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engineering and environmental consultants

Ms. Catherine Cesnik
Bassett Creek Watershed Management Commission
7800 Golden Valley Road
Golden Valley, MN 55427

Page # 1
Invoice # 23270051-2021-03
Project # 23/27-0051
Client # 59
May 7, 2021

Invoice of Account with
BARR ENGINEERING COMPANY

For professional services during the period of
March 27, 2021 through April 30, 2021

1000—ENGINEERING & MONITORING

1010—Technical Services

Technical Services

Respond to administrator's questions regarding Engineering items in draft 2022 budget, including sharing flow monitoring costs with MCES at the Bassett WOMP station, partnering with the City of Plymouth TRPD on Plymouth Creek monitoring (and relation to habitat monitoring site), TMDL (P8 model) and XPSWMM model updates (including potential process for updating and adopting the FEMA XPSWMM model), and development/project review costs and revenue (including reviewing 2019 and 2020 review costs and revenues); continue to follow up on Plymouth Creek 2022 monitoring costs and alignment with City of Plymouth/TRPD program and equipment; attend April 7 meeting with Minneapolis staff regarding BCWMC XPSWMM models, FEMA model and upstream storage; respond to administrator's inquiry regarding St. Louis Park's Smart Cities Initiative; communications with St. Louis Park staff and administrator regarding scheduling annual coordination meeting with city staff; prepare for and attend April 15 meeting with MCES staff and administrator regarding MCES staff contacts, MCES chloride memo, WOMP monitoring efforts, and coordination with/between MCES and BCWMC; communications with administrator regarding responses to PRAP II program policy questions; and prepare for and attend April 26 MTD meeting with MPCA staff and MTD work group to discuss approaches to resolving annual volume determination and MTD removal efficiency.

James P. Herbert, Principal Engineer/Scientist 3.0 hours @ \$200.00 per hour.....	\$ 600.00
Karen L. Chandler, Principal Engineer/Scientist 24.8 hours @ \$185.00 per hour	\$ 4,588.00
Josh P. Phillips, Engineer/Scientist/Specialist II 3.1 hours @ \$115.00 per hour.....	\$ 356.50
Gregory Wilson, Engineer/Scientist/Specialist IV 6.9 hours @ \$175.00 per hour	\$ 1,207.50
Jennifer Koehler, Engineer/Scientist/Specialist IV 2.9 hours @ \$155.00 per hour	\$ 449.50

Chris Bonick, Engineer/Scientist/Specialist III 8.0 hours @ \$135.00 per hour	\$ 1,080.00
Meg Rattei, Engineer/Scientist/Specialist III 1.1 hours @ \$145.00 per hour	\$ 159.50
Technicians/Administrative	\$ <u>165.50</u>
<i>Subtotal, Technical Services</i>	\$ 8,606.50

Monthly Meeting Preparation

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

James P. Herbert, Principal Engineer/Scientist 2.4 hours @ \$200.00 per hour	\$ 480.00
Karen L. Chandler, Principal Engineer/Scientist 13.5 hours @ \$185.00 per hour	\$ 2,497.50
Technicians/Administrative	\$ <u>810.00</u>
<i>Subtotal, Monthly Meeting Preparation</i>	\$ 3,787.50

WCA LGU Administration

Prepare for and attend April 7 WCA PRAP meeting with BWSR staff, including prepare information and documentation.

Karen L. Chandler, Principal Engineer/Scientist 0.2 hours @ \$185.00 per hour	\$ 37.00
Karen S. Wold, Engineer/Scientist/Specialist III 6.4 hours @ \$140.00 per hour	\$ <u>896.00</u>
<i>Subtotal, WCA LGU Administration</i>	\$ 933.00
Subtotal 1010—Technical Services	\$ 13,327.00

1020—Development/Project Reviews

W Broadway Ave Bridges Reconstruction (2020-13)

Review resubmittal; and communications with applicant.

James P. Herbert, Principal Engineer/Scientist 0.2 hours @ \$200.00 per hour	\$ 40.00
Josh P. Phillips, Engineer/Scientist/Specialist II 0.8 hours @ \$115.00 per hour	\$ <u>92.00</u>
<i>Subtotal, W Broadway Ave Bridges Reconstruction (2020-13)</i>	\$ 132.00

2021 LTFM Sandburg Middle Sch (2020-31)

Project closeout, including documentation, tracking and filing; and communications with applicant.

James P. Herbert, Principal Engineer/Scientist
0.5 hours @ \$200.00 per hour \$ 100.00

Josh P. Phillips, Engineer/Scientist/Specialist II
0.4 hours @ \$115.00 per hour \$ 46.00

Subtotal, 2021 LTFM Sandburg Middle Sch (2020-31)..... \$ 146.00

4710 Killarney Dr. Shore Improvements (2020-32)

Project closeout, including documentation, tracking and filing.

Josh P. Phillips, Engineer/Scientist/Specialist II
0.5 hours @ \$115.00 per hour \$ 57.50

Subtotal, 4710 Killarney Dr. Shore Improvements (2020-32)..... \$ 57.50

Plymouth Fire Station 2 Reconstr. (2020-33)

Project closeout, including documentation, tracking and filing.

Josh P. Phillips, Engineer/Scientist/Specialist II
0.4 hours @ \$115.00 per hour \$ 46.00

Subtotal, Plymouth Fire Station 2 Reconstr. (2020-33)..... \$ 46.00

Leef Townhomes (2021-01)

Review resubmittal; and prepare and send approval letter to city staff.

Josh P. Phillips, Engineer/Scientist/Specialist II
0.6 hours @ \$115.00 per hour \$ 69.00

Subtotal, Leef Townhomes (2021-01)..... \$ 69.00

1830 Magnolia Ln Pond Maint (2021-02)

Project closeout, including documentation, tracking and filing.

Josh P. Phillips, Engineer/Scientist/Specialist II
0.5 hours @ \$115.00 per hour \$ 57.50

Subtotal, 1830 Magnolia Ln Pond Maint (2021-02)..... \$ 57.50

Ridgemount Ave Improvements (2021-03)

Project closeout, including documentation, tracking and filing.

Josh P. Phillips, Engineer/Scientist/Specialist II
0.4 hours @ \$115.00 per hour \$ 46.00

Subtotal, Ridgemount Ave Improvements (2021-03)..... \$ 46.00

Louisiana Ave Culvert Replacement (2021-04)

Communications with city staff; and project closeout, including documentation, tracking and filing.

James P. Herbert, Principal Engineer/Scientist
1.3 hours @ \$200.00 per hour \$ 260.00

Josh P. Phillips, Engineer/Scientist/Specialist II
0.4 hours @ \$115.00 per hour \$ 46.00

Subtotal, Louisiana Ave Culvert Replacement (2021-04) \$ 306.00

TGK Automotive (2021-05)

Project closeout, including documentation, tracking and filing.

Josh P. Phillips, Engineer/Scientist/Specialist II
0.4 hours @ \$115.00 per hour \$ 46.00

Subtotal, TGK Automotive (2021-05) \$ 46.00

Boone Ave Animal Hospital (2021-06)

Review submittal for floodplain, shoreline, and erosion and sediment control; prepare draft review memo for May Commission meeting; and communications with applicant.

James P. Herbert, Principal Engineer/Scientist
1.4 hours @ \$200.00 per hour \$ 280.00

Josh P. Phillips, Engineer/Scientist/Specialist II
5.0 hours @ \$115.00 per hour \$ 575.00

Edward Anderson, Engineer/Scientist/Specialist II
0.9 hours @ \$95.00 per hour \$ 85.50

Technicians/Administrative \$ 85.50

Subtotal, Boone Ave Animal Hospital (2021-06) \$ 1,026.00

Plymouth 2021 Street Rehab (2021-07)

Review grading, drainage and erosion control plans; communications with city staff regarding comments; review resubmittal; and prepare and send approval letter to city staff.

James P. Herbert, Principal Engineer/Scientist
2.3 hours @ \$200.00 per hour \$ 460.00

Josh P. Phillips, Engineer/Scientist/Specialist II
4.5 hours @ \$115.00 per hour \$ 517.50

Technicians/Administrative \$ 52.50

Subtotal, Plymouth 2021 Street Rehab (2021-07) \$ 1,030.00

Valor Place Twinhome Dev (2021-08)

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

James P. Herbert, Principal Engineer/Scientist
1.8 hours @ \$200.00 per hour \$ 360.00

Josh P. Phillips, Engineer/Scientist/Specialist II
3.2 hours @ \$115.00 per hour \$ 368.00

Technicians/Administrative \$ 63.00

Subtotal, Valor Place Twinhome Dev (2021-08) \$ 791.00

Meadowbrook ES Parking Lot Improvements (2021-09)

Preliminary review of submittal.

James P. Herbert, Principal Engineer/Scientist 0.7 hours @ \$200.00 per hour	\$ 140.00
Technicians/Administrative	\$ 85.50
<i>Subtotal, Meadowbrook ES Parking Lot Improvements (2021-09)</i>	<i>\$ 225.50</i>
Subtotal, 1020—Development/Project Reviews	\$ 3,978.50

1030—Non-Fee and Preliminary Reviews

Preliminary Reviews

Preliminary review of proposed bridge project at Courage Kenny site in Golden Valley, including communications/meeting with city staff and developer’s engineer; preliminary review and response for proposed two-home construction at 7325 Harold Ave. in Golden Valley; review contractor’s response to BCWMC comments on MDNR permit application 2020-3457 and provide recommended response to administrator; and review MDNR permit application 2021-0875 and provide email to administrator (no response required).

James P. Herbert, Principal Engineer/Scientist 6.1 hours @ \$200.00 per hour	\$ 1,220.00
Josh P. Phillips, Engineer/Scientist/Specialist II 1.1 hours @ \$115.00 per hour	\$ 126.50
<i>Subtotal, Preliminary Reviews</i>	<i>\$ 1,346.50</i>

Non-Fee Reviews

<i>Subtotal Non-Fee Reviews</i>	<i>\$ 0.00</i>
Subtotal, 1030— Non-Fee and Preliminary Reviews	\$ 1,346.50

1040—Commission and TAC Meetings

Attend April 15 Commission meeting (virtual).

Karen L. Chandler, Principal Engineer/Scientist 2.5 hours @ \$185.00 per hour	\$ 462.50
Subtotal, 1040—Commission and TAC Meetings.....	\$ 462.50

1050—Surveys and Studies

Medicine Lake Staff Gage

Follow-up communications with Medicine Lake representatives, administrator and Plymouth staff regarding installation of new staff gage; review survey and other data and internal communications.

James P. Herbert, Principal Engineer/Scientist 2.3 hours @ \$200.00 per hour	\$ 460.00
Karen L. Chandler, Principal Engineer/Scientist 1.8 hours @ \$185.00 per hour	\$ 333.00
<i>Subtotal, Medicine Lake Staff Gage</i>	<i>\$ 793.00</i>
Subtotal, 1050—Surveys and Studies	\$ 793.00

1060—Water Quality/Monitoring

General Water Quality

Communications with administrator regarding monitoring Lost Lake to determine whether the algae bloom is due to blue-green algae; coordination with staff; prepare a phytoplankton sample bottle with preservative and courier the sample bottle to Lost Lake resident.

Margaret R. Rattei, Engineer/Scientist/Specialist III	
1.4 hours @ \$145.00 per hour	\$ 203.00
Technicians/Administrative.....	\$ <u>33.00</u>
<i>Subtotal, General Water Quality.....</i>	<i>\$ 236.00</i>

Sweeney-Twin Lake 2020 Monitoring Report

Prepare for and collect samples from Sweeney Lake and Twin Lake for AIS suitability parameters; data management of lab data collected for AIS suitability analyses including QA review of data and filing data in project file; Pace laboratory charges analyses of AIS suitability parameters; create maps of Sweeney Lake and Twin Lake for the water quality monitoring reports; and prepare draft Sweeney Lake report.

Margaret R. Rattei, Engineer/Scientist/Specialist III	
2.7 hours @ \$145.00 per hour	\$ 391.50
Terri Olson, Engineer/Scientist/Specialist III	
0.3 hours @ \$150.00 per hour	\$ 45.00
Heather Hlavaty, Engineer/Scientist/Specialist II	
2.0 hours @ \$120.00 per hour	\$ 240.00
Kelly Wild, Engineer/Scientist/Specialist II	
0.3 hours @ \$105.00 per hour	\$ 31.50
Technicians/Administrative.....	\$ 290.00
Expenses (Pace Analytical).....	\$ <u>118.00</u>
<i>Subtotal, Sweeney-Twin Lake 2020 Monitoring Report.....</i>	<i>\$ 1,116.00</i>

Sweeney Branch Monitoring Year 2

Collect April 6 storm sample and April 29 grab sample and deliver the samples to the MCES lab; acid wash automatic sampler bottles from the April 6 storm event; complete maintenance work at the monitoring station; download, review, and process data; develop sampling and equipment maintenance schedule; MCES laboratory charges for the 4th quarter of 2020; Verizon charges for the April cell phone/IP account; and equipment rental charges for the conductivity meter and turbidimeter.

Chris Bonick, Engineer/Scientist/Specialist III	
0.5 hours @ \$135.00 per hour	\$ 67.50
Margaret R. Rattei, Engineer/Scientist/Specialist III	
0.3 hours @ \$145.00 per hour	\$ 43.50
Kallie Doeden, Engineer/Scientist/Specialist II	
0.1 hours @ \$110.00 per hour	\$ 11.00
Heather Hlavaty, Engineer/Scientist/Specialist II	
1.3 hours @ \$120.00 per hour	\$ 156.00

Technicians/Administrative.....	\$	409.50
Subconsultant (Met Council Enviro Services).....	\$	679.75
Expenses (Verizon/mileage/Conductivity Meter/Turbidimeter).....	\$	<u>107.89</u>
<i>Subtotal, Sweeney Branch Monitoring Year 2.....</i>	<i>\$</i>	<i>1,475.14</i>

Parkers Lake 2021 Monitoring

Communications with TRPD staff regarding 2021 Parkers Lake monitoring scope; prepare and execute contract with TRPD; and prepare phytoplankton and zooplankton sample bottles and courier to TRPD.

Karen L. Chandler, Principal Engineer/Scientist 0.5 hours @ \$185.00 per hour	\$	92.50
Margaret R. Rattei, Engineer/Scientist/Specialist III 2.4 hours @ \$145.00 per hour	\$	348.00
Technicians/Administrative	\$	135.00
Expenses (Verizon/mileage/Conductivity Meter/Turbidimeter).....	\$	<u>27.82</u>
<i>Subtotal, Parkers Lake 2021 Monitoring.....</i>	<i>\$</i>	<i>603.32</i>

Westwood Lake 2021 Monitoring

Prepare subconsultant contract for plant surveys; prepare for and collect ice-out samples from Westwood Lake on April 12; review field report and chain of custody from ice-out monitoring; expense charges for vehicle and equipment rental, mileage, and supplies.

Terri Olson, Engineer/Scientist/Specialist III 0.2 hours @ \$150.00 per hour	\$	30.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 0.9 hours @ \$145.00 per hour	\$	130.50
Heather Hlavaty, Engineer/Scientist/Specialist II 1.0 hours @ \$120.00 per hour	\$	120.00
Technicians/Administrative	\$	316.00
Expenses (mileage/vehicle/canoe/turb-meter/bottle sampler/filtration apparatus/zooplankton net/WQ meter)	\$	<u>206.68</u>
<i>Subtotal, Westwood Lake 2021 Monitoring.....</i>	<i>\$</i>	<i>803.18</i>

Crane Lake 2021 Monitoring

Prepare subconsultant contract for plant surveys; prepare for and collect ice-out samples from Crane Lake on April 12; review field report and chain of custody from ice-out monitoring; expense charges for vehicle and equipment rental, mileage, and supplies.

Terri Olson, Engineer/Scientist/Specialist III 0.1 hours @ \$150.00 per hour	\$	15.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 0.8 hours @ \$145.00 per hour	\$	116.00

Heather Hlavaty, Engineer/Scientist/Specialist II 1.0 hours @ \$120.00 per hour	\$	120.00
Technicians/Administrative	\$	307.00
Expenses (filtration apparatus).....	\$	<u>24.60</u>
<i>Subtotal, Crane Lake 2021 Monitoring.....</i>	<i>\$</i>	<i>582.60</i>
Subtotal, 1060—Water Quality/Monitoring.....	\$	4,816.24

1070—Water Quantity

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

Technicians/Administrative	\$	472.50
Expenses (mileage/vehicle)	\$	<u>73.00</u>
Subtotal, 1070—Water Quantity	\$	545.50

1080—Annual Flood Control Project Inspections

Internal meeting to discuss Long Term Maintenance Fund and future funding needs for maintenance.

James P. Herbert, Principal Engineer/Scientist 0.8 hours @ \$200.00 per hour	\$	160.00
Karen L. Chandler, Principal Engineer/Scientist 0.9 hours @ \$185.00 per hour	\$	166.50
Joe Welna, Engineer/Scientist/Specialist IV 1.0 hours @ \$155.00 per hour	\$	<u>155.00</u>
Subtotal, 1080—Annual Flood Control Project Inspections	\$	481.50

1090—Municipal Plan Review

Subtotal, 1090—Municipal Plan Review.....	\$	0.00
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1100—Watershed Outlet Monitoring Program

WOMP Rating Curve

Subtotal, 1100—Watershed Outlet Monitoring Program.....	\$	0.00
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1110—Annual XP-SWMM Model Updates/Reviews

Subtotal, 1110— Annual XP-SWMM Model Updates/Reviews...\$	\$	0.00
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1120—TMDL Implementation Reporting

SUBTOTAL, 1120—TMDL Implementation Reporting.....	\$	0.00
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SUBTOTAL, 1000—ENGINEERING & MONITORING	\$	25,750.74
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4000—OUTREACH & EDUCATION

4010—Publications/Annual Report

Subtotal, 4010—Publications/Annual Report	\$	0.00
SUBTOTAL, 4000—OUTREACH & EDUCATION	\$	0.00

CAPITAL IMPROVEMENT PROJECTS

Bryn Mawr Meadows WQ Imp Project (2020) (BC-5)

Communications with administrator and internal staff regarding split of construction work between MPRB and City of Minneapolis for the Bryn Mawr Meadows CIP project.

Karen L. Chandler, Principal Engineer/Scientist 1.8 hours @ \$185.00 per hour.....	\$	333.00
Michelle Kimble, Engineer/Scientist/Specialist IV 0.9 hours @ \$155.00 per hour	\$	139.50
Subtotal, Bryn Mawr Meadows WQ Imp Project (2020) (BC-5)...	\$	472.50

Mt Olivet Stream Restoration (2021) (ML-20)

Communications with administrator, internal staff, Plymouth staff and consultant regarding status of CIP project review and to schedule meeting.

James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$200.00 per hour.....	\$	100.00
Subtotal, Mt Olivet Stream Rest (2021) (ML-20)	\$	100.00

Parkers Lk Stream Restoration (2021) (PL-7)

Communications with administrator, internal staff, Plymouth staff and consultant regarding status of CIP project review and to schedule meeting.

Karen L. Chandler, Principal Engineer/Scientist 0.5 hours @ \$185.00 per hour.....	\$	92.50
Subtotal, Parkers Lk Stream Restoration (2021) (PL-7)	\$	92.50

DeCola Ponds - SEA School/Wildwood Park Flood Storage Project Feasibility Study (2022) (BC-2, 3, 8, 10)

Perform environmental desktop review and summary for feasibility study report; prepare draft permitting summary for feasibility report; review City pre-recorded presentation/information to prepare for virtual public meeting; attend virtual public meeting; follow-up from virtual public meeting; compile public input comments; draft feasibility report; discuss recommendations with administrator and Golden Valley staff based on public comments; internal review of feasibility report and finalize draft feasibility report; submit draft feasibility report to administrator and Golden Valley staff for review; and develop draft feasibility study presentation for the May Commission meeting.

Karen L. Chandler, Principal Engineer/Scientist 6.8 hours @ \$185.00 per hour.....	\$	1,258.00
Jennifer Brekken, Engineer/Scientist/Specialist IV 1.8 hours @ \$165.00 per hour.....	\$	297.00
Jennifer Koehler, Engineer/Scientist/Specialist IV 15.4 hours @ \$155.00 per hour	\$	2,387.00

Tyler Conley, Engineer/Scientist/Specialist II
1.4 hours @ \$100.00 per hour \$ 140.00

Katelyn Turpin-Nagel, Engineer/Scientist/Specialist II
17.8 hours @ \$120.00 per hour \$ 2,136.00

**Subtotal, DeCola Ponds - SEA School/Wildwood Park Flood
Storage Project Feasibility Study (2022) (BC-2, 3, 8, 10) \$ 6,218.00**

Medley Park Stormwater Treatment Facility Feasibility Study (2022) (ML-12)

Develop draft feasibility report for internal review and finalize draft feasibility report; submit draft feasibility report to administrator and Golden Valley staff for review; develop draft feasibility study presentation for May Commission meeting; and develop spreadsheet summarizing comments from public engagement #2 event.

Karen L. Chandler, Principal Engineer/Scientist
9.3 hours @ \$185.00 per hour \$ 1,720.50

Tyler Olsen, Engineer/Scientist/Specialist II
9.1 hours @ \$105.00 per hour \$ 955.50

Katelyn Turpin-Nagel, Engineer/Scientist/Specialist II
19.3 hours @ \$120.00 per hour \$ 2,316.00

**Subtotal, Medley Park Stormwater Treatment Facility
Feasibility Study (2022)(ML-12) \$ 4,992.00**

Schaper Pond Carp Management (SL-3)

Follow-up communications with Carp Solutions regarding carp control options; and summarize carp control options.

Gregory J. Wilson, Engineer/Scientist/Specialist IV
2.7 hours @ \$175.00 per hour \$ 472.50

Subtotal, Schaper Pond Carp Management (SL-3) \$ 472.50

SUBTOTAL CAPITAL IMPROVEMENTS PROJECTS \$ 12,050.00

INVOICE SUMMARY

ACCOUNTING CODE	BUDGET LINE ITEM	INVOICE AMOUNT
1000	ENGINEERING & MONITORING	
1010	Technical Services	\$ 13,327.00
1020	Development/Project Reviews	\$ 3,978.50
1030	Non-fee and Preliminary Reviews	\$ 1,346.50
1040	Commission and TAC Meetings	\$ 462.50
1050	Surveys and Studies	\$ 793.00
1060	Water Quality/Monitoring	\$ 4,816.24
1070	Water Quantity	\$ 545.50
1080	Annual Flood Control Project Inspections	\$ 481.50
1090	Municipal Plan Review	\$ -
1100	Watershed Outlet Monitoring Program	\$ -
1110	Annual XP-SWMM Model Updates/Reviews	\$ -
1120	TMDL Implementation Reporting	\$ -
1000	SUBTOTAL ENGINEERING & MONITORING	\$ 25,750.74
4000	OUTREACH & EDUCATION	
4010	Publications/Annual Report	\$ -
4000	SUBTOTAL OUTREACH & EDUCATION	\$ -
--	SUBTOTAL CAPITAL IMPROVEMENT PROJECTS	\$ 12,347.50
TOTAL PAYABLE		\$ 38,098.24

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



Capital Improvement Projects

Bryn Mawr Water Quality Improvement (BC-5) = \$472.50

Mt. Olivet Stream Restoration (ML-20) = \$100.00

Parkers Lake Drainage Improvement (PL-7) = \$92.50

DeCola Ponds SEA School-Wildwood (2022) (BC-2,3,8,10) = \$6,218.00

Medley Park Stormwater Facility (ML-12) = \$4,992.00

Schaper Pond Improvement Project (SL-3) = \$472.50