resourceful. naturally. engineering and environmental consultants

Bassett Creek WMO 7800 Golden Valley Road Golden Valley, MN 55427 Page # 1

Invoice # 23270051-2014-6

Project # 23/27-0051

Client # 59 September 5, 2014

Invoice of Account with BARR ENGINEERING COMPANY

For professional services during the period of August 2, 2014 through August 29, 2014

ENGINEERING

TECHNICAL SERVICES

Calls/emails to or from the Commissioners, administrator, watershed communities and interested citizens; communications with administrator regarding Hennepin County natural resource partnership meeting; attend August 5 (first) Project Advisory Team meeting for MPRB ecological system plan; meeting and communications with administrator regarding status of miscellaneous projects; and respond to data request from consultant; reviewed 2004 Flood Insurance Study.

Karen L. Chandler, Consultant/Advisor 10.4 hours @ \$155.00 per hour\$	1,612.00
Sterling G. Williams, Engineer/Scientist/Specialist II 0.2 hours @ \$115.00 per hour\$	23.00
Technicians/Administrative\$	636.50
Expenses (mileage)\$_	51.52
Subtotal, Technical Services\$	2,323.02

PRELIMINARY SITE REVIEW/CORRESPONDENCE

Coordination with Westwood regarding Target Pond in Plymouth and previous permit information; communications with Westwood regarding Room & Board site, including review of historical information and email regarding requirements; communications with LHB regarding Tennant site in Golden Valley; coordination with consultant and city staff regarding Golden Valley Senior Housing project; communications with Landform regarding Golden Valley project requirements; communication with Medicine Lake resident regarding requirements; communication with consultant regarding Golden Valley library site; communications with Summit Design-Build regarding home construction on Sweeney Lake; prepare materials for and attend meeting with Golden Valley staff and consultant regarding city's upcoming Douglas Drive project in city, and provide XP SWMM and P8 models to city of Golden Valley for project; communications with SambaTech regarding proposed BMPs for project in Medicine Lake; and communications with HR Green regarding BCWMC requirements for review of upcoming channel restoration project in Golden Valley, and provide HR Green with BCWMC XP-SWMM model for project (per request from Golden Valley).

James P. Herbert, Principal Engineer/Scientist 7.2 hours @ \$165.00 per hour\$	1,188.00
Karen L. Chandler, Consultant/Advisor 6.4 hours @ \$155.00 per hour\$	992.00
Gregory J. Wilson, Engineer/Scientist/Specialist III 1.8 hours @ \$145.00 per hour\$	261.00
Jennifer A. Koehler, Engineer/Scientist/Specialist II 7.3 hours @ \$115.00 per hour\$	839.50
Candice M. Kantor, Engineer/Scientist/Specialist I 0.3 hours @ \$90.00 per hour\$	45.00
Expenses (mileage)\$_	6.72
Subtotal, Preliminary Site Review/Correspondence\$	3,332.22

MONTHLY MEETING PREPARATION

Communications/coordination with administrator and recording administrator regarding agenda and meeting packet for August 2014 meeting; review and edit draft July Commission meeting minutes and email to administrator; prepare mid-year Engineering budget review memo for August Commission meeting; prepare for August Commission meeting, including conference call with Chair de Lambert regarding meeting agenda, internal meeting regarding August Commission meeting; provide grant tracking and MPRB ecological system plan information to administrator; and review and respond to administrator's task list from August Commission meeting.

*	· ·	· ·	
James P. Herbert, Principal Engin 9.0 hours @ \$165.00 per		\$	1,485.00
Karen L. Chandler, Consultant/A 32.0 hours @ \$155.00 per	dvisor · hour	\$	4,960.00
Sterling G. Williams, Engineer/S 0.3 hours @ \$115.00 per h		\$_	34.50
Subtotal, Monthly Me	eeting Preparation	\$	6,479.50
Subtotal Technical Services	•••••	\$	12,134.74

PLAT REVIEW

Note: Projects in **Bold** have provided review fees to offset review costs. Projects not in Bold are either in a preliminary stage or do not require application fee.

Hilde Performance Center Phase 2 Site Improvements (2014-16)

Review grading, drainage and erosion control plans; prepare and send letter to City of Plymouth with review comments.

James P. Herbert, Principal Engineer/Scientist	
3.0 hours @ \$165.00 per hour\$	495.00

Candice M. Kantor, Engineer/Scientist/Specialist I 8.4 hours @ \$90.00 per hour\$	756.00
Subtotal, Hilde Performance Ctr Ph 2 Site Improvements\$	1,251.00
Morrie's Luxury Auto (2014-17)	
Review revised plans and send approval letter to city.	
James P. Herbert, Principal Engineer/Scientist 4.5 hours @ \$165.00 per hour\$	742.50
Candice M. Kantor, Engineer/Scientist/Specialist I 7.4 hours @ \$90.00 per hour\$	666.00
Subtotal, Morrie's Luxury Auto\$	1,408.50
TruStone Financial (2014-18)	
Review grading, drainage and erosion control plans; review stormwater report; coor City of Golden Valley and applicant; prepare memo for August Commission meeting send letter of recommendation to city.	rdination with ng; prepare and
James P. Herbert, Principal Engineer/Scientist 5.9 hours @ \$165.00 per hour\$	973.50
Karen L. Chandler, Consultant/Advisor 0.8 hours @ \$155.00 per hour\$	124.00
Candice M. Kantor, Engineer/Scientist/Specialist I 10.9 hours @ \$90.00 per hour\$	981.00
Technicians/Administrative\$	42.50
Subtotal, TruStone Financial\$	2,121.00
KIA of St. Louis Park (2014-19)	
Review grading, drainage and erosion control plans; prepare and send letter to City with review comments	of St. Louis Park
James P. Herbert, Principal Engineer/Scientist 2.0 hours @ \$165.00 per hour\$	330.00
Candice M. Kantor, Engineer/Scientist/Specialist I 1.4 hours @ \$90.00 per hour\$	126.00
Subtotal, KIA of St. Louis Park\$	456.00
Subtotal Plat Review\$	5,236.50
COMMISSION AND TAC MEETINGS	

Attend August 11th Commission workshop regarding next generation plan; attend August 21st Commission meeting; and attend August 25th Plan Steering Committee meeting.

Karen L. Chandler, Consultant/Advisor	
6.3 hours @ \$155.00 per hour\$_	976.50
Subtotal, Commission and TAC Meetings\$	976.50

SURVEYS AND STUDIES

Sweeney Lake Algae Testing: collection of algal sample from Sweeney Lake for toxin sampling; send sample to GreenWater Laboratories for analysis; expenses for laboratory analysis of algal toxin sample for anatoxin-a; file pictures of Sweeney algal blooms and communications with Golden Valley city staff.

Margaret R. Rattei, Engineer/Scientist/Specialist II	
1.2 hours @ \$120.00 per hour\$	144.00
Technicians/Administrative\$	584.00
Expenses (GreenWater Laboratories/FedX)	329.50
Subtotal, Surveys and Studies\$	1.057.50

WATER QUALITY/MONITORING

Review MCES draft WOMP station report regarding stream water quality and discuss with MCES; meeting with administrator regarding MPCA's response to BCWMC's comments on bacteria TMDL and MCES draft report; send email to member city staff regarding staff concerns regarding the bacteria TMDL responses and potential next steps; provide comments to administrator regarding MCES draft report; identify algae found during August 4th sampling on Sweeney Lake, prepare document summarizing status of algae (change to green algae), and send document to administrator and Golden Valley staff; and communications with administrator and MPCA staff regarding MPCA algae presentation. Twin and Sweeney Lake 2014 monitoring: prepare for and perform August 4th and 20th lake water quality sampling, including calibration and preparation of equipment, and collection of zooplankton and phytoplankton; prepare for September lake water quality sampling; review, tabulate and graph water quality sampling lab results to-date; and enter lab reports into system.

Henry M. Runke, Principal Engineer/Scientist 2.5 hours @ \$170.00 per hour\$	425.00
Karen L. Chandler, Consultant/Advisor 7.3 hours @ \$155.00 per hour\$	1,131.50
Gregory J. Wilson, Engineer/Scientist/Specialist III 11.1 hours @ \$145.00 per hour\$	1,609.50
Margaret R. Rattei, Engineer/Scientist/Specialist II 3.7 hours @ \$120.00 per hour\$	444.00
Technicians/Administrative\$	1,933.00
Expenses (Pace Analytical Services/Endangered Resource Services/filtration apparatus/canoe/WQ meter/mileage/2WD field vehicle)\$_	5,010.63
Subtotal, Water Quality/Monitoring\$	10,553.63

WATER QUANTITY

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

TOTAL ENGINEERING\$	30,857.11
Subtotal, Water Quantity\$	898.24
Expenses (Mileage/2WD vehicle) <u>\$</u>	133.24
Technicians/Administrative\$	765.00

SECRETARIAL SERVICES

SECRETARIAL SERVICES EXPENSES

Expenses (postage)......\$ 32.85

TOTAL SECRETARIAL SERVICES EXPENSES......\$ 32.85

PLANNING

Review and revise buffer memo in preparation for the August 11 Commission workshop; meet with administrator to discuss agenda and packet items for the August 11 Commission workshop; prepare materials for August 11 Commission workshop packet and distribute packet; review results of the August 11 Commission workshop and revise policies to reflect workshop discussion; prepare materials for August 25 PSC meeting and distribute packet; review draft Education and Outreach Program document; attend August 25 PSC meeting; revise plan policies per discussion at the August 25 PSC meeting; develop matrix of possible BCWMC recreational roles; summarize existing water quality data and continue work on Land and Water Resource Inventory section of the draft plan; develop Implementation section of the draft plan; develop draft ideas for policies addressing Commission's role in blue-green algae; and communications with administrator and cities.

TOTAL PLANNING (Next Generation Plan)\$	5,860.72
Subtotal, Next Generation Plan\$	5,860.72
Expenses (postage)	3.22
Technicians/Administrative\$	42.50
Katelyn J. Nagel, Engineer/Scientist/Specialist I 6.8 hours @ \$65.00 per hour\$	442.00
Sterling G. Williams, Engineer/Scientist/Specialist II 29.2 hours @ \$115.00 per hour\$	3,358.00
Karen L. Chandler, Consultant/Advisor 13.0 hours @ \$155.00 per hour\$	2,015.00

PLANNING (Funded through Flood Control Project Long-term Maintenance Funds)

TOTAL PLANNING (Maintenance Funds).....\$ 0.00

ANNUAL REPORT	
TOTAL ANNUAL REPORT\$	0.00
PUBLIC COMMUNICATIONS	
TOTAL PUBLIC COMMUNICATIONS\$	0.00
WEBSITE	
TOTAL WEBSITE\$	0.00
WATERSHED OUTLET MONITORING PROGRAM (WOMP)	
WATERSHED OUTLET MONITORING PROGRAM (WOMP)\	
Review WOMP station flow data.	
Christopher J. Bonick, Engineer/Scientist/Specialist II 0.5 hours @ \$115.00 per hour\$	57.50
Subtotal, Watershed Outlet Monitoring Program\$	57.50
TOTAL WOMP\$	57.50

CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

CEDAR LAKE ROAD TO GOLDEN VALLEY ROAD, 2012 MAIN STEM (2012 CR)\

Communications with MPRB, Minneapolis and consultant staff regarding status of Corps review; review MPRB consultant's responses to comments on HEC-RAS model for Bassett Creek through Wirth Park and review XP-SWMM model results; internal meetings to discuss updated model and floodplain impacts; communications with administrator regarding project status; communications with MPRB staff regarding CIP project budget status and channel maintenance funds; and communications with MPRB consultant regarding project status and floodplain impacts.

Leonard J. Kremer, Principal Engineer/Scientist 2.2 hours @ \$180.00 per hour\$	396.00
James P. Herbert, Principal Engineer/Scientist 4.8 hours @ \$165.00 per hour\$	792.00
Karen L. Chandler, Consultant/Advisor 10.4 hours @ \$155.00 per hour\$	1,612.00
Jennifer A. Koehler, Engineer/Scientist/Specialist II 0.5 hours @ \$115.00 per hour\$	57.50

Jeffrey D. Weiss, Engineer/Scientist/Specialist II	
5.0 hours @ \$115.00 per hour\$_	575.00
Subtotal, Cedar Lk Rd to Golden Valley Rd, 2012 Main Stem\$	3,432.50

TWIN LAKE ALUM TREATMENT PROJECT (TW-2)

Review 2014 water quality data for Twin Lake and previous internal loading assessment; internal communications regarding required steps to accomplish alum treatment in fall 2014; and attend meeting with administrator and Golden Valley staff regarding alum treatment in 2014.

Karen L. Chandler, Consultant/Advisor 7.0 hours @ \$155.00 per hour\$	1,085.00
Gregory J. Wilson, Engineer/Scientist/Specialist III 7.5 hours @ \$145.00 per hour\$	1,087.50
Keith M. Pilgrim, Engineer/Scientist/Specialist III 0.5 hours @ \$145.00 per hour\$	72.50
Margaret R. Rattei, Engineer/Scientist/Specialist II 1.6 hours @ \$120.00 per hour\$	192.00
Subtotal, Twin Lake Alum Treatment Project\$	2,437.00

BRIARWOOD-DAWNVIEW POND (BC-7)

Communications with administrator and Golden Valley staff regarding status of BCWMC review; and communications with city's consultant regarding status of water quality modeling and plan revisions.

Karen L. Chandler, Consultant/Advisor	
1.3 hours @ \$155.00 per hour\$_	201.50
Subtotal, Briarwood-Dawnview Pond\$	201.50

MAIN STEM: 10TH AVENUE-DULUTH STREET (2015CR)

Prepare draft memo for September Commission meeting regarding recommended tax levy for project.

Karen L. Chandler, Consultant/Advisor	
0.8 hours @ \$155.00 per hour\$	124.00
Subtotal, Main Stem: 10 th Ave – Duluth Street\$	124.00

HONEYWELL POND EXPANSION (2016) (BC-4)

Prepare materials for and attend meeting with Golden Valley staff and consultant regarding project options and feasibility study, and provide XP SWMM and P8 models to city of Golden Valley for project; begin review of draft feasibility study; and communications with city staff and city's consultant.

Karen L. Chandler, Consultant/Advisor	
2.6 hours @ \$155.00 per hour\$	403.00

Jennifer A. Koehler, Engineer/Scientist/Specialist II	
4.9 hours @ \$115.00 per hour\$	563.50
Subtotal, Honeywell Pond Expansion\$	966.50

NORTHWOOD LAKE IMPROVEMENT PROJECTS (2016)(NL-1)

Communications and coordination with New Hope's consultant regarding draft feasibility study for project and concept plans for feasibility study; review and provide comments to city's consultant on the Northwood Park concept plans; and communications with city's consultant regarding proposed stormwater reuse BMP.

James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$165.00 per hour\$	82.50
Karen L. Chandler, Consultant/Advisor 2.1 hours @ \$155.00 per hour\$	325.50
Jennifer A. Koehler, Engineer/Scientist/Specialist II 1.6 hours @ \$115.00 per hour\$	184.00
Subtotal, Northwood Lake Improvement Projects\$	592.00

TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)\$ 7,753.50

CAPITAL IMPROVEMENT PROJECTS (Funded through Flood Control Project Long-term Maintenance Funds)

TOTAL CAPITAL IMPROVEMENT PROJECTS	
(Maintenance Funds)\$	0.00

TMDL WORK

TMDL IMPLEMENTATION REPORTING

P8 Model Update: look into P8 model subwatershed revisions for each city.

2.0 hours @ \$145.00 per hour \$ 290.00 Subtotal, TMDL Studies \$ 290.00
2.0 hours @ \$145.00 per hour\$ 290.00
Gregory J. Wilson, Engineer/Scientist/Specialist III

SUMMARY TOTALS

Total Engineering\$	30,857.11
Total Secretarial Services Expenses\$	32.85
Total Planning (Next Generation Plan)\$	5,860.72
Total Planning (Maintenance Funds)\$	0.00
Total Annual Report/Website/Public Communications\$	0.00
Total WOMP\$	57.50
Total Capital Improvement Projects (Tax Levy)\$	7,753.50
Total Capital Improvement Projects (Maintenance Funds)\$	0.00
Total TMDL Studies <u>\$</u>	290.00
TOTAL PAYABLE\$	44,851.68

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

James P. Herbert