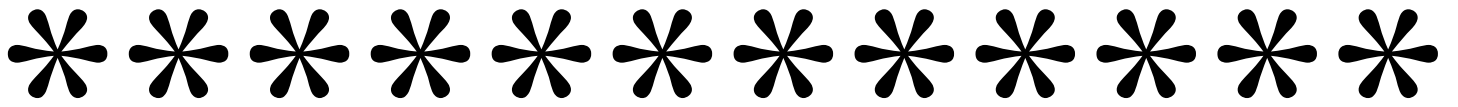




**RAMSEY-WASHINGTON**  
METRO WATERSHED DISTRICT

# **June 2018**

# **Board Packet**



# Agenda





## **Regular Board Meeting Agenda**

Wednesday, June 6, 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 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
4. **Treasurer’s Report and Bill List**
5. Visitor Presentations
6. Permit Program
  - A. Applications
    - i. **18-10 Maplewood 2018 Street Improvement Project**
    - ii. **18-11 Whistler Pines, Shoreview**
    - iii. **18-12 Panera Bread – Maplewood**
  - B. I-694 and Rice Street Wetland Mitigation Discussion
  - C. Enforcement Action Report
7. Stewardship Grant Program
  - A. Applications
    - i. **18-11 CS Lake Phalen Aquatic Vegetation Harvesting**
  - B. Budget Status Update
8. Action Items
  - A. **Stormwater Pollution Prevention Plan Annual Report and Meeting**

9. Administrator's Report
  - A. Meetings Attended
  - B. Upcoming Meetings and Dates
  - C. July Meeting Date Change Reminder
  - D. Washington County Meeting Update
  - E. 3M Settlement Working Group
10. Project and Program Status Reports
  - A. Presentation: 2017 Water Quality Summary – Eric Korte
  - B. New Project Memo: Maplewood Mall Green Infrastructure Assessment
  - C. New Project Memo: Impact of Removal of Accumulated Sediment from Wakefield Lake on Lake Phalen Water Quality
  - 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
    - 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
    - xvii. Natural Resources Program
    - xviii. Education 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  
May 2, 2018**

The Regular Meeting of May 2, 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  
Nicole Soderholm, Permit Inspector  
Bill Bartodziej, Natural Resource Specialist  
Viet-Hanh Winchell, Attorney for District  
Bruce Copley, Crestview Addition Resident  
Ashley Payne, Kimley-Horn  
Amy Thomas, Snail Lake Resident

Paige Ahlborg, Project Manager  
Brad Lindaman, Barr Engineering  
Erin Anderson Wenz, Barr Engineering  
Dave Vlasin, Water Quality Technician  
Chris O'Brien, Communications Coordinator  
Carol Stadler, Snail Lake Resident  
Steve LaBerge, Crestview Addition Resident

**1. CALL TO ORDER**

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

**2. APPROVAL OF AGENDA**

Tina Carstens requested to add an item under the Administrator's Report, Item E, to discuss upcoming meeting dates.

Motion: Dianne Ward moved, Dr. Pam Skinner seconded, to approve the agenda as amended. Motion carried unanimously.

**3. CONSENT AGENDA**

A. Approval of Minutes from April 4, 2018

Manager Ward noted on page two, under the Stewardship Grant Program, it should state, "...~~homeowner~~ District could advertise in their association newsletter to alert other homeowners to the project and advertise the District program. She also noted that signage would be helpful."

Motion: Dianne Ward moved, Dr. Pam Skinner seconded, to approve the consent agenda as amended. Motion carried unanimously.

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

Motion: Dr. Pam Skinner moved, Cliff Aichinger seconded, to approve the May 2, 2018, bill list as submitted. Motion carried unanimously.

**5. VISITOR PRESENTATIONS**

Bruce Copley stated that the residents around Suzanne Pond have concern with putting a pipe in from North Gramsie Pond to Suzanne Pond, although recognize the benefits and support that element. He stated that they would like to see a written agreement that the City of Shoreview would maintain the level of 873. He stated that if a bigger pump is needed, they would like to see more details and have that happen. He stated that there were concerns with potential leakage from East to West Vadnais. He stated that it is the residents' belief that getting West Vadnais to 881 would be ideal. He asked the role of decreased well pumping by St. Paul Regional Water Supply (SPRWS) on the groundwater levels. He stated that the models in the proposal show that at certain starting levels there is no problem with the backdoor route through the Crestview Addition and homes near Snail Lake. He noted that the current starting level is 884.5. He stated that if there were a high-water event this weekend, a home on Snail Lake would be flooded. He asked what would happen if Snail Lake does not drop as the District believes that it will. He confirmed that he has given a copy of his comments to the District staff.

**6. PERMIT PROGRAM**

**A. Applications**

Permit #18-08: Shoreview 2018 Street Improvement Plan – Shoreview

Nicole Soderholm noted that this is a street improvement project in Shoreview. Manager Skinner asked if the District is reviewing whether there are opportunities to treat additional water in these road construction projects. Nicole stated that staff does look for opportunities and provided an example of a project that was completed the previous year in a high priority area. President Ebensteiner asked if the rain gardens were included in the original scope of the project. Paige Ahlborg stated that is part of the cost-share program and noted that with the smaller projects there is not a lot of opportunity.

Motion: Dr. Pam Skinner moved, Cliff Aichinger seconded, to approve Permit #18-08. Motion carried unanimously.

Permit #18-09: Keller Golf Course Practice Range Improvements – Maplewood

Nicole Soderholm provided details on the realignment project for the practice range. She stated that there are limited drainage areas for impervious surface. She noted that the filtration basin is oversized, and banked credits will be used for the remainder. She noted that Bill Bartodziej has offered to consult on the plantings.

Motion: Cliff Aichinger moved, Dianne Ward seconded, to approve Permit #18-09. Motion carried unanimously.

Permit #18-03 WCA: Nature Path Extension – Woodbury

Nicole Soderholm stated that this is a unique case in which a wetland replacement plan is not bundled with a project. She stated that this decision is solely on the replacement plan and would allow the developer to move ahead on the next steps. She stated that the project was first introduced one year ago to gain input from the Board on the mitigation requirements and noted that the Board stated that the project would require on-site replacement, or replacement within the watershed to follow the District's policy on no net loss of wetlands. She stated that the proposed design meets the two-to-one replacement ratio and the other District requirements. She noted that various other agencies have reviewed this plan and the Technical Evaluation Panel (TEP) has met to review the plan. She advised that the comment period has expired, and the comments will be incorporated. She stated that if this is approved, there would be subsequent permit applications for the road construction and project permit. President Ebensteiner asked whether the area would be aesthetically pleasing and whether the path would be accessible to the public. Ashley Payne, Kimley-Horn, provided details on the proposed plantings that would be used. She noted that this would be a road extension, as Nature Path is the name of the road. Manager Aichinger asked, and received confirmation, that the depressions would also serve as wetland area and would be accounted for.

Motion: Cliff Aichinger moved, Dianne Ward seconded, to approve Permit #18-03 WCA. Motion carried unanimously.

B. Monthly Enforcement Report

During April, seven notices were sent to address: install/maintain inlet protection (1), install/maintain perimeter control (1), install/maintain construction entrance (1), stabilize exposed soils (1), contain liquid/solid wastes (1), and install/maintain energy dissipation (2).

**7. STEWARDSHIP GRANT PROGRAM**

A. Applications

Permit #18-06 CS: Margaret Street Project – Rain Gardens

Paige Ahlborg stated that the City of St. Paul is doing a mill and overlay and is not required to meet the volume reduction standards. She stated that the District and the city collaborated and currently have five interested homeowners that would like rain gardens. She stated that there are Master Water Stewards lined up to assist.

Motion: Dianne Ward moved, Cliff Aichinger seconded, to approve Permit #18-06 CS. Motion carried unanimously.

Permit #18-07 CS: Willowbrook Reserve – Native Habitat Restoration

Paige Ahlborg stated that this is a native habitat restoration project and these funds will count as a match for the DNR grant that the applicant has been awarded.

Motion: Dr. Pam Skinner moved, Dianne Ward seconded, to approve Permit #18-08 CS. Motion carried unanimously.

Permit #18-08 CS: Wakefield Park Improvements – Rain Garden

Paige Ahlborg stated that this is more work for Wakefield Park project, noting that the funding will be used to add nicer, more native vegetation in the required rain garden and will also add another smaller rain garden.

Motion: Dr. Pam Skinner moved, Cliff Aichinger seconded, to approve Permit #18-09 CS. Motion carried unanimously.

B. Budget Status Update No additional comments.

**8. ACTION ITEMS**

A. Grass Lake and Snail Lake Optimization Study

Brad Lindaman stated that the purpose of the presentation tonight is to summarize what has been done thus far, update the Board on the cost versus benefit of the various options, discuss the recommendations with the Board, and seek approval from the Board for a path forward. The presentation is located on the District's website titled, "May Presentation on Snail and Grass Lake".

Brad provided background information on Snail Lake and the potential flooding concerns. He stated that the wet cycle continues with precipitation levels, and Snail Lake is responding accordingly with higher levels. He reviewed information on the low home survey that was completed. He provided data on a chart that includes data and the impact that a 100-year, 96-hour storm event would have depending on the starting elevation. Erin Anderson Wenz provided additional details on the chart that attempts to answer the question "what if the 100-year storm event happened today". She stated that the purpose of the chart is to show what would happen if the storm occurred at different beginning water levels. President Ebensteiner stated that it appears that only one home on Snail Lake would be impacted. Erin confirmed that one home on Snail Lake would be impacted under the most extreme circumstances. And if the water reached the 887.9 elevation, the water would travel through the backdoor route



into the Crestview Addition. Brad identified the backdoor route that is the primary overflow and then identified the secondary overflow which travels into wetland A. This overflow priority would be switched as part of an emergency response plan for the area.

Brad and Erin gave an overview of the three options evaluated to manage the Snail Lake area. Option 1: Implement Emergency Response Plan. Option 2: Add a Snail Lake outlet to Grass Lake after more storage is available in West Vадnais Lake. Option 3: Pump Snail Lake water to Sucker Lake.

Recommendations to the board include: partnering with the city of Shoreview to prepare and implement an emergency response plan for Snail Lake including a diversion of Snail Lake overland overflow from the Crestview Addition to Wetland A and further exploring a partnership with the city and county to install an off-peak drawdown pipeline that connects Snail Lake to Grass Lake.

Brad provided background information on Wetland A and discussed the request from the county to work with the District on determining future placement of trails throughout the park system based on the modeling that has been done. Brad noted that staff will provide the recommendations and ultimately the decision will be of Ramsey County. Manager Swope asked the responsibility of Shoreview towards the water coming into wetland A. Brad stated that Shoreview would not factor in much for this element and provided additional details. He stated that if they can further minimize Grass Lake water overflowing into this area, the wetland handles the water pretty well on its own. Staff recommendation is to provide guidance to the county regarding water levels in Wetland A to inform future placement of trails.

Brad next moved on to Grass Lake with the following management options discussed: do nothing further or lower West Vадnais Lake's 15 inch outlet under Highway 694 to elevation 881.

He stated that East Vадnais has been operating at a higher level than the targeted level. Erin noted that Grass and West Vадnais lakes roughly coordinate in water levels, but in past years Grass Lake is much lower than both East and West Vадnais Lakes. She provided data on the modeling that was done for the do-nothing further scenario, assuming that precipitations levels remain constant for the next three years. She stated that under that do-nothing further scenario, in the second year when the water rises above 884, water would flow from Grass Lake north into the parkland south of Gramsie Road. She then compared that data to the scenarios in which the lower 15-inch pipe under 694 is installed and the scenario that the lower pipe under 694 pipe is installed in addition to the Snail Lake outlet at 882 elevation. Manager Ward asked if there has been a correlation when SPRWS was pumping groundwater. Erin stated that they do have the data and it does appear to correlate but it is not an option for SPRWS to continue to pump from those wells.

She noted that there could be a substantial change in the shoreline for Grass and West Vадnais with the lowering of the outlet and therefore an EAW would be required. She stated that nothing seemed impossible but there were additional steps identified. Brad stated that a key piece of permitting would be to gain agreement from the majority of the property owners on both waterways. Manager Ward asked if the shoreline would be changed that much since the water levels have been so high, noting that perhaps the water levels would be better match the typical level for the lakes. Erin stated that the ordinance high water (OHW) mark would be used. She stated that about one to 1.5 feet of shoreline could be impacted. She explained how the acreage difference would be determined.

Manager Skinner noted that some of these projects will require a lot of staff time and therefore it would be helpful to see those additional costs, above the engineering and design costs. President Ebensteiner noted that the \$40,000 is just for the pipe and therefore there would be additional costs associated with that option. Brad stated that staff will continue to discuss the option with the DNR to determine what the additional costs would be. He noted that staff was able to gain some additional information on the steps that would be necessary to move

forward with that option after meeting with the DNR yesterday but explained that staff would continue to gain information on the costs.

Manager Aichinger stated that staff is simply recommending that the Board take the next steps on some of these options and that may not necessarily mean the actual project goes forward. Manager Skinner confirmed that the next steps would simply be to talk to the other parties involved and then bring that information back to the Board to continue discussions. Brad confirmed that this would simply start down the recommended paths and the Board could stop at any time. He stated that for Grass Lake, staff would recommend continuing to pursue lowering the 15-inch pipe under 694 with the DNR and VLAWMO.

Erin provided details on the lake levels for Grass Lake, West Vadnais Lake, and East Vadnais Lake. Brad noted that one study looked at a pumping system, which would be a very expensive option that would have capital costs, operational concerns, and water quality concerns. He stated that staff would not recommend that option. He stated that perhaps the District could promote infiltration from West Vadnais, through the berm, into East Vadnais. He noted that water quality would still remain as a concern. He stated that there is a really aggressive water quality goal for East Vadnais that is not met by West Vadnais. He noted that SPRWS does a lot of treatment to the water of East Vadnais. Manager Ward asked if the District should be concerned with the water quality of West Vadnais anyways because it is dirty water that is traveling into the District's watershed. Tina noted that she has spoken with staff at VLAWMO. She stated that the waterbody is listed on the impaired waters list and there is an improvement planned in the next five years. Brad stated that in respect to the draw down time staff would recommend continuing to pursue further lowering of East Vadnais below West Vadnais with the SPRWS; and to complete the proposed scope of work – West Vadnais Lake to East Vadnais Lake Gravity Flow – Feasibility Evaluation per scope summary. He stated that this could inform the added need to have SPRWS operate in a different way. He stated that the study would be important in informing a number of other options. President Ebensteiner stated that it would make sense to move forward on the study in order to inform other decisions. Tina noted that a lot of the paths will be concurrent, rather than waiting for the study to be complete.

Staff recommendations include continuing to pursue the lowering of East Vadnais Lake to the elevation of West Vadnais Lake with the St. Paul Regional Water Services and complete a scope of work to gravity flow water underground from West to East Vadnais Lake.

Next Brad moved on to North Gramsie Pond and reviewed the conclusions from the pumping study that was done the previous year. He reviewed the recommendations which include partnering with the City of Shoreview to install a pipeline at elevation 877 with a manual gate valve to link the North Gramsie Pond to Suzanne Pond. He then displayed a summary table of the recommendations as listed in the packet.

He stated that, if approved, the next steps would include meeting with the City of Shoreview and the County to discuss potential partnering and cost implications associated with the recommended options; preparation of ERPS for Snail and Grass Lake and seek formal agreements by the City of Shoreview to implement; make formal request to SPRWS to operate East Vadnais Lake at 881.0 for interim; prepare scope of work for information and studies and discuss with DNR; and conduct seepage study per scope of work in handout.

Motion: Dr. Pam Skinner moved, Cliff Aichinger seconded, to direct staff to continue with the recommended actions. Motion carried unanimously.

Further discussion: Manager Ward noted that staff should keep in mind that there has been discussion that certain elements should occur first, before other elements. She also wanted to ensure that there are firm agreements in place with Shoreview to ensure that everyone is keeping up their maintenance responsibilities. President Ebensteiner noted that the proposed action does not include construction of any of the projects and simply moving down the paths to gain additional information.

Manager Aichinger asked the responsibility breakdown between the District and Shoreview for the pump for Suzanne Pond. Brad stated that he is unsure that the District would have a role in building that pipe. President Ebensteiner stated that the role of the District has not firmly been identified. She stated that the role of the District initially was to protect the one home at risk. Tina stated that the role of the District has changed throughout the process as this would build more resiliency into the watershed in that area overall. She stated that the recommendations outline the role of the District and where partnering is suggested that would define the role of the other entities.

Erin stated that the next logical steps would include the sequencing defined in the recommendation. She noted that other steps would follow after these recommended actions. Manager Aichinger stated that it would help to see a flowchart of actions that would occur following certain steps. President Ebensteiner stated that she is concerned that there is no real cost estimate for these actions. Brad noted that is why the process has moved slowly and knowledgeable so that at any time the Board can stop. Manager Skinner stated that it would be nice to keep a running total that includes the costs thus far, the cost for staff time and the additional elements. She noted that it would be helpful to have similar costs for other projects for comparison. President Ebensteiner stated that she is concerned with cost because this is just one project. Manager Aichinger noted that the big-ticket items have been weeded out and are not continuing.

**B. Review and Accept the 2017 District Annual Financial Audit**

Motion: Dr. Pam Skinner moved, Cliff Aichinger seconded, to accept the 2017 Annual Audit Report. Motion carried unanimously.

**C. Floodplain Modeling and Mapping Grant Agreement, Resolution 18-01**

Tina Carstens stated that there is no financial obligation for this request.

Motion: Cliff Aichinger moved, Dr. Pam Skinner seconded, to approve the grant agreement and adopt Resolution #18-01. Motion carried unanimously.

**9. ADMINISTRATOR'S REPORT**

A. Meetings Attended No comments.

B. Upcoming Meetings and Dates No comments.

**C. Washington County Meeting – May 21, 2018**

Tina Carstens reminded the Board about the joint meeting with Washington County.

**D. MAWD Summer Tour**

Tina Carstens asked the Board to respond if they are able to attend the tour.

**E. Discuss Upcoming Meeting Dates**

Tina Carstens proposed that the July 4, 2018, meeting be moved to July 11, 2018. She confirmed the consensus of the Board to change the meeting date. She stated that the October meeting date falls on a date that she will be attending an out-of-state conference and recommended changing the October meeting to October 10, 2018. She confirmed the consensus of the Board.

**10. PROJECT AND PROGRAM STATUS REPORTS**

**A. Ongoing Project and Program Updates**

- i. Beltline Resiliency Study
- ii. At Risk Subwatershed Feasibility Studies
- iii. Snail Lake and Grass Lake Study and Berm Raise Project
- iv. Snail, Grass and West Vadnais Lakes Outlet Permitting
- v. District Wide Atlas 14 Modeling
- vi. Wakefield Park/Frost Avenue Project
- vii. Targeted Retrofit Projects
- viii. Owasso Basin Improvements
- ix. Beltline/Battle Creek Tunnel
- x. CIP Maintenance/Repair 2018
- xi. Frost/Kennard Project
- xii. Willow Pond CMAC Project
- xiii. New Technology Report
- xiv. Natural Resources Program
- xv. Education Program  
Update on Solar Project

Tina Carstens stated that staff met with the contractor on site to talk about staging for the solar project. She stated that the engineering review found damage to the shingles. She stated that the adjuster for the insurance company is coming to look at the shingles the following day to determine if the District would have a claim and could have roof replacement prior to the solar installation.

Tina Carstens referenced Change Order #2 for the Grass Lake Berm. Brad Lindaman noted that this time extension is due to the road restrictions which were placed on the road. He stated that it is a reasonable request and would extend the completion date to the end of May. He noted that the contractor must also submit a water control plan.

Motion: Cliff Aichinger moved, Dianne Ward seconded, to approve Change Order #2 for the Grass Lake Berm Project. Motion carried unanimously.

President Ebensteiner stated that at some time she would like to devote some meeting time to reviewing the items on the report one-by-one to ensure that everyone is up to date.

Lawrence Swope referenced an article on the District's carp program that was featured in the *Star Tribune*. President Ebensteiner stated that it would be nice to have an article written on the tunnel project as well. Chris O'Brien stated that he could reach out in attempt to have an article written.

Tina Carstens stated that the Freshwater Society event was the previous week and noted that the District received an award. Chris O'Brien noted that the District will receive an award on May 17 for the redesign of the website.

**11. INFORMATIONAL ITEMS** No additional comments.

**12. REPORTS OF MANAGERS** No additional comments.

**13. ADJOURN**

Motion: Dr. Pam Skinner moved, Dianne Ward seconded, to adjourn the meeting at 9:03 p.m. Motion carried unanimously.

Respectfully submitted,

Dr. Pam Skinner, Secretary

# Consent Agenda Item

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**Board Meeting Date:** June 6, 2018

**Agenda Item No.:** 3B

**Preparer:** Tina Carstens, Administrator

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**Item Description:** Change order #1 for the CIP Maintenance and Repair Project 2018

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**Background:**

Attached is change order #1 for the 2018 CIP Maintenance and Repair Project. This change order is for a contract completion extension request from the contractor. Due to unfavorable weather related conditions this spring, the Contractor could not complete some specific site work items within the contract time.

On May 15, Barr discussed project delays with the contractor, Fitzgerald Excavating & Trucking. The contractor stated that in addition to the weather conditions, other commitments had delayed them recently, and that they plan to restart the work immediately. The contractor said that they will send a revised estimated schedule by May 17. To date, we have not received anything; however, construction has resumed in recent weeks, and is progressing well on most sites. Work remains at South Vadnais Boulevard and at the 15-inch pipe serving as the outlet from the Grass Lake system. Work in Battle Creek Ravine Park also remains. A change order to extend the contract time to June 15, 2018, is attached.

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**Applicable District Goal and Action Item:**

**Goal: Manage risk of flooding:** The District will reduce the public's risk to life and property from flooding through programs and projects that protect public safety and economic well-being.

**Action Items:** Maintain District flood storage facilities and storm sewer systems.

**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:** Maintain District water quality improvement projects and consider opportunities to support the maintenance activities of others.

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**Staff Recommendation:**

Approve Change Order #1.

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**Financial Implications:**

This request does not change the contract price at this time.

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**Board Action Requested:**

Approve Change Order #1.

**Change Order No. 1  
Ramsey-Washington Metro Watershed District  
Capital Improvement Project Maintenance/Repair 2018**

**DATE OF ISSUANCE:** May 30, 2018

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

**Contractor:** Fitzgerald Excavating & Trucking, Inc.  
21432 350<sup>th</sup> St.  
Goodhue, MN 55027  
Attn: Jason Fitzgerald

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

**C.O.1.A      Contract Completion Extension**

Description of Change:

Due to unfavorable weather related conditions this spring, the Contractor could not complete some specific site work items within the contract time. The Owner is extending the final completion time in the contract to allow the contractor to execute the proposed work, in a timely manner.

Measurement and Payment:

Not Applicable


**Change in Contract Time:**

Final Completion Date is revised to be June 15, 2018.

**Total Impact on Contract Price:**

None

This Change Order No. 1 is:

Submitted By:  \_\_\_\_\_ Date: May 30, 2018  
(ENGINEER) Bradley J. Lindaman, Project Engineer  
Barr Engineering Company

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

Approved By: \_\_\_\_\_ Date: \_\_\_\_\_  
(CONTRACTOR) Jason Fitzgerald, President  
Fitzgerald Excavating & Trucking, Inc.



# Consent Agenda Item

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**Board Meeting Date:** June 6, 2018

**Agenda Item No.:** 3C

**Preparer:** Tina Carstens, Administrator

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**Item Description:** Change order #1 for the Frost/Kennard Spent Lime Filter

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**Background:**

Attached is change order #1 for the Frost/Kennard Spent Lime Filter Project. This change order is for a contract completion extension request from the contractor. Due to conditions beyond the control of the Contractor; all work items could not be completed within the contract time. The extension of the final completion time in the contract is to allow the contractor to order, furnish, and install an anti-backflow check valve called a "Plug 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 early June.

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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 #1.

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**Financial Implications:**

This request does not change the contract price at this time.

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**Board Action Requested:**

Approve Change Order #1.

**Change Order No. 1  
Ramsey-Washington Metro Watershed District  
Frost/Kennard Stormwater Filter**

**DATE OF ISSUANCE:** May 30, 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: Luke Minger

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

**C.O.1.A Contract Completion Extension**

Description of Change:

Due to conditions beyond the control of the Contractor; all work items could not be completed within the contract time. The Owner is extending the final completion time in the contract to allow the contractor to order, furnish, and install an anti-backflow check valve called a "Plug Valve". The valve is needed to reduce backflows into the filter, which cause sediment to degrade the filter performance.

The additional work associated with the "Plug Valve" will be described in a future change order once pricing is finalized.

Measurement and Payment:

Not Applicable

**Change in Contract Time:**

Final Completion Date is revised to be August 21, 2018 to accommodate the delivery time and installation of the "Plug Valve".

**Total Impact on Contract Price:**

None

This Change Order No. 1 is:

Submitted By:  
(ENGINEER)



Bradley J. Lindaman, Project Engineer  
Barr Engineering Company

Date: May 30, 2018

Authorized By:  
(OWNER)

Marj Ebensteiner, President  
Ramsey-Washington Metro Watershed District

Date: \_\_\_\_\_

Approved By:  
(CONTRACTOR)

Luke Minger, President  
Minger Construction Co., Inc.

Date: \_\_\_\_\_

# Consent Agenda Item

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**Board Meeting Date:** June 6, 2018

**Agenda Item No.:** 3D

**Preparer:** Tina Carstens, Administrator

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**Item Description:** Washington County Metro Watershed Based Funding Memorandum of Agreement (MOA)

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**Background:**

As we've discussed in the past, the district will be receiving Clean Water funding from the state through our two counties for the metro watershed based funding program. In Washington County, an MOA has been developed as part of that process. The agreement's purpose is to agree on the funding distribution of the pilot program in Washington County as well as solidify our desire to continue to work collaboratively with the county and neighboring watersheds.

This agreement is between Washington County, Washington Conservation District, and the eight watershed organizations. See the attached agreement.

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**Applicable District Goal and Action Item:**

**Goal: Manage effectively:** The District will operate in a manner that achieves its mission while adhering to its core principles.

**Action Items:** Coordinate management efforts and collaborate with local and state agencies and governments to promote the efficient use of resources.

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**Staff Recommendation:**

Approve the MOA and authorize board president and administrator to sign.

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**Financial Implications:**

There are no financial implications to this agreement.

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**Board Action Requested:**

Approve the MOA and authorize board president and administrator to sign.

**WASHINGTON COUNTY METRO WATERSHED BASED FUNDING  
MEMORANDUM OF AGREEMENT**

This agreement (Agreement) is made and entered into by and among:

Washington County, by and through its Board of Commissioners (referred to as the County);

The Washington Conservation District, by and through its Board of Supervisors (collectively referred to as the WCD);

The Brown's Creek, Carnelian Marine St. Croix, Comfort Lake Forest Lake, Ramsey Washington Metro, Rice Creek, South Washington and Valley Branch Watershed Districts, each by and through its Board of Managers (collectively referred to as the Watershed Districts); and

The Middle St. Croix, Joint Powers Watershed Management Organizations, each by and through its governing board (referred to as the Watershed Organization),

(Altogether, the County, WCD, Watershed Districts and Watershed Organization are collectively referred to as the "Parties.")

**WHEREAS**, the County is a political subdivision of the State of Minnesota, with authority to carry out environmental programs and land use controls, pursuant to Minnesota Statutes Chapters 373 and 375, and as otherwise provided by law;

**WHEREAS**, the WCD is a political subdivision of the State of Minnesota, with statutory authority to carry out erosion control and other soil and water conservation programs, pursuant to Minnesota Statutes Chapter 103C and as otherwise provided by law;

**WHEREAS**, the Watershed Districts are political subdivisions of the State of Minnesota, with statutory authority to carry out conservation of the natural resources of the state by land use controls, flood control, and other conservation projects for the protection of the public health and welfare and the provident use of the natural resources, pursuant to Minnesota Statutes Chapters 103B, 103D, 103E and as otherwise provided by law;

**WHEREAS**, the Water Management Organization is a joint powers entity formed in accordance with a Minnesota Statutes Section 471.59, with authority to carry out conservation of the natural resources of the state by land use controls, flood control, and other conservation projects for the protection of the public health and welfare and the provident use of the natural resources, as provided in Minnesota Statutes Chapter 103B and as otherwise provided by law; and

**WHEREAS**, the Parties have a common interest and authority to implement state approved plans under chapters 103B, 103C, or 103D in WASHINGTON COUNTY to conserve soil and

water resources through the implementation of practices, programs, and regulatory controls that effectively control or prevent erosion, sedimentation, siltation and related pollution in order to preserve natural resources, ensure continued soil productivity, protect water quality, reduce damages caused by floods, protect groundwater resources, control or prevent aquatic invasive species, preserve wildlife, protect the tax base, and protect public lands and waters; and

**WHEREAS**, each of the Parties maintains its water management authority pursuant to state law, and has in place a state-approved and locally adopted: watershed management plan required under §103B.231, county groundwater plan authorized under §103B.255, or soil and water conservation district comprehensive plan under Minnesota Statutes §103C.331, subdivision 11; and

**WHEREAS**, with matters that relate to coordination of water management authorities pursuant to Minnesota Statutes Chapters 103B, 103C, and 103D with public drainage systems pursuant to Minnesota Statutes Chapter 103E, this Agreement does not change the rights or obligations of the public drainage system authorities.

**WHEREAS**, all eligible units of local government have been offered the opportunity to participate in the management and use of fund allocations from the 2018-19 Watershed Based Funding Pilot Program (“Pilot Program”), and the Parties have formed this agreement to work collaboratively to utilize watershed-based funding made available by the Board of Water and Soil Resources (BWSR).

**NOW, THEREFORE**, the Parties hereto agree as follows:

1. **Purpose:** The Parties recognize the importance of partnerships to plan and implement protection and restoration efforts for *WASHINGTON COUNTY* water planning entities. The purpose of this Agreement is
  - a. To agree to a funding distribution for the Pilot Program made available by BWSR.
  - b. To continue to collaborate on watershed based funding.
  - c. The recitals set forth in the above whereas clauses are herein included.
2. **Term:** This agreement is effective upon signature of all Parties; and will remain in effect until December 31, 2022, unless canceled according to the provisions of this Agreement or earlier terminated by law. The funding distribution in this Agreement only applies to the FY18-19 Watershed Based Funding Pilot Program allocation.
3. **Formula for Funding Distribution:** The Parties agree to split Pilot Program Funding based on the formula; The sum of all funds allocated to each party herein under the Pilot Program divided by the total number of Parties to the agreement (Total dollars allocated/10 Parties). Each Party independently will enter into a grant agreement with BWSR, or make such other arrangements as BWSR may require, for its receipt and use of its fund allotment.

4. **Projects:** The funds provided to the Parties by BWSR for the Pilot Program will be used for projects located within Washington County. However, if sufficient feasible projects do not exist in Washington County upon which funds should be expended, each Party may in its own discretion use its remaining per capita share of the funding distribution on projects outside Washington County, provided they can be shown to benefit the water resources of Washington County or prevent adverse impacts caused by drainage from/to Washington County.

5. **General Provisions:**

- a. **Compliance with Laws/Standards:** The Parties agree to abide by all federal, state, and local laws; statutes, ordinances, rules and regulations now in effect or hereafter adopted pertaining to this Agreement or to the facilities, programs, and staff for which the Agreement is responsible.
- b. **Indemnification:** Each party to this Agreement shall be liable for the acts of its officers, employees or agents and the results thereof to the extent authorized or limited by law and shall not be responsible for the acts of any other party, its officers, employees or agents. The provisions of the Municipal Tort Claims Act, Minnesota Statute Chapter 466 and other applicable laws govern liability of the Parties. To the full extent permitted by law, actions by the Parties, their respective officers, employees, and agents pursuant to this Agreement are intended to be and shall be construed as a “cooperative activity.” It is the intent of the Parties that they shall be deemed a “single governmental unit” for the purpose of liability, as set forth in Minnesota Statutes Section 471.59, subd. 1a (a). For purposes of Minnesota Statutes Section 471.59, subd. 1a (a) it is the intent of each party that this Agreement does not create any liability or exposure of one party for the acts or omissions of any other party.
- c. **Records Retention and Data Practices:** The Parties agree that records created pursuant to the terms of this Agreement will be retained in a manner that meets their respective entity’s records retention schedules that have been reviewed and approved by the State in accordance with Minnesota Statutes Section 138.17. The Parties further agree that records prepared or maintained in furtherance of the Agreement shall be subject to the Minnesota Government Data Practices Act.
- d. **Timeliness:** The Parties agree to perform obligations under this Agreement in a timely manner and keep each other informed about any delays that may occur.
- e. **Extension:** The Parties may extend the termination date of this Agreement upon written agreement by all Parties.

6. **Administration:**

- a. **Establishment of Working Group.** Each party agrees to participate in a Working Group to continue to collaborate on watershed based funding.
- b. **Submittal of 2018-2019 Project List.** The Parties must submit a joint project list to BWSR for a determination of project eligibility. Each Party will submit its own project list to the WCD by July 2, 2018 for compilation and transmittal to BWSR.
- c. **Grant Agreements.** Notwithstanding any other term of this Agreement, each Party is independently and solely responsible to fulfill the terms of its grant agreement with BWSR for its receipt and use of Pilot Program funds.



7. **Authorized Representatives:** The following persons will be the primary contacts for all matters concerning this Agreement:

Ramsey-Washington Metro Watershed District  
Tina Carstens  
Administrator  
2665 Noel Drive  
Little Canada, MN 55117  
Tina.carstens@rwmwd.org  
651-792-7950

**IN TESTIMONY WHEREOF** the Parties have duly executed this agreement by their duly authorized officers.

PARTNER: Ramsey-Washington Metro Watershed District

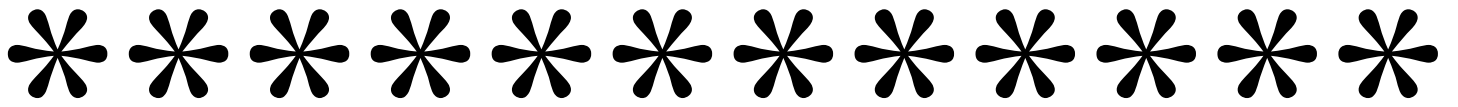
APPROVED:

BY: \_\_\_\_\_ Date: \_\_\_\_\_  
Board President

BY: \_\_\_\_\_ Date: \_\_\_\_\_  
Administrator

APPROVED AS TO FORM

BY: \_\_\_\_\_ Date: \_\_\_\_\_  
Attorney



# Bill List



**RWMWD BUDGET STATUS REPORT**

**Administrative & Program Budget**

Fiscal Year 2018

5/31/2018

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	-	-	1,630.00	\$4,870.00	25.08%
	Manager expenses	4360	3,500.00	-	-	552.52	2,947.48	15.79%
Committees	Committee/Bd Mtg. Exp.	4365	3,500.00	-	267.73	1,277.53	2,222.47	36.50%
Employees	Staff salary/taxes/benefits	4010	1,300,000.00	-	94,338.48	455,117.09	844,882.91	35.01%
	Employee expenses	4020	10,000.00	-	450.73	1,204.74	8,795.26	12.05%
	District training & education	4350	25,000.00	-	2,256.26	4,810.87	20,189.13	19.24%
Administration/ Office	GIS system maint. & equip.	4170	15,000.00	-	1,550.00	2,537.02	12,462.98	16.91%
	Data Base/GIS Maintenance	4171	15,000.00	-	1,300.00	1,300.00	13,700.00	8.67%
	Equipment maintenance	4305	3,000.00	-	1,430.83	1,430.83	1,569.17	47.69%
	Telephone	4310	8,000.00	-	358.22	1,185.46	6,814.54	14.82%
	Office supplies	4320	5,000.00	-	298.15	1,460.90	3,539.10	29.22%
	IT/Internet/Web Site/Software Lic.	4325	42,000.00	-	2,511.60	13,743.58	28,256.42	32.72%
	Postage	4330	10,000.00	-	1,500.00	1,642.47	8,357.53	16.42%
	Printing/copying	4335	8,000.00	-	285.67	1,939.26	6,060.74	24.24%
	Dues & publications	4338	11,000.00	-	-	7,620.00	3,380.00	69.27%
	Janitorial/Trash Service	4341	17,000.00	-	790.17	5,076.61	11,923.39	29.86%
	Utilities/Bldg.Contracts	4342	18,000.00	-	1,083.03	8,540.82	9,459.18	47.45%
	Bldg/Site Maintenance	4343	70,000.00	-	588.03	4,452.71	65,547.29	6.36%
	Miscellaneous	4390	5,000.00	-	-	305.19	4,694.81	6.10%
	Insurance	4480	35,000.00	-	4,643.00	4,643.00	30,357.00	13.27%
	Office equipment	4703	40,000.00	-	6,318.65	11,728.92	28,271.08	29.32%
	Vehicle lease, maintenance	4810-40	43,000.00	-	27,353.31	28,990.41	14,009.59	67.42%
Consultants/ Outside Services	Auditor/Accounting	4110	50,000.00	-	23,005.36	32,547.20	17,452.80	65.09%
	Engineering-administration	4121	93,000.00	-	4,899.18	26,592.18	66,407.82	28.59%
	Engineering-permit I&E	4122	15,000.00	-	1,980.00	3,155.00	11,845.00	21.03%
	Engineering-eng. review	4123	55,000.00	-	6,426.50	25,611.44	29,388.56	46.57%
	Engineering-permit review	4124	50,000.00	-	2,918.00	12,078.50	37,921.50	24.16%
	Project Feasibility Studies	4129	735,000.00	-	60,793.28	140,473.35	594,526.65	19.11%
	Attorney-permits	4130	10,000.00	-	-	603.60	9,396.40	6.04%
	Attorney-general	4131	40,000.00	-	3,300.00	5,100.00	34,900.00	12.75%
	Outside Consulting Services	4160	40,000.00	-	-	7,832.00	32,168.00	19.58%
Programs	Educational programming	4370	60,000.00	-	724.78	9,156.19	50,843.81	15.26%
	Communications & Marketing	4371	25,000.00	-	2,012.05	3,127.99	21,872.01	12.51%
	Events	4372	50,000.00	-	12,673.42	19,368.42	30,631.58	38.74%
	Water QM-Engineering	4520-30	513,000.00	-	5,792.02	30,710.34	482,289.66	5.99%
	Project operations	4650	140,000.00	-	25,911.24	69,243.35	70,756.65	49.46%
	SLMP/TMDL Studies	4661	115,000.00	-	1,168.00	2,576.00	112,424.00	2.24%
	Natural Resources/Keller Creek	4670-72	100,000.00	-	13,690.00	21,745.77	78,254.23	21.75%
	Outside Prog.Support/Weed Mgmt.	4683-84	70,000.00	-	11,204.11	29,124.49	40,875.51	41.61%
	Research Projects	4695	100,000.00	-	3,482.13	4,908.63	95,091.37	4.91%
	Health and Safety Program	4697	2,000.00	-	-	52.15	1,947.85	2.61%
	NPDES Phase II	4698	20,000.00	-	1,138.50	1,926.00	18,074.00	9.63%
	Atlas 14 Watershed Modeling	4732	-	-	-	-	-	0.00%
<b>GENERAL FUND TOTAL</b>			<b>\$3,976,500.00</b>	<b>\$0.00</b>	<b>\$328,442.43</b>	<b>\$1,007,122.53</b>	<b>\$2,969,377.47</b>	<b>25.33%</b>
CIP's	CIP Project Repair & Maintenance	516	1,000,000.00	-	259,942.31	438,413.51	561,586.49	43.84%
	Targeted Retrofit Projects	518	800,000.00	-	12,570.88	17,192.88	782,807.12	2.15%
	District Office Building Solar Energy Retrofit	519	150,000.00	-	742.00	38,580.00	111,420.00	25.72%
	Flood Damage Reduction Fund	520	2,000,000.00	-	9,416.79	48,781.65	1,951,218.35	2.44%
	Debt Services-96-97 Beltline/MM/Battle Creek	526	448,951.00	-	-	277,525.09	171,425.91	61.82%
	Stewardship Grant Program Fund	528-529	800,000.00	-	7,930.50	46,230.57	753,769.43	5.78%
	Impervious Surface Volume Reduction Opportunity	531	1,500,000.00	-	-	-	1,500,000.00	0.00%
	Beltline & Battle Creek Tunnel Repair	549	-	-	12,249.99	1,357,270.85	(1,357,270.85)	---
	Frost/Kennard Enhanced WQ BMP	550	400,000.00	-	6,025.02	19,887.71	380,112.29	4.97%
	Markham Pond Dredging & Aeration	551	25,000.00	-	-	-	25,000.00	0.00%
	Wakefield Park Project	553	1,100,000.00	-	5,944.93	13,599.93	1,086,400.07	1.24%
	Willow Pond CMAC	554	400,000.00	-	24,079.74	47,404.24	352,595.76	11.85%
	District Office Bond Payment	585	194,885.00	-	-	195,173.81	(288.81)	100.15%
<b>CIP BUDGET TOTAL</b>			<b>\$8,818,836.00</b>	<b>-</b>	<b>\$338,902.16</b>	<b>\$2,500,060.24</b>	<b>\$6,318,775.76</b>	<b>28.35%</b>
<b>TOTAL BUDGET</b>			<b>\$12,795,336.00</b>	<b>\$0.00</b>	<b>\$667,344.59</b>	<b>\$3,507,182.77</b>	<b>\$9,288,153.23</b>	<b>27.41%</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 @ 05/31/18
101 - General Fund	4,329,903.56	0.00	126,279.61	328,442.43	1,007,122.53	3,449,060.64
516 - CIP Project Repair & Maintenance	615,041.00	0.00	54,412.00	259,942.31	438,413.51	231,039.49
518 - Targeted Retrofit Projects	836,989.00	0.00	15,000.00	12,570.88	17,192.88	834,796.12
519 - District Office Building Solar Energy Retrofit	129,623.00	0.00	0.00	742.00	38,580.00	91,043.00
520 - Flood Damage Reduction Fund	1,118,749.00	0.00	16,889.49	9,416.79	48,781.65	1,086,856.84
526 - Debt Services-96-97 Beltline/MM/Beltline-Battle Creek Tunnel Repair	359,578.00	0.00	0.00	0.00	277,525.09	82,052.91
528/529 - Stewardship Grant Program Fund	561,388.00	0.00	15,000.00	7,930.50	46,230.57	530,157.43
531 - Impervious Surface Volume Reduction Opportunity	1,484,215.00	0.00	0.00	0.00	0.00	1,484,215.00
549 - Beltline & Battle Creek Tunnel Repair	2,407,984.00	0.00	0.00	12,249.99	1,357,270.85	1,050,713.15
550 - Frost/Kennard Enhanced WQ BMP	119,513.00	0.00	0.00	6,025.02	19,887.71	99,625.29
551 - Markham Pond Dredging & Aeration	110,411.00	0.00	0.00	0.00	0.00	110,411.00
553 - Wakefield Park Project	351,874.00	0.00	0.00	5,944.93	13,599.93	338,274.07
554 - Willow Pond CMAC	0.00	0.00	0.00	24,079.74	47,404.24	(47,404.24)
580 - Contingency Fund	476,100.94	0.00	0.00	0.00	0.00	476,100.94
585 - Certificates of Participation	133,637.00	0.00	0.00	0.00	195,173.81	(61,536.81)
<b>Total District Fund Balance</b>	<b>\$13,035,006.50</b>	<b>-</b>	<b>\$ 227,581.10</b>	<b>\$ 667,344.59</b>	<b>\$3,507,182.77</b>	<b>\$9,755,404.83</b>

**Ramsey Washington Metro Watershed Dist.**  
**Check Register**  
**For the Period From May 1, 2018 to May 31, 2018**

Check #	Date	Payee ID	Payee	Description	Amount
EFT	05/01/18	met008	MetLife-Group Benefits	Employee Benefits	\$2,293.16
EFT	05/10/18	hea002	HealthPartners	Employee Benefits	9,203.67
69908	05/10/18	aws001	AWS Service Center	Janitorial/Trash Service	185.17
69909	05/10/18	bfg001	BFG Supply Co.	Educational Program	172.27
69910	05/10/18	hen002	Henriksen Ace Hardware	Natural Resources Project	41.97
69911	05/10/18	int003	Intereum, Inc.	Office Equipment	4,976.35
69912	05/10/18	ncp001	NCPERS Minnesota	Employee Benefits	16.00
69913	05/10/18	pre003	Premium Waters, Inc.	Utilities/Bldg. Contracts	19.00
69914	05/10/18	shi001	SHI International Corp.	IT/Website/Software	163.00
69915	05/10/18	voy001	US Bank Voyager Fleet Sys.	Vehicle Fuel	222.20
69916	05/30/18	ahl001	Paige Ahlborg	Employee Reimbursement	178.69
69917	05/30/18	all003	All Safe Global, Inc.	Bldg./Site Maintenance	50.53
69918	05/30/18	all004	allstream	Project Operations	64.75
69919	05/30/18	att002	AT & T Mobility - ROC	IT/Website/Software	45.23
69920	05/30/18	bar001	Barr Engineering	April/May Engineering	178,247.37
69921	05/30/18	bar003	Pamela Barragan	Events	250.00
69922	05/30/18	bar004	Deborah Barnes	Employee Reimbursement	32.69
69923	05/30/18	blo001	Simba Blood	Employee Reimbursement	244.16
69924	05/30/18	bro001	Brock White, Inc.	Keller Creek Project	1,523.37
69925	05/30/18	bur002	Tom Burns Consulting, LLC	Data Base/GIS Maintenance	1,300.00
69926	05/30/18	cad003	Cady Building Maintenance, Inc.	Janitorial/Trash Service	605.00
69927	05/30/18	car007	Carp Solutions, LLC	Natural Resources Project	4,341.92
69928	05/30/18	cen004	Center for Hmong Arts & Talent	Events	1,000.00
69929	05/30/18	cit009	City of St. Paul	Events	125.00
69930	05/30/18	cit011	City of Roseville	Telephone/IT/Website/Softw.	2,513.82
69931	05/30/18	esr002	Environmental Systems Research Institute	GIS System Maint. & Equip.	1,550.00
69932	05/30/18	fis001	Fisher Scientific	Water QM Staff	288.50
69933	05/30/18	fit001	Fitzgerald Excavating & Trucking, Inc.	Construction-Maint. & Repair	5,980.00
69934	05/30/18	fre001	Freshwater Society	Outside Program Support	10,000.00
69935	05/30/18	gal001	Galowitz Olson, PLLC	May Legal Fees	4,220.00
69936	05/30/18	gil001	Gilbert Mechanical Contractors, Inc.	Bldg./Site Maintenance	287.50
69937	05/30/18	gou001	Ryan J. Gould	Natural Resources Project	27.75
69938	05/30/18	gra001	Rick Gravrok	Events	125.00
69939	05/30/18	gus001	Gustavus Adolphus Lutheran Church	Events	150.00
69940	05/30/18	han002	Dean Hansen	Events	250.00
69941	05/30/18	haw001	Hawkins, Inc.	Project Operations	17,557.40
69942	05/30/18	hen002	Henriksen Ace Hardware	Water QM/Nat.Res./Educat.	85.74
69943	05/30/18	hom001	Home Depot Credit Services	Water QM/Nat.Res./Proj.Op.	895.06
69944	05/30/18	inn002	Innovative Office Solutions LLC	Office Supplies	286.34
69945	05/30/18	inn003	Innovational Concepts, Inc.	Utilities/Bldg. Contracts	206.75
69946	05/30/18	int001	Office of MN, IT Services	Telephone Expense	55.40
69947	05/30/18	isd002	ISD 622	Events	142.48
69948	05/30/18	jad001	Anita Jader Photography	Events	200.00
69949	05/30/18	lea001	League of MN Cities Insurance Trust	Insurance Expense	4,643.00

**Ramsey Washington Metro Watershed Dist.**  
**Check Register**  
**For the Period From May 1, 2018 to May 31, 2018**

Check #	Date	Payee ID	Payee	Description	Amount
69950	05/30/18	mel001	Michelle L. Melser	Employee Reimbursement	524.87
69951	05/30/18	met004	Metro Sales, Inc.	Equipment Maintenance	830.83
69952	05/30/18	mid001	Quicksilver Express Courier	Employee Benefits	26.86
69953	05/30/18	mil001	Mill Direct	Events	852.15
69954	05/30/18	min007	Minger Construction Co., Inc.	Progress Pay #1	230,204.00
69955	05/30/18	min008	Minnesota Native Landscapes, Inc.	Natural Resources Project	5,360.00
69956	05/30/18	mmc001	MMC Associates, Inc.	Events	7,840.00
69957	05/30/18	nsp001	Xcel Energy	Utilities/Project Operations	1,124.34
69958	05/30/18	obr001	Christopher O'Brien	Employee Reimbursement	156.56
69959	05/30/18	omo001	Nicholas D. Omodt	Employee Reimbursement	55.43
69960	05/30/18	out001	Outdoor Lab Landscape Design, Inc.	Construction-Maint. & Repair	15,556.00
69961	05/30/18	pac001	Pace Analytical Services, Inc.	Water QM Staff	2,122.00
69962	05/30/18	pas002	Sage Passi	Employee Reimbursement	662.26
69963	05/30/18	pra001	Prairie Moon Nursery, Inc.	Keller Creek Project	1,025.00
69964	05/30/18	qwe001	CenturyLink	Project Operations	225.91
69965	05/30/18	red002	Redpath & Company, Ltd	2017 Audit/Monthly Accting.	23,005.36
69966	05/30/18	res001	Pitney Bowes - Reserve Account	Postage	1,500.00
69967	05/30/18	ros004	Roseville Midway Ford	Vehicle Expense	26,587.26
69968	05/30/18	sel001	Select Synthetics	Office Equipment	225.00
69969	05/30/18	sod001	Nicole Soderholm	Employee Reimbursement	84.79
69970	05/30/18	stu001	Studio Lola	Events	1,135.00
69971	05/30/18	sup002	Superior Tent Rental, Inc.	Events	180.00
69972	05/30/18	sup004	Superior Minerals Company	Water QM Staff	61.20
69973	05/30/18	tes001	The Tessman Company	Natural Resources Project	144.00
69974	05/30/18	tie001	Tierney	Equipment Maintenance	600.00
69975	05/30/18	tim002	Timesaver Off-Site Secretarial, Inc.	Committee/Board Meeting Exp.	245.50
69976	05/30/18	tri002	Tri-State Bobcat	Natural Resources Project	300.00
69977	05/30/18	usb002	U.S. Bank	Monthly Credit Card Expense	5,112.78
69978	05/30/18	usb005	US Bank Equipment Finance	Printing	285.67
69979	05/30/18	vla001	Dave Vlasin	Employee Reimbursement	190.34
69980	05/30/18	voy001	US Bank Voyager Fleet Sys.	Vehicle Fuel	543.85
69981	05/30/18	was002	Washington Conservation District	Educational Program	55.00
69982	05/30/18	wil007	Patrick Williamson	Employee Reimbursement	64.31
69983	05/30/18	win002	Windmill Design Incorporated	Communications & Marketing	1,600.00
69984	05/30/18	wis001	Wisdom Dances	Events	200.00
69985	05/30/18	ysi001	YSI, Inc.	Water QM Staff	911.00
<b>Total</b>					<b>\$584,363.51</b>

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From May 1, 2018 - May 31, 2018**

<b>Date</b>	<b>Check #</b>	<b>Vendor ID</b>	<b>Name</b>	<b>Account ID</b>	<b>Account Description</b>	<b>Amount</b>	<b>Check Detail</b>
05/01/18	EFT	met008	MetLife-Group Benefits			\$2,293.16	
				4040-101-000	Employee Benefits-General		2,085.09
				2015-101-000	Employee Health-General		208.07
05/10/18	EFT	hea002	HealthPartners			9,203.67	
				4040-101-000	Employee Benefits-General		7,486.10
				2015-101-000	Employee Health-General		1,717.57
05/10/18	69908	aws001	AWS Service Center	4341-101-000	Janitorial/Trash Service	185.17	
05/10/18	69909	bfq001	BGF Supply Co.	4370-101-000	Educational Program-General	172.27	
05/10/18	69910	hen002	Henriksen Ace Hardware	4670-101-000	Natural Resources Project-General	41.97	
05/10/18	69911	int003	Intereum, Inc.	4703-101-000	Office Equipment-General	4,976.35	
05/10/18	69912	ncp001	NCPERS Minnesota	2015-101-000	Employee Health-General	16.00	
05/10/18	69913	pre003	Premium Waters, Inc.	4342-101-000	Utilities/Bldg. Contracts	19.00	
05/10/18	69914	shi001	SHI International Corp.	4325-101-000	IT/Website/Software	163.00	
05/10/18	69915	voy001	US Bank Voyager Fleet Sys.	4830-101-000	Vehicle Fuel-General	222.20	
05/30/18	69916	ahl001	Paige Ahlborg			178.69	
				4040-101-000	Employee Benefits-General		72.10
				4020-101-000	Employee Expense-General		55.59
				4350-101-000	Training & Education-General		51.00
05/30/18	69917	all003	All Safe Global, Inc.	4343-101-000	Bldg./Site Maintenance	50.53	
05/30/18	69918	all004	allstream	4650-101-000	Project Operations-General	64.75	
05/30/18	69919	att002	AT & T Mobility - ROC	4325-101-000	IT/Website/Software	45.23	
05/30/18	69920	bar001	Barr Engineering			178,247.37	
				4121-101-000	Engineering Admin-General Fund		4,899.18
				4698-101-000	Engineering-NPDES Phase II		1,138.50
				4123-101-000	Engineering-Review		6,426.50
				4129-101-000	Project Feasability-General		645.00
				4129-101-000	Project Feasability-General		1,891.50
				4129-101-000	Project Feasability-General		5,120.85
				4129-101-000	Project Feasability-General		5,086.85
				4129-101-000	Project Feasability-General		5,125.85

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From May 1, 2018 - May 31, 2018**

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
				4129-101-000	Project Feasability-General		624.50
				4129-101-000	Project Feasability-General		330.50
				4129-101-000	Project Feasability-General		402.50
				4129-101-000	Project Feasability-General		431.00
				4129-101-000	Project Feasability-General		10,568.11
				4129-101-000	Project Feasability-General		16,941.27
				4129-101-000	Project Feasability-General		13,625.35
				4520-101-000	Water QM-Engineering		42.00
				4520-101-000	Water QM-Engineering		1,444.00
				4122-101-000	Engineering-Permit I & E		1,980.00
				4124-101-000	Engineering-Permit Review		2,918.00
				4661-101-000	SLMP/TMDL Studies		446.00
				4661-101-000	SLMP/TMDL Studies		722.00
				4695-101-000	Research Projects-General		750.00
				4695-101-000	Research Projects-General		2,732.13
				4650-101-000	Project Operations-General		7,733.62
				4128-553-000	Engineering-Wakefield		5,944.93
				4128-550-000	Engineering-Frost/Kennard		6,025.02
				4128-518-000	Engineering-School/Commer Retrofit		4,822.45
				4128-518-000	Engineering-School/Commer Retrofit		5,635.43
				4128-518-000	Engineering-School/Commer Retrofit		1,524.00
				4128-518-000	Engineering-School/Commer Retrofit		589.00
				4682-529-000	Stewardship Grant Program		7,930.50
				4128-554-000	Engineering-Willow Pond		24,079.74
				4128-520-000	Engineering-Flood Damage		7,612.29
				4128-520-000	Engineering-Flood Damage		1,624.50
				4128-519-000	Engineering-Office Solar Energy		742.00
				4128-549-000	Engineering-Beltline/Battle Creek		12,249.99
				4128-516-000	Engineering-Projects Maint. & Repair		3,540.91
				4128-516-000	Engineering-Projects Maint. & Repair		3,901.40
05/30/18	69921	bar003	Pamela Barragan	4372-101-000	Events	250.00	
05/30/18	69922	bar004	Deborah Barnes			32.69	
				4040-101-000	Employee Benefits-General		12.52
				4020-101-000	Employee Expense-General		20.17
05/30/18	69923	blo001	Simba Blood			244.16	
				4040-101-000	Employee Benefits-General		120.00
				4020-101-000	Employee Expense-General		11.72
				4670-101-000	Natural Resources Project-General		112.44
05/30/18	69924	bro001	Brock White, Inc.	4672-101-000	Keller Creek Project	1,523.37	
05/30/18	69925	bur002	Tom Burns Consulting, LLC	4171-101-000	Data Base/GIS Maientenance	1,300.00	
05/30/18	69926	cad003	Cady Building Maintenance, Inc.	4341-101-000	Janitorial/Trash Service	605.00	
05/30/18	69927	car007	Carp Solutions, LLC	4670-101-000	Natural Resources Project-General	4,341.92	

**Ramsey Washington Metro Watershed Dist.**  
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05/30/18	69928	cen004	Center for Hmong Arts & Talent	4372-101-000	Events	1,000.00	
05/30/18	69929	cit009	City of St. Paul	4372-101-000	Events	125.00	
05/30/18	69930	cit011	City of Roseville			2,513.82	
				4325-101-000	IT/Website/Software		2,211.00
				4310-101-000	Telephone-General		302.82
05/30/18	69931	esr002	Environmental Systems Research Institute	4170-101-000	GIS System Maint. & Equipment	1,550.00	
05/30/18	69932	fis001	Fisher Scientific	4530-101-000	Water QM-Engineering	288.50	
05/30/18	69933	fit001	Fitzgerald Excavating & Trucking, Inc.	4630-516-000	Construction Imp.-Maint. & Repair	5,980.00	
05/30/18	69934	fre001	Freshwater Society	4683-101-000	Outside Program Support	10,000.00	
05/30/18	69935	gal001	Galowitz Olson, PLLC			4,220.00	
				4131-101-000	Attorney General-General Fund		3,300.00
				4131-520-000	Attorney-Flood Damage		180.00
				4131-516-000	Attorney General-Maint. & Repair		740.00
05/30/18	69936	gil001	Gilbert Mechanical Contractors, Inc.	4343-101-000	Bldg./Site Maintenance	287.50	
05/30/18	69937	gou001	Ryan Gould	4670-101-000	Natural Resources Project-General	27.75	
05/30/18	69938	gra001	Rick Gravrok	4372-101-000	Events	125.00	
05/30/18	69939	gus001	Gustavus Adolphus Lutheran Church	4372-101-000	Events	150.00	
05/30/18	69940	han002	Dean Hansen	4372-101-000	Events	250.00	
05/30/18	69941	haw001	Hawkins, Inc.	4650-101-000	Project Operations-General	17,557.40	
05/30/18	69942	hen002	Henriksen Ace Hardware			85.74	
				4530-101-000	Water QM-Engineering		15.92
				4670-101-000	Natural Resources Project-General		11.10
				4370-101-000	Educational Program-General		58.72
05/30/18	69443	hom001	Home Depot Credit Services			895.06	
				4670-101-000	Natural Resources Project-General		671.25
				4530-101-000	Water QM-Engineering		203.81
				4650-516-000	Project Operations-General		20.00
05/30/18	69444	inn002	Innovative Office Solutions, LLC	4320-101-000	Office Supplies-General	286.34	
05/30/18	69445	inn003	Innovational Concepts, Inc.	4342-101-000	Utilities/Bldg. Contracts	206.75	
05/30/18	69446	int001	Office of MN, IT Services	4310-101-000	Telephone-General	55.40	
05/30/18	69447	isd002	ISD 622	4372-101-000	Events	142.48	
05/30/18	69448	jad001	Anita Jader Photography	4372-101-000	Events	200.00	
05/30/18	69449	lea001	League of MN Cities Insurance Trust	4480-101-000	Insurance-General	4,643.00	
05/30/18	69450	mel001	Michelle Melser			524.87	
				4040-101-000	Employee Benefits-General		229.18
				4020-101-000	Employee Expense-General		45.69
				4343-101-000	Bldg./Site Maintenance		250.00
05/30/18	69451	met004	Metro Sales, Inc.	4305-101-000	Equipment Maintenance-General	830.83	
05/30/18	69452	mid001	Quicksilver Express Courier	4040-101-000	Employee Benefits-General	26.86	
05/30/18	69453	mil001	Mill Direct	4372-101-000	Events	852.15	



**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From May 1, 2018 - May 31, 2018**

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05/30/18	69454	min007	Minger Construction Co., Inc.	4630-516-000	Construction Imp.-Maint. & Repair	230,204.00	
05/30/18	69455	min008	Minnesota Native Landscape, Inc.	4670-101-000	Natural Resources Project-General	5,360.00	
05/30/18	69456	mmc001	MMC Associates, Inc.	4372-101-000	Events	7,840.00	
05/30/18	69457	nsp001	Xcel Energy			1,124.34	
				4342-101-000	Utilities/Bldg. Contracts		857.28
				4650-101-000	Project Operations-General		267.06
05/30/18	69458	obr001	Christopher O'Brien			156.56	
				4040-101-000	Employee Benefits-General		40.00
				4020-101-000	Employee Expense-General		73.51
				4371-101-000	Communications & Marketing		43.05
05/30/18	69459	omo001	Nicholas Omodt	4020-101-000	Employee Expense-General	55.43	
05/30/18	69460	out001	Outdoor Lab Landscape Design, Inc.	4630-516-000	Construction Imp.-Maint. & Repair	15,556.00	
05/30/18	69461	pac001	Pace Analytical Services, Inc.	4530-101-000	Water QM Staff-General	2,122.00	
05/30/18	69462	pas002	Sage Passi			662.26	
				4040-101-000	Employee Benefits-General		234.60
				4370-101-000	Educational Program-General		344.71
				4365-101-000	Committee/Board Meeting Expense		22.23
				4372-101-000	Events		60.72
05/30/18	69463	pra001	Prairie Moon Nursery, Inc.	4672-101-000	Keller Creek Project	1,025.00	
05/30/18	69464	qwe001	CenturyLink	4650-101-000	Project Operations-General	225.91	
05/30/18	69465	red002	Redpath & Company, Ltd			23,005.36	
				4110-101-000	Auditor/Accounting		1,605.36
				4110-101-000	Auditor/Accounting		21,400.00
05/30/18	69466	res001	Pitney Bowes - Reserve Account	4330-101-000	Postage-General	1,500.00	
05/30/18	69467	ros004	Roseville Midway Ford	4810-101-000	Vehicle Lease-General	26,587.26	
05/30/18	69468	sel001	Select Synthetics	4703-101-000	Office Equipment-General	225.00	
	69469	sod001	Nichole Soderholm			84.79	
				4040-101-000	Employee Benefits-General		38.64
				4020-101-000	Employee Expense-General		46.15
05/30/18	69470	stu001	Studio Lola	4372-101-000	Events	1,135.00	
05/30/18	69471	sup002	Superior Tent Rental, Inc.	4372-101-000	Events	180.00	
05/30/18	69472	sup004	Superior Minerals Company	4530-101-000	Water QM Staff-General	61.20	
05/30/18	69473	tes001	The Tessman Company	4670-101-000	Natural Resources Project-General	144.00	
05/30/18	69474	tie001	Tierney	4305-101-000	Equipment Maintenance-General	600.00	
05/30/18	69475	tim002	Timesaver Off-Site Secretarial, Inc.	4365-101-000	Committee/Board Meeting Expense	245.50	
05/30/18	69476	tri002	Tri-State Bobcat	4670-101-000	Natural Resources Project-General	300.00	
05/30/18	69477	usb002	U.S. Bancorp			5,112.78	
				4372-101-000	Events		127.46
				4684-101-000	Weed Management Program		162.60
				4325-101-000	IT/Website/Software		92.37
				4350-101-000	Training & Education-General		112.00
				4650-101-000	Project Operations-General		62.50

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From May 1, 2018 - May 31, 2018**

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				4320-101-000	Office Supplies-General		11.81
				4350-101-000	Training & Education-General		7.99
				4370-101-000	Educational Program-General		94.08
				4350-101-000	Training & Education-General		155.26
				4530-101-000	Water QM Staff-General		119.94
				4372-101-000	Events		35.61
				4530-101-000	Water QM Staff-General		79.96
				4350-101-000	Training & Education-General		100.00
				4350-101-000	Training & Education-General		100.00
				4350-101-000	Training & Education-General		100.00
				4670-101-000	Natural Resources Project-General		65.60
				4350-101-000	Training & Education-General		102.01
				4670-101-000	Natural Resources Project-General		65.60
				4703-101-000	Office Equipment-General		120.00
				4703-101-000	Office Equipment-General		997.30
				4350-101-000	Training & Education-General		1,528.00
				4530-101-000	Water QM Staff-General		503.69
				4371-101-000	Communications & Marketing		289.00
				4371-101-000	Communications & Marketing		80.00
05/30/18	69478	usb005	US Bank Equipment Finance	4335-101-000	Printing-General	285.67	
05/30/18	69479	vla001	Dave Vlasin			190.34	
				4040-101-000	Employee Benefits-General		112.18
				4020-101-000	Employee Expense-General		78.16
05/30/18	69480	voy001	US Bank Voyager Fleet Sys.	4830-101-000	Vehicle Fuel-General	543.85	
05/30/18	69481	was002	Washington Conservation District	4370-101-000	Educational Program-General	55.00	
05/30/18	69482	wil007	Patrick Williamson	4020-101-000	Employee Expense-General	64.31	
05/30/18	69483	win002	Windmill Design Incorporated	4371-101-000	Communications & Marketing	1,600.00	
05/30/18	69484	wis001	Wisdom Dances	4372-101-000	Events	200.00	
05/30/18	69485	ysi001	YSI, Inc.	4530-101-000	Water QM Staff-General	911.00	
						<b><u>\$584,363.51</u></b>	



**Summary of Professional Engineering Services During the Period  
April 14, 2018 through May 18, 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	\$26,592.18	\$49,407.82	\$4,899.18	4121-101	DW-13
RWMWD Health and Safety/ERTK Program	\$2,000.00	\$0.00	\$2,000.00		4697-101	DW-13
Educational Program/Educational Forum Assistance	\$20,000.00	\$1,526.00	\$18,474.00	\$1,138.50	4698-101	DW-11
<b>Engineering Review</b>						
Engineering Review	\$55,000.00	\$25,611.44	\$29,388.56	\$6,426.50	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	\$645.00	4129-101	DW-5
Beltline Resiliency and Phalen Chain Water Level Management	\$250,000.00	\$5,095.50	\$244,904.50	\$1,891.50	4129-101	BELT-3
Beaver Lake Subwatershed Feasibility Study	\$15,000.00	\$9,028.85	\$5,971.15	\$5,120.85	4129-101	BL-1
Owasso Lake Subwatershed Feasibility Study	\$15,000.00	\$7,918.85	\$7,081.15	\$5,086.85	4129-101	LO-3
Battle Creek Lake Subwatershed Feasibility Study	\$15,000.00	\$10,250.23	\$4,749.77	\$5,125.85	4129-101	BCL-3
Create an Emergency Response Plan for Twin Lake	\$15,000.00	\$624.50	\$14,375.50	\$624.50	4129-101	DW-19
Create an Emergency Response Plan for Grass Lake	\$15,000.00	\$330.50	\$14,669.50	\$330.50	4129-101	DW-19
Create an Emergency Response Plan for Snail Lake	\$15,000.00	\$402.50	\$14,597.50	\$402.50	4129-101	DW-19
Create an Emergency Response Plan for Lake Owasso	\$5,000.00	\$3,563.00	\$1,437.00	\$431.00	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	\$10,568.11	4129-101	DW-9
West Vадnais Lake to East Vадnais Lake Gravity Flow	\$66,000.00	\$0.00	\$66,000.00		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	\$25,980.85	\$103,519.15	\$13,625.35	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	\$63.00	\$9,937.00		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	\$42.00	4520-101	BC-3
Auto Lake monitoring systems (5)	\$50,000.00	\$6,645.78	\$43,354.22	\$1,444.00	4520-101	DW-18
Maplewood Mall Monitoring	\$10,000.00	\$713.00	\$9,287.00		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	\$1,980.00	4122-101	DW-7
Permit Application Review	\$50,000.00	\$12,078.50	\$37,921.50	\$2,918.00	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	\$1,854.00	\$1,146.00	\$446.00	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	\$722.00	\$9,278.00	\$722.00	4661-101	WL-5
<b>Research Projects</b>						
New Technology Mini Case Studies (average 6 per year)	\$12,000.00	\$2,176.50	\$9,823.50	\$750.00	4695-101	DW-12
Kohlman Permeable Weir Test System - Implement Monitoring Plan	\$15,000.00	\$2,732.13	\$12,267.87	\$2,732.13	4695-101	DW-12
<b>Project Operations</b>						
2018 Tanners Alum Facility Monitoring	\$15,000.00	\$8,462.62	\$6,537.38	\$7,733.62	4650-101	TaL-3
<b>Capital Improvements</b>						
Wakefield Park/Frost Avenue Stormwater Project	\$25,000.00	\$13,599.93	\$11,400.07	\$5,944.93	4128-553	WL-1
Frost Kennard Spent Lime BMP	\$24,000.00	\$19,887.71	\$4,112.29	\$6,025.02	4128-550	WL-1
Commercial Sites Retrofit Projects 2018	\$55,000.00	\$4,822.45	\$50,177.55	\$4,822.45	4128-518	DW-6
School Sites Retrofit Projects 2018	\$55,000.00	\$8,605.43	\$46,394.57	\$5,635.43	4128-518	DW-6
Church Sites Retrofit Projects 2018	\$55,000.00	\$2,604.00	\$52,396.00	\$1,524.00	4128-518	DW-6
Roseville High School Campus Stormwater Retrofit (Bennett Lake Subwatershed)	\$30,000.00	\$1,161.00	\$28,839.00	\$589.00	4128-518	DW-6
BMP Incentive Fund: General BMP Design Assistance and Review	\$30,000.00	\$22,297.00	\$7,703.00	\$7,930.50	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	\$47,404.24	\$52,595.76	\$24,079.74	4128-554	BeL-4
Grass Lake Berm Construction Administration	\$75,000.00	\$32,969.73	\$42,030.27	\$7,612.29	4128-520	GrL-1
Phase 1 implementation from Owasso Basin Improvements Feasibility Study	\$75,000.00	\$6,180.00	\$68,820.00	\$1,624.50	4128-520	GC-3
District Office Solar Energy Retrofit	\$20,000.00	\$10,953.00	\$9,047.00	\$742.00	4128-519	DW-13
<b>CIP Project Repair &amp; Maintenance</b>						
2017-2018 Beltline Repairs Construction Services	\$360,000.00	\$422,033.08	-\$62,033.08	\$12,249.99	4128-549	BELT-2
Routine CIP Inspection and Unplanned Maintenance Identification	\$75,000.00	\$8,564.41	\$66,435.59	\$3,540.91	4128-516	DW-5
2018 CIP Maintenance and Repairs	\$90,000.00	\$69,497.80	\$20,502.20	\$3,901.40	4128-516	DW-5
2019 CIP Maintenance and Repairs	\$150,000.00	\$0.00	\$150,000.00		4128-516	DW-5
<b>Subtotal</b>				<b>\$178,247.37</b>		

\*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 4/14/2018 - 5/18/2018**

**\$178,247.37**

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

**Capital Improvement Project Maintenance/Repairs 2018  
Progress Payment Number 3**

1.0	Total Completed Through This Period:	<u>\$155,790.00</u>	
2.0	Total Completed Previously Completed:	<u>\$149,810.00</u>	
3.0	Total Completed This Period:		<u>\$5,980.00</u>
4.0	Amount Previously Retained:	<u>\$13,891.00</u>	
5.0	Amount Retained This Period (See Note 1):		<u>\$0.00</u>
6.0	Total Amount Retained (See Note 2):	<u>\$13,891.00</u>	
7.0	Retainage Released Through This Period:		<u>\$0.00</u>
8.0	Total Retainage Remaining:	<u>\$13,891.00</u>	
9.0	Amounts Previously Paid:	<u>\$135,919.00</u>	
10.0	Amount Due This Estimate:		<u><u>\$5,980.00</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 (\$277,822.00)


**SUBMITTED BY:**

Name: Jason Fitzgerald Date: \_\_\_\_\_  
 Title: President  
 Contractor: Fitzgerald Excavating & Trucking, Inc.

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

**RECOMMENDED BY:**

Name: Brad Lindaman Date: 5/23/2018  
 Title: District Engineer  
 Engineer: Barr Engineering Company

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

**APPROVED BY:**

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

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

**Capital Improvement Project Maintenance/Repairs 2018**  
**Ramsey-Washington Metro Watershed District**  
**Summary of Work Completed Through May 22nd, 2018 for Progress Payment Number 3**

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	20,000.00	20,000.00	0.65	\$13,000.00	0.6	\$12,000.00	0.05	\$1,000.00
<b>Site 1 – Lower Afton Road, St. Paul</b>											
B	Sediment/Muck Cleanout of Drainageway (Landfill Disposal)	L.S.	1	4,000.00	4,000.00	1	\$4,000.00	1	\$4,000.00	0	\$0.00
B	Site Restoration (Seeding and Erosion Control Blanket)	S.Y.	220	4.00	880.00	0	\$0.00	0	\$0.00	0	\$0.00
<b>Site 2 – Tanners Boat Ramp, Oakdale</b>											
B	Sediment/Muck Cleanout from Pond (Landfill Disposal)	L.S.	1	8,000.00	8,000.00	1	\$8,000.00	1	\$8,000.00	0	\$0.00
D	Construction of Sedimentation Barrier (Mn/DOT Super Duty Silt Fence 3886.1)	L.F.	80	15.00	1,200.00		\$0.00	0	\$0.00	0	\$0.00
C	Site Restoration (Seeding and Erosion Control Blanket)	S.Y.	150	4.00	600.00		\$0.00	0	\$0.00	0	\$0.00
<b>Site 3 – Tanners Wetland Weir Maintenance, Oakdale</b>											
E	Permeable Weir Maintenance (Reopening Drainage Slots and Remove all Brush and Debris)	L.F.	580	10.00	5,800.00	580	\$5,800.00	580	\$5,800.00	0	\$0.00
<b>Site 4 – 5TH Street Wetland, Oakdale</b>											
F	Excavation/Dredging and Removal of Sediment from Treatment Basin (Disposal on Site)	L.S.	1	20,000.00	20,000.00	1	\$20,000.00	1	\$20,000.00	0	\$0.00
E	Permeable Weir Maintenance (Reopening Drainage Slots and Remove all Brush and Debris)	L.F.	65	10.00	650.00	65	\$650.00	65	\$650.00	0	\$0.00
C	Site Restoration (Seeding and Erosion Control Blanket)	S.Y.	210	4.00	840.00	500	\$2,000.00	500	\$2,000.00	0	\$0.00
<b>Site 5 – Hills &amp; Dales/County Road B, Maplewood</b>											
G	Pipe and Structures Cleanout Sediment/Muck Removal (Disposal at Landfill)	L.S.	1	4,000.00	4,000.00		\$0.00	0	\$0.00	0	\$0.00
C	Site Access Restoration (Seeding and Erosion Control Blanket, Repair Wood Chip Path)	S.Y.	50	4.00	200.00		\$0.00	0	\$0.00	0	\$0.00
<b>Site 6 – Tamarac Swamp PFS Basins Paver Cleaning and Sweeping, Woodbury</b>											
H	Sediment Log (6-Inch Diameter)	L.F.	60	4.00	240.00		\$0.00	0	\$0.00	0	\$0.00
B	Sediment/Muck Cleanout (Tier 2 & 3 Landfill Disposal)	L.S.	1	2,000.00	2,000.00	1	\$2,000.00	0	\$0.00	1	\$2,000.00
I	Paver Sweeping	S.Y.	1400	2.00	2,800.00	1400	\$2,800.00	0	\$0.00	1400	\$2,800.00
C	Site Restoration (Native Seeding and Erosion Control Blanket)	S.Y.	100	4.00	400.00	45	\$180.00	0	\$0.00	45	\$180.00
<b>Site 7 – Gervais Creek, Little Canada</b>											
J	Removal of Trees, Brush, Deadfalls, and Debris (Disposal Off Site)	L.S.	1	5,000.00	5,000.00	1	\$5,000.00	1	\$5,000.00	0	\$0.00
B	Sediment/Muck Cleanout (Disposal at Landfill)	L.S.	1	5,000.00	5,000.00		\$0.00	0	\$0.00	0	\$0.00
C	Site and Access Restoration (Seeding and Erosion Control Blanket)	S.Y.	650	4.00	2,600.00		\$0.00	0	\$0.00	0	\$0.00
<b>Site 8 – Owasso Basin, Little Canada</b>											
B	Sediment/Muck Cleanout (Disposal at Landfill)	L.S.	1	6,000.00	6,000.00	1	\$6,000.00	1	\$6,000.00	0	\$0.00
L	Excavate and Regrade Channel Inlet Basin (Landfill Disposal)	L.S.	1	8,000.00	8,000.00		\$0.00	0	\$0.00	0	\$0.00
M	Riprap Channel Basin and Inlet Pipe, MnDOT Class 4	Ton	14	50.00	700.00		\$0.00	0	\$0.00	0	\$0.00
C	Site and Access Restoration (Seeding and Erosion Control Blanket)	S.Y.	300	4.00	1,200.00		\$0.00	0	\$0.00	0	\$0.00
<b>Site 9 – Johnson Pond, Maplewood</b>											
N	Remove and Replace Existing Guardrail for Access	L.S.	1	500.00	500.00	0	\$0.00	0	\$0.00	0	\$0.00
H	Cleanout Debris, Sediment/Muck From Structures and Pipe (Disposal at Landfill)	L.S.	1	4,000.00	4,000.00		\$0.00	0	\$0.00	0	\$0.00
C	Site Access Restoration (Seeding and Erosion Control Blanket)	S.Y.	244	4.00	976.00		\$0.00	0	\$0.00	0	\$0.00
<b>Site 10 – Maplewood Mall, Maplewood</b>											
O	Repair Catch Basin and Sinkhole	L.S.	1	2,000.00	2,000.00		\$0.00	0	\$0.00	0	\$0.00

**Capital Improvement Project Maintenance/Repairs 2018**  
**Ramsey-Washington Metro Watershed District**  
**Summary of Work Completed Through May 22nd, 2018 for Progress Payment Number 3**

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
<b>Site 11 – Battle Creek Lower Ravine Park, St. Paul</b>											
H	Cleanout/Remove Debris from Pipe and Structures	L.S.	1	6,000.00	6,000.00		\$0.00	0	\$0.00	0	\$0.00
P	Televise and Inspect Storm Sewer Pipe (12", 15", 18" RCP)	L.F.	768	2.00	1,536.00		\$0.00	0	\$0.00	0	\$0.00
Q	Repair Manhole and Pipe with Cured-In-Place Pipe Liner	L.S.	1	4,000.00	4,000.00		\$0.00	0	\$0.00	0	\$0.00
R	Remove and Replace One (1) Trash Rack and Install Fasteners on The New Trash Rack and Two (2) Existing Trash Racks	L.S.	1	3,000.00	3,000.00		\$0.00	0	\$0.00	0	\$0.00
S	MnDOT Common Borrow 2105.1A.6 "Select Grading Material"	Ton	140	15.00	2,100.00		\$0.00	0	\$0.00	0	\$0.00
T	MnDOT 3149.2H Coarse Filter Aggregate	Ton	140	50.00	7,000.00		\$0.00	0	\$0.00	0	\$0.00
U	Topsoil Borrow	C.Y.	50	15.00	750.00		\$0.00	0	\$0.00	0	\$0.00
V	Futerra R45 HP Turf Reinforcement Mat	S.Y.	422	10.00	4,220.00		\$0.00	0	\$0.00	0	\$0.00
K	Site Restoration (Seeding and HP-FGM Hydro Mulch)	S.Y.	1125	4.00	4,500.00		\$0.00	0	\$0.00	0	\$0.00
<b>Site 12 – Grass Lake, Shoreview</b>											
B	(Site 12A) – Sediment/Muck and Vegetation Cleanout, Grass Lake Area (Unregulated Fill	L.S.	1	18,000.00	18,000.00	1	\$18,000.00	1	\$18,000.00	0	\$0.00
B	(Site 12B) - Sediment/Muck and Vegetation Cleanout, Wetland Triangle Area (Unregulated	L.S.	1	18,000.00	18,000.00	1	\$18,000.00	1	\$18,000.00	0	\$0.00
B	(Site 12C) - Sediment/Muck and Vegetation Cleanout, West Vadnais Lake Channel	L.S.	1	18,000.00	18,000.00		\$0.00	0	\$0.00	0	\$0.00
X	Remove and Replace Bituminous Trail	S.Y.	26	50.00	1,300.00		\$0.00	0	\$0.00	0	\$0.00
X	Remove and Replace Bituminous Roadway	S.Y.	80	88.00	7,040.00		\$0.00	0	\$0.00	0	\$0.00
Y	Remove Existing 12" CPEP	L.F.	60	15.00	900.00		\$0.00	0	\$0.00	0	\$0.00
Y	Remove existing 15" RC Pipe Apron	Each	1	200.00	200.00		\$0.00	0	\$0.00	0	\$0.00
Z	RC Transition Pipe Reducer	Each	2	1,500.00	3,000.00		\$0.00	0	\$0.00	0	\$0.00
AA	24" RC Pipe Apron and Trash Rack	Each	1	3,500.00	3,500.00		\$0.00	0	\$0.00	0	\$0.00
AB	44" Span RC Pipe Arch	L.F.	312	90.00	28,080.00	144	\$12,960.00	144	\$12,960.00	0	\$0.00
AC	44" Span RC Pipe Arch Apron	Each	6	2,000.00	12,000.00	4	\$8,000.00	4	\$8,000.00	0	\$0.00
M	Random Riprap Class III Fieldstone with Type 4 Filter Fabric	Ton	159	90.00	14,310.00		\$0.00	0	\$0.00	0	\$0.00
C	Site restoration (Seeding and Erosion Control Blanket)	S.Y.	3200	4.00	12,800.00	7350	\$29,400.00	7350	\$29,400.00	0	\$0.00
<b>Total of Extensions = \$</b>						<b>277,822.00</b>	<b>\$155,790.00</b>	<b>\$149,810.00</b>	<b>\$5,980.00</b>		

**Frost/Kennard Stormwater Filter  
Progress Payment Number 1**

1.0	Total Completed Through This Period:	<u>\$243,060.00</u>	
2.0	Total Completed Previously Completed:		<u>\$0.00</u>
3.0	Total Completed This Period:		<u>\$243,060.00</u>
4.0	Amount Previously Retained:		<u>\$0.00</u>
5.0	Amount Retained This Period (See Note 1):		<u>\$12,856.00</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>\$0.00</u>	
10.0	Amount Due This Estimate:		<u><u>\$230,204.00</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: Luke Minger Date: 5-23-18  
 Title: President  
 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 May 22, 2018 for Progress Payment Number 1**

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	0	\$0.00	1	\$27,500.00
B	Erosion Control Construction Entrance	Each	1	1,000.00	1,000.00	1	\$1,000.00	0	\$0.00	1	\$1,000.00
C	Erosion Control Silt Fence	L.F.	600	1.80	1,080.00	600	\$1,080.00	0	\$0.00	600	\$1,080.00
D	Erosion Control Blanket	S.Y.	1,070	1.20	1,284.00	0	\$0.00	0	\$0.00	0	\$0.00
E	Remove & Salvage Topsoil (P)	S.Y.	980	2.00	1,960.00	980	\$1,960.00	0	\$0.00	980	\$1,960.00
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	0	\$0.00	1	\$1,500.00
G	96-inch Precast Manhole with Casting	L.F.	14	1,700.00	23,800.00	14	\$23,800.00	0	\$0.00	14	\$23,800.00
H	48-inch Precast Manhole with Casting	L.F.	11	500.00	5,500.00	11	\$5,500.00	0	\$0.00	11	\$5,500.00
I	8-ft wide, Precast Concrete and FRP Stop Log Weir	L.S.	1	20,000.00	20,000.00	1	\$20,000.00	0	\$0.00	1	\$20,000.00
J	27-inch Access Manhole with Casting Assembly	Each	4	850.00	3,400.00	4	\$3,400.00	0	\$0.00	4	\$3,400.00
K	Common Excavation for Vault (P)	C.Y.	950	15.00	14,250.00	950	\$14,250.00	0	\$0.00	950	\$14,250.00
L	Disposal of Excess Excavated Material (P)	C.Y.	350	15.00	5,250.00	350	\$5,250.00	0	\$0.00	350	\$5,250.00
M	Existing Structure Connection	Each	1	4,000.00	4,000.00	1	\$4,000.00	0	\$0.00	1	\$4,000.00
N	10-inch Ductile Iron Pipe (DIP)	L.F.	20	95.00	1,900.00	20	\$1,900.00	0	\$0.00	20	\$1,900.00
O	12-inch Corrugated Polyethylene Pipe (CPEP) Dual-Wall (Smooth Interior)	L.F.	145	86.00	12,470.00	145	\$12,470.00	0	\$0.00	145	\$12,470.00
P	12-inch CPEP 22.5 Degree Bend	Each	2	75.00	150.00	3	\$225.00	0	\$0.00	3	\$225.00
Q	Stormwater Filter Piping and Fittings, All Complete	L.S.	1	13,000.00	13,000.00	1	\$13,000.00	0	\$0.00	1	\$13,000.00
R	Concrete Fore bay	Each	1	2,400.00	2,400.00	1	\$2,400.00	0	\$0.00	1	\$2,400.00
S	Anchor Underdrain Pipe to Vault	L.S.	1	5,500.00	5,500.00	1	\$5,500.00	0	\$0.00	1	\$5,500.00
T	10-inch Stainless Steel Plug Valve w/Box ASM	Each	1	3,500.00	3,500.00	0	\$0.00	0	\$0.00	0	\$0.00
U	Fine Filter Aggregate	Ton	18	1,350.00	24,300.00	18	\$24,300.00	0	\$0.00	18	\$24,300.00
V	Plastic Netting	S.Y.	75	13.00	975.00	75	\$975.00	0	\$0.00	75	\$975.00
W	Spent Lime	L.S.	1	4,600.00	4,600.00	1	\$4,600.00	0	\$0.00	1	\$4,600.00
X	Precast 3-sided Box Culvert Vault & Cover (6 Sections)	L.S.	1	73,000.00	73,000.00	1	\$73,000.00	0	\$0.00	1	\$73,000.00
Y	Precast End Walls (2 Sides)	L.S.	1	12,000.00	12,000.00	1	\$12,000.00	0	\$0.00	1	\$12,000.00
Z	Non-Shrink Grouting	C.Y.	7	200.00	1,400.00	7	\$1,400.00	0	\$0.00	7	\$1,400.00
AA	Ladder	L.S.	2	2,500.00	5,000.00	2	\$5,000.00	0	\$0.00	2	\$5,000.00
AB	Netlon Stabilizing Mesh Bales for Stabilized Turf Driveway	Each	5	500.00	2,500.00	0	\$0.00	0	\$0.00	0	\$0.00
AC	Special Planting Soil Mix for Netlon Turf Driveway	C.Y.	25	130.00	3,250.00	0	\$0.00	0	\$0.00	0	\$0.00
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	0	\$0.00	0	\$0.00	0	\$0.00
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      \$243,060.00      \$0.00      \$243,060.00**



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  
May 24, 2018  
File No: 9M

	Balance
General Account	\$3,300.00
Grass Lake Emergency Project	\$180.00
2018 CIP	\$740.00
	<u>\$4,220.00</u>

\* \* \* \* \*

# Permit Program

\* \* \* \* \*

# Permit Application Coversheet

**Date** June 06, 2018

**Project Name** Maplewood 2018 SIP

**Project Number** 18-10

**Applicant Name** Jon Jarosch, City of Maplewood

**Type of Development** Linear

## Property Description

This project is located northwest of I-94 and Century Avenue in the City of Maplewood. The city is proposing to reconstruct approximately 2.3 miles of predominantly residential streets which will include bituminous replacement, sewer updates, and concrete curb and gutter. Proposed layouts reflect a "Living Streets" design with narrowing of street widths and the addition of sidewalks. The city is undergoing outreach to residents in the neighborhood to generate interest for boulevard rain gardens. Pretreatment will include sumped inlets. The final number and location of rain gardens is currently uncertain. In order to streamline the permitting process, the city has requested to utilize banked credits available in the amount of 40,090 cubic feet. Filtration BMPs previously constructed in Lion's Park (permit #10-22) were oversized to account for future projects in the area and have sufficient capacity to meet volume reduction requirements. As part of the current project, one of the Lion's Park filtration basins will be reconstructed to improve drainage. Rate control requirements are met within the project area.

## 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.

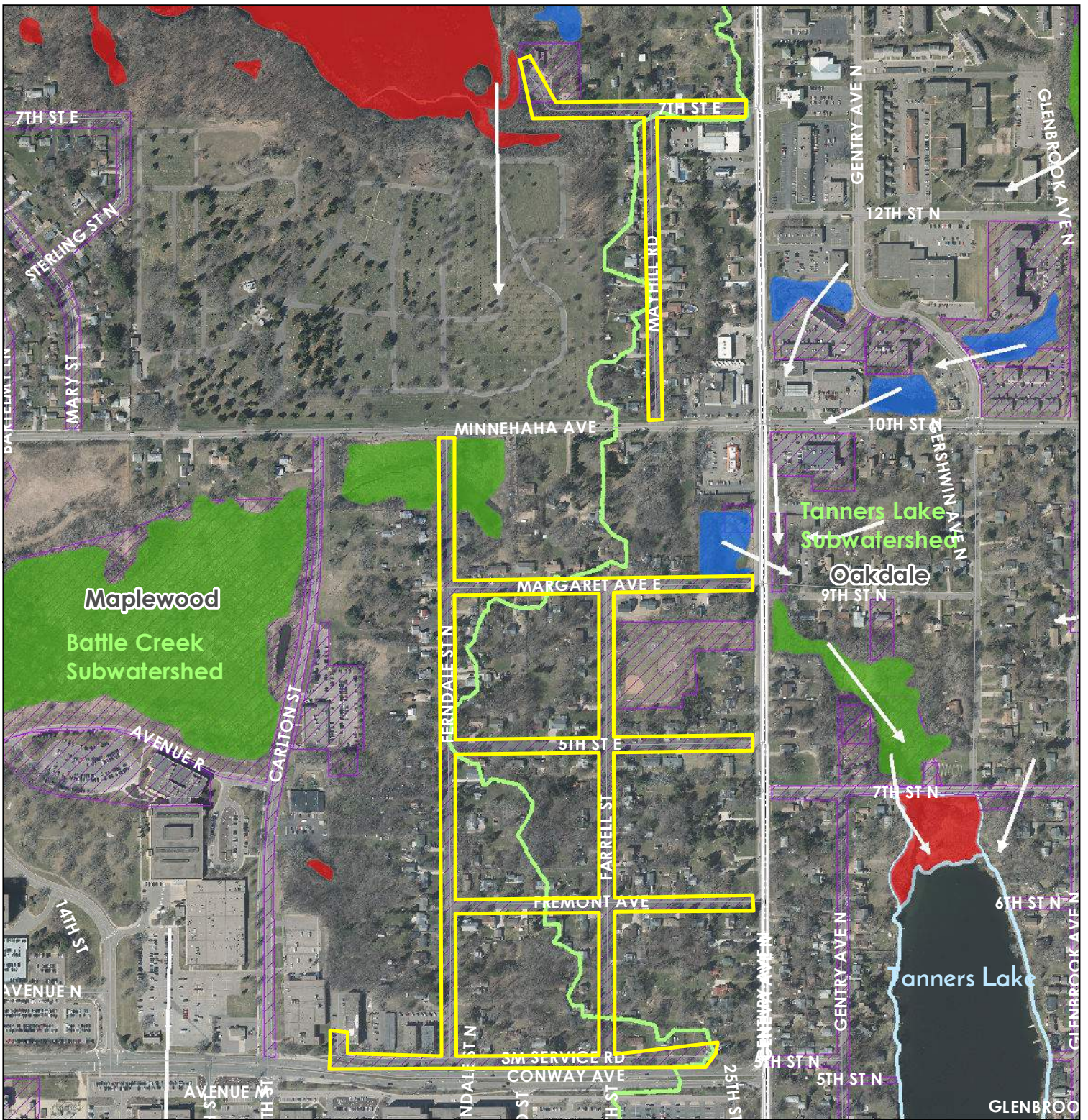
## Staff Recommendation

Staff recommends approval of this permit with the special provisions.

## Attachments:

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

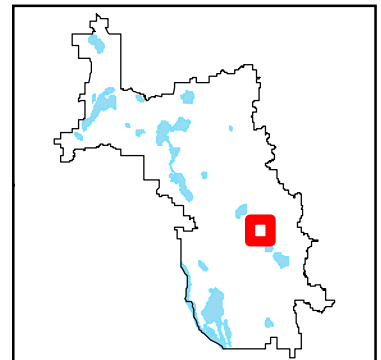
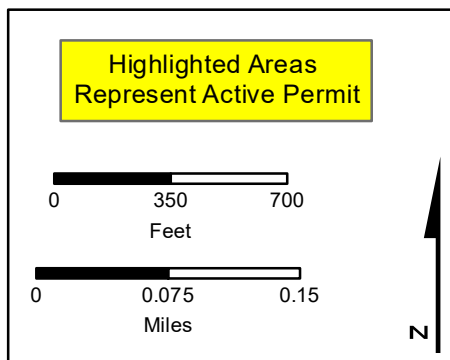
# #18-10 Maplewood 2018 SIP



**Wetlands**

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

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



**18-10**

**Special Provisions**

1. The applicant shall submit a revised narrative that:
  - A. Confirms there are no wetland impacts associated with the project.
  - B. Includes a revised required infiltration volume equation.
2. The applicant shall submit a final copy of the signed construction plans.
3. The applicant shall add redundant perimeter control to the plans alongside the wetland area if down-gradient of any disturbed soils from the project.
4. The applicant shall label the 100-year High Water Level on the plans for the Lion's Park BMP.
5. The applicant shall provide contact information for the trained erosion control coordinator responsible for implementing the Stormwater Pollution Prevention Plan (SWPPP).
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 details for perimeter control, inlet protection, and construction entrances.

# Permit Application Coversheet

**Date** June 06, 2018

**Project Name** Whistler Pines

**Project Number** 18-11

**Applicant Name** Sean Keatts, Cara Builders, LLC

**Type of Development** Residential

## Property Description

This project is located at 4140 Hodgson Road, southeast of Snail Lake in the City of Shoreview. The applicant is proposing to construct 8 single-family homes which will include construction of a street with sewer and water main installation. The total site area is 3.67 acres. Volume reduction and rate control will be achieved through construction of an infiltration basin and underground infiltration trench. Pretreatment will include sump structures. Due to existing site topography, an outlet for the infiltration basin will be provided via a lift station to the county ditch on Hodgson Rd. The City of Shoreview has agreed to inspect and maintain the stormwater infrastructure on the site.

## 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**

# #18-11 Whistler Pines



Vadnais Lake Area  
Watershed Management  
Organization

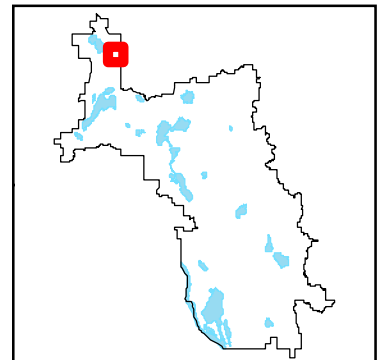
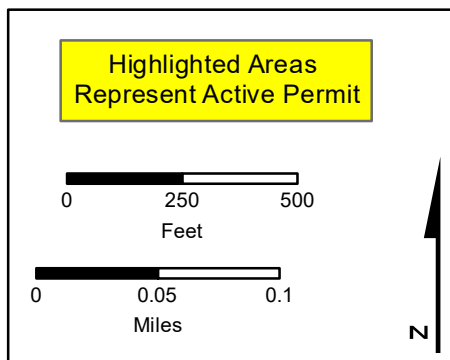
Vadnais Heights

Grass Lake  
Subwatershed

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
	City Boundaries



**18-11**

**Special Provisions**

1. The applicant shall submit the escrow fee of \$17,500.
2. The applicant shall provide contact information for the trained erosion control coordinator responsible for implementing the Stormwater Pollution Prevention Plan (SWPPP).
3. The applicant shall submit a copy of the approved Minnesota Pollution Control Agency's NPDES Phase 2 Construction Permit.
4. The applicant shall submit a final copy of the signed construction plans.



**GENERAL NOTES**

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CALL "811" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
4. INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND DETAIL PLATES.
5. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
6. NOTIFY CITY A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

**CURB & BITUMINOUS NOTES**

1. REMOVAL AND DISPOSAL OF EXISTING STREET MATERIALS AS REQUIRED FOR CONSTRUCTION IS CONSIDERED INCIDENTAL.
2. ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAW-CUT AT FULL DEPTH.
3. RESTORE DISTURBED STREET TO EXISTING OR BETTER SECTION.
4. BACKFILLING OF CURB IS INCIDENTAL TO CURB INSTALLATION.

**STORM SEWER NOTES**

1. PROPOSED STORM SEWER PIPE SHALL BE:  
1.1. REINFORCED CONCRETE PIPE (RCP) WITH R-4 GASKETS; AND,  
1.2. HIGH-DENSITY POLYETHYLENE PIPE (HDPE). HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE 5 WITH WATER-TIGHT CONNECTIONS. USE SAND/GRAVULAR MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321.
2. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
3. STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTION. LAYING LENGTH OF APRON TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
4. ALL PORTIONS OF THE STORM SEWER SYSTEM LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED IN ACCORDANCE WITH MINNESOTA RULES, CHAPTER 4714, SECTION 110B.G.

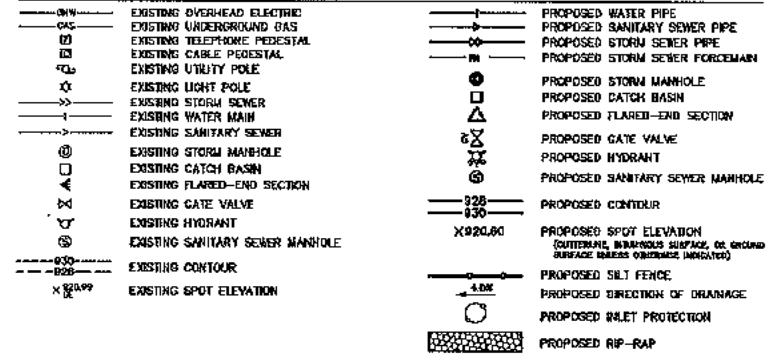
**SANITARY SEWER NOTES**

1. PROPOSED SANITARY SEWER PIPE SHALL BE:  
1.1. 8" PVC SDR 35 (ASTM D3034)  
1.2. 4" PVC SCHEDULE 40 (ASTM 32665)
2. FIELD VERIFY SIZE, ELEVATION AND LOCATION OF EXISTING SANITARY SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
3. CONTRACTOR TO CONTACT CITY ENGINEERING DEPARTMENT AT LEAST 48 HOURS PRIOR TO CONNECTION TO EXISTING PUBLIC SANITARY SEWER (763-765-0172)

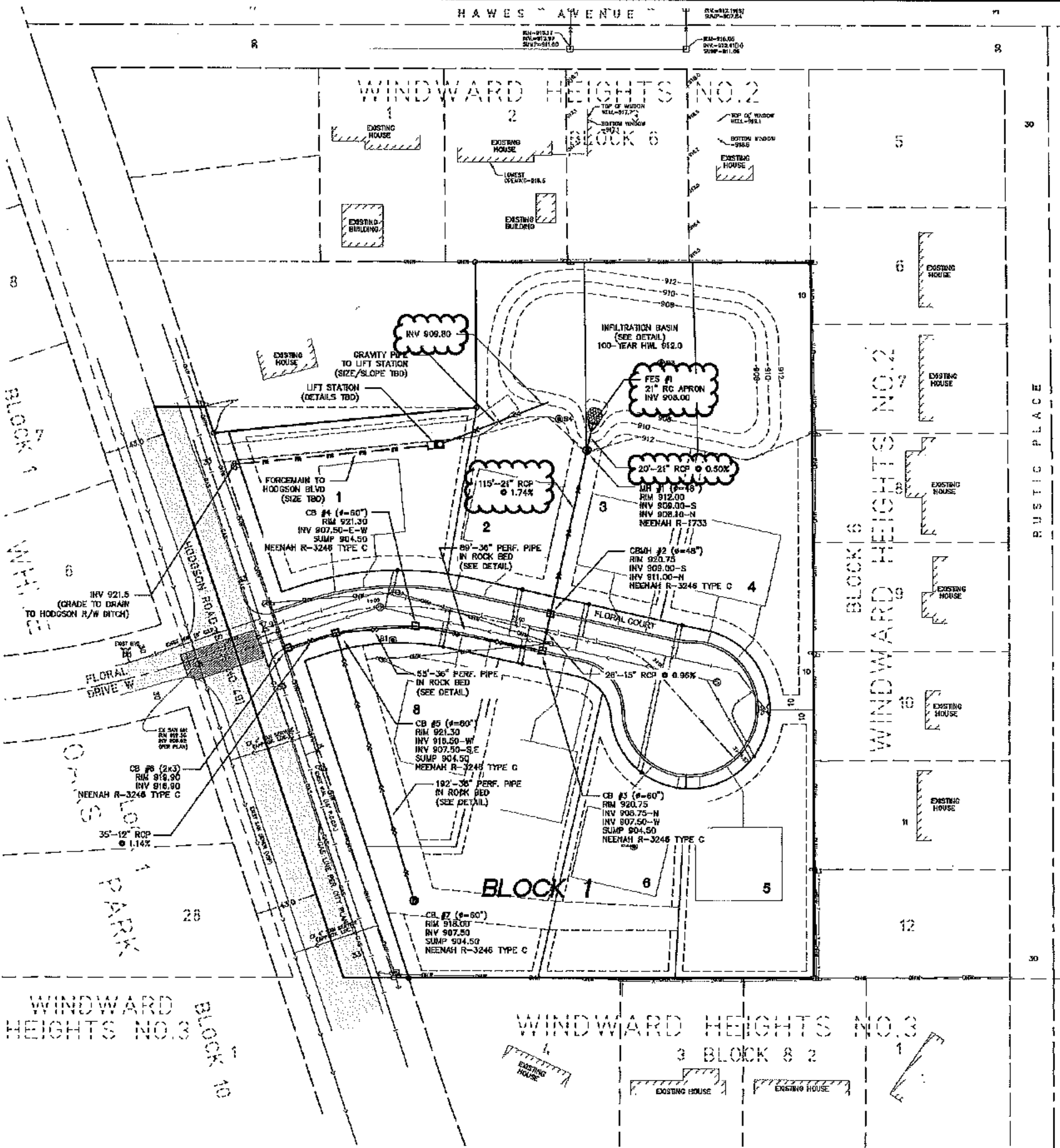
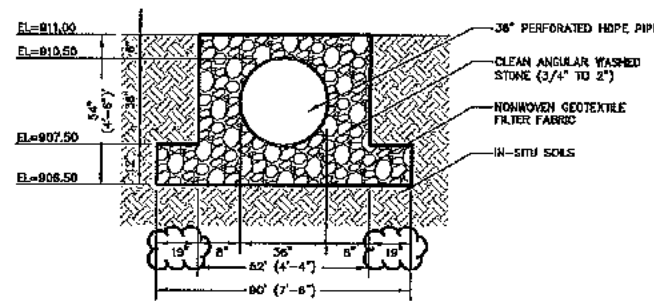
**WATERMAIN NOTES**

1. PROPOSED WATERMAIN PIPE SHALL BE:  
1.1. 8" AND 12" PVC C-900 WITH OR 18  
1.2. 1" HDPE EN60-PURE PE 4710-250 PSI SDR 7 (PPS)
2. ALL WATERMAIN VALVES SHALL BE OPERATED ONLY BY SHOREVIEW PUBLIC WORKS FORCES (763-765-0172)
3. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING WATERMAIN AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
4. MAINTAIN A MINIMUM OF 7.5 FEET OF COVER OVER ALL WATERMAIN PIPE. PROVIDE PREFORMED INSULATION, FFG FOAMGLASS, OR APPROVED EQUAL WADE. SANITARY SEWER OR STORM SEWER CROSSES WITHIN 18" OF WATERMAIN.

**LEGEND**



STORAGE PER L.F. (ROCK @ 40% VOIDS) = 8.17 CF  
 STORAGE PER L.F. (PIPE ONLY) = 7.07 CF  
 TOTAL STORAGE PER L.F. = 15.24 CF  
 BOTTOM SURFACE AREA PER L.F. = 7.90 SF



- NOTES:**
1. SEE STORM WATER POLLUTION PREVENTION PLAN FOR ADDITIONAL EROSION CONTROL NOTES, SITE SEQUENCING & EROSION AND SEDIMENT CONTROL DETAILS
  2. TEMPORARY EROSION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO START OF CONSTRUCTION
  3. SPECIFIED EROSION & SEDIMENT CONTROL MEASURES ARE MINIMUM. ADDITIONAL PRACTICES MAY BE REQUIRED DURING THE COURSE OF CONSTRUCTION.

**UTILITY PLAN - STORM SEWER  
WHISTLER PINES**

DRAWN BY: A.G.	DESIGN BY: A.G.
CHECKED BY: C.W.P.	PROJ. NO. 18-1748
ORIGINAL DATE: MARCH 20, 2018	
DATE	REVISION DESCRIPTION
5-8-18	CITY REVIEW COMMENTS
5-14-18	CITY & FORWARD COMMENTS
5-22-18	FORWARD COMMENTS

1. 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.

**PRELIMINARY**

ADAM GINKEL  
 LIC. NO. 45953  
 DATE: 05.22.2018

**WHISTLER PINES**  
 SHOREVIEW, MN  
 UTILITY PLAN  
 STORM SEWER

PREPARED FOR:  
**CARA BUILDERS, LLC**

**PLOWE**  
 ENGINEERING, INC.  
 5773 LAKE DRIVE  
 SUITE 110  
 LINDO LAKES, MN 55014  
 PHONE: (651) 391-3210  
 FAX: (651) 361-6701

**NORTH**

**C2.2**

# Permit Application Coversheet

**Date** June 06, 2018

**Project Name** Panera Bread 2965 White Bear Ave

**Project Number** 18-12

**Applicant Name** Brian Barnard, Panera Bread Restaurant

**Type of Development** Commercial/Retail

## Property Description

This project is located at 2965 White Bear Ave, just east of the Maplewood Mall. The applicant is proposing to redevelop the site to incorporate a new Panera Bread restaurant with associated parking and utilities. Volume reduction and rate control will be achieved through construction of an underground infiltration system. Pretreatment will include sumped catch basins with snouts to capture floatables. The total site area is 1.13 acres.

## 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.

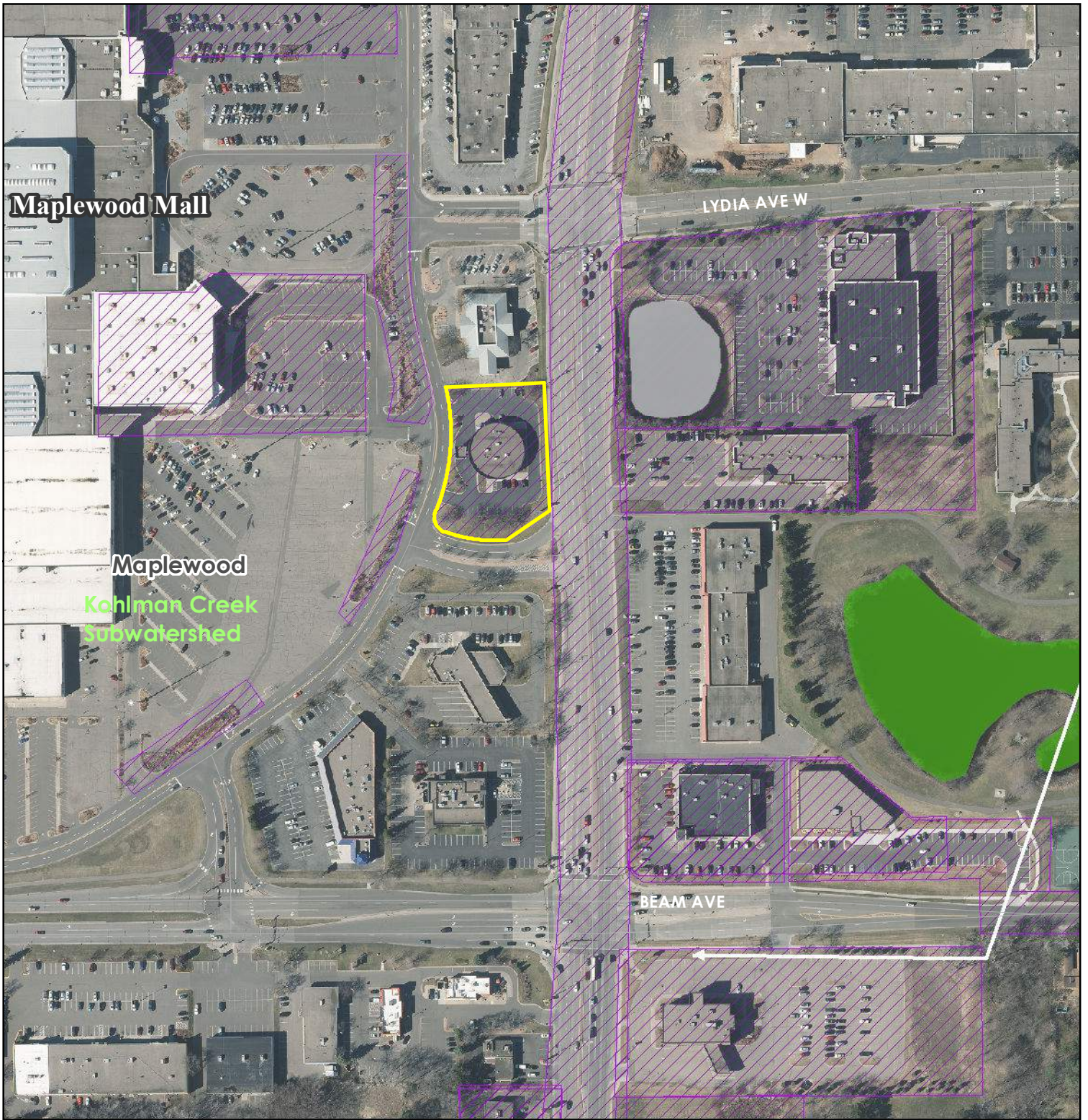
## Staff Recommendation

Staff recommends approval of this permit with the special provisions.

## Attachments:

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

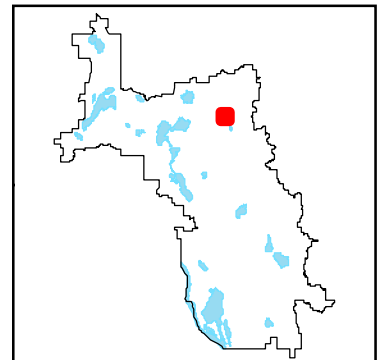
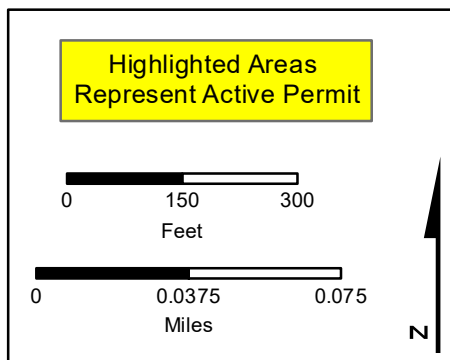
# #18-12 Panera Bread 2965 White Bear Ave



**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

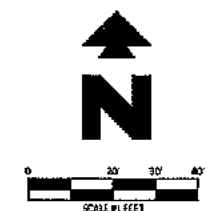
	RWMWD Boundary
	Flow Arrows
	Major Flow Arrows
	Subwatersheds
	Creeks
	Permits
	City Boundaries



**Special Provisions**

1. The applicant shall submit a drainage narrative that is signed by a Minnesota Professional Engineer.
2. The applicant shall submit the escrow fee of \$5,500.
3. The applicant shall submit a joint executed maintenance agreement with the City of Maplewood for the proposed stormwater infiltration system.
4. The applicant shall add a note to the plans that additional soil boring information must be submitted to the District prior to construction of the stormwater infiltration system. Failure to do so may result in the removal of work completed.
5. The applicant shall add a note to the plans providing direction to the contractor on the construction of the stormwater infiltration system. Infiltration areas must be free of compaction and protected from sediment throughout the duration of the project to prevent clogging. If the system does not drain within 48 hours of a rainfall event, the watershed permit cannot be closed out.
6. The applicant shall update the 100-year High Water Level for the stormwater infiltration system on Sheet C3.
7. The applicant shall provide contact information for the trained erosion control coordinator responsible for implementing the Stormwater Pollution Prevention Plan (SWPPP).
8. The applicant shall provide a copy of the approved Minnesota Pollution Control Agency's NPDES Phase 2 Construction Permit.
9. The applicant shall submit a final copy of the signed construction plans.

**SITE BENCHMARK**  
 CHECKED AND RECORDED IN THE PUBLIC RECORDS OF THE STATE OF MINNESOTA BY THE REGISTERED PROFESSIONAL ENGINEER AND SURVEYOR  
 5/21/18



**LEGEND**

EXISTING	
---	DIST. OF ELECTRIC
---	GAS
---	OVERHEAD ELECTRIC
---	OVERHEAD TELEPHONE
---	OVERHEAD TV
---	SANITARY SEWER
---	UNDERGROUND ELECTRIC
---	UNDERGROUND TELEPHONE
---	UNDERGROUND TELEPHONE
---	UNDERGROUND TV
---	WATER
---	TRACE INFO
---	5' - CENTERLINE OF TRUNK AT FEET
---	10' - HEIGHT OF TREE IN FEET
---	21' - CANOPY DIAMETER IN FEET
---	50.5' - ELEVATION AT BASE OF TREE

PROPOSED	
---	PROPERTY LINE/RIGHT OF WAY LINE
---	GRADE BENCH
---	CENTERLINE ELEVATION
---	STORM DRAIN
XX.XX	SPOT ELEVATIONS TC = TOP OF CURB G = GUTTER

**GENERAL GRADING NOTES**

- BEFORE INSTALLATION OF STORM OR SANITARY SEWER, THE CONTRACTOR SHALL EXCAVATE, VERIFY, AND CALCULATE ALL CROSSINGS AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THE ENGINEER'S NOTIFICATION OF DESIGN CONFLICTS.
- ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND 4" OF TOPSOIL APPLIED, IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE. THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE AREA SHALL THEN BE SEEDING, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL STABLE GRASS COVER IS ESTABLISHED. ALL SLOPES SHALL BE MAINTAINED AT 10% MAXIMUM UNLESS OTHERWISE SPECIFIED. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATIONS OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE USED AS BASIS FOR CONSTRUCTION. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
- UNLESS OTHERWISE SHOWN, CALLED OUT OR SPECIFIED HEREON OR WITHIN THE SPECIFICATIONS, ALL STORM DRAIN PIPE BEDDING SHALL BE INSTALLED PER DETAIL 28A. ALL STORM DRAIN PIPES ARE MEASURED FROM CENTER OF STRUCTURES AND ENDS OF FLARED END SECTIONS.

**GRADING NOTES**

- CONSTRUCT DOWN SLOPES TO DRAIN PIPE. (SEE ARCH. PLANS FOR DRAIN NO. AND LOCATION OF DRAIN SLOPES).
- REMOVE TOP OF EXISTING DRAINAGE STRUCTURE. RECONSTRUCT TOP AND FINISH MATCH FRESH GRADE.
- CONSTRUCT TO EXISTING STORM DRAIN DIAMETER OR PIPE.
- MATCH EXISTING PIPE VERT. ELEVATIONS.
- LOCATION OF THIS UTILITY AS SHOWN IS FOR DRAWING PURPOSES ONLY. CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN FIELD PRIOR TO THE CONSTRUCTION OF THE PROPOSED UTILITY LINE TO BE CONNECTED. CONTRACTOR SHALL NOTIFY THE ENGINEERING IF THE DESIGN AS SHOWN IS NOT ACHIEVABLE.

**GRADING DETAILS**

- 28A DETENTION BOX
- 28B CURB INLET
- 28C GATE INLET
- 28D 24" DIA. UNDERGROUND STORMWATER DETENTION SYSTEM (SLOPE/REACH DC-200 CHAMBERS OR APPROVED EQUAL. DESIGN/INSTALLATION PER MANUFACTURER'S SPECIFICATIONS).

**STORMWATER RUNOFF SUMMARY:**

TOTAL PROPERTY AREA = 11.13 ACRES OR 48,335 SF  
 TOTAL DISTURBED AREA = 11.04 ACRES = 1.7% DISTURBED AREA PERMIT WILL BE REQUIRED.

**1. OFF-SITE AREAS & RUNOFF COEFFICIENTS:**

**PRE-DEVELOPMENT:**  
 DRAINAGE AREA = 49,325 SF  
 PERVIOUS AREA = 16,300 SF  
 PERVIOUS CO = 0.34  
 IMPERVIOUS AREA = 33,025 SF  
 IMPERVIOUS CO = 0.90  
 COMPOSITE CO = 0.60

**POST-DEVELOPMENT:**  
 DRAINAGE AREA = 49,325 SF  
 PERVIOUS AREA = 12,370 SF  
 PERVIOUS CO = 0.26  
 IMPERVIOUS AREA = 36,955 SF  
 IMPERVIOUS CO = 0.90  
 COMPOSITE CO = 0.52

**2. EXISTING SITE PEAK DISCHARGE FOR DESIGN STORAGE:**  
 2-YR 4.99 CFS  
 10-YR 6.74 CFS  
 100-YR 12.74 CFS

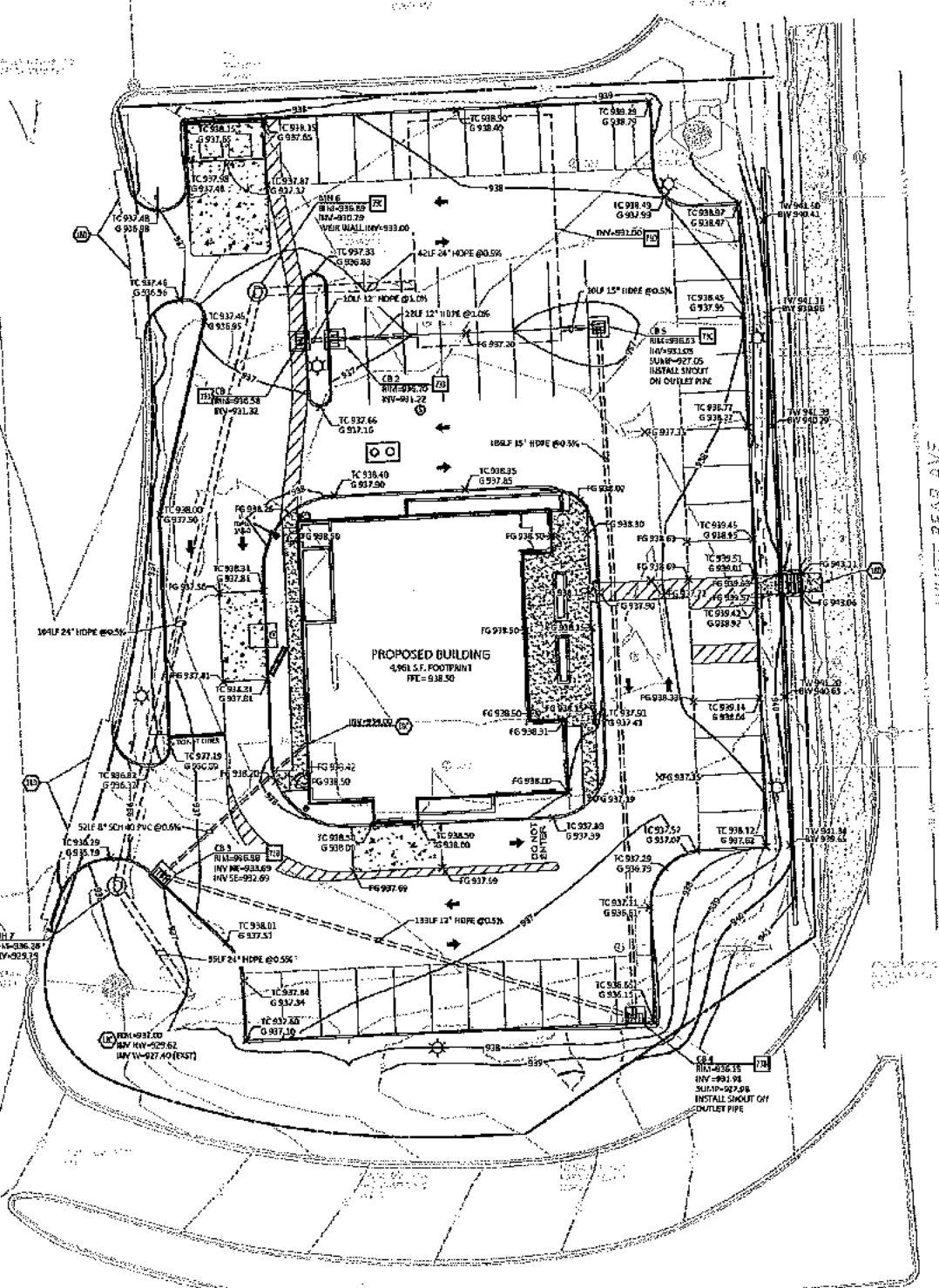
**3. PROPOSED SITE PEAK DISCHARGE FOR DESIGN STORAGE:**  
 2-YR 1.20 CFS  
 10-YR 0.83 CFS  
 100-YR 12.40 CFS

**4. SUMMARY:**  
 STORAGE SYSTEM MAINTAINS TOTAL PEAK DISCHARGE FOR DESIGN STORAGE TO AT OR BELOW THE EXISTING LEVELS  
 100-YR (REV.) = 13.40 CFS  
 SYSTEM E.O.F. (EXISTING OR IN SW CORNER OF SITE) = 934.40

**5. REQUIRED WAREE QUANTITY (TREATMENT) STD. REQUIRED WQV = 10,840 YD<sup>3</sup> @ 1.172 (L/FT) @ 1.06 C.F. PROVIDED WQV = 4,062 C.F. WQV ELEV = 933.00**

**EARTHWORK SUMMARY:**

RUN EARTHWORK CALCULATIONS:  
 PROPOSED CUT = 1,781 CY  
 PROPOSED FILL = 247 CY  
 NET EARTHWORK = 1,534 CY (CUT)



DATE: 5/21/18 10:00 AM LAST SAID BY: AUGUSTINE LOPEZ, P.E. AUGUSTINE LOPEZ, P.E. AUGUSTINE LOPEZ, P.E. AUGUSTINE LOPEZ, P.E.

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

*Grant L. Massey*  
 Grant L. Massey  
 Professional Engineer  
 Registration Number: 44468  
 Date: 5/21/2018



3076	5/21/18	ALC	ALC	JTA	JTA
CEI PROJECT NO.	INITIAL DATE	OWNER	DES	DES	DIRTY
<b>CEI Engineering Associates, Inc.</b>					
2025 Centre Pointe Blvd., Suite 210 Maplewood, MN 55120					
<b>PANERA BREAD</b>					
3086 WHITE BEAR AVE. MAPLEWOOD, MN 55120					
<b>GRADING PLAN</b>				REV. DATE 5/21/18 REV. 1	SHEET NO. CS



**MEMORANDUM**

**Date:** June 6, 2018  
**To:** RWMWD Board of Managers  
**From:** Nicole Soderholm, Permit Coordinator  
**Subject:** Ramsey County I-694/Rice St Interchange —Wetland Mitigation Requirements

Ramsey County, in cooperation with MnDOT, is proposing to reconstruct the I-694/Rice Street Interchange within Shoreview, Little Canada, and Vadnais Heights.

In October of 2017, the RWMWD Board was introduced to project. At that meeting, a representative from SEH (on behalf of Ramsey County) was present to discuss the likelihood of permanent wetland impacts in an effort to start an informal discussion on the Board's requirements for mitigation.

The Board directed SEH to look at options such as enhancement of existing wetlands on the site, expansion of existing wetlands, providing excess stormwater treatment, roundabout designs that would minimize impervious area, and wetland creation on county property elsewhere within RWMWD.

The enclosed memo from SEH summarizes the results of looking at these options along with updated wetland impact figures. Due to a number of constraints, project-specific mitigation may not be feasible.

The proposed project is considered a transportation and safety improvement to an existing roadway, and the Board of Water and Soil Resources (BWSR) has expressed support for the county's eligibility to obtain wetland credits through the BWSR Local Road Replacement Program. The RWMWD Board has a history of waiving wetland mitigation in the District for projects that are eligible for the Road Bank, recognizing linear site constraints in existing right-of-way. The eligible Road Bank credits are not located in the watershed district and therefore do not meet the RWMWD Board's 'no let loss' of wetlands policy.

The county would like further direction related to mitigation requirements for the project as they prepare to apply for District and Wetland Conservation Act (WCA) permits.



Building a Better World  
for All of Us®

## MEMORANDUM

TO: Nicole Soderholm, RWMWD Permit Coordinator

FROM: Rebecca Beduhn, SEH Wetland Scientist

DATE: May 23, 2018

RE: I-694 & Rice Street Interchange: Wetland Mitigation  
SEH No. RAMSE 135877  
S.P. No. 6285-158

### INTRODUCTION

The purpose of this memorandum is to address Ramsey-Washington Metro Watershed District wetland mitigation requirements, and their applicability for the Interstate 694 (I-694) and Rice Street interchange reconstruction in Ramsey County, Minnesota.

The project is proposed by Ramsey County, and is located within both the Ramsey-Washington Metro Watershed District (RWMWD) and the Vadnais Lake Area Water Management Organization (VLAWMO). Additionally, a portion of the project is located within the Minnesota Department of Transportation (MnDOT) Right of Way (ROW) for I-694.

The project is within the Cities of Shoreview, Little Canada, and Vadnais Heights, within the 7-County Metro Wetland Bank Service Area (BSA 7-M); the Mississippi River - Twin Cities major watershed (#20); an unnamed Minnesota Department of Natural Resources minor watershed; and the Gervais Creek sub-watershed.

### WETLANDS

A wetland delineation was completed for the project corridor in August 2016. The project area was reviewed and the wetland delineations were approved by the RWMWD, VLAWMO, and MnDOT in November 2016.

The wetland delineation identified six (6) wetlands (**Figure 1**); Wetlands 1-4 are wholly or partially within MnDOT ROW; Wetland 5 (fringe of West Vadnais Lake) and Wetland 6 (stormwater basin) are exclusively within the VLAWMO; and Wetland 4 is partly within the RWMWD. Additionally, Wetlands 2, 3, and 4 are wholly or partially identified as wet ditch wetlands constructed for the purposes of conveying storm and surface runoff.

### Proposed Wetland Impacts

The project as proposed will permanently impact **57,384 square feet (1.32 acres)** of Wetland 4 (**Figure 2**). There are no proposed impacts to any other wetlands within the project limits. The impacts to Wetland 4 include 15,481 square feet (0.36 acres) to type 1/floodplain forest, 834 square feet (0.02 acres) to type 2/fresh (wet) meadow - wet ditch, and 41,069 square feet (0.94 acres) to type 3/shallow marsh wetland communities.

### REGULATORY JURISDICTION

Wetlands in the project area are regulated by agencies at the local, regional, state, and federal levels including the U.S. Army Corps of Engineers (USACE) and the Environmental Protection Agency (EPA) at the federal level; the Minnesota Board of Water and Soil Resources (BWSR) the Minnesota Pollution Control Agency (MPCA) at

the state level; and the MnDOT, RWMWD, and VLAWMO at the local level. These three entities administer the Minnesota Wetland Conservation Act (WCA) of 1991 for wetlands within each respective zone. The Minnesota Department of Natural Resources (MnDNR) regulates areas within the project that are identified as public waters or public waters wetlands.

Preliminary discussion regarding proposed wetland impacts designate the RWMWD as the leading WCA governing agency for the project, as Wetland 4 is located within both MnDOT ROW and the RWMWD. All wetlands within the project area are anticipated to be under the jurisdiction of the USACE.

The USACE has a Transportation Regional General Permit (TRGP 2017-02361) that applies to certain transportation associated activities, which applies to this reconstruction project.

#### **RAMSEY-WASHINGTON METRO WATERSHED DISTRICT COMPENSATORY MITIGATION REQUIREMENTS**

The District requires no net loss for wetlands. For wetland mitigation, the following siting sequence is preferred:

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

At a minimum, the replacement required within the District is a 1:1 ratio to ensure no net loss. The WCA and the USACE require a minimum 2:1 replacement, so at a maximum half of the required replacement (ex: the remaining 1:1) can be purchased from an approved wetland bank. The minimum amount of wetland replacement required is 113,100 square feet (2.60 acres). This value excludes the wet ditch portion of the basin, as described in the previous section, there are no replacement requirements for incidental wetlands (per WCA) or wet ditches created wholly in upland (per USACE).

The siting sequence for replacement has been considered in regards to replacing the lost wetland functions and values that will result from the project. Feasible on-site mitigation options for the project are limited. The project involves reconstruction of an existing freeway interchange, and will utilize the current alignment for Rice Street to the greatest extent possible to limit additional disturbance and property acquisition. This does not leave sufficient space to implement wetland creation or restoration within the project limits. Any available space within the corridor is primarily being used for stormwater Best Management Practices (BMPs) for the increase in impervious surfaces, as described in the Preliminary Drainage and Stormwater Management memorandum for the project.

Currently, there are no wetland banks with available credits in the Gervais Creek sub-watershed, in the RWMWD, or even within Ramsey County. The closest available USACE-approved wetland credits are within the same BSA (7-M) and major watershed (#20) in Washington County ([bank #1137](#)), approximately nine miles northeast of the proposed project.

#### **District Correspondence**

An early agency coordination meeting was held on July 13, 2017 with representatives from RWMWD, VLAWMO, and SEH. Minutes are attached to this memorandum.

During the October 2017 District RWMWD Board meeting, the lack of available wetland credits in the District, as well as the limited feasibility to provide on-site wetland mitigation, were discussed.

The Board was willing to consider alternative mitigation options due to the constraints of the site, as it may not be realistic to mitigate 1:1 within the project area. Alternative suggestions to achieve wetland mitigation requirements included; providing additional stormwater volume retention or infiltration above what is required, enhancing the quality of the effected wetland, expanding Wetland 2 or 3, using roundabout with depressed pervious centers, or



wetland creation within one of the nearby vacant lots. All of these options have considered, and are discussed below.

#### **Stormwater volume retention or infiltration**

The option to provide additional 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. Similarly, additional floodplain requirements (beyond the minimum required) may result in excavation within wetland, causing additional wetland impacts. Additional review of the project area and grading requirements for the proposed reconstruction are being employed and if determined practicable, will be provided, but currently is not sufficient to be considered satisfactory to meet the goal of 1:1 replacement of lost functions and values.

#### **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 have, and will continue, to be 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 the County and used for construction staging. 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 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. The County supports additional wetlands and improved quality within the watershed, but is unable to find opportunities related to this project.

#### **COMPENSATORY WETLAND MITIGATION**

It is the intention of the project to use the BWSR Local Road Wetland Replacement Program (LRWRP) for compensatory wetland mitigation for this project.

As required by WCA to be eligible for consideration under the LRWRP program, the proposed project is an existing roadway, is not being completed solely for additional traffic capacity, and is being designed to meet federal and state design standards. Therefore we conclude that provision of wetland credits for unavoidable wetland impacts is appropriate for this project.

A letter was sent to Ben Meyer at BWSR explaining the projects eligibility for the LRWRP program. Ben Meyer concurred with the determination on May 8<sup>th</sup>, 2018 that in his opinion that this project is eligible to use the LRWRP for mitigation of this project. As a member of the Technical Evaluation Panel, and representing the agency that provides these credits, this is strong endorsement of eligibility. A copy of that correspondence has been provided to RWMWD staff.

### **Functions and Values Assessment**

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 1.02 acres is required. 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 Country Drive and I-694, which leaves little area to employ a wetland buffer. The required wetland buffer in comparison to the proposed alignment is shown in **Figure 3**. While there may be some wetland buffer functions within the designated area, it is insufficient to meet the watershed requirements. Discussion of a possible variance to the buffer requirements may be warranted.

### **CONCLUSION**

Due to the nature of the proposed action and the location of the wetland impacts, SEH believes the projects is best suited for compensatory wetland mitigation through the BWSR LRWRP. This is supported by BWSR, and is also an acceptable replacement approach for meeting USACE requirements. This is sufficient to meet the requirements of the WCA, which is administered by the RWMWD, but may not meet the watershed-specific rules as currently interpreted.

It is requested that because the project is eligible for mitigation through the LRWRP that the local requirements for on-site replacement or replacement within the watershed be reconsidered. Particularly due to the lack of opportunity to meet these standards. Limited opportunities to provide partial replacement may be present, but would require acceptance of lowered performance criteria, as creation or enhancement of high quality wetland is not achievable within the scope of this project. With consideration that this project is for public roadways, we believe that there may be a basis for consideration of a waiver for the local requirements.

Similarly, there may be a need to consider a waiver for wetland buffer requirements, as the area of Wetland 4 that is being impacted will not allow for the establishment of buffer that meets watershed standards.

We appreciate the opportunity to further discussion of this project with the RWMWD Board, and look forward to a mutually agreeable resolution.

**Figures**

Figure 1 – Wetland Delineation Results

Figure 2 – Proposed Wetland Impacts (Overview)

Figure 3 – Proposed Wetland Impacts (Zoom)

**Attachments**

Early Agency Coordination Meeting Minutes

c: Beth Engum (Ramsey County)

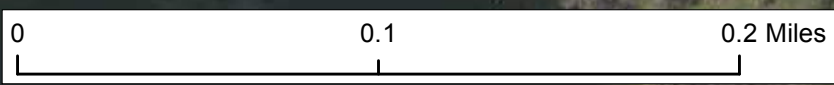
Nicole Soderholm (RWMWD)

Brian Corcoran (VLAWMO)



**Legend**

-  Construction Limits
-  MnDOT ROW
-  Approved Wetland Boundary



Path: S:\P\13\Ramse\135877\5-final-dgn\151-drawings\50-GIS\Wetland Permits\GIS\Fig01\_Memo\_DelirResults.mxd



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: 3/13/2018

User Name: ebudrow  
Projection: NAD 1983 UTM Zone 15N  
Source: USDA, MnDOT, SEHinc





**WETLAND DELINEATION RESULTS**  
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**

-  Construction Limits
-  MnDOT ROW
-  Approved Wetland Boundary
-  Wetland Impact



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User Name: ebudrow  
Projection: NAD 1983 UTM Zone 15N  
Source: USDA, MnDOT, SEHinc

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

Figure  
2

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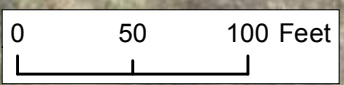


**Legend**

- Construction Limits
- MnDOT ROW
- Approved Wetland Boundary

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

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



Path: S:\P\TR\Ramsey\135877\5-final-dgn\151-drawings\00-GIS\Wetland\Permit\GIS\Fig03\_Memo\_Impacts\_Zoom.mxd



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User Name: ebudrow  
Projection: NAD 1983 UTM Zone 15N  
Source: USDA, MnDOT, SEHinc

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

Figure  
3

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# RAMSEY-WASHINGTON

## METRO WATERSHED DISTRICT

### MEMORANDUM

**Date:** June 6, 2018  
**To:** Board of Managers and Staff  
**From:** Nicole Soderholm, Permit Coordinator  
**Subject:** May Enforcement Action Report

During May 2018:

<b>Number of Violations:</b>	<b>13</b>
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
Install/Maintain Energy Dissipation	2

#### **Ongoing Activities:**

Erosion/sediment control inspections and enforcement continued this month. Underground BMP inspections were completed with the assistance of Barr staff. In May, staff assisted private developers and government entities with permitting. Staff completed monthly permit review with Barr Engineering and responded to permit-related inquiries on projects in the District. Staff provided Wetland Conservation Act (WCA) guidance/administration and are continuing to work on drafting proposed permit rule changes with the Technical Advisory Committee. Staff attended Regulatory Enforcement training and Stormwater BMP Maintenance recertification training through the U of M Extension. Staff attended a biannual meeting of the Erosion & Stormwater Advisory Board.

#### **Project Updates:**

Permit #16-07 Wheaton Woods, Roseville

Work continues on the Wheaton Woods residential development off Dale St & County Rd C. Items noted on the most recent inspection include corrective actions needed on biologs and

street sweeping. Four rain gardens have been excavated as part of the project but remain unfinished and insufficiently protected from sediment. Staff will continue to work with the contractor on getting exposed soils stabilized so that the rain gardens can be completed per plan.

#### Permit #16-06 Hill-Murray Track & Field Improvements, Maplewood

A final inspection of the Hill-Murray track & field project was attempted last year, but there were areas of vegetation that had not reached 70% coverage per close-out requirements. A final punchlist was sent to the contractor last year. Staff revisited the site late in May and confirmed the vegetation is now sufficient. The contractor was contacted again to inquire about the status of the remaining punchlist items in the hopes that this permit can be closed soon.

#### Permit #15-29 Cardigan Ridge, Little Canada

The last remaining item to be completed on the Cardigan Ridge site off Country Dr & Rice St is final excavation and restoration of the infiltration basin. The engineer wanted to hold off on excavating the basin to final grade last year until the side slopes were stabilized. Staff visited the site late in the month and confirmed the slopes are now stabilized. The contractor was contacted to inquire about the timeline for completing the basin. The basin will need to be pumped down before any soil work can take place.

#### Permit #17-21 Maplewood Retail Development, Maplewood

The Maplewood Retail development off White Bear Ave & County Rd D is now underway. Staff completed an initial site inspection and organized a meeting with the contractor to discuss permit requirements/expectations. Biolog is being used for perimeter control along the sidewalk of White Bear Ave. Due to the steep slope, staff will keep an eye on this location as more substantial perimeter control like silt fence may be necessary. The contractor was notified of this as well.

#### Permit #15-36 MnDOT I-694 Reconstruction, Shoreview

Staff completed a joint inspection with MnDOT on the I-694 section that was reconstructed over the last 2 years. While the project is substantially complete, a punchlist was generated for areas that need to be reseeded. Some of these areas were seeded too late in the season last year, so MnDOT will be responsible for making these corrections. The areas that lacked proper vegetation are relatively minor, and there are no immediate erosion concerns that would impact downstream water resources. The permit deadline for temporary cover on these areas is mid-June. The filtration basins constructed for the project will need to be inspected 48 hours after a rainfall to ensure they are drawing down properly. At the time of the May inspection there had been consecutive days of moderate to heavy rainfall.

#### **Permits Closed in May 2018:**

- 14-22 Edgerton at Sunset Culvert Maintenance (Little Canada)
- 17-01 Idaho-Atlantic RSVP (St. Paul)



\* \* \* \* \*

# Stewardship Grant Program

\* \* \* \* \*

## BMP Incentive Application Summary

**Project Name:** Lake Phalen Aquatic Vegetation Harvesting

**Application Number:** 18-11 CS

**Board Meeting Date:** 6/6/2018

**Applicant Name:** Michael Hahm

**Residential**

**Commercial/Government**

### Project Overview:

As part of the 2018 Stewardship Grant Program, RWMWD offers 50% cost share funding up to \$15,000 for materials and labor associated with harvesting aquatic plants. The City of St. Paul has contracted mechanical lake weed harvesting services for Eurasian watermilfoil on Lake Phalen. Harvesting will be performed to remove organically-bound phosphorous within the plants and will also enhance recreational access at the boat launch, swimming beach, and fishing access points. Harvesting will occur mid-June and will take one week to complete. The applicant has received an Invasive Aquatic Plant Management Permit from the MnDNR.

### BMP type(s):

Aquatic Vegetation Harvesting(1)

### Grant Request:

\$8,500.00

### Recommendation:

Staff recommends approval of this application.

### Subwatershed:

Lake Phalen

### Location Maps:





# Lake Phalen

## 2018 Eurasian Watermilfoil Harvest Locations

*(approximately 25 acres)*



## Stewardship Grant Program Budget Status Update

June 6, 2018

Homeowner	Coverage	Number of Projects	Funds Allocated
Habitat Restoration and rain garden w/o hard surface drainage	50% Cost Share \$15,000 Max	2	\$6,384.41
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
PRIORITY AREAS:	100% Cost Share \$100,000 Max	3	\$120,020
NON-PRIORITY AREAS:	75% Cost Share \$50,000 Max	0	\$0
Aquatic Veg Harvest	50% Cost Share \$15,000 Max	0	\$0
Maintenance	50% Cost Share \$5,000 Max for 5 Years	4	\$5,000
Consultant Fees			\$45,507
<b>Total Allocated</b>			<b>\$225,471.41</b>

<b>2018 Stewardship Grant Program Budget</b>	
Budget	\$800,000.00
Total Funds Allocated	\$225,471.41
<b>Total Available Funds</b>	<b>\$574,528.59</b>

\* \* \* \* \*

# Action Items

\* \* \* \* \*

# Request for Board Action

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**Board Meeting Date:** June 6, 2018

**Agenda Item No.:** 8A

**Preparer:** Tina Carstens, Administrator  
Nicole Soderholm, Permit Coordinator

---

**Item Description:** Accept the submittal of the 2017 MS4 Storm Water Pollution Prevention Plan (SWPPP) Annual Report and receive public comments.

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**Background:**

All MS4s are required to complete an annual report and submit to the MPCA, by June 30 of each year, which details the implementation status of their approved MS4 permit program. The District SWPPP and the Annual Report are available on the District web site. I have also attached the annual report to this memo for your review.

The MS4 permit requires that we give the public an opportunity to comment on the annual report and SWPPP program. A notice about the opportunity to comment at this meeting was posted at the District office and on the website. At the June 7<sup>th</sup> Board meeting, any members of the public that wish to comment on the SWPPP may during this agenda item.

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**Applicable District Goal, Action:**

**Goal: Manage effectively** – The District will operate in a manner that achieves its mission while adhering to its core principles.

**Action Items:** Follow all legal requirements applicable to watershed districts.

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**Staff Recommendation:**

Accept the 2017 MS4 Annual Report.

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**Financial Implications:**

None.

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**Board Action Requested:**

Accept the 2017 MS4 Annual Report. Authorize District Administrator to submit the report to the MPCA.

# MS4 question worksheet for 2017 annual report

Municipal Separate Storm Sewer Systems (MS4s)  
Reporting period January 1, 2017 to December 31, 2017  
Due June 30, 2018

Copy of questions – **Not for submittal**

**Instructions:** This form is for your personal use only. Complete the online Annual Report to provide a summary of your activities under the 2013 MS4 Permit (Permit) between January 1, 2017, and December 31, 2017. The online Annual Report and additional information can be found on the Minnesota Pollution Control Agency (MPCA) website at:  
[https://stormwater.pca.state.mn.us/index.php?title=MS4\\_Annual\\_Report](https://stormwater.pca.state.mn.us/index.php?title=MS4_Annual_Report).

**Questions:** Contact Cole Landgraf ([cole.landgraf@state.mn.us](mailto:cole.landgraf@state.mn.us), 651-757-2880) or Megan Handt ([megan.handt@state.mn.us](mailto:megan.handt@state.mn.us), 651-757-2843).

## Contact information

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### MS4 General contact information

Full name: Tina Carstens Title: Administrator  
Mailing address: 2665 Noel Drive  
City: Little Canada State: MN Zip code: 55117  
Phone: 651-792-7960 Email: tina.carstens@rwmwd.org

### Preparer contact information (if different from the MS4 General contact)

Full name: Nicole Soderholm Title: Permit Coordinator  
Mailing address: 2665 Noel Drive  
City: Little Canada State: MN Zip code: 55117  
Phone: 651-792-7976 Email: nicole.soderholm@rwmwd.org

## Minimum Control Measure (MCM) 1: Public education and outreach

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### The following questions refer to Part III.D.1. of the Permit.

2. Did you select a stormwater-related issue of high priority to be emphasized during this Permit term?  Yes  No  
[Part III.D.1.a.(1)]
3. If 'Yes' in Q2, what is your stormwater-related issue(s)? *Check all that apply.*
- Total Maximum Daily Loads (TMDLs)
  - Local businesses
  - Residential best management practices (BMPs)
  - Pet waste
  - Yard waste
  - Deicing materials
  - Household chemicals
  - Construction activities
  - Post-construction activities
  - Other (describe): managing stormwater runoff from schools and churches
4. Have you distributed educational materials or equivalent outreach to the public focused on illicit discharge recognition and reporting? [Part III.D.1.a.(2)]  Yes  No
5. Do you have an implementation plan as required by the Permit? [Part III.D.1.b.]  Yes  No

6. How did you distribute educational materials or equivalent outreach? [Part III.D.1.a.] *Check all that apply in table below.*
7. For the items checked in **Q6** below, who is the intended audience? *Check all that apply in table below.*
8. For the items checked in **Q6** below, enter the total circulation/audience in table below (if unknown, use best estimate).

Q6. How did you distribute educational materials? (Check all that apply):	Q7. Intended audience? (Check all that apply.)						Q8. Total circulation /audience:
	Residents	Local businesses	Developers	Students	Employees	Other	
<input checked="" type="checkbox"/> <b>Brochure</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	650
<input checked="" type="checkbox"/> <b>Newsletter</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	759
<input type="checkbox"/> <b>Utility bill insert</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> <b>Newspaper ad</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> <b>Radio ad</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> <b>Television ad</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> <b>Cable access channel</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> <b>Stormwater-related event</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3,500
<input checked="" type="checkbox"/> <b>School presentation or project</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,500
<input checked="" type="checkbox"/> <b>Website</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	679,211
<input checked="" type="checkbox"/> <b>Other (1): describe</b> Social media: Facebook, Instagram, Twitter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	647 Facebook followers, 7,922 Facebook impressions, 185 Instagram followers, 917 Twitter followers
<input checked="" type="checkbox"/> <b>Other (2): describe</b> Newspaper articles	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	7 articles
<input type="checkbox"/> <b>Other (3): describe</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

For **Q9** and **Q10**, provide a brief description of each activity related to public education and outreach (e.g., rain garden workshop, school presentation, public works open house) held and the date each activity was held from January 1, 2017, to December 31, 2017. [Part III.D.1.c.(4)]

9. Date of activity *in table below*
10. Description of activity *in table below*

Q9. Date of activity	Q10. Description of activity
Throughout 2017	94 school field trips and outdoor lessons, 111 school presentations at 17 schools with 51 teachers
1/23/17	District office BMP tour with Roseville Middle School teachers
2/2, 2/16	District 837 School Board presentations on rain gardens
2/11	Phalen Freeze Fest: outreach for smart salting and WaterFest promotion
Additional dates	2/17: meeting with Woodbury city staff to set up outreach about lawn irrigatino controllers for HOAs 2/18: Central Park Pet Expo in Woodbury: public education about pet waste and stormwater Feb-May: outreach mailing in Beaver Lake neighborhood to 200 households for rain garden installation, Master Gardener site visits with 18 homeowners to select demonstration sites for rain gardens 3/21: Train the Trainer workshop: alternative turf, sustainable yards, bee lawns 4/6, 4/18: 'Spring Dreaming' workshops in North St. Paul and Oakdale: resilient yards Mid Apri: Adopt-a-Drain campaign with Master Water Stewards in Phalen Heights neighborhood, 735 households contacted 4/18, 4/26: Level 1 & 2 Smart Salting trainings for city staff, public works, school district



4/27: Rain garden class for Master Water Stewards at District office  
 4/29: Master Naturalist tour/training at Casey Lake rain gardens, Keller Creek, District office  
 5/1, 5.4: BMP and Adopt-a-Drain workshop in Phalen neighborhood  
 6/2: WaterFest at Lake Phalen  
 7/19: Tamarack tour for Woodbury residents  
 7/21: Rain barrel distribution event for residents at Shoreview Public Works  
 7/25: BMP and soil conservation booth with Washington Conservation District at Washington County Fair  
 8/3: Exceptional LEAP Tour to view BMPs  
 8/23-9/3: Blue Thumb education display at State Fair Eco Experience Building  
 9/27: Childrens Water Festival at State Fairgrounds  
 9/13, 9/14, 9/20, 9/21, 10/4, 10/5, 10/10: Rain garden installations at Central Park Elementary, Roseville Middle School, Woodbury Elementary with students, Master Gardeners, Master Naturalists  
 10/18: IDDE training for Oakdale Public Works staff  
 10/17: Installed 21 BMP interpretive signs at schools, churches, and commercial sites  
 11/21: Smart Salting Level 2 workshops for public works and city staff  
 Summer-fall: curb-cut rain garden installations for Master Water Stewards capstone projects  
 Master Water Stewards classes and field trips on stormwater and BMPs (1/10, 1/24, 2/11, 2/28, 3/14, 3/28, 4/11, 10/10, 10/14, 10/24, 11/14, 11/28)

11. Between January 1, 2017, and December 31, 2017, did you modify your BMPs, measurable goals, or future plans for your public education and outreach program? [Part IV.B.]  Yes  No  
 If 'Yes,' describe these modifications:

## MCM 2: Public participation/involvement

### The following questions refer to Part III.D.2.a. of the Permit.

12. You must provide a minimum of one opportunity each year for the public to provide input on the adequacy of your Stormwater Pollution Prevention Program (SWPPP). Did you provide this opportunity between January 1, 2017, and December 31, 2017? [Part III.D.2.a.(1)]  Yes  No
13. If 'Yes' in Q12, what was the opportunity that you provided? *Check all that apply.*  Yes  No  
 Public meeting  
 Public event  
 Other
14. If 'Public meeting' in Q13, did you hold a stand-alone meeting or combine it with another event?  
 Stand-alone  
 Combined  
 Enter the date of the public meeting: 6/7/17  
 Enter the number of citizens that attended and were informed about your SWPPP: 5
15. If 'Public event' in Q13, describe:  
 Enter the date (mm/dd/yyyy) of the public meeting: \_\_\_\_\_  
 Enter the number of citizens that attended and were informed about your SWPPP: \_\_\_\_\_
16. If 'Other' in Q13, describe:  
*Notices were posted on District website and public bulletin board at District office regarding availability of the Annual Report for review.*  
 Enter the date (mm/dd/yyyy) of the public meeting: N/A

- Enter the number of citizens that attended and were informed about your SWPPP: Unknown
17. Between January 1, 2017, and December 31, 2017, did you receive any input regarding your SWPPP?  Yes  No  
If 'Yes,' enter the total number of individuals or organizations that provided comments on your SWPPP.
18. If 'Yes' in Q17, did you modify your SWPPP as a result of written input received? [Part III.D.2.b.(2)]  Yes  No  
If 'Yes,' describe those modifications.
19. Between January 1, 2017, and December 31, 2017, did you modify your BMPs, measurable goals, or future plans for your public participation/involvement program? [Part IV.B.]  Yes  No  
If 'Yes,' describe those modifications.

### MCM 3: Illicit discharge detection and elimination

The following questions refer to Part III.D.3. of the Permit.

20. Do you have a regulatory mechanism which prohibits non-stormwater discharges to your MS4? [Part III.D.3.b.]  Yes  No
21. Did you identify any illicit discharges between January 1, 2017, and December 31, 2017? [Part III.D.3.h.(4)]  Yes  No
22. If 'Yes' in Q21, enter the number of illicit discharges detected. 3
23. If 'Yes' in Q21, how did you discover these illicit discharges? Check all that apply and enter the number of illicit discharges discovered by each category.  
 Public complaint  
 Staff
24. If 'Public complaint' in Q23, enter the number discovered by the public: 2
25. If 'Staff' in Q23, enter the number discovered by staff: 1
26. If 'Yes' in Q21, did any of the discovered illicit discharges result in an enforcement action (this includes verbal warnings)?  Yes  No
27. If 'Yes' in Q26, what type of enforcement action(s) was taken and how many of each action were issued between January 1, 2017, and December 31, 2017? Check all that apply. For each of the below checked, enter the number that were issued.  
 Verbal warning: 1  
 Notice of violation: 2  
 Fine: \_\_\_\_\_  
 Criminal action: \_\_\_\_\_  
 Civil penalty: \_\_\_\_\_  
 Other: describe \_\_\_\_\_
28. If 'Yes' in Q26, did the enforcement action(s) taken sufficiently address the illicit discharge(s)?  Yes  No
29. If 'No' in Q28, why was the enforcement not sufficient to address the illicit discharge(s)?
30. Do you have written Enforcement Response Procedures (ERPs) to compel compliance with your illicit discharge regulatory mechanism(s)? [Part III.B.]  Yes  No

31. Between January 1, 2017 and December 31, 2017, did you train all field staff in illicit discharge recognition (including conditions which could cause illicit discharges) and reporting illicit discharges for further investigations? [Part III.D.3.e.]  Yes  No
32. If 'Yes' in Q31, how did you train your field staff? Check all that apply.
- Email
  - PowerPoint
  - Presentation
  - Video
  - Field training
  - Other: describe

**The following questions refer to Part III.C.1. of the Permit.**

33. Did you update your storm sewer system map between January 1, 2017, and December 31, 2017? [Part III.C.1.]  Yes  No
34. Does your storm sewer map include all pipes 12 inches or greater in diameter and the direction of stormwater flow in those pipes? [Part III.C.1.a.]  Yes  No
35. Does your storm sewer map include outfalls, including a unique identification (ID) number and an associated geographic coordinate? [Part III.C.1.b.]  Yes  No
36. Does your storm sewer map include all structural stormwater BMPs that are part of your MS4? [Part III.C.1.c.]  Yes  No
37. Does your storm sewer map include all receiving waters? [Part III.C.1.d.]  Yes  No
38. In what format is your storm sewer map available:
- Hardcopy only
  - GIS
  - CAD
  - Other: describe
39. Between January 1, 2017, and December 31, 2017, did you modify your BMPs, measurable goals, or future plans for your illicit discharge detection and elimination program? [Part IV.B.]  Yes  No
- If 'Yes,' describe those modifications.
- The District obtained a video training for IDDE which will be shown to all field/seasonal staff in early June 2018 as part of the annual safety/employee Right-to-Know training.*

**MCM 4: Construction site stormwater runoff control**

**The following questions refer to Part III.D.4. of the Permit**

40. Do you have a regulatory mechanism that is at least as stringent as the Agency's general permit to Discharge Stormwater Associated with Construction Activity (CSW Permit) No. Minn. R. 100001 (<http://www.pca.state.mn.us/index.php/view-document.html?gid=18984>) for erosion and sediment controls and waste controls? [Part III.D.4.a.]  Yes  No  
*(Permit can be found on the MPCA website at <https://www.pca.state.mn.us/water/construction-stormwater> (titled 'Minnesota NPDES/SDS Construction Stormwater General Permit').*
41. Have you developed written procedures for site plan reviews as required by the Permit? [Part III.D.4.b.]  Yes  No
42. Have you documented each site plan review as required by the Permit? [Part III.D.4.f.]  Yes  No
43. Enter the number of site plan reviews conducted for sites an acre or greater between January 1, 2017, and December 31, 2017. 33
44. What types of enforcement actions do you have available to compel compliance with your regulatory mechanism? Check all that apply and enter the number of each used from January 1, 2017, to December 31, 2017.
- Verbal warning, Number that were issued: 11
  - Notice of violation, Number that were issued: 156

- Administrative order, Number that were issued: \_\_\_\_\_
- Stop-work order, Number that were issued: 0
- Fine, Number that were issued: \_\_\_\_\_
- Forfeit of security of bond money: 58
- Withholding of certificate of occupancy \_\_\_\_\_
- Criminal action, Number that were issued: \_\_\_\_\_
- Civil penalty, Number that were issued: 0
- Other: describe. \_\_\_\_\_, Number that were issued: \_\_\_\_\_

45. Do you have written ERPs to compel compliance with your construction site stormwater runoff control regulatory mechanism(s)? [Part III.B.]  Yes  No

46. Enter the number of active construction sites an acre or greater that were in your jurisdiction between January 1, 2017, and December 31, 2017: 55

47. Do you have written procedures for identifying priority sites? [Part III.D.4.d.(1)]  Yes  No

48. If 'Yes,' in Q47, How are sites prioritized? *Check all that apply.*

- Site topography
- Soil characteristics
- Types of receiving water(s)
- Stage of construction
- Compliance history
- Weather conditions
- Citizen complaints
- Project size
- Other: describe

49. Do you have a checklist or other written means to document site inspections when determining compliance? [Part III.D.4.d.(4)]  Yes  No

50. Enter the number of site inspections conducted for sites an acre or greater between January 1, 2017, and December 31, 2017. 353

51. Weekly, monthly, or seasonally, depending on project stage and priority  
 Enter the frequency at which site inspections are conducted (e.g., daily, weekly, monthly). [Part III.D.4.d.(2)]

52. Enter the number of trained inspectors that were available for construction site inspections between January 1, 2017, and December 31, 2017. 3

53. Provide the contact information for the inspector(s) and/or organization that conducts construction stormwater inspections for your MS4. List your primary construction stormwater contact first if you have multiple inspectors.

**(1) Inspector name:**

Organization: Nicole Soderholm, Ramsey-Washington Metro Watershed District  
 Phone (office): 651-792-7976  
 Phone (work cell): \_\_\_\_\_  
 Email: nicole.soderholm@rwmwd.org  
 Preferred contact method: Phone or e-mail

**(2) Inspector name:**

Organization: Paige Ahlborg, Ramsey-Washington Metro Watershed District  
 Phone (office): 651-792-7964  
 Phone (work cell): \_\_\_\_\_  
 Email: paige.ahlborg@rwmwd.org  
 Preferred contact method: Phone or e-mail

**(3) Inspector name:**

Organization: Zola Pineles, Ramsey-Washington Metro Watershed District  
 Phone (office): \_\_\_\_\_  
 Phone (work cell): \_\_\_\_\_  
 Email: \_\_\_\_\_  
 Preferred contact method: N/A (seasonal employee, no longer at RWMWD)

54. What training did inspectors receive? *Check all that apply.*

- University of Minnesota Erosion and Stormwater Management Certification Program
- Qualified Compliance Inspector of Stormwater (QCIS)
- Minnesota Laborers Training Center Stormwater Pollution Prevention Plan Installer or Supervisor
- Minnesota Utility Contractors Association Erosion Control Training
- Certified Professional in Erosion and Sediment Control (CPESC)
- Certified Professional in Stormwater Quality (CPSWQ)
- Certified Erosion Sediment and Storm Water Inspector (CESSWI)
- Other: describe

55. Between January 1, 2017, and December 31, 2017, did you modify your BMPs, measurable goals, or future plans for your construction site stormwater runoff control program? [Part IV.B.]  Yes  No

If 'Yes,' describe those modifications:

## MCM 5: Post-construction stormwater management in new development and redevelopment

The following questions refer to Part III.D.5. of the Permit.

56. Do you have a regulatory mechanism which meets all requirements as specified in Part III.D.5.a. of the Permit?  Yes  No

57. What approach are you using to meet the performance standard for Volume, Total Suspended Solids (TSS), and Total Phosphorus (TP) as required by the permit? [Part III.D.5.a.(2)] *Check all that apply.* Refer to the Technical Support Document at <http://www.pca.state.mn.us/index.php/view-document.html?gid=17815> for guidance on stormwater management approaches. *The TSD can be found on the MPCA website at <https://www.pca.state.mn.us/water/municipal-stormwater-ms4> (refer to the Post Construction Stormwater Management section under the 'Guidance and BMPs' tab).*

- Retain a runoff volume equal to one inch times the area of the proposed increase of impervious surfaces on-site
- Retain the post-construction runoff volume on site for the 95th percentile storm
- Match the pre-development runoff conditions
- Adopt the Minimal Impact Design Standards
- An approach has not been selected
- Other method (Must be technically defensible - e.g., based on modeling, research and acceptable engineering practices)

*If 'Other method,' describe:*

Retain a volume of 1.1" times the area of the new and/or reconstructed impervious surfaces onsite. All stormwater BMPs require pretreatment method(s) to remove solids.

58. Do you have written ERPs to compel compliance with your post-construction stormwater management regulatory mechanism(s)? [Part III.B.]  Yes  No

59. Between January 1, 2017, and December 31, 2017, did you modify your BMPs, measurable goals, or future plans for your post-construction stormwater management program? [Part IV.B.]  Yes  No

If 'Yes,' describe those modifications.

## MCM 6: Pollution prevention/good housekeeping for municipal operations

The following questions refer to Part III.D.6. of the Permit.

60. Enter the total number of **structural stormwater BMPs, outfalls** (excluding underground outfalls), and **ponds** within your MS4 (exclude privately owned). Enter the number for each category below:

Structural stormwater BMPs: 10

Outfalls: 16

Ponds: 20

61. Enter the total number of **structural stormwater BMPs, outfalls** (excluding underground outfalls), and **ponds** that were inspected from January 1, 2017 to December 31, 2017 within your MS4 (exclude privately owned) [Part III.D.6.e.]. Enter the number for each category below:

Structural stormwater BMPs: 10

Outfalls: 16

Ponds: 20

62. Have you developed an alternative inspection frequency for any structural stormwater BMPs, as allowed in Part III.D.6.e.(1) of the Permit?  Yes  No

63. Based on inspection findings, did you conduct any maintenance on any structural stormwater BMPs? [Part III.D.6.e.(1)]  Yes  No

64. If 'Yes' in Q63, briefly describe the maintenance that was conducted:

*Removed 4 cubic yards (cy) sediment from Tanners Alum Treatment Facility manholes, removed 1 cy sediment from Battle Creek sump manhole, removed 4 cy sediment from ABI diversion manhole, removed 2 cy sediment from Owasso basin manhole, removed 55 cy sediment and cleaned pavers at PFS basins, removed 2 cy sediment and cleaned 19' of pipe at PCU Pond, cleaned 580 ft of permeable weirs at Tanners wetland/Horseshoe Park, replaced clear washed rock at upstream side of Gervais Mill Pond control dike, removed 130 cy sediment from twin culverts under Noel Drive/Gervais Creek, dredged sediment/repared berm/removed debris at 5<sup>th</sup> Street weirs, removed 20 cy sediment and constructed energy dissipation structure at Kohlman Basin sand filter, removed sediment from 65 sumped manholes at Maplewood Mall, removed sediment from manhole and pipe at Highway 36/Highway 61 interchange, removed sediment and cattails along 525 ft of shoreline at West Vadnais outlet channel, constructed temporary sandbag levee along north shore of Grass Lake, replaced fence and added riprap to Kohlman Creek at Maplewood Toyota.*

65. Do you own or operate any stockpiles, and/or storage and material handling areas? [Part III.D.6.e.(3)]  Yes  No

66. If 'Yes' in Q65, did you inspect all stockpiles and storage and material handling areas quarterly? [Part III.D.6.e.(3)]  Yes  No

67. If 'Yes' in Q66, based on inspection findings, did you conduct maintenance at any of the stockpiles and/or storage and material handling areas?  Yes  No

68. If 'Yes' in Q67, briefly describe the maintenance that was conducted:

69. Between January 1, 2017, and December 31, 2017, did you modify your BMPs, measurable goals, or future plans for your pollution prevention/good housekeeping for municipal operations program? [Part IV.B.]  Yes  No

If 'Yes,' describe those modifications:

## Discharges to impaired waters with a EPA-approved TMDL that includes an applicable WLA

If you have been assigned a Waste Load Allocation (WLA) in a TMDL that was approved by the U.S. Environmental Protection Agency (EPA) prior to August 1, 2013, and were not meeting WLA(s) at the time of your permit application, you must complete the **TMDL Annual Report Form**, available on the MPCA website at: [https://stormwater.pca.state.mn.us/index.php?title=Download\\_page\\_with\\_TMDL\\_forms](https://stormwater.pca.state.mn.us/index.php?title=Download_page_with_TMDL_forms). Attach your completed TMDL Annual Report Form to the actual Annual Report as instructed within that document. [Part III.E.]

71. [question left blank for you to attach a file]

## Alum or Ferric Chloride Phosphorus Treatment Systems

The following questions refer to Part III.F.3.a. of the Permit. Provide the information below as it pertains to your alum or ferric chloride phosphorus treatment system.

72. Date(s) of operation:

Month	Date(s) of operation (mm/dd/yyyy – mm/dd/yyyy)
January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	

Month	Q73 Chemical(s) used for treatment	Q74 Gallons of alum or ferric chloride treatment	Q75 Gallons of water treated	Q76 Calculated pounds of phosphorus removed
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

77. Any performance issues and corrective action(s), including date(s) when corrective action(s) were taken, between January 1, 2017, and December 31, 2017:

## Partnerships

78. Did you rely on any other regulated MS4s to satisfy one or more permit requirements?

Yes  No

79. If 'Yes' in Q78, describe the agreements you have with other regulated MS4s and which permit requirements the other regulated MS4s help satisfy: [Part IV.B.6.]

## Additional information

If you would like to provide any additional files to accompany your Annual Report, use the space below to upload those files. For each space, you may attach one file.

80. [Optional space for you to attach a file]

- 81. [Optional space for you to attach a file]
- 82. [Optional space for you to attach a file]
- 83. Optional, describe the file(s) uploaded:

### Optional question

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The MPCA is attempting to identify potential sources of water quality data. Answering this question will help the MPCA and interested stakeholders obtain a more comprehensive understanding of sources of data that may be shared and ultimately aid in understanding the extent to which stormwater management practices result in water quality improvements.

- 84. Are you collecting water quality data (e.g., from surface waters, outfalls, BMPs, etc.) that is not associated with a wastewater treatment plant?  Yes  No

### Owner or Operator Certification

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The person with overall administrative responsibility for SWPPP implementation and permit compliance must certify this MS4 Annual Report. This person must be duly authorized and should be either a principal executive (i.e., Director of Public Works, City Administrator) or ranking elected official (i.e., Mayor, Township Supervisor).

- Yes - *I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete (Minn. R. 7001.0070). I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment (Minn. R. 7001.0540).*

By typing my name in the following space, I certify the above statements to be true and correct, to the best of my knowledge, and that information can be used for the purpose of processing my MS4 Annual Report.

Name of certifying official: The certifying official must electronically sign the online Annual Report form.

Title: Administrator Date: 5/4/18  
(mm/dd/yyyy)

**Note:** In the online form, you will be prompted to provide the email(s) of the individual(s) you would like to receive the MS4 Annual Report for 2017 submittal confirmation email from the MPCA. After you submit the form, please allow up to three business days to receive this confirmation email.

- Email (1) tina.carstens@rwmwd.org
- Email (2) nicole.soderholm@rwmwd.org
- Email (3) \_\_\_\_\_



\* \* \* \* \*

# Administrator's Report

\* \* \* \* \*

## MEMO

**TO:** Board of Managers and Staff  
**FROM:** Tina Carstens, Administrator  
**SUBJECT:** June Administrator's Report  
**DATE:** May 31, 2018

### A. Meetings Attended

Tuesday, May 1	1:00 PM	Grass Lake area meeting with DNR
Wednesday, May 2	9:00 AM	Snail Lake meeting with residents
	2:00 PM	Washington County groundwater advisory
	5:00 PM	Frost/Kennard site visit
	6:30 PM	Board meeting
Thursday, May 3	9:00 AM	MIDS update meeting
	12:00 PM	St. Paul projects discussion
Friday, May 4	9:00 AM	North and East Metro groundwater update
Monday, May 7	12:00 PM	Staff training meeting - Equity initiative
Thursday, May 10	9:30 AM	Washington County funding meeting
Tuesday, May 15	10:00 AM	Bennett Lake TMDL presentation planning
	11:30 AM	Administrator meeting
	2:30 PM	Metro INET managers meeting
Monday, May 21	5:30 PM	Washington County joint meeting
Tuesday, May 22	10:30 AM	Meet with Little Canada engineer
Tuesday, May 29	1:00 PM	Project planning with Barr staff
Thursday, May 31	8:00 AM	Water Resources Conference planning

### B. Upcoming Meetings and Dates

WaterFest	Saturday, June 2
MAWD Summer Tour	June 20-22, 2018
District Paddling Event	Saturday, June 30

**C. July Meeting Date Change Reminder**

Just a reminder that the date of the July board meeting has been changed to July 11<sup>th</sup>. The board packet will come to you at the end of the previous week, around July 6<sup>th</sup>.

**D. Washington County and Watershed Joint Meeting Update**

Manager Aichinger and I attended the joint meeting hosted by the Washington County commissioners and staff. All the Washington County watersheds were in attendance and created a small display of work and topics important to the county. Each county commissioner gave a few remarks. Many of the remarks applauded the collaborative nature of the watersheds with the county. There were also remarks regarding the need to be transparent and work together in more ways. One suggestion was that each watershed should meet with the commissioners that represent their area, face-to-face, at least once a year. They also would like to continue holding the budget work session with the watersheds in the fall. There was talk of making this joint meeting an annual event. A survey from the staff will be sent out to evaluate the goals of these future meetings.

**E. 3M Settlement Working Group**

As part of the settlement with 3M, the MPCA and DNR are collaborating to work through a process to evaluate the potential ways of using the settlement money on various projects. They are establishing working groups for soliciting local advice and recommendations for potential projects. I requested to be placed on the working group and did receive notification that we have a seat. See the attached document for more information. I will be submitting my name and another staff as an alternate member of this working group. We will be part of the subgroup 2 for groundwater protection, sustainability, conservation and recharge.

## 3M Settlement Work Groups

The Minnesota Pollution Control Agency (MPCA) and Department of Natural Resources (DNR) are responsible for implementing the 2018 Agreement and Order (Agreement) with 3M Company (3M). Under the Agreement, MPCA and DNR are responsible for establishing a Working Group to identify and recommend projects and for determining what projects and other activities will be funded by the Grant. MPCA and DNR will use the framework described below to engage communities, stakeholders and technical experts in helping to identify and recommend priorities and projects to be funded from the Grant.

### Government and 3M Working Group

The Government and 3M Working Group will identify and recommend projects to the MPCA and DNR for funding from the Grant. To assist the Working Group, Subgroups will be established to analyze options and deliver assessments and advice to the Working Group on alternatives and options. The Working Group will review the work products of the Subgroups and provide recommendations on projects and priorities to the MPCA and the DNR for their approval. The Working Group will also share advice and recommendations with the Citizen – Business Group.

#### Structure

This group will be composed of one representative each from the MPCA, DNR, 3M, Washington County and one representative from each of the following communities: the cities of Afton, Cottage Grove, Lake Elmo, Maplewood, Newport, Oakdale, St. Paul Park, Woodbury, the townships of Denmark, Grey Cloud Island and West Lakeland and the Prairie Island Indian Community. One representative from the Citizen – Business Group will also be a liaison to this group. Each community, MPCA, DNR and 3M can designate one alternate for when their representative is unable to participate in a meeting.

- This group will meet at least once a quarter, or more frequently if needed, will be briefed on all work in progress, and will provide input on topics to explore.
- The Minnesota Department of Health (MDH) and the Metropolitan Council, while not members of the Working Group, will be invited to consult on regulatory and policy topics in their area of expertise.
- The MPCA and DNR will assist and support the group, including preparation of project proposals and technical materials for meetings.
- The meetings will be open to the public, and time will be reserved at the end of each meeting for public questions or comments.

### Citizen and Business Group

The Citizen – Business Group will identify and recommend projects to the MPCA and DNR for funding from the Grant. To assist the Group, Subgroups will be established to analyze options and deliver assessments and advice to the Group on alternatives and options. The Group will review the work products of the Subgroups and provide recommendations on projects and priorities to the MPCA and the DNR for their approval. The Citizen – Business Group will also share advice and recommendations with the Government and 3M Working Group.

## Structure

This group will be composed of MPCA, DNR, and about 15 at-large citizen, business, and nongovernmental representatives who live or are working in the East Metropolitan Area. Applicants can be nominated or self-nominated. Representatives on the group will be selected by DNR and MPCA. One representative from the Government and 3M Working Group will also be a liaison to this group.

- This group will meet at least once a quarter, or more frequently if needed, will be briefed on all work in progress, and will provide input on work in progress and topics to explore.
- Minnesota Department of Health (MDH) and the Metropolitan Council, while not members of the Citizen – Business Group, will be invited to consult on regulatory and policy topics in their area of expertise.
- The MPCA and DNR will assist and support the group.
- The meetings will be open to the public, and time will be reserved at the end of each meeting for public questions or comments.

## Subgroup 1: Drinking Water Supply

This Subgroup will analyze options and deliver assessments and advice to the Government and 3M Working Group and the Citizen – Business Group for long-term options for drinking water supply and for treatment of existing water supplies that will improve the quality and quantity of drinking water for communities and individuals in the East Metropolitan Area.

### Structure

The group will be composed of technical experts from MPCA, DNR, MDH, 3M, Metropolitan Council, and Washington County. The cities of Afton, Cottage Grove, Lake Elmo, Maplewood, Newport, Oakdale, St. Paul Park, Woodbury, and the townships of Denmark, Grey Cloud Island and West Lakeland will each have one representative on the Subgroup. Each community, MPCA, DNR, MDH, 3M, Metropolitan Council, and Washington County can designate one alternate for when their representative is unable to participate in a meeting.

- The Subgroup will meet at least once a month and more frequently if needed. While all members will be invited to every meeting, actual participation at a given meeting may be driven by the agenda for that meeting. It is understood that those who are interested in specific projects and approaches will be most likely to attend a particular meeting.
- Technical experts not affiliated with the Subgroup may be invited to consult on topics in their area of expertise.
- The meetings will be open to the public, and time will be reserved at the end of each meeting for public questions or comments.

### Evaluation of Potential Projects

Potential projects may include private well use alternatives, multi-municipal drinking water supply concepts, individual municipal drinking water supply systems (including treatment systems), neighborhood connections to municipal systems, drinking water supply alternatives, groundwater studies, and monitoring/modeling needs.

- Project options will be assessed by the Subgroup. Municipalities will provide information on needs and feedback on emerging ideas. Involvement by particular communities will vary and evolve over time.
- Under MPCA, DNR and Subgroup direction, technical teams may be created to delve more deeply into specific project approaches and work closely with individual communities on project proposals.

## **Subgroup 2: Groundwater Protection, Sustainability, Conservation and Recharge**

This Subgroup will analyze options and deliver assessments and advice to the Government and 3M Working Group and the Citizen – Business Group for long-term solutions for groundwater protection, recharge, conservation, sustainability, and for groundwater studies and modeling needs in the East Metropolitan Area.

### **Structure**

The group will be composed of technical experts from MPCA, DNR, MDH, 3M, Metropolitan Council, Washington County, Washington Conservation District, South Washington Watershed District, Ramsey-Washington Metro Watershed District, and the Valley Branch Watershed District. One technical representative each from the cities of Afton, Cottage Grove, Lake Elmo, Maplewood, Newport, Oakdale, St. Paul Park, Woodbury, and the townships of Denmark, Grey Cloud Island and West Lakeland will also be a part of this group. Each community, MPCA, DNR, MDH, 3M, Metropolitan Council, Washington County, Washington Conservation District, South Washington Watershed District, Ramsey-Washington Metro Watershed District, and the Valley Branch Watershed District can designate one alternate for when their representative is unable to participate in a meeting.

- The Subgroup will meet at least once a month and more frequently if needed. While all members will be invited to each meeting, actual participation at a given meeting may be driven by the agenda for that meeting. It is understood that those who are interested in specific projects and approaches will be most likely to attend a particular meeting.
- Technical experts not affiliated with the Subgroup may be invited to consult on topics in their area of expertise.
- The meetings will be open to the public, and time will be reserved at the end of each meeting for public questions or comments.

### **Evaluation of Projects**

Potential projects may include water conservation and efficiency, open space acquisition, and groundwater recharge.

- The project options could be a mix of grants, where the grantee would develop the projects, and group-developed projects similar to Subgroup 1. Municipalities, counties and local non-governmental organizations (NGOs) will provide needs and feedback on emerging ideas. Involvement by particular entities will vary and evolve over time.
- Under the MPCA, DNR and Subgroups' direction, technical teams may be created to delve more deeply into specific project approaches and work closely with individual communities on project proposals.

### **Future Subgroups**

Additional Subgroups will be established at a later date to address other provisions of the Agreement (e.g., Natural Resources Restoration and Enhancement).

## **Work Group Support**

MPCA and DNR, with assistance from consultants, will support and coordinate the work of the Government and 3M Working Group, the Citizen – Business Group, and the Subgroups.

### **Support Provided**

MPCA and DNR will:

- Coordinate meetings, direct state contractors, and report to the Government and 3M Working Group, the Citizen – Business Group, and the Subgroups regarding tasked items.
- Develop drafts of the Government and 3M Working Group, Citizen – Business Group and Subgroups' charters, project goals and objectives, and evaluation criteria for review by the groups and approval by the MPCA and DNR.
- Prepare meeting agendas for the Government and 3M Working Group, Citizen – Business Group and the Subgroups.
- Coordinate preparation of reports on Agreement implementation.
- Coordinate technical teams of the Subgroups as needed.
- Track project proposals and review ideas for the potential of dual or multiple restoration goal benefits.
- Prepare communication plans.
- Promote consistency among groups.
- Maintain administrative records.

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# Project and Program Status Reports

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## Memorandum

**To:** Board of Managers and Staff  
**From:** Tina Carstens and Brad Lindaman  
**Subject:** Project and Program Status Report – June 2018  
**Date:** May 31, 2018

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### 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 district staff reviewed construction plans and attended inspections for 12 underground infiltration projects, including past permits that have previously been inspected, were performing poorly, and for which maintenance was performed, and permits that have yet to be closed. 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. District staff will contact the property owners on an individual basis, either to instruct them on methods to maintain or revitalize the systems as necessary.

### 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 continued to optimize outlet structures and identify modifications to the stormwater system in the Owasso Basin and Gervais Creek subwatersheds to reduce flood risk to existing structures. We developed a list of possible capital improvements that will be discussed with the RWMWD next month. The first phase focuses on the Gervais Creek watershed between Owasso Basin and Gervais Lake. Barr estimated the low structure elevation based on available topographic information and

**To:** Board of Managers and Staff  
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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). If the first phase of the study produces desired results, Barr will proceed to other parts of the RWMWD in a prioritized, sequential approach.

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

**Beaver Lake, Lake Owasso, Battle Creek Lake subwatershed feasibility study (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 desktop review of the subwatersheds, performed site visits to evaluate specific locations, began conceptual design of BMPs at various sites within the watershed, and started a draft report for the feasibility study.

**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 late March and early April, the contractor began mobilizing and hauling material for work at the Grass Lake berm site. The district extended the contract to May 31, 2018, in a change order approved in April. The first change order was justified due to local road restrictions during April that impacted construction. However, no work has been conducted since the restrictions were lifted, despite the appearance of ideal weather conditions.

Barr met with the contractor in mid-May to discuss the delays. The contractor stated that other commitments had delayed them recently, and that they plan to restart the work as they wrap up the RWMWD’s capital improvement plan (CIP) maintenance and repairs project. The contractor said that they will send a revised estimated schedule to complete the work to staff by May 17. To date, we have not received anything.

We anticipate a request for an extension on or before the June 6 board meeting. However, we have not received a formal extension request at this time.

**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.*

On May 1, Barr met with area hydrologist Jen Sorensen and other DNR representatives to discuss the various flood control options being considered for water bodies in the Grass Lake area (addition of an outlet pipe from Snail Lake and lowering of the 15-inch West Vadnais Lake outlet under Highway 694) and lowering the operational level of East Vadnais Lake. Given the regional scale and complexity of flood control options and limitations in the Grass Lake area, several more steps of evaluation are needed before the DNR authorizes permitting. Barr is currently drafting a scope of work for the DNR requirements and estimating the level of effort and timeframe to secure a DNR permit to lower the levels of Grass, West Vadnais, and East Vadnais Lakes.

**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 continued validating the RWMWD's stormwater models. Simulation results for rainfall events on August 13, 2017, and September 29, 2017, were compared to water-surface elevation measurements compiled by the RWMWD. Barr collected survey information and completed a site visit for locations to verify that the model accurately characterized the existing condition. The process of validating the RWMWD's stormwater model will continue over the next few months. When complete, the models will be used to simulate design rainfall events to estimate the uncertainty in the 100-year floodplain.

**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.*

Planning was conducted in April in anticipation of May field testing. Material will be placed in May, and monitoring will be conducted in May and October to determine how performance changes during that time. Using a treatment media at the Kohlman weir is challenging because the material will be nearly continuously inundated, and there are high flows through the system, leading to plugging of a filtering

material such as sand; hence, the target for this system should be dissolved phosphorus removal. Media will be tested in May and October to determine if they are properly suited for this site.

**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.

### 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 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 is 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 complete and the monitoring equipment installed in early June.

**Willow Pond CMAC (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Tina Carstens)**

*The purpose of this study is to evaluate the feasibility of using CMAC technology in a project that involves diverting flows from Willow Pond to a filter that will remove dissolved and particulate phosphorus to benefit Bennett Lake.*

This period, Barr continued developing plans and specifications and conducted a topographic shoreline survey to assess impacted areas for DNR permitting. To complete the design, a soil boring was performed at the end of May. The 95-percent plans and specifications for RWMWD review are now complete, and construction of the CMAC filtration system could occur as early as late summer or fall 2018.

The City of Roseville and RWMWD will conduct final review and community outreach before the project is put out to bid. Staff will request authorization to advertise the project for bid in July.

**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 began design of the bio retention basin with initial stormwater modeling to determine the size of the treatment system. We have discussed the desirable size and location of the facility with City of Maplewood park staff, and we are starting initial layout, keeping in mind park uses. Soil borings were recently conducted; understanding subsoils will allow us to now design in detail.

**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 currently underway on five 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; 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 these 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.

**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.

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

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**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 May, Barr continued evaluating 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 mobile-home park on the basin's south side. This period, efforts focused on options that would divert flows to other locations without raising the potential for further flooding downstream. Barr will summarize results in a technical memorandum for RWMWD review in the coming weeks. This project is linked to the system-wide evaluation of flood control options/Beltline resiliency study, described above.

**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 most punch-list and restoration items, with the notable exception of patching the DNR access location, due to high water levels in the Mississippi River. That work is scheduled to be complete by the end of May. (The concrete patch was poured on May 23.)

In the next period, PCi Roads will finish patching the access hole in the Mississippi branch, and Barr will compile the final construction report and documentation. We anticipate that the final pay application from PCi Roads will be submitted to the board at the July meeting.

**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.*

On May 15, Barr discussed project delays with the contractor, Fitzgerald Excavating & Trucking (the same contractor used for the RWMWD's Grass Lake berm project). The contractor stated that other commitments had delayed them recently, and that they plan to restart the work immediately. The contractor said that they will send a revised estimated schedule by May 17. To date, we have not received anything; however, construction has resumed in recent weeks, and is progressing well on most sites. Work remains at South Vadnais Boulevard and at the 15-inch pipe serving as the outlet from the

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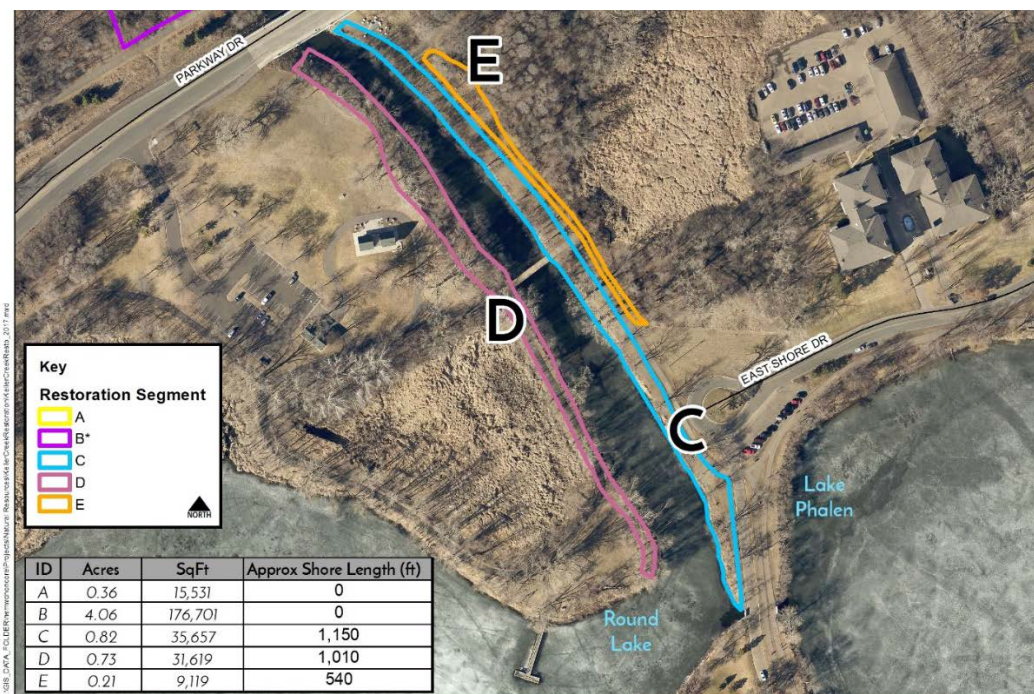
Grass Lake system. Work in Battle Creek Ravine Park also remains. A change order to extend the contract time to June 15, 2018, has been prepared for consideration at the June 6 board meeting.

A partial payment application was processed this month for work completed at both PFS Basin sites in Woodbury. It is included in the bill list.

## Natural Resources Update – Bill Bartodziej and Simba Blood

### Keller Creek Ecological Restoration

Despite the crazy weather, NR and Education staff were able to engage a large number of students in this year’s ecological restoration project. We had 460 students from 6 educational institutions participate. The schools include: Mounds Park Academy, L’Etoile du Nord, Weaver Elementary, Farnworth 5-8 Upper Campus, Farnsworth PreK-4, and Roseville Area Middle school. The students worked very hard and were able to install over 5,400 native plant plugs. This is an amazing accomplishment and will definitely add a tremendous amount of value to the restoration project. In addition, they take away a very practical and real ecology lesson. We believe that this is quite a unique and significant experience for the students.



#### Keller Creek Ecological Restoration

Ramsey-Washington Metro Watershed District & Partners

\* Note: Area estimates are based on flat terrain, so they will underestimate highly-contoured segments.



All of the planting with the students is taking place in area E on the map above. We are also restoring area D this year. Because of the steep slope on that side of the creek (D), a majority of this work is being conducted by NR staff and RCC inmate work crews. In addition, the Citizen Advisory Committee will help with installing emergent aquatic plants on the shore edge this summer. We are pleased with the progress to date and expect to complete all aspects of the restoration this year.





**Area E – Before restoration – fall 2017**

**A massive quantity of buckthorn was removed from the site last year. Larger stumps were pulverized with a stump grinder. The path on the upper left is the North-South trail that links with Lake Phalen.**



**Area E – restoration in progress – May 2018**

**Seedlings are popping through the biodegradable erosion control blanket. The exposed soil circles mark the prairie plant plugs that were installed by the students.**



**Intern Ryan is providing a plant installation lesson.**



**A happy group of students working very hard to improve the creek natural area.**

## Public Involvement and Education Program – Sage Passi

### The Month of May Inspires “Live Action” in the Watershed District

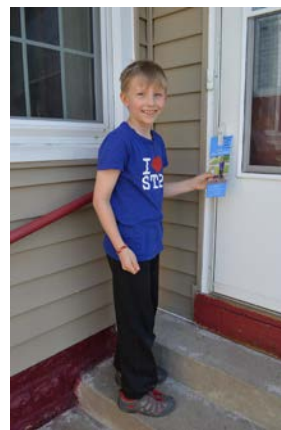
#### Students Get School Rain Gardens in Shape!

Fourteen classrooms at 6 schools (400 students) assisted by watershed staff and 9 Master Gardeners got our Clean Water school rain gardens in great shape during May at Weaver, Woodbury Elementary, Maplewood Middle School, Harmony Learning Center, Roseville Area Middle School and Central Park Elementary School by removing old vegetation and weeding. Summer maintenance will be in the hands of Landbridge Ecological (formerly Wetland Habitats). Overall, our school rain gardens are doing great!

**Maplewood Middle School eighth graders cut down last year’s growth of native grasses. Inlets are cleared at rear rain gardens at Maplewood Middle School.**



#### Adopt A Drain School Volunteers Hit the Streets in the Beaver Lake Neighborhood

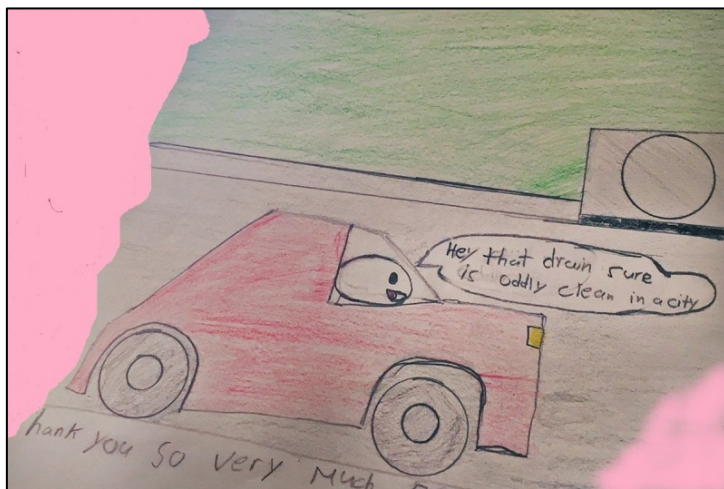


L'Etoile du Nord French Immersion School fourth grade students partnered with RWMWD, the City of Saint Paul and Hamline University in early May to promote the Adopt-a-Drain program by distributing 500 door hangers in the Beaver Lake neighborhood to encourage residents to adopt their storm drains by keeping leaves, grass clippings and trash from polluting the lake. Hamline University students added

to this neighborhood outreach effort by distributing over a thousand more door hangers in the area. The fourth grade classes will return on June 6 to do a clean-up of storm drains in the area and celebrate their efforts at Beaver Lake.

**Farnsworth Fourth graders make an “Adopt A Drain” Pitch Too!**

Farnsworth fourth graders sent thank you letters to residents who have adopted storm drains in the past year near Lake Phalen and mailed out additional appeal letters with artwork to 250 residents in their neighborhood to encourage them to adopt drains in their neighborhood. This outreach brought in a flush of new adoptions.



**“Heh, that drain sure is oddly clean in a city!”**

**“Help me! People throw trash at me (Wow)!  
Thank you! I can’t ever repay you!”**



**Southwood Nature Preserve – Prairie Buffer Continue to Grow, Woodland is Thriving and Water Quality is Investigated on Field Trips**



St. Peter Catholic School fourth graders and Harmony Learning Center adult ESL students each had the opportunity to spend a day at Southwood Nature Preserve to enhance the prairie and woodland areas with plantings, compare their characteristics and study the water quality in the pond. Cathy Troendle, a North St. Paul Master Naturalist who has been restoring the preserve for over ten years, partnered with the District to provide hands on investigations as well as pre-lessons for each of the classes before their trips.

## Alternative Turf and Bee Lawn Training; Demonstration Projects Are Launched



Fifty Master Gardeners from Ramsey and Washington County and Master Water Stewards attended a training on May 8 to learn the nuts and bolts of installing alternative turf and bee lawns to increase lawn resiliency, decrease compaction, improve infiltration and soil microbial health, conserve water and foster pollinator habitat. James Taillon, from the University of Minnesota Bee Lab and Bob Dammes, “Organic Bob”, were the presenters and provided consultation during the

installation of a participatory demonstration bee lawn project at the workshop site, Macalester Plymouth United Church. Blue Thumb, Metro Blooms, RWMWD and Capitol Region Watershed District were co-hosts. Workshop participants signed up for involvement in a variety of future demonstration project sites at residences, a school, the Washington Conservation District office and a church in our watershed district and a residence in CRWD.



Roger Hintze, Carol Mollner (Ramsey County Master Gardeners) and James Taillon, on left, watch the final step in the installation of a bee lawn as Organic Bob spreads a seed mix of fine fescues, Dutch white clover, creeping thyme and self-heal at the church's demo site.

Asphalt removal begins at Lions Gate Academy in Shoreview in preparation for the installation of a large rain garden, alternative bee lawn demonstration project and native plantings.



### Completing the Fourth Year of Keller Creek Restoration

Seventeen classes from Mounds Park Academy, L'Etoile du Nord, Farnsworth Aerospace (upper and lower campuses), Weaver, and Roseville Middle School learned about the history and purpose for the Keller Creek restoration through presentations and then assisted in this large scale planting with the help of 15 Ramsey County Master Gardeners, Master Water Stewards and watershed staff. They investigated water quality in the creek using pH/ temp meters, a secchi tube and dissolved oxygen kits.



### Maplewood Middle School Seventh Graders Plant Courtyard

Seventh graders at this school grew and planted native seedlings in this rebuilt raised bed in their courtyard on May 22 with Watershed staff. The structure for the planting was provided by Opus corporate volunteers with the construction and financial support of Rebuilding Together Twin Cities.



## Memorandum

**To:** Board of managers and staff  
**From:** Matt Kumka, Fred Rozumalski, Greg Nelson, Leslie DellAngelo, Erin Anderson Wenz  
**Subject:** Maplewood Mall green infrastructure assessment 2018  
**Date:** May 30, 2018

### Project team

RWMWD staff: Eric Korte, Lyndsey Provos, and Tina Carstens  
Barr staff: Matt Kumka, Erin Anderson Wenz, Greg Nelson, Leslie DellAngelo, Bill Brohman, Fred Rozumalski, and Josh Vosejпка

### Barr team roles

Project management: Erin Anderson Wenz  
Field assessment: Matt Kumka, Bill Brohman, and Fred Rozumalski  
Engineering review: Erin Anderson Wenz, Leslie DellAngelo, and Greg Nelson

### RWMWD staff

Project management: Tina Carstens  
Assessment management: Paige Ahlborg  
Sump sediment data collection: Lyndsey Provos  
Cistern and pump inspection: Eric Korte

### Maplewood Mall staff

Mall management: Jennifer Lewis  
Mall operations management: Steve Swanson

### Scope of work

The purpose of this project is to assess the integrity of the stormwater management system, tree trenches, and plantings implemented through the RWMWD during 2009-2012 at Maplewood Mall. Now that much of the system at least five years old, the condition of materials, sediment capture, structures, and plant growth should be evaluated.

#### Task 1: inventory and assessment

The first step will be to conduct a field assessment of conditions, including:

- Tree inspection (size, condition, and other notes)
- Stormwater structures (trench drains, agri-drains, and sump catch basins)
  - Condition inspection with notes and photos



- Asphalt and concrete associated with the structures
- Sediment levels in sump catch basins
- Video inspection of underdrains within selected tree trenches to inspect for root intrusion, sediment accumulation, or blockage
- Rain gardens and planting areas, including entrances
  - Condition assessment including erosion, sediment accumulation, weeds, and plant loss
  - Summary of maintenance records from past activities by Minnesota Native Landscapes, Inc.
- Signage and cistern
  - Condition inspection and documentation of damage
  - Summary of maintenance records from the RWMWD
- Pavement conditions
  - Decorative concrete at entrances and permeable pavers
  - Curbs associated with the original project
- Hydrology
  - Summary of past monitoring efforts (continuous event monitoring and 2016 synthetic storm)
  - Synthetic storm event, summer 2018

#### **Task 2: findings and recommendations**

- Create a summary memo (including photos of all notable findings)
- Present findings to the RWMWD
- Create a recommendations memo
  - Tree/plant replacements
  - Signage and cistern repair
  - Additional monitoring
  - Estimate of cost for recommended work
  - Proposed strategy for work completion with schedule (e.g., included with yearly capital projects maintenance or potentially create a separate bid; some of the plant work could be done under the existing maintenance contract with Minnesota Native Landscapes, Inc.)
- Presentation to the RWMWD board

#### **Task 3: oversight of implementation of repairs**

- Assemble bid package for structure repairs and plantings
- Oversee repairs and plantings

#### **Budget**

Barr will complete this work for an estimated amount not to exceed \$20,000.

#### **Schedule**

##### ***Task 1: inventory and assessment***

- Project to begin after leaf-out in mid to late May
- Complete site work by mid-June

- Synthetic storm event mid to late summer

**Task 2: findings and recommendations**

- Presentation to staff in early September
- Presentation to board at October meeting

**Task 3: oversight of implementation of repairs**

- Coordinate creation of plans and specs for repair work with the RWMWD 2019 CIP

**Project tracking**

**Project milestones**

Milestone	Estimated completion date	Actual completion date
Inventory and assessment	June 30, 2018	
Findings and recommendations	September 15, 2018	
Presentation to RWMWD board	October 3, 2018	

**Project budget tracking (engineering)**

Project objectives	Estimated budget*	Spent to date
Task 1: inventory and assessment	\$8,900	
Task 2: findings and recommendations	\$11,100	
Task 3: oversight of implementation of repairs	To be completed as a part of the 2019 CIP effort	
<b>Total</b>	<b>\$20,000</b>	

*\*Barr budget only; these totals do not include RWMWD project budgets*

**Monthly updates**

Month	Budget spent (\$/%)
June 2018	

## Memorandum

**To:** Board of managers and staff  
**From:** Jen Koehler, Kevin Menken, and Erin Anderson Wenz  
**Subject:** Impact of removal of accumulated sediment from Wakefield Lake on Lake Phalen water quality  
**Date:** May 30, 2018

### Project team

RWMWD: Project manager: Tina Carstens  
Barr: Principal in charge: Brad Lindaman  
Project manager: Jen Koehler  
Project team: Erin Anderson Wenz, Kevin Menken, Josh Vosejпка, and Tyler Olson

### Scope of work

#### Task 1: bathymetric survey, sediment investigation, and testing

**Objective:** Estimate existing bathymetry and determine the depth of accumulated sediment on the south end of Wakefield Lake, between the Larpenteur Avenue storm-sewer outfall and the Wakefield Lake outlet, and determine sediment quality characteristics that may affect disposal requirements

**Task work scope:** Task 1 includes a bathymetric survey on the south end of Wakefield Lake (approximately 4 acres) to determine the top of the accumulated sediment in this area of the lake. Additionally, sediment cores will be collected at four locations on the south end of the lake, and the samples will be analyzed for polycyclic aromatic hydrocarbons and metals in accordance with Minnesota Pollution Control Agency guidelines for sediment testing and disposal in stormwater ponds in watersheds dominated by residential land use. Field screening will be conducted to determine if further testing for benzene and diesel range organics is needed, although given the watershed land use, this is not anticipated. Results of the analytical testing will be compared to the soil reference values (SRV) to determine disposal requirements. As part of the field work, Barr will also inspect the slopes along the southeast side of the lake for signs of erosion that may be contributing to the sedimentation issue on the south end of Wakefield Lake.

**Task cost:** \$8,300

#### Task 2: bathymetric analysis and cost estimate

**Objective:** Quantify the accumulated volume of sediment on the south end of Wakefield Lake, between the Larpenteur Avenue storm-sewer outfall and the Wakefield Lake outlet, to develop updated

**To:** Board of managers and staff  
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Wakefield Lake bathymetry for water-quality modeling (Wakefield Lake volumes) and to quantify the volume of accumulated sediment.

**Task work scope:** This task will include development of gridded bathymetric data (raster data) for Wakefield Lake for the following conditions:

- Existing conditions, utilizing Minnesota Department of Natural Resources bathymetric data along with the estimated surface of existing accumulated sediment on the south end of Wakefield Lake (per data collected in task 1)
- Proposed conditions based on estimated depth of removal of accumulated sediment on the south end of Wakefield Lake (per data collected in task 1)

This gridded bathymetric data can be used to estimate the volume of accumulated material to be removed. Using these volumes and the results of the laboratory analysis (from task 1), we will develop planning-level cost estimates for the engineering, design, permitting, and removal/disposal of the accumulated sediment on the south end of Wakefield Lake.

**Task cost:** \$3,300

### **Task 3: load reduction estimate**

**Objective:** Quantify the water-quality impact (total suspended solids and total phosphorus) of removing the accumulated sediment volume from the south end of Wakefield Lake on pollutant loads to Lake Phalen.

**Task work scope:** Utilizing the bathymetry data developed in task 2, we will develop updated P8 water-quality model inputs to represent the existing conditions in Wakefield Lake as well as the proposed conditions (reflecting the removal of the accumulated sediment). The permanent pool volume for the lake will be updated in using the RWMWD's P8 models to quantify the impact of removing the accumulated sediment on the pollutant loads reaching Lake Phalen from the Wakefield Lake system.

**Task cost:** \$2,600

### **Task 4: technical memo**

**Objective:** Develop a brief summary of this analysis to help the RWMWD determine if pursuing the removal of accumulated sediment in Wakefield Lake should be part of the RWMWD's 2019 capital improvement plan maintenance efforts.

**Task work scope:** This task includes development of a brief memo summarizing the sediment investigation efforts, the impact of sediment removal on pollutant loads to Lake Phalen, the planning-level cost estimate for sediment management, and a summary of associated permitting to perform dredging and disposal of the removed accumulated sediment. This includes one round of review by the RWMWD.

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**Task cost: \$2,300**

### **Project cost and schedule**

The total project cost is estimated at **\$16,500**. Barr can complete this work in June through August 2018.

<b>Milestone</b>	<b>Estimated completion date</b>
Project start	May 25, 2018
Task 1: sediment investigation and testing	June 30, 2018
Task 2: bathymetric analysis and cost estimate	July 30, 2018
Task 3: load reduction estimate	July 30, 2018
Task 4: technical memo	August 30, 2018

### **Project tracking (monthly updates)**

<b>Month</b>	<b>Budget spent (\$/%)</b>
May 2018	
June 2018	
July 2018	
August 2018	

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# Informational Items

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## L'Etoile students get hands-on in the neighborhood

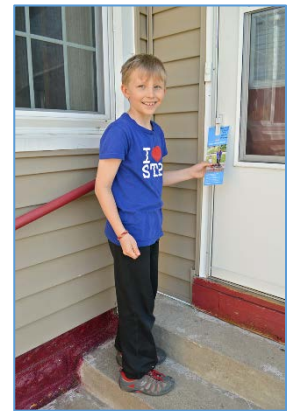
Submitted by admin on Mon, 05/14/2018

By: Marjorie Otto



*On the left: Courtesy of Ramsey-Washington Metro Watershed District • L'Etoile du Nord French Immersion School students went around the Beaver Lake neighborhood in early May to encourage neighbors to “adopt a drain” and help keep local water sources clean. The students have been working with the Ramsey-Washington Metro Watershed District all year on various water quality projects.*

*On the right: Courtesy of Ramsey-Washington Metro Watershed District  
L'Etoile du Nord French Immersion School fourth-grade students went around the Beaver Lake neighborhood in early May encouraging neighbors to adopt a drain.*



The school, which is located in the neighborhood, has been involved in environmental learning for a number of years.

Sage Passi, who is the education coordinator for the Ramsey-Washington Metro Watershed District, said she's been working with the school for nearly a decade. She helps create hands-on environmental learning for a number of local schools.

Throughout the school year, fourth-grade students from L'Etoile work with the watershed district to learn more about how their actions can impact the local watershed and water around the world.

Passi said students do a variety of activities throughout the year. This fall, L'Etoile students met with neighbors near Beaver Lake to tour their rain gardens and to learn about water runoff and how it moves from lakes to streams to rivers, and eventually, to the ocean.

In the winter, students again went to Beaver Lake and helped researchers take water samples. They tested the water's PH level, the temperature and the salinity of the water, tying into a lesson about the use of road salt during the winter and how it can affect water quality.

Most recently at the beginning of the month, L'Etoile students went around in the neighborhood to encourage neighbors to “adopt a drain,” meaning that neighbors will help keep drains clear of garbage, leaves and other pollutants.

Nick Gasho, a fourth-grade teacher at L'Etoile, said his students are at an age where “their curiosity level is almost endless,” and that these ground- and water-level opportunities held create long-lasting educational lessons that stick with the students much longer than classroom work.

“We spend enough time, too much time, in a classroom,” said Gasho. “9 and 10-year-olds thrive when they can get out into the community, into nature and when they can have hands-on projects.”

For those interested in adopting a drain, go to [www.adopt-a-drain.org](http://www.adopt-a-drain.org).

— Marjorie Otto