Mr. Jim de Lambert Bassett Creek Watershed Management Commission 7800 Golden Valley Road Golden Valley, MN 55427 Page # 1

Invoice # 23270051-2018-6

Project # 23/27-0051

Client # 59 August 3, 2018

Invoice of Account with BARR ENGINEERING COMPANY

For professional services during the period of June 30, 2018 through July 27, 2018

ENGINEERING

TECHNICAL SERVICES

Communications with administrator, Golden Valley staff, Hennepin County staff and Golden Valley resident regarding County Road 66 construction and local flooding issues; provide watershed divide GIS data to RWMWD staff for Adopt-a-Drain; prepare for and attend July 10 Hennepin County Committee meeting regarding minor plan amendment and follow-up communications; internal discussions regarding FEMA mapping; provide information to administrator regarding review fees paid by applicant; communications with administrator regarding MDNR/FEMA grant reimbursement request form; set up meeting with administrator; communications with Robbinsdale staff regarding AIS research; communications with administrator regarding extreme precipitation events; internal communications regarding future TAC meeting agenda items; and communications with and provide information to TRPD staff regarding Rice Ponds information.

James P. Herbert, Principal Engineer/Scientist 1.2 hours @ \$190.00 per hour\$	228.00
Karen L. Chandler, Principal Engineer/Scientist 14.2 hours @ \$175.00 per hour\$	2,485.00
Sterling 'Greg' Williams, Engineer/Scientist/Specialist III 0.3 hours @ \$135.00 per hour\$	40.50
Technicians/Administrative\$	37.50
Expenses (Mileage/Parking) <u>\$</u>	22.18
Subtotal, Technical Services\$	2,813.18

MONTHLY MEETING PREPARATION

Communications/coordination with administrator and internal staff regarding draft/final agenda and meeting packet for July Commission meeting; review/edit draft June meeting minutes; prepare for July Commission meeting, including setting up and attending pre-meeting conference call with Chair de Lambert and administrator and preparing Engineer communications; communications with administrator and internal staff regarding follow-up items from July Commission meeting and

upcoming meeting agenda items; and communications with administrator regarding August meeting packet preparation.

James P. Herbert, Principal Engineer/Scientist	
1.0 hours @ \$190.00 per hour\$	190.00
Karen L. Chandler, Principal Engineer/Scientist	
21.7 hours @ \$175.00 per hour\$	3,797.50
Technicians/Administrative\$_	540.00
Subtotal, Monthly Meeting Preparation\$	4,527.50

CIP PRIORITIZATION PROCESS

Prepare draft redevelopment maps; meeting with administrator regarding upcoming committee meeting agenda and materials, including review of maps; prepare draft CIP prioritization scoring matrix and provide to administrator for review; and revise figures and matrix for July 31 committee meeting.

Subtotal Technical Services\$	9,148.18
Subtotal, CIP Prioritization Process\$	1,807.50
Sterling 'Greg' Williams, Engineer/Scientist/Specialist III 6.0 hours @ \$135.00 per hour\$	810.00
Karen L. Chandler, Principal Engineer/Scientist 5.7 hours @ \$175.00 per hour\$	997.50

PLAT REVIEW

Ridgedale Active Adults Apartments (2018-16)

Review grading, drainage and erosion control plans; prepare and send approval/comment letter to city staff; and review revised grading, drainage and erosion control plans.

James P. Herbert, Principal Engineer/Scientist	
2.0 hours @ \$190.00 per hour\$	380.00
Josh P. Phillips, Engineer/Scientist/Specialist I	
8.3 hours @ \$85.00 per hour\$	705.50
Subtotal, Ridgedale Active Adults Apartments\$	1,085.50

Plymouth Commons Apartments (2018-19)

Review grading, drainage and erosion control plans; prepare and send approval/comment letter to city staff; review revised grading, drainage and erosion control plans; and prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist 1.8 hours @ \$190.00 per hour\$	342.00
Josh P. Phillips, Engineer/Scientist/Specialist I 5.8 hours @ \$85.00 per hour\$_	493.00
Subtotal. Plymouth Commons Apartments\$	835.00

MCES G.V. Interceptor Rehab (2018-21)

Review grading, drainage and erosion control plans; communications with applicant and city staff; and prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist 2.5 hours @ \$190.00 per hour\$	475.00
Josh P. Phillips, Engineer/Scientist/Specialist I 7.0 hours @ \$85.00 per hour\$	595.00
Technicians/Administrative\$	57.00
Expenses (Postage)	0.47
Subtotal, MCES G.V. Interceptor Rehab\$	1,127.47

Sanitary & Storm Sewer Rehab-15th Ave & TH 55 (2018-22)

Preliminary review of grading, drainage and erosion control plans; and communications with applicant and city staff.

Subtotal Plat Review\$	3,221.47
Subtotal, Sanitary & SS Rehab-15 th Ave & TH 55\$	173.50
Technicians/Administrative \$	19.00
Josh P. Phillips, Engineer/Scientist/Specialist I 1.2 hours @ \$85.00 per hour\$	102.00
Karen L. Chandler, Principal Engineer/Scientist 0.3 hours @ \$175.00 per hour\$	52.50

PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

PRELIMINARY COMMUNICATIONS

Communications with consultant and internal staff regarding proposed construction in Medicine Lake; communications with Mobile Radio Engineering staff and Golden Valley staff regarding FEMA floodplain and flood insurance questions; internal discussions regarding review of Bassett Creek dewatering and appropriations permit applications; and provide wetland normal water level and 100-year flood level information to developer's consultant.

James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$190.00 per hour\$	95.00
Karen L. Chandler, Principal Engineer/Scientist 1.3 hours @ \$175.00 per hour\$	227.50
Jennifer A. Koehler, Engineer/Scientist/Specialist III 0.5 hours @ \$140.00 per hour\$	70.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 1.4 hours @ \$135.00 per hour\$	189.00
Ross S. Mullen, Engineer/Scientist/Specialist II 1.1 hours @ \$100.00 per hour\$	110.00

Subtotal, Preliminary Communications	\$	793.50
1.2 hours @ \$85.00 per hour		102.00
Josh P. Phillips, Engineer/Scientist/Specialist I		

NON-FEE REVIEWS

Blue Line LRT

Communications with administrator, Blue Line LRT staff and internal staff regarding submittal and review of upcoming BCWMC application.

Karen L. Chandler, Principal Engineer/Scientist	
1.1 hours @ \$175.00 per hour\$	192.50
Subtotal, Blue Line LRT\$	192.50

MnDOT Metro Ponds Reconstruction (2018-20)

Review revised grading, drainage, and erosion control plans for dredging of five MnDOT stormwater ponds; and prepare and send approval letter to MnDOT staff [State agencies are exempt from paying BCWMC review fees].

James P. Herbert, Principal Engineer/Scientist 1.2 hours @ \$190.00 per hour\$	228.00
Josh P. Phillips, Engineer/Scientist/Specialist I 2.6 hours @ \$85.00 per hour\$_	221.00
Subtotal, MnDOT Metro Ponds Reconstruction (2018-20)\$	449.00
Subtotal Non-Fee Reviews\$	641.50
Subtotal Preliminary Communications and Non-Fee Reviews\$	1,435.00
COMMISSION AND TAC MEETINGS	
Attend July 19 Commission meeting.	

Attend July 19 Commission meeting.

Karen L. Chandler, Principal Engineer/Scientist	
3.8 hours @ \$175.00 per hour\$_	665.00
Subtotal, Commission and TAC Meetings\$	665.00

SURVEYS & STUDIES

Subtotal Surveys & Studies\$	0.00
------------------------------	------

WATER QUALITY/MONITORING

General Water Quality Tasks

Prepare information comparing total phosphorus concentrations and maximum depth of plant growth in lakes; and prepare memo with draft criteria for reviewing Bassett Creek dewatering and appropriations permit applications and their potential impacts on biological communities.

Margaret R. Rattei, Engineer/Scientist/Specialist III	
6.6 hours @ \$135.00 per hour\$	891.00
Subtotal, General Water Quality Tasks\$	891.00

Routine Lake Monitoring - Parkers and Westwood Lakes

Review June aquatic plant survey data for Westwood Lake and communications with subconsultant regarding survey; analyze Westwood Lake phytoplankton samples collected in May and Juen, Westwood Lake zooplankton sample collected in May, and Parkers Lake zooplankton samples collected in May and June; review Westwood data and prepare status report for July Commission meeting; coordinate with Westwood Nature Center staff regarding July sampling of Westwood Lake, including equipment preparation; and review lab reports, revised lab reports and lab invoices.

Henry M. Runke, Principal Engineer/Scientist 0.2 hours @ \$175.00 per hour\$	35.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 12.2 hours @ \$135.00 per hour\$	1,647.00
Erin M. Dietrich, Engineer/Scientist/Specialist III 0.6 hours @ \$145.00 per hour\$	87.00
Terri A. Olson, Engineer/Scientist/Specialist III 0.6 hours @ \$135.00 per hour\$	81.00
Technicians/Administrative\$_	275.00
Subtotal, Routine Lake Monitoring – Parkers and Westwood\$	2,125.00

Stream Water Quality/Quantity Monitoring - North Branch

Storm event sampling; edit data logger program to update rating curve and add code to write 48 sample data lines; collect grab sample; perform flow measurements; perform site maintenance and troubleshoot auto-sampler skipped bottles; internal communications regarding surveying; review rating curve with new data points; and provide update for Engineer's communications.

Karen L. Chandler, Principal Engineer/Scientist 0.4 hours @ \$175.00 per hour\$	70.00
Christopher J. Bonick, Engineer/Scientist/Specialist III 12.6 hours @ \$125.00 per hour\$	1,575.00
Heather N. Hlavaty, Engineer/Scientist/Specialist II 3.5 hours @ \$95.00 per hour\$	332.50
Sean Campbell, Engineer/Scientist/Specialist I 0.9 hours @ \$80.00 per hour\$	72.00
Technicians/Administrative\$	765.00
Expenses (Verizon Wireless/2WD vehicle/mileage)	311.22
Subtotal, North Branch Stream Water Quality/Quantity Monitor\$	3,125.72

Biotic Index Monitoring

Communications with subcontractor regarding macroinvertebrate analysis.

Margaret R. Rattei, Engineer/Scientist/Specialist III	
0.2 hours @ \$135.00 per hour\$_	27.00
Subtotal, Biotic Index Monitoring\$	27.00
Subtotal, Water Quality/Monitoring\$	<i>6,168.72</i>
WATER QUANTITY	
Subtotal, Water Quantity\$	0.00
FLOOD CONTROL PROJECT INSPECTION+DEEP TUNNEL	
Subtotal, Flood Control Proj Inspect+Deep Tunnel\$	0.00

MUNICIPAL PLAN REVIEWS

General

Communications with administrator and internal staff regarding New Hope local plan review and local plan review process in general.

Karen L. Chandler, Principal Engineer/Scientist	
0.8 hours @ \$175.00 per hour	\$ 140.00
Subtotal, Municipal Plan Review	\$ 140.00

Minneapolis WRMP Review

Review Minneapolis water resources management plan and city ordinances; review Metropolitan Council comments on city plan; prepare table of review comments and draft letter and internal meeting to discuss; communications with administrator; summarize review comments for July Commission meeting; and revise comments per July Commission meeting and provide to administrator.

Karen L. Chandler, Principal Engineer/Scientist 4.7 hours @ \$175.00 per hour\$	822.50
Sterling 'Greg' Williams, Engineer/Scientist/Specialist III	
16.5 hours @ \$135.00 per hour\$_	2,227.50
Subtotal, Minneapolis WRMP Review\$	3,050.00

Crystal LSWMP Review

Review Crystal local surface water management plan, prepare table of review comments and internal meeting to discuss review.

Karen L. Chandler, Principal Engineer/Scientist	
0.9 hours @ \$175.00 per hour\$	157.50
Sterling 'Greg' Williams, Engineer/Scientist/Specialist III	
13.0 hours @ \$135.00 per hour\$	1.755.00

Subtotal, Crystal LSWMP\$	1,912.50
Subtotal, Municipal Plan Reviews\$	5,102.50
XP-SWMM MODEL UPDATES-REVIEWS	
Subtotal, XP-SWMM Model Updates-Reviews\$	0.00
	25,740.87

Communications with MAISRC staff, internal staff and administrator regarding Medicine Lake zebra mussels; prepare Medicine Lake zebra mussel update for July Commission meeting; communications with supplier regarding Earth Tech QZ for potential treatment of Medicine Lake and cost estimates; prepare memo summarizing communications with supplier and providing recommendations for approach to treat Medicine Lake zebra mussels; and provide memo to administrator.

Karen L. Chandler, Principal Engineer/Scientist 0.7 hours @ \$170.00 per hour\$	122.50
Margaret R. Rattei, Engineer/Scientist/Specialist III 3.2 hours @ \$135.00 per hour\$\$	432.00
Subtotal, APM/AIS Work\$	554.50
TOTAL APM/AIS WORK\$	554.50
ANNUAL REPORT	
TOTAL ANNUAL REPORT\$	0.00
PUBLIC COMMUNICATIONS	
TOTAL PUBLIC COMMUNICATIONS\$	0.00
WEBSITE	
TOTAL WEBSITE\$	0.00
WATERSHED OUTLET MONITORING PROGRAM (WOMP)	
TOTAL WOMP\$	0.00

CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

DECOLA PONDS B&C IMPROVEMENT PROJECT (2019) (BC-2, BC-3. BC-8)

Attend July 10 Hennepin County Committee meeting regarding maximum levy request.

Karen L. Chandler, Principal Engineer/Scientist 1.0 hours @ \$175.00 per hour		175.00 175.00
WESTWOOD LAKE WATER QUALITY IMPROVEMENT PROJECT (2019) (WST	<u>-2)</u>	
Attend July 10 Hennepin County Committee meeting regarding maximum	levy requ	est.
Karen L. Chandler, Principal Engineer/Scientist 1.0 hours @ \$175.00 per hour	\$	175.00
Subtotal, Westwood Lake WQ Feasibility Study	\$	175.00
SCHAPER POND 2018 MONITORING AND REPORTING (SL-3)		
Collect water quality sample; review bathymetric survey results; summarize sp communications with carp survey subconsultant; and expenses for carp survey	•	•
Gregory J. Wilson, Consultant/Advisor 3.5 hours @ \$160.00 per hour	\$	560.00
Heather N. Hlavaty, Engineer/Scientist/Specialist I		
3.0 hours @ \$95.00 per hour	\$	285.00
Technicians/Administrative	\$	213.50
Expenses (Carp Solutions/canoe/mileage/conductivity meter/parking).		1,056.06
Expenses (Carp Solutions/canoe/mileage/conductivity meter/parking). Subtotal, Schaper Pond 2018 Monitoring and Reporting	·\$	2,114.56
Expenses (Carp Solutions/canoe/mileage/conductivity meter/parking). Subtotal, Schaper Pond 2018 Monitoring and Reporting TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)	·\$	
Expenses (Carp Solutions/canoe/mileage/conductivity meter/parking). Subtotal, Schaper Pond 2018 Monitoring and Reporting	\$ \$	2,114.56
Expenses (Carp Solutions/canoe/mileage/conductivity meter/parking). Subtotal, Schaper Pond 2018 Monitoring and Reporting TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)	\$ \$	2,114.56 2,464.56
Expenses (Carp Solutions/canoe/mileage/conductivity meter/parking). Subtotal, Schaper Pond 2018 Monitoring and Reporting TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy) TMDL WORK TOTAL TMDL WORK IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)	\$ \$	2,114.56 2,464.56
Expenses (Carp Solutions/canoe/mileage/conductivity meter/parking). Subtotal, Schaper Pond 2018 Monitoring and Reporting TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy) TMDL WORK TOTAL TMDL WORK	\$\$ \$	2,114.56 2,464.56 0.00
Expenses (Carp Solutions/canoe/mileage/conductivity meter/parking). Subtotal, Schaper Pond 2018 Monitoring and Reporting TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)	\$\$\$	2,114.56 2,464.56 0.00
Expenses (Carp Solutions/canoe/mileage/conductivity meter/parking). Subtotal, Schaper Pond 2018 Monitoring and Reporting TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy) TMDL WORK TOTAL TMDL WORK	**************************************	2,114.56 2,464.56 0.00 del.
Expenses (Carp Solutions/canoe/mileage/conductivity meter/parking). Subtotal, Schaper Pond 2018 Monitoring and Reporting TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)	**************************************	2,114.56 2,464.56 0.00 del.

Subtotal, Improved FEMA Floodplain Modeling & Mapping (MDNR)\$	337.00	
TOTAL IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)\$	337.00	

SUMMARY TOTALS

Total Engineering\$	25,740.87
Total APM/AIS Work\$	554.50
Total Annual Report/Website/Public Communications\$	0.00
Total WOMP\$	0.00
Total TMDL Work\$	0.00
Total Capital Improvement Projects (Tax Levy)\$	2,464.56
Total Improved FEMA Floodplain Modeling & Mapping (MDNR)\$_	337.00

TOTAL PAYABLE.....\$ 29,096.93

Barr declares under the penalties of law that this account, claim or demand is just and that no part of it has been paid.