



Bassett Creek Watershed Management Commission

Regular Meeting
Thursday June 18, 2020
8:30 – 11:00 a.m.

Via WebEx – Join the meeting [HERE](#).

To join by phone call 1-408-418-9388 and use Access Code: 126 177 3002 and Password: Bassett (2277388)

AGENDA

1. CALL TO ORDER and ROLL CALL

2. **PUBLIC FORUM ON NON-AGENDA ITEMS** – *Members of the public 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 Commission committee.*

3. APPROVAL OF AGENDA

4. CONSENT AGENDA

- A. Approval of Minutes – May 21, 2020 Commission Meeting
- B. Acceptance of June 2020 Financial Report
- C. Approval of Payment of Invoices
 - i. Keystone Waters, LLC – May 2020 Administrative Services
 - ii. Keystone Waters, LLC – May 2020 Printing Expenses
 - iii. Barr Engineering – May 2020 Engineering Services
 - iv. Lawn Chair Gardener – May 2020 Administrative and Education Services
 - v. Wenck – WOMP Monitoring
 - vi. Kennedy & Graven – April 2020 Legal Services
 - vii. LMCIT – Insurance Coverage
 - viii. ECM Publishers – Public Hearing Notice Publication
 - ix. MMKR – Financial Audit
- D. Approve West Broadway Ave (CSAH81) Bridges Reconstruction Project, Minneapolis & Robbinsdale

5. BUSINESS

- A. Consider Variance Request and Approval of Sanitary Sewer Replacement Project, Minneapolis (20 min)
- B. Consider Approval of Commission Engineer Recommendations Regarding Flood Control Project (15 min)
- C. Consider Submitting Letter of Support for U.S. Army Corps of Engineers Mississippi River Middle Pool Drawdown (10 min)
- D. Consider Approval of Feasibility Study for 2021 Main Stem Lagoon Dredging Project (10 min)
- E. Consider Funding Options for Main Stem Lagoon Dredging Project and Set 2021 Maximum Levy (30 min)
- F. Discuss Meeting Format for July 16th BCWMC Meeting (10 min)

6. COMMUNICATIONS (10 minutes)

- A. Administrator's Report
 - i. Watershed Based Implementation Funding 2nd Convene Meeting
 - ii. Update on BWSR's Performance Review and Assessment Program
- B. Chair
- C. Commissioners
- D. TAC Members

- E. Committees
- F. Education Consultant
 - i. Latest Education Video [Alternative Lawns](#)
- G. Legal Counsel
- H. Engineer
 - i. Sochacki Subwatershed Assessment
 - ii. Sweeney Lake Water Quality Improvement Project

7. INFORMATION ONLY (Information online only)

- A. CIP Project Updates <http://www.bassettcreekwmo.org/projects>
- B. Grant Tracking Summary and Spreadsheet
- C. 2020 BCWMC Administrative Calendar
- D. 2019 WMWA Annual Report
- E. [2020 Salt Symposium](#) (online; registration reimbursement available)
- F. WCA Notices of Decision, Plymouth

8. ADJOURNMENT

Upcoming Meetings & Events

- Bassett Creek Watershed Mgmt Commission Meeting: Thursday July 16th, 8:30 a.m., location TBD
- 2020 Salt Symposium – August 4 – 5; online and live streamed; register at <https://fortinconsulting.com/salt-symposium/>
- Minnesota Water Resources Conference – October 20 – 21; St. Paul River Centre; <https://ccaps.umn.edu/minnesota-water-resources-conference>



Bassett Creek Watershed Management Commission

AGENDA MEMO

Date: June 10, 2020

To: BCWMC Commissioners

From: Laura Jester, Administrator

RE: Background Information for 6/18/20 BCWMC Meeting

1. **CALL TO ORDER and ROLL CALL**
2. **PUBLIC FORUM ON NON-AGENDA ITEMS**
3. **APPROVAL OF AGENDA – ACTION ITEM with attachment**
4. **CONSENT AGENDA**
 - A. Approval of Minutes – May 21, 2020 Commission Meeting- ACTION ITEM with attachment
 - B. Acceptance of June Financial Report - ACTION ITEM with attachment (full report online)
 - 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 2020 Administrative Services
 - ii. Keystone Waters, LLC – May 2020 Printing Expenses
 - iii. Barr Engineering – May 2020 Engineering Services
 - iv. Lawn Chair Gardener – May 2020 Administrative and Education Services
 - v. Wenck – WOMP Monitoring
 - vi. Kennedy & Graven – April 2020 Legal Services
 - vii. LMCIT – Insurance Coverage
 - viii. ECM Publishers – Public Hearing Notice Publication
 - ix. MMKR – Financial Audit
 - D. Approve West Broadway Ave (CSAH81) Bridges Reconstruction Project, Minneapolis & Robbinsdale – ACTION ITEM with attachment - The proposed linear project is located at the northern extents of the Grimes Lake and Bassett Creek Main Stem subwatersheds and results in 7.4 acres of grading, creates 2.56 acres of fully reconstructed impervious surfaces, and results in a decrease of impervious surfaces from 3.64 acres to 3.41 acres within the BCWMC jurisdiction. The project does not trigger BCWMC standards for rate control or water quality and meets erosion and sediment control standards. Staff recommends approval.
5. **BUSINESS**
 - A. Consider Variance Request and Approval of Sanitary Sewer Replacement Project, Minneapolis (20 min) – ACTION ITEM with attachment – The proposed linear project includes replacement of 2,300 linear feet of sanitary sewer, including 75 feet under Bassett Creek at the unused Irving Ave. bridge. The city of Minneapolis requests a variance to Section 8.3 of the BCWMC Requirements document for the utility crossing requirement of a minimum depth of 4.0 feet below the channel invert. See the attached memo with recommendations from the Commission Engineer and correspondence from the city.
 - B. Consider Approval of Commission Engineer Recommendations Regarding Flood Control Project (15 min) – ACTION ITEM with attachments (full inspection report online) – In October 2019, the Commission Engineer inspected the Bassett Creek Double Box Culvert (part of the BCWMC Flood Control Project). Based on inspection observations and evaluation of tunnel condition over time, several repairs are recommended. Staff recommends approving the inspection report and directing the Commission Engineer to prepare an opinion of cost for repairs. Please see memo and report attached (full report online).

- C. Consider Submitting Letter of Support for U.S. Army Corps of Engineers Mississippi River Middle Pool Drawdown (10 min) – **DISCUSSION ITEM no attachment** – *The BCWMC was recently notified by the ACOE that they are developing an Environmental Assessment (EA) for a proposed drawdown of the Middle Pool of the Mississippi River (between Upper and Lower St. Anthony Falls dams). The main purpose of the drawdown is to facilitate ACOE inspections of the concrete walls in this area. The proposed drawdown would take place in the September – November timeframe and offers an excellent opportunity for the BCWMC to perform its 5-year inspection of the deep tunnel (where the Bassett Creek tunnel enters the Mississippi River). The EA is expected to be out for comment later this month. Staff recommends that the BCWMC submit a letter of support to the ACOE on the proposed drawdown.*

- D. Consider Approval of Feasibility Study for 2021 Main Stem Lagoon Dredging Project (10 min) – **ACTION ITEM (see attachment 6Ci from May 2020 meeting)** – *At the May meeting, the Commission reviewed the [feasibility study](#) for this project, received a presentation by the Commission Engineer, and took action approving implementation of Alternative 2, Option 1 (dredging all lagoons to 6-feet). Funding options for that alternative are presented in Item 5E below. Staff recommends action approving the feasibility study so the document can be officially finalized.*

- E. Consider Funding Options for Main Stem Lagoon Dredging Project and Set 2021 Maximum Levy (30 min) – **ACTION ITEM with attachment** – *The attached memo includes a discussion of funding options for the Main Stem Lagoon Dredging Project and my recommendations for a 2021 maximum levy amount.*

- F. Discuss Meeting Format for July 16th BCWMC Meeting (10 min) – **DISCUSSION ITEM no attachment** – *At the May meeting there was discussion about various formats and venues for future Commission meetings. The cities of Plymouth and Golden Valley are discussing and making decisions about building use and access at their respective meetings this week. I will have more information on those decisions at this meeting. Please note that the Governor’s Executive Order 20-74 says that governmental entities are strongly encouraged to hold remote meetings whenever possible as permitted by state or local authority ([Section 6c\(i\)](#)).*

6. COMMUNICATIONS (10 minutes)

- A. Administrator’s Report – **INFORMATION ITEM with attachment**
 - i. Watershed Based Implementation Funding 2nd Convene Meeting
 - ii. Update on BWSR’s Performance Review and Assessment Program
- B. Chair
- C. Commissioners
- D. TAC Members
- E. Committees
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Bassett Creek Watershed Management Commission

DRAFT Minutes of Public Hearing and Regular Meeting
Thursday, May 21, 2020
8:30 a.m.
Via video conference due to the COVID-19 global pandemic

1. CALL TO ORDER and ROLL CALL

On Thursday, May 21, 2020 at 8:31 a.m. via video conference, Chair Prom called the meeting of the Bassett Creek Watershed Management Commission (BCWMC) to order.

Commissioners and city staff present:

City	Commissioner	Alternate Commissioner	Technical Advisory Committee Members (City Staff)
Crystal	Dave Anderson	<i>Vacant Position</i>	<i>Absent</i>
Golden Valley	Stacy Harwell (Treasurer)	Jane McDonald Black	Jeff Oliver
Medicine Lake	<i>Absent</i>	Gary Holter	<i>Absent</i>
Minneapolis	Michael Welch (Vice Chair)	<i>Vacant Position</i>	Liz Stout
Minnetonka	Mike Fruen	<i>Vacant Position</i>	Leslie Yetka
New Hope	<i>Absent</i>	Patrick Crough	Megan Hedstrom
Plymouth	James Prom	<i>Absent</i>	Ben Scharenbroich
Robbinsdale	<i>Vacant Position</i>	Wayne Sicora	Marta Roser, Richard McCoy
St. Louis Park	Jim de Lambert	<i>Absent</i>	Erick Francis
Administrator	Laura Jester, Keystone Waters		
Engineer	Karen Chandler, Jen Koehler, Patrick Brockamp - Barr Engineering		
Recorder	Dawn Pape, Lawn Chair Gardener		
Legal Counsel	Dave Anderson, Kennedy & Graven		
Presenters/ Guests/Public	Alan Catchpool, Kimley-Horn; Steve Christopher, BWSR; Rachael Crabb, Minneapolis Park & Recreation Board; Logan Schmidt and Brady DeVoe, Dominion Development and Acquisition, LLC Sam Trebesch, Loucks; Mike Blank		

2. PUBLIC FORUM ON NON-AGENDA ITEMS

None.

3. APPROVAL OF AGENDA

MOTION: Commissioner Welch moved to approve the agenda. Alternative Commissioner Holter seconded the motion. Upon a rollcall vote, the motion carried 9-0.

4. CONSENT AGENDA

Commissioner Welch asked to remove two items from the consent agenda: 4A Draft Minutes from April 16, 2020 Commission meeting and 4L- New Hope 2020 Infrastructure Improvement Project.

MOTION: Commissioner Welch moved to approve the consent agenda as amended. Alternate Commissioner Holter seconded the motion. Upon a rollcall vote, the motion carried 9-0.

The following items were approved as part of the consent agenda: May financial report, payment of invoices, reimbursement request from Golden Valley for Channel Maintenance Funds, approval of agreement with Met Council for Watershed Outlet Monitoring Program (WOMP), approval of agreement with Met Council for 2020 Citizen Assisted Monitoring Program (CAMP), approval of Updated Data Practices Policy, approval of BCWMC 2019 Annual Report for Submittal to BWSR, acceptance of BCWMC Fiscal Year 2019 Financial Audit, approval of Resolution 20-05 Not to Waive Monetary Limits on Municipal Tort Liability, and approval of Ridgedale Sears Redevelopment Project, Minnetonka.

The general and construction account balances reported in the May 2020 Financial Report are as follows:

Checking Account Balance	804,758.03
TOTAL GENERAL FUND BALANCE	804,758.03
TOTAL CASH & INVESTMENTS ON-HAND (5/13/20)	2,860,324.82
CIP Projects Levied – Budget Remaining	(4,956,023.52)
Closed Projects Remaining Balance	(584,746.41)
2012-2017 Anticipated Tax Levy Revenue	8,425.14
2018 Anticipated Tax Levy Revenue	11,050.60
Anticipated Closed Project Balance	(565,270.67)

5. PUBLIC HEARING

A. Receive Comments from Cities and Public on Proposed Minor Plan Amendment

Chair Prom opened the public hearing at 8:39. Administrator Jester gave an overview of the purpose for the public hearing – to hear comments on the proposed minor plan amendment including additions to the Capital Improvement Program and revisions to the wetland management policies.

There were no citizen comments made during the hearing. Administrator Jester noted that Hennepin County requested the comment period be extended until August 14th to accommodate County Board meeting schedules.

MOTION: Commissioner Welch moved to close the public meeting and extend the comment period to August 14, 2020. Alternate Commissioner Crough seconded the motion. Upon a rollcall vote, the motion carried 9-0.

The public hearing closed at 8:42 a.m.

6. BUSINESS

A. Consider Agreement with Dominion Regarding CIP Funds for Four Seasons Mall Redevelopment Project

Administrator Jester noted that at the April meeting the Commission conditionally approved the project plans for the redevelopment of Four Seasons Mall site by Dominion, including plans to remove at least 100 lbs. of total phosphorus “above and beyond” the required treatment, making the project eligible for BCWMC CIP funds. At that meeting, the agreement with Dominion for design, construction, and maintenance of the project and to transfer CIP funds was tabled until this meeting. She noted that the attached agreement shows changes from the last draft which was emailed just ahead of the April meeting. She noted it included some revisions reflecting additional input from the Commission’s Legal Counsel and Vice Chair Welch. Dominion legal counsel reviewed and approved the latest revisions. Commissioner Welch offered praise for Attorney Dave Anderson for his hard work on this. There was no other discussion.

MOTION: Commissioner Welch moved to approve the agreement with Dominion regarding CIP funds for the Four Seasons Mall Redevelopment Project. Alternate Commissioner Crough seconded the motion. Upon a rollcall vote, the motion carried 9-0.

B. Consider Agreement with City of Plymouth Regarding Four Seasons Mall Redevelopment Project

Administrator Jester noted that this item was also tabled at the April meeting and that an agreement with the city of Plymouth is needed to ensure that access is granted by the city for project construction and that ongoing maintenance will be performed by the city, when appropriate, and required by the city of the developer. She reported the attached agreement was drafted by BCWMC Legal Counsel and reviewed by the city’s attorney.

There was no discussion.

MOTION: Commissioner Welch moved to approve the agreement with City of Plymouth regarding Four Seasons Mall Redevelopment Project. Commissioner Anderson seconded the motion. Upon a rollcall vote, the motion carried 9-0.

C. Review Draft Feasibility Studies for 2021 Capital Improvement Projects

ii. Mt. Olivet Stream Restoration and Parkers Lake Drainage Improvement Projects

Administrator Jester reported that at the August 2019 meeting, the Commission approved a proposal from the Commission Engineer to complete a feasibility study for two projects, which are both in Plymouth. Commission Engineer Jen Koehler gave an overview of the projects:

The Mt. Olivet Stream Stabilization Project and the Parkers Lake Drainage Improvement Project are both stream restoration projects aimed at reducing erosion, total suspended solids and phosphorous loading to Medicine Lake and Parkers Lake downstream, respectively. Engineer Koehler also reported on extremely high chloride concentrations originating from a subwatershed north of Parkers Lake and flowing down through the drainage area to be stabilized. She noted that Parkers Lake is impaired for chlorides and that the CIP project could include chloride reduction practices and projects. There was some discussion about the possibility of County Road 6 being a significant source of chlorides in the area.

Engineer Koehler then reviewed the Mt. Olivet feasibility study more closely, noting it looked at two different alternatives, both of which use mostly bio-stabilization techniques. Alternative 1 includes wetland restoration and a manhole drop structure off the Mt Olivet Church parking lot. Alternative 2 includes riprap at the edge of the church parking lot and a stream meander rather than wetland restoration. Mt. Olivet Church is interested in

adding a pedestrian bridge outside of the project scope. Engineer Koehler noted that staff recommends Alternative 1 after input from the city was received as well as from the public meeting.

There was a discussion about tree removal and replacement. Engineer Koehler replied that tree replacements are included in the budget and that it is a balancing act between leaving trees and vegetation restoration. Engineer Koehler added that tree removal was discussed at the public meeting and that there may be opportunities to engage church volunteers in native plantings. She noted there were no negative comments received at the public meeting.

TAC member Ben Scharenbroich mentioned that the City of Plymouth hasn't heard from private property owners, but many of the trees within the ravine are undercut and would fall anyway. Some trees that are removed would be used in the stabilization of the banks.

Administrator Jester clarified that engagement with the apartment complex to the east and a private property owner in the northwest corner of the project area will be needed. She also reiterated that building a pedestrian bridge would be outside the scope of the CIP funding.

Commissioner Welch commented that the large amount of impervious surface at the church made for a good education opportunity about stormwater management. He also strongly encouraged outreach to the apartment and others.

MOTION: Commissioner Harwell moved to approve the Mount Olivet Stream Restoration feasibility report and to select Alternative 1 for implementation. Commissioner Fruen seconded the motion. Upon a rollcall vote, the motion carried 8-1, with the City of Minneapolis voting against the motion.

Engineer Koehler then presented the results of the feasibility study for the Parkers Lake Drainage Improvement Project. She noted that Alternatives 1 and 2 are not very feasible because permitting by the U.S. Army Corps of Engineers wouldn't be likely and the alternatives are expensive with high cost per pound pollutant removal figures. She reported that Alternatives 4 and 5 use more traditional stormwater best management practice strategies. Alternative 4 would use enhanced filtration and but would not greatly improve water quality. Alternatives 5a/5b would use wet retention ponds. Engineer Koehler directed the Commission's attention to Alternatives 3 and 6 as the preferred alternatives. Alternative 3 involves stream stabilization utilizing bio-engineering techniques and alternative 6 includes chloride reduction demonstration projects in the northern watershed tributary to Parkers Lake to reduce salt usage and chloride loads to the lake.

There was a brief discussion on using trees removed from one project area in another project and how bidding would work. TAC member Scharenbroich noted the city has space to store trees until needed for a project.

Engineer Koehler reviewed examples of chloride-reduction projects and their costs noting the information came from the Nine Mile Creek Watershed District and the City of Plymouth. Commissioner Harwell asked about using salt with permeable pavements because there may be a groundwater contamination problem. Engineer Koehler replied that permeable pavements typically do not need as much salt because ice doesn't build up.

Commissioner Welch agreed with Engineer Koehler's assessment and he shared that he thought Alternative 3 is a straightforward selection and Alternative 6 offers a great opportunity for community engagement, which will take a considerable amount of staff time. He was not sure whether it should be included with a capital improvement project.

TAC member Scharenbroich added that he thought about 98% of this Parker's Lake watershed is privately owned, so responsibility does rest on individual property management. He agreed that it is crucial to educate the property owners and the city would take the lead on doing that.

Dawn Pape also noted her support for Alternative 6. In fact, BCWMC's education program is aiming to achieve the "bottom up" approach with educating property owners as opposed to the state-wide program which is

taking the “top down” approach with educating applicators. She thought it offers the perfect opportunity to implement what the Commission has been talking about for so long. Commissioner Harwell agreed and added that the cost/benefit for Alternative 3 is so low that it makes sense to implement.

MOTION: Commissioner Harwell moved to approve the Parkers Lake Drainage Improvement Project portion of this feasibility study and to implement Alternatives 3 and 6. Alternate Commissioner Holter seconded the motion.

[Commissioner Harwell leaves the meeting. Alternate Commissioner McDonald Black is voting member for Golden Valley.]

Discussion: Commissioner Welch noted that for the chloride reduction portion of the project, staff should determine which approaches may make sense or be viable for the area.

Commissioner Welch offered an amendment to the motion directing Administrator Jester, Dawn Pape, and Plymouth city staff to work with property owners and further analyze alternatives. He noted this may help the county be more comfortable with the levy for this project. Alternate Commissioner McDonald Black added that this was a great opportunity to have measurable results with monitoring station already in place. TAC member Scharenbroich noted it’s possible the city’s new high efficiency street sweeper may be able to sweep private properties with proper agreements in place.

VOTE: Upon a rollcall vote, the motion carried 9-0.

i. Main Stem Lagoon Dredging Project

Administrator Jester noted that in August 2019, the Commission approved a proposal from the Commission Engineer to complete a study to examine the feasibility of dredging accumulated sediment from three of seven lagoons in the Main Stem of Bassett Creek just north of Highway 55, in Theodore Wirth Regional Park. Commission Engineer Chandler provided the Commission with the details of the study results as well as a history of the development of the lagoons and the goals to restore the lagoons’ original pool storage, improve water quality, and provide flooding storage. She noted that sediment islands and deltas have formed in the lagoons over time and that some of the islands have scrub trees growing on them. She reported the project would remove accumulated sediment from the lagoons to re-establish their original aesthetic and function and be implemented in 2021 and 2022.

Engineer Chandler reported that based on concentrations of contaminants in the sediment of the lagoons, all dredged material would require landfill disposal. She reviewed two alternatives: dredging to a four-foot depth or a six-foot depth. She recommends Alternative 2, six-foot dredging depth, because this alternative has a significantly longer project lifespan and increased project benefits. Within this alternative, there are three options. Option 1 includes all lagoons, Option 2 is only lagoon E, and Option 3 is lagoon D only—which is the lowest cost. Engineer Chandler noted that the project cost is very high due to the contaminated soils, but that the cost benefit for pollutant removal is very low compared to other Commission CIP projects. She believes that Option 1 (dredging all lagoons) is the best option and noted the project could be implemented in future years and the cost can be spread over multiple years.

Commissioner Welch noted that originally, he didn’t believe the project would offer much benefit and was surprised to see the pollutant reduction numbers and the low cost per pound pollutant removal. He noted these are toxic lagoons in a popular park and that sediment leaving the lagoons and flowing downstream contaminates Bassett Creek and the Mississippi River. There was discussion about the permitting process, which would be complicated and lengthy. It was noted that although the project is extremely expensive, it addresses multiple Commission goals including improving water quality, reducing flooding, and improving habitats – all in an underserved area in a regional resource.

Rachael Crabb with MPRB echoed Commissioner Welch in restating that this sediment is very contaminated. She will continue to work with the MPRB to possibly offer some CIP funds to the project.

MOTION: Commissioner Welch moved to approve Alternative 2, Option 1 (dredging all lagoons to a 6-foot depth) for the Main Stem Lagoon Dredging Project. Alternate Commissioner McDonald Black seconded the motion.

Discussion: Commissioner Anderson and Chair Prom voiced concerns about the high cost and the possibility of pushing out other projects. Commissioner Anderson indicated he is not comfortable with voting in favor of the project until he can understand how it will be funded.

Alternate Commissioner McDonald Black agreed it was daunting to spend so much money, but noted the project has a high benefit/cost. Administrator Jester gave her opinion on how high the cost of the project may make it unviable right now given the economic crisis of the country. Commissioner Welch stated the Commission should get started with investing funding options and asked that Administrator Jester bring options back to the June meeting before a maximum levy for 2021 is set.

Upon a rollcall vote, the motion carried 6-3, with the Cities of Crystal, Plymouth and St. Louis Park voting against.

D. April Minutes revision (Item 4A from Consent Agenda)

MOTION: Commissioner Welch moved to amend the minutes to reflect that the April Meeting was held via web video conference due to the global pandemic and to approve the minutes as amended. Alternate Commissioner McDonald Black seconded the motion. Upon a rollcall vote, the motion carried 9-0.

E. Approval of New Hope 2020 Infrastructure Improvement Project (Item 4L from Consent Agenda)

Commissioner Welch noted that this project is an example of a linear project with 6 acres of fully redeveloped impervious surface but no treatment requirements due to the Commission's revised standards for linear projects. He noted the Commission should reassess their linear project requirements. TAC member Megan Hedstrom (New Hope) noted the city will be implementing a water quality treatment project for the watershed outside of this project, which will be submitted to the Commission for review.

MOTION: Alternate Commissioner Crough moved to approve the New Hope 2020 Infrastructure Improvement Project. Commissioner Anderson seconded the motion. Upon a rollcall vote, the motion carried 8-0, with Minneapolis abstaining from the vote.

F. Review Budget Committee Recommendations on 2021 Operating Budget

Budget Committee Chair McDonald Black reviewed the proposed 2021 operating budget noting that it includes a 1.5% increase in city assessments. She reported the BCW/MC Budget Committee met twice in April to discuss 2021 budgets. Over the two meetings, the committee reviewed and clarified activities, needs, and annual changes in budget levels for several line items with input from the Administrator, Commission Engineer, and TAC. She noted the committee discussed city assessments, Channel Maintenance Funds, technical services, monitoring, administrator hours, MAWD dues, education activities, number of meetings, use of fund balance, etc.

Committee Chair McDonald Black reported on the revenue collected through some activities, noting that information was added to the budget spreadsheet. She noted that technical services continue to increase slightly due to additional work requested of the engineers. She also indicated a need to have a discussion about MAWD membership and whether or not it offers enough benefit.

Commissioner Welch complimented the committee for their great work and added that he thought it is really important to be a member of MAWD. Administrator Jester updated the Commission that the 2021 MAWD dues are actually \$3,750 in 2021 and expects them to go to \$7,500 in 2022.

Bassett Creek Watershed Commission
 General Fund (Administration) Financial Report
 Fiscal Year: February 1, 2020 through January 31, 2021
 MEETING DATE: June 18, 2020

Item 4B.
 BCWMC 6-18-20
 Full Document
 Online

(DITED)

BEGINNING BALANCE	13-May-2020	804,758.03
ADD:		
General Fund Revenue:		
Interest less Bank Fees		0.00
Permits:		
Northern States Power	2020-11	1,500.00
City of New Hope	2020-12	1,500.00
ISD 284	2020-09	2,500.00
ISD 284	2020-10	2,500.00
Wenck	2020-14	2,500.00
SRF Consulting	2020-13	1,500.00
City of Plymouth	2020-15	1,500.00
Other:		
Reimbursed Construction Costs		11,280.90
	Total Revenue and Transfers In	24,780.90
DEDUCT:		
Checks:		
3305 Barr Engineering	May Engineering	45,706.65
3306 Kennedy & Graven	April Legal	2,975.05
3307 Keystone Waters LLC	May Admin	5,032.14
3308 Lawn Chair Gardener	May Admin Services	1,231.25
3309 Wenck Associates	May WOMP	1,470.00
3310 League of MN Cities	Insurance	7,734.00
3311 MMKR	Audit-Final	1,850.00
3312 ECM Publisher	PH Notice	404.60
	Total Checks/Deductions	66,403.69
Outstanding from previous month:		
3299 Finance & Commerce	PH Notice	79.77
3304 ISD #284	Refund Excess Permit Fee	1,000.00
ENDING BALANCE	8-Jun-2020	763,135.24

Bassett Creek Watershed Commission
 General Fund (Administration) Financial Report
 Fiscal Year: February 1, 2020 through January 31, 2021
 MEETING DATE: June 18, 2020

(UNAUDITED)

	2020/2021 BUDGET	CURRENT MONTH	YTD 2020/2021	BALANCE
OTHER GENERAL FUND REVENUE				
ASSESSMENTS TO CITIES	550,450	0.00	512,820.00	37,630.00
PROJECT REVIEW FEES	50,000	13,500.00	34,500.00	15,500.00
WOMP REIMBURSEMENT	5,000	0.00	0.00	5,000.00
TRANSFERS FROM LONG TERM FUND & CIP	42,000	0.00	0.00	42,000.00
CIP ADMINISTRATIVE CHARGE	30,000			
LONG TERM MAINT-FLOOD CONTROL PRO	12,000			
USE OF FUND BALANCE	15,000	0.00	0.00	15,000.00
METROPOLITAN COUNCIL - LRT		0.00	0.00	
THREE RIVERS PARK DISTRICT - CURLY LEAF POND		0.00	0.00	
REVENUE TOTAL	662,450	13,500.00	547,320.00	115,130.00
EXPENDITURES				
ENGINEERING & MONITORING				
TECHNICAL SERVICES	130,000	8,939.50	59,273.19	70,726.81
DEV/PROJECT REVIEWS	75,000	10,659.65	36,227.75	38,772.25
NON-FEE/PRELIM REVIEWS	20,000	110.50	6,229.00	13,771.00
COMMISSION AND TAC MEETINGS	12,000	712.50	2,830.20	9,169.80
SURVEYS & STUDIES	10,000	0.00	0.00	10,000.00
WATER QUALITY/MONITORING	102,600	9,883.45	37,174.90	65,425.10
WATER QUANTITY	6,500	501.25	2,466.44	4,033.56
ANNUAL FLOOD CONTROL INSPECTIONS	12,000	1,946.00	11,810.50	189.50
REVIEW MUNICIPAL PLANS	2,000	700.00	1,260.00	740.00
WOMP	20,500	2,442.90	6,147.58	14,352.42
APM / AIS WORK	30,000	0.00	6,634.42	23,365.58
ENGINEERING & MONITORING TOTAL	420,600	35,895.75	170,053.98	250,546.02
PLANNING				
Next Generation Plan Development	18,000	0.00	0.00	18,000.00
MAINTENANCE FUNDS TOTAL	18,000	0.00	0.00	18,000.00
ADMINISTRATION				
ADMINISTRATOR	69,200	4,824.00	22,554.00	46,646.00
MN ASSOC WATERSHED DIST DUES	500	0.00	500.00	0.00
LEGAL COSTS	15,000	2,975.05	5,771.00	9,229.00
AUDIT, INSURANCE & BONDING	18,000	9,584.00	18,684.00	(684.00)
FINANCIAL MANAGEMENT	3,500	0.00	0.00	3,500.00
MEETING EXPENSES	1,500	0.00	223.50	1,276.50
ADMINISTRATIVE SERVICES	15,000	1,063.14	3,533.28	11,466.72
ADMINISTRATION TOTAL	122,700	18,446.19	51,265.78	71,434.22
OUTREACH & EDUCATION				
PUBLICATIONS/ANNUAL REPORT	1,300	0.00	1,000.00	300.00
WEBSITE	1,000	0.00	0.00	1,000.00
PUBLIC COMMUNICATIONS	1,000	404.60	484.37	515.63
EDUCATION AND PUBLIC OUTREACH	22,000	376.25	2,486.11	19,513.89
WATERSHED EDUCATION PARTNERSHIPS	15,850	0.00	9,500.00	6,350.00
OUTREACH & EDUCATION TOTAL	41,150	780.85	13,470.48	27,679.52
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	0.00	10,000.00
TMDL WORK TOTAL	10,000	0.00	0.00	10,000.00
TOTAL EXPENSES	662,450	55,122.79	234,790.24	427,659.76

BCWMC Construction Account
 Fiscal Year: February 1, 2020 through January 31, 2021
 June 2020 Financial Report

(UNAUDITED)

Cash Balance 05/13/2020			
Cash		265,680.61	
	Total Cash		265,680.61
Investments:			
Minnesota Municipal Money Market (4M Fund)		2,500,000.00	
2018-20 Dividends		88,193.54	
2020-21 Dividends		6,450.67	
Dividends-Current		461.14	
	Total Investments		<u>2,595,105.35</u>
	Total Cash & Investments		2,860,785.96
Add:			
Interest Revenue (Bank Charges)		0.00	
State of MN - Sweeney Lake Water Quality Improvement Project		4,527.00	
State of MN - Plymouth Creek Restoration Project		185,468.96	
State of MN - Bryn Mawr Water Quality Improvement Project		200,000.00	
Hennepin County - Plymouth Creek Restoration Project		50,000.00	
	Total Revenue		439,995.96
Less:			
CIP Projects Levied - Current Expenses - TABLE A		(6,604.90)	
Proposed & Future CIP Projects to Be Levied - Current Expenses - TABLE B		(2,269.50)	
	Total Current Expenses		<u>(8,874.40)</u>

Total Cash & Investments On Hand 6/8/2020 3,291,907.52

Total Cash & Investments On Hand	3,291,907.52
Current Anticipated Levy -2020 (July 20/Dec 20/Jan 21)	1,500,000.00
CIP Projects Levied - Budget Remaining - TABLE A	(4,548,198.60)
Secured Grant Funds (CIP Projects Levied)-Not yet received	710,060.00
2021 Expected Levy for 2020/2021 Projects	630,080.00
Closed Projects Remaining Balance	1,583,848.92
2015 - 2018 Anticipated Tax Levy Revenue - TABLE C	19,326.30
2019 Anticipated Tax Levy Revenue - TABLE C	10,952.29
Anticipated Closed Project Balance	1,614,127.51
Proposed & Future CIP Project Amount to be Levied - TABLE B	0.00

TABLE A - CIP PROJECTS LEVIED

	Approved Budget	Current Expenses	2020/21 YTD Expenses	INCEPTION To Date Expenses	Remaining Budget	Grant Funds Received- included in Cash Balances	Secured Grant Funds	2021 Expected Levy for 2020/2021 Projects
Projects Completed-to be removed at year end								
Northwood Lake Pond (NL-1) ²	1,433,740							
Close Project - Use Closed Project Funds	13,403	1,447,143	0.00	0.00	1,447,143.38	0.00	700,000	
Plymouth Creek Restoration (2017 CR-P)	863,573	627,329	0.00	0.00	627,329.10	0.00	435,468	
Close Project - funds to Closed Project Fund	(236,244)							
Current Projects								
Four Seasons Mall Area Water Quality Proj (NL-2)		990,000	0.00	7,319.00	182,350.56	807,649.44		
2014								
Schaper Pond Enhance Feasibility/Project (SL-1)(SL-3)		612,000	0.00	3,146.00	431,508.45	180,491.55		
Twin Lake Alum Treatment Project (TW-2)		163,000	0.00	0.00	91,037.82	71,962.18		
2017								
Main Stem Cedar Lk Rd-Dupont (2017CR-M)		2017 Levy 400,000	1,064,472	0.00	0.00	132,029.25	932,442.75	
		2018 Levy 664,472					150,300	
2018								
Bassett Creek Park & Winnetka Ponds Dredging (BCP-2)	1,000,000							
Mar-19 Budget Adj	114,301							
Mar-19 From Channel Maint	9,050	0.00	0.00	1,063,148.32	60,202.68			
2019								
Decola Ponds B&C Improvement(BC-2,BC-3,BC-8)	1,031,500	0.00	787,615.09	894,212.65	137,287.35	34,287	34,287	
Westwood Lake Water Quality Improvement Project(Feasibility)	404,500	0.00	174,486.76	223,640.96	180,859.04			
2020								
Bryn Mawr Meadows (BC-5)	912,000	0.00	0.00	97,687.03	814,312.97	200,000	200,000	412,000
Jevne Park Stormwater Mgmt Feasibility (ML-21)	500,000	0.00	0.00	46,390.75	453,609.25			
Crane Lake Improvement Proj (CL-3)	380,000	0.00	0.00	12,000.85	367,999.15			
Sweeney Lake WQ Improvement Project (SL-8)	568,080	6,604.90	25,547.76	26,697.76	541,382.24	4,527	325,473	218,080
	<u>9,823,375</u>	<u>6,604.90</u>	<u>998,114.61</u>	<u>5,275,176.88</u>	<u>4,548,198.60</u>		<u>710,060.00</u>	<u>630,080.00</u>

TABLE B - PROPOSED & FUTURE CIP PROJECTS TO BE LEVIED

	Approved Budget - To Be Levied	Current Expenses	2020/21 YTD Expenses	INCEPTION To Date Expenses	Remaining Budget
2021					
Main Stem Dredging Project (BC-7)	0	1,023.50	32,095.00	74,289.72	(74,289.72)
Mt Olivet Stream Restoration (ML-20)	0	105.00	14,248.50	35,831.92	(35,831.92)
Parkers Lake Stream Restoration (PL-7)	0	1,141.00	24,105.90	57,088.12	(57,088.12)
2021 Project Totals	0	2,269.50	70,449.40	167,209.76	(167,209.76)
Total Proposed & Future CIP Projects to be Levied	0	2,269.50	70,449.40	167,209.76	(167,209.76)

BCWMC Construction Account

Fiscal Year: February 1, 2020 through January 31, 2021

(UNAUDITED)

June 2020 Financial Report

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
2020 Tax Levy	1,500,000.00		1,500,000.00				1,500,000.00	1,500,000.00
2019 Tax Levy	1,436,000.00		1,436,000.00			1,425,047.71	10,952.29	1,436,000.00
2018 Tax Levy	1,346,815.00		1,346,815.00			1,335,764.40	11,050.60	947,115.00
2017 Tax Levy	1,303,600.00	(10,691.48)	1,292,908.52			1,287,711.00	5,197.52	1,303,600.00
2016 Tax Levy	1,222,000.00	(9,526.79)	1,212,473.21			1,210,070.71	2,402.50	1,222,000.00
2015 Tax Levy	1,000,000.00	32.19	1,000,032.19			999,356.51	675.68	1,000,000.00
				<u>0.00</u>			<u>30,278.59</u>	

OTHER PROJECTS:

	Approved Budget	Current Expenses / (Revenue)	2020/21 YTD Expenses / (Revenue)	INCEPTION To Date Expenses / (Revenue)	Remaining Budget
TMDL Studies					
TMDL Studies	135,000	0.00	0.00	107,765.15	27,234.85
TOTAL TMDL Studies	135,000	0.00	0.00	107,765.15	27,234.85
Flood Control Long-Term					
Flood Control Long-Term Maintenance	694,573	2,406.50	2,526.50	411,696.41	
Less: State of MN - DNR Grants		0.00	0.00	(141,846.90)	
	694,573	2,406.50	2,526.50	269,849.51	424,723.49
Annual Flood Control Projects:					
Flood Control Emergency Maintenance	500,000	0.00	0.00	0.00	500,000.00
Annual Water Quality					
Channel Maintenance Fund	415,950	0.00	11,453.70	267,073.30	148,876.7
Metro Blooms Harrison Neighborhood CWF Grant Project					
BWSR Grant	134,595	0.00	0.00	87,892.89	46,702.11
				(67,298.00)	(67,298.00)
	134,595	0.00	0.00	20,594.89	
Total Other Projects	1,880,118	2,406.50	13,980.20	597,984.85	1,080,239.15



Memorandum

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Barr)
Subject: Item 4D: West Broadway Ave (CSAH81) Bridges Reconstruction – Minneapolis and Robbinsdale, MN
BCWMC June 18, 2020 Meeting Agenda
Date: June 8, 2020
Project: 23270051 2020 2218

4D West Broadway Avenue (CSAH81) Bridges Reconstruction – Minneapolis and Robbinsdale, MN BCWMC 2020-13

Summary:

Proposed Work: Bridge, roadway, and trail reconstruction, and associated utility improvements including storm sewer

Basis for Review at Commission Meeting: Linear project with more than five acres of disturbance

Impervious Surface Area: Decrease 0.23 acres

Recommendation: Approval

General Project Information

The proposed linear project is located at the northern extents of the Grimes Lake and Bassett Creek Main Stem subwatersheds, generally at and around the intersection of West Broadway Avenue (CSAH81), Theodore Wirth Parkway, Lowry Avenue (CSAH 153), and Oakdale Avenue in the cities of Minneapolis and Robbinsdale (see figure). The proposed linear project includes reconstruction of bridges, roads, and trails, and associated utility improvements including storm sewer. The proposed linear project results in 7.4 acres of grading (disturbance), creates 2.56 acres of fully reconstructed impervious surfaces, and results in a decrease of impervious surfaces from 3.64 acres (existing) to 3.41 acres (proposed) within the BCWMC jurisdiction.

Floodplain

The proposed linear project does not involve work in the BCWMC 100-year floodplain; therefore, BCWMC floodplain review is not required.

Wetlands

The proposed linear project does not appear to involve work in or directly adjacent to wetlands. BCWMC wetland review is not required.

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Barr)
Subject: Item 4D: West Broadway Avenue (CSAH 81) Bridges Reconstruction – Minneapolis and Robbinsdale, MN
Date: June 8, 2020
Page: 2

Rate Control

The proposed linear project does not create one or more acres of net new impervious surfaces; therefore, BCWMC rate control review is not required. However, drainage patterns will generally remain the same between existing and proposed conditions, and the proposed project includes a reduction of impervious surfaces.

Water Quality

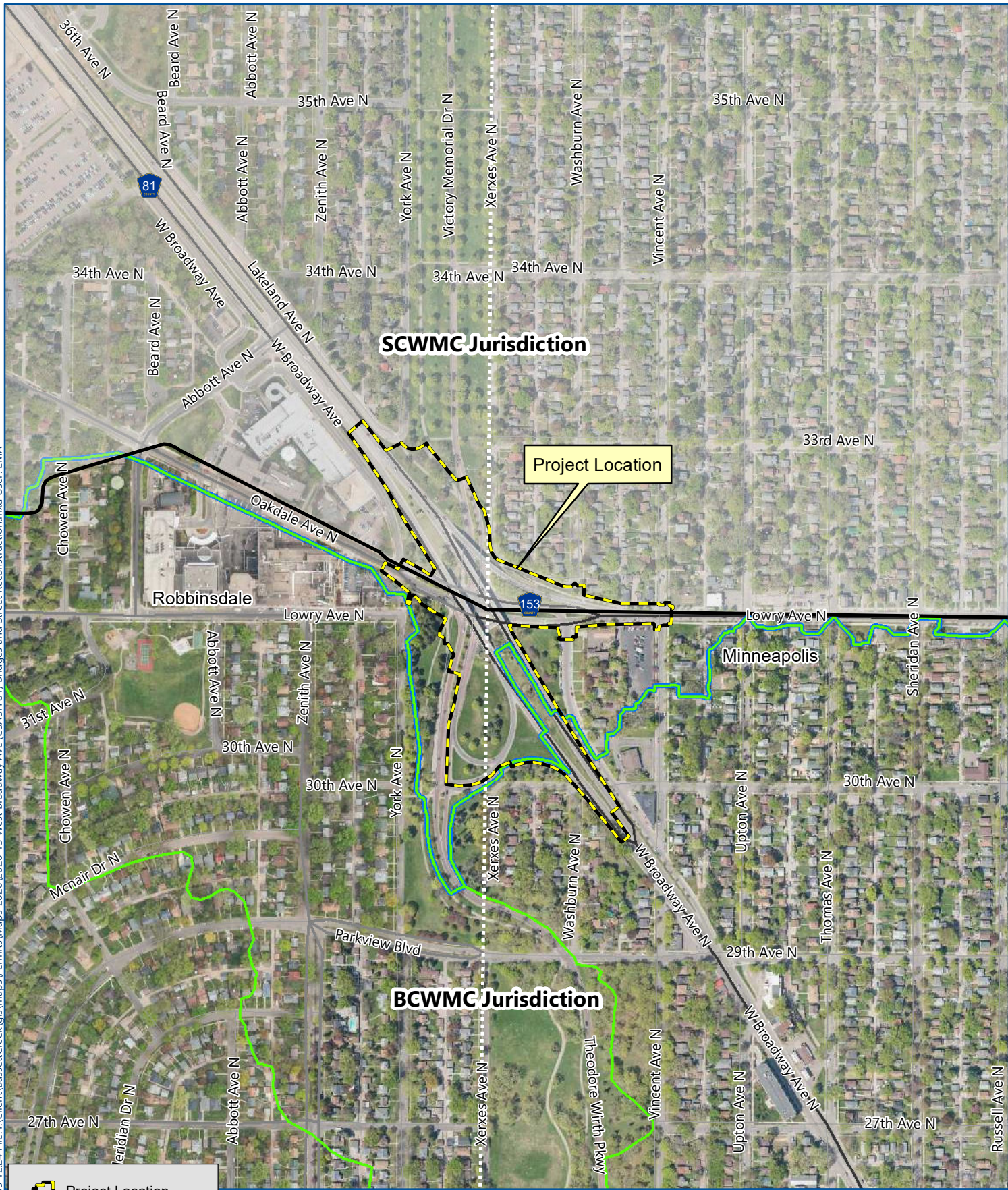
The proposed linear project does not create one or more acres of net new impervious surfaces; therefore, BCWMC water quality review is not required. However, the proposed linear project includes a reduction of impervious surface and the applicant indicated that the project was designed to maximize the amount of runoff from CSAH81 that is routed to ditches and infield ponding areas in order to maximize pretreatment and sediment removal.







Erosion and Sediment Control

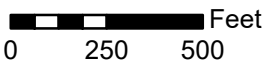
The proposed linear project results in one or more acres of land disturbance; therefore, the proposed project must meet the BCWMC erosion and sediment control requirements. Proposed temporary erosion and sediment control features include rock construction entrances, sediment control logs, silt fence, catch basin inlet protection, culvert inlet protection, rapid stabilization, and hydromulch. Permanent erosion and sediment control features include stabilization with seeding, hydromulch, and erosion control blanket.

Recommendation

Approval



-  Project Location
-  Municipality
-  BCWMC Legal Boundary
-  Major Subwatershed
-  BCWMC Hydrologic Boundary
-  Bassett Creek



BCWMC #2020-13
 WEST BROADWAY AVE
 (CSAH81) BRIDGES AND
 STREET RECONSTRUCTION
 Minneapolis &
 Robbinsdale, MN
 LOCATION MAP



Memorandum

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Barr)
Subject: Item 5A: Irving Avenue Sanitary Sewer Replacement – Minneapolis, MN
BCWMC June 18, 2020 Meeting Agenda
Date: June 11, 2020
Project: 23270051 2020 2221

5A Irving Avenue Sanitary Sewer Replacement – Minneapolis, MN BCWMC 2020-16

Summary:

Proposed Work: Sanitary sewer replacement

Basis for Review at Commission Meeting: Work in floodplain; utility crossing that disturbs the bed or banks of the creek, variance request for installing new utility pipe crossing with less than 4 feet of cover.

Impervious Surface Area: N/A

Recommendations:

- A. Approval of a variance to Section 8.3 of the BCWMC Requirements document for utility crossing requirement of a minimum depth of 4.0 feet below the channel invert.
- B. Conditional approval of the entire project.
- C. A separate BCWMC application shall be submitted for review of the diversion and dewatering plan and authorize Commission Engineer to review and approve application without bringing back to the BCWMC.

General Project Information

The proposed linear project is located in the Bassett Creek Main Stem subwatershed, within the Irving Avenue right of way, the Minneapolis impound lot, and Bryn Mawr Meadows Park in Minneapolis. The proposed linear project includes replacement of 2,300 linear feet of sanitary sewer, including 75 linear feet under Bassett Creek. Recent pipe inspections have revealed that at least a portion of the system is compromised. The proposed linear project results in 0.92 acres of grading (disturbance) and no change in impervious surfaces from the 2.04 acres of impervious within the project limits in existing conditions. A new 24-inch diameter ductile iron pipe will be installed across Bassett Creek in the location of the existing Irving Avenue Bridge. The existing 48-inch diameter and 52-inch equivalent diameter pipes will continue to convey wastewater until the new pipe is constructed. Due to unfavorable soils in the area, the new pipe must be installed on piles via open cut construction. Once the new pipe is in service, the existing pipe will be abandoned in place with high density controlled low strength material (CLSM). The BCWMC administrator and technical staff have been involved in several preliminary coordination meetings and communications regarding this project. Anticipated construction schedule is from September 2020

through September 2021. Construction for the Bassett Creek crossing will be during low-flow periods in the winter of 2020-2021. Attached is a copy of the City's May 27, 2020 letter to the Commission.

Floodplain

The proposed linear project includes work in the Bassett Creek floodplain. The October 2019 BCWMC Requirements for Improvements and Development Proposals (Requirements) document ... *requires that projects within the floodplain must maintain no net loss in floodplain storage and no increase in flood level at any point along the trunk system* (managed to at least a precision of 0.00 feet). The floodplain elevation of Bassett Creek is 811.2 feet NAVD88 downstream of Irving Avenue, and 811.3 feet NAVD88 upstream of Irving Avenue.

The Irving Avenue wooden bridge and abutments are no longer maintained and will be removed as part of the project, in advance of the sanitary pipe installation. The Metropolitan Council WOMP station, including the flow meter operated by BCWMC, will be relocated and the stairs adjacent to the bridge will be removed.

Documentation was not provided to evaluate the impact to Bassett Creek of removing the Irving Avenue Bridge and abutments, but we generally expect this change to be an improvement on existing conditions.

Rate Control

The proposed linear project does not create one or more acres of net new impervious surfaces; therefore, BCWMC rate control review is not required.

Water Quality

The proposed linear project does not create one or more acres of net new impervious surfaces; therefore, BCWMC water quality review is not required.

Erosion and Sediment Control

The proposed linear project does not result in one or more acres of land disturbance; therefore, BCWMC erosion and sediment control is not required. However, proposed temporary erosion and sediment control features include rock construction entrances, sediment control logs, silt fence, and catch basin inlet protection. Proposed permanent erosion and sediment control features include stabilization with seeding, erosion control blanket, and other features within the creek as noted below.

Lakes, Streams, and Wetlands

The proposed linear project includes bridge removal and pipe installation that will affect the Bassett Creek streambed and streambanks. As noted earlier, open cut construction is necessary to install the piles and pipe, which will result in disturbance of the creek bed and banks. The open cut construction will also require the temporary diversion of Bassett Creek. The applicant proposes to construct a temporary channel on the south side of Bassett Creek, approximately 225 feet long; its width and depth will be determined by the contractor based on their method of construction. The applicant will require that the contractor construct watertight embankment dams upstream and downstream of the work area. Once the work area in the creek is dry, the applicant anticipates supporting the open cut and pipe installation work area with sheeting and shoring. Should flows exceed the diversion channel's capacity, the excess flows would overtop the embankment and flow through the work area (i.e., in the creek channel).

The work is proposed to be completed during months with normally lower flows (i.e., in the winter) to reduce land use and environmental impacts. The applicant reviewed twenty years of Bassett Creek flow data collected by the BCWMC/MCES at Irving Avenue to gain a better understanding of the diversion requirements. The work within the creek is anticipated to take two to three months to complete. The contractor will be required to submit their diversion and dewatering design and plans to the City and BCWMC for review and approval prior to installation.

The cross-section of the creek will be restored to match the existing elevations and grades. The applicant used the City of Minneapolis/BCWMC CIP Bassett Creek Main Stem Stabilization Project as the basis for the proposed creek restoration. Proposed stream restoration measures include riprap on the stream bed and banks (toe protection), rock cross vanes, and seeding. As requested by the City, the Commission Engineer provided comments, in the recommendation section, suggesting a few changes to the in-stream structures to better tie into the Main Stem project upstream and downstream of the bridge.

The City of Minneapolis is the local government unit (LGU) responsible for administering the Wetland Conservation Act; therefore, BCWMC wetland review is not required. However, the applicant provided an exhibit identifying a 50-ft. buffer from the edge of the Bassett Creek wetland and indicated the areas within the buffer will be restored.

Water Resources

Soil contamination has been identified within the project area. Excavation, removal and disposal of contaminated soils will be managed in accordance with the Phase 2 Investigation Report and Response Action Plan (RAP). Soil excavated in the vicinity of Bassett Creek has chemical concentrations above MPCA industrial limits and will be disposed of at a landfill and replaced with clean fill. Barr Engineering Co. prepared the RAP for the City of Minneapolis.

Utility Crossings

As noted, a new 24-inch diameter ductile iron pipe will be installed across Bassett Creek in the location of the existing Irving Avenue bridge. Section 8.3 of the Requirements document includes a utility crossing requirement of a minimum depth of 4.0 feet below the channel invert. The city of Minneapolis has provided a variance request for providing less than 4.0 feet of cover over the top of the pipe.

Variance Request

The city of Minneapolis requested a variance to Section 8.3 of the BCWMC Requirements document for the utility crossing requirement of a minimum depth of 4.0 feet below the channel invert.

Section 3.3 of the BCWMC Requirements document indicates that in granting variances, the Commission shall make a finding showing that all of the following conditions exist. A memo from the city's consultant addressed these conditions, as follows.

1. There are special circumstances or conditions affecting the property such that the strict application of the provisions of these standards and criteria would deprive the applicant of the reasonable use of the applicant's land.

Response: *The existing sanitary sewer was installed in 1905 and has less than 4 feet of cover. A new pipe will be installed with the same crown elevation and similar cover to the existing condition. The*

pipe cannot be lowered to accommodate the minimum cover requirement because it is a gravity sewer that has a controlled grade at the intersection of Irving Avenue and Currie Avenue.

Commission Engineer Response: *Follow-up discussion with the City's consultant indicates the crown of the new pipe will be installed approximately 1.5 feet higher than the existing pipe at the Bassett Creek crossing, thus decreasing the cover from about 3.5 ft. to about 2 ft.*

-
2. The variance is necessary for the preservation and enjoyment of a substantial property right of the applicant.

Response: *The City of Minneapolis is committed to providing reliable and sustainable sanitary sewer service to its residents. As such, the City evaluated several options for the reconstruction of the sewer. Eight alternatives were developed in advance of the design development; four lift station options and four gravity options following different alignments in the area were considered. Through that evaluation, it was determined that the reconstruction of the sanitary in its current location was the most efficient and reliable way to provide service to the project area.*

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3. The granting of the variance will not be detrimental to the public welfare or injurious to the other property in the territory in which the property is situated.

Response: *As stated above, granting of the variance will allow the sewer to be constructed at elevations similar to existing conditions. Although temporary excavation is required in the creek, the new sewer will not alter any conditions within the stream. Grades will be restored to existing conditions once construction is complete.*

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-
-
4. In applications relating to a use in the 1% (base flood elevation, 100-year flood) floodplain set forth in Table 2-9 of the Plan, the variance shall not allow a lower degree of flood protection than the current flood protection.

Response: *As noted in the Utility Crossings section of this letter, a temporary diversion channel will be provided. Should an event occur which would cause the flows to increase beyond the designed channel diversion capacity, the flow will be allowed to overtop the temporary embankments and flow through the work site, i.e., the existing stream bed. Additionally, the construction of the new sewer will not permanently impact the floodplain as existing grades will be restored upon project completion.*

-
-
-
-
5. The granting of the variance will not be contrary to the intent of taking all reasonable and practical steps to improve water quality within the watershed.

Response: *Although there may be temporary impacts, it is expected the long-term effects of the project will be favorable to the overall water quality in the watershed while considering two main contributing factors:*

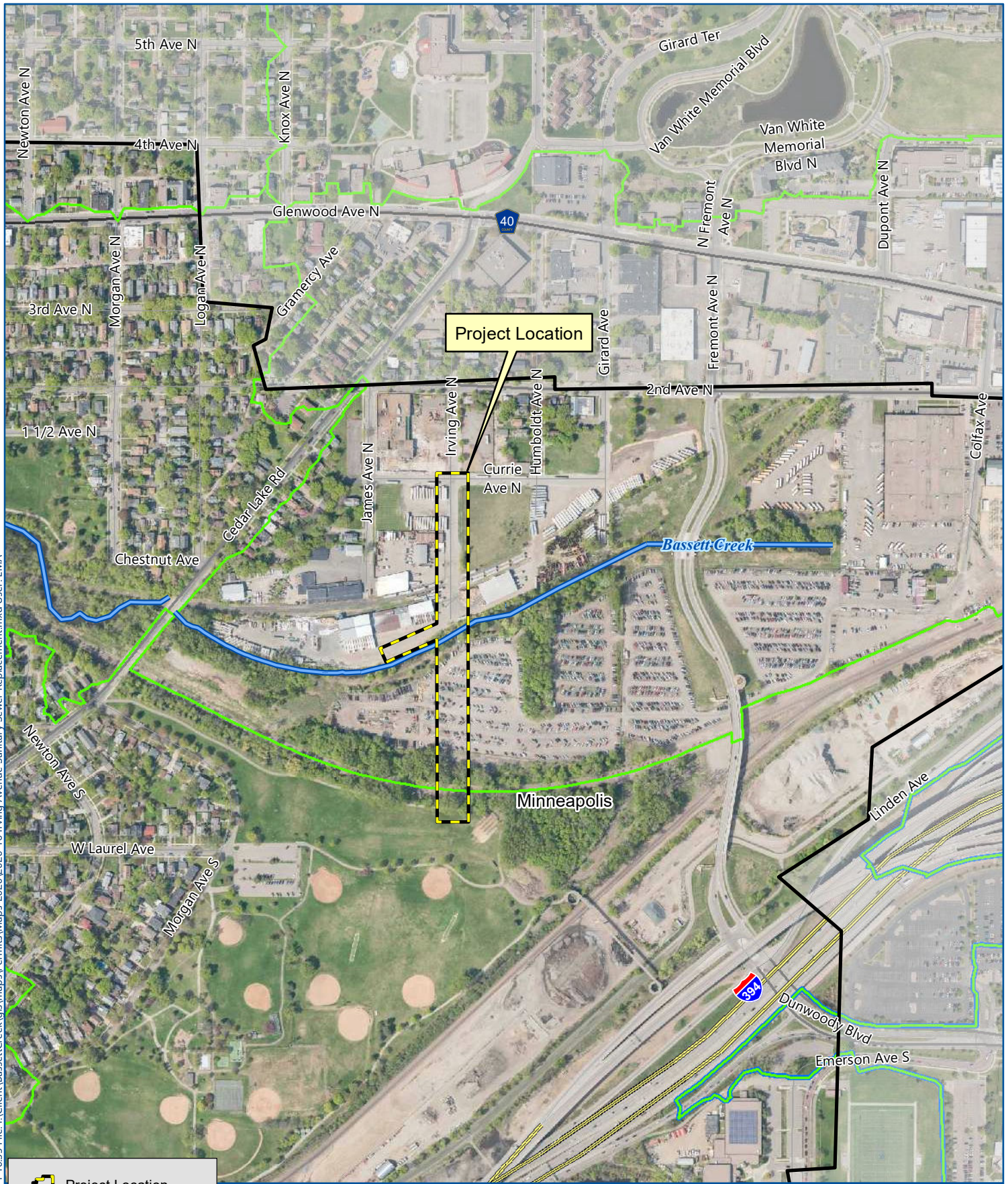
- 1. Contaminated soils excavated during construction will be removed and properly disposed of at a regulated landfill. New fill will be brought in.*
- 2. The new ductile iron pipe sewer will provide a more reliable watertight system, preventing infiltration or exfiltration.*







Recommendation

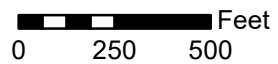
- A) Approval of the City of Minneapolis' variance to Section 8.3 of the BCWMC Requirements document for the utility crossing requirement of a minimum depth of 4.0 feet below the channel invert.
- B) Conditional approval of the entire project based on the following comments:
1. Applicant must provide documentation of any changes to flows and water surface elevations for Bassett Creek for the 2-year, 10-year, and 100-year 24-hour storm events based on the removal of the Irving Avenue Bridge and abutments.
 2. Sheets 43-44: Restoration of the proposed diversion must be shown on the plans.
 3. Applicant must evaluate lowering the crown of the sanitary pipe to maximize the cover at the Bassett Creek crossing.
 4. Applicant must demonstrate the sanitary pipe is adequately protected from scour at the Bassett Creek crossing.
 5. Sheet 16: Clarification must be provided for the proposed project's intent for the existing sheet pile weir that was installed as part of the Bassett Creek Flood Control Project approximately 20 feet downstream of the existing sanitary sewer. The existing sheet pile weir is shown on Sheet 16, but should also be included on the temporary erosion & sediment control plans (Sheet 27), the removals and abandonment plan & profile (Sheet 31), the sanitary sewer plan & profile (Sheet 37), the restoration plans (Sheets 43-44), as applicable.
 6. The proposed restoration plan must be revised or clarified as follows:
 - i. Consider shifting the rock cross vane that is directly upstream of the Irving Avenue Bridge removal approximately 10 feet further upstream to the edge of the existing riprap.
 - ii. Consider shifting the rock cross vane that is directly downstream of the Irving Avenue Bridge removal approximately 10 feet further downstream to the edge of the existing riprap.
 - iii. The proposed rock vanes further upstream and downstream of the Irving Avenue Bridge removal may not be necessary, but further coordination and discussion is needed with the BCWMC Engineer.
 - iv. Clarification must be provided as to why the riprap toe protection is shown on the south bank but not the north bank.
 - v. Class 3 riprap was used for the riprap toe protection for the Bassett Creek Main Stem stabilization project, therefore Class 3 riprap should also be used for this application.
 - vi. Clarification must be provided as to how the proposed riprap at the Irving Avenue Bridge removal will tie into the existing riprap in the area.

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Barr)
Subject: Item 5A: Irving Avenue Sanitary Sewer Replacement – Minneapolis, MN
Date: June 11, 2020
Page: 6

- vii. Clarification must be provided for why random riprap, class 2 is proposed for final restoration at the beginning and end of the proposed diversion.
- 7. Revised Drawings (paper and final electronic files) and supplemental documentation must be provided to the BCWMC Engineer for final review and approval.
- C) A separate BCWMC application shall be submitted for review of the diversion and dewatering plan and authorize Commission Engineer to review and approve application without bringing back to the BCWMC. The plan must include adequate protection during potential overflow events.



-  Project Location
-  Municipality
-  BCWMC Legal Boundary
-  Major Subwatershed
-  BCWMC Hydrologic Boundary
-  Bassett Creek



BCWMC #2020-16
 IRVING AVENUE SANITARY
 SEWER REPLACEMENT
 Minneapolis, MN

LOCATION MAP

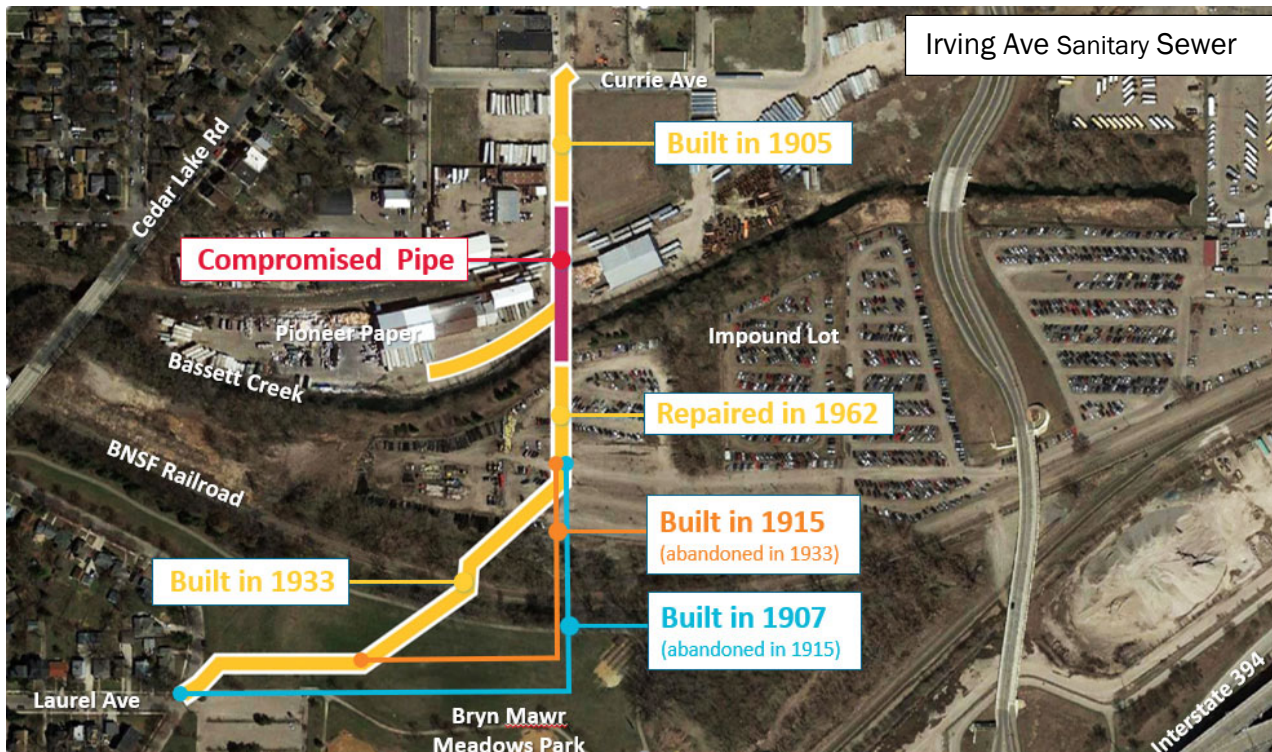
May 27, 2020

Bassett Creek Watershed Management Commission
c/o Barr Engineering Co.
Attn: Jim Herbert, P.E.
4300 MarketPointe Drive, Suite 200
Minneapolis, MN 55435-5422

Subject: Irving Avenue Sanitary Sewer Reconstruction Project

Dear Mr. Herbert:

The City of Minneapolis (City) Surface Water and Sewers (SWS) Division owns and operates an existing 48- and 52-inch equivalent diameter sanitary sewer located within the Irving Ave right-of-way, the Minneapolis Impound Lot and Bryn Mawr Meadows Park. Recent pipe inspections have revealed that at least a portion of the system is compromised (see figure below). Accordingly, the City needs to move forward with the replacement of the pipe. Overall, approximately 2,300 linear feet of sanitary sewer will be replaced, including a 75 linear foot section located under Bassett Creek at Irving Avenue.



A new 24-inch ductile iron pipe will be installed across Bassett Creek in the location of the existing Irving Avenue Bridge. The existing 48-inch diameter pipe will continue to convey wastewater until the new pipe is constructed. Soils in the area are unfavorable and will require the new pipe be installed on piles via open cut construction. Once the new pipe is in service, the existing pipe will be abandoned in place with high density controlled low strength material (CLSM). Below is a summary of each of the major components of construction.

As previously discussed, we are submitting the following information and Attachments for your review:

Application for Development Proposals

The Application for Development Proposals has been completed and is included as Attachment A.

Erosion and Sediment Control

Work in and around Bassett Creek will be performed in accordance with the Stormwater Pollution Prevention Plan (SWPPP) and best management practices (BMP) outlined in the contract documents (see Attachment B). The work site will be protected by redundant erosion control measures as shown in Sheets 27 and 28, using the details provided on Sheet 24. All erosion control will be completed per City of Minneapolis and/or MnDOT Specifications.

Contamination

Soil contamination has been identified within the Project area. Excavation, removal and disposal of contaminated soils will be managed in accordance with the Phase 2 Investigation Report and Response Action Plan (RAP) prepared by Barr Engineering for the site (see Attachment C).

Bridges: Removal of the Irving Avenue Bridge

An existing bridge was constructed across the Creek along Irving Avenue in the 1980's and is no longer maintained or inspected. With the installation of the new pipe within the bridge footprint, the City has elected to remove the bridge as part of this Project. Accordingly, the wooden bridge and abutments will be removed in advance of the pipe installation. Pictures of the existing bridge deck and abutment are provided below. The Metropolitan Council flow meter (operated by BCWMC) will be relocated and the stairs adjacent to the bridge will be removed.



Utility Crossings: Installation of new Sanitary Sewer Pipe

The bridge removal and pipe installation will require the temporary diversion of Bassett Creek. It is proposed a temporary channel be constructed on the south side of the Creek (see Sheet 16 in Attachment B). The proposed channel will be approximately 225 linear feet in length; its width and depth will be determined by the Contractor based on his/her method of construction. The Contractor will be required to construct watertight embankments both upstream and downstream of the work area. Once the creek area is dry, it is anticipated the work will be completed within sheeting and shoring. If the flows were to become greater than the diversion channel capacity, the flows would overtop the embankment and allowed through the work area.

It is proposed the work be completed during the normally lower flow, i.e. in the winter months, to reduce land use and environmental impacts. Overall, it is anticipated the work within the Creek will take two to three months to complete. To get a better understanding of the diversion requirements and provide information to the bidding contractors, a review of Bassett Creek flows was performed. Twenty years of data collected at Irving Avenue by BCWMC was reviewed. A summary is provided Attachment D and summarized in the table on Sheet 16. The Contractor will be required to submit his/her diversion channel design to the City and BCWMC for review and comments prior to installation.

Variance Request: Depth of Cover under Creek

A variance from BCWMC is being requested due to lack of available pipe cover. Below are responses to the conditions outlined in Section 3.3.3 of the BCWMC Requirements for Improvements and Development Proposals:

Condition #1: There are special circumstances or conditions affecting the property such that the strict application of the provisions of these standards and criteria would deprive the applicant of the reasonable use of the applicant's land.

- The existing sanitary sewer was installed in 1905 and has less than 4-feet of cover. A new pipe will be installed with the same crown elevation and similar cover to the existing condition. The pipe cannot be lowered to accommodate the minimum cover requirement because it is a gravity sewer that has a controlled grade at the intersection of Irving Avenue and Currie Avenue.

Condition #2: The variance is necessary for the preservation and enjoyment of a substantial property right of the applicant.

- The City of Minneapolis is committed to providing reliable and sustainable sanitary sewer service to its residents. As such, the City evaluated several options for the reconstruction of the sewer. Eight alternatives were developed in advance of the design development; four lift station options and four gravity options following different alignments in the area were considered. Through that evaluation, it was determined that the reconstruction of the sanitary in its current location was that the most efficient and reliable way to provide service to the project area.

Condition #3: The granting of the variance will not be detrimental to the public welfare or injurious to the other property in the territory in which the property is situated.

- As stated above, granting of the variance will allow the sewer to be constructed at elevations similar to existing conditions. Although temporary excavation is required in the Creek, the new sewer will not alter any conditions with the stream. Grades will be restored to existing conditions once construction is complete.

Condition #4: In applications relating to a use in the 1% (base flood elevation, 100-year flood) floodplain set forth in Table 2-9 of the Watershed Management Plan, the variance shall not allow a lower degree of flood protection than the current flood protection.

- As noted in the Utility Crossings section of this letter, a temporary diversion channel will be provided. Should an event occur which would cause the flows to increase beyond the designed channel diversion capacity, the flow will be allowed to overtop the temporary embankments and flow through the work site, i.e. the existing stream bed. Additionally, the construction of new sewer will not permanently impact the floodplain as existing grades will be restored upon project completion.

Condition #5: The granting of the variance will not be contrary to the intent of taking all reasonable and practical steps to improve water quality within the watershed.

- Although there may be temporary impacts, it is expected the long-term effects of the project will be favorable to the overall water quality in the watershed while considering two main contributing factors:
 1. Contaminated soils excavated during construction will be removed and properly disposed of at a regulated landfill. New fill will be brought in.
 2. The new ductile iron pipe sewer will provide a more reliable watertight system, preventing infiltration or exfiltration.

Wetland Buffer Requirements

The 50-foot buffer from the edge of the Bassett Creek wetland boundary has been identified in the Wetland Buffer Exhibit (Attachment E). Areas within the buffer will be restored per MnDOT and BCWMC Requirements.

Restoration

The cross-section of the creek will be restored to match the existing elevations and grades. Details from the Bassett Creek Main Stem Stabilization Project will be used for restoration of the Creek. See Sheet 43 for proposed restoration. The City would greatly appreciate if Barr could review the proposed restoration and provide input as necessary.

Construction Schedule

Anticipated construction schedule is from September 2020 through September 2021. Construction for the Bassett Creek crossing will be during low-flow periods in the winter of 2020-2021.

Please note that the City will separately be submitting the following permit applications to the Minnesota Department of Natural Resources (DNR) for work within the Creek:

- Public Water permit for removal of the bridge & appurtenances
- Water appropriation for the temporary dewatering
- License to Cross

We appreciate your time reviewing the attached information and are available to review with you at your earliest convenience. Please do not hesitate to contact me if you have questions or comments. I can be reached at 612-919-4243 or Kelly.MacIntyre@minneapolismn.gov.

Sincerely,
DocuSigned by:



Kelly MacIntyre, Project Manager
Professional Engineer – Public Works, Surface Water & Sewers

cc: Laura Jester, BCWMC Administrator
Julie E Benadum, Brown and
Caldwell Elizabeth Stout City, of
Minneapolis

Attachments (5)

1. Attachment A: Bassett Creek Watershed Management Commission Permit Application
2. Attachment B: Preliminary Contract Drawings
3. Attachment C: Investigation Report and Response Action Plan (RAP)
4. Attachment D: Bassett Creek Flow Summary
5. Attachment E: Wetland Buffer Exhibit



Memorandum

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Barr)
Subject: Item 5B: Bassett Creek Double Box Culvert Inspection – Minneapolis, MN
BCWMC June 18, 2020 Meeting Agenda
Date: June 10, 2020
Project: 23270051 2020

5B Bassett Creek Double Box Culvert Inspection and Recommended Repairs – Minneapolis, MN

Summary:

Proposed Work: Bassett Creek Double Box Culvert Inspection and Recommended Repairs

Basis for Review at Commission Meeting: Bassett Creek Flood Control Project

Recommendations:

1. Accept the *Bassett Creek Double Box Culvert Inspection Report, October 2019* and direct Commission Engineer to submit the report to the City of Minneapolis, Minnesota DNR and U.S. Army Corps of Engineers.
2. Direct Commission Engineer to prepare an opinion of repair costs.

General Project Information

On behalf of the BCWMC, the Commission Engineer conducted a condition inspection of the Bassett Creek Double Box Culvert (Double Box Culvert) during October 2019. The purpose of the inspection was to compare the current tunnel conditions to past inspections, identify changes in condition over time, and provide recommendations to the Commission regarding future monitoring and repair. The report *Bassett Creek Double Box Culvert Inspection Report, October 2019* is attached. Based on the 2019 inspection observations, and evaluation of tunnel condition over time, Barr recommends the following repairs:

Shear Key Joint Repair: It is recommended that the BCWMC repair the shear key joint material to minimize infiltration and potential for soil transport into the tunnel. It is recommended that this work occur in the next 5 years.

Crack Sealing, Deposit Removal: Various degrees of infiltration were observed throughout the tunnel, occurring at cracks, joints, and other defects. At four locations, continuous infiltration was observed that equates to a grade 4 PACP (Pipeline Assessment Certification Program) defect. It is recommended that the

To: Bassett Creek Watershed Management Commission (BCWMC)
From: Barr Engineering Co. (Barr)
Subject: Item 5B: Bassett Creek Double Box Culvert Inspection – Minneapolis, MN
BCWMC June 18, 2020 Meeting Agenda
Date: June 10, 2020
Page: 2

BCWMC repair these points of infiltration, and remove deposits as necessary to improve the operational condition of the tunnel, and slow degradation of the concrete. It is recommended that this work be coordinated with the shear key joint repair work.

Repair Exposed Reinforcement: At two locations, exposed reinforcement was observed that equates to a grade 5 PACP defect. It is recommended that the BCWMC repair these areas to minimize further degradation of the reinforcement and concrete. It is recommended that this work be coordinated with the shear key joint repair and crack sealing repair work.

Maintenance Repairs Funding

Several years ago the BCWMC and the TAC evaluated flood control project (FCP) policies to provide guidance to the BCWMC and member cities for maintaining the FCP. The Commission approved the attached policy at their May 19 and July 21, 2016 meetings. Based on the policy, the recommended repairs would likely be considered Major Maintenance and Repair, with repair costs over \$100,000. Following preparation of an opinion of repair costs, the Commission can determine whether to (1) move forward with repairs by utilizing the Long-Term Maintenance Fund or (2) add the project to its CIP and fund the projects using the BCWMC's ad valorem levy (via Hennepin County).



Bassett Creek Watershed Management Commission

BASSETT CREEK WATERSHED MANAGEMENT COMMISSION FLOOD CONTROL PROJECT (FCP) POLICIES

Approved by Commission at their May 19 and July 21, 2016 Meetings

(Based on recommendations from the Technical Advisory Committee developed over several meetings: September and November 2015; and January, February, and March 2016)

1. Inspections by the Commission

The Commission will continue an inspection and maintenance program for the FCP features.

The *Bassett Creek Flood Control Project Operation and Maintenance Manual* should be followed but with increased frequency of some inspections:

- Annual inspection of all non-tunnel FCP features
- Inspection at least every 5 years of the double box culvert
- Inspection every 5 years of 3rd Avenue Deep Tunnel (in conjunction with City of Minneapolis I-94 tunnel inspection)
- Inspection every 10 years of the 2nd Street Deep Tunnel

The Commission will continue to fully fund the FCP inspections (including the recommended more-frequent tunnel inspections), unless the City of Minneapolis requests even more-frequent inspections or more complicated (more expensive) inspections beyond the currently used National Association of Sewer Service Companies' (NASSCO) assessment and certification program. The Commission will continue funding the FCP inspection costs through the Long Term Maintenance Fund.

Table 1 shows the estimated 20-year costs following the new inspection frequencies. (Over 20 years, the total added cost of new tunnel inspections would be \$55,000, or \$2,750/year.)

2. Inspection Reports

The Commission Engineer will continue to submit annual inspection reports to cities regarding the condition and maintenance/repair needs of the FCP features in their cities. Cities will formally notify the Commission Engineer regarding their completed maintenance and repair actions on any of the FCP project features. The Commission Engineer will include this information in the following year's inspection reports to the Commission and the letters sent to the cities (with copies sent to the US Army Corps of Engineers). The letters sent to the cities must note that the cities are required to report on their maintenance and repair actions. The inspection and reporting are essential to ensure the Commission maintains its eligibility to receive federal funds to repair or replace flood control project features in the event of a catastrophe.

The Commission will rely on the FCP inspection and maintenance program to identify when major repairs, rehabilitation or replacement of features will be needed.

3. Maintenance Funding

The Commission will add the identified FCP major repairs, rehabilitation and replacement projects to the BCWMC CIP and will fund the projects using the BCWMC's ad valorem levy (via Hennepin County). The Commission will need to amend the BCWMC plan to add these projects to the CIP and to change (or add to) the funding mechanisms for project implementation.

The Commission will maintain the existing Flood Control Emergency Repair Fund and the Long-Term Maintenance Fund as two separate funds.

4. Emergency Management

Member cities shall perform the initial response to an emergency with the FCP structures, as the Commission is not set up to perform these emergency management and response services. The Commission shall assist the cities in obtaining reimbursement for the emergency response, either through Commission funds or grants (e.g., FEMA funding).

5. Flood Control Projects at Road Crossings

Member cities (or other road authority) where the FCP structures are located are responsible for maintenance, repair and replacement of road crossings, and their corresponding conveyance structures, that were installed as part of the FCP.

[This clarifies BCWMC policy (#23) in the 2015 BCWMC Watershed Management Plan, which states that these crossings will be "maintained" by the city where the structure is located. However, policy #23 does not address significant rehabilitation or replacement. This clarification also aligns with the intent of the original FCP—that the cities would be responsible for significant rehabilitation or replacement of road crossings that were installed as part of the FCP because they are primarily transportation-related.]

6. Routine vs. Major Maintenance and Repair

- The Commission requires that cities are responsible for routine maintenance and repair of the FCP features (per Policy #24 in the 2015 BCWMC Watershed Management Plan). Table 2 shows the routine maintenance and repairs.
- The Commission will reimburse cities (if requested) for maintenance and repairs that are over \$25,000, using funds from the Long-Term Maintenance Fund. Before receiving funding from the Long-Term Maintenance Fund, the cities must perform regular, routine maintenance (reporting of completed maintenance and repair actions are required as part of #2 above). This will help prevent the situation wherein the Commission pays for maintenance work over \$25,000 because the cities neglected routine maintenance for several years. Cities are expected to inform the Commission in advance (e.g., two years) of their request for reimbursement.

- The Commission will consider adding maintenance and repair projects that are more than \$100,000 to the BCWMC CIP. Table 2 provides examples of maintenance and repairs that are major or could be major.

[These policies regarding *routine versus major maintenance/repair* of the FCP features are intended to clarify policy #24 of the 2015 BCWMC Watershed Management Plan, which states that routine maintenance and repair is the responsibility of the city where the FCP feature is located, and Plan policy #20, which states that funding of major repair and maintenance is a BCWMC responsibility.]

Additional information (from July 13, 2016 memo): Attached Table 3 provides estimated costs for annual operation and maintenance, five-year operation and maintenance, significant rehabilitation of structures, and replacement of structures. As Table 3 shows, the five year operation and maintenance costs (in blue) over \$25,000 could be \$1,232,000; the significant rehabilitation of structures costs (in blue) could be from \$2,026,000 (without tunnel) to \$14,800,000 (including the tunnel); and the replacement of structures costs (in blue) could be from \$8,100,00 (without tunnel) to \$142,740,000 (including the tunnel).

Table 1. Current and Recommended Flood Control Project Inspection Program

Item	Current/ Recommended Inspection Cycle	Cost/Inspection ¹	20-Year Cost ¹ Current/Recommended
Annual inspection of the FCP features, except double box culvert and the deep tunnel	Annually	\$10,000	\$200,000/\$200,000
Double box culvert inspection (NASSCO) ³	Every 5 years	\$32,000	\$128,000/\$128,000
Deep tunnel (2 nd St. & 3 rd Ave.) inspection (NAASCO) ³	Every 20 years/ Every 10 years	\$45,000	\$45,000/\$90,000
Two additional 3 rd Ave deep tunnel inspections (NASSCO) ^{3,4}	Not Applicable/ Every 5 years	\$5,000	\$0/\$10,000 ⁴
Total²			\$373,000/\$428,000

¹ 2016 dollars

² Simple summation (annualized or present worth not calculated)

³ Tunnel condition inspection based on pipeline assessment and certification program developed by the National Association of Sewer Service Companies (NASSCO)

⁴ 3rd Avenue tunnel inspections assume two additional inspections that are combined with I-94 tunnel inspection (by Minneapolis); the I-94 tunnel inspection provides access to the 3rd Avenue tunnel, therefore does not require separate mobilization.

Table 2 Routine vs. Major Maintenance and Repair Items

Item # Routine vs. Major Maintenance and Repairs –as Recommended by TAC¹	
Routine	
1	Vegetation: removal of trees, removal of brush, chemical treatment of stumps, control of noxious weeds, establish vegetation on bare areas.
2	Removal of debris: woody debris, riprap, trash from channel, inlets, culverts
3	Repair erosion; channels, inlet and outlet structures, culvert ends
4	Repair/replace riprap: on inlet and outlet ends of culverts, channels, banks
6	Remove sediment from channels, structures, culverts, etc.
10	Repair/maintain guard rails, hand rails and fencing: remove rust, prime and paint, repair damaged rails and posts, replace rusted-out sections, repair cables, replace posts, repair chain link fence
12	Repair concrete pipe: repair joints, tie-bolts, spalling, connection to culverts, breakage
13	Repair/replace catch basins, manholes, casting assemblies, grates
14	Repair/maintain debris barrier: removal of debris, repair cables, replace poles
15	Repair/maintain tunnel inlet trash rack: repair/replace trash rack rods, loose or broken, vandalized, bent
16	Street repairs: pavement, curb and gutter, cracks, depressions, settlement
Major	
5	Repair/replace gabion baskets
7	Remove sediment/dredge ponds, basins, etc.
17	Tunnel repairs: concrete and other repairs to the new Bassett Creek tunnel
Could be major depending on extent	
8	Repair scouring/undercutting at structures and culvert outlets
9	Repair concrete structures: cracking, spalling, breakage
11	Culverts/Bebo sections: joints, settlement, separation, concrete spalling, wing walls –movement and breakage

¹ Based on needed repairs identified during 2015 FCP inspection

**Table 3 (Table 1 in September 2, 2015 memo to TAC)
 Summary of Annual/Periodic Operation and Maintenance Requirements & Costs
 Bassett Creek Flood Control Project, MN
 September 1, 2015**

BCWMC Responsibility⁽¹⁰⁾
City Responsibility⁽¹⁰⁾
City Responsibility per TAC Recommendation 7

	Annual Operation & Maintenance			Five Year Operation & Maintenance		Significant Rehabilitation of Structure ⁽⁶⁾	End of Design Life	
	Annual Inspection & Report ⁽¹⁾	Debris Removal ⁽²⁾	Brushing & Tree Removal ⁽³⁾	Five-Year Inspection & Report ⁽⁴⁾	General Maintenance & Repairs ⁽⁵⁾		Estimated Year of Replacement ⁽⁷⁾	Replacement of Structure ⁽⁹⁾
Minneapolis								
A Tunnel								
1 Phase 1 - Second Street Tunnel (Mn/DOT)					\$439,100	\$5,030,400	2029	\$61,944,784
2 Phase 2 - 3rd Avenue Tunnel (BCWMC)					\$150,900	\$1,728,400	2040	\$12,378,834
3 Phase 3 - Double Box Conduit and Inlet Structure				\$13,900	\$524,600	\$6,010,500	2042	\$60,309,774
Minneapolis Subtotal:				\$13,900	\$1,114,600	\$12,769,300		\$134,633,400
Golden Valley								
B Golden Valley Country Club Embankment	\$1,500	\$1,800	\$1,800		\$14,600	N.A.	2031	N.A.
Golden Valley Country Club Control Structure	\$1,500	\$1,800	\$1,800		\$14,600	\$491,521	2044	\$1,966,083
C Hwy 55 Control Structure	\$1,500	\$1,800			\$14,600	\$115,295	2044	\$461,180
D Wisconsin Avenue Control Structure	\$1,500	\$1,800			\$14,600	\$108,547	2037	\$434,189
E Road Crossings								
1 Regent Avenue	\$700	(8)			(8)	\$123,964	2031	\$495,854
2 Noble Avenue	\$700	(8)			(8)	\$123,964	2031	\$495,854
3 Westbrook Road	\$700	(8)			(8)	\$217,982	2043	\$871,929
Golden Valley Subtotal:	\$8,100	\$7,200	\$3,600		\$58,400	\$1,181,270		\$4,725,089
Crystal								
F Edgewood Embankment and Control Structures	\$1,500	\$1,800	\$4,400		\$14,600	\$95,039	2031	\$380,155
G Markwood Channel & Culverts	\$1,500	(8)			(8)	\$61,982	2031	\$247,927
H Hwy 100 Control Structure & BC Park Pond	\$1,500	\$1,800	\$1,800		\$117,100	\$975,180	2031	\$3,900,720
I Road Crossings								
1 32nd Avenue	\$700	(8)			(8)	\$95,039	2031	\$380,155
2 Brunswick Avenue	\$700	(8)			(8)	\$95,039	2031	\$380,155
3 34th Avenue	\$700	(8)			(8)	\$95,039	2031	\$380,155
4 Georgia Avenue	\$700	(8)			(8)	\$78,510	2031	\$314,041
5 36th/Hampshire Avenue	\$700	(8)			(8)	\$157,021	2031	\$628,082
6 Douglas Drive	\$700	(8)			(8)	\$108,547	2037	\$434,189
Crystal Subtotal:	\$8,800	\$3,500	\$6,100		\$131,700	\$1,761,393		\$7,045,580
Plymouth								
J Medicine Lake Outlet Structure	\$1,500	\$1,800	\$1,800			\$115,879	2046	\$463,515
K Plymouth Creek Fish Barrier	\$1,500	\$1,800	\$1,800			\$64,142	2037	\$256,566
Plymouth Subtotal:	\$1,500	\$1,800	\$1,800			\$180,020		\$720,081
Total Bassett Creek Flood Control Project Costs	\$18,400	\$12,500	\$11,500	\$13,900	\$1,304,700	\$15,900,000		\$147,120,000
						\$14,800,000		\$142,740,000
						\$1,100,000		\$4,380,000

- (1) Inspection & report; Inspection at tunnel only includes inlet structure and approach channel
- (2) BCMWC Responsible for Maintenance. Work assumed to be performed by City and reimbursed by BCWMC.
- (3) BCMWC Responsible for Maintenance. Work assumed to be performed by City and reimbursed by BCWMC.
- (4) Five year inspection required for above-water portion of Bassett Creek Tunnel
- (5) General Maintenance includes: sediment removal, erosion repair, riprap replacement, sod & vegetation and other misc. maintenance items.
Does not include gate at Wisconsin Ave. (Note: Bassett Creek Park Pond is assumed to be dredged every 10 years at cost of \$230,000 assuming a type 1 material and \$500,000 for a type 2 material that requires disposal in a landfill)
Lowering the middle pool (if approved by Corps, Coast Guard, DNR etc.) could decrease dewatering costs up to \$45,000.
- (6) Includes all items in 1-year and 5-year O & M repairs plus void fill in Minneapolis tunnels, partial structure demo and replacement, Wisconsin Avenue gate upgrades for construction costs in 2014.
(assume one repair project per project feature in addition to 5-yr maintenance)
- (7) Assumes a 50 year life of project
- (8) Assumes City shall be responsible for maintenance of all road crossings and the Markwood channel modifications and storm sewer components.
- (9) Cost includes total replacement of structure at the end of design life assuming 3% inflation and construction technology, means, and methods remain as they are today (2014).
- (10) **5.1.1.3 Management of the BCWMC Trunk System and Flood Control Project**
...The BCWMC will finance major maintenance and repair of water level control and conveyance structures that were part of the original BCWMC Flood Control Project on the same basis as the original project. Ne road crossings of the creek that were installed as part of the project will be maintained by the city where the structure is located. Member cities are responsible for routine maintenance and repair of BCWMC Flood Control Project structures located within each city; this includes the removal of debris, brush, and trees. The BCWMC will work with member cities to determine responsibilities for major rehabilitation or replacement of the BCWMC Flood Control Project features and establish the associated funding mechanisms (see policy 22, Section 4.2.2).

Bassett Creek Double Box Culvert Inspection Report



Prepared for
Bassett Creek Watershed Management Commission

Inspection Date: October 2019

Bassett Creek Double Box Culvert Inspection Report

Inspection Date: October 2019

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1.0 Executive Summary

The Bassett Creek Watershed Management Commission (BCWMC) retained Barr Engineering Co. (Barr) to conduct a condition inspection of the Bassett Creek Double Box Culvert (Double Box Culvert) during October 2019. The purpose of the inspection was to compare the current tunnel conditions to past inspections, identify changes in condition over time, and provide recommendations to BCWMC regarding future monitoring and repair.

The Double Box Culvert is part of a system of stormsewer tunnels that convey Bassett Creek flow through downtown Minneapolis to the Mississippi River where it discharges downstream of St. Anthony Falls. The stormsewer system was constructed in three phases including the I-94/2nd Street tunnel (Phase 1), the 3rd Avenue tunnel (Phase 2), and the Double Box Culvert (Phase 3), all of which are depicted in Figure 1-1. The I-94 tunnel upstream the 3rd Avenue tunnel connection is managed by the City of Minneapolis and MnDOT. Further discussion and details regarding each tunnel and phase is provided in Section 2.0.



Figure 1-1 System Overview

1.1 Recommendations

The Double Box Culvert was found to be in “good” condition from a structural standpoint, and “fair” condition from an operations and maintenance standpoint. Changes from the 2014 inspection (Ref. (1)) were observed and are attributed to a combination of factors including minor changes in the NASSCO PACP code severity rating (Section 4.0), fluctuation in base flow and groundwater levels at the time of the respective inspections, as well as deterioration of the tunnel over time. The inspection included visual observations only, and no destructive or non-destructive methods were utilized to measure potential voids outside the tunnel liner. Based on the 2019 inspection findings, the following recommendations are provided to the BCWMC for consideration. Further of discussion of these recommendations is provided in Section 6.0.

1.1.1 Inspection Recommendations

Frequency of Inspections: It is recommended that the BCWMC continue to perform a full NASSCO PACP inspection on a 5-year basis.

Shear Keys - Structural: A large portion of significant defects, including fractures, spalling, and evidence of differential settlement were observed at the shear keys. Future inspection programs should continue to monitor the shear keys for continued degradation and/or differential settlement.

Infiltration: Infiltration was observed at joints, and a large portion of the shear keys as a result of missing or degraded joint material. Future inspections should continue to review infiltration, with special consideration for evidence of soil loss through the joints.

1.1.2 Monitoring Recommendations

SWLRT Monitoring Reports: The southwest light rail transit (SWLRT) project was underway at the time of the inspection, and portions of the alignment run above the Double Box Culvert. Crack gauges were installed at several of the shear keys by others to measure potential displacement related to the construction. It is recommended that the BCWMC request the ongoing monitoring reports generated as part of the Southwest Light Rail Transit (SWLRT) project for engineer review to verify potential impacts to the Double Box Culvert.

1.1.3 Repair Recommendations

Shear Key Joint Repair: It is recommended that the BCWMC repair the shear key joint material to minimize infiltration and potential for soil transport into the tunnel. It is recommended that this work occur in the next 5 years.

Crack Sealing, Deposit Removal: Various degrees of infiltration were observed throughout the tunnel, occurring at cracks, joints, and other defects. At four locations, infiltration runners were observed that equate to a grade 4 PACP defect. It is recommended that the BCWMC repair these points of infiltration, and remove deposits as necessary to improve the operational condition of the tunnel, and slow degradation of the concrete. It is recommended that this work be coordinated with the shear key joint repair work.

Repair Exposed Reinforcement: At two locations, exposed reinforcement were observed that equate to a grade 5 PACP defect. It is recommended that the BCWMC repair these areas to minimize further degradation of the reinforcement and concrete. It is recommended that this work be coordinated with the shear key joint repair and crack sealing repair work.

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Bassett Creek Watershed Management

MEMO

To: BCWMC Commissioners and Alternate Commissioners
From: Laura Jester, Administrator
Date: June 9, 20220

RE: Setting Maximum 2021 Levy and Options for Funding Main Stem Lagoon Dredging Project (BC-7)

At the June 18, 2020 meeting, the Commission must set a maximum levy amount to be collected by Hennepin County in 2021 for BCWMC CIP projects. A final 2021 levy will be set at the September 2020 meeting. There are several projects slated for 2021 levy funds including those presented at the May BCWMC meeting. At that meeting, after review of the feasibility studies, the Commission chose to implement Alternative 1 for the [Mt. Olivet Stream Restoration Project](#), Alternatives 3 and 6 for the [Parkers Lake Drainage Improvement Project](#), and Alternative 2, Option 1 for the [Main Stem Lagoon Dredging Project](#). The cost for these projects and others slated for 2021 levy funds can be found in Table 1 attached here.

While the Main Stem Lagoon Dredging Project offers significant water quality improvements at very low cost per pound of pollutant removal, it also has a significant price tag. Due to the large amount of contaminated sediment to be removed, the total project cost is estimated at \$3,259,000 (including design, construction, feasibility study, and administrative costs) (Table 1). Originally, the BCWMC 5-year CIP schedule only included \$400,000 for this project. At the May meeting, I was directed to develop funding and implementation options for discussion at this meeting.

There are several options for funding and implementing the Main Stem Lagoon Dredging Project including:

1. Spreading the cost over multiple years
2. Postponing the project for a future year
3. Pursuing funding partners (MPRB, city of Minneapolis, city of Golden Valley)
4. Utilizing BCWMC Closed Project Account Funds
5. Applying for grant funding
 - o Clean Water Funds competitive grants
 - o Clean Water Funds Watershed Based Implementation Funds
 - o Hennepin County Opportunity Grant
 - o Hennepin County Environmental Response Fund
 - o Federal or State Historic Places Preservation Grants

I recently completed a detailed review of how the Commission's Closed Project Funds were being calculated. The Closed Project Fund includes the amount of levy funds left over after implementation of active CIP projects. I discovered that secured grant funding (i.e., grant agreements are in place) expected to be collected for active projects was not being used in the calculations. After working with the Deputy Treasurer Sue Virnig to correct this oversight, we now calculate the anticipated Closed Project Balance to be over \$1.6M (as shown in this month's financial report above Table A). Policy 3.4 regarding the Closed Project Account in the [BCWMC Policy Manual](#) states that "funds remaining in the CIP construction account from

completed projects may be used to reduce future tax levies for future CIP projects.” At least a portion of these funds should be used to offset new levy funding for this project (or other projects).

Regarding grant funding, I anticipate that given the significant water quality benefit of the dredging project and the low cost per pound pollutant removal, the project would score well in various grant applications. It’s also possible that the Minneapolis Park and Rec Board would have CIP funds available for this project in future years.

I talked with county staff about the possibility of a significant increase in levy funds and I requested a meeting with Hennepin County Commissioner Fernando. Although my email to the Commissioner’s staff is yet unanswered, county staff reported the following:

- There have been no internal discussions about watershed levies but a large levy request would likely be scrutinized by commissioners and we should expect significant questions and justifications.
- Spreading costs over multiple years is a good idea.
- County departments are being asked to reduce program and project spending due to financial crisis.
- There is no indication from commissioners that they have significant concerns with the watershed levy process.
- County staff have heard only positive feedback about BCWMC, its projects, and how projects are implemented.
- A meeting with Commissioner Fernando is a good idea.

Recommendation (as reflected in Table 2):

- Set a maximum 2021 levy of \$1,774,780
- Implement the Main Stem Lagoon Dredging Project beginning in 2021
 - Spread the cost of the project over 3 levy years
 - Use \$1.2M in Closed Project Funds (\$400,000 a year for 3 years)
 - Pursue grant funding for the project
 - Continue discussions with Minneapolis Park and Rec Board for possible funding
 - Meet with Commissioner Fernando to review and discuss the project
- Review any new information at the September meeting ahead of setting the final levy

Another option to consider (as reflected in Table 3):

- Set a maximum levy of \$1,374,780
- Delay the beginning of the Main Stem Lagoon Dredging Project by one year, allowing a review and possible improvement in the financial situation

Table 1. Breakdown of Project Costs for 2021 Projects

Project Costs	Mt. Olivet Stream Restoration Project (Alt 1)	Parkers Lake Drainage Improvement Project (Alternatives 3 and 6)	Cost share purchase of high efficiency street sweeper	Dredging of accumulated sediment in Main Stem Bassett Creek just north of Hwy 55, Wirth Park (Alternative 2, Option 1)
Feasibility Study	\$35,600	\$57,500	\$0	\$74,000
Design & Construction	\$134,000	\$413,000	\$75,000	\$3,145,000
Project Design Reviews	\$5,000	\$5,000	\$5,000	\$0
Administrative Funds (2% levy)	\$3,500	\$9,500	\$1,600	\$40,000
Total	\$178,100	\$485,000	\$81,600	\$3,259,000
Levy Future Years	\$0	\$0	\$0	- \$2,459,000
TOTAL Project Cost	\$178,100	\$485,000	\$81,600	\$800,000
TOTAL all projects				\$1,544,700
Sweeney Lake and Bryn Mawr 2021 Costs (levy funding for these projects were split over 2020 and 2021)				+ \$630,080
Use of Closed Project Funds				- \$400,000
TOTAL Proposed 2021 Max Levy				\$1,774,780

Table 2. Proposed 2021 Levy						
Project Name	City	Number	2020	2021	2022	2023
Medicine Lake Rd & Winnetka Ave Long Term Flood Mitigation Plan Project (DeCola Ponds B&C Improvement Proj. + DeCola Pond F Flood Storage & Diversion Project + SEA School Flood Storage Project)	GV, Crystal, New Hope	BC-2,3,8,10	\$500,000		\$300,000	\$1,000,000
Water quality improvements in Bryn Mawr Meadows, Main Stem Watershed	MPLS	BC-5	\$100,000	\$412,000		
Stormwater Pond in Jevne Park to alleviate flooding/improve water quality	Medicine Lake	ML-21	\$500,000			
Crane Lake Improvement Project @ Ridgedale Dr.	Minnetonka	CL-3	\$380,000			
Sweeney Lake Water Quality Improvement Project (alum + carp management)	Golden Valley	SL-8	\$20,000	\$218,080		
Mt. Olivet Stream Restoration Project	PLYM	ML-20		\$178,100		
Parkers Lake Drainage Improvement Project	Plymouth	PL-7		\$485,000		
Cost share purchase of high efficiency street sweeper	Plymouth	ML-23		\$81,600		
Dredging of accumulated sediment in Main Stem Bassett Creek just north of Hwy 55, Wirth Park	GV/MPLS	BC-7		\$800,000	\$1,659,000	\$800,000
Medley Park Stormwater Treatment Facility	GV	ML-12			\$200,000	\$300,000
Total Project Cost*			\$1,500,000	\$2,174,780	\$2,159,000	\$2,100,000
Use of Closed Project Account				\$400,000	\$400,000	\$400,000
PROPOSED TOTAL LEVY				\$1,774,780	\$1,759,000	\$1,700,000
*Accounts for use of grant funding for Bryn Mawr and Sweeney Lake Projects						

Table 3: Second Option for 2021 Levy							
Project Name	City	Number	2020	2021	2022	2023	2024
Medicine Lake Rd & Winnetka Ave Long Term Flood Mitigation Plan Project (DeCola Ponds B&C Improvement Proj. + DeCola Pond F Flood Storage & Diversion Project + SEA School Flood Storage Project)	GV, Crystal, New Hope	BC-2,3,8, 10	\$500,000		\$300,000	\$1,000,000	
Water quality improvements in Bryn Mawr Meadows, Main Stem Watershed	MPLS	BC-5	\$100,000	\$412,000			
Stormwater Pond in Jevne Park to alleviate flooding/improve water quality	Medicine Lake	ML-21	\$500,000				
Crane Lake Improvement Project @ Ridgedale Dr.	Minnetonka	CL-3	\$380,000				
Sweeney Lake Water Quality Improvement Project (alum + carp management)	Golden Valley	SL-8	\$20,000	\$218,080			
Mt. Olivet Stream Restoration Project	PLYM	ML-20		\$178,100			
Parkers Lake Drainage Improvement Project	Plymouth	PL-7		\$485,000			
Cost share purchase of high efficiency street sweeper	Plymouth	ML-23		\$81,600			
Bassett Creek Main Stem Restoration - Regent Ave to Golden Valley Rd	Golden Valley	2024CR-M					\$400,000
Bassett Creek Park WQ Improvement Project	MPLS	BC-11					\$500,000
Ponderosa Woods Stream Restoration	Plymouth	ML-22					\$475,000
Dredging of accumulated sediment in Main Stem Bassett Creek just north of Hwy 55, Wirth Park	GV/MPLS	BC-7			\$1,600,000	\$859,000	\$800,000
Medley Park Stormwater Treatment Facility	GV	ML-12			\$200,000	\$300,000	
Total Project Cost*			\$1,500,000	\$1,374,780	\$2,100,000	\$2,159,000	\$2,175,000
Use of Closed Project Account					\$400,000	\$400,000	\$400,000
PROPOSED TOTAL LEVY				\$1,374,780	\$1,700,000	\$1,759,000	\$1,775,000
*Accounts for use of grant funding for Bryn Mawr and Sweeney Lake Projects							



Bassett Creek Watershed Management

MEMO

Date: June 9, 2020
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: A feasibility study for this project was completed in May 2018 after months of study, development of concepts and input from residents at two public open houses. At the May 2018 meeting, the Commission approved Concept 3 and set a maximum 2019 levy. Also in May 2018, the Minnesota Legislature passed the bonding bill and the MDNR has since committed \$2.3M for the project. The Hennepin County Board approved a maximum 2019 levy request at their meeting in July 2018. A BCWMC public hearing on this project was held on August 16, 2018 with no comments being received. Also at that meeting the Commission officially ordered the project and entered an agreement with the City of Golden Valley to design and construct the project. In September 2018, the City of Golden Valley approved the agreement with the BCWMC. The [Sun Post](#) ran an article on this project October 2018. Another public open house and presentation of 50% designs was held February 6, 2019. An EAW report was completed and available for public review and comment December 17 – January 16, 2019. At their meeting in February 2019, the Commission approved the 50% design plans. Another public open house was held April 10th and a public hearing on the water level drawdown was held April 16th. 90% Design Plans were approved at the April Commission meeting. It was determined a Phase 1 investigation of the site is not required. The City awarded a contract to Dahn Construction for the first phase of the project, which involves earthwork, utilities, and trail paving and extends through June 2020. Dewatering began late summer 2019. Tree removal was completed in early winter; excavation was ongoing through the winter. As of early June 2020, earth work and infrastructure work by Dahn Construction is nearly complete and trail paving is complete. Vegetative restoration by AES is underway including soil prep and seeding. Plants, shrubs, and trees will begin soon along with placement to goose protection fencing to help

ensure successful restoration. Most restoration work will be complete by June 30, 2020 and bare root trees will be planted in September. A resident of Rosalyn Court recently thanked the city and Commission for the successful project, noting it's nice to take a walk not only through the woods, but also with open water views. She submitted the photo included here. Final completion for restoration is anticipated by the end of September. Project website: <http://www.bassettcreekwmo.org/index.php?cID=433> .



2020 Bryn Mawr Meadows Water Quality Improvement Project (BC-5), Minneapolis (No change since May): A feasibility study by the Commission Engineer began last fall and included wetland delineations, soil borings, public open houses held in conjunction with MPRB's Bryn Mawr Meadows Park improvement project, and input from MPRB's staff and design consultants. 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. The final feasibility study was approved at the January 2019 Commission meeting. Staff discussed the maintenance of Penn Pond with MnDOT and received written confirmation that pond maintenance will occur prior to the park's reconstruction project with coordination among the BCWMC, MPRB, and MnDOT. A public hearing for this project was held September 19, 2019. The project was officially ordered at that meeting. An agreement with the MPRB and the city of Minneapolis will be considered at a future meeting. In January 2020 this project was awarded a \$400,000 Clean Water Fund grant from BWSR; a grant work plan was completed and the grant with BWSR was fully executed in early May. The project and the grant award was recently the subject of an article in the Southwest Journal: <https://www.southwestjournal.com/voices/green-digest/2020/02/state-awards-grant-to-bryn-mawr-runoff-project/>. Project website: <http://www.bassettcreekwmo.org/projects/all-projects/bryn-mawr-meadows-water-quality-improvement-project>

2020 Jevne Park Stormwater Improvement Project (ML-21) Medicine Lake (No change since Oct): At their meeting in July 2018, the Commission approved a proposal from the Commission Engineer to prepare a feasibility study for this project. The study got underway last fall and the city's project team met on multiple occasions with the Administrator and Commission Engineer. The Administrator and Engineer also presented the draft feasibility study to the Medicine Lake City Council on February 4, 2019 and a public open house was held on February 28th. The feasibility study was approved at the April Commission meeting with intent to move forward with option 1. The city's project team is continuing to assess the project and understand its implications on city finances, infrastructure, and future management. The city received proposals from 3 engineering firms for project design and construction. At their meeting on August 5th, the Medicine Lake City Council voted to continue moving forward with the project and negotiating the terms of the agreement with BCWMC. Staff was directed to continue negotiations on the agreement and plan to order the project pending a public hearing at this meeting. Staff continues to correspond with the city's project team and city consultants regarding language in the agreement. The BCWMC held a public hearing on this project on September 19, 2019 and received comments from residents both in favor and opposed to the project. The project was officially ordered on September 19, 2019. On October 4, 2019, the Medicine Lake City Council took action not to move forward with the project. At their meeting on October 17th, the Commission moved to table discussion on the project. The project remains on the 2020 CIP list. Project webpage: <http://www.bassettcreekwmo.org/index.php?cid=467>.

2019 Westwood Lake Water Quality Improvement Project (WST-2) St. Louis Park: At their meeting in September 2017, 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. After months of study, several meetings with city consultants and nature center staff, and a public open house, the Commission approved Concept 3 (linear water feature) and set a maximum 2019 levy at their May meeting. 50% designs were approved at the July meeting and 90% design plans were approved at the August meeting. The Hennepin County Board approved a maximum 2019 levy request at their meeting in July. A BCWMC public hearing on this project was held on August 16th with no comments being received. At that meeting the Commission officially ordered the project and entered an agreement with the City of St. Louis Park to design and construct the project and directed the Education Committee to assist with development of a BCWMC educational sign for inside the nature center. The draft sign was presented at the October meeting and was finalized over the winter. Construction on the new building started this spring.



The Sun Sailor printed [an article](#) on the project in October 2018. All educational signs were finalized and are currently in production. Some slight modifications to the project plans were made late in 2019 at the request of city inspectors. Building and project construction is well underway. The bog (above) was recently installed. Additional earthwork and project components are continuing. The grand opening celebration was postponed until September 13th. 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) (No change since Dec): 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?clD=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. A public open house on the project was held May 24th where four residents asked questions, provided comments, and expressed support. 90% design plans were approved at the June 2018 meeting. An Environmental Assessment Worksheet was recently approved and a construction company was awarded the contract. A pre-construction meeting was held December 14th and construction began in January. A large area of contamination was discovered during excavation in February 2019. At their meeting February 21, 2019 the Commission approved additional funding for this project in order to properly dispose of the contamination and continue building the project as designed. An amended agreement with the city of Crystal was approved at the March Commission meeting. Pond dredging and other storm sewer work was completed in early summer. The landscaping contractor completed a final herbicide treatment in preparation for seeding in late October and was set to perform dormant seeding in late October or early November.

2017 Main Stem Bassett Creek Streambank Erosion Repair Project (2017CR-M): 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?clD=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 2017, 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 summer of 2018 but will be delayed until summer 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. The cultural and historical survey fieldwork is complete and a final report was sent to the State Historical Preservation Office (SHPO) in February. The Hennepin County ERF grant agreement was amended to extend the term. Construction was scheduled to begin in September but will be pushed to late November. City staff updated the Commission on the latest developments with this project at the Sept 19 and Oct 17, 2019 meetings (see memos in those meeting packets). The section along Pioneer Paper will no longer be stabilized/restored due to lack of access and cooperation from Pioneer Paper. For various reasons the project did not get underway in late 2019 as planned. Currently, city and consultant staff are working to complete some permitting requirements and plan to implement the project starting in September 2020. The prolonged schedule and additional requirements resulted in an increase in the design budget of \$32,500, and the construction contractor will have a rate increase as well. The city is hoping to gain access to the Pioneer Paper property so that they can complete the entire project as originally planned. The ERF grant has been recommended for extension and is in the approval process.

2014 Schaper Pond Diversion Project, Golden Valley (SL-3) (No change since Oct): 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 is being performed this summer. At the July meeting the Commission Engineer

reported that over 200 carp were discovered in the pond during a recent carp survey. At the September meeting the Commission approved the Engineer's recommendation to perform a more in-depth survey of carp including transmitters to learn where and when carp are moving through the system. A Federal 319 grant for management of carp in relation to Schaper Pond and Sweeney Lake was recently approved by the MPCA and the grant agreement may be available by the December Commission meeting. At the October 17th meeting, the Commission received a report on the carp surveys and recommendations for carp removal and management. Project webpage: <http://www.bassettcreekwmo.org/index.php?cID=277>.

Sweeney Lake Water Quality Improvement Project, Golden Valley (SL-8): This project was added to the 2020 CIP list after receiving a federal 319 grant from the MPCA. It is partially a result of the carp surveys completed through the Schaper Pond Diversion Project and a study of the year-round aeration on Sweeney Lake. This project will treat curly-leaf pondweed in spring 2020, will remove carp in summer 2020, and will perform an alum treatment on Sweeney Lake in late summer 2020. The project was officially ordered by the Commission after a public hearing in September 2019. A public open house on this project was held via Webex on April 8th with approximately 20 people joining. The open house presentation and a question and answer document is available online. The curly-leaf pondweed herbicide treatment was completed and Carp Solutions is working on carp tracking and netting over the next few weeks. The project website is continually updated to keep lake residents informed: [Sweeney Lake Water Quality Improvement Project, SL-8](#)).

2014 Twin Lake In-lake Alum Treatment, Golden Valley (TW-2): (No change since June 2018) 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 were presented at the June 2018 meeting. Commissioners agreed with staff recommendations to keep the CIP funding remaining for this project as a 2nd treatment may be needed in the future. Project webpage: <http://www.bassettcreekwmo.org/index.php?cID=278>.

2013 Four Seasons Area Water Quality Project/Agora Development (NL-2): 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. In 2019, a new potential buyer/developer (Dominium) began preparing plans for redevelopment at the site. City staff, the Commission Engineer and I have met on numerous occasions with the developer and their consulting engineers to discuss stormwater management and opportunities with "above and beyond" pollutant reductions. Concurrently, the Commission attorney has been working to draft an agreement to transfer BCWMC CIP funds for the above and beyond treatment. At their meeting in December, Dominium shared preliminary project plans and the Commission discussed the redevelopment and potential "above and beyond" stormwater management techniques. At the April 2020 meeting, the Commission conditionally approved the 90% project plans. The agreements with Dominium and the city of Plymouth to construct the project were approved May 2020 and project designers are coordinating with Commission Engineers to finalize plans per conditions. Project webpage: <http://www.bassettcreekwmo.org/index.php?cID=282>.

2020 Crane Lake Improvement Project (CL-3): This project was constructed in conjunction with the reconstruction of Ridgedale Drive in the City of Minnetonka. At their meeting on March 21, 2019, the BCWMC approved the project's feasibility study and chose to implement Option 3 from the study. At their meeting on May 16, 2019, the BCWMC approved the 90% design plans for the project. Construction is expected in early 2020. A public hearing on this project was held on September 19, 2019. No persons commented on the project. The project was officially ordered and an agreement with the city of Minnetonka was approved at the same meeting. Project webpage: <http://www.bassettcreekwmo.org/index.php?cID=490>.

June 2020 update:

- Underground storm water tank was installed last fall.
- Construction of the lift station, which will pump storm water from the underground storm water tank into the rain gardens, will be completed within the next couple weeks.
- All storm sewer along Ridgedale Drive and within the area draining to the underground storm water tank is installed.
- Rain gardens are constructed (see photo; weed control needed), plantings to be installed over the next several weeks
- Underground storm water tank and pumping system to the rain gardens will be fully operational this fall.
- Educational sign design will be completed in 2020 and installation will occur in 2021.
- Additional project updates can be viewed on our City Website Project Page:



<https://www.minnetonkamn.gov/services/construction-projects/street-and-utility-projects/ridgedale-drive-improvements-project>

Other Work

CIP Project Work and Technical Assistance

- Tracked work on Sweeney Lake Improvement Project and disseminated information to lake association and updated website
- Participated in Minneapolis Bacteria Task Force meeting
- Participated in Sochacki Park Assessment Steering Committee meeting
- Reviewed draft BCWMC Stream Monitoring Report
- Posted updated water quality graphs for all priority lakes online
- Assisted in addressing possible algae bloom in Sweeney (communication with lake homeowner, city staff, Commission Engineers)
- Discussed Main Stem Lagoon Dredging Project with county staff
- Reviewed Flood Control Project inspection report, ACOE correspondence; discussed with Commission Engineer

Administration and Education

- Participated in WMWA meeting; reviewed meeting minutes
- Distributed CAMP monitoring equipment to volunteers
- Reviewed BCWMC financial statements to correct some project budgets and calculate anticipated closed project account funding
- Developed possible funding mechanisms for Main Stem Lagoon Dredging Project
- Prepared for and participated in Watershed Based Implementation Funding convene meeting #2