



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

Page # 1
Invoice # 23270051-2016-2
Project # 23/27-0051
Client # 59
April 8, 2016

Invoice of Account with
BARR ENGINEERING COMPANY

For professional services during the period of
February 27, 2016 through April 1, 2016

ENGINEERING

TECHNICAL SERVICES

Coordination regarding CIP projects; develop scope and budget estimate for Bassett Creek Park Pond dredging CIP project, and coordinate with administrator regarding CIP fact sheet; March 3 meeting with administrator (after TAC meeting); communications with administrator regarding website edits, 2014 tour costs, requested presentation to AMLAC regarding XPSWMM model, records retention, and potential project review fee increases; locate and email feasibility study agreement to administrator; prepare estimated budgets for 2017 engineering items including additional water quality monitoring/assessment items for Schaper Pond, Twin Lake sediment, Sweeney Lake aeration and special chloride assessment, in response to administrator's request, and provide 2017 budget estimates and supplementary information to administrator, in preparation for budget committee meeting; communications with administrator regarding 2017 budget items, including potential use of CIP funds for Schaper Pond monitoring/assessment; communications with auditor and BWSR staff regarding 2012 CWF grant monies; review and send Freshwater Society's groundwater report to administrator; communications with administrator and internal staff regarding BWSR 2018-2019 biennial budget request, develop BBR and enter into eLINK; call from contractor regarding Bassett Creek flow information; and internal discussion regarding project reviews.

James P. Herbert, Principal Engineer/Scientist 10.8 hours @ \$180.00 per hour	\$ 1,944.00
Karen L. Chandler, Consultant/Advisor 27.8 hours @ \$165.00 per hour	\$ 4,587.00
Gregory J. Wilson, Consultant/Advisor 17.3 hours @ \$155.00 per hour	\$ 2,681.50
Margaret R. Rattei, Engineer/Scientist/Specialist III 4.1 hours @ \$130.00 per hour	\$ 533.00
Kevin D. Menken, Engineer/Scientist/Specialist II 1.0 hours @ \$110.00 per hour	\$ 110.00

Amy R. Anderson, Engineer/Scientist/Specialist I 2.0 hours @ \$90.00 per hour	\$ 180.00
Megan J. Wika, Engineer/Scientist/Specialist I 1.0 hours @ \$70.00 per hour	\$ 70.00
Technicians/Administrative.....	\$ <u>36.00</u>
<i>Subtotal, Technical Services.....</i>	<i>\$ 10,141.50</i>

MONTHLY MEETING PREPARATION

Communications/coordination with administrator regarding draft/final agenda and meeting packet for March 2016 meeting; review/edit draft February meeting minutes; prepare for March Commission meeting, including set up and attend pre-meeting conference call with vice chair Mueller and administrator to review meeting agenda; review past variance requests/actions; provide grant tracking information to administrator; prepare memo for March Commission meeting summarizing changes to the Plymouth Creek feasibility study report; and coordination and communications with administrator and internal staff regarding follow-up tasks from March Commission meeting and upcoming meeting agenda items.

James P. Herbert, Principal Engineer/Scientist 9.3 hours @ \$180.00 per hour	\$ 1,674.00
Karen L. Chandler, Consultant/Advisor 15.5 hours @ \$165.00 per hour	\$ 2,557.50
Jeffrey D. Weiss, Engineer/Scientist/Specialist II 3.0 hours @ \$125.00 per hour	\$ 375.00
Technicians/Administrative.....	\$ <u>579.00</u>
<i>Subtotal, Monthly Meeting Preparation.....</i>	<i>\$ 5,185.50</i>

WETLAND ISSUES

Communications with administrator regarding Wetland Conservation Act (WCA) resolution; provide WCA resolution to BWSR; send request to BWSR for change in WCA contact.

Karen L. Chandler, Consultant/Advisor 0.2 hours @ \$165.00 per hour	\$ 33.00
Karen S. Wold, Engineer/Scientist/Specialist II 0.3 hours @ \$120.00 per hour	\$ <u>36.00</u>
<i>Subtotal, Wetland Issues.....</i>	<i>\$ 69.00</i>

TAC PREPARATION

Prepare for March 3 TAC meeting; and internal discussion regarding P8 modeling on May meeting agenda.

James P. Herbert, Principal Engineer/Scientist 0.3 hours @ \$180.00 per hour	\$ 54.00
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Gregory J. Wilson, Consultant/Advisor 1.0 hours @ \$155.00 per hour	\$ 155.00
<i>Subtotal, TAC Preparation</i>	\$ 209.00
Subtotal Technical Services	\$ 15,605.00

PLAT REVIEW

Waterford Innovation Center (2015-34)

Communications with applicant regarding 2015 review comments; and review revised grading, drainage and erosion control plans.

James P. Herbert, Principal Engineer Scientist 1.9 hours @ \$180.00 per hour	\$ 342.00
Amy R. Anderson, Engineer/Scientist/Specialist I 1.4 hours @ \$90.00 per hour.....	\$ 126.00
<i>Subtotal, Waterford Innovation Center</i>	\$ 468.00

1301 Theodore Wirth Parkway (2016-01)

Review Welcome and Adventure Center and Golf Course improvement plans and computations; review comments from MPRB; review revised plans and prepare email comments to MPRB; prepare and send approval letter to Golden Valley staff; review revised plans; and prepare and send final approval letter to Golden Valley staff.

James P. Herbert, Principal Engineer Scientist 11.0 hours @ \$180.00 per hour	\$ 1,980.00
Candice M. Kantor, Engineer/Scientist/Specialist II 7.5 hours @ \$100.00 per hour	\$ 750.00
Amy R. Anderson, Engineer/Scientist/Specialist I 1.9 hours @ \$90.00 per hour	\$ 171.00
<i>Subtotal, 1301 Theodore Wirth Parkway</i>	\$ 2,901.00

2016 Northwood Lake Improvements (2016-02)

Review revised grading, drainage and erosion control plans; and prepare draft approval letter to city staff.

James P. Herbert, Principal Engineer Scientist 0.5 hours @ \$180.00 per hour	\$ 90.00
Candice M. Kantor, Engineer/Scientist/Specialist II 0.7 hours @ \$100.00 per hour	\$ 70.00
Amy R. Anderson, Engineer/Scientist/Specialist I 1.4 hours @ \$90.00 per hour.....	\$ 126.00
<i>Subtotal, 2016 Northwood Lake Improvements</i>	\$ 286.00

2016 Northwood South Area Infrastructure (2016-03)

Review revised grading, drainage and erosion control plans; provide review comments to city's consultant and follow-up communications; review MIDS calculator results; communications with city consultant regarding final plans; and prepare draft approval/comment letter.

James P. Herbert, Principal Engineer Scientist 2.2 hours @ \$180.00 per hour	\$ 396.00
Karen L. Chandler, Consultant/Advisor 3.0 hours @ \$165.00 per hour	\$ 495.00
Candice M. Kantor, Engineer/Scientist/Specialist II 4.5 hours @ \$100.00 per hour	\$ 450.00
Eric V. Novotny, Engineer/Scientist/Specialist II 1.6 hours @ \$120.00 per hour	\$ 192.00
Amy R. Anderson, Engineer/Scientist/Specialist I 1.2 hours @ \$90.00 per hour.....	\$ <u>108.00</u>
<i>Subtotal, 2016 Northwood South Area Infrastructure.....</i>	<i>\$ 1,641.00</i>

Three Rivers PD BC Regional Trail (2016-04)

Review grading, drainage and erosion control plans, including floodplain impacts; prepare review memo and map for March Commission meeting and provide to administrator; coordinate with applicant; and prepare and send approval/comment letter to Crystal and New Hope staff.

James P. Herbert, Principal Engineer Scientist 7.9 hours @ \$180.00 per hour	\$ 1,422.00
Karen L. Chandler, Consultant/Advisor 3.0 hours @ \$165.00 per hour	\$ 495.00
Candice M. Kantor, Engineer/Scientist/Specialist II 1.2 hours @ \$100.00 per hour	\$ 120.00
Amy R. Anderson, Engineer/Scientist/Specialist I 17.5 hours @ \$90.00 per hour.....	\$ 1,575.00
Technicians/Administrative.....	\$ <u>45.00</u>
<i>Subtotal, Three Rivers PD BC Regional Trail</i>	<i>\$ 3,657.00</i>

Arlington Row East Apartments (2016-05)

Review grading, drainage and erosion control plans; and prepare and send approval/comment letter to St. Louis Park staff.

James P. Herbert, Principal Engineer Scientist 2.7 hours @ \$180.00 per hour	\$ 486.00
Candice M. Kantor, Engineer/Scientist/Specialist II 0.5 hours @ \$100.00 per hour	\$ 50.00

Amy R. Anderson, Engineer/Scientist/Specialist I
5.5 hours @ \$90.00 per hour..... \$ 495.00
Subtotal, Arlington Row East Apartments..... \$ 1,031.00

GV 2016 PMP STH169 Plymouth Ave (2016-06)

Review grading, drainage and erosion control plans; communications with administrator and city staff regarding requested variance; prepare review memo for March Commission meeting; provide final review memo to administrator for meeting packet; and prepare and send approval/comment letter to Golden Valley staff.

James P. Herbert, Principal Engineer Scientist
4.2 hours @ \$180.00 per hour \$ 756.00
Karen L. Chandler, Consultant/Advisor
6.5 hours @ \$165.00 per hour \$ 1,072.50
Candice M. Kantor, Engineer/Scientist/Specialist II
6.3 hours @ \$100.00 per hour \$ 620.00
Amy R. Anderson, Engineer/Scientist/Specialist I
1.7 hours @ \$90.00 per hour..... \$ 153.00
Subtotal, GV 2016 PMP STH 169 Plymouth Ave..... \$ 2,611.50

Gardendale Development (2016-07)

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

James P. Herbert, Principal Engineer Scientist
3.2 hours @ \$180.00 per hour \$ 576.00
Amy R. Anderson, Engineer/Scientist/Specialist I
2.8 hours @ \$90.00 per hour..... \$ 252.00
Technicians/Administrative..... \$ 45.00
Subtotal, Gardendale Development..... \$ 873.00

Morries Lincoln of SLP (2016-08)

Plat review set up; and preliminary review.

James P. Herbert, Principal Engineer Scientist
0.5 hours @ \$180.00 per hour \$ 90.00
Technicians/Administrative..... \$ 45.00
Subtotal, Morries Lincoln of SLP \$ 135.00

Four Seasons Mall Demolition (2016-09)

Communications with consultant regarding separate application for demolition plans; plat review set up; and preliminary review.

James P. Herbert, Principal Engineer Scientist 1.0 hours @ \$180.00 per hour	\$ 180.00
Technicians/Administrative.....	\$ 45.00
<i>Subtotal, Four Seasons Mall Demolition.....</i>	<i>\$ 225.00</i>
Subtotal Plat Review.....	\$ 13,828.50

PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

PRELIMINARY COMMUNICATIONS

Coordination with city staff and consultant regarding Mortenson expansion; research background on TH169 project; communications with applicant regarding proposed project and provide flood elevation for site; and call from consultant regarding project in Medicine Lake floodplain in Plymouth (directed caller to city staff), and provided flood elevation.

James P. Herbert, Principal Engineer/Scientist 3.2 hours @ \$180.00 per hour	\$ 576.00
Karen L. Chandler, Consultant/Advisor 0.2 hours @ \$165.00 per hour	\$ 33.00
<i>Subtotal, Plat Review – Preliminary Communications.....</i>	<i>\$ 609.00</i>

NON-FEE REVIEWS

BLUE LINE LRT/BOTTINEAU TRANSITWAY

Provide information to Blue Line LRT consultant, in response to data request.

Jennifer A. Koehler, Engineer/Scientist/Specialist III (3/3/2016) 0.3 hours @ \$125.00 per hour	\$ 37.50
<i>Subtotal, Blue Line LRT/Bottineau Transitway.....</i>	<i>\$ 37.50</i>

BLUE LINE LRT WCA LGU ADMIN

Golden Valley

Download and review jurisdictional memo submittal, including request for incidental determination and discuss with Blue Line LRT wetland consultant; prepare Notice of Application, send to Golden Valley staff, and request signature; send waiver to Golden Valley staff for release of electronic wetland files; request electronic wetland files on behalf of BCWMC; submit Notice of Application, and provide comments to TEP.

Karen S. Wold, Engineer/Scientist/Specialist II
 8.0 hours @ \$120.00 per hour (3/21/16, 3/22/16, 3/23/16,
 3/24/16, 3/25/16, 3/30/16, 3/31/16, 4/1/16) \$ 960.00
Subtotal, Golden Valley..... \$ 960.00

Minneapolis

Download and review jurisdictional memo submittal, including request for incidental determination and discuss with Blue Line LRT wetland consultant; prepare Notice of Application, send to Minneapolis staff, and request signature; request electronic wetland files on behalf of BCWMC; submit Notice of Application, and provide comments to TEP.

Karen S. Wold, Engineer/Scientist/Specialist II
 8.0 hours @ \$120.00 per hour (3/21/16, 3/22/16, 3/23/16,
 3/24/16, 3/25/16, 3/30/16, 3/31/16, 4/1/16) \$ 960.00
Subtotal, Minneapolis..... \$ 960.00

Robbinsdale

Download and review jurisdictional memo submittal, including request for incidental determination and discuss with Blue Line LRT wetland consultant; internal discussions regarding wetland status; prepare Notice of Application, communications with administrator regarding waiver letter; request electronic wetland files on behalf of BCWMC; submit Notice of Application, and provide comments to TEP.

Karen L. Chandler, Consultant/Advisor
 0.9 hours @ \$165.00 per hour (3/22/16, 3/30/16, 3/31/16)..... \$ 148.50
 Karen S. Wold, Engineer/Scientist/Specialist II
 8.0 hours @ \$120.00 per hour (3/21/16, 3/22/16, 3/23/16,
 3/24/16, 3/25/16, 3/30/16, 3/31/16, 4/1/16) \$ 960.00
 Candice M. Kantor, Engineer/Scientist/Specialist II
 0.7 hours @ \$100.00 per hour (3/22/16) \$ 70.00
Subtotal, Robbinsdale..... \$ 1,178.50
Subtotal Blue Line LRT WCA LGU Admin..... \$ 3,098.50
*Subtotal Blue Line LRT/Bottineau Transitway & Blue Line
 LRT WCA LGU Admin*..... \$ 3,136.00

SW LRT

Review SWLRT models and results, including impacts of VanWhite/Glenwood station; prepare for and attend March 2 meeting with SWLRT staff, SWLRT consultant, Minneapolis staff and administrator regarding connection analysis and next steps; review revised SWLRT modeling and provide comments to SWLRT staff; prepare memo for March Commission meeting regarding requested connection to Bassett Creek tunnel; communications with administrator regarding 2000 Joint and Cooperative Agreement and need for resolution for tunnel connection; review 1977 MnDOT/Minneapolis agreement for requirements; prepare text for transmittal letter regarding Commission tunnel connection approval and send to administrator; prepare tunnel modeling information for administrator; and internal meetings;

James P. Herbert, Principal Engineer/Scientist 3.3 hours @ \$180.00 per hour	\$ 594.00
Karen L. Chandler, Consultant/Advisor 15.7 hours @ \$165.00 per hour	\$ 2,590.50
Jennifer A. Koehler, Engineer/Scientist/Specialist III 12.4 hours @ \$125.00 per hour	\$ 1,550.00
<i>Subtotal, SW LRT.....</i>	<i>\$ 4,734.50</i>
Subtotal Non-Fee Reviews	\$ 7,870.50
Subtotal Preliminary Communications and Non-Fee Reviews	\$ 8,479.50

COMMISSION AND TAC MEETINGS

Attend March 3 TAC meeting and March 17 Commission meeting.

James P. Herbert, Principal Engineer/Scientist 3.5 hours @ \$180.00 per hour	\$ 630.00
Karen L. Chandler, Consultant/Advisor 6.2 hours @ \$165.00 per hour	\$ 1,023.00
Expenses (Mileage)	\$ 29.16
Subtotal, Commission and TAC Meetings	\$ 1,682.16

SURVEYS & STUDIES

Subtotal, Surveys & Studies	\$ 0.00
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WATER QUALITY/MONITORING

Follow-up on MPCA's responses to comments on Chloride TMDL document and provide monitoring recommendations to administrator; Westwood Lake 2015 monitoring: revise Westwood Lake water quality monitoring report, per administrator's comments; communications with administrator regarding options for water quality graphs; create pdf of final report and provide to administrator; Stream Biotic Index Monitoring: revise biotic index monitoring report, per administrator's comments; Medicine Lake 2016 monitoring: prepare and deliver phytoplankton and zooplankton sample containers to Three Rivers Park District (TRPD) staff; communications with TRPD staff regarding 2016 Medicine Lake monitoring; and prepare memo to TRPD staff regarding work scope and cost for monitoring program; Northwood and Crane Lakes 2016 monitoring: prepare for monitoring, including look into ice-out dates for lakes, order sample bottles, and prepare memo to internal staff regarding monitoring work scope; respond to Minnetonka's questions regarding chloride/conductivity measurements for Crane Lake and communications with administrator and internal staff regarding chloride/conductivity measurement recommendations; prepare subcontractor agreements for aquatic plant surveys and send signed agreements to subcontractor;

James P. Herbert, Principal Engineer/Scientist 0.8 hours @ \$180.00 per hour	\$ 144.00
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Karen L. Chandler, Consultant/Advisor 10.2 hours @ \$165.00 per hour.....	\$	1,683.00
Gregory J. Wilson, Consultant/Advisor 8.4 hours @ \$155.00 per hour	\$	1,302.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 65.5 hours @ \$130.00 per hour	\$	8,515.00
Terri A. Olson, Engineer/Scientist/Specialist III 0.6 hours @ \$130.00 per hour	\$	78.00
Megan J. Wika, Engineer/Scientist/Specialist I 0.8 hours @ \$70.00 per hour	\$	56.00
Technicians/Administrative.....	\$	1,368.00
Expenses (Postage)	\$	<u>1.42</u>
Subtotal, Water Quality/Monitoring.....	\$	13,147.42

SHORELAND HABITAT MONITORING

Review other habitat monitoring programs; and internal meeting regarding potential BCWMC habitat monitoring program.

Karen L. Chandler, Consultant/Advisor 2.6 hours @ \$165.00 per hour.....	\$	429.00
Sterling G. Williams, Engineer/Scientist/Specialist III 1.0 hours @ \$130.00 per hour	\$	<u>130.00</u>
Subtotal, Shoreland Habitat Monitoring	\$	559.00

WATER QUANTITY

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

Technicians/Administrative.....	\$	360.00
Expenses (Mileage/2WD field vehicle)	\$	<u>53.62</u>
Subtotal, Water Quantity.....	\$	413.62
TOTAL ENGINEERING	\$	53,715.20

SECRETARIAL SERVICES

SECRETARIAL SERVICES EXPENSES

Expenses for postage.

Expenses (Postage)	\$	<u>61.44</u>
TOTAL SECRETARIAL SERVICES EXPENSES	\$	61.44

ANNUAL REPORT

Prepare portions of 2015 annual report, per administrator request; email report to administrator; and communications with MPRB and Plymouth staff.

James P. Herbert, Principal Engineer/Scientist 0.8 hours @ \$180.00 per hour	\$	144.00
Karen L. Chandler, Consultant/Advisor 6.1 hours @ \$165.00 per hour	\$	1,006.50
Karen S. Wold, Engineer/Scientist/Specialist II 0.8 hours @ \$120.00 per hour	\$	96.00
<i>Subtotal, Annual Report</i>	\$	1,246.50
TOTAL ANNUAL REPORT	\$	1,246.50

PUBLIC COMMUNICATIONS

TOTAL PUBLIC COMMUNICATIONS	\$	0.00
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WEBSITE

TOTAL WEBSITE	\$	0.00
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WATERSHED OUTLET MONITORING PROGRAM (WOMP)

WATERSHED OUTLET MONITORING PROGRAM (WOMP)

Review of rating curve, including meeting with MCES staff on March 3; attend March 17 MCES WOMP Training meeting; and internal discussion regarding rating curve tasks.

Karen L. Chandler, Consultant/Advisor 0.2 hours @ \$165.00 per hour.....	\$	33.00
Christopher J. Bonick, Engineer/Scientist/Specialist II 6.0 hours @ \$120.00 per hour	\$	720.00
Expenses (Mileage/2WD Field Vehicle).....	\$	99.68
<i>Subtotal, Watershed Outlet Monitoring Program</i>	\$	852.68
TOTAL WOMP	\$	852.68

CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

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

Prepare and send comments to city's consultant; review revised 100% plans; and prepare and send comments regarding revised plans to city's consultant.

Karen L. Chandler, Consultant/Advisor 0.9 hours @ \$165.00 per hour.....	\$	148.50
Candice M. Kantor, Engineer/Scientist/Specialist II 1.7 hours @ \$100.00 per hour	\$	<u>170.00</u>
<i>Subtotal, Northwood Lake Improvement Project.....</i>	\$	<i>318.50</i>

NORTHWOOD LAKE [NON-MPCA REIMBURSABLE]

File documentation regarding BWSR Clean Water Fund grant agreement and work plan.

Amy R. Anderson, Engineer/Scientist/Specialist I 0.2 hours @ \$90.00 per hour.....	\$	<u>18.00</u>
<i>Subtotal, Northwood Lake [Non-MPCA Reimbursable]</i>	\$	<i>18.00</i>

MAIN STEM CHANNEL RESTORATION, CEDAR LK RD TO DUPONT, PLUS FRUEN MILL (2017CR-M)

Complete final reconnaissance to check concept designs and confirm estimated dimensions and quantities for the concept plans; check and modify concept designs and cost estimates; review lab data for the Phase II environmental investigation; data entry from Phase II investigation; complete drafts of both the main body of the report and the Phase II environmental investigation report; complete internal review and QA/QC of the report and figures for both the main body and Phase II environmental investigation; text edits and figure revisions based on internal QA/QC; complete draft appendices; compile draft report to forward to administrator and City of Minneapolis for review and comment; attend March 29 meeting with Minneapolis staff, MPRB staff, and administrator to discuss draft report and review comments; respond to Alternate Commissioner Goddard's questions regarding the wetland delineation; and edit the report to address comments received from administrator and Minneapolis staff.

Daniel J. Fetter, Principal Engineer/Scientist 7.5 hours @ \$200.00 per hour	\$	1,500.00
Jeffrey T. Lee, Principal Engineer/Scientist 2.8 hours @ \$155.00 per hour	\$	434.00
Karen L. Chandler, Consultant/Advisor 2.3 hours @ \$165.00 per hour.....	\$	379.50
Jennifer L. Brekken, Engineer/Scientist/Specialist III 18.5 hours @ \$140.00 per hour	\$	2,590.00
Terri A. Olson, Engineer/Scientist/Specialist III 2.8 hours @ \$130.00 per hour	\$	364.00

Brent A. Lindstrom, Engineer/Scientist/Specialist III 3.3 hours @ \$125.00 per hour	\$ 412.50
Peter J. Hinck, Engineer/Scientist/Specialist II 41.6 hours @ \$125.00 per hour	\$ 5,200.00
John W. Juntilla, Engineer/Scientist/Specialist II 32.0 hours @ \$110.00 per hour	\$ 3,520.00
Christian E. Frias, Engineer/Scientist/Specialist II 12.0 hours @ \$105.00 per hour	\$ 1,260.00
Jeffrey D. Weiss, Engineer/Scientist/Specialist II 31.7 hours @ \$125.00 per hour	\$ 3,962.50
Brian K. Burgner, Engineer/Scientist/Specialist I 4.8 hours @ \$95.00 per hour	\$ 456.00
Christopher R. Ross, Engineer/Scientist/Specialist I 6.0 hours @ \$65.00 per hour	\$ 397.50
Technicians/Administrative.....	\$ 1,940.00
Expenses (Legend Tech Services/Quicksilver Courier/travel).....	\$ <u>3,023.61</u>
<i>Subtotal, Main Stem Channel Restoration, Cedar Lk Rd to Dupont, Plus Fruen Mill.....</i>	
	\$ 25,439.61

PLYMOUTH CREEK RESTORATION, ANNAPOLIS LN TO 2,500 FT UPSTREAM OF ANNAPOLIS LN (2017 CR-P)

Subcontractor charges for the Phase I Cultural and Historical Assessment.

Expenses (Archaeological Research Services)	\$ <u>4,158.00</u>
<i>Subtotal, Plymouth Creek Restoration, Annapolis Ln to 2,500 Ft Upstream of Annapolis Ln.....</i>	
	\$ 4,158.00

TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)\$ 29,934.11

TMDL WORK

TMDL IMPLEMENTATION REPORTING

Update P8 model inputs, including information for Spring Pond and Crane Lake.

Karen L. Chandler, Consultant/Advisor 0.8 hours @ \$165.00 per hour.....	\$ 132.00
Gregory J. Wilson, Consultant/Advisor 5.5 hours @ \$155.00 per hour	\$ 852.50

Joshua R. Vosejpk, Engineer/Scientist/Specialist I	
14.3 hours @ \$75.00 per hour	\$ 1,072.50
<i>Subtotal, TMDL Studies</i>	\$ 2,057.00
TOTAL TMDL STUDIES	\$ 2,057.00

XP-SWMM PHASE II

XP-SWMM PHASE II

North Branch & Main Stem Modeling

Data request follow-up; data requests to Golden Valley and New Hope; additional edits and detailed figure for data request; create nodes/links for Bassett Creek Park Pond (including review of Highway 100 as-built plans); create longest flow paths and other hydrologic parameters for North Branch; work on model inside of XPSWMM – update with New Hope data; fill in missing data from Hennepin County/MnDOT; update orifice information on Winnetka Pond based on City of Crystal site visit; Bassett Creek Upstream node and links information; St. Louis Park as-built plan check; compile Golden Valley missing information; Westwood Lake node and links and as-built plan review; develop Shelard Park node and links; review Bassett Creek upstream as-built plans; name runoff nodes; develop watershed divides; subwatershed feature class trouble shooting; coordination regarding modeling in north Minneapolis; review and develop Wirth and Sweeney XPSWMM network and nodes/links; create Sweeney XPSWMM model including water capture; populate information about pipes/features for Wirth XPSWMM network in GIS; build joint Sweeney and Wirth XPSWMM model; review P8 model, 2012 WQ survey, and as-builts to develop 'final' list of Golden Valley data request items; build Grimes/Rice Ponds network in GIS- review development plans, as-builts, previous site visits, etc.; and Bassett Creek Main Stem node and links information.

James P. Herbert, Principal Engineer/Scientist	
1.1 hours @ \$180.00 per hour	\$ 198.00
Jennifer A. Koehler, Engineer/Scientist/Specialist III	
7.5 hours @ \$125.00 per hour	\$ 937.50
Ross S. Mullen, Engineer/Scientist/Specialist I	
92.8 hours @ \$90.00 per hour	\$ 8,352.00
Lulu Fang, Engineer/Scientist/Specialist I	
58.0 hours @ \$75.00 per hour	\$ 4,350.00
Megan J. Wika, Engineer/Scientist/Specialist I	
1.5 hours @ \$70.00 per hour	\$ 105.00
<i>Subtotal, XP-SWMM Phase II</i>	\$ 13,942.50
TOTAL XP-SWMM PHASE II	\$ 13,942.50

SUMMARY TOTALS

Total Engineering	\$ 53,715.20
Total Secretarial Services Expenses	\$ 61.44
Total Annual Report/Website/Public Communications	\$ 1,246.50
Total WOMP	\$ 852.68
Total Capital Improvement Projects (Tax Levy).....	\$ 29,934.11
Total TMDL Work	\$ 2,057.00
Total XP-SWMM Phase II.....	\$ <u>13,942.50</u>
TOTAL PAYABLE.....	\$ 101,809.43

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