



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

Page # 1
Invoice # 23270051-2019-5
Project # 23/27-0051
Client # 59
July 8, 2019

Invoice of Account with
BARR ENGINEERING COMPANY

For professional services during the period of
June 1, 2019 through June 28, 2019

ENGINEERING

TECHNICAL SERVICES

Respond to administrator's floodplain question for property in Medicine Lake; communications with Crystal staff, administrator, and internal staff regarding foam on North Branch after rainstorm; communications with Golden Valley staff regarding BCWMC floodplain jurisdiction and flood elevation for landlocked basins; review/edit administrator's memo regarding 2025 plan budgeting; communications with administrator and internal staff regarding MPCA's iron enhanced sand filter initiative; communications with administrator and internal staff regarding Hennepin County request for creek water level monitoring at CSAH66 in 1965; prepare for and attend June 14 meeting with Hennepin County Commissioner Fernando, Chair Prom, Commissioner Welch and administrator; and provide administrator with total development review fees for project 2018-16 to bill applicant.

James P. Herbert, Principal Engineer/Scientist 1.0 hours @ \$195.00 per hour	\$ 195.00
Karen L. Chandler, Principal Engineer/Scientist 16.9 hours @ \$175.00 per hour	\$ 2,957.50
Margaret R. Rattei, Engineer/Scientist/Specialist III 0.1 hours @ \$135.00 per hour	\$ 13.50
Ross S. Mullen, Engineer/Scientist/Specialist II 0.3 hours @ \$110.00 per hour	\$ 33.00
Lulu Fang, Engineer/Scientist/Specialist II 1.0 hours @ \$95.00 per hour	\$ 95.00
Josh P. Phillips, Engineer/Scientist/Specialist II 0.6 hours @ \$95.00 per hour	\$ 57.00

Technicians/Administrative.....	\$	22.50
Expenses (Postage)	\$	<u>26.64</u>
<i>Subtotal, Technical Services</i>	\$	3,400.14

MONTHLY MEETING PREPARATION

Communications/coordination with administrator and internal staff regarding draft/final agenda and meeting packet for June Commission meeting; review/edit draft May meeting minutes; prepare for June Commission meeting, including pre-meeting conference call with Chair Prom and administrator, provide information to administrator regarding MPCA chloride initiative, and review meeting packet; and communications with administrator and internal staff regarding follow-up items from June Commission meeting and upcoming meeting agenda items.

James P. Herbert, Principal Engineer/Scientist 6.5 hours @ \$195.00 per hour.....	\$	1,267.50
Karen L. Chandler, Principal Engineer/Scientist 10.2 hours @ \$175.00 per hour.....	\$	1,785.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 0.5 hours @ \$135.00 per hour.....	\$	67.50
Technicians/Administrative.....	\$	<u>500.00</u>
<i>Subtotal, Monthly Meeting Preparation</i>	\$	3,620.00

TAC PREPARATION

Communications with administrator and Crystal staff regarding TAC memo for June Commission meeting; internal meetings to discuss information needed for July 8 TAC meeting packet and MTD review/approval approach; review State of Washington’s third party verification/certification (TAPE) protocols; communications with Plymouth city staff regarding city and BCWMC review processes; prepare draft memo with supplemental information for July 8 TAC meeting; revise memo per administrator’s comments and provide final memo to administrator for meeting packet.

James P. Herbert, Principal Engineer/Scientist 1.5 hours @ \$195.00 per hour.....	\$	292.50
Karen L. Chandler, Principal Engineer/Scientist 10.1 hours @ \$175.00 per hour.....	\$	1,767.50
Josh P. Phillips, Engineer/Scientist/Specialist II 12.9 hours @ \$95.00 per hour.....	\$	<u>1,225.50</u>
<i>Subtotal, TAC Preparation</i>	\$	3,285.50

***Subtotal Technical Services* \$ 10,305.64**

PLAT REVIEW

Minneapolis Impound Lot Facility Improvements (2017-37)

Review revised submittal, including erosion and sediment control, rate control, water quality, and floodplain impacts.

Josh P. Phillips, Engineer/Scientist/Specialist II
2.9 hours @ \$95.00 per hour \$ 275.50
Subtotal, Minneapolis Impound Lot Facility Impr..... \$ 275.50

Marsh Run Apartments (2019-06)

Review modifications; and follow up communications with applicant and Minnetonka staff.

James P. Herbert, Principal Engineer/Scientist
0.5 hours @ \$195.00 per hour \$ 97.50
Josh P. Phillips, Engineer/Scientist/Specialist II
0.8 hours @ \$95.00 per hour \$ 76.00
Subtotal, Marsh Run Apartments..... \$ 173.50

Ridgedale Drive Improvements (2019-10)

Project close-out and filing.

Josh P. Phillips, Engineer/Scientist/Specialist II
1.4 hours @ \$95.00 per hour \$ 133.00
Subtotal, Ridgedale Drive Improvements \$ 133.00

Golden Hills Parking (2019-11)

Project close-out and filing.

Josh P. Phillips, Engineer/Scientist/Specialist II
1.4 hours @ \$95.00 per hour \$ 133.00
Subtotal, Golden Hills Parking \$ 133.00

Theo Wirth GC Cart Path (2019-12)

Review revised grading, drainage and erosion control plans; review floodplain impacts; prepare memo for June Commission meeting; and prepare and send comment letter to city staff.

James P. Herbert, Principal Engineer/Scientist
2.3 hours @ \$195.00 per hour \$ 448.50
Karen L. Chandler, Principal Engineer/Scientist
1.0 hours @ \$175.00 per hour \$ 175.00
Josh P. Phillips, Engineer/Scientist/Specialist II
4.0 hours @ \$95.00 per hour \$ 380.00
Subtotal, Theodore Wirth GC Cart Path \$ 1,003.50

Daikin Testing Addition (2019-13)

Review revised grading, drainage and erosion control plans for erosion and sediment control, rate control, and water quality; prepare and send comment letter to city staff; review multiple revised grading, drainage and erosion control plans; prepare and send approval letter to city staff; and communications with applicant.

James P. Herbert, Principal Engineer/Scientist
2.5 hours @ \$195.00 per hour \$ 487.50

Ross S. Mullen, Engineer/Scientist/Specialist II 0.6 hours @ \$110.00 per hour	\$	66.00
Josh P. Phillips, Engineer/Scientist/Specialist II 15.4 hours @ \$95.00 per hour	\$	<u>1,463.00</u>
<i>Subtotal, Daikin Testing Addition.....</i>	\$	<i>2,016.50</i>

Automotive Concepts Facility (2019-15)

Plat review set up and preliminary review.

Josh P. Phillips, Engineer/Scientist/Specialist II 1.4 hours @ \$95.00 per hour	\$	133.00
Technicians/Administrative.....	\$	47.50
Expenses (Postage)	\$	<u>0.50</u>
<i>Subtotal, Automotive Concepts Facility.....</i>	\$	<i>181.00</i>

Subtotal Plat Review.....\$ 3,916.00

PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

PRELIMINARY COMMUNICATIONS

Compile, scan, and provide historic files from BCWMC #2007-10 (Bassett Creek Office Centre) to consultant (Wenck); communications with consultants (BKBM and Wenck) regarding BCWMC review requirements; and communications with consultant (Wenck) regarding development in Plymouth.

James P. Herbert, Principal Engineer/Scientist 1.8 hours @ \$195.00 per hour	\$	351.00
Josh P. Phillips, Engineer/Scientist/Specialist II 3.3 hours @ \$95.00 per hour	\$	313.50
Alex D. Bateman, Engineer/Scientist/Specialist I 0.8 hours @ \$80.00 per hour	\$	<u>64.00</u>
Subtotal, Preliminary Communications.....	\$	728.50

NON-FEE REVIEWS

Bassett Creek Valley

Communications with Wenck and administrator regarding upcoming meetings; prepare for and attend meeting #1 (via conference call) with administrator, Minneapolis staff, MPRB staff, and Wenck to review model results and design factors.

James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$195.00 per hour	\$	97.50
Karen L. Chandler, Principal Engineer/Scientist 2.8 hours @ \$175.00 per hour	\$	<u>490.00</u>
<i>Subtotal, Bassett Creek Valley.....</i>	\$	<i>587.50</i>

Metropolitan Council SWLRT (2016-17)

Review MnDOT email response to approval conditions, and internal communications.

Karen L. Chandler, Principal Engineer/Scientist 0.4 hours @ \$175.00 per hour	\$	70.00
<i>Subtotal, Metropolitan Council SWLRT</i>	\$	70.00

510 Cloverleaf Drive (Channel Maintenance Fund)

Review channel restoration project plans; and prepare and send comment letter to city staff.

James P. Herbert, Principal Engineer/Scientist 2.0 hours @ \$195.00 per hour	\$	390.00
Ross S. Mullen, Engineer/Scientist/Specialist II 0.3 hours @ \$110.00 per hour	\$	33.00
Lulu Fang, Engineer/Scientist/Specialist II 0.6 hours @ \$95.00 per hour	\$	57.00
Josh P. Phillips, Engineer/Scientist/Specialist II 0.1 hours @ \$95.00 per hour	\$	9.50
<i>Subtotal, 510 Cloverleaf Drive (Channel Maint Fund)</i>	\$	489.50

Subtotal Non-Fee Reviews\$ 1,147.00

Subtotal Preliminary Communications and Non-Fee Reviews\$ 1,875.50

COMMISSION AND TAC MEETINGS

Attend June 20 Commission meeting.

Karen L. Chandler, Principal Engineer/Scientist 2.0 hours @ \$175.00 per hour	\$	350.00
Subtotal, Commission and TAC Meetings	\$	350.00

SURVEYS & STUDIES

BCWMC 50th Anniversary

Provide West Medicine Lake Park Pond information and construction plan to administrator; edit tour map, per administrator's comments and provide final tour map to administrator; review draft Medicine Lake tour stop information and provide comments to administrator; review/edit tour handout and communications with administrator regarding 1990 plan; and prepare information for tour stop regarding monitoring.

Karen L. Chandler, Principal Engineer/Scientist 10.2 hours @ \$175.00 per hour	\$	1,785.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 4.4 hours @ \$135.00 per hour	\$	594.00

Joshua R. Vosejka, Engineer/Scientist/Specialist I 2.5 hours @ \$85.00 per hour	\$ 212.50
<i>Subtotal, BCWMC 50th Anniversary</i>	<i>\$ 2,591.50</i>
Subtotal Surveys & Studies	\$ 2,591.50

WATER QUALITY/MONITORING

Cavanaugh and Northwood Lakes Monitoring

Complete June 10 water quality monitoring of Cavanaugh and Northwood Lakes; review lab results and lab quality assurance data for June 10 monitoring event and file the lab report; and complete zooplankton analyses of ice-out samples collected on April 23.

Terri A. Olson, Engineer/Scientist/Specialist III 0.4 hours @ \$140.00 per hour	\$ 56.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 3.0 hours @ \$135.00 per hour	\$ 405.00
Heather N. Hlavaty, Engineer/Scientist/Specialist II 3.3 hours @ \$100.00 per hour	\$ 330.00
Technicians/Administrative.....	\$ 465.00
Expenses (WQ meter/filtration apparatus/canoe/mileage/2WD vehicle)	\$ 172.38
<i>Subtotal, Cavanaugh and Northwood Lakes Monitoring</i>	<i>\$ 1,428.38</i>

North Branch Monitoring Year 2

Download and review data; and collect baseflow sample on June 18.

Christopher J. Bonick, Engineer/Scientist/Specialist III 2.0 hours @ \$125.00 per hour	\$ 250.00
Sean Campbell, Engineer/Scientist/Specialist I 2.7 hours @ \$80.00 per hour	\$ 216.00
Expenses (Verizon Wireless/mileage)	\$ 76.50
<i>Subtotal, North Branch Monitoring Year 2</i>	<i>\$ 542.50</i>
Subtotal, Water Quality/Monitoring.....	\$ 1,970.88

WATER QUANTITY

Update lake levels benchmark table.

Karen L. Chandler, Principal Engineer/Scientist 0.3 hours @ \$175.00 per hour	\$ 52.50
Subtotal, Water Quantity.....	\$ 52.50

FLOOD CONTROL PROJECT ANNUAL INSPECTION & DOUBLE BOX CULVERT INSPECTION

Communications with administrator and Plymouth staff regarding potential structure settlement, and review agreement and other Flood Control Project information regarding Medicine Lake Dam/Outlet structure ownership; and preliminary planning for double box culvert inspection.

James P. Herbert, Principal Engineer/Scientist 2.7 hours @ \$190.00 per hour	\$	526.50
Karen L. Chandler, Principal Engineer/Scientist 1.4 hours @ \$175.00 per hour	\$	245.00
Subtotal, Flood Control Annual Proj Inspect&Dbl Box Culvert\$		771.50

TOTAL ENGINEERING\$ 21,833.52

WATERSHED OUTLET MONITORING PROGRAM (WOMP)

WATERSHED OUTLET MONITORING PROGRAM (WOMP)

Communications with Minneapolis and MCES staff regarding available bacteria data from WOMP station.

Christopher J. Bonick, Engineer/Scientist/Specialist III 0.5 hours @ \$125.00 per hour	\$	62.50
<i>Subtotal, Watershed Outlet Monitoring Program</i>	\$	62.50
TOTAL WOMP	\$	62.50

APM/AIS WORK

TOTAL APM/AIS WORK.....\$ 0.00

CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

FOUR SEASONS AREA WQ PROJECT (NL-2)

Prepare for and attend June 19 meeting with city staff, administrator, developer and developer's consultant regarding plans for Four Seasons Mall, including review of previous agreement and memos; communications with Plymouth staff regarding status of Four Seasons development project status; provide 100-year floodplain information to developer's consultant; communications with developer's consultant regarding garage floor elevation and 100-year floodplain; and re-send models to developer's consultant.

James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$190.00 per hour	\$	97.50
Karen L. Chandler, Principal Engineer/Scientist 5.4 hours @ \$175.00 per hour	\$	945.00
Lulu Fang, Engineer/Scientist/Specialist II 0.4 hours @ \$95.00 per hour	\$	38.00
Expenses (Mileage)	\$	5.22
Subtotal, Four Seasons Area WQ Project (NL-2)	\$	1,085.72

DeCOLA PONDS B&C IMPROVEMENT PROJECT (2019) (BC-2.3,8)

Prepare for and attend June 25 Hennepin County Committee meeting regarding maximum tax levy request.

Karen L. Chandler, Principal Engineer/Scientist
0.9 hours @ \$175.00 per hour \$ 157.50
Subtotal, DeCOLA PONDS B&C IMPROVEMENT PROJ.....\$ 157.50

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

Prepare and send approval letter to city staff; and prepare for and attend June 25 Hennepin County Committee meeting regarding maximum tax levy request.

Karen L. Chandler, Principal Engineer/Scientist
1.1 hours @ \$175.00 per hour \$ 192.50
Subtotal, Crane Lake Improvement Project\$ 192.50

BRYN MAWR MEADOWS WATER QUALITY IMPROVEMENT PROJECT (2020) (BC-5)

Prepare for and attend June 25 Hennepin County Committee meeting regarding maximum tax levy request; and conference call expenses.

Karen L. Chandler, Principal Engineer/Scientist
0.9 hours @ \$175.00 per hour \$ 157.50
Expenses (Level 3 Communications -WebEx) \$ 30.97
Subtotal, Bryn Mawr Meadows Water Quality Imp Project.....\$ 188.47

JEVNE PARK STORMWATER IMPROVEMENT PROJECT (2020) (ML-21)

Prepare for and attend June 25 Hennepin County Committee meeting regarding maximum tax levy request.

Karen L. Chandler, Principal Engineer/Scientist
0.9 hours @ \$175.00 per hour \$ 157.50
Subtotal, Jevne Park Stormwater Improvement Project.....\$ 157.50

MAIN STEM DREDGING PROJECT (2021) (BC-7)

Review historic information and internal meeting regarding lagoons, sediment build-up and previous wetland delineations; and communications and conference call with Minneapolis and MPRB staff regarding project scope and extent for feasibility study.

Karen L. Chandler, Principal Engineer/Scientist
7.3 hours @ \$175.00 per hour \$ 1,277.50
Patrick E. Brockamp, Engineer/Scientist/Specialist II
6.0 hours @ \$105.00 per hour \$ 630.00
Subtotal, Main Stem Dredging Project.....\$ 1,907.50

MT OLIVET STREAM RESTORATION (2021) (ML-20)

Communications with city staff regarding project scope and extent for feasibility study.

Karen L. Chandler, Principal Engineer/Scientist 2.2 hours @ \$175.00 per hour	\$	385.00
Subtotal, Mount Olivet Stream Restoration.....	\$	385.00

PARKERS LAKE STREAM RESTORATION (2021) (PL-7)

Communications with city staff regarding project scope and extent for feasibility study.

Karen L. Chandler, Principal Engineer/Scientist 0.5 hours @ \$175.00 per hour	\$	87.50
Subtotal, Parkers Lake Stream Restoration.....	\$	87.50

SWEENEY LAKE WQ IMPROVEMENT PROJECT (2020) (SL-8)

Prepare for and attend June 25 Hennepin County Committee meeting regarding maximum tax levy request.

Karen L. Chandler, Principal Engineer/Scientist 0.8 hours @ \$175.00 per hour	\$	140.00
Subtotal, Sweeney Lake WQ Improvement Project	\$	140.00

TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)\$ 4,301.69

TMDL WORK

TOTAL TMDL WORK\$ 0.00

IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)

IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)

Hydrologic Analysis

Communications with MnDNR staff regarding selection of hydrologic and hydraulic parameters.

Karen L. Chandler, Principal Engineer/Scientist 2.7 hours @ \$175.00 per hour	\$	472.50
Ross S. Mullen, Engineer/Scientist/Specialist II 7.0 hours @ \$110.00 per hour	\$	770.00
Samantha A. Beck, Engineer/Scientist/Specialist I 0.4 hours @ \$80.00 per hour	\$	32.00
Subtotal, Hydrologic Analysis.....	\$	1,274.50

Hydraulic Analysis

Communications with MnDNR staff regarding selection of hydrologic and hydraulic parameters.

Ross S. Mullen, Engineer/Scientist/Specialist II	
0.8 hours @ \$110.00 per hour	\$ 88.00
<i>Subtotal, Hydraulic Analysis</i>	\$ 88.00

Floodplain, Floodway, and Cross section Shapefiles

Develop floodplain, floodway, and cross sections and depth grid inputs.

Ross S. Mullen, Engineer/Scientist/Specialist II	
10.8 hours @ \$110.00 per hour	\$ 1,188.00
Joshua R. Vosejka, Engineer/Scientist/Specialist I	
11.3 hours @ \$85.00 per hour	\$ 960.50
Technicians/Administrative	\$ 143.00
<i>Subtotal, Floodplain, Floodway, Cross Sections Data-Inputs</i>	\$ 2,291.50

TOTAL IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR).....\$ 3,654.00

SUMMARY TOTALS

Total Engineering	\$ 21,833.52
Total WOMP	\$ 62.50
Total APM/AIS Work	\$ 0.00
Total TMDL Work	\$ 0.00
Total Capital Improvement Projects (Tax Levy)	\$ 4,301.69
Total Improved FEMA Floodplain Modeling & Mapping (MDNR)	\$ 3,654.00
TOTAL PAYABLE	\$ 29,851.71

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


