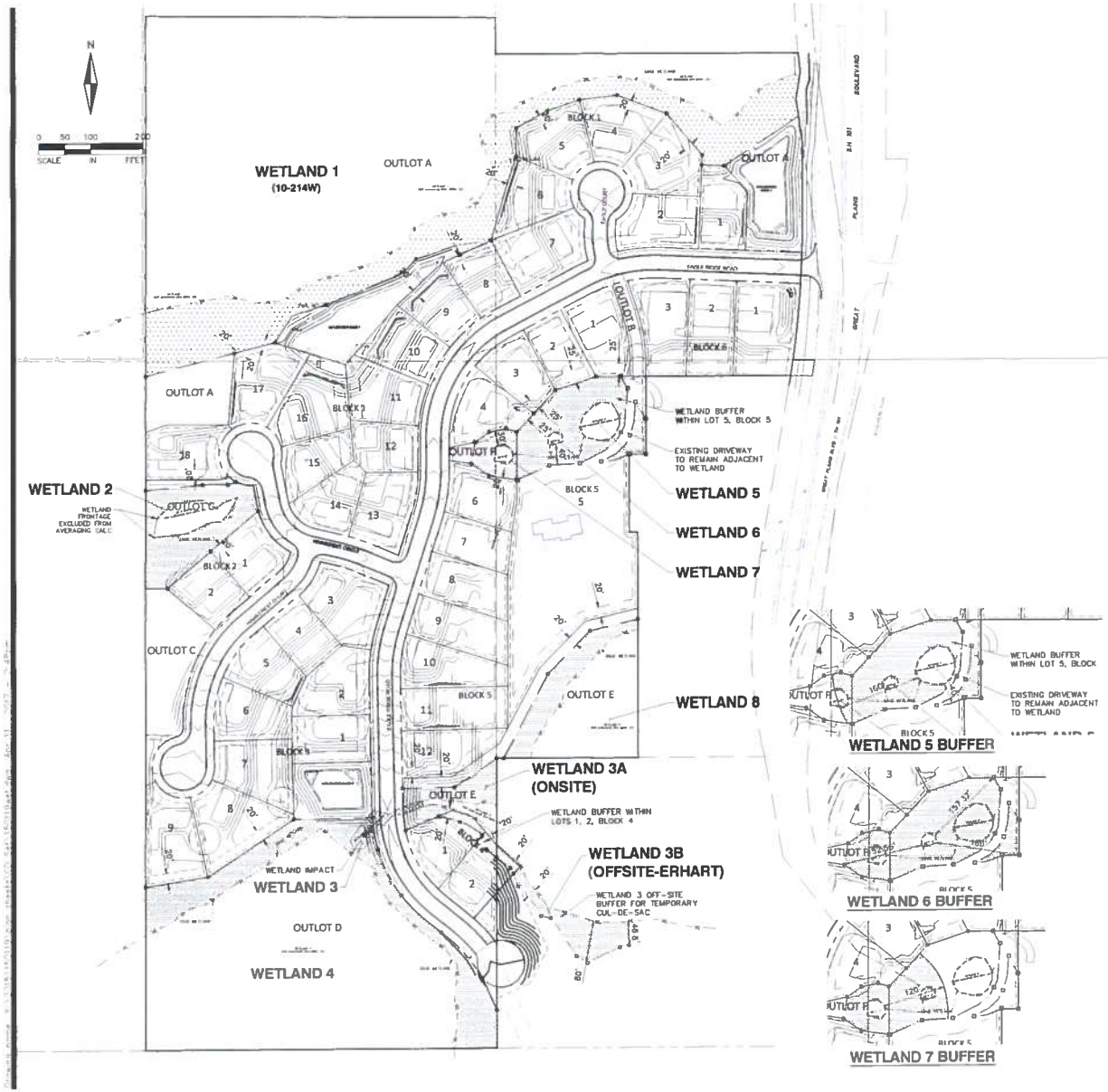
QUALITY ASSURANCE/CONTROL

BY	DATE	ISSUE
	6-30-16	WATERSHED SUBMITTAL
	7-18-16	WATERSHED RESUBMITTAL
	8-10-16	CONSTRUCTION SET
	8-29-16	CITY COMMENTS
	9-23-16	TEMP. CBS RELOCATION
	10-10-16	UTILITY REVISIONS
	10-25-16	FORCEMAIN UPDATE
	10-31-16	STORM (1ST TO 1ST REVS)
	11-7-16	TH 101 TRAIL INSTALL NOTES
	4-11-17	WATERSHED REV-WET 2 & 8

PROJECT TEAM DATA
DESIGNED: MPR
DRAWN: ELL
PROJECT NO: 215-0110

17

SHEET 17 of 48



WETLAND 5 BUFFER

WETLAND 6 BUFFER

WETLAND 7 BUFFER

WETLAND SUMMARY

WETLAND	CITY CLASS	RPBCWD CLASS	AREA
1	MANAGE 1	HIGH VALUE	387,330 SF (8.433 AC)
2	MANAGE 1	HIGH VALUE	6,840 SF (0.157 AC)
3	MANAGE 2	MEDIUM VALUE	6,830 SF (0.156 AC)
4	MANAGE 2	MEDIUM VALUE	187,825 SF (4.314 AC)
5	PRESERVE	EXCEPTIONAL VALUE	4,231 SF (0.971 AC)
6	PRESERVE	EXCEPTIONAL VALUE	538 SF (0.012 AC)
7	MANAGE 1	HIGH VALUE	986 SF (0.023 AC)
8	MANAGE 2	MEDIUM VALUE	32,619 SF (0.748 AC)

TOTAL AREA 607,299 SF / 13.942 AC

WETLAND BUFFER CALCULATION

ASSUMED BUFFERING REQUIREMENTS

THE CITY OF CHANHASSEN AND RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT HAVE BUFFER REQUIREMENTS PER WETLAND CLASSIFICATION. THE BUFFER REQUIREMENTS ARE AS FOLLOWS

City of Chanhassen				Riley Purgatory Bluff Creek Watershed District		
Wetland Classification	Buffer Strip Requirement	Principal Structure Setback to Buffer	Accessory Structure Setback to Buffer	Wetland Classification	Average Buffer Width Required	Min. Buffer Width Required
OUTSTANDING	50	50	50	N/A		
PRESERVE	40	40	30	EXCEPTIONAL	80	60
MANAGE 1	25	30	15	HIGH	60	30
MANAGE 2	20	30	15	MEDIUM	40	20
MANAGE 3	10.5	30	15	LOW	20	10

MAXIMUM BUFFER WIDTH IS 200 PERCENT OF THE APPLICABLE WIDTH AS REQUIRED BY RPBCWD DISTRICT BUFFER AVERAGING RULES

WETLAND	FRONTAGE	BUFFER AREA	MIN. BUFFER WIDTH	AVG. WIDTH
1	1,555 LF	93,635 SF	30'	60.2'
2	369 LF*	22,584 SF	30'	61.2'
3A**	322 LF	12,906 SF	20'	40.1'
3B**	301 LF	22,052 SF	20'	40.8'
4	940 LF	42,572 SF	20'	45.3'
5	238 LF	29,286 SF***	40'	124.1'
6	89 LF	37,177 SF***	40'	417.7'
7	118 LF	17,531 SF***	30'	147.3'
8	335 LF	13,906 SF	20'	41.5'

NOTES

* WETLAND 2 FRONTAGE IS CALCULATED ALONG NORTH, EAST, AND SOUTH LIMITS. THE WEST PERIMETER IS EXCLUDED AS ITS PROXIMITY TO THE PROJECT BOUNDARY DOES ALLOW FOR MIN BUFFER WIDTH

** AN IMPACT IS PROPOSED TO WETLAND 3 TO CONSTRUCT A ROADWAY CONNECTION TO THE PROPERTY TO THE SOUTH. THE REMAINING PORTION OF 3 TO REMAIN WILL BE WITHIN THE WETLAND BUFFER PROVIDED FOR WETLAND 4. THE BUFFER CALCULATION FOR WETLAND 3A IS CALCULATED ON THE EAST PORTION OF THE WETLAND. WETLAND 3B CALCULATES THE OFFSITE BUFFER TO INSTALL THE TEMPORARY CUL-DE-SAC.

*** WETLANDS 5, 6, AND 7 BUFFER AREA IS CALCULATED TO MAX. ALLOWABLE BUFFER WIDTH

WETLAND IMPACT DATA

WETLAND IMPACT

WETLAND 3 = 2,585 SF
(OFFSITE MITIGATION @ 1:1 PROPOSED)

LEGEND:

- EASEMENT LINE
- BUILDING SETBACK
- PROPERTY LINE
- LOT LINE
- ROW
- WETLAND DELINEATION
- WETLAND BUFFER
- WETLAND BUFFER MONUMENT
- RESIDENTIAL WETLAND BUFFER MONUMENT (ONLY USE LOT 5, BLOCK 5)
- WETLAND BUFFER STRIP
- WETLAND IMPACT

GONYEA
HOMES & REMODELINGS
1000 BOONE AVE N. SUITE 400
GOLDEN VALLEY, MN 55427
OFFICE 763-432-4500
FAX 763-432-4501

ALLIANT ENGINEERING
233 Park Ave S, Ste 300
Minneapolis, MN 55415
612.758.3080 MAIN
612.758.3099 FAX
www.alliant-inc.com

FOXWOOD
9150 GREAT PLAINS BLVD.
CHANHASSEN, MINNESOTA 55317

CONSTRUCTION DOCUMENTS

WETLAND MANAGEMENT PLAN

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed PROFESSIONAL ENGINEER under the laws of the State of MINNESOTA

MARK MAHER, PE
6-11-17 (License No.)
Date

QUALITY ASSURANCE/CONTROL

BY	DATE

DATE	ISSUE
6-30-16	WATERSHED SUBMITTAL
7-18-16	WATERSHED RESUBMITTAL
8-10-16	CONSTRUCTION SET
8-29-16	CITY COMMENTS
9-23-16	TEMP. CDS RELOCATION
10-10-16	UTILITY REVISIONS
10-25-16	FORCEMAIN UPDATE
10-31-16	ENGRG (17' TO 15' REVS)
12-7-16	TH 101 FINAL INSTALL NOTES
4-11-17	WATERSHED REV-WET 3 & NO

PROJECT TEAM DATA

DESIGNER:	MPR
DRAWN:	ELL
PROJECT NO:	215-0119

38

SHEET 38 of 48

RILEY PURGATORY BLUFF CREEK
WATERSHED DISTRICT

18681 Lake Drive East
Chanhassen, MN 55317
952-607-6512
www.rpbcwd.org

Riley Purgatory Bluff Creek Watershed District Permit Application Review

Permit No: 2016-030

Original application: Conditionally approved at October 5, 2016 meeting

Modification Request Received complete: June 6, 2017

Applicant: Equitable Holding Co. LLC

Consultant: Eric Luth, Sambatek

Project: IDI Distribution Building Expansion – Expansion of existing building and northern parking lot. Stormwater management facilities, including pervious concrete pavement, an underground stormwater chamber with underlying infiltration, and a water reuse system will be constructed to provide volume control, water quality, and rate control for runoff prior to discharging offsite.

Location: 8303 Audubon Road, Chanhassen, MN

Reviewer: Scott Sobiech, PE Barr Engineering

Rules: Applicable rules checked

	Rule B: Floodplain Management		Rule H: Appropriation of Public Waters
X	Rule C: Erosion and Sediment Control		Rule I: Appropriation of Groundwater
X	Rule D: Wetland and Creek Buffers	X	Rule J: Stormwater Management
	Rule E: Dredging and Sediment Removal		Rule K: Variances and Exceptions
	Rule F: Shoreline/Streambank Stabilization	X	Rule L: Permit Fees
	Rule G: Waterbody Crossings	X	Rule M: Financial Assurances

Rule Conformance Summary

Rule	Issue		Conforms to RBPCWD Rules?	Comments
C	**Erosion Control Plan**		Yes	
D	**Wetland and Creek Buffers**		Yes	See Rule Specific Permit Condition D1.
J	**Stormwater Management**	Rate	Yes	
		Volume	Yes	
		Water Quality	Yes	
		Low Floor Elev.	Yes	
		Maintenance	See Comment	See Rule Specific Permit Condition J1.
L	**Permit Fee**		See Comment	$2,000 was received on July 19, 2016, applicant must submit an additional $3,137 for excess cost recovery.
M	**Financial Assurance**		See Comment	The total financial assurance of$672,800 is needed.

Project Description

The proposed project includes an expansion of an existing building and an expansion of a parking area north of the building. Stormwater management facilities including pervious concrete pavement, an underground stormwater chamber with underlying infiltration, and a water reuse system will be constructed to provide volume control, water quality, and rate control for runoff prior to discharging offsite. The permit was conditionally approved on October 5, 2016. The applicant has fulfilled the conditions for issuance of the permit, and construction consistent with the approved plan is under way. The permit was issued and remains effective through October 5, 2017.

The requested permit modification revises the proposed design by adding more parking lot, replacing some existing and previously approved parking lot with pervious concrete pavement to offset the added impervious parking area, and replacing the previously approved biofiltration basin with elevated draintile to promote infiltration with an underground stormwater chamber with underlying infiltration. The following permit review reanalyzed the entire proposed project because of the revised grading and proposed conversion of the biofiltration basin to an underground system. Only limited comparison with the prior review report are provided where needed to provide context for prior approval.

The project site information is summarized below:

	Original Project	Modification Request
Total Site Area (acres)	6.27	6.27
Existing Site Impervious (acres)	2.11	2.11
New (Increase) in Site Impervious Area (acres)	1.05 (49.7% increase)	1.05 (49.7% increase)
Total Disturbed Area (acres)	2.3	2.3

Exhibits for Modification Request:

1. Transmittal letter with modification request dated May 12, 2017
2. Design Plan Sheets (Sheets 1-16) received May 12, 2017 (received July 21, 2017).
3. Stormwater Management Plan dated received May 12, 2017 (revised July 17, 2017).
4. HydroCAD Model for existing and proposed conditions received July 20, 2017
5. MIDS Calculator file received July 20, 2017.
6. Draft Maintenance Declaration received July 20, 2017 (revision received July 21, 2017.
7. Cost estimated for pervious concrete pavement and StormTech MC3500 underground system received July 21, 2017

Rule Specific Permit Conditions

Rule C: Erosion and Sediment Control

Because the project will alter 2.3 acres (100,188 square feet) of land-surface area, the same as originally approved, the project must conform to the requirements in the RPBCWD Erosion and Sediment Control rule (Rule C, Subsection 2.1).

The erosion control plan prepared by Sambatek includes installation of silt fence, bioroll, inlet protection for storm sewer catch basins, rock construction entrance, placement of a minimum of 6 inches of topsoil, decompaction of pervious areas compacted during construction, and retention of native topsoil onsite. The proposed project conforms to the RPBCWD Rule C requirements.

Rule D: Wetland and Creek Buffers

Because the proposed work triggers a permit under RPBCWD Rule J and the onsite wetlands are protected by the state Wetland Conservation Act, Rule D, Subsections 2.1a and 3.1 require buffer on the portions of the wetlands downgradient from the proposed land-disturbing activities. No draining, filling of the onsite wetlands is proposed.

A June 22, 2016 wetland delineation for the site was included with the submittal and identified two wetlands (north wetland and south wetland) on the parcel that are downgradient from the proposed work. A MnRAM analysis indicates that both wetlands onsite are medium value wetlands according to Appendix D1. Rule D, Subsection 3.1.a.iii requires a wetland buffer with an average of 40 feet from the delineated edge of the wetland, minimum 20 feet. The applicant is requesting slight adjustments to the approved buffer for the northern wetland but will provide wetland buffers for the northern wetland with an average width of 40 feet, minimum of 20 feet, thus meeting the average and minimum widths identified in Rule D, Subsection 3.1 for medium value wetlands.

The Applicant previously submitted a variance request from the minimum and average buffer requirements in Rule D, Subsection 3.1 for the southern wetland due to the presence of an existing retaining wall, access drive, and stormwater pond. The Applicant is proposed to provide a 15.6 foot minimum, 37.5 foot average buffer from the delineated edge of the southern wetland on the project parcel. The variance request was approved by the RPBCWD Board of Managers at the October5, 2017 meeting. The applicant is not requesting any modification to the buffer or variance terms for the southern wetland.

The Applicant is proposing buffer monument locations consistent with criteria in Rule D, Subsection 3.3. The Applicant is proposing revegetating disturbed areas within the proposed buffer with native vegetation in conformance with Rule D, Subsection 3.2. A note is included on the plan sheet indicating

the project will be constructed so as to minimize the potential transfer of aquatic invasive species (e.g., zebra mussels, Eurasian watermilfoil, etc.) to the maximum extent possible conforming to Rule D, Subsection 3.5.

To conform to the RPBCWD Rule D the following revisions are needed:

D1. Because the applicant proposes to modify the wetland buffer for the north wetland as part of the modification request, the permit applicant must amend the previously approved maintenance and inspection declaration. Buffer areas and maintenance requirements must be documented in a declaration recorded after review and approval by RPBCWD in accordance with Rule D, Subsection 3.4.

Rule J: Stormwater Management

Because the project will alter 2.3 acres (100,188 square feet) of land-surface area, increase the imperviousness of the entire site by less than 50% and disturb less than 50% of the existing impervious area, the project must meet the criteria of RPBCWD's Stormwater Management rule (Rule J, Subsection 2.3) for the new and disturbed impervious surface on the site.

The developer is proposing construction of pervious concrete pavement, an underground stormwater chamber system with underlying infiltration, a water reuse system, and using pervious concrete pavement to provide the rate control, volume abstraction, and water quality management on the site. A sump manhole is proposed to provide the necessary pretreatment for the chamber system with underlying infiltration.

Rate Control

In order to meet the rate control criteria listed in Subsection 3.1.a, the 2-, 10-, and 100-year post development peak runoff rates must be equal to or less than the existing discharge rates at all locations where stormwater leaves the site.

The Applicant used a HydroCAD hydrologic model to simulate runoff rates for pre- and post-development conditions for the 2-, 10-, and 100-year frequency storm events using a nested rainfall distribution, and a 100-year frequency, 10-day snowmelt event. The existing and proposed 2-, 10-, and 100-year frequency discharges from the site are summarized in the table below. Because the computer model shows no change or a decrease in the discharge rate at all discharge locations, the proposed project conforms to RPBCWD Rule J, Subsection 3.1.a.

Modeled Discharge Location	2-Year Discharge (cfs)		10-Year Discharge (cfs)		100-Year Discharge (cfs)		10-Day Snowmelt (cfs)	
	Ex	Prop	Ex	Prop	Ex	Prop	Ex	Prop
Existing Pond	8.3	6.4	14.0	9.9	24.4	16.1	0.7	0.4
South Wetland	1.3	1.3	2.7	2.7	5.7	5.7	0.2	0.2
North Wetland	3.4	2.1	6.6	4.0	12.9	7.9	0.3	0.3
Offsite	0.2	0.2	0.4	0.4	0.9	0.9	<0.1	<0.1

Volume Abstraction

Subsection 3.1.b and 2.3 of Rule J requires the abstraction onsite of 1.1 inches of runoff from all new and disturbed impervious surfaces on the parcel. An abstraction volume of 4,193 cubic feet is required from the 1.05 acres (45,738 square feet) of new and fully reconstructed impervious surface on the project for volume retention. The Applicant proposes an underground stormwater chamber system with underlying infiltration with pretreatment of runoff provided by an isolator row and a water reuse system. Soil borings performed by American Engineering Testing, Inc. show that soils in the project area are clays (CL); the MN Stormwater Manual indicates an infiltration rate of 0.06 inches per hour for the clay soil is appropriate. Soil borings performed by American Engineering Testing, Inc. show no groundwater to a boring depth of 21 feet. This indicates that groundwater is at least 3 feet below the bottom of the proposed filtration basin with underlying infiltration and irrigation area for the water reuse system (Rule J, Subsection 3.1.b.ii). An abstraction volume of 2,835 cubic feet is provided by the proposed water reuse system.

The table below summarizes the volume abstraction on the site.

Required Abstraction Depth (inches)	Required Abstraction Volume (cubic feet)	Conditionally Approved Abstraction Volume Provided (cubic feet)	Modified Abstraction Volume Provided (cubic feet)
1.1	4,193	4,245	4,589

Because the proposed water reuse irrigation system requires consistent use at a specified rate to meet District requirements, an operations plan and performance monitoring for the site will be required to ensure that the project is able to meet the RPBCWD volume abstraction requirement as has been proposed. In accordance with Rule J, Subsection 2.6 performance monitoring, and as a stipulation of issuing a permit for this project, the Applicant must monitor the proposed irrigation system to determine the ability of the system to achieve the estimated volume abstraction as presented in the

design. The operations and monitoring program must be included in the maintenance declaration that is recorded with the County. The recorded reuse volume must be submitted to the RPBCWD on a yearly basis. If it is determined that the system is not performing as designed, the Applicant will need to submit a revised design and construction plan to demonstrate that the volume abstraction standard will be achieved. The proposed project conforms to the criteria of RPBCWD Rule J, Subsection 3.1.b.

Water Quality Management

Subsection 3.1.c of Rule J requires the Applicant provide for at least 60 percent annual removal efficiency for total phosphorus (TP), and at least 90 percent annual removal efficiency for total suspended solids (TSS) from site runoff. The Applicant is proposing an underground stormwater chamber with underlying infiltration and pervious concrete pavement to achieve the required TP and TSS removals. A stormwater sump manhole will provide pretreatment for the underground stormwater chamber with underlying infiltration. A P8 model was developed to estimate the TP and TSS loading from the new and fully reconstructed impervious area and the removal capacity of the proposed BMPs. The results of this modeling are summarized below. The engineer finds that the proposed project is in conformance with Rule J, Subsection 3.1.c

Pollutant of Interest	Regulated Site Loading (lbs/yr)	Required Load Removal (lbs/yr)[1]	Provided Load Reduction (lbs/yr)
Total Suspended Solids (TSS)	1358	1221 (90%)	1268.2 (93%)
Total Phosphorus (TP)	4.4	2.64 (60%)	3.7 (84%)

[1]Required load reduction is calculated based on the removal criteria in Rule J, Subsection 3.1c and the new and reconstructed impervious area site load.

Low floor Elevation

No structure may be constructed or reconstructed such that its lowest floor elevation is less than 2 feet above the 100-year event flood elevation and no stormwater management system may be constructed or reconstructed in a manner that brings the low floor elevation of an adjacent structure into noncompliance according to Rule J, Subsection 3.6. The lowest elevation of the building and the 100-year event flood elevation of the adjacent stormwater features are summarized below.

Stormwater Facility	100-year Event Flood Elevation of Adjacent Stormwater Facility (feet)	Low Floor Elevation of Building (feet)	Freeboard (feet)
Ex. NURP Pond	941.46	953.00	11.54
Pervious Concrete	949.09	953.00	3.91

The proposed project is in conformance with Rule J, Subsection 3.6.

Maintenance

Subsection 3.7 of Rule J requires the submission of a maintenance plan. All stormwater management structures and facilities, including the stormwater reuse system, must be designed for maintenance access and properly maintained in perpetuity to assure that they continue to function as designed.

J1. Because the applicant proposes to replace the biofiltration basin with an underground stormwater chamber as part of the modification request, the permit applicant must amend the previously approved maintenance and inspection declaration. Permit applicant must provide a draft maintenance and inspection plan. Once approved by RPBCWD, the plan must be recorded on the deed in a form acceptable to the District.

Rule L: Permit Fee:

The applicant originally submitted a $2,000 permit fee on July 19, 2016 which conformed to the fee schedule in effect at that time. The RPBCWD permit fee schedule adopted in December 2015 indicates that costs of site inspections, analysis of the proposed activities, services of consultants and compliance assurance in excess of $3,500 for properties between 5-9.99 acres will be charged to the permit applicant. To conform to the requirements of Rule L the following is needed:

L1. Because the engineer and legal time to review this permit exceeded $3,500 the applicant must submit an additional permit fee of $3,137 for excess cost recovery.

Rule M: Financial Assurance:

A financial assurance in the amount $178,700 of was received by RPBCWD to fulfil the financial assurance condition of the October 5, 2016 conditional approval. The applicant provided opinion of cost to construct the stormwater management features associated with the requested modification are significantly greater than the financial assurance provided by the applicant. Therefore a new total project financial assurance was calculated below.

Rule C: Silt fence: 3,426 L.F. x $2.50/L.F. = ... $8,600

Restoration: 2.3 acres x $2,500/acre = ... $5,750

Rule D: Wetland Buffer: $5,000 + $1,000/acre over 10 acres = ... $5,000

Rule J: Pervious concrete pavement: $142,632 x 125% = ... $178,300

Water reuse system: $13,500 x 125% = ... $17,000

StormTech MC3500 underground system: $204,593 x 125% = ... $255,800

Contingency (10%) $47,000

Administration (30%) $155,300

Total Financial Assurance $672,800*

*A financial assurance of $178,700 has already been filed with RPBCWD.

Applicable General Requirements:

1. The RPBCWD Administrator shall be notified at least three days prior to commencement of work.
2. Construction shall be consistent with the plans and specifications approved by the District as a part of the permitting process. The date of the approved plans and specifications is listed on the permit.
3. Return or allowed expiration of any remaining surety and permit close out is dependent on the permit holder providing proof that all required documents have been recorded and providing as-built drawings that show that the project was constructed as approved by the Managers and in conformance with the RPBCWD rules and regulations.

Findings

1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
2. The proposed project conforms to Rules C.
3. The proposed project will conform to Rules D and J if the Rule Specific Permit Conditions listed above are met.

Recommendation:

Approval of the permit modification contingent upon:

1. Continued compliance with General Requirements.
2. Total Financial Assurance in the amount of $672,800.
3. Receipt of an additional permit fee of $3,137 for the excess cost recovery.

4. Receipt in recordation of an amendment to maintenance declaration for the wetland buffers and stormwater management facilities. The declaration must also include a stormwater reuse operations, monitoring and reporting plan. A draft must be approved by the District prior to recordation.

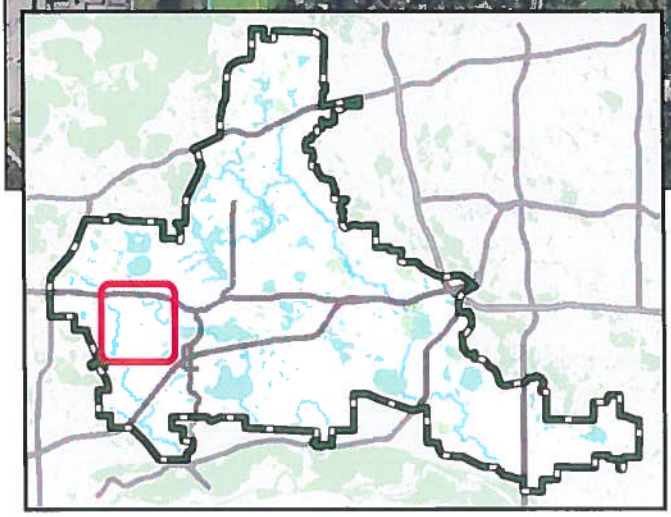
By accepting the permit, when issued, the applicant agrees to the following stipulations:

1. Per Rule J Subsection 4.5, upon completion of the site work, the permittee must submit as-built drawings demonstrating that at the time of final stabilization, stormwater facilities conform to design specifications as approved by the District.

2. Per Rule J Subsection 2.6, performance monitoring, the applicant must submit an operations plan and monitor the proposed irrigation system to provide the volume abstraction as presented in the design. The recorded reuse volume must be submitted to the RPBCWD annually. If it is determined that the irrigation system is not performing as designed, a revised design must be submitted to the District for approval to demonstrate that the volume abstraction and water quality standard is achieved.

Board Action

It was moved by Manager _____, seconded by Manager _____ to approve permit modification for application No. 2016-030 with the conditions recommended by staff.



N

Feet

0 1,000

Permit Location Map

IDI DISTRIBUTION
BUILDING EXPANSION
Permit 2016-030
Riley Purgatory Bluff Creek
Watershed District

Site Development Plans

for

IDI Distribution Building Expansion

Chanhassen, Minnesota

Presented by:

Eden Trace Corp.

CONSULTANT CONTACT LIST:

DEVELOPER
EDEN TRACE CORP
8821 SUNSET TRAIL
CHANHASSEN, MN 55317
TEL 612-803-6970
CONTACT: MARK LINDSTROM

CIVIL ENGINEER
SAMBATEK
12800 WHITEWATER DRIVE, SUITE 300
MINNETONKA, MN 55343
TEL 763-476-6010
FAX 763-476-8532
CONTACT: ERIC LUTH, PE

OWNER
ECLIPTABLE HOLDINGS, LLC
8303 AUDUBON ROAD
CHANHASSEN, MN 55317
TEL 952-937-2000
CONTACT: JOE NOVOGRATZ

SURVEYOR
SAMBATEK
12800 WHITEWATER DRIVE, SUITE 300
MINNETONKA, MN 55343
TEL 763-476-6010
FAX 763-476-8532
CONTACT: RICK BLOM, PLS

ARCHITECT
HOUMAN ARCHITECTS
31572 SNOWBALL ROAD
PENGILLY, MN 5575
TEL 651-631-0200
CONTACT: BRIAN HOUMAN

LANDSCAPING
SAMBATEK
12800 WHITEWATER DRIVE, SUITE 300
MINNETONKA, MN 55343
TEL 763-476-6010
FAX 763-476-8532
CONTACT: JOSH MCKINNEY, PLA

GEOTECHNICAL
AMERICAN ENGINEERING TESTING, INC
550 CLEVELAND AVE N
ST. PAUL, MN 55114
TEL 651-490-1369
CONTACT: THOMAS VENEMA, PE

VICINITY MAP
NO SCALE

SHEET INDEX

Sambatek
www.sambatek.com
12800 Whitewater Drive, Suite 300
Minnetonka, MN 55343
763 476 6010 telephone
763 476 6532 facsimile
Engineering | Surveying | Planning | Environmental

Client
EDEN TRACE CORPORATION
8821 SUNSET TRAIL CHANHASSEN, MN 55317

Project
IDI DISTRIBUTION BUILDING EXPANSION

Location
CHANHASSEN, MN

Certification
NOT FOR CONSTRUCTION

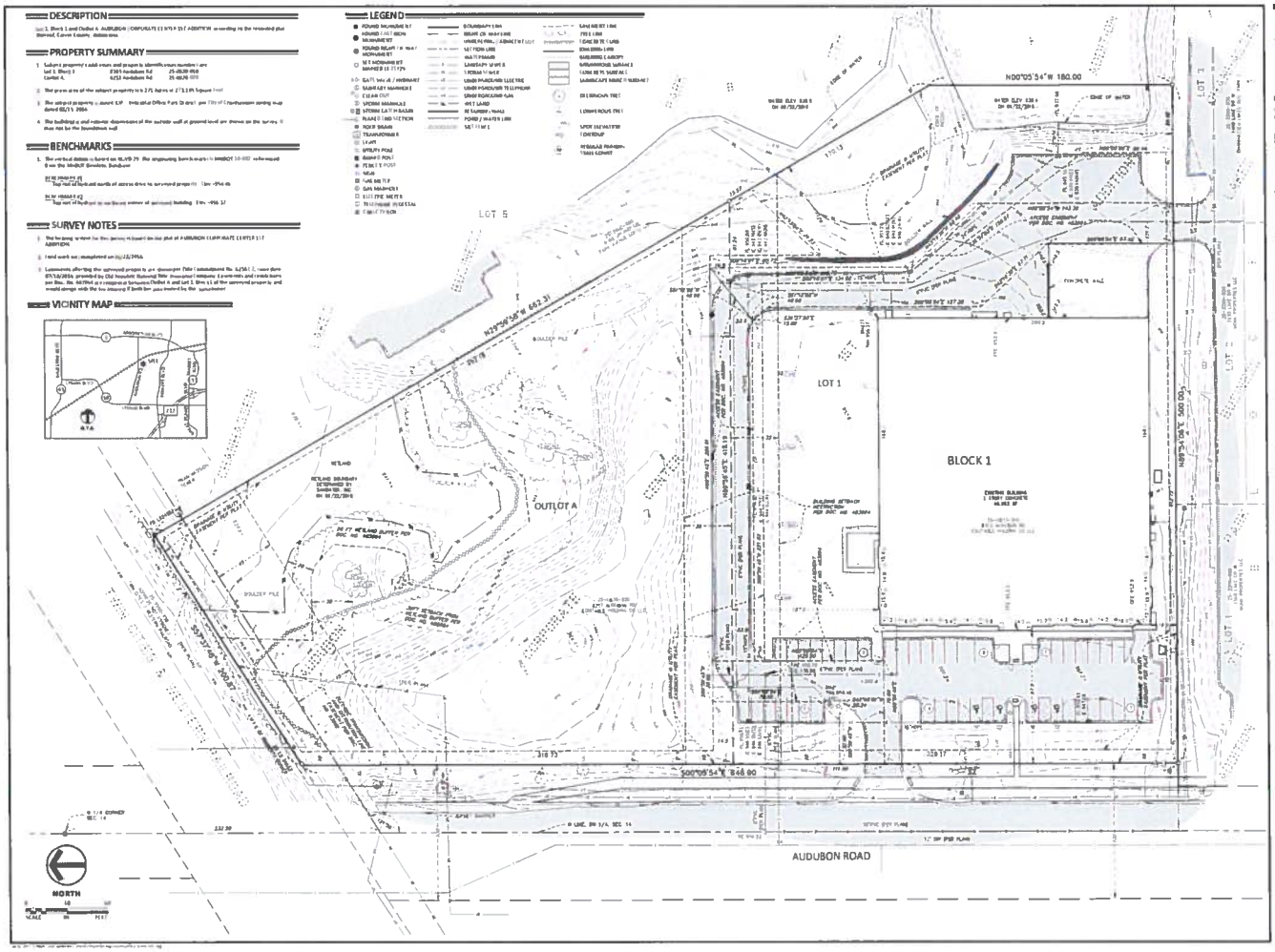
Summary
Designed
Drawn
Approved
Book / Page
Phase
Initial Issued

Revision History
No. Date By Submittal / Revision

Sheet Title
TITLE SHEET

Sheet No. Revision
C1.01

Project No. 20592



Sambatek
www.sambatek.com
12800 Whitewater Drive, Suite 300
Minnetonka, MN 55343
763 478 8000 telephone
763 478 8033 facsimile
Engineering | Surveying | Planning | Environmental

Client
EDEN TRACE CORPORATION
6821 SUNSET TRAIL, CHANHASSEN MN 55317

Project
IDI DISTRIBUTION BUILDING EXPANSION

Location
CHANHASSEN, MN
8303 AUDUBON ROAD

Certification

Summary
Designed — Drawn —
Approved — Check / Pkgd —
Plotted — Bid Set Issued: 09/29/2025

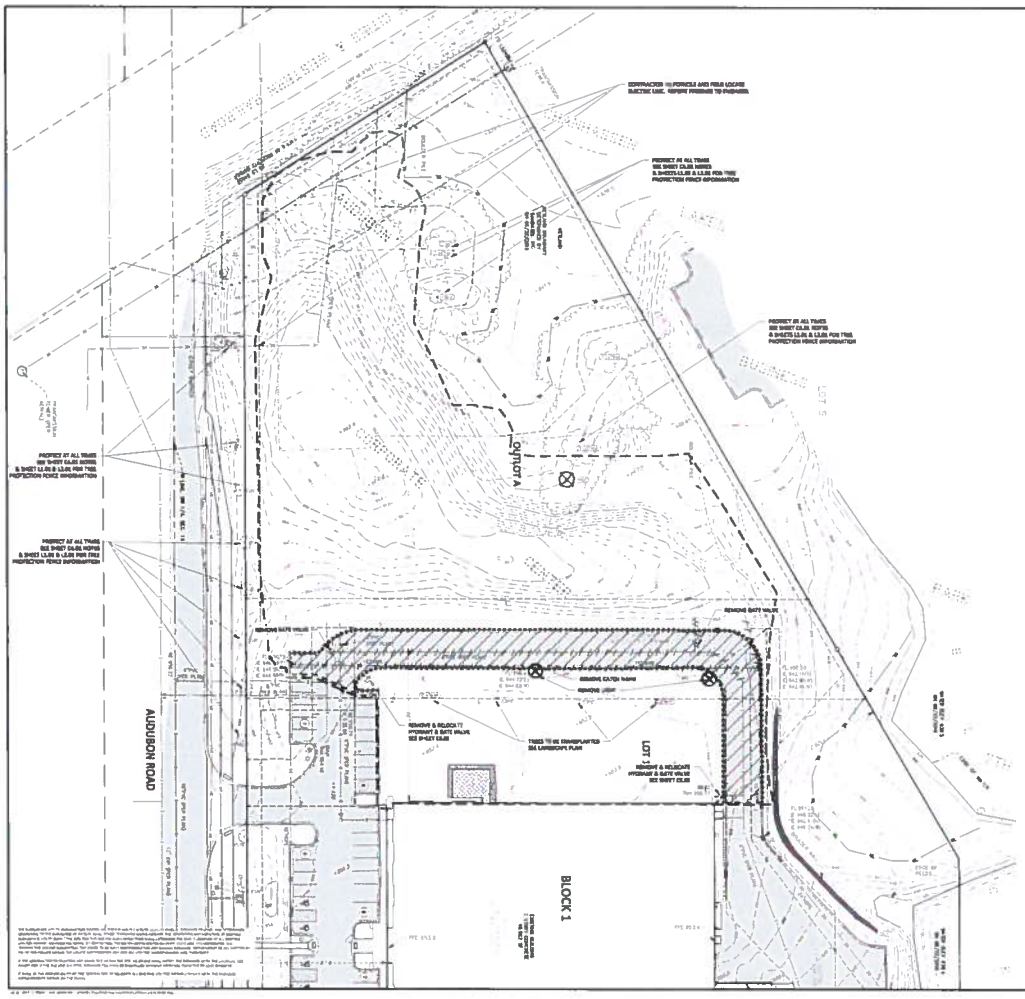
Revision History

No.	Date	By	Submittal / Revision
A	10/15/25	DL	ADD 28-FT WIDE UTILITY EASEMENT
B	12/05/25	DL	ADD 2 ADDITIONAL FIRE HYDRANTS
C	12/22/25	DL	ADD SANITARY MANHOLE

Sheet Title
EXISTING CONDITIONS

Sheet No. C2.01 **Revision** C

Project No. 20592



LEGEND

DEMOLITION NOTES

Sambatek
www.sambatek.com
12900 Whitewater Drive, Suite 300
Minnetonka, MN 55343
763 478 8010 telephone
763 478 8520 facsimile
Engineering | Surveying | Planning | Environmental

Client

EDEN TRACE CORPORATION

6821 SUNSET TRAIL CHANHASSEN, MN 55317

Project

IDI DISTRIBUTION BUILDING EXPANSION

Location

CHANHASSEN, MN

Certification

NOT FOR CONSTRUCTION

Summary

Designed
Approved
Plotted

Revision History

No.	Date	By	Submittal / Revision

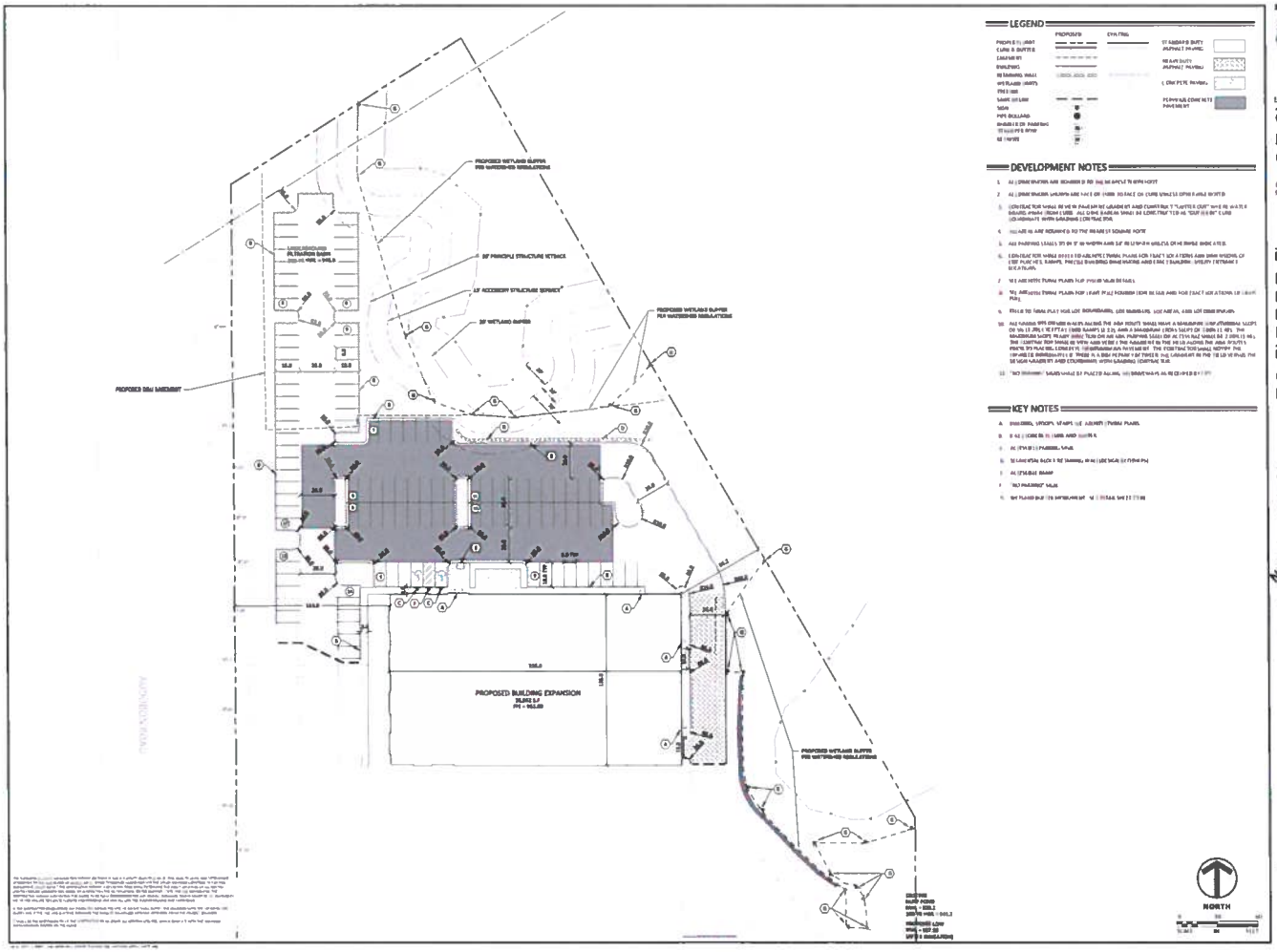
Sheet Title

DEMOLITION PLAN

Sheet No. Revision

C2.02

Project No. 20592



LEGEND

DEVELOPMENT NOTES

KEY NOTES

NOT FOR CONSTRUCTION

Sambatek
www.sambatek.com
12900 Whitewater Drive, Suite 200
Minnetonka, MN 55343
763 476 8010 Telephone
763 476 8533 facsimile
Engineering | Surveying | Planning | Environmental

Client
EDEN TRACE CORPORATION
8621 SUNSET TRAIL CHANHASSEN MN 55317

Project
IDI DISTRIBUTION BUILDING EXPANSION

Location
CHANHASSEN, MN

Certification

Summary

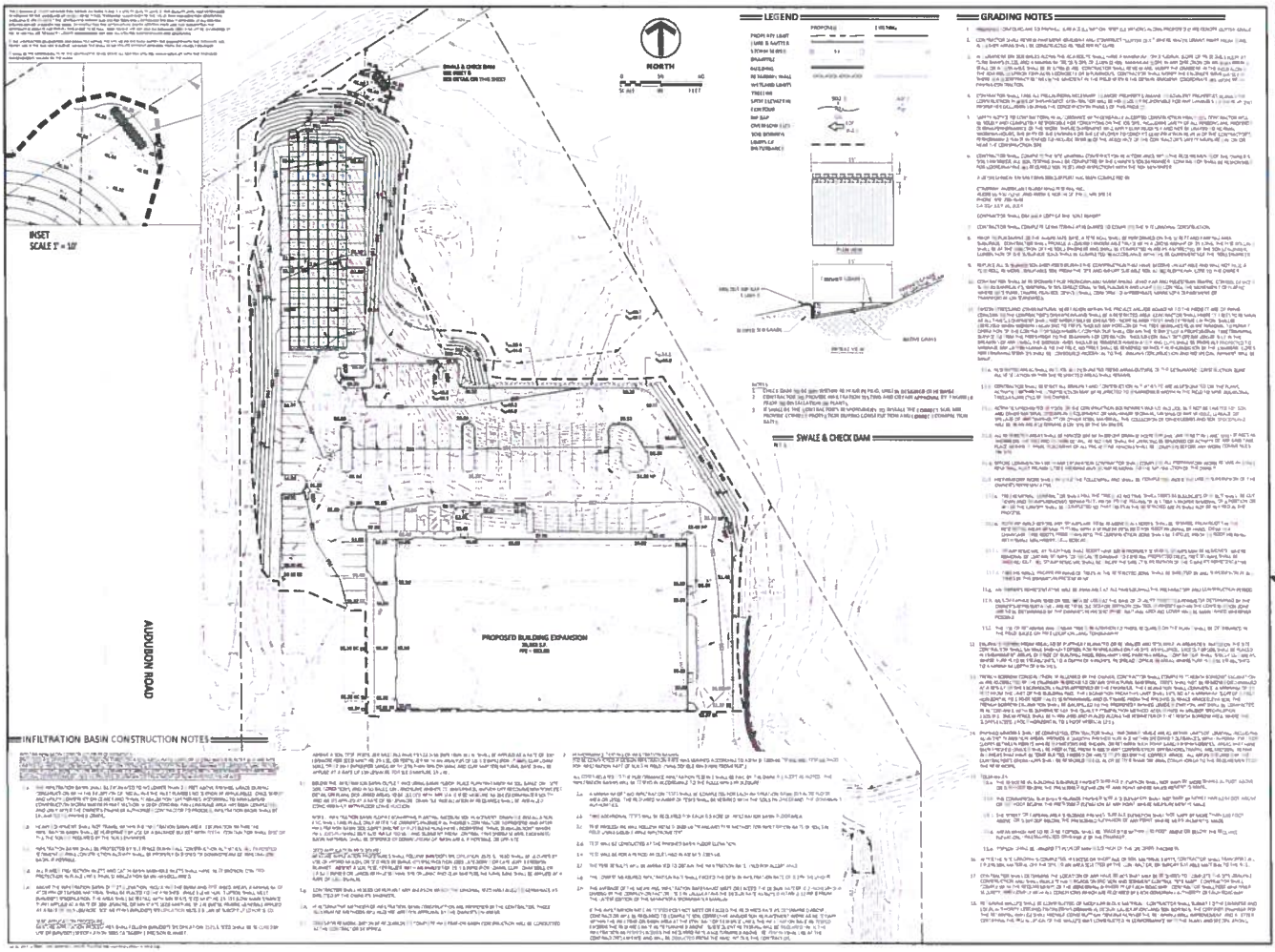
Revision History

No.	Date	By	Submittal / Revision

Sheet Title
SITE PLAN

Sheet No. Revision
C3.01

Project No. 20592



Sambatek
www.sambatek.com
12860 Whitewater Drive, Suite 300
Minnetonka, MN 55343
763 479 8090 telephone
763 478 8532 facsimile
Engineering | Surveying | Planning | Environmental

Client
EDEN TRACE CORPORATION

6821 SUNSET TRAIL CHANHASSEN, MN 55317

Project
IDI DISTRIBUTION BUILDING EXPANSION

Location
CHANHASSEN, MN

Certification

NOT FOR CONSTRUCTION

Summary

Designed By
Drawn By
Approved By
Book / Page
Phase

Revision History

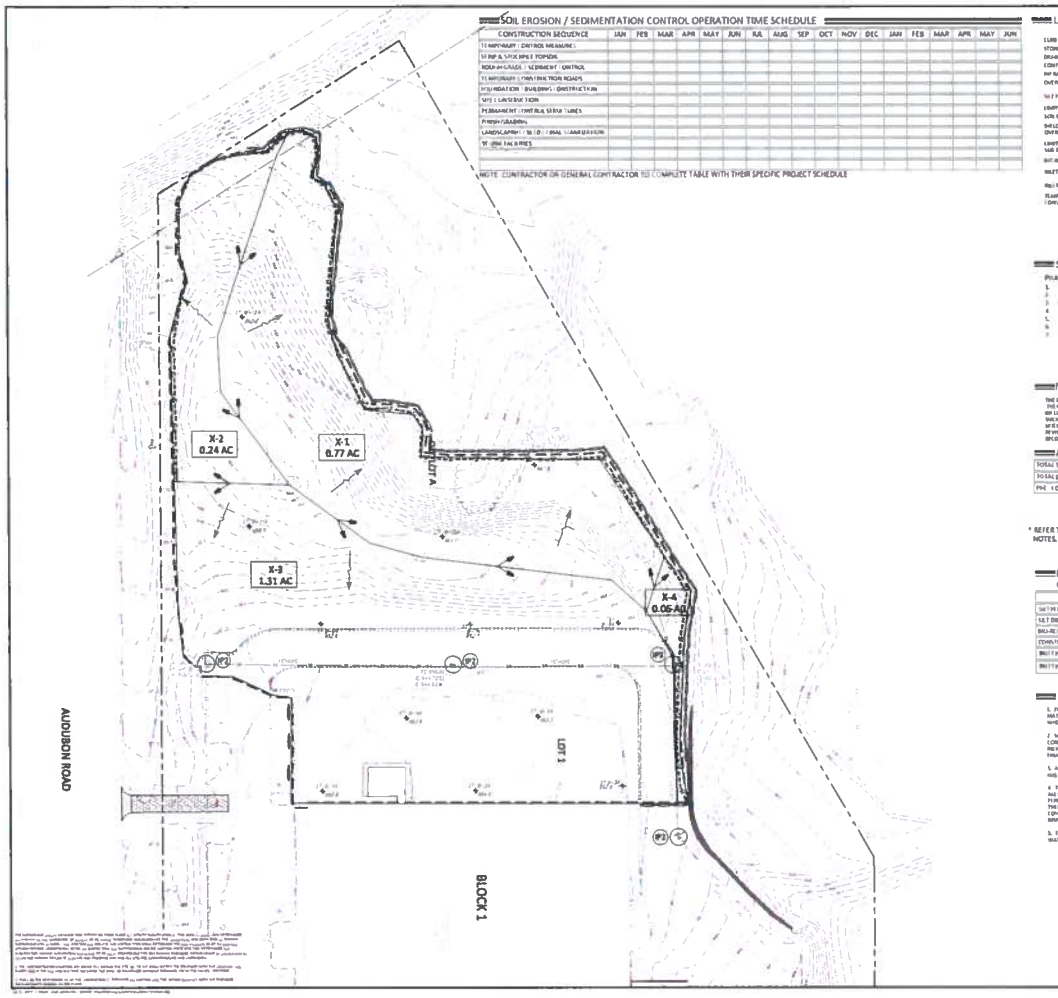
No.	Date	By	System #Pg / Revision
1	11/21/2014	TS	PRIOR TO PLANNING
2	12/15/14	TS	PRIOR TO PLANNING

Sheet Title
GRADING PLAN

Sheet No. C4.01

Revision

Project No. 20592



SOIL EROSION / SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
TEMPORARY CONTROL MEASURE:																		
STRIP & STOCKPILE TOPSOIL																		
ROUGH GRADE / SEDIMENT CONTROL																		
TEMPORARY CONSTRUCTION ROADS																		
INSTALLATION / BUILDING CONSTRUCTION																		
UTILITY INSTALLATION																		
PERMANENT CONTROL MEASURES:																		
PAVING/CURBING																		
LANDSCAPING / SEEDING / FINAL STABILIZATION																		
REMOVAL OF TEMPORARY MEASURES																		

NOTE: CONTRACTOR OR GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

LEGEND

PROPOSED / EXISTING

LOT LINE & EASEMENTS
STORM SEWER
DRAINTILE
CONTOUR
RIP RAP
OVERFLOW
SILT FENCE
LIMITS OF DISTURBANCE
SOIL BORINGS
DIRECTION OF OVERLAND FLOW
CONCRETE WASHOUT
SAND BAGS
INLET PROTECTION DEVICE
CULVERT PROTECTION DEVICE
TEMPORARY STONE CONSTRUCTION ENTRANCE

SEQUENCE OF CONSTRUCTION

PHASE I:

1. INSTALL PERIMETER CONSTRUCTION FENCING
2. PREPARE TEMPORARY PARKING AND STORAGE AREA
3. CONSTRUCT THE SILT FENCES ON THE SITE
4. INSTALL INLET PROTECTION DEVICES
5. CLEAR AND GRUB THE SITE
6. BEGIN GRADING THE SITE
7. START CONSTRUCTION OF BUILDING PAD AND STRUCTURES

NOTE TO CONTRACTOR

THE EROSION CONTROL PLAN SHEETS ALONG WITH THE NOTES ON THE SWPPP MUST BE KEPT UNTIL AFTER THE NOTICE OF TERMINATION IS FILED WITH THE MPCA. THE CONTRACTOR MUST UPDATE THE SWPPP AS NECESSARY TO ADD ADDITIONAL BEST MANAGEMENT PRACTICES AS DETERMINED BY THE SITE CONDITIONS. ANY ADDITIONS OR REVISIONS TO THE SWPPP MUST BE FILED WITH THE MPCA OR DELEGATED AUTHORITY BEFORE THE CHANGE IS IMPLEMENTED IN THE FIELD. THE SWPPP MUST BE AMENDED AND IMPLEMENTED WITHIN 7 DAYS OF ANY CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE WHICH HAS THE POTENTIAL FOR A SIGNIFICANT IMPACT ON THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE. THE CONTRACTOR SHALL KEEP A COPY OF THE SWPPP AND ALL AMENDMENTS ON SITE AT ALL TIMES.

AREA SUMMARY IN ACRES

TOTAL SITE AREA	4.7 AC±
TOTAL DISTURBED	2.39 AC±
PRE-CONSTRUCTION IMPERVIOUS	2.11 AC±

* REFER TO SHEET C5.03 FOR GENERAL NOTES, MAINTENANCE NOTES, LOCATION MAPS, AND STANDARD DETAILS

EROSION CONTROL MATERIALS QUANTITIES

ITEM	UNIT	QUANTITY
SILT FENCE	LINEAR FEET	1820
SILT FENCE	LINEAR FEET	0
BIO-ROLL	LINEAR FEET	760
CONSTRUCTION ENTRANCE	UNIT	1
INLET PROTECTION DEVICE (SP 1)	UNIT	0
INLET PROTECTION DEVICE (SP 2)	UNIT	4

ADDITIONAL NOTES

1. FINAL SITE STABILIZATION MEASURES MUST BE IN PLACE BY OCTOBER 15TH OR WITHIN 14 DAYS OF FINAL GRADING, WHICHEVER IS SOONER. ALL DISTURBED AREAS MUST BE SEEDED AND MULCHED OR SODDED. ANY SEEDING DONE AFTER SEPTEMBER 15TH MUST BE DORMANT SEEDED.
2. NOTIFY THE CONSTRUCTION SUPERVISOR OR OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION OF ANY CONSTRUCTION ENTRANCE. ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND ANY SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
3. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR PLATTING, WHICHEVER IS SOONER. ALL STOCKPILES MUST BE STABILIZED OR SURROUNDED BY SEDIMENT CONTROLS.
4. THE PERMITTEE MUST AT A MINIMUM PERFORM INSPECTIONS AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL BMPS AS FOLLOWS: INSPECTIONS AND MAINTENANCE MUST BE PERFORMED AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER ANY RAINFALL EVENT THAT RESULTS IN 0.5 INCHES OR MORE OF RAIN IN A 24-HOUR PERIOD. ANY DEFICIENCIES FOUND DURING INSPECTIONS MUST BE CORRECTED WITHIN 7 DAYS OF THE INSPECTION. IF THE PERMITTEE SHALL MAINTAIN A RECORD OF ALL INSPECTIONS AND MAINTENANCE CONDUCTED ON THE SITE AND ALL RAINFALL EVENTS GREATER THAN 0.5 INCHES IN A 24-HOUR PERIOD. THE RECORDS MUST INCLUDE THE DATE AND TIME OF INSPECTIONS, THE NAME OF THE PERSON CONDUCTING THE INSPECTIONS, FINDINGS OF INSPECTIONS, AND ACTIONS TAKEN AS A RESULT OF THE INSPECTIONS. THE RECORDS SHALL BE RETAINED WITH THE SWPPP. THE RECORDS MUST BE MADE AVAILABLE TO THE MPCA OR THE DELEGATED AUTHORITY AT THE TIME OF AN ON-SITE INSPECTION OR UPON REQUEST.
5. THE PERMITTEE SHALL REMOVE ALL TEMPORARY SYNTHETIC AND SOLID SEDIMENT CONTROL BMPS WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED. TRAPPED SEDIMENT REMAINING ON THE SITE AFTER REMOVING THE BMPS MUST BE DISPOSED OF AND STABILIZED.

NORTH

SCALE: 1" = 50' (0, 50, 100 FEET)

Sambatek
www.sambatek.com
17900 Wheeler Drive, Suite 300
Minnetrista, MN 55343
763 478 8010 telephone
763 478 8532 facsimile
Engineering | Surveying | Planning | Environmental

Client
EDEN TRACE CORPORATION
6821 SUNSET TRAIL CHANHASSEN, MN 55317

Project
IDI DISTRIBUTION BUILDING EXPANSION

Location
CHANHASSEN, MN

Certification
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.
Date: 11/21/2016
NOT FOR CONSTRUCTION

Summary
Designed: EB
Drawn: EB
Approved: EB
Check / Page: 1
Phase: 1
Initial Issued: 11/21/2016

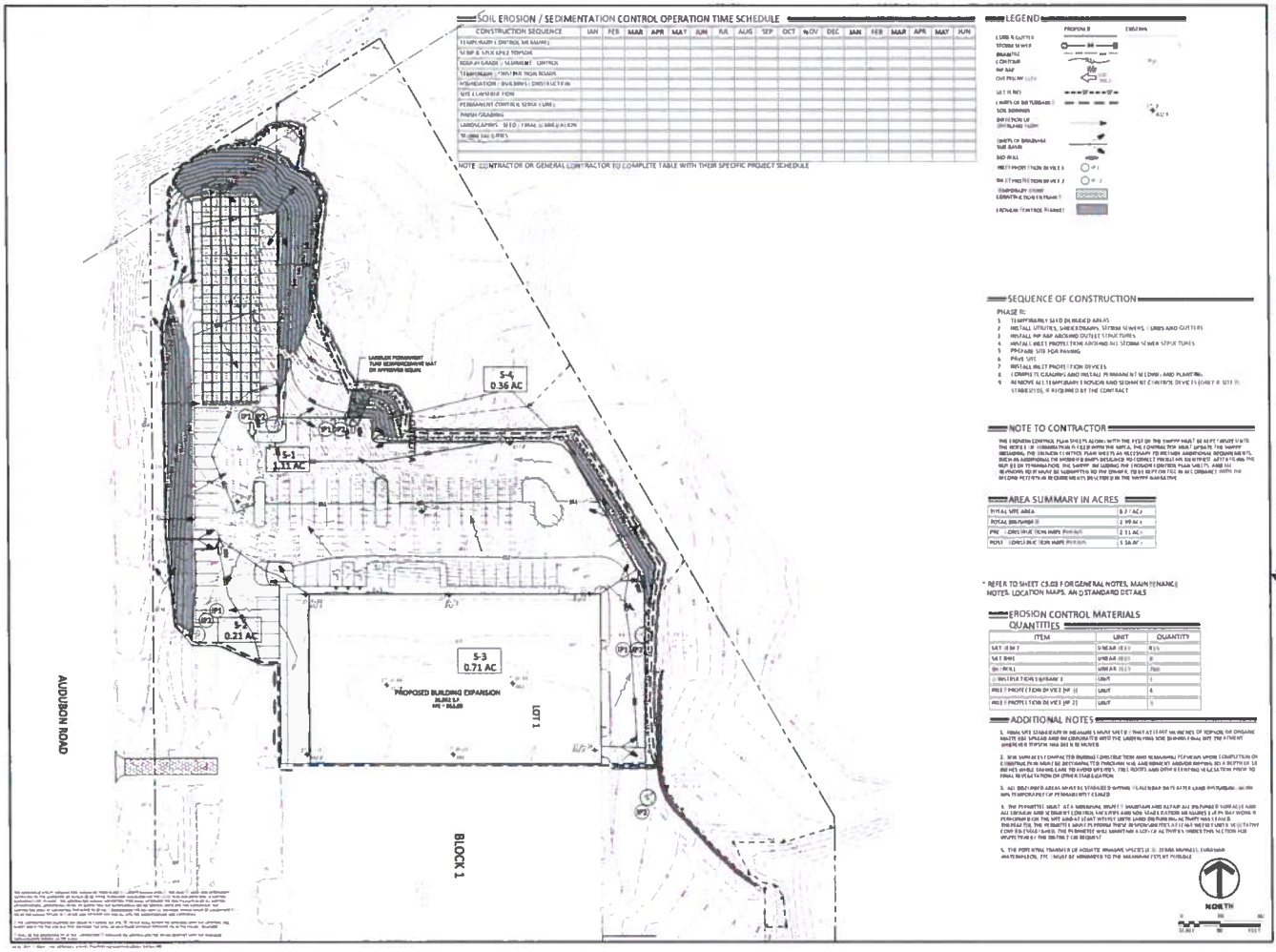
Revision History

No.	Date	By	Submittal / Revision
1	12/20/16	EB	CITY COMMENTS
2	01/04/17	EB	PERMIT SUBMITTAL
3	01/17/17	EB	REVISED PERMIT SUBMITTAL

Sheet Title
EROSION CONTROL PHASE 1

Sheet No. Revision
C5.01

Project No. 20592



SOIL EROSION / SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
TEMPORARY CONTROL MEASURE																		
STRIP & STOCKPILE TOPSOIL																		
ROUGH GRADE / SEDIMENT CONTROL																		
TEMPORARY CONTROL ROAD																		
MOBILIZATION / BUILDING CONSTRUCTION																		
SITE UTILITIES																		
PERMANENT CONTROL SEED / MULCH																		
FINISH GRADING																		
LANDSCAPING SEED / FINAL MULCH																		
REMOVE SILT FENCE																		

NOTE: CONTRACTOR OR GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

LEGEND

PROPOSED / EXISTING

- LIMIT OF DISTURBANCE
- SOIL BORINGS
- DIRECTION OF DRAINAGE
- TREE PROTECTION DEVICE 1
- TREE PROTECTION DEVICE 2
- TEMPORARY STOCKPILE LOCATION
- REMOVAL/CONTRACTOR PLANNED

SEQUENCE OF CONSTRUCTION

PHASE II:

1. TEMPORARILY SEED DISTURBED AREAS
2. INSTALL UTILITIES, STORM DRAINS, STORM SEWERS, CURBS AND GUTTERS
3. INSTALL RIP RAP AROUND OUTLET STRUCTURES
4. INSTALL INLET PROTECTION AROUND ALL STORM SEWER INLET TYPES
5. PREPARE SITE FOR PAVING
6. PAVE SITE
7. INSTALL INLET PROTECTION DEVICES
8. COMPLETE CLEANING AND INSTALL PERMANENT SEEDING AND PLANTING.
9. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (ONLY IF SITE IS STABILIZED), IF REQUIRED BY THE CONTRACT

NOTE TO CONTRACTOR

THE EROSION CONTROL PLAN SHEETS ALONG WITH THE KEY ON THE SWPPP MUST BE KEPT ONSITE UNTIL THE NOTICE OF TERMINATION FILED WITH THE MPCA. THE CONTRACTOR MUST UPDATE THE SWPPP DRAWINGS, THE GRADING ELEMENTS PLAN SHEETS AS NECESSARY TO INCLUDE ADDITIONAL REQUIREMENTS, SUCH AS ADDITIONAL OR MOVED BMPS BECAUSE OF CONFLICT PROBLEMS ENCOUNTERED AFTER PLANS ARE IMPLEMENTED OR TO ACCOMMODATE THE SWPPP THE GRADING AND DRAINAGE PLAN SHEETS, AND ALL REVISIONS TO IT MUST BE SUBMITTED TO THE OWNER, TO BE KEPT ON FILE IN ACCORDANCE WITH THE RECORD RETENTION REQUIREMENTS DESCRIBED IN THE SWPPP GENERAL PERMIT.

AREA SUMMARY IN ACRES

TOTAL SITE AREA	6.7 AC±
TOTAL DISTURBED	2.99 AC±
PRE-CONSTRUCTION IMPERVIOUS	2.11 AC±
POST-CONSTRUCTION IMPERVIOUS	5.36 AC±

REFER TO SHEET C5.03 FOR GENERAL NOTES, MAINTENANCE NOTES, LOCATION MAPS, AND STANDARD DETAILS

EROSION CONTROL MATERIALS QUANTITIES

ITEM	UNIT	QUANTITY
SILT FENCE	LINEAR FEET	815
SILT DIKE	LINEAR FEET	0
INLET PROTECTION	LINEAR FEET	780
CONSTRUCTION ENTRANCE	UNIT	1
INLET PROTECTION DEVICE (NP 1)	UNIT	4
INLET PROTECTION DEVICE (NP 2)	UNIT	0

ADDITIONAL NOTES

1. ALL SITE STABILIZATION MEASURES SHALL MEET OR EXCEED THE MINIMUM REQUIREMENTS OF SECTION 300 OF THE MINNESOTA NPDES GENERAL PERMIT NO. MNR100001. ALL SITE DISTURBANCE SHALL BE STABILIZED WITHIN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE.

2. ALL SWPPP DEVICES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT OF 0.5 INCHES OR GREATER. ALL REPAIRS SHALL BE MADE IMMEDIATELY AFTER INSPECTION. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF PROPERLY SO AS NOT TO CONTAMINATE WATERS OF THE STATE.

3. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN 7 CALENDAR DAYS AFTER LAND DISTURBING ACTIVITIES HAVE CEASED ON THAT PORTION OF THE SITE.

4. THE PERMITTEE MUST ACT A RESPONSIBLE PARTY / SMARTSAVER AND REPAIR ALL BMPS AS SOON AS ALL CHANGES ARE IDENTIFIED FROM THE SITE'S LAND USE, STAGES, EXTENT OR NATURE) & IF BMP DESIGN IS PERFORMED FOR THE MPCA GENERAL PERMIT NO. MNR100001. THE PERMITTEE MUST PERFORM THE SWPPP INSPECTIONS AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT OF 0.5 INCHES OR GREATER. THE PERMITTEE MUST PERFORM THESE INSPECTIONS AT LEAST ONCE EVERY 14 CALENDAR DAYS. THE PERMITTEE MUST MAINTAIN A LOG OF ALL BMPS THAT WERE INSPECTED, THAT WERE FOUND TO BE IN NEED OF MAINTENANCE, AND THAT WERE REPAIRED.

5. THE POLLUTION PREVENTION MANAGER SHALL BE RESPONSIBLE FOR MAINTAINING THE SWPPP.

NORTH

Sambatek
www.sambatek.com
12900 Whitewater Drive, Suite 200
Minnetonka, MN 55343
763 478 8010 telephone
763 478 8032 facsimile
Engineering | Surveying | Planning | Environmental

Client
EDEN TRACE CORPORATION

8821 SUNSET TRAIL CHANHASSEN, MN 55317

Project
IDI DISTRIBUTION BUILDING EXPANSION

Location
CHANHASSEN, MN

Certification
NOT FOR CONSTRUCTION

Summary
Designed
Drawn
Approved
Book / Page
Plotted
Initial Issued

Revision History

No.	Date	By	Submittal / Revision

Sheet Title
EROSION CONTROL PHASE 2

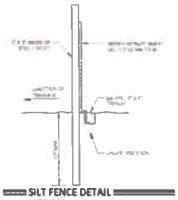
Sheet No. Revision
C5.02

Project No. 20592

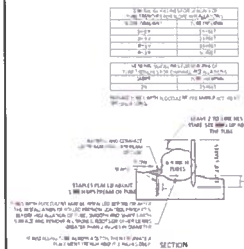
EROSION & SEDIMENTATION CONTROL NOTES & DETAILS / "SITE MAP"

SITE LOCATION MAP

USGS MAP

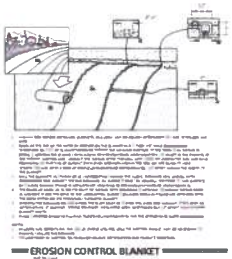


SILT FENCE DETAIL

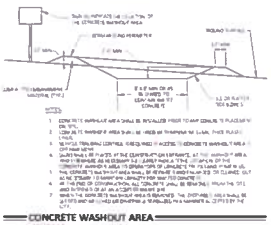


SECTION

PLAN



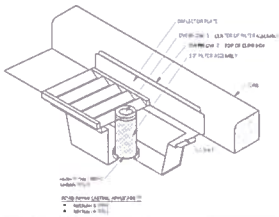
EROSION CONTROL BLANKET



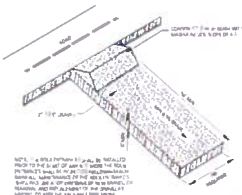
CONCRETE WASHOUT AREA

BIO-ROLLS

SILT FENCE INLET PROTECTION (IP-1)



ROAD DRAIN INLET PROTECTION (IP-2)



ROCK ENTRANCE DRIVE

GENERAL EROSION NOTES

MAINTENANCE NOTES

Sambatek
www.sambatek.com
12860 Whitewater Drive, Suite 300
Minnetonka, MN 55343
763 476 6010 telephone
763 476 8532 facsimile
Engineering | Surveying | Planning | Environmental

Client
EDEN TRACE CORPORATION

4821 SUNSET TRAIL CHANHASSEN, MN 55317

Project
IDI DISTRIBUTION BUILDING EXPANSION

Location
CHANHASSEN, MN

Certification

NOT FOR CONSTRUCTION

Summary
Designed | Drawn
Approved | Issued / Plot
Plotted

Revision History

No.	Date	By	Submittal / Revision
1	10/17/17	ES	PLANNING SUBMITTAL
2	12/04/17	ES	PLANNING SUBMITTAL
3	12/15/17	ES	PLANNING SUBMITTAL

Sheet Title
EROSION CONTROL DETAILS

Sheet No. C5.03 **Revision**

Project No. 20592

Sambatek
www.sambatek.com
17882 Whitewater Drive, Suite 200
Minnetonka, MN 55343
763 478 8010 telephone
763 476 2532 facsimile
Engineering | Surveying | Planning | Environmental

Client

EDEN TRACE CORPORATION

6815 SUNSET TRAIL CHANHASSEN, MN 55317

Project

IDI DISTRIBUTION BUILDING EXPANSION

Location

CHANHASSEN, MN

Certification

NOT FOR CONSTRUCTION

Summary

Revision History

No.	Date	By	Submittal / Revision

Sheet Title

SWPPP NARRATIVE

Sheet No. **Revision**

C5.04

Project No. 20592

3.3 CHEMICAL / POLYMER AND SEDIMENT TREATMENT BMPS

BMP DESCRIPTION

INSTALLATION SCHEDULE:

MAINTENANCE AND INSPECTION REQUIREMENTS

RESPONSIBLE STAFF ASSIGNED TO COMPLETING

3.4 ADDITIONAL EROSION AND SEDIMENT CONTROL BMPS

BMP DESCRIPTION

INSTALLATION SCHEDULE:

MAINTENANCE AND INSPECTION REQUIREMENTS

RESPONSIBLE STAFF ASSIGNED TO COMPLETING

SECTION 3: DEWATERING & BASIN DRAINING

3.1 DEWATERING AND BASIN DRAINING

SECTION 4: GOOD HOUSEKEEPING BMPS

4.1 MATERIAL HANDLING AND WASTE MANAGEMENT

4.2 ESTABLISH PROPER STORAGE, HANDLING & DISPOSAL PRACTICES

4.3 DESIGNATE WASHOUT AREAS

BMP DESCRIPTION

INSTALLATION SCHEDULE:

MAINTENANCE AND INSPECTION REQUIREMENTS

RESPONSIBLE STAFF ASSIGNED TO COMPLETING

4.4 ESTABLISH PROPER EQUIPMENT/VEHICLE FUELING AND MAINTENANCE PRACTICES

4.3 CONTROL EQUIPMENT/VEHICLE WASHING

4.6 SPILL PREVENTION AND CONTROL PLAN

SECTION 5: POST-CONSTRUCTION BMPS

BMP DESCRIPTION

INSTALLATION SCHEDULE:

MAINTENANCE AND INSPECTION REQUIREMENTS

RESPONSIBLE STAFF ASSIGNED TO COMPLETING

SECTION 6: INSPECTIONS

6.1 INSPECTORS

6.2 DELEGATION OF AUTHORITY

6.3 CORRECTIVE ACTION LOG

SECTION 7: RECORD KEEPING AND TRAINING

7.1 RECORDS KEEPING

7.2 RECORD RETENTION

7.3 TRAINING

SECTION 8: FINAL STABILIZATION

Sambatek
www.sambatek.com
12900 Whitewater Drive, Suite 300
Minnetonka, MN 55343
763 478 8010 telephone
763 478 8532 facsimile
Engineering | Surveying | Planning | Environmental

Client

EDEN TRACE CORPORATION

8821 SUNSET TRAIL CHANHASSEN, MN 55317

Project

IDI DISTRIBUTION BUILDING EXPANSION

Location

CHANHASSEN, MN

Certification

NOT FOR CONSTRUCTION

Summary

Designed: TK | Drawn: DE
Approved: EN | Date: / Plot
Plotted: 15:1 | Initial Issued: 11/17/2021

Revision History

No.	Date	By	Submittal / Revision
1	12/16/21	EB	CITY COMMENTS
2	03/23/22	EB	PERMIT SUBMITTAL
3	05/25/22	EB	MPCA COMMENTS

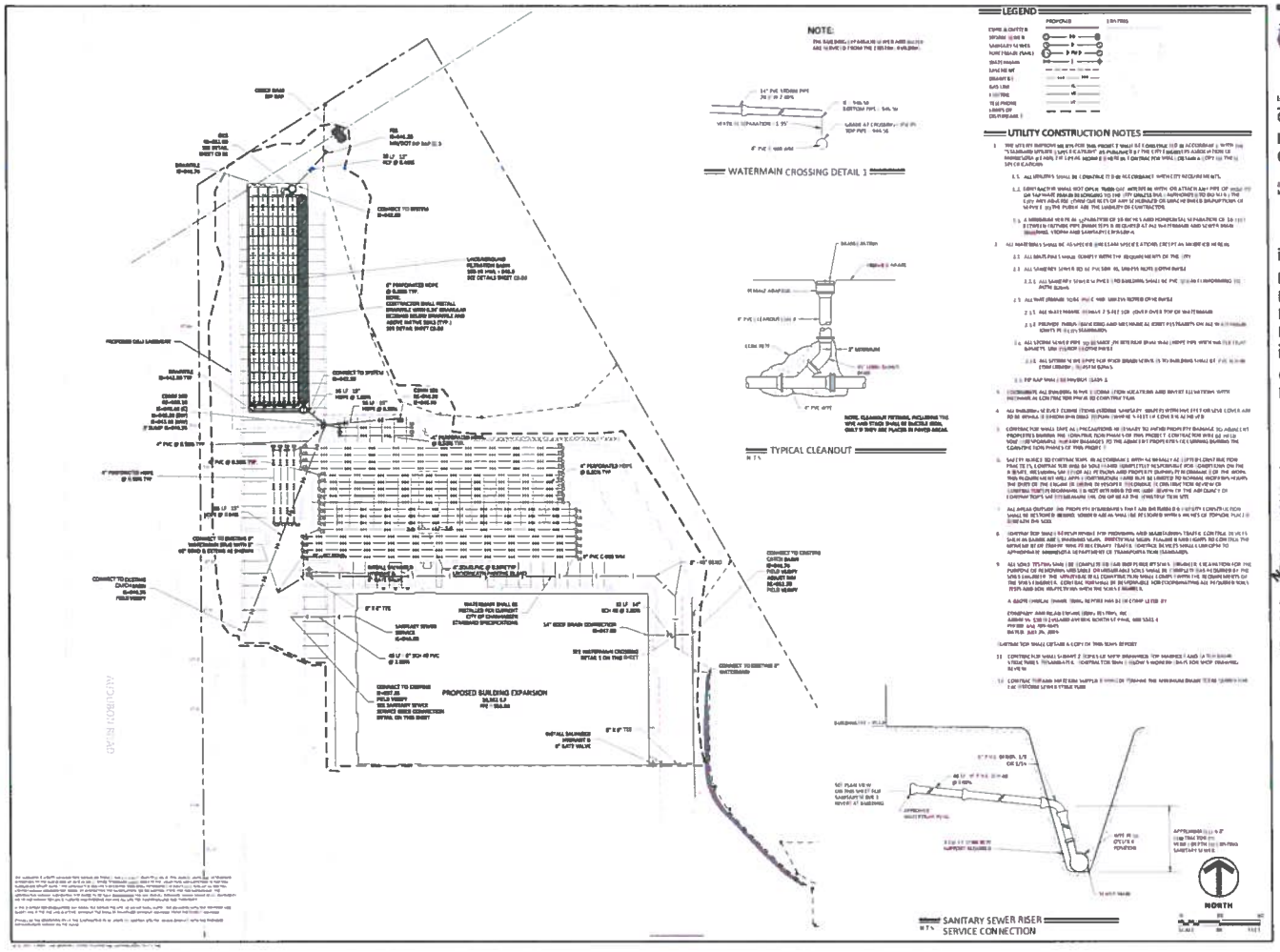
Sheet Title

SWPPP NARRATIVE

Sheet No. C5.05

Revision

Project No. 20592



LEGEND

UTILITY CONSTRUCTION NOTES

Sambatek
www.sambatek.com
17300 Westwater Drive, Suite 300
Minnetonka, MN 55343
763 476 8010 telephone
763 476 8532 facsimile
Engineering | Surveying | Planning | Environmental

Client
EDEN TRACE CORPORATION

6821 SUNSET TRAIL CHANHASSEN, MN 55317

Project
IDI DISTRIBUTION BUILDING EXPANSION

Location
CHANHASSEN, MN

Certification

NOT FOR CONSTRUCTION

Summary
Designed
Drawn
Approved
Project

Revision History

No.	Date	By	Submittal / Revision

Sheet Title
UTILITY PLAN

Sheet No. Revision
C6.01

Project No. 20592

WETLAND BUFFER MONUMENT DETAIL

PERVIOUS CONCRETE TYPICAL SECTION

OCS FOR UNDERGROUND INFILTRATION BASIN

Sambatek
www.sambatek.com
12900 Whitewater Drive, Suite 200
Minnetonka, MN 55343
763.476.3010 telephone
763.476.8532 facsimile
Engineering | Surveying | Planning | Environmental

Client
EDEN TRACE CORPORATION

8821 SUNSET TRAIL CHANHASSEN, MN 55317

Project
IDI DISTRIBUTION BUILDING EXPANSION

Location
CHANHASSEN, MN

Certification

NOT FOR CONSTRUCTION

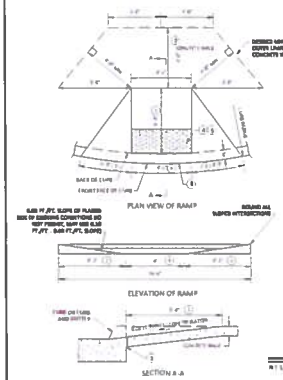
Summary
Designed | Drawn
Approved | Book / Pg
Phase | Initial Project

Revision History
No. Date By Submittal / Revision

Sheet Title
DETAIL SHEET

Sheet No. Revision
C9.01

Project No. 20592

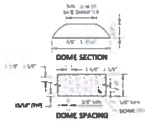


PLAN VIEW OF RAMP

ELEVATION OF RAMP

SECTION A-A

PEDESTRIAN CURB RAMP



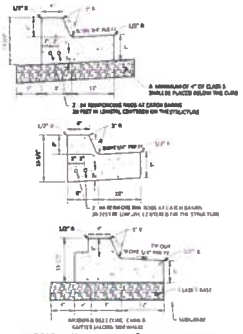
DOME SECTION

DOME SPACING

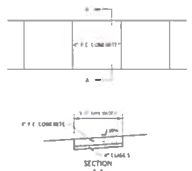
NOTE:

THE CURB AND GUTTER TRANSITION ON THE RAMP WILL BE PAID PER AS LINEAL FOOT OF CONCRETE CURB OR CONCRETE CURB AND GUTTER. THE RAMP AREA WILL BE PAID AS SQUARE FEET OF CONCRETE WALK, UNLESS SPECIFIED OTHERWISE. THE TRUNCATED DOME AREA WILL BE CONSIDERED INCIDENTAL.

1. 1/2 INCH PREFORMED JOINT FILLER MATERIAL, AASHTO M 213.
2. MATCH WITH CURB HEIGHT. EXAMPLE SHOWN IS FOR 6" CURB HEIGHT.
3. 6" TO 8" IS THE ALLOWED OFFSET OF THE DETECTABLE WARNINGS/TRUNCATED DOME AREA FROM THE FRONT FACE OF CURB, OR PLACE THE DETECTABLE WARNING AT THE BACK OF CURB.
4. ADA REQUIRED TRUNCATED DOME AREA SHALL BE 2' 0" MIN. IN DIRECTION OF TRAVEL AND SHALL EXTEND THE FULL WIDTH (2' 0" OR 4' 0" TYP.) OF THE CURB RAMP. THUS 2' 0" BY 2' 0" OR 4' 0" SHOWN (TYP.). TRUNCATED DOME AREA SHALL CONTRAST VISUALLY WITH THE ADJACENT WALKING SURFACE. THE DOME TRUNCATED DOME AREA SHALL BE A LIGHT COLOR (LIGHT GRAY, WHITE, OR YELLOW) WHEN THE ADJACENT SIDEWALK IS A DARK COLOR. THE DARKER TRUNCATED DOME AREA SHALL BE A DARK COLOR (RED, BLACK, DARK GRAY, OR DARK YELLOW) WHEN THE ADJACENT SIDEWALK IS A "WHITE" OR LIGHT GRAY CONCRETE COLOR.
5. THE TRUNCATED DOME AREA MAY BE EITHER GRANITE PAVER OR STAMPED CONCRETE, INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. GRANITE PAVERS SHALL BE 4" MINIMUM THICKNESS WITH SAWED BEVELED EDGES, FREE OF ANY CRACKS, CHIPS OR COLOR DISCREPANCIES. STAMPED CONCRETE SHALL MEET REQUIREMENTS OF 3000 CONCRETE MIX AND HAVE APPROVED MONOCHROMATIC COLORING.
6. 4'-0" FOR NEW CONSTRUCTION, 3'-0" ALLOWED FOR RETROFIT OR RECONSTRUCTION PROJECTS.
7. WHERE POSSIBLE, PROVIDE A PATH OF TRAVEL 4'0" WIDE BEHIND THE PEDESTRIAN RAMP. A SQUARE 5' FLAT CITY SIDEWALK SLOPE) 5' X 5' LANDING WILL ALLOW WHEELCHAIRS TO MANEUVER AROUND THE PEDESTRIAN RAMP



B612 CONCRETE CURB & GUTTER

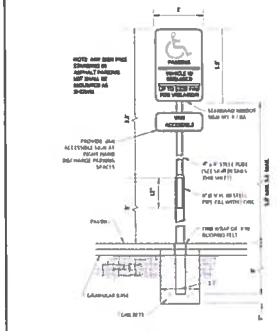


SECTION
A-A

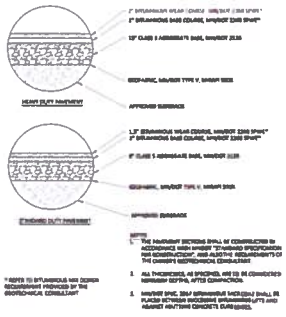
GENERAL NOTES FOR CONCRETE CONSTRUCTION:

1. THE CURB SETS AND WALKS SHALL BE CONSTRUCTED TO THE ALIGNMENT WITH THE SQUARED WITH OR ABUTMENT'S SHOWED WITH A FINISH NOTE CONTRARY FLOW.
2. ADA CURB CONSTRUCTION SHALL BE ACCEPTED AT 2 FEET ON EITHER SIDE AND 2 DEPARTURE ZONES SHALL BE 1/4 FEET AT A MAXIMUM OF 1/4 FEET ON EITHER SIDE AND WHERE SIDEWALK ABUTS CURB, STRAIGHT AND FLUSH WITH SIDEWALK DEPTH. AT ALL EXPANSION JOINTS, SAND AS HIGH AS POSSIBLE BUT NOT MORE THAN THE LINE OF TRAFFIC.

CONCRETE SIDEWALK



ACCESSIBLE PARKING SIGN



HEAVY DUTY PAVEMENT

* REFER TO BITUMINOUS MIX DESIGN REQUIREMENT PROVIDED BY THE GEOTECHNICAL CONSULTANT

NOTES:

1. THE PAVEMENT SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MNDOT "STANDARD SPECIFICATION FOR CONSTRUCTION", AND ALSOTHE REQUIREMENTS OF THE OWNER'S GEOTECHNICAL CONSULTANT.
2. ALL THICKNESSES, AS SPECIFIED, ARE TO BE CONSIDERED MINIMUM DEPTHS, AFTER COMPACTION.
3. MNDOT SPEC. 2564 (MINIMUM VOIDS [3%] SHALL BE PLACED BETWEEN BITUMINOUS PAVEMENT LIFTS AND AGAINST ADJACENT CONCRETE CURB EDGES.

PAVEMENT SECTIONS

Sambatek
www.sambatek.com
7900 Wintergreen Drive, Suite 300
Minnetonka, MN 55343
763 479 0010 telephone
763 479 0520 facsimile
Engineering | Surveying | Planning | Environmental

Client

EDEN TRACE CORPORATION

8821 SUNSET TRAIL CHANHASSEN, MN 55317

Project

IDI DISTRIBUTION BUILDING EXPANSION

Location

CHANHASSEN, MN

Certification

NOT FOR CONSTRUCTION

Summary

Designed | Drawn
Approved | Seal | Plot
Plotted | Initial Issued

Revision History

No.	Date	By	Submittal / Revision
1	10/24/24	KB	City Re-Submittal
2	11/27/24	KB	Update for Planning
3	12/20/24	KB	Site Plan Resubmittal

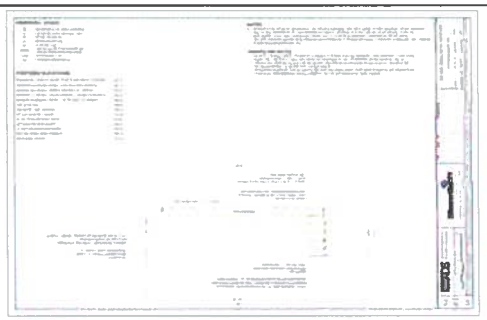
Sheet Title

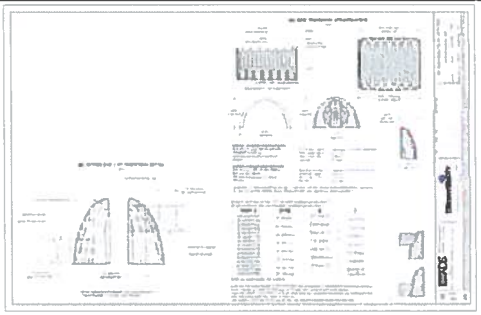
DETAIL SHEET

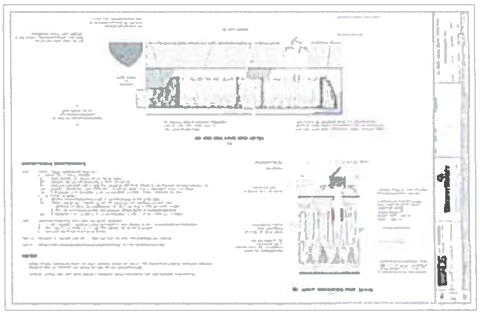
Sheet No. Revision

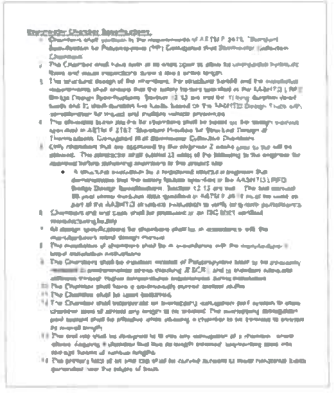
C9.02

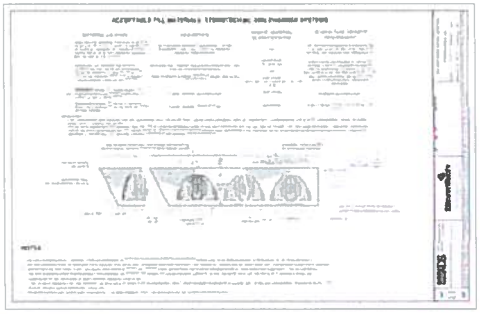
Project No. 20592

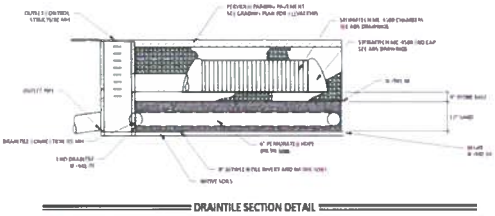












DRAINTILE SECTION DETAIL

Sambatek
www.sambatek.com
12800 Whitewater Drive, Suite 309
Minnetonka, MN 55343
763 478 6010 telephone
763 478 6132 facsimile
Engineering | Surveying | Planning | Environmental

Client

EDEN TRACE CORPORATION

8821 SUNSET TRAIL CHANHASSEN, MN 55317

Project

IDI DISTRIBUTION BUILDING EXPANSION

Location

CHANHASSEN, MN

Certification

NOT FOR CONSTRUCTION

Summary

Designed
Drawn
Approved
Check / Pkgr
Plan
Initial Issued

Revision History

No.	Date	By	Submittal / Revision

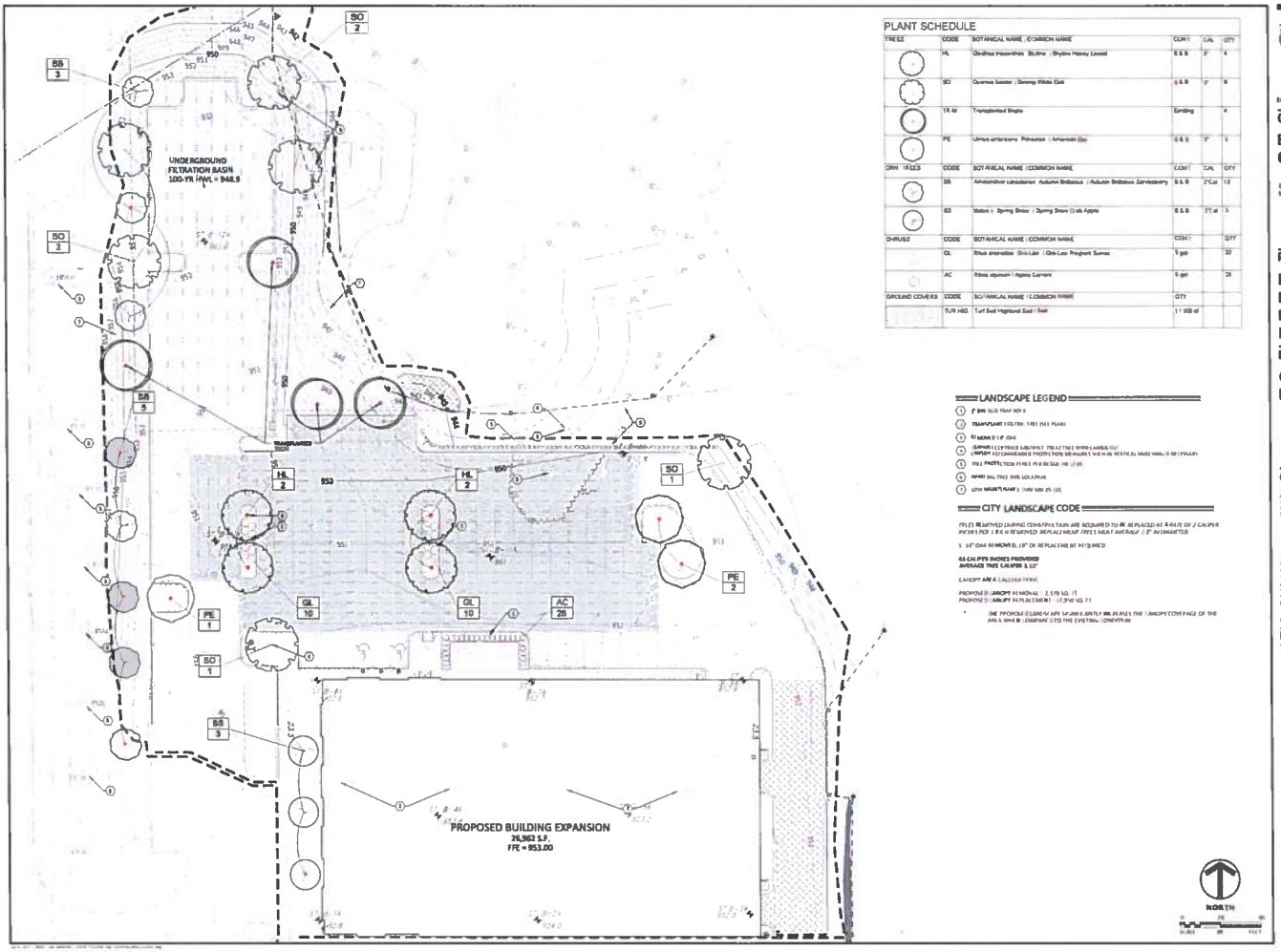
Sheet Title

DETAIL SHEET

Sheet No. Revision

C9.03

Project No. 20592



PLANT SCHEDULE

TREES	CODE	BOTANICAL NAME / COMMON NAME	CONT	CAL	QTY
	HL	Gleditsia triacanthos 'Skyline' / Skyline Honey Locust	B & B	2"	4
	SO	Quercus bicolor / Swamp White Oak	B & B	2"	6
	TR MI	Transplanted Maple	Existing		4
	PE	Ulmus americana 'Princeton' / American Elm	B & B	2"	3
ORN TREES	CODE	BOTANICAL NAME / COMMON NAME	CONT	CAL	QTY
	SB	Amelanchier canadensis 'Autumn Brilliance' / Autumn Brilliance Serviceberry	B & B	2"Cal	10
	SS	Syringa reticulata 'Ivory Silk' / Ivory Silk Japanese Tree Lilac	B & B	2"Cal	5
SHRUBS	CODE	BOTANICAL NAME / COMMON NAME	CONT		QTY
	GL	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	5 gal		20
	AC	Rosa alpina 'Alpina' / Alpine Cumano	5 gal		28
GROUND COVERS	CODE	BOTANICAL NAME / COMMON NAME	QTY		
	TUR SOD	Turf Sod Highland Sod / Sod	11,900 sf		

LANDSCAPE LEGEND

1. 6' [illegible]
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]
7. [illegible]

CITY LANDSCAPE CODE

TREES REMOVED DURING CONSTRUCTION ARE REQUIRED TO BE REPLACED AT A RATE OF 2 CALIPER INCHES PER 1 INCH REMOVED. REPLACEMENT TREES MUST AVERAGE 2.5" IN DIAMETER.

1 - 14" OAK REMOVED, 28" OF REPLACEMENT MITIGATED

65 CALIPER INCHES PROVIDED
AVERAGE TREE CALIPER 3.33"

CANOPY AREA CALCULATIONS

PROPOSED CANOPY REMOVAL = 2,178 SQ. FT.
PROPOSED CANOPY PLANTING = 17,240 SQ. FT.

* THE PROPOSED CANOPY APPROXIMATELY MATCHES THE CANOPY COVERAGE OF THE AREA WHICH OBSTRUCTED THE EXISTING CANOPY.

Sambatek
www.sambatek.com
12900 Whitewater Drive, Suite 200
Minnetrista, MN 55343
763 476 8010 telephone
763 476 8532 facsimile
Engineering | Surveying | Planning | Environmental

Client
EDEN TRACE CORPORATION

8821 SUNSET TRAIL CHANHASSEN, MN 55317

Project
IDI DISTRIBUTION BUILDING EXPANSION

Location
CHANHASSEN, MN

Certification

Jeff McKinney
Registration No. 157 84 Date: 07/24/2019

Summary
Designed: JM Drawn: AB
Approved: JM Check: Page:
Plotted: Initial Issued:

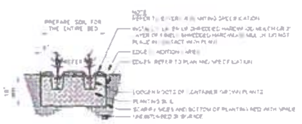
Revision History

No.	Date	By	Submittal / Revision
1	7/24/19	JM	CITY SUBMITTAL REVIEW
2	8/16/19	JM	AMENDED CITY REVIEW
3	10/18/19	AB	PLANTING REVISIONS
4	10/30/19	JM	INCREASED LANDMARK TREES
5	11/27/19	JM	ADDED SITE DETAILS
6	12/16/19	JM	REVISED PER CITY COMMENTS
7	01/10/20	AB	REVISED LANDMARK TREES
8	01/13/20	JM	ADDED TREE PROTECTION
9	01/15/20	JM	ADDED TREE PROTECTION

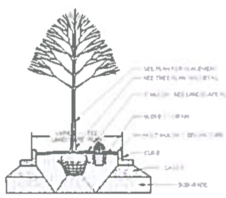
Sheet Title
LANDSCAPE PLAN

Sheet No. L1.01 **Revision**

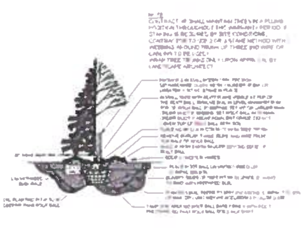
Project No. 20592



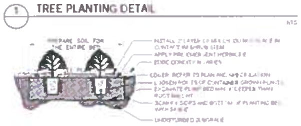
3 PERENNIAL PLANTING DETAIL



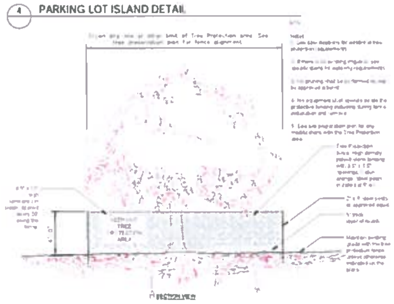
4 PARKING LOT ISLAND DETAIL



1 TREE PLANTING DETAIL



2 SHRUB PLANTING DETAIL



5 TREE PROTECTION

NOTES

GENERAL NOTES:

[illegible]

PLANTING NOTES

[illegible]

TURF NOTES:

[illegible]

IRRIGATION NOTES:

[illegible]

Sambatek
www.sambatek.com
12800 Whitewater Drive, Suite 300
Minnetonka, MN 55343
763 476 6010 telephone
763 476 8532 facsimile
Engineering | Surveying | Planning | Environmental

Client

EDEN TRACE CORPORATION

8821 SUNSET TRAIL CHANHASSEN, MN 55317

Project

IDI DISTRIBUTION BUILDING EXPANSION

Location

CHANHASSEN, MN

Certification

Josh McKinney

Summary

Revision History

No. Date By Submittal / Revision

Sheet Title

LANDSCAPE DETAILS

Sheet No. **Revision**

L2.01

Project No. 20592

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

18681 Lake Drive East
Chanhassen, MN 55317
952-607-6512
www.rpbcwd.org

Riley Purgatory Bluff Creek Watershed District Permit Application Review

Permit No: 2017-037

Received complete: May 19, 2017

Applicant: United Properties, Nick McKelvey

Consultant: ISG, Ryan Anderson

Project: The Venue – Demolition of an existing building and construction of a mixed use commercial building along with appurtenant site work, utilities, stormwater management, and landscaping. Two underground filtration practices and tree trenches are proposed to provide stormwater quantity, quality, and rate control.

Location: 525 West 78th Street, Chanhassen, MN

Reviewer: Terry Jeffery, Permit Coordinator

Rules: Applicable rules checked

	Rule B: Floodplain Management		Rule H: Appropriation of Public Waters
X	Rule C: Erosion and Sediment Control		Rule I: Appropriation of Groundwater
	Rule D: Wetland and Creek Buffers	X	Rule J: Stormwater Management
	Rule E: Dredging and Sediment Removal		Rule K: Variances and Exceptions
	Rule F: Shoreline/Streambank Stabilization	X	Rule L: Permit Fees
	Rule G: Waterbody Crossings	X	Rule M: Financial Assurances

Rule Conformance Summary

Rule	Issue		Conforms to RBPCWD Rules?	Comments
C	**Erosion Control Plan**		See comment	See Rule Specific Permit Condition C1.
J	**Stormwater Management**	Rate	Yes	
		Volume	Yes	
		Water Quality	Yes	
		Low Floor Elev.	Yes	
		Maintenance	See Comment	See Rule Specific Permit Condition J1.
L	**Permit Fee**		Yes	$1,500 was received on May 19, 2017
M	**Financial Assurance**		See Comment	The financial assurance has been calculated at $226,904.

Project Description

The project proposes to demolish an existing commercial building and construct in its place a mixed use commercial venue. In conjunction with the new building, modifications will be made to the parking lot including realignment of landscaping islands and the installation of two underground filtration best management practices will provide stormwater quantity and quality control. Minor utilities work is also proposed including the relocation of a fire hydrant and installation of new sewer and water services.

The project site information is summarized below:

1. Total Site Area: 4.022 acres
2. Existing Site Impervious Area: 3.776 acres
3. Post Construction Site Impervious: 3.660 acres
4. New (Increase) in Site Impervious Area: 0 acres (-10,715 square feet) (3% decrease in site impervious area)
5. Disturbed impervious surface: 1.747 acres (46% of existing site impervious area)
6. Total Disturbed Area: 1.854 acres

Exhibits:

1. Permit Application dated June 16, 2017
2. Design Plan Sheets (22 Plan Sheets) dated May 19, 2017 (revised 7/10/17)
3. Stormwater Management Plan dated May 19, 2017 (Updated June 16, 2017 and July 5, 2017)
4. MIDS Model – Existing Conditions dated May 18, 2017
5. MIDS Model – Proposed Conditions dated May 18, 2017
6. Existing and Proposed Conditions HydroCAD Model received May 19, 2017
7. Geotechnical Evaluation Report by Braun Intertec dated May 5, 2017
8. Post Construction Stormwater Management Maintenance Plan, undated, received May 19, 2017
9. Response to Comments Letter dated June 16, 2017

Rule Specific Permit Conditions

Rule C: Erosion and Sediment Control

Because the project will alter 1.85 acres (80,760 square feet) of land-surface area the project must conform to the requirements in the RPBCWD Erosion and Sediment Control rule (Rule C, Subsection 2.1).

The erosion control plan prepared by ISG includes installation of, perimeter control where applicable, inlet protection for storm sewer catch basins, a rock construction entrance, placement of a minimum of

6 inches of topsoil, decompaction of areas compacted during construction, and retention of native topsoil onsite. The contractor to be responsible for erosion control at the site needs to be determined. To conform to the RPBCWD Rule C requirements the following revisions are needed:

C1. The Applicant must provide the name and contact information of the individual responsible for erosion and sediment control at the site. RPBCWD must be notified if the responsible party changes during the permit term.

Rule J: Stormwater Management

Because the project will disturb 1.747 acres (76,099 square feet) the site, the project must meet the criteria of RPBCWD's Stormwater Management rule (Rule J, Subsection 2.3). As less than 50% of the existing 3.776 acres of impervious surface will be disturbed and the imperviousness of the entire site will be decreased, the criteria in section 3 only apply to the disturbed areas and any newly constructed impervious surface. The total impervious area to be treated is 1.85 acres.

The developer is proposing a combination of two on the site underground stormwater best management practices: a Prinsco Stormwater Quality Unit and a Stormtech Isolator Row. The developer is also proposing a tree trench with an underdrain. These practices will be used to provide the required rate control, volume abstraction and water quality management on the site.

Rate Control

To meet the rate control criteria listed in Subsection 3.1.a, the 2-, 10-, and 100-year post development peak runoff rates must be equal to or less than the existing discharge rates at all locations where stormwater leaves the site. The Applicant used a HydroCAD hydrologic model to simulate runoff rates for pre- and post-development conditions for the 2-, 10-, and 100-year frequency storm events using a nested rainfall distribution, and a 100-year frequency, 10-day snowmelt event. The existing and proposed 2-, 10-, and 100-year frequency discharges from the site are summarized in the table below.

Modeled Discharge Location	2-Year Discharge (cfs)		10-Year Discharge (cfs)		100-Year Discharge (cfs)		10-Day Snowmelt (cfs)	
	Ex	Prop	Ex	Prop	Ex	Prop	Ex	Prop
78th Street	3.43	3.29	5.33	5.12	8.73	8.37	0.07	0.06
Market Boulevard	15.84	11.16	24.69	18.52	40.46	34.02	0.30	0.24

The proposed project conforms to RPBCWD Rule J, Subsection 3.1.a

Volume Abstraction

Subsection 3.1.b of Rule J requires the abstraction onsite of 1.1 inches of runoff from all new and disturbed impervious surface on the parcel. An abstraction volume of 6,715 cubic feet is required from the 1.85 acres (80,586 square feet) of reconstructed and new impervious area on the project for volume retention. The developer is proposing a tree trench with an underdrain in addition to the water quality practices to be discussed later. The table below summarizes the volume abstraction on the site.

Required Abstraction Depth (inches)	Required Abstraction Volume (cubic feet)	Provided Abstraction Volume (cubic feet)
1.1	6,715	247

Soil borings performed by Braun Intertec, Inc. show that soils in the project area below the upper layer of topsoil and fill consist primarily of clays to the depths of 20± feet below existing site grades. In addition, four (4) permeability tests were performed in the areas of the proposed best management practices. The results found hydraulic conductivities of between $9.39x10^{-7}$ and $1.68x10^{-8}$. This is effectively impervious and precludes the ability to provide abstraction through infiltration. The boring logs across the site indicate a consistent soil profile throughout the site support a determination that the infiltrometer tests would yield similar results throughout the site. Further, the numerous cross access, parking, and utility easements encumbering the property significantly limit the potential location for any BMPs. All of this, combined with a lack of green space for irrigation reuse does result in this being considered a restricted site under Rule J, subsection 3.3. Consideration is being given to including a green roof on the retail building portion of the project. At an average cost of $20/square foot, this roof is estimated to cost more than $400,000. The applicant is seeking grant opportunities to defray some of those costs. However, without additional outside funding, the applicant contends and staff concurs that the green roof is not practicable.

Rule J, subsection 3.3.b. requires that the applicant provide "abstraction of runoff onsite to the maximum extent practicable and treatment of all runoff to the standard in paragraph 3.1c." The applicant is proposing a tree trench to provide abstraction via evapotranspiration. This is located southeasterly on the site. Due to topographic constraints precluding positive drainage to the tree trench, the trench is maximized to consume the effective area. The tree trench will provide 4% of the regulatory abstraction requirement or 0.044 inch of runoff from new and fully reconstructed impervious surface. Given the encumbrances on the site – soils, easements, prohibitive cost of certain BMPS, and grades – staff concurs that this is the maximum extent practicable.

Water Quality Management

Subsection 3.1.c of Rule J requires the Applicant provide for at least 60 percent annual removal efficiency for total phosphorus (TP), and at least 90 percent annual removal efficiency for total suspended solids (TSS) from site runoff. The developer is proposing a combination of two underground stormwater best management practices: a Prinsco Stormwater Quality Unit and a Stormtech Isolator Row on the site. The developer is also proposing a tree trench with an underdrain. The table below summarized the water quality treatment provided for the site. Based on information reviewed, the proposed project conforms to Rule J, Subsection 3.1.c.

Pollutant of Interest	Regulated Site Loading (lbs/yr)	Required Load Removal (lbs/yr)[1]	Provided Load Reduction (lbs/yr)
Total Suspended Solids (TSS)	571.2	514.1 (90%)	589.1 (102.9%)[2]
Total Phosphorus (TP)	3.114	1.886 (60%)	2.008 (64.5%)

[1]Required load reduction is calculated based on the removal criteria in Rule J, Subsection 3.1c and the new and reconstructed impervious area site load.

[2]Removals exceed 100% as the proposed best management practices will be treating offsite water being captured by the systems.

Low floor Elevation

No structure may be constructed or reconstructed such that its lowest floor elevation is less than 2 feet above the 100-year event flood elevation and no stormwater management system may be constructed or reconstructed in a manner that brings the low floor elevation of an adjacent structure into noncompliance according to Rule J, Subsection 3.6.

The low floor elevations of the structure and the adjacent stormwater management feature are summarized below.

Location Riparian to Stormwater Facility	Low Floor Elevation of Building (feet)	100-year Event Flood Elevation of Adjacent Stormwater Facility (feet)	Freeboard (feet)
South of Building	963.13	955.96	7.17

The proposed freeboard separation is compliant with Rule J, subsection 3.6.

Maintenance

Subsection 3.7 of Rule J requires the submission of maintenance plan. All stormwater management structures and facilities must be designed for maintenance access and properly maintained in perpetuity to assure that they continue to function as designed.

J1. Permit applicant must provide a draft maintenance and inspection plan, including the off-site detention pond. Once approved by RPBCWD, the plan must be recorded on the deed in a form acceptable to the District.

Rule L: Permit Fee:

Fees for the project are:

Rule C & J $1,500

Rule M: Financial Assurance:

Rules C: Silt fence: 420 L.F. x $2.50/L.F. =.....$1,050

Restoration: 1.85 acres x $2,500/acre =.....$4,625

Rules J: Stormtech system = ...$130,000

Rules J: Prinsco system = ...$8,000

Rules J: Tree trench = ...$15,000

Contingency (10%) $15,867

Administration (30%) $52,362

Total Financial Assurance.....$226,904

Applicable General Requirements:

1. The RPBCWD Administrator shall be notified at least three days prior to commencement of work.
2. Construction shall be consistent with the plans and specifications approved by the District as a part of the permitting process. The date of the approved plans and specifications is listed on the permit.
3. Return or allowed expiration of any remaining surety and permit close out is dependent on the permit holder providing proof that all required documents have been recorded and providing as-built drawings that show that the project was constructed as approved by the Managers and in conformance with the RPBCWD rules and regulations.

Findings

1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.

2. The proposed project will conform to Rule C and Rule J if the Rule Specific Permit Conditions listed above are met.

Recommendation:

Approval, contingent upon:

1. Continued compliance with General Requirements.
2. Financial Assurance in the amount of $226,904.
3. Receipt in recordation a maintenance declaration for the stormwater management facilities. A draft must be approved by the District prior to recordation.

By accepting the permit, when issued, the applicant agrees to the following stipulations:

1. Per Rule J Subsection 4.5, upon completion of the site work, the permittee must submit as-built drawings demonstrating that at the time of final stabilization, stormwater facilities conform to design specifications as approved by the District.

Board Action

It was moved by Manager _____, seconded by Manager _____ to approve permit application No. 2017-037 with the conditions recommended by staff.

```
ERROR: syntaxerror
OFFENDING COMMAND:              OS/2 ._x       'cvt        ,   TfpgmRxb        nglyf: V>

STACK:

-mark-
/sfnts
false
```

Approve Master Water Steward Project

Applicant	Address	City	Project Description	Project Cost	Amount Requested	Water captured	P removal	TSS removal	Buffer/ stabilize	Staff Rec
Lackey	8007 Island Road	Eden Prairie	Gutters & rainbarrel install for capture & reuse	$1613.16	$1209.87	80 gal/1 inch rainfall	NA	NA	NA	Fund at $1209.87

This is a Master Water Steward capstone project. As a part of the training program, stewards must plan and implement a water quality project, utilizing their watershed district's cost share program. The two stewards, Shari Lackey and Duane Marschel, are creating a capture and reuse system on a gazebo in their yard. They are installing gutters and rainbarrels on the gazebo, and the water will be used to water a previously installed shoreline buffer. They received guidance from the district's technical adviser from Carver County. It is the opinion of staff and the technical adviser that the project as designed be approved for funding.

Staff recommend the Master Water Steward capstone project in the table above be approved for funding at the amount listed.

Board Action

It was moved by Manager _____, seconded by Manager _____ to approve funding for the Master Water Steward project in the amount of $1209.87.

Cost share grant application
2017

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

Do not fill in gray boxes. District use only.

Applicant type (check one) ☒ Homeowner ☐ Non-profit - 501(c)(3)
☐ Business or corporation ☐ Public agency or local government unit ☐ School

Project type (check all that apply) ☐ Raingarden ☐ Vegetated swale ☐ Lake/creek/wetland buffer
☐ Shoreline/bank stabilization ☐ Wetland restoration ☐ Pervious hard surface ☐ Infiltration basin
☐ Conservation practice ☒ Other Recapturing storm water

Applicant information

Works or resides in district? ✓

Name Duane Marschel Address 8607 Island Road
City/State/Zip Eden Prairie, MN 55347
Phone 952-303-6660 Alt phone 952-956-4330 Email sjlackey@comcast.

Primary contact

☒ Same as applicant (leave blank)

Name _____ Address _____
City/State/Zip _____
Phone _____ Alt phone _____ Email _____

Project location

Address 8607 Island Road City/State/Zip Eden Prairie, MN 55347
Property Identification Number (PID) 1711622240012
Property owner(s) Shari Lackey / Duane Marschel

Project located in district? ✓

Project summary

Tributary to a waterbody? No ☐ Yes, indirectly ☐ Yes, adjacent ✓

Title Recapture rainwater for shoreline stabilization
Total project cost $16,613.16 Grant amount requested $10,209.87
Estimated start date As soon as approved Estimated completion date 10/1/17
Sub-watershed Mitchell Lake

Project located in priority drainage area?

Is project tributary to a water body? ☐ No, water remains on site ☐ Yes, indirectly ☒ Yes, directly adjacent

2-3 sentence project description

Recapture rain water from gazebo - add gutters/downspouts that lead to rain barrels with pea gravel overflow

Is this work required as a part of a permit? ☒ No ☐ Yes

(If yes: describe how the project provides water quality treatment beyond permit requirements on the next page.)

Site visit

One of the requirements for a complete application is a site visit from district staff.

Have you had a site visit? ☐ No ☒ Yes

(If you answered no, please contact staff to schedule one: 952-607-6512)

Project details

Do not fill in gray boxes. District use only.

Checklist To be considered complete the following must be included with the application.

- [x] location map
- [ ] project time-line
- [ ] site plan & design schematics
- [ ] proof of property ownership
- [x] itemized budget or contractor bid
- [ ] plant list & planting plan (if project includes plants)

Is time-line reasonable?

Is budget reasonable?

Is plan comprehensive?

Does plant list conform to district's approved plant list?

Description

Describe the current site conditions, as well as site history, and past management.

Native plants planted last year. We have no way to water plants for proper maintenance. Gutters/downspouts leading to 2 rain barrels to capture rain water.

What are the project objectives and expected outcomes? Give any additional project details.

- Capture much needed water
- maintain plant growth, wildflowers, sedges grasses
- Reuse of stormwater
-

Are there multiple objectives?

Does the project have well-defined, measurable results?

List other key participants and their roles

Land of Lakes Seamless gutters - install gutters and downspouts with diverters.

Does the project demonstrate strong partnerships & support?

Which cost share goals does the project support? (check all that apply)

- [x] Improve watershed resources
- [x] Increase awareness of the vulnerability of watershed resources
- [x] Increase familiarity with and acceptance of solutions to improve waters
- [x] Foster water resource stewardship

How does the project support the goals you checked?

Influence neighborhood.
Recapture rainfall to reuse for vegetation
We will take care of gutters / downspouts and rainbarrels. We will disconnect rainbarrels for winter.
Pea rocks to avoid erosion and create permeable surface.

Project details (continued)

Do not fill in gray boxes.
District use only.

Benefits Estimate the project benefits in terms of restoration and/or **annual** pollution reduction. If you are working with a designer or contractor, they can provide these numbers. If you need help, contact the district cost share program coordinator.

Benefit	Amount
Water captured	~~150~~ gal / year
Water infiltrated	gal / year
Phosphorus removed	lbs / year
Sediment removed	lbs / year
Land restored	ft²

80 gal/1 inch rain per rainfall

100 gallon capacity

Does the project provide water quality treatment?

Does the project provide restoration?

How will you share the project results with your community?

Through neighborhood board
Friends, family
Children in the neighborhood

Is there educational value to the project?

Will the project be visible to the public?

Are there other projects that could be initiated as a result of this one?

Yes, thru other neighboors applying for cost sharing grants to support environment
Storm water drains all marked and identified.

Evaluation

How will the project be monitored and evaluated?

By Masterwater Stewards
Shari Lackey Duane Marschel

Maintenance agreement

I acknowledge that receipt of a grant is contingent upon agreeing to maintain the project for the number of years outlined in the cost share guidelines document ☑ Yes

Authorization

Name of landowner or responsible party Duane Marschel

Signature Duane Marschel Date 7/24/17

Cost Estimating Worksheet

Labor Costs (Contractors, Consultants, In-Kind Labor)

Service Provider	Task	# Hours	Rate/Hour	Requested Funds from RPBCWD	Matching / In-Kind Funds	Total
LAND OF LAKES (SEE QUOTE)	GUTTER INSTALLATION		$ /hr	$ 460	$	$ 460
APPLICANT	INSTALLING RAINBARREL BASES	6	$ 10 /hr	$	$ 60	$ 60
APPLICANT	APPLYING PEA GRAVEL	4	$ 10 /hr	$	$ 40	$ 40
			$ /hr	$	$	$
			$ /hr	$	$	$
			$ /hr	$	$	$
			$ /hr	$	$	$
			$ /hr	$	$	$
			$ /hr	$	$	$
			Total:	$	$ 100	$ 560

Project Materials

Materials	Unit Costs	Total # of Units	Requested Funds from RPBCWD	Matching / In-Kind Funds	Total
GUTTERS + DOWNSPOUTS, (SEE QUOTE)	500	1	$ 500	$	$ 500
50 GALLON RAINBARREL (WOODIDEAS) - IMPNSO - DBR	160.30	2	$	$	$ 320.60
PEAROCK FOR RAINBARREL OVERFLOW (0.5 CU FT)	2.60	30	$	$	$ 78
50 ft EXPANDABLE DOUBLE LATEX HOSE	48.32	2	$	$	$ 96.64
RAIN BARREL STAND (MENARDS 2781974)	28.96	2	$	$	$ 57.92
~~GRAVITY BASES FOR RAINBARRELS~~			$	$	$
			$	$	$
		Total:	$	$	$ 1053.16

(A) Total Requested Funds from RPBCWD*: $ 1249.87 (Labor + Project Materials)
(B) Total Matching/In-Kind Funds: $_____ (Labor + Project Materials)
(C) Project Total: $_____ (A + B) 403.29
1653.16

Please note: total requested funds (A) cannot be more than 75% of the Project Total (C).

If you have questions about the Cost Estimating Worksheet, please contact the Riley-Purgatory-Bluff Creek Watershed District office at 952-294-5976.

Gutter Proposal

Land of Lakes Seamless Gutters

5407 Boone Avenue North, New Hope, MN 55428 • 651-285-2301

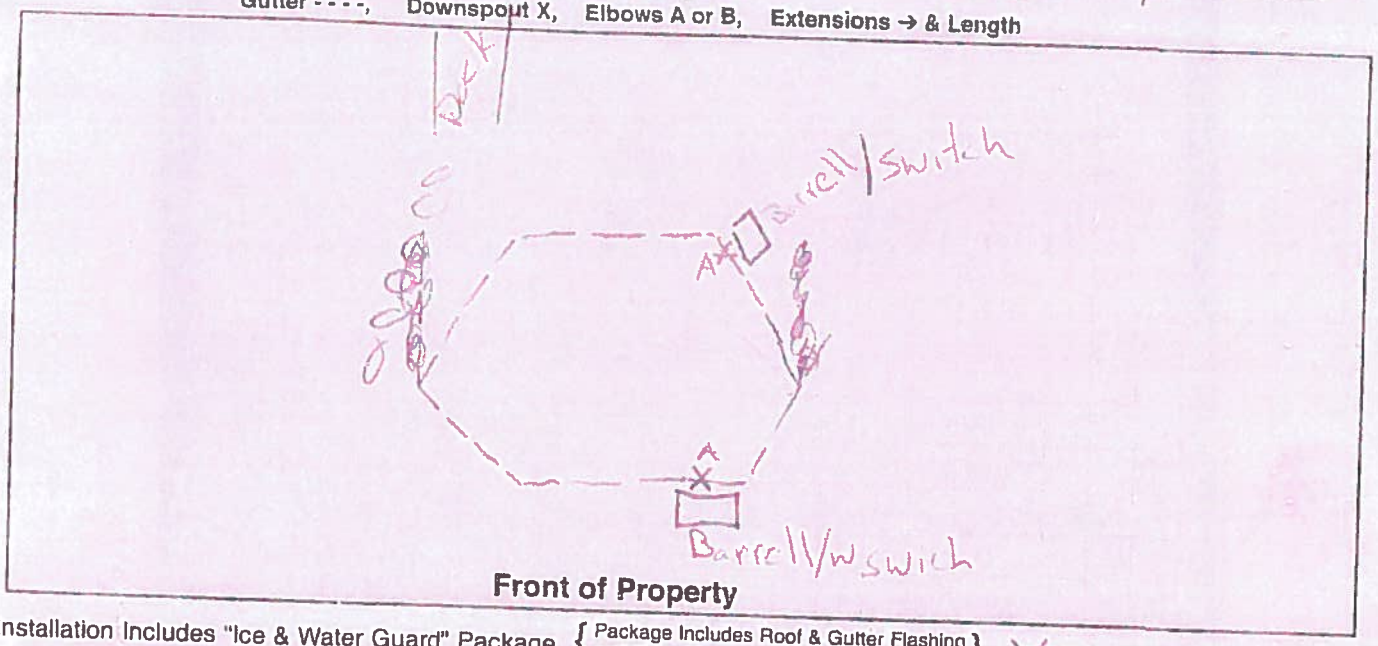
Name Sherry & Duane Lackey Address 8007 Island Rd

City Eden Prairie, MN Zip 55347 Phone 952.303.6660

Date 6/9/2017 Email sjlackey@comcast.net

Gutter Diagram

Gutter - - - -, Downspout X, Elbows A or B, Extensions → & Length



Front of Property

* Installation Includes "Ice & Water Guard" Package { Package Includes Roof & Gutter Flashing and Extra Heavy Duty Support Brackets } ☒ YES ☐ NO

* Remove & Dispose of Existing Gutter & Downspouts ☐ YES ☐ Only as Described Below

INSTALL GUTTERS & DOWNSPOUTS AS FOLLOWS: True Life Time Warranty!!

6 Bav Milers

 # Gutter FT 60 **# Downspout FT** **Power Location** Generator **Call Before Installation** ☒ YES ☐ NO

Price Includes all labor, materials, tax, Clean-up and "Lifetime Warranty" on workmanship & materials

A. TOTAL PRICE ..... $ 960.00 + Materials cost

B. DOWN PAYMENT ..... $ _____

C. UNPAID BALANCE ..... $ _____

GUTTER COLOR 5" Stat Bronze

DOWNSPOUT COLOR 3x11 Stat Bronze

BALANCE IS DUE ON COMPLETION THANK YOU

Leaf Protection: Gutter Dome

Seller shall not be liable for delays caused by strikes, weather conditions, delays in obtaining materials, or other causes beyond its control.
Seller shall not be liable for repairs due to wind, hail, ice or other causes beyond it's control. A late fee of 1-1/2% may be assessed on past due balances.
Buyer shall be liable for any structure repairs or changes necessary to properly complete the installation.
Seller shall use the existing metal roof apron as flashing when it cannot be removed due to roofing underlayment attachment.

NOTICE TO THE BUYER

1. **Any person or company suppling labor or materials for improvement to your property may file a lien against your property if that person or company is not paid for the contributions.**
2. **Do not sign this contract before you read it or if it contains any blank spaces.**
3. **You are entitled to an exact copy of the contract you sign, completly signed.**
4. **No work will be considered unless herin specified. No verbal agreements recognized.**

Authorized Signature

Buyer's Signature

Crew-While Copy Office- Yellow Copy Customer- Pink Copy

These rainbarrels sold at Purchase thru Amazon

Gutter Proposal

Land of Lakes Seamless Gutters

5407 Bygone Avenue North, New Hope, MN 55428 • 651-285-2301

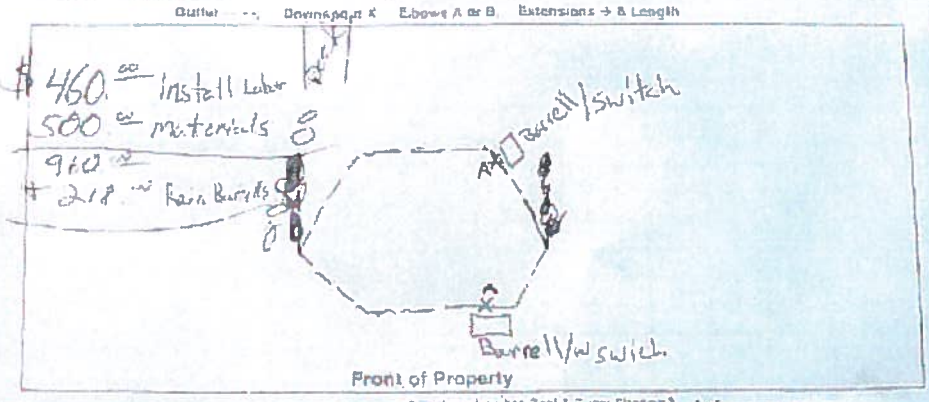
Name Sherry & Duane Lee Address 8007 Island Rd

City Isle, MN Zip 56342 Phone 952.303.6660

Date 6/9/2012 Email SJLacke@comcast.net

Gutter Diagram

Gutter —, Downspout x Elbows A or B Extensions → & Length



* Installation includes "Ice & Water Guard" Package { Package includes Vent & Gutter Flashing and Extra 8-Way Strap Support Brackets } ☒ YES ☐ NO

* Removal & Disposal of existing Gutter & Downspouts ☐ YES ☐ Only as Described Below

INSTALL GUTTERS & DOWNSPOUTS AS FOLLOWS: True Lifetime Warranty!!

~~Rain Barrells add $218.00~~ Additional to below price

6 Box miters

Gutter FT 60 # Downspout FT 12Ft 3 Sides Power Location Generator Call Before Installation ☒ YES ☐ NO

Price includes all labor, materials, tax, Clean-up and "Lifetime Warrant," on workmanship & materials

A TOTAL PRICE . . . $ 960.00 + Rainbarrell cost GUTTER COLOR 5" Std Bronze

B DOWN PAYMENT . . $ _____ DOWNSPOUT COLOR 3x4 Std Bronze

C. UNPAID BALANCE . $ _____ BALANCE IS DUE ON COMPLETION THANK YOU Leaf Protection Gutter Dome

Seller shall not be liable for delays caused by strikes, weather conditions, delays in delivering materials or other causes beyond its control. A late fee of 1.5%/mo. be assessed on past due balances

Buyer shall be liable for any additional repairs or changes necessary to property complete the installation

Seller shall use the existing metal and wood as flashing where it cannot be removed due to existing underlayment attachment.

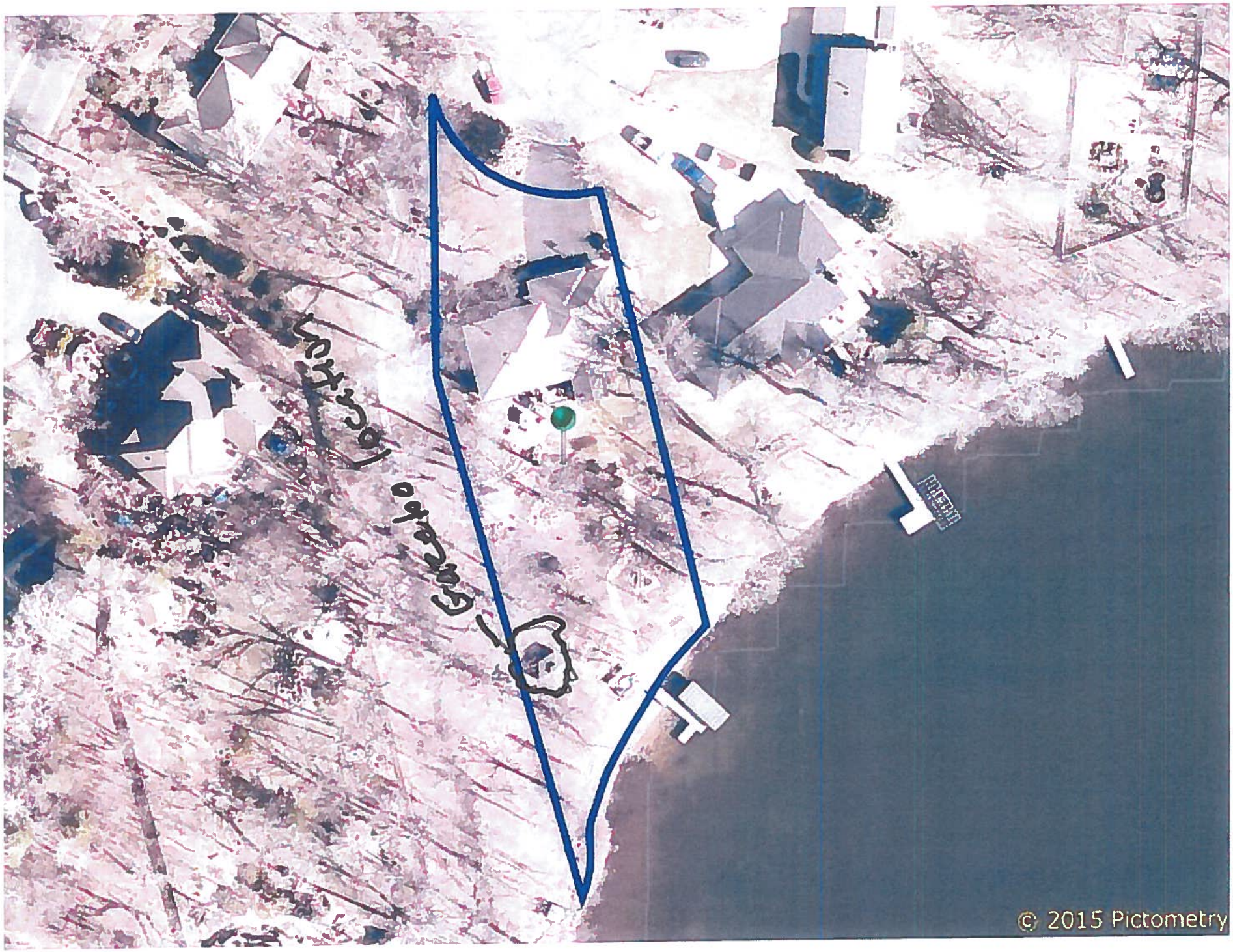
NOTICE TO THE BUYER

1. Any person or company supplying labor or materials for improvement to your property may file a lien against your property if that person or company is not paid for the contributions.
2. Do not sign this contract before you read it or if it contains any blank spaces.
3. You are entitled to an exact copy of the contract you sign, completly signed.
4. No work will be considered unless herin specified, No verbal agreements recognized.

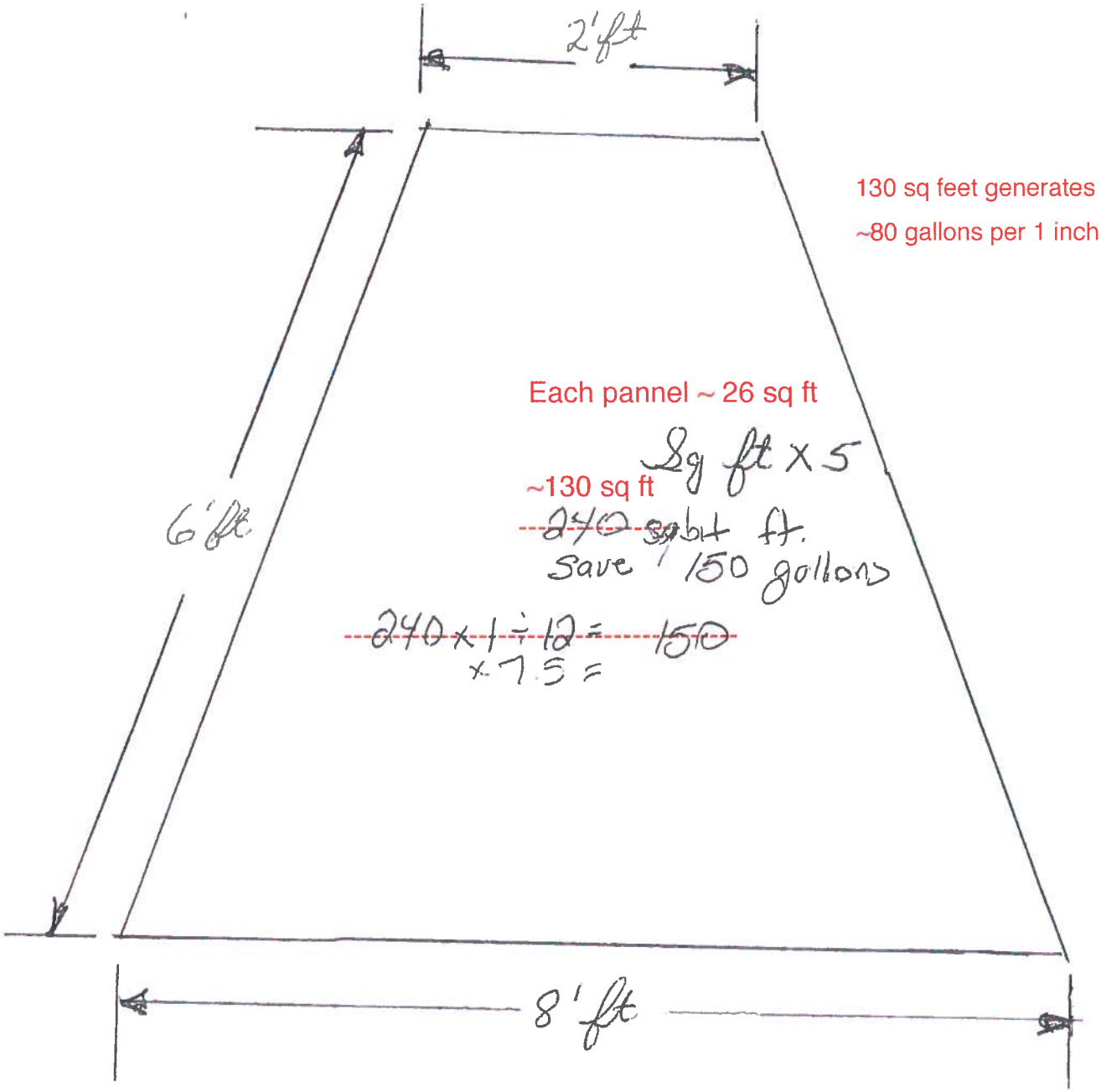
Authorized Signature

Buyer's Signature

Crew-White Copy Office-Yellow Copy Customer-Pink Copy


Concordia Terrace
© 2015 Pictometry

5/05



130 sq feet generates

~80 gallons per 1 inch rainfall

Each pannel ~ 26 sq ft

Sq ft x 5

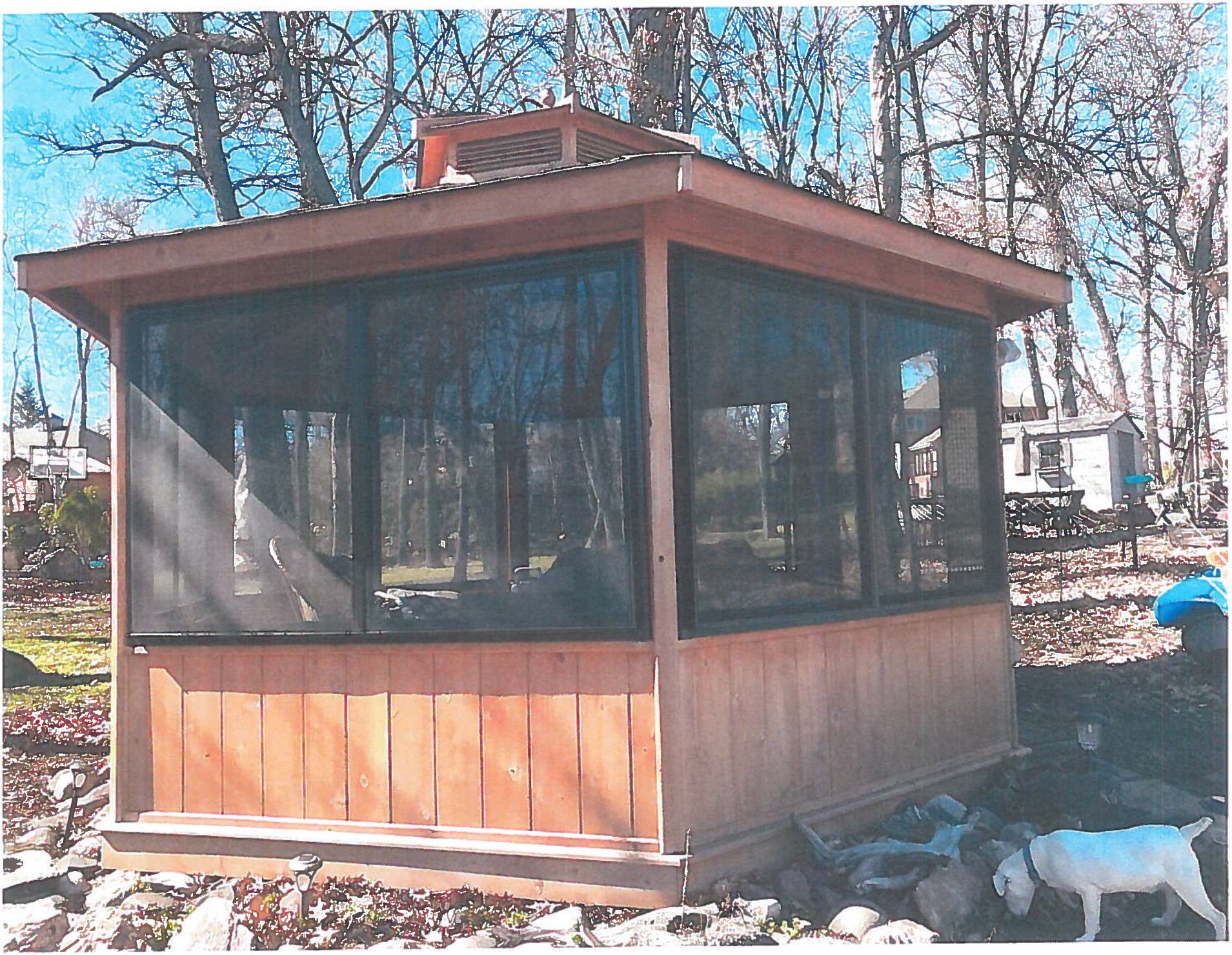
~130 sq ft

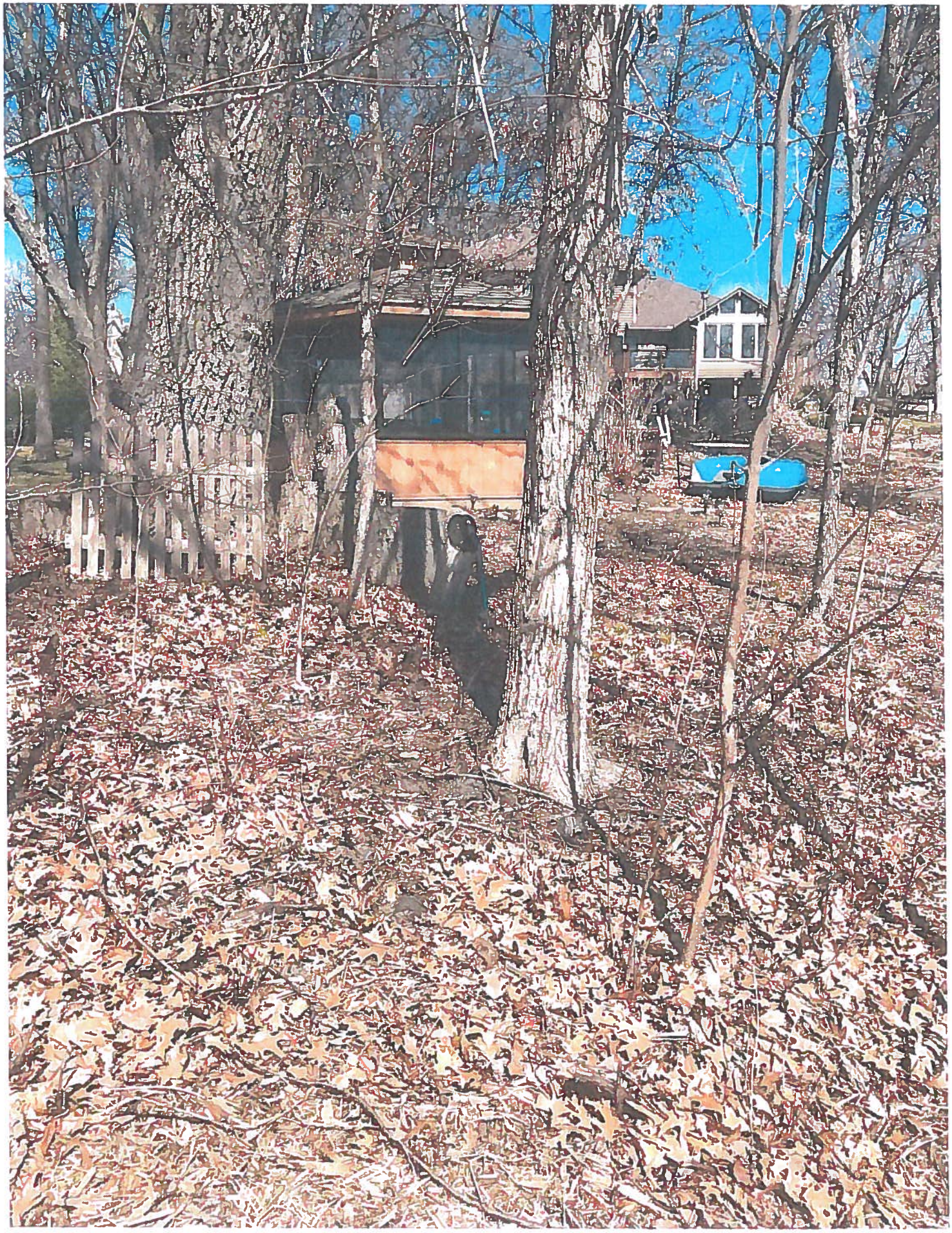
~~240 sq ft~~ ft.

Save 150 gallons

~~240 x 1 ÷ 12 = 150~~

x 7.5 =





Minutes: Monday July 17, 2017

RPBCWD Citizen's Advisory Committee Monthly Meeting

Location: RPBCWD new offices: 18681 Lake Street, Chanhassen

CAC Members

Anne Deuring	P	Peter Iverson	P	Joan Palmquist	P
Jim Boettcher	U	Matt Lindon	E	Dorothy Pedersen	P
Paul Bulger	P	Sharon McCotter	P	David Ziegler	P

Others

Michelle Jordan	District Liaison	P

Summary of key actions/motions for the Board of Managers:

1. The CAC requests some time on the agenda of the August Board of Managers' meeting, so the CAC Storm Drain Subcommittee can inform the Board of their efforts in this area, review their recommendations and and ask for approval to use staff time.

Meeting

1. **Call to Order:** President Pedersen called the July 17 meeting of the CAC to order at 6:36 p.m. Attendance noted above.

2. **Approval of the Agenda:** Agenda approved with additions of several new business topics, noted in minutes, below. Motion was made (Ziegler/Iverson) and passed.

3. **Approval of meeting minutes from June 2017:** Motion to approve minutes, as drafted without amendments, made by Ziegler/McCotter and passed unanimously.

4. **Matters of General Public Interest:**
   Lori Susla, President of Lotus Lake Association, and former CAC member:
   - Their board is concerned that:
     - Lotus Lake has seen little spending over the years, relative to others, and
     - There is a misperception that the district has spent money on lakes but *not* on rivers and creeks and so now the focus is shifting to rivers/creeks.
   - She created and shared a spread sheet (spending report) to show what has been spent by the district from 2000 to 2016. Data sources were Claire and published treasurer's reports.
   - Note: The spread sheet does not identify projects that cities were doing anyway where the watershed got involved, nor other funding sources.

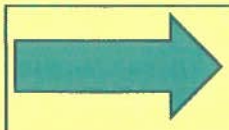
   Motion to close the public comment made by Dave, seconded by Sharon. During a follow up discussion the CAC agreed:
   1. To thank Lori for her time and for bringing this additional tool (spread sheet) to us, and to let her know that we will use it as we look at the 10-year plan and prioritization tool, etc.

2. It is not our role to allocate funds, and even if it were, the distribution of funds is not done with a goal of equality, but based on need and impact, so the data presented is interesting but not prescriptive.

5. **July Board of Managers meeting**, if any questions. (Pedersen)
   - A new summary of the various projects and how they are rated was distributed.
   - **10-year plan**
     - The current timeline for 10-year plan review calls for the CAC to get the plan on Sept. 7. and prepare our feedback in time for our Sept. 25th meeting. At that time, the plan will be presented and there will be discussion/feedback.
     - Feedback at the Board meeting: Perry was concerned that it was not reader friendly, too complex and requested an executive summary. Others (Jill) liked the detail.
     - Mary felt it should include information about groundwater, groundwater recharging and wetlands management.
     - Also, someone asked for information on low impact building, and Dorothy shared that there are so many different rules by city, area, etc. and confusion as to who to go to. Sharon has also heard complaints that people are afraid of asking questions, don't know who to go to, and that the Watershed, City and DNR are hard to work with and not well coordinated. This may represent an **opportunity for us** to find a way to make it easier for people to do the right thing. Dorothy thinks going through builders' associations or educational associations for landscapers/architects may be best approach for general education.
     - Claire mentioned some shifts to the 2018 budget based on 10-year plan, as it won 't be finalized when the 2018 budget is due.
   - There will be a parcel exchange with 9 Mile, Carver County and Lower MN to reallocate spaces where the hydrological boundaries don't line up with the legal boundaries. The net is a gain in our district.
   - Terry, the new staff permit person, reviewed the permitting process and is working on some changes/improvements which will be brought to the CAC in Sept. for our input. The goal is to have these implemented in January of 2018.
   - Discussion on apartment complex going in by SW Station (old Ruby Tuesday's site): This is a large project on a small site. The watershed district's part of this approval is small and we must enforce the rules we have. However, as in this case, the rules and regulations get parsed out, with us concerned about water, the City about development/transit or other issues, and it is not clear who/if anyone, is looking at the bigger picture and whether this is in fact a good idea. The City is supporting it for residential mass transit zone—new standards they've just created due to light rail—and their desire to create a pedestrian-friendly apartment complex.

6. **Old Business**
   a. Update on 10-year plan, E &O Plan Appendix (Michelle) (INFORM)

- Michelle distributed the first draft of Education and Outreach Plan which is required, by statute to support the goals of the 10-year plan. This is designed to serve as a tool to do E and O, being specific enough but with flexibility as priorities change, etc. She will also send it to us electronically so track changes can be used.
- Discussion:
  - Resources used: IAP2 scale for language about the continuum
  - Questions: These are the guiding questions that frame messaging—the things that people want to know about. She is using this framework for the website, too.
  - Topics: Michelle went through goals and objectives to align them into topics which we will then address in programs.
  - Implementation includes six broad programs. Every year as part of creating the workplan, two major topics are chosen as focus for the year, based largely on the projects the district is implementing that year (like stream restoration).
  - Paul suggested a resource library so if something is not a current year priority the website could still direct them to previous, most recent work. Goal for website to be a robust repository.
  - Evaluation: Joan asked about tracking of people or activities, if there is a database. Michelle said now this is done mostly with spreadsheets, and with ARCGIS online maps, but software for tracking volunteer hours are available. Sharon and Matt found one system in use in Minnetonka, as an example.
  - Dorothy asked, as educators, how do we best create change? Michelle talked about several resources she uses and trainings she has attended that she calls upon for best practices, including:
    - The Art of Hosting: http://www.artofhosting.org/trainings/event-listing/
    - Community based social marketing training, Doug McKinzee: http://www.cbsm.com/
    - Water Words that Work (presentation to water stewards): http://www.waterwordsthatwork.com/
    - MacArthur Foundation: https://www.macfound.org/
    - Frame Works institute: http://www.frameworksinstitute.org/



- **CAC Action Item: All members to review Michelle's E&O Document and provide feedback directly to her by July 25. Note, refer to the goals and objectives of the 10-year plan, as the E&O is designed to support them.**

b. Storm Drain Subcommittee update (Sharon and Matt) (INFORM)

- Feedback solicited so this can go to August Board of Directors.
- Sharon presented five opportunities identified through interviews with city leaders and asked for help in two areas:

- Dorothy will take the Shorewood grass clipping awareness program and Dave and Anne will pursue work on the Minnetonka monitoring program.
- Sharon will do the introductions to facilitate these hand-offs.
- Matt and Sharon will cover the other two recommendations: Fall storm drain clean-up program (Chanhassen and Shorewood) and a storm drain stenciling program (Chanhassen).

- Aside: Dorothy has good friend at Acxiom who volunteered to help on analytic projects.
- Dave made a motion to support the recommendation of the Storm Drain Subcommittee and request time at the August Watershed Board meeting to present recommendations and get approval for use of staff time. Joan seconded and the motion passed. (See Actions for Board at top of this).

c. Review of subcommittees—moving forward (All) (Discuss)

As a reminder, CAC members indicated the following areas of interest:

- **Dorothy:** Groundwater, wetlands, climate change, lake associations
- **Dave:** Lake association, also in-depth reviews of project/permits (e.g. draft UAA)
- **Matt:** Lake matrix/water quality review, the lake water quality restoration efforts, groundwater. He is also the CAC TAC representative.
- **Anne:** Ten-year plan, volunteerism, citizen monitoring, climate change, groundwater and a special project (silk sock to provide 24/7 storm drain hygiene)
- **Paul:** Groundwater, major reports, website
- **Pete:** Wide interest including groundwater, lake associations and hopes to add other things
- **Joan:** Interest in speaker's bureau, volunteerism, and marketing issues (which cross many of the outreach/education and volunteerism topics and the website, etc.)
- **Sharon:** Volunteerism, Earth Day clean up every year, and Anne's silk sock project
- **Jim:** TBD

It was agreed that the groundwater subcommittee will meet to review the portions of the 10-year plan dealing with groundwater, before our discussion on the 25th of Sept.

7. New Business

a. Ideas for 2017 Water Quality projects: "Water Week"? (All) (Discuss)

i. **Groundwater:** Dorothy thinks that we don't know much about groundwater and should do a project or event focused on it to educate and engage people. Use the Groundwater Foundation as a resource.

ii. **Wetlands:** Dorothy also suggested that we take a wetland tour, perhaps having an Arboretum specialist take us on a tour of their wetlands so we can better understand the ecosystem to begin/further our education.

iii. **How to care for green infrastructure:** Dorothy went to a Metro Blooms workshop recently on BMP maintenance. They have put together a manual (e.g. for teaching and work with kids), which show pictures of the 25 worst weeds and 25 most common native plant materials. They are still working on the book, and it is structured to allow inclusion of the Lake Phalen and Lakeshore Weeds books. It would be great to be able to give one of these to each recipient of a rain garden or shoreline restoration cost share grant.

Metro Blooms also developed an evaluation form for site visits. They would be willing to do a workshop for us here, and Dorothy suggested two sessions would be best—the first to learn and the second to bring your books and tools and apply learning, working on a public site.

iv. **Curb restorations and other smaller projects:** Dave commented that people seem to understand shoreline restoration, but are less informed about what happens to water that runs into the street. He suggested that we do a couple of small demonstration projects (e.g. curb buffer, or property line restoration), and see how they work. Dave offered his curbside and Dorothy agreed to do the design. They will do a site visit as part of the July 31 Watershed Tour.

b. **Presentation of special project:** Storm Drain Screens/Silt Socks: Anne has been working on an idea, trying to perfect it as a way to provide diligent care for storm drains. After trying several approaches, she came up with the idea of a silt sock or silt dam which keeps debris out of the storm drain. She brought one to show us what it is like, and response was very positive. Next steps are to install three of them on her street. She will keep us posted on progress.

8. **Adjournment:** At 9:28 the motion to adjourn was made by Joan seconded by Sharon, passed and the meeting was adjourned.

Upcoming Events

Watershed tour, 10-year plan highlights, July 31, 4:00 pm (56 people so far)
Board of Managers Meeting and Workshop, Wednesday, August 12, 5:30 pm, District Office
Next CAC meeting: August 21, 2017, District Office, 6:30 pm

August topics for CAC:

- Draft groundwater report: Paul will try (again) to get a copy of this report (which has been issued) so we can work on it in August
- Update from groundwater subcommittee if they meet before Aug. meeting
- Speaker's bureau proposal: Joan will submit to Dorothy and Michelle in advance
- Possible draft of fall cleanup from Storm Drain subcommittee from Sharon/Matt.
- Website update from Michelle
- Update/review of Governor Dayton's 25 in 25 initiative from David and Paul

Respectfully submitted by Joan Palmquist, recorder

RILEY
PURGATORY
BLUFF CREEK
WATERSHED DISTRICT

14500 Martin Drive | Suite 1500
Eden Prairie, MN 55344
952-607-6512
www.rpbcwd.org

Friday, July 25, 2017

Re: Item 10a and b – June Treasurer's report

Dear Managers,

As per District's Internal Controls and Procedures for Financial Management, the Administrator has reviewed the bills and recommends payment as outlined on page 2 of the Treasurer's report.

Sincerely,

Claire Bleser

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

Treasurers Report

June 30, 2017

REPORT INDEX

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Cash Disbursements
June 30, 2017

Accounts Payable		Amount
Barr Engineering Company	$	52,429.16
CenterPoint Energy		35.98
CenturyLink		76.69
City of Chanhassen		11.86
Claire Bleser		436.95
ECM Publishers, Inc.		952.00
Fortin Consulting		375.00
HealthPartners		7,096.78
Jill Crafton		2,036.45
Jill O'Toole		119.84
JMSC Futurity, PLLC		1,395.00
Josh Maxwell		692.17
JR Copier of Minnesota, LLC		185.00
Klein Bank Visa		5,660.06
MN Dept of Natural Resources		1,000.00
PLM Lake & Land Management		37,949.59
Purchase Power		389.22
Redpath and Company		14,028.30
Regents of the University of Minnesota		17,446.09
Richard Chadwick		359.69
RMB Environmental Laboratories, Inc.		6,096.00
Smith Partners PLLP		11,788.31
Spee-Dee Delivery Service Inc.		293.10
Spotless Cleaning Service LLC		428.00
SRF Consulting Group		5,207.21
Taylor Creek Restoration Nurseries		123.51
The Lincoln Nathional Life Insurance Company		576.42
Wenck Associates Inc		2,836.80
Xcel Energy		15.88
Xcel Energy		638.68
Xcel Energy		26.59
Zachary Dickhausen		11.70
Total Accounts Payable	**$**	**170,718.03**

Payroll Disbursements		Amount
Payroll Processing Fee	$	145.00
Manager Payroll Taxes		149.18
Employee Salaries		26,036.02
Employee Payroll Taxes		1,950.58
PERA Match		1,905.60
Total Payroll Disbursements	**$**	**30,186.38**

Total Disbursements	**$**	**200,904.41**

Memos

The 2016 mileage rate is 0.54¢ per mile. The 2017 mileage rate is 53.5¢. Klein Bank Visa will be paid online.

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Fund Performance Analysis - Table 1
June 30, 2017

	2017 Budget	Month Ended Jun. 30, 2017	Year to Date Jun. 30, 2017
REVENUES			
Interest Income	0.00	17.17	17.17
Other Income	0.00	225.00	225.00
Other Income - Refunds	0.00	0.00	1,875.00
Other Income - District Floodplain	0.00	0.00	22,080.00
Plan Implementation Levy	2,859,000.00	0.00	9,476.83
Permit Income	15,000.00	6,500.00	19,300.00
TOTAL REVENUES	**$ 2,874,000.00**	**$ 6,742.17**	**$ 52,974.00**
EXPENDITURES			
Administration			
Accounting/Audit	$ 39,500.00	$ 15,568.30	$ 23,568.30
Advisory Committee	4,000.00	0.00	3,408.83
Engineering Services	103,000.00	4,691.00	41,316.70
Insurance and Bonds	12,000.00	783.58	4,701.49
Legal Services	75,000.00	(10,246.18)	34,549.34
Manager Expenses	18,500.00	3,234.36	7,000.81
Dues and Memberships	8,000.00	0.00	4,000.00
Office Costs	95,000.00	10,389.13	94,781.31
Permit Review and Inspection	90,000.00	28,815.07	104,769.19
Recording Services	15,000.00	0.00	5,643.49
Employee Cost	450,000.00	36,498.49	173,993.69
Total Administration Costs	**$ 910,000.00**	**$ 89,733.75**	**$ 497,733.15**
Programs and Projects			
District Wide			
‡ Education & Outreach	$ 114,000.00	4,381.00	32,419.62
AIS Inspection and Early Response	75,000.00	62.24	62.24
Cost Share Program	200,000.00	0.00	5,370.79
District Wide Floodplain Eval- Atlas 14	30,000.00	0.00	1,559.32
Data Collection	180,000.00	14,297.10	54,433.47
U of M Plant Restoration	75,000.00	17,446.09	27,931.26
TMDL	10,000.00	0.00	1,028.00
Watershed - 10 Year Plan	75,000.00	17,300.53	55,965.97
○ Repair and Maintanance	100,000.00	0.00	0.00
○ ♦ Community Resilience MPCA	0.00	1,999.50	27,492.05
Creek Restoration Action Straegies Phase 2	20,000.00	225.00	11,487.00
District Groundwater Assessment	30,000.00	2,043.00	18,275.00
Total District Wide Costs	**$ 909,000.00**	**$ 57,754.46**	**$ 236,024.72**
Bluff Creek One Water			
○ ♦ Fish Passage Bluff Creek	$ 0.00	0.00	8,392.43
○ Bluff Creek Tributary	0.00	428.00	17,294.27
○ ♦ Chanhassen HS reuse	50,000.00	306.86	96,312.90
Total District Wide Costs	**$ 50,000.00**	**$ 734.86**	**$ 121,999.60**

○ Denotes Multi-Year Project - See Table 2 for details
♦ Grants are supplementing the projects - See table 3 for further details
* Denotes the project will be overlapping by one year as it was not fully complete by year end.
‡ Includes the Master Design items - See Table 2 to details

See Accountants Compilation Report

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Fund Performance Analysis - Table 1
June 30, 2017

	2017 Budget	Month Ended Jun. 30, 2017	Year to Date Jun. 30, 2017
Riley Creek One Water			
Lake Riley EWM Treatment	$ 25,000.00	22,325.20	22,325.20
○ Lake Riley Alum Treatment	0.00	0.00	681.85
○ ♦ Lake Susan Improvement Phase 2	0.00	84.94	13,476.02
○ ♦ Chanhassen Town Center	0.00	0.00	12,605.56
Rice Marsh Lake Aeration	0.00	15.88	15.88
Lake Riley - CLP Treatment	10,000.00	7,173.37	7,173.37
Lake Susan - CLP Treatment	10,000.00	3,074.30	3,074.30
Rice Marsh Lake WQ Improvement - Phase 1	20,000.00	0.00	0.00
Rice Marsh Lake Winter Fish Kill Prevention	10,000.00	0.00	382.69
Riley Creek Restoration	600,000.00	589.00	19,292.60
Total Riley Creek One Water Costs	**$ 675,000.00**	**$ 33,262.69**	**$ 79,027.47**
Purgatory Creek One Water			
○ Purgatory Creek Restoration	$ 0.00	82.50	34,211.50
Mitchell Lake Plant Management	15,000.00	2,261.83	2,261.83
Red Rock Lake Plant Management	15,000.00	3,114.89	4,064.89
Starring Lake Plant Management	20,000.00	0.00	7,949.98
♦ Fire Station 2 Water Reuse	20,000.00	5,207.21	13,769.19
Purgatory Creek Rec Area	50,000.00	0.00	0.00
Hyland Lake UAA	20,000.00	5,682.50	5,846.50
Lotus Lake - Phase 1	20,000.00	0.00	0.00
Silver Lake Restoration - Phase 1	20,000.00	0.00	0.00
○ ♦ Scenic Heights	0.00	7,349.50	14,395.10
Total Purgatory Creek One Water Costs	**$ 180,000.00**	**$ 23,698.43**	**$ 82,498.99**
Contingency Reserve			
Contingency Reserve	$ 135,000.00	$ 0.00	$ 0.00
Total Contingency Reserve Costs	**$ 135,000.00**	**$ 0.00**	**$ 0.00**
TOTAL EXPENDITURES	**$ 2,859,000.00**	**$ 205,184.19**	**$ 1,017,283.93**
Excess (Deficiency)	**$ 15,000.00**	**$ (198,442.02)**	**$ (964,309.93)**

○ Denotes Multi-Year Project - See Table 2 for details
♦ Grants are supplementing the projects - See table 3 for further details
* Denotes the project will be overlapping by one year as it was not fully complete by year end.
‡ Includes the Master Design items - See Table 2 to details

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Multi-Year Project Performance Analysis - Table 2
June 30, 2017

	Total Available for Project	2017 Budget	Month Ended Jun. 30, 2017	Year to Date Jun. 30, 2017	Lifetime Costs	Remaining Budget Funds
Projects						
○ ♦ Chanhassen Town Center	63,000.00	0.00	0.00	12,605.56	35,196.56	27,803.44
○ ♦ Fish Passage Bluff Creek	415,000.00	0.00	0.00	8,392.43	33,185.82	381,814.18
○ Lake Lucy Iron Enhanced	85,000.00	0.00	0.00	0.00	62.32	84,937.68
○ Lake Riley Alum Treatment	260,000.00	0.00	0.00	681.85	235,659.41	24,340.59
○ Lake Susan Improvements	275,000.00	0.00	0.00	0.00	272,134.10	2,865.90
○ ♦ Lake Susan Improvement Ph 2	383,400.00	0.00	84.94	13,476.02	30,217.80	353,182.20
○ Purgatory Creek Restoration	661,094.00	0.00	82.50	34,211.50	365,437.06	295,656.94
○ ♦ Chanhassen HS Reuse	250,000.00	50,000.00	306.86	96,312.90	107,450.00	142,550.00
○ ♦ Community Resilience MPCA	47,000.00	0.00	1,999.50	27,492.05	45,667.18	1,332.82
○ ♦ Scenic Heights	260,000.00	0.00	7,349.50	14,395.10	14,395.10	245,604.90
○ Bluff Creek Tributary	200,000.00	0.00	428.00	17,294.27	17,294.27	182,705.73
Total Multi-Year Project Costs	**$ 2,899,494.00**	**$ 50,000.00**	**$ 10,251.30**	**$ 224,861.68**	**$ 1,156,699.62**	**$ 1,742,794.38**
Programs						
○ Repair and Maintenance	$102,005.00	100,000.00	0.00	0.00	0.00	102,005.00
○ Survey and Analysis	37,257.00	0.00	0.00	0.00	24,165.26	13,091.74
Total Program Costs	**$ 139,262.00**	**$ 100,000.00**	**$ 0.00**	**$ 0.00**	**$ 24,165.26**	**$ 115,096.74**
Other						
Total Other	**$ 0.00**	**$ 0.00**	**$ 0.00**	**$ 0.00**	**$ 0.00**	**$ 0.00**
Total Multi-Year Project Costs	**$ 3,038,756.00**	**$ 150,000.00**	**$ 10,251.30**	**$ 224,861.68**	**$ 1,180,864.88**	**$ 1,857,891.12**

Grant and Other Income Performance Analysis - Table 3
June 30, 2017

	Total Available for Project	Total Grant Amount	Required District Match	Additional District Funds	Partner Funds
○ ♦ Chanhassen Town Center	$ 63,000.00	$ 48,000.00	$ 12,000.00	$ 3,000.00	$ 0.00
○ ♦ Fish Passage Bluff Creek	415,000.00	150,000.00	37,500.00	77,500.00	150,000.00
○ ♦ Lake Susan Improvement Ph 2	383,400.00	233,400.00	58,350.00	91,650.00	0.00
♦ Metropolitan Council - WOMP	5,000.00	5,000.00	0.00	0.00	0.00
○ ♦ Chanhassen HS Reuse	250,000.00	200,000.00	50,000.00	0.00	0.00
♦ Fire Station 2 Water Reuse	98,287.00	73,715.00	24,572.00	0.00	0.00
○ ♦ Community Resilience MPCA	47,000.00	27,000.00	10,000.00	0.00	10,000.00
○ ♦ Scenic Heights	260,000.00	50,000.00	0.00	165,000.00	45,000.00
Total Grants and Other Income	**$ 1,521,687.00**	**$ 787,115.00**	**$ 192,422.00**	**$ 337,150.00**	**$ 205,000.00**

○ Denotes Multi-Year Project - See Table 2 for details

♦ Grants are supplementing the projects - See table 3 for further details

* Denotes the project will be overlapping by one year as it was not fully complete by year end.

‡ Includes the Master Design items - See Table 2 to details

See Accountants Compilation Report

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

Balance Sheet

As of June 30, 2017

ASSETS		
Current Assets		
Checking	$	630,467.41
Money Market Savings		0.00
Investments		2,469,000.00
Total Current Assets	$	3,099,467.41
Other Assets		
Security Deposit		9,744.00
Prepaid Expenses		16,011.13
Delinquent Property Taxes		17,622.16
Total Other Assets	$	43,377.29
Total Assets	**$**	**3,142,844.70**
LIABILITIES AND NET ASSETS		
Liabilities		
Current Liabilities		
Accounts Payable	$	172,873.19
Payroll Withholding		631.16
Accrued Payroll		10,816.15
PERA Withholding		1,980.20
Total Current Liabilities	$	186,300.70
Other Current Liabilities		
Retainages Payable		23,786.93
Total Other Current Liabilities	$	23,786.93
Long-Term Liabilities		
Deferred Revenues	$	17,622.16
Unearned Revenue		132,396.16
Permit Escrows		678,050.00
Total Long-Term Liabilities	$	828,068.32
Total Liabilities	$	1,038,155.95
Net Assets		
Cumulative Fund Balance	$	3,068,998.68
Excess (Deficiency) Current		(964,309.93)
Total Net Assets	$	2,104,688.75
Total Liabilities and Net Assets	$	**3,142,844.70**

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT
Klein Bank Visa Activity
June 20, 2017

DATE	PURCHASE FROM	AMT	DESCRIPTION	ACCT #	Total
25-May	MAWD	$ 350.00	Conferences & Training - M	70302	$ 350.00
7-Jun	26 Piada	$ 135.60	Manager General Expense	70402	
7-Jun	Kowalski's	$ 54.26	Manager General Expense	70402	$ 189.86
19-May	Freshwater Society	$ 120.00	Conferences & Training - S	71002	
25-May	MAWD	$ 175.00	Conferences & Training - S	71002	
1-Jun	Spot Café	$ 62.23	Conferences & Training - S	71002	
2-Jun	Miller Concessions	$ 25.00	Conferences & Training - S	71002	
2-Jun	UM ContLearning	$ 900.00	Conferences & Training - S	71002	$ 1,282.23
31-May	Kowalski's	$ 79.38	Education & Outreach	93002	
9-Jun	Dunn & Semington	$ 620.06	Education & Outreach	93002	
9-Jun	Dunn & Semington	$ 72.95	Education & Outreach	93002	
9-Jun	Dunn & Semington	$ 26.82	Education & Outreach	93002	
9-Jun	Dunn & Semington	$ 98.70	Education & Outreach	93002	
13-Jun	Display2Go	$ 67.60	Education & Outreach	93002	$ 965.51
13-Jun	Frattalone's	$ 24.96	AIS Inspection & Early Response	94002	
13-Jun	Home Depot	$ 37.28	AIS Inspection & Early Response	94002	$ 62.24
19-May	Home Depot	$ 82.62	Data Collection	100802	
19-May	Superamerica	$ 76.59	Data Collection	100802	
22-May	Amazon	$ 74.05	Data Collection	100802	
23-May	Gander Mountain	$ 68.65	Data Collection	100802	
24-May	Amazon	$ 153.00	Data Collection	100802	
1-Jun	Superamerica	$ 25.21	Data Collection	100802	
1-Jun	Superamerica	$ 60.54	Data Collection	100802	
2-Jun	Holiday Station	$ 45.97	Data Collection	100802	
2-Jun	In Situ	$ 743.19	Data Collection	100802	
13-Jun	Frattalone's	$ 9.62	Data Collection	100802	
13-Jun	Home Depot	$ 67.12	Data Collection	100802	
15-Jun	Hwy 5 BP	$ 70.16	Data Collection	100802	
16-Jun	Marathon Petro	$ 31.89	Data Collection	100802	$ 1,508.61
19-May	General Delivery	$ 17.92	Office Cost	170402	
23-May	Kowalski's	$ 18.17	Office Cost	170402	
23-May	Office Depot	$ 10.72	Office Cost	170402	
25-May	Office Depot	$ 375.45	Office Cost	170402	
26-May	General Delivery	$ 42.21	Office Cost	170402	
30-May	Randy's Sanitation	$ 49.91	Office Cost	170402	
30-May	Gov't Center Parking	$ 5.00	Office Cost	170402	
31-May	Facebook	$ 8.17	Office Cost	170402	
2-Jun	General Delivery	$ 83.10	Office Cost	170402	
2-Jun	UM Bookstores	$ 119.00	Office Cost	170402	
7-Jun	Office Depot	$ 207.58	Office Cost	170402	
8-Jun	Office Depot	$ 18.76	Office Cost	170402	
9-Jun	General Delivery	$ 18.61	Office Cost	170402	
10-Jun	Microsoft	$ 67.05	Office Cost	170402	
13-Jun	Webstaurant Store	$ 161.41	Office Cost	170402	
16-Jun	General Delivery	$ 49.80	Office Cost	170402	
8-Jun	Office Depot	$ 9.63	Office Cost	170402	$ 1,262.49
16-Jun	Davanni's	$ 39.12	Watershed 10-year Plan	182502	$ 39.12
TOTAL PURCHASES		**$ 5,660.06**			**$ 5,660.06**
Total Credits					- Y
TOTAL DUE		**$ 5,660.06**			**$ 5,660.06**

JM SC futurity
ACCOUNTING • TAX • ADVISORY SERVICES

www.JMSCfuturity.com

Moving People
and
Business Forward

Riley Purgatory Bluff Creek
Watershed District
Eden Prairie, MN

To the Board of Managers:

Accountant's Opinion

The Riley Purgatory Bluff Creek Watershed District is responsible for the accompanying June 30, 2017 Treasurer's Report in the prescribed form. We have performed a compilation engagement in accordance with the Statements on Standards for Accounting and Review promulgated by the Accounting and Review Services Committee of the AICPA. We did not audit or review the Treasurer's Report nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by the Riley Purgatory Bluff Creek Watershed District. Accordingly, we do not express an opinion, a conclusion, nor provide any form of assurance on the Treasurer's Report.

Reporting Process

The Treasurer's Report is presented in a prescribed form mandated by the Board of Managers and is not intended to be a presentation in accordance with accounting principles generally accepted in the United States of America. The reason the Board of Managers mandates a prescribed form instead of GAAP (Generally Accepted Accounting Principles) is this format gives the Board of Managers the financial information they need to make informed decisions as to the finances of the watershed.

GAAP basis reports would require certain reporting formats, adjustments to accrual basis and supplementary schedules to give the Board of Managers information they need, making GAAP reporting on a monthly basis extremely cost prohibitive. An outside independent auditing firm is retained each year to perform a full audit and issue an audited GAAP basis report. This annual report is submitted to the Minnesota State Auditor, as required by Statute, and to the Board of Water and Soil Resources.

The Treasurer's Report is presented on a modified accrual basis of accounting. Expenditures are accounted for when incurred. For example, payments listed on the Cash Disbursements report are included as expenses in the Treasurer's Report even though the actual payment is made subsequently. Revenues are accounted for on a cash basis and only reflected in the month received.

JMSC, PLLC
St. Louis Park, MN
July 26, 2017

Buffalo: 215 Hwy 55 East, #306 Buffalo, MN 55313 p: 763.682.6458 f: 763-682-1880
Minneapolis: 5000 West 36th Street, #240 St. Louis Park, MN 55416 p: 952-540-4340 f: 952-540-4345
Plymouth: 3020 Harbor Lane North, #101 Plymouth, MN 55447 p:763-424-8261 f: 763-404-8681

RILEY PURGATORY BLUFF CREEK WATERSHED DISTRICT

18681 Lake Drive East
Chanhassen, MN 55317
952-607-6512
www.rpbcwd.org

Riley Purgatory Bluff Creek Watershed District Permit Application Review

Permit No: 2017-032

Received complete: June 17, 2017

Applicant: City of Eden Prairie – Dave Modrow

Consultant: Wenck Associates, Inc. – Jason Warne

Project: 11193 Bluestem Lane (Purgatory Stream Stabilization) – A section of Purgatory Creek streambank, approximately 100 lineal feet, has slumped, creating an escarpment on City owned property behind 11193 Bluestem Lane. The escarpment is not only introducing sediment into Purgatory Creek but is also threatening a multiple use natural trail. This project aims to restore the streambank and prevent future slumping by providing a stable conveyance for the active hillside seep most likely to be the cause of the slope failure.

Location: Outlot E, Bluestem Hills 1st Addition, Eden Prairie, MN / PIN 2511622330050

Reviewer: Terry Jeffery, Permit Coordinator

Rules: Applicable rules checked

X	Rule B: Floodplain Management		Rule H: Appropriation of Public Waters
X	Rule C: Erosion and Sediment Control		Rule I: Appropriation of Groundwater
X	Rule D: Wetland and Creek Buffers	X	Rule J: Stormwater Management
	Rule E: Dredging and Sediment Removal	X	Rule K: Variances and Exceptions
X	Rule F: Shoreline/Streambank Stabilization		Rule L: Permit Fees
	Rule G: Waterbody Crossings		Rule M: Financial Assurances

Rule Conformance Summary

Rule	Issue		Conforms to RBPCWD Rules?	Comments
B	**Floodplain Management**		See Comment	See Rule Specific Permit Condition B1
C	**Erosion Control Plan**		See Comment	See Rule Specific Permit Condition C1.
F	**Shoreline/Streambank Stabilization**		No	See Rule K Variance Request
J	**Stormwater Management**	Rate	Yes	No impervious surface added
		Volume	Yes	No impervious surface added
		Water Quality	Yes	No impervious surface added
		Low Floor Elev.	Yes	
		Maintenance	Yes	No impervious surface added
K	**Variances and Exceptions**		See comments	Variance requested from Rule B 3.2 and Rule F 3.3f.

RILEY PURGATORY BLUFF CREEK
WATERSHED DISTRICT

18681 Lake Drive East
Chanhassen, MN 55317
952-607-6512
www.rpbcwd.org

Project Description:

The project proposes to stabilize a slump scarp along 100 feet of Purgatory Creek. The slope will be stabilized to halt deposition of sediment and associated contaminants into the creek and encroachment of slumping upon adjacent residential property at 10089 Purgatory Road. Stabilization will consist of placement of a riprap buttress along the toe of the scarp, scarp regrading, and fill material for turf restoration. A portion of the fill material will be Class II basalt riprap which will be placed in an existing gully that conveys surface and subsurface flow towards the creek. An additional 75 feet of streambank will receive a small amount of riprap toe protection to provide slope stabilization and protect against scour. The project site information is summarized below:

- Total Site Area: 5.16 acres
- Existing Site Impervious Area: 0 square feet
- Proposed Site Impervious Area: 0 square feet
- Total Disturbed Area: 12,000 square feet
- Length of Streambank affected: 100 feet

Exhibits:

1. Permit Application dated April 25, 2017.
2. Plan Set Sheets 1-5 dated March 30, 2017.
3. Technical Memorandum dated June 16, 2017
4. Riprap stabilization memo date June 26, 2015
5. Annotated Photograph received May 22, 2017
6. Photographs dated September 22, 2015
7. Minnesota Wetland Conservation Act Notice of Decision Dated April 24, 2017

Rule Specific Permit Conditions:

Rule B: Floodplain Management and Drainage Alteration:

A Floodplain Management and Drainage Alteration Permit (Rule B) is required from the Riley Purgatory Bluff Creek Watershed District (RPBCWD) because disturbance in the floodplain is proposed below the 100-year flood elevation of Purgatory Creek (Rule B, Subsection 2.1). The 100-year flood elevation at this location is approximately 754 feet (NGVD29).

Rule B, subsections 3.1 and 3.4, impose no requirements on the project because no structures will be constructed or reconstructed and no surface will be paved as part of the project. The proposed plan will place fill material below the 100-year flood elevation for Purgatory Creek. This is not complaint with Rule B, subsection 3.2. The applicant is requesting a variance from providing compensatory storage for fill below the 100-year flood elevation and has provided a memorandum (see attached) in

support of their request. See Rule K discussion for further variance analysis. The project will not alter surface flows (Rule B, Subsection 3.3).

To otherwise conform to the applicable provisions of RPBCWD Rule B (subsection 3.5) the following revision must be incorporated into the plans:

B1. Construction activities must be conducted as to minimize the potential transfer of aquatic invasive species (e.g., zebra mussels, Eurasian watermilfoil, etc.) to the maximum extent possible. (Rule B, Subsection 3.5)

Rule C: Erosion and Sediment Control:

An Erosion and Sediment Control Permit (Rule C) is required from the Riley Purgatory Bluff Creek Watershed District because more than 50 cubic yards of earth will be placed, altered, or removed and more than 5,000 square feet of land-surface area will be altered (Rule C, subsection 2.1).

The surface water pollution prevention plan (SWPPP) prepared by Wenck Associates includes installation of a rock construction entrance, perimeter site fence, soil decompaction and silt fence toward the downstream end of the project site. The contractor to be responsible for erosion control at the site needs to be determined. To conform to the RPBCWD Rule C requirements the following revisions are needed:

C1. The Applicant must provide the name and contact information of the individual responsible for erosion and sediment control at the site. RPBCWD must be notified if the responsible party changes during the permit term.

Rule D: Wetland and Creek Buffers:

Because the proposed work triggers a permit under RPBCWD Rules F and J for the streambank stabilization work and Purgatory Creek is a public waters watercourse Rule D, Subsections 2.1a and 3.1 require buffer adjacent to this watercourse. In addition, the proposed work will take place in a High-Risk Erosion Area. The applicable base buffer width under paragraph 3.1a(v) is 50 feet, however because slopes in much of the project area exceed the 18 percent grade criterion in paragraph 3.1c, buffer must extend to the top of the slope. The applicant does not own sufficient property rights to provide buffer to the top of the bluff but will establish buffer to the extent of property it owns – a buffer width between 140 feet and 160 feet for a distance of 175 feet. The buffer area and monument locations are shown appropriately on the project plans.

To conform to the RPBCWD Rule D, the following revisions are needed:

D1. Buffer areas and maintenance requirements must be documented in a written agreement with the RPBCWD in accordance with Rule D, Subsection 3.4.

Rule F: Shoreline and Streambank Stabilization

Rule F states it is the policy of the Board of Managers to prevent erosion of shorelines and streambanks, and to foster the use of natural materials and bioengineering for the maintenance and

restoration of shorelines. A permit under Rule F is required because the project will install improvements to stabilize a 110-foot reach of Purgatory Creek using riprap.

Rule F.3.1 states, *An applicant for a permit under this rule must demonstrate a need to prevent erosion or restore an eroded shoreline, unless the proposed improvement is part of a public project designed to restore natural shoreline:*

Under existing conditions, the streambank along this stretch of Purgatory Creek is badly degraded and continues to experience dramatic loss of integrity, causing deposition of sediment and associated pollutants into the creek. The main purpose of the project is to stabilize the steep slope that has experienced slope failures (slumps) to reduce the potential for further sediment deposition into Purgatory Creek. The proposed project will require the installation of improvements to stabilize the streambank from erosion and improve the geotechnical stability of the overall slope to repair the existing scarp and prevent future formation of a second scarp. In addition, the applicant provided site photographs and met onsite with RPBCWD staff to document the existing erosion, thus supporting the need for the proposed project.

Rule F.3.2 states, *Stabilization practices must be consistent with the erosion intensity and/or sheer stress calculated for the property proposed to be stabilized. The District will approve proposed stabilization practices in accordance with the following sequencing priority:*

a. *An applicant must first assess whether maintenance or restoration of shoreline can be accomplished using bioengineering.*
b. *If the erosion intensity or shear stress calculation demonstrates that bioengineering cannot provide a stable shoreline, a combination of riprap and bioengineering may be used to restore or maintain shoreline.*
c. *If the erosion intensity or shear stress calculation demonstrates that a combination of riprap and bioengineering cannot provide a stable shoreline, riprap may be used to restore or maintain shoreline.*

The applicant has provided calculations which indicate that the Class III riprap is appropriate to resist the erosional forces from the expected velocities in Purgatory Creek, especially when considering the acceleration that occurs around a 180 degree bend in the channel. Flows in this area are approximately nine (9) feet per second. The NRCS guidance recommends that riprap with an average diameter of 9 inches be used for these velocities. Class III riprap meets this specification. Staff concurs that erosive forces in the creek are sufficient to warrant the use of class III riprap.

Class III riprap is also being used to provide a buttress for the proposed rock conveyance that will allow the water from the upslope hillside slope. In addition to the shear stress on the stream bank, slope instability is also a result of outwash over glacial till coupled with sub-surface water flows. The applicant has prepared slope stability calculations for the area that show that subsurface flows are a contributor to the scarp formation. Sandy glacial till is superimposed upon a soft clay outwash. Groundwater intrusion into the clay outwash further compromises the cohesive force and the outwash begins to migrate downslope. The proposed improvements are compliant with Rule F, subsection 3.2.

Rule F.3.3a states, *Live plantings incorporated in shoreline bioengineering must be native aquatic vegetation and/or native upland plants:*

Given the shear forces resulting from the flow velocities, engineered hard armoring is appropriate in this situation. No bioengineering is proposed. The proposal is compliant with Rule F, subsection 3.3a

Rule F.3.3b states, *Riprap to be used in shoreline erosion protection must be sized appropriately in relation to the erosion potential of the wave or current action of the particular waterbody, but in no case will the riprap rock average less than six inches in diameter or more than 30 inches in diameter. Riprap will be durable, natural stone and of a gradation that will result in a stable shoreline embankment. Stone, granular filter and geotextile material will conform to standard Minnesota Department of Transportation specifications, except that neither limestone nor dolomite will be used for shoreline riprap, but may be used at stormwater outfalls. All materials used must be free from organic material, soil, clay, debris, trash or any other material that may cause siltation or pollution.*

The project proposes the use of Class III basalt rip-rap (MNDOT 3601.2), having an average diameter of 9-inches, a minimum of six inches of granular filter material, with a Type IV non-woven geotextile (MNDOT 3733.2). The proposed plan is compliant with Rule F, subsection 3.3b.

Rule F.3.3c states, *Riprap will be placed to conform to the natural alignment of the shoreline.*

Plans submitted show no proposed change in cross-section or horizontal alignment of the channel from the existing condition.

Rule F.3.3d states, *A transitional layer consisting of graded gravel, at least six inches deep, and an appropriate geotextile filter fabric will be placed between the existing shoreline and any riprap. The thickness of riprap layers should be at least 1.25 times the maximum stone diameter. Toe boulders, if used, must be at least 50 percent buried.*

The project proposes the use of a Type IV non-woven geotextile (MNDOT 3733.2). A transitional layer of 6 inches of granular fill conforming to MNDOT 3149 is also shown on the plan. The design drawing require the toe boulders to be buried at least 50 percent, thus conforming to the requirement.

Rule F.3.3e states, *Riprap must not cover emergent vegetation, unless authorized by a Department of Natural Resources permit.*

The proposed riprap will not cover emergent vegetation because the exposed slump/scarp area and adjacent creek consist of bare slopes due to the active slope movement and streambank erosion.

Rule F.3.3f states, *Riprap will extend no higher than the top of bank or two feet above the 100-year high water elevation, whichever is lower.*

The basalt riprap placed as a buttress will extend approximately 1 foot above the OHWL (i.e., 1 foot above top of bank) and will be three feet below the 100-year flood elevation. The design is in compliance with Rule F, subsection 3.3f.

Rule F.3.3g states, *the finished, stabilized slope of any shoreline will not be steeper than 3:1 (horizontal to vertical).*

The existing slopes adjacent to the creek at this location are roughly 1:1 or steeper in areas of the slope slumping. The graded slope above the riprap will be 3:1 or shallower. The proposed riprap buttress is shown on the plans with a 2:1 slope which does not meet the requirements of this subsection. Because this does not meet the requirements of Rule F, the applicant has requested a variance from strict compliance with Rule F, subsection 3.3g.

Rule F.3.3h states, *Horizontal encroachment from a shoreline will be the minimal amount necessary to permanently stabilize the shoreline and will not unduly interfere with water flow or navigation. No riprap or filter material will be placed more than 6 feet waterward of the OHW. Streambank riprap will not reduce the cross-sectional area of the channel or result in a stage increase at or upstream of the installation.*

The project as shown on the plans will not encroach into the channel based upon the cross-sectional views provided. The proposed plan is compliant with Rule F, subsection 3.3h

Rule F.3.3i states, *The design of any shoreline erosion protection will reflect the engineering properties of the underlying soils and any soil corrections or reinforcements necessary. The design will conform to engineering principles for dispersion of wave energy and resistance to deformation from ice pressures and movement, considering prevailing winds, fetch and other factors that induce wave energy.*

The geotechnical slope analysis submitted on May 22, 2017 reflects the underlying soils in the area. NRCS guidance recommends, and staff concurs, that the proposed riprap, with an average diameter of nine (9) inches, is appropriately sized based upon standard engineering practices to disperse the energy and resist erosional forces from the creek.

Rule F.3.3j states, *Placement of riprap for cosmetic purposes alone is prohibited.*

The project is to provide a stable creek section and is not for cosmetic purposes.

Because the propose project does not meet the design requirements in Rule B, subsection 3.2 and Rule F, subsection 3.3g the applicant submitted a variance request from these criteria. The variance applicant's analysis and justification is included in the attached memorandum.

Rule J: Stormwater Management:

A Stormwater Management Permit (Rule J) is required for this project because more than 50 cubic yards of earth will be placed, altered, or removed and more than 5,000 square feet of land-surface area will be altered (Rule J, Subsection 2.1). Rule J, Subsection 2.3 for redevelopment applies to this project. The project will not disturb or create any impervious surface; therefore, the requirements of Rule J, Subsection 3.1 will apply to the disturbed area on the site. However, because no new or reconstructed impervious area will be constructed, no stormwater management practices are required for compliance with Rule J.

Rule K: Variances and Exceptions

The applicant is requesting variances from Rule B, subsection 3.2 allowing for fill in a floodplain without compensatory volume and Rule F, subsection 3.3g requiring the slope of the streambank stabilization be 3:1 (horizontal to vertical) or flatter. The need for the variances is due to the unique

site location with the creek immediately adjacent to the valley walls, slope instability due to soils, groundwater seepage and adjacent residential property.

1. The Applicant's first variance request is from Rule B to allow for fill in the floodplain. The need for this variance was caused by the streambank erosion and bank slumping that has resulted in an enlarged floodplain from what was present before the slumping occurred.

   The proposed fill restores the streambank to near original condition. The applicant has provided 2007 lidar data as well as 2-foot contours based off data from 1964 or 1965, all of which indicate that the materials to be placed will restore the streambank to a configuration more consistent with the original cross-section. Further, the proposed finished grade would provide greater flood storage capacity than existed prior to the slope failure (before 2007).

   The proposed variance will have no impact on government services nor will it impact neighboring properties in that it provides flood storage and minimizes the sediment input to Purgatory Creek known to contribute to its impairment for turbidity.

   Numerous scenarios were reviewed to see if a technically feasible alternative to the proposed design would be effective in achieving the needed bank stabilization. Grading the streambank and slope above to a more stable shape would not address the unstable and migratory nature of the clay glacial outwash. Were the instability of the glacial outwash materials not of concern, grading alone to a provided a more stable geometry would likely be an effective solution. However, to provide the appropriate geometry, the extent of grading that would be required would extend will outside of the project bounds, encroach into neighboring properties and result in extensive tree removal which may, in turn, produce further instabilities or sources of sediment deposition in to Purgatory Creek.

   The scarp formation was a result of naturally occurring hydrogeological conditions beyond the control of the applicant.

2. The Applicant's second variance request is from the requirement to limit the slope of the streambank stabilization to 3:1 or flatter. (Rule F §3.3h).

   The riprap buttress will have a slope of 2:1 extending one (1) foot above the OHWL. But will transition immediately above the riprap to a slope of 3:1 or shallower. The applicant has modified the design to materials placed to repair the slope slump will have a finished slope of 3:1 or shallower.

   Granting the variance to allow a 2:1 slope will not adversely impact Purgatory Creek and minimizes the impacts on neighboring properties.

   The applicant evaluated the project for technically feasible alternatives. The buttress, in addition to protecting the streambank for scour resulting from flows in Purgatory Creek, will support the load of the soils placed above the buttress to repair the scarp and gully.

Shallowing the slope will compromise the ability of the buttress to bear the load of the materials placed above and will allow for the soft glacial till to simply flow over the buttress.

The scarp formation driving the need for the steeper-than-allowed slope was a result of naturally occurring hydrogeological conditions and beyond the control of the applicant.

Applicable General Requirements:

1. The RPBCWD Administrator and Engineer shall be notified at least three days prior to commencement of work.
2. Construction shall be consistent with the plans and specifications approved by the District as a part of the permitting process. The date of the approved plans and specifications is listed on the permit.
3. All revisions to the plans and specifications approved by the District as a part of the permitting process shall be submitted to the District for review and will not become the new approved plans and specifications until written notice from the District is received by the Applicant.

Findings

1. The proposed project includes the information necessary and plan sheets for review.
2. The proposed project will conform to C and D if the Rule Specific Permit Conditions listed above are met.
3. The applicant is seeking a variance from strict compliance with the Rule B criteria related to the placement of fill in the floodplain without providing compensatory storage, but otherwise the project will comply with Rule B criteria if the Rule Specific Permit Conditions listed above are met.
4. The applicant is seeking a variance from strict compliance with the Rule F criteria requiring slopes be no greater than 3:1, but otherwise the project complies with Rule F.
5. The proposed project conforms to Rule J.

Recommendation:

Approval of the variance and underlying, contingent upon:

1. Continued compliance with General Requirements.
2. Compliance with the rule specific permit conditions reiterated below.

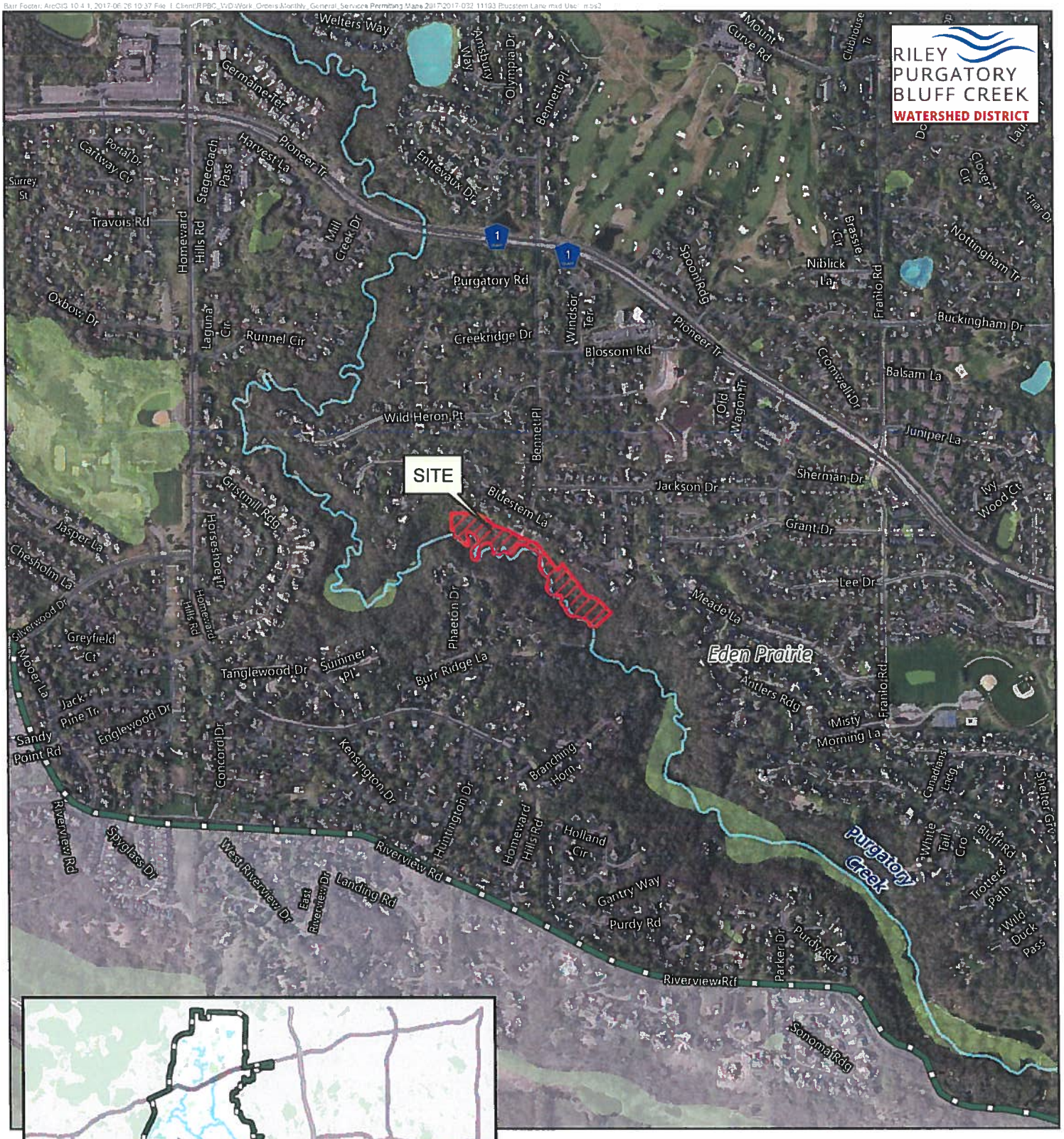
   B1. Construction activities must be conducted as to minimize the potential transfer of aquatic invasive species (e.g., zebra mussels, Eurasian watermilfoil, etc.) to the maximum extent possible. (Rule B, Subsection 3.5)

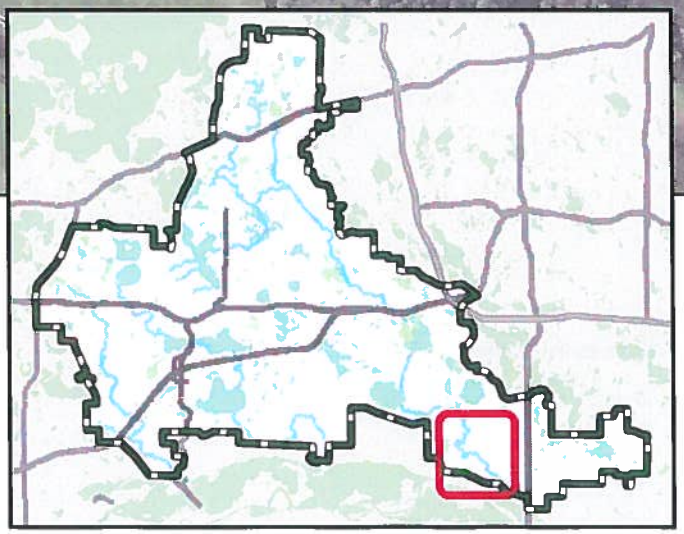
C1. The Applicant must provide the name and contact information of the individual responsible for erosion and sediment control at the site. RPBCWD must be notified if the responsible party changes during the permit term.

D1. Buffer areas and maintenance requirements must be documented in a written agreement with the RPBCWD in accordance with Rule D, Subsection 3.4.

Board Action

It was moved by Manager _____, seconded by Manager _____ to approve permit application No. 2017-032 with the conditions recommended by staff.





Feet

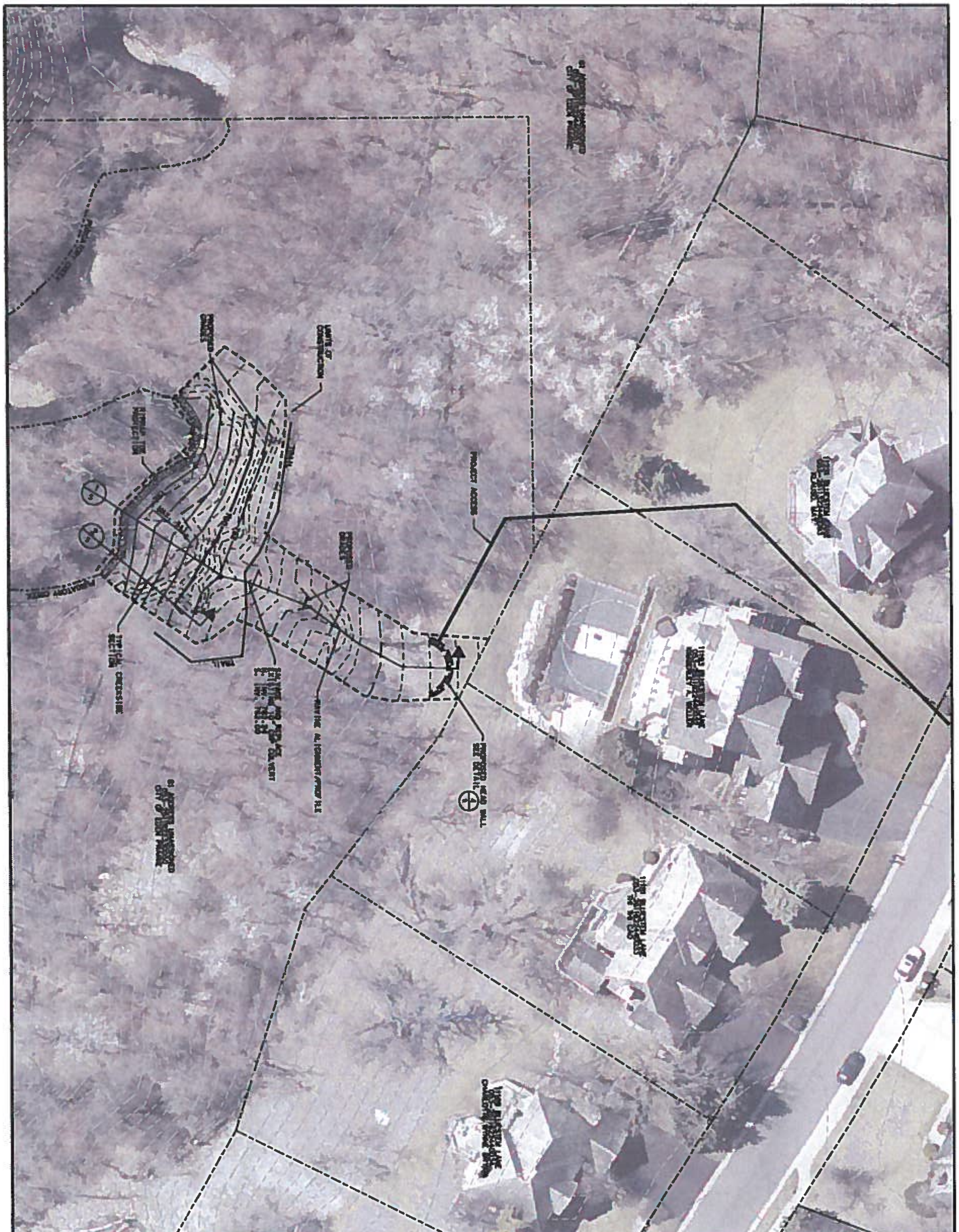
0 1,000

Permit Location Map

11193 BLUESTEM LANE

Permit 2017-032

Riley Purgatory Bluff Creek Watershed District



LEGEND

- EXISTING CONTOURS
- PARCEL LINE
- LIMIT OF CONSTRUCTION
- CREEK
- PROPOSED CONTOURS

GENERAL NOTES:

INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE EROSION CONTROL PLAN (SHEET [illegible]) FOLLOWING VEGETATION REMOVAL AND BEFORE THE START OF GRADING ACTIVITIES.

PRINT NAME: JASON BARNE

SIGNATURE: [signature]

DATE: 03/30/17 LICENSE #: 45719

FILE NAME: M/0094/0110/DGN/2018 RAVINE04.DGN

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

1800 PIONEER CREEK CENTER, MAPLE PLAIN, MN 55357 PHONE: 763-479-4200 FAX: 763-479-4242

PROJECT: CONSTRUCTION PLANS FOR STREAMBANK STABILIZATION & RAVINE REPAIR
11193 BLUESTEM LANE
PREPARED FOR CITY OF EDEN PRAIRIE
8080 MITCHELL ROAD
EDEN PRAIRIE, MINNESOTA

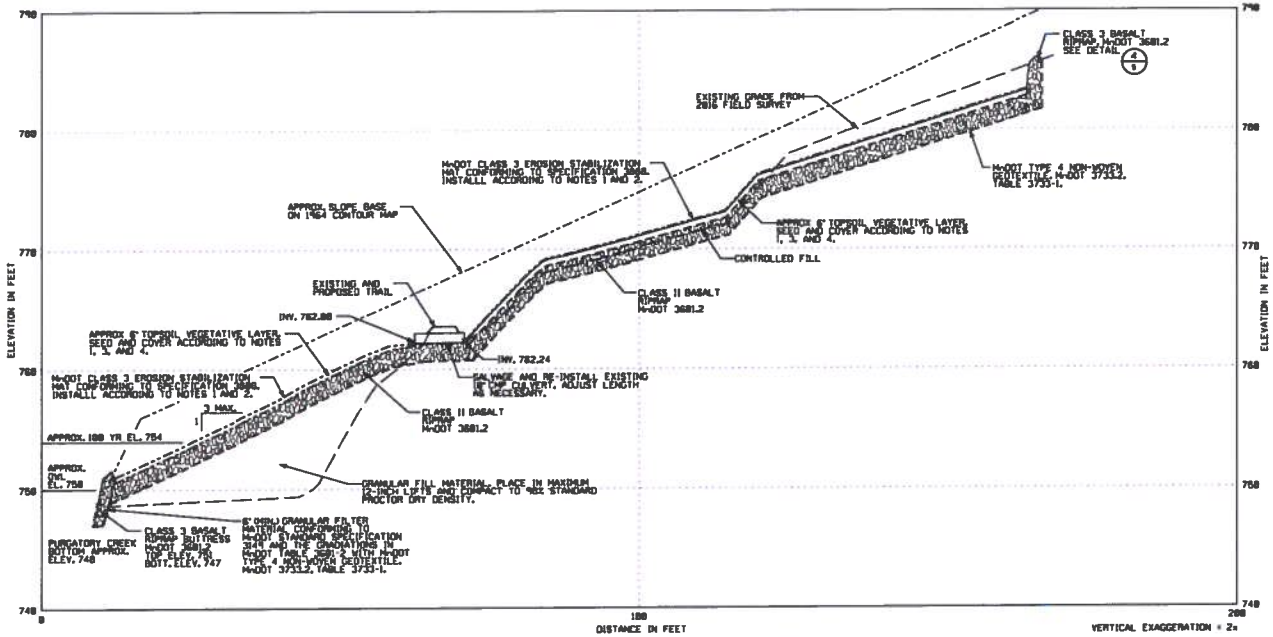
SHEET TITLE: SITE PLAN

DATE: MARCH, 2017

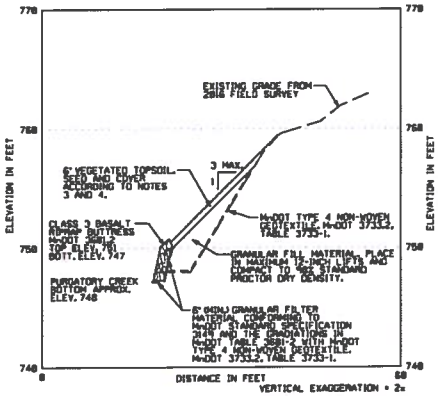
REVISIONS	DATE
PROPOSED GRADES	06/26/17
PROPOSED GRADES	06/29/17

DWN JRT CHK'D BAB APP'D JWB

SHEET NO. 4



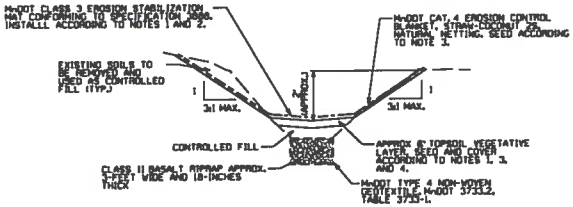
RAVINE PROFILE 1/5



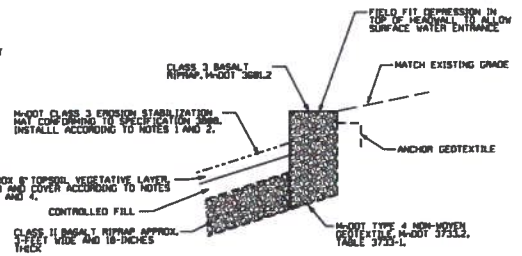
TYPICAL CREEKSIDE SECTION 2/5

NOTES:

1. INSTALL EROSION STABILIZATION MAT, MINIMUM 6 FT WIDTH ALONG CENTERLINE OF RAVINE, OVERLAP AND ANCHOR ACCORDING TO MANUFACTURERS SPECIFICATIONS.
2. FILL MAT WITH TOPSOIL
3. SEED WIDTH OF VEGETATIVE LAYER AND DISTURBED AREA WIDTH M-DOT NATIVE SEED MIX 33-262.
4. COVER SEEDED AREA WITH M-DOT CAT. 4 EROSION CONTROL BLANKET (STRAW-COCONUT 2S, NATURAL NETTING, OVERLAP AND ANCHOR ACCORDING TO MANUFACTURER'S SPECIFICATIONS.



TYPICAL RAVINE SECTION 3/5



HEAD WALL SECTION 4/5
NOT TO SCALE

JASON BARNE

03/30/17 LICENSE # 46719

REVISIONS

	DATE
ADDED 2007 LIDAR DATA	3/15/17
PROPOSED GRADES	06/28/17
ADDED 1964 GRADES	06/28/17
GRANULAR FILTER MATERIAL NOTE	07/07/17

DWN ___JBT___ CHK'D ___JMB___ APP'D ___JMB___

SHEET TITLE: CROSS-SECTIONS

DATE: MARCH, 2017

PROJECT: CONSTRUCTION PLANS FOR STREAMBANK STABILIZATION & RAVINE REPAIR
11193 BLUESTEM LANE
CITY OF EDEN PRAIRIE
8080 MITCHELL ROAD
EDEN PRAIRIE, MINNESOTA

WENCK ASSOCIATES
Responsive partner. Exceptional outcomes.
1800 PIONEER CREEK CENTER
MAPLE PLAIN, MN 55359
PHONE 763-479-4200
FAX 763-479-4242

SHEET NO. 5

FILE NAME: I:\A\0094\07\DGN\SHEETS\0094-07-SHEETS.DGN