



Bassett Creek WMO  
7800 Golden Valley Road  
Golden Valley, MN 55427

Page # 1  
Invoice # 23270051-2013 - 9  
Project # 23/27-0051  
Client # 59  
November 8, 2013

Invoice of Account with  
BARR ENGINEERING COMPANY

For professional services during the period of  
September 28, 2013 through November 1, 2013

**ENGINEERING**

TECHNICAL SERVICES

Calls/emails to or from the Commissioners, administrator, Commission attorney, recording administrator, watershed communities and interested citizens; coordination with administrator regarding post-meeting tasks; coordination with administrator regarding revisions to CIP flowchart; communications with Hennepin County staff and administrator regarding tax levy certification process/notification; communications with Golden Valley staff regarding CIP project review process; communications with BWSR staff regarding 2012 amendment information; provide links to updated soil survey information to TAC; respond to Medicine Lake resident's concerns regarding potential seepage at Medicine Lake dam; call from Chair Black regarding Medicine Lake dam; internal meetings regarding future CIP project costs; communications with deputy treasurer regarding CIP project status and closeout; develop template table of CIP project costs; communications with administrator regarding Hennepin County meeting and CIP project inspections; communications with Commissioner Carlson regarding XP-SWMM model; communications with BWSR staff regarding MnRAM database and questions; communications with administrator and internal staff regarding Medicine Lake dam responsibilities; locate CIP spreadsheet from 2004 Plan; provided watershed divides to LimnoTech.

Leonard J. Kremer, Principal Engineer/Scientist	
3.0 hours @ \$180.00 per hour.....	\$ 540.00
James P. Herbert, Principal Engineer/Scientist	
0.5 hours @ \$160.00 per hour.....	\$ 80.00
Karen L. Chandler, Engineer/Scientist/Specialist III	
18.7 hours @ \$150.00 per hour.....	\$ 2,805.00
Gregory J. Wilson, Engineer/Scientist/Specialist III	
1.5 hours @ \$145.00 per hour.....	\$ 217.50
Karen S. Wold, Engineer/Scientist/Specialist II	
2.5 hours @ \$105.00 per hour.....	\$ 262.50

Technicians/Administrative .....\$ 289.50  
*Subtotal, Technical Services* .....\$ 4,194.50

#### PRELIMINARY SITE REVIEW/CORRESPONDENCE

Telephone conversations regarding proposed developments and review requirements; provided watershed hydraulic information, flood profiles and BCWMC development requirements to applicants; coordination with GVCC regarding proposed bridge; phone call/coordination regarding Ministorage site in Plymouth; phone calls, emails regarding Glenwood site; email to MnDOT regarding water quality treatment for 494; coordination with Plymouth regarding proposed St. Mary drainage site; coordination with city staff and developer regarding Hidden Village bridge site; telephone call with Centerpoint energy regarding utility crossing of old tunnel.

James P. Herbert, Principal Engineer/Scientist  
2.5 hours @ \$160.00 per hour .....\$ 400.00  
*Subtotal, Preliminary Site Review/Correspondence* .....\$ 400.00

#### MONTHLY MEETING PREPARATION

Reviewed draft BCWMC meeting minutes, agenda and packet materials and discussed comments with administrator; internal meetings, and communications/coordination with administrator and recording administrator regarding agenda, task list and meeting packet for October 2013 meeting; pre-meeting conference call with administrator; communications with administrator regarding actions for agenda items; discussion regarding November meeting agenda items; reviewed CIP project maintenance/inspection items.

James P. Herbert, Principal Engineer/Scientist  
12.4 hours @ \$160.00 per hour .....\$ 1,984.00  
Karen L. Chandler, Engineer/Scientist/Specialist III  
9.7 hours @ \$150.00 per hour .....\$ 1,455.00  
*Subtotal, Monthly Meeting Preparation* .....\$ 3,439.00

#### TAC MEETING PREPARATION

Communications with administrator and TAC members regarding TAC agenda and meeting date; reviewed and edited administrator's draft TAC agenda and materials for TAC meeting; reviewed draft October TAC memo and emailed comments to administrator; reviewed flood control project issues; reviewed Medicine Lake dam agreement; prepared trunk system figure for November 7<sup>th</sup> TAC meeting; communications with New Hope staff regarding TAC agenda; prepared revisions to XP SWMM memo; prepared updated CIP table and emailed to administrator; internal staff meeting to review maintenance, repair and replacement responsibilities for flood control project features; prepared memo for November 7<sup>th</sup> TAC meeting regarding flood control project responsibilities.

James P. Herbert, Principal Engineer/Scientist  
6.4 hours @ \$160.00 per hour .....\$ 1,024.00  
Karen L. Chandler, Engineer/Scientist/Specialist III  
18.3 hours @ \$150.00 per hour .....\$ 2,745.00  
Rita W. Weaver, Engineer/Scientist/Specialist II  
1.5 hours @ \$120.00 per hour .....\$ 180.00

Joshua R. Vosejpka, Engineer/Scientist/Specialist I  
2.6 hours @ \$65.00 per hour .....\$ 169.00  
*Subtotal, TAC Meeting Preparation.....\$ 4,118.00*  
  
*Subtotal Technical Services.....\$ 12,151.50*

#### **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.

#### **Three Nine Four Apt and Senior Care (2013-12)**

Coordination with applicant and City staff; reviewed grading, drainage and erosion control plans; prepared memorandum to the BCWMC; prepared letter of approval to City of Golden Valley.

James P. Herbert, Principal Engineer/Scientist  
2.9 hours @ \$160.00 per hour .....\$ 464.00  
Karen L. Chandler, Engineer/Scientist/Specialist III  
1.0 hours @ \$150.00 per hour .....\$ 150.00  
Rita W. Weaver, Engineer/Scientist/Specialist II  
4.4 hours @ \$120.00 per hour .....\$ 528.00  
Technicians/Administrative .....\$ 23.00  
*Subtotal, Three Nine Four Apt and Sr Care .....\$ 1,165.00*

#### **Ridgedale Mall Macy's Expansion (2013-15)**

Telephone call with applicant to discuss Ridgedale 2nd phase expansion and inline treatment options.

Rita W. Weaver, Engineer/Scientist/Specialist II  
0.2 hours @ \$120.00 per hour .....\$ 24.00  
*Subtotal, Ridgedale Mall Macy's Expansion.....\$ 24.00*

#### **Golden Valley Lutheran Church Addition (2013-22)**

Coordination with applicant and City staff; reviewed revised grading, drainage and erosion control plans; prepared letter of approval to City of Golden Valley.

Rita W. Weaver, Engineer/Scientist/Specialist II  
0.7 hours @ \$120.00 per hour .....\$ 84.00  
*Subtotal, Golden Valley Lutheran Church Addition .....\$ 84.00*

#### **Plymouth City Center Medical Building (2013-29)**

Coordination with applicant and City staff; review of revised grading, drainage and erosion control plans; prepared memorandum to the BCWMC; prepared letter of approval to City Plymouth.

James P. Herbert, Principal Engineer/Scientist  
2.6 hours @ \$160.00 per hour .....\$ 416.00

Karen L. Chandler, Engineer/Scientist/Specialist III	
0.7 hours @ \$150.00 per hour .....	\$ 105.00
Rita W. Weaver, Engineer/Scientist/Specialist II	
11.0 hours @ \$120.00 per hour .....	\$ 1,320.00
Technicians/Administrative .....	\$ 23.00
<i>Subtotal, Plymouth City Center Medical Building .....</i>	<i>\$ 1,864.00</i>

**Golden Valley Road – Parking Lot Repair (2013-30)**

Coordination with applicant and City staff; reviewed revised grading, drainage and erosion control plans; prepared letter of approval to the City of Golden Valley.

James P. Herbert, Principal Engineer/Scientist	
0.5 hours @ \$160.00 per hour .....	\$ 80.00
Rita W. Weaver, Engineer/Scientist/Specialist II	
2.4 hours @ \$120.00 per hour .....	\$ 288.00
<i>Subtotal, Golden Valley Road – Parking Lot Repair .....</i>	<i>\$ 368.00</i>

**Productivity Inc. Parking Lot (2013-31)**

Coordination with applicant and City staff; reviewed grading, drainage and erosion control plans; prepared letter of approval to the City of Plymouth.

James P. Herbert, Principal Engineer/Scientist	
0.5 hours @ \$160.00 per hour .....	\$ 80.00
Rita W. Weaver, Engineer/Scientist/Specialist II	
4.8 hours @ \$120.00 per hour .....	\$ 576.00
Technicians/Administrative .....	\$ 40.00
<i>Subtotal, Productivity, Inc. Parking Lot .....</i>	<i>\$ 696.00</i>

**Room & Board Parking Lot Add'n (2013-32)**

Coordination with applicant and City staff; reviewed historical plans, correspondence and submittal; discussion with applicant about infiltration vs. filtration requirements; reviewed grading, drainage and erosion control plans; prepared letter of recommendation to the City of Golden Valley.

James P. Herbert, Principal Engineer/Scientist	
2.7 hours @ \$160.00 per hour .....	\$ 432.00
Rita W. Weaver, Engineer/Scientist/Specialist II	
6.6 hours @ \$120.00 per hour .....	\$ 792.00
Technicians/Administrative .....	\$ 40.00
<i>Subtotal, Room &amp; Board Parking Lot Add'n .....</i>	<i>\$ 1,264.00</i>

**LCA 3200 Harbor Lane N (2013-33)**

Plat review set up.

Technicians/Administrative .....	\$ 40.00
<i>Subtotal, LCA 3200 Harbor Lane N .....</i>	<i>\$ 40.00</i>

**Push Interactive Redevelopment (2013-34)**

Coordination with applicant and City staff; preliminary review of grading plans for the project in the City of Minneapolis; attend meeting with applicants consultant and architect regarding floodplain issues.

James P. Herbert, Principal Engineer/Scientist 5.0 hours @ \$160.00 per hour .....	\$ 800.00
Technicians/Administrative .....	\$ 40.00
<i>Subtotal, Push Interactive Redevelopment .....</i>	<i>\$ 840.00</i>

**The Xenia (2013-35)**

Preliminary project review coordination for project in Golden Valley.

Technicians/Administrative .....	\$ 40.00
<i>Subtotal, The Xenia .....</i>	<i>\$ 40.00</i>

<i>Subtotal Plat Review .....</i>	<i>\$ 6,385.00</i>
-----------------------------------	--------------------

**COMMISSION AND TAC MEETINGS**

Attended October 7<sup>th</sup> TAC meeting, October 17<sup>th</sup> Commission meeting and workshop, and October 28<sup>th</sup> Steering Committee meeting.

James P. Herbert, Principal Engineer/Scientist 3.0 hours @ \$160.00 per hour .....	\$ 480.00
Karen L. Chandler, Engineer/Scientist/Specialist III 9.0 hours @ \$150.00 per hour .....	\$ 1,350.00
Expenses (Mileage) .....	\$ 14.13
<i>Subtotal, Commission Meetings .....</i>	<i>\$ 1,844.13</i>

**SURVEYS AND STUDIES**

**Map revisions**

Revised watershed map with new divides per XP-SWMM model results; internal discussions regarding revised watershed map.

Karen L. Chandler, Engineer/Scientist/Specialist III 1.8 hours @ \$150.00 per hour .....	\$ 270.00
Rita W. Weaver, Engineer/Scientist/Specialist II 0.3 hours @ \$120.00 per hour .....	\$ 36.00
John E. McCarthy, Engineer/Scientist/Specialist I 1.6 hours @ \$80.00 per hour .....	\$ 128.00
<i>Subtotal, Surveys and Studies .....</i>	<i>\$ 434.00</i>

### WATER QUALITY MONITORING

Communications with administrator regarding Wirth Lake delisting and chloride impairment listings; prepared and submitted Step 1 document and follow-up on Step 1 documentation regarding Wirth Lake delisting; provided shapefile to MPCA consultant to assess chloride impairments; 2013 monitoring program for Northwood Lake, and North and South Rice Ponds, including QA/QC review of analytical results entry and verification of calculated summer average water quality in EQUIS, prepared plant maps from August aquatic plant surveys at Northwood Lake and North and South Rice Ponds.

Henry M. Runke, Principal Engineer/Scientist 0.5 hours @ \$170.00 per hour .....	\$ 85.00
Karen L. Chandler, Engineer/Scientist/Specialist III 0.2 hours @ \$150.00 per hour .....	\$ 30.00
Gregory J. Wilson, Engineer/Scientist/Specialist III 9.0 hours @ \$145.00 per hour .....	\$ 1,305.00
Keith M. Pilgrim, Engineer/Scientist/Specialist III 1.0 hours @ \$140.00 per hour .....	\$ 140.00
Margaret R. Rattei, Engineer/Scientist/Specialist II 0.6 hours @ \$120.00 per hour .....	\$ 72.00
Ross S. Mullen, Engineer/Scientist/Specialist I 1.2 hours @ \$70.00 per hour .....	\$ 84.00
Technicians/Administrative .....	\$ 455.00
<i>Subtotal, Water Quality Monitoring.....</i>	<i>\$ 2,171.00</i>

### WATER QUANTITY

Measured and reviewed lake level elevations as part of the lake-gauging program.

Technicians/Administrative .....	\$ 340.00
Expenses (Mileage/2WD vehicle).....	\$ 51.88
<i>Subtotal, Water Quantity .....</i>	<i>\$ 391.88</i>

### WATERSHED INSPECTION

<i>Subtotal, Watershed Inspection.....</i>	<i>\$ 0.00</i>
--	----------------

### ANNUAL FLOOD CONTROL PROJECT INSPECTIONS

Performed inspection and dye testing at Medicine Lake Dam and sent email to administrator and Medicine Lake/Plymouth Commissioners and TAC members; prepared email regarding cancellation of further Flood Control Project inspections during 2013; reviewed pond depth maps at Bassett Creek Park Pond and prepared pond bathymetry GIS files; prepared draft existing conditions bathymetric contour figure.

James P. Herbert, Principal Engineer/Scientist 11.6 hours @ \$160.00 per hour .....	\$ 1,856.00
--	-------------

Joshua R. Vosejpka, Engineer/Scientist/Specialist I	
2.0 hours @ \$65.00 per hour .....	\$ 130.00
Expenses (Mileage) .....	\$ 16.95
<i>Subtotal, Annual Flood Control Project Inspections .....</i>	<i>\$ 2,002.95</i>
<b>TOTAL ENGINEERING .....</b>	<b>\$ 25,380.46</b>

<b>SECRETARIAL SERVICES</b>
-----------------------------

SECRETARIAL SERVICES EXPENSES

Administrative expenses requested by Amy Herbert including: copies, color copies for meeting packet; postage; copied and assembled packet materials for September 2013 meeting.

Technicians/Administrative .....	\$ 8.00
Expenses (B&W/color copies/postage) .....	\$ 522.25
<b>TOTAL SECRETARIAL SERVICES EXPENSES .....</b>	<b>\$ 530.25</b>

<b>PLANNING</b>
-----------------

NEXT GENERATION PLAN

Coordination and communications with administrator regarding plan tasks and Steering Committee meeting agenda; prepared priority waterbodies figure; reviewed/edited draft meeting notes for September 16<sup>th</sup> and September 23<sup>rd</sup> Plan Steering Committee meetings; meeting with administrator and internal staff to plan October 17<sup>th</sup> Commission workshop; prepared information regarding eligible water quality CIP costs and emailed to administrator for workshop materials; prepared matrix for workshop and summary of policies and questions for Commission; provided flood control project information to administrator for workshop packet; prepared for and attended October 17<sup>th</sup> Commission workshop; prepared lake classification tables and other materials for October 28<sup>th</sup> Plan Steering Committee meeting; internal meeting regarding policy revisions for Plan Steering Committee meeting, next steps/tasks, outcomes from October 28<sup>th</sup> Plan Steering Committee meeting and preparation for November 18<sup>th</sup> Plan Steering Committee meeting; phone call with Hennepin County staff regarding ditches.

James P. Herbert, Principal Engineer/Scientist	
1.0 hours @ \$160.00 per hour .....	\$ 160.00
Karen L. Chandler, Engineer/Scientist/Specialist III	
19.7 hours @ \$150.00 per hour .....	\$ 2,955.00
Sterling G. Williams, Engineer/Scientist/Specialist II	
19.2 hours @ \$110.00 per hour .....	\$ 2,112.00
Joshua R. Vosejpka, Engineer/Scientist/Specialist I	
1.5 hours @ \$65.00 per hour .....	\$ 97.50

Expenses (FedX) .....	\$	13.65
<i>Subtotal, Next Generation Plan .....</i>	<i>\$</i>	<i>5,338.15</i>
<b>TOTAL PLANNING .....</b>	<b>\$</b>	<b>5,338.15</b>

<b>ANNUAL REPORT</b>
----------------------

<b>TOTAL ANNUAL REPORT.....</b>	<b>\$</b>	<b>0.00</b>
---------------------------------	-----------	-------------

<b>PUBLIC COMMUNICATIONS</b>
------------------------------

<b>TOTAL PUBLIC COMMUNICATIONS .....</b>	<b>\$</b>	<b>0.00</b>
--	-----------	-------------

<b>WEBSITE</b>
----------------

<b>TOTAL WEBSITE .....</b>	<b>\$</b>	<b>0.00</b>
----------------------------	-----------	-------------

<b>WATERSHED OUTLET MONITORING PROGRAM (WOMP)</b>
---

WATERSHED OUTLET MONITORING PROGRAM (WOMP)

Coordination with MCES; reviewed and performed high flow measurement options and rating curve.

Christopher J. Bonick, Engineer/Scientist/Specialist II		
5.0 hours @ \$110.00 per hour.....	\$	550.00
<i>Subtotal, Watershed Outlet Monitoring Program.....</i>	<i>\$</i>	<i>550.00</i>
<b>TOTAL WOMP .....</b>	<b>\$</b>	<b>550.00</b>

<b>CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)</b>
---

WIRTH LAKE OUTLET MODIFICATION (WTH-4)

Coordination regarding grant deadline, budget and reimbursement.

Karen L. Chandler, Engineer/Scientist/Specialist III		
0.5 hours @ \$150.00 per hour .....	\$	75.00
<i>Subtotal, Wirth Lake Outlet Modification (WTH-4).....</i>	<i>\$</i>	<i>75.00</i>

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

Coordination and communications with administrator, applicant and MPRB consultant; reviewed payment application from Minneapolis and prepared recommendation to administrator.



James P. Herbert, Principal Engineer/Scientist  
1.5 hours @ \$160.00 per hour.....\$ 240.00  
*Subtotal, Cedar Lk Rd to Golden Valley Rd, 2012 Main Stem .....\$ 240.00*

#### SCHAPER POND ENHANCEMENT (SL-3)

Performed wetland functions and values analysis (MnRAM) for existing and post-modification conditions, including October 4 site evaluation; prepare write-up of MnRAM results; review draft impacts memo.

Karen L. Chandler, Engineer/Scientist/Specialist III  
1.1 hours @ \$150.00 per hour.....\$ 165.00  
Michael B. Strong, Engineer/Scientist/Specialist I  
0.3 hours @ \$85.00 per hour .....\$ 25.50  
Brian K. Burgner, Engineer/Scientist/Specialist I  
22.2 hours @ \$80.00 per hour.....\$ 1,776.00  
Expenses (Color plotter/GPS digital camera/soil probe/hand auger).....\$ 26.38  
*Subtotal, Schaper Pond Enhancement.....\$ 1,992.88*

#### TWIN LAKE ALUM TREATMENT PROJECT (TW-2)

Communications with administrator and internal staff regarding water quality monitoring results for Twin Lake; prepared final files for distribution of major plan amendment.

Karen L. Chandler, Engineer/Scientist/Specialist III  
1.1 hours @ \$150.00 per hour.....\$ 165.00  
*Subtotal, Twin Lake Alum Treatment Project (TW-2).....\$ 165.00*

#### BRIARWOOD-DAWNVIEW POND (BC-7)

Coordination with administrator and city staff; prepared grant and figure revisions; completed grant application and submitted grant to BWSR via eLINK; reviewed CIP budget and estimated future BCWMC costs and provided to city staff.

James P. Herbert, Principal Engineer/Scientist  
1.6 hours @ \$160.00 per hour.....\$ 256.00  
Karen L. Chandler, Engineer/Scientist/Specialist III  
4.6 hours @ \$150.00 per hour .....\$ 690.00  
Amy R. Mikus, Engineer/Scientist/Specialist I  
4.0 hours @ \$85.00 per hour .....\$ 340.00  
Joshua R. Vosejka, Engineer/Scientist/Specialist I  
1.1 hours @ \$65.00 per hour .....\$ 71.50  
*Subtotal, Briarwood-Dawnview Pond (BC-7) .....\$ 1,357.50*

#### MAIN STEM: 10<sup>TH</sup> AVE – DULUTH STREET (2015 CR)

Internal meeting regarding 2015 project, restoration practices and tree removal, provided recommendations regarding public input process and feasibility study to administrator and Golden Valley staff.

Leonard J. Kremer, Principal Engineer/Scientist 1.5 hours @ \$180.00 per hour.....	\$ 270.00
James P. Herbert, Principal Engineer/Scientist 1.5 hours @ \$160.00 per hour.....	\$ 240.00
Karen L. Chandler, Engineer/Scientist/Specialist III 4.0 hours @ \$150.00 per hour.....	\$ 600.00
<i>Subtotal, Main Stem: 10<sup>th</sup> Ave – Duluth Street .....</i>	<i>\$ 1,110.00</i>

**TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy) .....\$ 4,940.38**

<b>CAPITAL IMPROVEMENT PROJECTS (Funded through Flood Control Project Long-term Maintenance Funds)</b>
--

**TOTAL CAPITAL IMPROVEMENT PROJECTS  
(Maintenance Funds) .....\$ 0.00**

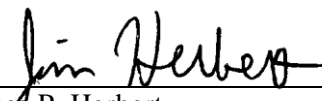
<b>TMDL STUDIES</b>
---------------------

**TOTAL TMDL STUDIES .....\$ 0.00**

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

<b>Total Engineering .....</b>	<b>\$ 25,380.46</b>
<b>Total Secretarial Services Expenses.....</b>	<b>\$ 530.25</b>
<b>Total Planning .....</b>	<b>\$ 5,338.15</b>
<b>Total Annual Report/Website/Public Communications .....</b>	<b>\$ 0.00</b>
<b>Total WOMP .....</b>	<b>\$ 550.00</b>
<b>Total Capital Improvement Projects (Tax Levy) .....</b>	<b>\$ 4,940.38</b>
<b>Total Capital Improvement Projects (Maintenance Funds).....</b>	<b>\$ 0.00</b>
<b>Total TMDL Studies.....</b>	<b>\$ 0.00</b>
<b>TOTAL PAYABLE .....</b>	<b>\$ 36,739.24</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.

  
James P. Herbert