



Ms. Catherine Cesnik
Bassett Creek Watershed Management Commission
7800 Golden Valley Road
Golden Valley, MN 55427

Page # 1
Invoice # 23270051-2022-8
Project # 23/27-0051
Client # 59
September 2, 2022

Invoice of Account with
BARR ENGINEERING COMPANY

For professional services during the period of
July 30, 2022 through August 26, 2022

1000—ENGINEERING & MONITORING

1010—Technical Services

Technical Services

Communications with Golden Valley staff regarding resident inquiry about sedimentation in Minnaqua Pond/Bassett Creek; communications regarding new BCWMC review fee schedule; Parkers Lake chloride dilution/removal study: attend virtual meeting with Plymouth staff regarding project scope, communications with internal staff regarding next steps, communications with Plymouth staff regarding Parkers Lake outlet information/discharge elevation and water quality data, communications with Plymouth and TRPD staff regarding additional monitoring needs at Parkers Lake, and communications with MCES and Plymouth staff regarding MCES special discharge permitting; internal communications regarding past CIP projects; communications with Plymouth staff, administrator and internal staff regarding the city's Four Seasons Mall data request, and review, compile and provide historic Four Seasons Mall submittals (files submitted by the applicant, BCWMC meeting memos, and BCWMC letters) to city staff; execute XP SWMM user agreement, and compile and transfer XP SWMM model to Plymouth consultant, per city request, for streambank repair project on Plymouth Creek; communications with Commissioner Welch and internal staff regarding Medicine Lake dam; provided WST-1 CIP (Westwood Park Pond) information to St. Louis Park staff; follow-up communications with Minneapolis staff, Chair Cesnik and administrator regarding Chair Cesnik's inquiry regarding the impact of the new Central City parallel tunnel on the Bassett Creek tunnel; prepare figure showing the floodplain elevation and flooding extents near Currie Commons and provide to University of Minnesota research assistant working for Hennepin County; and provide information to administrator regarding project review fees over \$5,000 for Currie Commons (2020-28) and for Vicksburg Ridge (2022-03).

James P. Herbert, Principal Engineer/Scientist		
13.9 hours @ \$205.00 per hour	\$	2,849.50
Karen L. Chandler, Principal Engineer/Scientist		
13.3 hours @ \$190.00 per hour	\$	2,527.00
Jen Koehler, Engineer/Scientist/Specialist IV		
1.4 hours @ \$165.00 per hour	\$	231.00

Greg Wilson, Engineer/Scientist/Specialist IV 13.8 hours @ \$180.00 per hour	\$ 2,484.00
Josh Phillips, Engineer/Scientist/Specialist II 0.8 hours @ \$125.00 per hour	\$ 100.00
Gabrielle Campagnola, Engineer/Scientist/Specialist I 0.4 hours @ \$105.00 per hour	\$ <u>42.00</u>
<i>Subtotal, Technical Services</i>	<i>\$ 8,233.50</i>

Monthly Meeting Preparation

Communications/coordination with administrator and internal staff regarding draft/final agenda and meeting packet for August Commission meeting; review/edit July meeting minutes; prepare for August Commission meeting, including review meeting packet, pre-meeting conference call with Chair Cesnik and administrator, prepare engineer communications, internal communications regarding Commissioner Welch’s comments/questions on agenda items, and communications with administrator and internal staff regarding agenda items; and communications with administrator and internal staff regarding follow-up items from August Commission meeting and upcoming meeting agenda items.

James P. Herbert, Principal Engineer/Scientist 3.8 hours @ \$205.00 per hour	\$ 779.00
Karen L. Chandler, Principal Engineer/Scientist 2.5 hours @ \$190.00 per hour	\$ 4,085.00
Technicians/Administrative.....	\$ <u>724.50</u>
<i>Subtotal, Monthly Meeting Preparation</i>	<i>\$ 5,588.50</i>
Subtotal 1010—Technical Services	\$ 13,822.00

1020—Development/Project Reviews

Currie Commons (2020-28)

Review resubmittal for water quality, rate control, erosion and sediment control, and floodplain; and prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$205.00 per hour	\$ 102.50
Josh P. Phillips, Engineer/Scientist/Specialist II 2.5 hours @ \$125.00 per hour	\$ <u>312.50</u>
<i>Subtotal, Currie Commons (2020-28).....</i>	<i>\$ 415.00</i>

2022 Vicksburg Lane Improvements (2022-03)

Project close-out, including documentation, tracking and filing.

Gabrielle Campagnola, Engineer/Scientist/Specialist I 0.2 hours @ \$105.00 per hour	\$ <u>21.00</u>
<i>Subtotal, 2022 Vicksburg Lane Improvements (2022-03).....</i>	<i>\$ 21.00</i>

Hwy 55 & Hwy 169 Apts (2022-07)

Project close-out, including documentation, tracking and filing.

Gabrielle Campagnola, Engineer/Scientist/Specialist I	
0.3 hours @ \$105.00 per hour	\$ 31.50
<i>Subtotal, Hwy 55 & Hwy 169 Apts (2022-07)</i>	\$ 31.50

Bassett Creek Dog Park Ped. Bridge Imp. (2022-08)

Review submittal for work in the Bassett Creek floodplain; meeting with city's consultant; and communications with applicant.

James P. Herbert, Principal Engineer/Scientist	
3.8 hours @ \$205.00 per hour	\$ 779.00
Jen Koehler, Engineer/Scientist/Specialist IV	
0.5 hours @ \$165.00 per hour	\$ 82.50
<i>Subtotal, Bassett Creek Dog Park Ped. Bridge Imp. (2022-08)</i>	\$ 861.50

Perpich Center Sidewalk (2022-12)

Project close-out, including documentation, tracking and filing.

Gabrielle Campagnola, Engineer/Scientist/Specialist I	
0.3 hours @ \$105.00 per hour	\$ 31.50
<i>Subtotal, Perpich Center Sidewalk (2022-12)</i>	\$ 31.50

Brookview Golf Course Streambank Stabilization (2022-13)

Review grading, drainage, and erosion control plans for erosion and sediment control and stream impacts; and communications with applicant.

James P. Herbert, Principal Engineer/Scientist	
5.3 hours @ \$205.00 per hour	\$ 1,086.50
Jessica Olson, Engineer/Scientist/Specialist III	
2.4 hours @ \$160.00 per hour	\$ 384.00
Gabrielle Campagnola, Engineer/Scientist/Specialist I	
5.3 hours @ \$105.00 per hour	\$ 556.50
Technicians/Administrative	\$ 157.50
<i>Subtotal, Brookview Golf Course Streambank Stabilization (2022-13)</i>	\$ 2,184.50
Subtotal, 1020—Development/Project Reviews	\$ 3,545.00

1030—Non-Fee and Preliminary Reviews

Preliminary Reviews

Preliminary review of W. Medicine Lake Trail pedestrian bridge, and communications with Plymouth staff, city's consultant and administrator concurring project does not require a BCWCMC submittal; follow-up communications with consultant regarding questions about floodplain cross section for 187 Humboldt Avenue N. in Minneapolis; review MDNR permit application for work near old Bassett Creek tunnel in Minneapolis and MWMO watershed, and communications with administrator; communications and meeting with Medicine Lake consultant regarding lift station project and

BCWMC floodplain requirements; communications with consultant regarding BCWMC electronic submittal requirements and process; communications with Golden Valley staff and Courage Kenny Institute representative regarding proposed Sweeney Branch bridge removal at Courage Kenny site; communications with consultant regarding Golden Valley pavement management program project plans; and communications with BNSF consultant regarding proposed work on railroad bridge over Bassett Creek in Minneapolis.

James P. Herbert, Principal Engineer/Scientist 10.4 hours @ \$205.00 per hour	\$ 2,132.00
Jen Koehler, Engineer/Scientist/Specialist IV 0.2 hours @ \$165.00 per hour	\$ <u>33.00</u>
<i>Subtotal, Preliminary Reviews</i>	\$ 2,165.00

Non-Fee Reviews

<i>Subtotal, Non-Fee Reviews</i>	\$ 0.00
Subtotal, 1030— Non-Fee and Preliminary Reviews	\$ 2,165.00

1040—Commission and TAC Meetings

Attend August 18 Commission meeting.

Karen L. Chandler, Principal Engineer/Scientist 3.5 hours @ \$190.00 per hour	\$ 665.00
Subtotal, 1040—Commission and TAC Meetings	\$ 665.00

1050—Surveys and Studies

XPSWMM Update

Finalize Bassett Creek XP SWMM model; subdivide the model into three parts; update Table 2-9 in the 2015 Bassett Creek Watershed Management Plan with the new flood elevations, flow rates and updated crossing information; and begin preparing new flood inundation maps.

James P. Herbert, Principal Engineer/Scientist 5.5 hours @ \$205.00 per hour	\$ 1,127.50
Karen L. Chandler, Principal Engineer/Scientist 5.1 hours @ \$190.00 per hour	\$ 969.00
Jen Koehler, Engineer/Scientist/Specialist IV 2.0 hours @ \$165.00 per hour	\$ 330.00
Lulu Fang, Engineer/Scientist/Specialist II 20.0 hours @ \$120.00 per hour	\$ 2,400.00
Joshua Vosejpka, Engineer/Scientist/Specialist I 3.5 hours @ \$105.00 per hour	\$ <u>367.50</u>
<i>Subtotal, XPSWMM Update</i>	\$ 5,194.00
Subtotal, 1050—Surveys and Studies	\$ 5,194.00

1060—Water Quality/Monitoring

General Water Quality

Communications with MPCA staff and administrator regarding the MPCA’s upcoming stressor ID work for Bassett Creek and Plymouth Creek and BCWMC’s request that MPCA add the Sweeney Branch and North Branch to their stressor ID work; communications with the administrator, Crystal staff, and internal staff regarding the reported blue-green algae bloom on Winnetka Pond, collect and analyze blue-green algae samples from East and West Winnetka Ponds, and provide results to the Crystal staff and administrator; and communications with MPCA staff, administrator, and internal staff regarding sharing BCWMC macroinvertebrate data with the MPCA for use in the Bassett Creek and Plymouth Creek stressor ID analyses.

Karen L. Chandler, Principal Engineer/Scientist 3.7 hours @ \$190.00 per hour	\$	703.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 7.9 hours @ \$150.00 per hour	\$	1,185.00
Technicians/Administrative.....	\$	<u>171.00</u>
<i>Subtotal, General Water Quality.....</i>	<i>\$</i>	<i>2,059.00</i>

Northwood Lake & Lost Lake 2022 Monitoring

Prepare for and complete August 1 and August 16 water quality monitoring of Northwood Lake and Lost Lake; file the field data; review lab reports; analyze April 18, June 14, July 13, August 2, and August 6 Northwood Lake and Lost Lake phytoplankton samples; add 2022 phytoplankton data to historical data tables and graphs and provide data to administrator; download and review 2022 aquatic plant survey data and add data to project folders; communications with aquatic plant survey subcontractor (ERS), administrator, and MDNR staff regarding presence of hooded arrowhead in Lost Lake and ERS observations of herbicide treatment/manual removal of hooded arrowhead in Lost Lake; lake monitoring expenses include vehicle use and mileage charges, equipment rental and disposable filtration unit charges; expenses include ERS invoice for June and August 2022 aquatic plant surveys of Northwood Lake and Lost Lake.

Terri Olson, Engineer/Scientist/Specialist III 0.7 hours @ \$155.00 per hour	\$	108.50
Margaret R. Rattei, Engineer/Scientist/Specialist III 40.8 hours @ \$150.00 per hour	\$	6,120.00
Samantha Schirmer, Engineer/Scientist/Specialist III 0.1 hours @ \$130.00 per hour	\$	13.00
Technicians/Administrative.....	\$	1,373.00
Subconsultant (Endangered Resource Services).....	\$	5,452.70
Expenses (WQ meter/KV bottle sampler/vehicle/canoe/ice/meters/ zooplankton net/mileage).....	\$	<u>345.15</u>
<i>Subtotal, Northwood Lake & Lost Lake 2022 Monitoring.....</i>	<i>\$</i>	<i>13,412.35</i>

Plymouth Creek Monitoring Year 1

Review 2022 flow data and plan 2022 continuous dissolved oxygen monitoring; program and calibrate HOBO dissolved oxygen sensor; prepare and install HOBO DO sensor in Plymouth Creek on

August 12; visit Plymouth Creek monitoring site on August 16 to check flow and measure dissolved oxygen with hand-held dissolved oxygen meter; remove HOBO DO sensor from Plymouth Creek on August 18; process and review continuous dissolved oxygen data and communications with internal staff; expenses include vehicle and mileage expenses for Plymouth Creek site visits and equipment rental for the hand-held dissolved oxygen meter.

Christopher Bonick, Engineer/Scientist/Specialist II 18.5 hours @ \$135.00 per hour	\$	2,497.50
Expenses (WQ meter/vehicle/mileage)	\$	<u>274.38</u>
<i>Subtotal, Plymouth Creek Monitoring Year 1</i>	\$	<i>2,771.88</i>

Plymouth Creek Biota Monitoring

Communications with MPCA staff regarding 2022 Plymouth Creek biological data and historical biological data collected from Plymouth Creek, including offer to share all past and present data with MPCA for use in the Plymouth Creek Stressor ID analysis; meeting and communications with internal staff to plan the 2022 habitat and biological monitoring of Plymouth Creek; and prepare for habitat and biological monitoring of Plymouth Creek.

Margaret R. Rattei, Engineer/Scientist/Specialist III 1.8 hours @ \$150.00 per hour	\$	270.00
Technicians/Administrative	\$	<u>98.00</u>
<i>Subtotal, Plymouth Creek Monitoring Year 1</i>	\$	<i>368.00</i>
Subtotal, 1060—Water Quality/Monitoring	\$	18,611.23

1070—Water Quantity

Subtotal, 1070—Water Quantity	\$	0.00
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1080—Annual Flood Control Project Inspections

Coordinate with Minneapolis staff, administrator, and Kennedy and Graven staff regarding FCP easement records along the Stage 4 box culvert tunnel; contact easement acquisition manager regarding availability of historic FCP easement documents; request file retrieval; review records from recalled files to verify FCP easement; and provide the Stage 4 box culvert tunnel easements to Minneapolis staff and the administrator.

James P. Herbert, Principal Engineer/Scientist 3.5 hours @ \$205.00 per hour	\$	717.50
Leonard Kremer, Engineer/Scientist/Specialist IV 15.0 hours @ \$200.00 per hour	\$	<u>3,000.00</u>
Subtotal, 1080—Annual Flood Control Project Inspections.....	\$	3,717.50

1100—Watershed Outlet Monitoring Program

WOMP Rating Curve

Perform flow measurement at WOMP station; complete and submit Survey 1-2-3 form to MCES staff; troubleshoot Survey 1-2-3 form for flow measurement; send flow measurement information to MCES staff; and communications with MCES staff.

Christopher Bonick, Engineer/Scientist/Specialist II 7.5 hours @ \$135.00 per hour	\$ 1,012.50
Expenses (tablet/vehicle/ mileage).....	\$ 66.25
<i>Subtotal, WOMP Rating Curve.....</i>	<i>1,078.75</i>
Subtotal, 1100—Watershed Outlet Monitoring Program.....	\$ 1,078.75

1120—TMDL Implementation Reporting

Subtotal, 1120—TMDL Implementation Reporting.....	\$ 0.00
SUBTOTAL, 1000—ENGINEERING & MONITORING	\$ 48,798.48

2000—PLANNING

2010—Next Generation Plan Development

Develop memo for Commission meeting detailing the proposed scope of work and budget to evaluate complex issues during Plan development (Phase 2 of original Plan scope); meeting and communications with administrator; and export results from the BCWMC Plan Update online survey and provide to administrator.

Karen L. Chandler, Principal Engineer/Scientist 5.1 hours @ \$190.00 per hour.....	\$ 969.00
Greg Williams, Engineer/Scientist/Specialist III 6.1 hours @ \$155.00 per hour.....	\$ 945.50
Technicians/Administrative.....	\$ 162.00
Subtotal, 2010—Next Generation Plan Development	\$ 2,076.50
SUBTOTAL, 2000—PLANNING.....	\$ 2,076.50

4000—OUTREACH & EDUCATION

4010—Publications/Annual Report

Subtotal, 4010—Publications/Annual Report	\$ 0.00
SUBTOTAL, 4000—OUTREACH & EDUCATION.....	\$ 0.00

CAPITAL IMPROVEMENT PROJECTS

Sweeney Lake Water Quality Improvement Project (2020)(SL-8)

Engineer and Perform In-lake Alum Treatment

Schedule Phase 2 alum treatment and arrange for advertising contract documents in Finance and Commerce; finalize and post contract documents for public bidding on QuestCDN; send email notification to potential alum treatment contractors; and respond to questions/inquiries.

Karen L. Chandler, Principal Engineer/Scientist 0.5 hours @ \$190.00 per hour	\$ 95.00
Gregory Wilson, Engineer/Scientist/Specialist IV 20.3 hours @ \$180.00 per hour	\$ 3,654.00

Technicians/Administrative.....	\$	<u>202.50</u>
<i>Subtotal, Engineer and Perform In-lake Alum Treatment</i>		<i>3,951.50</i>

Perform Post Treatment Monitoring

Perform two August water quality monitoring events, QA/QC and summarize results; expenses include laboratory analysis costs.

Terri Olson, Engineer/Scientist/Specialist III 1.2 hours @ \$155.00 per hour.....	\$	186.00
Samantha Schirmer, Engineer/Scientist/Specialist II 0.1 hours @ \$130.00 per hour.....	\$	13.00
Technicians/Administrative.....	\$	1,402.50
Subconsultant (RMB Enviro Labs).....	\$	272.00
Expenses (filtration apparatus/ice).....	\$	<u>105.30</u>
<i>Subtotal, Perform Post Treatment Monitoring.....</i>		<i>1,978.80</i>
<i>Subtotal, Sweeney Lake Water Quality Improvement Project (2020)(SL-8).....</i>		<i>5,930.30</i>

Schaper Pond Carp Management (SL-3)

Communications with Carp Solutions regarding arrangements for second and third population surveys; and review/comment on preliminary carp survey results.

Gregory Wilson, Engineer/Scientist/Specialist IV 2.5 hours @ \$180.00 per hour.....	\$	<u>450.00</u>
<i>Subtotal, Schaper Pond Carp Management (SL-3).....</i>		<i>450.00</i>

Main Stem Lagoon Dredging Project (2021) (BC-7)

Prepare for and attend meeting with MPRB staff and Commission attorney regarding construction permit and temporary access agreement; communications with MPRB staff, administrator, and Commission attorney regarding reimbursement for permitting fees; develop agenda and attend meeting with Loppet staff and administrator; communications with Golden Valley staff regarding site restoration and buffers; prepare for project bidding, including discussions with Commission attorney; prepare final plans and specifications; and perform lagoon verification surveys, including travel, equipment, and expenses.

James P. Herbert, Principal Engineer/Scientist 1.8 hours @ \$205.00 per hour.....	\$	369.00
Karen L. Chandler, Principal Engineer/Scientist 14.8 hours @ \$190.00 per hour.....	\$	2,812.00
Patrick Brockamp, Engineer/Scientist/Specialist II 21.9 hours @ \$135.00 per hour.....	\$	2,956.50
Peter Hinck, Engineer/Scientist/Specialist III 0.3 hours @ \$150.00 per hour.....	\$	45.00
Alec Bateman, Engineer/Scientist/Specialist II 17.6 hours @ \$110.00 per hour.....	\$	1,936.00

Tyler Conley, Engineer/Scientist/Specialist II 0.7 hours @ \$110.00 per hour	\$	77.00
Rachel Bateman, Engineer/Scientist/Specialist I 4.4 hours @ \$105.00 per hour	\$	462.00
Technicians/Administrative.....	\$	5,556.50
Expenses (mileage/vehicles/GPS system)	\$	<u>1,130.01</u>
<i>Subtotal, Main Stem Lagoon Dredging Project (2021)(BC-7).....</i>	<i>\$</i>	<i>15,299.01</i>

Bryn Mawr Meadows Water Quality Improvement Project

Design and project coordination related to site geotechnical conditions; geotechnical analysis; finalize project design; prepare final plan sets, project specifications, estimate of quantities, and engineering cost estimates; coordinate with MPRB's consultant (SRF) on combining content for bid package; coordinate with Minneapolis staff regarding maintenance access tee; attend project pre-bid meeting; address questions during bidding; and project management.

James P. Herbert, Principal Engineer/Scientist 5.5 hours @ \$205.00 per hour	\$	1,127.50
Karen L. Chandler, Principal Engineer/Scientist 2.3 hours @ \$190.00 per hour	\$	437.00
Robert Osburn, Principal Engineer/Scientist 0.4 hours @ \$210.00 per hour	\$	84.00
Benjamin Borree, Engineer/Scientist/Specialist IV 3.8 hours @ \$175.00 per hour	\$	665.00
Jennifer Brekken, Engineer/Scientist/Specialist IV 4.1 hours @ \$175.00 per hour	\$	717.50
Stephanie Johnson, Engineer/Scientist/Specialist IV 63.5 hours @ \$190.00 per hour	\$	12,065.00
Michelle Kimble, Engineer/Scientist/Specialist IV 12.3 hours @ \$165.00 per hour	\$	2,029.50
BJ Siljenberg, Engineer/Scientist/Specialist IV 0.2 hours @ \$165.00 per hour	\$	33.00
Greg Fransen, Engineer/Scientist/Specialist III 1.4 hours @ \$145.00 per hour	\$	203.00
Josh Phillips, Engineer/Scientist/Specialist II 21.8 hours @ \$125.00 per hour	\$	2,725.00
Derek Seifert, Engineer/Scientist/Specialist II 0.2 hours @ \$125.00 per hour	\$	25.00
Alexander Puetz, Engineer/Scientist/Specialist II 0.2 hours @ \$125.00 per hour	\$	25.00
Jacob Daire, Engineer/Scientist/Specialist I 17.5 hours @ \$105.00 per hour	\$	1,837.50

Seth Stump, Engineer/Scientist/Specialist I

0.4 hours @ \$95.00 per hour \$ 38.00

Subtotal, Bryn Mawr Meadows Water Quality Improvement Project.. \$ 22,012.00

SUBTOTAL CAPITAL IMPROVEMENTS PROJECTS\$ 43,691.31

ACCOUNTING CODE	BUDGET LINE ITEM	INVOICE AMOUNT
1000	ENGINEERING & MONITORING	
1010	Technical Services	\$13,822.00
1020	Development/Project Reviews	\$3,545.00
1030	Non-fee and Preliminary Reviews	\$2,165.00
1040	Commission and TAC Meetings	\$665.00
1050	Surveys and Studies	\$5,194.00
1060	Water Quality/Monitoring	\$18,611.23
1070	Water Quantity	\$0.00
1080	Annual Flood Control Project Inspections	\$3,717.50
1090	Municipal Plan Review	\$0.00
1100	Watershed Outlet Monitoring Program	\$1,078.75
1110	Annual XP-SWMM Model Updates/Reviews	\$0.00
1120	TMDL Implementation Reporting	\$0.00
1000	SUBTOTAL ENGINEERING & MONITORING	\$48,798.48
2000	PLANNING	
2010	Next Generation Plan Development	\$2,076.50
2000	SUBTOTAL PLANNING	\$2,076.50
4000	OUTREACH & EDUCATION	
4010	Publications/Annual Report	\$0.00
4000	SUBTOTAL OUTREACH & EDUCATION	\$0.00
--	SUBTOTAL CAPITAL IMPROVEMENT PROJECTS	\$43,691.31
TOTAL PAYABLE		\$94,566.29

Please note our new remittance address

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.

