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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 # 23270051-2020-8
Project # 23/27-0051
Client # 59
September 3, 2020

Invoice of Account with
BARR ENGINEERING COMPANY

For professional services during the period of
August 1, 2020 through August 28, 2020

ENGINEERING

TECHNICAL SERVICES

Communications with Golden Valley staff and consultant regarding BCWMC XP SWMM model request and provide model; conference call with Plymouth staff regarding chloride project; communications with administrator regarding Hennepin County board meeting; communications with Crystal staff and internal staff regarding whether culvert along North Branch is part of the Flood Control Project; look into Commissioner Welch's question about policy/monitoring results driving policy and projects; review water quantity and WOMP budgets; communications with administrator regarding watershed-wide studies and other items; internal communications regarding starry stonewort; Plymouth street sweeping agreement: review adopted Commission policy and past documents, internal meeting, and 8/21 conference call with administrator and Plymouth staff regarding agreement provisions; communications with internal staff regarding Medicine Lake staff gage replacement; communications with Crystal staff regarding existence of easements along Markwood Channel; communications with administrator regarding Lagoon dredging TP removal; communications with internal staff regarding plan amendment changes; internal discussion regarding BCWMC boundary issue; communications with Minnetonka staff, consultant, and administrator regarding proposed Ridgedale Mall issue, including Ridgedale pond and sanitary and storm sewer in area; and communications with Golden Valley staff and administrator regarding Ring Pond emergency pipe repair.

James P. Herbert, Principal Engineer/Scientist 3.1 hours @ \$200.00 per hour.....	\$ 620.00
Karen L. Chandler, Principal Engineer/Scientist 14.9 hours @ \$180.00 per hour.....	\$ 2,682.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 0.3 hours @ \$145.00 per hour.....	\$ 43.50
Josh P. Phillips, Engineer/Scientist/Specialist II 0.2 hours @ \$105.00 per hour.....	\$ 21.00
Subtotal, Technical Services.....	\$ 3,978.50

MONTHLY MEETING PREPARATION

Communications/coordination with administrator and internal staff regarding draft/final agenda and meeting packet for August Commission meeting; prepare for August Commission meeting, including review/edit administrator's minor plan amendment memo for August Commission meeting, prepare engineer communications for August Commission meeting regarding status of stream and lake monitoring and M-IBI request to MPCA, pre-meeting conference call with administrator and Chair Prom and review meeting packet; 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 4.4 hours @ \$200.00 per hour	\$ 880.00
Karen L. Chandler, Principal Engineer/Scientist 21.6 hours @ \$180.00 per hour	\$ 3,888.00
Christopher Bonick, Engineer/Scientist/Specialist III 0.5 hours @ \$130.00 per hour	\$ 65.00
Margaret Rattei, Engineer/Scientist/Specialist III 1.7 hours @ \$140.00 per hour	\$ 238.00
Technicians/Administrative	\$ 812.50
<i>Subtotal, Monthly Meeting Preparation</i>	<i>\$ 5,883.50</i>

PLAT REVIEW

Association Free Lutheran Bible School (2019-21)

Review treatment modifications for site.

James P. Herbert, Principal Engineer/Scientist 1.2 hours @ \$200.00 per hour	\$ 240.00
<i>Association Free Lutheran Bible School (2019-21).....</i>	<i>\$ 240.00</i>

Four Seasons Mall Redevelopment (2019-25)

Internal coordination and review revised submittal.

Josh P. Phillips, Engineer/Scientist/Specialist II 0.5 hours @ \$105.00 per hour	\$ 52.50
<i>Four Seasons Mall Redevelopment (2019-25).....</i>	<i>\$ 52.50</i>

Sweeney Lake Shores (PUD) (2020-05)

Review resubmittal for erosion and sediment control; and prepare and send approval letter.

Karen L. Chandler, Principal Engineer/Scientist 0.3 hours @ \$180.00 per hour	\$ 54.00
Josh P. Phillips, Engineer/Scientist/Specialist II 0.7 hours @ \$105.00 per hour	\$ 73.50
<i>Subtotal, Sweeney Lake Shores (PUD).....</i>	<i>\$ 127.50</i>

Irving Avenue Sanitary Sewer Replacement (2020-16)

Review revised drawings, reports, and other submittals regarding variance/cover over the pipe, floodplain, scour and velocities; internal meeting; communications with administrator; prepare review memo for

August Commission meeting; provide memo and attachments to administrator for August meeting packet; communications with administrator and internal staff regarding Commissioner Welch's comments on review memo; prepare and send approval/comment letter to city staff; and communications with administrator, city staff and city consultant.

James P. Herbert, Principal Engineer/Scientist 15.1 hours @ \$200.00 per hour	\$ 3,020.00
Karen L. Chandler, Principal Engineer/Scientist 6.9 hours @ \$180.00 per hour	\$ 1,242.00
Josh P. Phillips, Engineer/Scientist/Specialist II 2.5 hours @ \$105.00 per hour	\$ 262.50
Peter Hinck, Engineer/Scientist/Specialist III 0.2 hours @ \$140.00 per hour	\$ 70.00
<i>Subtotal, Irving Avenue Sanitary Sewer Replacement.....</i>	<i>\$ 4,594.50</i>

Rude Landscaping 11625 26th Ave N (2020-19)

Prepare review memo for August Commission meeting for shoreline restoration work in Medicine Lake floodplain and provide to administrator; and prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist 1.7 hours @ \$200.00 per hour	\$ 340.00
Karen L. Chandler, Principal Engineer/Scientist 0.5 hours @ \$180.00 per hour	\$ 90.00
Josh P. Phillips, Engineer/Scientist/Specialist II 1.3 hours @ \$105.00 per hour	\$ 136.50
Technicians/Administrative	\$ 45.00
<i>Subtotal, Rude Landscaping 11625 26th Ave N.....</i>	<i>\$ 611.50</i>

Retro Company Comp Home Care Facility (2020-20)

Review resubmittal for erosion and sediment control; prepare and send approval letter; and communications with applicant.

Karen L. Chandler, Principal Engineer/Scientist 0.5 hours @ \$180.00 per hour	\$ 90.00
Josh P. Phillips, Engineer/Scientist/Specialist II 2.5 hours @ \$105.00 per hour	\$ 262.50
Technicians/Administrative	\$ 10.00
<i>Subtotal, Retro Company Comp Home Care Facility.....</i>	<i>\$ 362.50</i>

Brose Shoreline Repair (2020-21)

Prepare review memo for August Commission meeting for shoreline restoration work in Medicine Lake floodplain and provide to administrator; prepare and send approval letter to city staff; and communications with applicant.

James P. Herbert, Principal Engineer/Scientist 1.9 hours @ \$200.00 per hour	\$ 380.00
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Karen L. Chandler, Principal Engineer/Scientist 0.8 hours @ \$180.00 per hour	\$	144.00
Josh P. Phillips, Engineer/Scientist/Specialist II 2.1 hours @ \$105.00 per hour	\$	220.50
Technicians/Administrative	\$	<u>106.00</u>
<i>Subtotal, Brose Shoreline Repair</i>	\$	850.50

Xchange Medical Office Bldg (2020-22)

Preliminary review of plans.

James P. Herbert, Principal Engineer/Scientist 0.3 hours @ \$200.00 per hour	\$	60.00
Josh P. Phillips, Engineer/Scientist/Specialist II 1.0 hour @ \$105.00 per hour	\$	<u>105.00</u>
<i>Subtotal, Xchange Medical Office Bldg</i>	\$	165.00

Plymouth Commons Drainage Impr. (2020-23)

Preliminary review of plans.

James P. Herbert, Principal Engineer/Scientist 0.4 hours @ \$200.00 per hour	\$	80.00
Josh P. Phillips, Engineer/Scientist/Specialist II 0.3 hours @ \$105.00 per hour	\$	31.50
Technicians/Administrative	\$	<u>57.50</u>
<i>Subtotal, Brose Shoreline Repair</i>	\$	169.00
Subtotal Plat Review	\$	7,173.00

PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

PRELIMINARY COMMUNICATIONS

Communications with Plymouth staff regarding preliminary review of Hollydale development; New Hope radio tower collapse removal work: communications with owner's representative and city staff regarding emergency work, future work and BCWMC requirements; and review MDNR permit applications 2020-2513, 2020- 2514, 2020-2596, and 2020-2780 submitted to BCWMC for review/comment, and provide comments to administrator/MDNR.

James P. Herbert, Principal Engineer/Scientist 6.3 hours @ \$200.00 per hour	\$	1,260.00
Karen L. Chandler, Principal Engineer/Scientist 3.8 hours @ \$180.00 per hour	\$	684.00
Josh P. Phillips, Engineer/Scientist/Specialist II 0.3 hours @ \$105.00 per hour	\$	<u>31.50</u>
<i>Subtotal, Preliminary Communications</i>	\$	1,975.50

NON-FEE REVIEWS

Subtotal Non-Fee Reviews.....\$ 0.00

***Subtotal Preliminary Communications and Non-Fee Reviews*\$ 1,975.50**

COMMISSION AND TAC MEETINGS

Attend August 20 Commission meeting (virtual).

James P. Herbert, Principal Engineer/Scientist
1.8 hours @ \$200.00 per hour\$ 360.00

Karen L. Chandler, Principal Engineer/Scientist
2.8 hours @ \$180.00 per hour\$ 504.00

***Subtotal, Commission and TAC Meetings*.....\$ 864.00**

SURVEYS & STUDIES

Subtotal Surveys & Studies\$ 0.00

WATER QUALITY/MONITORING

General Water Quality

Communications with MPCA staff, administrator and internal staff regarding status of request for information from the MPCA about streams meeting/not meeting the M-IBI standard; prepare stream water quality graphs; and prepare 2018-2019 stream data for import into EQulS.

Karen L. Chandler, Principal Engineer/Scientist
0.8 hours @ \$180.00 per hour\$ 144.00

Margaret R. Rattei, Engineer/Scientist/Specialist III
1.4 @ \$140.00 per hour\$ 196.00

Greg Williams, Engineer/Scientist/Specialist III
0.5 @ \$140.00 per hour\$ 72.50

Technicians/Administrative\$ 175.00

***Subtotal, General Water Quality*.....\$ 587.50**

Sweeney – Twin Lake Monitoring

Communications with Green Water Lab and review and process invoice for PTOX analyses completed on June Sweeney Lake samples; prepare for and conduct August 3 and August 17 monitoring of Sweeney Lake and Twin Lake, including ordering bottles; download MCES CAMP data for Sweeney Twin from 2014-2019, update historical Sweeney Lake data spreadsheet with 2014-2019 CAMP data, 2017 BCWMC data and June-July 2020 data; review Twin Lake monitoring data and provide to internal staff; and laboratory charges for PTOX analysis and analysis of water quality samples.

Terri A. Olson, Engineer/Scientist/Specialist III
0.8 hours @ \$145.00 per hour\$ 116.00

Margaret R. Rattei, Engineer/Scientist/Specialist III
5.7 hours @ \$140.00 per hour\$ 798.00

Technicians/Administrative	\$	1,761.00
Expenses (Pace Analytical/GreenWater Lab/mileage/2WD vehicle/4WD vehicle/ canoe/WQ meter/bottle sampler/ice/zooplankton Net/filtration apparatus)	\$	678.60
<i>Subtotal, Sweeney-Twin Lake Monitoring.....</i>	\$	<i>4,171.60</i>

Sweeney Branch Monitoring Year 1

Download and graph flow data; perform low flow measurement on August 3; collect Sweeney Branch low flow grab samples on August 21; prepare sampler, collect samples from August 8-9 and August 12 storms, and deliver samples to the lab; and internal communications.

Kallie B, Doeden, Engineer/Scientist/Specialist II 3.7 hours @ \$100.00 per hour	\$	370.00
Technicians/Administrative	\$	1,199.00
Expenses (Verizon Wireless/mileage/Ice Flow Meter/turbidmeter/2WD vehicle/conductivity meter).....	\$	299.25
<i>Subtotal, Sweeney Branch Monitoring Year 1.....</i>	\$	<i>1,868.25</i>

2020 Sweeney Branch Biotic Index Monitoring

Create GPS file data for stream reach.

Technicians/Administrative	\$	82.00
<i>Subtotal, Sweeney Branch Biotic Index Monitoring.....</i>	\$	<i>82.00</i>

Subtotal, Water Quality/Monitoring..... \$ 6,709.35

WATER QUANTITY

Communications with administrator, Plymouth staff, Commissioner Carlson and internal staff regarding replacement of destroyed Medicine Lake gage;

Karen L. Chandler, Principal Engineer/Scientist 1.2 hours @ \$180.00 per hour	\$	216.00
Technicians/Administrative	\$	120.00
<i>Subtotal, Water Quantity.....</i>	\$	<i>336.00</i>

Deep Tunnel Inspection

Communications with Minneapolis staff, U.S. Army Corps of Engineers staff, and administrator regarding inspection schedule.

James P. Herbert, Principal Engineer/Scientist 2.5 hours @ \$200.00 per hour	\$	500.00
<i>Subtotal, Deep Tunnel Inspection.....</i>	\$	<i>500.00</i>
TOTAL ENGINEERING	\$	27,419.85

ANNUAL REPORT

TOTAL ANNUAL REPORT \$ 0.00

WATERSHED OUTLET MONITORING PROGRAM (WOMP)

TOTAL WOMP\$ 0.00

APM/AIS WORK

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

CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

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

Prepare for and attend August 4 Hennepin County Committee of the Whole meeting regarding maximum levy request; and communications with administrator.

Karen L. Chandler, Principal Engineer/Scientist
 2.1 hours @ \$180.00 per hour\$ 378.00

Subtotal, Main Stem Dredging Project Feasibility Study.....\$ 378.00

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

Engineer and Perform In-lake Alum Treatment

Communications with administrator, commission attorney and internal staff regarding alum treatment contracting; compiling/reviewing 2020 Sweeney Lake water quality monitoring data; and prepare alum treatment contract documents.

Karen L. Chandler, Principal Engineer/Scientist
 1.4 hours @ \$180.00 per hour\$ 252.00

Gregory J. Wilson, Engineer/Scientist/Specialist IV
 6.9 hours @ \$170.00 per hour\$ 1,173.00

Subtotal, Engineer and Perform In-lake Alum Treatment.....\$ 1,425.00

Subtotal, Sweeney Lake Water Quality Improvements.....\$ 1,425.00

DeCola Ponds - SEA School/Wildwood Park Flood Storage Project Feasibility Study (2022)(BC-2, 3, 8, 10)

Project set-up; Conversation with Tyler Conley re: wetland delineation; Email to Jennifer Brekken regarding environmental data summary and MPCA what's in my neighborhood; Compile topographic, utility, and tree survey request.

Karen L. Chandler, Principal Engineer/Scientist
 0.2 hours @ \$180.00 per hour\$ 36.00

Jennifer Koehler, Engineer/Scientist/Specialist III
 4.0 @ \$145.00 per hour\$ 580.00

Katelyn Turpin-Nagel, Engineer/Scientist/Specialist II
 1.2 @ \$110.00 per hour\$ 132.00

Technicians/Administrative\$ 90.00

Subtotal, DeCola Ponds - SEA School/Wildwood Park Flood Storage Project Feasibility Study.....\$ 838.00

Medley Park Stormwater Treatment Facility Feasibility Study (2022)(ML-12)

Project set-up; communications with internal staff regarding field investigations' tasks and schedules (wetland delineation, sediment sampling, bathymetric survey, geotechnical investigations); develop topographic, utility, and tree survey quote proposal and send to subcontractors.

Karen L. Chandler, Principal Engineer/Scientist 1.4 hours @ \$180.00 per hour	\$ 252.00
Jennifer Koehler, Engineer/Scientist/Specialist III 1.6 @ \$145.00 per hour	\$ 232.00
Katelyn Turpin-Nagel, Engineer/Scientist/Specialist II 6.7 @ \$110.00 per hour	\$ 737.00
John Juntilla, Engineer/Scientist/Specialist III 0.5 @ \$125.00 per hour	\$ 62.50
Kevin Menken, Engineer/Scientist/Specialist II 1.0 @ \$120.00 per hour	\$ 120.00
Technicians/Administrative	\$ 270.00

Subtotal, Medley Park Stormwater Treatment Facility Feasibility Study.....\$ 1,673.50

TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)\$ 4,314.50

TMDL WORK

TOTAL TMDL WORK\$ 0.00

IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)

IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR)

Floodplain, Floodway, Cross-Section Shapefiles

Compile floodway modeling information for submittal to MDNR; QA/QC review of preliminary 500-year mapping and recompile inundation mapping based on review; review of mapping documentation from MDNR; prepare for MDNR audit submittal.

Karen L. Chandler, Principal Engineer/Scientist 0.5 hours @ \$180.00 per hour	\$ 90.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 13.4 hours @ \$145.00 per hour	\$ 1,943.00
Joshua Vosejpka, Engineer/Scientist/Specialist I 13.3 hours @ \$90.00 per hour	\$ 1,197.00
<i>Subtotal, Floodplain, Floodway, Cross-Section Shapefiles</i>	<i>\$ 3,230.00</i>

TOTAL IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR).....\$ 3,230.00

SUMMARY TOTALS

Total Engineering	\$ 27,419.85
Total WOMP.....	\$ 0.00
Total Annual Report.....	\$ 0.00
Total APM/AIS Work.....	\$ 0.00
Total TMDL Work	\$ 0.00
Total Capital Improvement Projects (Tax Levy).....	\$ 4,314.50
Total Improved FEMA Floodplain Modeling & Mapping (MDNR)	\$ <u>3,230.00</u>
TOTAL PAYABLE.....	\$ 34,964.35

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


