Ms. Catherine Cesnik Bassett Creek Watershed Management Commission PO Box 270825 Golden Valley, MN 55427 Page # 1 Invoice # 23270051-2024-8 Project # 23/27-0051 Client # 59 October 4, 2024

# Invoice of Account with BARR ENGINEERING COMPANY

For professional services during the period of September 1, 2024 through September 27, 2024

# 1000—ENGINEERING & MONITORING

#### **1010—Technical Services**

Coordinate with administrator, TRPD, and City of Plymouth staff on presentation for Plymouth City Council on water quality in Medicine Lake; prepare for and attend Plymouth City Council meeting on behalf of administrator; communications with administrator regarding grant tracking.

Karen L. Chandler, Principal Engineer/Scientist 2.3 hours @ \$210.00 per hour	\$	483.00
Stephanie Johnson, Consultant/Advisor 4.8 hours @ \$205.00 per hour	\$	984.00
Greg Wilson, Engineer/Scientist/Specialist IV 1.5 hours @ \$195.00 per hour	. \$	292.50
Subtotal Technical Services	\$	1.759.50

# Monthly Meeting Preparation

Communications/coordination with administrator and internal staff regarding draft/final agenda and meeting packet for September Commission meeting; review/edit August meeting minutes; prepare for September Commission meeting, including review meeting packet, and pre-meeting conference call with Chair Cesnik and administrator; and communications with administrator and internal staff regarding follow-up items from September Commission meeting and upcoming meeting agenda items.

James P. Herbert, Principal Engineer/Scientist  3.7 hours @ \$220.00 per hour\$	814.00
Karen L. Chandler, Principal Engineer/Scientist 9.3 hours @ \$210.00 per hour\$	1,953.00
Stephanie Johnson, Consultant/Advisor 7.4 hours @ \$205.00 per hour\$	1,517.00
Gabrielle Campagnola, Engineer/Scientist/Specialist II 1.0 hours @ \$120.00 per hour\$	120.00

Technicians/Administrative\$	805.00
Subtotal, Monthly Meeting Preparation\$	5,209.00
Subtotal 1010—Technical Services\$	6,968.50
1020—Development/Project Reviews Ply Blvd Rehab Project (2024-03) Review revised water quality plans; and communications with city's consultant.	
James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$220.00 per hour\$	110.00
Gabrielle Campagnola, Engineer/Scientist/Specialist II 4.1 hours @ \$120.00 per hour\$	492.0 <u>0</u>
Subtotal, Ply Blvd Rehab Project (2024-03)\$	602.00
Creek Edge Townhomes Crystal (2024-12) Review revised grading, drainage, and erosion control plans; and review revised floanalysis; communications with owner and consultant; and send approval letter to describe the consultant of	
James P. Herbert, Principal Engineer/Scientist 1.3 hours @ \$220.00 per hour\$	286.00
Gabrielle Campagnola, Engineer/Scientist/Specialist II 3.5 hours @ \$120.00 per hour\$	420.0 <u>0</u>
Subtotal, Creek Edge Townhomes Crystal (2024-12)\$	706.00
Graham Research Addition (2024-13) Review grading, drainage, and erosion control plans; and send comments letter to	city staff
James P. Herbert, Principal Engineer/Scientist 0.7 hours @ \$220.00 per hour\$	154.00
Gabrielle Campagnola, Engineer/Scientist/Specialist II  1.8 hours @ \$120.00 per hour\$	216.00
Technicians/Administrative\$	52.50
Subtotal, Graham Research Addition (2024-13)\$	422.50
1326 Spring Valley Rd shoreline Restoration (2024-14) Review grading, landscaping, and erosion control plans; and coordination with app	olicant.
James P. Herbert, Principal Engineer/Scientist 2.0 hours @ \$220.00 per hour\$	440.00
Gabrielle Campagnola, Engineer/Scientist/Specialist II  2.8 hours @ \$120.00 per hour\$	336.00
Subtotal, 1326 Spring Valley Rd shoreline Restoration (2024-14)\$	776.00
Subtotal, 1020—Development/Project Reviews\$	2,506.50

# 1030—Preliminary and Non-Fee Reviews

# **Preliminary Reviews**

Communications with Loucks about the BCWMC development review submission process; and communication with Civil Methods, Inc. regarding tributary area to PCE-002 and PCE-003 (Plymouth Creek) in the BCWMC XPSWMM model.

James P. Herbert, Principal Engineer/Scientist	
0.5 hours @ \$220.00 per hour	\$ 110.00
Lulu Fang, Engineer/Scientist/Specialist II	
0.5 hours @ \$135.00 per hour	\$ 67.50
Subtotal, Preliminary Reviews	\$ 177.50

# Non-Fee Reviews

# General Reviews

Review MDNR permit No. 1969-0646 for Plymouth property owner to remove sediment and restore channel in Medicine Lake; communications with consultant for BCWMC #2023-10 in Golden Valley about BCWMC requirements for final construction documentation; communications with city of Crystal staff regarding BCWMC #2024-12.

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James P. Herbert, Principal Engineer/Scientist  2.8 hours @ \$220.00 per hour	\$	616.00
Gabrielle Campagnola, Engineer/Scientist/Specialist II  0.4 hours @ \$120.00 per hour	. \$	48.00
Subtotal, General Reviews	.\$	664.00
Subtotal, 1030—Preliminary and Non-Fee Reviews	.\$	841.50
1040—Commission and TAC Meetings Attend September 19 Commission meeting.		
Stephanie Johnson, Consultant/Advisor 3.7 hours @ \$205.00 per hour	. \$	758.50
Subtotal, 1040—Commission and TAC Meetings	.\$	758.50
1050—Surveys and Studies		

Subtotal, 1050—Surveys and Studies.....\$

0.00

# 1060—Water Quality/Monitoring

# North Branch Monitoring (Year 1)

Download and review data and check on battery and solar panel charge status; calibrate water quality meter, collect grab samples on 9/6 and 9/26, and deliver samples to MCES lab; check on sampler cable damaged by rodents, work to repair and replace damaged cable; troubleshoot modem connection and reset modem; program, calibrate, and install HOBO continuous dissolved oxygen sensor on 9/9 to monitor dissolved oxygen in the stream; 9/12 site visit to perform QA manual check of dissolved oxygen concentration in stream; and 9/20 site visit to perform QA manual measurement on dissolved oxygen and to remove HOBO dissolved oxygen sensor. Expenses include charges for vehicle use and mileage for site visits and rental of the water quality meter used for field measurements made during grab sample collection and to measure dissolved oxygen as a QA for the continuous dissolved oxygen monitoring.

Meg Rattei, Engineer/Scientist/Specialist III  1.0 hours @ \$155.00 per hour\$	155.00
Chris Bonick, Engineer/Scientist/Specialist III 22.0 hours @ \$145.00 per hour\$	3,190.00
Technicians/Administrative\$	
Expenses (vehicle/mileage/WQ meter)\$	
Subconsultant (MCES)\$	1,224.30
Subtotal, North Branch Monitoring (Year 1)\$	5,279.87

# Parkers Lake Monitoring

Receive samples from TRPD; QA/QC review of lab report from samples collected in August for AIS suitability analysis; and complete analysis of zooplankton sample collected on 6/17 and analyses of phytoplankton samples collected on 7/16 and 8/13. Expense is for RMB lab analyses of August sample collected for AIS suitability analysis.

Meg Rattei, Engineer/Scientist/Specialist III 5.9 hours @ \$155.00 per hour	\$ 914.50
Terri Olson, Engineer/Scientist/Specialist III	
0.3 hours @ \$165.00 per hour	\$ 49.50
Technicians/Administrative	\$ 117.50
Subconsultant (RMB Enviro Labs)	\$ 72.60
Subtotal, Parkers Lake Monitoring	\$ 1,154.10

# Westwood Lake Monitoring

QA/QC review of field data, chain of custody forms, and lab reports for samples collected on 8/20 and 9/4; analyses of zooplankton samples collected on 8/20 and 9/4; analysis of phytoplankton sample collected on 8/20; and prepare for and complete water quality monitoring on 9/4. Expenses are for RMB laboratory analyses of samples collected on 8/20 and 9/4 and for disposable filtration units used to field filter samples collected on 9/4.

Meg Rattei, Engineer/Scientist/Specialist III 7.0 hours @ \$155.00 per hour\$	1,085.00
Terri Olson, Engineer/Scientist/Specialist III  1.1 hours @ \$165.00 per hour\$	181.50
Katie Kramarczuk, Engineer/Scientist/Specialist I  1.8 hours @ \$105.00 per hour\$	189.00
Technicians/Administrative\$	564.50
Sub-Consultant (RMB Enviro)\$	289.08
Expenses (filtration apparatus)\$_	38.60
Subtotal, Westwood Lake Monitoring\$	2,347.68

# Cavanaugh Lake Monitoring

QA/QC review of field data, chain of custody forms, and lab reports for samples collected on 8/20 and 9/4; analyses of zooplankton samples collected on 8/7, 8/20, and 9/4; analyses of phytoplankton sample collected on 8/20 and 9/4; and prepare for and complete water quality monitoring on 9/4. Lab expenses are for RMB laboratory analyses of samples collected on 8/20 and 9/4; and field expenses for 9/4 water quality monitoring include disposable filtration units used to field filter samples, Barr owned vehicle use, mileage cost, cost of ice to cool samples, canoe use, Kemmerer water bottle sampler use, and water quality meter use.

Meg Rattei, Engineer/Scientist/Specialist III  13.4 hours @ \$155.00 per hour\$	2,077.00
Terri Olson, Engineer/Scientist/Specialist III  0.7 hours @ \$165.00 per hour\$	115.50
Katie Kramarczuk, Engineer/Scientist/Specialist I  1.8 hours @ \$105.00 per hour\$	189.00
Technicians/Administrative\$	614.50
Sub-Consultant (RMB Enviro)\$	347.16
Expenses (filtration apparatus/vehicle/canoe/WQ meter/KVB sampler/mileage)\$_	202.39
Subtotal, Cavanaugh Lake Monitoring\$	3,545.55

# Main Stem & North Branch Bio Monitoring

Medicine Lake Monitoring

Prepare for and complete morphology surveys and collection of macroinvertebrate samples from two Basset Creek Main Stem locations on 9/27.

Chris Bonick, Engineer/Scientist/Specialist III	
9.0 hours @ \$145.00 per hour\$	1,305.00
Technicians/Administrative\$	1,471.00
Expenses (VFM/vehicle/WQ meter/mileage)\$_	222.93
Subtotal, Main Stem & North Branch Bio Monitoring\$	2,998.93

Coordination and pick up of phytoplankton and zooplankton samples collected by TRPD during July through September; QA/QC review of lab report from samples collected in August for AIS suitability analysis; and analysis of phytoplankton sample collected on 4/1. Expenses are for RMB lab analyses of August sample collected for AIS suitability analysis and the courier expense for picking up phytoplankton and zooplankton samples collected by TRPD during July through September.

Meg Rattei, Engineer/Scientist/Specialist III  2.4 hours @ \$155.00 per hour\$	372.00
Terri Olson, Engineer/Scientist/Specialist III	
0.4 hours @ \$165.00 per hour\$	66.00

Technicians/Administrative\$	146.50
Expenses (courier)\$	45.90
Sub-Consultant (RMB Enviro)\$	145.20
Subtotal, Medicine Lake Monitoring\$	775.60
Subtotal, 1060—Water Quality/Monitoring\$	16,101.73
1070—Water Quantity Measure and review lake elevations as part of the lake-gauging program.	
Technicians/Administrative\$	495.00
Subtotal, Water Level Monitoring\$	495.00
Subtotal, 1070—Water Quantity\$	495.00
1080—Annual Flood Control Project Inspections Prepare and organize for 2024 inspection, including internal meeting.	
James P. Herbert, Principal Engineer/Scientist 2.5 hours @ \$220.00 per hour\$	550.00
Josh Phillips, Engineer/Scientist/Specialist III  1.3 hours @ \$150.00 per hour\$	195.00
Gabrielle Campagnola, Engineer/Scientist/Specialist II  1.3 hours @ \$120.00 per hour\$	156.00
Subtotal, Annual Inspection\$	901.00
H&H Model Update, Grant Preparation  Communications with HSEM regarding grant submission.	
Stephanie Johnson, Consultant/Advisor 0.2 hours @ \$205.00 per hour\$	41.00
Subtotal, H&H Model Update, Grant Preparation\$	41.00
Subtotal, 1080—Annual Flood Control Project Inspections\$	942.00
1090—Municipal Plan Review	
Subtotal, 1090— Municipal Plan Review\$	0.00
1100—Watershed Outlet Monitoring Program	
Subtotal, 1100—Watershed Outlet Monitoring Program\$	0.00
1110—XPSWMM Model Updates/Reviews	
Subtotal, 1110—XPSWMM Model Updates/Reviews\$	0.00

# 1120—APM/AIS

ERS invoice for bed-mapping surveys of Twin Lake, Sweeney Lake, and adjacent ponds.

3,336.30	nt (Endangered RS)\$	Sub-C
3,336.30	ubtotal, 1130—APM/AIS\$	
50.376.53	OTAL, 1000—ENGINEERING & MONITORING\$ 5	

# 2000—PLANNING

# **2010—Next Generation Plan Development**

Review and provide comment on materials for the September 4 PSC meeting; prepare for, attend, and participate in the September 4 PSC meeting; share notes from the September 4 PSC meeting with the administrator; prepare meeting materials for the October 2 PSC meeting, including meeting agenda, plan progress tracker, and updated linear standards pros/cons table; compile and email October 2 meeting materials to PSC; meet with the administrator regarding approach to discussing linear standards and street sweeping study with the PSC; develop and revise the draft BCWMC Monitoring Plan including communicating with MCES and TRPD staff regarding partner programs; and share the final draft monitoring plan with the administrator.

Karen L. Chandler, Principal Engineer/Scientist 16.7 hours @ \$210.00 per hour\$	3,507.00
Stephanie Johnson, Consultant/Advisor 17.8 hours @ \$205.00 per hour\$	3,649.00
Greg Wilson, Engineer/Scientist/Specialist IV  2.3 hours @ \$195.00 per hour\$	448.50
Greg Williams, Engineer/Scientist/Specialist III 5.8 hours @ \$170.00 per hour\$	986.00
Meg Rattei, Engineer/Scientist/Specialist III 11.7 hours @ \$155.00 per hour\$	1,813.50
Chris Bonick, Engineer/Scientist/Specialist III 4.0 hours @ \$145.00 per hour\$	580.00
Michael McKinney, Engineer/Scientist/Specialist III  1.5 hours @ \$160.00 per hour\$	240.00
Technicians/Administrative\$_	210.00
Subtotal, 2010—Next Generation Plan Development\$	11,434.00
2020—Next Generation Plan Development - Address Complex Issues	
Subtotal, 2010—Next Generation Plan Development– Address Complex Issues \$	0.00
SUBTOTAL, 2000—PLANNING\$	11,434.00
4000—OUTREACH & EDUCATION	

SUBTOTAL, 4000—OUTREACH & EDUCATION......\$

0.00

4040—Education & Public Outreach

# **SPECIAL PROJECTS**

# Medicine Lake TMDL Status Assessment

Compile, review, and update existing BMP information, field verification, mapping, and P8 modeling for Medicine Lake Northeast and Plymouth Creek tributaries; communicate with project partners and utilize BMP updates; work with city staff to prepare PowerPoint presentation for 9/24 Plymouth City Council study session regarding Medicine Lake; attend 9/24 Council session; and prepare project update.

SUBTOTAL SPECIAL PROJECTS\$	3.804.00
Subtotal, Medicine Lake TMDL Status Assessment\$	3,804.00
Joshua Vosejpka, Engineer/Scientist/Specialist I 9.0 hours @ \$115.00 per hour\$\$	1,035.00
Greg Wilson, Engineer/Scientist/Specialist IV  14.2 hours @ \$195.00 per hour\$	2,769.00

# **CAPITAL IMPROVEMENT PROJECTS**

# Schaper Pond and Sweeney Lake Carp Management

Communications, planning, and scheduling with Carp Solutions for Sweeney Lake box netting for carp removal in response to elevated carp biomass in Sweeney Lake; and follow-up communications with administrator, Golden Valley staff and Sweeney Lake association, including lake resident notifications, regarding Carp Solutions' schedule and implementation of box netting for Sweeney Lake carp management.

Greg Wilson, Engineer/Scientist/Specialist IV	
7.1 hours @ \$195.00 per hour\$	1,384.50
Subtotal, Schaper Pond and Sweeney Lake Carp Management\$	1,384.50

# Ponderosa Woods Stream Restoration (2024 ML-22)

Review submittal from City's consultant, including design basis memo, drawings, and modeling results; and internal communications regarding project review schedule, modeling results/flood elevations, and design review.

James P. Herbert, Principal Engineer/Scientist 0.2 hours @ \$220.00 per hour	\$ 44.00
Karen L. Chandler, Principal Engineer/Scientist 2.5 hours @ \$210.00 per hour	\$ 525.00
Jen Koehler, Engineer/Scientist/Specialist IV 1.2 hours @ \$185.00 per hour	\$ 222.00
Jessica Olson, Engineer/Scientist/Specialist IV 1.4 hours @ \$175.00 per hour	\$ 245.00
Subtotal. Ponderosa Woods Stream Restoration (2024 ML-22)	\$ 1.036.00

Crane Lake Chloride Reduction Demonstration Project Feasibility Study (CL-4)
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Subwatershed and pond review and follow-up from site reconnaissance, including ordering equipment for continuous chloride monitoring; and plan, schedule, prepare for, and attend 9/26 kickoff meeting with administrator and Minnetonka staff.

Karen L. Chandler, Principal Engineer/Scientist 1.1 hours @ \$210.00 per hour	\$	231.00
Greg Wilson, Engineer/Scientist/Specialist IV 4.9 hours @ \$195.00 per hour	\$	955.50
Chris Bonick, Engineer/Scientist/Specialist III  2.5 hours @ \$145.00 per hour	\$	362.50
Expenses (mileage)	\$	20.10
Subtotal, Crane Lake Chloride Reduction Demonstration Project Feasibility Study (CL-4)	\$	1,569.10
Bryn Mawr Meadows Water Quality Improvement Project (2020) (BC-5) [6] Coordination with SRF on final close out items for contractor; review of contract applications for items associated with the BCWMC project.	tor p	payment
Josh Phillips, Engineer/Scientist/Specialist III 1.9 hours @ \$150.00 per hour	\$	285.00
Subtotal, Bryn Mawr Meadows Water Quality Improvement Project (2020) (BC-5) [6]	\$	285.00
SUBTOTAL CAPITAL IMPROVEMENT PROJECTS	\$	4,274.60

ACCOUNTING CODE	BUDGET LINE ITEM	INVOICE AMOUNT
1000	ENGINEERING & MONITORING	
1010	Technical Services	\$6,968.50
1020	Development/Project Reviews	\$2,506.50
1030	Non-fee and Preliminary Reviews	\$841.50
1040	Commission and TAC Meetings	\$758.50
1050	Surveys and Studies	\$0.00
1060	Water Quality/Monitoring	\$12,894.00
1070	Water Quantity	\$495.00
1080	Flood Control Project	\$942.00
1090	Municipal Plan Review	\$0.00
1100	Watershed Outlet Monitoring Program	\$0.00
1110	Annual XP-SWMM Model Updates/Reviews	\$0.00
1120	APM/AIS	\$0.00
1000	SUBTOTAL ENGINEERING & MONITORING	\$25,406.00
2000	PLANNING	
2010	Next Generation Plan Development	\$11,434.00
2020	Next Generation Plan Development - Address Complex Issues	\$0.00
2000	SUBTOTAL PLANNING	\$11,434.00
4000	OUTREACH & EDUCATION	
4040	Education & Public Outreach	\$0.00
4010	Publications/Annual Report	\$0.00
4000	SUBTOTAL OUTREACH & EDUCATION	\$0.00
	SPECIAL PROJECTS [4]	\$3,804.00
	SUBTOTAL CAPITAL IMPROVEMENT PROJECTS	\$4,274.60
TOTAL PAYABL	E	\$44,918.60

Remittance address: Lockbox 446104 PO Box 64825 St Paul, MN 55164-0825 Barr declares under the penalties of law that this account, claim, or demand is just and that no part of it has been paid.