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

Invoice # 23270051-2019-1

Project # 23/27-0051

Client # 59 March 8, 2019

Invoice of Account with BARR ENGINEERING COMPANY

For professional services during the period of February 1, 2019 through March 1, 2019

ENGINEERING

TECHNICAL SERVICES

Internal communications regarding BCWMC requirements for linear projects, flexible treatment options, and BCWMC flow chart; communications with St. Louis Park staff and internal staff regarding Westwood Lake outlet survey and potential Westwood Lake outlet channel CIP project; and inactivate 2018 budgets.

Karen L. Chandler, Principal Engineer/Scientist 3.1 hours @ \$175.00 per hour	\$ 542.50
Josh P. Phillips, Engineer/Scientist/Specialist II 0.7 hours @ \$95.00 per hour	\$ 66.50
Subtotal, Technical Services	\$ 609.00

MONTHLY MEETING PREPARATION

Communications/coordination with administrator and internal staff regarding draft/final agenda and meeting packet for February Commission meeting; review/edit draft January meeting minutes; review administrator's draft memo for February Commission meeting regarding 319 grant; prepare for February Commission meeting, including pre-meeting conference call with Chair de Lambert and administrator, and review meeting packet; and communications with administrator and internal staff regarding follow-up items from February Commission meeting and upcoming meeting agenda items.

James P. Herbert, Principal Engineer/Scientist 6.0 hours @ \$195.00 per hour\$	1,170.00
Karen L. Chandler, Principal Engineer/Scientist 15.4 hours @ \$175.00 per hour\$	2,695.00
Technicians/Administrative\$_	320.00
Subtotal, Monthly Meeting Preparation\$	4,185.00

TAC PREPARATION

Prepare for February 4 TAC meeting, and review administrator's memo to Commission regarding TAC meeting.

Subtotal Technical Services \$	5.056.50
Subtotal, TAC Preparation\$	262.50
Sterling 'Greg' Williams, Engineer/Scientist/Specialist III 0.5 hours @ \$140.00 per hour\$	70.00
Karen L. Chandler, Principal Engineer/Scientist 1.1 hours @ \$175.00 per hour\$	192.50

PLAT REVIEW

Ridgedale Active Adults Apartments (2018-16)

Review resubmittal/supporting materials for proposed alternative proprietary treatment filter, including communications with applicant, manufacturer and internal staff; and set up meeting with manufacturer.

James P. Herbert, Principal Engineer/Scientist	
3.5 hours @ \$195.00 per hour\$	682.50
Josh P. Phillips, Engineer/Scientist/Specialist II	
4.5 hours @ \$95.00 per hour\$	427.50
Subtotal, Ridgedale Active Adults Apts\$	1,110.00

Rockford Rd/I-494 Interchange (2018-31)

Review submittal, including grading, drainage and erosion control plans, H&H model, and water quality model; review proposed diversion impacts and communications with applicant, city and Shingle Creek WMC staff regarding diversion; prepare review memo for February Commission meeting; prepare and send comment letter to city staff; and communications with applicant.

James P. Herbert, Principal Engineer/Scientist 10.7 hours @ \$195.00 per hour\$	2,086.50
Karen L. Chandler, Principal Engineer/Scientist 2.1 hours @ \$175.00 per hour\$	367.50
Michael B. McKinney, Engineer/Scientist/Specialist II 1.3 hours @ \$105.00 per hour\$	136.50
Josh P. Phillips, Engineer/Scientist/Specialist II 20.4 hours @ \$95.00 per hour\$	1,938.00
Edward M. Anderson, Engineer/Scientist/Specialist I 0.7 hours @ \$85.00 per hour\$_	59.50
Subtotal, Rockford Rd/I-494 Interchange\$	4,588.00

Plymouth Medical Office Building (2018-32)

Review grading, drainage and erosion control plans; prepare and send comment letter to city staff; review revised grading, drainage and erosion control plans; and coordination with applicant.

James P. Herbert, Principal Engineer/Scientist 2.0 hours @ \$195.00 per hour	\$	390.00
Josh P. Phillips, Engineer/Scientist/Specialist II 5.2 hours @ \$95.00 per hour	\$	494.00
Technicians/Administrative	\$	9.50
Subtotal, Plymouth Medical Office Building	\$	893.50
RiverTree School Expansion (2019-01)		
Plat review set up and preliminary review.		
James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$195.00 per hour	\$	97.50
Technicians/Administrative	\$	76.00
Expenses (Postage)	<u>\$</u>	1.15
Subtotal, RiverTree School Expansion	\$	174.65
Golden Valley 2019 PMP (2019-02)		
Plat review set up and preliminary review.		
James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$195.00 per hour	\$	97.50
Technicians/Administrative	\$	47.50
Subtotal, Golden Valley 2019 PMP	\$	145.00
5005 Bassett Creek Drive Fence (2019-03)		
Plat review set up; preliminary review; meeting with applicant; and communications city staff.	s wit	h applicant and
James P. Herbert, Principal Engineer/Scientist 1.5 hours @ \$195.00 per hour	\$	292.50
Technicians/Administrative	\$	47.50
Subtotal, 5005 Bassett Creek Dr Fence	\$	340.00
Subtotal Plat Review	\$	7,251.15

PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

PRELIMINARY COMMUNICATIONS

Communications with consultant regarding Wayzata school site in Plymouth; preliminary review of project in Crystal; communications with Golden Valley staff regarding proposed project on Bassett Creek; communications with Golden Valley and MPRB staff regarding Wirth Park cart path, review preliminary plan and provide comments; communications with consultant regarding potential Four Seasons Mall project; preliminary review for 2020 Norway Pine Circle in Minnetonka; and respond to floodplain question at 3370 Sycamore Lane North in Plymouth.

James P. Herbert, Principal Engineer/Scientist 5.5 hours @ \$195.00 per hour	\$	1,072.50
Josh P. Phillips, Engineer/Scientist/Specialist II		
1.1 hours @ \$95.00 per hour		104.50
Subtotal, Preliminary Communications	\$	1,177.00
NON-FEE REVIEWS		
Bassett Creek Valley Study		
Review revised Bassett Creek Valley floodplain study scope; communications of Minneapolis staff, and city consultant regarding suggested revisions; estimate engineer's review/participation in project; and review final scope, schedule and	BCW	MC budget for
Karen L. Chandler, Principal Engineer/Scientist 1.8 hours @ \$175.00 per hour	\$	315.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 1.5 hours @ \$140.00 per hour	\$	210.00
Subtotal, Wellington Dev./B. Cr. Valley	\$	525.00
Metropolitan Council SWLRT (2016-17)		
Review revised drawings and compare against historical submittal/approval; and administrator, SWLRT consultant, and Metropolitan Council staff regarding project		
James P. Herbert, Principal Engineer/Scientist 6.3 hours @ \$195.00 per hour	\$	1,228.50
Karen L. Chandler, Principal Engineer/Scientist 0.8 hours @ \$175.00 per hour	\$	140.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 0.2 hours @ \$140.00 per hour	\$	28.00
Josh P. Phillips, Engineer/Scientist/Specialist II 0.4 hours @ \$95.00 per hour	\$	38.00
Subtotal, Metropolitan Council SWLRT	\$	1,434.50
Subtotal Non-Fee Reviews	\$	1,959.50
Subtotal Preliminary Communications and Non-Fee Reviews	\$	3,136.50
COMMISSION AND TAC MEETINGS		
Attend February 4 TAC meeting and February 21 Commission meeting.		
Karen L. Chandler, Principal Engineer/Scientist 6.0 hours @ \$175.00 per hour	\$	1,050.00
Sterling 'Greg' Williams, Engineer/Scientist/Specialist III 2.5 hours @ \$140.00 per hour	\$_	350.00
Subtotal, Commission and TAC Meetings	\$	1,400.00

SURVEYS & STUDIES

Subtotal Surveys & Studies.....\$ 0.00

WATER QUALITY/MONITORING

General Water Quality

Attend MPCA's February 4 kick-off meeting regarding proposed Cycle II 2020-2021 water quality monitoring program and follow-up communications with administrator and internal staff; communications with administrator and internal staff regarding 319 grant for Sweeney Lake projects, develop 319 grant application materials (including map) for Sweeney Lake improvements and send to administrator; revise Westwood and Parkers Lake reports in response to administrator's comments, and internal discussion regarding bearded stonewort in Westwood Lake and exotic/invasive status.

Karen L. Chandler, Principal Engineer/Scientist	
1.9 hours @ \$175.00 per hour\$	332.50
Gregory J. Wilson, Consultant/Advisor 15.2 hours @ \$165.00 per hour\$	2,508.00
Sterling 'Greg' Williams, Engineer/Scientist/Specialist III 0.5 hours @ \$140.00 per hour\$	70.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 4.9 hours @ \$135.00 per hour\$	661.50
Joshua R. Vosejpka, Engineer/Scientist/Specialist I	
0.5 hours @ \$85.00 per hour\$	42.50
Technicians/Administrative\$	448.50
Expenses (Mileage)\$	26.10
Subtotal, General Water Quality\$	4,089.10

North Branch Monitoring Year 2

Winterization of monitoring station; download and file station photos; test/prepare equipment; and internal communications.

Christopher J. Bonick, Engineer/Scientist/Specialist III	
5.5 hours @ \$125.00 per hour\$	687.50
Technicians/Administrative\$	36.00
Expenses (Mileage/2WD vehicle/Verizon Wireless)\$	141.04
Subtotal, North Branch Monitoring Year 2\$	864.54

2018 Biotic Index Monitoring

Communications with Metropolitan Council staff regarding WOMP station water quality and macroinvertebrate data; update monitoring locations map; summarize Main Stem at Irving Avenue invertebrate data in format required by MPCA for computation of M-IBI; and communications with MPCA staff regarding computing M-IBI for 2018 BCWMC biota stations.

Margaret R. Rattei, Engineer/Scientist/Specialist III 1.7 hours @ \$135.00 per hour	\$	229.50
Joshua R. Vosejpka, Engineer/Scientist/Specialist I 1.0 hours @ \$85.00 per hour	\$	<u>85.00</u>
Subtotal, Biotic Index Monitoring	\$	314.50
Subtotal, Water Quality/Monitoring	\$	5,268.14
WATER QUANTITY		
Measure and review lake level elevations as part of the lake-gauging program.		
Technicians/Administrative	\$	1,030.00
Expenses (Mileage/2WD Field)	\$	59.74
Subtotal, Water Quantity	\$	1,089.74
2018 FLOOD CONTROL PROJECT INSPECTIONS-DEEP TUNNEL INSPECTION		
Continue coordination with U.S. Army Corps of Engineers (Corps) staff, administration internal staff regarding late February deep tunnel inspection; communications with barge; and coordination and communications with Corps staff, administrator and i cancelled inspection.	n con	tractor to move
James P. Herbert, Principal Engineer/Scientist		
7.5 hours @ \$195.00 per hour	\$	1,462.50
Subtotal, 2018 Flood Control Proj Inspection-Deep Tunnel	\$	1,462.50
MUNICIPAL PLAN REVIEWS		
St. Louis Park Plan		
Review city responses to BCWMC comments; and attend February 7 conference castaff, city consultants and administrator regarding responses to BCWMC comment		h St. Louis Park
Karen L. Chandler, Principal Engineer/Scientist 1.4 hours @ \$175.00 per hour	\$	<u> 245.00</u>
Subtotal, St. Louis Park Plan	\$	245.00
Medicine Lake LSWMP Review		
Communications with administrator and internal staff regarding review status; reviand final plan; and communication with Medicine Lake consultant.	ew re	evised draft plan

0.3 hours @ \$175.00 per hour.....\$

2.5 hours @ \$140.00 per hour.....\$_

Subtotal, Medicine Lake LSWMP\$

52.50

350.00

402.50

Karen L. Chandler, Principal Engineer/Scientist

Sterling 'Greg' Williams, Engineer/Scientist/Specialist III

Robbinsdale	ISWMP	Review

Communications with administrator and internal staff regarding review status; review revised draft LSWMP
and final LSWMP; and communication with Robbinsdale staff.

ADMINISTRATIVE SERVICES TOTAL ADMINISTRATIVE SERVICES	0.00
ADMINISTRATIVE SERVICES TOTAL ADMINISTRATIVE SERVICES\$ ANNUAL REPORT	0.00
ADMINISTRATIVE SERVICES TOTAL ADMINISTRATIVE SERVICES\$	
ADMINISTRATIVE SERVICES	
TOTAL APM/AIS WORK\$	
	105.00
Subtotal, APM/AIS Work\$	105.00
Karen L. Chandler, Principal Engineer/Scientist 0.6 hours @ \$175.00 per hour\$_	105.00
Communications with administrator regarding starry stonewort treatments on Medicir	ie Lake.
APM/AIS WORK	
TOTAL WOMP\$	0.00
WATERSHED OUTLET MONITORING PROGRAM (WOMP)	
TOTAL ENGINEERING\$	25,714.53
Subtotal, XP-SWMM Model Updates-Reviews\$	0.00
XP-SWMM MODEL UPDATES-REVIEWS	
Subtotal, Municipal Plan Reviews\$	1,050.00
Subtotal, Robbinsdale LSWMP\$	402.50
Sterling 'Greg' Williams, Engineer/Scientist/Specialist III 2.5 hours @ \$140.00 per hour\$_	350.00
	52.50
Karen L. Chandler, Principal Engineer/Scientist 0.3 hours @ \$175.00 per hour\$	

PUBLIC COMMUNICATIONS

TOTAL PUBLIC COMMUNICATIONS\$ 0.00

CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

SCHAPER POND 2018 MONITORING AND REPORTING (SL-3)

Review Carp Solutions progress reporting, invoicing, and preliminary PIT tag results; and communications with Carp Solutions regarding future carp management options (to assist in developing 319 funding application materials for Sweeney Lake improvements).

Gregory J. Wilson, Consultant/Advisor	
5.0 hours @ \$165.00 per hour\$	825.00
Subtotal, Schaper Pond 2018 Monitoring and Reporting\$	825.00

CRANE LAKE IMPROVEMENT PROJECT (2020) (CL-3)

Communications with Minnetonka staff, administrator, and internal staff regarding upcoming submittal and review.

Subtotal, Crane Lake Improvement Project\$	133.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 0.2 hours @ \$140.00 per hour\$_	28.00
Karen L. Chandler, Principal Engineer/Scientist 0.6 hours @ \$175.00 per hour\$	105.00

JEVNE PARK STORMWATER MANAGEMENT FEASIBILITY STUDY (2020) (ML-21)

Prepare for and attend February 4 Medicine Lake City Council meeting with administrator, and follow-up from meeting; revise concepts; revise graphical figures for each concept; create and mount figures on boards for public open house; prepare for and attend February 28 open house; and prepare draft feasibility study report.

Karen L. Chandler, Principal Engineer/Scientist 0.2 hours @ \$175.00 per hour\$	35.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 15.2 hours @ \$140.00 per hour\$	2,128.00
Lulu Fang, Engineer/Scientist/Specialist II 22.8 hours @ \$95.00 per hour\$	2,166.00
Michael B. McKinney, Engineer/Scientist/Specialist II 0.3 hours @ \$105.00 per hour\$	31.50
Brendan H. Dougherty, Engineer/Scientist/Specialist I 0.3 hours @ \$90.00 per hour\$	27.00
Erin E. Feehily, Engineer/Scientist/Specialist I 2.3 hours @ \$85.00 per hour\$	195.50

Nicholas Bad Heart Bull, Engineer/Scientist/Specialist l 1.9 hours @ \$65.00 per hour\$	123.50
Technicians/Administrative\$	368.00
Expenses (Mileage) <u>\$</u>	6.96
Subtotal, Jevne Park Stormwater Feasibility Study\$	5,081.46
TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)\$	5,081.46 6,039.46

IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)

IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)

Perform QAQC of the survey updates in the XP-SWMM model; prepare floodway model inputs for Bassett Creek between Medicine Lake and the New Tunnel Inlet; compile GIS and model source data information; and prepare draft Hydraulic Analysis Narrative.

Ross S. Mullen, Engineer/Scientist/Specialist II 86.8 hours @ \$110.00 per hour\$	9,548.00
Lulu Fang, Engineer/Scientist/Specialist II 0.3 hours @ \$95.00 per hour\$	28.50
Samantha A. Beck, Engineer/Scientist/Specialist I 79.5 hours @ \$80.00 per hour\$	6,360.00
Subtotal, Improved FEMA Floodplain Modeling & Mapping (MDNR)\$	15,936.50
TOTAL IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)\$	15,936.50

SUMMARY TOTALS

Total Engineering\$	25,714.53
Total WOMP\$	0.00
Total APM/AIS Work\$	105.00
Total Administrative Services\$	0.00
Total Annual Report/Website/Public Communications\$	0.00
Total TMDL Work\$	0.00
Total Capital Improvement Projects (Tax Levy)\$	6,039.46
Total Improved FEMA Floodplain Modeling & Mapping (MDNR)\$_	15,936.50
TOTAL PAYABLE\$	47.795.49

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