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engineering and environmental consultants

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

Page # 1
Invoice # 23270051-2020-4
Project # 23/27-0051
Client # 59
June 5, 2020

Invoice of Account with
BARR ENGINEERING COMPANY

For professional services during the period of
May 2, 2020 through May 29, 2020

ENGINEERING

TECHNICAL SERVICES

Review revised draft 2021 proposed budget from administrator and provide edited notes to administrator; review TRPD Plymouth Creek water quality report and internal communications regarding 2022 creek monitoring station; prepare list of 2019 BCWMC reviews in Golden Valley for city's MS4 permit report; communications with consultant regarding request for BCWMC Phase 2 XP-SWMM model; follow-up with Minneapolis staff regarding leaking watermain in Bassett Creek Park that discharges to the creek; coordination with MPCA regarding MTDs (costs shared with Elm Creek WMC); communications with internal staff regarding lower valley work; review project budgets; review deputy treasurer's CIP budget reports and communications with administrator regarding discrepancies; review Plymouth street sweeping memo; communications with administrator and internal staff regarding authorization of routine water quality monitoring work and complete paperwork; and communications with administrator regarding Minneapolis pathogens meeting.

James P. Herbert, Principal Engineer/Scientist		
1.8 hours @ \$200.00 per hour.....	\$	360.00
Karen L. Chandler, Principal Engineer/Scientist		
11.4 hours @ \$180.00 per hour.....	\$	2,052.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III		
0.2 hours @ \$145.00 per hour.....	\$	29.00
Christopher J. Bonick, Engineer/Scientist/Specialist III		
1.0 hours @ \$130.00 per hour.....	\$	130.00
Technicians/Administrative.....	\$	21.00
<i>Subtotal, Technical Services.....</i>	<i>\$</i>	<i>2,592.00</i>

MONTHLY MEETING PREPARATION

Communications/coordination with administrator and internal staff regarding draft/final agenda and meeting packet for May Commission meeting; review/edit draft April meeting minutes; prepare draft Parkers/Mt. Olivet presentation for May Commission meeting and revise/final per administrator comments; prepare for May Commission meeting, including pre-meeting conference call with administrator and Chair Prom, internal communications regarding meeting attendance, and review meeting packet; and communications with administrator and internal staff regarding follow-up items from May Commission meeting, and upcoming meeting agenda items.

James P. Herbert, Principal Engineer/Scientist 1.6 hours @ \$200.00 per hour.....	\$ 320.00
Karen L. Chandler, Principal Engineer/Scientist 25.7 hours @ \$180.00 per hour.....	\$ 4,626.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 5.9 hours @ \$145.00 per hour.....	\$ 855.50
Technicians/Administrative.....	\$ 546.00
<i>Subtotal, Monthly Meeting Preparation.....</i>	<i>\$ 6,347.50</i>

TAC PREPARATION

Subtotal, TAC Preparation..... \$ 0.00

Subtotal Technical Services \$ 8,939.50

PLAT REVIEW

Four Seasons Mall Redevelopment (2019-25)

Communications with applicant, city staff and internal staff.

James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$200.00 per hour.....	\$ 100.00
Josh P. Phillips, Engineer/Scientist/Specialist II 0.1 hours @ \$105.00 per hour.....	\$ 10.50
<i>Subtotal, Four Seasons Mall Redevelopment.....</i>	<i>\$ 110.50</i>

Plymouth 2020 St Reconstruction (PUD) (2019-28)

Prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist 0.8 hours @ \$200.00 per hour.....	\$ 160.00
<i>Subtotal, Plymouth 2020 St Reconstruction (PUD).....</i>	<i>\$ 160.00</i>

Sweeney Lake Shores (PUD) (2020-05)

Review revised grading, drainage and erosion control plans and resubmittals for erosion and sediment control, rate control and water quality; and communications with applicant and city staff.

James P. Herbert, Principal Engineer/Scientist 2.3 hours @ \$200.00 per hour	\$ 460.00
Josh P. Phillips, Engineer/Scientist/Specialist II 2.0 hours @ \$105.00 per hour	\$ 210.00
<i>Subtotal, Sweeney Lake Shores (PUD)</i>	\$ 670.00

Ridgedale Mall Sears Redevelopment (2020-08)

Review grading, drainage and erosion control plans and submittals for erosion and sediment control, rate control, and alternative water quality BMP (MTD); provide draft comments to applicant; prepare review memo and provide to administrator for May Commission meeting; communications with applicant; and prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist 4.1 hours @ \$200.00 per hour	\$ 820.00
Karen L. Chandler, Principal Engineer/Scientist 2.1 hours @ \$180.00 per hour	\$ 378.00
Josh P. Phillips, Engineer/Scientist/Specialist II 6.5 hours @ \$105.00 per hour	\$ 682.50
Edward M. Anderson, Engineer/Scientist/Specialist I 0.7 hours @ \$90.00 per hour	\$ 63.00
<i>Subtotal, Ridgedale Mall Sears Redevelopment</i>	\$ 1,943.50

Sunset Hill Elementary Improvements (2020-09)

Prepare and send comment letter to city staff; review revised grading, drainage and erosion control plans and resubmittals for erosion and sediment control, rate control, and water quality; provide draft comments to applicant; and communications with applicant.

James P. Herbert, Principal Engineer/Scientist 3.0 hours @ \$200.00 per hour	\$ 600.00
Josh P. Phillips, Engineer/Scientist/Specialist II 3.3 hours @ \$105.00 per hour	\$ 346.50
Louise L. Heffernan, Engineer/Scientist/Specialist I 10.2 hours @ \$100.00 per hour	\$ 1,020.00
<i>Subtotal, Sunset Hill Elementary Improvements</i>	\$ 1,966.50

East Middle School Site Improvements (2020-10)

Review grading, drainage and erosion control for erosion and sediment control; and prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist 1.5 hours @ \$200.00 per hour	\$ 300.00
Josh P. Phillips, Engineer/Scientist/Specialist II 1.5 hours @ \$105.00 per hour	\$ 157.50

Louise L. Heffernan, Engineer/Scientist/Specialist I
0.8 hours @ \$100.00 per hour \$ 80.00

Subtotal, East Middle School Site Improvements..... \$ 537.50

Hollydale Substation Expansion (2020-11)

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

James P. Herbert, Principal Engineer/Scientist
4.8 hours @ \$200.00 per hour \$ 960.00

Subtotal, Hollydale Substation Expansion..... \$ 960.00

New Hope 2020 Infrastructure Improvements (2020-12)

Review grading, drainage and erosion control for erosion and sediment control; communications with city staff and applicant; prepare review memo and provide to administrator for May Commission meeting; and prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist
3.0 hours @ \$200.00 per hour \$ 600.00

Karen L. Chandler, Principal Engineer/Scientist
0.9 hours @ \$180.00 per hour \$ 162.00

Josh P. Phillips, Engineer/Scientist/Specialist II
3.2 hours @ \$105.00 per hour \$ 336.00

Louise L. Heffernan, Engineer/Scientist/Specialist I
6.8 hours @ \$100.00 per hour \$ 680.00

Edward M. Anderson, Engineer/Scientist/Specialist I
1.6 hours @ \$90.00 per hour \$ 144.00

Subtotal, New Hope 2020 Infrastructure Improvements \$ 1,922.00

West Broadway Ave Bridge Reconstruction (2020-13)

Review grading, drainage and erosion control for erosion and sediment control; and communications with city staff and applicant.

James P. Herbert, Principal Engineer/Scientist
2.3 hours @ \$200.00 per hour \$ 460.00

Josh P. Phillips, Engineer/Scientist/Specialist II
2.2 hours @ \$105.00 per hour \$ 231.00

Technicians/Administrative..... \$ 100.00

Subtotal, West Broadway Ave Bridge Reconstruction..... \$ 791.00

Hennepin County Gravelbed Concrete Paving (2020-14)

Plat review set-up; preliminary review of plans; and communications with applicant and city staff.

James P. Herbert, Principal Engineer/Scientist
1.0 hours @ \$200.00 per hour \$ 200.00

Josh P. Phillips, Engineer/Scientist/Specialist II 0.4 hours @ \$105.00 per hour.....	\$ 42.00
Technicians/Administrative.....	\$ <u>123.00</u>
<i>Subtotal, Hennepin County Gravelbed Concrete Paving.....</i>	<i>\$ 365.00</i>

Plymouth Creek Center Renovation (2020-15)

Plat review set-up; preliminary review of plans; and communications with administrator, applicant and city staff.

James P. Herbert, Principal Engineer/Scientist 1.0 hours @ \$200.00 per hour.....	\$ 200.00
Josh P. Phillips, Engineer/Scientist/Specialist II 0.4 hours @ \$105.00 per hour.....	\$ 42.00
Technicians/Administrative.....	\$ 103.00
Expenses (Postage)	\$ <u>0.65</u>
<i>Subtotal, Plymouth Creek Center Renovation.....</i>	<i>\$ 345.65</i>

Irving Avenue Sanitary Sewer Replacement (2020-16)

Plat review set-up; preliminary review of plans; and communications with applicant and city staff.

James P. Herbert, Principal Engineer/Scientist 3.2 hours @ \$200.00 per hour.....	\$ 640.00
Karen L. Chandler, Principal Engineer/Scientist 1.1 hours @ \$180.00 per hour.....	\$ 198.00
Technicians/Administrative.....	\$ <u>50.00</u>
<i>Subtotal, Irving Avenue Sanitary Sewer Replacement.....</i>	<i>\$ 888.00</i>

Subtotal Plat Review..... \$ 10,659.65

PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

PRELIMINARY COMMUNICATIONS

Communications with administrator and St. Louis Park staff regarding BCWMC requirements.

James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$200.00 per hour.....	\$ 100.00
Josh P. Phillips, Engineer/Scientist/Specialist II 0.1 hours @ \$105.00 per hour.....	\$ <u>10.50</u>
Subtotal, Preliminary Communications.....	\$ 110.50

NON-FEE REVIEWS

Subtotal Non-Fee Reviews	\$ 0.00
Subtotal Preliminary Communications and Non-Fee Reviews	\$ 110.50

COMMISSION AND TAC MEETINGS

Attend May 21 Commission meeting (virtual).

Karen L. Chandler, Principal Engineer/Scientist 3.0 hours @ \$180.00 per hour	\$ 540.00
Patrick E. Brockamp, Engineer/Scientist/Specialist II 1.5 hours @ \$115.00 per hour	\$ <u>172.50</u>
Subtotal, Commission and TAC Meetings	\$ 712.50

SURVEYS & STUDIES

Subtotal Surveys & Studies	\$ 0.00
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WATER QUALITY/MONITORING

General Water Quality

Prepare for and attend MPCA's May 7 online Professional Judgment Group meeting and follow-up from meeting regarding use attainability analysis review; Main Stem biotic index monitoring report: revise report and map to include stream restoration CIP projects/impacts, revise document in response to administrator comments, and provide revised draft to administrator; and review water quality data to update website graphs;

Karen L. Chandler, Principal Engineer/Scientist 6.3 hours @ \$180.00 per hour	\$ 1,134.00
Gregory J. Wilson, Engineer/Scientist/Specialist IV 4.0 hours @ \$170.00 per hour	\$ 680.00
Sterling 'Greg' Williams, Engineer/Scientist/Specialist III 0.5 hours @ \$145.00 per hour	\$ 72.50
Technicians/Administrative.....	\$ <u>1,788.00</u>
<i>Subtotal, General Water Quality</i>	<i>\$ 3,674.50</i>

Sweeney – Twin Lake Monitoring

Review and file laboratory reports and enter into EQulS; and communications with laboratory.

Terry A. Olson, Engineer/Scientist/Specialist III 0.2 hours @ \$145.00 per hour	\$ 29.00
Lea J. Davidson, Engineer/Scientist/Specialist I 1.5 hours @ \$70.00 per hour	\$ 105.00
Technicians/Administrative.....	\$ <u>46.00</u>
<i>Subtotal, Sweeney-Twin Lake Monitoring</i>	<i>\$ 180.00</i>

Sweeney Branch Monitoring Year 1

Bench test monitoring equipment; prepare and install equipment at site, including securing shelter; program datalogger for modem and flow monitoring only; perform rating curve/flow measurements,

including high flows; calculate rating curve and program datalogger; install autosampler/intake tubing (for water quality sampling), and test and program autosampler; perform storm event sampling; and coordination/communication with internal staff.

Christopher J. Bonick, Engineer/Scientist/Specialist III 34.5 hours @ \$130.00 per hour.....	\$	4,485.00
Heather N. Hlavaty, Engineer/Scientist/Specialist II 5.0 hours @ \$110.00 per hour.....	\$	550.00
Kallie B, Doeden, Engineer/Scientist/Specialist II 0.3 hours @ \$100.00 per hour.....	\$	30.00
Technicians/Administrative.....	\$	488.00
Expenses (Verizon Wireless/mileage/2WD vehicle/Sontek ADV)	\$	<u>475.95</u>
<i>Subtotal, Sweeney Branch Monitoring Year 1</i>	\$	<i>6,028.95</i>
Subtotal, Water Quality/Monitoring.....	\$	9,883.45

WATER QUANTITY

Measure and review lake level elevations as part of lake-gauging program.

Technicians/Administrative.....	\$	400.00
Expenses (Mileage/2WD vehicle).....	\$	<u>101.25</u>
Subtotal, Water Quantity.....	\$	501.25

FLOOD CONTROL PROJECT ANNUAL INSPECTION & DOUBLE BOX CULVERT INSPECTION

Annual inspection: prepare and send email to cities reminding them of recommended Flood Control Project maintenance; and double box culvert 2019 inspection: complete draft inspection report.

James P. Herbert, Principal Engineer/Scientist 1.2 hours @ \$200.00 per hour.....	\$	240.00
Joseph A. Welna, Engineer/Scientist/Specialist III 8.0 hours @ \$145.00 per hour.....	\$	1,160.00
Josh P. Phillips, Engineer/Scientist/Specialist II 1.7 hours @ \$105.00 per hour.....	\$	178.50
Technicians/Administrative.....	\$	<u>287.50</u>
Subtotal, Flood Control Annual Proj Inspect&Dbl Box Culvert\$	\$	1,866.00

DEEP TUNNEL INSPECTION

Follow-up communications with Corps of Engineers staff.

James P. Herbert, Principal Engineer/Scientist 0.4 hours @ \$200.00 per hour.....	\$	<u>80.00</u>
Subtotal, Deep Tunnel Inspection.....	\$	80.00

MUNICIPAL PLAN REVIEWS

Prepare for and attend (virtual) May 20 meeting regarding Minneapolis stormwater ordinances.

James P. Herbert, Principal Engineer/Scientist 3.5 hours @ \$200.00 per hour.....	\$ 700.00
Subtotal, Municipal Plan Reviews	\$ 700.00
TOTAL ENGINEERING	\$ 33,452.85

ANNUAL REPORT

TOTAL ANNUAL REPORT	\$ 0.00
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WATERSHED OUTLET MONITORING PROGRAM (WOMP)

Perform flow measurement at WOMP station, prepare Survey123 notes and download/send flow files to MCES staff; and communication with MCES staff regarding flow measurement.

Christopher J. Bonick, Engineer/Scientist/Specialist III 6.5 hours @ \$130.00 per hour.....	\$ 845.00
Expenses (Tablet Computer/mileage/2WD vehicle/Sontek ADV).....	\$ 127.90
<i>Subtotal, Watershed Outlet Monitoring Program</i>	<i>\$ 972.90</i>
TOTAL WOMP	\$ 972.90

APM/AIS WORK

TOTAL APM/AIS WORK.....	\$ 0.00
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CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

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

Communications with administrator regarding project implementation/funding options; update draft feasibility report text with information from permitting agencies, and communications with administrator regarding revisions; review presentation in preparation for May Commission meeting; and meeting follow-up communications with internal staff regarding next steps/finishing report.

Karen L. Chandler, Principal Engineer/Scientist 4.6 hours @ \$180.00 per hour.....	\$ 828.00
Patrick E. Brockamp, Engineer/Scientist/Specialist II 1.7 hours @ \$115.00 per hour.....	\$ 195.50
Subtotal, Main Stem Dredging Project Feasibility Study.....	\$ 1,023.50

MOUNT OLIVET STREAM STABILIZATION PROJECT (2021)(ML-20) AND PARKERS LAKE DRAINAGE IMPROVEMENT PROJECT (2021)(PL-7) FEASIBILITY STUDY

Mount Olivet Stream Stabilization Project Feasibility Study (2021)(ML-20)

Update figures in draft feasibility report.

Kallie B, Doeden, Engineer/Scientist/Specialist II 0.6 hours @ \$100.00 per hour	\$	60.00
Joshua R. Vosejpka, Engineer/Scientist/Specialist I 0.5 hours @ \$90.00 per hour	\$	45.00
<i>Subtotal, Mount Olivet Stream Stabilization Project Feas Study.....</i>	\$	105.00

Parkers Lake Drainage Improvement Project (2021)(PL-7)

Complete and compile draft feasibility study report and provide to administrator; and present report at May Commission meeting.

Jennifer A. Koehler, Engineer/Scientist/Specialist III 7.8 hours @ \$145.00 per hour	\$	1,131.00
Kallie B, Doeden, Engineer/Scientist/Specialist II 0.1 hours @ \$100.00 per hour	\$	10.00
<i>Subtotal, Parkers Lake Drainage Improvement Project Feas Study</i>	\$	1,141.00
<i>Subtotal, Mt. Olivet Stream Stabilization Project & Parkers Lake Drainage Improvement Project Feasibility Study.....</i>	\$	1,246.00

SWEENEY LAKE WATER QUALITY IMPROVEMENT PROJECT (2020) (SL-8)

Survey and Treat Curly-leaf Pondweed

Provide project update to administrator; prepare herbicide treatment design and map, provide to MDNR, and revise treatment map per MDNR comments; communications with aquatic plant survey subconsultant; prepare map of lake parcels; prepare draft herbicide treatment notification letter for administrator to send to lakeshore residents; communications with administrator in response to resident questions about herbicide (diquat); communications with administrator, herbicide applicator and Golden Valley staff regarding resident requests to opt out of herbicide treatment; communications with Golden Valley staff and internal staff regarding lake access for herbicide treatment; coordination and communications with herbicide applicator, administrator and internal staff regarding treatment schedule and follow-up treatment for missed treatment areas; and communications with administrator regarding posted treatment notice sign.

Karen L. Chandler, Principal Engineer/Scientist 4.2 hours @ \$180.00 per hour	\$	756.00
Gregory J. Wilson, Engineer/Scientist/Specialist IV 12.4 hours @ \$170.00 per hour	\$	2,108.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 12.3 @ \$140.00 per hour	\$	1,722.00

Kelly A. Wild, Engineer/Scientist/Specialist II	
5.3 hours @ \$100.00 per hour	\$ 530.00
Expenses (Mileage)	\$ 21.90
<i>Subtotal, Survey and Treat Curly-leaf Pondweed.....</i>	<i>\$ 5,137.90</i>

Engineer and Perform In-lake Alum Treatment

Communications with internal staff regarding post-alum treatment monitoring; and communications with administrator and internal staff regarding project budget and invoicing.

Karen L. Chandler, Principal Engineer/Scientist	
3.5 hours @ \$180.00 per hour	\$ 630.00
Gregory J. Wilson, Engineer/Scientist/Specialist IV	
2.0 hours @ \$170.00 per hour	\$ 340.00
<i>Subtotal, Engineer and Perform In-lake Alum Treatment.....</i>	<i>\$ 970.00</i>

Carp Control Options Design-Permit-Implement

Prepare and execute subconsultant contract with Carp Solutions.

Karen L. Chandler, Principal Engineer/Scientist	
0.4 hours @ \$180.00 per hour	\$ 72.00
Gregory J. Wilson, Engineer/Scientist/Specialist IV	
2.5 hours @ \$170.00 per hour	\$ 425.00
<i>Subtotal, Public Engagement.....</i>	<i>\$ 497.00</i>

***Subtotal, Sweeney Lake Water Quality Improvements.....* \$ 6,604.90**

TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy) \$ 8,874.40

TMDL WORK

TOTAL TMDL WORK \$ 0.00

IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)

IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)

Hydraulic Analysis

Respond to formal comments from MDNR staff on selection of hydraulic inputs and survey data.

Karen L. Chandler, Principal Engineer/Scientist	
2.9 hours @ \$180.00 per hour	\$ 522.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III	
0.5 hours @ \$145.00 per hour	\$ 72.50
Ross S. Mullen, Engineer/Scientist/Specialist II	
11.9 hours @ \$120.00 per hour	\$ 1,428.00
<i>Subtotal, Hydraulic Analysis.....</i>	<i>\$ 2,022.50</i>

Develop Depth Grids

Respond to formal comments from MDNR staff on selection of modeled and mapped overflows.
Updating QC Plan for verification of mapping of road, culvert, and other hydraulic structures.

Ross S. Mullen, Engineer/Scientist/Specialist II	
3.2 hours @ \$120.00 per hour	\$ 384.00
<i>Subtotal, Develop Depth Grids</i>	\$ 384.00
TOTAL IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)	\$ 2,406.50

SUMMARY TOTALS

Total Engineering	\$ 33,452.85
Total WOMP	\$ 972.90
Total Annual Report	\$ 0.00
Total APM/AIS Work	\$ 0.00
Total TMDL Work	\$ 0.00
Total Capital Improvement Projects (Tax Levy)	\$ 8,874.40
Total Improved FEMA Floodplain Modeling & Mapping (MDNR)	\$ 2,406.50
TOTAL PAYABLE	\$ 45,706.65

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


