



Bassett Creek Watershed Management Commission

Public Hearing & Regular Meeting

Thursday June 21, 2018

8:30 – 11:00 a.m.

Council Conference Room, Golden Valley City Hall, Golden Valley, MN

AGENDA

1. CALL TO ORDER and ROLL CALL

2. CITIZEN FORUM ON NON-AGENDA ITEMS - *Citizens may address the Commission about any item not contained on the regular agenda. A maximum of 15 minutes is allowed for the Forum. If the full 15 minutes are not needed for the Forum, the Commission will continue with the agenda. The Commission will take no official action on items discussed at the Forum, with the exception of referral to staff or a Commissions Committee for a recommendation to be brought back to the Commission for discussion/action.*

3. APPROVAL OF AGENDA

4. CONSENT AGENDA

- A. Approval of Minutes – May 17, 2018 Commission Meeting
- B. Approval of June 2018 Financial Report
- C. Approval of Payment of Invoices
 - i. Keystone Waters, LLC – May 2018 Administrative Services
 - ii. Keystone Waters, LLC – May 2018 Meeting Materials Distribution Expenses
 - iii. Barr Engineering – May 2018 Engineering Services
 - iv. Triple D Espresso – June 2018 Meeting Refreshments
 - v. Wenck – May 2018 WOMP Monitoring
 - vi. Lawn Chair Gardener – May 2018 Administrative and Education Services
 - vii. Kennedy Graven – April 2018 Legal Services
 - viii. MMKR – 2017 Financial Audit
 - ix. LMCIT – Insurance Premium Payment
 - x. PLM Lake and Land Management Corp – Medicine Lake Herbicide Treatment
 - xi. Three Rivers Park District – Equipment for zebra mussel survey
 - xii. Three Rivers Park District – Decontamination Unit for Medicine Lake
- D. Approval of Reimbursement Request for Plymouth Creek Restoration Project (2017CR-P)
- E. Approval of Reimbursement Request from New Hope for Northwood Lake Improvement Project (NL-1)
- F. Approval of Reimbursement Request for Workshop on the Water Registration
- G. Set Public Hearing on 2019 Capital Improvement Projects for August 16, 2018
- H. Approval to Submit Comments on Golden Valley Surface Water Management Plan

5. PUBLIC HEARING

- A. Receive Comments from Cities and Public on Proposed Minor Plan Amendment (10 minutes)
 - i. Comments from Review Agencies
 - ii. Consider Extending Comment Period to July 25, 2018 per Hennepin County Request

6. BUSINESS

- A. Consider Approval of 90% Design Plans for Bassett Creek Park Phase I Dredging Project: Winnetka Pond (BCP-2) (20 minutes)
- B. Consider Approval of Final Report and Reimbursement Request for Honeywell Pond Expansion Project (BC-4) (20 minutes)
- C. Discuss Interest and Logistics of Inviting Commissioners to Participate in Bassett Creek Deep Tunnel Inspection (15 minutes)
- D. Receive Report on Status of Twin Lake Alum Treatment and Consider Recommendations (15 minutes)
- E. Receive Update on Process and Timelines on CIP Projects (15 minutes)

7. COMMUNICATIONS (15 minutes)

- A. Administrator's Report
 - i. BCWMC- sponsored Smart Salt Training
 - ii. Analysis of Linear Project Requirements
- B. Chair
- C. Commissioners
- D. TAC Members
- E. Committees
 - i. CIP Prioritization Committee
- F. Legal Counsel
- G. Engineer
 - i. Zebra Mussels in Medicine Lake
 - ii. Schaper Pond Effectiveness Monitoring
 - iii. Sweeney Lake Aeration Study

8. INFORMATION ONLY (Information online only)

- A. Administrative Calendar
- B. CIP Project Updates <http://www.bassettcreekwmo.org/projects>
- C. Grant Tracking Summary and Spreadsheet
- D. WCA Notice of Decision, Plymouth
- E. [One Water Summit](#)

9. ADJOURNMENT

Upcoming Meetings & Events

- BCWMC Regular Meeting: July 19th, 8:30 a.m., Golden Valley City Hall



Bassett Creek Watershed Management Commission

AGENDA MEMO

Date: June 14, 2018

To: BCWMC Commissioners

From: Laura Jester, Administrator

RE: Background Information for 6/21/18 BCWMC Meeting

1. **CALL TO ORDER and ROLL CALL**
2. **CITIZEN FORUM ON NON-AGENDA ITEMS**
3. **APPROVAL OF AGENDA – ACTION ITEM with attachment**
4. **CONSENT AGENDA**
 - A. Approval of Minutes – May 17, 2018 Commission Meeting- **ACTION ITEM with attachment**
 - B. Approval of June 2018 Financial Report - **ACTION ITEM with attachment**
 - C. Approval of Payment of Invoices - **ACTION ITEM with attachments (online)** – *I reviewed the following invoices and recommend approval of payment.*
 - i. Keystone Waters, LLC – May 2018 Administrative Services
 - ii. Keystone Waters, LLC – May 2018 Meeting Materials Distribution Expenses
 - iii. Barr Engineering – May 2018 Engineering Services
 - iv. Triple D Espresso – June 2018 Meeting Refreshments
 - v. Wenck – May 2018 WOMP Monitoring
 - vi. Lawn Chair Gardener – May 2018 Administrative and Education Services
 - vii. Kennedy Graven – April 2018 Legal Services
 - viii. MMKR – 2017 Financial Audit
 - ix. LMCIT – Insurance Premium Payment
 - x. PLM Lake and Land Management Corp – Medicine Lake Herbicide Treatment
 - xi. Three Rivers Park District – Equipment for zebra mussel survey
 - xii. Three Rivers Park District – Decontamination Unit for Medicine Lake
 - D. Approval of Reimbursement Request for Plymouth Creek Restoration Project (2017CR-P) – ACTION ITEM with attachment (full document online) – *At their meeting in September 2016, the Commission approved an agreement with the City of Plymouth to design and construct this project. Most of the construction is complete. The city is requesting reimbursement for construction costs and construction-related expenses. Staff recommends approval.*
 - E. Approval of Reimbursement Request from New Hope for Northwood Lake Improvement Project (NL-1) – ACTION ITEM with attachment – *At their meeting in February 2016, the Commission approved an amended agreement with the City of New Hope to design and construct this project. All project components except the installation of an educational sign were completed and reimbursed last year. With the sign installed, final grant reports (due August 1st) can be prepared and closed out. The city will present a final report on this project at a future meeting. Staff recommends approval.*
 - F. Approval of Reimbursement Request for Workshop on the Water Registration – ACTION ITEM no attachment – *As allowed through the 2018 Education Workplan and Budget for commissioner reimbursements for trainings, Commissioner Scanlan is requesting reimbursement of \$20 for registration costs related to the Metro Watershed Partner’s Workshop on the Water. Staff recommends approval.*

- G. Set Public Hearing on 2019 Capital Improvement Projects for August 16, 2018 – **ACTION ITEM no attachment** – *After the maximum levy is approved by the County in July, the Commission should hold a public hearing on the 2019 capital projects. The August meeting will also include a resolution officially ordering the projects, setting a final levy amount, and entering agreements with the cities to design and construct the projects.*
- H. Approval to Submit Comments on Golden Valley Surface Water Management Plan – **ACTION ITEM with attachment** – *The City of Golden Valley recently submitted its Surface Water Management Plan (SWMP) for 60-day review by the Commission. Since Barr Engineering drafted the SWMP, staff with Wenck Associates and I reviewed the plan and drafted the attached letter with recommended revisions and required changes. I recommend approving the comment letter with the Chair’s signature and submitting it to Golden Valley. Once a final SWMP is submitted, the Commission will consider approval by resolution at a future meeting.*

5. PUBLIC HEARING

- A. Receive Comments from Cities and Public on Proposed Minor Plan Amendment (10 minutes) – **DISCUSSION ITEM with attachment** – *At the April meeting, the Commission approved a 5-year CIP and directed staff to begin a minor plan amendment process to incorporate new projects into the CIP. At this public hearing the Commission should consider comments from the public and its member cities on the proposed amendment.*
 - i. Comments from Review Agencies – **INFORMATION ITEM with attachment** - *The 30-day comment period for agencies began on May 3rd. The Board of Water and Soil Resources, Met Council, and MDNR all indicated support and had no comments (other than the MDNR requesting early coordination as these projects move forward).*
 - ii. Consider Extending Comment Period to July 25, 2018 per Hennepin County Request – **ACTION ITEM with attachment** - *Due to the timing of Hennepin County Board meetings, the County is requesting an extension of the comment period until July 25th. Staff recommends approval.*

6. BUSINESS

- A. Consider Approval of 90% Design Plans for Bassett Creek Park Phase I Dredging Project: Winnetka Pond (BCP-2) (20 minutes) **ACTION ITEM with attachment** - *In September 2017 the Commission entered an [agreement](#) with the City of Crystal to design and construct this CIP project. The city hired Barr Engineering to prepare project plans and specifications for the project. 50% design plans were approved at the April meeting. Staff recommends approving the plans; authorizing the city to proceed with final plans, contract documents, and permitting; and consider the request for reimbursement of easement development and acquisition costs.*
- B. Consider Approval of Final Report and Reimbursement Request for Honeywell Pond Expansion Project (BC-4) (20 minutes) – **ACTION ITEM with attachments** – *At the August 2015 meeting, the Commission approved an agreement with the City of Golden Valley to design and construct this project. The project is complete and the city is presenting a final report and requesting final reimbursement. Staff recommends approval of the report and reimbursement request.*
- C. Discuss Interest and Logistics of Inviting Commissioners to Participate in Bassett Creek Deep Tunnel Inspection (15 minutes) – **DISCUSSION ITEM with attachment** – *The Commission Engineer is scheduled to inspect the Bassett Creek deep tunnel this year. This presents an opportunity for commissioners/TAC members to enter and observe portions of the tunnel. If the Commissioners/TAC members are interested in participating in a tour, there are several logistical items regarding planning, safety, equipment, etc. to be considered and planned. Staff are seeking input regarding participation and an approximate head count of the interested Commissioners/TAC members.*

- D. Receive Report on Status of Twin Lake Alum Treatment and Consider Recommendations (15 minutes) – **ACTION ITEM with attachment** - *Twin Lake received the first phase of an alum treatment in the spring of 2015 (BCWMC CIP project TW-2). The first phase delivered half of the total dosage of aluminum to immobilize phosphorus in the lake sediments and reduce internal phosphorus loading, thus protecting the high water quality of the lake. The split dosage minimizes the potential impacts on aquatic biota and improves the overall treatment efficiency and longevity of the alum treatment. The Commission Engineer recently analyzed lake sediment and water quality data to determine when or if a second dose is needed. Please see memo and recommendations in the attached memo.*
- E. Receive Update on Process and Timelines on CIP Projects (15 minutes) – **INFORMATION ITEM with attachment** – *There are some upcoming CIP projects that are not following the Commission’s typical project development timeline for various reasons. Please see the attached memo with project-specific information.*

7. COMMUNICATIONS

- A. Administrator’s Report – **INFORMATION ITEM with attachment**
 - i. BCWMC- sponsored Smart Salt Training
 - ii. Analysis of Linear Project Requirements
- B. Chair
- C. Commissioners
- D. TAC Members
- E. Committees
 - i. CIP Prioritization Committee
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9. ADJOURNMENT

Upcoming Meetings & Events

- BCWMC Regular Meeting: July 19th, 8:30 a.m., Golden Valley City Hall



Bassett Creek Watershed Management Commission

DRAFT Minutes of Regular Meeting

Thursday, May 17, 2018

8:30 a.m.

Golden Valley City Hall, Golden Valley MN

1. CALL TO ORDER and ROLL CALL

On Thursday, May 17, 2018 at 8:32 a.m. in the Council Conference Room at Golden Valley City Hall (7800 Golden Valley Rd.), Chair de Lambert called to order the meeting of the Bassett Creek Watershed Management Commission (BCWMC) and asked for roll call to be taken.

Commissioners and city staff present:

City	Commissioner	Alternate Commissioner	Technical Advisory Committee Members (City Staff)
Crystal	NA	NA	Absent
Golden Valley	Absent	Jane McDonald Black	Eric Eckman, Jeff Oliver
Medicine Lake	Clint Carlson	Gary Holter	Absent
Minneapolis	Michael Welch	NA	Liz Stout
Minnetonka	Mike Fruen	Bill Monk	Tom Dietrich
New Hope	Absent	Pat Crough	Megan Albert
Plymouth	Jim Prom	Absent	Derek Asche
Robbinsdale	Michael Scanlan	Absent	Richard McCoy, Marta Roser
St. Louis Park	Jim de Lambert	Absent	Erick Francis
Administrator	Laura Jester, Keystone Waters		
Engineers	Karen Chandler, Michelle Kimble, Greg Wilson, Jen Koehler – Barr Engineering		
Recorder	Dawn Pape, Lawn Chair Gardener		
Legal Counsel	Troy Gilchrist, Kennedy & Graven		
Presenters/ Guests/Public	Laurie Larsen, Crystal resident; Chuck Schmidt, New Hope resident; George Abide, Golden Valley resident; Jeannie and Howard Schwartz, Golden Valley residents; Bob Friddle, City of Minneapolis; Devin Power, SRF Consulting		

2. CITIZEN FORUM ON NON-AGENDA ITEMS

Chuck Schmidt, a resident of New Hope, reported on a gully from the railroad tracks near Winnetka Pond. Although he has reported on this gully in the past, he noted it has progressed much closer to tracks. He sent an email to the railroad company; they said they will forward it on to their engineers. Mr. Schmidt also indicated he is willing to help plant and maintain wildflowers around Winnetka Pond. Engineer Chandler recommended forwarding the emails to and from the railroad to Mark Ray with the City of Crystal and she informed Mr. Schmidt about the upcoming public open house on the Winnetka Pond dredging project.

3. APPROVAL OF AGENDA

MOTION: Alt. Commissioner McDonald Black moved to approve the agenda. Commissioner Prom seconded the motion. Upon a vote, the motion carried 7-0. [Cities of Minneapolis and Crystal absent from the vote.]

[Commissioner Welch arrives.]

4. CONSENT AGENDA

The following items were approved as part of the consent agenda: April 19 2018 commission meeting minutes, May 2018 financial report, payment of invoices, Fiscal Year 2017 Financial Audit Report, 2017 BCWMC Annual Report, Bassett Creek Park Playground Project, and the Agreement with Met Council for Citizen Assisted Monitoring Program (CAMP).

The general and construction account balances reported in the May 2018 Financial Report are as follows:

Checking Account Balance	\$763,012.71
TOTAL GENERAL FUND BALANCE	\$ 763,012.71
TOTAL CASH & INVESTMENTS ON-HAND (5/9/18)	\$ 3,653,194.63
CIP Projects Levied – Budget Remaining	(\$ 5,201,159.45)
Closed Projects Remaining Balance	(\$ 1,547,964.82)
2012-2016 Anticipated Tax Levy Revenue	\$ 3,721.01
2017 Anticipated Tax Levy Revenue	\$ 1,771.12
Anticipated Closed Project Balance	(\$ 1,542,472.69)

MOTION: Commissioner Prom moved to approve the consent agenda. Alternate Commissioner McDonald Black seconded the motion. Upon a vote, the motion carried 8-0. [City of Crystal absent from the vote.]

5. BUSINESS

A. Consider Approval of Feasibility Study for Westwood Lake Water Quality Improvement Project (WST-2) and Choose Alternative

Commission Engineer Chandler noted that at the April meeting, the Commission reviewed the draft feasibility study for this project and discussed various options. She noted that two additional options are included in this month’s final feasibility report.

Engineer Chandler introduced Michelle Kimble from Barr Engineering who gave an overview of feasibility study results and concepts for consideration. She noted that Concepts 1 (Additional Permeable Pavers) and 2 (Expand Filtration Basins) remain the same as were reviewed at last month’s meeting.

Engineer Kimble reviewed educational concepts related to Concept 3 (Linear Water Feature). She noted this feature would collect stormwater runoff from the interpretive center roof and the north patios and the runoff would be routed through a series of channels, basins, and pumps which would recirculate the runoff until the water left the system through infiltration, evaporation, or evapotranspiration. The recirculation pumps could be solar-powered or operated manually by visitors. An overflow would be installed from the downstream basin to Turtle Pond for excess water during storms. Since Turtle Pond is currently stagnant and receives minimal runoff, increasing water to the pond may improve its water quality.

Engineer Kimble reported that in addition to water quality benefits from Concept 3, this system would be designed as an educational experience with signage and interactive features such as a recirculation pump powered with a stationary bike, a wheel, or a hand crank. When initiated, the manual pumping could discharge at a highly visible, elevated, and accessible location. These, or similar educational features, would allow Westwood Hills Nature Center (WHNC) visitors to see the connection between their effort and the recirculation flow.

Engineer Kimble reported that in 2017 WHNC had 36,000 program participants ranging in age from toddlers to seniors and that many more visitors are expected at the future nature center. She reviewed the following ideas for educational opportunities related to Concept 3.

- Install a rain gauge and record how much it rains. Relate the gauge to the amount of water in the system. Have discussion about precipitation trends and if the area is in a wet or dry cycle.
- Place a visual marker within the manhole which shows water level in the pipe/manholes. Relate the marker to the recent amount of rain, or lack of rain.
- Construct the structure that conveys rain from the roof down to the water feature in a location that can be seen when standing inside the building and out on the patio.
- Install signage showing the volume of runoff the system holds and the runoff volume the building roof is generating, which otherwise would be infiltrated if the area was forested.
- Install signage showing the complete hydrologic cycle from rain, runoff, infiltration, evapotranspiration, and overflow; install markers along the linear water feature system to identify each part in the cycle.
- Plant each basin with specific plants for wet and dry zones, allowing staff to educate visitors on plant identification.
- Measure the amount the solar pump is pumping and show how the amount of water being pumped increases when the sun is brighter.
- Install signage inside the building showing the different habitats that are present as part of the greater WHNC project. The linear water feature would give staff a way to show visitors some of those habitats.
- Collect water quality samples from the water feature pools and from Turtle pond, and compare the water quality in each, and to other samples from Westwood Lake.
- Discuss the importance of erosion control when viewing the controlled elevation drops through the linear water feature system.
- Note the variety of animals fairly close to the building as a result of the habitat provided by the linear water feature.

Engineer Kimble reviewed Concept 4 (Heated Sidewalks to reduce the need for salt) and reported circulating glycol was deemed impractical for this location because pump and heater locations would be required throughout the sidewalk area and heating would be uneven. She noted an electrical system would be more effective with this layout, however annual electric costs would be greater than if a glycol system was installed. It was noted this option would require annual maintenance by a building maintenance engineer. Educational signage would be installed near the sidewalks explaining how the system works to improve water quality and why chlorides are harmful to aquatic resources.

Engineer Kimble reviewed Concept 5 (Water Reuse) including capturing stormwater runoff from the building roof and reusing the water for toilet flushing. She noted this option was considered by the WHNC design engineer/architect, but was eliminated due to high costs because the water reuse inside the building would require treating the stormwater with filtration and disinfection prior to reuse. Also, with approximately 36,000 annual visitors, with an average of 1.5 gallons per flush and 1.5 flushes per person, the annual peak water demand would be 81,000 gallons. Approximately nine 1.1-inch rainfall events would be required to meet the annual water demand.

Commissioners reviewed Table 5-1 in the feasibility study with estimated pollutant reductions and estimated costs for each concept. Engineer Kimble indicated that she recommends implementing Concept 3.

MOTION: Commissioner Scanlan made a motion to approve the implementation of Concept 3. Commissioner Welch seconded the motion.

During discussion Commissioner Welch noted that this project underscores the work of the CIP Prioritization Committee as this project doesn't fit with typical CIP project outcomes and the significant educational benefits make it difficult to compare to other projects.

Commissioner Scanlan asked about the life expectancy of the project. Engineer Kimble reported that the nature center uses volunteers for vegetation maintenance so maintenance costs are low. She noted plants will need to be maintained and replanted, but it should last 20-30 years.

Another commissioner pointed out that the "return on investment" is low for pollutants removed. (\$350-470/pound of suspended solids removal and \$63,380-84,610/pound of phosphorus removal.)

Chair de Lambert agreed that this is not a water quality project and this lake already has good water quality. He noted that the WHNC is a major resource for west metro grade schools and that it's used for a wide range of events. He announced that he is in support of project.

Commissioner Monk added that water reuse is the future. He noted his interest in Concept 5 because it's a good example for the public. Alternate Commissioner McDonald Black brought up the point that this educational project is 6.5 times the Commission's annual education budget.

Education committee member, Dawn Pape, commended the Commission for supporting education, but underscored McDonald Black's point that this is very expensive education and the value is unclear. She wondered how success would be measured, if the proposed education components would meet the state standards and benchmarks, and whether this educational project encourages behavior changes in reducing chlorides, AIS, or stormwater runoff management—the Commission's top educational goals.

Chair de Lambert reminded the Commission that this money comes from CIP dollars, not the operating budget and that education is squarely in the Commission's purview.

TAC member, Derek Asche, added that the days of ponding and stream restoration projects are likely behind us. Mr. Asche said he thinks we are going to see more of these types of projects that integrate different benefits, like education. Engineer Chandler added that with 36,000 visitors per year these costs are roughly \$10 per person per year. Commissioner Fruen added that this project shows we are changing the way cities are thinking and that education needs to target children. On a similar note, Mr. Asche said that education is the next step in evolution of where we are going. Commissioner Scanlan said that this project is starting a precedent. Mr. Francis mentioned that he thought the actual number of visitors was upwards of 50,000 people per year and that this project is a great opportunity.

Alternate Commissioner McDonald Black noted that creating a metric to help guide these decisions and measure these types of projects would be helpful. She noted it's difficult to compare apples to oranges.

VOTE: Made by roll call vote. The motion carried 7-1, with the City of Plymouth voting against and all other cities voting in favor. [City of Crystal absent from the vote.]

B. Receive Presentation on Schaper Pond Effectiveness Monitoring Results and Consider Next Steps

Engineer Chandler provided background on the project, presented results of the monitoring and made recommendations for next steps. She reminded the Commission that the Schaper Pond Diversion Project was a BCWMC CIP project constructed in the winter of 2015-2016 and that it was designed to divert water via a floating water baffle within the pond to the northwest part of the pond. She noted the diversion allows water to remain in the pond for a longer period of time, resulting in more pollutants settling out before water exits the pond and enters Sweeney Lake. She reported that in 2016, the Commission approved the use of some of the remaining CIP funds to

study the effectiveness of the pond in 2017. She noted that in short, the monitoring results were surprising and disappointing.

[Commissioner Carlson arrives]

Engineer Chandler reported that when comparing the water quality in the pond and upstream of the pond between 2011 and 2017, several observations were noted including: 1) the water entering the pond had much higher pollutant loads in 2011 than 2017; 2) total suspended solids particles entering the pond were much bigger (and easier to settle) in 2011 than in 2017; 3) total suspended solids concentrations entering the pond from the railroad inlet were nearly twice as high in 2017 as they were in 2011; 4) total suspended solids leaving the pond were 30% higher in 2017 than in 2011; and 4) Schaper Pond is not removing suspended solids or total phosphorus as well as it did in 2011, and during most of the monitored events, the flow-weighted constituent concentrations are higher at the pond outlet than the combined inflow.

Engineer Chandler explained potential factors that may be limiting treatment effectiveness including effectiveness monitoring happening before the pond had a chance to equilibrate; several high water events in 2017 when the barrier was raised off the pond bottom; the presence of carp possibly stirring up the bottom of the pond; construction in the watershed in 2017; water quality improvements upstream of the pond; and changes to the pond's bathymetry.

Engineer Chandler reviewed her recommendations for 2018 including water quality monitoring, a carp survey, and bathymetric surveys. She noted an estimated cost for these activities and reporting at \$21,000.

Jeff Oliver with the City of Golden Valley noted he thinks the Commission is on the right path and that more data are needed to determine whether or not the 2017 results were an anomaly. He suspected carp as having a significant impact. Eric Eckman with the City of Golden Valley echoed Mr. Oliver and stated he wasn't ready to say the project isn't working since this is the first year.

Commissioner Welch commented that investigating if carp play a significant role would be a low cost. He also reminded the Commission that this project was known to be experimental from the beginning.

Alternate Commissioner McDonald Black also commented that she didn't want to abandon this project yet and that it presents a tough situation. She noted that 12 foot rises in high events indicates that more data is needed and that there is still a lot of phosphorus flowing into the lake. Greg Wilson, Barr Engineering, reviewed the flow data.

Commissioner Prom asked if carp were just being surveyed, not removed? Wilson responded that they want to understand how/if carp are impacting water quality.

MOTION: Alternate Commissioner Crough moved to approve the memorandum recommendations including performing additional monitoring of Schaper Pond in 2018 with up to \$21,000 from the project's CIP account. Commissioner Scanlan seconded the motion. Upon a vote, the motion carried 8-0. [City of Crystal absent from the vote.]

C. Consider Temporary Variance Request for Minneapolis Impound Lot Facility Improvements

Engineer Chandler provided an overview of the temporary variance request from the City of Minneapolis noting the request was for a temporary surcharge (467 cubic yards of fill) in the floodplain for one year for a new access road from Van White Memorial Blvd. She noted this would increase the flood level by 0.01 ft. She reviewed how the variance conditions were addressed and recommended approval. Administrator Jester reminded the Commission that approving a variance requires action by resolution and that Attorney Gilchrist had drafted a resolution which was displayed on the screen.

MOTION: Commissioner Scanlan moved to approve Temporary Variance Request for Minneapolis Impound Lot Facility Improvements. Commissioner Prom seconded the motion.

Discussion: Commissioner Welch asked if this poses a flooding risk noting that the Commission's variance requirements specifically state no allowed floodplain increase. Engineer Chandler replied that another

environmental risk is disturbing contaminated soil and that the 0.01 ft. increase is within the margin of error for modeling. Commissioner Welch asked if there were other options considered.

Bob Friddle with the City of Minneapolis stated they have a Response Action Plan with the Minnesota Pollution Control Agency and that an alternative to a variance is excavating contaminated soils that poses significant environmental costs and risks. He noted the best option is to slightly increase the flood elevation for a year.

Commissioner Monk inquired whether the soil report shows another option instead of surcharge and wondered if this variance is a slippery slope. Mr. Oliver asked if additional properties would be put in jeopardy of flooding because of this. The reply was no.

VOTE: Upon a vote, the motion carried 8-0. [City of Crystal absent from the vote.]

D. Consider Approval of Feasibility Study for DeCola Ponds B & C Improvement Project (BC2,3,8) and Choose Alternative

Engineer Chandler reminded the Commission that at last month's meeting feasibility concepts for this project were reviewed and discussed. She introduced Jen Koehler from Barr Engineering, who reviewed the project goals of flood reduction, water quality improvements, and habitat restoration, noting that this project meets numerous CIP "gatekeeper" criteria. She also reviewed funding sources along with the \$1.6 million in BCWMC CIP funds (over two years), the city is requesting \$23 million from MDNR's Flood Damage Reduction Grant, plus \$700,000 from Hennepin County and the City of Golden Valley.

Next, Ms. Koehler reviewed concepts 1 and 2 and the hybrid concept 3. Three conceptual designs were evaluated for developing flood storage volume within the DeCola Ponds B and C and the Dover Hills areas. The first conceptual design focused on developing maximum flood storage volume, the second focused on tree preservation (while still providing flood storage), and the third concept concentrated on developing flood storage volume between the first and second alternatives while also trying to preserve trees and develop new habitat.

Ms. Koehler explained how the project could be phased depending on when funding becomes available. Administrator Jester noted that if the full amount is funded by the MDNR, then more money would be available than needed for the project. She asked if the Commission could lower the levy amount. Mr. Oliver replied affirmatively and offered the alternative of reserving funding for future projects in this area. It was decided the decision could be made in September when the maximum levy amount was set.

MOTION: Commissioner Scanlan moved to approve the implementation of Concept 3. Alternate Commissioner McDonald Black seconded the motion.

Discussion: Several residents from the DeCola Ponds area and Roslyn Court spoke in support of the project. Mr. Abide indicated that he supported the project and encouraged the Commission to implement concept 1 for even more flood storage. Another resident said he supported the project and had lived through the 1987 flood and noted flooding is a public health issue due to contaminated water and power outages. He stated that he has waited 30 years for action to be taken in this area. Ms. Larsen spoke, noting she is on the board of directors for her condo association (Roslyn Court) and reported the condo building had flooded 6 times in the last 12 years. She thanked the Commission for their time and effort.

Ms. Koehler said she is recommending Concept 3, but that during design more ways to mitigate flooding could be incorporated. There was discussion and reiteration of the project goals. Engineer Koehler added that long-term a total of approximately 60-acre feet are needed among all of these projects. Commissioner Welch noted the need for a detailed cooperative agreement.

Alternate Commissioner Monk wondered if it's possible to approve the CIP funding since this is only a piece of the package. Administrator Jester responded that BCWMC is in this position often and that there will be a public hearing on the project later in the summer and additional chances to understand all the funding pieces before the project is officially ordered.

VOTE: Upon a vote, the motion carried 8-0. [City of Crystal absent from the vote.]

E. Set 2019 Maximum Levy Amount for Collection by Hennepin County

Administrator Jester explained that a maximum 2019 levy amount for collection by Hennepin County on behalf of the Commission must be set at this meeting and she reviewed the 2019 CIP costs and her recommendations for a maximum levy amount. She noted the Commission can lower the levy request when it submits its final levy amount in September of this year, but it cannot request more. She also detailed the outcome of the official “convene meeting” on BWSR’s Watershed Based Funding Pilot Program for allocating Clean Water Funds, noting there was consensus among the 11 watersheds and cities attending the meeting that \$102,000 of CWF be used to address chloride pollution county-wide and that the remainder of the funds will be divided by formula among the watersheds. She reported BCWMC will receive \$68,500 which is reflected in the levy request table, as revised and presented at the meeting.

MOTION: Commissioner Welch moved to request a maximum levy amount of \$1,436,000 to Hennepin County for collection in 2019. Commissioner Scanlan seconded the motion. Upon a vote, the motion carried 8-0. [City of Crystal absent from the vote.]

F. Discuss Recommendations from Budget Committee on Proposed 2019 Operating Budget

Budget Committee chair McDonald Black reported that the committee met on March 23 and April 25 and developed the proposed 2019 operating budget for the Commission. She presented the proposed budget and explained areas where there were significant changes from the 2018 budget. She noted the committee is proposing a 2.9% increase in assessments over this year. She also clarified that the operating budget and CIP are two separate budgets and sought feedback from commissioners and TAC members.

Administrator Jester reminded the committee that the final proposed budget should be approved no later than the June meeting because it is due to cities by July 1 to receive their input.

MOTION: Commissioner Scanlan moved to approve the 2019 operating budget as presented. Commissioner Fruen seconded the motion.

Commissioner Welch indicated he would like another month to review it. Commissioner Prom agreed and noted he wanted to make sure public funds were being spent appropriately.

VOTE: A roll call vote was taken with the cities of Plymouth, St. Louis Park, and Minneapolis voting against the motion and five cities voting for the motion. The motion carried 5-3, with the City of Crystal absent from the vote.

G. Discuss Interest and Possibility of Inviting Commissioners to Participate in Bassett Creek Deep Tunnel Inspection

This item was moved to next month’s meeting.

H. Receive Update on Watershed Based Funding Pilot Program

Administrator Jester noted that she and Alternate Commissioner Monk and Engineer Chandler attended the official convene meeting hosted by Hennepin County. The outcome of this meeting was shared in item E above.

I. Receive Update on Zebra Mussel Surveys on Medicine Lake

Administrator Jester reviewed an email from Three Rivers Park District (TRPD) staff, Brian Vlach, regarding new information on zebra mussels. It was noted that on Saturday April 28th, 18 Plymouth and Medicine Lake residents gathered to learn zebra mussel identification and then inspected docks that were pulled on shore for the winter around the entire lake. No mussels were found during that survey. Staff with TRPD performed a shoreline/shallow water survey around the lake and they found one adult zebra mussel close to the outlet channel and it was attached to a native mussel. Mr. Vlach reported he contacted the MDNR with the results. The MDNR recommended not performing a SCUBA survey at this time and that a treatment of zebra mussels in the lake was not warranted because there was not a truly localized population. The MDNR may perform SCUBA surveys later in the summer and recommended installing sampler plates around the lake.

Bassett Creek Watershed Management Commission General Account
General Fund (Administration) Financial Report
Fiscal Year: February 1, 2018 through January 31, 2019
MEETING DATE: June 21, 2018

Item 4B.
BCWMC 6-21-18

BEGINNING BALANCE	9-May-18	763,012.71
ADD:		
General Fund Revenue:		
Interest less Bank Fees		27.12
Metropolitan Council	SG-10379 #1	4,500.00
Permits:		
City of Minneapolis	BCWMC 2018-12	1,500.00
Southtech Ridge LLC	BCWMC 2018-13	1,500.00
Independent School District 270	BCWMC 2018-14	1,500.00
S E H	BCWMC 2018-15	1,500.00
Trammell Crow	BCWMC 2018-16	2,500.00
Car Wash Partners	BCWMC 2018-17	1,500.00
Environmental Resources Mgmt	BCWMC 2018-18	1,500.00
Reimbursed Construction Costs		1,101,951.18
	Total Revenue and Transfers In	1,117,978.30
DEDUCT:		
Checks:		
3079 Barr Engineering	May Engineering	69,343.44
3080 Kennedy & Graven	April Legal	995.00
3081 Keystone Waters LLC	May Administrator	6,060.79
3082 Lawn Chair Gardener	May Admin Serv/Educ	1,177.89
3083 League of MN Cities Ins	Insurance Renewal	7,098.00
3084 MMKR	Audit-final	3,150.00
3085 PLM Lake & Land Mgmt	Diquat Treatment	4,215.90
3086 Michael Scanlan	Workshop Registration	20.00
3087 Three Rivers Park District	Decontamination Unit/!	19,211.84
3088 Triple D Espresso	June Meeting	103.98
3089 Wenck Associates	May WOMP	1,079.87
3090 City of Golden Valley	Honeywell Pond	785,623.00
3091 City of New Hope	Northwood Lake	2,000.00
3092 City of Plymouth	Plymouth Creek	291,933.66
	Total Checks/Deductions	1,192,013.37
ENDING BALANCE	13-Jun-18	688,977.64

Bassett Creek Watershed Management Commission General Account

General Fund (Administration) Financial Report

(UNAUDITED)

Fiscal Year: February 1, 2018 through January 31, 2019

MEETING DATE: June 21, 2018

	2018 /2019 BUDGET	CURRENT MONTH	YTD 2018 /2019	BALANCE
OTHER GENERAL FUND REVENUE				
ASSESSMENTS TO CITIES	515,000	0.00	515,050.00	(50.00)
PROJECT REVIEW FEES	55,000	11,500.00	31,000.00	24,000.00
WOMP REIMBURSEMENT	5,000	4,500.00	4,500.00	500.00
METRO BLOOMS - MET COUNCIL GRANT		0.00	36,541.24	
TRANSFERS FROM LONG TERM FUND & CIP	75,000	0.00	0.00	75,000.00
REVENUE TOTAL	650,000	16,000.00	587,091.24	99,450.00
EXPENDITURES				
ENGINEERING & MONITORING				
TECHNICAL SERVICES	125,000	14,990.08	50,551.74	74,448.26
DEV/PROJECT REVIEWS	75,000	7,130.30	24,023.00	50,977.00
NON-FEE/PRELIM REVIEWS	10,000	4,244.95	8,876.45	1,123.55
COMMISSION AND TAC MEETINGS	12,000	1,012.53	3,637.53	8,362.47
SURVEYS & STUDIES	12,000	0.00	0.00	12,000.00
WATER QUALITY/MONITORING	80,700	13,987.39	39,358.98	41,341.02
WATER QUANTITY	6,300	874.14	2,512.03	3,787.97
WATERSHED INSPECTIONS -EROSION CONTROL	1,000	0.00	0.00	1,000.00
ANNUAL FLOOD CONTROL INSPECTIONS	48,000	1,941.50	2,036.50	45,963.50
REVIEW MUNICIPAL PLANS	8,000	730.00	2,217.50	5,782.50
WOMP	20,500	1,602.40	6,440.76	14,059.24
XP-SWMM MODEL UPDATES/REVIEWS	10,000	1,268.00	4,962.00	5,038.00
APM / AIS WORK	32,000	23,427.74	23,427.74	8,572.26
ENGINEERING & MONITORING TOTAL	440,500	71,209.03	168,044.23	272,455.77
ADMINISTRATION				
ADMINISTRATOR	67,200	5,775.00	23,992.50	43,207.50
LEGAL COSTS	17,000	995.00	2,945.20	14,054.80
AUDIT, INSURANCE & BONDING	15,500	10,248.00	17,648.00	(2,148.00)
FINANCIAL MANAGEMENT	3,200	0.00	0.00	3,200.00
MEETING EXPENSES	1,600	103.98	519.90	1,080.10
ADMINISTRATIVE SERVICES	15,000	1,169.68	5,008.54	9,991.46
ADMINISTRATION TOTAL	119,500	18,291.66	50,114.14	69,385.86
OUTREACH & EDUCATION				
PUBLICATIONS/ANNUAL REPORT	1,500	247.50	937.00	563.00
WEBSITE	4,200	0.00	0.00	4,200.00
PUBLIC COMMUNICATIONS	2,500	0.00	0.00	2,500.00
EDUCATION AND PUBLIC OUTREACH	22,000	314.00	7,247.51	14,752.49
WATERSHED EDUCATION PARTNERSHIPS	13,850	0.00	3,850.00	10,000.00
OUTREACH & EDUCATION TOTAL	44,050	561.50	12,034.51	32,015.49
MAINTENANCE FUNDS				
EROSION/SEDIMENT (CHANNEL MAINT)	25,000	0.00	0.00	25,000.00
LONG TERM MAINTENANCE (moved to CF)	25,000	0.00	0.00	25,000.00
MAINTENANCE FUNDS TOTAL	50,000	0.00	0.00	50,000.00
TMDL WORK				
TMDL IMPLEMENTATION REPORTING	10,000	0.00	4,588.00	5,412.00
TMDL WORK TOTAL	10,000	0.00	4,588.00	5,412.00
TOTAL EXPENSES	664,050	90,062.19	234,780.88	429,269.12

Cash Balance 5/09/18				
Cash			1,147,469.52	
	Transfer to purchase investments			
		Total Cash		1,147,469.52
Investments:				
	Minnesota Municipal Money Market (4M Fund)		2,500,000.00	
	Dividends-prior months		5,725.11	
	Dividends-Current		3,200.95	
		Total Investments		<u>2,508,926.06</u>
		Total Cash & Investments		3,656,395.58
Add:				
	Interest Revenue (Bank Charges)		78.66	
		Total Revenue		<u>78.66</u>
Less:				
	CIP Projects Levied - Current Expenses - TABLE A		(1,084,006.18)	
	Proposed & Future CIP Projects to Be Levied - Current Expenses - TABLE B		<u>(16,663.00)</u>	
		Total Current Expenses		<u>(1,100,669.18)</u>
		Total Cash & Investments On Hand	06/13/18	<u><u>2,555,805.06</u></u>
	Total Cash & Investments On Hand		2,555,805.06	
	CIP Projects Levied - Budget Remaining - TABLE A		<u>(4,117,153.27)</u>	
	Closed Projects Remaining Balance		(1,561,348.21)	
	2012 - 2016 Anticipated Tax Levy Revenue - TABLE C		<u>3,721.01</u>	
	2017 Anticipated Tax Levy Revenue - TABLE C		<u>1,771.12</u>	
	Anticipated Closed Project Balance		<u><u>(1,555,856.08)</u></u>	
	Proposed & Future CIP Project Amount to be Levied - TABLE B		<u>0.00</u>	

TABLE A - CIP PROJECTS LEVIED							
	Approved Budget	Current Expenses	2018 YTD Expenses	INCEPTION To Date Expenses	Remaining Budget	Grant Funds Received	
Lakeview Park Pond (ML-8) (2013)	196,000	0.00	0.00	11,589.50	184,410.50		
Four Seasons Mall Area Water Quality Proj (NL-2)	990,000	0.00	0.00	162,907.34	827,092.66		
2014							
Schaper Pond Enhance Feasibility/Project (SL-1)(SL-3)	612,000	4,449.52	4,449.52	354,110.92	257,889.08		
Briarwood / Dawnview Nature Area (BC-7)	250,000	0.00	0.00	250,000.00	0.00		
Twin Lake Alum Treatment Project (TW-2)	163,000	0.00	0.00	91,037.82	71,962.18		
2015							
Main Stem 10th to Duluth (CR2015)	1,503,000	0.00	0.00	1,003,746.24	499,253.76		
2016							
Honeywell Pond Expansion (BC-4) ¹	810,930	785,623.00	785,623.00	810,930.00	0.00		
Northwood Lake Pond (NL-1) ²	822,140						
Budget Amendment	<u>611,600</u>						
	1,433,740	2,000.00	2,000.00	1,447,143.38	(13,403.38)	670,000	
2017							
Main Stem Cedar Lk Rd-Dupont (2017CR-M)	2017 Levy 400,000						
	2018 Levy 664,472	1,064,472	0.00	0.00	126,376.39	938,095.61	
Plymouth Creek Restoration (2017 CR-P)	2017 Levy 580,930	863,573	291,933.66	291,933.66	450,650.89	412,922.11	
	2018 Levy 282,643					200,000	
2018							
Bassett Creek Park & Winnetka Ponds Dredging (BCP-2)	1,000,000	0.00	0.00	61,069.25	938,930.75		
	<u>8,886,715</u>	<u>1,084,006.18</u>	<u>1,084,006.18</u>	<u>4,769,561.73</u>	<u>4,117,153.27</u>		

TABLE B - PROPOSED & FUTURE CIP PROJECTS TO BE LEVIED

	Approved Budget - To Be Levied	Current Expenses	2018 YTD Expenses	INCEPTION To Date Expenses	Remaining Budget
2019					
Bryn Mawr Meadows (BC-5)	0	5,105.50	42,044.24	73,286.56	(73,286.56)
Decola Ponds B&C Improvement(BC-2,BC-3,BC-8)	0	3,686.00	40,828.40	85,337.56	(85,337.56)
Westwood Lake Water Quality Improvement Project(Feasibility)	0	7,871.50	32,906.50	35,416.70	(35,416.70)
2019 Project Totals	0	16,663.00	115,779.14	194,040.82	(194,040.82)
Total Proposed & Future CIP Projects to be Levied	0	16,663.00	115,779.14	194,040.82	(194,040.82)

BCWMC Construction Account

Fiscal Year: February 1, 2018 through January 31, 2019

June 2018 Financial Report

(UNAUDITED)

TABLE C - TAX LEVY REVENUES

	County Levy	Abatements / Adjustments	Adjusted Levy	Current Received	Year to Date Received	Inception to Date Received	Balance to be Collected	BCWMO Levy
2018 Tax Levy	947,115.00		947,115.00	0.00	0.00	0.00	947,115.00	947,115.00
2017 Tax Levy	1,303,600.00	(10,691.48)	1,292,908.52	0.00	0.00	1,291,137.40	1,771.12	1,303,600.00
2016 Tax Levy	1,222,000.00	(9,526.79)	1,212,473.21	0.00	0.00	1,211,215.56	1,257.65	1,222,000.00
2015 Tax Levy	1,000,000.00	32.19	1,000,032.19	0.00	0.00	998,931.70	1,100.49	1,000,000.00
2014 Tax Levy	895,000.00	(8,533.75)	886,466.25	0.00	0.00	885,636.52	829.73	895,000.00
2013 Tax Levy	986,000.00	(10,510.52)	975,489.48	0.00	0.00	974,956.34	533.14	986,000.00
				<u>0.00</u>			<u>5,492.13</u>	

OTHER PROJECTS:

	Approved Budget	Current Expenses / (Revenue)	2018 YTD Expenses / (Revenue)	INCEPTION To Date Expenses / (Revenue)	Remaining Budget
TMDL Studies					
TMDL Studies	135,000.00	0.00	0.00	107,765.15	27,234.85
TOTAL TMDL Studies	135,000.00	0.00	0.00	107,765.15	27,234.85
Flood Control Long-Term					
Flood Control Long-Term Maintenance	690,573.00	1,282.00	1,282.00	322,024.41	
Less: State of MN - DNR Grants			0.00	(93,000.00)	
	690,573.00	1,282.00	1,282.00	229,024.41	461,548.59
Annual Flood Control Projects:					
Flood Control Emergency Maintenance	500,000.00	0.00	0.00	0.00	500,000.00
Annual Water Quality					
Channel Maintenance Fund	375,000.00	0.00	73,461.65	255,619.60	119,380.40
Metro Blooms Harrison Neighborhood CWF Grant Project					
BWSR Grant	134,595.00	0.00	0.00	8,396.89	126,198.11
	134,595.00	0.00	0.00	(67,298.00)	(67,298.00)
	134,595.00	0.00	0.00	(58,901.11)	
Total Other Projects	1,835,168.00	1,282.00	74,743.65	466,210.05	1,167,063.95

Cash Balance 5/09/18 **1,065,845.90**

Add:

Transfer from GF 0.00

Less:

Current (Expenses)/Revenue (1,282.00)

Ending Cash Balance 06/13/18 **1,064,563.90**

Additional Capital Needed **(102,500)**

CIP Projects Levied

	Total	2013	2013	2014	2014	2014	2015	2016	2016	2017	2017	2018
	CIP Projects Levied	Lakeview Park Pond (ML-8)	Four Seasons Mall Area Water Quality Project (NL-2)	Schaper Pond Enhancement Feasibility / Project (SL-1) (SL-3)	Briarwood / Dawnview Water Quality Improve Proj (BC-7)	Twin Lake In-Lake Alum Treatment Project (TW-2)	Main Stem - 10th Ave to Duluth (CR2015)	Honeywell Pond Expansion (BC-4)	Northwood Lake Pond (NL-1)	Main Stem-Cedar Lk Rd to Dupont (CR-M)	Plymouth Creek Restoration (CR-P)	Bassett Cr Pk & Winnetka Ponds Dredging (BCP-2)
Original Budget	8,275,115	196,000	990,000	612,000	250,000	163,000	1,503,000	810,930	822,140	1,064,472	863,573	1,000,000
Added to Budget	611,600								611,600			
Expenditures:												
Feb 2004 - Jan 2014	269,971.68	11,589.50	101,635.49	89,594.90	19,598.09	23,793.65	11,179.35	7,461.95	5,118.75			
Feb 2015-Jan 2016	313,510.98		25,866.35			432.00	93,862.65	6,442.53	94,823.44	42,671.88	49,412.13	
Feb 2016-Jan 2017	2,835,773.05		14,350.00	213,668.55	230,401.91	66,812.17	841,405.15	11,402.52	1,338,331.79	71,889.91	16,192.00	31,319.05
Feb 2017-Jan 2018	266,299.84		21,055.50	46,397.95			57,299.09		6,869.40	11,814.60	93,113.10	29,750.20
Feb 2018-Jan 2019	1,084,006.18		4,449.52					785,623.00	2,000.00		291,933.66	
Total Expenditures:	4,769,561.73	11,589.50	162,907.34	354,110.92	250,000.00	91,037.82	1,003,746.24	810,930.00	1,447,143.38	126,376.39	450,650.89	61,069.25
Project Balance	4,117,153.27	184,410.50	827,092.66	257,889.08		71,962.18	499,253.76		(13,403.38)	938,095.61	412,922.11	938,930.75

	Total	2013	2013	2014	2014	2014	2015	2016	2016	2017	2017	2018
	CIP Projects Levied	Lakeview Park Pond (ML-8)	Four Seasons Mall Area Water Quality Project (NL-2)	Schaper Pond Enhancement Feasibility / Project (SL-1) (SL-3)	Briarwood / Dawnview Water Quality Improve Proj (BC-7)	Twin Lake In-Lake Alum Treatment Project (TW-2)	Main Stem - 10th Ave to Duluth (CR2015)	Honeywell Pond Expansion (BC-4)	Northwood Lake Pond (NL-1)	Main Stem-Cedar Lk Rd to Dupont (CR-M)	Plymouth Creek Restoration (CR-P)	Bassett Cr Pk & Winnetka Ponds Dredging (BCP-2)
Project Totals By Vendor												
Barr Engineering	524,246.45	6,338.95	64,076.04	126,098.97	13,089.74	15,712.00	15,825.00	13,157.98	17,966.00	111,939.39	78,973.13	61,069.25
Kennedy & Graven	11,961.70	1,200.55	2,471.95	993.40	1,038.35	1,058.65	2,223.75	796.00	1,701.45	318.40	159.20	
City of Golden Valley	1,471,580.12			213,668.55	230,401.91	66,812.17	960,697.49					
City of Minneapolis												
City of Plymouth	439,277.91		75,759.35								363,518.56	
City of New Hope	1,413,267.55								1,413,267.55			
City of Crystal												
MPCA	2,500.00									2,500.00		
Blue Water Science	3,900.00					3,900.00						
Misc												
2.5% Admin Transfer	115,205.00	4,050.00	20,600.00	13,350.00	5,470.00	3,555.00	25,000.00	11,353.02	12,208.38	11,618.60	8,000.00	
Transfer to General Fund												
Total Expenditures	3,981,938.73	11,589.50	162,907.34	354,110.92	250,000.00	91,037.82	1,003,746.24	25,307.00	1,445,143.38	126,376.39	450,650.89	61,069.25

	Total	2013	2013	2014	2014	2014	2015	2016	2016	2017	2017	2018
	CIP Projects Levied	Lakeview Park Pond (ML-8)	Four Seasons Mall Area Water Quality Project (NL-2)	Schaper Pond Enhancement Feasibility / Project (SL-1) (SL-3)	Briarwood / Dawnview Water Quality Improve Proj (BC-7)	Twin Lake In-Lake Alum Treatment Project (TW-2)	Main Stem - 10th Ave to Duluth (CR2015)	Honeywell Pond Expansion (BC-4)	Northwood Lake Pond (NL-1)	Main Stem-Cedar Lk Rd to Dupont (CR-M)	Plymouth Creek Restoration (CR-P)	Bassett Cr Pk & Winnetka Ponds Dredging (BCP-2)
Levy/Grant Details												
2010 -2014 Levies	1,881,000	162,000	824,000	534,000	218,800	142,200						
2014/2015 Levy	1,000,000						1,000,000					
2015-2016 Levy	1,222,000							810,930	411,070			
2016-2017 Levy	1,303,600								322,670	580,930	400,000	
2017-2018 Levy	947,115								282,643	282,643	664,472	
Construction Fund Balance	703,000	34,000	166,000				503,000		470,000			
BWSR Grant- BCWMO	470,000											
DNR Grants-LT Maint												
Total Levy/Grants	7,526,715	196,000	990,000	534,000	218,800	142,200	1,503,000	810,930	1,203,740	863,573	1,064,472	
BWSR Grants Received									670,000		200,000	
MPCA Grant-CWP (Total \$300,000)									75,000.00			
									19,932.80			

Bassett Creek Construction Project Details

Proposed & Future CIP Projects (to be Levied)				Other Projects					Totals - All Projects	
Total Proposed & Future CIP Projects (to be Levied)	2019 Bryn Mawr Meadows (BC-5)	2019 DeCola Ponds B&C Improve (BC-2,BC-3,BC-8)	Westwood Lake Water Quality - Feasibility	Total Other Projects	TMDL Studies	Flood Control Emergency Maint	Flood Control Long-Term Maint	Channel Maint		
Original Budget										
Added to Budget										
Expenditures:										
Feb 2004 - Jan 2014	5,282.80	5,282.80								
Feb 2015-Jan 2016										
Feb 2016-Jan 2017										
Feb 2017-Jan 2018	72,978.88	25,959.52	44,509.16	2,510.20			43,195.48	94,465.60	520,680.71	
Feb 2018-Jan 2019	115,779.14	42,044.24	40,828.40	32,906.50			110,580.19	26,777.35	450,868.52	
Total Expenditures:	194,040.82	73,286.56	85,337.56	35,416.70	685,409.16	107,765.15	322,024.41	255,619.60	5,649,011.71	
Project Balance	(194,040.82)	(73,286.56)	(85,337.56)	(35,416.70)	1,108,163.84	27,234.85	500,000.00	461,548.59	119,380.40	5,031,276.29
Project Totals By Vendor										
Barr Engineering	194,040.82	73,286.56	85,337.56	35,416.70	389,221.50	104,888.70	284,332.80		1,107,508.77	
Kennedy & Graven					2,648.25	1,164.30	1,099.35	384.60	14,609.95	
City of Golden Valley					55,287.50			55,287.50	1,526,867.62	
City of Minneapolis					38,823.35			38,823.35	38,823.35	
City of Plymouth					100,209.15			100,209.15	539,487.06	
City of New Hope								29,240.00	1,413,267.55	
City of Crystal										
MPCA									2,500.00	
Blue Water Science									3,900.00	
Misc					5,704.41	1,712.15	3,992.26		5,704.41	
2.5% Admin Transfer									115,205.00	
Transfer to General Fun					32,600.00		32,600.00		32,600.00	
Total Expenditures	194,040.82	73,286.56	85,337.56	35,416.70	653,734.16	107,765.15	322,024.41	223,944.60	4,800,473.71	
Levy/Grant Details										
2010 -2014 Levies										
2014/2015 Levy										
2015-2016 Levy										
2016-2017 Levy										
2017-2018 Levy					42,200.00	30,000	175,000	175,000	1,881,000	
Construction Fund Balance							17,200	25,000	1,042,200	
BWSR Grant- BCWMO									703,000	
DNR Grants-LT Maint									470,000	
Total Levy/Grants					93,000.00		93,000			
					515,200.00	30,000	285,200	200,000	4,096,200	

DNR Grant From GF

2010-2017 2017/18

DNR Grant



Adding Quality to Life

Item 4D.
BCWMC 6-21-18
Full documentation online

June 4, 2018

Laura Jester, Administrator
Bassett Creek Watershed Management Commission
16145 Hillcrest Lane
Eden Prairie MN 55346

SUBJECT: Plymouth Creek Stream Restoration Project
City Project No. 16007

Dear Ms. Jester,

Enclosed/attached you will find payment documentation totaling \$291,933.66 for construction of the Plymouth Creek Stream Restoration Project in Plymouth. Per the Cooperative Agreement for the Plymouth Creek Stream Restoration Project between the City of Plymouth and the Bassett Creek Watershed Management Commission, the City is requesting reimbursement of \$291,933.66 for this project at this time.

Budget Impact

The overall budget of \$863,573.00 was included with Bassett Creek levy requests in 2016/2017 and 2017/2018. With this request, total expenditures including feasibility, legal, administration, design, and construction total \$450,650.89.

The City is grateful for the partnership with the Bassett Creek Watershed Management Commission on water quality improvements and protections.

Sincerely,

A handwritten signature in blue ink that reads 'Derek Asche'.

Derek Asche
Water Resources Manager

enc



Table 1. Design, Construction, and Monitoring Costs through June 1, 2018.

Design Costs

<u>Date</u>	<u>Vendor</u>	<u>Description</u>	<u>Amount</u>
3/3/2017	Wenck Associates	Professional Design Services	\$6,309.60
4/4/2017	Wenck Associates	Professional Design Services	\$21,560.50
5/3/2017	Wenck Associates	Professional Design Services	\$14,397.90
6/7/2017	Wenck Associates	Professional Design Services	\$7,618.05
7/10/2017	Wenck Associates	Professional Design Services	\$7,880.40
8/3/2017	Wenck Associates	Professional Design Services	\$6,634.50
9/6/2017	Wenck Associates	Professional Design Services	\$2,890.85
9/21/2017	ECM Publishers	Advertisement for Bids	\$540.50
10/3/2017	Wenck Associates	Professional Design Services	\$2,290.70
12/6/2017	Wenck Associates	Professional Design Services	\$1,461.90

Reimbursed
January 2018



Total Design Costs: \$71,584.90

Construction Costs

<u>Date</u>	<u>Vendor</u>	<u>Description</u>	<u>Amount</u>
1/3/2018	Wenck Associates	Construction Services	\$8,673.60 *
1/3/2018	Standard Contracting	Construction	\$66,016.00 *
2/5/2018	Wenck Associates	Construction Services	\$2,798.28 *
2/5/2018	Standard Contracting	Construction	\$4,150.45 *
3/6/2018	Wenck Associates	Construction Services	\$3,470.72 *
3/7/2018	Standard Contracting	Construction	\$51,666.55 *
4/3/2018	Standard Contracting	Construction	\$62,957.45 *
4/6/2018	Wenck Associates	Construction Services	\$8,363.60 *
5/7/2018	Standard Contracting	Construction	\$78,850.62 *
5/7/2018	Wenck Associates	Construction Services	\$4,986.40 *

Total Construction Costs: \$291,933.67

Grand Total: \$363,518.57



Stantec Consulting Services Inc.
 2335 Highway 36 West
 St. Paul MN 55113
 Tel: (651) 636-4600
 Fax: (651) 636-1311

Item 4E.
 BCWMC 6-21-18

June 12, 2018
 File: 193802816

Attention: Laura Jester
 Keystone Waters, LLC
 BCWMC Administrator
 16145 Hillcrest Lane
 Eden Prairie, MN 55346

Reference: Northwood Lake Improvements – Reimbursement Request #4 & Final
 City Project No.: 938, 967, 974

Dear Laura,

Per the terms of the Cooperative Agreement for the 2016 Northwood Lake Improvements Project, the City of New Hope is requesting reimbursement for expenses incurred for the design and fabrication of the educational sign. The total reimbursement eligible for engineering services and material costs is \$2,000.00. All costs for the educational sign were identified in Objective 4 of the grants awarded with this project.

Engineering Services

The request for reimbursement for engineering is \$1,153.00. A total design invoice of \$2,004.50 was paid by the City of New Hope. Details of BCWMC related invoice amount is shown below and attached:

Period Ending	Invoice No.	BCWMC Related Amount
9/29/2017	1271298	\$1,153.00
Total Amount		\$1,153.00

Sign Fabrication Costs

The request for reimbursement of construction costs is \$847.00. Attached is the invoice for the fabrication.

Construction Status

All work is complete and final project closeout will be presented to the BCWMC at a future meeting.



June 12, 2018
Ms. Laura Jester
Page 2 of 2

Reference: Northwood Lake Improvements – Reimbursement Request **#4 & Final**

Enclosed please find the attached invoice from Stantec, proof of payment by New Hope for the sign and engineering services. If you have any questions or require further information, please call me at (651)604-4808.

Sincerely,

STANTEC

Christopher W. Long, P.E.

Attachments: Stantec Invoice; City of New Hope Proof of Payment for Educational Sign and Stantec Engineering Services

Cc: Bernie Weber, Megan Albert, Shawn Markham – New Hope; Kellie Schlegel, Ann Dienhart, Adam Martinson – Stantec.



INVOICE

Invoice Number 1271298
Invoice Date October 27, 2017
Customer Number 92751
Project Number 193802816

Bill To

City of New Hope
Accounts Payable
4401 Xylon Avenue N
New Hope MN 55428
United States

Please Remit To

Stantec Consulting Services Inc. (SCSI)
13980 Collections Center Drive
Chicago IL 60693
United States
Federal Tax ID
11-2167170

Project Description: 2016 Northwood Lake Storm Water, Park and Playground & Jordan Avenue North Improvements

Stantec Project Manager: Long, Chris
Stantec Office Location: St. Paul MN
Current Invoice Due: \$2,004.50
For Period Ending: September 29, 2017

City Project # 938/967/974
Professional Services Rendered September 2, 2017 to September 29, 2017

INVOICE

Invoice Number

1271298

Project Number

193802816

Top Task 560

Educational Sign

Professional Services

Billing Level

Graphics Designer

Hours

Rate

**Current
Amount**

13.50

114.00

1,539.00

13.50

1,539.00

Project Manager

3.50

133.00

465.50

3.50

465.50

Professional Services Subtotal

17.00

2,004.50

Top Task 560 Total

2,004.50

Total Fees & Disbursements

\$2,004.50

INVOICE TOTAL (USD)

2,004.50

Proposal



948 Sherren St. W.
Roseville, MN 55113

(651) 487-3100 fax (651) 487-0304
www.vackersign.com

Proposal D...	Proposal #:
6/11/2018	1952

Ship To

City of New Hope
Megan Albert
5500 International Parkway
New Hope, MN 55428

Bill To:

City of New Hope
Megan Albert
4401 Xylon Avenue N
New Hope, MN 55428

Project:

Description	Quantity	Cost	Total
22"Hx34"Wx.5" High Pressure Laminate panel output from client prepared file.	1	535.00	535.00
Angle Mount Frameless Pedestal for self-supporting sign panel. 16"x20" mount plate and 3"x3"x60" post, 45 degree angle, for in ground installation, black texture powder coat. Two piece aluminum construction.	1	167.00	167.00
Packing and shipping costs with no special services 55428	1	145.00	145.00
Sales Tax			0.00

Total \$847.00

Accepted by: Megan Albert

Date 6/11/18 P.O. number _____

Reber, City of New Hope
01/20



Bassett Creek Watershed Management Commission

June 21, 2018

Jason Zimmerman
City of Golden Valley
7800 Golden Valley Rd.
Golden Valley MN 55427

Dear Jason,

Thank you for the opportunity to comment on the Surface Water Management Plan (SWMP) (Appendix 5A) within Golden Valley's draft 2040 Comprehensive Plan. The Bassett Creek Watershed Management Commission (BCWMC) has the following comments which include recommended revisions as well as changes required to be consistent with the 2015 Bassett Creek Watershed Management Plan.

Recommended revisions:

Section 3.10.1.2. It could be noted that South Rice Pond is no longer monitored by the BCWMC.

Section 3.10.1.4. If there are or were lakes monitored through the CLMP, please consider listing them. Also, you could include a link to more information and reports of the River Watch Program here: <https://www.hennepin.us/riverwatch>.

Section 4.1.1, paragraph 3: Consider including chloride as another "major concern" for all waterbodies.

Section 4.5 paragraph 3: Consider adding chloride from deicers as a potential groundwater contaminant.

Section 5.6 could also include acknowledgement of the city's financial contributions to the education materials and programs of the BCWMC. (For example, see letter of understanding addressed to Jeff Oliver outlining 2017 BCWMC educational activities dated February 21, 2018.)

Section 5.8, last sentence: Sentence indicates that Table 5-2 includes the city's ordinance implementation and official controls. This is not an accurate description of Table 5-2, consider rewording.

Required revisions to these or similarly appropriate sections:

Section 3.8.2 should indicate that the city is maintaining a database of wetland functions and values assessment results as required by BCWMC policy #65.

Section 3.10.2 should include an assessment of the need for a local waterbody management classification system (other than BCWMC) as found in policy #3 and section 5.3.1.1 of the BCWMC Watershed Management Plan.

Section 3.10.3.2 should more explicitly indicate that the city will annually provide the BCWMC with plans for BMPs constructed in the city in order for the BCWMC to accurately update its P8 model. (As per BCWMC Policy #16)

Section 3.11 The Plan is required to conform to Minnesota Statutes 103B.235. Minnesota Statutes 103B.235 Subd. 2 include specific requirements for local plan contents including:

(2) Define drainage areas and the volumes, rates, and paths of storm water runoff. Figure 3-2 shows drainage districts and direction of flow. Figure 3-13 shows the storm sewer network and components. The plan describes the BCWMC XP-SWMMM model but volumes and rates for critical events are not set forth in the Plan. Please add volumes or rates or reference them in another document.

Table 3.7. The table should be revised to note that the Wirth Lake chloride impairment was also addressed in TCMA chloride TMDL <https://www.pca.state.mn.us/sites/default/files/wq-iw11-06g.pdf>

Section 4.1.2: The MPCA's Twin Cities Metro Area Chloride TMDLs were approved by the EPA in June 2016. This should be noted in this section as the TMDL to address chloride impairments in Sweeney Lake, Wirth Lake and Bassett Creek. Here is the official approval letter from EPA: <https://www.pca.state.mn.us/sites/default/files/wq-iw11-06g.pdf>

Section 4.3.2, paragraph 4, last sentence: The BCWMC Requirements Document does not describe the MCWD review process. Please reword.

Section 5.3.1 should include the requirement that the city not only perform the routine maintenance of Flood Control Project structures, but also report the maintenance and repair actions to the BCWMC. (Consistent with policies regarding FCP adopted in 2016 found at <https://www.pca.state.mn.us/sites/default/files/wq-iw11-06g.pdf>.)

Table 5-1 includes the project: "Main Stem Channel Restoration, Minnaqua Pond to Golden Valley Road (SS-54)" and is cross referenced as BCWMC Project 2021CR-M. This project description is inconsistent with the description of BCWMC 2021CR-M in Table 5-3 of the BCWMC Plan. Further, the description of BCWMC 2021CR-M is different yet again in the current [BCWMC 5-year CIP](#). Effort should be made to align the project descriptions among the three tables.

Section 5.0 should include (or reference an ordinance that includes) a policy that the city does not allow the drainage of sanitary sewage or non-permitted industrial wastes onto any land or into any watercourse or storm sewer discharging into Bassett Creek, to be consistent with BCWMC Policy #15.

Section 5.0 should include (or reference a different document that includes) an activity of the city to annually inspect wetlands classified as Preserve for terrestrial and emergent aquatic invasive vegetation, such as buckthorn and purple loosestrife, and attempt to control or treat invasive species, where feasible, to be consistent with BCWMC Policy #72.

Please contact BCWMC Administrator, Laura Jester, if you have any questions. The BCWMC will consider approval of your final Surface Water Management Plan upon completion of these revisions.

Sincerely,

Jim de Lambert
Chair

CC: Jeff Oliver, City of Golden Valley
Eric Eckman, City of Golden Valley



Bassett Creek Watershed Management Commission

NOTICE OF PUBLIC HEARING

**Proposed Minor Plan Amendment to the
Bassett Creek Watershed Management Commission's
*September 2015 Watershed Management Plan***

NOTICE IS HEREBY GIVEN that the Bassett Creek Watershed Management Commission (BCWMC) will hold a public hearing during its regular meeting on

Thursday, June 21, 2018 at 8:30 a.m.

at Golden Valley City Hall, 7800 Golden Valley Road, Golden Valley, Minnesota.

Interested persons are invited to attend. The purpose of the public hearing is to answer questions about the proposed minor plan amendment to the BCWMC's *September 2015 Watershed Management Plan* and to hear public testimony and comments of member cities regarding the proposed amendment. The proposed minor plan amendment involves revisions to the Capital Improvement Program (CIP):

- Adding the Ponderosa Woods Stream Restoration Project (ML-22) to the CIP. This project in the City of Plymouth will reduce erosion, total suspended solids, and phosphorous loading to Medicine Lake.
- Adding the Bassett Creek Park Water Quality Improvement Project (BC-11) to the CIP. This project in the City of Minneapolis will include construction of water quality treatment facilities benefitting the main stem of Bassett Creek in cooperation with a park renovation project by the Minneapolis Park and Recreation Board.

Although not requiring a formal amendment, Table 5-3 will also be updated to:

- Move the "Bryn Mawr Meadows Water Quality Improvement Project (BC-5)" in the City of Minneapolis from 2019 to 2020 to better align with the schedule for design and construction of park improvements by the Minneapolis Park and Recreation Board.
- Schedule the project "Retention of impervious area drainage at Ridgedale area (e.g., bioswales, tree trenches, rain gardens) to reduce phosphorus loading to Crane Lake (CL-3)" for 2020 to coincide with reconstruction of Ridgedale Drive in the City of Minnetonka.

Bassett Creek Watershed Management Commission

7800 Golden Valley Road | Golden Valley, MN 55427 | www.bassettcreekwmo.org | Established 1968

Crystal | Golden Valley | Medicine Lake | Minneapolis | Minnetonka | New Hope | Plymouth | Robbinsdale | St. Louis Park

- Schedule the “Main Stem Channel Restoration, Bassett Creek Drive to Golden Valley Road (2021CR-M)” in the City of Golden Valley for 2024. This project in the City of Golden Valley will include bank stabilization measures and erosion repair to reduce phosphorus and sediment loading to the creek.

You can view all proposed changes to Capital Improvement Program (Table 5-3) of the *2015 Watershed Management Plan* and view fact sheets on all proposed additions to the CIP on the BCWMC website at: www.bassettcreekwmo.org/document/wmp-plans.

A levy of an ad valorem property tax by Hennepin County on property within the Bassett Creek Watershed is the proposed method of payment for the costs of the CIP Projects.

BASSETT CREEK WATERSHED MANAGEMENT COMMISSION

Laura Jester, Administrator



June 12, 2018

Laura Jester, Administrator
Bassett Creek Watershed Management Commission
16145 Hillcrest Lane
Eden Prairie, MN 55346

RE: Bassett Creek Watershed Management Commission - Plan Amendment (Minor)

Dear Ms. Jester:

On May 3, 2018, the Board of Water and Soil Resources (BWSR) received documentation of proposed changes to the Bassett Creek Watershed Management Commission's (Commission) Comprehensive Watershed Management Plan (Plan) submitted in accordance with the minor amendment process defined in MN Rules 8410.0140 Sup.2. The Commission also sent the minor amendment documentation to plan review authorities and other stakeholders for the required 30-day review and comment period. The Plan amendment includes the addition of the Ponderosa Woods Stream Restoration and the Bassett Creek Park Water Quality Improvement Project.

BWSR staff had no comments. The Department of Natural Resources and Metropolitan Council stated that they had no comments. Hennepin County has requested an extension for review.

We commend the Commission for maintaining a current watershed management plan. Once the Commission adopts the changes, please print and forward them in the form of replacement pages for the Plan, to all plan review authorities and plan holders in accordance with 8410.140 Subps. 4 & 5. Refer to the Metro Plan Review Roster found on the BWSR website for the plan format review agencies have requested (BWSR requires hard and electronic copies). Feel free to contact me with any questions at 651-249-7519.

Sincerely,

Steve Christopher
Board Conservationist

From: [Drewry, Kate \(DNR\)](#)
To: [Laura Jester](#)
Cc: [Christopher, Steve \(BWSR\)](#); [Spiegel, Jason \(DNR\)](#); [Daniels, Jeanne M \(DNR\)](#)
Subject: RE: BCWMC Proposed Minor Plan Amendment
Date: Friday, June 8, 2018 12:04:44 PM
Attachments: [image004.png](#)
[image005.png](#)
[image006.png](#)
[image002.png](#)

Hello Laura:

DNR staff have reviewed the above referenced Minor Plan Amendment and have no specific comments at this time. As more detailed plans are developed, for any of these projects that may impact public waters we encourage early coordination with DNR Area Hydrologist Jason Spiegel to obtain his input during the preliminary design stage.

Thanks you for the opportunity to review.

Best Regards,

Kate Drewry
District Hydrologist
Region 3, South District
DNR Division of Ecological and Water Resources
1200 Warner Road St. Paul, MN 55106
Phone: 651-259-5753
Fax: 651-772-7977
kate.drewry@state.mn.us
www.mndnr.gov



From: [Resseger, Emily](#)
To: steve.christopher@state.mn.us
Cc: laura.jester@keystonewaters.com; [Sventek, Judy](#)
Subject: RE: BCWMC Proposed Minor Plan Amendment
Date: Thursday, May 3, 2018 9:26:35 AM

Hi Steve-

The Metropolitan Council will have no formal comments on this amendment and is very supportive of the projects added to the CIP.

Thanks!

Emily Resseger

Principal Environmental Scientist | Environmental Services
P. 651.602.1033



Hennepin County
Public Works

Environment and Energy Department
701 Fourth Avenue South, Suite 700
Minneapolis, Minnesota 55415-1842

612-348-3777, Phone
612-348-8532, Fax
hennepin.us/environment

May 24, 2018

Jim de Lambert, Chair
Bassett Creek Watershed Management Commission
c/o Laura Jester, Watershed Administrator
16145 Hillcrest Lane
Eden Prairie, MN 55346

Re: Minor Plan Amendment

Dear Mr. de Lambert:

I request that Hennepin County's review deadline for the proposed plan amendment be extended to July 25, 2018. The need for the extension is due to the County's 2018 meeting dates, formal review process and the lead time required to place the item on the County Board's meeting schedule.

The Board Action requesting formal approval of the Minor Plan Amendment will be heard by the Hennepin County Board of Commissioners Administration Committee on July 10, 2018 and by the full Board on July 24, 2018.

Sincerely,

A handwritten signature in black ink, appearing to read 'Karen Galles', with a small asterisk below the signature.

Karen Galles
Supervisor, Land & Water Unit

Cc: Laura Jester, Watershed Administrator
Steve Christopher, BWSR

Item 6A.
BCWMC 6-21-18
Full plan set online

resourceful. naturally.
engineering and environmental consultants



June 13, 2018

Mr. Mark Ray, P.E.
Director of Public Works
4141 Douglas Dr. N.
Crystal, MN, 55422-1696

Re: 90% Design Plans – Winnetka Pond Dredging Project
City of Crystal Project 2018-04

Dear Mr. Ray:

Attached please find the 90% design plans for the Winnetka Pond Dredging Project. The Bassett Creek Watershed Management Commission (BCWMC) is funding the Winnetka Pond Dredging Project (BCWMC CIP project BCP-2: Bassett Creek Park Pond Phase I Dredging Project) through a 2018 ad valorem levy (via Hennepin County). Per the cooperative agreement between the City of Crystal and the BCWMC, the city is to construct the project, and the plans and specifications are subject to approval by the Commission. Also, per the agreement, the 90% design plans for this project must be submitted to the BCWMC for review and approval. If the attached 90% plans meet the city's approval, we recommend submitting them, along with this letter, to the BCWMC for inclusion in the meeting packet for their June 21st meeting. Barr staff will present the 90% plans to the BCWMC at the meeting and answer any questions from the BCWMC.

The remainder of this letter presents information about the feasibility study, the design features of the project, and approval/permitting needs.

Feasibility Study Summary and Selected Project

The BCWMC completed the *Feasibility Report for Bassett Creek Park Pond and Winnetka Pond East Dredging Project (May 2017)* to evaluate options for dredging accumulated sediment from Bassett Creek Park Pond and Winnetka Pond. The BCWMC selected completing the Winnetka Pond East alternative 3 project (deepening to 6.0 feet), along with add-on 1 (native buffer) and add-on 2 (goose management). The selected project will provide water quality improvement by (1) providing additional permanent pool storage for sedimentation and to prevent re-suspension of sediment, (2) minimizing downstream transport of sediment, (3) filtering pollutants such as phosphorus, sediment, and bacteria from stormwater runoff, and (4) reducing phosphorus and bacteria loads from geese.

Earlier in the design process, City of Crystal staff met with the Winnetka Village Apartments management staff to discuss the native buffer and goose management measures. As a result of these discussions and further discussion at the March 20th city council workshop, the city council decided to move ahead with installing the native buffer, and to continue to manage goose populations at Winnetka Pond (and other waterbodies along the North Branch).

Design features – 90% plans

The primary design features of the proposed work, as shown on the attached 90% plans, include:

1. Pond dredging. The design calls for removal of approximately 18,500 cubic yards of accumulated sediment and native soils to deepen the pond to a depth of 6 feet (the feasibility study estimated 18,400 cubic yards of excavation). As originally designed, the pond depth was only 2 feet. A large

portion of the original volume has now been filled in with accumulated sediment, allowing for increased sediment resuspension and transport downstream. (No change in pond dredging amounts from 50% design). Minnesota Department of Natural Resources (MDNR) staff have indicated that increasing the depth to 6 feet is justifiable, although formal approval is needed (see "Approvals/permit requirements" section).

2. Maintenance access. The design includes providing maintenance access at two locations. The west access point is a 12-foot-wide vehicle ramp at a 10% maximum slope. This access point will be used for construction hauling traffic. The east access near the outlet structure will allow for maintenance vehicle parking while city crews perform routine maintenance at the outlet structure. Both access locations will have turf reinforcement to prevent rutting and compaction and will be maintained as native buffer or turf grass. This design feature was not identified in the feasibility study. (No change from 50% design.)
3. Outlet structure modifications. To reduce the frequency of obstructed flows, the design includes removing the existing grate and installing a new hinged grate with sloping bars. The design will also allow maintenance crews to clean the new grate more effectively and easily than the current structure. The existing plywood weir will be replaced with a concrete weir of the same dimensions, elevations, and orifice size/shape to ensure no change in flood elevations or outflow. The joints of the downstream 42-inch pipe have separated, which allows soil to infiltrate into the pipe. The project includes replacing these sections of pipe. (No change from 50% design.)
4. Erosion repair and new storm sewer installation. The runoff from the existing driveway curb cuts has resulted in visible erosion along the slopes, forming channels on both sides of the driveway, and depositing sediment in the pond. The design calls for installing new storm sewer inlets at each curb cut location and directing that stormwater through pipes into the existing box culvert that connects the east and west ponds. This design feature was not identified in the feasibility study, as the issue was identified later, during the existing condition field evaluation, where it became apparent the project would need to address the problem. (No change from 50% design.)
5. Expanding the existing vegetated buffer. To improve erosion control and the filtering of stormwater runoff, the design calls for removing the vegetation within the existing buffer and expanding the footprint. The restored buffer will be planted with native plant species. The buffer will be a minimum 30 feet in width and includes a 10 foot wide mow strip along the driveway perimeter. The area of the expanded buffer is approximately 1.1 acres (the feasibility study estimated a buffer area of 0.85 acres). (No change in buffer area since 50% design.) Because a portion of the buffer is on private property and outside of any existing easements, the city is in the process of acquiring a permanent easement over both the buffer area that is located on private property (on the far west end of the pond) and the very west portion of the pond. Once acquired, the easement will allow the City to plant and maintain the buffer, and perform any future pond or storm sewer maintenance. The city anticipates completing the easement acquisition by August 2018.
6. Goose management. At the March 20th work session, the city council decided to continue goose management at Winnetka pond by city staff. The city is currently performing goose management in the form of egg addling at other locations within the city (Bassett Creek Park Pond). City staff performed goose management at Winnetka Pond in the past, turned it over to the apartment

management staff, but the apartment management staff subsequently discontinued goose management activities. (No change from 50% design.)

Opinion of cost

The table below summarizes our opinion of costs, based on the 90% design plans:

Table 1 Opinion of Cost Summary

Item Description	Cost
Project costs eligible for BCWMC reimbursement:	
Pond dredging and general work	\$ 536,000
Other pond improvements	\$ 47,000
Native buffer	\$ 17,000
Existing drainage corrections	\$ 23,000
Goose management	\$ 0 ¹
Total estimated construction costs	\$ 623,000
Contingency (+15%)	\$ 93,000
Engineering costs	\$ 82,500
Total construction and engineering costs	\$ 798,500
Other project costs that the city requests the BCWMC consider for reimbursement:	
Easement acquisition costs (engineering and legal services only)	\$ 3,000 ²

¹ Work already performed by city staff

² Costs include easement development and recording, but not purchasing of easement.

The total estimated construction and engineering costs (\$798,500) shown above are less than the 50% design estimated costs (\$830,000). However, the pond dredging costs are 75% of the total estimated construction cost. A small increase in the unit price (cost per cubic yard of pond dredging) will have a significant impact on total project cost. If the low bidder construction cost results in the total project cost being over budget the pond depth could be reduced to lower the total project cost accordingly.

The detailed cost estimate is also attached.

Per the cooperative agreement between the city and the BCWMC, the BCWMC's total reimbursement for this project may not exceed \$1,000,000, less Commission expenses. The current balance (as of May 9, 2018) in the CIP budget for this project is \$938,930.75. The total estimated construction and engineering costs (\$798,500), plus easement acquisition costs (engineering and legal services only) are well within the reimbursable costs allowed for this project.

Approvals/permit requirements

In addition to BCWMC approval of the plans, other permits/approvals will be required for this project.

Permit applications have been submitted for the following:

- MDNR public waters work permit. Winnetka Pond is a MDNR Public Water (#27062900P) and the MDNR requires a Public Waters Work Permit for any work below the ordinary high water level (OHWL). Winnetka Pond East was created in about 1968 as part of the Winnetka Village Apartments development. Because the project pre-dates permitting, MDNR and United States Army Corps of Engineers (USACE) permits were not required. Typically, removal of accumulated sediment is permitted with some documentation, such as the available original construction

drawings for the site. Deepening the pond to 6 feet involves additional permitting considerations because it requires excavating into native material in a MDNR public water wetland, which is also under jurisdiction of the USACE. Barr contacted the MDNR area hydrologist after we submitted the permit application and he indicated that the sediment removal and trapping that would be achieved by the 6-foot excavation are sufficient justification for the project. We anticipate MDNR permit approval around mid-August 2018.

- Wetland Conservation Act (WCA) permit. There is a narrow fringe of WCA wetland above the MDNR OHWL at the southeastern and eastern sides of the pond. Site access through this area is needed during construction, which will cause temporary wetland impacts within the WCA wetland (approximately 350 square feet). This will be considered a no-loss under MN Rules 8420.0415 H, as long as the disturbed areas are restored back to original elevation, and vegetation is restored within six months of the start of activity. The project will also result in permanent wetland impacts (approximately 130 square feet) due to the fill required to allow for routine maintenance access within this portion of WCA wetland; the area of permanent wetland fill is within the allowable de minimis exemption amount (≤ 400 square feet). We submitted a joint application form requesting approval of both the WCA no-loss and de minimis exemption.
- USACE joint permit application (Section 404 permit and Section 401 Certification), although the permit is not required. Submitting this application formally documents that the project will follow the rules for work in a USACE jurisdictional wetland. This is the same application as required for the WCA permit. The USACE may consider the pond a "previously-authorized structure," which will simplify permitting. As long as there is no re-grading of the pond bottom, the USACE does not consider it a wetland impact and therefore the USACE does not regulate the activity.

A Minnesota Pollution Control Agency (MPCA) Construction Stormwater General Permit is required for construction activity if land disturbance outside of the pond dredging is greater than 1 acre. However, the permit does not consider disturbance of less than 5 acres for the purpose of routine maintenance as construction activity. Managing or improving the existing vegetation around the pond falls under routine maintenance. The remaining construction activity that does not fall under routine maintenance is less than 1 acre, therefore a permit (along with a SWPPP) is not required. Although a SWPPP is not required, the plans include erosion and sediment control measures as needed.

Recommendations

We recommend that the city request 1) BCWMC approval of the 90% drawings, 2) BCWMC authorization for the city to proceed with final plans, contract documents, and permitting, and 3) BCWMC consideration of reimbursement for easement development and acquisition costs.

If you have any questions, please contact me at 952-832-2813 or kchandler@barr.com.

Sincerely,



Karen L. Chandler, P.E.
Vice President

CITY OF CRYSTAL
WINNETKA POND DREDGING PROJECT
ENGINEERS OPINION OF COST
DATED JUNE 13, 2018

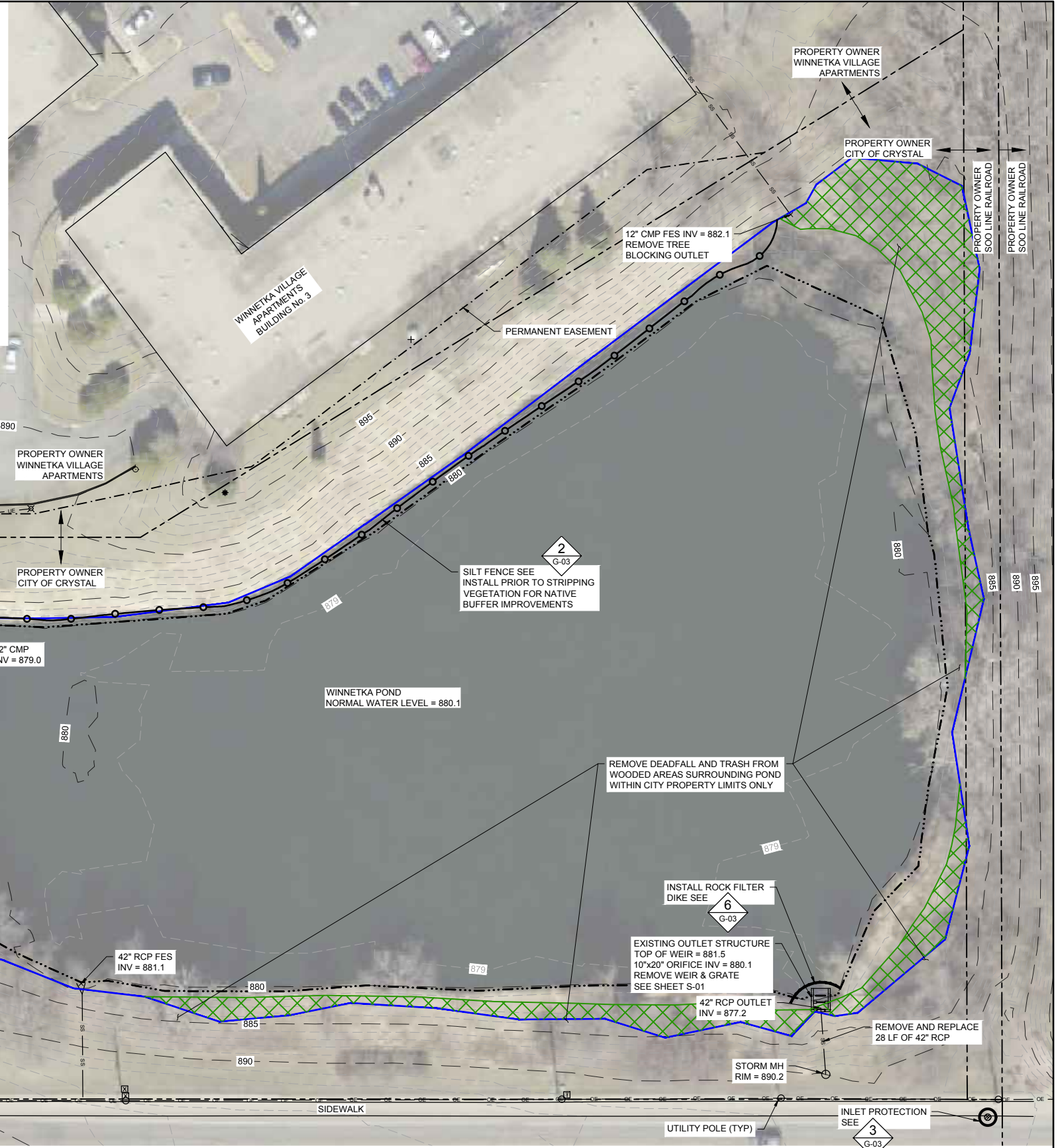
M&P Item	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	EXTENSION
POND DREDGING AND GENERAL WORK					
1.06.A	MOBILIZATION/DEMOBILIZATION	LS	1	\$ 31,000.00	\$ 31,000.00
1.06.B	CONTROL OF WATER/DEWATERING	LS	1	\$ 20,000.00	\$ 20,000.00
1.06.C	EROSION CONTROL CONSTRUCTION ENTRANCE	EACH	1	\$ 2,500.00	\$ 2,500.00
1.06.D	ROCK FILTER DIKE	LS	1	\$ 2,000.00	\$ 2,000.00
1.06.E	INLET PROTECTION	EACH	6	\$ 200.00	\$ 1,200.00
1.06.F	SILT FENCE	LF	850	\$ 2.50	\$ 2,125.00
1.06.G	REMOVE STORM SEWER PIPE 42" RCP	LF	28	\$ 35.00	\$ 980.00
1.06.H	REMOVE EXISTING WEIR AND TRASH RACK	LS	1	\$ 1,000.00	\$ 1,000.00
1.06.I	REMOVE TREE	EACH	1	\$ 500.00	\$ 500.00
1.06.J	REMOVE FALLEN TREES AND DEBRIS	LS	1	\$ 5,000.00	\$ 5,000.00
1.06.K	COMMON EXCAVATION	CY	600	\$ 12.00	\$ 7,200.00
1.06.L	POND DREDGING OF MPCA DREDGED MATERIAL LEVEL 1 REMOVAL AND DISPOSAL	CY	18,500	\$ 25.00	\$ 462,500.00
SUBTOTAL					\$ 536,005.00
OTHER POND IMPROVEMENTS					
1.06.M	STORM SEWER PIPE 42" RCP CLASS 3	LF	28	\$ 220.00	\$ 6,160.00
1.06.O	CONNECT TO EXISTING MANHOLE	EACH	2	\$ 300.00	\$ 600.00
1.06.P	RIPRAP AT PIPES AND STRUCTURES	TON	76	\$ 65.00	\$ 4,940.00
1.06.Q	CONCRETE WEIR	LS	1	\$ 3,000.00	\$ 3,000.00
1.06.S	OUTLET STRUCTURE TRASH RACK	LS	1	\$ 9,000.00	\$ 9,000.00
1.06.T	TOPSOIL SALVAGE AND REINSTALL	CY	170	\$ 12.00	\$ 2,040.00
1.06.U	TOPSOIL IMPORT	CY	100	\$ 30.00	\$ 3,000.00
1.06.V	MAINTENANCE ACCESS TURF REINFORCEMENT (NETLON)	LS	1	\$ 10,000.00	\$ 10,000.00
1.06.W	MAINTENANCE ACCESS SOIL	CY	100	\$ 60.00	\$ 6,000.00
1.06.Y	SEEDING LOW MAINTENANCE TURF	ACRE	0.4	\$ 1,500.00	\$ 600.00
1.06.BB	HYDROMULCH	LS	1	\$ 2,000.00	\$ 2,000.00
SUBTOTAL					\$ 47,340.00
NATIVE BUFFER					
1.06.X	POND BUFFER VEGETATION REMOVAL	ACRE	0.5	\$ 4,500.00	\$ 2,250.00
1.06.Y	SEEDING SHORT GRASS PAIRIE	ACRE	1.1	\$ 8,800.00	\$ 9,680.00
1.06.AA	DISC-AHCHORED STRAW MULCH	ACRE	1.1	\$ 2,000.00	\$ 2,200.00
1.06.CC	ONE YEAR SEEDING WARRANTY AND ESTABLISHMENT	LS	1	\$ 3,000.00	\$ 3,000.00
SUBTOTAL					\$ 17,130.00
EXISTING DRAINAGE CORRECTIONS					
1.06.G	REMOVE STORM SEWER 12" CMP FLARED END	LS	1	\$ 200.00	\$ 200.00
1.06.I	REMOVE TREE	EACH	1	\$ 500.00	\$ 500.00
1.06.M	STORM SEWER 12" ALUMINIZED CMP FLARED END	LS	1	\$ 300.00	\$ 300.00
1.06.M	STORM SEWER PIPE 12" PVC SDR-35	LF	153	\$ 30.00	\$ 4,590.00
1.06.N	STORM SEWER CATCH BASIN 24" PVC NYLOPLAST	EACH	3	\$ 2,000.00	\$ 6,000.00
1.06.N	STORM SEWER DROP STRUCTURE 24" PVC	EACH	2	\$ 2,500.00	\$ 5,000.00
1.06.O	CONNECT TO EXISTING BOX CULVERT	EACH	2	\$ 800.00	\$ 1,600.00
1.06.P	RIPRAP AT PIPES AND STRUCTURES	TON	8	\$ 65.00	\$ 520.00
1.06.R	CONCRETE AROUND CATCH BASIN	EACH	3	\$ 1,000.00	\$ 3,000.00
1.06.Z	REPAIR EROSION	LS	1	\$ 1,000.00	\$ 1,000.00
SUBTOTAL					\$ 22,710.00
CONSTRUCTION TOTAL					\$ 623,185.00
CONTINGENCY (+15%)					\$ 93,000.00
ENGINEERING TOTAL					\$ 82,500.00
PROJECT TOTAL					\$ 798,685.00

LEGEND

- - - - -879- - - - - EXISTING MINOR CONTOUR
- - - - -880- - - - - EXISTING MAJOR CONTOUR
- - - - -879- - - - - PROPOSED MINOR CONTOUR
- - - - -880- - - - - PROPOSED MAJOR CONTOUR
- DECIDUOUS TREE
- * CONIFEROUS TREE
- - - - - PROPERTY LINE
- - - - - PERMANENT EASEMENT
- - - - - POND NORMAL WATER LEVEL
- SS SS EXISTING STORM SEWER
- SAN SAN EXISTING SANITARY SEWER
- CW CW EXISTING WATER MAIN
- UE UE EXISTING BURIED ELECTRIC
- CATV CATV EXISTING BURIED CABLE TV
- OE OE EXISTING OVERHEAD ELECTRIC
- SILT FENCE
- INLET PROTECTION
- ▨ WCA WETLAND
- ▨ FIELD DELINEATED WETLAND BOUNDARY

GENERAL NOTES:

1. PRIOR TO COMMENCING WORK AT THE SITE, CONTACT GOPHER ONE-CALL (1-800-252-1166) AND HAVE ALL EXISTING UTILITIES, PUBLIC AND PRIVATE, FIELD LOCATED AND MARKED. EXISTING UTILITIES SHALL BE PROTECTED UNLESS OTHERWISE INDICATED. ANY UTILITIES DAMAGED BY CONTRACTOR SHALL BE REPAIRED AT EXPENSE OF CONTRACTOR.
2. NOTIFY ENGINEER IMMEDIATELY IF SITE CONDITIONS OR UTILITIES DIFFER SIGNIFICANTLY FROM THAT SHOWN.
3. ALL EXISTING UTILITIES MUST REMAIN OPERATIONAL FOR THE DURATION OF CONSTRUCTION.
4. SURVEYED TREES WITH SYMBOLS DO NOT REPRESENT ALL TREES WITHIN OR AROUND THE WORK LIMITS. PROTECT ALL TREES UNLESS NOTED FOR REMOVAL.
5. MINIMIZE DISTURBANCE OF TREES/SHRUBS/ VEGETATION NOT MARKED FOR REMOVAL, INCLUDING MINIMIZING DISTURBANCE OF SOILS WITHIN THE TREE DRIFLINE.
6. ALL STOCKPILES SHALL BE LOCATED WITHIN CONSTRUCTION LIMITS OR DESIGNATED STAGING AREAS. DO NOT STOCKPILE MATERIALS OR DRIVE VEHICLES/EQUIPMENT WITHIN TREE DRIFLINE(S) UNLESS APPROVED BY ENGINEER.
7. PROTECT ALL STRUCTURES, UTILITIES AND TREES WHICH ARE NOT BEING REMOVED. COORDINATE ALL DEMOLITION WORK WITH OWNER/ENGINEER.
8. ALL CONTROL OF WATER AND EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE SEQUENCED, INSTALLED, MAINTAINED AND MONITORED BY CONTRACTOR.
9. SWEEP BITUMINOUS PAVEMENT DAILY, OR AS REQUIRED TO KEEP FROM TRACKING MATERIALS OFFSITE.
10. CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR ANY DAMAGE RESULTING FROM THE CONTRACTOR'S WORK.
11. REPAIR OR REMOVE ITEMS THAT ARE DAMAGED BY CONTRACTOR. REPAIR AND INSTALLATION OF DAMAGED ITEMS WILL BE PERFORMED TO CONDITION AT LEAST EQUAL TO THAT WHICH EXISTED PRIOR TO START OF WORK AT NO ADDITIONAL COST TO OWNER.
12. NO CONCRETE OR RUBBLE SHALL BE BACKFILLED ONSITE. RECYCLE DEMOLISHED DEBRIS PER THE SPECIFICATIONS OR DISPOSE OF AT AN OFFSITE LOCATION WITHIN ALL LOCAL, STATE AND FEDERAL GUIDELINES, LAWS AND REGULATIONS.
13. ESTABLISH AND MAINTAIN TRAFFIC AND PEDESTRIAN SAFETY CONTROL MEASURES PRIOR TO START OF CONSTRUCTION. TRAFFIC AND PEDESTRIAN SAFETY CONTROL MEASURES SHALL BE COORDINATED WITH OWNER.
14. CONTRACTOR IS RESPONSIBLE FOR KEEPING THE SITE PERIMETER SAFE FOR PEDESTRIANS, CHILDREN, PETS AND OTHER PASSERS-BY FOR ALL DAYS AND NIGHTS DURING THE DURATION OF THE WORK, FOR BOTH WORKING AND NON-WORKING HOURS.
15. PROVIDE A CONTINUOUS, ACCESSIBLE, AND SAFE PEDESTRIAN WALKWAY THAT MEETS ADA AND MN MUTCD STANDARDS IF WORKING IN A SIDEWALK AREA, AND TRAFFIC CONTROL PER MN MUTCD REQUIREMENTS FOR THE WORK IN THE PUBLIC RIGHT OF WAY AREA.
16. APARTMENT ENTRANCE MUST REMAIN OPEN FOR THE DURATION OF CONSTRUCTION.
17. COORDINATE ALL WORK AND SITE ACCESS WITH ROADWAY WEIGHT RESTRICTION REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING TEMPORARY ACCESS PERMITS, IF REQUIRED.



1 PLAN: EXSITING CONDITIONS, REMOVALS, & EROSION CONTROL PLAN



CADD USER: PATRICK E. BROCKAMP FILE: M:\DESIGN\23271622_00\23271622_00_G-02.DWG PLOT SCALE: 1:2 PLOT DATE: 6/13/2018 2:59 PM

NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION
B	CMH3	PEB	PEB	06/13/2018	90% DRAFT FOR REVIEW
A	CMH3	PEB	PEB	03/08/2018	50% DRAFT FOR REVIEW

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

PRINTED NAME: PATRICK BROCKAMP
SIGNATURE: _____
DATE: _____ LICENSE #: _____

CLIENT	BID	CONSTRUCTION
03/08/18	06/13/18	
A	B	C
0	1	2
3		

BARR
Corporate Headquarters:
Minneapolis, Minnesota
Ph: 1-800-632-2277

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

Scale	AS SHOWN
Date	06/13/2018
Drawn	CMH3
Checked	PEB
Designed	BARR
Approved	PEB

CITY OF CRYSTAL
CRYSTAL, MINNESOTA

WINNETKA POND DREDGING PROJECT
EXISTING CONDITIONS, REMOVALS, & EROSION CONTROL PLAN

90% DRAFT FOR REVIEW

BARR PROJECT No. 23/27-1622.00
CLIENT PROJECT No. 2018-04
DWG. No. G-02 REV. No. B

LEGEND

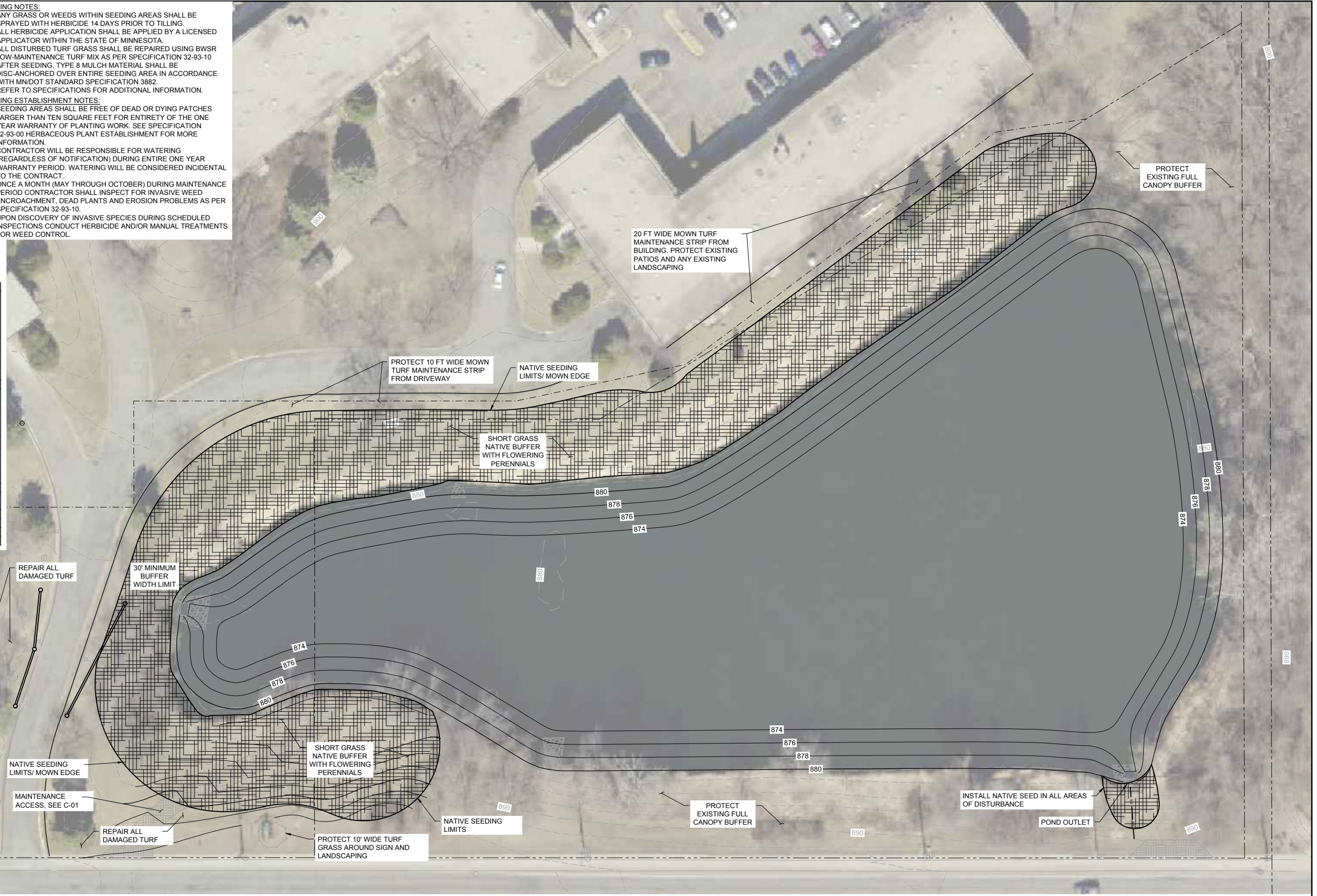
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---	880	---	EXISTING MAJOR CONTOUR
---	879	---	PROPOSED MINOR CONTOUR
---	880	---	PROPOSED MAJOR CONTOUR
●			DECIDUOUS TREE
*			CONIFEROUS TREE
---		---	PROPERTY LINE
SS	SS	---	EXISTING STORM SEWER
SAN	SAN	---	EXISTING SANITARY SEWER
CW	CW	---	EXISTING WATER MAIN
UE	UE	---	EXISTING BURIED ELECTRIC
CATV	CATV	---	EXISTING BURIED CABLE TV
OE	OE	---	EXISTING OVERHEAD ELECTRIC
[Grid Pattern]			NATIVE BUFFER AREA

- SEEDING NOTES:**
- ANY GRASS OR WEEDS WITHIN SEEDING AREAS SHALL BE SPRAYED WITH HERBICIDE 14 DAYS PRIOR TO TILLING.
 - ALL HERBICIDE APPLICATION SHALL BE APPLIED BY A LICENSED APPLICATOR WITHIN THE STATE OF MINNESOTA.
 - ALL DISTURBED TURF GRASS SHALL BE REPAIRED USING BWSR LOW-MAINTENANCE TURF MIX AS PER SPECIFICATION 32-93-10
 - AFTER SEEDING, TYPE 8 MULCH MATERIAL SHALL BE DISC-ANCHORED OVER ENTIRE SEEDING AREA IN ACCORDANCE WITH MN/DOT STANDARD SPECIFICATION 3882.
 - REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- SEEDING ESTABLISHMENT NOTES:**
- SEEDING AREAS SHALL BE FREE OF DEAD OR DYING PATCHES LARGER THAN TEN SQUARE FEET FOR ENTIRETY OF THE ONE YEAR WARRANTY OF PLANTING WORK. SEE SPECIFICATION 32-93-00 HERBACEOUS PLANT ESTABLISHMENT FOR MORE INFORMATION.
 - CONTRACTOR WILL BE RESPONSIBLE FOR WATERING (REGARDLESS OF NOTIFICATION) DURING ENTIRE ONE YEAR WARRANTY PERIOD. WATERING WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
 - ONCE A MONTH (MAY THROUGH OCTOBER) DURING MAINTENANCE PERIOD CONTRACTOR SHALL INSPECT FOR INVASIVE WEED ENCROACHMENT, DEAD PLANTS AND EROSION PROBLEMS AS PER SPECIFICATION 32-93-10.
 - UPON DISCOVERY OF INVASIVE SPECIES DURING SCHEDULED INSPECTIONS CONDUCT HERBICIDE AND/OR MANUAL TREATMENTS FOR WEED CONTROL.

SHORT GRASS SEED MIX:

Common Name	Botanic Name	Rate (lb/ac)	% of Mix (% by Wt)
Sideoats Grama	<i>Bouteloua curtipendula</i>	1.75	14.25
Blue Grama	<i>Bouteloua gracilis</i>	2.00	16.29
Kalm's Brome	<i>Bromus kalmii</i>	0.25	2.04
Plains Oval Sedge	<i>Carex brevif</i>	0.06	0.49
Poverty Oat Grass	<i>Danthonia spicata</i>	0.50	4.07
Squirrel-tail Grass	<i>Hordeum jubatum</i>	0.50	4.07
June Grass	<i>Koeleria macrantha</i>	0.30	2.44
Little Bluestem	<i>Schizachyrium scoparium</i>	3.00	24.43
Sand Dropseed	<i>Sporobolus cryptandrus</i>	1.00	8.14
Prairie Dropseed	<i>Sporobolus heterolepis</i>	0.12	0.98
Total Grasses & Sedges		9.48	77.20
Pussytoes	<i>Antennaria plantaginifolia</i>	0.01	0.08
Prairie onion	<i>Allium stellatum</i>	0.25	2.04
Butterfly weed	<i>Asclepias tuberosa</i>	0.30	2.44
Whorled milkweed	<i>Asclepias verticillata</i>	0.06	0.49
partridge pea	<i>Chamaecrista fasciculata</i>	0.80	6.51
Prairie smoke	<i>Geum triflorum</i>	0.01	0.08
White prairie clover	<i>Petalostemum candidum</i>	0.50	4.07
Purple prairie clover	<i>Petalostemum purpureum</i>	0.80	6.51
Pasque flower	<i>Pulsatilla nuttalliana</i>	0.01	0.08
Goat's Rue	<i>Tephrosia virginiana</i>	0.06	0.49
Total Forbes		2.80	22.80
Total		12.28	100.00

Common Name	Botanic Name	Rate (lb/ac)	% of Mix (% by Wt)
Oats	<i>Avena sativa</i>	3.00	100.00
Total		3.00	100.00



1 PLAN: NATIVE BUFFER AND RESTORATION PLAN

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SCALE IN FEET

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NO.	BY	CHK.	APP.	DATE	REVISION DESCRIPTION
B	CMH3	MEK2	PEB	06/13/2018	90% DRAFT FOR REVIEW
A	CMH3	PEB	PEB	03/08/2018	50% DRAFT FOR REVIEW

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

PRINTED NAME: PATRICK BROCKAMP
SIGNATURE: _____
DATE: _____ LICENSE #: _____

CLIENT	BID	CONSTRUCTION	RELEASED TO/FOR	DATE RELEASED
03/08/18	06/13/18		A B C 0 1 2 3	

BARR Engineering Co.
4300 MARKETPOINTE DRIVE
Suite 200
MINNEAPOLIS, MN 55435
Ph: 1-800-632-2277
Fax: (952) 832-2601
www.barr.com

Scale	AS SHOWN
Date	06/13/2018
Drawn	CMH3
Checked	PEB
Designed	MEK2
Approved	PEB

CITY OF CRYSTAL
CRYSTAL, MINNESOTA

WINNETKA POND DREDGING PROJECT		BARR PROJECT No. 23/27-1622.00	
		CLIENT PROJECT No. 2018-04	
NATIVE BUFFER AND RESTORATION PLAN		DWG. No.	REV. No.
		C-04	B

90% DRAFT
FOR REVIEW

I. Project Description and Outcomes

This project was completed in conjunction with Hennepin County's Douglas Drive Reconstruction Project. The project expanded Honeywell pond from a surface area of 1.5 acres to 2.4 acres which also increased the flood storage and dead storage of the pond.

A 48-inch low flow diversion pipe was installed from Douglas Drive to maximize the volume of water to Honeywell Pond from low flow events. A native buffer was also installed to provide habitat around much of the pond.

Honeywell Pond was also used as a source of irrigation for both the Sandburg athletic fields and an infiltration system that was installed along Douglas Drive. A pump system was installed along with a force main to allow the water to be pumped from the pond and run to the different sites. The pumps have automatic sensors that will not allow the pond to be pumped below a designated level.

The project's 90% design plans estimated that 61 lbs of total phosphorus per year will be removed by the pond after expansion, compared to 36 lbs/year prior to expansion. The irrigation and infiltration systems will remove an additional 15 lbs of total phosphorus per year.

II. Project Area

Honeywell Pond is located on the south side of Honeywell's property in Golden Valley, between St. Croix Avenue North and Hampshire Place, on the west side of Douglas Drive North. The outlet is located on the south side of the pond and discharges south along the Canadian Pacific Railroad into the Main Stem of Bassett Creek.

The indirect drainage area of Honeywell Pond receives runoff from a system of ponds northwest of Honeywell pond, including DeCola Ponds. This area is approximately 620 acres consisting of land in the cities of Golden Valley, Crystal, and New Hope.

The direct drainage is approximately 105 acres and consists of much of the runoff from the Honeywell property. The direct drainage area also consists of runoff from several of the homes on Duluth Street and much of the SEA School property at Duluth Street and Kelly Drive.

III. Project Documents, Timeline and Budget

Key Documents

- The Honeywell Pond Expansion Project was identified in the 2015 Bassett Creek Watershed Management Plan, Table 5-3 as project BC-4.

http://www.bassettcreekwmo.org/application/files/6415/0367/7836/BCWMC_Section_5_Final_Revised_August_2017.pdf.

- The feasibility report for the project was completed in July 2015.

<http://www.bassettcreekwmo.org/application/files/7514/4693/5989/FeasibilityReportFinal-071415-HoneywellPondImprovProj-2016.pdf>.

- A resolution ordering the project was approved on August 20, 2015.

<http://www.bassettcreekwmo.org/application/files/5214/4693/5990/Resolution-15-04-Ordering2016projects-HoneywellPondImprov2016-GV.pdf>

- 50% design plans were approved (with Commission Engineer's comments in September) and 90% design plans were approved (with Commission Engineer's comments) in November 2015

http://www.bassettcreekwmo.org/application/files/8814/5633/7265/Honeywell_Project_90_Percent_Design_Plans.pdf

Construction Timeline

Construction started onsite in October of 2016 to clear and grub site. During the winter of 2016-2017 the pond was excavated and expanded. Work continued in 2017 with the construction of the lift station and force main to Sandburg ball fields. Final stabilization and restoration will be completed in 2018.

Project Budget

The estimated cost for the project was \$1,260,930 of which the BCWMC had \$810,930 set aside for the funding of the project. Funding needed above the Commission's contribution is the responsibility of the city. Currently the project has incurred \$938,596 in expenses. After out of pocket expenses by the Commission (design review, etc.) the reimbursement to the city totaled \$785,623.

IV. Lessons Learned

One of the issues we faced with this project was the changes in plumbing code. As planning for the project began we started running into issues with the design and having our blowouts and irrigation all meet the new standards.

Because this project was completed with the Douglas Drive Reconstruction Project it faced challenges with the phasing of the pond work. The street project seemed to get the majority of the attention and we had a hard time getting crews back in a timely manner to work on completing the pond. As construction of the road work slowed in winter, these issues resolved themselves.

V. Maintenance

The contractor has a 3-year maintenance and warranty period for the construction of the project. That will begin in spring 2018 once the work has been completed. After the 3-year maintenance period the City will assume maintenance of the system.

VI. Photos







Item 6B.
BCWMC 6-21-18
Full documentation online



7800 Golden Valley Road
Golden Valley, MN 55427

June 8, 2018

Laura Jester, Administrator
Bassett Creek Watershed Management Commission
16145 Hillcrest Lane
Eden Prairie, MN 55346

Subject: Honeywell Pond Expansion Project (City Project No. 14-20)
BCWMC Project #BC-4
First and Final Request for Reimbursement

Dear Ms. Jester:

Per the terms of the Cooperative Agreement for the Honeywell Pond Enhancement/Improvement Project, the City of Golden Valley is requesting reimbursement for expenses incurred to date for the design, construction, and observation of the Honeywell Pond Expansion project. This is the first and only reimbursement request for the project. The project is complete and a final project report has been submitted to the BCWMC. The amount of the request for this reimbursement is **\$785,623.00**.

The breakdown of costs incurred by the City are as follows:

- | | |
|--|---------------------|
| • Study, design, and construction observation by WSB | \$149,429.74 |
| • Payment to Hennepin County for pond expansion performed by Park Construction | <u>\$789,166.31</u> |
| Total | \$938,596.05 |

The original cost estimate for this project was \$1,260,930. According to the cooperative agreement, up to \$810,930 may be reimbursed to the City for eligible project costs, less the Commission's legal and administrative costs which total \$25,307. Therefore, the amount remaining for reimbursement is \$785,623.00.

Enclosed please find the following supporting documentation:

- Hennepin County Pay Request Number 19 (Group 9 is for pond expenses less 3.5% retainage)
- Hennepin County Pay Items Spreadsheet for Group 9 expenses (includes retainage)
- Invoice from Hennepin County to City for 45% of total construction costs (includes all pond construction costs)
- WSB Invoices 1-31 for Professional Services

If you have any questions regarding this submission, please contact me at 763-593-8084.

Sincerely,

A handwritten signature in black ink that reads "Eric Eckman".

Eric Eckman
Development and Assets Supervisor

Laura Jester
June 8, 2018
Page 2

Enclosures

C: Marc Nevinski, Physical Development Director
Jeff Oliver, PE, City Engineer
Sue Virnig, Finance Director



Remit To:
CITY OF GOLDEN VALLEY
7800 GOLDEN VALLEY RD
GOLDEN VALLEY MN 55427

7800 Golden Valley Road
Golden Valley, MN 55427

INVOICE

8713

Invoice Date 6/8/2018

Due Date 6/8/2018

Page: 1

Billing Address: 116776
BASSETT CREEK WATERSHED MGMT COMMISSION
7800 GOLDEN VALLEY RD
GOLDEN VALLEY MN 55427

Item	Remark	Amount
001	HONEYWELL POND EXPANSION PROJ	785,623.00
	Total Amount Invoiced	785,623.00
	Tax Amount	
	Balance Due	785,623.00

Please return one copy with your payment.



Memorandum

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Co.
Subject: Item 6C – Discuss Interest and Logistics of Inviting Commissioners to Participate in Bassett Creek Deep Tunnel Inspection
Date: June 12, 2018

6C. Discuss Interest and Logistics of Inviting Commissioners to Participate in Bassett Creek Deep Tunnel Inspection

Recommendations:

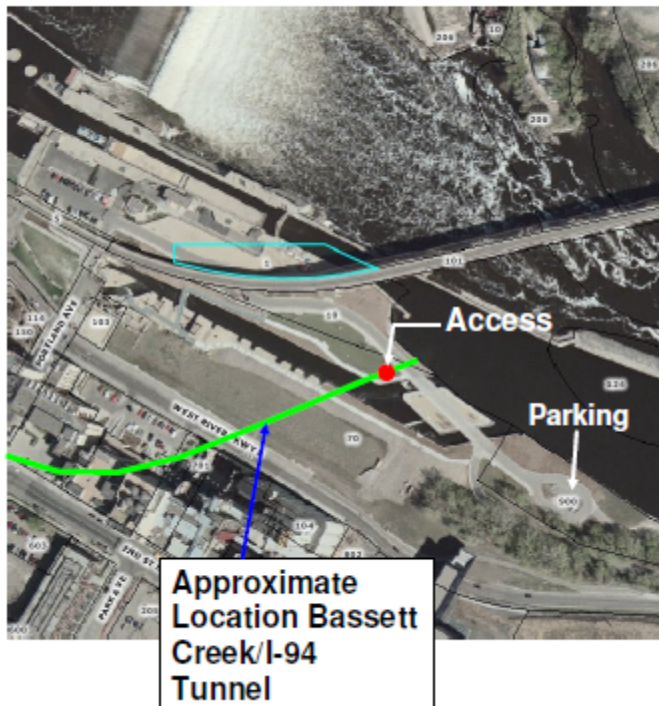
1. Gather input regarding participation and an approximate head count of the Commissioners/TAC members that may be interested in a tunnel tour.
2. Because the tunnel is a significant component of the Bassett Creek Flood Control Project, we recommend Commissioners/TAC members participate in one of the tunnel tour options.

Tunnel Tour

The Commission Engineer is scheduled to inspect the Bassett Creek deep tunnel during 2018. This presents an opportunity for Commissioners/TAC members to enter and observe portions of the tunnel. If the Commissioners/TAC members are interested in participating in such a tour, there are several logistical items regarding planning, safety, confined space entry, equipment (hard hats, lamps, safety harnesses, safety glasses, waders, high visibility vests), etc. to be considered and planned. Although the Commission has not yet committed to participate, we are seeking input regarding participation and an approximate head count of the interested Commissioners/TAC members.

The tunnel entry is near Mill Ruins Park (see figure). At this location, the tunnel is submerged and several hundred feet of the tunnel is underwater. The Commission Engineer has been coordinating with the U.S. Army Corps of Engineers (Corps) to schedule the inspection during early November to minimize navigation impacts and minimize disruptions to Xcel Energy's operation of the St. Anthony Falls hydropower dam. The middle pool—the area between the lower and upper locks—needs to be lowered for access to the tunnel and also to drain the tunnel for inspection. Although preliminary feedback from the Corps Mississippi River Valley Division office has discouraged the request to lower the pool, the Commission Engineer and local Corps staff have provided additional information to support the need to lower the pool for the inspection. The inspection will be cancelled if the Corps does not approve its variance to lower the pool. The inspection typically includes a 3-person inspection team, surface attendants for at least two access/emergency egress locations, a crane and man basket (subcontractor) and a standby emergency extraction team (subcontractor).

Access Location Map



Tour conditions/considerations:

- There may be 1 – 2 feet of water flowing in the tunnel.
- Access to the tunnel would be via a manhole some distance upstream of the tunnel outlet (access from tunnel outlet is not likely).
- Participants would use a ladder to descend approximately 12 feet to the bottom of the tunnel.
- Participants would likely need to wear hard hats, head lamps, safety harnesses, safety glasses, waders and high visibility vests.
- The following two tour options could be considered:
 1. Short duration tour: After entering the tunnel, walk approximately 70 ft. downstream to tunnel outlet (great view of stone arch bridge), then walk up the tunnel a few hundred feet to the cathedral arch section, then return to ladder and exit tunnel. City of Minneapolis staff take council members and others in its tunnels on similar short duration trips. This may be the best manageable approach and will allow several Commissioners/TAC members to access the tunnel in shifts (approximately 20-30 minutes in tunnel, and 30-70 feet underground).
 2. Long duration tour: After entering the tunnel, walk the entire Second Street Tunnel (5,146 feet), walk the Third Avenue Tunnel (1,450 feet) to bottom of drop structure, return to ladder and exit tunnel (a few hours in the tunnel, walking approximately 2.5 miles round trip, and 80-95 feet underground). A variation would be to walk one-way and exit the tunnel via man basket and crane located at the upstream end of the Third Avenue tunnel near the drop structure.

If all of the Commissioners and TAC members want to participate, we would likely need to perform the tour in shifts, due to availability of equipment, overcrowding, etc. Also, everybody entering the tunnel would need to go through site-specific confined space training and sign a waiver prepared by the Commission Legal Counsel to reduce potential risks for the Commission. Training could be performed at the end of a Commission meeting prior to the tour or on-site prior to tunnel entry. The Commission Engineer and the City of Minneapolis may have sufficient safety equipment to share if the tunnel was viewed in shifts.

Budget

The existing budget for the inspection and the estimated budget for the two tunnel tour options are shown in the following table. The actual added cost to include the Commission tour is difficult to estimate because of many variable factors (number of participants, length of tour, amount of safety equipment to obtain, whether tour can be performed when existing inspection infrastructure is in place). The long duration tour cost would be the most cost-effective if performed during a time when the existing inspection infrastructure is in place (rescue team, crane operator for emergency egress, surface attendants, etc.), because, otherwise we would need to secure the safety measures just for the tour.

The tour could be performed under the BCWMC's Surveys & Studies budget (2018 budget = \$12,000) and any unused flood control inspection budget.

Existing 2018 tunnel inspection budget:	\$36,000
Short Duration tour	\$1,000-\$2,000
Long Duration tour	\$3,000-\$6,000

We can provide an updated cost estimate once we know the number of participants and tour length.

General Bassett Creek Tunnel Information

The Bassett Creek tunnel was constructed in three phases:

- Phase 1: Second Street Tunnel (constructed by MnDOT during 1979). The Second Street tunnel generally consists of a concrete-lined 12-foot arch tunnel along Second Street North in Minneapolis. The entire tunnel is approximately 8,900 feet long; however, the portion that conveys Bassett Creek is 5,146 feet. The Second Street tunnel was designed to convey runoff from Interstate 94 and 394, as well as Bassett Creek.
- Phase 2: Third Avenue Tunnel and Drop Structure (constructed by the Corps during 1990). The Third Avenue tunnel generally consists of a concrete-lined 13-foot arch tunnel, 1,450 feet long, along Third Avenue North in Minneapolis. The tunnel was constructed to convey Bassett Creek flow from the drop structure to the Second Street tunnel.
- Phase 3: Double Box Culvert (constructed by the Corps during 1992). This phase included 5,572 feet of box culvert—5,256 feet of 11-foot by 11-foot double box culvert and 316 feet of 11-foot by 11-foot single box culvert (near the drop structure and inlet structure).

Memorandum

To: Jeff Oliver, City of Golden Valley
From: Greg Wilson, Barr Engineering Co.
Subject: Follow-up on Phase 1 of Twin Lake Alum Treatment and Recommendations for Phase 2
Date: June 13, 2018
Project: 23271420.00 PH1
c: Laura Jester, Bassett Creek Watershed Management Commission (BCWMC)

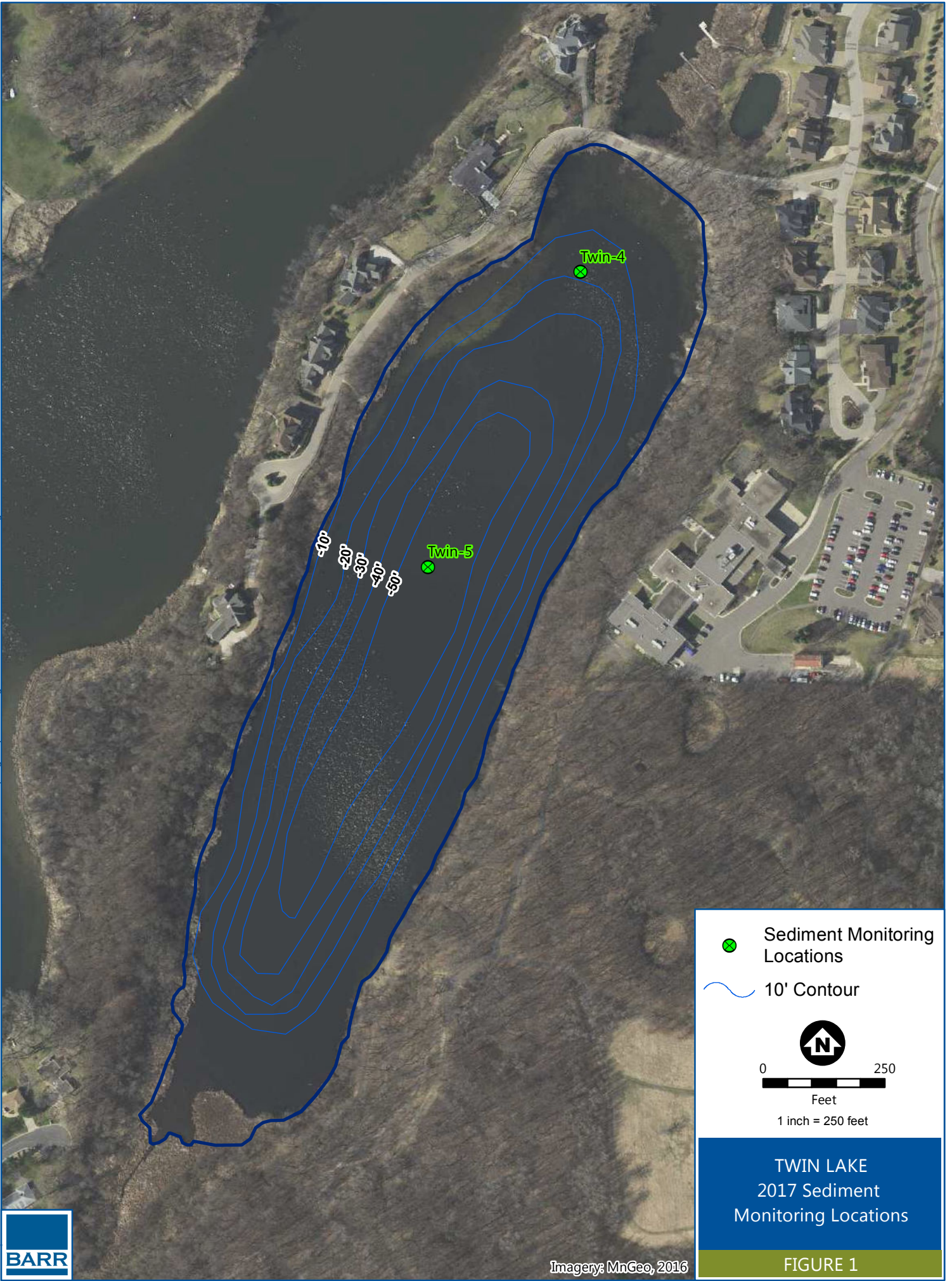
Twin Lake received the first phase of an alum treatment in the spring of 2015 (BCWMC CIP project TW-2). The intent of the first phase was to deliver half of the total dosage of aluminum to immobilize the “releasable” forms of phosphorus in the lake sediments, thereby reducing internal phosphorus loading and protecting the high water quality of the lake. The split dosage serves two purposes: 1) it minimizes the potential impacts on aquatic biota during each phase of treatment, and 2) it improves the overall treatment efficiency and longevity of the alum treatment. More background on the project, and general information about alum treatments, is included in a two-page handout (included as an attachment to this memo).

Approximately \$71,000 remains in the BCWMC CIP budget to complete the Twin Lake alum treatment. To further assess the need for the second phase of the alum treatment, Barr collected two new sediment cores from Twin Lake and analyzed the post-treatment lake water quality monitoring data. The locations of the sediment core sampling sites are shown in Figure 1.

Conclusions

Based on our review of the updated monitoring data, the first phase of alum treatment was very successful at controlling internal phosphorus load and we do not feel that it would be beneficial to conduct the second phase of the alum treatment at this time. Our conclusion is based on the following:

1. Figures 2 and 3 show that the alum floc layer (and bound phosphorus) is still very near the surface of the sediment and has not experienced significant sediment accumulation since the first phase of the alum treatment.
2. Figure 4 shows that the bottom water total phosphorus (TP) concentration in 2017 was between 80% and 90% lower than the pretreatment monitoring, when compared to the long-term average TP concentration and the 2014 TP concentration, respectively. This confirms that the first phase of the alum treatment has largely controlled the internal phosphorus load.



- Sediment Monitoring Locations
- 10' Contour

N

0 250
Feet
1 inch = 250 feet

TWIN LAKE
2017 Sediment
Monitoring Locations

FIGURE 1



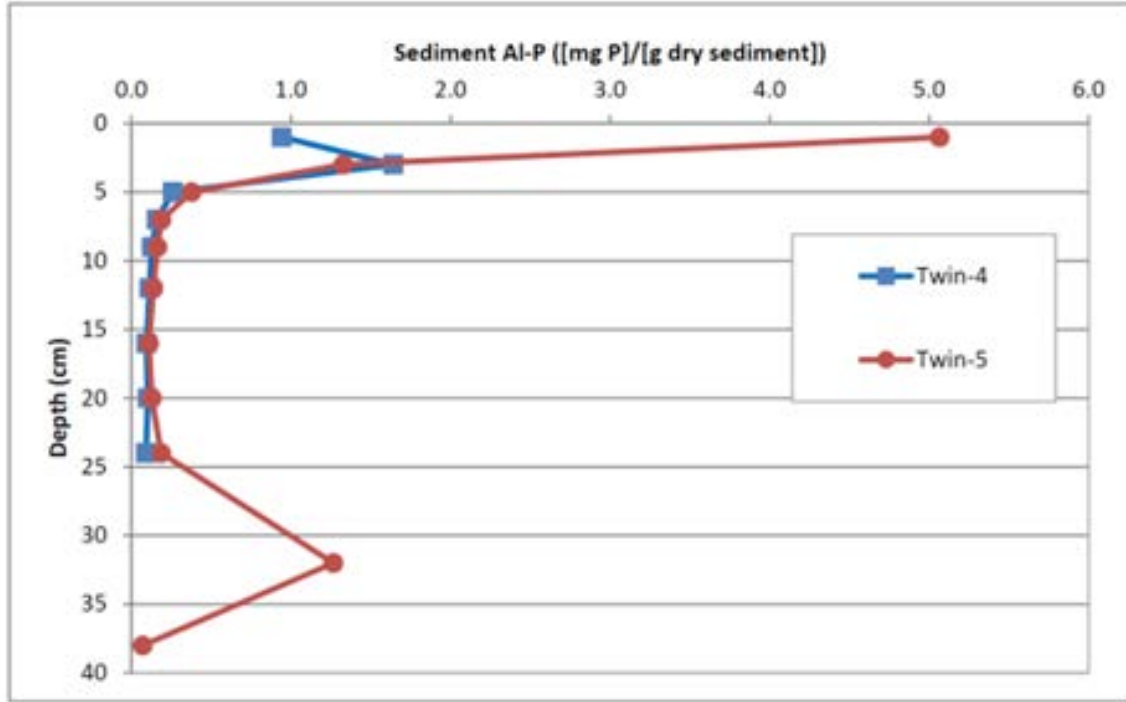


Figure 2 Aluminum-bound phosphorus concentrations throughout the sediment core profile



Figure 3 Photo of sediment core showing alum floc within the top layer

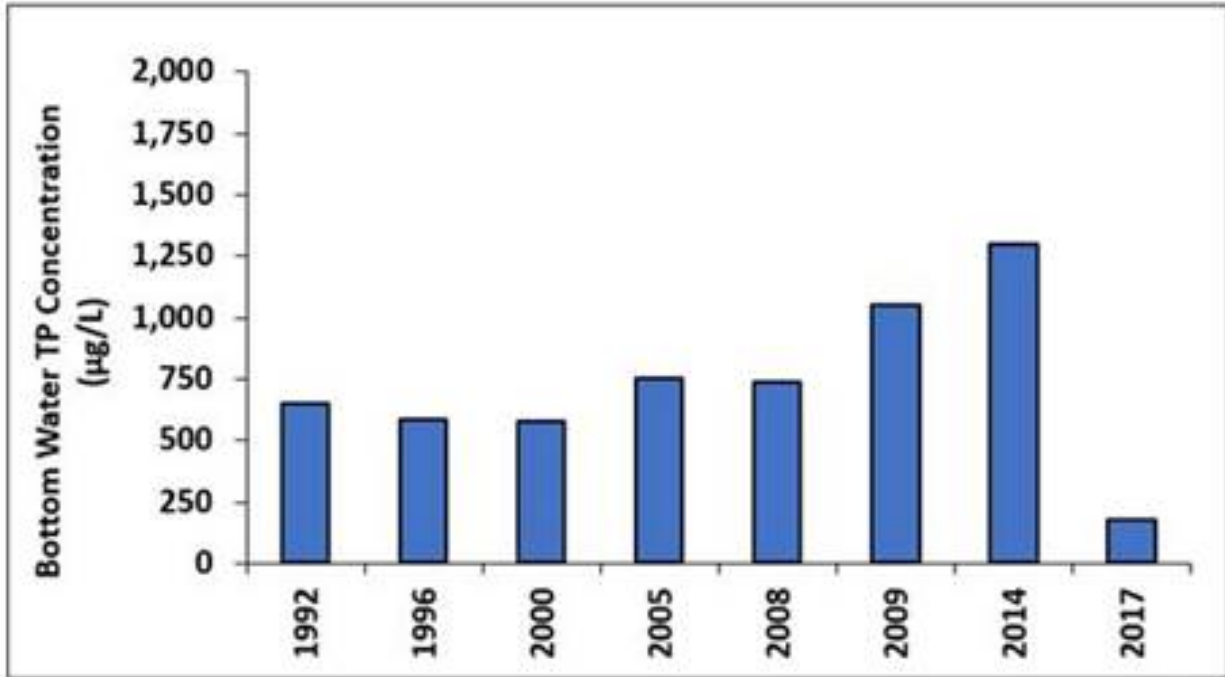


Figure 4 Historical summer average total phosphorus concentrations of Twin Lake bottom water

Recommendations

It is still expected that the second phase of the alum treatment will be needed in the future. It is recommended that the second phase of the alum treatment should be reconsidered after monitoring data (both sediment and lake phosphorus) becomes available, following the 2020 monitoring season. As a result, it is suggested that BCWMC hold CIP budget funds to conduct the second phase of the treatment and associated assessment.

Alum treatment: Protecting the water quality of Twin Lake



With the goal of improving water quality in Twin Lake, the Bassett Creek Watershed Management Commission and City of Golden Valley plan to treat the lake with aluminum sulfate (alum) in 2015. As a lake-area resident you may have some questions about alum treatment. We hope this information sheet answers those questions. You'll also have an opportunity to learn more at a public meeting scheduled for March 19 (see information box at right).

Alum: frequently asked questions

Why treat the lake with alum?

The alum treatment will provide safe, effective control of algae in Twin Lake for 20–30 years or longer. The result will be cleaner, clearer water for recreation.

What does alum do?

Alum (aluminum sulfate) is derived from aluminum. It has been used in water purification and wastewater treatment for centuries and in lake restoration for decades. The chemical reduces the growth of algae by trapping phosphorus in the lake sediments.

Where does phosphorus come from?

- **From external sources** such as stormwater runoff or groundwater.

- **From internal sources**—phosphorus that has already accumulated in lake-bottom sediments and is periodically re-suspended in the summer.

Project partners have worked to control external sources of phosphorus. But, even when external sources have been reduced, phosphorus that is recycled from the lake's sediments into the overlying waters can support explosive algal growth. This process, frequently referred to as *internal loading*, can be controlled by alum.

How does alum work?

Alum is injected into the lake, several feet below the water's surface. Upon contact with the water it becomes aluminum hydroxide, taking the form of a fluffy substance called *floc*. This floc works to improve water quality in two ways:

1. As it settles to the bottom of the lake, the floc interacts with phosphorus to form aluminum phosphate, an insoluble compound. In this state the phosphorus can no longer be used by algae for food. Other suspended particles are also collected by the floc, leaving the water noticeably clearer.

Public meeting

Alum treatments in Twin Lake

- **Date:** March 19, 2015
- **Time:** 6:30–8 p.m.
- **Place:** Golden Valley City Hall Council Chambers
- **Address:** 7800 Golden Valley Road

For additional information, please contact Tom Hoffman at 763-593-8044 (thoffman@goldenvalleymn.gov).

2. On the bottom of the lake, the floc forms a layer which binds with phosphorus as it is released from the sediment. This produces a "blanket" over the sediment, reducing internal loading.

How long does it take to complete an alum treatment project?

Alum treatments are generally made either in the late fall or early spring over a period of 7–10 days.

How quickly will results be seen?

Lake transparency will increase dramatically, even within a few hours. Reductions in algae should be noticeable within one year.

How long will the alum treatment last and how can we extend the effectiveness of the treatment?

Since Twin Lake does not receive much phosphorus from *external* sources, the alum treatment is expected to maintain the lake's water quality for 20–30 years, or longer.

We can extend the effectiveness of the treatment by limiting the phosphorus that enters the lake from surface runoff. Leaves, grass clippings, eroded soil, fertilizers, and animal droppings are examples of phosphorus-rich materials carried by surface runoff.

The effectiveness of alum can also be increased by splitting the full alum treatment into multiple applications. Two applications will be used to treat Twin Lake.

Will recreation/aesthetics be affected?

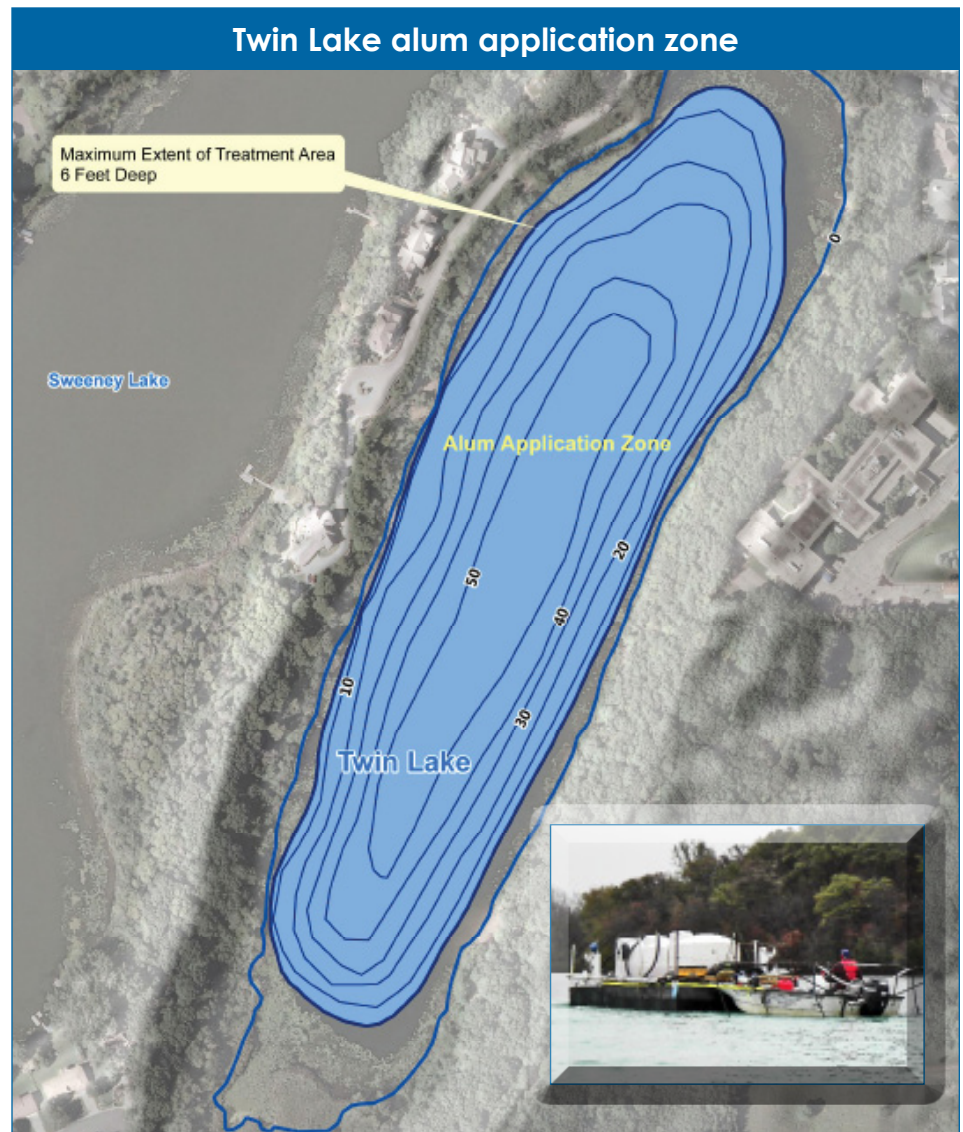
Treatment is planned during times of the year when lake water temperatures would discourage in-lake recreational activities. Swimming, canoeing and boating can continue during treatment; however, direct contact with the alum barge should be avoided.

Because application of the alum takes place in relatively deep water (6 or more feet), it is unlikely that the floc would be visible in shallow, recreational areas.

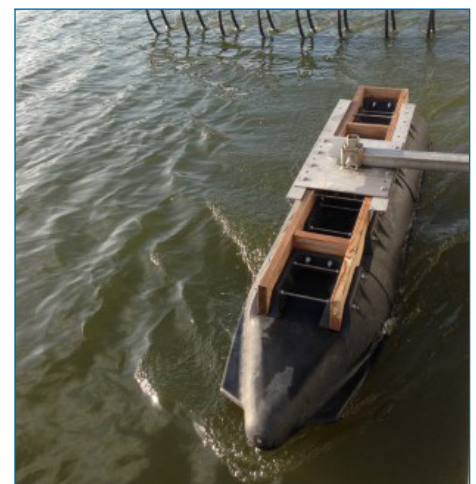
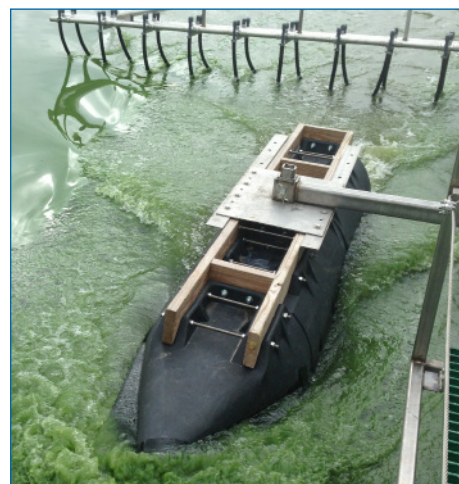
Is alum safe?

Yes. There is no evidence to suggest that aluminum ingested in water poses a health threat. Water treatment plants throughout the United States use hundreds of thousands of tons of alum annually and many municipalities use it for wastewater treatment. The floc is harmless to water creatures and aquatic plants; no adverse effects on spawning habitat have been documented.

The Food and Drug Administration, the U.S. Environmental Protection Agency, and leading medical experts all concur that **aluminum is not a risk factor** for any diseases or health conditions.



Above: The figure shows the extent of the alum treatment area; inset is a photo of an alum treatment barge. Below: Photos of Spring Lake before (left) and after alum treatment (right) by the Prior Lake-Spring Lake Watershed District.





Bassett Creek Watershed Management Commission

MEMO

To: BCWMC Commissioners
From: Laura Jester, Administrator
Date: June 12, 2018

RE: Upcoming CIP Project Schedules

There are several upcoming CIP project schedules that are atypical. I wanted to update you on the status of these projects and let you know what to expect in coming months.

2017 Main Stem Bassett Creek Erosion Repair Project (2017CR-M) = delayed construction

Spring 2018: Bidding complete and construction was ready to begin
Late April 2018: US Army Corps of Engineers issued letter requiring a field based cultural and historical survey of the project area. This was not anticipated and will delay construction. The field work and reporting for the investigation is estimated to be completed within 6-8 weeks after city approval. The Corps then requires additional time to review the report.

Due to an unrelated situation, Pioneer Paper (a business/landowner from whom construction access is necessary to complete much of the project) is requesting a delay in the project so they can manage their storage issues. However, they still strongly prefer spring/early summer construction in their portion of the project area. Therefore, it is anticipated that construction will proceed in winter/spring of 2019.

2018 Bassett Creek Park Phase I Dredging Project: Winnetka Pond (BCP-2) = typical schedule

- Summer 2017: County approved 2018 maximum levy
- September 2017: BCWMC held public hearing, ordered project, set final levy, entered agreement with city to design and construct the project
- April 2018: 50% design plans approved
- June 2018: 90% design plans considered
- Winter 2018/2019: Project construction

2019 DeCola Ponds Improvement Project (BC-2,3,8) = typical schedule, complete project funding available

- May 17, 2018: Feasibility study approved, maximum levy set for 2019
- July 10, 2018: County Board considers and makes recommendation on maximum levy request at a committee meeting (committee of the whole)
- July 24, 2018: County Board takes action on the committee recommendation on the maximum levy
- Early August: City signs MDNR grant agreement and contract for \$2.3M of Flood Damage Reduction funding (already committed by the MDNR and included in approved bonding bill)
- August 16, 2018: BCWMC holds public hearing, orders project, sets final levy, enters agreement with city to design and construct the project
- Fall 2018: Project design begins

2019 Westwood Lake Improvement Project (WST-2) = design ahead of schedule

- May 17, 2018: Feasibility study approved, maximum levy set for 2019
- July 10, 2018: County Board considers and makes recommendation on maximum levy request at a committee meeting (committee of the whole)
- July 19, 2018: Commission reviews and considers 50% design plans in order to coincide with the city's Westwood Hills Nature Center redevelopment project. Design will be completed by a consultant (Barr Engineering) under contract with the city. The city understands the slight financial risk it encumbers in the event the maximum levy is not approved by the County or the Commission doesn't officially order the project after the public hearing in August.
- July 24, 2018: County Board takes action on the committee recommendation on the maximum levy
- August 16, 2018: BCWMC holds public hearing, orders project, sets final levy, enters agreement with city to design and construct the project
- August 16, 2018: Commission reviews and considers 90% design plans
- Spring 2019: Construction begins

2020 Crane Lake Improvement Project via Ridgedale Drive (CL-3) = feasibility/design ahead of schedule

- August or September 2018: BCWMC reviews and considers feasibility study completed by city consultant (in conjunction with Ridgedale Drive Reconstruction Project)
- September 2018: BCWMC reviews and considers 60% project designs.
- November 2018: BCWMC reviews and considers 90% project designs.
[The city understands the financial risk it encumbers in the event the maximum levy is not approved by the County or the Commission doesn't officially order the project after the public hearing in August/September 2019.]
- May 2019: BCWMC sets maximum levy for 2020
- August/September 2019: BCWMC holds public hearing, orders project, sets final levy, enters agreement with city to design and construct the project

2020 Bryn Mawr Meadows Improvement Project (BC-5) = ahead of schedule because recently moved from 2019 project to 2020 project

- July 19, 2018: Commission reviews and considers draft feasibility study
- Later summer 2018: Commission reviews and considers final feasibility study and sets project budget for 2020 levy
- May 2019: Commission sets maximum levy for 2020
- June/July 2019: County Board considers maximum levy request
- August/September 2019: BCWMC holds public hearing, orders project, sets final levy, enters agreement with city to design and construct the project

2020 Jevne Park Stormwater Pond (ML-21) = typical schedule

- July 19, 2018: BCWMC considers proposal from Commission Engineer to draft feasibility study
- Fall/Winter 2018/2019: Feasibility study underway
- March 2019: BCWMC reviews and considers draft feasibility study
- May 2019: BCWMC reviews and considers final feasibility study and sets maximum levy for 2020
- August/September 2019: BCWMC holds public hearing, orders project, sets final levy, enters agreement with city to design and construct the project



Bassett Creek Watershed Management Commission

MEMO

Date: June 13, 2018
From: Laura Jester, Administrator
To: BCWMC Commissioners
RE: **Administrator's Report**

Aside from this month's agenda items, the Commission Engineers, city staff, committee members, and I continue to work on the following Commission projects and issues.

CIP Projects (more resources at <http://www.bassettcreekwmo.org/projects.>)

2019 Medicine Lake Road and Winnetka Avenue Area Long Term Flood Mitigation Plan Implementation Phase I: DeCola Ponds B & C Improvement Project (BC-2, BC-3 & BC-8), Golden Valley: At their meetings in September and October, the Commission approved a proposal and additional proposed actions (respectively) from the Commission Engineer to complete a feasibility study for this project. Feasibility study field work began in late September. A project kick-off meeting was held October 6th, a public open house was held November 9th, a meeting with permitting agencies was held December 8th and a meeting with Met Council regarding the existing sanitary sewer line was held in late December. Work on various aspects of the feasibility study continued over the winter including establishment of ordinary high-water levels, test trench investigations, use of the XP-SWMM model, and development of 3 concepts for city staff, administrator review and presentation to residents at a public open house on April 11th. At its May meeting, the Commission approved Concept 3 and set a maximum 2019 levy. In May, the Minnesota Legislature passed the bonding bill and the MDNR has since committed \$2.3M for the project. Project website: <http://www.bassettcreekwmo.org/index.php?cID=433>

2019 2020 Bryn Mawr Meadows Water Quality Improvement Project (BC-5), Minneapolis: At their meeting in September, the Commission approved a proposal from the Commission Engineer to complete a feasibility study for this project. A project kick-off meeting was held on October 23rd. A wetland delineation is complete and submitted for approval. Preliminary concepts were developed and discussed with designers for Minneapolis Park and Rec Board. A meeting with permitting agencies was held on January 19th and another meeting with MPRB designers was held February 13th to review possible concepts. Soil borings were recently completed and a public open house on the MPRB's Bryn Mawr Meadows Park improvement project was held March 8th and had about 50 participants. At their meeting in April, the Commission approved a TAC and staff recommendation to move this project from implementation in 2019 to design in 2020 and construction in 2021 to better coincide with the MPRB's planning and implementation of significant improvements and redevelopment Bryn Mawr Meadows Park where the project will be located. A draft feasibility study will be presented at the July 2018 Commission meeting. Project website: <http://www.bassettcreekwmo.org/projects/all-projects/bryn-mawr-meadows-water-quality-improvement-project>

2019 Westwood Lake Water Quality Improvement Project (WST-2), St. Louis Park: At their meeting in September, the Commission approved a proposal from the Commission Engineer to complete a feasibility study for this project. The project will be completed in conjunction with the Westwood Hills Nature Center reconstruction project. A kick-off meeting was held November 21st. A wetland delineation was completed and approved. The Commission Engineer has received the architect's survey and building location and soil boring data. Project concepts were recently discussed with the city's architect and city staff and two public open houses were held in February for the Westwood Hills Nature Center reconstruction project. At their meeting in May, the Commission approved Concept 3 (linear water feature) and set a maximum 2019 levy. Project website: <http://www.bassettcreekwmo.org/projects/all-projects/westwood-lake-water-quality-improvement-project>

2018 Bassett Creek Park Pond Phase I Dredging Project: Winnetka Pond, Crystal (BCP-2) (See Item 6A): The final feasibility study for this project was approved at the May 2017 meeting and is available on the project page online at <http://www.bassettcreekwmo.org/index.php?cid=403>. At the September 2017 meeting, the Commission held a public hearing on the project and adopted a resolution officially ordering the project, certifying costs to Hennepin County, and entering an agreement with the City of Crystal for design and construction. Hennepin County approved the 2018 final levy request at their meeting in November 2017. The City of Crystal hired Barr Engineering to design the project. At their meeting in April, the Commission approved 50% design plans. 90% design plans are expected at the June Commission meeting. A public open house on the project was held May 24th where four residents asked questions, provided comments, and expressed support. At this meeting the Commission will consider 90% design plans.

2017 Plymouth Creek Restoration Project, Annapolis Lane to 2,500 feet Upstream (2017CR-P) (See Item 4D): All project documents including the feasibility study and 90% design plans are available online at <http://www.bassettcreekwmo.org/index.php?cid=284>. The BCWMC executed agreements with the BWSR for a \$400,000 Clean Water Fund grant and with Hennepin County for a \$50,000 Opportunity Grant and a subgrant agreement with the City was executed. Project design was completed by the city's contractor, Wenck Associates, with 60% and 90% design plans approved by the Commission at the April and August 2017 meetings, respectively. Plymouth City Council awarded a construction contract in early December 2018 and construction got underway on December 11, 2018. Streambank restoration work is complete in all three reaches. Vegetation is currently being established.

2017 Main Stem Bassett Creek Streambank Erosion Repair Project (2017CR-M) (See update in 6E): The feasibility study for this project was approved at the April Commission meeting and the final document is available on the project page at: <http://www.bassettcreekwmo.org/index.php?cid=281>. A Response Action Plan to address contaminated soils in the project area was completed by Barr Engineering with funding from Hennepin County and was reviewed and approved by the MPCA. The Commission was awarded an Environmental Response Fund grant from Hennepin County for \$150,300 and a grant agreement is in the process of being signed by the county. A subgrant agreement with the City will be developed. The City hired Barr Engineering to design and construct the project. Fifty-percent and 90% designs were approved at the August and October Commission meetings, respectively. In September, design plans were presented by Commission and city staff to the Harrison Neighborhood Association's Glenwood Revitalization Team committee and through a public open house on the project. Bidding for construction is complete and a pre-construction meeting was recently held. Construction was to begin this summer but will be delayed until winter/spring 2019 due to the unanticipated need for a field based cultural and historical survey of the project area required by the Army Corps of Engineers and the preference for Pioneer Paper (a significant landowner and access grantor) for a spring/summer construction window.

2016 Northwood Lake Improvement Project, New Hope (NL-1) (See Item 4E): Northwood Lake Improvement Project is nearing completion with all major work complete. The storm water tank was fully operational in June and irrigated the fields all summer. Since it began operating the tank has captured and reused 904,000 gallons of storm water. All raingardens are planted and working well. A grand opening of the park was held last spring. Friends of Northwood Lake disseminated water quality educational materials, including BCWMC materials. A semi-annual grant report was submitted to the MPCA in January. The final piece of the project – an educational sign was designed and fabricated. It will be installed this month and final grant reporting will be completed in July.

2016 Honeywell Pond Expansion Project, Golden Valley (BC-4) (See Item 6B): In spring 2016, the Honeywell Pond Project was bid as part of the City of Golden Valley and Hennepin County's Douglas Drive (CSAH 102) Reconstruction Project. The reconstruction project began in June 2016. Excavation of the pond basin is complete

and the disturbed soils around the pond were temporarily stabilized. The force main work was recently completed. The lift station and pumps were installed and connected to the Sandburg Athletic. Final stabilization of the pond was completed last fall and the area was seeded with a mix of natives including wetland and upland species. The project is complete and a final report and final reimbursement will be presented at this meeting.

2015 Main Stem Restoration Project 10th Avenue to Duluth Street, Golden Valley (2015CR) (No change since October): The restoration project is being constructed in two phases, each under separate contract. Phase one included stream bank shaping, placement of field stone rock and 12-inch bio-logs, and repair of storm sewer outlets. The first phase of the project began in November 2015 and was finished in June 2016. Turf establishment and minor restoration repairs in Phase 1 were accepted in late October 2016. Repairs to some areas where flooding impacted rocks or biologs were completed and accepted in mid-December 2016. Phase 1 of the construction project has entered the warranty period.

Phase 2 of the project includes the establishment of native vegetation along the stream, including grasses, wildflowers, shrubs, live stakes and fascines, and cordgrass plugs. The project has been seeded and stabilized and maintenance mowing and spot treatments have been completed. Applied Ecological Services (AES) installed live stakes and fascines this spring and completed the tree and shrub planting along the restoration project. AES will continue to monitor and maintain the native vegetation through 2018. It is anticipated that the total contract amount for both Phase one and Phase two will be within the Watershed's overall project budget.

2014 Schaper Pond Diversion Project, Golden Valley (SL-3): Repairs to the baffle structure were made in 2017 after anchor weights pulled away from the bottom of the pond and some vandalism occurred in 2016. The city continues to monitor the baffle and check the anchors, as needed. Vegetation around the pond was planted in 2016 and a final inspection of the vegetation was completed last fall. Once final vegetation has been completed, erosion control will be pulled and the contract will be closed. The Commission Engineer began the Schaper Pond Effectiveness Monitoring Project last summer and presented results and recommendations at the May 2018 meeting. Additional effectiveness monitoring will be performed this summer.

2014 Twin Lake In-lake Alum Treatment, Golden Valley (TW-2) (See Item 6D): At their March 2015 meeting, the Commission approved the project specifications and directed the city to finalize specifications and solicit bids for the project. The contract was awarded to HAB Aquatic Solutions. The alum treatment spanned two days: May 18-19, 2015 with 15,070 gallons being applied. Water temperatures and water pH stayed within the desired ranges for the treatment. Early transparency data from before and after the treatment indicates a change in Secchi depth from 1.2 meters before the treatment to 4.8 meters on May 20th. There were no complaints or comments from residents during or since the treatment. Water monitoring continues to determine if and when a second alum treatment is necessary. Lake monitoring results from 2017 will be presented at this meeting along with a recommendation to further delay a 2nd treatment.

2013 Four Season Area Water Quality Project/Agora Development (NL-2) (No change since May): At their meeting in December 2016, the Commission took action to contribute up to \$830,000 of Four Seasons CIP funds for stormwater management at the Agora development on the old Four Seasons Mall location. At their February 2017 meeting the Commission approved an agreement with Rock Hill Management (RHM) and an agreement with the City of Plymouth allowing the developer access to a city-owned parcel to construct a wetland restoration project and to ensure ongoing maintenance of the CIP project components. At the August 2017 meeting, the Commission approved the 90% design plans for the CIP portion of the project. At the April 2018 meeting, Commissioner Prom notified the Commission that RHM recently disbanded its efforts to purchase the property for redevelopment. I will be writing letters to the RHM and the City of Plymouth to officially cancel the agreements. Staff will work with the City of Plymouth to determine another possible option for treatment in this area.

Other Work

CIP Project Work and Technical Assistance

- Coordinated with TRPD, MDNR and contractor on curly-leaf pondweed mapping, permits, and treatment in Medicine Lake.
- Distributed zebra mussel sampler plates and instructions to Parkers Lake volunteers
- Prepared for and attended BCWMC CIP Prioritization Committee meeting including meeting with MCWD staff
- Developed project-specific timeline and met with Medicine Lake “working group” to discuss Jevne Park CIP process and timeline
- Met with Commission Engineers and St. Louis Park staff regarding Westwood Lake CIP project timeline
- Reviewed and edited Honeywell Pond Final Report
- Reviewed reimbursement documents for Honeywell Pond, Northwood Lake, and Plymouth Creek Restoration Projects

Administration and Education

- Submitted maximum levy request and 2019 CIP project information to County
- Updated administrative calendar, CIP project status table, and CIP webpages
- Communicated with MAWD Executive Director about WMOs joining organization
- Met with Wellington Management, city of Minneapolis, Commissioner Welch and Commission Engineers on future development in Bassett Creek Valley
- Reviewed Golden Valley Surface Water Management Plan
- Responded to residents’ concerns regarding herbicide use along creek and water quality conditions in Sweeney Lake
- Reviewed materials for Sweeney Lake Aeration Study meeting and created agenda