MARTIN SANITARY DIVERSION DRAIN INTRA-COUNTY DRAINAGE BOARD DECEMBER 13, 2021 10:00 A.M. AGENDA

NOTE: THIS MEETING WILL BE HELD IN PERSON WITH TELECONFERENCE OPTION

Call in Number: 1-423-720-0191 Access Code: 311 154 467

		Page
1.	Call of meeting to order and roll call	
2.	Approval of Agenda for December 13, 2021	
3.	Approval of Minutes for November 8, 2021	3
4.	Public Participation	
5.	Project Update – Vince Astorino	5
6.	Martin Flushing System Construction Contract Administration Recommendation - Vincent Astorino	7
	Motion: To award the CCA change order to Fishbeck and AEW in the total amount of \$90,000 to perform the work associated with the Martin Flushing System CCA services.	
7.	Consideration for approval of invoices (see attached)	16
8.	Financial Report – Bruce Manning	17
9.	Adjourn	

STORMWATER PS

RETENTION TREATMENT BASIN

GRAVITY INTERCEPTOR

OVERFLOW POINT

ALGER PS

ASSET LEGEND

 \boxtimes

MARTIN SYSTEM MAP

Southeast Macomb Sanitary District Macomb County, MI

Wastewater Master Plan

Hard copy is intended to be 8.5"x11" when plotted. Scale(s) indicated and graphic quality may not be accurate for

any other size.

PROJECT NO. 181053

SYSTEM LEGEND (AS OF DATE OF PUBLICATION) SYSTEM BOUNDARY **DISTRICT LEGEND** (AS OF DATE OF PUBLICATION) 8 1/2 MILE RELIEF DRAIN DRAINAGE DISTRICT SOUTHEAST MACOMB COUNTY WASTEWATER DISPOSAL SYSTEM MARTIN SANITARY DIVERSION DISTRICT SOUTHEAST MACOMB SANITARY DISTRICT NORTHEAST SEWAGE DISPOSAL SYSTEM MILK RIVER INTERCOUNTY DRAIN DRAINAGE DISTRICT LOCAL MUNICIPALITY OTHER

KELLY LATERAL

VERONICA RELIEF

TIME: 7:48:58 AM USER: MESEDKI

An adjourned meeting of the Intra-County Drainage Board for the **MARTIN SANITARY DIVERSION DRAIN** was held in the Office of the Macomb County Public Works Commissioner, 21777 Dunham, Clinton Township, Michigan, and virtually per the State Public Act 254 of 2020, on November 8, 2021, at 10:00 A.M.

PRESENT:

Candice S. Miller, Chair

Bryan Santo, Member

Harold Haugh, Member

ALSO PRESENT: Veronica Klinefelt, Don VanSyckel, Macomb County Board of Commissioners; Brian Baker, Chief Deputy, Stephen Downing, Construction & Maintenance Manager, Bruce Manning, Financial Manager, Vince Astorino, Operations & Flow Manager, Kellie Kource, Drain Account Specialist, Norb Franz, Communications Manager, Dan Acciavatti, Deputy Government Relations, Macomb County Public Works

The meeting was called to order by the Chair, Candice S. Miller. A motion was made by Mr. Haugh, supported by Mr. Santo to approve the agenda as presented.

Adopted:

YEAS: 3

NAYS: 0

Minutes of the meeting of October 18, 2021 were presented. A motion was made by Mr. Haugh, supported by Mr. Santo to approve the minutes as presented.

Adopted:

YEAS: 3

NAYS: 0

The meeting was opened to public participation, then closed, there being no comments from the public.

Mr. Astorino updated the board that there were 2 wet weather events, one on October 25th with 2.34 inches of rain resulting in 50.4 million gallons of treated discharge. The other event was on October 29th with 1.02 inches of rain with 23.3 million gallons of treated discharge due to not having fully recovered from the first event. There were no issues at the pump station.

The disinfection project is closed out.

The flushing project will begin around January 2022.

A motion was made by Mr. Santo, supported by Mr. Haugh to receive and file the project update by Mr. Astorino.

Adopted:

YEAS: 3

NAYS: 0

The Chair presented the invoices totaling \$104,866.27 to the board for review and approval.

A motion was made by Mr. Santo, supported by Mr. Haugh to approve the invoices as presented.

Adopted:

YEAS: 3

NAYS: 0

A motion to receive and file the financial report given by Mr. Manning was made by Mr. Santo and supported by Mr. Haugh.

Adopted:

YEAS: 3

NAYS: 0

There being no further business, it was moved by Mr. Haugh, supported by Mr. Santo that the meeting of the Martin Sanitary Diversion Drain Board be adjourned.

Adopted:

YEAS: 3

NAYS: 0

The meeting was adjourned at 10:09 a.m.

Candice S. Miller, Chair

Macomb County Public Works Commissioner

STATE OF MICHIGAN COUNTY OF MACOMB

I certify that the foregoing is a true and correct copy of proceedings taken by the Intra-County Drainage Board for the Drainage District shown on the attached set of minutes, on November 8, 2021 the original of which is on file in the Public Works Commissioner's Office. Public notice of the meeting was given pursuant to Act No. 267, Public Acts of Michigan, 1975, including, in the case of a special or rescheduled meeting or a meeting secured for more than 36 hours, notice by posting at least 18 hours prior to the time set for the meeting.

Candice S. Miller, Chair

Macomb County Public Works Commissioner

DATED: 11/8/21

Candice S. Miller



Public Works Commissioner Macomb County

To: Martin Sanitary Diversion Drainage District Board Members

CC: File

From: Vincent Astorino, Operations & Flow Manager

Date: December 13, 2021

Subject: Construction Projects Status Updates for the December 2021 Board Meeting

The following provides a status update for construction work completed within the Martin Sanitary Diversion Drain District (MSDDD) for the previous month.

Wet Weather Operations

There were no wet weather events for the month of November.

Martin Flushing Improvements Project

Contractor: L. D'Agostini & Sons, Inc.

Engineering Consultant: AEW

Project Description:

This project consists of the installation of two small sluice gates and a concrete weir within the Martin Retention Treatment Basin (RTB) to aid in flushing sediment and debris. The existing piped flushing systems at the facility are largely abandoned and require the use of storm water or lake water to as the water source. This adds cost since these sources ultimately become metered flow. In 2016, MCPWO obtained approval from EGLE for a pilot program to use dryweather flow in the Martin Drain as the flushing water source. This program involves installing temporary stoplogs within the influent channel of the RTB to divert flow through the three main zones within the RTB. This program was successful but requires manned-entries to install and reconfigure the stoplogs. The completion of this project will provide remotely-operated gates and a passive weir to direct flow where needed.

Significant project tasks that have occurred over the past month:

- 1. Reviewed and approved initial shop drawings and set project schedule
- 2. Ordered two (2) 42"x42" stainless steel sluice gates (expected to be delivered mid-April 2022)

Construction Costs:

	Date (if applicable)	Amount
Original Contract Amount	10/19/21	\$610,049.34
Change Order	-	1
Revised Contract Amount	-	1
Total Spent to Date	-	-
Remaining Budget		\$610,049.34



Figure 1 – Example sluice gate





Public Works Commissioner Macomb County

To: Martin Sanitary Diversion Drainage District (MSDDD) Board Members

CC: File

From: Vincent Astorino, Operations & Flow Manager

Date: December 13, 2021

Subject: Martin Flushing System Construction Contract Administration (CCA) Recommendation

Macomb County Public Works Office (MCPWO), on behalf of the Martin Sanitary Diversion Drainage District, has developed a plan to retrofit the existing flushing system at the Martin Retention Basin (RTB). In 2005, the existing Martin flushing system which utilized the 10 Mile Drain water to be pumped into the facility through multiple zones was abandoned due to PCB's being identified within that drain. In 2015, a confined space entry was performed in the Martin RTB and it was found that the lack of any flushing being performed since 2008, which was the last documented time that the RTB was cleaned, had caused up to approximately 12 inches of sludge to build up. This accumulated debris reduced the storage volume by approximately 1 million gallons and contributed to water quality values that were on the border of being poor to be sent to the lake.

In 2015, MCPWO worked with Anderson, Eckstein, and Westrick, Inc. (AEW) to evaluate several options to correct the flushing system at this facility. The top option that was selected to be evaluated further was a concept that would use the dry weather flow already in the system. This would be accomplished by closing gates in the system to store sewage and then installation of new gates within the basin to force that stored water through different zones. To test this option, a pilot study was commenced using manually controlled stop logs by MCWO staff. This pilot was a success and has since been able to keep the basin free of settled sludge build up within the RTB. Not only was this option the cheapest to construct but it will also provide significant long-term savings to the rate payers. The reason for this is that it utilizes the existing dry weather sewage within the system instead of pumping in drain/lake water that would need to be treated ultimately by GLWA.

In December 2020, MCPWO started design with AEW and Fishbeck for the permanent flushing solution. Design has since been finished and MCPWO has gone out to a competitive bidding process in which L. D'Agostini & Sons was the lowest qualified bidder at \$610,049.34.

MCPWO has worked with the design team to provide a proposal for construction contract administration costs for this project. You will find that proposal attached which is requesting \$102,004.65 for that task. Since design finished \$12,004.65 under budget the total increase will be \$90,000.00 for CCA services. A breakdown of this is in the table below.

Task	Amount	Budgeted Amount
Design	\$69,960.00	
Construction Contract	\$610,049.34	
CCA Services	\$90,000	
Total	\$770,009.34	\$865,000.00

MCPWO staff is recommending to award the CCA change order to Fishbeck and AEW in the total amount of \$90,000 to perform the work associated with the Martin Flushing System CCA services.

Attachments: Fishbeck & AEW CCA Proposal - Dated November 5, 2021

	Change Or	Change Order No.								
Date of Issuance: 12/13/21	Effective Date: 12/	13/21								
Owner: 8 ½ Mile Relief Drain	Owner's Contract 1	Owner's Contract No.: WWS-2019-001								
Drainage District	Engineer Contract									
Engineer: Fishbeck	Contract Name: SI		eded							
The Contract is modified as follows upon ex	ecution of this Change Order:									
Add \$90,000 to the existing contract to prov portion of the project. Task 2 is specifically funds that are being added are for Task 2f w the Martin RTB. A copy of the Fishbeck/AE	for the Martin Sanitary Diversion hich is the CCA of the flushing	on Drainage Distric system modification	ct. The ons within							
The original Contract Sum was:		\$ <u>198,919.00</u>	<u>)</u>							
The net change from previously approved C	hange Orders No. 1 to No. 4:	\$ <u>657,412.00</u>	<u>)</u>							
The Contract Sum prior to this Change Orde	er:	\$ <u>856,331.00</u>	<u>)</u>							
The Contract Sum prior to this Change Orde	er will be increased by:	\$ <u>90,000.00</u>								
The new Contract Sum, including this Chang	ge Order, will be:	\$ <u>946,331.00</u>	<u>)</u>							
The Contract Time will be unchanged by:		0	(days)							
The date of Substantial Completion as of the	e date of this Change Order, then	refore, is:								
ACCEPTED:	ACCEPTED:		_							
By:	By:									
Owner (Authorized Signatu	re) Eng	gineer (Authorized	Signature)							

Title

Date

Title

Date ___





November 5, 2021

Vincent Astorino Operations and Flow Manager Macomb County Public Works 21777 Dunham Road Clinton Township, MI 48036

Proposal for As-Needed Professional Engineering Services Martin Sanitary Diversion Drain Drainage District Task 2.F: Construction Contract Administration – Martin Flushing Improvements Project

Dear Mr. Astorino:

At your request, Fishbeck and Anderson, Eckstein & Westrick, Inc. (AEW) are pleased to submit this proposal for professional engineering services as part of the Martin Sanitary Diversion Drain Drainage District (MSDDD) As-Needed Engineering Services.

While Fishbeck is the lead engineer for the as-needed engineering services, AEW will take the lead in providing construction contract administration (CCA) services for Task 2.F. Fishbeck will provide overall project management (PM) services.

Attached is AEW's proposal to complete the CCA services requested.

We propose to complete the scope of services described in the attached proposal on a time-and-materials with a not to exceed fee. The estimated fee is detailed as follows:

Total	\$102,004.65
Fishbeck PM Services	\$7,004.65
AEW CCA Services	\$95,000.00

We propose to complete these services under the terms of our As-Needed Contract for MSDDD under the existing Task 2.F as follows:

Requested Change Order	\$90,000.00
Current Budget Request	\$102,004.65
Remaining	\$12,004.65
Spent to Date	\$57,955.35
Current Task 2.F Budget	\$69,960.00

As a result, we request a Change Order to Task 2.F in the amount of Ninety Thousand Dollars (\$90,000.00).

If you have any questions or require additional information, please contact me at 248.324.1228 or mesedki@fishbeck.com.

Sincerely,

Maria E. Sedki, PE

Vice President/Senior Civil Engineer



ANDERSON, ECKSTEIN & WESTRICK, INC. CIVIL ENGINEERS - SURVEYORS - ARCHITECTS

51301 Schoenherr Road, Shelby Township, MI 48315 586.726.1234 | www.aewinc.com

November 4, 2021

Maria E. Sedki, P.E. Vice President – Senior Civil Engineer Fishbeck 45200 Card Road, Suite 128 Macomb Township, Michigan 48044

Reference: Proposal for Professional Services

Martin Retention Treatment Basin

Martin Flushing Improvements Project - CCA

Dear Ms. Sedki:

Anderson, Eckstein and Westrick, Inc. (AEW) is pleased to submit our proposal for Construction Contract Administration for the improvements to the Martin Retention Treatment Basin (RTB) flushing system under the MSDDD As-Needed Task 2.f contract.

Understanding of the Project

Per our discussion, the Macomb County Public Works Office (MCPWO) would like to engage Anderson Eckstein and Westrick with oversight from Fishbeck to provide Construction Contract Administration for the proposed Martin RTB automated gate flushing system.

Services to be Provided

Construction Contract Administration for the Martin Flushing Improvements Project

- 1) Pre-construction meeting administration
- 2) RFI reviews
- 3) Submittal / shop drawing reviews (2 reviews per submittal)
- 4) Pay application reviews
- 5) Attend and memorialize construction progress meetings
- 6) Construction observation
- 7) Preparation of change order forms
- 8) As-built / Record drawings
- 9) Contract / Project close-out

Fee for Professional Services

The attached costing spreadsheet provides a breakdown of the opinion of probable costs. The fee for AEW services is calculated based on the schedule provided by L. D'Agostini & Sons Inc. Billing would be on an hourly basis and Construction Contract



Maria E. Sedki, P.E. November 4, 2021 Page 2

Administration is anticipated to not to exceed:

\$95,000.00

Any additional services will be provided on an hourly basis according to our rate schedule effective for the period in which the work is performed. We have attached our current hourly rate schedule as part of this proposal; this schedule is revised effective January 1 of each year and is considered an amendment to the proposal at that time.

We thank you and look forward to working with you on this project.

Sincerely,

Anderson, Eckstein and Westrick, Inc.

Louis J. Urban, PE

Senior Project Engineer

Scott P. Lockwood, P.E.

Executive Vice President

M:\0999\0999-0852\2021\LJU\Martin RTB\Martin RTB Fluhsing Fishbeck CCA.docx



Maria E. Sedki, P.E. November 4, 2021 Page 3

EXHIBIT "A"

HOURLY-BASE FEE SCHEDULE

PROFESSIONAL SERVICES

Where it is agreed that fees for services will be based upon the time worked on the project, such fees will be computed at the following rates:

Classification Hourly Rate	2022 Rates
Principal Engineer/Surveyor/Architect	\$183.50
Project Manager	\$179.50
Senior Project Engineer	\$169.00
Project Engineer/Project Surveyor/ Resident Project Representative	\$153.00
Operation and Maintenance Specialist	\$147.00
Graduate Engineer/Surveyor/Architect	\$126.50
Team Leader/Designer	\$126.50
Drafter/Technician	\$104.50
Clerical	\$ 50.50
One-person Survey Crew (Crew Chief) w/Truck and Equipment	\$179.50
Two-person Survey Crew (Crew Chief and Instrument Man w/Truck and Equipment)	\$247.50
Three-person Survey Crew (Crew Chief and Instrument Man and Assistant w/Truck and Equipment)	\$305.00
Three Person Sewer Crew	\$357.00
Four Person Sewer Crew	\$435.50
Construction Observer	\$104.50

If necessary, the Consultant would serve on litigation or as an expert witness at a rate of 1.5 times the current hourly rate.

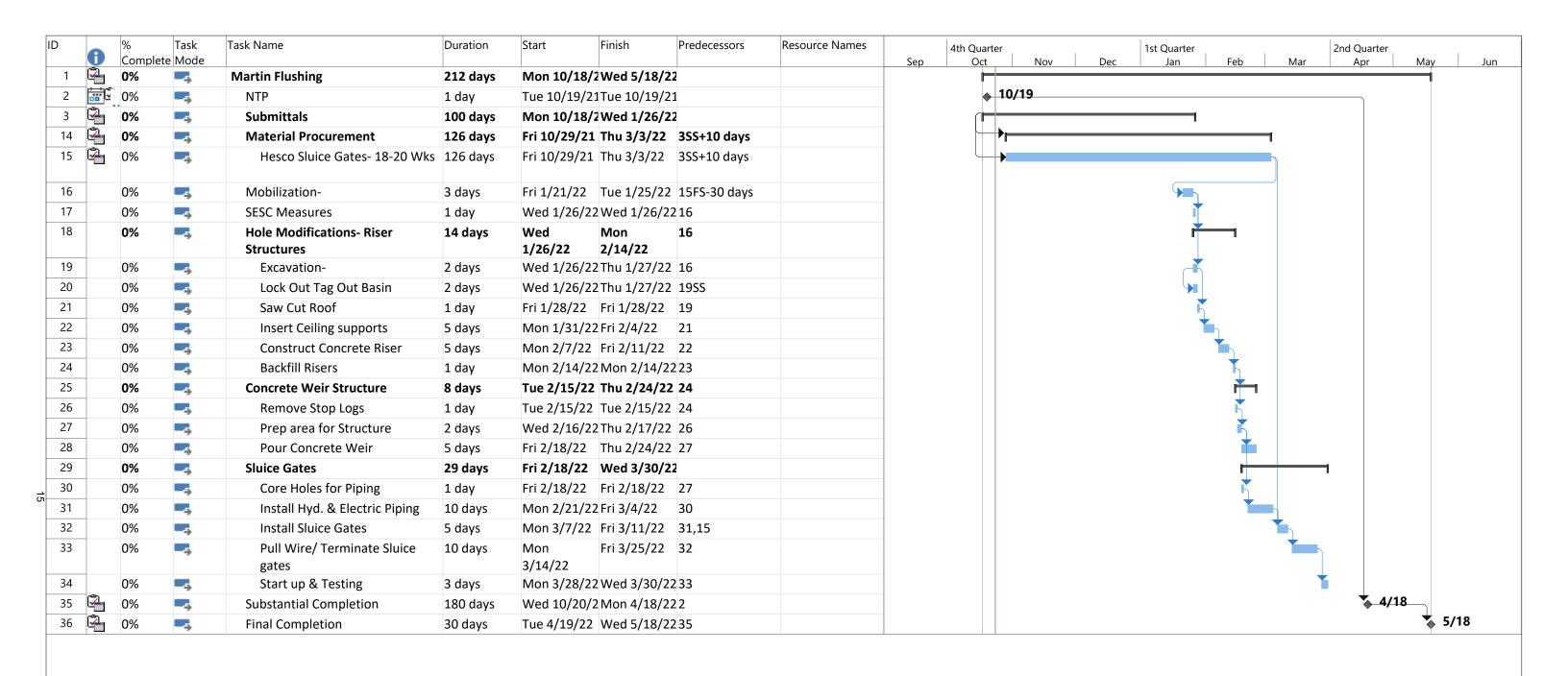
These rates are inclusive of all overhead items that are normal business operations. No reimbursable for normal business operations will be allowed, i.e., mileage, faxes, phone bills, etc.

Hourly-Basis Fee Schedule to be adjusted beginning January 1, 2023.

Effective January 1, 2022.

Martin Source Water for Flushing System

			Estimated Staff Hours By Classification									Total Cost	Commentary	
						А	EW Services	5						
14	Emergency Pump Station Survey & Record Drawqing Opinion of Probable Cost	Principal Engineer Scott Lockwood	Senior Project Engineer Louis Urban	Construction Observer Paul Guinnane	Graduate Engineer Chris Frayer	Drafter / Technician	Senior Project Engineer Kevin Zauel	Project Surveyor	Two Person Survey Crew	Three Person CSE) Sewer Crew	Clerical	Equipment & Expenses		
		\$ 183.50	\$ 169.00	\$ 104.50	\$ 126.50	\$ 104.50	\$ 153.00	\$ 126.50	\$ 247.50	\$ 229.00	\$ 50.50			
Construc	ction Contract Administration													
1 Pre-	Construction Meeting		6		6								\$ 1,773.00	
2 RFI F	Reviews		8	32									\$ 4,696.00	
3 Subr	mittal / Shop Drawing Review	2	2	50	8		20						\$ 10,002.00	2 reviews per submittal
4 Prog	ress Meetings	2	12	12	2						4		\$ 4,104.00	assume 6 meetings
5 Cons	struction Observation		8	440	8			6	16				\$ 53,063.00	Observation time based on an 8 hour day and estimated 55 days of work from the LDS schedule
6 Cons	struction administration & draw request approvals	2	8	8	8	60							\$ 9,837.00	
7 As-b	uilt record of improvements		6	10		40		·	·				\$ 6,239.00	
8 Cont	tract / Project Closeout	1	4	8		8					4		\$ 2,733.50	
	PROJECT TOTAL	7	54	560	32	108	20	6	16	0	8	0	\$92,447.50	



Project: Martin Flushing Project Date: Thu 10/21/21

Date: Thu 10/21/21

Project Summary Progress

Deadline

Project Summary Progress

Page 1

Funding Source	<u>Apportionment</u>	Manager	<u>Vendor</u>	1	<u>Amount</u>	Invoice Detail	<u>Project Summary</u>	Pro	ject Balance
	Chapter 20 Roseville - 78.09% St. Clair Shores - 21.91%								
		Manning Astorino Astorino Astorino Astorino	County of Macomb DTE Energy HESCO Fishbeck JCI Jones Chemicals Inc. TREMCO/Weatherproofing Tech	\$ \$ \$ \$ \$	630.12 1,644.00 5,909.26 4,627.27	Invoice #AR211081 - 11.9.21 Invoice #S5LMD-KVHZ6 - 11.17.21 Invoice #202113277 - 11.30.21 Invoice #405726 - 11.3.21 Invoice #871851 - 11.2.21 Invoice #96452303 - 11.21.21	Personnel/Operating Expense 3rd Quarter 2021 Monthly Electric - 10.16.21 - 11.15.21 Flow Module In-System Storage Devices Hypochlorite Solution Roof Warranty	\$	281,965.30

Total \$ 49,930.87

YTD Budget

Fund: Martin Sanitary Diversion
As of Fiscal Period: Oct 1, 2021-Nov 30, 2021(17%)

	2022			REMAINING	
DESCRIPTION	FINAL BUDGET	ENCUMBERED	ACTUAL	BUDGET	PCT UTILIZED
REVENUE ACCOUNTS					
Investment Inc-Interest	2,400			2,400	0.0%
Contribution from Community	600,000			600,000	100.0%
Reimb-Local Communities	1,011,270		505,635	505,635	50.0%
PY Revenue-Fund Balance	1,183,960			1,183,960	0.0%
Total Revenue Accounts	2,797,630	-	505,635	2,291,995	18.1%
EXPENSE ACCOUNTS					
Application/Permit Fee	6,000			6,000	0.0%
Dues, Training, Conf, Subs.	4,830			4,830	0.0%
Engineering					
-As Needed Engineering	25,000			25,000	0.0%
-Misc Sewer Repairs	20,000		116	19,884	0.6%
-Flushing System Upgrades-Design, Const, and CCA	795,040			795,040	0.0%
-In System Storage-Design and CCA	1,218,000		5,909	1,212,091	100.0%
-Design Basin Equipment Hatch	9,950			9,950	0.0%
-In System Storage-Design Money from SEMSD	333,000			333,000	100.0%
New Equipment	5,120			5,120	0.0%
Operating Supplies	44,880		9,345	35,535	20.8%
Other Professional Srvcs	8,750		748	8,002	8.5%
Personnel Services	199,390			199,390	0.0%
Repair & Maintenance	58,800		1,892	56,908	3.2%
Scada System	26,320		671	25,649	2.5%
Utilities	42,550		1,406	41,144	3.3%
Total Expense Accounts	2,797,630	-	20,087	2,777,543	0.7%

	O&M Balance 9/30/2021	O&M	Total 11/30/2021
Cash - Operating	1,656,008	485,548	2,141,556
Accounts Receivable	е		0
Assets			0
Liabilities			0
Revenues		505,635	505,635
Expenditures		20,087	20,087
Equity	1,656,008		2,141,556

Detail of 2021 Equity

tai	i or zozi Equity			
	Design Basin Equipment Hatch	9,950	SolarWinds-Net Mgt Software	1,940
	Misc Sewer Repairs	20,000	Obsolete Wireless Backhaul Links	3,230
	SS SEMSD Contribution	329,155	Fiber Optic improvements	3,220
	Flushing System Upgrades-Design, Const, CCA	807,127	Firewall Hard Design/Config	2,580
	CCTV of Dewatering Line and Influent and Effluent Boxes	25,000	Parking Lot Resurface	15,000
	SCADA Reserves	14,090		
	Capital Reserves	434,716		