



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

Page # 1  
Invoice # 23270051-2018-2  
Project # 23/27-0051  
Client # 59  
April 5, 2018

Invoice of Account with  
BARR ENGINEERING COMPANY

For professional services during the period of  
February 24, 2018 through March 30, 2018

**ENGINEERING**

TECHNICAL SERVICES

Create 2018 budget table; communications with administrator regarding Minnetonka inquiry about BCWMC project reviews; communications with administrator regarding schedule for meetings; communications with Minneapolis staff regarding impound lot contamination; prepare and send email to Medicine Lake TAC member regarding Medicine Lake flood elevations and datum; 2019 budgeting; communications with administrator, TRPD staff and internal staff, prepare and send 2019 draft budget for technical services to administrator, and respond to administrator's questions; communications with administrator regarding BWSR BBR; communications with Medicine Lake staff regarding Medicine Lake weir elevation; and prepare for and attend March 30 Hennepin County watershed-based funding Pre-Convene Meeting #3, including communications with administrator.

James P. Herbert, Principal Engineer/Scientist	
0.7 hours @ \$190.00 per hour .....	\$ 133.00
Karen L. Chandler, Principal Engineer/Scientist	
24.6 hours @ \$175.00 per hour .....	\$ 4,305.00
Margaret R. Rattei, Engineer/Scientist/Specialist III	
4.9 hours @ \$135.00 per hour .....	\$ 661.50
Sterling 'Greg' Williams, Engineer/Scientist/Specialist III	
0.5 hours @ \$135.00 per hour .....	\$ 67.50
Ross S. Mullen, Engineer/Scientist/Specialist II	
1.0 hours @ \$100.00 per hour .....	\$ 100.00
Expenses (Mileage/Verizon Wireless) .....	\$ 149.16
<i>Subtotal, Technical Services .....</i>	<i>\$ 5,416.16</i>

MONTHLY MEETING PREPARATION

Communications/coordination with administrator regarding draft/final agenda and meeting packet for March Commission meeting; review/edit draft February meeting minutes; prepare for March Commission meeting, including setting up and attending pre-meeting conference call with Chair de

Lambert, and administrator, and reviewing and internal discussion regarding New Hope's University of Minnesota Northwood Lake iron filings study proposal; and coordination and communications with administrator and internal staff regarding follow-up items from March Commission meeting and upcoming meeting agenda items.

James P. Herbert, Principal Engineer/Scientist	
5.3 hours @ \$190.00 per hour .....	\$ 1,007.00
Karen L. Chandler, Principal Engineer/Scientist	
17.2 hours @ \$175.00 per hour .....	\$ 3,010.00
Gregory J. Wilson, Consultant/Advisor	
2.0 hours @ \$160.00 per hour .....	\$ 320.00
Technicians/Administrative.....	\$ 913.00
<i>Subtotal, Monthly Meeting Preparation.....</i>	<i>\$ 5,250.00</i>

#### WCA LGU Administration

Project filing.

Karen S. Wold, Engineer/Scientist/Specialist II	
1.0 hours @ \$125.00 per hour .....	\$ 125.00
<i>Subtotal, WCA LGU Administration .....</i>	<i>\$ 125.00</i>

#### TAC PREPARATION

Prepare for March TAC meeting; and review/edit TAC memo for Commission meeting.

Karen L. Chandler, Principal Engineer/Scientist	
1.6 hours @ \$175.00 per hour .....	\$ 280.00
<i>Subtotal, TAC Preparation.....</i>	<i>\$ 280.00</i>
<b><i>Subtotal Technical Services .....</i></b>	<b><i>\$ 11,071.16</i></b>

#### PLAT REVIEW

##### 212 James Avenue North (2017-07)

Review revised submittal.

Josh P. Phillips, Engineer/Scientist/Specialist I	
0.3 hours @ \$85.00 per hour .....	\$ 25.50
<i>Subtotal, 212 James Avenue North.....</i>	<i>\$ 25.50</i>

##### Metro Transit C Line BRT (2017-33)

Project closeout and filing.

Josh P. Phillips, Engineer/Scientist/Specialist I	
0.5 hours @ \$85.00 per hour .....	\$ 42.50
<i>Subtotal, Metro Transit C Line BRT .....</i>	<i>\$ 42.50</i>

2018-2019 PMP (2017-40)

Review revised concept plans and supporting information (XP-SWMM and P8 models) for proposed diversion of surface water runoff from the Medicine Lake Direct subwatershed to the Main Stem subwatershed; communications with city's consultant; and prepare and send approval letter to city staff.

Karen L. Chandler, Principal Engineer/Scientist	
0.4 hours @ \$175.00 per hour .....	\$ 70.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III	
0.5 hours @ \$140.00 per hour .....	\$ 70.00
Michael B. McKinney, Engineer/Scientist/Specialist II	
0.3 hours @ \$100.00 per hour .....	\$ 30.00
Ross S. Mullen, Engineer/Scientist/Specialist II	
3.2 hours @ \$100.00 per hour .....	\$ 320.00
Kimberly S. Baker, Engineer/Scientist/Specialist I	
14.9 hours @ \$90.00 per hour .....	\$ 1,341.00
Josh P. Phillips, Engineer/Scientist/Specialist I	
5.1 hours @ \$85.00 per hour .....	\$ <u>433.50</u>
<i>Subtotal, 2018-2019 PMP</i> .....	\$ 2,264.50

Fretham 26<sup>th</sup> Addition (2018-01)

Project closeout and filing.

Josh P. Phillips, Engineer/Scientist/Specialist I	
0.5 hours @ \$85.00 per hour .....	\$ <u>42.50</u>
<i>Subtotal, Fretham 26<sup>th</sup> Addition</i> .....	\$ 42.50

Hwy 55 Frontage Rd Reconstruction (2018-02)

Project closeout and filing.

Josh P. Phillips, Engineer/Scientist/Specialist I	
0.4 hours @ \$85.00 per hour .....	\$ <u>34.00</u>
<i>Subtotal, Hwy 55 Frontage Rd Reconstruction</i> .....	\$ 34.00

Buhler Food App Centre Addition (2018-03)

Review grading, drainage and erosion control plans; communications with applicant, prepare and send comment/approval letter to city staff; review revised plans; and follow-up communications with applicant.

James P. Herbert, Principal Engineer/Scientist	
2.0 hours @ \$190.00 per hour .....	\$ 380.00
Heather N. Hlavaty, Engineer/Scientist/Specialist II	
0.4 hours @ \$95.00 per hour .....	\$ 38.00

Josh P. Phillips, Engineer/Scientist/Specialist I	
8.3 hours @ \$85.00 per hour.....	\$ 705.50
<i>Subtotal, Buhler Food App Centre Addition.....</i>	<i>\$ 1,123.50</i>

#### Golden Valley 2018 PMP (2018-04)

Review grading, drainage and erosion control plans; prepare review memo and map for March Commission meeting and provide to administrator; communications with applicant and administrator; and prepare and send comment/approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist	
6.7 hours @ \$190.00 per hour .....	\$ 1,273.00
Karen L. Chandler, Principal Engineer/Scientist	
2.9 hours @ \$175.00 per hour .....	\$ 507.50
Josh P. Phillips, Engineer/Scientist/Specialist I	
16.2 hours @ \$85.00 per hour.....	\$ 1,377.00
Edward M. Anderson, Engineer/Scientist/Specialist I	
2.3 hours @ \$85.00 per hour.....	\$ 195.50
<i>Subtotal, Golden Valley 2018 PMP .....</i>	<i>\$ 3,353.00</i>

#### Luce Line Regional Trail Recon (2018-05)

Review grading, drainage and erosion control plans; prepare and send comment/approval letter to city staff; review revised plans; and follow-up communications with applicant.

James P. Herbert, Principal Engineer/Scientist	
0.8 hours @ \$190.00 per hour .....	\$ 152.00
Josh P. Phillips, Engineer/Scientist/Specialist I	
4.8 hours @ \$85.00 per hour.....	\$ 408.00
Technicians/Administrative.....	\$ 57.00
Expenses (Postage) .....	\$ 0.47
<i>Subtotal, Luce Line Regional Trail Recon.....</i>	<i>\$ 617.47</i>

#### East Medicine Lake Park (2018-06)

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

James P. Herbert, Principal Engineer/Scientist	
0.8 hours @ \$190.00 per hour .....	\$ 152.00
Karen L. Chandler, Principal Engineer/Scientist	
0.2 hours @ \$175.00 per hour .....	\$ 35.00
Josh P. Phillips, Engineer/Scientist/Specialist I	
3.8 hours @ \$85.00 per hour.....	\$ 323.00

Technicians/Administrative.....	\$	57.00
Expenses (Postage) .....	\$	<u>0.47</u>
<i>Subtotal, East Medicine Lake Park.....</i>	<i>\$</i>	<i>567.47</i>

Toledo-Scott Avenue Reconstruction (2018-07)

Review grading, drainage and erosion control plans; communications with applicant; prepare and send comment/approval letter to city staff; review revised plans; and prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist 1.5 hours @ \$190.00 per hour .....	\$	285.00
Karen L. Chandler, Principal Engineer/Scientist 0.5 hours @ \$175.00 per hour .....	\$	87.50
Josh P. Phillips, Engineer/Scientist/Specialist I 5.6 hours @ \$85.00 per hour.....	\$	476.00
Technicians/Administrative.....	\$	57.00
Expenses (Postage) .....	\$	<u>0.47</u>
<i>Subtotal, Toledo-Scott Ave Reconstruction .....</i>	<i>\$</i>	<i>905.97</i>

Kilmer Park St Reconstruction (2018-08)

Review grading, drainage and erosion control plans; provide preliminary comments to applicant; review revised plans; and prepare draft review memo for April Commission meeting.

James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$190.00 per hour .....	\$	95.00
Josh P. Phillips, Engineer/Scientist/Specialist I 5.1 hours @ \$85.00 per hour.....	\$	433.50
Edward M. Anderson, Engineer/Scientist/Specialist I 1.3 hours @ \$85.00 per hour.....	\$	110.50
Technicians/Administrative.....	\$	57.00
Expenses (Postage) .....	\$	<u>0.47</u>
<i>Subtotal, Kilmer Park St Reconstruction .....</i>	<i>\$</i>	<i>696.47</i>

***Subtotal Plat Review.....\$ 9,672.88***

PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

PRELIMINARY COMMUNICATIONS

Communications regarding Ridgedale linear project; review MDNR temporary appropriation permit application for previously-approved project; look into question from City of Medicine Lake planning consultant regarding BCWMC review of potential work in floodplain; and communications with Crystal staff regarding proposed subdivision in city and BCWMC/city review process.

Karen L. Chandler, Principal Engineer/Scientist	
0.8 hours @ \$175.00 per hour .....	\$ 140.00
Josh P. Phillips, Engineer/Scientist/Specialist I	
1.8 hours @ \$85.00 per hour .....	\$ 153.00
<i>Subtotal, Preliminary Communications .....</i>	<i>\$ 293.00</i>

#### NON-FEE REVIEWS

##### BLUE LINE LRT

Conference call with Blue Line LRT consultant regarding floodplain mitigation project schedule; and provide BCWMC water level information spreadsheet for Hwy 55 structure to Blue Line LRT consultant.

Karen L. Chandler, Principal Engineer/Scientist	
2.0 hours @ \$175.00 per hour .....	\$ 350.00
<i>Subtotal, Blue Line LRT.....</i>	<i>\$ 350.00</i>

##### BLUE LINE LRT WCA LGU ADMIN

##### Golden Valley

Review supplement #4 submittal; submit Notice of Extension; review wetland application submittal #4 and provide comments to applicant; and communications with Blue Line LRT consultant, WCA LGU staff, and BWSR staff.

Karen S. Wold, Engineer/Scientist/Specialist III	
1.9 hours @ \$125.00 per hour .....	\$ 237.50
<i>Subtotal, Golden Valley.....</i>	<i>\$ 237.50</i>

##### Minneapolis

Review supplement #4 submittal; submit Notice of Extension; review wetland application submittal #4 and provide comments to applicant; and communications with Blue Line LRT consultant, WCA LGU staff, and BWSR staff.

Karen S. Wold, Engineer/Scientist/Specialist III	
1.9 hours @ \$125.00 per hour .....	\$ 237.50
<i>Subtotal, Minneapolis.....</i>	<i>\$ 237.50</i>

##### Robbinsdale

Review supplement #4 submittal; submit Notice of Extension; review wetland application submittal #4 and provide comments to applicant; and communications with Blue Line LRT consultant, WCA LGU staff, and BWSR staff.

Karen S. Wold, Engineer/Scientist/Specialist III	
1.9 hours @ \$125.00 per hour .....	\$ 237.50
<i>Subtotal, Robbinsdale.....</i>	<i>\$ 237.50</i>

<i>Subtotal Blue Line LRT WCA LGU Admin.....</i>	<i>\$ 712.50</i>
<i>Subtotal Blue Line LRT &amp; Blue Line LRT WCA LGU Admin.....</i>	<i>\$ 1,062.50</i>

<b><i>Subtotal Non-Fee Reviews .....</i></b>	<b><i>\$ 1,062.50</i></b>
--	---------------------------

**Subtotal Preliminary Communications and Non-Fee Reviews .....\$ 1,355.50**

COMMISSION AND TAC MEETINGS

Attend March 2 TAC meeting and March 15 Commission meeting.

Karen L. Chandler, Principal Engineer/Scientist  
6.3 hours @ \$175.00 per hour .....\$ 1,102.50

**Subtotal, Commission and TAC Meetings .....\$ 1,102.50**

SURVEYS & STUDIES

**Subtotal Surveys & Studies .....\$ 0.00**

WATER QUALITY/MONITORING

Sweeney Lake Aeration Study

Continue developing and trouble-shooting three-dimensional lake water quality model; internal communications regarding trouble-shooting; process analytical lab data; and communications with administrator, Golden Valley staff and internal staff regarding schedule change/modeling issues.

Karen L. Chandler, Principal Engineer/Scientist  
1.0 hours @ \$175.00 per hour .....\$ 175.00

Gregory J. Wilson, Consultant/Advisor  
2.2 hours @ \$160.00 per hour .....\$ 352.00

Keith M. Pilgrim, Consultant/Advisor  
16.0 hours @ \$160.00 per hour .....\$ 2,560.00

Technicians/Administrative.....\$ 94.00

**Subtotal, Sweeney Lake Aeration Study.....\$ 3,181.00**

General Water Quality Tasks

Communications with Plymouth staff and administrator regarding 2018 water quality monitoring; communications with administrator regarding Engineer's participation in chloride committee and chloride BMPs, and potential PFC contamination of Bassett Creek in Wirth Park; communications with administrator and internal staff regarding incorporating CAMP data into 2017 water quality data, performing trend analyses on updated 2017 data, updating 2017 water quality reports, and storage of historic water quality data; download and file MCES CAMP data for Sweeney and Twin Lakes; download and file Wenck 2017 monitoring data files for Sweeney and Twin Lakes; provide Northwood Lake 2013 and 2016 data to New Hope consultant and University of Minnesota staff; communications with MCES staff responding to their questions about usage of MCES' water quality loading estimates; attend March 27 MPCA planning meeting regarding future WRAPS/TMDL studies; and communications with administrator and internal staff regarding RMB Lab QA/QC concerns.

Henry M. Runke, Principal Engineer/Scientist  
0.5 hours @ \$175.00 per hour .....\$ 87.50

Karen L. Chandler, Principal Engineer/Scientist 4.2 hours @ \$175.00 per hour .....	\$ 735.00
Gregory J. Wilson, Consultant/Advisor 5.8 hours @ \$160.00 per hour .....	\$ 928.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 5.1 hours @ \$135.00 per hour .....	\$ 688.50
Expenses (Mileage) .....	\$ 21.80
<i>Subtotal, General Water Quality Tasks.....</i>	<i>\$ 2,460.80</i>

#### Routine Lake Monitoring - Parkers and Westwood Lakes

Prepare and send memo to TRPD staff regarding Parkers Lake work scope and cost estimate; and prepare and send phytoplankton/zooplankton bottles to TRPD for Parkers Lake monitoring.

Margaret R. Rattei, Engineer/Scientist/Specialist III 4.2 hours @ \$135.00 per hour .....	\$ 567.00
Technicians/Administrative.....	\$ 81.00
<i>Subtotal, Routine Lake Monitoring – Parkers/Westwood .....</i>	<i>\$ 648.00</i>

#### Stream Water Quality/Quantity Monitoring - North Branch

Prepare for 2018 stream monitoring, including site selection for station location.

Sterling 'Greg' Williams, Engineer/Scientist/Specialist III 0.5 hours @ \$135.00 per hour .....	\$ 67.50
Christopher J. Bonick, Engineer/Scientist/Specialist III 4.0 hours @ \$125.00 per hour .....	\$ 500.00
<i>Subtotal, North Branch Stream Water Quality/Quantity Monitor... \$</i>	<i>567.50</i>

#### Biotic Index Monitoring

Internal communications regarding biotic index monitoring location and placement of WOMP station.

Margaret R. Rattei, Engineer/Scientist/Specialist III 0.2 hours @ \$135.00 per hour .....	\$ 27.00
<i>Subtotal, Biotic Index Monitoring .....</i>	<i>\$ 27.00</i>
<b><i>Subtotal, Water Quality/Monitoring.....</i></b>	<b><i>\$ 6,884.30</i></b>

#### WATER QUANTITY

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

Karen L. Chandler, Principal Engineer/Scientist 0.4 hours @ \$175.00 per hour .....	\$ 70.00
--	----------

Technicians/Administrative.....	\$	491.00
Expenses (Mileage/2WD Field) .....	\$	56.25
<b>Subtotal, Water Quantity.....</b>	<b>\$</b>	<b>617.25</b>

#### MUNICIPAL PLAN REVIEWS

##### General

Review Crystal city ordinance amendments for consistency with BCWMC policies and the Requirements document; and provide comments to city's attorney.

Karen L. Chandler, Principal Engineer/Scientist		
0.3 hours @ \$175.00 per hour .....	\$	52.50
Sterling 'Greg' Williams, Engineer/Scientist/Specialist III		
3.5 hours @ \$135.00 per hour .....	\$	472.50
<b>Subtotal, General.....</b>	<b>\$</b>	<b>525.00</b>

##### Minneapolis WRMP Review

Attend February 26 meeting at Minneapolis offices regarding the city's updated Water Resources Management Plan (WRMP); perform preliminary review of Minneapolis WRMP regarding Flood Control Project policies and implementation program; and provide comments to Minneapolis staff.

Karen L. Chandler, Principal Engineer/Scientist		
5.5 hours @ \$175.00 per hour .....	\$	962.50
<b>Subtotal, Minneapolis WRMP Review.....</b>	<b>\$</b>	<b>962.50</b>
<b>Subtotal, Municipal Plan Reviews .....</b>	<b>\$</b>	<b>1,487.50</b>

##### XP-SWMM Model Updates-Reviews

Prepare and send memo to TAC requesting information for XP-SWMM model update; and follow-up with Minneapolis staff.

Karen L. Chandler, Principal Engineer/Scientist		
2.4 hours @ \$175.00 per hour .....	\$	420.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III		
0.1 hours @ \$130.00 per hour .....	\$	14.00
Ross S. Mullen, Engineer/Scientist/Specialist II		
1.6 hours @ \$100.00 per hour .....	\$	160.00
Katelyn Turpin-Nagel, Engineer/Scientist/Specialist II		
0.5 hours @ \$95.00 per hour .....	\$	47.50
<b>Subtotal, XP-SWMM Model Updates-Reviews.....</b>	<b>\$</b>	<b>641.50</b>
<b>TOTAL ENGINEERING .....</b>	<b>\$</b>	<b>32,832.59</b>

## 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)

Prepare for and conduct flow measurement at WOMP station; and attend March 14 MCES WOMP Cooperator Forum.

Christopher J. Bonick, Engineer/Scientist/Specialist III	
7.5 hours @ \$125.00 per hour .....	\$ 937.50
Sean Campbell, Engineer/Scientist/Specialist I	
2.0 hours @ \$80.00 per hour .....	\$ 160.00
Expenses (Mileage, 2WD Field Vehicle, digital camera, Sontek ADV) .....	\$ 110.45
<i>Subtotal, Watershed Outlet Monitoring Program .....</i>	<i>\$ 1,207.95</i>
<b>TOTAL WOMP .....</b>	<b>\$ 1,207.95</b>

## CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

### DECOLA PONDS B&C IMPROVEMENT PROJECT FEASIBILITY STUDY (2019) (BC-2, BC-3, BC-8)

Revise, review, and finalize Phase II investigation/test trench summary memo, including DeCola Ponds figures, trench log review and update, review and filing of lab data files, lab reports, field reports and QC data sheets, and ASTM description entry; internal communications regarding XP-SWMM questions; QAQC XP-SWMM model of design Concepts 1 & 2; develop design Concept 3 based on review of design Concepts 1 & 2; review outlet configuration results; prepare results summary; develop spreadsheet regarding impacted homes; develop and review concept matrix; develop P8 model inputs (general device discharge/areas) and perform P8 model runs; prepare XPSWMM model summary; send preliminary results update to Golden Valley staff and administrator; internal follow-up regarding discussion/questions from Golden Valley staff; develop and review cost estimates; perform cost-benefit estimates; finish CAD drawing of proposed outlet structure; develop estimated wetland and upland habitat areas; develop proposed trails; revise cost estimate; prepare annualized costs for TP removal; edit concept matrix; communications with Golden Valley staff regarding concepts and boards for April 11 open house; develop graphical figures of concept designs; draft Sections 1, 2 & 3 of the feasibility report; and draft permitting section of feasibility report.

Daniel J. Fetter, Principal Engineer/Scientist 0.9 hours @ \$200.00 per hour .....	\$ 180.00
Kurt A. Leuthold, Principal Engineer/Scientist 5.0 hours @ \$180.00 per hour .....	\$ 900.00
Karen L. Chandler, Principal Engineer/Scientist 0.2 hours @ \$175.00 per hour .....	\$ 35.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III 19.8 hours @ \$140.00 per hour .....	\$ 2,772.00
Brandon J. Barnes, Engineer/Scientist/Specialist III 1.1 hours @ \$140.00 per hour .....	\$ 154.00
Jennifer L. Brekken, Engineer/Scientist/Specialist III 4.5 hours @ \$150.00 per hour .....	\$ 675.00
Shanna R. Braun, Engineer/Scientist/Specialist III 4.0 hours @ \$130.00 per hour .....	\$ 520.00
Emily J. Jurgens, Engineer/Scientist/Specialist II 3.8 hours @ 110.00 per hour .....	\$ 418.00
Kelly A. Wild, Engineer/Scientist/Specialist II 1.4 hours @ \$95.00 per hour .....	\$ 133.00
Patrick E. Brockamp, Engineer/Scientist/Specialist II 0.4 hours @ \$95.00 per hour .....	\$ 38.00
Katelyn Turpin-Nagel, Engineer/Scientist/Specialist II 74.0 hours @ \$95.00 per hour .....	\$ 7,030.00
Brendan H. Dougherty, Engineer/Scientist/Specialist I 10.0 hours @ \$85.00 per hour .....	\$ 850.00
Rachel C. Mitcavish, Engineer/Scientist/Specialist I 0.5 hours @ \$80.00 per hour .....	\$ 40.00
Technicians/Administrative.....	\$ 225.00
<b>Subtotal, DeCola Ponds B&amp;C Feasibility Study .....</b>	<b>\$ 13,970.00</b>

#### WESTWOOD LAKE WATER QUALITY IMPROVEMENT PROJECT FEASIBILITY STUDY

Communications with city's consultant regarding current design and soil borings; communications with St. Louis Park staff; develop potential design concepts; meeting with St. Louis Park staff, city's consultant, and administrator to discuss potential concepts; update summary email to administrator and project team; internal communications regarding project schedule, soil borings, and design concepts; develop draft design concepts and provide to administrator and city staff; perform stormwater modeling of design concepts for draft report; and begin preparing draft report.

Kurt A. Leuthold, Principal Engineer/Scientist 5.4 hours @ \$180.00 per hour .....	\$ 972.00
Karen L. Chandler, Principal Engineer/Scientist 1.3 hours @ \$175.00 per hour .....	\$ 227.50

Michelle A. Kimble, Engineer/Scientist/Specialist III	
58.4 hours @ \$130.00 per hour .....	\$ 7,592.00
Josh P. Phillips, Engineer/Scientist/Specialist I	
30.5 hours @ \$85.00 per hour .....	\$ 2,592.50
Rachel C. Mitcavish, Engineer/Scientist/Specialist I	
1.7 hours @ \$80.00 per hour .....	\$ 136.00
<b>Subtotal, Westwood Lake WQ Feasibility Study .....</b>	<b>\$ 11,520.00</b>

BRYN MAWR MEADOWS WATER QUALITY IMPROVEMENT PROJECT FEASIBILITY STUDY (2019) (BC-5)

Review/revise wetland delineation report; internal communications regarding environmental and soil testing; update summary email to administrator and project team; internal meetings to discuss concept alternatives; additional investigation into watershed divides near 394; coordinate with subcontractor for soil borings; apply for MPRB permit; coordinate/observe soil borings; prepare draft geotechnical report; communications with administrator regarding project schedule; prepare for and attend March 9 public open house, including preparing schematics of concept designs; and prepare plan and profile of existing storm sewer.

Kurt A. Leuthold, Principal Engineer/Scientist	
8.0 hours @ \$180.00 per hour .....	\$ 1,440.00
Karen L. Chandler, Principal Engineer/Scientist	
1.1 hours @ \$175.00 per hour .....	\$ 192.50
Robert H. Osburn, Principal Engineer/Scientist	
0.9 hours @ \$175.00 per hour .....	\$ 157.50
Timothy J. Anderson, Consultant/Advisor	
1.5 hours @ \$160.00 per hour .....	\$ 240.00
Michelle A. Kimble, Engineer/Scientist/Specialist III	
36.4 hours @ \$130.00 per hour .....	\$ 4,732.00
Jennifer L. Brekken, Engineer/Scientist/Specialist III	
0.9 hours @ \$150.00 per hour .....	\$ 135.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III	
0.2 hours @ \$140.00 per hour .....	\$ 28.00
Benjamin R. Borree, Engineer/Scientist/Specialist III	
8.0 hours @ \$125.00 per hour .....	\$ 1,000.00
Shanna R. Braun, Engineer/Scientist/Specialist III	
0.5 hours @ \$130.00 per hour .....	\$ 65.00
Brian K. Burgner, Engineer/Scientist/Specialist II	
1.9 hours @ \$100.00 per hour .....	\$ 190.00
Michael B. Strong, Engineer/Scientist/Specialist II	
0.5 hours @ \$110.00 per hour .....	\$ 55.00
Carl J. Sorensen, Engineer/Scientist/Specialist II	
15.1 hours @ \$100.00 per hour .....	\$ 1,510.00

Kathryn G. Ryan, Engineer/Scientist/Specialist II 6.5 hours @ \$115.00 per hour .....	\$ 747.50
Josh P. Phillips, Engineer/Scientist/Specialist I 19.8 hours @ \$85.00 per hour .....	\$ 1,683.00
Patrick J. Heiman, Engineer/Scientist/Specialist I 46.4 hours @ \$85.00 per hour .....	\$ 3,944.00
Rachel C. Mitcavish, Engineer/Scientist/Specialist I 0.6 hours @ \$80.00 per hour .....	\$ 48.00
William M. Brohman, Engineer/Scientist/Specialist I 3.9 hours @ \$70.00 per hour .....	\$ 273.00
Technicians/Administrative.....	\$ 804.00
Expenses (Mileage, rental vehicle/gas, Uber, UltraRAE Detector) .....	\$ 474.66
<b><i>Subtotal, Bryn Mawr Meadows Feasibility Study.....</i></b>	<b><i>\$ 17,719.16</i></b>

**TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy) .....\$ 43,209.16**

<b>TMDL WORK</b>
------------------

TMDL IMPLEMENTATION REPORTING

Prepare and send memo to TAC requesting information for P8 model update; update and calibrate Northwood Lake watershed P8 model; and respond to Minnetonka data request.

Karen L. Chandler, Principal Engineer/Scientist 1.2 hours @ \$175.00 per hour .....	\$ 210.00
Gregory J. Wilson, Consultant/Advisor 6.0 hours @ \$160.00 per hour .....	\$ 960.00
Michael B. McKinney, Engineer/Scientist/Specialist II 0.5 hours @ \$100.00 per hour .....	\$ 50.00
Joshua R. Vosejpka, Engineer/Scientist/Specialist I 4.0 hours @ \$80.00 per hour .....	\$ 320.00
<i>Subtotal, TMDL Implementation Reporting .....</i>	<i>\$ 1,540.00</i>

**TOTAL TMDL WORK .....\$ 1,540.00**

<b>SUMMARY TOTALS</b>
-----------------------

<b>Total Engineering .....</b>	<b>\$ 32,832.59</b>
<b>Total Annual Report/Website/Public Communications .....</b>	<b>\$ 0.00</b>
<b>Total WOMP.....</b>	<b>\$ 1,207.95</b>
<b>Total TMDL Work .....</b>	<b>\$ 1,540.00</b>
<b>Total Capital Improvement Projects (Tax Levy).....</b>	<b>\$ <u>43,209.16</u></b>
 <b>TOTAL PAYABLE.....</b>	 <b>\$ 78,789.70</b>

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



---