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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 # 23270051-2021-05  
Project # 23/27-0051  
Client # 59  
July 2, 2021

Invoice of Account with  
BARR ENGINEERING COMPANY

For professional services during the period of  
May 29, 2021 through June 25, 2021

**1000—ENGINEERING & MONITORING**

**1010—Technical Services**

Technical Services

Communications with administrator and Chair Cesnik regarding meeting lengths; internal communications regarding Flood Control Project budgeting meeting; communications with Medicine Lake consultant regarding Medicine Lake OHW; locate Sweeney Lake elevation information; communications with administrator regarding TAC meeting; and communications with administrator regarding potential State shutdown impact on projects.

Karen L. Chandler, Principal Engineer/Scientist 4.1 hours @ \$185.00 per hour.....	\$	758.50
<i>Subtotal, Technical Services</i> .....	\$	758.50

Monthly Meeting Preparation

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

James P. Herbert, Principal Engineer/Scientist 1.1 hours @ \$200.00 per hour.....	\$	220.00
Karen L. Chandler, Principal Engineer/Scientist 19.7 hours @ \$185.00 per hour .....	\$	3,644.50
Technicians/Administrative .....	\$	690.00
<i>Subtotal, Monthly Meeting Preparation</i> .....	\$	4,554.50
<b>Subtotal 1010—Technical Services</b> .....	<b>\$</b>	<b>5,313.00</b>

**1020—Development/Project Reviews**

TGK Automotive (2021-05)

Project close-out.

Josh P. Phillips, Engineer/Scientist/Specialist II	
0.3 hours @ \$115.00 per hour .....	\$ 34.50
<i>Subtotal, TGK Automotive (2021-05) .....</i>	<i>\$ 34.50</i>

Meadowbrook ES Parking Lot Improvements (2021-09)

Review submittal for water quality, rate control, and erosion and sediment control; prepare and send comment letter to city staff; and communications with city staff.

James P. Herbert, Principal Engineer/Scientist	
2.0 hours @ \$200.00 per hour .....	\$ 400.00
Josh P. Phillips, Engineer/Scientist/Specialist II	
3.7 hours @ \$115.00 per hour .....	\$ 425.50
<i>Subtotal, Meadowbrook ES Parking Lot Improvements (2021-09) .....</i>	<i>\$ 825.50</i>

Hollydale Residential Development (2021-10)

Review submittal for water quality, rate control, floodplain, and erosion and sediment control, including review of proposed stormwater reuse system (and calculator inputs and results); prepare draft review memo and provide to administrator for review; prepare final memo for June Commission meeting and provide to administrator; provide XPSWMM model to applicant and preliminary review of model results; review resubmittal; prepare and send comment (and extension) letter to city staff; review commissioner comments from June Commission meeting; meeting with administrator and Commissioner Harwell regarding June meeting comments; and communications with administrator, Commission attorney, Plymouth staff, developer, owner, and developer's engineer.

James P. Herbert, Principal Engineer/Scientist	
15.8 hours @ \$200.00 per hour .....	\$ 3,160.00
Karen L. Chandler, Principal Engineer/Scientist	
11.9 hours @ \$185.00 per hour .....	\$ 2,201.50
Jennifer Koehler, Engineer/Scientist/Specialist IV	
1.2 hours @ \$155.00 per hour .....	\$ 186.00
Edward Anderson, Engineer/Scientist/Specialist II	
1.1 hours @ \$95.00 per hour .....	\$ 104.50
Kimberly Baker, Engineer/Scientist/Specialist II	
0.5 hours @ \$110.00 per hour .....	\$ 55.00
Josh P. Phillips, Engineer/Scientist/Specialist II	
49.7 hours @ \$115.00 per hour .....	\$ 5,715.50
Lulu Fang, Engineer/Scientist/Specialist II	
4.2 hours @ \$115.00 per hour .....	\$ 483.00
Katelyn Turpin-Nagel, Engineer/Scientist/Specialist II	
0.3 hours @ \$120.00 per hour .....	\$ 36.00
<i>Subtotal, Hollydale Residential Development (2021-10) .....</i>	<i>\$ 11,941.50</i>

Plymouth Creek Parking Lot Reconstruction (2021-11)

Review submittal for water quality, rate control, floodplain, and erosion and sediment control; prepare and send comment letter to city staff; review resubmittals; and communications with city staff.

James P. Herbert, Principal Engineer/Scientist 0.7 hours @ \$200.00 per hour .....	\$ 140.00
Josh P. Phillips, Engineer/Scientist/Specialist II 5.7 hours @ \$115.00 per hour .....	\$ <u>655.50</u>
<i>Subtotal, Plymouth Creek Parking Lot Reconstruction (2021-11) .....</i>	<i>\$ 795.50</i>

Taco Bell, Minnetonka (2021-12)

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

James P. Herbert, Principal Engineer/Scientist 0.6 hours @ \$200.00 per hour .....	\$ 120.00
Josh P. Phillips, Engineer/Scientist/Specialist II 2.8 hours @ \$115.00 per hour .....	\$ <u>322.00</u>
<i>Subtotal, Taco Bell, Minnetonka (2021-12).....</i>	<i>\$ 442.00</i>

Carousel Auto Parking Expansion (2021-13)

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

James P. Herbert, Principal Engineer/Scientist 1.0 hours @ \$200.00 per hour .....	\$ 200.00
Josh P. Phillips, Engineer/Scientist/Specialist II 4.2 hours @ \$115.00 per hour .....	\$ <u>483.00</u>
<i>Subtotal, Carousel Auto Parking Expansion (2021-13).....</i>	<i>\$ 683.00</i>

Regency Hospital Expansion (2021-15)

Preliminary review of grading, drainage, and erosion control plans.

James P. Herbert, Principal Engineer/Scientist 0.5 hours @ \$200.00 per hour .....	\$ 100.00
Josh P. Phillips, Engineer/Scientist/Specialist II 0.3 hours @ \$115.00 per hour .....	\$ 34.50
Technicians/Administrative.....	\$ 63.00
Expenses (Postage).....	\$ <u>0.51</u>
<i>Subtotal, Regency Hospital Expansion (2021-15).....</i>	<i>\$ 198.01</i>

Hollydale Dev. (Remediation) (2021-10A)

Preliminary review of grading, drainage and erosion control plans; and communications with city staff, construction contractor, and internal staff.

James P. Herbert, Principal Engineer/Scientist 2.4 hours @ \$200.00 per hour .....	\$ 480.00
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Josh P. Phillips, Engineer/Scientist/Specialist II		
0.2 hours @ \$115.00 per hour .....	\$	23.00
Technicians/Administrative.....	\$	<u>63.00</u>
<i>Subtotal, Hollydale Dev. (Remediation) (2021-10A)</i> .....	\$	566.00
<b>Subtotal, 1020—Development/Project Reviews .....</b>	<b>\$</b>	<b>15,486.01</b>

**1030—Non-Fee and Preliminary Reviews**

Preliminary Reviews

Communications with Golden Valley staff regarding upcoming MnDOT Hwy 55 culvert repair work and floodplain elevation at 1410 Louisiana Ave; preliminary review of Schiebel Addition Submittal in Plymouth (found BCWMC review not necessary so City withdrew application); and provide XPSWMM model to consultant for project at Fruen Mill site in Minneapolis.

James P. Herbert, Principal Engineer/Scientist		
2.3 hours @ \$200.00 per hour .....	\$	460.00
Karen L. Chandler, Principal Engineer/Scientist		
0.5 hours @ \$185.00 per hour .....	\$	92.50
Jennifer Koehler, Engineer/Scientist/Specialist IV		
1.0 hours @ \$155.00 per hour .....	\$	155.00
Josh P. Phillips, Engineer/Scientist/Specialist II		
0.2 hours @ \$115.00 per hour .....	\$	23.00
Technicians/Administrative.....	\$	<u>52.50</u>
<i>Subtotal, Preliminary Reviews</i> .....	\$	783.00

Non-Fee Reviews

<i>Subtotal Non-Fee Reviews</i> .....	\$	0.00
<b>Subtotal, 1030— Non-Fee and Preliminary Reviews .....</b>	<b>\$</b>	<b>783.00</b>

**1040—Commission and TAC Meetings**

Attend June 17 Commission meeting (virtual).

Karen L. Chandler, Principal Engineer/Scientist		
3.4 hours @ \$185.00 per hour .....	\$	629.00
Josh P. Phillips, Engineer/Scientist/Specialist II		
2.3 hours @ \$115.00 per hour .....	\$	<u>264.50</u>
<b>Subtotal, 1040—Commission and TAC Meetings.....</b>	<b>\$</b>	<b>893.50</b>

**1050—Surveys and Studies**

<b>Subtotal, 1050—Surveys and Studies .....</b>	<b>\$</b>	<b>0.00</b>
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**1060—Water Quality/Monitoring**

General Water Quality

Communications with administrator regarding question from resident about Sweeney Lake algae issue; communications with Plymouth staff, administrator, and internal staff regarding BCWMC

stream chloride monitoring data request and provide Commission and WOMP station stream chloride monitoring data to Plymouth staff; and review MDNR's fish IBI information for Medicine Lake and provide to administrator.

Karen L. Chandler, Principal Engineer/Scientist 1.7 hours @ \$185.00 per hour .....	\$	314.50
Gregory Wilson, Engineer/Scientist/Specialist IV 0.5 hours @ \$175.00 per hour .....	\$	87.50
Greg Williams, Engineer/Scientist/Specialist III 0.5 hours @ \$150.00 per hour .....	\$	<u>75.00</u>
<i>Subtotal, General Water Quality</i> .....	\$	<i>477.00</i>

Sweeney-Twin Lake 2020 Monitoring Report

Review and edit draft Sweeney Lake and Twin Lake 2020 water quality monitoring reports, including report figures; internal communications regarding draft reports; and develop draft Sweeney Lake and Twin Lake presentation for July Commission meeting.

Karen L. Chandler, Principal Engineer/Scientist 3.4 hours @ \$185.00 per hour .....	\$	629.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 5.6 hours @ \$145.00 per hour .....	\$	812.00
Kelly Wild, Engineer/Scientist/Specialist II 0.5 hours @ \$105.00 per hour .....	\$	52.50
Technicians/Administrative .....	\$	<u>689.00</u>
<i>Subtotal, Sweeney-Twin Lake 2020 Monitoring Report</i> .....	\$	<i>2,182.50</i>

Medicine Lake 2020 Monitoring Report

Create total phosphorus, dissolved oxygen, temperature, and specific conductance isopleths from 2020 monitoring data; complete trend analyses of total phosphorus, chlorophyll *a*, and Secchi disc transparency for 2011 through 2020 data, including set up and review of EPA ProUCL software, complete trend analyses, and adjust graphs to show y-intercepts; and prepare draft Medicine Lake 2020 water quality monitoring report, including reviewing 2020 aquatic plant data, computing and graphing plant IBI, summarizing water quality data for report, creating report figures, and writing report.

Evan Christianson, Engineer/Scientist/Specialist IV 1.3 hours @ \$170.00 per hour .....	\$	221.00
Chris Bonick, Engineer/Scientist/Specialist III 6.0 hours @ \$135.00 per hour .....	\$	810.00
Kevin Menken, Engineer/Scientist/Specialist III 0.5 hours @ \$125.00 per hour .....	\$	62.50
Margaret R. Rattei, Engineer/Scientist/Specialist III 34.1 hours @ \$145.00 per hour .....	\$	4,944.50
Technicians/Administrative .....	\$	<u>1,393.00</u>
<i>Subtotal, Medicine Lake 2020 Monitoring Report</i> .....	\$	<i>7,431.00</i>

Sweeney Branch Monitoring Year 2

Plan for Sweeney Branch monitoring and equipment maintenance; internal communications; troubleshoot modem issues at Sweeney Branch site (modem was not connecting to the network); acid wash sample bottles from May 27 storm event; and calibrate the YSI meter in preparation for the June grab sample event.

Margaret R. Rattei, Engineer/Scientist/Specialist III		
0.5 hours @ \$145.00 per hour .....	\$	72.50
Kallie Doeden, Engineer/Scientist/Specialist II		
2.1 hours @ \$110.00 per hour .....	\$	231.00
Technicians/Administrative.....	\$	93.00
Expenses (Verizon/Mileage).....	\$	<u>57.52</u>
<i>Subtotal, Sweeney Branch Monitoring Year 2.....</i>	<i>\$</i>	<i>454.02</i>

Parkers Lake 2021 Monitoring

Review log-in paperwork from Pace Laboratories and file chain-of-custody and lab acknowledgement in database and project file folders; and internal communications.

Terri Olson, Engineer/Scientist/Specialist III		
0.1 hours @ \$150.00 per hour .....	\$	15.00
Technicians/Administrative.....	\$	<u>49.50</u>
<i>Subtotal, Parkers Lake 2021 Monitoring.....</i>	<i>\$</i>	<i>64.50</i>

Westwood Lake 2021 Monitoring

Prepare for and complete June 15 lake water quality monitoring; complete post-monitoring tasks including transfer of photos, chain of custody, and field data to project folders; review log-in paperwork from Pace Laboratories and file chain-of-custody and lab acknowledgement in database and project file folders; and internal communications; expenses include Pace Analytical Services Inc. charges for April 12 ice-out samples and equipment charges for June 15 monitoring event.

Kevin Menken, Engineer/Scientist/Specialist III		
2.0 hours @ \$125.00 per hour .....	\$	250.00
Terri Olson, Engineer/Scientist/Specialist III		
0.1 hours @ \$150.00 per hour .....	\$	15.00
Margaret R. Rattei, Engineer/Scientist/Specialist III		
0.7 hours @ \$145.00 per hour .....	\$	101.50
Technicians/Administrative.....	\$	318.50
Expenses (Pace Analytical/filtration apparatus).....	\$	<u>156.60</u>
<i>Subtotal, Westwood Lake 2021 Monitoring.....</i>	<i>\$</i>	<i>841.60</i>

Crane Lake 2021 Monitoring

Prepare for and complete June 15 lake water quality monitoring; complete post-monitoring tasks, including transfer of photos, chain of custody, and field data to project folders; review log-in paperwork from Pace Laboratories and file chain-of-custody and lab acknowledgement in database and project file

folders; and internal communications; expenses include Pace Analytical Services Inc. charges for April 12 ice-out samples and equipment charges for June 15 monitoring event.

Kevin Menken, Engineer/Scientist/Specialist III 2.0 hours @ \$125.00 per hour .....	\$ 250.00
Terri Olson, Engineer/Scientist/Specialist III 0.1 hours @ \$150.00 per hour .....	\$ 15.00
Margaret R. Rattei, Engineer/Scientist/Specialist III 0.7 hours @ \$145.00 per hour .....	\$ 101.50
Technicians/Administrative.....	\$ 318.50
Expenses (Pace Analytical/filtration apparatus/vehicle/canoe/ice/ bottle sampler/mileage/water quality meter/zooplankton net) .....	\$ 302.15
<i>Subtotal, Crane Lake 2021 Monitoring</i> .....	\$ 987.15
<b>Subtotal, 1060—Water Quality/Monitoring</b> .....	<b>\$ 12,437.77</b>

**1070—Water Quantity**

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

Technicians/Administrative .....	\$ 420.00
Expenses (mileage/vehicle) .....	\$ 73.00
<b>Subtotal, 1070—Water Quantity</b> .....	<b>\$ 493.00</b>

**1080—Annual Flood Control Project Inspections**

<b>Subtotal, 1080—Annual Flood Control Project Inspections</b> .....	<b>\$ 0.00</b>
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**1090—Municipal Plan Review**

<b>Subtotal, 1090—Municipal Plan Review</b> .....	<b>\$ 0.00</b>
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**1100—Watershed Outlet Monitoring Program**

WOMP Rating Curve

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

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

<b>Subtotal, 1120—TMDL Implementation Reporting</b> .....	<b>\$ 0.00</b>
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<b>SUBTOTAL, 1000—ENGINEERING &amp; MONITORING</b> .....	<b>\$ 35,406.28</b>
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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**

Schaper Pond Carp Management (SL-3)

Develop matrix comparison of carp control options; and communications with administrator and internal staff regarding timing of carp management discussion at Commission meeting and meeting with Golden Valley staff.

Karen L. Chandler, Principal Engineer/Scientist  
 0.8 hours @ \$185.00 per hour .....\$ 148.00

Gregory Wilson, Engineer/Scientist/Specialist IV  
 3.6 hours @ \$175.00 per hour .....\$ 630.00

*Subtotal, Schaper Pond Carp Management (SL-3).....\$ 778.00*

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

Review 60% plans and submittal; prepare draft comments on plans; prepare for and attend June 8 meeting with administrator, Plymouth staff and consultant regarding draft comments on 60% plans; prepare draft memo for June Commission meeting regarding 60% plans and provide to administrator for review; prepare review memo for June Commission meeting and provide to administrator; prepare draft review letter regarding 60% plans and send to administrator and internal staff for review; revise and send final comment letter to Plymouth staff; and communications with administrator, Plymouth staff and consultant.

Karen L. Chandler, Principal Engineer/Scientist  
 6.6 hours @ \$185.00 per hour.....\$ 1,221.00

Peter Hinck, Engineer/Scientist/Specialist III  
 5.0 hours @ \$145.00 per hour.....\$ 725.00

*Subtotal, Mt Olivet Stream Rest (2021) (ML-20).....\$ 1,946.00*

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

Review 60% plans and submittal; prepare draft comments on plans; prepare for and attend June 8 meeting with administrator, Plymouth staff and consultant regarding draft comments on 60% plans; prepare draft memo for June Commission meeting regarding 60% plans and provide to administrator for review; prepare review memo for June Commission meeting and provide to administrator; prepare draft review letter regarding 60% plans and send to administrator and internal staff for review; revise and send final comment letter to Plymouth staff; and communications with administrator, Plymouth staff and consultant.

Karen L. Chandler, Principal Engineer/Scientist  
 6.4 hours @ \$185.00 per hour.....\$ 1,184.00

Peter Hinck, Engineer/Scientist/Specialist III  
 5.3 hours @ \$145.00 per hour.....\$ 768.50

*Subtotal, Parkers Lk Stream Restoration (2021) (PL-7).....\$ 1,952.50*

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

Finalize feasibility report and submit to administrator and Golden Valley staff; follow-up communications with Golden Valley staff regarding project cost details and reduced report (for



submittal to MDNR); and develop Concept 3 draft easement figures to begin conversations with SEA School.

Jennifer Koehler, Engineer/Scientist/Specialist IV	
4.0 hours @ \$155.00 per hour.....	\$ 620.00
Katelyn Turpin-Nagel, Engineer/Scientist/Specialist II	
1.1 hours @ \$120.00 per hour.....	\$ <u>132.00</u>
<i>Subtotal, DeCola Ponds - SEA School/Wildwood Park Flood Storage</i>	
<i>Project Feasibility Study (2022) (BC-2, 3, 8, 10).....</i>	<i>\$ 752.00</i>

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

Internal discussion regarding aquatic plant management; prepare for and attend June 2 meeting with administrator and Golden Valley staff regarding additional water quality treatment options; review/edit report revisions, including internal meeting; compile final report and provide to administrator for June Commission meeting; prepare cover memo for June Commission meeting and provide to administrator; provide final report to Golden Valley staff; prepare draft and final presentation for June Commission meeting; communications with administrator to discuss June Commission meeting; prepare for and attend June Commission meeting to present final report; and communications with internal staff regarding next steps.

Karen L. Chandler, Principal Engineer/Scientist	
5.6 hours @ \$185.00 per hour.....	\$ 1,036.00
Joseph Bischoff, Consultant/Advisor	
0.5 hours @ \$190.00 per hour.....	\$ 95.00
Tyler Olsen, Engineer/Scientist/Specialist II	
3.5 hours @ \$105.00 per hour.....	\$ 367.50
Katelyn Turpin-Nagel, Engineer/Scientist/Specialist II	
17.4 hours @ \$120.00 per hour.....	\$ <u>2,088.00</u>
<i>Subtotal, Medley Park Stormwater Treatment Facility Feasibility</i>	
<i>Study (2022)(ML-12).....</i>	<i>\$ 3,586.50</i>

Main Stem Lagoon Dredging Project (2021) (BC-7)

Begin preparing 50% drawings; internal review/edits; and internal communications.

Karen L. Chandler, Principal Engineer/Scientist	
0.5 hours @ \$185.00 per hour.....	\$ 92.50
Patrick Brockamp, Engineer/Scientist/Specialist III	
4.1 hours @ \$125.00 per hour.....	\$ 512.50
Alec Bateman, Engineer/Scientist/Specialist II	
16.9 hours @ \$100.00 per hour.....	\$ <u>1,690.00</u>
<i>Subtotal, Main Stem Lagoon Dredging Project (2021)(BC-7).....</i>	
	<i>\$ 2,295.00</i>

**SUBTOTAL CAPITAL IMPROVEMENTS PROJECTS.....\$ 11,310.00**

**INVOICE SUMMARY**

<b>ACCOUNTING CODE</b>	<b>BUDGET LINE ITEM</b>	<b>INVOICE AMOUNT</b>
<b>1000</b>	<b>ENGINEERING &amp; MONITORING</b>	
1010	Technical Services	\$ 5,313.00
1020	Development/Project Reviews	\$ 15,486.01
1030	Non-fee and Preliminary Reviews	\$ 783.00
1040	Commission and TAC Meetings	\$ 893.50
1050	Surveys and Studies	\$ -
1060	Water Quality/Monitoring	\$ 12,437.77
1070	Water Quantity	\$ 493.00
1080	Annual Flood Control Project Inspections	\$ -
1090	Municipal Plan Review	\$ -
1100	Watershed Outlet Monitoring Program	\$ -
1110	Annual XP-SWMM Model Updates/Reviews	\$ -
1120	TMDL Implementation Reporting	\$ -
<b>1000</b>	<b>SUBTOTAL ENGINEERING &amp; MONITORING</b>	<b>\$ 35,406.28</b>
<b>4000</b>	<b>OUTREACH &amp; EDUCATION</b>	
4010	Publications/Annual Report	\$ -
<b>4000</b>	<b>SUBTOTAL OUTREACH &amp; EDUCATION</b>	<b>\$ -</b>
--	<b>SUBTOTAL CAPITAL IMPROVEMENT PROJECTS</b>	<b>\$ 11,310.00</b>
<b>TOTAL PAYABLE</b>		<b>\$ 46,716.28</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.

