Mr. Jim Prom Bassett Creek Watershed Management Commission 7800 Golden Valley Road Golden Valley, MN 55427 Page # 1 Invoice # 23270051-2019-4 Project # 23/27-0051

Client # 59 June 7, 2019

Invoice of Account with BARR ENGINEERING COMPANY

For professional services during the period of April 27, 2019 through May 31, 2019

ENGINEERING

TECHNICAL SERVICES

Coordination and conference call with administrator, attorney, and Chair Prom regarding response to proprietary treatment device manufacturer, and prepare several replies to emails from manufacturer; communications with administrator and Commissioner Harwell regarding BCWMC's minimum building elevation requirement; communications with administrator and internal staff regarding Medicine Lake 2020 monitoring budget/costs, including potential phytoplankton and zooplankton analyses in 2020 for Medicine Lake, and communications with Three Rivers Park District staff regarding 2020 monitoring program and verifying TRPD collection of phytoplankton/zooplankton samples for BCWMC in 2020; internal discussion regarding plat review costs; communications with administrator and internal staff regarding Schaper Pond/Sweeney Lake project and reporting; internal communications and meeting with administrator to review/discuss BCWMC 2025 plan update budget; provide GIS watershed boundary files to MWMO staff; and communications with administrator regarding AIS plant surveys, CIP project feasibility studies, project review, MPCA meeting, Wirth golf course flooding, and "owner" of CIP projects.

| James P. Herbert, Principal Engineer/Scientist 5.5 hours @ \$195.00 per hour\$ | 1,072.50 |
|---|----------|
| Karen L. Chandler, Principal Engineer/Scientist 19.4 hours @ \$175.00 per hour\$ | 3,395.00 |
| Sterling 'Greg' Williams, Engineer/Scientist/Specialist III 3.1 hours @ \$140.00 per hour\$ | 434.00 |
| largaret R. Rattei, Engineer/Scientist/Specialist III 1.5 hours @ \$135.00 per hour | 202.50 |
| Josh P. Phillips, Engineer/Scientist/Specialist II 0.1 hours @ \$95.00 per hour\$ | 9.50 |
| Subtotal, Technical Services\$ | 5,113.50 |

MONTHLY MEETING PREPARATION

Communications/coordination with administrator and internal staff regarding draft/final agenda and meeting packet for May Commission meeting; review/edit draft April meeting minutes; prepare for May Commission meeting, including pre-meeting conference call with Chair Prom and administrator, and review meeting packet; and communications with administrator and internal staff regarding follow-up items from May Commission meeting and upcoming meeting agenda items.

| James P. Herbert, Principal Engineer/Scientist 5.2 hours @ \$195.00 per hour\$ | 1,014.00 |
|--|----------|
| Karen L. Chandler, Principal Engineer/Scientist 17.1 hours @ \$175.00 per hour\$ | 2,992.50 |
| Margaret R. Rattei, Engineer/Scientist/Specialist III 0.1 hours @ \$135.00 per hour\$ | 13.50 |
| Josh P. Phillips, Engineer/Scientist/Specialist II 0.4 hours @ \$95.00 per hour\$ | 38.00 |
| Technicians/Administrative\$_ | 420.00 |
| Subtotal, Monthly Meeting Preparation\$ | 4,478.00 |

TAC PREPARATION

Gather information and prepare memo for May 29 TAC meeting regarding manufactured stormwater treatment devices (types of devices, testing results, third party verification/certification, etc.) and options/recommendations for BCWMC review/acceptance of manufactured devices; prepare for May 29 TAC meeting, including review of additional information regarding application of potential new process/guidelines; and internal follow-up from TAC meeting.

| James P. Herbert, Principal Engineer/Scientist 6.6 hours @ \$195.00 per hour | . \$ | 1,287.00 |
|---|-------|-----------|
| Karen L. Chandler, Principal Engineer/Scientist 13.9 hours @ \$175.00 per hour | . \$ | 2,432.50 |
| Josh P. Phillips, Engineer/Scientist/Specialist II 26.9 hours @ \$95.00 per hour | . \$_ | 2,555.50 |
| Subtotal, TAC Preparation | \$ | 6,275.00 |
| Subtotal Technical Services | .\$ | 15,866.50 |

PLAT REVIEW

RiverTree School Expansion (2019-01)

Project close-out filing.

| Josh P. Phillips, Engineer/Scientist/Specialist II | |
|--|-------|
| 0.6 hours @ \$95.00 per hour\$ | 57.00 |
| Subtotal, RiverTree School Expansion\$ | 57.00 |

5005 Bassett Creek Drive Fence (2019-03)

Project close-out filing.

| Josh P. Phillips, Engineer/Scientist/Specialist II 0.4 hours @ \$95.00 per hour | 38.00 |
|---|------------------|
| Subtotal, 5005 Bassett Creek Drive Fence | 38.00 |
| CenterPoint MBLSW Winnetka Avenue (2019-04) | |
| Project close-out filing. | |
| Josh P. Phillips, Engineer/Scientist/Specialist II | |
| 0.6 hours @ \$95.00 per hour | |
| Subtotal, CenterPoint MBLSW Winnetka Ave\$ | 57.00 |
| Candlelight Terrace St Reconstruction (2019-05) | |
| Project close-out filing. | |
| Josh P. Phillips, Engineer/Scientist/Specialist II 0.5 hours @ \$95.00 per hour | \$ <u>47.50</u> |
| Subtotal, Candlelight Terrace St Reconstruction | 47.50 |
| Marsh Run Apartments (2019-06) | |
| review re-revised grading, drainage and erosion control plans and supporting subprepare and send approval letter to city staff; and communications with administration applicant. James P. Herbert, Principal Engineer/Scientist | |
| 3.3 hours @ \$195.00 per hour | 643.50 |
| Karen L. Chandler, Principal Engineer/Scientist 2.9 hours @ \$175.00 per hour | 507.50 |
| Josh P. Phillips, Engineer/Scientist/Specialist II 16.5 hours @ \$95.00 per hour | 1,567.50 |
| Subtotal, Marsh Run Apartments | 2,718.50 |
| Sandburg Middle School Roof (2019-07) | |
| Project close-out filing. | |
| Josh P. Phillips, Engineer/Scientist/Specialist II 0.6 hours @ \$95.00 per hour | \$ 57.0 <u>0</u> |
| Subtotal, Sandburg Middle School Roof | |
| Capri Theater Addition (2019-08) | 57.00 |
| Project close-out filing. | 57.00 |
| | 57.00 |
| Josh P. Phillips, Engineer/Scientist/Specialist II | 57.00 |
| Josh P. Phillips, Engineer/Scientist/Specialist II 0.5 hours @ \$95.00 per hour | |
| · | \$ <u>47.50</u> |

Wayzata E. Middle School Addition (2019-09)

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

| James P. Herbert, Principal Engineer/Scientist | |
|--|--------------|
| 1.0 hours @ \$195.00 per hour | \$ 195.00 |
| Josh P. Phillips, Engineer/Scientist/Specialist II | |
| 1.0 hours @ \$95.00 per hour | \$ 95.00 |
| Subtotal, Wayzata E. Middle School Addition | \$ 290.00 |

Ridgedale Drive Improvements (2019-10)

Review revised grading, drainage and erosion control plans; prepare review memo for May Commission meeting; and prepare and send approval letter to city staff.

| James P. Herbert, Principal Engineer/Scientist 1.0 hours @ \$195.00 per hour\$ | 195.00 |
|--|--------|
| 1.0 nours @ \$195.00 per nour\$ | 195.00 |
| Karen L. Chandler, Principal Engineer/Scientist 0.4 hours @ \$175.00 per hour\$ | 70.00 |
| Josh P. Phillips, Engineer/Scientist/Specialist II | |
| 3.5 hours @ \$95.00 per hour\$_ | 332.50 |
| Subtotal, Ridgedale Drive Improvements\$ | 597.50 |

Golden Hills Parking (2019-11)

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

| James P. Herbert, Principal Engineer/Scientist 2.6 hours @ \$195.00 per hour\$ | 507.00 |
|---|--------|
| Josh P. Phillips, Engineer/Scientist/Specialist II 2.7 hours @ \$95.00 per hour\$ | 256.50 |
| Technicians/Administrative\$ | 28.50 |
| Expenses (Postage) <u>\$</u> | 0.50 |
| Subtotal, Golden Hills Parking\$ | 792.50 |

Theo Wirth GC Cart Path (2019-12)

Review grading, drainage and erosion control plans; review floodplain impacts; prepare draft memo for May Commission meeting; and communications with city and MPRB staff.

| James P. Herbert, Principal Engineer/Scientist | |
|--|--------------|
| 3.4 hours @ \$195.00 per hour | \$ 663.00 |
| Karen L. Chandler, Principal Engineer/Scientist 1.3 hours @ \$175.00 per hour | \$ 227.50 |
| Heather N. Hlavaty, Engineer/Scientist/Specialist II | |
| 2.9 hours @ \$100.00 per hour | \$ 290.00 |

| Josh P. Phillips, Engineer/Scientist/Specialist II 7.8 hours @ \$95.00 per hour | \$ | 741.00 |
|---|-----------|----------|
| Edward M. Anderson, Engineer/Scientist/Specialist I 0.7 hours @ \$85.00 per hour | \$ | 59.50 |
| Technicians/Administrative | \$ | 85.50 |
| Expenses (Postage) | <u>\$</u> | 0.50 |
| Subtotal, Theo Wirth GC Cart Path | \$ | 2,067.00 |
| Daikin Testing Addition (2019-13) | | |
| Review grading, drainage and erosion control plans; prepare draft comment le communications with applicant. | tter; a | and |
| James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$195.00 per hour | \$ | 97.50 |
| Josh P. Phillips, Engineer/Scientist/Specialist II 4.5 hours @ \$95.00 per hour | \$ | 427.50 |
| Technicians/Administrative | \$ | 47.50 |
| Expenses (Postage) | <u>\$</u> | 0.50 |
| Subtotal, Daikin Testing Addition | \$ | 573.00 |
| Subtotal Plat Review | \$ | 7,342.50 |

PRELIMINARY COMMUNICATIONS AND NON-FEE REVIEWS

PRELIMINARY COMMUNICATIONS

Communications with Golden Valley staff and internal staff regarding 2360 Dresden Lane; communications with developer's consultant regarding freeboard requirements; and communications with developer's consultant regarding development in Plymouth.

| Subtotal, Preliminary Communications | .\$ | 814.50 |
|---|------|--------|
| 0.8 hours @ \$95.00 per hour | \$ | 76.00 |
| Josh P. Phillips, Engineer/Scientist/Specialist II | | |
| Ross S. Mullen, Engineer/Scientist/Specialist II 0.6 hours @ \$110.00 per hour | . \$ | 66.00 |
| Karen L. Chandler, Principal Engineer/Scientist 0.5 hours @ \$175.00 per hour | . \$ | 87.50 |
| James P. Herbert, Principal Engineer/Scientist 3.0 hours @ \$195.00 per hour | . \$ | 585.00 |

NON-FEE REVIEWS

Bassett Creek Valley

Provide P8, XP SWMM and GIS data files to Wenck per request; and communications with Wenck regarding data request and conditional use license.

| Karen L. Chandler, Principal Engineer/Scientist 1.5 hours @ \$175.00 per hour | \$ | 262.50 |
|---|-------------|--------------|
| Gregory J. Wilson, Consultant/Advisor 2.5 hours @ \$165.00 per hour | \$ | 412.50 |
| Joshua R. Vosejpka, Engineer/Scientist/Specialist I 1.7 hours @ \$85.00 per hour | | 144.50 |
| Subtotal, Bassett Creek Valley | | 819.50 |
| 510 Cloverleaf Drive (Channel Maintenance Fund) | | |
| Preliminary review; communications with applicant; and review BCWMC/c fund agreement. | city channe | el maintenar |
| James P. Herbert, Principal Engineer/Scientist 1.5 hours @ \$195.00 per hour | \$ | 292.50 |
| Karen L. Chandler, Principal Engineer/Scientist 0.5 hours @ \$175.00 per hour | \$ | 87.50 |
| Technicians/Administrative | \$_ | 38.00 |
| Subtotal, 510 Cloverleaf Drive (Channel Maint Fund) | \$ | 418.00 |
| Subtotal Non-Fee Reviews | \$ | 1,237.50 |
| Subtotal Preliminary Communications and Non-Fee Reviews | \$ | 2,052.00 |
| COMMISSION AND TAC MEETINGS | | |
| Attend May 16 Commission meeting and May 29 TAC meeting. | | |
| James P. Herbert, Principal Engineer/Scientist 2.5 hours @ \$195.00 per hour | \$ | 487.50 |
| | | 1,050.00 |
| Karen L. Chandler, Principal Engineer/Scientist 6.0 hours @ \$175.00 per hour | \$ | 1,030.00 |
| Karen L. Chandler, Principal Engineer/Scientist 6.0 hours @ \$175.00 per hour Expenses (Mileage) | | • |

SURVEYS & STUDIES

BCWMC 50th Anniversary

Prepare draft watershed map with CIP project locations, provide to administrator for review and revise map per review, create EPS file and provide to Dawn Pape for placement in anniversary booklet; summarize P8 results of past CIP projects and provide revised CIP water quality treatment (P8) information to administrator; and communications with administrator regarding total phosphorus removals provided by Medicine Lake curly-leaf pondweed treatments.

| Karen L. Chandler, Principal Engineer/Scientist | |
|---|----------|
| 9.0 hours @ \$175.00 per hour\$ | 1,575.00 |

| Gregory J. Wilson, Consultant/Advisor 3.5 hours @ \$165.00 per hour\$ | 577.50 |
|---|----------|
| Rachel C. Mitcavish, Engineer/Scientist/Specialist I 5.4 hours @ \$80.00 per hour\$ | 432.00 |
| Karen C. Kaul, Contracted 3.0 hours @ \$85.00 per hour\$_ | 255.00 |
| Subtotal, BCWMC 50 th Anniversary\$ | 2,839.50 |
| Subtotal Surveys & Studies\$ | 2,839.50 |

WATER QUALITY/MONITORING

General Water Quality

Communications with administrator regarding resident question about wake boat impact on Sweeney Lake water quality and alum treatment.

| Gregory J. Wilson, Consultant/Advisor | | |
|---------------------------------------|----|---------------|
| 1.0 hours @ \$165.00 per hour\$ | ; | <u>165.00</u> |
| Subtotal, General Water Quality\$ | \$ | 165.00 |

Cavanaugh and Northwood Lakes Monitoring

Determine sample points for Cavanaugh Lake point intercept aquatic plant survey and prepare map; prepare, execute, and send contract to Endangered Resource Services for 2019 aquatic plant surveys; prepare and send GIS files of base maps and point intercept aquatic plant survey points to Endangered Resource Services, LLC; perform phytoplankton analyses of ice-out samples collected April 23; and prepare for future water quality monitoring events.

| Terri A. Olson, Engineer/Scientist/Specialist III 0.9 hours @ \$140.00 per hour\$ | 126.00 |
|---|----------|
| Margaret R. Rattei, Engineer/Scientist/Specialist III 7.2 hours @ \$135.00 per hour\$ | 972.00 |
| Kelly A. Wild, Engineer/Scientist/Specialist II 0.9 hours @ \$95.00 per hour\$ | 85.50 |
| Technicians/Administrative\$ | 251.00 |
| Expenses (WQ meter/filtration apparatus/canoe/mileage/2WD vehicle)\$ | 282.45 |
| Subtotal, Cavanaugh and Northwood Lakes Monitoring\$ | 1,716.95 |

North Branch Monitoring Year 2

Purchase and install temperature/conductivity sensor; collect storm samples; download and review data; and plan for remaining 2019 storm and baseflow monitoring.

| Sterling 'Greg' Williams, Engineer/Scientist/Specialist III 0.5 hours @ \$140.00 per hour\$ | 70.00 |) |
|--|--------|---|
| Margaret R. Rattei, Engineer/Scientist/Specialist III | | |
| 1.5 hours @ \$135.00 per hour\$ | 202.50 |) |

| Christopher J. Bonick, Engineer/Scientist/Specialist III 13.0 hours @ \$125.00 per hour\$ | 1,625.00 |
|---|----------|
| Heather N. Hlavaty, Engineer/Scientist/Specialist II 13.8 hours @ \$100.00 per hour\$ | 1,380.00 |
| Technicians/Administrative\$ | 108.00 |
| Expenses (Verizon Wireless/Campbell Scientific/conductivity meter/turbidimeter/mileage/2WD vehicle)\$ | 656.94 |
| Subtotal, North Branch Monitoring Year 2\$ | 4,042.44 |
| 2018 Biotic Index Monitoring | |
| Prepare draft report. | |
| Technicians/Administrative\$ | 953.50 |
| Subtotal, Biotic Index Monitoring\$ | 953.50 |
| Subtotal, Water Quality/Monitoring\$ | 6,877.89 |

WATER QUANTITY

Measure and review lake level elevations as part of the lake-gauging program; perform VRS survey of lake benchmarks; review and tabulate results; compare to past benchmark elevations, including conversion to NAVD88 datum; and internal communications regarding re-establishing benchmark elevations.

| TOTAL ENGINEERING\$ | 38,710.79 |
|--|-----------|
| Subtotal, Water Quantity\$ | 2,180.98 |
| Expenses (GPS survey system/mileage/2WD vehicle)\$ | 258.48 |
| Technicians/Administrative\$ | 1,590.00 |
| 1.9 hours @ \$175.00 per hour\$ | 332.50 |
| Karen L. Chandler, Principal Engineer/Scientist | |

WATERSHED OUTLET MONITORING PROGRAM (WOMP)

| TOTAL WOME |) | 5 (| 0.00 |
|------------|---|------------|------|
| | | | |

APM/AIS WORK

Coordinate with administrator to obtain GIS files from 2017 aquatic plant surveys of Sweeney Lake, Twin Lake, and Lost Lake and file in project folder; obtain GIS files from 2018 aquatic plant survey of Parkers Lake from Three Rivers Park District and file in project folder; determine sample points and prepare maps with point intercept sample points for Lost Lake and Wirth Lake; provide GIS files of base maps and point intercept sample points of lakes funded by Hennepin County AIS grant (Sweeney Lake, Twin Lake, Lost Lake, Parkers Lake, Wirth Lake, and Westwood Lake) to Endangered Resource Services, LLC; and prepare, execute, and send contract to Endangered Resource Services for 2019 aquatic plant surveys of lakes funded by Hennepin County AIS grant.

| Karen L. Chandler, Principal Engineer/Scientist 0.3 hours @ \$175.00 per hour\$ | 52.50 | |
|---|----------------|--|
| Margaret R. Rattei, Engineer/Scientist/Specialist III 3.2 hours @ \$135.00 per hour\$ | 432.00 | |
| Kelly A. Wild, Engineer/Scientist/Specialist II 3.8 hours @ \$95.00 per hour\$ | <u> 361.00</u> | |
| TOTAL APM/AIS WORK\$ | 845.50 | |

CAPITAL IMPROVEMENT PROJECTS (Funded through tax levy)

FOUR SEASONS AREA WQ PROJECT (NL-2)

Provide P8, XP SWMM and GIS data files to developer's consultant per city request; communications with developer's consultant regarding data request and conditional use license; and communications with administrator, developer, developer's consultant and city staff regarding scheduling of meeting.

| Karen L. Chandler, Principal Engineer/Scientist 2.9 hours @ \$175.00 per hour\$ | 507.50 |
|--|----------|
| Gregory J. Wilson, Consultant/Advisor 1.0 hours @ \$165.00 per hour\$ | 165.00 |
| Lulu Fang, Engineer/Scientist/Specialist II 1.4 hours @ \$95.00 per hour\$_ | 133.00 |
| Subtotal, Four Seasons Area WQ Project (NL-2)\$ | 805.50 |
| SCHAPER POND 2018 MONITORING AND REPORTING (SL-3) | |
| Communications with Carp Solutions regarding final carp survey and PIT tag monitor | oring. |
| Gregory J. Wilson, Consultant/Advisor 2.1 hours @ \$165.00 per hour\$ | 346.50 |
| Expenses (Carp Solutions) <u>\$</u> | 1,855.08 |
| Subtotal, Schaper Pond 2018 Monitoring and Reporting\$ | 2,201.58 |
| JEVNE PARK STORMWATER MANAGEMENT FEASIBILITY STUDY (2020) (ML-21) Revise and send final feasibility study report to administrator. | |
| Karen L. Chandler, Principal Engineer/Scientist | |

CRANE LAKE IMPROVEMENT PROJECT (2020) (CL-3)

Review 90% plans, including review of P8 model; prepare review memo for May Commission meeting; communications with city staff, city consultant, administrator and internal staff regarding review; prepare and send approval letter to city staff; and prepare and send revised review memo to administrator.

0.4 hours @ \$175.00 per hour.....\$___

Subtotal, Jevne Park Stormwater Feasibility Study.....\$

70.00

70.00

| Karen L. Chandler, Principal Engineer/Scientist 2.3 hours @ \$175.00 per hour | \$ | 402.50 |
|---|----------|----------|
| Michael B. McKinney, Engineer/Scientist/Specialist II 0.6 hours @ \$105.00 per hour | \$ | 63.00 |
| Heather N. Hlavaty, Engineer/Scientist/Specialist II 1.3 hours @ \$100.00 per hour | \$ | 130.00 |
| Josh P. Phillips, Engineer/Scientist/Specialist II 16.4 hours @ \$95.00 per hour | \$ | 1,558.00 |
| Subtotal, Crane Lake Improvement Project | \$ | 2,153.50 |
| BRYN MAWR MEADOWS WATER QUALITY IMPROVEMENT PROJECT (2020) (BO | <u> </u> | |
| Review MnDOT memo; meet with MPRB staff; and conference call with MnDO administrator. | Γ staff | fand |
| Michelle A. Kimble, Engineer/Scientist/Specialist III 1.7 hours @ \$135.00 per hour | \$ | 229.50 |
| Josh P. Phillips, Engineer/Scientist/Specialist II 0.1 hours @ \$95.00 per hour | | 0.50 |
| 0.1 Hours @ \$95.00 per Hour | \$ | 9.50 |

JEVNE PARK STORMWATER IMPROVEMENT PROJECT (2020) (ML-21)

Look into City of Medicine Lake's question regarding need for sampling of wetland native sediments to check for contamination, including review sediment sampling locations and results from feasibility study, review historical photos/topographic maps, and meeting and communications with internal staff; and communications with administrator and Medicine Lake representatives regarding recommendation to not sample the sediments.

| James P. Herbert, Principal Engineer/Scientist 1.0 hours @ \$195.00 per hour\$ | 195.00 |
|--|----------|
| Karen L. Chandler, Principal Engineer/Scientist 4.5 hours @ \$175.00 per hour\$ | 787.50 |
| Mary K. Sands, Principal Engineer/Scientist 1.0 hours @ \$215.00 per hour\$ | 215.00 |
| Jennifer L. Brekken, Consultant/Advisor 1.3 hours @ \$155.00 per hour\$ | 201.50 |
| Brent A. Lindstrom, Engineer/Scientist/Specialist III 0.3 hours @ \$130.00 per hour\$ | 39.00 |
| Brian K. Burgner, Engineer/Scientist/Specialist II 1.4 hours @ \$95.00 per hour\$_ | 105.00 |
| Subtotal, Jevne Park Stormwater Improvement Project\$ | 1.543.00 |
| TOTAL CAPITAL IMPROVEMENTS PROJECTS (Tax Levy)\$ | 7,012.58 |

| TMDL WORK | |
|---|----------|
| TOTAL TMDL WORK\$ | 0.00 |
| IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR) | |
| IMPROVED FEMA FLOODPLAIN MODELING & MAPPING (MDNR) | |
| Hydrologic Analysis Communications with MnDNR staff regarding selection of hydrologic parameters. | |
| Karen L. Chandler, Principal Engineer/Scientist 1.8 hours @ \$175.00 per hour\$ | 315.00 |
| Ross S. Mullen, Engineer/Scientist/Specialist II 4.1 hours @ \$110.00 per hour\$ | 451.00 |
| Samantha A. Beck, Engineer/Scientist/Specialist I 5.6 hours @ \$80.00 per hour\$ | 448.00 |
| Subtotal, Hydrologic Analysis\$ | 1,214.00 |
| Hydraulic Analysis Communications with MnDNR staff regarding selection of hydraulic parameters. | |
| Ross S. Mullen, Engineer/Scientist/Specialist II 0.6 hours @ \$110.00 per hour\$ | 66.00 |
| Subtotal, Hydraulic Analysis\$ | 66.00 |
| <u>Floodplain, Floodway, and Cross section Shapefiles</u> Develop floodplain, floodway, and cross sections and depth grid inputs. | |
| Ross S. Mullen, Engineer/Scientist/Specialist II 0.3 hours @ \$110.00 per hour\$ | 33.00 |
| Joshua R. Vosejpka, Engineer/Scientist/Specialist I 3.3 hours @ \$85.00 per hour\$ | 280.50 |
| Samantha A. Beck, Engineer/Scientist/Specialist I 5.5 hours @ \$80.00 per hour\$ | 440.00 |
| Subtotal, Floodplain, Floodway, Cross Sections Data-Inputs\$ | 753.50 |
| <u>Developing Depth Grids</u> Develop floodplain, floodway, and cross sections and depth grid inputs. | |
| Ross S. Mullen, Engineer/Scientist/Specialist II 0.2 hours @ \$110.00 per hour\$ | 22.00 |

3.2 hours @ \$85.00 per hour......\$

272.00

Joshua R. Vosejpka, Engineer/Scientist/Specialist I

| Samantha A. Beck, Engineer/Scientist/Specialist I | |
|---|----------|
| 5.6 hours @ \$80.00 per hour\$_ | 448.00 |
| Subtotal, Developing Depth Grids\$ | 742.00 |
| TOTAL IMPROVED FEMA FLOODPLAIN MODELING & | |
| MAPPING (MDNR)\$ | 2,775.50 |

SUMMARY TOTALS

| Total Engineering\$ | 38,710.79 |
|--|-----------|
| Total WOMP\$ | 0.00 |
| Total APM/AIS Work\$ | 845.50 |
| Total TMDL Work\$ | 0.00 |
| Total Capital Improvement Projects (Tax Levy)\$ | 7,012.58 |
| Total Improved FEMA Floodplain Modeling & Mapping (MDNR)\$ | 2,775.50 |
| TOTAL PAYABLE\$ | 49,344.37 |

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