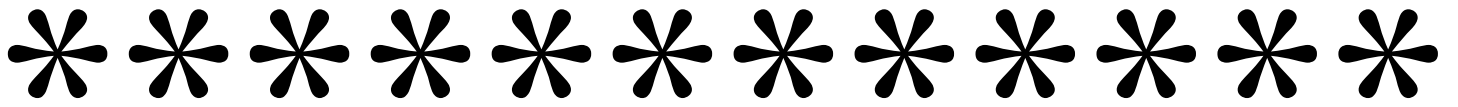




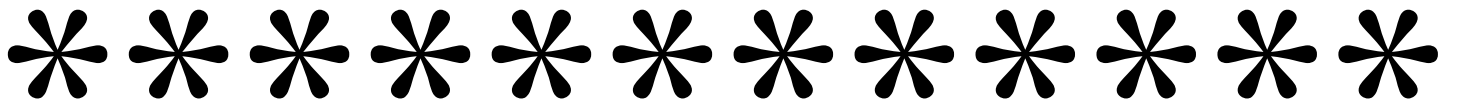
**RAMSEY-WASHINGTON**  
METRO WATERSHED DISTRICT

# **July 2018**

# **Board Packet**



# Agenda





## **Regular Board Meeting Agenda**

Wednesday, July 11, 2018

6:30 P.M.

District Office Board Room  
2665 Noel Drive, Little Canada, MN

1. Call to Order – 6:30 PM
2. **Approval of Agenda**
3. **Consent Agenda**
  - A. Approval of Minutes June 6, 2018
  - B. Change Order No. 2 – Frost/Kennard Spent Lime Filter
4. **Treasurer’s Report and Bill List**
5. Visitor Presentations
6. Permit Program
  - A. Applications
    - i. **18-13 Trails Edge Apartments, Maplewood**
    - ii. **18-14 365 S Owasso Blvd, Roseville**
    - iii. **18-15 Hy-Vee, Gem Lake**
    - iv. **18-16 Little Canada Elementary Addition**
    - v. **18-17 Beede Meadows, Maplewood**
    - vi. **18-18 I-694 & Rice Street Interchange including 18-08 WCA**
  - B. Enforcement Action Report
7. Stewardship Grant Program
  - A. Applications
    - i. **18-13 CS Rolling Hills, infiltration basin**
    - ii. **18-14 CS Battle Creek Elementary, native habitat restoration**
    - iii. **18-15 CS Maplewood City Hall, rain gardens**
    - iv. **18-16 CS Menomoni Park, infiltration basin**
  - B. Budget Status Update
8. Action Items
  - i. **Willow Pond CMAC Approval of Plans & Authorization to Advertise for Bid**

9. Administrator's Report
  - A. Meetings Attended
  - B. Upcoming Meetings and Dates
  - C. Solar Project Update
  - D. Board and CAC Tour Planning
  - E. MAWD Summer Tour Update
  - F. 2019 Budget Planning
10. Project and Program Status Reports
  - A. Ongoing Project and Program Updates
    - i. Permit Application Inspection/Enforcement
    - ii. Beltline Resiliency Study
    - iii. At Risk Subwatershed Feasibility Studies
    - iv. Snail Lake and Grass Lake Study and Berm Raise Project
    - v. Snail, Grass and West Vadnais Lakes Outlet Permitting
    - vi. West to East Vadnais Lakes Gravity Flow Feasibility Evaluation
    - vii. District Wide Atlas 14 Modeling
    - viii. Kohlman Weir Test System
    - ix. Roseville High School Campus Retrofit Feasibility Study
    - x. 2017 Tanners Lake Alum-Facility Monitoring
    - xi. Frost/Kennard Project
    - xii. Wakefield Park/Frost Avenue Project
    - xiii. Targeted Retrofit Projects
    - xiv. BMP Design Assistance and Review
    - xv. Owasso Basin Improvements
    - xvi. Beltline/Battle Creek Tunnel
    - xvii. CIP Maintenance/Repair 2018
    - xviii. Natural Resources Program
    - xix. Education Program
    - xx. Communications Program
11. Informational Items
12. Report of Managers
- 13. Adjourn**

*\*Items in **bold** signify that an action needs to be taken by the Board.*



# Consent Agenda





**Ramsey-Washington Metro Watershed District  
Minutes of Regular Board Meeting  
June 6, 2018**

The Regular Meeting of June 6, 2018, was held at the District Office Board Room, 2665 Noel Drive, Little Canada, Minnesota, at 6:30 p.m.

**PRESENT:**

Marj Ebensteiner, President  
Cliff Aichinger, Vice President  
Dianne Ward, Treasurer  
Dr. Pam Skinner, Secretary  
Lawrence Swope, Manager

**ABSENT:**

**ALSO PRESENT:**

Tina Carstens, District Administrator  
Amanda Staple, Recording Secretary  
Brad Lindaman, Barr Engineering  
Simba Blood, Natural Resources Specialist  
Viet-Hanh Winchell, Attorney for District  
Paige Ahlborg, Project Manager

Eric Korte, Water Quality Monitoring Coordinator  
Nicole Soderholm, Permit Inspector  
Dave Vlasin, Water Quality Technician  
Rebecca Beduhn, SEH for Ramsey County  
Brent Massey, CEI - Panera

**1. CALL TO ORDER**

The meeting was called to order by President Ebensteiner at 6:30 p.m.

**2. APPROVAL OF AGENDA**

Tina Carstens noted that Item 3B, Change Order No. 1 – 2018 CIP Maintenance and Repair, will be moved to Action Items to be considered as 8B and she requested to add an additional Item, 8C Change Order No. 1 – Grass Lake Berm.

Motion: Dianne Ward moved, Cliff Aichinger seconded, to approve the agenda as amended. Motion carried unanimously.

**3. CONSENT AGENDA**

- A. Approval of Minutes from May 2, 2018
- B. ~~Change Order No. 1 – 2018 CIP Maintenance and Repair~~
- C. Change Order No. 1 – Frost/Kennard Spent Lime Filter
- D. Washington County Watershed Based Funding Memorandum of Agreement

Motion: Dr. Pam Skinner moved, Lawrence Swope seconded, to approve the consent agenda as presented. Motion carried unanimously.

#### 4. TREASURER'S REPORT AND BILL LIST

Motion: Cliff Aichinger moved, Dianne Ward seconded, to approve the June 6, 2018, bill list as submitted. Motion carried unanimously.

#### 5. VISITOR PRESENTATIONS

There were none.

#### 6. PERMIT PROGRAM

##### A. Applications

##### Permit #18-10: Maplewood 2018 Street Improvement Project

Manager Aichinger asked for clarification on the volume credits. Nicole Soderholm provided additional details, noting that they will need to determine the number of cubic feet that will be removed from the Maplewood bank. She stated thus far there are six people interested in curb cut rain gardens. She explained that the city will continue outreach and the rain gardens added will decrease the amount of credit that needs to be used for the project.

Motion: Dr. Pam Skinner moved, Cliff Aichinger seconded, to approve Permit #18-10. Motion carried unanimously.

##### Permit #18-11: Whistler Pines – Shoreview

Manager Ward stated that it appears an overflow will be added from the infiltration basin to the ditch. Nicole provided additional details noting that the existing conditions create a bowl and therefore the ditch is at a higher elevation than the site. She noted that the only other option would be to raise the entire site and therefore they will use a pump when the water reaches the outflow elevation to reach the county ditch.

Manager Skinner noted that this is near the Grass Lake area and asked if the volume and rate control measures would prevent additional water from going to that area. She asked if the District is looking at sites of this nature that could be purchased for additional storage. Tina Carstens noted that staff did look at sites that could be used for storage, but advised that the small sites would not provide enough storage to make a difference.

Brad Lindaman confirmed that the available sites were reviewed but the smaller sites are not large enough to solve the problem and that is why the District looked downstream in attempt to solve the problem that way.

Motion: Cliff Aichinger moved, Lawrence Swope seconded, to approve Permit #18-11. Motion carried unanimously.

##### Permit #18-12: Panera Bread – Maplewood

Nicole Soderholm noted that this is a typical commercial redevelopment.

Brent Massey, in representation of the applicant, stated that they attempted to have an above ground infiltration basin, but the soils were not conducive to infiltration and therefore that aspect is proposed to be placed underground. Manager Skinner asked if the amount of impervious surface will increase with construction. Brent replied that the impervious surface will slightly decrease.

Motion: Dr. Pam Skinner moved, Dianne Ward seconded, to approve Permit #18-12. Motion carried unanimously.

##### D. I-694 and Rice Street Wetland Mitigation Discussion

Nicole Soderholm stated that this project was introduced to the Board back in October as there are anticipated wetland impacts for the project. She noted that in the past project specific mitigation has been waived for projects that qualify for the Board of Water and Soil Resources (BWSR) road replacement bank. She stated that detailed

information was provided in the packet explaining why project specific mitigation would not be ideal for this project.

Manager Swope asked what would be lost by losing the wetland, in terms of rain mitigation and wildlife. Tina noted that the floodplain mitigation would still need to be provided. Manager Skinner stated that she has big concerns about this. She asked for information on the District policy. Nicole noted that BWSR has recommended approval of this project using the road replacement bank. BWSR is concerned that onsite replacement would not provide adequate quality of wetland due to the position adjacent to a freeway. Manager Aichinger asked if something could be done with the staging area after the project to provide wetland area.

Rebecca Beduhn, SEH, stated that the area will be used for staging and wetland mitigation needs to occur prior to the project beginning. Manager Aichinger stated that, after the project is completed, perhaps some expansion to enhancement of the wetland and habitat could be done on that staging area. Tina noted that the area is used year-round for maintenance activity. Rebecca confirmed that there would not be enough space in that area because the site is used for maintenance purposes currently and in the future the road will go through this part of the site.

Manager Skinner stated that the wetlands currently filter the water from the freeway and asked if something else is going to be done to treat that water. Nicole confirmed that is an element of the permit that will come in for the project. She confirmed that BWSR supports non-project specific mitigation and utilization of the road bank for the project. Rebecca noted that both MnDOT and the Army Corps are also supportive of using non-project specific mitigation. Nicole stated that there is a history of the Board being flexible on the no net loss policy for linear existing road projects. Manager Aichinger stated that he does not have an issue and would support the plan as proposed, noting that the memorandum has sufficient information supporting the request. Manager Ward stated that she did not find sufficient information on why the county could not expand on the wetland two and three sites. Nicole stated that soils and hydrology were a big part of that decision. Rebecca stated that safety was a reason that site was ruled out as well, noting that the slope would cause the water to be too close to the roadway.

Nicole stated that she can provide the additional information to the Board prior to the next meeting for the Board to consider as the permit will come before the Board at the next meeting.

#### C. Monthly Enforcement Report

During May, 13 notices were sent to address: install/maintain inlet protection (2), install/maintain perimeter control (2), install/maintain construction entrance (2), sweep streets (1), contain liquid/solid wastes (1), protect/maintain permanent BMPs (3), and install/maintain energy dissipation (2).

### 7. **STEWARDSHIP GRANT PROGRAM**

#### A. Applications

##### Permit #18-11 CS: Lake Phalen Aquatic Vegetation Harvesting

Paige Ahlborg noted that this is the first application for aquatic vegetation removal. She stated that this activity has occurred for years. Tina Carstens confirmed that the District has cost-shared on this for years, this simply moves the action over to the new cost-share program.

Motion: Cliff Aichinger moved, Dianne Ward seconded, to approve Permit #18-11 CS. Motion carried unanimously.

#### B. Budget Status Update

No comments.

### 8. **ACTION ITEMS**

#### A. Stormwater Pollution Prevention Plan Annual Report and Meeting

Tina Carstens reported that this is an annual meeting the District holds, providing an opportunity for the public to comment on the MS4 Stormwater Pollution Prevention Plan (SWPPP). She stated that the report must be sent to



the MPCA by the end of June. Nicole Soderholm stated that there are six minimum control measures that must be included in the report. Manager Swope commended staff for the excellent job on the report. Manager Aichinger referenced the alum treatment information. Eric Korte noted that another staff member from Barr Engineering is compiling the full report for the alum treatment.

Motion: Cliff Aichinger moved, Dianne Ward seconded, to accept the 2017 MS4 Annual Report and authorize the Administrator to submit the report to the MPCA. Motion carried unanimously.

Manager Aichinger asked if the MPCA is doing any more analysis on the reports. Nicole stated that the MPCA does audit on occasion. Tina noted that the last audit the District received was in 2014.

B. Change Order No. 1 – 2018 CIP Maintenance and Repair

Brad Lindaman distributed change order requests from Fitzgerald, the contractor completing both the 2018 CIP Maintenance and Repair project and the Grass Lake Berm project. He stated that the contractor began work earlier in the year on the CIP project and then there was no work during the spring melt. He stated that following the spring melt, when there were good weeks of weather, the District noticed that the contractor was still not working. He stated that staff met with the contractor a couple of weeks ago and explained that the contractor would need to submit a timeline identifying how the project would be completed. He stated that the deadline to have that information submitted was not reached and there was no contact. He stated that the contractor has since been working on the CIP project, but is working outside the contract deadline and had not submitted the necessary information to request an extension. He stated that the legal counsel for the District sent a letter stating that the District would extend the contract to June 15<sup>th</sup> as long as there is acknowledgement from the contractor of the contract extension. He stated that there still has not been any communication from the contractor. He stated that he was finally able to reach the contractor recently through text specifying that he would need communication from the contractor in order to recommend extension of the contracts at this board meeting.

Brad stated that, as of the night of the board meeting, good progress has been made on the CIP project, but noted that the scope of work has changed on the Battle Creek pipe that will cause the project to run past the mid-June contract extension. He stated that there are two change orders before the Board and there is no obligation for the Board to extend the contracts. He stated that if the Board would choose to end their contracts with Fitzgerald there would be transition costs to switch contractors to finish the project. He provided an update on the progress for the CIP project and noted that there has not been much work on the Grass Lake Berm thus far, with the exception of hauling material.

Manager Aichinger stated that his concern would be that the District would need to rebid the project if the contract is canceled, which would cause further delay. He stated that the berm project is not weather dependent and does not see an issue with completing that project this summer. Brad noted that the only issue with the Grass Lake Berm is that a water control plan would be needed for high water, and the contractor has not yet submitted that plan. Manager Aichinger noted that this contractor was significantly under the other bidders and he would support moving forward with this contractor, ensuring that there is onsite supervision.

Manager Ward stated that she can understand the July 31<sup>st</sup> date for the berm, but asked why that date would be used for the CIP project. Brad stated that they are still in the discovery stage for the Battle Creek pipe and he would recommend the longer timeline to ensure the work can be completed due to the change in scope because of that site. Manager Ward asked if guidance is being given on which items should be completed first in terms of priority. Brad stated that would take over the responsibility of the contractor, noting that it is the job of the contractor to plan his time accordingly to meet the terms of the contract. Manager Ward stated that there should be priorities to ensure that the work is being completed. Brad noted that priorities can be identified by changing deadlines, if desired. He provided additional details on the issues that arose with the Battle Creek pipe.

President Ebensteiner noted that it appears the contractor is not good with paperwork and is not terribly responsive in communication. She stated that the references appear to support that in the end a good result will be reached. She stated that the contractor has submitted the requested correspondence and is still out working and would support continuing with the contractor rather than rebidding in attempt to go with another contractor. Brad stated that when a project goes past the contract date, additional charges can be recouped through liquidated damages. Viet-Hanh Winchell stated that the District could consider liquidated damages and provided additional details on that process.

Manager Ward stated that it appears the contractor has problems managing the work and therefore she would support creating separate deadlines to align the priorities. Manager Aichinger suggested using July 15<sup>th</sup> for the Grass Lake Berm and August 30<sup>th</sup> for the Battle Creek pipe work. Manager Aichinger noted that the change order could include the interim dates for the project elements. Manager Ward stated that she would support shorter deadlines to ensure work is being completed. Viet-Hanh Winchell stated that something needs to be done tonight because the contractor is working outside of the contract.

Motion: Cliff Aichinger moved, Dianne Ward seconded, to approve Change Order No. 1 – 2018 CIP Maintenance and Repair with a completion date of July 31, 2018. Motion carried unanimously.

C. Change Order No. 1 – Grass Lake Berm

Motion: Cliff Aichinger moved, Dianne Ward seconded, to approve Change Order No. 1 – Grass Lake Berm, revising the completion date to July 6, 2018, and directing staff to work with the contractor on phasing. Motion carried unanimously.

**9. ADMINISTRATOR'S REPORT**

A. Meetings Attended

No comments.

B. Upcoming Meetings and Dates

Tina Carstens provided details on the District paddling event.

C. July Meeting Date Change Reminder

Tina reminded the Board of the July meeting date change.

D. Washington County Meeting Update

Manager Aichinger suggested hosting a tour of Washington County properties within the District, inviting elected officials to highlight the projects in that area. Tina stated that the District could hold that activity as the annual tour this year.

E. 3M Settlement Working Group

Tina Carstens confirmed that the District does have a seat at the table for this discussion.

**10. PROJECT AND PROGRAM STATUS REPORTS**

A. Presentation: 2017 Water Quality Summary

Eric Korte presented the 2017 water quality summary and identified the water quality program sites within the District. He explained that the overall objective is to assess the condition of the lakes over time. He stated that the trophic state index is used to assess the lakes and reviewed the four different trophic states used. He displayed the trophic state data for each of the monitored lakes for 2017.

Manager Skinner asked if increased chloride has an impact on the water quality level. Eric stated that is unknown and noted that stormwater ponds are beginning to be monitored to provide additional data on chloride. He explained that the goal of monitoring is to monitor the lake condition over time and provided the trend analysis

information, noting that a lot of the lakes have positive or no trends, which is a good result. He provided more information on Kohlman Lake in example of a positive trending lake. He provided information on Best Management Practices (BMPs) including the alum plant. Manager Skinner stated that she is very opposed to the use of alum and therefore will never support a project of this type.

Eric provided additional information on various BMP monitoring throughout the District.

Manager Skinner asked if there are other researchers in this area that would perhaps be interested in projects. Tina Carstens stated that there is a project coming up where the District will work with Saint Anthony Falls Lab to determine if iron could be added to ponds to reduce phosphorus. Manager Aichinger stated that the Minnesota Stormwater Research Council is up and running and two grants were issued last year. He stated that new projects will be authorized each year. Manager Skinner stated that it would be great to allow master students to participate in certain research projects. Tina confirmed that master students are involved in the projects. Eric then reviewed some of the future monitoring sites.

B. New Project Memo: Maplewood Mall Green Infrastructure Assessment

Manager Aichinger stated that he is glad to see this plan and he believes that this is the time to complete that assessment. Brad Lindaman provided additional details on the process that will be used. He noted that water runs not only through the District project area but also from untreated areas. Tina stated that the rain gardens are easily monitored, and the District is now going to focus on the tree trenches.

C. New Project Memo: Impact of Removal of Accumulated Sediment from Wakefield Lake on Lake Phalen Water Quality

Tina stated that there is accumulated sediment at the south part of Wakefield Lake. Brad stated that they are attempting to determine if it would be worth it to dig the sediment out and determine if there is an impact downstream. He noted that the study will determine whether that action would be beneficial and cost efficient. Manager Aichinger asked if it would be beneficial to move some of the sediment during excavation, if that path is taken, in attempt to increase the circulation of the lake. He asked if that could be part of the study. Tina confirmed that could be discussed.

D. Ongoing Project and Program Updates

- i. Permit Application Inspection/Enforcement
- ii. Beltline Resiliency Study
- iii. At Risk Subwatershed Feasibility Studies
- iv. Snail Lake and Grass Lake Study and Berm Raise Project
- v. Snail, Grass and West Vadnais Lakes Outlet Permitting  
Dianne Ward asked if there has been any more progress with the DNR regarding Item V. Brad Lindaman replied that staff is still working to discuss the item further before discussing permitting, in attempt to further flush out the cost details.
- vi. District Wide Atlas 14 Modeling
- vii. Kohlman Weir Test System
- viii. Roseville High School Campus Retrofit Feasibility Study
- ix. Frost/Kennard Project
- x. Willow Pond CMAC Project
- xi. Wakefield Park/Frost Avenue Project
- xii. Targeted Retrofit Projects
- xiii. BMP Design Assistance and Review
- xiv. Owasso Basin Improvements
- xv. Beltline/Battle Creek Tunnel
- xvi. CIP Maintenance/Repair 2018

President Ebensteiner noted that there will be a more thorough review of the projects and programs at the next meeting. She stated that in the future it would also be helpful to have a presentation on the education programs to recognize the work that is being done.

Manager Aichinger referenced the Maplewood Mall study and suggested that perhaps this would be a good time to discuss the user agreement and maintenance responsibilities.

**11. INFORMATIONAL ITEMS**

No comments.

**12. REPORTS OF MANAGERS**

Manager Aichinger asked if staff has thought about site tours the staff might hold for the board. Tina Carstens stated that staff thought about going to the Wakefield park site with plans to look further in depth at that site. She identified potential other locations and noted that the tour could occur prior to the regular Board meeting.

**13. ADJOURN**

Motion: Cliff Aichinger moved, Dr. Pam Skinner seconded, to adjourn the meeting at 8:35 p.m. Motion carried unanimously.

Respectfully submitted,

Dr. Pam Skinner, Secretary

# Consent Agenda Item

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**Board Meeting Date:** July 11, 2018

**Agenda Item No.:** 3B

**Preparer:** Tina Carstens, Administrator

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**Item Description:** Change order #2 for the Frost/Kennard Spent Lime Filter

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**Background:**

Attached is change order #2 for the Frost/Kennard Spent Lime Filter Project. At the June 6, 2018 board meeting a change order for contract extension was awarded to the contractor in order to order, furnish and install an anti-backflow check valve. This change order pays for the cost of that check valve. The valve is needed to reduce backflows into the filter, which cause sediment to degrade the filter performance.

The rest of the construction is nearly complete. The filter remains offline until the backflow preventer and the monitoring equipment is installed. Construction is expected to be complete and the monitoring equipment installed in July or August dependent upon delivery of the specified backflow preventer.

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**Applicable District Goal and Action Item:**

**Goal: Achieve quality surface water:** The District will maintain or improve surface water quality to support healthy ecosystems and provide the public with a wide range of water-based benefits.

**Action Items:** Expand the use of innovative water quality improvement designs, products, equipment, and methods as necessary to address sites with limited land area for conventional treatment techniques.

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**Staff Recommendation:**

Approve Change Order #2.

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**Financial Implications:**

This request increases the contract price by \$3,300.00. There is sufficient funds in the project budget for this increase.

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**Board Action Requested:**

Approve Change Order #2.

**Change Order No. 2  
Ramsey-Washington Metro Watershed District  
Frost/Kennard Stormwater Filter**

**DATE OF ISSUANCE:** June 26, 2018

**Owner:** Ramsey-Washington Metro Watershed District  
2665 Noel Drive  
Little Canada, MN 55117  
Attn: Marj Ebensteiner

**Contractor:** Minger Construction Co., Inc.  
620 Corporate Drive  
Jordan, MN 55352  
Attn: Aaron Hoefs

**Engineer:** Barr Engineering Company  
4300 MarketPointe Drive, Suite 200  
Minneapolis, MN 55435  
Attn: Brad Lindaman

**C.O.2.A      Contract Completion Extension**

Description of Change:

Engineer requested a quote from the Contractor to provide a system valve to reduce backflows into the filter, reducing the sediment that can degrade the filter performance. A CheckMate UltraFlex Inline Valve was selected and obtained by the Contractor for installation.

**Measurement and Payment:**

CheckMate UltraFlex Inline Valve shall be measured per each (Each) as installed and recorded in the field and directed by the Engineer. Payment will be based on a unit price per each (Each) CheckMate UltraFlex Inline Valve installed, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish and install, CheckMate UltraFlex Inline Valve, all complete as specified.


**Change in Contract Time:**

None

**Total Impact on Contract Price:**

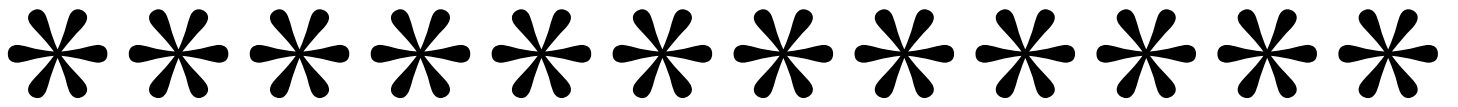
Additional cost of \$3,300.00 is anticipated.

This Change Order No. 2 is:

Submitted By:   
(ENGINEER) \_\_\_\_\_ Date: June 26, 2018  
Bradley J. Lindaman, Project Engineer  
Barr Engineering Company

Authorized By: \_\_\_\_\_ Date: \_\_\_\_\_  
(OWNER) Marj Ebensteiner, President  
Ramsey-Washington Metro Watershed District

Approved By:   
(CONTRACTOR) \_\_\_\_\_ Date: 6/27/18  
Aaron Hoefs, Project Manager  
Minger Construction Co., Inc.



# Bill List





**RWMWD BUDGET STATUS REPORT**

**Administrative & Program Budget**

Fiscal Year 2018

6/30/2018

Budget Category	Budget Item	Account Number	Original Budget	Budget Transfers	Current Month Expenses	Year-to-Date Expenses	Current Budget Balance	Percent of Budget
Manager	Per diems	4355	\$6,500.00	-	225.00	1,855.00	\$4,645.00	28.54%
	Manager expenses	4360	3,500.00	-	-	552.52	2,947.48	15.79%
Committees	Committee/Bd Mtg. Exp.	4365	3,500.00	-	211.00	1,488.53	2,011.47	42.53%
Employees	Staff salary/taxes/benefits	4010	1,300,000.00	-	146,089.94	601,207.03	698,792.97	46.25%
	Employee expenses	4020	10,000.00	-	521.11	1,725.85	8,274.15	17.26%
	District training & education	4350	25,000.00	-	3,261.16	8,072.03	16,927.97	32.29%
Administration/ Office	GIS system maint. & equip.	4170	15,000.00	-	-	2,537.02	12,462.98	16.91%
	Data Base/GIS Maintenance	4171	15,000.00	-	-	1,300.00	13,700.00	8.67%
	Equipment maintenance	4305	3,000.00	-	-	1,430.83	1,569.17	47.69%
	Telephone	4310	8,000.00	-	358.22	1,543.68	6,456.32	19.30%
	Office supplies	4320	5,000.00	-	660.15	2,121.05	2,878.95	42.42%
	IT/Internet/Web Site/Software Lic.	4325	42,000.00	-	2,767.86	16,511.44	25,488.56	39.31%
	Postage	4330	10,000.00	-	489.65	2,132.12	7,867.88	21.32%
	Printing/copying	4335	8,000.00	-	285.67	2,224.93	5,775.07	27.81%
	Dues & publications	4338	11,000.00	-	-	7,620.00	3,380.00	69.27%
	Janitorial/Trash Service	4341	17,000.00	-	1,564.95	6,641.56	10,358.44	39.07%
	Utilities/Bldg.Contracts	4342	18,000.00	-	964.92	9,505.74	8,494.26	52.81%
	Bldg/Site Maintenance	4343	70,000.00	-	1,004.60	5,457.31	64,542.69	7.80%
	Miscellaneous	4390	5,000.00	-	-	325.19	4,674.81	6.50%
	Insurance	4480	35,000.00	-	-	4,643.00	30,357.00	13.27%
	Office equipment	4703	40,000.00	-	-	11,728.92	28,271.08	29.32%
	Vehicle lease, maintenance	4810-40	43,000.00	-	841.14	29,831.55	13,168.45	69.38%
Consultants/ Outside Services	Auditor/Accounting	4110	50,000.00	-	1,993.60	34,782.85	15,217.15	69.57%
	Engineering-administration	4121	93,000.00	-	4,955.00	31,547.18	61,452.82	33.92%
	Engineering-permit I&E	4122	15,000.00	-	-	3,155.00	11,845.00	21.03%
	Engineering-eng. review	4123	55,000.00	-	3,738.00	29,349.44	25,650.56	53.36%
	Engineering-permit review	4124	50,000.00	-	7,224.00	19,302.50	30,697.50	38.61%
	Project Feasibility Studies	4129	735,000.00	-	32,370.71	172,844.06	562,155.94	23.52%
	Attorney-permits	4130	10,000.00	-	221.68	825.28	9,174.72	8.25%
	Attorney-general	4131	40,000.00	-	1,930.00	7,030.00	32,970.00	17.58%
	Outside Consulting Services	4160	40,000.00	-	-	7,832.00	32,168.00	19.58%
Programs	Educational programming	4370	60,000.00	-	7,522.46	16,678.65	43,321.35	27.80%
	Communications & Marketing	4371	25,000.00	-	594.17	3,722.16	21,277.84	14.89%
	Events	4372	50,000.00	-	10,643.68	30,012.10	19,987.90	60.02%
	Water QM-Engineering	4520-30	513,000.00	-	12,576.54	43,286.88	469,713.12	8.44%
	Project operations	4650	140,000.00	-	18,810.85	88,054.20	51,945.80	62.90%
	SLMP/TMDL Studies	4661	115,000.00	-	3,684.70	6,260.70	108,739.30	5.44%
	Natural Resources/Keller Creek	4670-72	100,000.00	-	10,189.03	31,934.80	68,065.20	31.93%
	Outside Prog.Support/Weed Mgmt.	4683-84	70,000.00	-	1,569.54	30,694.03	39,305.97	43.85%
	Research Projects	4695	100,000.00	-	29,943.00	34,851.63	65,148.37	34.85%
	Health and Safety Program	4697	2,000.00	-	1,524.95	1,577.10	422.90	78.86%
	NPDES Phase II	4698	20,000.00	-	1,742.00	3,668.00	16,332.00	18.34%
	Atlas 14 Watershed Modeling	4732	-	-	-	-	-	0.00%
<b>GENERAL FUND TOTAL</b>			<b>\$3,976,500.00</b>	<b>\$0.00</b>	<b>\$310,479.28</b>	<b>\$1,317,863.86</b>	<b>\$2,658,636.14</b>	<b>33.14%</b>
CIP's	CIP Project Repair & Maintenance	516	1,000,000.00	-	50,787.09	489,200.60	510,799.40	48.92%
	Targeted Retrofit Projects	518	800,000.00	-	20,448.55	37,641.43	762,358.57	4.71%
	District Office Building Solar Energy Retrofit	519	150,000.00	-	140.00	38,720.00	111,280.00	25.81%
	Flood Damage Reduction Fund	520	2,000,000.00	-	12,083.93	60,865.58	1,939,134.42	3.04%
	Debt Services-96-97 Beltline/MM/Battle Creek	526	448,951.00	-	110,093.34	387,618.43	61,332.57	86.34%
	Stewardship Grant Program Fund	528-529	800,000.00	-	280,574.06	326,804.63	473,195.37	40.85%
	Impervious Surface Volume Reduction Opportunity	531	1,500,000.00	-	-	-	1,500,000.00	0.00%
	Beltline & Battle Creek Tunnel Repair	549	-	-	43,814.74	1,401,085.59	(1,401,085.59)	---
	Frost/Kennard Enhanced WQ BMP	550	400,000.00	-	3,198.00	23,085.71	376,914.29	5.77%
	Markham Pond Dredging & Aeration	551	25,000.00	-	-	-	25,000.00	0.00%
	Wakefield Park Project	553	1,100,000.00	-	8,278.50	21,878.43	1,078,121.57	1.99%
	Willow Pond CMAC	554	400,000.00	-	15,595.30	62,999.54	337,000.46	15.75%
	District Office Bond Payment	585	194,885.00	-	1,809.72	196,983.53	(2,098.53)	101.08%
<b>CIP BUDGET TOTAL</b>			<b>\$8,818,836.00</b>	<b>-</b>	<b>\$546,823.23</b>	<b>\$3,046,883.47</b>	<b>\$5,771,952.53</b>	<b>34.55%</b>
<b>TOTAL BUDGET</b>			<b>\$12,795,336.00</b>	<b>\$0.00</b>	<b>\$857,302.51</b>	<b>\$4,364,747.33</b>	<b>\$8,430,588.67</b>	<b>34.11%</b>

**Current Fund Balances:**

Fund:	Beginning Fund Balance @ 12/31/17	Fund Transfers	Year to date Revenue	Current Month Expenses	Year to Date Expense	Fund Balance @ 06/30/18
101 - General Fund	\$4,329,903.56	-	141,390.36	310,479.28	1,317,863.86	3,153,430.06
516 - CIP Project Repair & Maintenance	615,041.00	-	54,412.00	50,787.09	489,200.60	180,252.40
518 - Targeted Retrofit Projects	836,989.00	-	15,000.00	20,448.55	37,641.43	814,347.57
519 - District Office Building Solar Energy Retrofit	129,623.00	-	0.00	140.00	38,720.00	90,903.00
520 - Flood Damage Reduction Fund	1,118,749.00	-	21,772.11	12,083.93	60,865.58	1,079,655.53
526 - Debt Services-96-97 Beltline/MM/Battle Creek Tunnel Repair	359,578.00	-	0.00	110,093.34	387,618.43	(28,040.43)
528/529 - Stewardship Grant Program Fund	561,388.00	-	15,000.00	280,574.06	326,804.63	249,583.37
531 - Impervious Surface Volume Reduction Opportunity	1,484,215.00	-	0.00	0.00	0.00	1,484,215.00
549 - Beltline & Battle Creek Tunnel Repair	2,407,984.00	-	0.00	43,814.74	1,401,085.59	1,006,898.41
550 - Frost/Kennard Enhanced WQ BMP	119,513.00	-	0.00	3,198.00	23,085.71	96,427.29
551 - Markham Pond Dredging & Aeration	110,411.00	-	0.00	0.00	0.00	110,411.00
553 - Wakefield Park Project	351,874.00	-	0.00	8,278.50	21,878.43	329,995.57
554 - Willow Pond CMAC	-	-	0.00	15,595.30	62,999.54	(62,999.54)
580 - Contingency Fund	476,100.94	-	0.00	0.00	0.00	476,100.94
585 - Certificates of Participation	133,637.00	-	0.00	1,809.72	196,983.53	(63,346.53)
<b>Total District Fund Balance</b>	<b>\$13,035,006.50</b>	<b>-</b>	<b>\$ 247,574.47</b>	<b>\$ 857,302.51</b>	<b>\$4,364,747.33</b>	<b>\$8,917,833.64</b>

**Ramsey Washington Metro Watershed Dist.**  
**Check Register**  
**For the Period From Jun 1, 2018 to Jun 30, 2018**

Check #	Date	Payee ID	Payee	Description	Amount
EFT	06/01/18	met008	MetLife-Group Benefits	Employee Benefits	\$1,196.21
EFT	06/14/18	hea002	HealthPartners	Employee Benefits	9,203.67
EFT	06/19/18	qwe001	CenturyLink	Project Operations	225.91
EFT	06/26/18	kin001	FedEx Office	Events	164.33
69938V	06/30/18	gra001	Rick Gravrok	VOID	(125.00)
69986	06/18/18	ada002	Adam's Pest Control, Inc.	Utilities/Bldg. Contracts	79.00
69987	06/18/18	aws001	AWS Service Center	Janitorial/Trash Services	186.51
69988	06/18/18	bud001	Budget Sign & Graphics	Events	50.00
69989	06/18/18	cob003	Dominic Cobb	Events	90.00
69990	06/18/18	eas001	East Side Area Business Association	Stewardship Grant Fund	150.00
69991	06/18/18	hej001	Hejny Rental	Events	132.97
69992	06/18/18	hen002	Henriksen Ace Hardware	Natural Resources Project	58.72
69993	06/18/18	hic001	Kaitlyn Hicks	Events	90.00
69994	06/18/18	ing002	INGCO International, Inc.	Communications/Events	934.17
69995	06/18/18	jam001	James Steele Construction, Inc	Bldg/Site Maintenance	600.00
69996	06/18/18	kid002	KidZibits, Inc.	Construction-Maint. & Rep.	10,300.00
69997	06/18/18	mac004	Jack MacMillan	Events	127.50
69998	06/18/18	mbc001	MBC Consulting	Events	3,000.00
69999	06/18/18	mil002	Becca Miller	Events	90.00
70000	06/18/18	ncp001	NCPERS Minnesota	Employee Benefits	16.00
70001	06/18/18	pit001	Pitney Bowes Global Financial Serv LLC	Postage	142.47
70002	06/18/18	pre003	Premium Waters, Inc.	Utilities/Bldg. Contracts	19.00
70003	06/18/18	rei003	Avery Reid	Events	90.00
70004	06/18/18	ros003	Roseville Area Middle School	Educational Program	458.93
70005	06/18/18	ros004	Roseville Midway Ford	Vehicle Expense	59.05
70006	06/18/18	rpz001	RPZ Testing Services	Project Operations	120.00
70007	06/18/18	stp004	St. Paul East Parks Lions	Events	607.50
70008	06/18/18	the003	The Luther Company, LLLP	Dev Escrow-General	36,790.00
70009	06/18/18	tho003	Adam Thompson	Events	71.25
70010	06/18/18	was003	Washington Co.-Taxation Div.	Auditor/Accounting	35.00
70011	06/18/18	wen001	Sue Wendlund	Events	127.50
70012	07/02/18	ahl001	Paige Ahlborg	Employee Reimbursement	523.37
70013	07/02/18	all004	allstream	Project Operations	64.75
70014	07/02/18	als001	ALS Group USA, Corp	Water QM Staff	1,115.00
70015	07/02/18	and003	Deborah Andresen	Educational Program	125.00
70016	07/02/18	att002	AT & T Mobility - ROC	IT/Website/Software	45.23
70017	07/02/18	bar001	Barr Engineering	May/June Engineering	147,896.92
70018	07/02/18	bar004	Deborah Barnes	Employee Reimbursement	86.10
70019	07/02/18	blo001	Simba Blood	Employee Reimbursement	100.50
70020	07/02/18	bre003	Bremer Bank	Employee Benefits	6,468.75
70021	07/02/18	cad003	Cady Building Maintenance, Inc.	Janitorial/Trash Services	605.00
70022	07/02/18	cad003	Cady Building Maintenance, Inc.	Janitorial/Trash Services	773.44
70023	07/02/18	car007	Carp Solutions, LLC	Natural Resources Project	10,024.90
70024	07/02/18	chi001	Chick-fil-A, Inc.	Dev Escrow-General	6,320.00
70025	07/02/18	chi002	Linda Chimzar	Stewardship Grant Fund	2,196.43
70026	07/02/18	cit011	City of Roseville	Telephone/IT/Website	2,932.82

**Ramsey Washington Metro Watershed Dist.**  
**Check Register**  
**For the Period From Jun 1, 2018 to Jun 30, 2018**

Check #	Date	Payee ID	Payee	Description	Amount
70027	07/02/18	cit013	City of St. Paul	Stewardship Grant Fund	270,358.73
70028	07/02/18	far002	Farnsworth Aerospace Magnet	Educational Program	320.00
70029	07/02/18	gal001	Galowitz Olson, PLLC	June Legal Fees	2,610.00
70030	07/02/18	gil001	Gilbert Mechanical Contractors, Inc.	Bldg/Site Maintenance	341.89
70031	07/02/18	gra005	Grainger	Construction-Maint. & Rep.	23.25
70032	07/02/18	hac002	Hach Company	Water QM Staff	286.67
70033	07/02/18	har003	Harmony Adult Education	Educational Program	107.20
70034	07/02/18	haw001	Hawkins, Inc.	Project Operations	13,182.80
70035	07/02/18	hen002	Henriksen Ace Hardware	Natural Resources Project	3.12
70036	07/02/18	hom001	Home Depot Credit Services	Nat.Resources/Water QM	127.37
70037	07/02/18	inn002	Innovative Office Solutions LLC	Office Supplies	356.30
70038	07/02/18	int001	Office of MN, IT Services	Telephone Expense	55.40
70039	07/02/18	kwi001	Kwik Trip, Inc.	Dev Escrow-General	10,500.00
70040	07/02/18	lea003	L. Tracy Leavenworth	Educational Program	5,839.71
70041	07/02/18	lig001	Lighthouse Management Group, Inc.	Dev Escrow-General	6,800.00
70042	07/02/18	mel001	Michelle L. Melser	Employee Reimbursement	71.07
70043	07/02/18	min007	Minger Construction Co., Inc.	Construction-Maint. & Rep.	17,459.00
70044	07/02/18	min008	Minnesota Native Landscapes, Inc.	Construction-Maint. & Rep.	9,691.00
70045	07/02/18	min010	MN Public Facilities Authority	Debt Serv.-Beltline/Tanner	110,093.34
70046	07/02/18	mmc001	MMC Associates, Inc.	Events	3,475.18
70047	07/02/18	mon001	Monarch Bus Service	Events	820.00
70048	07/02/18	ncp001	NCPERS Minnesota	Employee Benefits	16.00
70049	07/02/18	nor016	Northland Trust Services, Inc.	Construction-Beltline/Battle	38,876.25
70050	07/02/18	nsp001	Xcel Energy	Proj.Operations/Utilities	1,049.50
70051	07/02/18	obr001	Christopher O'Brien	Employee Reimbursement	213.21
70052	07/02/18	omo001	Nicholas D. Omodt	Employee Reimbursement	10.90
70053	07/02/18	pac001	Pace Analytical Services, Inc.	Water QM Staff	7,371.50
70054	07/02/18	pas002	Sage Passi	Employee Reimbursement	487.87
70055	07/02/18	pen001	Penn Contracting, Inc.	Construction-Maint. & Rep.	4,800.00
70056	07/02/18	pit002	Pitney Bowes, Inc.	Postage	347.18
70057	07/02/18	pra001	Prairie Moon Nursery, Inc.	Natural Resources Project	52.00
70058	07/02/18	pro003	Lyndsey R. Provos	Employee Reimbursement	48.72
70059	07/02/18	ram012	Ramsey Co.Master Gardener Program	Stewardship Grant Fund	204.50
70060	07/02/18	red002	Redpath & Company, Ltd	May Accounting	1,958.60
70061	07/02/18	sig001	Sign-A-Rama	Vehicle Expense	255.43
70062	07/02/18	sod001	Nicole Soderholm	Employee Reimbursement	168.94
70063	07/02/18	stp003	St. Peter Catholic School	Educational Program	273.60
70064	07/02/18	sun001	Sunram Construction, Inc	Payment #6-Final	8,465.71
70065	07/02/18	tec001	Tech Sales Co.	Research Projects	24,627.00
70066	07/02/18	tel001	Teledyne Instruments, Inc.	Water QM Staff	1,077.50
70067	07/02/18	tim002	Timesaver Off-Site Secretarial, Inc.	Committee/Board Meeting	211.00
70068	07/02/18	uni006	University of Minnesota	Training & Education	40.00
70069	07/02/18	ups001	United Parcel Service	Water QM Staff	87.15
70070	07/02/18	usb002	U.S. Bank	Monthly Credit Card Ex.	5,869.32
70071	07/02/18	usb003	US Bank St. Paul	Debt Serv.-Cert.of Particip.	1,809.72
70072	07/02/18	usb005	US Bank Equipment Finance	Printing Expense	285.67
70073	07/02/18	voy001	US Bank Voyager Fleet Sys.	Vehicle Fuel	526.66
70074	07/02/18	wea002	Weaver Elementary School	Educational Program	133.20
70075	07/02/18	wil007	Patrick Williamson	Employee Reimbursement	102.95
<b>Total</b>					<b>\$796,261.01</b>

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From June 1, 2018 - June 30, 2018**

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
06/01/18	EFT	met008	MetLife-Group Benefits			\$1,196.21	
				4040-101-000	Employee Benefits-General		988.14
				2015-101-000	Employee Health-General		208.07
06/14/18	EFT	hea002	HealthPartners			9,203.67	
				4040-101-000	Employee Benefits-General		7,486.10
				2015-101-000	Employee Health-General		1,717.57
06/19/18	EFT	qwe002	CenturyLink	4650-101-000	Project Operations-General	225.91	
06/26/18	EFT	kin001	FedEx	4372-101-000	Events	164.33	
06/30/18	69938V	gra001	Rick Gravrok	4372-101-000	Events	(125.00)	
06/18/18	69986	ada002	Adam's Pest Control	4342-101-000	Utilities/Bldg. Contracts	79.00	
06/18/18	69987	aws001	AWS Service Center	4341-101-000	Janitorial/Trash Service	186.51	
06/18/18	69988	bud001	Budget Sign & Graphics	4372-101-000	Events	50.00	
06/18/18	69989	cob003	Dominic Cobb	4372-101-000	Events	90.00	
06/18/18	69990	eas001	East Area Business Association	4682-529-000	Stewardship Grant Program	150.00	
06/18/18	69991	hej001	Hejny Rental	4372-101-000	Events	132.97	
06/18/18	69992	hen002	Henriksen Ace Hardware	4670-101-000	Natural Resources Project-General	58.72	
06/18/18	69993	hic001	Kaitlyn Hicks	4372-101-000	Events	90.00	
06/18/18	69994	ing002	INGCO International, Inc.			934.17	
				4372-101-000	Events		420.00
				4371-101-000	Communications & Marketing		514.17
06/18/18	69995	jam001	James Steele Construction, Inc.	4343-101-000	Bldg./Site Maintenance	600.00	
06/18/18	69996	kid002	KidZibits, Inc.	4630-516-000	Construction Imp.-Maint. & Repair	10,300.00	
06/18/18	69997	mac004	Jack MacMillan	4372-101-000	Events	127.50	
06/18/18	69998	mbc001	MBC Consulting	4372-101-000	Events	3,000.00	
06/18/18	69999	mil002	Becca Miller	4372-101-000	Events	90.00	
06/18/18	70000	ncp001	NCPERS Minnesota	2015-101-000	Employee Health-General	16.00	
06/18/18	70001	pit001	Pitney Bowes Global Financial Ser., LLC	4330-101-000	Postage-General	142.47	
06/18/18	70002	pre003	Premium Waters, Inc.	4342-101-000	Utilities/Bldg. Contracts	19.00	
06/18/18	70003	rei003	Avery Reid	4372-101-000	Events	90.00	
06/18/18	70004	ros003	Roseville Area Middle School	4370-101-000	Educational Program-General	458.93	
06/18/18	70005	ros004	Roseville Midway Ford	4820-101-000	Vehicle Maintenance-General	59.05	
06/18/18	70006	rpz001	RPZ Testing Services	4650-101-000	Project Operations-General	120.00	
06/18/18	70007	stp004	St. Paul East Parks Lions	4372-101-000	Events	607.50	
06/18/18	70008	the003	The Luther Company, LLLP	2024-101-000	Dev Escrow-General	36,790.00	
06/18/18	70009	tho003	Adam Thompson	4372-101-000	Events	71.25	
06/18/18	70010	was003	Washington County-Taxation Division	4110-101-000	Auditor/Accounting	35.00	
06/18/18	70011	wen001	Sue Wendlund	4372-101-000	Events	127.50	

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From June 1, 2018 - June 30, 2018**

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
07/02/18	70012	ahl001	Paige Ahlborg			523.37	
				4040-101-000	Employee Benefits-General		37.05
				4020-101-000	Employee Expense-General		101.92
				4350-101-000	Training & Education-General		384.40
07/02/18	70013	all004	allstream	4650-101-000	Project Operations-General	64.75	
07/02/18	70014	als001	ALS Group USA, Corp.	4530-101-000	Water QM Staff-General	1,115.00	
07/02/18	70015	and003	Deborah Anderson	4370-101-000	Educational Program-General	125.00	
07/02/18	70016	att002	AT & T Mobility - ROC	4325-101-000	IT/Website/Software	45.23	
07/02/18	70017	bar001	Barr Engineering			147,896.92	
				4121-101-000	Engineering Admin-General Fund		4,955.00
				4697-101-000	Health & Safety Program		1,356.00
				4698-101-000	Engineering-NPDES Phase II		1,742.00
				4123-101-000	Engineering-Review		3,738.00
				4129-101-000	Project Feasibility-General		4,563.00
				4129-101-000	Project Feasibility-General		58.50
				4129-101-000	Project Feasibility-General		1,353.50
				4129-101-000	Project Feasibility-General		915.50
				4129-101-000	Project Feasibility-General		1,682.00
				4129-101-000	Project Feasibility-General		115.50
				4129-101-000	Project Feasibility-General		1,700.00
				4129-101-000	Project Feasibility-General		571.00
				4129-101-000	Project Feasibility-General		5,537.00
				4129-101-000	Project Feasibility-General		1,779.08
				4129-101-000	Project Feasibility-General		14,095.63
				4520-101-000	Water QM-Engineering		175.50
				4520-101-000	Water QM-Engineering		1,042.50
				4520-101-000	Water QM-Engineering		1,116.50
				4124-101-000	Engineering-Permit Review		7,224.00
				4661-101-000	SLMP/TMDL Studies		378.00
				4661-101-000	SLMP/TMDL Studies		3,306.70
				4695-101-000	Research Projects-General		836.00
				4695-101-000	Research Projects-General		4,480.00
				4650-101-000	Project Operations-General		4,995.00
				4128-553-000	Engineering-Wakefield		8,278.50
				4128-550-000	Engineering-Frost/Kennard		3,198.00
				4128-518-000	Engineering-School/Commer Retrofit		7,545.50
				4128-518-000	Engineering-School/Commer Retrofit		5,473.80
				4128-518-000	Engineering-School/Commer Retrofit		7,429.25
				4682-529-000	Stewardship Grant Program		7,664.40
				4128-554-000	Engineering-Willow Pond		15,595.30
				4128-520-000	Engineering-Flood Damage		8,876.43
				4128-520-000	Engineering-Flood Damage		2,707.50
				4128-519-000	Engineering-Office Solar Energy		140.00
				4128-549-000	Engineering-Beltline/Battle Creek		4,938.49
				4128-516-000	Engineering-Projects Maint. & Repair		2,380.84
				4128-516-000	Engineering-Projects Maint. & Repair		5,953.00

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From June 1, 2018 - June 30, 2018**

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
07/02/18	70018	bar004	Deborah Barnes			86.10	
				4040-101-000	Employee Benefits-General		19.06
				4020-101-000	Employee Expense-General		67.04
07/02/18	70019	blo001	Simba Blood			100.50	
				4040-101-000	Employee Benefits-General		40.00
				4020-101-000	Employee Expense-General		4.84
				4372-101-000	Events		28.19
				4670-101-000	Natural Resources Project-General		27.47
07/02/18	70020	bre003	Bremer Bank	4040-101-000	Employee Benefits-General	6,468.75	
07/02/18	70021	cad003	Cady Building Maintenance, Inc.	4341-101-000	Janitorial/Trash Service	605.00	
07/02/18	70022	cad003	Cady Building Maintenance, Inc.	4341-101-000	Janitorial/Trash Service	773.44	
07/02/18	70023	car007	Carp Solutions, LLC	4670-101-000	Natural Resources Project-General	10,024.90	
07/02/18	70024	chi001	Chick-fil-A, Inc.	2024-101-000	Dev Escrow-General	6,320.00	
07/02/18	70025	chi002	Linda Chimzar	4682-529-000	Stewardship Grant Program	2,196.43	
07/02/18	70026	cit011	City of Roseville			2,932.82	
				4325-101-000	IT/Website/Software		2,630.00
				4310-101-000	Telephone-General		302.82
07/02/18	70027	cit013	City of St. Paul	4682-529-000	Stewardship Grant Program	270,358.73	
07/02/18	70028	far002	Farnsworth Aerospace Magnet	4370-101-000	Educational Program-General	320.00	
07/02/18	70029	gal001	Galowitz Olson, PLLC			2,610.00	
				4131-101-000	Attorney General-General Fund		1,930.00
				4131-520-000	Attorney-Flood Damage		500.00
				4131-516-000	Attorney General-Maint. & Repair		180.00
07/02/18	70030	gil001	Gilbert Mechanical Contractors, Inc.	4343-101-000	Bldg./Site Maintenance	341.89	
07/02/18	70031	gra005	Grainger	4630-516-000	Construction Imp.-Maint. & Repair	23.25	
07/02/18	70032	hac002	Hach Company	4530-101-000	Water QM Staff-General	286.67	
07/02/18	70033	har003	Harmony Adult Education	4370-101-000	Educational Program-General	107.20	
07/02/18	70034	haw001	Hawkins, Inc.	4650-101-000	Project Operations-General	13,182.80	
07/02/18	70035	hen002	Henriksen Ace Hardware	4670-101-000	Natural Resources Project-General	3.12	
07/02/18	70036	hom001	Home Depot Credit Services			127.37	
				4670-101-000	Natural Resources Project-General		22.82
				4530-101-000	Water QM-Engineering		104.55
07/02/18	70037	inn002	Innovative Office Solutions, LLC	4320-101-000	Office Supplies-General	356.30	
07/02/18	70038	int001	Office of MN, IT Services	4310-101-000	Telephone-General	55.40	
07/02/18	70039	kwi001	Kwik Trip, Inc.	2024-101-000	Dev Escrow-General	10,500.00	
07/02/18	70040	lea003	L. Tracy Leavenworth	4370-101-000	Educational Program-General	5,839.71	
07/02/18	70041	lig001	Lighthouse Management Group, Inc.	2024-101-000	Dev Escrow-General	6,800.00	
07/02/18	70042	mel001	Michelle Melser			71.07	
				4040-101-000	Employee Benefits-General		40.00
				4020-101-000	Employee Expense-General		31.07
07/02/18	70043	min007	Minger Construction Co., Inc.	4630-516-000	Construction Imp.-Maint. & Repair	17,459.00	
07/02/18	70044	min008	Minnesota Native Landscape, Inc.	4670-101-000	Construction Imp.-Maint. & Repair	9,691.00	

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From June 1, 2018 - June 30, 2018**

<u>Date</u>	<u>Check #</u>	<u>Vendor ID</u>	<u>Name</u>	<u>Account ID</u>	<u>Account Description</u>	<u>Amount</u>	<u>Check Detail</u>
07/02/18	70045	min010	MN Public Facilities Authority	4700-526-000	Debt Service-Beltline/Tanner	110,093.34	
07/02/18	70046	mmc001	MMC Associates, Inc.	4372-101-000	Events	3,475.18	
07/02/18	70047	mon001	Monarch Bus Service	4372-101-000	Events	820.00	
07/02/18	70048	ncp001	NCPERS Minnesota	2015-101-000	Employee Health-General	16.00	
07/02/18	70049	nor016	Northland Trust Services, Inc.	4630-549-000	Construction-Beltline/Battle	38,876.25	
07/02/18	70050	nsp001	Xcel Energy			1,049.50	
				4342-101-000	Utilities/Bldg. Contracts		866.92
				4650-101-000	Project Operations-General		182.58
07/02/18	70051	obr001	Christopher O'Brien	4040-101-000	Employee Benefits-General	213.21	
07/02/18	70052	omo001	Nicholas Omodt	4020-101-000	Employee Expense-General	10.90	
07/02/18	70053	pac001	Pace Analytical Services, Inc.	4530-101-000	Water QM Staff-General	7,371.50	
07/02/18	70054	pas002	Sage Passi			487.87	
				4040-101-000	Employee Benefits-General		59.00
				4370-101-000	Educational Program-General		264.82
				4020-101-000	Employee Expense-General		164.05
07/02/18	70055	pen001	Penn Contracting	4670-101-000	Construction Imp.-Maint. & Repair	4,800.00	
07/02/18	70056	pit002	Pitney Bowes, Inc.	4330-101-000	Postage-General	347.18	
07/02/18	70057	pra001	Prairie Moon Nursery, Inc.	4670-101-000	Natural Resources Project-General	52.00	
07/02/18	70058	pro003	Lyndsey R. Provos			48.72	
				4040-101-000	Employee Benefits-General		40.00
				4020-101-000	Employee Expense-General		8.72
07/02/18	70059	ram012	Ramsey Co Master Gardener Program	4682-529-000	Stewardship Grant Program	204.50	
07/02/18	70060	red002	Redpath & Company, Ltd	4110-101-000	Auditor/Accounting	1,958.60	
07/02/18	70061	sig001	Sign-A-Rama	4840-101-000	Vehicle-Miscellaneous	255.43	
07/02/18	70062	sod001	Nichole Soderholm			168.94	
				4040-101-000	Employee Benefits-General		139.32
				4020-101-000	Employee Expense-General		29.62
07/02/18	70063	stp003	St. Peter Catholic School	4370-101-000	Educational Program-General	273.60	
07/02/18	70064	sun001	Sunram Construction, Inc.	4682-518-000	BMP Cost Share Project	8,465.71	
07/02/18	70065	tec001	Tech Sales Co.	4695-101-000	Research Projects-General	24,627.00	
07/02/18	70066	tel001	Teledyne Instruments, Inc.	4530-101-000	Water QM Staff-General	1,077.50	
07/02/18	70067	tim002	Timesaver Off-Site Secretarial, Inc.	4365-101-000	Committee/Board Meeting Expense	211.00	
07/02/18	70068	uni006	University of Minnesota	4350-101-000	Training & Education-General	40.00	
07/02/18	70069	ups001	United Parcel Service	4530-101-000	Water QM Staff-General	87.15	
07/02/18	70070	usb002	U.S. Bancorp			5,869.32	
				4343-101-000	Bldg./Site Maintenance		40.66
				4650-101-000	Project Operations-General		39.81
				4350-101-000	Training & Education-General		50.00
				4372-101-000	Events		748.75
				4343-101-000	Bldg./Site Maintenance		22.05

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From June 1, 2018 - June 30, 2018**

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
				4325-101-000	IT/Website/Software		92.63
				4320-101-000	Office Supplies-General		13.05
				4320-101-000	Office Supplies-General		35.92
				4372-101-000	Events		98.58
				4697-101-000	Health & Safety Program		119.82
				4350-101-000	Training & Education-General		100.00
				4320-101-000	Office Supplies-General		15.96
				4697-101-000	Health & Safety Program		32.34
				4320-101-000	Office Supplies-General		151.45
				4697-101-000	Health & Safety Program		16.79
				4372-101-000	Events		38.78
				4372-101-000	Events		84.90
				4372-101-000	Events		14.99
				4320-101-000	Office Supplies-General		21.46
				4372-101-000	Events		161.93
				4350-101-000	Training & Education-General		101.76
				4372-101-000	Events		29.00
				4372-101-000	Events		207.33
				4350-101-000	Training & Education-General		20.00
				4320-101-000	Office Supplies-General		5.04
				4320-101-000	Office Supplies-General		15.97
				4350-101-000	Training & Education-General		525.00
				4040-101-000	Employee Benefits-General		246.38
				4530-101-000	Water QM Staff-General		114.57
				4320-101-000	Office Supplies-General		45.00
				4040-101-000	Employee Benefits-General		454.30
				4350-101-000	Training & Education-General		170.00
				4350-101-000	Training & Education-General		170.00
				4350-101-000	Training & Education-General		890.00
				4350-101-000	Training & Education-General		810.00
				4371-101-000	Communications & Marketing		80.00
				4530-101-000	Water QM Staff-General		85.10
07/02/18	70071	usb003	US Bank St. Paul	4700-585-000	Debt Service-Cert. of Participation	1,809.72	
07/02/18	70072	usb005	US Bank Equipment Finance	4335-101-000	Printing-General	285.67	
07/02/18	70073	voy001	US Bank Voyager Fleet Sys.	4830-101-000	Vehicle Fuel-General	526.66	
07/02/18	70074	wea002	Weaver Elementary School	4370-101-000	Educational Program-General	133.20	
07/02/18	70075	wil007	Patrick Williamson	4020-101-000	Employee Expense-General	102.95	
							<u><u>\$796,261.01</u></u>





**Summary of Professional Engineering Services During the Period  
May 19, 2018 through June 22, 2018**

	Total Budget* (2018)	Total Fees to Date (2018)	Budget Balance (2018)	Fees During Period	District Accounting Code	Plan Imple- mentation Task Number
<b>Engineering Administration</b>						
General Engineering Administration	\$76,000.00	\$31,547.18	\$44,452.82	\$4,955.00	4121-101	DW-13
RWMWD Health and Safety/ERTK Program	\$2,000.00	\$1,356.00	\$644.00	\$1,356.00	4697-101	DW-13
Educational Program/Educational Forum Assistance	\$20,000.00	\$3,268.00	\$16,732.00	\$1,742.00	4698-101	DW-11
<b>Engineering Review</b>						
Engineering Review	\$55,000.00	\$29,349.44	\$25,650.56	\$3,738.00	4123-101	DW-13
<b>Project Feasibility Studies</b>						
Aquifer Recharge Site Search and Feasibility Study	\$15,000.00	\$0.00	\$15,000.00		4129-101	DW-10
Owasso County Park Stormwater Master Plan and Detailed Design: Phase 1 and Phase 2	\$75,000.00	\$1,696.00	\$73,304.00		4129-101	DW-5
Beltline Resiliency and Phalen Chain Water Level Management	\$250,000.00	\$9,658.50	\$240,341.50	\$4,563.00	4129-101	BELT-3
Beaver Lake Subwatershed Feasibility Study	\$15,000.00	\$9,087.35	\$5,912.65	\$58.50	4129-101	BL-1
Owasso Lake Subwatershed Feasibility Study	\$15,000.00	\$9,272.35	\$5,727.65	\$1,353.50	4129-101	LO-3
Battle Creek Lake Subwatershed Feasibility Study	\$15,000.00	\$11,165.73	\$3,834.27	\$915.50	4129-101	BCL-3
Create an Emergency Response Plan for Twin Lake	\$15,000.00	\$2,306.50	\$12,693.50	\$1,682.00	4129-101	DW-19
Create an Emergency Response Plan for Grass Lake	\$15,000.00	\$446.00	\$14,554.00	\$115.50	4129-101	DW-19
Create an Emergency Response Plan for Snail Lake	\$15,000.00	\$2,102.50	\$12,897.50	\$1,700.00	4129-101	DW-19
Create an Emergency Response Plan for Lake Owasso	\$5,000.00	\$4,134.00	\$866.00	\$571.00	4129-101	LO-2
FEMA Flood Mapping Update	\$100,000.00	\$0.00	\$100,000.00		4129-101	DW-9
West Vадnais Lake to East Vадnais Lake Water Quality Treatment	\$24,400.00	\$36,526.80	-\$12,126.80		4129-101	DW-9
West Vадnais Lake to East Vадnais Lake Gravity Flow	\$66,000.00	\$5,537.00	\$60,463.00	\$5,537.00	4129-101	DW-9
Snail Lake to Sucker Lake Reverse Pumping Evaluation	\$9,100.00	\$9,715.50	-\$615.50		4129-101	DW-9
Snail, Grass, and West Vадnais outlet permitting with the MndNR Modeling of 95% Confidence Limit Atlas 14 District-wide (Climate Change Scenario); Flood Map Generation for Future Outreach	\$129,500.00	\$40,076.48	\$89,423.52	\$14,095.63	4129-101	DW-9
<b>GIS Maintenance</b>						
GIS Maintenance	\$5,000.00	\$0.00	\$5,000.00		4170-101	DW-13
<b>Monitoring Water Quality/Project Monitoring</b>						
Lake Water Quality Monitoring (Misc QA/QC)	\$10,000.00	\$238.50	\$9,761.50	\$175.50	4520-101	DW-2
Grass Lake WOMP station	\$10,000.00	\$0.00	\$10,000.00		4520-101	DW-3
Battle Creek longitudinal monitoring of TSS	\$15,000.00	\$843.00	\$14,157.00		4520-101	BC-3
Auto Lake monitoring systems (5)	\$50,000.00	\$7,688.28	\$42,311.72	\$1,042.50	4520-101	DW-18
Maplewood Mall Monitoring	\$10,000.00	\$1,829.50	\$8,170.50	\$1,116.50	4520-101	DW-12
<b>Permit Processing, Inspection and Enforcement</b>						
Permit Application Inspection and Enforcement	\$15,000.00	\$3,155.00	\$11,845.00		4122-101	DW-7
Permit Application Review	\$50,000.00	\$19,302.50	\$30,697.50	\$7,224.00	4124-101	DW-7
<b>Lake Studies/WRPPs/TMDL Reports</b>						
2018 Grant Applications	\$30,000.00	\$0.00	\$30,000.00		4661-101	--
Tanners Flood Response Tool Model Update	\$3,000.00	\$2,232.00	\$768.00	\$378.00	4661-101	TaL-1
Evaluate water quality benefit of removing accumulated sediment from south end of Wakefield Lake to improve Lake Phalen water quality	\$10,000.00	\$4,028.70	\$5,971.30	\$3,306.70	4661-101	WL-5
<b>Research Projects</b>						
New Technology Mini Case Studies (average 6 per year)	\$12,000.00	\$3,012.50	\$8,987.50	\$836.00	4695-101	DW-12
Kohlman Permeable Weir Test System - Implement Monitoring Plan	\$15,000.00	\$7,212.13	\$7,787.87	\$4,480.00	4695-101	DW-12
<b>Project Operations</b>						
2018 Tanners Alum Facility Monitoring	\$15,000.00	\$13,457.62	\$1,542.38	\$4,995.00	4650-101	TaL-3
<b>Capital Improvements</b>						
Wakefield Park/Frost Avenue Stormwater Project	\$25,000.00	\$21,878.43	\$3,121.57	\$8,278.50	4128-553	WL-1
Frost Kennard Spent Lime BMP	\$24,000.00	\$23,085.71	\$914.29	\$3,198.00	4128-550	WL-1
Commercial Sites Retrofit Projects 2018	\$55,000.00	\$12,367.95	\$42,632.05	\$7,545.50	4128-518	DW-6
School Sites Retrofit Projects 2018	\$55,000.00	\$14,079.23	\$40,920.77	\$5,473.80	4128-518	DW-6
Church Sites Retrofit Projects 2018	\$55,000.00	\$10,033.25	\$44,966.75	\$7,429.25	4128-518	DW-6
Roseville High School Campus Stormwater Retrofit (Bennett Lake Subwatershed)	\$30,000.00	\$1,161.00	\$28,839.00		4128-518	DW-6
BMP Incentive Fund: General BMP Design Assistance and Review	\$30,000.00	\$29,961.40	\$38.60	\$7,664.40	4682-529	DW-6
BMP Incentive Fund: Faith-Based Organizations	\$20,000.00	\$918.00	\$19,082.00		4128-528	DW-6
Willow Pond CMAC Implementation	\$100,000.00	\$62,999.54	\$37,000.46	\$15,595.30	4128-554	BeL-4
Grass Lake Berm Construction Administration	\$75,000.00	\$41,846.16	\$33,153.84	\$8,876.43	4128-520	GrL-1
Phase 1 implementation from Owasso Basin Improvements Feasibility Study	\$75,000.00	\$8,887.50	\$66,112.50	\$2,707.50	4128-520	GC-3
District Office Solar Energy Retrofit	\$20,000.00	\$11,093.00	\$8,907.00	\$140.00	4128-519	DW-13
<b>CIP Project Repair &amp; Maintenance</b>						
2017-2018 Beltline Repairs Construction Services	\$360,000.00	\$426,971.57	-\$66,971.57	\$4,938.49	4128-549	BELT-2
Routine CIP Inspection and Unplanned Maintenance Identification	\$75,000.00	\$10,945.25	\$64,054.75	\$2,380.84	4128-516	DW-5
2018 CIP Maintenance and Repairs	\$90,000.00	\$75,450.80	\$14,549.20	\$5,953.00	4128-516	DW-5
2019 CIP Maintenance and Repairs	\$150,000.00	\$0.00	\$150,000.00		4128-516	DW-5
<b>Subtotal</b>				\$147,896.92		

\*For projects carried over from previous years, the total budget reflects the total project budget, and not just the 2018 portion.

TOTAL PAYABLE FOR PERIOD 5/19/2018 - 6/22/2018

\$147,896.92

Barr declares under the penalties of Law that this Account, Claim, or Demand is just and that no part has been paid.

Bradley J. Lindaman, Vice President

2017 School Sites BMP Retrofits  
Progress Payment Number 6 - FINAL

1 Completed to Date:	\$175,606.72		
2 Less Previously Billed:		\$170,244.22	
3 Amount Completed This Period:			\$0.00
4 Amount Previously Retained:		\$8,465.71	
5 Amount Retained This Period (See Note 1):		\$0.00	
6 Total Amount Retained (See Note 2):		\$8,465.71	
7 Retainage Released Through This Period:			\$0.00
8 Less Total Retainage Remaining:			
9 Less Amounts Previously Paid:	\$175,606.72		
10 Amount Due This Estimate:			\$8,465.71

Note 1: At rate of 10% until Completed to Date equals 50% of current Contract Price and a rate of 0% thereafter.

Note 2: Maximum amount is 5% of current Contract Price

SUBMITTED BY:

Name: Ryan Sunram Date:  
Title: President  
Contractor: Sunram Constr Inc

Signature:

RECOMMENDED BY:

Name: Matt Kumka Date: 6/4/2018  
Title: Project Manager  
Engineer: Barr Engineering Company

Signature:



APPROVED BY:

Name: Marj Ebensteiner Date: 7/11/2018  
Title: President  
Owner: Ramsey-Washington Metro Watershed District

Signature:

Total Completed Through This Period			Total Completed Through This Period			Total Completed Through This Period			Total Completed Through This Period			Total Completed Through This Period			Total Completed Through This Period		
Invoice #1			Invoice #2			Invoice #3			Invoice #4			Invoice #5			Invoice #6		
Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension
\$3,400.85	1	\$3,400.85	\$3,400.85	0	\$0.00	\$3,400.85	0	\$0.00	\$3,400.85	0	\$0.00	\$3,400.85	0	\$0.00	\$3,400.85	0	\$0.00
\$22.50	23	\$517.50	\$22.50	0	\$0.00	\$22.50	0	\$0.00	\$22.50	0	\$0.00	\$22.50	0	\$0.00	\$22.50	0	\$0.00
\$1.30	268	\$348.40	\$1.30	0	\$0.00	\$1.30	0	\$0.00	\$1.30	0	\$0.00	\$1.30	0	\$0.00	\$1.30	0	\$0.00
				0	\$0.00		0	\$0.00		0	\$0.00		0	\$0.00		0	\$0.00
\$20.60	179	\$3,687.40	\$20.60	84	\$1,730.40	\$20.60	0	\$0.00	\$20.60	0	\$0.00	\$20.60	0	\$0.00	\$20.60	0	\$0.00
\$1,100.00	1	\$1,100.00	\$1,100.00	0	\$0.00	\$1,100.00	0	\$0.00	\$1,100.00	0	\$0.00	\$1,100.00	0	\$0.00	\$1,100.00	0	\$0.00
\$0.45	223	\$100.35	\$0.45	0	\$0.00	\$0.45	0	\$0.00	\$0.45	0	\$0.00	\$0.45	0	\$0.00	\$0.45	0	\$0.00
\$51.00	25	\$1,275.00	\$51.00	12	\$612.00	\$51.00	0	\$0.00	\$51.00	0	\$0.00	\$51.00	0	\$0.00	\$51.00	0	\$0.00
\$60.00	72	\$4,290.00	\$60.00	11	\$630.00	\$60.00	0	\$0.00	\$60.00	0	\$0.00	\$60.00	0	\$0.00	\$60.00	0	\$0.00
\$45.00	9	\$405.00	\$45.00	1	\$45.00	\$45.00	0	\$0.00	\$45.00	5	\$225.00	\$45.00	0	\$0.00	\$45.00	0	\$0.00
\$1,700.00	2	\$3,400.00	\$1,700.00	0	\$0.00	\$1,700.00	0	\$0.00	\$1,700.00	0	\$0.00	\$1,700.00	0	\$0.00	\$1,700.00	0	\$0.00
\$34.00	194	\$6,596.00	\$34.00	0	\$0.00	\$34.00	0	\$0.00	\$34.00	0	\$0.00	\$34.00	0	\$0.00	\$34.00	0	\$0.00
\$10.50	61	\$640.50	\$10.50	0	\$0.00	\$10.50	0	\$0.00	\$10.50	0	\$0.00	\$10.50	0	\$0.00	\$10.50	0	\$0.00
\$13.50	11	\$148.50	\$13.50	0	\$0.00	\$13.50	0	\$0.00	\$13.50	0	\$0.00	\$13.50	0	\$0.00	\$13.50	0	\$0.00
\$265.00	0	\$0.00	\$265.00	0	\$0.00	\$265.00	0	\$0.00	\$265.00	2	\$530.00	\$265.00	0	\$0.00	\$265.00	0	\$0.00
\$640.00	1	\$640.00	\$640.00	0	\$0.00	\$640.00	0	\$0.00	\$640.00	0	\$0.00	\$640.00	0	\$0.00	\$640.00	0	\$0.00
\$150.00	1	\$150.00	\$150.00	0	\$0.00	\$150.00	0	\$0.00	\$150.00	0	\$0.00	\$150.00	0	\$0.00	\$150.00	0	\$0.00
\$9.50	0	\$0.00	\$9.50	123	\$1,168.50	\$9.50	0	\$0.00	\$9.50	0	\$0.00	\$9.50	0	\$0.00	\$9.50	0	\$0.00
\$7.50	0	\$0.00	\$7.50	0	\$0.00	\$7.50	0	\$0.00	\$7.50	0	\$0.00	\$7.50	75	\$562.50	\$7.50	0	\$0.00
\$310.00	0	\$0.00	\$310.00	0	\$0.00	\$310.00	0	\$0.00	\$310.00	2	\$620.00	\$310.00	0	\$0.00	\$310.00	0	\$0.00
\$10.00	0	\$0.00	\$10.00	0	\$0.00	\$10.00	0	\$0.00	\$10.00	377	\$3,770.00	\$10.00	0	\$0.00	\$10.00	0	\$0.00
\$27.00	0	\$0.00	\$27.00	0	\$0.00	\$27.00	0	\$0.00	\$27.00	11	\$297.00	\$27.00	0	\$0.00	\$27.00	0	\$0.00
<b>TOTAL</b>		<b>\$26,699.50</b>	<b>TOTAL</b>		<b>\$4,185.90</b>	<b>TOTAL</b>		<b>\$0.00</b>	<b>TOTAL</b>		<b>\$5,442.00</b>	<b>TOTAL</b>		<b>\$562.50</b>	<b>TOTAL</b>		<b>\$0.00</b>

Woodbury Elementary  
Roseville  
Contract Amount

Base Bid Items				Total Completed Through This Period			Total Completed Through This Period			Total Completed Through This Period			Total Completed Through This Period			Total Completed Through This Period			Total Completed Through This Period		
				Invoice #1			Invoice #2			Invoice #3			Invoice #4			Invoice #5			Invoice #6		
Item	Description	Unit	Estimated Quantity	Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension
A	Mobilization/Demobilization/Traffic Control/Erosion Control	L.S.	1	\$5,825.35	1	\$5,825.35	\$5,825.35	0	\$0.00	\$5,825.35	0	\$0.00	\$5,825.35	0	\$0.00	\$5,825.35	0	\$0.00	\$5,825.35	0	\$0.00
D	Remove Concrete Curb and Gutter	L.F.	16	\$22.50	16	\$360.00	\$22.50	0	\$0.00	\$22.50	0	\$0.00	\$22.50	0	\$0.00	\$22.50	0	\$0.00	\$22.50	0	\$0.00
	Remove Concrete Apron	Each	1	\$750.00	1	\$750.00	\$750.00	0	\$0.00	\$750.00	0	\$0.00	\$750.00	0	\$0.00	\$750.00	0	\$0.00	\$750.00	0	\$0.00
	Remove Draintile	L.S.	1	\$750.00	1	\$750.00	\$750.00	0	\$0.00	\$750.00	0	\$0.00	\$750.00	0	\$0.00	\$750.00	0	\$0.00	\$750.00	0	\$0.00
H	Remove Sod	S.Y.	1396	\$1.30	1396	\$1,814.80	\$1.30	0	\$0.00	\$1.30	0	\$0.00	\$1.30	0	\$0.00	\$1.30	0	\$0.00	\$1.30	0	\$0.00
I	Remove Tree (Greater than 6" DBH)	Each	2	\$500.00	2	\$1,000.00	\$500.00	0	\$0.00	\$500.00	0	\$0.00	\$500.00	0	\$0.00	\$500.00	0	\$0.00	\$500.00	0	\$0.00
L	Excavate, Haul, and Dispose	C.Y.	1033	\$18.00	1033	\$18,594.00	\$18.00	265.5	\$4,779.00	\$18.00	168.89	\$3,040.02	\$18.00	0	\$0.00	\$18.00	0	\$0.00	\$18.00	0	\$0.00
M	Grading	L.S.	1	\$1,100.00	1	\$1,100.00	\$1,100.00	0	\$0.00	\$1,100.00	0	\$0.00	\$1,100.00	0	\$0.00	\$1,100.00	0	\$0.00	\$1,100.00	0	\$0.00
N	Soil Loosening	S.Y.	763	\$0.45	763	\$343.35	\$0.45	0	\$0.00	\$0.45	0	\$0.00	\$0.45	0	\$0.00	\$0.45	0	\$0.00	\$0.45	0	\$0.00
O	Clean Sand	C.Y.	77	\$51.00	51	\$2,601.00	\$51.00	0	\$0.00	\$51.00	0	\$0.00	\$51.00	0	\$0.00	\$51.00	0	\$0.00	\$51.00	0	\$0.00
P	Planting Soil (12" depth- 75% Sand, 25% Leaf compost- MnDOT Grade II)	C.Y.	333	\$60.00	354	\$21,240.00	\$60.00	0	\$0.00	\$60.00	0	\$0.00	\$60.00	0	\$0.00	\$60.00	0	\$0.00	\$60.00	0	\$0.00
Q	Twice-Shredded Hardwood Mulch (3" depth)	C.Y.	116	\$45.00	58	\$2,610.00	\$45.00	12	\$540.00	\$45.00	0	\$0.00	\$45.00	60	\$2,700.00	\$45.00	0	\$0.00	\$45.00	0	\$0.00
	Rip Rap	Ton	6	\$95.00	6	\$570.00	\$95.00	0	\$0.00	\$95.00	2.64	\$250.80	\$95.00	0	\$0.00	\$95.00	0	\$0.00	\$95.00	0	\$0.00
T	Concrete Curb & Gutter	L.F.	8	\$42.00	8	\$336.00	\$42.00	0	\$0.00	\$42.00	0	\$0.00	\$42.00	0	\$0.00	\$42.00	0	\$0.00	\$42.00	0	\$0.00
U.1	Concrete Curb Cut & Small Splash Block Assembly	Each	1	\$1,700.00	1	\$1,700.00	\$1,700.00	0	\$0.00	\$1,700.00	0	\$0.00	\$1,700.00	0	\$0.00	\$1,700.00	0	\$0.00	\$1,700.00	0	\$0.00
X	4" Perforated (CPEP) Draintile w/o sock (Underdrain)	L.F.	232	\$10.50	232	\$2,436.00	\$10.50	0	\$0.00	\$10.50	0	\$0.00	\$10.50	0	\$0.00	\$10.50	0	\$0.00	\$10.50	0	\$0.00
Y	4" Solid (CPEP) Draintile w/o sock (Underdrain)	L.F.	9	\$13.50	10	\$135.00	\$13.50	0	\$0.00	\$13.50	0	\$0.00	\$13.50	0	\$0.00	\$13.50	0	\$0.00	\$13.50	0	\$0.00
Z	Draintile Clean Out	Each	1	\$265.00	0	\$0.00	\$265.00	0	\$0.00	\$265.00	0	\$0.00	\$265.00	4	\$1,060.00	\$265.00	0	\$0.00	\$265.00	0	\$0.00
AA	Connect Draintile to Catch Basin	Each	2	\$640.00	2	\$1,280.00	\$640.00	0	\$0.00	\$640.00	0	\$0.00	\$640.00	0	\$0.00	\$640.00	0	\$0.00	\$640.00	0	\$0.00
	Inlet Protection	Each	2	\$150.00	2	\$300.00	\$150.00	0	\$0.00	\$150.00	0	\$0.00	\$150.00	0	\$0.00	\$150.00	0	\$0.00	\$150.00	0	\$0.00
BB	Edging	L.F.	661	\$9.50	0	\$0.00	\$9.50	496	\$4,712.00	\$9.50	0	\$0.00	\$9.50	58	\$551.00	\$9.50	0	\$0.00	\$9.50	0	\$0.00
	Sod	S.Y.	12	\$10.00	0	\$0.00	\$10.00	0	\$0.00	\$10.00	0	\$0.00	\$10.00	0	\$0.00	\$10.00	480	\$4,800.00	\$10.00	0	\$0.00
#N/A	#1 Cont. Perennial or Shrub (Furnish)	Each	803	\$17.30	0	\$0.00	\$17.30	0	\$0.00	\$17.30	0	\$0.00	\$17.30	625	\$10,812.50	\$17.30	0	\$0.00	\$17.30	0	\$0.00
DD	#1 Cont. Perennial or Shrub (Furnish & Install)	Each	625	\$10.00	0	\$0.00	\$10.00	0	\$0.00	\$10.00	0	\$0.00	\$10.00	803	\$8,030.00	\$10.00	0	\$0.00	\$10.00	0	\$0.00
#N/A	1.5" B&B Tree	Each	5	\$310.00	0	\$0.00	\$310.00	0	\$0.00	\$310.00	0	\$0.00	\$310.00	5	\$1,550.00	\$310.00	0	\$0.00	\$310.00	0	\$0.00
EE	#2 Cont. Shrub (Furnish & Install)	Each	58	\$40.00	0	\$0.00	\$40.00	0	\$0.00	\$40.00	0	\$0.00	\$40.00	0	\$0.00	\$40.00	0	\$0.00	\$40.00	0	\$0.00
SUBTOTAL				<b>TOTAL</b>	<b>\$63,745.50</b>	<b>TOTAL</b>	<b>\$10,031.00</b>	<b>TOTAL</b>	<b>\$3,290.82</b>	<b>TOTAL</b>	<b>\$24,703.50</b>	<b>TOTAL</b>	<b>\$4,800.00</b>	<b>TOTAL</b>	<b>\$0.00</b>						

Roseville Middle School  
Roseville  
Contract Amount

Base Bid Items				Total Completed Through This Period			Total Completed Through This Period			Total Completed Through This Period			Total Completed Through This Period			Total Completed Through This Period			Total Completed Through This Period		
				Invoice #1			Invoice #2			Invoice #3			Invoice #4			Invoice #5			Invoice #6		
Item	Description	Unit	Estimated Quantity	Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension	Unit Price	Actual Quantity	Extension
A	Mobilization/Demobilization/Traffic Control/Erosion Control	L.S.	1	\$2,050.70	1	\$2,050.70	\$2,050.70	0	\$0.00	\$2,050.70	0	\$0.00	\$2,050.70	0	\$0.00	\$2,050.70	0	\$0.00	\$2,050.70	0	\$0.00
D	Remove Concrete Curb and Gutter	L.F.	8	\$22.50	8	\$180.00	\$22.50	0	\$0.00	\$22.50	0	\$0.00	\$22.50	0	\$0.00	\$22.50	0	\$0.00	\$22.50	0	\$0.00
H	Remove Sod	S.Y.	405	\$1.30	405	\$526.50	\$1.30	0	\$0.00	\$1.30	0	\$0.00	\$1.30	0	\$0.00	\$1.30	0	\$0.00	\$1.30	0	\$0.00
I	Remove Tree (Greater than 6" DBH)	Each	2	\$300.00	2	\$600.00	\$300.00	0	\$0.00	\$300.00	0	\$0.00	\$300.00	0	\$0.00	\$300.00	0	\$0.00	\$300.00	0	\$0.00
L	Excavate, Haul, and Dispose	C.Y.	175	\$20.60	175	\$3,605.00	\$20.60	120	\$2,472.00	\$20.60	0	\$0.00	\$20.60	0	\$0.00	\$20.60	0	\$0.00	\$20.60	0	\$0.00
M	Grading	L.S.	1	\$1,100.00	1	\$1,100.00	\$1,100.00	0	\$0.00	\$1,100.00	0	\$0.00	\$1,100.00	0	\$0.00	\$1,100.00	0	\$0.00	\$1,100.00	0	\$0.00
N	Soil Loosening	S.Y.	52	\$0.45	52	\$23.40	\$0.45	0	\$0.00	\$0.45	0	\$0.00	\$0.45	0	\$0.00	\$0.45	0	\$0.00	\$0.45	0	\$0.00
O	Clean Sand	C.Y.	17	\$51.00	25	\$1,275.00	\$51.00	12	\$612.00	\$51.00	0	\$0.00	\$51.00	0	\$0.00	\$51.00	0	\$0.00	\$51.00	0	\$0.00
P	Planting Soil (12" depth- 75% Sand, 25% Leaf compost- MNDOT Grade II)	C.Y.	15	\$60.00	72	\$4,290.00	\$60.00	10.5	\$630.00	\$60.00	0	\$0.00	\$60.00	0	\$0.00	\$60.00	0	\$0.00	\$60.00	0	\$0.00
Q	Twice-Shredded Hardwood Mulch (3" depth)	C.Y.	34	\$45.00	17	\$765.00	\$45.00	0	\$0.00	\$45.00	0	\$0.00	\$45.00	9	\$405.00	\$45.00	0	\$0.00	\$45.00	0	\$0.00
U.1	Concrete Curb Cut & Small Splash Block Assembly	Each	1	\$1,700.00	1	\$1,700.00	\$1,700.00	0	\$0.00	\$1,700.00	0	\$0.00	\$1,700.00	0	\$0.00	\$1,700.00	0	\$0.00	\$1,700.00	0	\$0.00
X	4" Perforated (CPEP) Drain tile w/o sock (Underdrain)	L.F.	72	\$10.50	70	\$735.00	\$10.50	0	\$0.00	\$10.50	0	\$0.00	\$10.50	0	\$0.00	\$10.50	0	\$0.00	\$10.50	0	\$0.00
Y	4" Solid (CPEP) Drain tile w/o sock (Underdrain)	L.F.	14	\$13.50	14	\$189.00	\$13.50	0	\$0.00	\$13.50	0	\$0.00	\$13.50	0	\$0.00	\$13.50	0	\$0.00	\$13.50	0	\$0.00
Z	Drain tile Clean Out	Each	1	\$265.00	0	\$0.00	\$265.00	0	\$0.00	\$265.00	0	\$0.00	\$265.00	2	\$530.00	\$265.00	0	\$0.00	\$265.00	0	\$0.00
AA	Connect Drain tile to Catch Basin	Each	1	\$640.00	1	\$640.00	\$640.00	0	\$0.00	\$640.00	0	\$0.00	\$640.00	0	\$0.00	\$640.00	0	\$0.00	\$640.00	0	\$0.00
	6" Sediment Log	L.F.	60	\$4.00	60	\$240.00	\$4.00	0	\$0.00	\$4.00	0	\$0.00	\$4.00	0	\$0.00	\$4.00	0	\$0.00	\$4.00	0	\$0.00
	Inlet Protection	Each	2	\$150.00	2	\$300.00	\$150.00	0	\$0.00	\$150.00	0	\$0.00	\$150.00	0	\$0.00	\$150.00	0	\$0.00	\$150.00	0	\$0.00
BB	Edging	L.F.	56	\$9.50	0	\$0.00	\$9.50	56	\$532.00	\$9.50	0	\$0.00	\$9.50	0	\$0.00	\$9.50	0	\$0.00	\$9.50	0	\$0.00
DD	#1 Cont. Perennial or Shrub (Furnish & Install)	Each	509	\$17.30	0	\$0.00	\$17.30	0	\$0.00	\$17.30	0	\$0.00	\$17.30	139	\$2,404.70	\$17.30	0	\$0.00	\$17.30	0	\$0.00
	#1 Cont. Perennial or Shrub (Furnish)	Each	430	\$17.30	0	\$0.00	\$17.30	0	\$0.00	\$17.30	0	\$0.00	\$10.00	430	\$4,300.00	\$10.00	0	\$0.00	\$10.00	0	\$0.00
EE	#2 Cont. Shrub (Furnish & Install)	Each	29	\$38.30	0	\$0.00	\$38.30	0	\$0.00	\$38.30	0	\$0.00	\$38.30	29	\$1,110.70	\$38.30	0	\$0.00	\$38.30	0	\$0.00
#N/A	1.5" B&B Tree	Each	3	\$310.00	0	\$0.00	\$310.00	0	\$0.00	\$310.00	0	\$0.00	\$310.00	3	\$930.00	\$310.00	0	\$0.00	\$310.00	0	\$0.00
<b>SUBTOTAL</b>				<b>TOTAL</b>	<b>\$18,219.60</b>	<b>TOTAL</b>	<b>\$4,246.00</b>	<b>TOTAL</b>	<b>\$0.00</b>	<b>TOTAL</b>	<b>\$9,680.40</b>	<b>TOTAL</b>	<b>\$0.00</b>	<b>TOTAL</b>	<b>\$0.00</b>	<b>TOTAL</b>	<b>\$0.00</b>				

**Frost/Kennard Stormwater Filter  
Progress Payment Number 2**

1.0	Total Completed Through This Period:	<u>\$260,519.00</u>	
2.0	Total Completed Previously Completed:		<u>\$243,060.00</u>
3.0	Total Completed This Period:		<u>\$17,459.00</u>
4.0	Amount Previously Retained:		<u>\$12,856.00</u>
5.0	Amount Retained This Period (See Note 1):		<u>\$0.00</u>
6.0	Total Amount Retained (See Note 2):		<u>\$12,856.00</u>
7.0	Retainage Released Through This Period:		<u>\$0.00</u>
8.0	Total Retainage Remaining:		<u>\$12,856.00</u>
9.0	Amounts Previously Paid:	<u>\$230,204.00</u>	
10.0	Amount Due This Estimate:		<u><u>\$17,459.00</u></u>

Note 1: At rate of 10% until Completed to Date equals 50% of current Contract Price and a rate of 0% thereafter.

Note 2: Maximum amount is 5% of current Contract Price (\$257,127.00)

**SUBMITTED BY:**

Name: Aaron Hoefs Date: \_\_\_\_\_  
 Title: Project Manager  
 Contractor: Minger Construction Companies, Inc.

Signature: \_\_\_\_\_

**RECOMMENDED BY:**

Name: Brad Lindaman Date: \_\_\_\_\_  
 Title: District Engineer  
 Engineer: Barr Engineering Company

Signature: \_\_\_\_\_

**APPROVED BY:**

Name: Marj Ebensteiner Date: \_\_\_\_\_  
 Title: President  
 Owner: Ramsey-Washington Metro Watershed District

Signature: \_\_\_\_\_

**Frost/Kennard Stormwater Filter  
Ramsey-Washington Metro Watershed District  
Summary of Work Completed Through June 26, 2018 for Progress Payment Number 2**

1.04 Item	Description	Unit	Estimated Quantity	Unit Price	Extension	(1) Total Completed Through This Period		(2) Total Completed Previous Period		(3) Total Completed This Period	
						Quantity	Amount	Quantity	Amount	Quantity	Amount
A	Mobilization/Demobilization	L.S.	1	27,500.00	27,500.00	1	\$27,500.00	1	\$27,500.00	0	\$0.00
B	Erosion Control Construction Entrance	Each	1	1,000.00	1,000.00	1	\$1,000.00	1	\$1,000.00	0	\$0.00
C	Erosion Control Silt Fence	L.F.	600	1.80	1,080.00	600	\$1,080.00	600	\$1,080.00	0	\$0.00
D	Erosion Control Blanket	S.Y.	1,070	1.20	1,284.00	1070	\$1,284.00	0	\$0.00	1070	\$1,284.00
E	Remove & Salvage Topsoil (P)	S.Y.	980	2.00	1,960.00	980	\$1,960.00	980	\$1,960.00	0	\$0.00
F	Sawcut and Remove Concrete Curb from Existing B618 Concrete Curb and Gutter for Drive Opening	L.S.	1	1,500.00	1,500.00	1	\$1,500.00	1	\$1,500.00	0	\$0.00
G	96-inch Precast Manhole with Casting	L.F.	14	1,700.00	23,800.00	14	\$23,800.00	14	\$23,800.00	0	\$0.00
H	48-inch Precast Manhole with Casting	L.F.	11	500.00	5,500.00	11	\$5,500.00	11	\$5,500.00	0	\$0.00
I	8-ft wide, Precast Concrete and FRP Stop Log Weir	L.S.	1	20,000.00	20,000.00	1	\$20,000.00	1	\$20,000.00	0	\$0.00
J	27-inch Access Manhole with Casting Assembly	Each	4	850.00	3,400.00	4	\$3,400.00	4	\$3,400.00	0	\$0.00
K	Common Excavation for Vault (P)	C.Y.	950	15.00	14,250.00	950	\$14,250.00	950	\$14,250.00	0	\$0.00
L	Disposal of Excess Excavated Material (P)	C.Y.	350	15.00	5,250.00	350	\$5,250.00	350	\$5,250.00	0	\$0.00
M	Existing Structure Connection	Each	1	4,000.00	4,000.00	1	\$4,000.00	1	\$4,000.00	0	\$0.00
N	10-inch Ductile Iron Pipe (DIP)	L.F.	20	95.00	1,900.00	20	\$1,900.00	20	\$1,900.00	0	\$0.00
O	12-inch Corrugated Polyethylene Pipe (CPEP) Dual-Wall (Smooth Interior)	L.F.	145	86.00	12,470.00	145	\$12,470.00	145	\$12,470.00	0	\$0.00
P	12-inch CPEP 22.5 Degree Bend	Each	2	75.00	150.00	3	\$225.00	3	\$225.00	0	\$0.00
Q	Stormwater Filter Piping and Fittings, All Complete	L.S.	1	13,000.00	13,000.00	1	\$13,000.00	1	\$13,000.00	0	\$0.00
R	Concrete Fore bay	Each	1	2,400.00	2,400.00	1	\$2,400.00	1	\$2,400.00	0	\$0.00
S	Anchor Underdrain Pipe to Vault	L.S.	1	5,500.00	5,500.00	1	\$5,500.00	1	\$5,500.00	0	\$0.00
T	10-inch Stainless Steel Plug Valve w/Box ASM	Each	1	3,500.00	3,500.00	1	\$3,500.00	0	\$0.00	1	\$3,500.00
U	Fine Filter Aggregate	Ton	18	75.00	1,350.00	18	\$1,350.00	18	\$1,350.00	0	\$0.00
V	Plastic Netting	S.Y.	75	13.00	975.00	75	\$975.00	75	\$975.00	0	\$0.00
W	Spent Lime	L.S.	1	4,600.00	4,600.00	1	\$4,600.00	1	\$4,600.00	0	\$0.00
X	Precast 3-sided Box Culvert Vault & Cover (6 Sections)	L.S.	1	73,000.00	73,000.00	1	\$73,000.00	1	\$73,000.00	0	\$0.00
Y	Precast End Walls (2 Sides)	L.S.	1	12,000.00	12,000.00	1	\$12,000.00	1	\$12,000.00	0	\$0.00
Z	Non-Shrink Grouting	C.Y.	7	200.00	1,340.00	7	\$1,400.00	7	\$1,400.00	0	\$0.00
AA	Ladder	L.S.	2	2,500.00	5,000.00	2	\$5,000.00	2	\$5,000.00	0	\$0.00
AB	Netlon Stabilizing Mesh Bales for Stabilized Turf Driveway	Each	5	500.00	2,500.00	7	\$3,500.00	0	\$0.00	7	\$3,500.00
AC	Special Planting Soil Mix for Netlon Turf Driveway	C.Y.	25	130.00	3,250.00	50	\$6,500.00	0	\$0.00	50	\$6,500.00
AD	Import Common Topsoil Borrow	C.Y.	50	15.00	750.00	0	\$0.00	0	\$0.00	0	\$0.00
AE	Seeding	S.Y.	1,070	2.50	2,675.00	1070	\$2,675.00	0	\$0.00	1070	\$2,675.00
AF	Seed Mix (Mn/DOT 25-131 Low Maintenance Turf)	LBS	49	5.00	243.00	0	\$0.00	0	\$0.00	0	\$0.00

**Total of Extensions = \$ 257,127.00 \$260,519.00 \$243,060.00 \$17,459.00**

**Change Orders**

C.O.1A	Contract Completion Extension				0.00	0	\$0.00	0	\$0.00	0	\$0.00
C.O.2A	CheckMate UltraFlex Inline Valve	Each	1	3,300.00	3,300.00	0	\$0.00	0	\$0.00	0	\$0.00

**GRAND TOTALS \$260,519.00 \$243,060.00 \$17,459.00**

Galowitz Olson, PLLC  
10390 39th Street North  
Lake Elmo, Minnesota 55042  
Office: (651) 777-6960  
Fax: (651) 777-8937

Ramsey-Washington Metro Watershed District  
C/O Tina Carstens  
2665 Noel Drive  
Little Canada MN 55117

Page: 1  
June 28, 2018  
File No: 9M

	Balance
General Account	\$1,930.00
Grass Lake Emergency Project	\$500.00
2018 CIP	\$180.00
	<u>\$2,610.00</u>



\* \* \* \* \*

# Permit Program

\* \* \* \* \*

# Permit Application Coversheet

**Date** July 11, 2018

**Project Name** Trails Edge Apartments

**Project Number** 18-13

**Applicant Name** Jim Illies, Jr., CV2-INH Maplewood, LLC

**Type of Development** Residential

## Property Description

This project is located at the southeast corner of County Road D and Country View Drive in the City of Maplewood. The applicant is proposing to construct a 153-unit apartment building with associated parking and drive areas. The total site area is approximately 5 acres. Volume reduction and rate control will be achieved through expansion of an existing filtration basin and construction of an underground stormwater reuse system. The existing filtration basin was originally constructed when the Maplewood Costco was built (permit #07-14). At the time, the basin was oversized to treat future development. Since the District's volume reduction rules have changed, the basin will be expanded during this project to meet the current required volume for both properties. The underground stormwater reuse system will receive runoff from portions of the roof and parking lot of the apartment building. Rainwater collected will be used for irrigation.

## Watershed District Policies or Standards Involved:

- |  |   |
|--|---|
| <input type="checkbox"/> <b>Wetlands</b>                         | <input checked="" type="checkbox"/> <b>Erosion and Sediment Control</b> |
| <input checked="" type="checkbox"/> <b>Stormwater Management</b> | <input type="checkbox"/> <b>Floodplain</b>                              |

## Water Quantity Considerations

The proposed stormwater management plan is sufficient to handle the runoff from the site.

## Water Quality Considerations

### **Short Term**

The proposed erosion and sediment control plan is sufficient to protect downstream water resources during construction.

### **Long Term**

The proposed stormwater management plan is sufficient to protect the long term quality of downstream water resources.

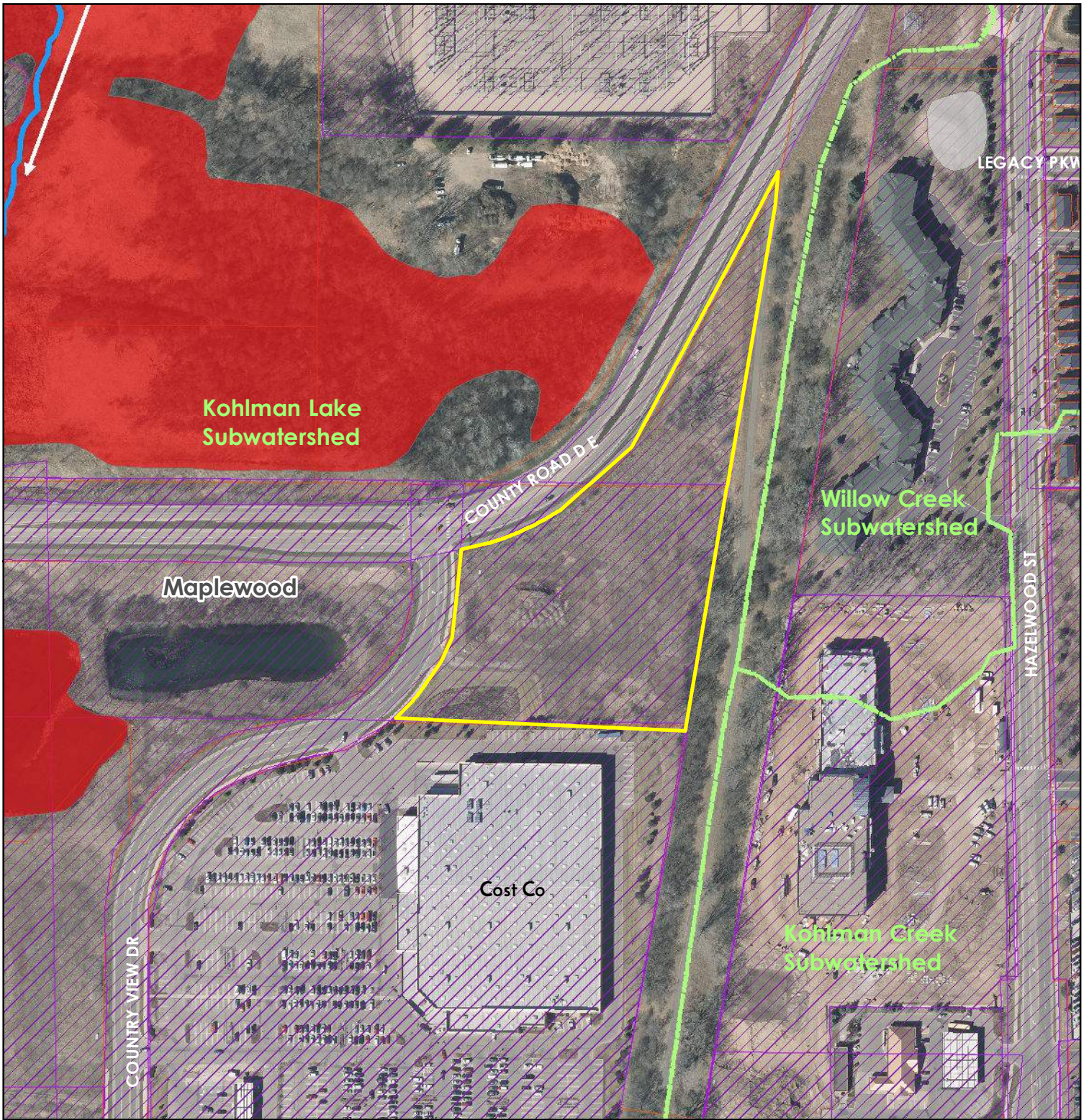
## Staff Recommendation

Staff recommends approval of this permit with the special provisions.

## Attachments:

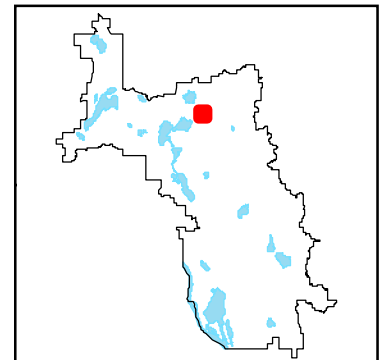
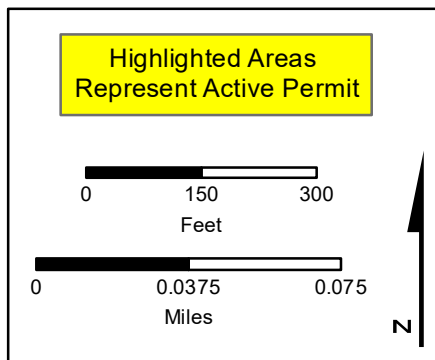
- Project Location Map**
- Project Grading Plan**

# #18-13 Trails Edge Apartments



Wetlands	
<span style="color: red;">■</span>	Manage A
<span style="color: green;">■</span>	Manage B
<span style="color: blue;">■</span>	Manage C
<span style="color: lightblue;">■</span>	Lake
<span style="color: gray;">■</span>	Sediment Pond
<span style="color: purple;">■</span>	Not Assessed

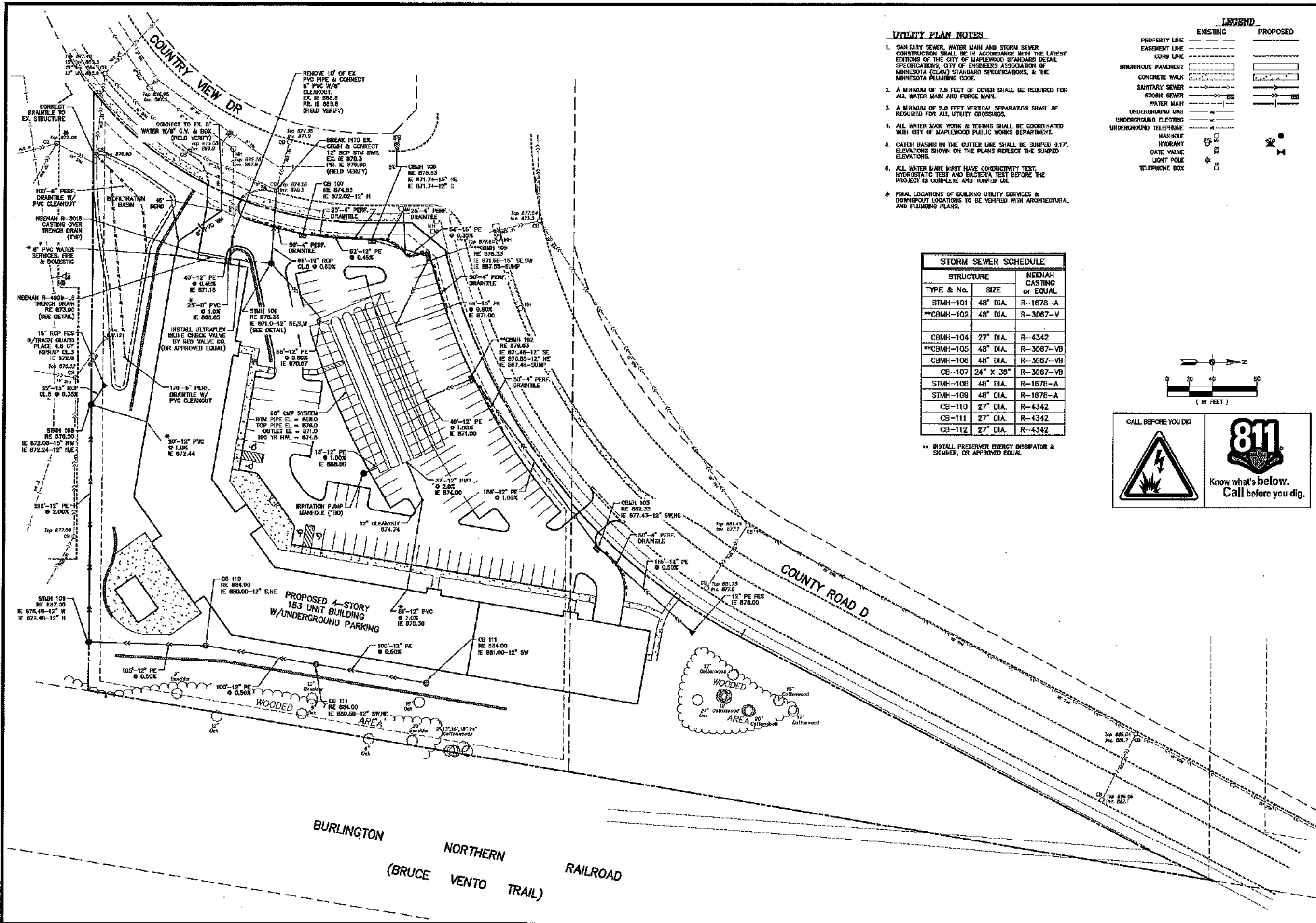
	RWMWD Boundary
	Flow Arrows
	Major Flow Arrows
	Subwatersheds
	Creeks
	Permits
	Ramsey Co Parcels
	City Boundaries



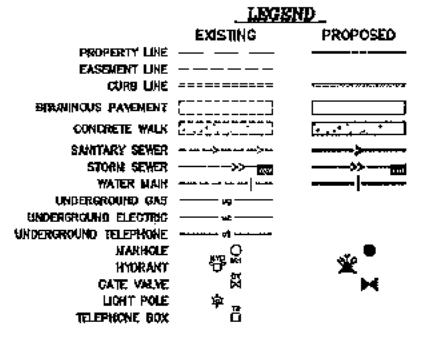
**18-13**

**Special Provisions**

1. The applicant shall submit the escrow fee of \$21,500.
2. The applicant shall submit an executed joint maintenance agreement with the City of Maplewood for the proposed stormwater facilities.
3. The applicant shall provide contact information for the trained erosion control coordinator responsible for implementing the Stormwater Pollution Prevention Plan (SWPPP).
4. The applicant shall submit a copy of the approved Minnesota Pollution Control Agency's NPDES Phase 2 Construction Permit.



- UTILITY PLAN NOTES**
- SANITARY SEWER, WATER MAIN AND STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE CITY OF MAPLEWOOD STANDARD DETAIL SPECIFICATIONS, CITY OF ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD SPECIFICATIONS, & THE MINNESOTA PLUMBING CODE.
  - A MINIMUM OF 7.5 FEET OF COVER SHALL BE REQUIRED FOR ALL WATER MAIN AND FORCE MAIN.
  - A MINIMUM OF 2.0 FEET VERTICAL SEPARATION SHALL BE REQUIRED FOR ALL UTILITY CROSSINGS.
  - ALL WATER MAIN WORK & TESTING SHALL BE COORDINATED WITH CITY OF MAPLEWOOD PUBLIC WORKS DEPARTMENT.
  - CATCH BASINS IN THE OUTER LINE SHALL BE SUMPED 0.17' ELEVATIONS SHOWN ON THE PLANS REFLECT THE SURFED ELEVATIONS.
  - ALL WATER MAIN MUST HAVE CONDUCTIVITY TEST, HYDROSTATIC TEST AND BACTERIA TEST BEFORE THE PROJECT IS COMPLETE AND TURNED OVER.
- \* FINAL LOCATIONS OF BUILDING UTILITY SERVICES & DOWNSPOUT LOCATIONS TO BE VERIFIED WITH ARCHITECTURAL AND FINISHING PLANS.



**STORM SEWER SCHEDULE**

STRUCTURE	NEENAH CASTING or EQUAL
TYPE & No.	SIZE
STMH-101	48" DIA. R-1878-A
**CBMH-102	48" DIA. R-3087-V
CBMH-104	27" DIA. R-4342
**CBMH-105	48" DIA. R-3087-VB
CBMH-106	48" DIA. R-3087-VB
CB-107	24" X 36" R-3067-VB
STMH-108	48" DIA. R-1878-A
STMH-109	48" DIA. R-1878-A
CB-110	27" DIA. R-4342
CB-111	27" DIA. R-4342
CB-112	27" DIA. R-4342

CALL BEFORE YOU DIG

**811**

Know what's below.  
Call before you dig.

**Carlson McCain**  
 ENVIRONMENTAL - ENGINEERING - SURVEYING  
 3890 Pheasant Ridge Dr. NE #100, Blaine, MN  
 Phone: 763-489-7900 Fax: 763-489-7959

**UTILITY PLAN**  
**TRAILS EDGE APARTMENTS**  
 Maplewood, Minnesota

**INH PROPERTIES**  
 175 7th Avenue South  
 Waite Park, MN 56387

**REVISIONS**

1. 06/20/18	Per RIVWD comments.
-------------	---------------------

DRAWN BY: JTK  
 DESIGNED BY: JTK  
 ISSUE DATE: 05/18/18

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.

Name: Norrah T. Redick, P.E.  
 Signature: [Signature]  
 Date: 05/18/18 License #: 45889

# Permit Application Coversheet

**Date** July 11, 2018

**Project Name** 365 S Owasso Blvd

**Project Number** 18-14

**Applicant Name** Tracy Pumper, Your Home Construction, Inc.

**Type of Development** Residential

## Property Description

This project is located at 365 South Owasso Boulevard, an existing residential property on Lake Owasso. The applicant is proposing to reconstruct an existing structure near the lakeshore. The proposed storage structure will be outside of the District's floodplain elevation of 889', but an existing artificial channel below 889' will be filled in to accommodate the project and DNR requirements. The channel fill will result in the placement of 20 cubic yards of fill below the District floodplain elevation. Compensatory storage has been provided to ensure there is no loss of floodplain storage. Due to the small disturbance area, District Rule F for Erosion and Sediment Control does not apply.

## Watershed District Policies or Standards Involved:

- |   |  |
|---|--|
| <input type="checkbox"/> <b>Wetlands</b>              | <input type="checkbox"/> <b>Erosion and Sediment Control</b> |
| <input type="checkbox"/> <b>Stormwater Management</b> | <input checked="" type="checkbox"/> <b>Floodplain</b>        |

## Water Quantity Considerations

There are no water quantity considerations.

## Water Quality Considerations

### **Short Term**

There are no short term water quality considerations.

### **Long Term**

There are no long term water quality considerations.

## Staff Recommendation

Staff recommends approval of this permit

## Attachments:

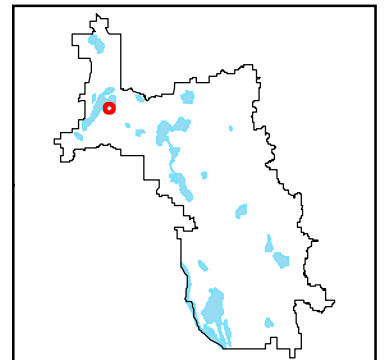
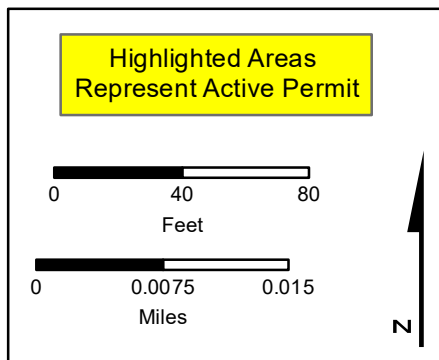
- Project Location Map**
- Project Grading Plan**

# #18-14 365 S Owasso Blvd



Wetlands	
Red	Manage A
Green	Manage B
Blue	Manage C
Light Blue	Lake
Grey	Sediment Pond
Purple	Not Assessed

Black outline	RWMWD Boundary
White arrow	Flow Arrows
Green arrow	Major Flow Arrows
Green dashed line	Subwatersheds
Blue line	Creeks
Yellow hatched area	Permits
Orange dashed line	Ramsey Co Parcels
Black dashed line	City Boundaries

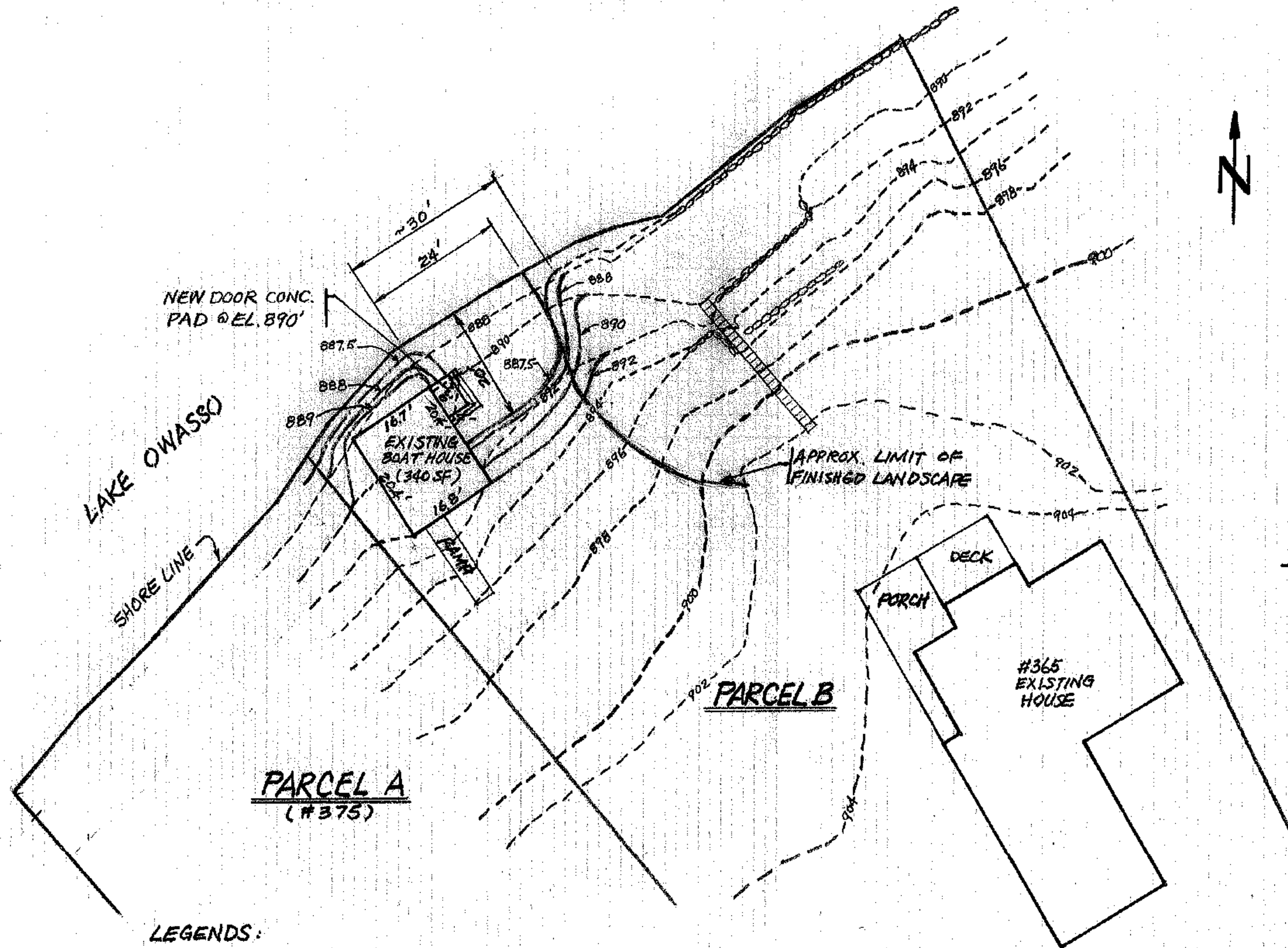


**18-14**

**Special Provisions**

None





NEW DOOR CONC. PAD @ EL. 890'

LAKE OWASSO  
SHORE LINE

EXISTING BOAT HOUSE (340 SF)

APPROX. LIMIT OF FINISHED LANDSCAPE

PARCEL A  
(#375)

PARCEL B

#365 EXISTING HOUSE

**LEGENDS:**

- INPLACE CONTOURS
- PROPOSED CONTOURS

**NOTES:**

1. TOTAL PROPOSED SPACE BELOW FLOOD ELEV. 889' TO BE APPROXIMATELY 24 C.Y.
2. TOTAL AREA FOR THE PROPOSED GRADING WORK TO BE AROUND 840 SF.
3. THE VOLUME OF FILL INSIDE THE BOAT HOUSE TO THE SHORE LINE UP TO THE REQUIRED FLOOD ELEVATION AT 889' IS ESTIMATED AT ABOUT 20 C.Y. THE EXCAVATED SOIL FROM THIS GRADING WORK TO BE USED FOR THIS FILL WORK.

**PROPOSED GRADING CONTOURS**

(FOR LAKE OWASSO BOAT HOUSE @ #365)

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAW OF THE STATE OF MINNESOTA.

SIGNED: *Jihshya J. Lin* DATE: 6/25/18

NAME: JIHSHYA J. LIN LIC. NO.: 19115



# Permit Application Coversheet

**Date** July 11, 2018

**Project Name** Hy-Vee Gem Lake

**Project Number** 18-15

**Applicant Name** Jeff Stein, Hy-Vee, Inc.

**Type of Development** Commercial/Retail

## Property Description

This project is located at 3583 Hoffman Road on the southeast corner of Highway 61 and County Road E in the City of Gem Lake. The applicant is proposing to construct a Hy-Vee grocery store with associated parking. The proposed project will result in a reduction in impervious area over existing conditions. Volume reduction will be achieved through construction of two filtration basins and an underground filtration system. Pretreatment will include sumped manholes, an oil-water separator, and an isolator row.

## Watershed District Policies or Standards Involved:

- |  |   |
|--|---|
| <input type="checkbox"/> <b>Wetlands</b>                         | <input checked="" type="checkbox"/> <b>Erosion and Sediment Control</b> |
| <input checked="" type="checkbox"/> <b>Stormwater Management</b> | <input type="checkbox"/> <b>Floodplain</b>                              |

## Water Quantity Considerations

The proposed stormwater management plan is sufficient to handle the runoff from the site.

## Water Quality Considerations

### Short Term

The proposed erosion and sediment control plan is sufficient to protect downstream water resources during construction.

### Long Term

The proposed stormwater management plan is sufficient to protect the long term quality of downstream water resources.

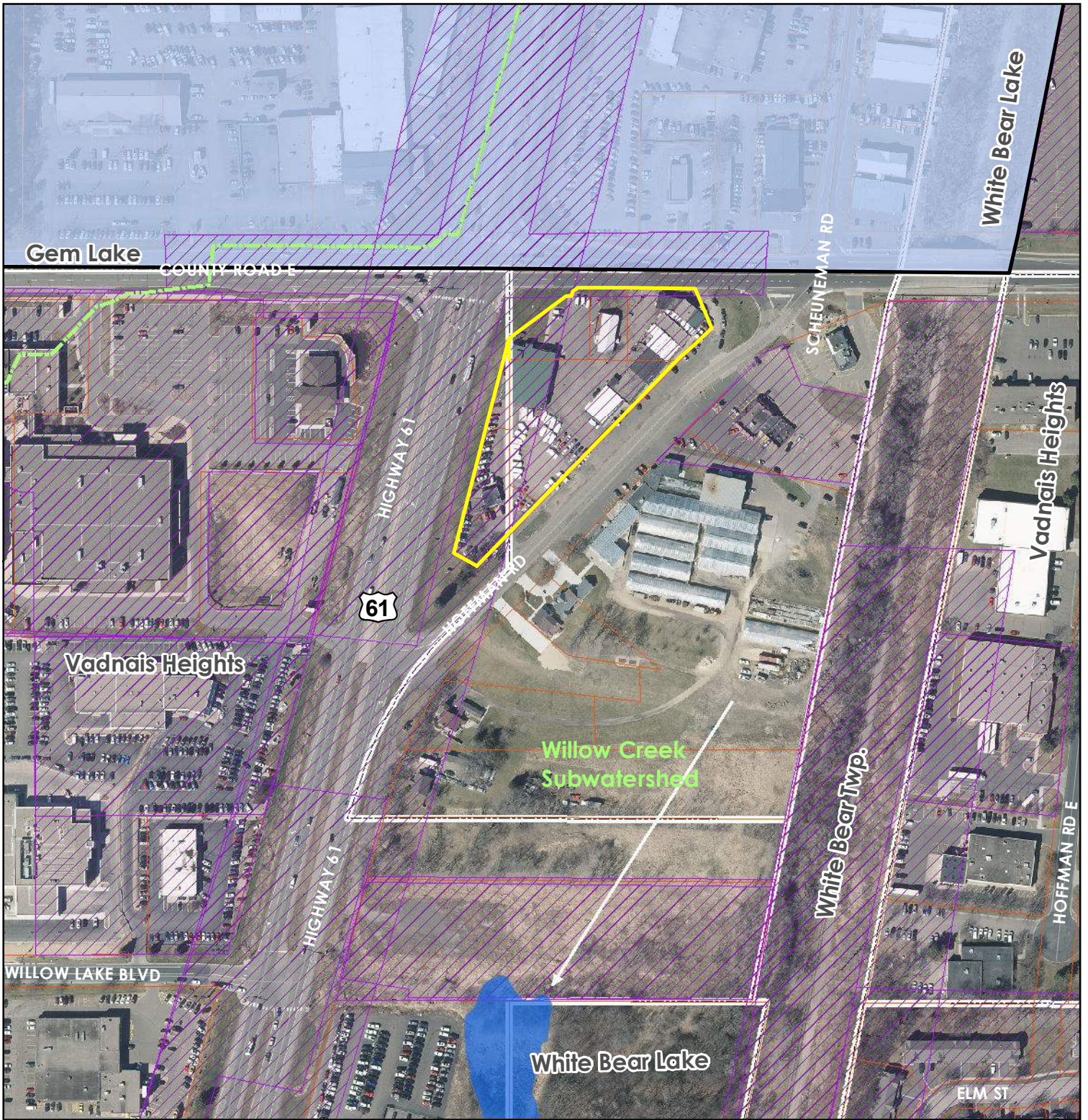
## Staff Recommendation

Staff recommends approval of this permit with the special provisions.

## Attachments:

- Project Location Map**
- Project Grading Plan**

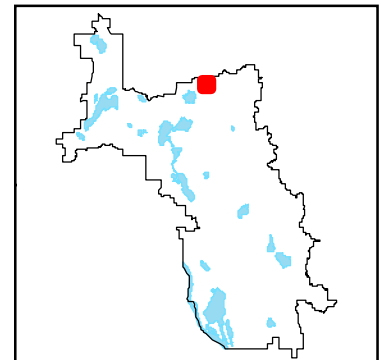
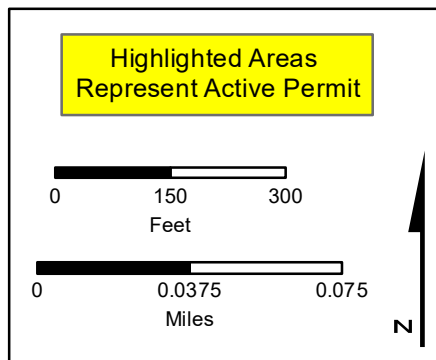
# #18-15 Hy-Vee Gem Lake



Note: Shaded area is outside RWMWD

Wetlands	
<span style="color: red;">■</span>	Manage A
<span style="color: green;">■</span>	Manage B
<span style="color: blue;">■</span>	Manage C
<span style="color: lightblue;">■</span>	Lake
<span style="color: gray;">■</span>	Sediment Pond
<span style="color: purple;">■</span>	Not Assessed

	RWMWD Boundary
	Flow Arrows
	Major Flow Arrows
	Subwatersheds
	Creeks
	Permits
	Ramsey Co Parcels
	City Boundaries



**18-15**

**Special Provisions**

1. The applicant shall submit the escrow fee of \$11,700.
2. The applicant shall submit a Stormwater Pollution Prevention Plan (SWPPP) for the project.
3. The applicant shall provide contact information for the trained erosion control coordinator responsible for implementing the SWPPP.
4. The applicant shall add a note to the plans to notify Nicole Soderholm, Ramsey-Washington Metro Watershed District, at 651-792-7976 prior to beginning any and all construction activity for an initial SWPPP inspection.
5. The applicant shall add a note to the plans that the specified erosion and sediment control practices are the minimum. Additional practices may be required during the course of construction.
6. The applicant shall submit a copy of the approved Minnesota Pollution Control Agency's NPDES Phase 2 Construction Permit.
7. The applicant shall submit an executed maintenance agreement for the proposed stormwater facilities.
8. The applicant shall submit a final copy of the signed construction plans.

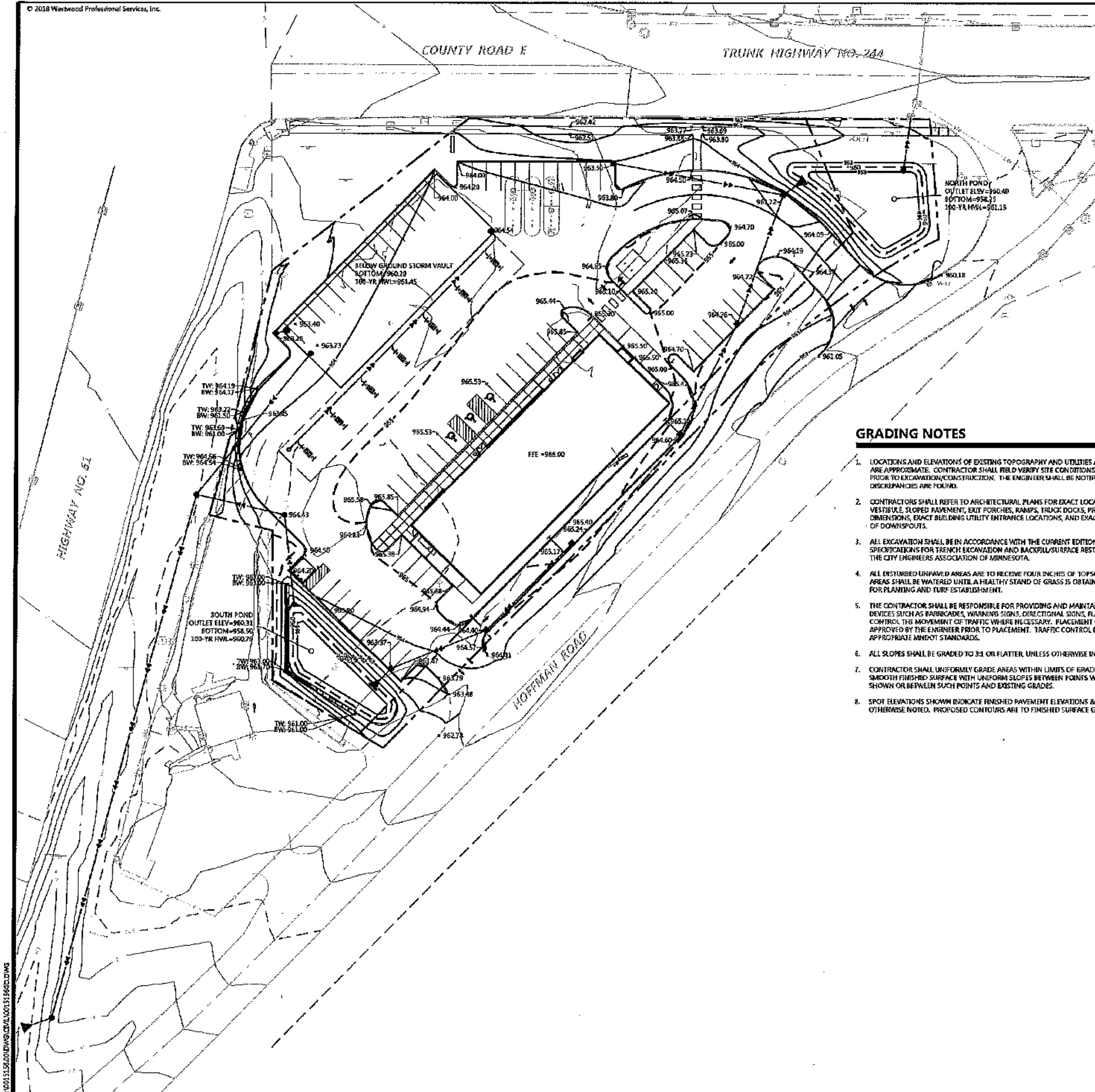
REVISION	DATE BY

**GRADING & DRAINAGE LEGEND**

EXISTING	PROPOSED	PROPERTY LINE
		INDEX CONTOUR
		INTERNAL CONTOUR
		CURB AND GUTTER
		POND NORMAL WATER LEVEL
		SILT FENCE
		STORM SEWER
		FLARED END SECTION (WITH RIPRAP)
		WATER MAIN
		SANITARY SEWER
		RETAINING WALL
		DRAIN TILE
		RIDGE LINE
		GRADING LIMITS
		ROCK CONSTRUCTION ENTRANCE
		EROSION CONTROL BLANKET
		TURF REINFORCEMENT MAT
		SPOT ELEVATION
		FLOW DIRECTION
		TOP AND BOTTOM OF RETAINING WALL
		EMERGENCY OVERTFLOW
		SOIL BORING LOCATION
		WILET PROTECTION

**GRADING NOTES**

- LOCATIONS AND ELEVATIONS OF EXISTING TOPOGRAPHY AND UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO EXCAVATION/CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
- CONTRACTORS SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULE, SLOPED PAVEMENT, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY ENTRANCE LOCATIONS, AND EXACT LOCATIONS AND NUMBER OF DOWNSPOUTS.
- ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR TRENCH EXCAVATION AND BACKFILL/SURFACE RESTORATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA.
- ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL AND SOO OR SEED. THESE AREAS SHALL BE WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. SEE LANDSCAPE PLAN FOR PLANTING AND TURF ESTABLISHMENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO APPROPRIATE MNDOT STANDARDS.
- ALL SLOPES SHALL BE GRADED TO 3:1 OR FLATTER, UNLESS OTHERWISE INDICATED ON THIS SHEET.
- CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AND PROVIDE A SMOOTH FINISHED SURFACE WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN OR BETWEEN SUCH POINTS AND EXISTING GRADES.
- SPOT ELEVATIONS SHOWN INDICATE FINISHED PAVEMENT ELEVATIONS & GUTTER FLOW LINE UNLESS OTHERWISE NOTED. PROPOSED CONTOURS ARE TO FINISHED SURFACE GRADE.
- SEE SOILS REPORT FOR PAVEMENT THICKNESSES AND HOLD DOWNS.
- CONTRACTOR SHALL DISPOSE OF ANY EXCESS SOIL MATERIAL THAT EXISTS AFTER THE SITE GRADING AND UTILITY CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS SOIL MATERIAL IN A MANNER ACCEPTABLE TO THE OWNER AND THE REGULATING AGENCIES.
- CONTRACTOR SHALL PROVIDE A STRUCTURAL RETAINING WALL DESIGN CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER.
- ALL CONSTRUCTION SHALL CONFORM TO LOCAL, STATE AND FEDERAL RULES INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS.
- PRIOR TO PLACEMENT OF ANY STRUCTURE OR PAVEMENT, A PROOF ROLL, AT MINIMUM, WILL BE REQUIRED ON THE SUBGRADE. PROOF ROLLING SHALL BE ACCOMPLISHED BY MAKING MINIMUM OF 2 COMPLETE PASSES WITH FULLY-LOADED TANDEM-AXLE DUMP TRUCK, OR APPROVED EQUAL, IN EACH OF 2 PERPENDICULAR DIRECTIONS WHILE UNDER SUPERVISION AND DIRECTION OF THE INDEPENDENT TESTING LABORATORY. AREAS OF FAILURE SHALL BE EXCAVATED AND RE-COMPACTED AS SPECIFIED HEREIN.
- EMBANKMENT MATERIAL PLACED BENEATH BUILDINGS AND STREET OR PARKING AREAS SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFIED DENSITY METHOD AS OUTLINED IN MNDOT 2105.3F1 AND THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER.
- EMBANKMENT MATERIAL NOT PLACED IN THE BUILDING PAD, STREETS OR PARKING AREA SHALL BE COMPACTED IN ACCORDANCE WITH REQUIREMENTS OF THE ORDINARY COMPACTION METHOD AS OUTLINED IN MNDOT 2105.3F2.
- ALL SOILS AND MATERIALS TESTING SHALL BE COMPLETED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. EXCAVATION FOR THE PURPOSE OF REMOVING UNSTABLE OR UNSUITABLE SOILS SHALL BE COMPLETED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOILS TESTS AND INSPECTIONS WITH THE GEOTECHNICAL ENGINEER.



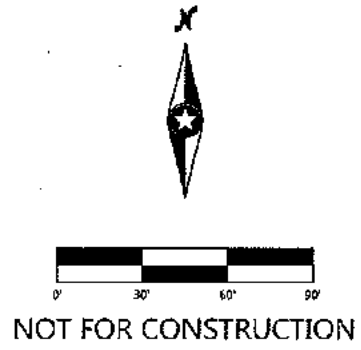
**Westwood**  
 Phone: (850) 887-5150  
 Fax: (850) 887-5822  
 Toll Free: (888) 617-5150  
 12704 Whitehouse Drive, Suite 8300  
 Miramar, FL 33025  
 westwoodps.com  
 Westwood Professional Services, Inc.

LOCATION:  
**S.H. 61 & COUNTY ROAD E**  
**GEM LAKE, MINNESOTA**  
**Hy-Vee**  
 EMPLOYEE OWNED  
 HY-VEE, INC.  
 3820 WESTOWN PARKWAY  
 WEST DES MOINES, IOWA 50265  
 TELEPHONE: (515) 267-2800  
 FAX: (515) 267-2955

I HEREBY CERTIFY THAT THIS PLAN 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.  
 Daniel M. Parks  
 DATE: 06/12/18 LICENSE NO. 18919

**GRADING & DRAINAGE PLAN**

DESIGNER	DATE
TDM	06/12/18
SCALE	1"=30'
SHEET	C3.0



NOT FOR CONSTRUCTION

H:\001518\06\DWG\CAD\1001518680.DWG

# Permit Application Coversheet

**Date** July 11, 2018

**Project Name** Little Canada Elementary Addition

**Project Number** 18-16

**Applicant Name** Todd Lieser, ISD 623

**Type of Development** Institutional

## Property Description

This project is located at 400 Eli Road in the City of Little Canada. The applicant is proposing to construct an addition to the existing Little Canada Elementary school along with sidewalk reconstruction and associated utilities. The total site area is 1.28 acres. Volume reduction and rate control will be achieved through construction of a filtration basin. Filtration is being proposed due to poor soils. Pretreatment will include a sumped inlet.

## Watershed District Policies or Standards Involved:

- Wetlands*                       *Erosion and Sediment Control*  
 *Stormwater Management*     *Floodplain*

## Water Quantity Considerations

The proposed stormwater management plan is sufficient to handle the runoff from the site.

## Water Quality Considerations

### *Short Term*

The proposed erosion and sediment control plan is sufficient to protect downstream water resources during construction.

### *Long Term*

The proposed stormwater management plan is sufficient to protect the long term quality of downstream water resources.

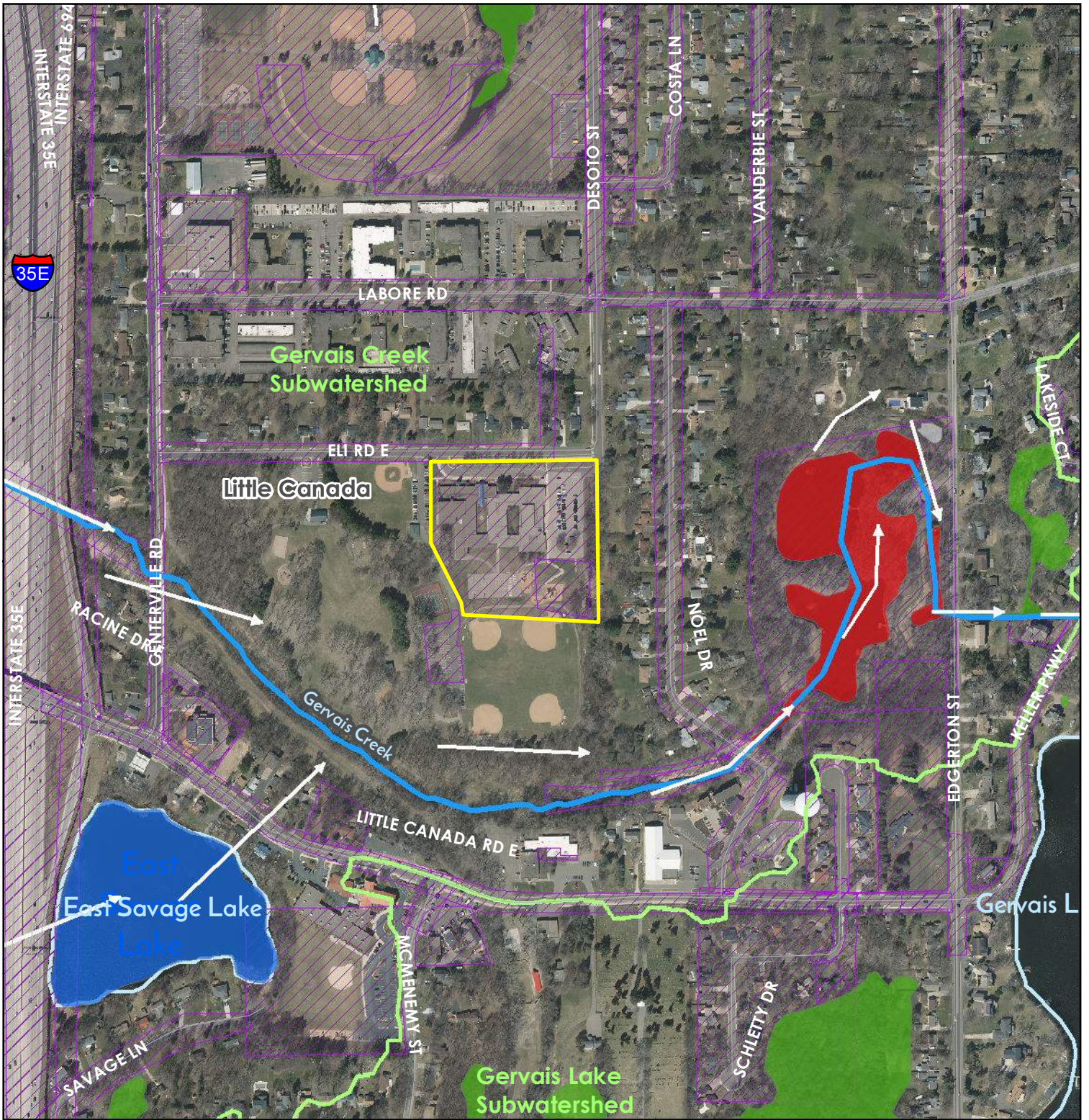
## Staff Recommendation

Staff recommends approval of this permit with the special provisions.

## Attachments:

- Project Location Map**  
 **Project Grading Plan**

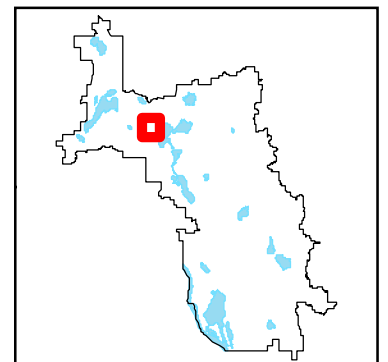
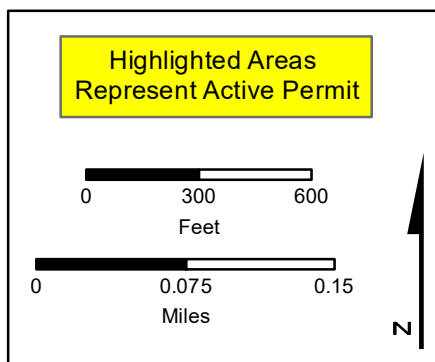
# #18-16 Little Canada Elementary Addition



**Wetlands**

<span style="color: red;">■</span>	Manage A
<span style="color: green;">■</span>	Manage B
<span style="color: blue;">■</span>	Manage C
<span style="color: lightblue;">■</span>	Lake
<span style="color: gray;">■</span>	Sediment Pond
<span style="color: purple;">■</span>	Not Assessed

	RWMWD Boundary
	Flow Arrows
	Major Flow Arrows
	Subwatersheds
	Creeks
	Permits
	City Boundaries





**18-16**

**Special Provisions**

1. The applicant shall submit a revised narrative that confirms there are no wetland impacts associated with the project.
2. The applicant shall submit an executed copy of the stormwater maintenance agreement.
3. The applicant shall submit a Stormwater Pollution Prevention Plan (SWPPP) for the project.
4. The applicant shall provide contact information for the trained erosion control coordinator responsible for implementing the SWPPP.
5. The applicant shall submit a copy of the approved Minnesota Pollution Control Agency's NPDES Phase 2 Construction Permit.
6. The applicant shall submit a final copy of the signed construction plans.

# LSE

### ARCHITECTS

124 ARCHITECTS, INC.

100 Piedmont Ave., Suite 160

Atlanta, GA 30308

404.353.1310 OFFICE

404.353.2500 FAX

www.lse-architects.com

We are a LEAN practice. We are committed to the highest quality of design, construction, and service. We are committed to the highest quality of service and to the highest quality of construction. We are committed to the highest quality of service and to the highest quality of construction. We are committed to the highest quality of service and to the highest quality of construction.

## LITTLE CANADA ELEMENTARY SCHOOL ADDITION AND REMODELING

400 Elm Road  
Little Canada, MN

**Larson**  
Engineering, Inc.  
3524 Lakota Road  
White Bear Lake, MN 55110  
651.481.8100 (t) 651.481.9201  
www.larsoneng.com

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### Key Plan

1. This key plan shows the location of the project on the site and the location of the project on the site. It is intended to provide a general overview of the project and its location on the site.

2. The project is located on the site shown on this plan. The project is located on the site shown on this plan.

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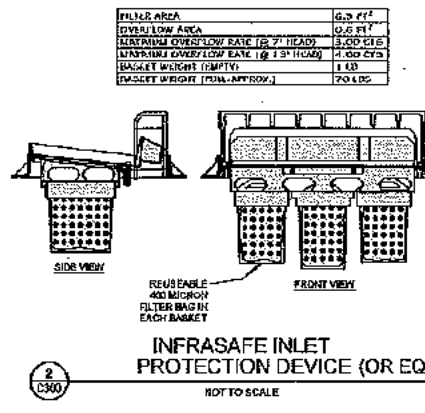
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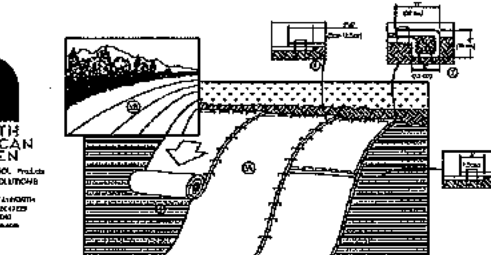
50. The project is located on the site shown on this plan. The project is located on the site shown on this plan.



### LEGEND

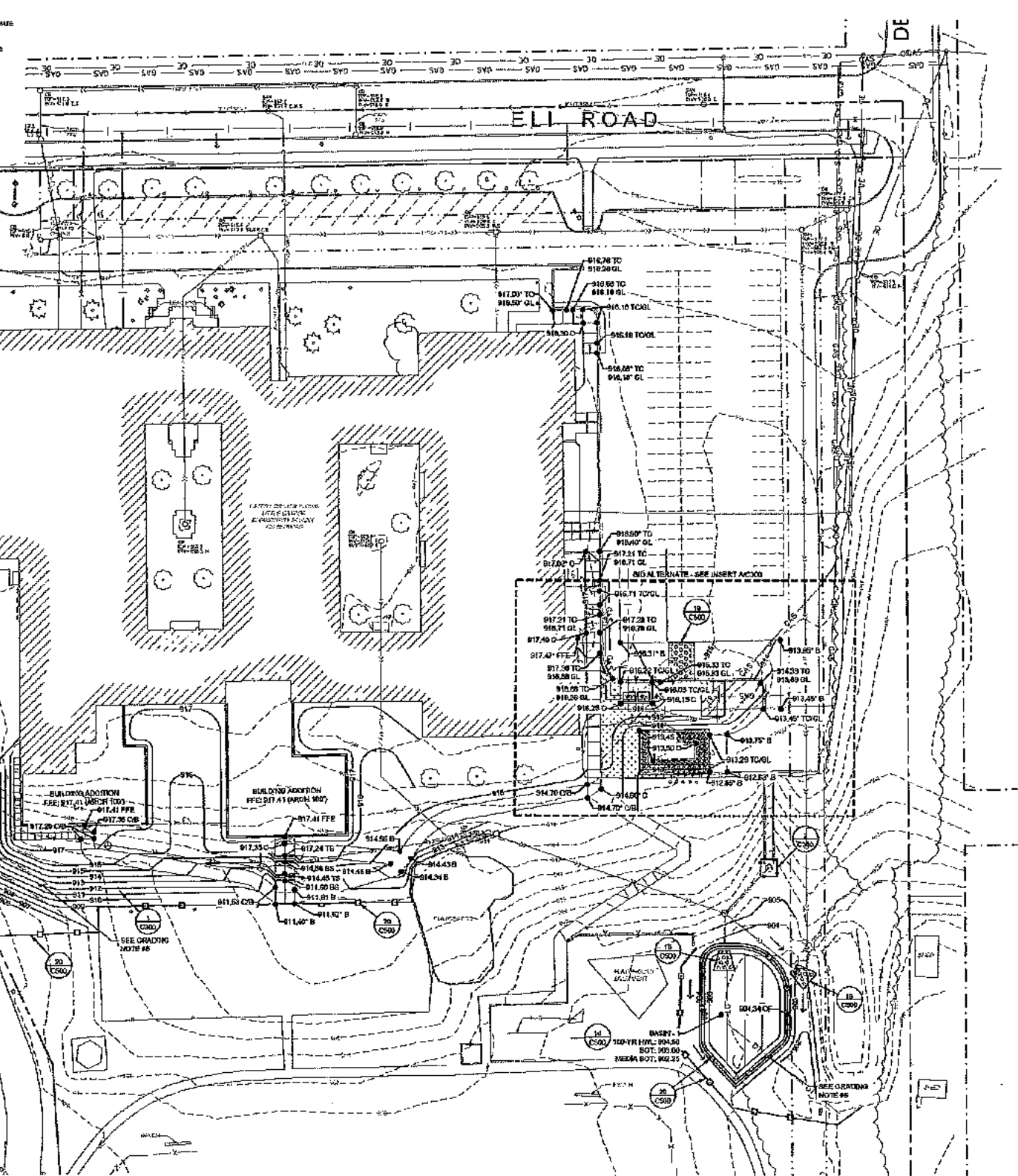
- EXISTING CONTOURS
- PROPOSED CONTOURS - MAJOR INTERVAL
- PROPOSED CONTOURS - MINOR INTERVAL
- GRADE BREAK LINE
- BRIDGE SLOPE
- SILT FENCE
- RIP RAP / ROCK CONST. ENTRANCE
- INLET PROTECTION
- CONCRETE YARDHOUS STATION
- LOCATE CURBS CONSTRUCTION
- SPOT ABBREVIATIONS:

TC - TOP OF CURB
CL - CENTER LINE
B - BUILDING
C - CONCRETE
EO - EMERGENCY OVERFLOW
TW - TOP OF WALL
BT - BOTTOM OF WALL (FAS)
BY - EXISTING TO BE VERIFIED



1. INSTALL EROSION CONTROL BLANKET OVER EXISTING GRASS OR SOIL (SEE SPECIFICATIONS FOR BLANKET TYPE).  
2. COVER ALL EXPOSED SOIL SURFACES WITH EROSION CONTROL BLANKET. BLANKET SHOULD BE INSTALLED WITH PROPER OVERLAP AND FASTENED TO THE GROUND TO PREVENT WIND UPLIFT.  
3. MAINTAIN PROPER SLOPE GRADING THROUGHOUT THE CONSTRUCTION PERIOD TO PREVENT EROSION.  
4. MAINTAIN PROPER SLOPE GRADING THROUGHOUT THE CONSTRUCTION PERIOD TO PREVENT EROSION.  
5. MAINTAIN PROPER SLOPE GRADING THROUGHOUT THE CONSTRUCTION PERIOD TO PREVENT EROSION.

EROSION CONTROL BLANKET  
NOT TO SCALE



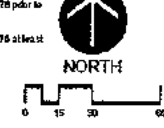
### GRADING NOTES

- The protection consisting of snow fence or safety lines installed on the site shall be in place prior to beginning any grading or demolition work at the site.
- All structures with an existing (E) shall be demolished. If structures vary significantly, notify the Engineer in Writing.
- Grades shown in paved areas represent final elevations.
- Remove all driveways within 4' of good quality topsoil and seed.
- All construction shall be performed in accordance with state and local standard specifications for construction.
- Erosion control blanket on slopes 4:1 or steeper.

### EROSION CONTROL NOTES

- Demer and Contractor shall obtain NPDES permit. Contractor shall be responsible for all fees pertaining to this permit. The SWPPP shall be kept on-site at all times.
- Install temporary erosion control measures (silt fence, straw mulch, rock construction blankets) prior to beginning any excavation or demolition work at the site.
- Erosion control measures shall be installed on the site at all times. The Contractor shall install temporary erosion control measures (silt fence, straw mulch, rock construction blankets) prior to beginning any excavation or demolition work at the site. All structures shall be demolished in accordance with the SWPPP.
- All excavation sites shall be stabilized with crushed rock over the entire width of the excavation and from the edge to a minimum of 2' into the excavation zone.
- The base of the excavation shall be protected by a minimum of 2'. The trench backing shall be protected with a silt fence or straw mulch.
- All grading operations shall be conducted in a manner to minimize the potential for site erosion. Grading operations shall be conducted on 4:1 down grades whenever possible to reduce any potential for site erosion.
- All exposed soil areas must be stabilized as soon as possible to prevent erosion. If it is not possible to stabilize the soil within 14 days after construction, the soil shall be covered with straw mulch or rock construction blankets. Temporary silt fences, straw mulch, or rock construction blankets shall be used to stabilize the soil. The stabilization of the soil shall be completed within 14 days after construction. All structures shall be demolished in accordance with the SWPPP.
- The normal water table shall be maintained at a level that will prevent water from entering the excavation. The Contractor shall install silt fences or straw mulch around the excavation. The stabilization of the soil shall be completed within 14 days after construction. All structures shall be demolished in accordance with the SWPPP.
- Pipe outlets must be provided with energy dissipation within 24 hours of connection to surface water.
- All steep slopes shall be stabilized with straw mulch or rock construction blankets and comply with the Minnesota Department of Transportation Standard Specifications.
- All storm water discharge into water bodies shall be treated to meet the minimum water quality standards for the receiving water body. The Contractor shall install silt fences or straw mulch around the excavation. The stabilization of the soil shall be completed within 14 days after construction. All structures shall be demolished in accordance with the SWPPP.
- All storm water discharge into water bodies shall be treated to meet the minimum water quality standards for the receiving water body. The Contractor shall install silt fences or straw mulch around the excavation. The stabilization of the soil shall be completed within 14 days after construction. All structures shall be demolished in accordance with the SWPPP.
- In areas where excavation occurs, the Contractor shall install silt fences or straw mulch around the excavation. The stabilization of the soil shall be completed within 14 days after construction. All structures shall be demolished in accordance with the SWPPP.
- In areas where excavation occurs, the Contractor shall install silt fences or straw mulch around the excavation. The stabilization of the soil shall be completed within 14 days after construction. All structures shall be demolished in accordance with the SWPPP.
- If an excavation occurs, the Contractor shall install silt fences or straw mulch around the excavation. The stabilization of the soil shall be completed within 14 days after construction. All structures shall be demolished in accordance with the SWPPP.
- All vehicles and equipment shall be covered with straw mulch or rock construction blankets to prevent soil erosion. The Contractor shall install silt fences or straw mulch around the excavation. The stabilization of the soil shall be completed within 14 days after construction. All structures shall be demolished in accordance with the SWPPP.
- Temporary silt fences must be installed around all excavation areas and shall be maintained in good condition throughout the construction period. The Contractor shall install silt fences or straw mulch around the excavation. The stabilization of the soil shall be completed within 14 days after construction. All structures shall be demolished in accordance with the SWPPP.
- Collected sediment, asphalt and concrete slippage, drilling debris, paper, plastic, fabric, construction and demolition debris and other wastes must be disposed of properly and in accordance with local disposal requirements.
- Oil, gasoline, paint and any hazardous substances must be properly stored, including secondary containment, to prevent spills, leaks or other discharges. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of hazardous wastes must be in accordance with local disposal requirements.
- External washing of trucks and other construction vehicles must be located to a certified area of the site. Wash water must be contained and shall not be discharged. If engine idling is allowed, a sign must be posted.
- All liquid and solid waste generated during construction operations must be contained in a leak-proof container facility or impervious liner. A completed clay liner that does not allow liquid waste to enter the ground is not acceptable. The liquid and solid waste must not be disposed of in the ground, water bodies, or on the site. Liquid and solid waste must be disposed of properly and in accordance with local disposal requirements. A sign must be posted around the site to inform construction workers of the proper disposal location.
- Upon completion of the project and stabilization of all graded areas, all temporary erosion control devices (silt fences, straw mulch, etc.) shall be removed from the site.
- All permanent sedimentation basins must be installed and completed immediately following stabilization of the site.
- Contractor shall submit Notice of Termination for NPDES permit within 90 days after final stabilization.
- Notify Minnesota Sustainable, Ramsey/Washington State Watershed District, at 651-702-1676 prior to beginning any and all construction activities for an initial C/PPP inspection.
- Notify Minnesota Sustainable, Ramsey/Washington State Watershed District, at 651-702-1676 at least 48 hours prior to the construction of the erosion basins.

03/23/2018 2:28:48 PM  
Project/Phase: Little Canada Elementary School Addition/Remodeling  
Drawing No: C300



Project: Little Canada Elementary School Addition/Remodeling  
Date: 05/21/18  
Drawn by: JKR  
Checked by: ECR  
C300

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NORTH AMERICAN GREEN  
1000 NORTH AMERICAN GREEN  
CHANDLER, AZ 85224  
480.752.4800  
www.nagreen.com

03/23/2018 2:28:48 PM  
Project/Phase: Little Canada Elementary School Addition/Remodeling  
Drawing No: C300

# Permit Application Coversheet

**Date** July 11, 2018

**Project Name** Beebe Meadows

**Project Number** 18-17

**Applicant Name** Mike Kevitt, SVK Development

**Type of Development** Residential

## Property Description

This project is located on the northeast corner of Larpenteur Avenue and Beebe Road in the City of Maplewood. The applicant is proposing to construct 7 single-family homes with associated driveways and sidewalks. The total site area is 1.47 acres. Volume reduction and rate control will be achieved through construction of two infiltration basins located in the backyards of the proposed homes. Pretreatment will include grass filtration. Two wetland basins were delineated to the south and east of the site. Boundaries were approved on 12/20/16 (#16-16 WCA). The proposed project will not impact wetlands and achieves compliance with the District's no-disturb buffer requirements.

## Watershed District Policies or Standards Involved:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> <b>Wetlands</b>              | <input checked="" type="checkbox"/> <b>Erosion and Sediment Control</b> |
| <input checked="" type="checkbox"/> <b>Stormwater Management</b> | <input type="checkbox"/> <b>Floodplain</b>                              |

## Water Quantity Considerations

The proposed stormwater management plan is sufficient to handle the runoff from the site.

## Water Quality Considerations

### **Short Term**

The proposed erosion and sediment control plan is sufficient to protect downstream water resources during construction.

### **Long Term**

The proposed stormwater management plan is sufficient to protect the long term quality of downstream water resources.

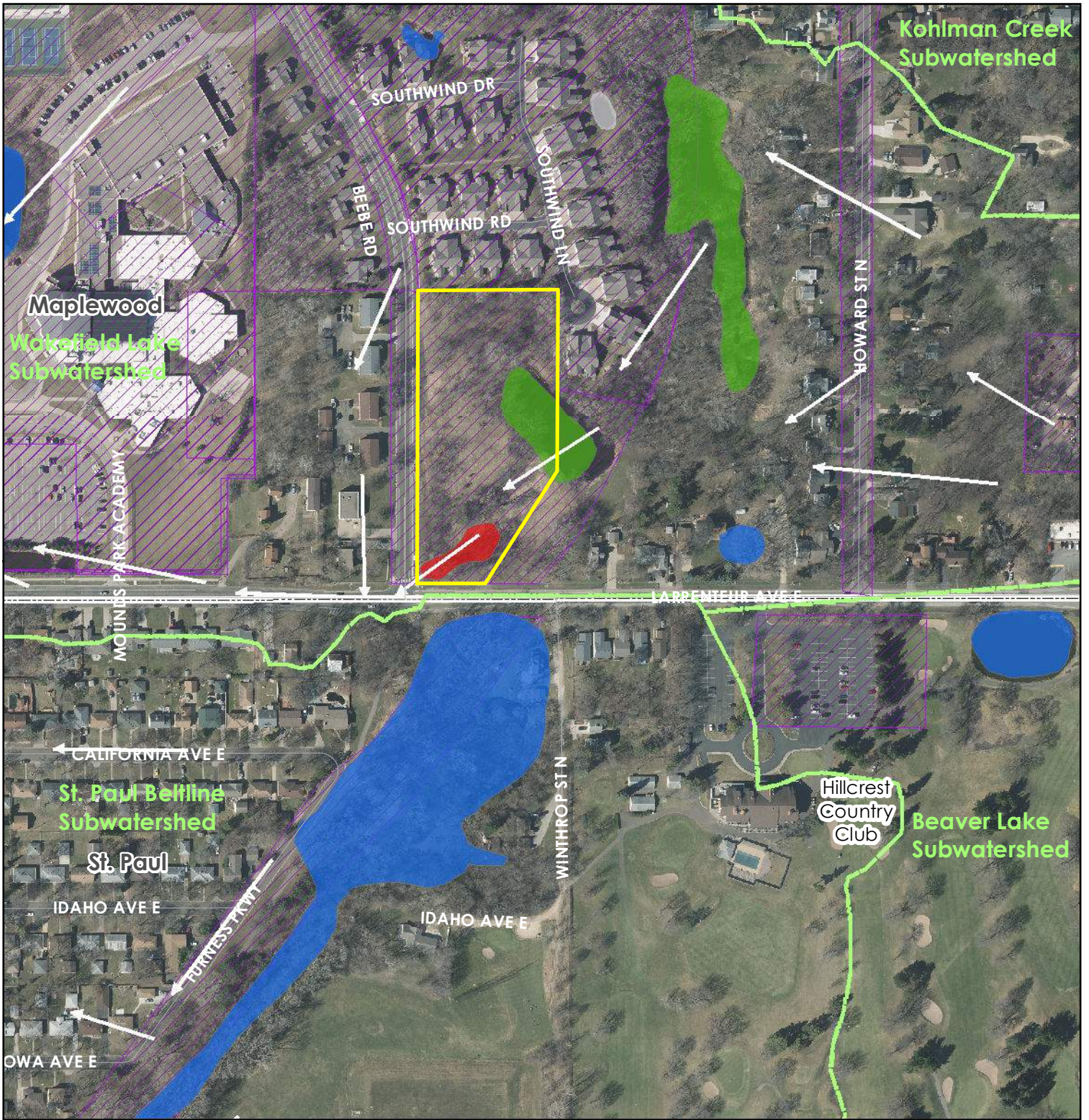
## Staff Recommendation

Staff recommends approval of this permit with the special provisions.

## Attachments:

- Project Location Map**
- Project Grading Plan**

# #18-17 Beebe Meadows



**Wetlands**

- Manage A
- Manage B
- Manage C
- Lake
- Sediment Pond
- Not Assessed

- RWMWD Boundary
- Flow Arrows
- ➔ Major Flow Arrows
- Subwatersheds
- Creeks
- Permits
- City Boundaries

Highlighted Areas  
Represent Active Permit

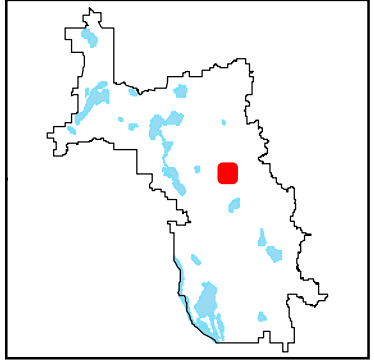
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Feet

0      0.045      0.09

Miles

N



**18-17**

**Special Provisions**

1. The applicant shall submit a revised narrative that confirms there are no wetland impacts associated with the project.
2. The applicant shall submit an updated 'Existing Conditions' model using the Atlas 14 NRCS MSE3 rainfall distributions.
3. The applicant shall submit an executed joint maintenance agreement with the City of Maplewood for the proposed stormwater facilities.
4. The applicant shall submit construction details for the proposed infiltration basins, including inlets, outlets, emergency overflows, and typical cross-section.
5. The applicant shall submit a Stormwater Pollution Prevention Plan (SWPPP) for the project.
6. The applicant shall provide contact information for the trained erosion control coordinator responsible for implementing the SWPPP.
7. The applicant shall submit a copy of the approved Minnesota Pollution Control Agency's NPDES Phase 2 Construction Permit.
8. The applicant shall submit a revised Sheet C3.1 with the correct wetland buffer symbology in the legend.
9. The applicant shall submit a final copy of the signed construction plans.



# BEEBE MEADOWS

MAPLEWOOD, MN

NO.	TITLE
001	PLAN SHEET
002	PROPOSED PLAT/20% PLAN
003	EXISTING CONDITIONS & UTILITIES PLAN
004	EXISTING DRAINAGE & EROSION CONTROL PLAN
005	SWPPP PLAN
006	UTILITY PLAN
007	1992 PRECIPITATION PLAN
008	LANDSCAPE PLAN

ISSUE / REVISION HISTORY

DATE	DESCRIPTION	REVISION
05/15/2018	PERMANENT PLAT	R13

PROJECT MANAGER REVIEW

CERTIFICATION

## PRELIMINARY NOT FOR CONSTRUCTION

### PRELIMINARY PLAT

05.15.2018

## LANDFORM

From Site to Fields

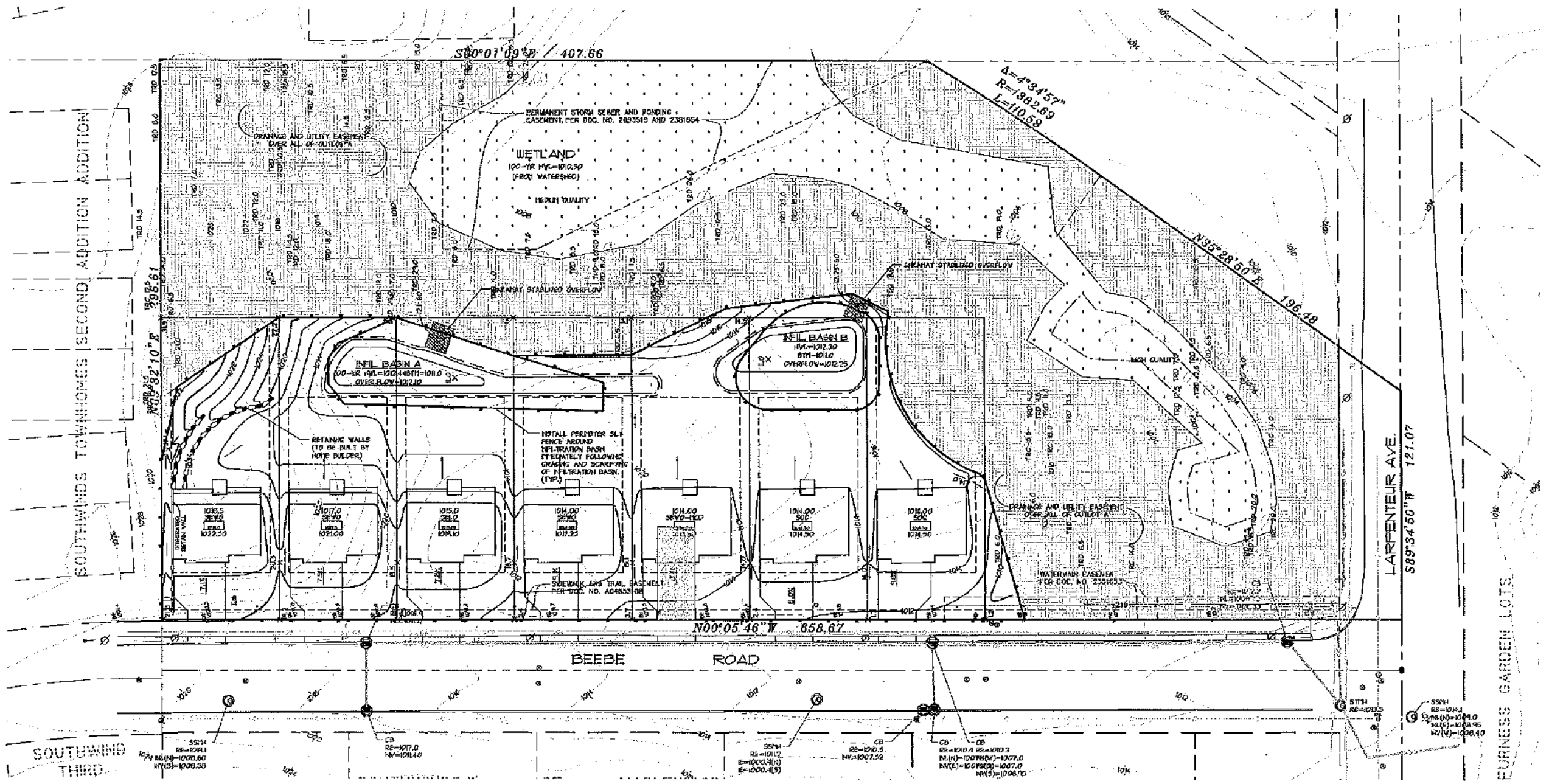
505 South Fifth Avenue Suite 513 Minneapolis, MN 55404  
Tel: 612-252-6070 Fax: 612-262-6077 Web: landform.net

FILE NAME: C3019V006.dwg PROJECT NO.: SVK18006

### GRADING, DRAINAGE & EROSION CONTROL PLAN

# C3.1

SHEET NO. 04/08



#### GENERAL NOTES

- FOR CONSTRUCTION STAKING AND SURVEYING SERVICES CONTACT LANDFORM PROFESSIONAL SERVICES AT 612.252.6070.
- EROSION PREVENTION AND SEDIMENT CONTROL NOTES**
- INSTALL PERIMETER SEDIMENT CONTROLS PRIOR TO BEGINNING WORK AND MAINTAIN FOR DURATION OF CONSTRUCTION. REMOVE CONTROLS AFTER AREAS CONTROLLING RUNOFF ARE PERMANENTLY STABILIZED AND DISPOSE OF OFF SITE.
- LIMIT SOIL DISTURBANCE TO THE GRADING LINES SHOWN. SCHEDULE OPERATIONS TO MINIMIZE LENGTH OF EXPOSURE OF DISTURBED AREAS.
- MAINTAIN PRACTICES SHOWN ARE THE MINIMUM REQUIREMENT. INSTALL AND MAINTAIN ADDITIONAL CONTROLS AS WORK PROGRESSES TO PREVENT EROSION AND CONTROL SEDIMENT CARRIED BY WIND OR WATER.
- REFER TO SWPPP NOTES ON SHEET C02 FOR ADDITIONAL REQUIREMENTS.
- CONTRACTOR SHALL PREVENT SEDIMENT LADEN WATER FROM ENTERING THE INFILTRATION SYSTEMS UNTIL THE SITE IS COMPLETELY STABILIZED.
- ALL EXPOSED SOIL AREAS MUST BE STABILIZED WITHIN 72 HOURS OF COMPLETION OF WORK IN EACH AREA. IF WITHIN 1 FEET OF EXPOSED WATER USE THE FOLLOWING NOTE INSTEAD: ALL EXPOSED SOILS AREAS SHALL BE STABILIZED IMMEDIATELY TO LIMIT SOIL EROSION IN THAT PORTION OF THE SITE WHERE CONSTRUCTION HAS TEMPORARILY OR PERMANENTLY CEASED.
- SEED, SOIL, MULCH AND FERTILIZER SHALL MEET THE FOLLOWING SPECIFICATIONS, AS INDICATED:  

ITEM	SPECIFICATION NUMBER
SEED	INDOT 3678
MULCH	INDOT 3682
FERTILIZER	INDOT 3691
CELEBRAL PLACEMENT	INDOT 2375

 SEE LANDSCAPE SHEETS FOR PERMANENT TURF AND LANDSCAPE ESTABLISHMENT.
- SCRAPE ADJACENT STREETS CLEAN DAILY AND SWEEP CLEAN WEEKLY.

#### GRADING NOTES

- CONTACT UTILITY SERVICE PROVIDERS FOR FIELD LOCATION OF SERVICES 72 HOURS PRIOR TO BEGINNING GRADING.
- REMOVE TOPSOIL FROM GRADING AREAS AND STOCKPILE SUFFICIENT QUANTITY FOR REUSE. MATERIALS MAY BE USED FROM LANDSCAPE AREAS FOR USE ON SITE AND REPLACED WITH EXCESS ORGANIC MATERIAL WITH PRIOR OWNER APPROVAL.
- REMOVE SURFACE AND GROUND WATER FROM EXCAVATIONS. PROVIDE INITIAL LPTS OF STABLE FOUNDATION MATERIAL IF EXPOSED SOILS ARE WET AND UNSTABLE.
- REFER TO STRUCTURAL SPECIFICATIONS FOR EARTHWORK REQUIREMENTS FOR BUILDING PADS.
- AN INDEPENDENT TESTING FIRM SHALL VERIFY THE REMOVAL OF ORGANIC AND UNSUITABLE SOILS, SOIL CORRECTION AND COMPACTION AND PROVIDE PERMANENT REPORTS TO THE OWNER.
- PLACE AND COMPACT FILL USING LIFT THICKNESSES MATCHED TO SOIL TYPE AND COMPACTION EQUIPMENT TO OBTAIN SPECIFIED COMPACTION THROUGHOUT THE LIFT.
- COMPACT COARSE SOILS IN PAVED AREAS TO 98% OF MAXIMUM DRY DENSITY, STANDARD PROCTOR (ASTM D998) EXCEPT THE TOP 3 FEET WHICH SHALL BE COMPACTED TO 100%. COMPACT TO 98% DENSITY WHERE FILL DEPTH EXCEEDS 10 FEET. THE SOILS SHALL BE WITHIN 3% OF OPTIMAL MOISTURE CONTENT. IN GRANULAR SOILS ALL PORTIONS OF THE FILLMENT SHALL BE COMPACTED TO NOT LESS THAN 98% OF INDEXED PROCTOR DENSITY (ASTM D997).
- AVOID SOIL COMPACTION OF INFILTRATION PRACTICES. ANY EQUIPMENT USED IN INFILTRATION AREAS SHOULD BE SMALL SCALED AND TRACKED.
- NOTIFY NICOLE SODORIN, RAINSEY-WASHINGTON METRO WATERSHED DISTRICT, AT 651-712-7416 PRIOR TO BEGINNING ANY AND ALL CONSTRUCTION ACTIVITY FOR AN INITIAL SWPPP INSPECTION.
- PLANS SPECIFY PERIMETER EROSION CONTROL/SEDIMENT CONTROL PRACTICES, ADDITIONAL EROSION CONTROL PRACTICES MAY BE REQUIRED DURING CONSTRUCTION.

#### RETAINING WALL NOTES

- RETAINING WALL SHOWN FOR SCHEMATIC PURPOSES ONLY. BUILDER TO SUBMIT PLAN FOR ANY RETAINING WALLS OVER 4' IN HEIGHT TO THE CITY AS REQUIRED BY CODE.

#### LEGEND

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	SILT FENCE	6 EACH
	VEHICLE TRACKING PAD	1 EACH
	WETLAND BUFFER	
	FUTURE RETAINING WALL (BY HOME BUILDER)	

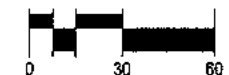
CALLING TYPE	DESCRIPTION
XXXX	REAR ELEVATION
XXXX/FD	UNIT TYPE
XXXX/FB	FRONT BASINMENT ELEVATION
XXXX/GF	FRONT GARAGE FLOOR ELEVATION
XXXX/DSP	DEMOTES ALPINE OF COURSES
XXXX/IC	GARAGE FLOOR IS DROPPED FROM TOP OF FOUNDATION

NOTES:  
1. GARAGE LOCATION INDICATED BY DRIVEWAY.

#### PAD DETAIL NO SCALE



Know what's Below.  
Call before you dig.



# Permit Application Coversheet

**Date** July 11, 2018

**Project Name** I-694 & Rice Street Interchange

**Project Number** 18-18

**Applicant Name** Beth Engum, Ramsey County Public Works

**Type of Development** Linear

## Property Description

This project is located along the I-694 and Rice Street interchange in the cities of Shoreview, Little Canada, and Vadnais Heights. The project is split between the District and the Vadnais Lake Area Water Management Organization (VLAWMO). The District has the most stringent design criteria, and VLAWMO does not have permitting authority. District requirements have been applied throughout the project area. The applicant is proposing to reconstruct the I-694 and Rice Street interchange, including three roundabouts, ramp and approach work, and the reconstruction of 2,300 linear feet of Rice Street.

The applicant is proposing to construct a filtration basin, infiltration basin, and dry pond to manage stormwater on the site. The District caps volume reduction credit at 2" of runoff to any one Best Management Practice (BMP), so the applicant has submitted BMP construction cost information to satisfy requirements for the linear cost cap. The project is located within a Drinking Water Supply Management Area, Wellhead Protection Area, and Emergency Response Area. Design guidelines from the Minnesota Pollution Control Agency and Minnesota Department of Health were utilized to confirm that infiltration can safely occur within the project limits. St. Paul Regional Water Services indicated infiltration is favorable where the soils allow it in order to reduce runoff to the drinking water intake site. The proposed design reduces rates from each discharge point within the project area for the 2, 10, and 100-year critical 24-hour rainfall events.

The layout of the proposed roadway was selected to increase safety and mobility through the corridor. While avoidance and minimization measures were incorporated, the proposed design will result in fill below the floodplain elevation of Black Tern Pond and resulting permanent wetland impacts in the amount of 0.72 acre. To ensure there is no loss of floodplain storage, the applicant has submitted a design that will provide sufficient compensatory storage adjacent to the affected floodplain and 0.42 acre of wetland buffer. Temporary wetland impacts of 0.61 acre will occur to accommodate site grading, and these areas will be restored with native vegetation. The applicant is required to provide the floodplain compensatory storage prior to or concurrently with the proposed fill to ensure there are no adverse flood impacts during and after construction. Due to site constraints, existing conditions, and the nature of the project, the applicant has requested approval for the Minnesota Board of Water and Soil Resource's Local Road Wetland Replacement Program to meet Wetland Conservation Act replacement requirements. A variance request to the District's Rule E 'no net loss' policy and wetland buffer requirements has been submitted for board consideration.

---

## Watershed District Policies or Standards Involved:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> <b>Wetlands</b>              | <input checked="" type="checkbox"/> <b>Erosion and Sediment Control</b> |
| <input checked="" type="checkbox"/> <b>Stormwater Management</b> | <input checked="" type="checkbox"/> <b>Floodplain</b>                   |

---

## Water Quantity Considerations

The proposed stormwater management plan is sufficient to handle the runoff from the site.

---

**Water Quality Considerations**

***Short Term***

The proposed erosion and sediment control plan is sufficient to protect downstream water resources during construction.

***Long Term***

The proposed stormwater management plan is sufficient to protect the long term quality of downstream water resources.

---

**Staff Recommendation**

Staff recommends approval of this permit with the special provisions, wetland replacement plan, and variance request.

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**Attachments:**

- Project Location Map**
- Project Grading Plan**



# #18-18 I-694 & Rice Street Interchange



Note: Shaded area is outside RWMWD

**Wetlands**

- Manage A
- Manage B
- Manage C
- Lake
- Sediment Pond
- Not Assessed

- RWMWD Boundary
- Flow Arrows
- Major Flow Arrows
- Subwatersheds
- Creeks
- Permits
- City Boundaries

Highlighted Areas  
Represent Active Permit

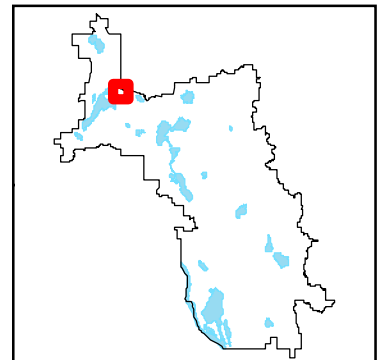
0      250      500

Feet

0      0.05      0.1

Miles

N



**Special Provisions**

1. The applicant shall submit a final project narrative.
2. The applicant shall submit a revised Stormwater Pollution Prevention Plan (SWPPP) with the following notes:
  - A. Notify Nicole Soderholm, Ramsey-Washington Metro Watershed District, at 651-792-7976 prior to beginning any and all construction activity for an initial SWPPP inspection.
  - B. Provide redundant perimeter control around surface waters including wetlands where a 50 foot no-disturb buffer cannot be preserved.
3. The applicant shall submit pdf files of the final HydroCAD report print-out for the 24-hour duration events.
4. The applicant shall submit a floodplain Memorandum of Understanding signed by Ramsey County and St. Paul Regional Water Services that preserves proposed grading contours adjacent to Black Tern Pond.
5. The applicant shall submit a copy of the approved Minnesota Pollution Control Agency's NPDES Phase 2 Construction Permit.
6. The applicant shall submit a wetland buffer restoration plan for areas temporarily disturbed during grading.
7. The applicant shall provide contact information for the trained erosion control coordinator responsible for implementing the SWPPP.
8. The applicant shall submit a final copy of the signed construction plans.

# Minnesota Wetland Conservation Act

## Notice of Application

Local Government Unit (LGU) <b>Ramsey-Washington Metro Watershed District</b>	Address 2665 Noel Drive Little Canada, MN 55117
--	---

### 1. PROJECT INFORMATION

Applicant Name <b>Beth Engum, Ramsey County Public Works</b> 1425 Paul Kirkwold Drive Arden Hills, MN 55112 beth.engum@co.ramsey.mn.us	Project Name <b>I-694 &amp; Rice Street Interchange</b>	Date of Application <b>6/25/18</b>	Application Number <b>18-08 WCA</b>
--	--	---------------------------------------	--

Type of Application (check all that apply):

<input type="checkbox"/> Wetland Boundary or Type	<input type="checkbox"/> No-Loss	<input type="checkbox"/> Exemption	<input type="checkbox"/> Sequencing
<input checked="" type="checkbox"/> Replacement Plan	<input type="checkbox"/> Banking Plan		

Summary and description of proposed project (attach additional sheets as necessary):

Rebecca Beduhn (SEH) submitted a joint application on behalf of Ramsey County Public Works requesting approval for a replacement plan through withdrawal of banked credits from the BWSR Local Road Wetland Replacement Program (LRWRP).

Ramsey County is proposing to reconstruct the existing I-694 & Rice St interchange. The project area is approximately 55 acres and spans the cities of Shoreview, Vadnais Heights, and Little Canada: Section 31, Township 30N, Range22W and Section 36, Township 30N, Range 23W.

Wetlands within and adjacent to the project area were delineated on August 24, 2016. Boundaries were approved by RWMWD on September 22, 2016.

The project proposes to permanently impact 30,805 square feet (0.72 acre) of wetland in addition to temporary impacts to 26,565 square feet (0.61 acre) of wetland. Avoidance and minimization efforts are discussed in the enclosed Wetland Permit Application Memo.

A pre-application TEP meeting was held on April 17, 2018 to discuss mitigation requirements for the project. The applicant is pursuing approval for the LRWRP because the project is an existing roadway that would be redesigned to meet federal and state design standards, including safety updates and improvements. Additionally, the project is not being constructed solely for additional traffic capacity. TEP members present expressed general agreement that the proposed project would likely qualify for the LRWRP.

If approved, the project will result in the withdrawal of 1.4144 credits (2:1 replacement) from a wetland bank to be identified by BWSR.

### 2. APPLICATION REVIEW AND DECISION

Signing and mailing of this completed form to the appropriate recipients in accordance with 8420.0255, Subp. 3 provides notice that an application was made to the LGU under the Wetland Conservation Act as specified above. A copy of the application is attached. Comments can be submitted to:

Name and Title of LGU Contact Person <b>Nicole Soderholm</b>	Comments must be received by (minimum 15 business-day comment period):
---	--

<b>Permit Coordinator</b>	<b>July 17<sup>th</sup>, 2018</b>
Address (if different than LGU)	Date, time, and location of decision: <b>A decision will be made following a review of the application and completion of the comment period.</b>
Phone Number and E-mail Address 651-792-7976 nicole.soderholm@rwmwd.org	Decision-maker for this application: <input type="checkbox"/> Staff <input checked="" type="checkbox"/> Governing Board or Council

Signature: *nicole.soderholm* Date: 6/26/18

### 3. LIST OF ADDRESSEES

<input checked="" type="checkbox"/> SWCD TEP member: <b>Michael Schumann (Ramsey Conservation District)</b>
<input checked="" type="checkbox"/> BWSR TEP member: <b>Ben Meyer</b>
<input type="checkbox"/> LGU TEP member (if different than LGU Contact):
<input checked="" type="checkbox"/> DNR TEP member: <b>Jen Sorensen, Becky Horton</b>
<input type="checkbox"/> DNR Regional Office (if different than DNR TEP member)
<input type="checkbox"/> WD or WMO (if applicable):
<input checked="" type="checkbox"/> Applicant (notice only) and Landowner (if different)
<input type="checkbox"/> Members of the public who requested notice (notice only):
<input checked="" type="checkbox"/> Corps of Engineers Project Manager (notice only)
<input type="checkbox"/> BWSR Wetland Bank Coordinator (wetland bank plan applications only)

### 4. MAILING INFORMATION

- For a list of BWSR TEP representatives: [www.bwsr.state.mn.us/contact/WCA\\_areas.pdf](http://www.bwsr.state.mn.us/contact/WCA_areas.pdf)
- For a list of DNR TEP representatives: [www.bwsr.state.mn.us/wetlands/wca/DNR\\_TEP\\_contacts.pdf](http://www.bwsr.state.mn.us/wetlands/wca/DNR_TEP_contacts.pdf)
- Department of Natural Resources Regional Offices:

NW Region:	NE Region:	Central Region:	Southern Region:
Reg. Env. Assess. Ecol. Div. Ecol. Resources 2115 Birchmont Beach Rd. NE Bemidji, MN 56601	Reg. Env. Assess. Ecol. Div. Ecol. Resources 1201 E. Hwy. 2 Grand Rapids, MN 55744	Reg. Env. Assess. Ecol. Div. Ecol. Resources 1200 Warner Road St. Paul, MN 55106	Reg. Env. Assess. Ecol. Div. Ecol. Resources 261 Hwy. 15 South New Ulm, MN 56073

For a map of DNR Administrative Regions, see: [http://files.dnr.state.mn.us/aboutdnr/dnr\\_regions.pdf](http://files.dnr.state.mn.us/aboutdnr/dnr_regions.pdf)

- For a list of Corps of Project Managers: [www.mvp.usace.army.mil/regulatory/default.asp?pageid=687](http://www.mvp.usace.army.mil/regulatory/default.asp?pageid=687)  
or send to:

➤  
US Army Corps of Engineers  
St. Paul District, ATTN: OP-R  
180 Fifth St. East, Suite 700  
St. Paul, MN 55101-1678

- For Wetland Bank Plan applications, also send a copy of the application to:  
Minnesota Board of Water and Soil Resources  
Wetland Bank Coordinator  
520 Lafayette Road North  
St. Paul, MN 55155

## 5. ATTACHMENTS

In addition to the application, list any other attachments:

**Wetland Permit Application Memo**



Building a Better World  
for All of Us®

## MEMORANDUM

TO: Nicole Soderholm, RWMWD Permit Coordinator

FROM: Rebecca Beduhn, SEH Wetland Scientist

DATE: June 18, 2018

RE: I-694 and Rice Interchange - Wetland Mitigation and Buffer Variance Request  
SEH No. RAMSE 135877 14.00

### **Background**

The purpose of this memorandum is to formally request a variance from the Ramsey-Washington Metro Watershed District wetland mitigation and buffer requirements for the proposed Interstate 694 (I-694) and Rice Street interchange reconstruction in Ramsey County, Minnesota. Ramsey County is proposing to reconstruct this interchange, and cannot comply with of the watershed rules due to hardship.

A variance is requested for both the wetland mitigation and the wetland buffer requirements.

### **Variance Request 1: RWMWD Rule E Standards**

The RWMWD requires, where permitted, that wetland replacement adhere to the following siting sequence:

1. On-site replacement, when feasible
2. Within the same sub-watershed
3. Within the District
4. Outside of the District

### **Summary of Request**

A variance of the requirement to mitigate within the watershed is requested, on the basis that 2:1 replacement is proposed outside the watershed through the Board of Water and Soil Resources (BWSR) Local Road Wetland Replacement Program

### **Summary of Proposed Approach**

This siting criteria differs from what is required under the Minnesota Wetland Conservation Act (WCA) and current guidance by the U.S. Army Corps of Engineers (USACE), which both prefer wetland banking over project specific replacement, and will allow a broader geography for location by considering the Bank Service Area to be considered in-place. The RWMWD rules are more restrictive, as the watershed is only a portion of the Bank Service Area, and therefore has a greater limitation on where mitigation can occur. Currently, there are no wetland banks within the district boundaries, so any mitigation would be required to be project specific.

The project proposes to use the BWSR Local Road Wetland Replacement Program for wetland mitigation, which is a state program which provides wetland mitigation for local road authorities where the project is an existing roadway and safety improvements are a primary component. Preliminary discussion with the BWSR has indicated that this project is likely to be supported, and with concurrence of the Technical Evaluation Panel, the mitigation for the WCA and the USACE would be provided by the State. The location of this mitigation is

Engineers | Architects | Planners | Scientists

Short Elliott Hendrickson Inc., 3535 Vadnais Center Drive, St. Paul, MN 55110-5196

SEH is 100% employee-owned | [sehinc.com](http://sehinc.com) | 651.490.2000 | 800.325.2055 | 888.908.8166 fax

determined by the State, and cannot be determined until after the eligibility has been confirmed, but with no banks available in the watershed we know it will not meet the RWMWD siting requirements.

In summary – the project proposes to meet the requirements of the WCA and USACE for wetland mitigation, but replacement will occur outside the watershed.

### **Summary of Hardship and Efforts to Comply**

The primary hardship is the lack of opportunities to complete wetland mitigation within the project, and within the watershed. In an effort to meet the watershed requirements, Ramsey County has undertaken efforts to meet the requirements, as summarized below.

#### *Stormwater volume retention or infiltration*

The option to provide wetland through incorporation with stormwater treatment (volume retention or infiltration) was examined by SEH staff. Preliminary designs indicate limited to no ability to provide additional capacity beyond meeting the minimum watershed permit requirements for stormwater treatment. The opportunity to create wetland as a second cell is not present, and calling areas of active treatment mitigation would not be appropriate as the functions and values would not be replaced, and the depth of water may not meet wetland definitions.

#### *Floodplain Mitigation*

Similarly, areas of proposed floodplain mitigation were considered to see if they could also serve as wetland mitigation. While excavation is proposed for the creation of floodplain, it is located above the Ordinary High Water (OHW) of Blacktern Pond, and is not expected to be wetland – only storage for floodwater. As it would not create wetland, it is not suitable to consider it for mitigation. Excavation to make the floodplain mitigation deeper and create wetland was considered, but any activity below the OHW would require permitting through the Minnesota Department of Natural Resources (MNDNR), as Blacktern Pond is a Public Water. The MNDNR has previously commented that permitting to excavate within a Public Water for the purposes of creating floodplain storage was not able to be approved, therefore we are unable to create wetland and have floodplain mitigation provide dual purpose approvals.

#### *Enhancing the quality of the effected wetland*

The Board and SEH were in agreement that enhancing existing wetlands within and surrounding the project area may not be a viable option, as the wetland are subject to degradation because of such close proximity to the freeway system. Short term vegetation enhancement may be technical possible, but are not realistic long-term sources of mitigation.

#### *Expanding Wetland 2 or 3*

Expansion of Wetlands 2 and 3 is a concern because of the proximity of the basins to the adjacent roadways, and the small drainage area supporting a larger wetland. Wetlands 2 and 3 are small ditch basins adjacent to the road, and could pose potential risk to the nearby road system if the sizes are increased. There is also a challenge of having wetland within the right of way, if there is sufficient hydrology to support a larger wetland, and ensuring that the wetland has acceptable functions and values, given the current wetland quality is low. While there may be a small opportunity here to make a marginal improvement to the wetland area or quality, it is essentially negligible toward the goal of 1:1 replacement.

#### *Using roundabout with depressed pervious centers*

The proposed design for each roundabout does employ pervious surfaces, however the centers cannot be depressed and meet MnDOT and Federal Highway Administration safety requirements for the corridor.

#### *Wetland creation within one of the nearby vacant lots*

The lot near Wetlands 2 and 3 is owned by Ramsey County, however, the proposed alignment also traverses this lot, and does not leave sufficient space to complete on-site replacement in this location.

#### *Other locations within Watershed District*

Ramsey County staff completed an internal review of other locations that could be considered, but ultimately determined that the majority of sites considered were not acceptable due to existing land uses, not available due to ownership, or would not be practicable due to the low quality of the existing wetlands and the inability to maintain the desired success criteria of high or improved quality wetlands. Public Works staff approached the Park and Recreation Department to expand the search to other County-owned parcels within the RWMWD. While there is land available, there is a general shortage of acceptable places where wetland can be created, and even fewer opportunities where restoration could be achieved. Based on feedback from the Park and Recreation staff, it is presumed that there are no opportunities that would be viable for this project. Potentially there are opportunities that could be considered further, but would require incorporation within the plans for these parks, and would require additional time before they could be fully evaluated and incorporated in plans for the current project.

#### *Design, monitoring, and maintenance limitations*

One of the primary concerns of project specific replacement within the watershed is that it would be potentially possible to create the area of wetland needed, but very difficult to meet success standards for quality. Mitigation standards under WCA, which presumably would be the same used by the RWMWD, establish recommendations for vegetation quality, grading and side slopes, depths, and required upland buffers. These can be difficult to achieve as expansions of existing wetlands, particularly if it is expansion of low quality wetland, or is not an appropriate fit within the landscape. Other concerns of on-site replacement include the requirements for maintenance, monitoring, and any limitations on future land use (such as a need for easement or deed of restrictions and covenants), which may also be difficult to achieve. Overall, if a potential site were to be identified, there is still concern that it would not be successful, and therefore the County has reservations on proceeding with what is a riskier approach to mitigation than using either the BWSR bank, or a private bank where the wetland restoration has already occurred.

## **Variance Request 2: Buffer Requirements**

### **Summary of Request**

A variance of the wetland buffer requirement is requested, on the basis that the existing site conditions fail to meet the requirements, and that there is insufficient area post-construction to meet these criteria.

### **Summary of Proposed Approach**

Wetlands in the RWMWD have been classified using the Minnesota Routine Assessment Method (MnRAM) Version 3.4 and are identified in the District's Watershed Management Plan. The classifications are used to manage wetlands and designate average and minimum wetland buffer widths (Ramsey-Washington Metro Watershed District Rules 2015). Wetland 4 has been classified as a Manage C, which designates the basin to be under "light management" criteria. Manage C wetlands require an average buffer width of 25 feet, with a minimum buffer width of 12.5 feet.

Wetland buffer requirements were examined for the project as proposed. Using the average buffer width of 25 feet, a total buffer of 0.87 acres is required to comply with the buffer requirements.

### **Summary of Hardship and Efforts to Comply**

Due to the nature of the project, it is not possible to meet the buffer requirements for Wetland 4. The reconstruction is to an existing roadway system and the wetland occurs at the toeslope of existing Country Drive and I-694, which leaves little area for a wetland buffer.

Using the post-construction wetland boundary, the area of fill into the wetland can be used to provide buffer for the western portion of Wetland 4. A total of 0.42 acres can be used as buffer for this portion. However, the eastern portion, which currently does not comply, will not be able to be able to meet buffer requirements.



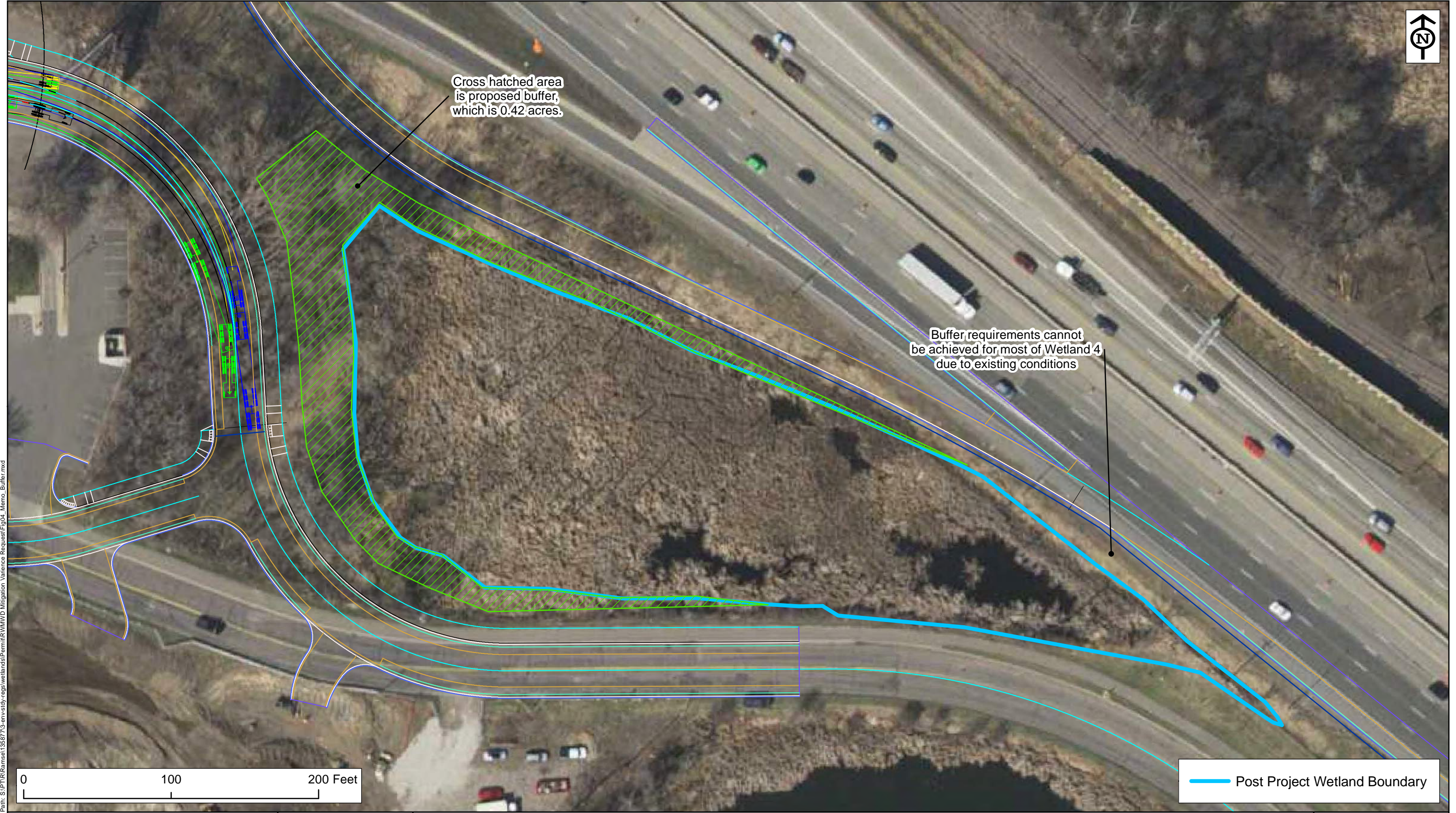
**Figure 1** is included to show where buffer can be placed, and to show where it doesn't not comply. Compliance is primarily because the new roadway sideslopes can be left vegetated and qualify, but it is noted that they are also a result of wetlands fill.

Overall, wetland buffers will be kept to the greatest extent possible, but full compliance cannot be achieved primarily due to limitations of existing conditions.

Enclosure

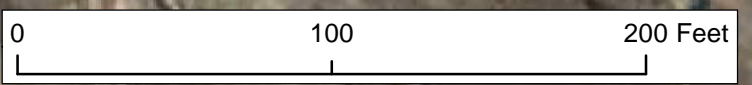
c: Beth Englum, Ramsey County

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Cross hatched area is proposed buffer, which is 0.42 acres.

Buffer requirements cannot be achieved for most of Wetland 4 due to existing conditions



— Post Project Wetland Boundary

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3535 VADNAIS CENTER DR.  
ST. PAUL, MN 55110  
PHONE: (651) 490-2000  
FAX: (888) 908-8166  
TF: (800) 325-2055  
www.sehinc.com

Project: RAMSE 135877  
Print Date: 6/20/2018

User Name: ddeuschle  
Projection: NAD 1983 HARN Adj MN Ramsey Feet  
Source: USDA, MnDOT, SEHinc

## PROPOSED BUFFER

### I-694/Rice Street Interchange Safety Improvements Ramsey County, Minnesota

Figure  
1

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.



**Legend**

- Approved Wetland Boundary
- Grading Limits
- - - - - Construction Limits

**Community Type Impacted**  
(within construction limits)

- Floodplain Forest
- Shallow Marsh
- Fresh (wet) Meadow

**Impact Type**

- Permanent
- Temporary

Path: S:\P\RAMSEY\13158773\env\study\ogc\wetlands\perm\GIS\Figure 4 - Wetland Impacts.mxd

0 50 100 Feet



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ST. PAUL, MN 55110  
PHONE: (651) 490-2000  
FAX: (888) 908-8166  
TF: (800) 325-2055  
www.sehinc.com

Project: RAMSE 135877  
Print Date: 6/18/2018

User Name: rbeduhn  
Projection: UTM NAD83 Zone 15N  
Source: USDA, MNDOT, SEHinc

**PROPOSED WETLAND IMPACTS**  
I-694/Rice Street Interchange Safety Improvements  
Ramsey County, Minnesota

Figure  
4

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.



# RAMSEY-WASHINGTON

## METRO WATERSHED DISTRICT

### MEMORANDUM

**Date:** July 11, 2018  
**To:** Board of Managers and Staff  
**From:** Nicole Soderholm, Permit Coordinator  
**Subject:** June Enforcement Action Report

During June 2018:

<b>Number of Violations:</b>	<b>32</b>
Install/Maintain Inlet Protection	10
Install/Maintain Perimeter Control	5
Install/Maintain Construction Entrance	4
Sweep Streets	1
Stabilize Exposed Soils	2
Contain Liquid/Solid Wastes	2
Remove Discharged Sediment	3
Protect/Maintain Permanent BMPs	2
Install/Maintain Ditch Checks	1
Install/Maintain Energy Dissipation	2

#### Ongoing Activities:

Erosion/sediment control inspections and enforcement, permitting assistance to private developers and government entities, monthly permit review in collaboration with Barr Engineering, WaterFest setup, IDDE training for all staff, miscellaneous complaints and inquiries, WCA site visits and administration, compiling information and collaboration with CRWD for proposed permit rule changes, permit close-outs and escrow refunds

#### Project Updates:

Permit #16-28 Hazelwood Medical Office Building, Maplewood

The medical office building constructed last year off Beam Avenue is complete, but the filtration basin that was constructed as part of the site's permit requirements is holding

water longer than 48 hours. District staff inspected the basin in May and June. The permit applicant and contractor for the project have been notified that the project escrow cannot be returned until the basin is functioning properly. The contractor has responded to indicate they will be assessing the basin for potential solutions.

#### Permit #15-40 Maplewood Imports

Construction at the new Porsche dealership off Highway 61 is substantially complete. Staff completed an inspection and notified the contractor of areas that are yet to achieve 70% vegetation coverage. A vegetation maintenance subcontractor will be visiting the site to assess areas for reseeding. The stormwater filtration areas are complete and draining properly. A final inspection will be scheduled later this year to determine if the permit can be closed out.

#### Permit #18-02 Twin City Hardware Expansion, Oakdale

Construction has started at the Twin City Hardware location off Hadley Avenue. District staff completed an initial inspection on the site and met with the contractor. Routine issues were noted like street sweeping and stockpile protection. The contractor responded that the issues would be promptly corrected. Staff will plan on visiting the site twice a month barring any non-compliance that would trigger more frequent inspections.

#### Permit #15-35 Shoreview Library

Site work is complete at the Ramsey County public library off Victoria Street. Staff completed a final inspection of the site mid-month and confirmed vegetation establishment. Stormwater BMPs have all been inspected and are functioning properly. Final as-built plans and maintenance information were requested of the county before the permit can be closed out, and the District is currently waiting on these items.

#### Permit #15-37 MnDOT I-94 from Earl St to TH120, St. Paul

MnDOT continues to work with the contractor on final punchlist items for the I-94 reconstruction project in St. Paul. A final inspection with District staff is expected to be scheduled in July to determine if the permit can be closed. Work was substantially completed last year including the construction of a filtration basin to capture drainage from the corridor.

#### **Permits Closed in June 2018:**

- 15-34 White Bear Acura Subaru, Vadnais Heights
- 16-04 Kwik Trip Vadnais Heights
- 16-13 Chick-fil-A, Maplewood
- 16-14 Indian Motorcycle, Landfall
- 16-29 MnDOT 35E Noise Wall Reconstruction, Little Canada

\* \* \* \* \*

# Stewardship Grant Program

\* \* \* \* \*

## BMP Incentive Application Summary

**Project Name:** Rolling Hills HOA

**Application Number** 18-13 CS

**Board Meeting Date:** 7/11/2018

**Applicant Name:** Vicki Pream

**Residential**

**Commercial/Government**

### Project Overview:

This project is located at Rolling Hills townhome association off Lexington Avenue and Victoria Street in Shoreview. The applicant is proposing to restore an existing drainage swale, by creating four pools to slow stormwater runoff. The proposed pooling areas will be planted with native vegetation and will include sand trenches to increase infiltration in the area. This will also help solve some erosion issues that the association has been experiencing. The Ramsey Conservation District will also be contributing grant funds towards this project.

This project is eligible for 75% funding up to \$50,000.

### BMP type(s):

Infiltration Basin(1)

### Grant Request:

\$50,000.00

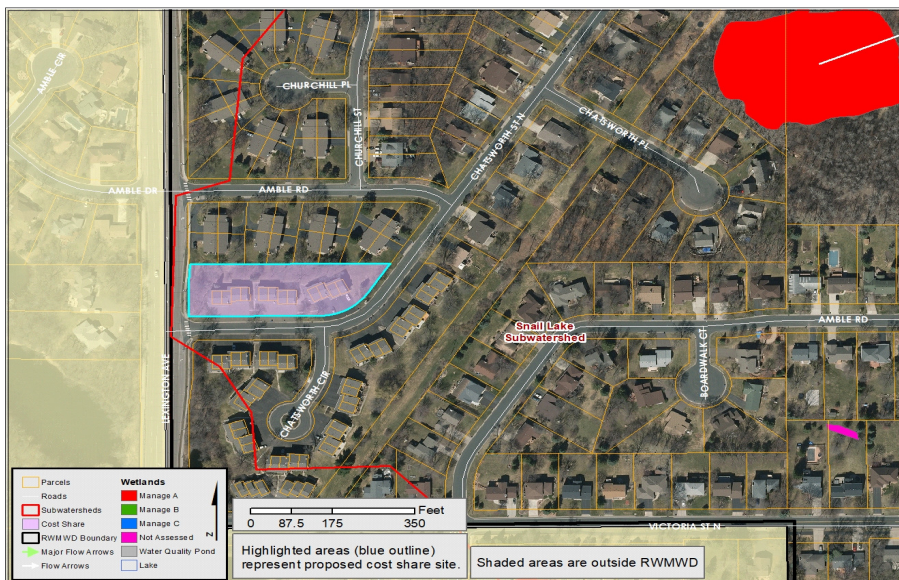
### Recommendation:

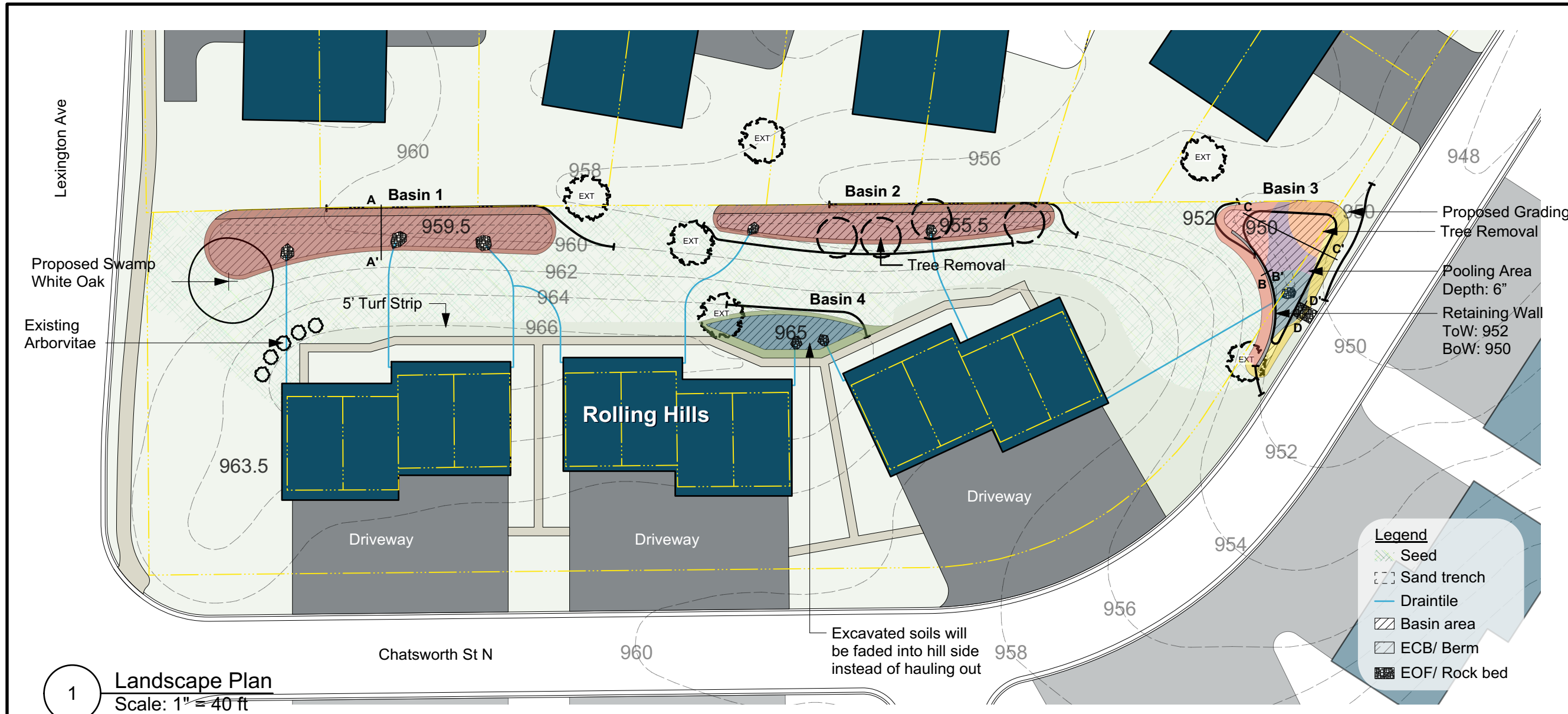
Staff recommends approval of this application.

### Subwatershed:

Snail Lake

### Location Maps:





**Rollin**  
 Chatsw  
 4th St  
 Arden  
 Hills, MN

**Landscape Plan**

DATE	REVISIONS

**outdoor LAB**  
 Landscape Design & Build  
 email: chuck@outdoorlab.net  
 phone: 651-202-3662  
 address: 147 Tenth Street East  
 St. Paul, Mn 55101

DRAWN BY	KO
CHECKED	CH
APPROVED	Approved
SCALE	1" = 40'

Date: 1/11/18  
**L1.1**

**1 Landscape Plan**  
 Scale: 1" = 40 ft

- Planting Plan**
- 35 Alleman's Compact Dogwood - *Cornus sericea* 'Alleman's Compact'
  - 72 Cardinal Dogwood - *Cornus sericea*
  - 67 Anise Hyssop - *Agastache foeniculum*
  - 70 Black Eyed Susan - *Rudbeckia fulgida* 'Goldsturm'
  - 169 Blue Flag Iris - *Iris versicolor*
  - 60 Purple Coneflower - *Echinacea purpurea*
  - 72 Lady Fern - *Athyrium filix-femina*

- 4,800 Plugs:
- 40% Pennsylvania Sedge - *Carex pensylvanica*
  - 15% Columbine - *canadensis*
  - 20% Jacob's Ladder
  - 10% Canada Anemone
  - 15% Wild Geranium
- Native Seed Mix:

- Basin Notes**
- Basin 1:** 2152 sqft  
 Sand trench- depth: 24" length: 115'
- Basin 2:** 1475 sqft  
 Sand trench- depth: 24" length: 114'
- Basin 3:** 1015 sqft  
 Sand trench- depth: 24" length: 32'
- Basin 4:** 747 sqft  
**Total Basin Area:** 5389 sqft  
**Seeded Area:** 12,840 sft

Excavated soils will be faded into hill side instead of hauling out



## BMP Incentive Application Summary

**Project Name:** Battle Creek Elementary School

**Application Number** 18-14 CS

**Board Meeting Date:** 7/11/2018

**Applicant Name:** Charles Colvin

**Residential**

**Commercial/Government**

### Project Overview:

This project is located at Battle Creek Elementary School off Ruth Street and Upper Afton Road in St. Paul. The school is looking to remove an existing asphalt play area to turn it into a playground. The applicant is proposing to convert 10,000 square feet of asphalt around the playground into a low mow turf area. This falls in line with our impervious surface reduction initiatives. This is phase 1 of a multi-phase remodel project the school is undergoing. The school has expressed interest in incorporating rain gardens and other stormwater BMPs in future phases of the project.

This project is in a priority area and is eligible for 100% coverage up to \$100,000.

### BMP type(s):

Native Habitat Restoration(1)

### Grant Request:

\$13,000.00

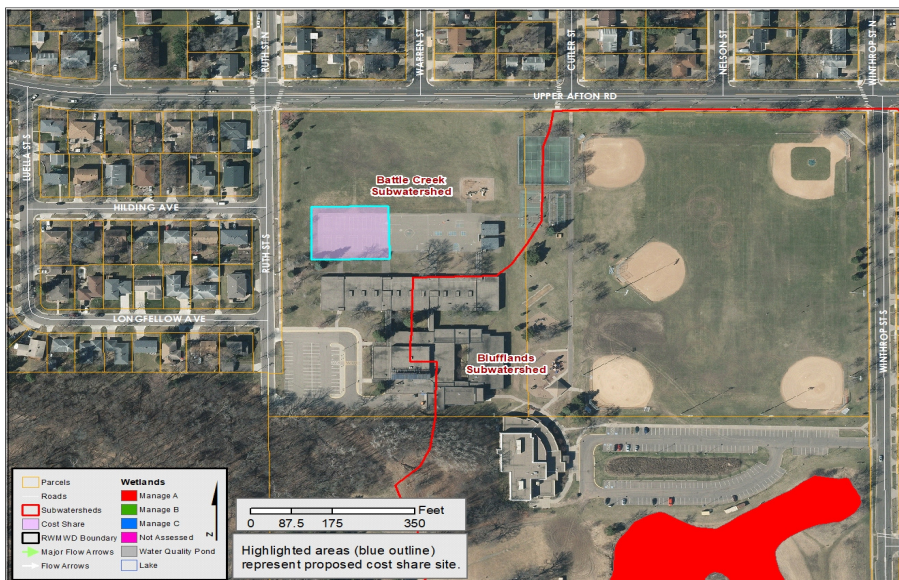
### Recommendation:

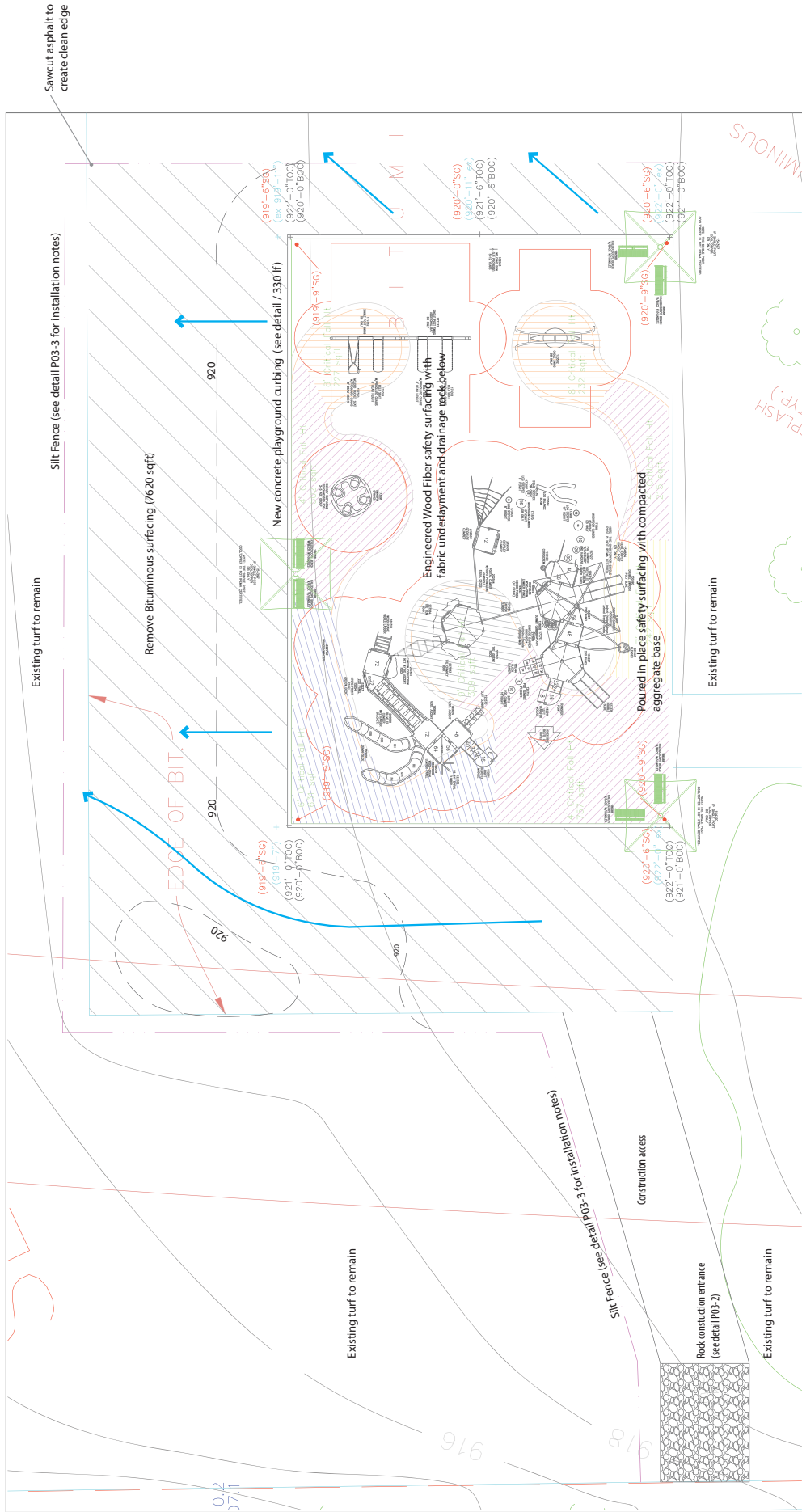
Staff recommends approval of this application.

### Subwatershed:

Battle Creek

### Location Maps:





**Legend:**

- Proposed contour
- Existing contour
- Proposed new drainage pattern
- Temporary silt fence
- Bituminous surface to be removed

**Impervious surfacing calculations:**

Total area of bituminous removal =	14,100 sqft
New impervious playground surfacing =	3155 sqft
Area of new concrete curbing =	221 sqft
<b>Net gain in pervious surface =</b>	<b>10,724 sqft</b>

- Notes:**
- Playgrounds are a non-permitted structure under MN's new Building Code, Sec. 1300.0120 Subpart 4.
  - Maximum anticipated import of pulverized soil is approx. 50 CY.
  - Maximum anticipated export of aggregate base is 50 CY.
  - Grading plan is designed to maximize overland flow over vegetated pervious surfaces except where existing conditions direct runoff onto city streets.
  - Final grading plan is subject to review and approval by the City of Saint Paul. A final DDCR (DNR) is necessary to receive a permit for construction of the playground.
  - Final DDCR (DNR) is necessary to receive a permit for construction of the playground.
- Erosion Control Notes:**
- Install inlet protection on all downspouts and catch basins. 2 have been identified on Ruth St.
  - Install silt fence per plan and detail sheet.
  - Install rock construction entrance per plan and detail sheet.
  - All soil stockpiles to be protected by sediment control logs.
  - Remove sediment from all sediment control logs placed at the end of every work day.
  - Inspect site for erosion weekly and after every precipitation event, remove accumulated sediment and debris as necessary.
  - All erosion control measures to remain in place until 70% vegetation is established.

- Project Scope:**
- Install erosion control measures per plan and detail P03-1, P03-2, P03-3 in areas designated for utility surfacing per plan and compact to 98% Proctor Density.
  - Remove 14,100 sqft of asphalt and aggregate base, place salvaged aggregate base in areas designated for utility surfacing per plan and compact to 98% Proctor Density.
  - Install 3155 sqft of bituminous surfacing per plan, manufacturer's specifications.
  - Install 221 sqft of concrete curbing per plan, manufacturer's specifications.
  - Install 10,724 sqft of pervious surfacing per plan, manufacturer's specifications.
  - Install inlet and compact recycled class 5 aggregate to final elevation based on Playground Safety's surfacing plan.
  - Install utility surfacing per plan, manufacturer's specifications.
  - Install drainage aggregate and fabric in areas to receive Engineered Wood Fiber & Safety surfacing per plan and detail P03-5.
  - Install 10,724 sqft of pervious surfacing to specified depth per detail P03-5.
  - Install 10,724 sqft of pervious surfacing to specified depth per detail P03-5.
  - Seed pervious surfaces as necessary to achieve final grade.
  - Seed distributed areas outside of play container to establish turf.
  - Remove erosion control measures once 70% vegetation coverage is achieved.

Sawcut asphalt to create clean edge

Silt Fence (see detail P03-3 for installation notes)

Existing turf to remain

Remove Bituminous Surfacing (7620 sqft)

New concrete playground curbing (see detail / 330 ft)

Engineered Wood Fiber safety surfacing with fabric underlayment and drainage rock below

Poured in place safety surfacing with compacted aggregate base

Existing turf to remain

Existing turf to remain

Silt fence (see detail P03-3 for installation on noise)

Construction access

Rock construction entrance (see detail P03-2)

Existing turf to remain

0/2  
37/11

916  
918

MINNOS  
PLASH

## BMP Incentive Application Summary

**Project Name:** Maplewood City Hall

**Application Number** 18-15 CS

**Board Meeting Date:** 7/11/2018

**Applicant Name:** Virginia Gaynor

**Residential**  **Commercial/Government**

### Project Overview:

This project is located at the Maplewood City Hall off County Road B East and White Bear Avenue. This project will install three rain gardens. One rain garden will be in the parking lot and two will be near the city hall entry walkway. Stormwater from the parking lot, rooftop, and adjacent walkways will be treated with these rain gardens. In July of 2017 the Board informally approved funding a public art piece at 50% coverage up to \$5,000. The City will be moving forward with an artpiece in one of the entry gardens. The request will be under \$5,000 so will be approved at a staff level.

This project is in a priority area and is eligible for 100% coverage up to \$100,000.

### BMP type(s):

Rain Garden(2)

### Grant Request:

\$60,000.00

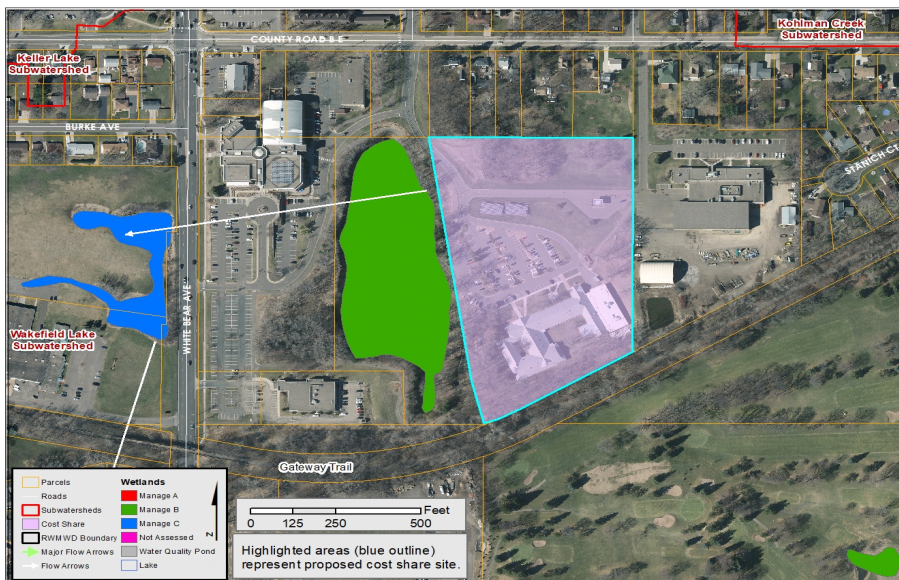
### Recommendation:

Staff recommends approval of this application.

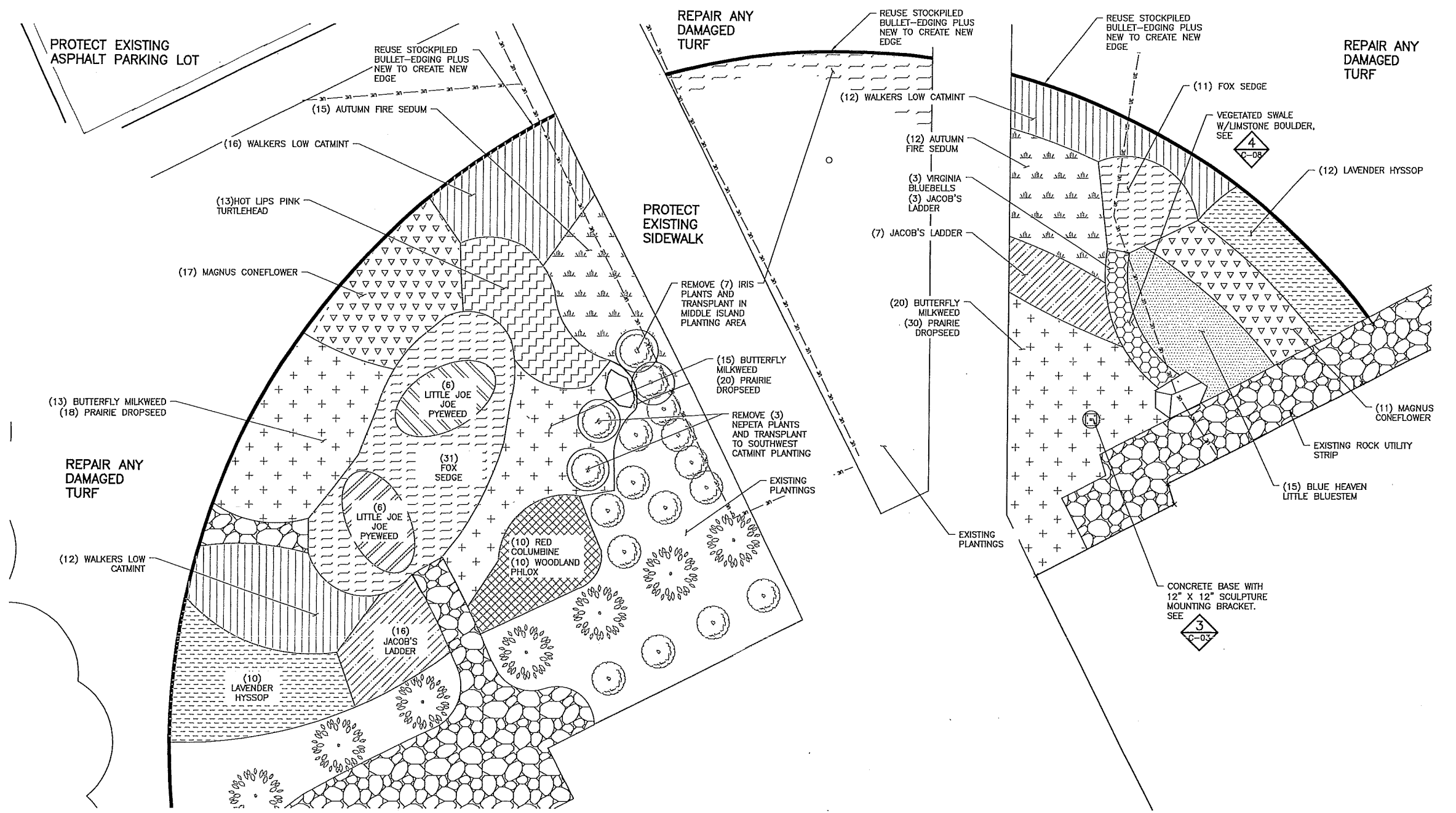
### Subwatershed:

Wakefield Lake

### Location Maps:



CAD USER: Bill M. Breckner FILE: H:\DESIGN\23621172.02\MAPLEWOOD CITY HALL\_C-05\_PLANTING PLAN.dwg PLOT SCALE: 1/2"=1'-0" PLOT DATE: 6/20/2018 12:16 PM  
 XREF: In: Drawing - H:\DESIGN\23621172.02\Maplewood\_CityHall.dwg H:\DESIGN\23621172.02\Maplewood\_CityHall.dwg H:\DESIGN\23621172.02\Maplewood\_CityHall.dwg  
 H:\DESIGN\23621172.02\Maplewood\_CityHall.dwg Plot at 0 12/15/2015 15:49:57



**PLANTING NOTES:**

1. POT HOLE ALL EXISTING UTILITIES WITHIN THE PROJECT LIMITS BEFORE EARTHWORK BEGINS.
2. INFORM THE LANDSCAPE ARCHITECT OF PLANTING TWO DAYS PRIOR TO PLANT DELIVERY.
3. CONTRACTOR SHALL COORDINATE LAYOUT OF ALL PLANTS WITH DIRECTION OF LANDSCAPE ARCHITECT IN THE FIELD.
4. TRANSPLANT THE NOTED 15 PLANTS TO THE DESIGNATED PLANTING AREAS ON THE PLAN. THE TRANSPLANTED PLANTS NEED TO BE MOVED AND INSTALLED THE SAME DAY AS THE NEW PLANTS ARE BEING INSTALLED. THEY SHOULD BE STORED IN POTS, WITH NATIVE SOIL, AND IN SHADE UNTIL PLANTING OCCURS. ALL WHOLES CREATED BY REMOVING THESE PLANTS SHOULD BE FILLED IN WITH SOIL.
5. PLACE SHREDDED HARDWOOD MULCH (MN/DOT SPEC 3882.2 TYPE 6 - WEED SEED FREE SHREDDED HARDWOOD.) TO A DEPTH OF 3" WITHIN ALL PLANTING AREAS ONCE PLANT INSTALLATION IS COMPLETE, THIS INCLUDES THE TWO EXISTING PLANTING BED.
6. INSTALL THE BULLET NOSE EDGING PER EXISTING SPACING OF EXISTING BED.
7. REMOVE SEDIMENT CONTROL LOG AFTER SOD IS IN PLACE. STAPLE SOD AS NECESSARY TO CONTROL IT FROM SLIDING.
8. CONTRACTOR WILL BE RESPONSIBLE FOR WATERING PLANTS (REGARDLESS OF NOTIFICATION) DURING ENTIRE ONE YEAR WARRANTY PERIOD. WATERING WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
9. ALL EXISTING CONCRETE, ASPHALT, TREES TO BE KEPT AND TREE ROOTS SHALL BE PROTECTED. ANY DAMAGE TO EXISTING SITE FEATURES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE AND TO THE OWNER'S SATISFACTION.
10. DAMAGE TO EXISTING STRUCTURES OR NEWLY CONSTRUCTED ITEMS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
11. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. IN THE CASE OF ANY DISCREPANCIES BETWEEN THIS DETAIL, PLANS, OR SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.



Common Name	Scientific Name	Quant.	Spacing	Size
<b>Perennials</b>				
Lavender Hyssop	<i>Agastache foeniculum</i>	32	2.5' o.c.	# 1 Pot
Little Joe Joe Pye Weed	<i>Eutrochium dubium 'Little Joe'</i>	44	2.5' o.c.	# 1 Pot
Magnus Coneflower	<i>Echinacea purpurea 'Magnus'</i>	28	2.5' o.c.	# 1 Pot
Walkers Low Catmint	<i>Nepeta racemosa 'Walkers Low'</i>	45	2.5' o.c.	# 1 Pot
Autumn Fire Sedum	<i>Sedum spectabile Autumn Fire</i>	25	2.5' o.c.	# 1 Pot
Hot Lips Turtlehead	<i>Cheone lyonii 'Hot Lips'</i>	13	2.5' o.c.	# 1 Pot
Butterfly Milkweed	<i>Asclepias tuberosa</i>	51	2.5' o.c.	# 1 Pot
Jacob's Ladder	<i>Polemonium reptans</i>	26	2' o.c.	# 1 Pot
Red Columbine	<i>Aquilegia canadensis</i>	10	2' o.c.	#1 Pot
Woodland Phlox	<i>Phlox divaricata</i>	10	2' o.c.	#1 Pot
Virginia Bluebells	<i>Mertensia virginica</i>	3	2' o.c.	#1 Pot
<b>Grasses</b>				
Fox Sedge	<i>Carex vulpinoidea</i>	42	2.5' o.c.	# 1 Pot
Prairie Dropseed	<i>Sporobolus heterolepis</i>	74	2.5' o.c.	# 1 Pot
Blue Heaven Little Bluestem	<i>Schizachyrium scoparium 'MinblueA'</i>	15	2.5' o.c.	# 1 Pot

**COST SHARE APPLICATION**

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 LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.		CLIENT: BID: CONSTRUCTION: RELEASED TO/FOR: DATE RELEASED:	<b>BARR</b> Corporate Headquarters: Minneapolis, Minnesota Phone: 1-800-632-2277	Project Office: BARR ENGINEERING CO. 4300 MARKETPOINTE DRIVE SUITE 200 MINNEAPOLIS, MN 55435 Phone: 1-800-632-2277 Fax: (952) 832-2801 www.barr.com	Scale: AS SHOWN Date: 06/20/2018 Drawn: WMB Checked: MEK2 Designed: BARR Approved: MEK2	CITY OF MAPLEWOOD MAPLEWOOD, MN	BARR PROJECT No. 23621172.03 CLIENT PROJECT No. DWG. No. C-05 REV. No. 0
NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION		



Lisa Elias.

## BMP Incentive Application Summary

**Project Name:** Menomini Park

**Application Number** 18-16 CS

**Board Meeting Date:** 7/11/2018

**Applicant Name:** Sharon Doucette

**Residential**

**Commercial/Government**

### Project Overview:

This project is located in Menomini Park in the City of Woodbury. Runoff from adjacent homes runs directly down a hillside and has created a gully that deposits sediment into the park area. The City of Woodbury is requesting funds to help stabilize the slope, install an infiltration basin, and redirect drainage directly into the infiltration basin. The infiltration basin will collect roof and garage runoff from the adjacent homes. The application is a joint effort between the two homeowners on the hillside and the City of Woodbury. The City of Woodbury has agreed to take on maintenance responsibility of the infiltration basin with assistance from the homeowners.

This project is in a priority area and is eligible for 100% funding up to \$100,000.

### BMP type(s):

Infiltration Basin(1)

### Grant Request:

\$36,000.00

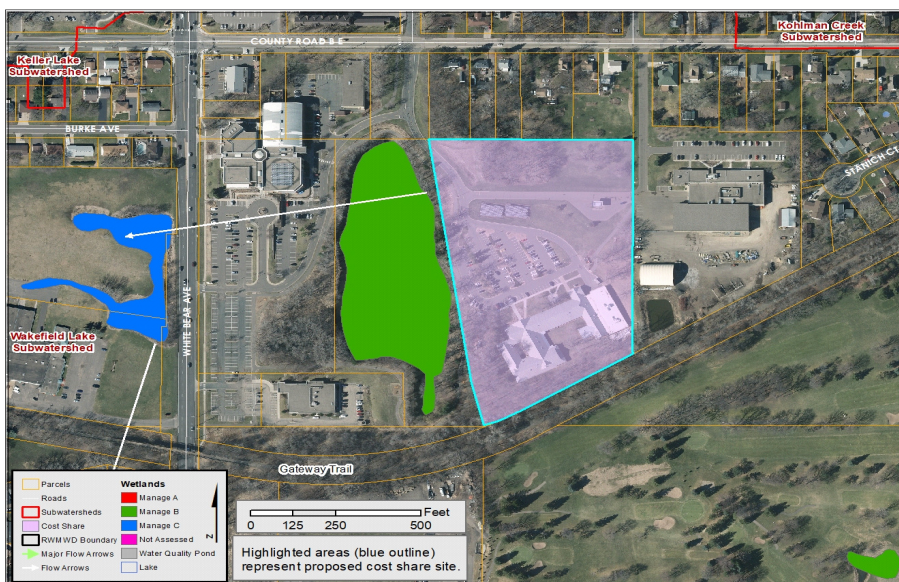
### Recommendation:

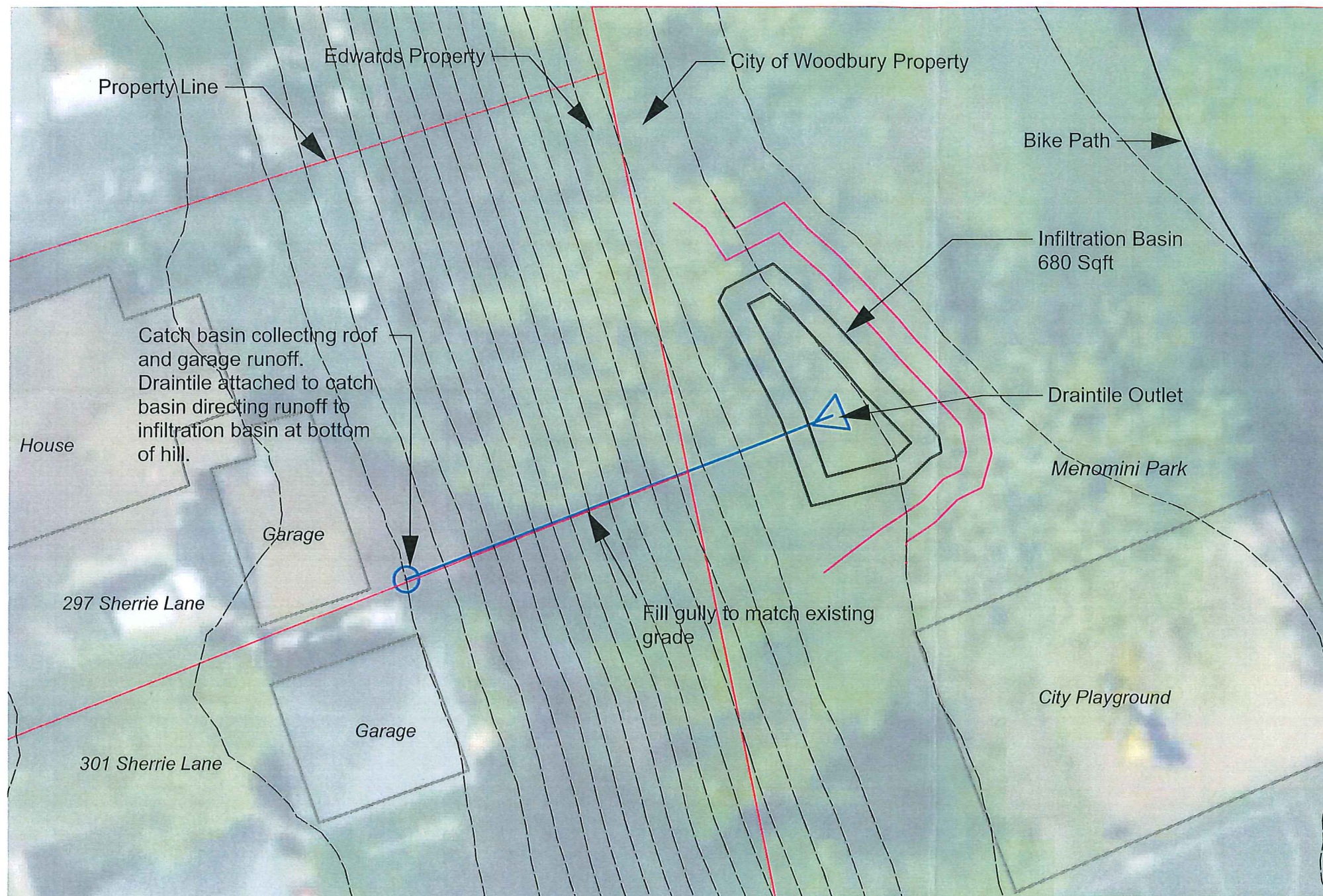
Staff recommends approval of this application.

### Subwatershed:

Battle Creek Lake

### Location Maps:





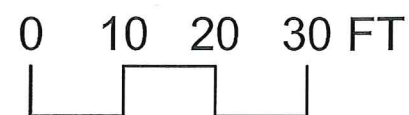
**Concept:**

Existing conditions: Years of roof runoff and increased roof surface behind the garage has eroded the hillside. The erosion has created a gully down the hill leading to Menomini Park. The concern is to stabilize the hillside and reduce soil deposit settling onto City owned property. The soil is a sandy loam. Little understory vegetation growth is present.

Proposed conditions:  
 Install catchbasin near garage and lay drantile at bottom of gully outletting to infiltration basin at bottom of hill.  
 Fill gully to match existing grade. Seed hillside with a native shade seed mix and place erosion control blanket in project area.  
 Infiltration basin will be planted with native plant material. Prior to project landowners will need to coordinate with the utility company to trim trees touching overhead utilities. Project is not possible without trimming trees touching utilities due to contractor and landowner safety.

Load Reduction:  
 TP = 0.75 lb/yr  
 TSS = 0.88 lb/yr

1 Layout Concept  
 SCALE: 1" = 20 ft



**Washington Conservation District**  
 455 Hayward Ave, Oakdale, MN 55128  
 Phone: 651-330-8220  
 Fax: 651-330-7747  
 WWW.MNWCD.ORG

Project Title: **Sherrie Ln / Menomini Park**  
 Project Address: 297 & 301 Sherrie Ln & Menomini Park  
 Woodbury  
 Watershed District: RWMWD

Sheet Title: **Concept Plan**  
 WCD  
 Project Manager

1/17/17  
 Date

Sheet

**L-100**

## Stewardship Grant Program Budget Status Update

**July 11, 2018**

Homeowner	Coverage	Number of Projects	Funds Allocated
Habitat Restoration and rain garden w/o hard surface drainage	50% Cost Share \$15,000 Max	3	\$8,884.41
Rain garden w/hard surface drainage, pervious pavement, green roof	75% Cost Share \$15,000 Max	2	\$9,650
Shoreland Restoration (below 100-year flood elevation w/actively eroding banks)	100% Cost Share \$15,000 Max	1	\$14,000

Commercial, School, Government, Church, Associations, etc.	Coverage	Number of Projects	Funds Allocated
Habitat Restoration	50% Cost Share \$15,000 Max	2	\$15,230.00
Shoreland Restoration (below 100-year flood elevation w/actively eroding banks)	100% Cost Share \$100,000 Max	0	\$0
<b>PRIORITY AREAS:</b>	100% Cost Share \$100,000 Max	4	\$390,378.73
<b>NON-PRIORITY AREAS:</b>	75% Cost Share \$50,000 Max	0	\$0
Aquatic Veg Harvest	50% Cost Share \$15,000 Max	1	\$8,500
Maintenance	50% Cost Share \$5,000 Max for 5 Years	4	\$5,000
Consultant Fees			\$45,507
<b>Total Allocated</b>			<b>\$498,330.14</b>

<b>2018 Stewardship Grant Program Budget</b>	
Budget	\$800,000.00
Total Funds Allocated	\$498,330.14
<b>Total Available Funds</b>	<b>\$301,669.86</b>



\* \* \* \* \*

# Action Items

\* \* \* \* \*

# Request for Board Action

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**Board Meeting Date:** July 11, 2018

**Agenda Item No:** 8A

**Preparer:** Tina Carstens, Administrator

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**Item Description:** Willow Pond Continuous Monitoring and Controls (CMAC) Project  
Approval of Plans and Authorization to Advertise for Bid

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## **Background:**

Willow Pond is a water basin upstream of Bennett Lake. Bennett Lake is impaired for excess nutrients. As the TMDL was prepared for Bennett Lake, this site was identified as a location for a potential project. The board approved a budget for 2018 to construct a spent lime filter using the CMAC technology adjacent to Willow Pond.

Willow Pond's current outflow elevation is 905.64. This system will allow Willow Pond water to flow to a new, adjacent spent-lime filter when the pond is above a lower elevation (905.1) via a weir and through an automatically adjustable valve (controlled by a sensor that tracks the depth of water in the filter and Willow Pond) until the water in the filter reaches an elevation of 904.7. At this water level in the filter, the valve will close, preventing inflowing water from Willow Pond until the water in the filter has completely passed through the media and is on its way downstream. Then, the valve will open again for another dose of water from Willow Pond, and the cycle repeats. If Willow Pond's level drops below its "new normal" elevation of 905.1, no water will enter the filter. This process will facilitate the removal of phosphorus from some of Willow Pond's water before it reaches Bennett Lake, which is impaired for excess phosphorus, while not greatly changing the water level in Willow Pond.

Shoreline surveys (both topographic and vegetation) have been conducted around Willow Pond in recent weeks. These surveys will help facilitate DNR permitting, as well as communicate expectations with the DNR and local residents after the project is implemented. Impacts are expected to be minor, but isolated areas of shoreline restoration may be in order. The City of Roseville and RWMWD will conduct final review and community outreach (at a June 27 public outreach event) before the project is put out to bid.

On Wednesday, June 27, RWMWD and City of Roseville staff held an open house at Roseville City Hall from 6:30pm to 8:00pm. 24 local residents were in attendance, many of whom live around or near Willow Pond. Staff gave a brief presentation on the background for the project, and shared project details with the attendees. Two posters were prepared to help describe the project and to answer questions (they will be shown to the managers at the July Board meeting). Residents offered good input on the project and existing conditions of Willow Pond. Homeowners were in support of the project and appreciate the efforts being put towards cleaning up Bennett Lake. Many were also interested in pursuing cost share opportunities on their property.

Barr has completed the 95-percent plans and specifications for the CMAC filtration system. Construction of this project could occur as early as late summer or fall 2018. The draft plans and specifications outline are attached for consideration at the July 11 meeting. Erin Anderson Wenz will present a project budget and construction cost estimate at that meeting. If the managers deem it appropriate, they should approve the plans and specifications, project budget, and proposed schedule and direct Barr to prepare the bidding documents and advertise the project for bid.

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**Applicable District Goal and Action Item:**

**Goal: Achieve quality surface water:** The District will maintain or improve surface water quality to support healthy ecosystems and provide the public with a wide range of water-based benefits.

**Action Items:** Expand use of innovative water quality improvement methods as necessary to address sites with limited land area for conventional treatment techniques.

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**Staff Recommendation:**

Approve the plans and specifications, preliminary cost estimate, and proposed schedule. Direct staff to finalize the bidding documents and advertise the project for bid.

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**Financial Implications:**

The board approved a budget of \$400,000 in 2018 for this project.

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**Board Action Requested:**

Approve the plans and specifications, preliminary cost estimate, and proposed schedule. Direct staff to finalize the bidding documents and advertise the project for bid.

**CONTRACT DOCUMENTS**

**CMAC FILTRATION BMP AT WILLOW POND**

**ROSEVILLE, MINNESOTA**

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**

**TABLE OF CONTENTS**

	<u>Page</u>
Advertisement for Bids	00 11 13-1
Instructions to Bidders	00 21 13-1
Bid Form	00 41 00-1
Successful Bidder Contractor Affidavit/Oath	00 45 13-1
Notice of Award	00 51 00-1
Form of Agreement	00 52 00-1
Notice to Proceed	00 55 00-1
General Conditions	00 72 00-1
Supplementary Conditions	00 73 00-1
 <b>Technical Specifications</b>	
<b>Division 1 - General Requirements</b>	
01 00 00 Construction Facilities and Temporary Controls	01 00 00-1
01 11 00 Summary of Work	01 11 00-1
01 22 00 Unit Price Measurement and Payment	01 22 00-1
01 29 00 Payment Procedures	01 29 00-1
01 31 19 Project Meetings	01 31 19-1
01 33 00 Submittal Procedures	01 33 00-1
01 35 23 Safety	01 35 23-1
01 55 26 Traffic Control	01 55 26-1
01 77 00 Closeout Procedures	01 77 00-1
 <b>Division 2 – Existing Conditions</b>	
02 24 09 Control of Water	02 24 09-1
 <b>Division 31 - Earthwork</b>	
31 05 19 Geosynthetic Clay Liners	31 05 19-1
31 09 13 Instrumentation Installation	31 09 13-1
31 10 00 Site Clearing, Preparation, and Demolition	31 10 00-1
31 23 00 Excavation and Fill	31 23 00-1
31 25 00 Erosion and Sedimentation Control	31 25 00-1
31 66 15 Helical Pile Foundation	31 66 15-1
 <b>Division 32 – Exterior Improvements</b>	
32 16 00 Curbs, Gutters, Sidewalks, and Driveways	32 16 00-1
32 93 10 Site Restoration and Rehabilitation	32 93 10-1
 <b>Division 33 – Utilities</b>	
33 40 00 Storm Utility Drainage Piping	33 40 00-1



**Drawings**

G-01	Sheet Index and Location Map
C-01	Erosion Control & Removal Plan
C-02	Storm Sewer & Grading Plan
C-03	Storm Sewer Profile, Treatment System Plan & Section
C-04	Storm Sewer Details
C-05	Storm Sewer Details
C-06	Details
C-07	Details
S-01	Helical Pile Details
L-01	Landscape Restoration Plan
L-02	Planting Details

**Appendices**

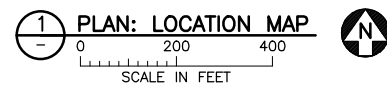
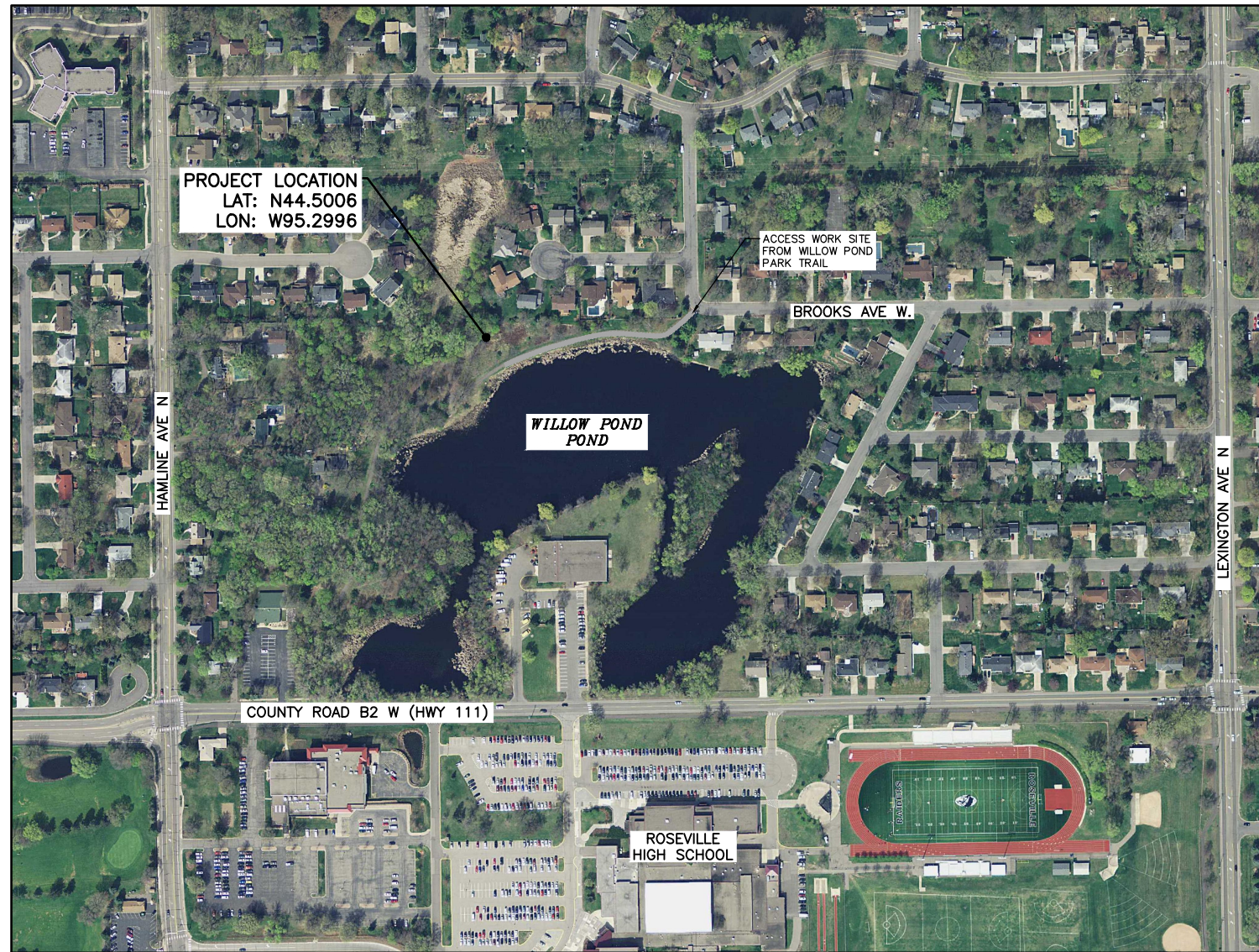
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# RAMSEY-WASHINGTON METRO WATERSHED DISTRICT

## CMAC FILTRATION BMP AT WILLOW POND

### ROSEVILLE, MINNESOTA



#### SHEET INDEX:

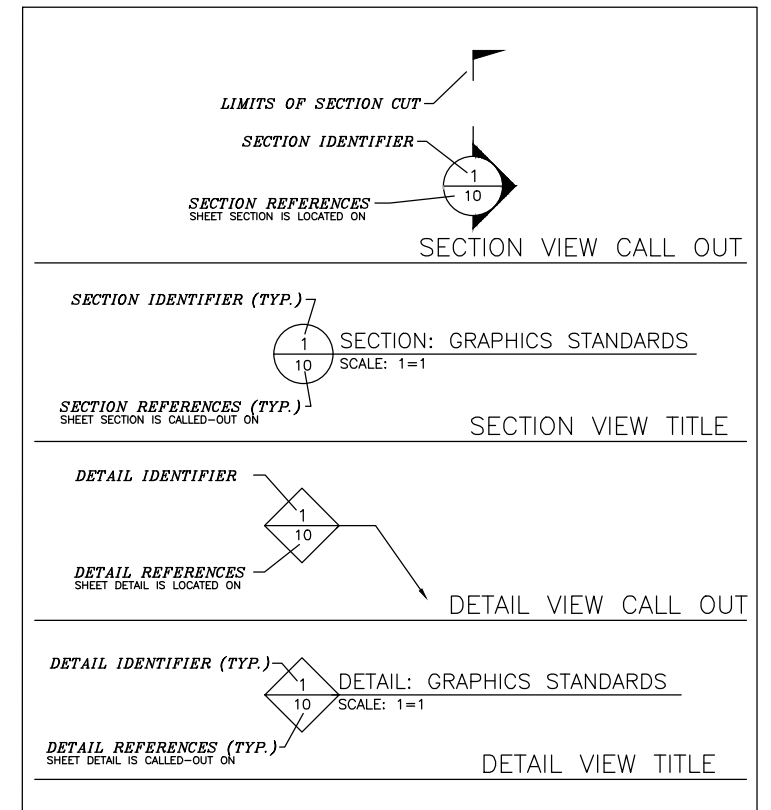
DWG.	SHEET NAME
G-01	SHEET INDEX & LOCATION MAP
C-01	EROSION CONTROL & REMOVAL PLAN
C-02	STORM SEWER & GRADING PLAN
C-03	STORM SEWER PROFILE, TREATMENT SYSTEM PLAN & SECTION
C-04	STORM SEWER DETAILS
C-05	STORM SEWER DETAILS
C-06	DETAILS
C-07	DETAILS
S-01	STRUCTURAL DETAILS
L-01	LANDSCAPE RESTORATION PLAN
L-02	PLANTING DETAILS

#### CONTACTS:

LESLIE DELLANGELO – PROJECT ENGINEER  
 BARR ENGINEERING CO.  
 PHONE: 952-832-2720  
 FAX: 952-832-2601  
 EMAIL: LAD@BARR.COM

BRAD LINDAMAN – DISTRICT ENGINEER  
 BARR ENGINEERING CO.  
 PHONE: 952-832-2808  
 FAX: 952-832-2601  
 EMAIL: BJL@BARR.COM

#### SYMBOLS AND ABBREVIATIONS:



GOPHER STATE ONE CALL:  
 CALL BEFORE YOU DIG.  
 1-800-252-1166

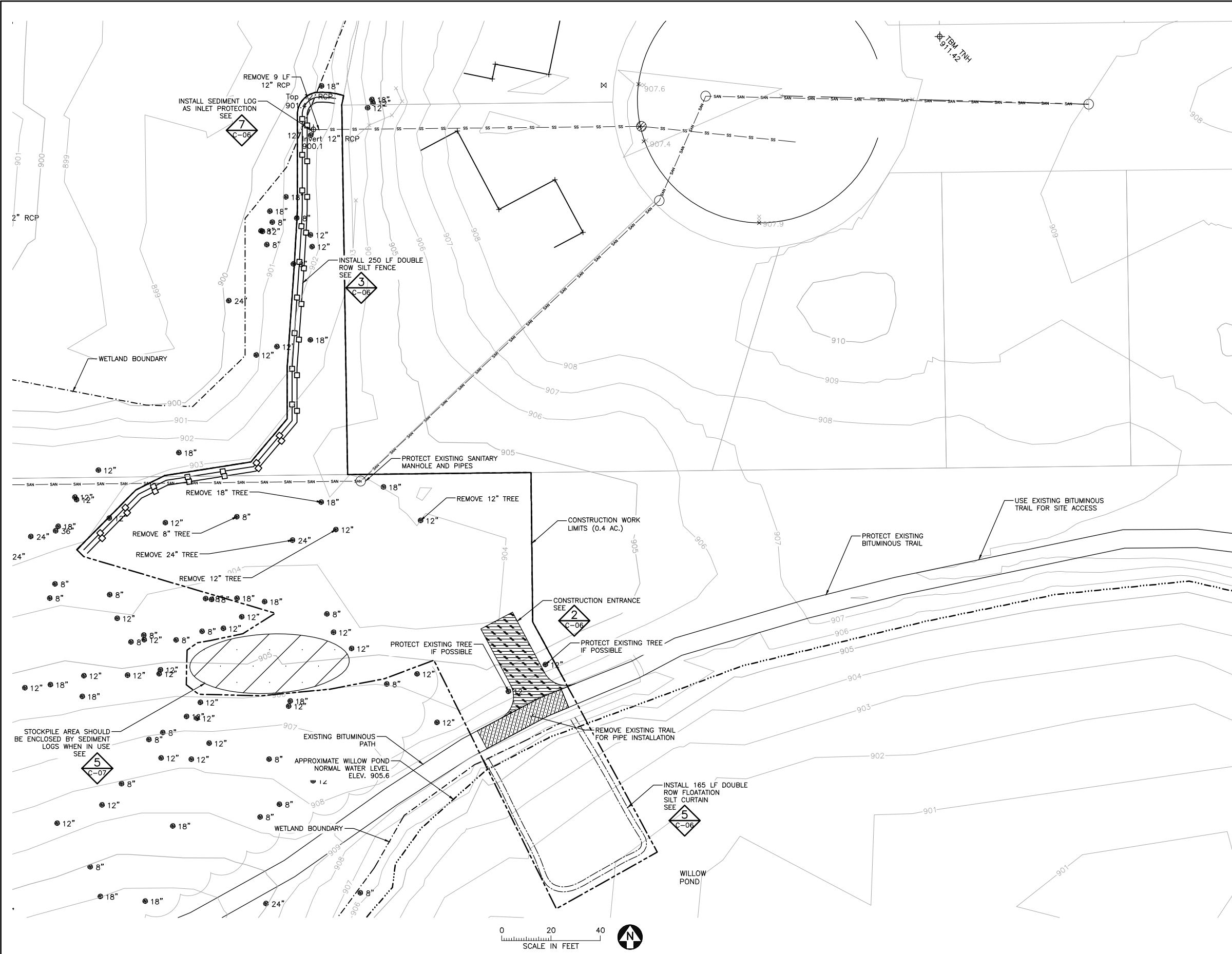
COORDINATE SYSTEM: MINNESOTA DOT  
 RAMSEY COUNTY, US FOOT  
 HORIZONTAL DATUM: NAD 83  
 VERTICAL DATUM: NAVD 88

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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. PRINTED NAME: LESLIE A. DELLANGELO SIGNATURE: _____ DATE: _____ LICENSE # 49094				CLIENT: BARR ENGINEERING CO. PROJECT: 23/62-1247.00 DATE: 6/20/2018 RELEASED TO/FOR: A B C 0 1 2 3 DATE RELEASED:				Project Office: BARR ENGINEERING CO. 4300 MARKETPOINTE DRIVE Suite 200 MINNEAPOLIS, MN 55435 Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277 Fax: (952) 832-2601 www.barr.com		Scale: AS SHOWN Date: 6/20/2018 Drawn: CMH3 Checked: LAD Designed: BARR Approved: LAD		RAMSEY-WASHINGTON METRO WATERSHED DISTRICT		WILLOW POND CMAC DEVICE AND STORMWATER FILTER SHEET INDEX & LOCATION MAP		BARR PROJECT No. 23/62-1247.00 CLIENT PROJECT No. DWG. No. G-01 REV. No. B	
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- 904 — EXISTING CONDITION MINOR CONTOUR (1')
- 905 — EXISTING CONDITION MAJOR CONTOUR (5')
- 904 — PROPOSED CONDITION MINOR CONTOUR (1')
- 905 — PROPOSED CONDITION MAJOR CONTOUR (5')
- — SILT FENCE
- — CONSTRUCTION BOUNDARY
- — PARCEL LINE
- - - - WETLAND DELINEATION
- - - - FLOATATION SILT CURTAIN
- - - - WILLOW POND APPROX. NORMAL WATER LEVEL
- - - - EXISTING SANITARY SEWER
- - - - EXISTING STORM SEWER
- — EXISTING DECIDUOUS TREE

**EROSION CONTROL NOTES:**

1. NOTIFY NICOLE SODERHOLM, RAMSEY-WASHINGTON METRO WATERSHED DISTRICT, AT 651-792-7976 PRIOR TO COMMENCING CONSTRUCTION EXCAVATION ACTIVITIES TO ALLOW FOR AN INITIAL INSPECTION OF THE EROSION/SEDIMENT CONTROL PRACTICES.
2. CONSTRUCT TEMPORARY EROSION CONTROL MEASURES SPECIFIED IN THE CONTRACT DOCUMENTS OR AS DIRECTED BY THE ENGINEER PRIOR TO COMMENCING CONSTRUCTION EXCAVATION ACTIVITIES.
3. MAINTAIN AND REPLACE THE EROSION CONTROLS FOR THE DURATION OF THE CONSTRUCTION AS NECESSARY IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR AS DIRECTED BY THE ENGINEER.
4. SWEEP BITUMINOUS SURFACE OF CONSTRUCTION ENTRANCES WITHIN A 24-HOUR PERIOD OF ANY CONSTRUCTION ACTIVITIES THAT PRODUCE SEDIMENT THAT MAY BE TRACKED OFF SITE OR A MINIMUM OF TWICE A DAY DURING PEAK CONSTRUCTION ACTIVITIES.
5. STAGE WORK TO MINIMIZE AREA THAT IS DISTURBED AT ANY ONE TIME AND STABILIZE THE DISTURBED AREAS IN A TIMELY MATTER.
6. COORDINATE GRADING WORK AND EROSION CONTROL MEASURES WITH PLACEMENT OF EROSION CONTROL BLANKET.
7. PROVIDE TEMPORARY STABILIZATION TO ANY INACTIVE EXPOSED SOILS BEFORE WINTER WEATHER.
8. REMOVE TEMPORARY EROSION CONTROLS AFTER THE COMPLETION OF THE PROJECT AND THE PERMANENT GROUND COVER HAS BEEN ESTABLISHED.

**REMOVAL NOTES:**

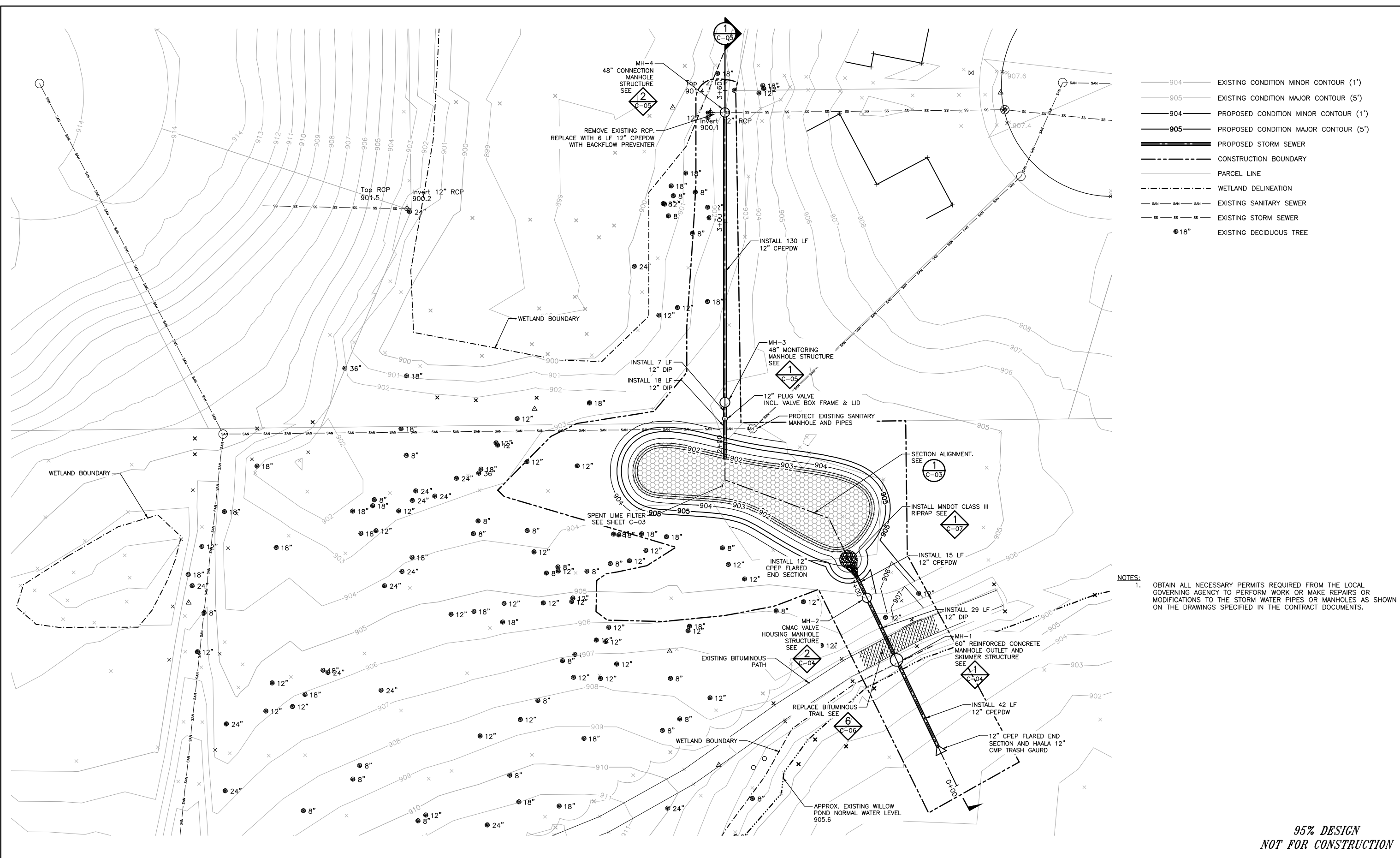
1. UTILIZE THE "GOPHER STATE ONE CALL" EXCAVATION NOTICE SYSTEM (PHONE 1-800-252-1166) AS REQUIRED BY MINNESOTA STATUTES CHAPTER 216D, AT LEAST 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION.
2. STRIP AND SALVAGE TOPSOIL AND INCORPORATE WITH FINAL RESTORATION WORK.
3. PERFORM ALL REMOVALS IN A SAFE, ORDERLY MANNER, IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS; AND PROTECT ALL ADJACENT STRUCTURES, UTILITIES, AND SERVICES DURING DEMOLITION AND REMOVAL.
4. PROMPTLY DISPOSE OF REMOVED MATERIALS OFF-SITE IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS.
5. TAKE PRECAUTIONS TO PREVENT DAMAGE TO EXISTING WORK WHICH IS TO REMAIN IN PLACE, BE REUSED, OR REMAIN THE PROPERTY OF OWNER AND TO ANY NEW WORK CONSTRUCTED OR INSTALLED UNDER THIS CONTRACT.
6. DESIGN, INSTALL AND MAINTAIN SHORING, BRACING, AND TEMPORARY SUPPORTS, AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY.
7. CONTROL DUST RESULTING FROM DEMOLITION TO AVOID CREATION OF A NUISANCE IN THE SURROUNDING AREA. THE USE OF WATER IS NOT PERMITTED WHEN IT WOULD RESULT IN OR CREATE HAZARDOUS OR OBJECTIONABLE CONDITIONS SUCH AS EROSION, TRANSPORT OF SEDIMENTS INTO RIVER, POLLUTION, FLOODING, OR ICE.
8. PROTECT ALL VEGETATION THAT IS NOT CALLED OUT FOR REMOVAL.

**95% DESIGN  
 NOT FOR CONSTRUCTION**



		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.		CLIENT 7/2/2018 6/20/2018		Project Office: <b>BARR ENGINEERING CO.</b> 4300 MARKETPOINTE DRIVE Suite 200 MINNEAPOLIS, MN 55435		Scale AS SHOWN		<b>RAMSEY WASHINGTON METRO WATERSHED DISTRICT</b>		BARR PROJECT No. <b>23/62-1247.00</b>	
		PRINTED NAME <b>LESLIE A DELLANGELO</b>		CONSTRUCTION		Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277 Fax: (952) 832-2601 www.barr.com		Date 6/20/2018				WILLOW POND CMAC DEVICE AND STORMWATER FILTER	
NO. BY CHK. APP. DATE REVISION DESCRIPTION		SIGNATURE _____ DATE _____ LICENSE # 49094		RELEASED TO/FOR		A B C 0 1 2 3		Checked ELA		<b>EROSION CONTROL AND REMOVAL PLAN</b>		DWG. No. <b>C-01</b>	
				DATE RELEASED				Designed BARR				REV. No. <b>B</b>	
								Approved LAD					

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- - - SS - - - SS - - - SS - - - EXISTING STORM SEWER
- 18" EXISTING DECIDUOUS TREE

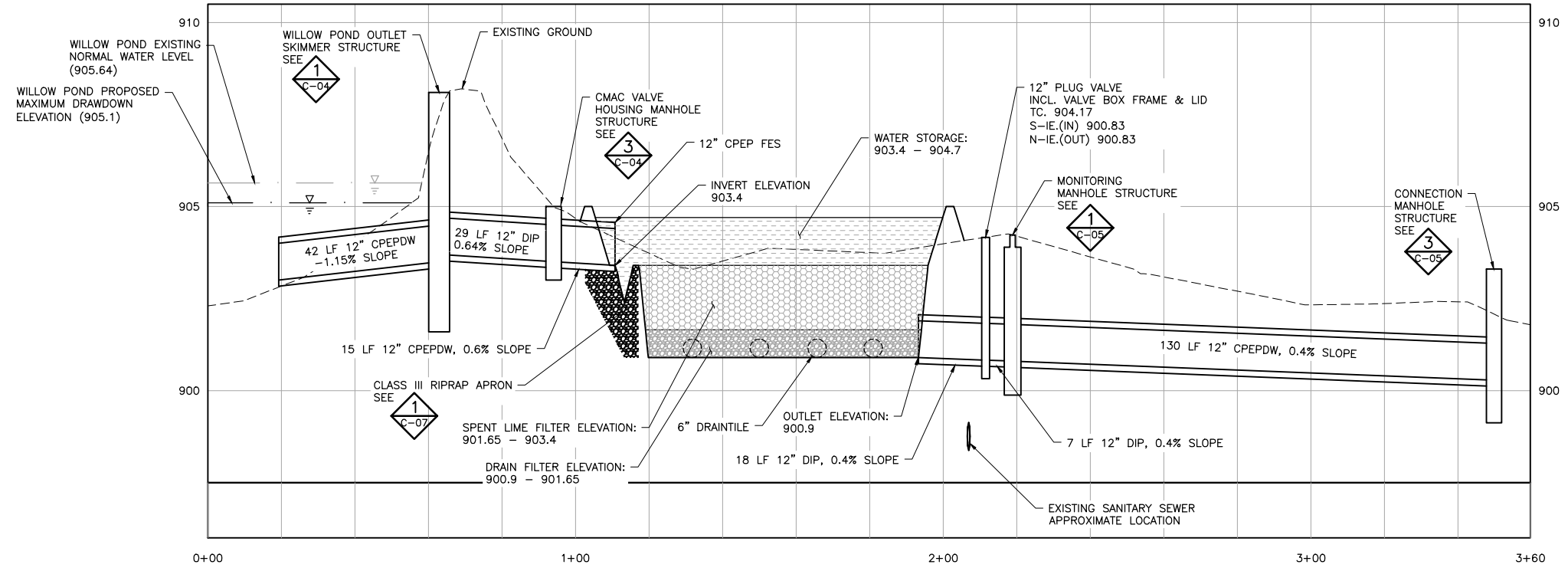
NOTES:  
 1. OBTAIN ALL NECESSARY PERMITS REQUIRED FROM THE LOCAL GOVERNING AGENCY TO PERFORM WORK OR MAKE REPAIRS OR MODIFICATIONS TO THE STORM WATER PIPES OR MANHOLES AS SHOWN ON THE DRAWINGS SPECIFIED IN THE CONTRACT DOCUMENTS.

95% DESIGN  
 NOT FOR CONSTRUCTION

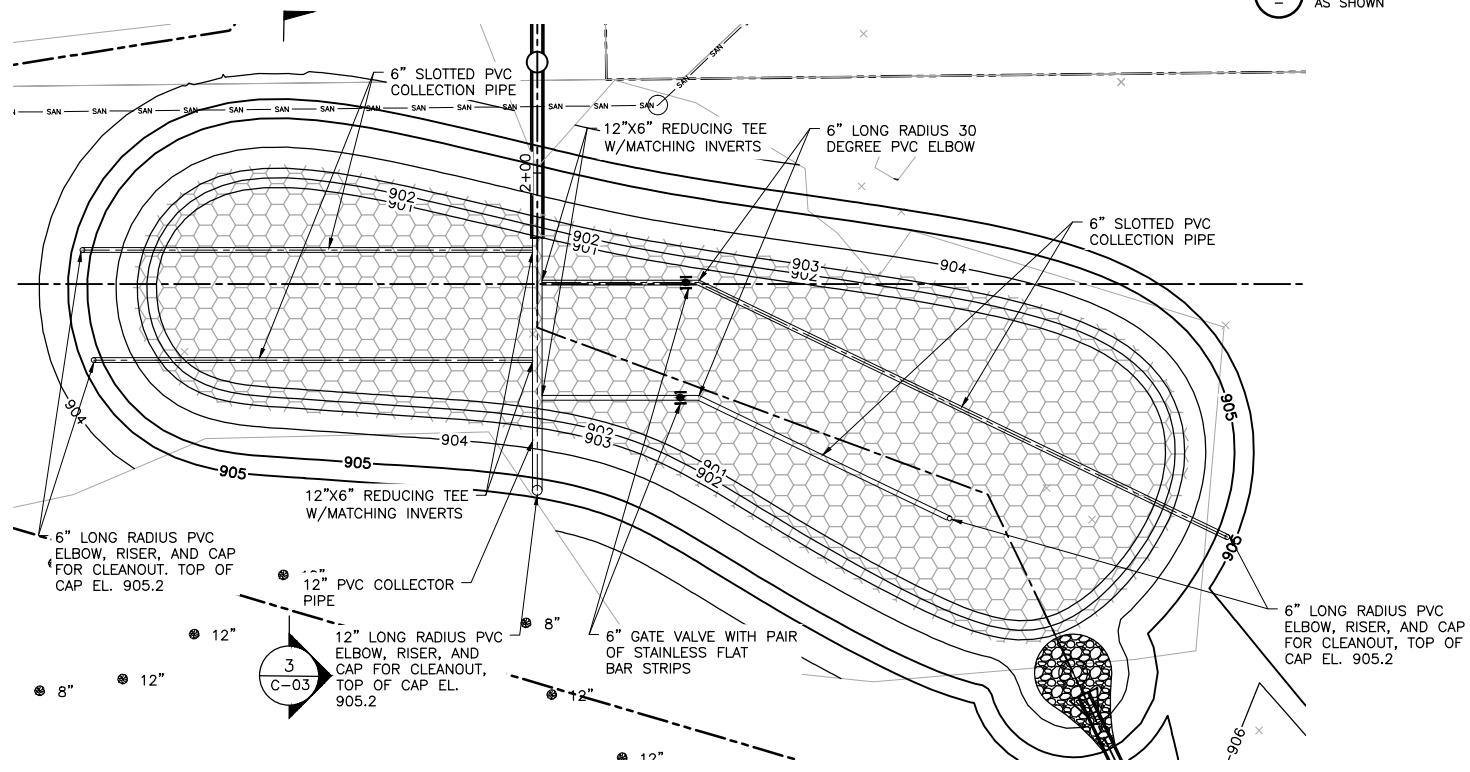
		I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.		CLIENT BARR ENGINEERING CO. CONSTRUCTION		RELEASED TO/ FOR A B C O 1 2 3		PROJECT OFFICE: <b>BARR ENGINEERING CO.</b> 4300 MARKETPOINTE DRIVE Suite 200 MINNEAPOLIS, MN 55435 Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277 Ph: 1-800-632-2277		Scale AS SHOWN Date 6/20/2018 Drawn CMH3 Checked ELA Designed BARR Approved LAD		<b>RAMSEY WASHINGTON          METRO WATERSHED DISTRICT</b>		<b>WILLOW POND          CMAC DEVICE AND STORMWATER FILTER          STORM SEWER &amp; GRADING          PLAN</b>		BARR PROJECT No. <b>23/62-1247.00</b> CLIENT PROJECT No.							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>BY</th> <th>CHK.</th> <th>APP.</th> <th>DATE</th> <th>REVISION DESCRIPTION</th> </tr> <tr> <td>B</td> <td>CMH3</td> <td>ELA</td> <td>LAD</td> <td>6/20/2018</td> <td>95% DESIGN</td> </tr> <tr> <td>A</td> <td>CMH3</td> <td>ELA</td> <td>LAD</td> <td>2/2/2018</td> <td>50% DESIGN</td> </tr> </table>		NO.	BY	CHK.	APP.	DATE	REVISION DESCRIPTION	B	CMH3	ELA	LAD	6/20/2018	95% DESIGN	A	CMH3	ELA	LAD	2/2/2018	50% DESIGN	SIGNATURE _____ DATE _____ LICENSE # _____		DWG. No. <b>C-02</b> REV. No. <b>B</b>	
NO.	BY	CHK.	APP.	DATE	REVISION DESCRIPTION																		
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A	CMH3	ELA	LAD	2/2/2018	50% DESIGN																		



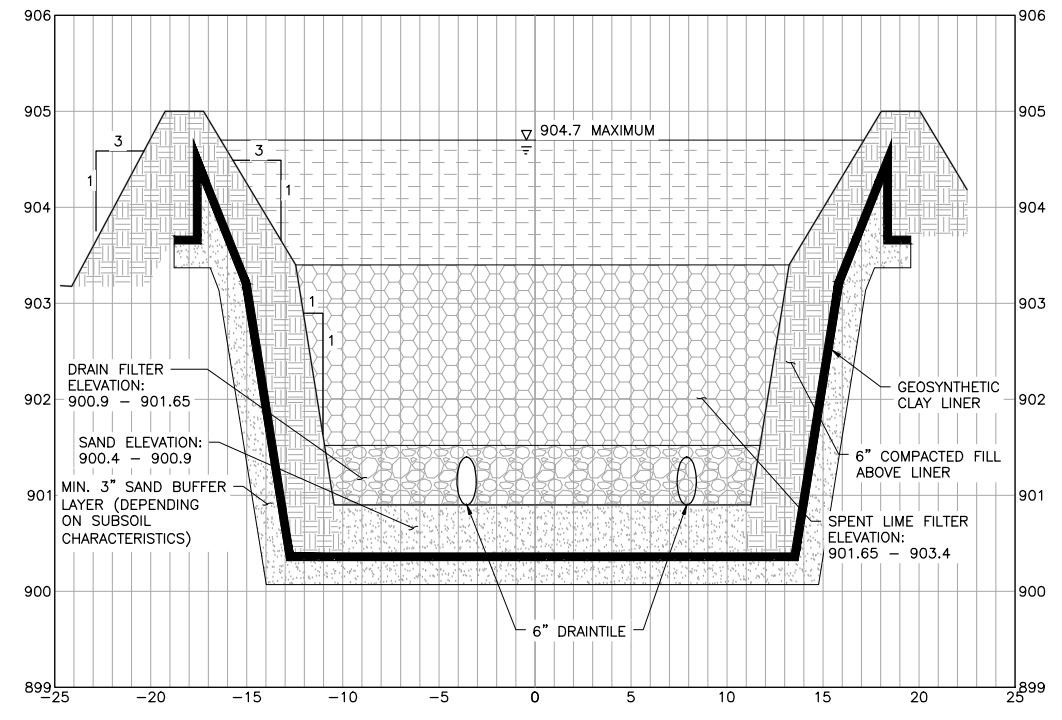
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1 SECTION: EXISTING AND DESIGN PROFILES  
AS SHOWN



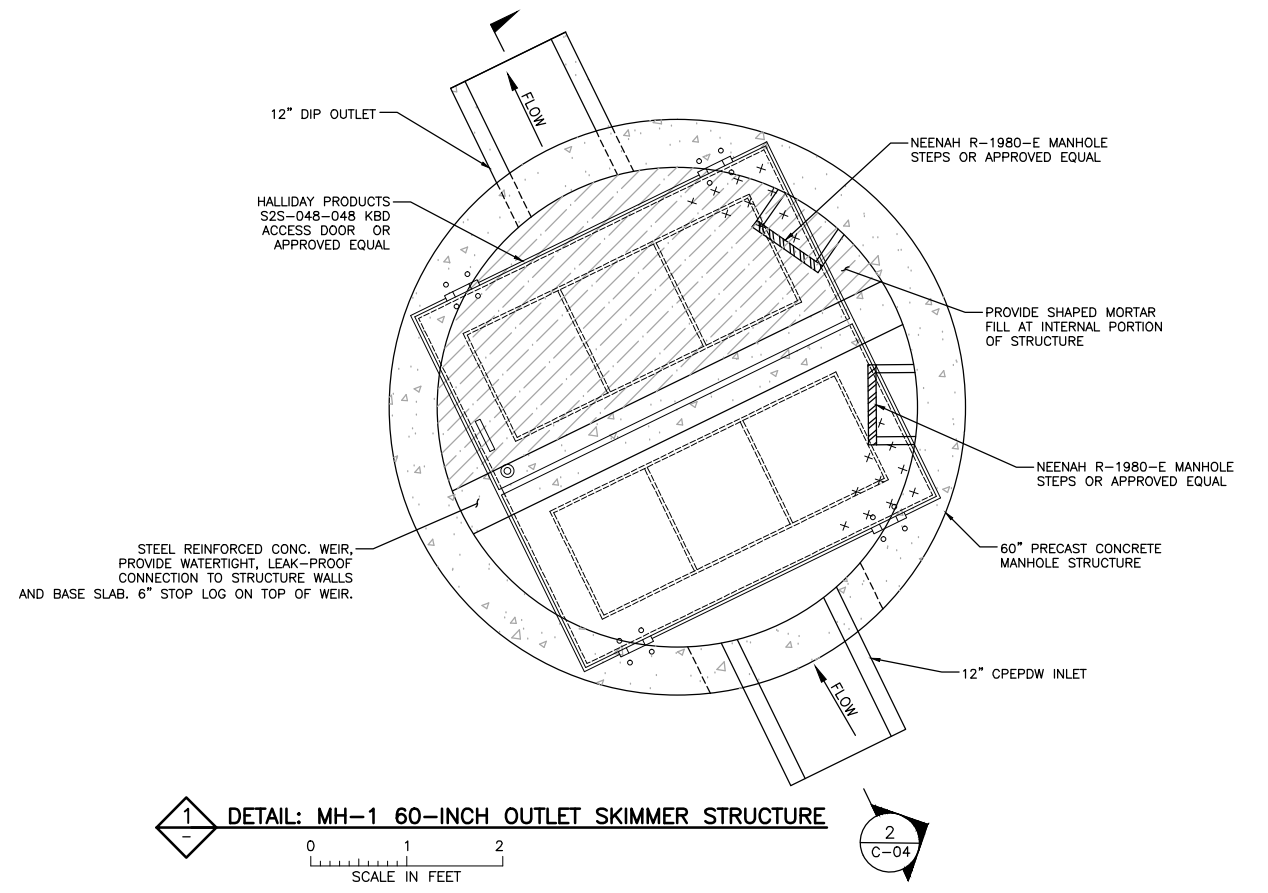
2 PLAN: DRAINTILE  
SCALE IN FEET



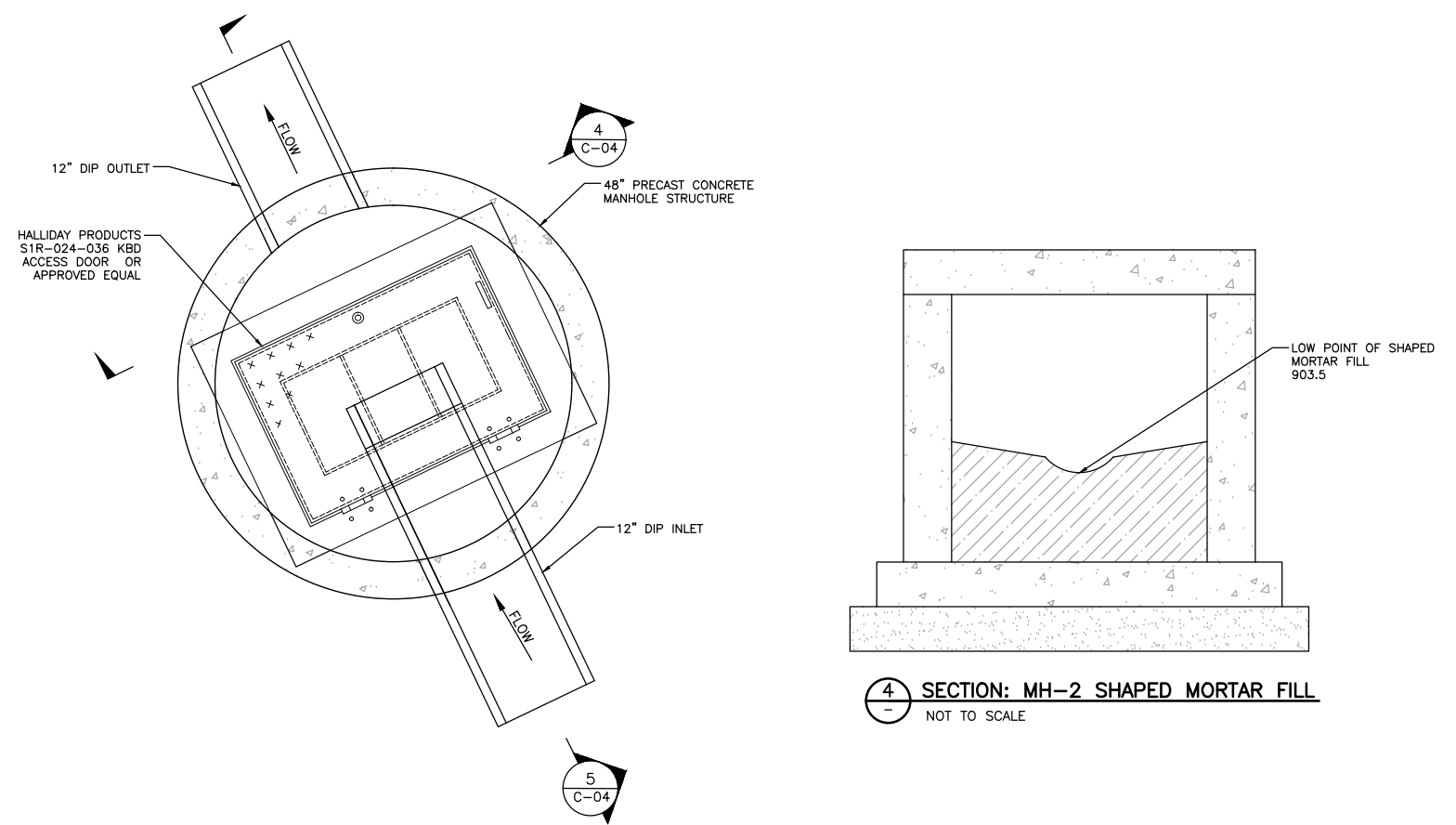
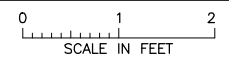
3 SECTION: SPENT LIME FILTER  
HORIZONTAL SCALE IN FEET VERTICAL SCALE IN FEET

95% DESIGN  
NOT FOR CONSTRUCTION

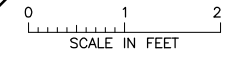
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.				CLIENT: 7/2/2018 6/20/2018 BID: _____ CONSTRUCTION: _____				Project Office: <b>BARR ENGINEERING CO.</b> 4300 MARKETPOINTE DRIVE Suite 200 MINNEAPOLIS, MN 55435 Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277 Fax: (952) 832-2601 www.barr.com				Scale: AS SHOWN Date: 6/20/2018 Drawn: CMH3 Checked: ELA Designed: BARR Approved: LAD		BARR PROJECT No. <b>23/62-1247.00</b> CLIENT PROJECT No.			
PRINTED NAME: _____ SIGNATURE: _____ DATE: _____ LICENSE #: _____				RELEASED TO/FOR: A B C O 1 2 3 DATE RELEASED: _____				<b>RAMSEY WASHINGTON</b> <b>METRO WATERSHED DISTRICT</b>				<b>WILLOW POND</b> <b>CMAQ DEVICE AND STORMWATER FILTER</b> <b>STORM SEWER PROFILE, TREATMENT SYSTEM</b> <b>PLAN, &amp; SECTION</b>		DWG. No. <b>C-03</b>		REV. No. <b>B</b>	
NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION												
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A	CMH3	ELA	LAD	2/2/2018	50% DESIGN												



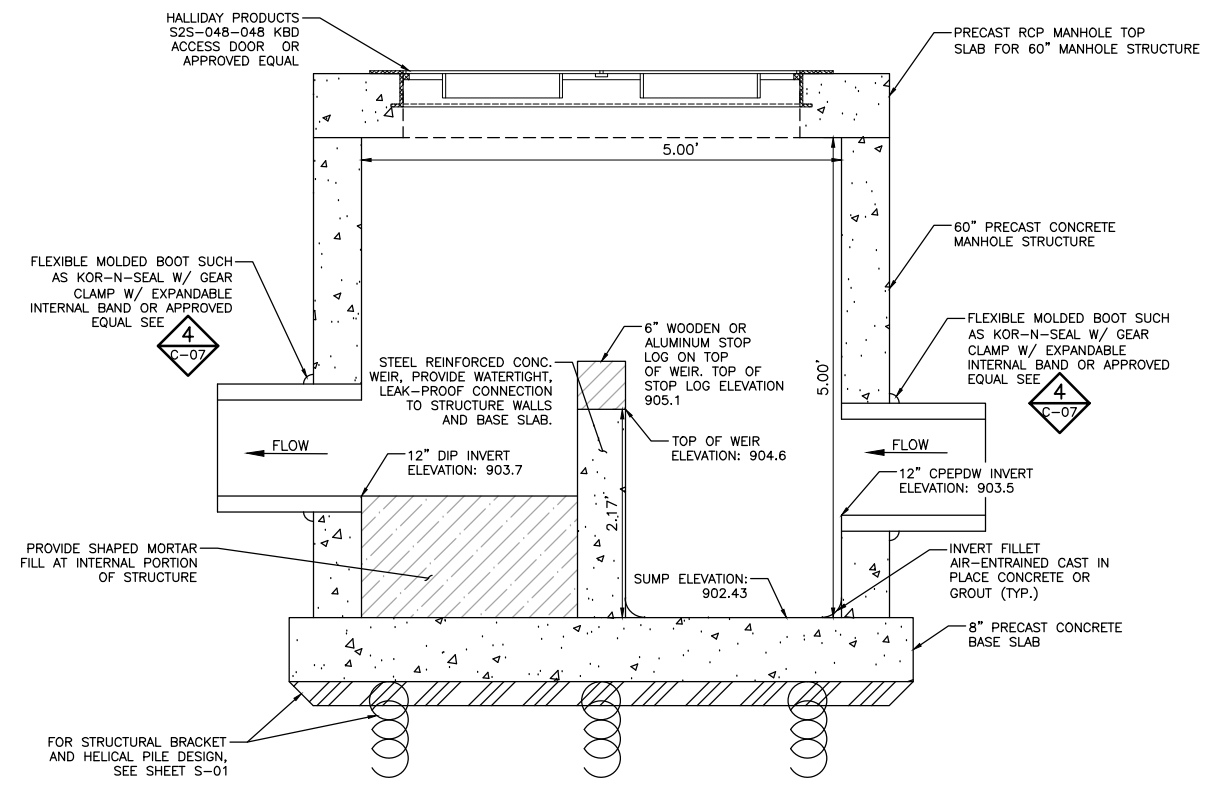
**1** **DETAIL: MH-1 60-INCH OUTLET SKIMMER STRUCTURE**



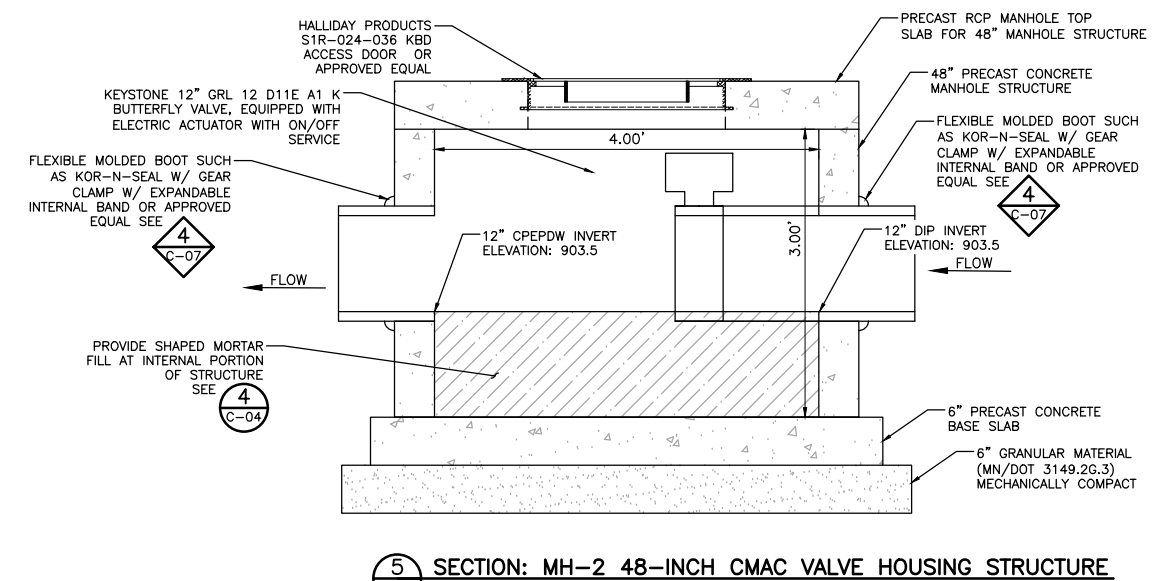
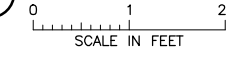
**3** **DETAIL: MH-2 48-INCH CMAC VALVE HOUSING STRUCTURE**



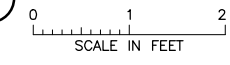
**4** **SECTION: MH-2 SHAPED MORTAR FILL**  
NOT TO SCALE



**2** **SECTION: MH-1 60-INCH OUTLET SKIMMER STRUCTURE**



**5** **SECTION: MH-2 48-INCH CMAC VALVE HOUSING STRUCTURE**



95% DESIGN  
NOT FOR CONSTRUCTION

CADD USER: Chorlie M. Hinds FILE: M:\DESIGN\23621247\00\2362124700\_C-04\_DETAILS.DWG PLOT SCALE: 1:2 PLOT DATE: 6/21/2018 4:09 PM  
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NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION
B	CMH3	ELA	LAD	6/20/2018	95% DESIGN
A	CMH3	ELA		2/2/2018	50% DESIGN

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 PRINTED NAME: \_\_\_\_\_  
 SIGNATURE: \_\_\_\_\_  
 DATE: \_\_\_\_\_ LICENSE #: \_\_\_\_\_

CLIENT	BID	CONSTRUCTION	RELEASED TO/FOR	DATE RELEASED
BARR ENGINEERING CO.				

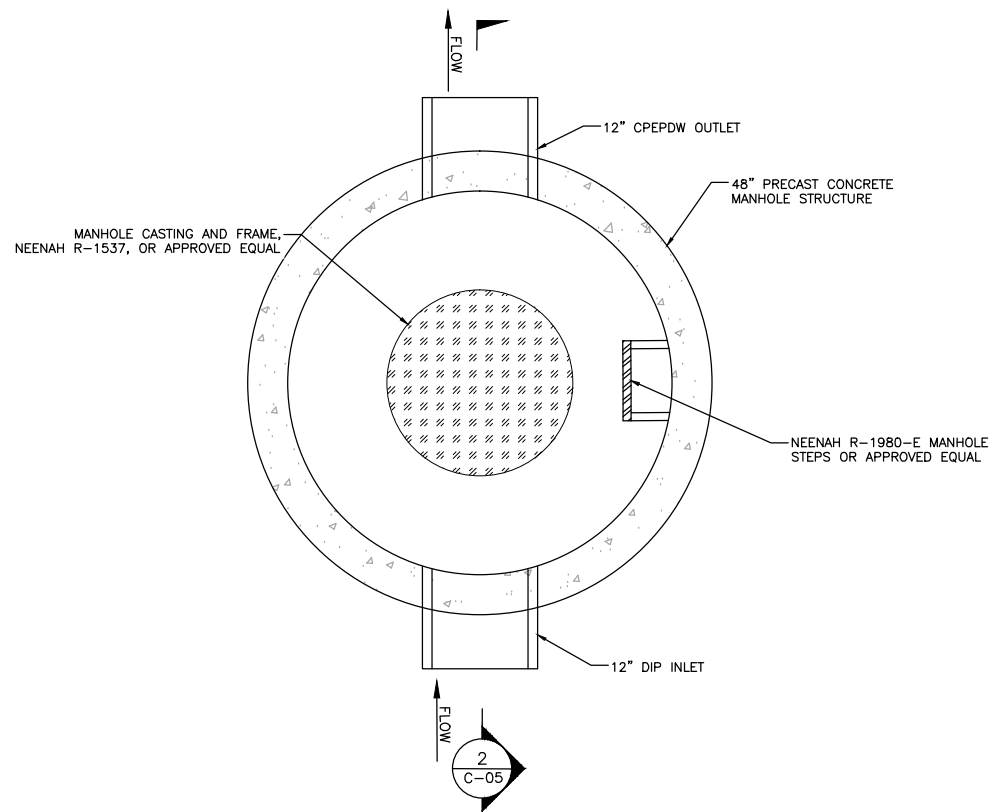
**BARR**  
 Project Office:  
**BARR ENGINEERING CO.**  
 4300 MARKETPOINTE DRIVE  
 Suite 200  
 MINNEAPOLIS, MN 55435  
 Corporate Headquarters:  
 Minneapolis, Minnesota  
 Ph: 1-800-632-2277  
 Fax: (952) 832-2601  
 www.barr.com

Scale	AS SHOWN
Date	6/20/2018
Drawn	CMH3
Checked	ELA
Designed	BARR
Approved	LAD

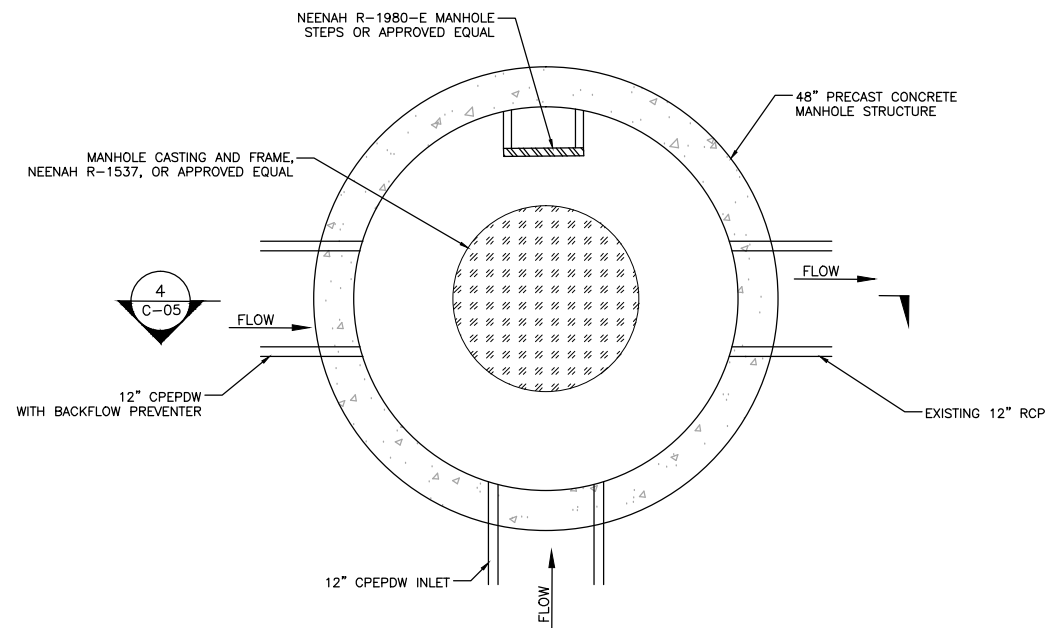
**RAMSEY WASHINGTON**  
**METRO WATERSHED DISTRICT**

**WILLOW POND**  
**CMAC DEVICE AND STORMWATER FILTER**  
**STORM SEWER DETAILS**

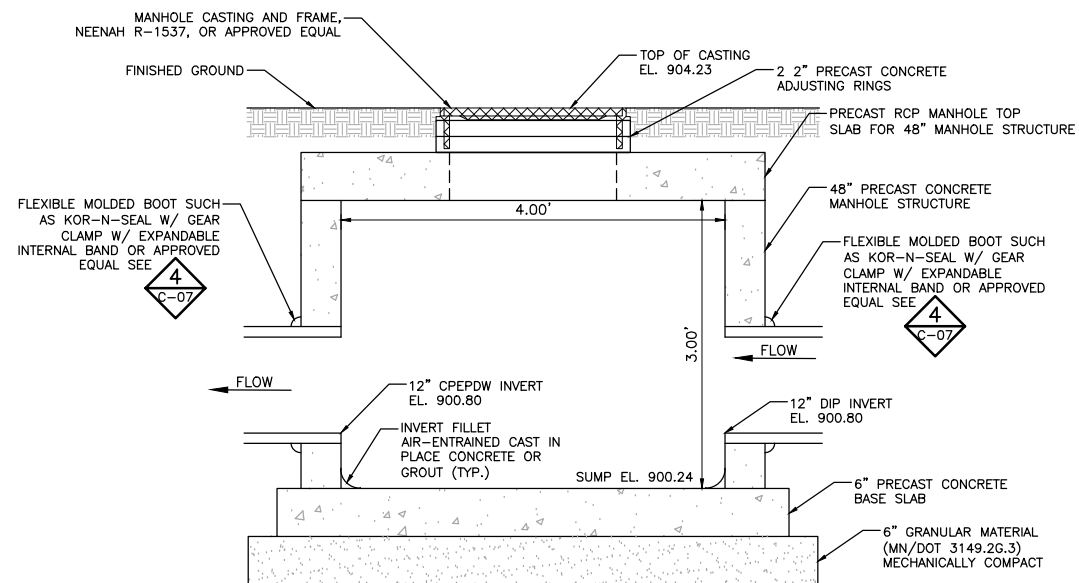
BARR PROJECT No.	CLIENT PROJECT No.
23/62-1247.00	
DWG. No.	REV. No.
C-04	B



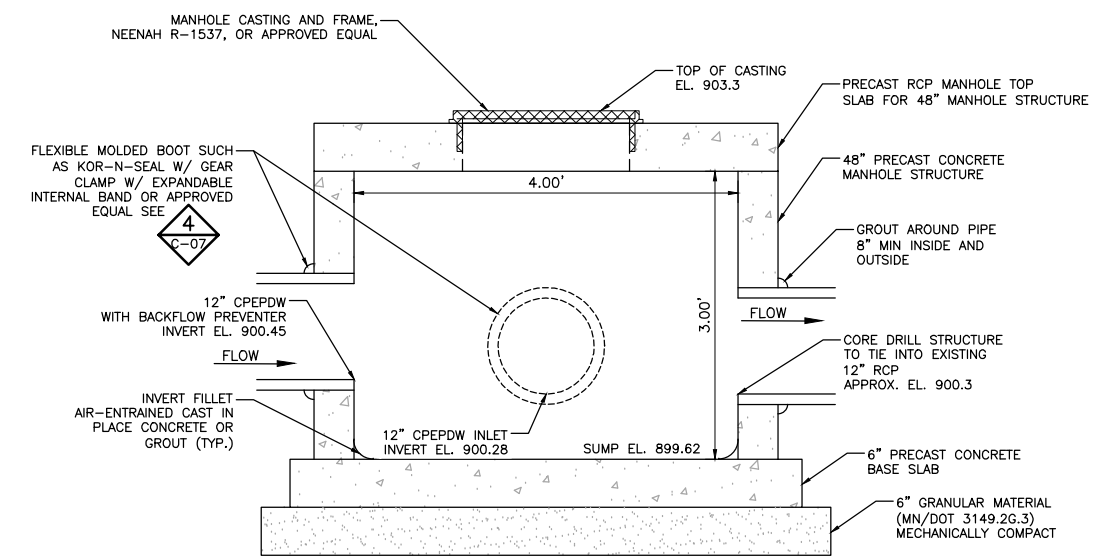
**1** **DETAIL: MH-3 MONITORING STRUCTURE**  
 0 1 2  
 SCALE IN FEET



**3** **DETAIL: MH-4 CONNECTION STRUCTURE**  
 0 1 2  
 SCALE IN FEET



**2** **SECTION: MH-3 MONITORING STRUCTURE**  
 0 1 2  
 SCALE IN FEET



**4** **SECTION: MH-4 CONNECTION STRUCTURE**  
 0 1 2  
 SCALE IN FEET

95% DESIGN  
 NOT FOR CONSTRUCTION

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NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION
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 DATE: \_\_\_\_\_ LICENSE #: \_\_\_\_\_

CLIENT	DATE	CONSTRUCTION	RELEASED TO/FOR	DATE RELEASED
BARR ENGINEERING CO.	6/20/2018	CONSTRUCTION	A B C O 1 2 3	

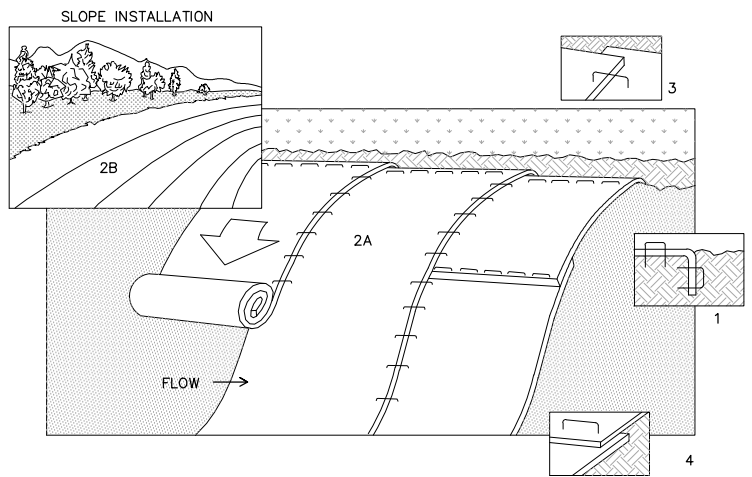
**BARR**  
 Project Office:  
 BARR ENGINEERING CO.  
 4300 MARKETPOINTE DRIVE  
 Suite 200  
 MINNEAPOLIS, MN 55435  
 Corporate Headquarters:  
 Minneapolis, Minnesota  
 Ph: 1-800-632-2277  
 Fax: (952) 832-2601  
 www.barr.com

Scale	AS SHOWN
Date	6/20/2018
Drawn	CMH3
Checked	ELA
Designed	BARR
Approved	LAD

**RAMSEY WASHINGTON**  
**METRO WATERSHED DISTRICT**

**WILLOW POND**  
**CMAC DEVICE AND STORMWATER FILTER**  
**STORM SEWER DETAILS**

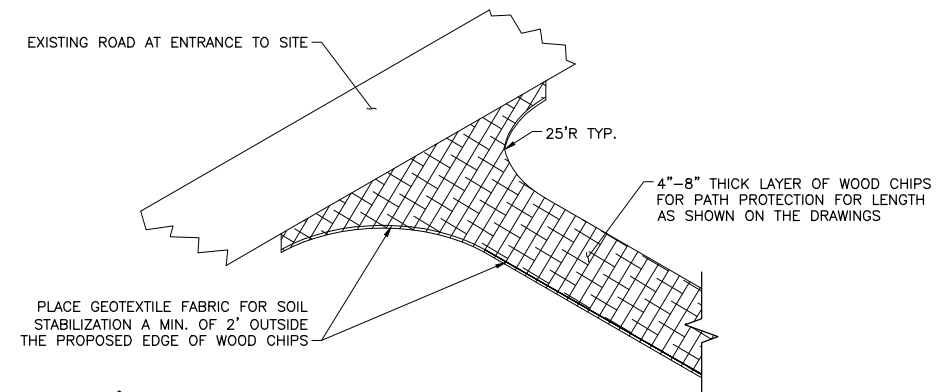
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CLIENT PROJECT No.	
DWG. No.	C-05
REV. No.	B



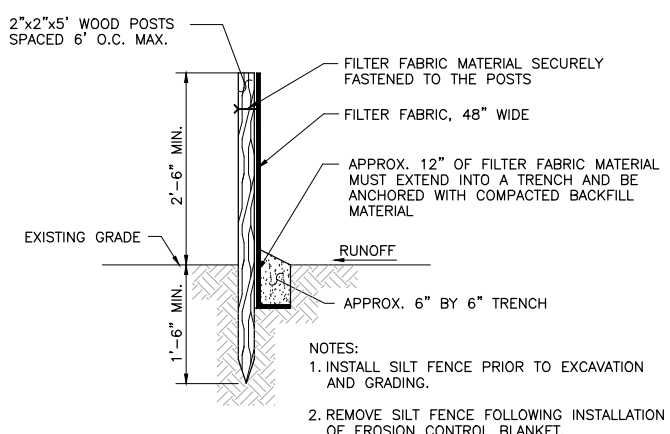
NOTE: REFER TO GENERAL STAPLE PATTERN GUIDE FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 6" OVERLAP, WITH THE UPHILL BLANKET ON TOP.
- WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.

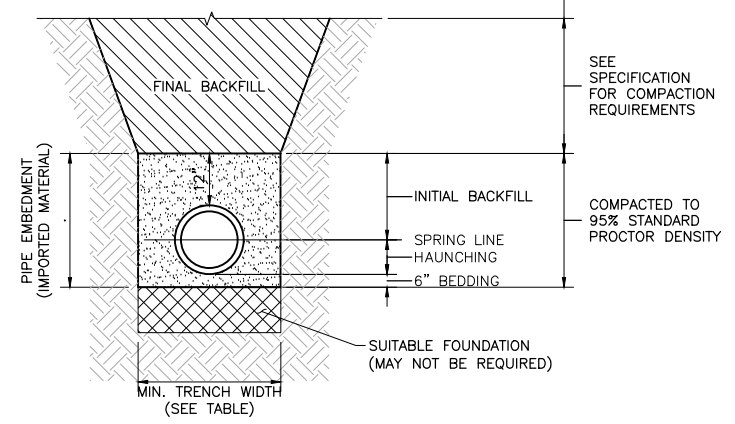
**1** DETAIL: TEMPORARY EROSION CONTROL BLANKET  
NOT TO SCALE



**2** DETAIL: WOOD CHIP CONSTRUCTION ENTRANCE  
NOT TO SCALE



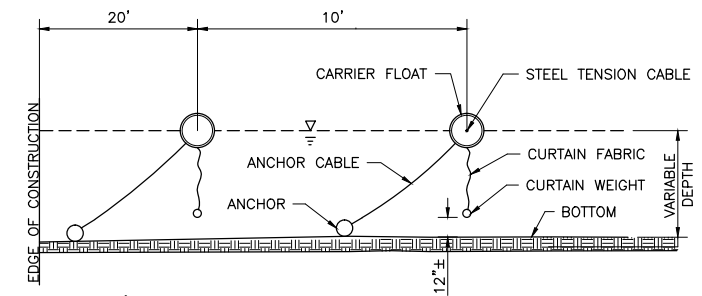
**3** DETAIL: SILT FENCE  
NOT TO SCALE



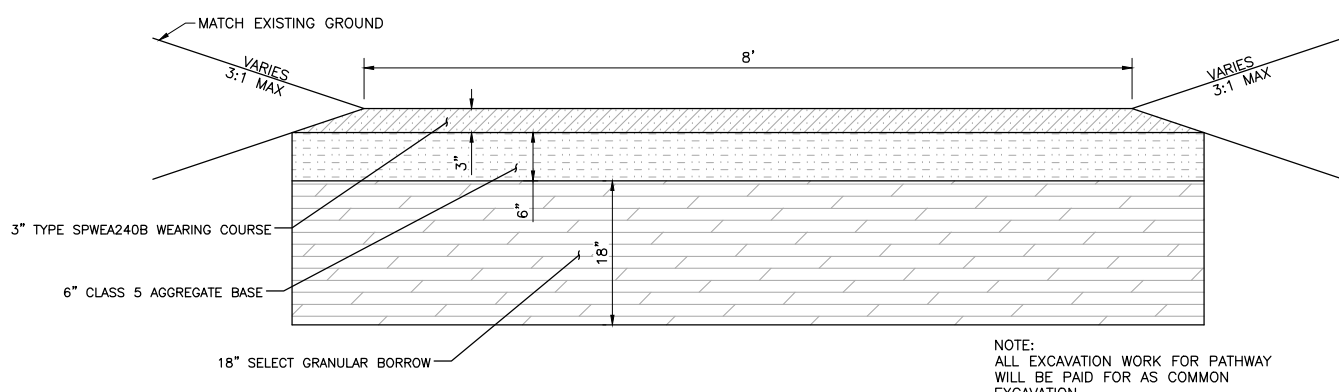
- IMPORTED PIPE EMBEDMENT MATERIAL PER MnDOT SPEC. 3149.2F GRANULAR BEDDING, 100% PASSING THE 1" SIEVE AND NOT MORE THAN 10.5% WILL PASS THE #200 SIEVE.
- IMPORTED PIPE EMBEDMENT MATERIAL SHALL BE COMPACTED IN UNIFORM LIFTS, 8" OR LESS IN DEPTH, LOOSE MEASURE, TO 95% STANDARD PROCTOR DENSITY FROM THE BEDDING TO A MINIMUM DEPTH OF AT LEAST 12" ABOVE THE CROWN OF THE PIPE.

PIPE DIAM. INCHES	MIN. TRENCH WIDTH INCHES
4	21
6	23
8	26
10	28
12	30

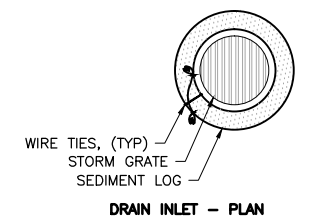
**4** DETAIL: NON-RIGID STORM SEWER TRENCH  
NOT TO SCALE



**5** DETAIL: DOUBLE ROW FLOTATION SILT CURTAIN  
NOT TO SCALE



**6** DETAIL: TYPICAL SECTION - PATHWAY CONSTRUCTION  
NOT TO SCALE



NOTES:

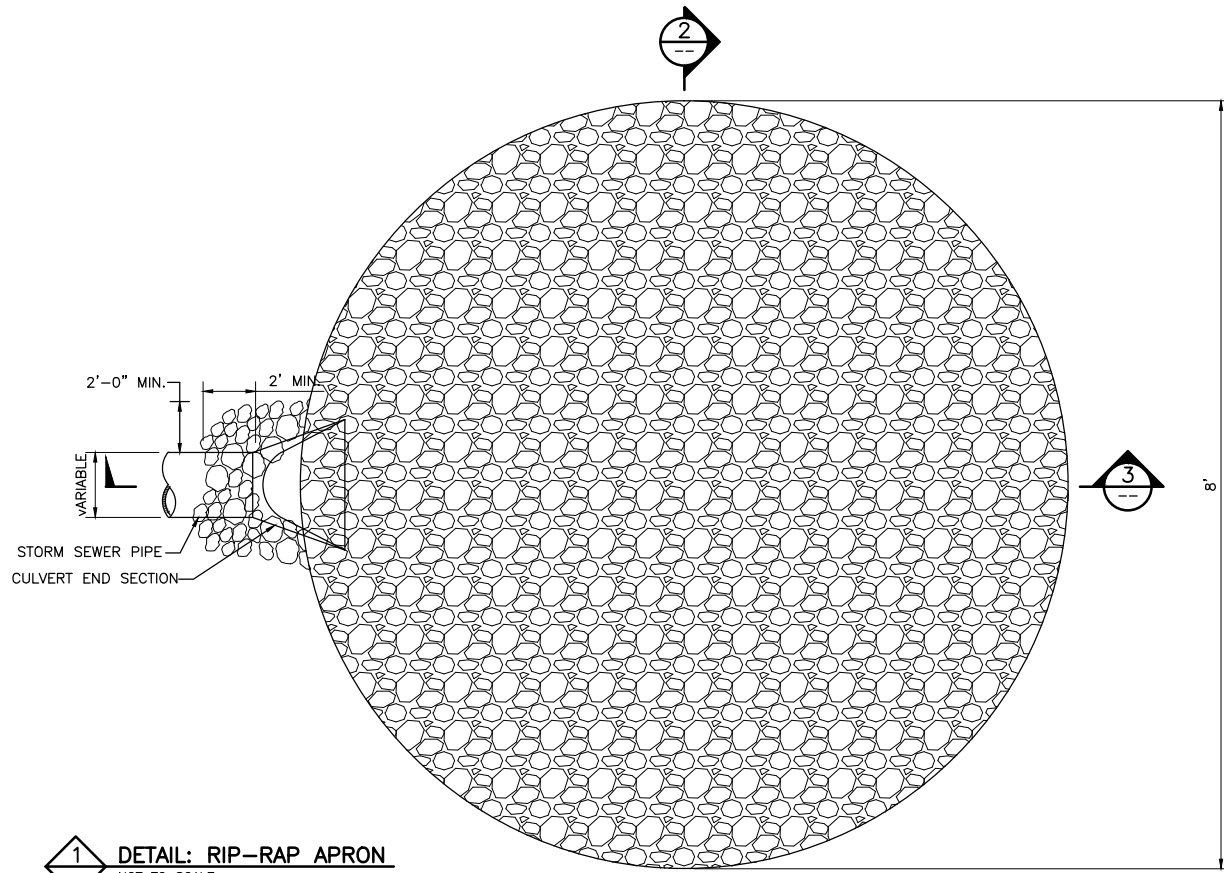
- INLET PROTECTION SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED OR IMMEDIATELY FOLLOWING CATCHBASIN INSTALLATION, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- MATERIALS SHALL BE SUFFICIENT TO ALLOW FLOW WHILE BLOCKING SEDIMENT. NO HOLES OR GAPS SHALL BE PRESENT IN/UNDER SEDIMENT LOG.
- INLET PROTECTION SHALL BE CLEANED AS REQUIRED.
- MATERIALS AND ANY ACCUMULATED SEDIMENT SHALL BE REMOVED IN CONJUNCTION WITH THE FINAL GRADING AND SITE STABILIZATION.

**7** DETAIL: INLET PROTECTION - SEDIMENT LOG  
NOT TO SCALE

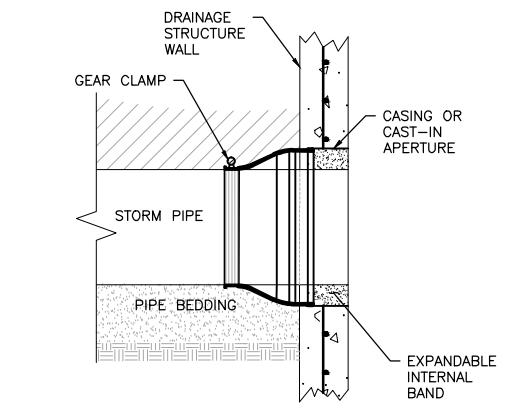
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BARR MA AutoCAD 2011 Support\enu\Template\Barr\_2011\_Template.dwt Plot at 1 10/05/2010 14:03:50

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NO.		BY	CHK.	APP.	DATE	REVISION DESCRIPTION		PRINTED NAME		Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277						DWG. No. <b>C-06</b>		REV. No. <b>B</b>	

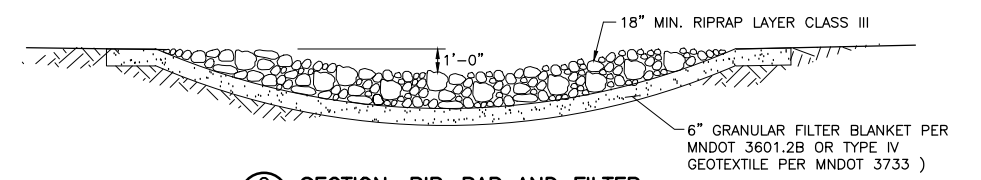
*95% DESIGN  
NOT FOR CONSTRUCTION*



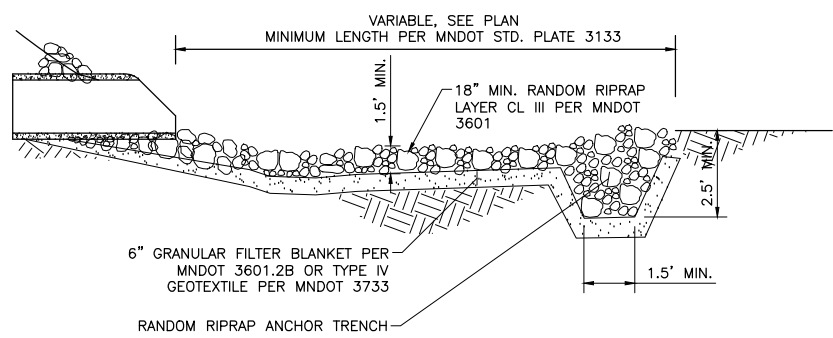
**1** DETAIL: RIP-RAP APRON  
NOT TO SCALE



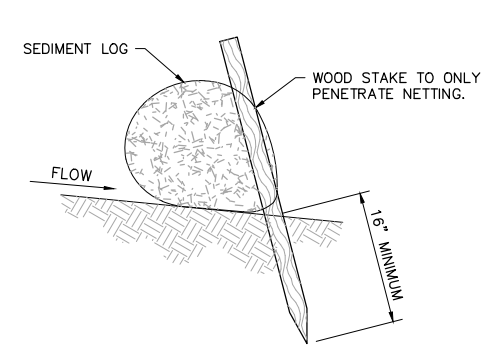
**4** DETAIL: FLEXIBLE MOLDED BOOT (KOR-N-SEAL)  
NOT TO SCALE



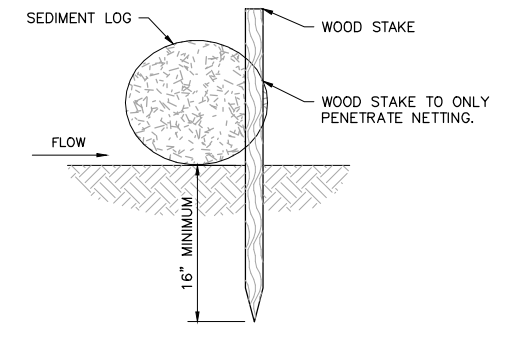
**2** SECTION: RIP-RAP AND FILTER  
NOT TO SCALE



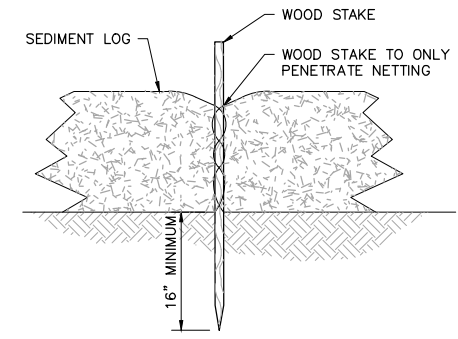
**3** SECTION: PIPE AND RIP-RAP APRON W/ ANCHOR TRENCH  
NOT TO SCALE



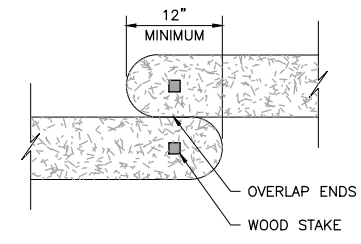
**SIDE VIEW ON SLOPE**



**SIDE VIEW FLAT**



**FRONT VIEW**



**TOP VIEW**

**NOTES:**

1. INSTALL SEDIMENT LOG ALONG CONTOURS (CONSTANT ELEVATION).
2. NO GAPS SHALL BE PRESENT UNDER SEDIMENT LOG. PREPARE AREA AS NEEDED TO SMOOTH SURFACE OR REMOVE DEBRIS.
3. REMOVE ACCUMULATED SEDIMENT WHEN REACHING 1/3 OF LOG HEIGHT.
4. MAINTAIN SEDIMENT LOG THROUGHOUT THE CONSTRUCTION PERIOD AND REPAIR OR REPLACED AS REQUIRED.

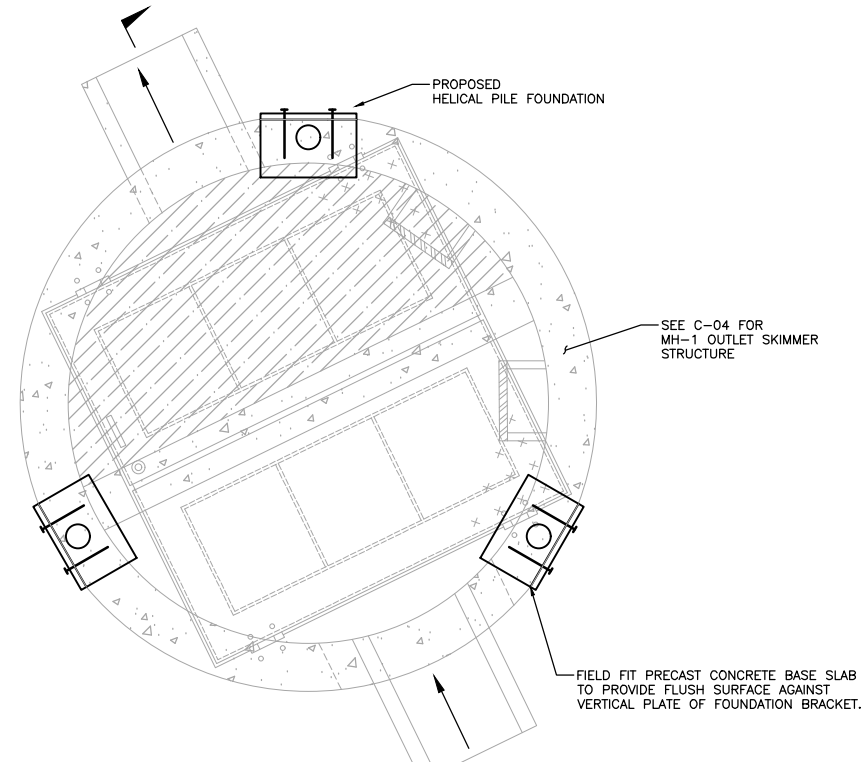
**5** DETAIL: EROSION LOG -- STAKING  
NOT TO SCALE

NOTE:  
1. THE CONTRACTOR, AT HIS OPTION, MAY SUBSTITUTE A GEOTEXTILE FABRIC, SPEC. 3733. FOR THE GRANULAR FILTER BLANKET UNLESS OTHERWISE SPECIFIED IN THE PLANS. THE FABRIC SHOULD COVER THE AREA OF THE RIP-RAP AND EXTEND UNDER THE PIPE 3' MIN.  
2. REFERENCE Mn/DOT STANDARD PLATE NO. 3133 (MODIFIED AS SHOWN ABOVE).

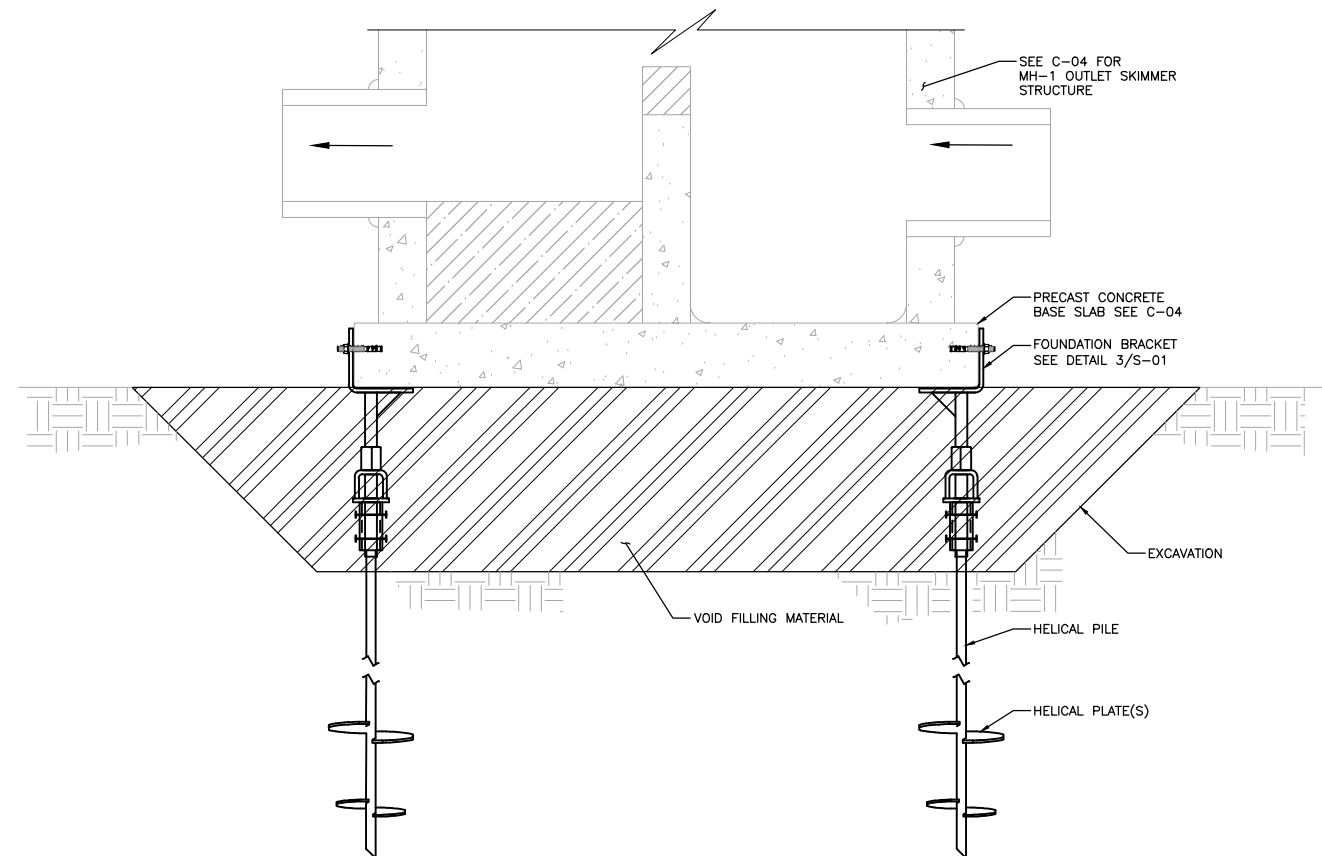
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CADD USER: Chorlie M. Hinds FILE: M:\DESIGN\23621247\00\2362124700\_C-07\_DETAILS.DWG PLOT SCALE: 1:2 PLOT DATE: 6/21/2018 8:47 AM  
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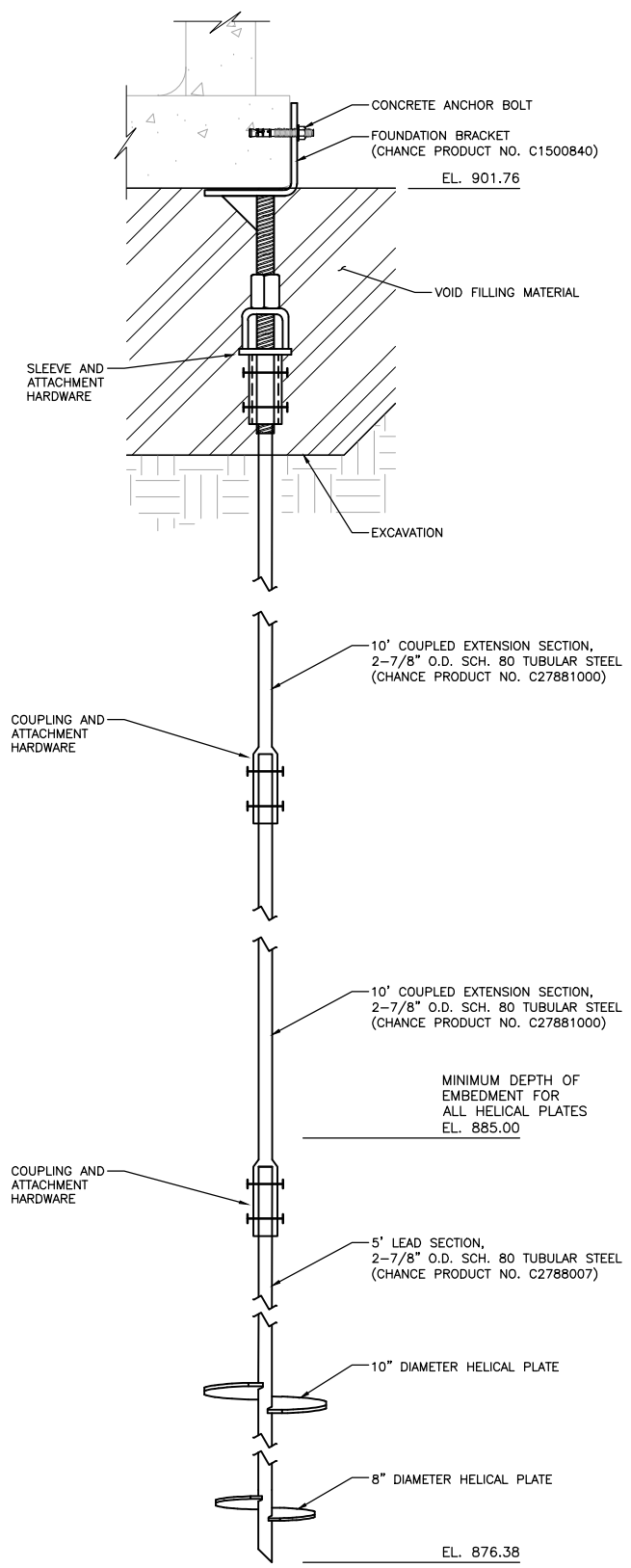
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NO. BY CHK. APP. DATE REVISION DESCRIPTION	PRINTED NAME SIGNATURE DATE LICENSE #	RELEASED TO/FOR DATE RELEASED	A B C 0 1 2 3	RAMSEY WASHINGTON METRO WATERSHED DISTRICT				DWG. No. <b>C-07</b>	REV. No. <b>B</b>



**1** DETAIL: FOUNDATION REPAIR BRACKET TYP. INSTALLATION  
 SCALE IN FEET  
 0 1 2  
**2** S-01



**2** SECTION: FOUNDATION REPAIR BRACKET TYP. INSTALLATION  
 SCALE IN FEET  
 0 1 2



**3** DETAIL: HELICAL PILE FOUNDATION COMPONENTS AND ACCESSORIES  
 SCALE  
 0 3" 6" 9" 1' 2'

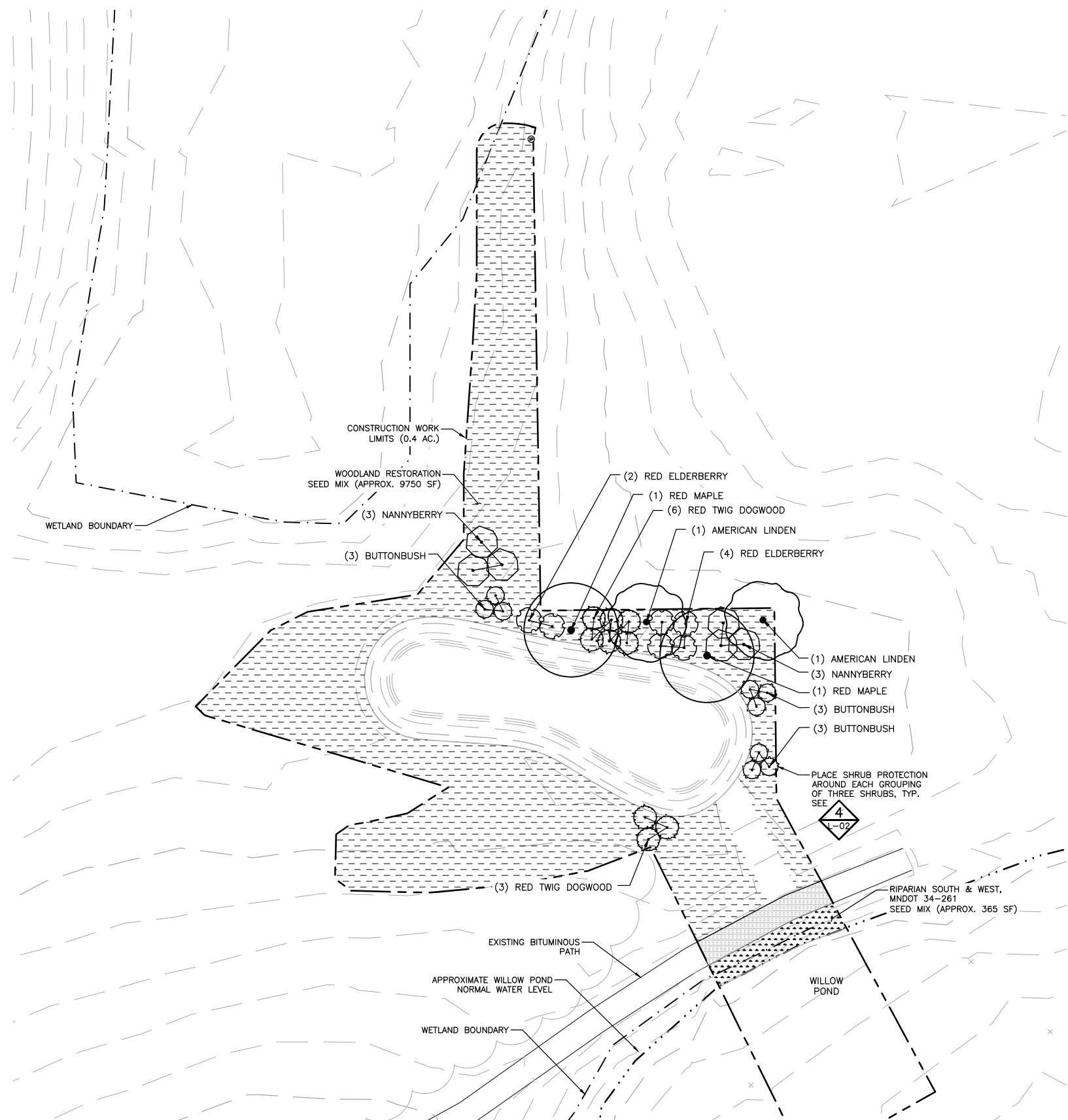
NOTE:  
 1. HELICAL PILE FOUNDATION COMPONENTS AND ACCESSORIES SHOWN HEREIN WERE DEVELOPED USING PRODUCTS MANUFACTURED BY CHANCE FOUNDATION SYSTEMS, A SUBSIDIARY OF HUBBELL POWER SYSTEMS, INC., OF CENTRALIA, MISSOURI. ALTERNATIVE PRODUCTS, PRODUCT MANUFACTURERS, AND/OR HELICAL PILE CONFIGURATIONS MAY BE USED BY THE CONTRACTOR UPON APPROVAL OF WRITTEN INSTALLATION PLAN BY THE OWNER'S REPRESENTATIVE.

95% DESIGN  
 NOT FOR CONSTRUCTION

CADD USER: Dale W. Ureng FILE: M:\DESIGN\2362124700\2362124700\_S-01\_HELICAL PILE DETAILS.DWG PLOT SCALE: 1:2 PLOT DATE: 6/21/2018 2:53 PM  
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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.		CLIENT BID CONSTRUCTION	6/20/2018	Project Office: <b>BARR ENGINEERING CO.</b> 4300 MARKETPOINTE DRIVE Suite 200 MINNEAPOLIS, MN 55435 Ph: 1-800-632-2277 Fax: (952) 832-2601 www.barr.com	Scale AS SHOWN Date 6/20/2018 Drawn DWU Checked JWH Designed BARR Approved	<b>RAMSEY WASHINGTON</b> <b>METRO WATERSHED DISTRICT</b>	<b>WILLOW POND</b> <b>CMAC DEVICE AND STORMWATER FILTER</b> <b>HELICAL PILE DETAILS</b>	BARR PROJECT No. <b>23/62-1247.00</b> CLIENT PROJECT No.
NO. BY CHK. APP. DATE REVISION DESCRIPTION	PRINTED NAME SIGNATURE DATE LICENSE #	RELEASED TO/FOR DATE RELEASED	A B C 0 1 2 3	Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277			DWG. No. <b>S-01</b>	REV. No. <b>B</b>

CADD USER: Chorlie M. Hinds FILE: M:\DESIGN\2362124700\1-01\_LANDSCAPE RESTORATION PLANDWG PLOT SCALE: 1:2 PLOT DATE: 6/21/2018 2:50 PM  
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1 PLAN: LANDSCAPE RESTORATION  
 0 20 40  
 SCALE IN FEET

**KEY**

- 904- EXISTING CONDITION MINOR CONTOUR (1')
- 905- EXISTING CONDITION MAJOR CONTOUR (5')
- CONSTRUCTION BOUNDARY
- PARCEL LINE
- · - · - WETLAND DELINEATION
- SAN EXISTING SANITARY SEWER
- SS EXISTING STORM SEWER
- EXISTING DECIDUOUS TREE
- [Pattern] MNDOT RIPARIAN SOUTH & WEST SEED MIX 34-261
- [Pattern] WOODLAND RESTORATION SEED MIX
- [Pattern] TRAIL RESTORATION, SEE C-06

**PLANTING NOTES:**

1. CONTACT GOPHER ONE TO HAVE ALL EXISTING UTILITIES LOCATED WITHIN THE PROJECT LIMITS BEFORE EARTHWORK BEGINS.
2. INFORM THE LANDSCAPE ARCHITECT OF PLANTING THREE DAYS PRIOR TO RESTORATION ACTIVITIES.
3. CONTRACTOR WILL BE RESPONSIBLE FOR WATERING SEEDING (REGARDLESS OF NOTIFICATION) DURING ENTIRE WARRANTY PERIOD. WATERING WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
4. ALL EXISTING CONCRETE, ASPHALT, TREES TO BE KEPT AND TREE ROOTS SHALL BE PROTECTED. ANY DAMAGE TO EXISTING SITE FEATURES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE AND TO THE OWNER'S SATISFACTION.
5. DAMAGE TO EXISTING STRUCTURES OR NEWLY CONSTRUCTED ITEMS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
6. THE CONTRACTOR SHALL HAVE ACCESS TO STREET SWEEPING EQUIPMENT AT ALL TIMES. THE CONTRACTOR SHOULD BE AWARE OF WEATHER CONDITIONS AND SWEEP ANY STREETS WITH DEBRIS PRIOR TO ANY RAINFALL EVENT. STOCKPILING ON THE STREET DURING ANY RAINFALL EVENT SHALL NOT BE ALLOWED.
7. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. IN THE CASE OF ANY DISCREPANCIES BETWEEN THIS DETAIL, PLANS, OR SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.

**SEEDING NOTES**

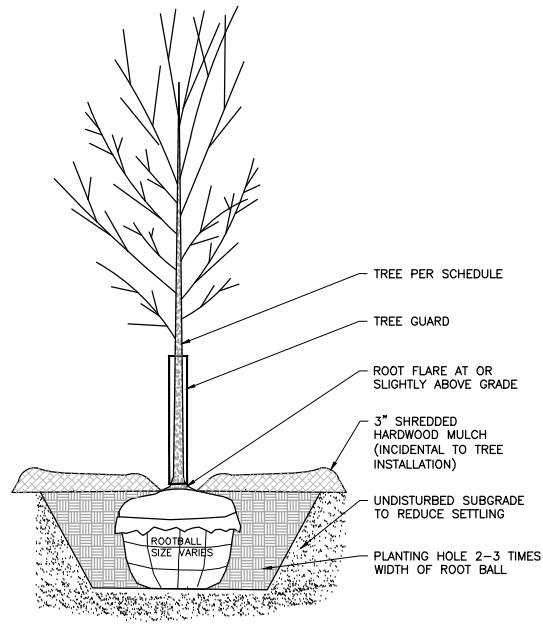
1. ANY EXOTIC INVASIVE PLANTS AND WEEDS WITHIN THE SEEDING AREAS SHALL BE SPRAYED WITH HERBICIDE 14 DAYS PRIOR TO SEEDING OR AS PER MANUFACTURE'S RECOMMENDATION. SIGNAGE INDICATING THE USE OF HERBICIDES MUST BE POSTED ON SITE.
2. ALL HERBICIDE APPLICATION SHALL BE APPLIED BY A LICENSED APPLICATOR WITHIN THE STATE OF MINNESOTA.
3. SEED IN ACCORDANCE WITH THE SPECIFICATIONS. SEEDING IS TO TAKE PLACE IMMEDIATELY FOLLOWING FINAL GRADING AND SOIL PLACEMENT TO PREVENT EROSION AND COMPACTION.
4. COVER CROP IS TO BE SEEDING WITHIN ALL AREAS.
5. ALL SEEDING IS TO BE COVERED WITH TYPE 3 MULCH DISC-ANCHORED OVER ENTIRE SEEDING AREA IN ACCORDANCE WITH MN/DOT STANDARD SPECIFICATION 3882.
6. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. IN THE CASE OF ANY DISCREPANCIES BETWEEN THIS DETAIL, PLANS, OR SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.

**PLANT SCHEDULE:**

Shrubs				
Common Name	Latin Name	Quantity	Spacing	Size
Buttonbush	<i>Cephalanthus occidentalis</i>	9	6' O.C.	#2 CONT.
Red Twig Dogwood	<i>Cornus sericea</i>	9	6' O.C.	#2 CONT.
Red Elderberry	<i>Sambucus racemosa</i>	6	6' O.C.	#2 CONT.
Nannyberry	<i>Viburnum lentago</i>	6	6' O.C.	#2 CONT.
Trees				
Common Name	Latin Name	Quantity	Spacing	Size
Red Maple	<i>Acer Rubrum</i>	2	Field Fit	2.5" B&B
American Basswood	<i>Tilia americana</i>	2	Field Fit	2.5" B&B

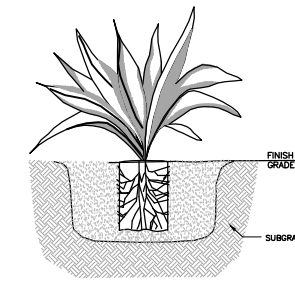
95% DESIGN  
 NOT FOR CONSTRUCTION

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PRINTED NAME SIGNATURE DATE				RELEASED TO/FOR DATE RELEASED		A B C 0 1 2 3				NO. BY CHK. APP. DATE REVISION DESCRIPTION		B CMH3 ELA 6/20/2018 95% DESIGN		REV. No. <b>B</b>		REV. No. <b>B</b>		REV. No. <b>B</b>					



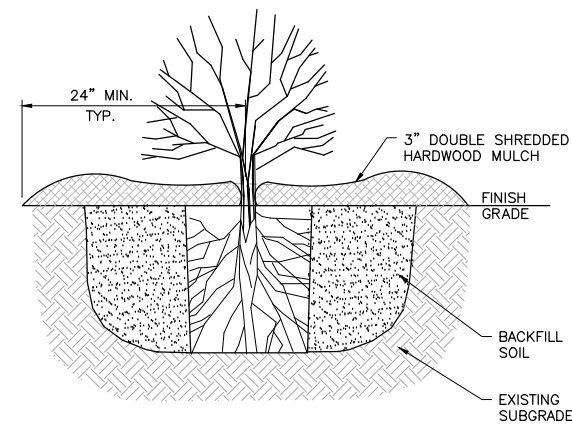
- TREE PLANTING NOTES:**
1. PROVIDE AND INSTALL PLANTS PER SCHEDULE.
  2. REMOVE DEAD OR DAMAGED BRANCHES. RETAIN THE NATURAL FORM OF PLANT. DO NOT CUT THE LEADER
  3. DIG PLANT HOLES WITH A WIDTH 2-3 TIMES LARGER THAN ROOT MASS, ON ALL SIDES.
  4. SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING
  5. SET TREE ON UNDISTURBED SUBGRADE AT A DEPTH WHERE THE ROOT FLARE IS LOCATED AT OR SLIGHTLY ABOVE GRADE.
  6. CUT ROPES AT BASE OF TRUNK, PULL BURLAP DOWN EXPOSING 1/3 OF ROOTBALL AND THOROUGHLY BURY ROPES AND BURLAP BELOW GRADE
  7. BACK FILL WITH PLANTING SOIL FIRM SOIL AROUND ROOT MASS TO MAINTAIN PLUMB AND ENSURE NO AIR GAPS AROUND ROOT MASS.
  8. CONSTRUCT 3" WATERING BASIN. THOROUGHLY WATER WITHIN 3 HOURS OF INSTALLATION.
  9. PLACE SHREDDED HARDWOOD MULCH (MN/DOT SPEC 3882.2 TYPE 6 - WEED SEED FREE SHREDDED HARDWOOD.) TO A RADIUS OF 24" AND A DEPTH OF 3" AROUND PLANT.
  10. NO MULCH TO BE IN CONTACT WITH BASE OF PLANT.
  11. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TREES IN A PLUMB POSITION THROUGHOUT THE GUARANTEE PERIOD.

**1** **DETAIL: B&B TREE PLANTING**  
NOT TO SCALE



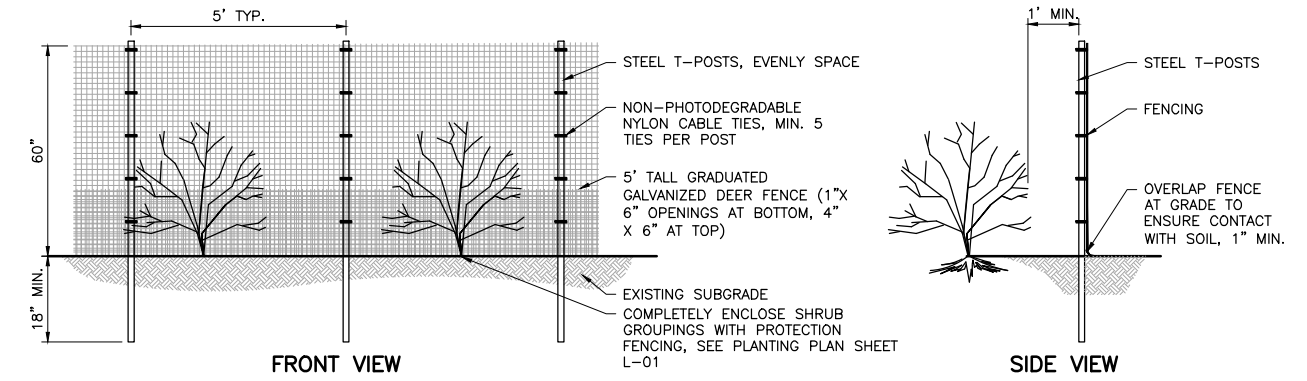
- HERBACEOUS PLUG PLANTING NOTES:**
1. PROVIDE AND INSTALL PLANTS PER SCHEDULE.
  2. EXCAVATE HOLE 3 TIMES WIDTH OF ROOTBALL.
  3. BREAK BOTTOM OF ROOTBALL TO LOOSEN ROOTS.
  4. ALIGN ROOTBALL TOP EVEN WITH SOIL - DO NOT PLANT TOO DEEP OR TOO SHALLOW. FIRM SOIL TO ENSURE GOOD CONTACT WITH ROOTS.
  5. WATER THOROUGHLY AFTER PLANTING.

**2** **DETAIL: HERBACEOUS PLUG**  
NOT TO SCALE



- SHRUB PLANTING NOTES:**
1. PROVIDE AND INSTALL PLANTS PER SCHEDULE.
  2. REMOVE DEAD OR DAMAGED BRANCHES. RETAIN THE NATURAL FORM OF PLANT.
  3. IF ROOT FLARE IS NOT EXPOSED WITHIN THE CONTAINER EXCAVATE SURFACE SOIL TO BASE OF ROOT FLARE.
  4. DIG PLANT HOLES 6" MIN. LARGER THAN ROOT MASS, ALL SIDES.
  5. SET SHRUB ON LIGHTLY FIRMED BACKFILL SOIL SO ROOT FLARE IS EVEN WITH FINISH GRADE.
  6. BACKFILL WITH PLANTING SOIL FIRM SOIL AROUND ROOT MASS TO MAINTAIN PLUMB AND ENSURE NO AIR GAPS AROUND ROOT MASS.
  7. CONSTRUCT 3" WATERING BASIN. THOROUGHLY WATER WITHIN 3 HOURS OF INSTALLATION.
  10. PLACE SHREDDED HARDWOOD MULCH (MN/DOT SPEC 3882.2 TYPE 6 - WEED SEED FREE SHREDDED HARDWOOD.) TO A RADIUS OF 24" AND TO A DEPTH OF 3" AROUND PLANT.
  11. NO MULCH TO BE IN CONTACT WITH PLANT.
  12. CONTRACTOR TO WATER AS NECESSARY THROUGHOUT GUARANTEE PERIOD TO MAINTAIN IN A HEALTHY CONDITION.

**3** **DETAIL: SHRUB PLANTING**  
NOT TO SCALE



- SHRUB PROTECTION NOTES:**
1. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING PROTECTION FENCE THROUGHOUT THE GUARANTEE PERIOD.

**4** **DETAIL: SHRUB PROTECTION FENCE**  
NOT TO SCALE

95% DESIGN  
NOT FOR CONSTRUCTION

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PRINTED NAME: _____ SIGNATURE: _____ DATE: _____ LICENSE # _____				RELEASED TO/FOR: <b>A B C O 1 2 3</b> DATE RELEASED:				<b>RAMSEY WASHINGTON METRO WATERSHED DISTRICT</b>		DWG. No. <b>L-02</b> REV. No. <b>B</b>	
NO. BY CHK. APP. DATE REVISION DESCRIPTION				PROJECT: <b>WILLOW POND CMAC DEVICE AND STORMWATER FILTER</b>				<b>PLANTING DETAILS</b>		BARR PROJECT No. <b>23/62-1247.00</b> CLIENT PROJECT No.	



\* \* \* \* \*

# Administrator's Report

\* \* \* \* \*

## MEMO

**TO:** Board of Managers and Staff  
**FROM:** Tina Carstens, Administrator  
**SUBJECT:** July Administrator's Report  
**DATE:** July 2, 2018

### A. Meetings Attended

Monday, June 4	12:00 PM	Staff training meeting
Tuesday, June 5	7:30 AM	Water Resources Conference planning
Wednesday, June 6	10:00 AM	Metro Gold Line stormwater meeting
	2:00 PM	Washington County consortium meeting
	6:30 PM	Board meeting
Tuesday, June 19	11:00 AM	Stormwater Advisory Committee planning
	12:30 PM	MIDS planning meeting
Wednesday, June 20	9:00 AM	MN Watershed Administrators (MAWA)
Thursday, June 21	8:00 AM	MAWD Summer Tour
Friday, June 22	8:00 AM	MAWD Summer Tour
Tuesday, June 26	9:00 AM	Freshwater Society re: Water Summit
	11:30 AM	Meet with Barr for 2019 planning
Wednesday, June 27	1:00 PM	Minnesota Stormwater Research Council

### B. Upcoming Meetings and Dates

Metro MAWD	Tuesday, July 17, 2018
August Board Meeting	Wednesday, August 1, 2018
September Board Meeting	Wednesday, September 5, 2018
Board/CAC Tour	TBD
October Board Meeting	Wednesday, October 10, 2018
November Board Meeting	Wednesday, November 7, 2018
Watershed Excellence Awards	TBD
MAWD Annual Meeting	November 29 – December 1, 2018
December Board Meeting	Wednesday, December 5, 2018

**C. District Office Solar Project Update**

The contractor has indicated that they will be starting this installation either the week of July 9<sup>th</sup> or July 16<sup>th</sup>. This project will take about two weeks to install and should be done by the end of the month.

**D. Board and CAC Tour Planning**

In the past we have planned a board and CAC tour for some time between the end of August and mid-September. Staff can plan on similar timing. I would like to get some ideas from you, the board, on locations that you would like to visit. As we are going through the project status report, it might give some ideas for locations on the tour. Also, at the meeting last month, it was suggested that we focus on projects in Washington County and invite our Washington County commissioners on the tour. This item is a prompt for discussion at the board meeting.

**E. MAWD Summer Tour Update**

The MAWD Summer Tour was held June 20-22 in the southwest metro. Riley Purgatory Bluff Creek, Lower Minnesota River, and Nine Mile Creek Watershed Districts along with the Carver County WMO hosted the event with MAWD. Managers Larry and Pam attended the event. I have attached a handout that shows what was covered on the boat and bus tours. I'd invite the managers that attended to share their experience at the board meeting.

**F. 2019 Budget Planning**

To begin the board budget process for 2019, I am preparing a preliminary budget memo for your review and input. The memo will outline budget issues and considerations for next year. The memo highlights any major additions or deletions to the budget as compared to this year. Items identified in our watershed management plan for 2019 will be highlighted for discussion.

On Monday, July 9, our internal staff training meeting will be focused on the budget and work plan for 2019. I will receive input from all staff and we will discuss our work plan for 2019 and the various budget considerations. I want to be sure to have all the input from staff as I prepare the memo for the board. I will try and send the memo to the board directly on Tuesday, July 10. And then I will bring it to the meeting and plan to walk through it for discussion.

In August, staff will provide the board with a draft budget table with projected budget and levy estimates. This information will be reviewed at the August meeting and if authorized by the board, the budget and work program will be sent to the cities and counties for review and comment. In September, the board will hold a public hearing to take comments on the budget and approve the preliminary budget and levy for certification to the counties. The final budget and levy will be approved by the board in December.

Southwest Metro  
Local Leaders Water Institute - 2018  
& MAWD Summer Tour - 2018

# Minnesota River Tour

June 20

The Minnesota River flows 335 miles from Big Stone Lake on the Minnesota-South Dakota border to its confluence with the Mississippi River at Fort Snelling in Minneapolis. Its basin encompasses approximately 16,770 square miles, draining nearly 17% of Minnesota as well as portions of South Dakota, Iowa, and North Dakota. The river flows through some of the most fertile agricultural land in the world. Over 80% of the land use in the basin is for agricultural purposes. The basin is geologically primed to generate large sediment loads. Although the Minnesota River contributes only 1/3 of the flow to the Mississippi, it contributes 2/3 of the sediment.

*This tour is brought to you by the Lower Minnesota River Watershed District, the Riley Purgatory Bluff Creek Watershed District, Carver County Water Management Organization, Nine Mile Creek Watershed District, and the Minnesota Association of Watershed Districts.*

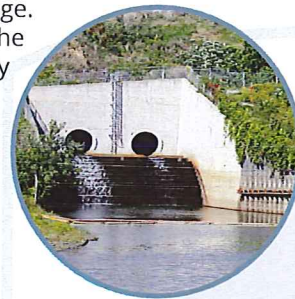
## LMRWD Dredge Placement Site

The Lower Minnesota River Watershed District is the local sponsor for the US Army Corps of Engineers dredging operations. On average 25,000 cubic yards of dredge material are removed every year, keeping the river navigable for commercial and recreational navigation. The material is deposited at this site temporarily as the watershed seeks out beneficial end uses for it (the site is owned by LMRWD).



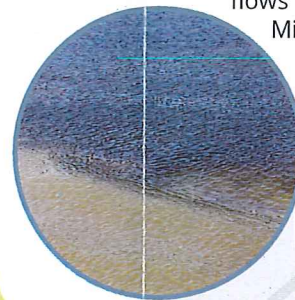
## MSP Airport stormwater outfall

The large stormwater outfall seen here drains both MSP Airport and the 494-35W interchange. Stormwater from the airport is eventually discharged here, while wastewater from the airplane deicing system is treated through a separate system.



## Confluence of the Minnesota & Mississippi Rivers

The confluence of the Mississippi and Minnesota rivers is one of the most powerfully historic places in the Twin Cities. To the Mdewakanton Dakota it has deep historic and spiritual meaning. They called the joining of the two rivers Bdote Minisota. For some, it was their place of origin, their Garden of Eden. To early Americans it became a center of trade and military authority. The confluence is often visually striking, as the muddier Minnesota flows into the clearer Mississippi.



CITY OF ST PAUL



Science Museum of Minnesota

Crosby Farm Park

Fort Snelling

Historical WPA Workcamp

Quarry Island Fen

Fort Snelling Fen

US Fish and Wildlife Headquarters

## MN Valley National Wildlife Refuge

The refuge was established in 1976 to provide habitat for migratory waterfowl, fish, and other wildlife species, and to create environmental education and recreational opportunities. Comprised of over 14,000 acres, the refuge is part of a corridor of land and water stretching nearly 70 miles along the Minnesota River, from Bloomington to Henderson, Minnesota.



## Black Dog Generating Station (Xcel Energy)

At the Black Dog Generating Station, Xcel Energy uses the river for cooling its energy production facilities. The intake is screened, and has a passage to return fish to the river. After use, the water is discharged to Black Dog Lake where it cools before returning to the river.



DNR Public Access Sorenson Landing

Nine Mile Creek Confluence

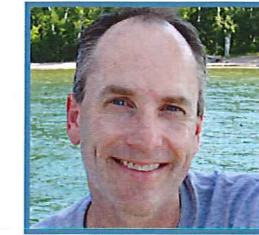
US Salt dock

Mosaic Fertilizer barge slip



CITY OF SAVAGE

## SPEAKERS



**Steve Woods**  
*Freshwater Society*  
Emcee for the trip



**Clint Gergen**  
*Central Harvest States*  
Commercial navigation challenges



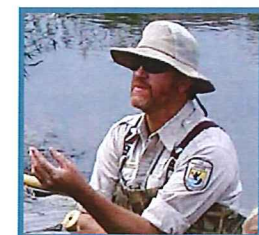
**Carrie Jennings**  
*Freshwater Society*  
Hydrology and sediment transport



**Tony Hetzel**  
*Chart Inc*  
Impact of commercial navigation on the regional economy



**Ted Suss**  
*Friends of the Minnesota Valley*  
Land management practices



**Gerry Shimek**  
*US Fish & Wildlife*  
Impact of sediment on habitat



**Rylee Main**  
*Lake Pepin Legacy Alliance*  
Sediment in Lake Pepin

# Bus tour

June 21

The tour is brought to you by the Lower Minnesota River Watershed District, the Riley Purgatory Bluff Creek Watershed District, Carver County Water Management Organization, Nine Mile Creek Watershed District, and the Minnesota Association of Watershed Districts.

The **Carver County Water Management Organization's** (CCWMO) function is to protect, preserve, and manage water resources within its boundaries. The CCWMO covers 320 square miles including the following watersheds: Bevens Creek, Carver Creek, East Chaska Creek, West Chaska Creek and parts of Pioneer, Sarah and the Crow River. CCWMO was established in 1996 and adopted its first Water Management Plan in 2001. Its functions include planning, funding, regulation and implementation of projects and programs to manage water resources.  
[co.carver.mn.us/departments/public-services/planning-water-management/water-management](http://co.carver.mn.us/departments/public-services/planning-water-management/water-management)

The **Riley Purgatory Bluff Creek Watershed District** (RPBCWD) encompasses 50 square miles in the southwest Twin Cities Metropolitan area. It was established in 1969 and includes three distinct creek watersheds (Bluff, Purgatory, and Riley), parts of seven cities, and two counties. The district partners with local communities to identify top priorities and plan and implement efforts to manage and restore water resources. This work includes educating and engaging district residents in the shared work of protecting clean water. [rpbcd.org](http://rpbcd.org)

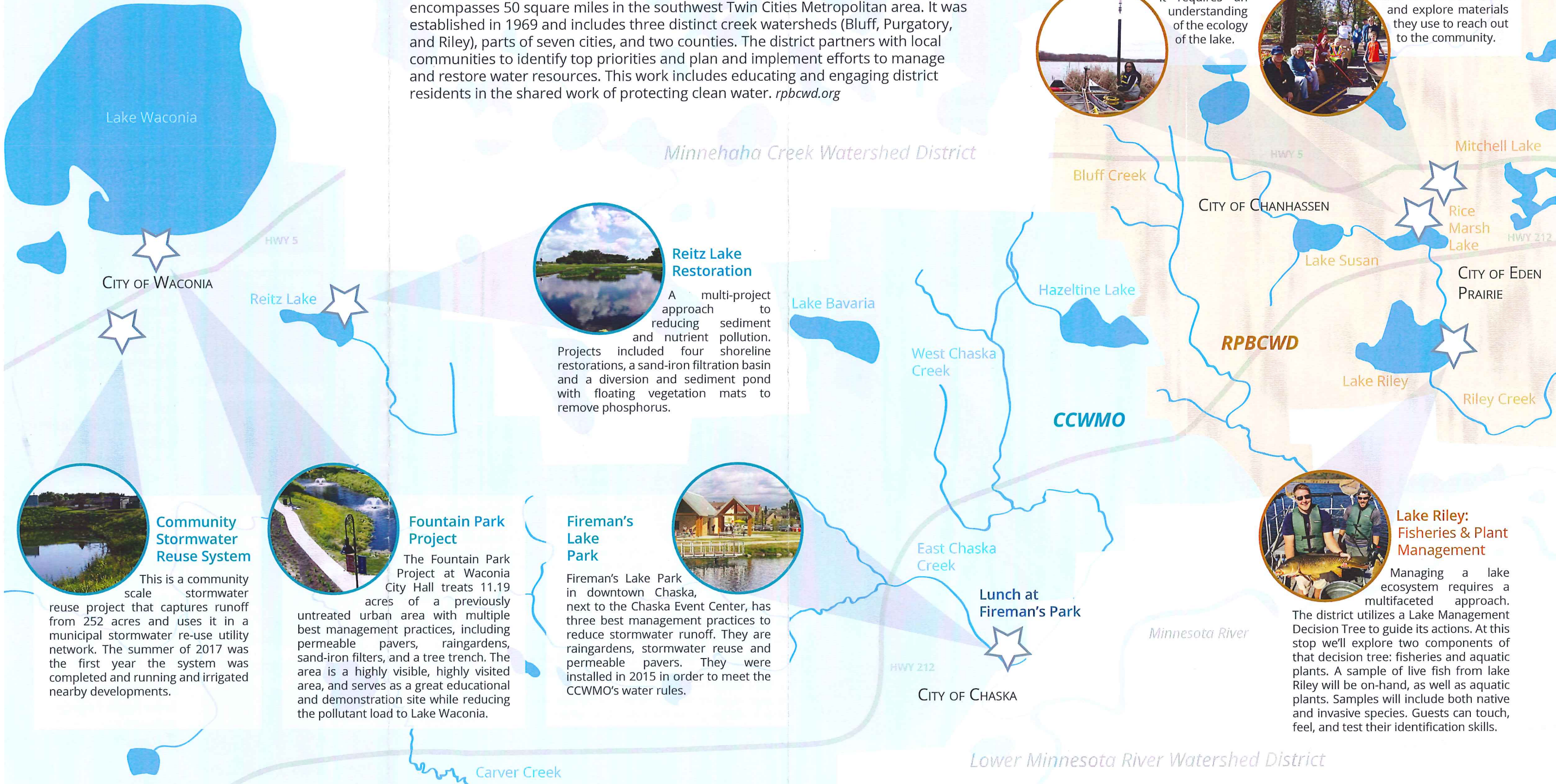
## Rice Marsh Lake: Non-point Source Pollution

Managing a lake ecosystem requires a multifaceted approach. The district utilizes a Lake Management Decision Tree to guide its actions. At this stop we'll discuss non-point source challenges and solutions, including treatment with alum and how it requires an understanding of the ecology of the lake.



## RPBCWD Office: Building Capacity Through Volunteers

The district's volunteer program leverages the power of community members to effect meaningful change. It engages residents in projects that protect and improve water resources, educate the community, and build capacity to do the shared work of protecting clean water. Meet district volunteers and explore materials they use to reach out to the community.



### Reitz Lake Restoration

A multi-project approach to reducing sediment and nutrient pollution. Projects included four shoreline restorations, a sand-iron filtration basin and a diversion and sediment pond with floating vegetation mats to remove phosphorus.



### Fireman's Lake Park

Fireman's Lake Park in downtown Chaska, next to the Chaska Event Center, has three best management practices to reduce stormwater runoff. They are raingardens, stormwater reuse and permeable pavers. They were installed in 2015 in order to meet the CCWMO's water rules.



### Community Stormwater Reuse System

This is a community scale stormwater reuse project that captures runoff from 252 acres and uses it in a municipal stormwater re-use utility network. The summer of 2017 was the first year the system was completed and running and irrigated nearby developments.



### Fountain Park Project

The Fountain Park Project at Waconia City Hall treats 11.19 acres of a previously untreated urban area with multiple best management practices, including permeable pavers, raingardens, sand-iron filters, and a tree trench. The area is a highly visible, highly visited area, and serves as a great educational and demonstration site while reducing the pollutant load to Lake Waconia.



### Lake Riley: Fisheries & Plant Management

Managing a lake ecosystem requires a multifaceted approach. The district utilizes a Lake Management Decision Tree to guide its actions. At this stop we'll explore two components of that decision tree: fisheries and aquatic plants. A sample of live fish from lake Riley will be on-hand, as well as aquatic plants. Samples will include both native and invasive species. Guests can touch, feel, and test their identification skills.

\* \* \* \* \*

# Project and Program Status Reports

\* \* \* \* \*

## Memorandum

**To:** Board of Managers and Staff  
**From:** Tina Carstens and Brad Lindaman  
**Subject:** Project and Program Status Report – July 2018  
**Date:** June 29, 2018

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*Note: This month for the Project and Program Status Report, staff is preparing to walk through each item with an interactive type of presentation. This will include a map to show the locations of the various projects and pictures for those that are active projects.*

### Permit processing, inspection, and enforcement

#### **Permit application inspection and enforcement (Barr project manager: Matt Kumka; Ramsey-Washington Metro Watershed District RWMWD project manager: Nicole Soderholm)**

*The purpose of this program is to provide engineering review and field inspection support to RWMWD staff for permitted best management practices (BMPs) that have been installed in the last several years to verify functionality. On an as-requested basis, Barr reviews previously permitted construction drawings and attends on-site inspections, with an emphasis on underground infiltration systems.*

Barr and RWMWD staff reviewed construction plans based on previously performed inspections for underground infiltration projects. Inspections include determining intended functionality of underground infiltration systems and reviewing appropriate BMP features such as water-level control structures to enable water-level drawdown. Barr assisted in interpreting follow-up comments and plan updates provided by property owners as requested by the RWMWD.

### Project feasibility studies

#### **System-wide evaluation of flood control options/Beltline resiliency study (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Tina Carstens)**

*The purpose of this study is to evaluate system-level flood damage reduction options, including real-time mechanical alteration of Lake Phalen and Keller Lake channel outlet structures, as well as other critical system infrastructure to actively manage stormwater runoff from flood-prone areas tributary to the Beltline storm sewer in an effort to reduce flood levels that would otherwise impact homes. The evaluation will involve using the RWMWD stormwater model to simulate system-level modifications to evaluate how adjustments to outlet structures during a flood event may be able to optimize the existing system performance to reduce flooding impacts on homes adjacent to RWMWD-managed water bodies.*

This period, Barr prepared documentation summarizing the methodology, simulation results, and potential system modifications within the Owasso Basin and Gervais Creek subwatersheds to remove existing structures from the floodplain. As part of the documentation, we developed concept-level, opinion-of-cost estimates for each modification to the stormwater system. Barr estimated the low

**To:** Board of Managers and Staff  
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Page 2

structure elevation based on available topographic information and evaluated modifications to the system model that could potentially lower 100-year flood levels below those that impact habitable structures (i.e., homes and businesses). The first phase of the study appears to produce desired results in reducing flood levels in the Owasso Basin area without an increase to flood levels in the Phalen Chain of Lakes. Therefore, Barr will proceed to the evaluation other parts of the RWMWD in a prioritized, sequential approach once the modeled flood levels of remaining areas are validated with actual rainfall data. Staff expect that confirmation effort to be complete yet this summer.

If the study proves successful, recommendations for actual field modifications will be offered for future capital improvement programming.

**Beaver Lake, Battle Creek Lake and Lake Owasso subwatershed feasibility studies (Barr project manager: Josh Phillips; RWMWD project manager: Paige Ahlborg)**

*The purpose of this project is to evaluate BMP opportunities throughout the Beaver Lake subwatershed. This study is being completed in conjunction with the Lake Owasso subwatershed and Battle Creek Lake subwatershed feasibility studies. These lakes are all considered to be “at risk” for nutrient impairment.*

Barr continued the evaluation of conceptual BMP designs of BMPs at various sites within each of these subwatersheds. A brief narrative of the evaluation and resulting recommendations are being developed in draft reports for each lake and subwatershed. Those result will be offered as consideration for design and construction in 2019. We expect the reports to be complete later this summer or early fall.

**Snail Lake/Grass Lake optimization study and berm raise project (Barr project manager: Brad Lindaman; RWMWD project manager: Tina Carstens)**

*The purpose of this study is to evaluate the potential for optimization of the existing Snail Lake/Grass Lake system (from Snail Lake to Grass Lake to Highway 694), with the goal of lowering flood levels in the system’s water bodies in order to reduce flood risk to habitable structures and lessen impacts to surrounding properties.*

During June, the contractor remobilized to the area and restarted the work. To date (June 27), the pathway has been removed and the installation of the overflow pipe in Gramsie Road is complete. Next, the contractor will complete construction of the emergency overflow swale, berm construction, and then pathway reconstruction. Erin Anderson Wenz and Dave Vlasin will provide an oral update to the Board on July 11.

**Snail, Grass, and West Vadnais Lakes outlet permitting with the Minnesota Department of Natural Resources (DNR) (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Tina Carstens)**

*The purpose of this project is to coordinate permitting efforts for the proposed Snail, Grass, and West Vadnais lakes outlets with the Minnesota DNR.*

This period, Barr began evaluating the changes in shoreline inundation that would occur in Grass Lake, West Vadnais Lake, and East Vadnais Lake, as well as preparing other graphics that will illustrate the



expected changes to these water bodies' water levels in to the future. Barr is preparing to send this information, along with a technical memo, to the DNR in July for consideration of next steps needed to further lower these lakes. Once Barr and RWMWD staff better understand the DNR's requirements, we will be able to update the project cost estimate for Board consideration moving forward.

**West Vadnais Lake to East Vadnais Lake gravity flow feasibility evaluation (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Tina Carstens)**

*The purpose of this study is to understand the feasibility of lowering East Vadnais Lake levels and encouraging subsurface flow by gravity from West Vadnais Lake into East Vadnais Lake in order to reduce flooding in the Grass Lake area of the RWMWD. The scope of the study will give a better understanding of hydrologic dynamics between the connected water bodies, and whether lowering East Vadnais Lake is a sufficient measure to reduce flooding while meeting requirements of all involved stakeholders.*

Barr is proceeding with the water-quality and geotechnical investigations for West Vadnais Lake and the berm separating it from East Vadnais Lake. We contacted St. Paul Regional Water Service (SPRWS) about its current water-quality testing program and received a suite of parameters that SPRWS requires for testing. These have been incorporated into a work plan, and a quote has been received for laboratory testing. Additionally, Barr has started planning for geotechnical soil borings, creating a work plan, and identifying access agreements that need to be obtained. The work will likely be conducted in July or August 2018.

**Modeling of 95-percent confidence limit Atlas 14 district-wide (climate change scenario): flood map generation for future outreach efforts (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Tina Carstens)**

*The purpose of this project is to use measured water surface elevations to verify and fine-tune water surface elevations calculated by the RWMWD stormwater model. Following validation, the model will be used to simulate larger rainfall events, including the 95-percent confidence limit of the 100-year rainfall depth. The confidence limit (or uncertainty) associated with the 100-year flood elevation will be used to develop inundation maps that will allow for evaluation of how future climate change may affect flood inundation areas within the RWMWD, and will be used for discussion with stakeholders when evaluating future flood-risk reduction projects within the RWMWD.*

This period, Barr finished validating the stormwater models for the Gervais Creek, Twin Lake, Willow Lake, Kohlman Creek, Beaver Lake, Tanners Lake, Battle Creek Lake, Battle Creek, Carver Lake, Fish Creek, and Snake Creek watersheds. We started the process of reviewing model results and preparing model documentation. In the next month, we will continue validating the stormwater models for the Phalen Chain of Lakes and the Beltline. When the validation process is complete, the models will be used to simulate design rainfall events to estimate the uncertainty in the 100-year floodplain in addition to testing possible system changes that would improve the Beltline's resiliency (mentioned above)

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**Kohlman weir test system (Barr project manager: Keith Pilgrim; RWMWD project manager: Bill Bartodziej)**

*The purpose of this project is to test new filtration media on a routine basis.*

Material was placed in May, and the first round of monitoring conducted in May. Four different media were placed in the cells: spent lime, spent lime with oxidized iron, limestone aggregate (CC17), and sand/biochar. There was measurable flow through all of the test cells except for the sand-biochar mixture. There is not enough water level difference through the weir to force water through the sand; hence, this type of media will not be useful at this site. Later this year, monitoring data will be evaluated and a technical memorandum with the results, prepared.

**Roseville High School campus stormwater retrofit feasibility study (Barr project manager: Leslie DellAngelo; RWMWD project manager: Paige Ahlborg)**

*The purpose of this project is to evaluate the feasibility of a regional stormwater infiltration or filtration project and other local stormwater infiltration projects at Roseville High School. The school is designing an addition to the southeast end of the building, so the project will also include coordination with Roseville High School and its design engineers to place stormwater BMP retrofits.*

This period, Barr collected additional information from the high school's design engineer (Larson Engineering, Inc.) and architect (LSE Architects, Inc.), including soil borings and a site survey. Next, we will review the information and develop a scope of work for completing the feasibility study.

## **Project operations**

**2017 Tanners Lake alum-facility monitoring (Barr project manager: Meg Rattei; RWMWD project manager: Eric Korte)**

*The purpose of this project is to complete monitoring and reporting required by the general National Pollutant Discharge Elimination/State Disposal System permit for municipal separate storm-sewer systems (MS4).*

The alum facility was restarted in May for the 2018 season. District staff is collecting samples weekly. We have finalized the 2017 reports required by the MS4 permit, and staff will submit these reports to the Minnesota Pollution Control Agency in the near future.

## **Capital improvements**

**Frost/Kennard enhanced water-quality treatment BMP (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Tina Carstens/Paige Ahlborg)**

*The purpose of this project is to prepare plans and specifications, conduct project bidding, and observe construction for the water-quality BMP enhancement retrofit of the existing infiltration basin located on*

**To:** Board of Managers and Staff  
**From:** Tina Carstens and Brad Lindaman  
**Subject:** Project and Program Status Report – July 2018  
**Date:** June 29, 2018

Page 5

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*the parcel owned by the City of Maplewood. The parcel is located in the southwest quadrant of the intersection of Frost Avenue and Kennard Street.*

Construction is nearly complete. The filter remains offline until a backflow preventer and the monitoring equipment are installed. The backflow preventer is included as a part of a change order to be offered at the Board meeting, and will help minimize excessive sediment loads backing up into the filter from the creek, as well as better facilitate monitoring of the outflow from the filter.

Construction is expected to be completed and the monitoring equipment installed in early July or August dependent upon delivery of the specified backflow preventer.

**Wakefield Park/Frost Avenue stormwater project (Barr project managers: Erin Anderson Wenz and Fred Rozumalski; RWMWD project manager: Paige Ahlborg)**

*The purpose of this project is to work with the City of Maplewood and its consultants to develop a site plan that involves stormwater management features with associated educational elements for the northern portion of Wakefield Park.*

Barr recently met with Maplewood parks and engineering staff to present a concept for BMP layout in Wakefield Park. The city was excited about the project and approved the layout of two fairly large infiltration basins within the park. We are set to run a water-quality model of the project, but significant water treatment is expected. The site has very sandy subsoils, so a significant amount of volume control will be accomplished. A feasibility report will be produced by July 13 for city staff to submit to the city council.

**School, commercial, and faith-based sites best management practice retrofit projects (Barr project manager: Matt Kumka; RWMWD project manager: Paige Ahlborg)**

*The purpose of this project is to design, provide bid assistance for, and oversee construction of BMP retrofits on previously identified commercial, school, and faith-based properties throughout the RWMWD.*

Surveying is nearing completion on six sites throughout the RWMWD, including Cornerstone Montessori, Boys and Girls Club Eastside, and Roosevelt Community Center in St. Paul; New Horizon Day Care in Woodbury; House of Prayer Lutheran Church in Oakdale; and the Roseville School District office. These sites were identified with the BMP incentive fund program. Barr is developing concept designs for each of these potential BMPs. Property owners will review the concepts prior to further design to verify complete buy-in to the BMP program, and to offer additional support for outreach and education opportunities within their organizations. It is planned that New Horizon Day Care, House of Prayer, and the Roseville School District office will have BMPs constructed later this fall, while the BMPs on the other sites will be constructed in 2019.

**BMP incentive fund: general BMP design assistance and review (Barr project manager: Matt Kumka; RWMWD project manager: Paige Ahlborg)**

*The purpose of this project is to respond to requests for assistance to find cost-share opportunities from RWMWD partners and to seek out opportunities for cost-share projects throughout the RWMWD.*

Barr continues to update the mobile geographic information system (GIS) mapping program that focuses on underserved communities within the watershed. These areas consist of neighborhoods within the RWMWD that are not well represented in terms of existing water-quality improvement projects, as well as communities of higher diversity and lower incomes. The GIS mapping helped identify several potential BMP projects within the RWMWD's portion of St. Paul, including the Boys and Girls Club Eastside on Ames Avenue. Design development for these sites has moved into the school, commercial, and faith-based sites BMP retrofit project (see above), and work will continue under that task item moving forward. Through another round of site visits based on the mapping efforts, we identified three more commercial sites for BMPs, including warehouse facilities and an office park in Oakdale. The RWMWD is conducting the initial outreach to property owners.

Barr is planning additional site reviews in the coming weeks to identify additional BMP locations.

**Phase 1 implementation from Owasso Basin improvements feasibility study (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Tina Carstens)**

*The purpose of this project is to evaluate flood control options for Owasso Basin and the surrounding area.*

In June, Barr completed its evaluation of alternatives for flood control in and around Owasso Basin. As described last month, we are using the RWMWD XP-SWMM hydrologic and hydraulic model of Grass Lake, Owasso Basin, and surrounding areas to evaluate how much additional storage would be required to keep the 100-year, 96-hour storm event (which was determined to be the critical event for the area) from overflowing the berm along the western edge of Owasso Basin, and from flooding the North Star Estates mobile-home park on the basin's south side. We also evaluated options that would divert flows to other locations without raising the potential for further flooding downstream. Barr created a technical memorandum for the RWMWD that describes the various options and their costs and benefits. This project is linked to the system-wide evaluation of flood control options and Beltline resiliency study, described above. Essentially, this project serves as the first phase of the Beltline resiliency study.

**CIP project repair and maintenance**

**Beltline and Battle Creek tunnel repair construction services (Barr project manager: Nathan Campeau; RWMWD project manager: Dave Vlasin)**

*The purpose of this project is to perform ongoing maintenance and repairs of the Beltline tunnel system to significantly increase the service life of the tunnel.*

During this period, PCi Roads completed punch-list and restoration items. We anticipate that the final contractor pay application will be submitted to the Board at the August meeting.

During the next period, Barr will complete the construction report.

**CIP maintenance/repairs 2018 project (Barr project manager: Greg Nelson; RWMWD project manager: Dave Vlasin)**

*The purpose of this project is to maintain the existing systems and infrastructure owned and operated by the RWMWD and to assist and facilitate stormwater pond cleanouts to allow other public entities to meet their MS4 requirements.*

No additional work was performed during this period, as the contractor has redirected efforts to the Grass Lake berm area. We anticipate that the capital improvement plan 2018 maintenance and repair work will wrap up later in July, after the Grass Lake berm work is complete. Work remains at Battle Creek Lower Ravine Park, and at the West Vadnais Lake pipe upsizing in Vadnais Boulevard and trash rack installation at the I-694 15-inch diameter outlet.

**Natural Resources Update – Bill Bartodziej and Simba Blood**

**Keller and Ponds of Battle Creek Golf Courses**

Our partnership with Ramsey County centering on the restoration and maintenance of substantial natural areas on the golf courses is working out very well. NR staff continues to provide technical services, and Ramsey County Parks and Recreation is funding a shared ecological restoration intern. Many restoration sites on Keller Golf Course are maturing nicely, and thus, we are seeing the number of maintenance hours decline. This mainly has to do with more cover of native vegetation, and less weed invasion. Because of this, we are able to shift a bit more resources into the management of natural areas on the Ponds of Battle Creek Golf Course. The superintendent of the Ponds Course, Justin Zimmerman, is very motivated to create high quality natural areas, using Keller as an example of what can be done. Over the next few weeks, we will be assisting Justin with the seeding of several acres of wetland buffer. These areas are associated with high quality wetlands. We are really happy to see Justin promote this sort of land management, and NR staff be able to work in partnership with the County over the long-term.



*Left: Monarch on swamp milkweed with flowering oxeye in the background.  
Right: Pale purple coneflower is now in full bloom around the watershed – hole 14.*



*Spiderwort in full bloom on hole number 16.*



*The number of butterflies on the course is impactful, even to the casual observer.*



*Superintendent Paul Diegnau said the prairies have never been so stunning.*



*Using fire to prepare a restoration site for native seeding - Ponds of Battle Creek Golf Course.*

## Public Involvement and Education Program – Sage Passi

### WaterFest: A Celebration in the Rain! Going with the Flow!

Implementing an event like WaterFest demands a “village”. Every volunteer slot Debbie Meister envisioned was filled and we had plenty of people to help us pull off this community fest. Junior ROTC members were out in full force. These high school students, dressed in brightly colored turquoise shirts



were everywhere, helping with exhibit set up and take down, assisting in games, passing out Passports, and making sure we were honoring our Zero Waste commitment to mention just a few roles they played. Dozens of local organizations and partners joined in the festivities to create the backbone of this event held on June 2. Thank you to everyone who contributed their time and energy, came to have fun and helped us celebrate the many facets of water.

### L’Etoile du Nord Takes on the Challenge - A Beaver Lake Neighborhood Street Clean-up



To top off their spring Adopt A Drain campaign to encourage their neighbors to the east of their school, to keep their storm drains clean, three L’Etoile du Nord School fourth grade classes “swept” their way through a six block area between Ruth and Edgewater Blvd on June 6, cleaning up organic material (seeds, grass clippings and dirt), plastic and garbage next to all the storm drains on their way to their final destination – Beaver Lake. By the

end of the morning, they had amassed two carloads of organic material that was taken to the Duluth and Case compost site. It was a graphic lesson in measuring the effort it takes to keep this volume of “pollution” from entering storm drains and contributing to the phosphorus level in their neighborhood lake. Thank you to the parents, Master Water Stewards and other volunteers who helped us with this community service learning experience.



## Summer Outreach - A Woodbury Triple Header- Two Rain Gardens and a Dip in a Lake

On June 19, a neighborhood “drop in” night and tour at several rain gardens recently installed in the Woodbury neighborhood was held near Battle Creek Lake. At one of the stops, neighbors gathered at the home of Mitzi Knutzen to see the flowers in bloom in this Master Water Steward capstone rain garden project overlooking Battle Creek.



The Master Water Stewards and staff shared tips about growing native plants and landscaping for water quality, and then moved on to Woodbury Elementary School where we held a “casual” reunion of sorts that gave us an opportunity to witness how the large rain gardens installed this fall are progressing. This event was coupled with a field night for Woodbury kids and parents to learn about water quality through a lake dipping experience at nearby Shawnee Park that was organized by EMWREP staff.



*Lauren Haydon, Washington Conservation District educator prepares macroinvertebrate samples at Battle Creek Lake for families to investigate.*

### **Beaver Lake Neighborhood Celebration - *No rain in sight!***



District 2 Community Council in St. Paul invited RWMWD to partner with them for a picnic and get-together on June 27 at Beaver Lake to get to know the community, provide resources and information about our cost-share program and engage in conversation with neighbors with an interest in installing rain gardens and making their yards more resilient.

On the left, Master Water Steward Chris Strong talked with a neighbor,

Victoria Caprioni, who lives near the lake and learned that she is planning to nominate her yard for a LEAP Award this year. Victoria reported that she has also adopted several storm drains near her yard. LEAP winner Kristi Odland was also on hand to help guide neighbors to our table.

### **Sun Ray Library - A Demonstration Site Provides Training Ground for Urban Roots**

David Woods, Urban Roots Conservation Program Manager helps interns ages 14-18 learn to identify native plants in the Sun Ray pollinator garden adjacent to the east St. Paul Library's parking lot.

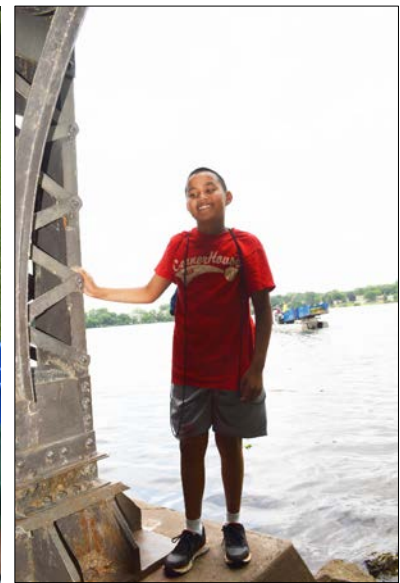


While driving back from Woodbury, Sage Passi, on a whim, decided to stop by and see the pollinator garden she heard about this fall at the Recognition Dinner. "It was a moment of synergy when I drove up and saw the Urban Roots crew working in the garden." I ended up joining in the effort to help these new interns identify plants and do invasive removal.



“The garden is quite beautiful with a lot of diversity. The garden has at least 40 different species.” The library has also installed two rain gardens near its parking lot entrance. Urban Roots youth were responsible for the installation of the pollinator garden and help take care of it. The library uses it for education. Looks like a good site for a LEAP nomination!

### Northeast Youth and Family Services Partners with Watershed on Summer Camp



Northeast Youth and Family Services asked RWMWD to work with them on a summer camp for Roseville youth related to water quality and lake health. During the camp, students learned some basic sampling techniques and made visual observations regarding flora, fauna and pollution to compare the lake quality of three lakes in the area including Lake Phalen, Lake McCarrons and Como Lake. The presence of a harvester on Lake Phalen provided a good teachable opportunity to learn about the relationship between invasive aquatic plants and water quality.

## Communications Update – Chris O'Brien

### Phalen Group Paddle on June 30

To promote outdoor recreation and our Phalen Chain Water Trail Map, we hosted a group paddling event Saturday, June 30. We partnered with Saint Paul Parks and Recreation, which co-hosted the event, featured it in their June newsletter and promoted it to youth in their [Right Track](#) program.



The event generated lots of interest, particularly among Saint Paul youth who don't normally have access to watercraft. The District covered the rental cost of ten Saint Paul Parks canoes, which were reserved quickly with more than 60 people on a wait list.

The event went smoothly thanks to a great lineup of volunteers, and the weather was clear and calm (albeit hot and muggy). While we ended up with less participants than expected, possibly due to the heat, we still had an enthusiastic group paddling from Phalen Beach, through Round Lake to Keller Creek and back. Several paddlers remarked they had no idea there was so much scenic water to explore outside of the main lake.

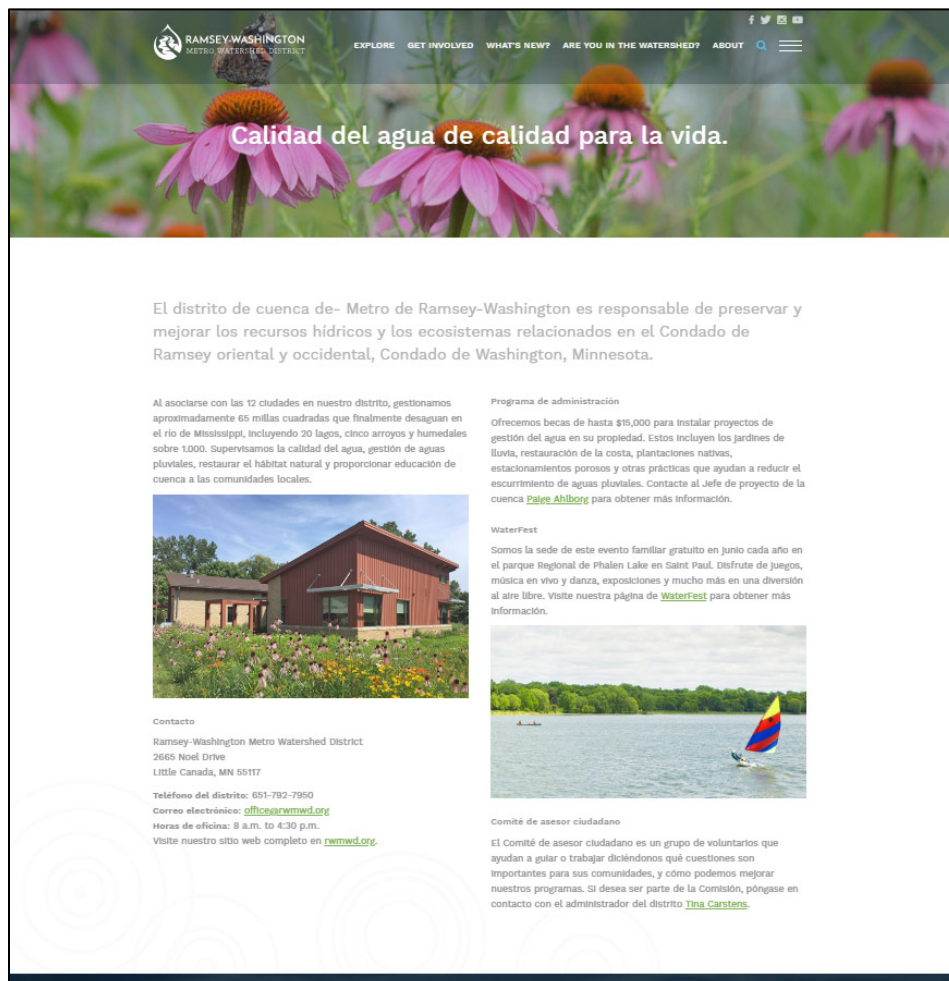
## Stewardship Grant Program outreach to East Side businesses

As part of our equity initiative, we developed and delivered a presentation to the East Side Area Business Association at their monthly meeting on June 12. This was an opportunity to engage with Saint Paul business owners, provide background on our watershed district, and explain how they could apply for stewardship grants to improve their properties.

Parking lot improvements were of particular interest to several business owners, and site visits have since been conducted at two East Side properties. The goal is identify those sites where porous pavement, tree trenches, rain gardens or other projects could help alleviate drainage issues and increase water infiltration.

## Website enhancements

We are close to launching multilingual “microsite” pages, which will provide basic information about the District in Spanish, Hmong, Somali and Karen languages. In addition, we will have an animated feature on the homepage that rotates our “Quality water for quality life” tagline through several languages and then back to English. The goal is to make the site welcoming to the immigrant populations we serve.



Also new on the website, an overview of the planned [Willow Pond](#) spent lime filter is up on our “Current Projects” section. We’ll continue to add detail and photos as this project moves along.

On the homepage, we added a callout for Landscape Ecology Award Program (LEAP) nominations, plus a featured link to the new “Getting to Know Shallow Lakes” video.

### Wakefield Lake video

The City of Maplewood released a [video](#) on the new Wakefield Lake spent lime filter, featuring interviews with District staff and Erin Anderson Wenz from Barr Engineering. We worked closely with their communications team to coordinate video footage, and then promoted the video through our website, email list and social media channels.

### Owasso Carp update

With information from Bill and the Natural Resources team, we posted a detailed update on [Lake Owasso Carp management](#) June 12. This included a recap of last season’s population survey, carp tracking and netting, along with the installation of carp barriers this spring. This follows the *Star Tribune* story we coordinated on carp management that ran in May.

### Other highlights

Our top social media post in June was a Facebook video of aquatic plant harvesting on Lake Phalen, which reached 500 people.

**Ramsey-Washington Metro Watershed District**  
Published by Chris O'Brien [?] · June 20 at 2:44 PM · 🌐

If you've been out to [Lake Phalen](#) lately, you may have seen this beast of a machine harvesting aquatic plants. We met with [Saint Paul Natural Resources](#) last week to map out target areas for removing invasive species around access points and other recreational areas while avoiding stands of native plants.

500 people reached

265 Views

Boost Post

To: Board of Managers and Staff  
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Lillie News published a [gallery of photos](#) from WaterFest featuring some great shots taken by Anita Jader.



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Home >

# GALLERY: Watery WaterFest

The annual WaterFest, put on by the Ramsey-Washington Metro Watershed District, was a bit soggy on a rainy June 2 at Lake Phalen, but what's a WaterFest without a little extra water? There were plenty of activities happening inside the Lakeside Pavillion at Lake Phalen Regional Park: card-making, meeting creatures with the Minnesota Herpetological Society and getting up close and personal with macroinvertebrates. There were lots of activities outside as well like learning how to paddle with Wilderness Inquiry and taking pond samples. Photos courtesy of Anita Jader Photography

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# Informational Items

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## Soil & Water Conservation division to join Parks & Recreation department

The Ramsey County Board of Commissioners voted today to approve the final administrative actions necessary to proceed with the transfer of duties and authorities of the Ramsey Conservation District to the Ramsey County Board of Commissioners.

The action follows Governor Dayton's signing of [legislation](#) on May 19 to discontinue the Ramsey Conservation District and transfer assets, contracts and employees to Ramsey County.

"We thank the legislature – especially sponsors Representative Fenton and Senator Laine – and Governor Dayton for taking action to transfer the duties of the Ramsey Conservation District to the Ramsey County Board of Commissioners," said Ramsey County Board Chair Jim McDonough. "We are confident that we have the long-term organizational stability and resources to continue and expand the valuable programming and services that the skilled Conservation District staff provide to our community. We also look forward to continuing coordination with the Board of Water and Soil Resources and appreciate their assistance and support."

The transfer effective date is July 1, 2018.

In preparation, Ramsey County assembled a multi-department team - including Ramsey Conservation District employees - to work collaboratively to integrate Conservation District functions into the county's organizational structure. The outcome of that process is for the Ramsey Conservation District to become the Soil & Water Conservation division of the Parks & Recreation department. Both groups have a natural resource-based mission which aligns well with the county's goal of environmental stewardship.

The Conservation District conserves and enhances natural resources by providing technical, financial, and educational support to residents, property owners, and state, local, and federal governmental agencies and environmental organizations. All Conservation division staff will continue working from the current Arden Hills office location.

Jon Oyanagi, [Parks & Recreation](#) Director, said, "We welcome the addition of this important work to the parks department and anticipate a smooth transition for the team. Most importantly, the mission and workplan will continue uninterrupted and we are fully committed to effective water and related land resource management within the county."

Partners, including the Board of Soil and Water Resources and Minnesota Association of Water Conservation Districts, will continue to work with the same employees during this transition. The Parks & Recreation department oversees Ramsey County's 6,500 acres of parkland and recreational facilities, manages natural resources and facilitates recreational programming.

**Contact:** [John Sigveland](#), Public Communications Director, 651-746-9250.