OKEECHOBEE UTILITY AUTHORITY MEETING AGENDA FEBRUARY 17, 2022 8:30 A.M.

- 1. Call the Meeting to Order
 - Pledge of Allegiance
 - Determination of Voting Members
- 2. Agenda Additions or Deletions
- 3. Meeting Minutes from January 10, 2022

4. Consent Agenda

- 5. Finance Report
- 6. Invoices from Holtz Consulting Engineers, Inc Conners Gables Watermain Extension
- 7. Invoices from Eckler Engineering, Inc. Pine Ridge Park Utility Improvements
- 8. Invoice from Sumner Engineering & Consulting, Inc. SW Wastewater Service Area Project (Part E)
- 9. Invoice from Sumner Engineering & Consulting, Inc. Tortoise Survey and Permitting
- 10. Invoice from Sumner Engineering & Consulting, Inc. SW 5th Avenue Sewer
- 11. Invoice from MacVicar Consulting, Inc. Lake Okeechobee System Operating Manual
- 12. Invoices from Thorn Run Partners
- 13. Accounts to be Written Off
- 14. Conners Gables Watermain Improvements
- 15. SWSA Master Pump Station
- 16. SWSA Master Force Main
- 17. SWSA SE2 Interconnect
- 18. Okee-Tantie Engineering RFP
- 19. SW 5th Avenue Engineering Report
- 20. SWSA Project 1 Additional Engineering Fees
- 21. Public Comments
- 22. Items from the Attorney
- 23. Items from the Executive Director
- 24. Items from the Board

AGENDA ITEM NO. 1

FEBRUARY 17, 2022

Call Meeting to Order

Pledge of Allegiance Determine Voting Members

	<u>Absent</u>	Present
Melanie Anderson – Board Member		
Tommy Clay – Board Member		
John Creasman – Chairperson		
Jeff Fadley - Alternate		
Harry Moldenhauer - Alternate		
Steve Nelson – 2 nd Vice Chairperson		
Tabitha Trent –Vice Chairperson		
Glenn Sneider - Alternate		

FUTURE MEETING OF OUA BOARD

FUTURE HOLIDAYS FOR OUA STAFF Sunday, April 17, 2022 – Easter Monday – May 30, 2022 – Memorial Day

AGENDA ITEM NO. 2

FEBRUARY 17, 2022

AGENDA ADDITIONS OR DELETIONS

AGENDA ITEM NO. 3

FEBRUARY 17, 2022

MEETING MINUTES

Attached are copies of the minutes of the meetings held on January 10, 2022.

Unless the Board determines a correction is required to the minutes, Staff recommends the approval of the meeting minutes from January 10, 2022 as presented.

OKEECHOBEE UTILITY AUTHORITY MEETING MINUTES

Monday, January 10, 2029:00 A.M.
Okeechobee Utility Authority
100 SW 5 Avenue
Okeechobee, Florida

Chairperson Creasman called the meeting to order a 19:00 A.M.

Chairperson Creasman addressed Agenda Item No, the following Okeechobee Utility Authority Board Members were present:

Board Members:

Melanie Anderson*

Jeff Fadley

John Creasman*

Tommy Clay*

Steve Nelson*

Tabitha Trent*

Alternates:

Harry Moldenhauer

Glenn Sneider

*Voting Board Members

OUA Members:

John Hayford Tom Conely

George Gall Michelle Willoughby

Chairperson Creasman determined the voting members and led all participating attendees and visitors in the Pledge of Allegiance

Chairperson Creasman addressed Agenda Item No. 'Agenda Additions or Deletions' There were no additions or deletions to the age Mation by Tommy Clay to accept the Agenda as written. Second by Steve Nelson. Votenanimous (5-0), motion carried.

Chairperson Creasman addressed Agenda Item No. 3 'Meeting Minutes from December 13, 2021. Motion by Steve Nelson tacceptthe Meeting Minutes from December 13, 2021 as written. Second by Tommy Clay. Vote unanimous (8), motion carried.

Chairperson Creasman addressed Agenda Item No. 4 'Employee Recognition' Chairperson Creasman recognized key Vinson who was not present, for hts years of service to the OUA

Chairperson Creasmanaddressed Agenda Item No5 'Consent Agenda' Motion by Tommy Clay to accept the Consent Agendas follows:

Consent Agenda Item No6 'Finance Report for the period ending December 31 2021
Consent Agenda Item No. 7 'Invoice from Sumner Engineering & Consulting, Inc–SW
Wastewater Service Area Project (ParB and C) in the
amount of \$13,491.60'

Consent Agenda Item No8 'Invoice from Sumner Engineering & Consulting, Inc – SW 5th
Avenue Sewer in the amount of \$,909.52

Consent Agenda Item No9 'Invoice from Sumner Engineering & Consulting, Inc – SW Wastewater Service Area Project (ParE) in the amount of \$85,990.00'

Consent Agenda Item No. 0 'Invoice from MacVicar Consulting, Inc. in the amount of \$250.00'

Secondby Steve Nelson. Vote Unanimous (0), motion carried.

Chairperson Creasman addressed Agnda Item No. 11 'Okee-Tantie Utility System Improvements Engineering Presentation's Executive Director Hayford iscusses that the FP review committee met concerning the submitted RFP's. However, the committee could not come to a consensus as to an agreed upon final ranking. The OUA Board directed OUA staff to arrange for presentations to be made by the three firms: Sumner Engige hastain Skillman, and Kimley Horn. At the meeting today, the three firms will make presentations concerning their respective firm capabilities, their understanding of the project and why their firm is best suited to complete the work. Each present will be have 5-20 minutes followed by a question and answer sestime cutive Director Hayford askethat at the conclusion of presentations, question and answer period and OUA Board discussions, OUA staff is requesting a final ranking of the firms.

Chastain Skillman, Kimley Horn and Sumner Engineering & Consulting nade presentations to the Board John Creasman and Tabith Tarent out at 1024 A.M. John Creasman and Tabith Trent in at 1026 A.M. Executive Director Hayford informs the pard that after tabulating the rank in the results are as follows:

Chastain Skillman	3.3
Kimley Horn	4.5
Sumner Engineering and Consulting, Inc	4.7

There was a brief discussion leanie Anderson out at 10:40 A.M. arry Moldenhauer to vote for Melanie Anderson Motion by Tommy Clay to authorize negotiations with Sumner Engineering and Consulting, Inc. Second by Steve Nelson Vote unanimous (5-0), motion carried.

Chairperson Creasmanaddressed Agenda Item No.12 'SW 5th Avenue Wastewater Collection/Pumping System Update' Executive Director Hayforthforms the board that Jeff Sumner is present at theeting today to give the Board an update on the project. Sumner with Sumner Engineering & Consulting, Irinforms the board that they expect to provide the Board with a final version of the reliminary report for the projectat the February Board Leting. Executive Director Hayford discusses the area that is included in this project mational Purpose of the state of the reliminary reports.

Chairperson Creasman addressed Agenda Item No3 'SWSA Gopher Tortoise Executive Director Hayforddiscusses that during the preparation for site clearing, what appeared to be two gopher tortoise burrows were located the OUA will obtain a tortoise relocation permit from FWC and then engage a firm to dig up the burrows to determine whether or not threstourne active and occupied. If it is determined they are empty, then we report the empty burrows and move on with the project. If, upon excavation of the burrow(s) a tortoise is found, then by permit, the tortoise will need to be relocated, either ortesior offsite. Until the FWC issues a permit, it is unknown as to whether or not onsite or offsite relocation will be required. It is anticipated that FWC will allow for onsite relocation of any tortoises found within the construction area. No constructed activity can proceed until the tortoise issue is resolved cutive Director Hayford iscusses the proposals submitted in regards to the associated services in the permitting and relocation of the gopher tortoise(s) Motion by Tommy Clay to authorize Sumner Engineering and Consulting, Indo provide associated services in the permitting and relocation of gopher tortoise(s) in the amount of \$6,900.00.Second by Tabitha Trent. Vote unanimous 6-0), motion carried.

Motion by Tommy Clay to authorize Sumner Engineering and Consulting, Inc toprovide associated services in the actual relocation of gopher tortoise(s), either on the master pump/vacuum station site or relocation offsite in an amount not to exceed \$30,000.66econd by Steve Nelson. Vote unanimous (50), motion carried.

Chairperson Creasman addressed Agnda Item No. 14 'Master Pump Station – Site Civil Work' Executive Director Hayfordiscussed that the work includes the driveway and culvert into the site, clearing the property line and installing a fence, clearing and building a rock stabilized road into the site, clearing the pump/vacuum station site and clearing and excavating a shallow storage pond. ExecutiveDirector Hayford discusses that the work was put outdo one bid waseceived for the project from B & B Site Development (B&B) the amount o\$97,459.00. Motion by Tommy Clay to approve the execution and issuance of the Notice of Awaifor the MPS Site Civil Work to B & B Development Second bySteve NelsonVote unanimous 6-0), motion carried.

Motion by Tommy Clay to approve, upon completion of the gopher tortoise issue, the execution and issuance of the Notice to Proceed to B & B Site Development for the MPS Site Civil Work. Second by Steve Nelson Vote unanimous (5), motion carried

Chairperson Creasman addressed Agnda Item No.15 'Master Pump Station Bid Award''
Executive Director Hayfordiscusses that the SWSA Project 1 Master Pump Station (Mass) out out to bid. There were five bids submitted ranging from \$1,894,600 to \$2,645,140. The engineers estimate of construction was \$1,860,000. The Sumner Engineering & Consulting, Inc., team has reviewed the bids for compliance with the Instruction Bidders, contacted the references and discussed the project at length with the bidder in Associates of Florida, Inwas the lowest bid with an amount of \$1,894,600.0 Based upon this effort, SEC has recommended an award to Felix Associates of Edrida, Inc. Executive Director Hayford informed the Board that is Mr. Sumner is present should the OUA Board have any questions concerning the bid, bid process of Master Dump Station. by Tommy Clay to approve the execution and issuance of the Notice to Award Felix Associates of Florida, Inc. in the amount of \$1,894,600.0 for the SWSA Master Pump Station. Second by Steve Nelson vote unanimous (50), motion carried

Chairperson Creasman addressed Agnda Item No.16 'NW 26th Avenue WM Update' Executive Director Hayfor discusses the NW 26th Avenue Watermain extension project in Basswood. Due to the unfavorable responses in October 2021, the OUA Board directed staff to take no action unless contacted by the residents on NWA26nue. In December, the lot owner of 3747 NW 26th Avenue did contact the OUA. He has stated that there are a total of three lot owners that are interested in water service executive Director Hayford informs the Board that the costotostruct a 6-inch water main is approximately \$33,1000 toton by Tommy Clay to construct the 6-inch watermain on NW 26th Avenue for the approximate cost of \$33,100.06 econd by Tabitha Trent. Vote unanimous 6-0), motion carried.

Chairperson Creasman addressed Agenda Item No. 17 '66 Acre Lease Agreement' Executive Director Hayfordinformed the Board that the urrent lease agreement between the Okeechobee Utility Authority and Pearce Cattle Company has expired. Both the OUA and Peattle had a successful lease agreement with Year extension. Pearce Cattle has paid the property taxes and provided insurance agreements as required. The OUA publicly advertised a bid for a new lease agreement on December 29, 2021. Bids were could be OUA main office by 5PM on January 5, 2022. As of that date and time, Pearce Cattle Company was the only bid redebted by Tommy Clay to accept Pearce Cattle Company lease with a year term with 2 year extension at the price of \$3,505.00 preyear. Second by Steve Nelson. Vote unanimous (5), motion carried.

Chairperson Creasman addressed Agenda Item No. 18 'Conflict of Interest Policy' Executive Director Hayford present the Conflict-of-Interest Policy for the Board's review and discussion. Executive Director Hayford informs that Board that the USDA loan agreement requires a written policy. The proposed OUA Policy is more restrictive than as stated on Form 8B in that this policy restricts any participation including discussion by Steve Nelson to approve the Conflict of Interest Policy as presented Second by Tommy Clay. Vote unanimos (5-0), motion carried.

Chairperson Creasman addressed Agenda Item No9 'Public Comments' There were none

Chairperson Creasmanaddressed Agenda Item No20 'Items from the Attorney' Attorney Conely informs the Board that he is still waiting on thet Easement, however there is a delay due to COVID. He further discusses thems needed to finalize the paperwork for the Street Homes Agreement George Gall out at 11:25 A.M.

Chairperson Creasman addressed Agenda Item No. 2'Items from the Executive Director' Executive Director Hayford gave an update on current projects general general states and that 11:28 A.M. Executive Director Hayford informs the Board that bids for materials affectine Force Main (MFM) and are due back February 2, 202 Executive Director Hayford further informs the Board that there would be a cost savings for the OUA to purchase the pipe instead of the contractors.

Chairperson Creasmanaddressed Agenda Item No22 'Items from the Board' Executive
Director Hayford discusses that at the December 2021 Mething was a discussion garding
moving the board meeting week, day and time. Executive Director Hayford discusses the benefits for
OUA staff to move the meeting from the 2 week to the third week. There was a brief discussion

Motion by Steve Nelsorto move the next Board of Director's Meeting to Thursday, February 17, 2022 at 8:30 A.MSecond byTommy Clay. Vote unanimous (50), motion carried.

There being no other business, meeting adjourneat 12:04P.M.

PLEASE TAKE NOTICE AND BE ADVISED that if a person decided to appeal any decision made by the Okeechobee Utility Authority with respect to any matter considered at this meeting, he/she may need to measure that verbatim record of the proceeding is to be based. A CD recording of this meeting is on file in the Executive Director's office.

hairperson	Executive Director (Secretary)

AGENDA ITEM NO. 4

FEBRUARY 17, 2022

CONSENT AGENDA

- 1. Pull items for discussion from Consent Agenda.
- 2. Items pulled from Consent Agenda will be discussed at the end of Agenda.
- 3. Unless noted all Consent Agenda items are recommended for approval.
- 4. Motion to approve items on Consent Agenda as follows:

Agenda

- 5. Finance Report
- 6. Invoices from Holtz Consulting Engineers, Inc Conners Gables Watermain Extension
- 7. Invoices from Eckler Engineering, Inc. Pine Ridge Park Utility Improvements
- 8. Invoice from Sumner Engineering & Consulting, Inc. SW Wastewater Service Area Project (Part E)
- 9. Invoice from Sumner Engineering & Consulting, Inc. Tortoise Survey and Permitting
- 10. Invoice from Sumner Engineering & Consulting, Inc. SW 5th Avenue Sewer
- 11. Invoice from MacVicar Consulting, Inc. Lake Okeechobee System Operating Manual
- 12. Invoices from Thorn Run Partners
- 13. Accounts to be Written Off

AGENDA ITEM NO. 5

FEBRUARY 17, 2022

CONSENT AGENDA

FINANCE REPORT

Attached for your review is a copy of the Finance Report for the period ending January 31, 2022.

Okeechobee Utility Authority

Finance Report

Fiscal Year 2022

As of

The Period Ending

January 31, 2022

OKEECHOBEE UTILITY AUTHORITY TABLE OF CONTENTS

Executive Summary	Page 1
Finance Report for: The Period Ending January 31, 2022	Page 2
Graphs:	
Operating Revenue Comparison- YTD Actual vs Budget	Page 3
Operating Expenses Comparison- YTD Actual vs Budget	Page 3
Operating Activity Comparisons:	
Revenue-Current Year vs 4 Year Weighted Average vs Current YTD Budget	Page 4
Graph-Current Year vs 4 Year Weighted Average YTD	Page 5
Graph-Water Revenue FY16-FY21 & FY22 YTD	Page 6
Graph-Sewer Revenue FY16-FY21 & FY22 YTD	Page 7
Expenses-Current Year vs 4 Year Weighted Average vs Current YTD Budget	Page 8
Graph-Current Year vs 4 Year Weighted Average YTD	Page 9
Graph Operating Expenses FY16-FY21 & FY22 YTD	Page 10
Graph Non Operating Expenses FY16-FY21 & FY22 YTD	Page 11
Comparative Statement of Cash Flows: 9.30.21 & 1.31.22	Page 12
Balance Sheet as of January 31, 2022	Pages 13-14
Pie Graph of Major Balance Sheet Items	Page 15
Detail of Other Operating Revenue	Page 16

Okeechobee Utility Authority Executive Summary Prepared by Finance Director

The accompanying Finance Report is for the first four months of FY2022. It is presented for your review and information. There may be invoices received at a later date that when paid, may change these results.

For the first four months of fiscal year 2022, actual YTD operating revenues on an accrual basis are \$3,889,449 which is \$161,429 greater than the budgeted operating revenues. YTD operating expenses that have been paid are \$2,064,469, which is \$596,392 lower than operating expenses budgeted on an accrual basis. Restricted revenues are \$25,778 greater than budget. Based on this limited data, there is a positive budget variance for net operating income for the first 4 months of fiscal year 2022.

OKEECHOBEE UTILITY AUTHORITY BUDGET SUMMARY COMPARISON

	Operating Revenues			Operating Expenses				Restri	icted Reve	nues	
	Actual YTD	Budget YTD	% Variance	Actual YTD	Budget YTD	% Variance	Cumulative YTD Operating Budget Variance	Actual YTD	Budget YTD	% Variance	Cumulative YTD Restricted Budget Variance
Oct-20	952,107	933,685	2.0%	304,448	665,215	54.2%	379,189	16,943	10,239	65.5%	6,704
Nov-20	1,932,264	1,867,370	3.5%	856,789	1,330,431	35.6%	538,536	37,265	20,478	82.0%	16,787
Dec-20	2,839,735	2,801,055	1.4%	1,578,441	1,995,646	20.9%	455,885	57,320	30,716	86.6%	26,604
Jan-21	3,889,449	3,728,020	4.3%	2,064,469	2,660,861	22.4%	757,821	73,453	47,675	54.1%	25,778
Feb-21											
Mar-21											3 € 3
Apr-21											
May-21											
Jun-21											
Jul-21											
Aug-21											
Sep-21											

Utility billing accounts receivable over 90 days past due increased \$24,098 to \$128,722 from January 31, 2021 to January 31, 2022.

If you have any questions, please contact me.

Respectfully,

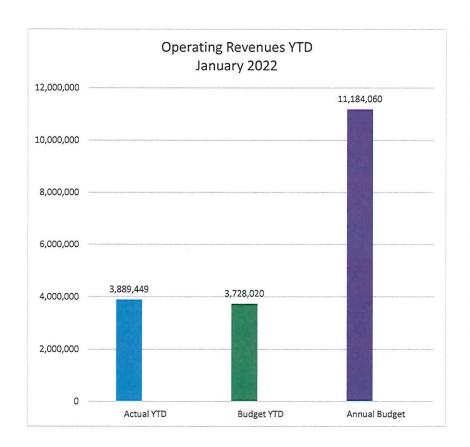
George Gall

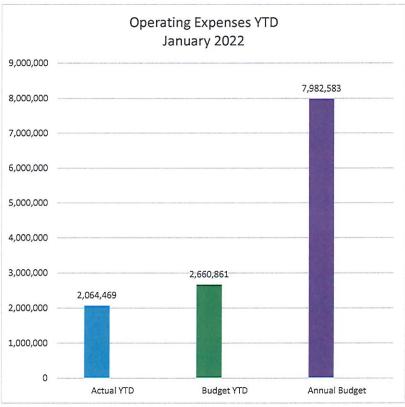
Okeechobee Utility Authority FY 2022 Finance Report for January 31, 2022 The Period Ending

OPERATING REVENUE FUND		Actual YTD		Budget YTD		Variance	% Variance
OPERATING REVENUE: Water Sewer Other Operating Revenue (see detail on page 16)	\$ \$ \$ \$	2,322,420 1,426,579 140,450	\$	2,227,814 1,380,571 119,635	\$	94,606 46,008 20,815	4.2% 3.3% 17.4%
Total Operating Revenue Received	_\$	3,889,449	\$	3,728,020	\$	161,429	4.3%
OPERATING EXPENSES: Water Wastewater Meter Readers Maintenance Administration Operating General & Admin. Contingency Expense	****	406,788 306,858 75,980 693,682 375,772 205,390	\$	564,028 379,700 92,514 816,531 452,195 305,893 50,000	\$	157,240 72,842 16,534 122,849 76,422 100,504 50,000	27.9% 19.2% 17.9% 15.0% 16.9% 32.9% 0.0%
Total Operating Expenses Paid (3) (4) (5) (6)	\$	2,064,469	\$	2,660,861	\$	596,392	22.4%
Net Operating Income	\$	1,824,980	\$	1,067,159	_\$	757,821	<u>71.0%</u>
RESTRICTED REVENUE FUNDS							
RESTRICTED REVENUE FUNDS RECEIVED: Fire Hydrant Fund Fee Water CC Fees (infill) WW CC Fees (infill) Operating Acct. Payroll Acct. Interest Income-restricted	\$\$\$\$\$\$	31,255 19,599 17,865 2,767 70 1,897	\$	29,080 3,475 3,240 6,540 181 5,160	\$	2,175 16,124 14,625 (3,773) (110) (3,263)	7.5% 464.0% 451.4% 0.0% 0.0% -63.2%
TOTAL RESTRICTED REVENUE (1) (2)_\$	73,453	\$	47,675	\$	25,778	54.1%
NON-OPERATING EXPENSES: Debt service interest expense Non-cash depreciation & amortization		\$118,951 \$889,033		\$118,951 \$904,200		0 15,167	0.0% 1.7%
NET REVENUE BEFORE ITEMS BELOW	/ <u>\$</u>	890,449	\$	91,683	_\$	768,432	838.1%

NOTES: Above Revenue and Expense does not include the following:	Actual YTD	Annual Budget	Variance
(1) Grant funds & state appropriations of: (2) Contributed capital of: (3) Debt service principal payments of:	\$0 \$0 \$0	\$2,028,142	
(4) Net Construction in Progress (CIP) Expenditures of:	\$166,729		

Page 2

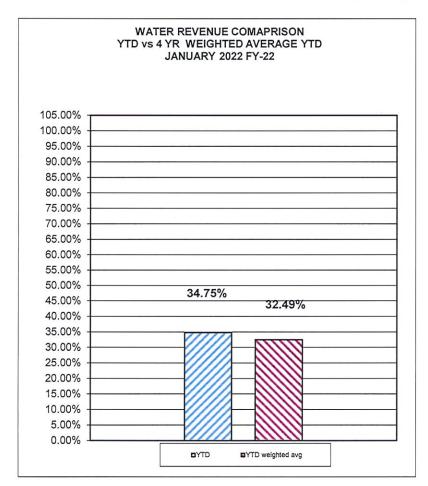


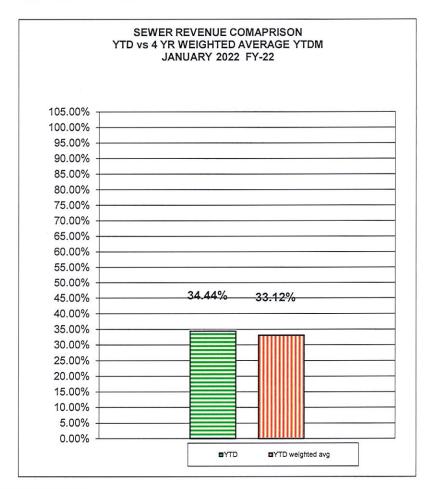


Current FY-22 Water and Sewer Utility Revenue Monthly & YTD Revenue and Difference from 4Yr Weighted Average (in \$)

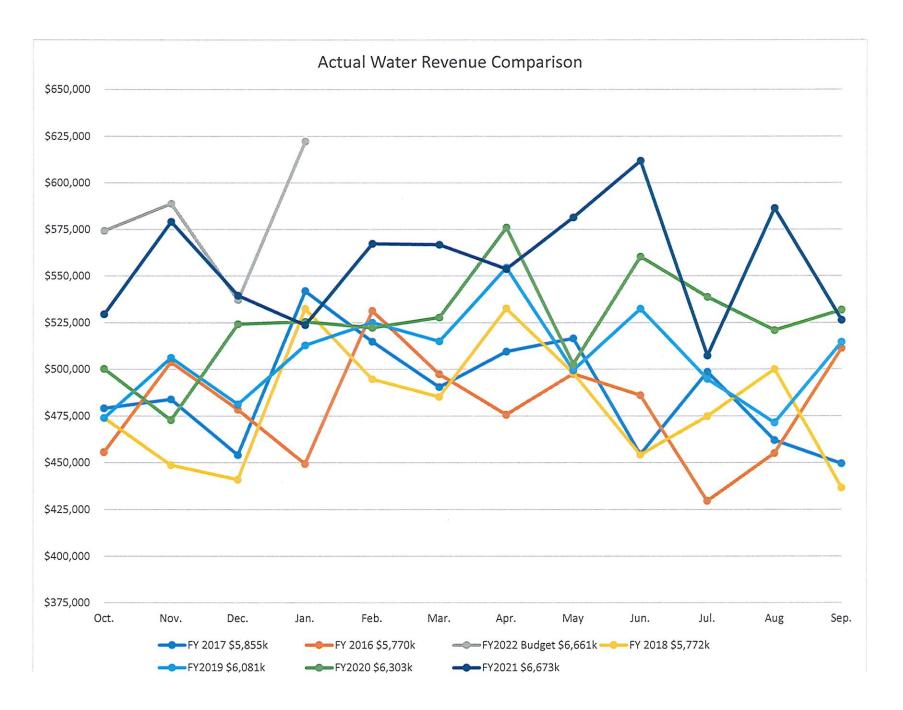
	WATER (JTILITY REVE		Fr V A	lonthly \$ ifference om 4 Year Veighted verage of	% Current YTD To Budget Water Revenue	4 Yr Weighted Average %
		Period	YTD	\$	6,353,369	\$6,683,443	
Oct. Nov. Dec. Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep.	\$ \$ \$ \$ \$	574,183 588,819 537,151 622,267	574,183 1,163,002 1,700,153 2,322,420	\$ \$ \$ \$ \$	70,168 69,267 23,738 99,324	8.59% 17.40% 25.44% 34.75%	7.97% 15.85% 23.85% 32.49% 40.99% 49.40% 58.50% 66.77% 75.30% 83.66% 91.81% 100.00%
				Fr V	Monthly \$ vifference om 4 Year Veighted verage of	% Current YTD To Budgeted Sewer Revenue	
	SEWER	JTILITY REVE	NUE:	\$	3,918,848	\$4,141,713	
Oct. Nov. Dec. Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep.	\$ \$ \$ \$	345,403 358,045 334,864 388,267	345,403 703,448 1,038,312 1,426,579	\$ \$ \$ \$ \$	27,060 30,170 9,856 66,340	8.34% 16.98% 25.07% 34.44%	8.17% 16.15% 24.43% 33.12% 41.82% 50.30% 59.36% 67.28% 75.59% 83.89% 91.83% 100.00%

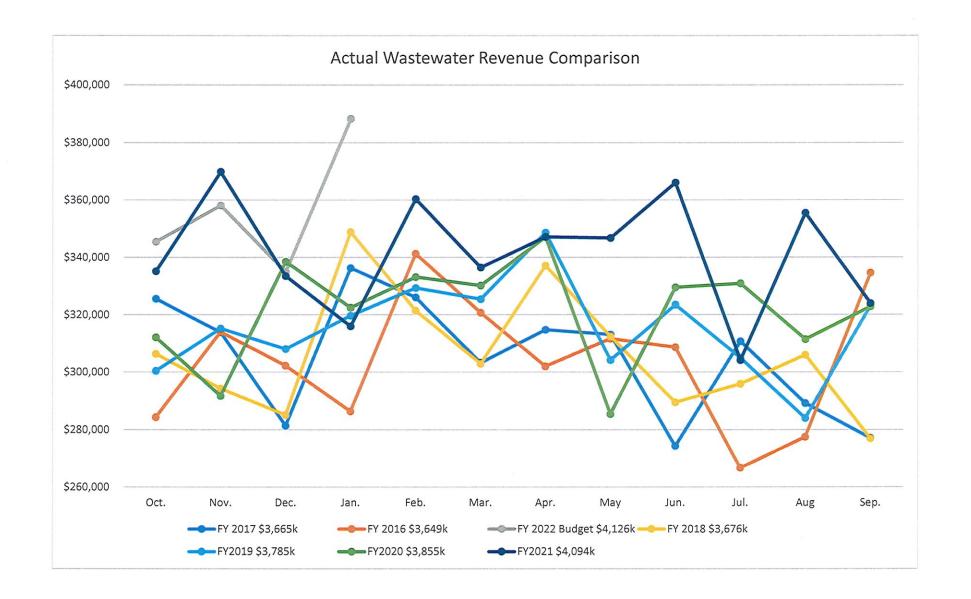
WATER AND SEWER REVENUE COMPARISON YEAR TO DATE vs 4 YEAR WEIGHTED AVERAGE YEAR TO DATE





Page 5

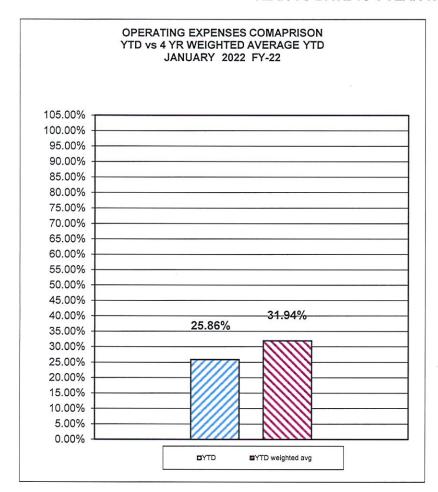


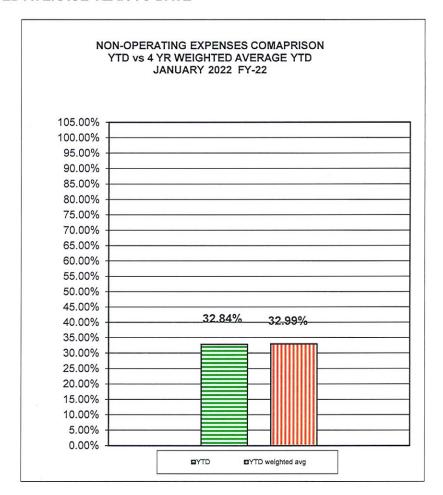


Current FY-22 Operating & Non-Operating Expenses, Monthly & YTD Expense and Difference from 4Yr Weighted Average (in \$)

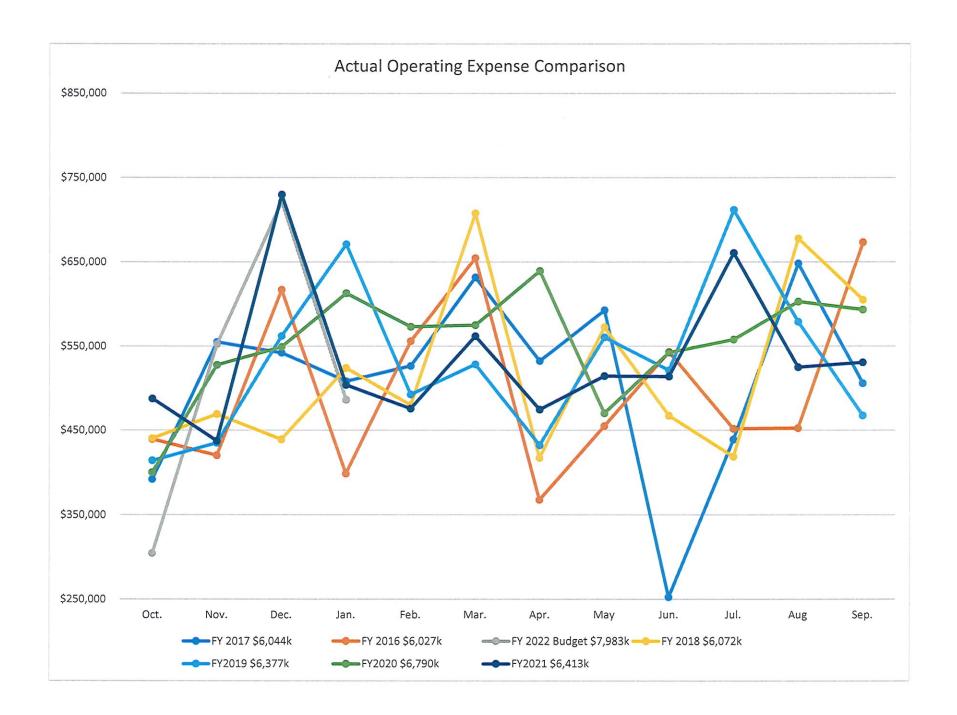
Oct. Nov. Dec. Jan.	OPERA	TING EXPENT Period 304,448 552,341 721,652 486,028	\SES 	: YTD 304,448 856,789 1,578,441 2,064,469	Fo Fr	Difference r the Month rom 4 Year ghted Avg of 6,484,908 (137,422) 85,300 108,757 (85,873)	% Current YTD To Budgeted Operating Exp. \$7,982,583 3.81% 10.73% 19.77% 25.86%	4 Yr Weighted Average 6.78% 14.34% 22.82% 31.94%
Feb. Mar. Apr. May Jun. Jul. Aug. Sep.					t	fference For he Month	% Current YTD To Budgeted	40.05% 50.00% 57.12% 66.16% 73.46% 82.17% 92.02% 100.00%
					Wei	om 4 Year ghted Avg of	Non-Oper. Exp.	
	NON-OPE	RATING EXF	PENS	ES:	\$	3,151,769	\$3,069,454	
Oct. Nov. Dec. Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep.	\$ \$ \$ \$ \$	251,996 251,996 251,996 251,997	\$ \$ \$ \$	251,996 503,992 755,988 1,007,985	\$ \$ \$ \$ \$	(4,911) (2,594) (3,793) (3,771)	8.21% 16.42% 24.63% 32.84%	8.20% 16.40% 24.70% 32.99% 41.20% 49.42% 57.60% 65.74% 74.08% 82.41% 90.72%

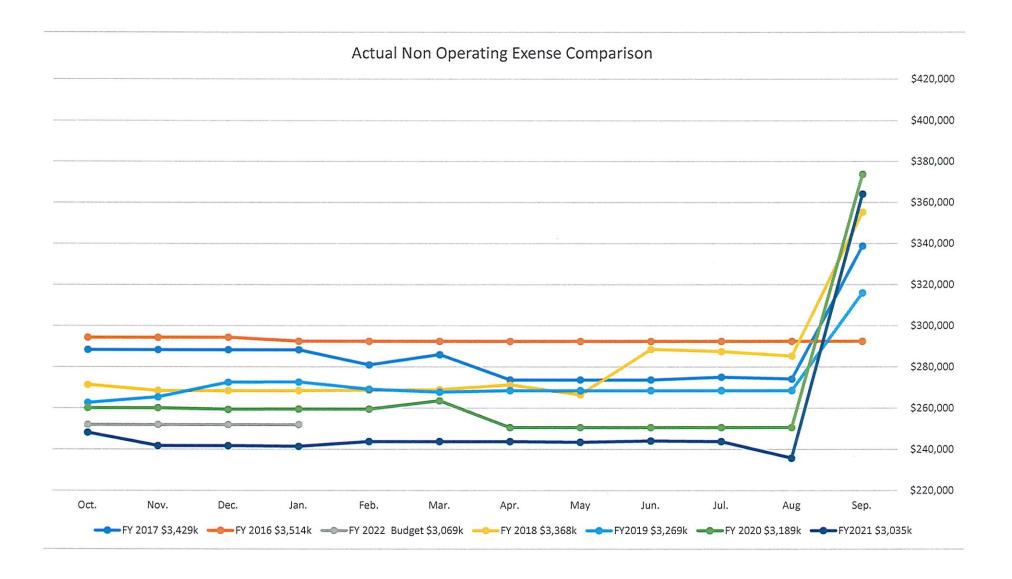
OPERATING AND NON-OPERATING EXPENSE COMPARISON YEAR TO DATE vs 4 YEAR WEIGHTED AVERAGE YEAR TO DATE





Page 9





Page 11 2/8/2022 3:18 PM

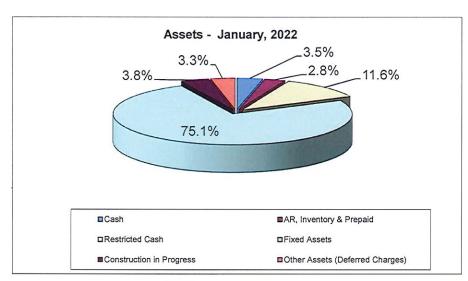
	В	T	AB	AC	AD
84					
85	Okeechobee Utility Authority		OUA prepared		OUA prepared
86	Statement of Cash Flows				
			Accrual Basis for		Accrual Basis for
87	Basis of Accounting		Revenues Accrual Basis for		Revenues
88			Expenses		Cash Basis for Expenses
89			myheiises	-///	Exhauses
90			Cont 20, 2021		January 21, 2022
91			Sept 30, 2021 12 Months		January 31, 2022
92			TZ MOUTUS		4 Months
	Cash Flows from Operations				M
	Operating Income		2,111,090		025.047
	Depreciation & Amortization			*************	935,947
35	Increase (decrease) in cash from changes in		2,630,853		889,033
96	accounts receivable		(384,962)		979,667
	Increase (decrease) in cash from changes in		30/11 = 10 = 1 = 1.0 M/M and an	-~-	
97	accounts payable		15,521		(466,919)
	Increase (decrease) in cash from changes in other				
98	assets		111,258		(294,104)
	Increase (decrease) in cash from changes in other liabilities		(50.075)		
			(69,876)		163,452
	Cash provided (used) by operations		4,413,884		2,207,076
101					
	Cash Flows from Nonoperating Revenues/Expenses		0.17.0.10		
	Capital connection fees		317,946		68,719
	Interest revenue		47,913		4,735
	Debt issuance costs		0		0
	Interest expense		(523,113)		(118,951)
	Cash provided (used) by nonoperating activities		(157,253)		(45,498)
108					——————————————————————————————————————
109	Cash Flows from Capital and Financing Activities				
	Purchase of equipment, computer hardware,				
	technology equipmment & contributed capital assets		(477,116)		(47,635)
****	Construction in progress		(2,551,029)		(166,729)
_	Acquisition of land, easements and related costs		(34,500)		(32,682)
	Sale of land and equipment		29,501		
-	Gain (Loss) on sale of land and equipment		37,022		
	Bond principal payments		(2,028,142)		<u>-</u>
	Grant revenue & FEMA reimbursement	~~~~	1,497,834	-1191274	
117	Capital contributions from developers		78,020		-
	Cash provided (used) by capital / financing				
⊢	activities		(3,448,410)		(247,046)
119	1997/19-50				
	Net increase (decrease) in cash and investments		808,221		1,914,532
121	This unaudited cash flow statement is subject to ad	jus	tments.		

Statement of Net Assets 01/31/2022

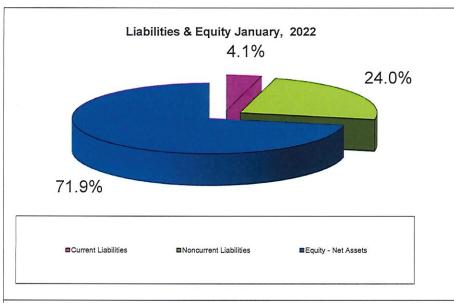
ASSETS			
CURRENT ASS			
	Cash and cash equivalents	\$	2,755,881.83
	Unrestricted assets:		0.00
	Investments		0.00
	Interest receivable		0.00
	Grants receivable		
	Restricted assets:		0.400.000.00
	Cash and cash equivalents		9,169,880.29
	Investments Interest receivable		0.00 0.00
	Receivables:		0.00
			4 474 004 44
	Accounts receivable		1,474,901.44
	less allowance for uncollectible accounts		-179,622.37
	Inventories		629,176.28
Total current ass	Prepaid Expenses		301,509.09
Total current ass	sets		14,151,726.56
NONCURRENT	ASSETS		
Capital assets:	AOOLIO		
ouplial doods.	Land		2,810,505.11
	Utility plants, buildings and equipment		106,519,323.05
	cuity plants, ballange and equipment		109,329,828.16
	Less accumulated depreciation		-49,772,367.78
	2000 dood.malatou doprooration	•	59,557,460.38
	Construction in progress		3,037,023.87
Total capital ass	· -	***************************************	62,594,484.25
			02,001,101,20
Other Assets:			
	Net Pension Asset		1,904,107.00
			, .
Deferred Charge	98:		
	Deferred Pension Outflows - Actuarial and Prepaid		138,282.00
	Deferred loss on bond refunding, net		553,788.00
Total Deferred c	harges:		692,070.00
Total noncurrent	assets		65,190,661.25
TOTAL ACCUT		Φ.	70 040 007 04
TOTAL ASSETS		\$	79,342,387.81

LIABILITIES AND NET ASSETS

CURRENT LIABILIT	IES	
	Accounts payable	\$ 78,025.23
	Accrued expenses	4,327.39
	Due to other governments	42,328.07
	Bonds payable (current)	2,073,095.68
	Accrued compensated absences (current)	286,530.51
Pa	yable from restriceted assets	
	Accrued interest	122,640.74
	Customer Deposits	658,963.57
Total current liabilitie	es .	3,265,911.19
NONCURRENT LIA	BILITIES	
	Long-term portion of bonds payable, net	16,922,603.84
	Accrued OPEB payable	45,523.00
	Net Pension Liability	0.00
	Deferred Pension Inflow from Actuarial Calculation	1,641,218.00
	Unearned revenues:	
	Developer agreements	 424,402.36
Total noncurrent liab	ilities	 19,033,747.20
TOTAL LIABILITIES		 22,299,658.39
NET POSITION		
	vested in capital assets, net of related debt	42,498,667.00
Re	estricted for capital projects	2,168,736.00
Re	estricted for debt service	99,091.00
Re	estricted for Rate Stabilization	1,890,225.00
	estricted for Pension Benefits	286,195.00
	nrestricted	9,209,366.88
	D Surplus of Revenue over Expenses	 890,448.54
Total net position		 57,042,729.42
TOTAL LIABILITIES	AND NET POSITION	\$ 79,342,387.81



Cash	2,755,882	3.5%
AR, Inventory & Prepaid	2,225,964	2.8%
Restricted Cash	9,169,880	11.6%
Fixed Assets	59,557,460	75.1%
Construction in Progress	3,037,024	3.8%
Other Assets (Deferred Charges)	2,596,177	3.3%
Total Assets	79,342,388	



Current Liabilities	3,265,911	4.1%
Noncurrent Liabilities	19,033,747	24.0%
Equity - Net Assets	57,042,729	71.9%
Total Liab & Equity	79,342,388	

Okeechobee Utility Authority Detail of January 31, 2022 Other Operating Revenue Data Per General Ledger Account Balances For Finance Report

Accounts included in Other		Actual Amount YTD			Amount er Budget YTD	\$ Variance From Budget YTD		
Operating Revenue:		•		_		_		
Install Fees-Water		\$	10,412	\$	2,208	\$	8,204	
Private Fire Protection		\$	28,570		27,063		1,507	
Turn on/off Fees		\$	20,898		21,184		(286)	
Other Revenue-Water	Α	\$	5,698		5,568		130	
Install Fees-Sewer		\$	1,072		2,120		(1,048)	
Kings Bay Sewer Maint. Fees		\$	6,493		3,613		2,879	
Other Revenue-Sewer	В	\$	900		816		84	
Penalties & Late Charges		\$	44,160		42,954		1,206	
Gain/Loss Sale of Assets	С		100		0		100	
Ag Land Lease		\$	10		0		10	
Merchant & Misc. Revenue	D	\$	22,137		14,108		8,029	
Totals		_\$	140,450	\$	119,635	\$	20,815	

A Other Revenue-Water includes:

Water service inspection fees Backflow prevention fees After hours charges Meter relocation charges Bench test charges

B Other Revenue-Sewer includes:
Wastewater service line inspection fees

c Gain/Loss on Sale of Assets

D Miscellaneous Revenue includes:

Administration charges
Charges for damage and repair to system:
Parts and labor used
Equipment charges

AGENDA ITEM NO. 6

FEBRUARY 17, 2022

CONSENT AGENDA

INVOICES FROM HOLTZ CONSULTING ENGINEERS INC. – CONNERS GABLES WATERMAIN EXTENSION

Please find attached the invoices in the amount of \$13,356.00 and \$1,484.00 submitted by Holtz Consulting Engineers, Inc. Staff is aware of the work currently being done by Holtz Consulting Engineers Inc. and is in agreement with this request.

Invoice Date	Pay Request No.	Date Paid	Amt. Requested	Amount Paid	Remaining Balance
					\$14,840.00
Jan-22	1		\$13,356.00	\$0.00	\$1,484.00
Feb-22	2		\$1,484.00		\$0.00

Staff recommends approval of the invoices in the amounts of \$13,356.00 and \$1,484.00 to Holtz Consulting Engineers Inc.

INVOICE

270 South Central Boulevard, Suite 207

Jupiter, FL 33458

Phone: (561) 575-2005 Fax: (561) 575-2009

INVOICE DATE:

January 10, 2022

INVOICE #:

11006-1 OUA

CLIENT: PROJECT:

Connors Gables WM

Extension

P.O. Number: 0000011006

Bill To:

Okeechobee Utility Authority 100 SW 5th Avenue Okeechobee, FL 34974-4221

Lump Sum Contract Amount:

\$ 14,840.00

Prior Invoices to Date: This Invoice Amount:

\$ 13,356.00

Remaining Balance:

1 484 00

THIS INVOICE AMOUNT:

13,356.00

Please make checks payable to:

Holtz Consulting Engineers, Inc.

270 South Central Boulevard, Suite 207

Jupiter, FL 33458

If you have any questions concerning this invoice, please contact Christine Miranda at (863) 824-7200

HCE will never communicate changes to invoicing, payment procedures, and/or account number information in an email. All financial communications will be in writing via certified mail.

Summary of Invoice by Task Amount



Billing Period Thru: December 31, 2021

Invoice #: 11006-1

PROJECT: Conners Gables WM Extension

TASK	DESCRIPTION	FULL AMOUNT	PERCENT COMPLETE	TOTAL AMOUNT BILLED TO DATE	PREVIOUSLY BILLED	THIS INVOICE AMOUNT	BALANCE REMAINING
1	Preparation of Design Plans and Bidding Documents	\$ 14,840.00	90%	\$ 13,356.00	\$ -	\$ 13,356.00	\$ 1,484.00
		\$ 14,840.00		\$ 13,356.00	\$ -	\$ 13,356.00	
							\$ 1,484.00

INVOICE

270 South Central Boulevard, Suite 207

Jupiter, FL 33458

Phone: (561) 575-2005 Fax: (561) 575-2009

INVOICE DATE:

February 10, 2022

11006-2

INVOICE #: CLIENT:

CLIENT: OUA
PROJECT: Connors Gables WM

Extension

P.O. Number: 0000011006

Bill To:

Okeechobee Utility Authority 100 SW 5th Avenue Okeechobee, FL 34974-4221

Lump Sum Contract Amount:\$ 14,840.00Prior Invoices to Date:\$ 13,356.00This Invoice Amount:\$ 1,484.00Remaining Balance:\$ -

THIS INVOICE AMOUNT: \$ 1,484.00

Please make checks payable to: Holtz Consulting Engineers, Inc.

270 South Central Boulevard, Suite 207

Jupiter, FL 33458

If you have any questions concerning this invoice, please contact Christine Miranda at (863) 824-7200

HCE will never communicate changes to invoicing, payment procedures, and/or account number information in an email. All financial communications will be in writing via certified mail.

Summary of Invoice by Task Amount



Billing Period Thru: January 31, 2022

Invoice #: 11006-2

PROJECT: Conners Gables WM Extension

TAS	SK	DESCRIPTION	FULL AMOUNT	PERCENT COMPLETE	AL AMOUNT LED TO DATE	REVIOUSLY BILLED	IS INVOICE AMOUNT	BALA	NCE REMAINING
1		Preparation of Design Plans and Bidding Documents	\$ 14,840.00	100%	\$ 14,840.00	\$ 13,356.00	\$ 1,484.00	\$	-
			\$ 14,840.00		\$ 14,840.00	\$ 13,356.00	\$ 1,484.00		
								\$	-

AGENDA ITEM NO. 7

FEBRUARY 17, 2022

CONSENT AGENDA

INVOICES FROM ECKLER ENGINEERING, INC. – PINE RIDGE PARK UTILITY IMPROVMENT

Please find attached invoices in the amount of \$3,001.81 and 6,003.62 submitted by Eckler Engineering, Inc. Staff is aware of the work currently being done by Eckler Engineering, Inc. and is in agreement with this request.

Invoice Date	Pay Request No.	Date Paid	Amt. Requested	Amount Paid	Remaining Balance
					\$145,600.00
May-20	1	May-20		\$2,912.00	\$142,688.00
Jun-20	2	Jun-20		\$11,648.00	\$131,040.00
Jul-20	3	Jul-20		\$32,032.00	\$99,008.00
Aug-20	4	Aug-20		\$14,560.00	\$84,448.00
Aug-20	Change Order #1		\$21,000.00		\$105,448.00
Sep-20	5	Sep-20		\$22,148.00	\$83,300.00
Oct-20	6	Oct-20		\$24,990.00	\$58,310.00
Nov-20	7	Nov-20		\$19,992.00	\$38,318.00
Dec-20	8	Dec-20		\$4,998.00	\$33,320.00
Dec-20	Change Order #2		\$22,000.00		\$55,320.00
Jan-21	9	Jan-21		\$8,170.00	\$47,150.00
Feb-21	10	Feb-21		\$18,860.00	\$28,290.00
Mar-21	11	Mar-21		\$9,430.00	\$18,860.00
Apr-21	12	Apr-21		\$3,772.00	\$15,088.00
May-21	13			\$1,886.00	\$13,202.00
	Change Order #3		\$111,581.00		\$124,783.00
Jun-21	14	Jun-21		\$7,712.41	\$117,070.59
Jul-21	15	Jul-21		\$12,007.24	\$105,063.35
Aug-21	16	Aug-21		\$9,005.43	\$96,057.92
Sep-21	17	Sep-21		\$30,018.10	\$66,039.82
Oct-21	18	Oct-21		\$15,009.05	\$51,030.77
Nov-21	19	Nov-21		\$9,005.43	\$42,025.34
Dec-21	20	Dec-21		\$9,005.43	\$33,019.91
Jan-22	21		\$3,001.81		\$30,018.10
Feb-22	22		\$6,003.62		\$24,014.48

Staff recommends approval of these invoices in the amount of \$3,001.81 and \$6,003.62 to Eckler Engineering, Inc.



Mr. John Hayford, P.E. Okeechobee Utility Authority 100 SW 5th Avenue Okeechobee, FL 34974 January 12, 2022

No:

235-006.01

Invoice No:

21313

Project: Pine Ridge Park Utility Improvements

Professional engineering services for the design of the Pine Ridge Park Utility Improvements as authorized on May 17, 2021 under P.O. No. 10380 (Change Order No. 3), Engineering Scope Revision No. 1 dated 7/20/2020 and Engineering Scope Revision No. 2 dated 12/3/2020 and Engineering Scope Revision No. 3 dated 5/17/2021.

Professional Services from November 26, 2021 to December 25, 2021

Phase	0001	Design Phase				
Fee						
Total Fee		300,181.00				
Percent C	Complete	90.00	Total Earne	d	270,162.90	
			Previous Fe	ee Billing	267,161.09	
			Current Fee	e Billing	3,001.81	
			Total Fee			3,001.81
Billing Limits	5		Current	Prior	To-Date	
Total Billi	ngs		3,001.81	267,161.09	270,162.90	
Limit					300,181.00	
Rema	aining				30,018.10	
				Total this	s Phase	\$3,001.81
				Total this	Invoice	\$3,001.81

Fee (Design Phase) History Summary:

2020-04-14 Original PO #10380 = \$145,600.00 2020-09-22 Change Order #1 = \$21,000.00 2020-12-22 Change Order #2 = \$22,000.00 2021-05-17 Change Order #3 = \$111,581.00

Fee Total \$300,181.00



Mr. John Hayford, P.E. Okeechobee Utility Authority 100 SW 5th Avenue Okeechobee, FL 34974 February 2, 2022

No: 235-006.01 Invoice No: 22001

Project: Pine Ridge Park Utility Improvements

Professional engineering services for the design of the Pine Ridge Park Utility Improvements as authorized on May 17, 2021 under P.O. No. 10380 (Change Order No. 3), Engineering Scope Revision No. 1 dated 7/20/2020 and Engineering Scope Revision No. 2 dated 12/3/2020 and Engineering Scope Revision No. 3 dated 5/17/2021.

Professional Services from December 26, 2021 to January 25, 2022

Phase	0001	Design Phase				
Fee						
Total Fe	e	300,181.00				
Percent	Complete	92.00	Total Earne	d	276,166.52	
			Previous Fe	ee Billing	270,162.90	
			Current Fee	e Billing	6,003.62	
			Total Fee			6,003.62
Billing Limits	3		Current	Prior	To-Date	
Total Bil	lings		6,003.62	270,162.90	276,166.52	
Limi	t				300,181.00	
Rem	naining				24,014.48	
				Total this	Phase	\$6,003.62
				Total this I	nvoice	\$6,003.62

Fee (Design Phase) History Summary:

2020-04-14 Original PO #10380 = \$145,600.00 2020-09-22 Change Order #1 = \$21,000.00 2020-12-22 Change Order #2 = \$22,000.00 2021-05-17 Change Order #3 = \$111,581.00

Fee Total \$300,181.00

PROJECT INVOICE SCHEDULE PINE RIDGE PARK UTILITY IMPROVEMENTS

Okeechobee Utility Authority EEI Project Number: 235-006.01

INVOICE NUMBER : 22001 INVOICE DATE : 2/2/2022

	FY 2021 PO #	PROJECT COMPONENT	DESIGN PHASE	C	% COMPLETE		TOTAL THIS INVOICE	TOTAL PREVIOUS INVOICES	TOTAL TO DATE		BALANCE REMAININC	;
1	10380	Original Contract	\$ 145,600.00		91%		\$ -	\$132,398.00	\$132,398.00	;	\$ 13,202.0)
2	10380	CO #1 - 11th Lane and Palm Mobile Home	\$ 21,000.00		100%		\$ -	\$ 21,000.00	\$ 21,000.00	;	\$ -	
3	10380	CO #2 - Water System Components	\$ 22,000.00		100%		\$ -	\$ 22,000.00	\$ 22,000.00	;	\$ -	
4	10380	CO #3 - Vacuum Sewer Design	\$ 111,581.00		90%	=	\$ 6,003.62	\$100,768.52	\$100,768.52	<u>:</u>	\$ 10,812.4	<u>3</u>
		TOTALS	\$ 300,181.00		92%	;	\$ 6,003.62	\$276,166.52	\$276,166.52	9	\$ 24,014.4	3

AGENDA ITEM NO. 8

FEBRUARY 17, 2022

CONSENT AGENDA

INVOICES FROM SUMNER ENGINEERING & CONSULTING, INC. – SW WASTEWATER SERVICE AREA PROJECT (PART E)

Please find attached the invoice in the amount of \$57,147.84 submitted by Sumner Engineering & Consulting, Inc. Staff is aware of the work currently being done by Sumner Engineering & Consulting, Inc. and is in agreement with this request.

Invoice Date	Pay Request No.	Date Paid	Amt. Requested	Amount Paid	Remaining Balance
					\$1,141,783.00
Jun-21	1	Jun-21		\$19,783.98	\$1,121,999.02
Jul-21	2	Jul-21		\$28,576.86	\$1,093,422.16
Aug-21	3	Aug-21		\$17,585.76	\$1,075,836.40
Sep-21	4	Sep-21		\$61,550.16	\$1,014,286.24
Oct-21	5	Oct-21		\$68,144.82	\$946,141.42
Dec-21	6	Dec-21		\$15,387.54	\$930,753.88
Jan-22	7	Jan-22		\$84,990.00	\$845,763.88
Feb-22	8		\$57,147.84		\$788,616.04

Staff recommends approval of this invoice in the amount of \$57,147.84 to Sumner Engineering & Consulting, Inc.

The Southwest Service Area (SWSA) septic to sewer project has three separate segments or phases which can be described as follows:

Project 2 Collection System

- Oak Lake Estates (Part D)
- Collection system for the Oak Lake Estates area only
- o SWSA (Part E)
- The collection piping and two vacuum pump stations for all of the remaining service area



Invoice

BILL TO February 7, 2022

Okeechobee Utility Authority 100 SW 5th Avenue Okeechobee, Florida 34974

Invoice No. 1431

SW Wastewater Service Area Project (SEC Proj. No. 19-04)

Part E – SWSA Project 2 Design, Permitting and Construction Phase Services

OUA Purchase Order No. 10829

Task	Contract	Percent	Amount	Previously	Invoice
	Amount	Complete	Complete	Billed	Amount
E1 – Preliminary Design	\$219,822	100%	\$219,822.00	\$219,822.00	\$0.00
and Permitting					
E2 – Final Design and	\$476,232	28%	\$133,344.96	\$76,197.12	\$57,147.84
Permitting					
E3 – Bidding and	\$34,778	0%	\$0.00	\$0.00	\$0.00
Negotiation Phase					
E4 – Construction Phase	\$147,500	0%	\$0.00	\$0.00	\$0.00
Services (excl. RPR)					
E5 – Post-Construction	\$20,784	0%	\$0.00	\$0.00	\$0.00
Phase Services					
E6 – Resident Project	\$242,667	0%	\$0.00	\$0.00	\$0.00
Representative (T&M)					
				TOTAL:	\$57,147.84

Total Purchase Order Amount: \$1,141,783.00
Total Billed to Date: \$ 353,166.96

Total Billed this Invoice: \$ 57,147.84

For services rendered January 1 - 29, 2022.

AGENDA ITEM NO. 9

FEBRUARY 17, 2022

CONSENT AGENDA

INVOICES FROM SUMNER ENGINEERING & CONSULTING, INC. – TORTOISE SURVEYING AND PERMITTING

Please find attached the invoice in the amount of \$4,485.00 submitted by Sumner Engineering & Consulting, Inc. Staff is aware of the work currently being done by Sumner Engineering & Consulting, Inc. and is in agreement with this request.

Invoice Date	Pay Request No.	Date Paid	Amt. Requested	Amount Paid	Remaining Balance
					\$6,900.00
Jan-22	1		\$4,485.00		\$2,415.00

Staff recommends approval of this invoice in the amount of \$4,485.00 to Sumner Engineering & Consulting, Inc.



Invoice

BILL TO February 7, 2022

Okeechobee Utility Authority 100 SW 5th Avenue Okeechobee, Florida 34974

Invoice No. 1430

SWSA Project 1 (SEC Proj. No. 19-04)

OUA Purchase Order No. 11063 (Tortoise Survey and Permitting – MPS Site)

Task	Contract	Percent	Amount	Previously	Invoice
	Amount	Complete	Complete	Billed	Amount
Tortoise Field Survey and	\$6,900.00	65%	\$4,485.00	\$0.00	\$4,485.00
Permitting Application					
				TOTAL:	\$4,485.00

Total Purchase Order Amount: \$6,900.00
Total Billed to Date: \$4,485.00 **Total Billed this Invoice:** \$4,485.00

For services rendered through January 29, 2022.

AGENDA ITEM NO. 10

FEBRUARY 17, 2022

CONSENT AGENDA

INVOICE FROM SUMNER ENGINEERING & CONSULTING, INC. – SW $\mathbf{5}^{\text{TH}}$ AVENUE SEWER

Please find attached the invoice in the amount of \$12,357.12 submitted by Sumner Engineering & Consulting, Inc. Staff is aware of the work currently being done by Sumner Engineering & Consulting, Inc. and is in agreement with these requests.

Invoice Date	Pay Request No.	Date Paid	Amt. Requested	Amount Paid	Remaining Balance
					\$46,588.00
Apr-21	1	Apr-21		\$5,445.24	\$41,142.76
Sep-21	2	Sep-21		\$6,985.68	\$34,157.08
Oct-21	3	Oct-21		\$1,355.94	\$32,801.14
Dec-21	4	Dec-21		\$4,088.80	\$28,712.34
Jan-22	5	Jan-22		\$5,909.52	\$22,802.82
Feb-22	6		\$12,357.12		\$10,445.70

Staff recommends approval of this invoice in the amount of \$12,357.12 to Sumner Engineering & Consulting, Inc.



Invoice

BILL TO February 7, 2022

Okeechobee Utility Authority 100 SW 5th Avenue Okeechobee, Florida 34974

Invoice No. 1432

SW 5th Avenue Sewer PER (SEC Proj. No. 20-10)

OUA Purchase Order No. 10711

Task	Contract	Percent	Amount	Previously	Invoice
	Amount	Complete	Complete	Billed	Amount
A1 – Project Management	\$3,690.00	80%	\$2,952.00	\$1,918.80	\$1,033.20
& Meetings					
A2 – Preliminary	\$39,048.00	85%	\$33,190.80	\$21,866.88	\$11,323.92
Evaluation Report					
A3 – Funding Sources &	\$3,850.00	0%	\$0.00	\$0.00	\$0.00
Opportunities Review					
				TOTAL:	\$12,357.12

Total Purchase Order Amount: \$46,588.00
Total Billed to Date: \$36,142.80
Total Billed this Invoice: \$12,357.12

For services rendered January 1 - 29, 2022.

AGENDA ITEM NO. 11

FEBRUARY 17, 2022

CONSENT AGENDA

INVOICE FROM MACVICAR CONSULTING, INC.

Please see attached the MacVicar Consulting Inc. invoice.

Staff recommends approval of the monthly invoice from MacVicar Consulting Inc. in the amount of \$250.00.



Invoice

Okeechobee Utility Authority Attn:John Hayford, Exec Director 100 SW 5th Avenue Okeechobee, FL 34974 PO No:0000010989

DATE	INVOICE#
1/31/2022	202202013

PROJECT
540.01-LOSOM Support

DESCRIPTION		AMOUNT
Support for the month of January 2022		250.00
	Total	\$250.00

AGENDA ITEM NO. 12

FEBRUARY 17, 2022

CONSENT AGENDA

INVOICE FROM THORN RUN PARTNERS

Please see attached the Thorn Run Partners monthly invoices for January and February.

Staff recommends approval of the January and February monthly invoices from Thorn Run Partners in the amounts of \$3,500.00 and \$3,500.00



INVOICE

January 3, 2022

Invoice No: 1322

TO:

Okeechobee Utility Authority

100 SW 5th Avenue Okeechobee, FL 34974

DESCRIPTION	AMOUNT
Government Relations Services performed January 2022 Fee as agreed to and amount owed: PO 10938	\$3,500.00
TOTAL AMOUNT DUE:	\$3,500.00

Please make all checks payable to Thorn Run Partners, LLC:

By Mail:

Thorn Run Partners, LLC 100 M Street, SE Suite 750 Washington, DC 20003 By Wire: PNC BANK

ABA: 054000030

Account #5313630938

Account: Thorn Run Partners, LLC

FEIN: 27-1541515

If you have any questions concerning this invoice, contact Chris Lamond at clamond@thornrun.coror 202-688-0222



INVOICE

February 1, 2022

Invoice No: 2322

TO:

Okeechobee Utility Authority

100 SW 5th Avenue Okeechobee, FL 34974

DESCRIPTION	AMOUNT
Government Relations Services performed February 2022 Fee as agreed to and amount owed: PO 10938	\$3,500.00
TOTAL AMOUNT DUE:	\$3,500.00

Please make all checks payable to Thorn Run Partners, LLC:

By Mail:

Thorn Run Partners, LLC 100 M Street, SE Suite 750 Washington, DC 20003 By Wire: PNC BANK

ABA: 054000030

Account #5313630938

Account: Thorn Run Partners, LLC

FEIN: 27-1541515

If you have any questions concerning this invoice, contact Chris Lamond at clamond@thornrun.co or 202-688-0222

AGENDA ITEM NO. 13

FEBRUARY 17, 2022

CONSENT AGENDA

ACCOUNTS TO BE WRITTEN OFF

In accordance with Section 44 of Resolution 15-01, all accounts that have an outstanding balance of \$50.00 or less or bankrupt and are older than one year will not be pursued for payment. Except for the 3 bankrupt accounts, the debt is still owed, but is recommended to be written-off for accounting purposes.

The resolution states that:

"Before any account is deemed uncollectible and immaterial for collection, a list reflecting customers' names and outstanding balances will be provided to the Board of Directors for review and approval."

And "if the debt has been discharged in bankruptcy."

The accompanying list of accounts to be written off totals \$1,823.34 and represents the unpaid balances on 9 customers whose accounts meet the established criterion for write off. The list is attached for Board review and approval.

Staff recommends approval of the attached list of accounts to be written off.

	Α	В	С	D	E	F	G	М	l N
1								101	114
2									
3	UB ACCT	RTE/SEQ	OWNER	R/NR/GO	FINAL	NAME (CUSTOMER)	ADDRESS	TOTAL	
4_	016044-000	27903300	TENANT	Non Residen	4/2/2019	TIMESAVER FOOD STORES LLC	3990 HWY 710	\$230.10	Bankrupt
5	016975-000	28609680	TENANT	Non Residen	4/2/2019	TIMESAVER FOOD STORES LLC	2398 HWY 70 W	\$324.05	Bankrupt
6	039500-000	26006200	TENANT	Non Residen	4/2/2019	TIMESAVER FOOD STORES LLC #50	1865 HWY 70 W	\$1,174.78	Bankrupt
7								\$1,728.93	
8			4						
9	052510-000	13200400	TENANT	RESIDENTIAL	11/12/2020	BOSWELL ANTHONY	810 NW 12TH ST APT 2	\$15.30	
10	048483-000	27402230	Tenant	Residential	11/23/2020	HARRIS JUSTIN R	1301 SE 5TH ST	\$16.42	
11	052256-000	13202214	Tenant	Residential	1/13/2021	MILLAN DESIRAE L	908 NW 10TH ST	\$13.41	
12	053020-000	50207230	TENANT	RESIDENTIAL	2/3/2021	ROSE MASON G	1218 8TH ST	\$13.56	
13	050600-000	13302405	Tenant	Residential	2/11/2021	ORTIZ EMMANUEL	503 NE 3RD AVE	\$35.02	
14	051926-000	13306925	Tenant	Residential	2/11/2021	OLIVER JESSE DEWAYNE	104 NW 11TH ST	\$0.70	
15								\$94.41	

Tenants past dues 1.31.22 2/8/2022 5:54 PM

AGENDA ITEM NO. 14

FEBRUARY 17, 2022

CONNERS GABLES WATER MAIN IMPROVEMENTS

In late January 2022, the OUA received quotations from three suppliers of utility material. OUA staff prepared a bid tabulation and it is attached for review.

The lowest bid of \$37,702.70 was submitted by Core & Main.

After review, discussion and if approved by the OUA Board, staff is recommending approval of the bid submitted by Core & Main in the amount of \$37,702.70.

During the first week of February, the OUA received sealed bids for the Conners Gables Water Main Extension project. There were three bidders for the project. Please find attached a Recommendation of Award letter form Holtz Consulting Engineers, Inc., the engineer of record for the project.

Upon review of this letter, HCE is making a recommendation to award the project to PRP Construction Group, LLC in the amount of \$141,472.00.

After review, discussion and if approved by the OUA Board, staff is recommending approval of the bid submitted by PRP Construction Group, LLC in the amount of \$141,472.00.

If the PRP Construction Group, LLC bid is accepted and approved, then HCE is requesting approval to execute the Notice of Award by the OUA Board Chair.

Staff is requesting approval from the OUA Board to authorize the OUA Board Chair to execute the Notice of Award for the CONNERS GABLES WATER MAIN IMPROVEMENTS project.

hase of Materials for the Conners Gables Water Main Exten

				FORTILINE				CORE&MAIN				FERGUSON
Piping	Units	Qty	Unit Price	Extended Price		Unit Price		Extended Price		Unit Price		Extended Price
8" DR18 PVC	LF	1,000	\$ 21.75	\$ 21,750.00		\$ 20.0	7	\$ 20,070.00	\$	23.00	\$	23,000.00
6" DIP	LF	20	\$ 20.07	\$ 401.40		\$ 19.6	9	\$ 393.80	\$	21.00	\$	420.00
2" SDR11 HDPE	LF	700	\$ 1.80	\$ 1,260.00		\$ 2.0	0	\$ 1,400.00	\$	1.97	\$	1,375.50
EW DI	1	1	1	I	- I	1	1				İ	
Fittings, DI 8" 45° Bend, MJ DI	Units EA	Qty 2	Unit Price \$ 120.95	Extended Price 241.90	ł	Unit Price		Extended Price	\$	Unit Price	_	Extended Price
,	EA	1		\$ 241.90	ł	100.2			\$	113.70	\$	239.40
8" Tee, MJ DI 8"x6"x8" Tee, MJ DI	EA	2	·	Ψ	ł	£33.0			<u>⊢</u>	217.00	\$	217.80
,				\$ 919.10	1	202.3	7		\$	100.50	\$	360.60
8" Cross, MJ DI	EA	1	\$ 233.35	\$ 233.35	1	\$ 445.0			\$	231.00	\$	231.00
8" Solid Sleeve, MJ DI	EA	1	\$ 147.15	\$ 147.15	ļ	\$ 160.0	8 \$	\$ 160.08	\$	147.30	\$	147.90
8" Plug w/ 2" Tap, DI	EA	1	\$ 105.75	\$ 105.75	ļ	\$ 153.8	3 \$	\$ 153.83	\$	104.70	\$	104.70
6" Anchor Coupling	EA	4	\$ 166.95	\$ 667.80	ļ	\$ 163.2	0 \$	\$ 652.80	\$	304.30	\$	1,458.00
Fire Hydrant, 36" Bury	EA	2	\$ 2,105.00	\$ 4,210.00	ļ	\$ 2,236.4	4 \$	\$ 4,472.88	\$	2,000.40	\$	4,018.80
6" MJ Kits, less gland	EA	12	\$ 28.00	\$ 336.00	ļ	\$ 20.2	5 \$	\$ 243.00	\$	30.40	\$	364.80
8" MJ Kits, less gland	EA	16	\$ 32.00	\$ 512.00	-	\$ 22.8	8 \$	\$ 366.08	\$	33.00	\$	528.00
Valve Box Top, Long 5 1/4" DI	EA	5	\$ 27.50	\$ 137.50	ļ	\$ 66.5	0 \$	\$ 332.50	\$	56.10	\$	280.50
Valve Box Top, Short 5 1/4" DI	EA	2	\$ 18.50	\$ 37.00		\$ 44.9	1 \$	\$ 89.82	\$	45.80	\$	91.60
Valve Box Bottom, Long, 5 1/4" DI	EA	7	\$ 35.00	\$ 245.00		\$ 71.6	9 \$	\$ 501.83	\$	56.40	\$	394.80
Valve Box Lid, 5 1/4" DI "WATER"	EA	7	\$ 12.00	\$ 84.00		\$ 20.4	8 \$	\$ 143.36	\$	9.90	\$	69.30
Valves	Linita	l otr	Unit Price	Extended Price	l	Unit Price	1	Extended Price	1	Unit Price	1	Extended Price
8" Gate Valve, MJ	Units EA	Qty 4	\$ 1,085.00	£ 4,340.00	1	•	0 4		\$		•	
6" Gate Valve, MJ	EA	2	\$ 680.00	\$ 1,360.00	1	1,072.0			\$	343.00	\$	3,775.20
2" Ball Valve	EA	1	\$ 320.00	Ψ ,	ł	ф			\$	333.10	\$	1,186.20
2 Ball valve	L/\		Ψ 020.00	\$ 020.00	l	^{\$} 221.1	4 \	\$ 221.14	Ψ	316.50	\$	316.50
EBAA		ı	1	ı	ı	1	i	1	1		i	1
Mechanical Joint Restraint 2000PV Megalug	Units	Qty	Unit Price	Extended Price		Unit Price		Extended Price		Unit Price		Extended Price
6" - 2006PV	EA	0	\$	\$ 0.00	Ī	\$ 34.3	7 9		\$	42.00	\$	0.00
8" - 2008PV	EA	16	\$ 58.00	\$ 928.00	Ì	\$ 50.8	7 \$	\$ 813.92	\$	62.10	\$	993.60
Pipe Joint Restraint		I	ĺ		1	ĺ	1	I	ı		1	I
Series 1600	Units	Qty	Unit Price	Extended Price	1	Unit Price		Extended Price		Unit Price	L,	Extended Price
6" - 1606	EA	0	\$	\$ 0.00		\$ 48.4	9 \$	\$ 0.00	\$	116.60	\$	0.00
8" - 1608	EA	6	\$ 106.50	\$ 639.00		\$ 78.6	5 \$	\$ 471.90	\$	165.90	\$	995.40
Material Listing Version 2, dated	January 14	, 2022		\$39,095.00				\$37,702.70				\$40,569.60
		Handwritte	n unit bid had a c	lifferent value than wha	t is	on the Compar	ıy bi	id quote, company quo	te en	tered here		

Company bid quote still had the earlier bid quantity of 12, this entry reflects the corrected quantity, 0

Company bid quote still had a bid quantity of 1, this entry reflects the corrected quantity, 0



February 8, 2022

Mr. John Hayford, PE Executive Director Okeechobee Utility Authority 100 SW 5th Avenue Okeechobee, FL 34974

Subject: OUA Conners Gables Water Main Extension

Recommendation of Award to PRP Construction Group, LLC

Dear Mr. Hayford,

On February 7, 2022 at 3:30 PM bids were opened for the referenced project. There were (3) three bids

accepted for the project as follows:

Bidder	Total Bid Amount	Acknowledged Addenda?	Included Bid Security?
PRP Construction Group, LLC	\$141,472.00	Y	Y
Johnson-Davis, Inc.	\$151,000.00	N	Y
Hinterland Group, Inc.	\$218,700.00	Y	Y

The bids were reviewed by Holtz Consulting Engineers, Inc. (HCE) to evaluate whether the bids were responsive to the bid submittal requirements. The apparent low bidder was PRP Construction Group, LLC. with a Total Bid Amount of \$141,472.00. Bid security in the form of a bid bond in the amount of five percent of the total base bid was provided. They acknowledged receipt of the addenda on the bid form. The other forms and information required to be submitted with their bid appear to be in order. We therefore consider the bid submitted by PRP Construction Group, LLC to be responsive.

PRP Construction Group, LLC has recently successfully completed a similar water main project in which HCE served as the engineer-of-record. They also have recently completed a water main project for Okeechobee Utility Authority. PRP Construction Group, LLC is a corporation in good standing with the Florida Department of State Division of Corporations. We therefore consider PRP Construction Group, LLC to be a responsible bidder.

Based on the above information, Holtz Consulting Engineers, Inc. considers PRP Construction Group, LLC to be the low responsive and responsible bidder and recommends that they be awarded the contract for the Conners Gables Water Main Extension project in the Total Bid Amount of \$141,472.00.

Sincerely,

HOLTZ CONSULTING ENGINEERS, INC.

Principal Engineer

CONNERS GABLES WATER MAIN EXTENSION

Bid Tabulation

February 7, 2022

TEM NO.				PRP Construction	Group, LLC	Johnson-Davis, Inc.		Hinterland	Group, Inc.	Engineer's Estimate	
	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
1 1	MOBILIZATION/DEMOBILIZATION (INC. GC'S, MOT, AND SAFETY)	1	LS	\$10,000.00	\$10,000.00	\$7,000.00	\$7,000.00	\$25,000.00	\$25,000.00	\$12,100.50	\$12,100.50
	MAINTENANCE OF TRAFFIC	1	LS	\$1,000.00	\$1,000.00	\$3,500.00	\$3,500.00	\$7,000.00	\$7,000.00	\$3,630.15	\$3,630.15
	PRECONSTRUCTION VIDEO DOCUMENTATION	1	LS	\$1,850.00	\$1,850.00	\$1,640.00	\$1,640.00	\$3,280.00	\$3,280.00	\$820.00	\$820.00
4	RECORD DRAWINGS	1	LS	\$5,750.00	\$5,750.00	\$9,840.00	\$9,840.00	\$9,840.00	\$9,840.00	\$3,280.00	\$3,280.00
5 I	8" PVC WATER MAIN (OWNER WILL FURNISH 1,000 LF OF C900 PVC AND SIXTEEN (16) MEGALUG 2008PV JOINT RESTRAINTS), SIXTEEN (16) MECHANICAL JOINT BOLT AND GASKET PACKS (LESS GLAND), AND SIX (6) 1608 RESTRAINTS)	970	LF	\$23.00	\$22,310.00	\$30.00	\$29,100.00	\$32.00	\$31,040.00	\$32.00	\$31,040.00
6	2" POLYETHYLENE WATER MAIN TO BE INSTALLED VIA OPEN- CUT OR HDD AS DIRECTED ON ENGINEERING PLANS (OWNER WILL FURNISH 700 LF OF 2" SDR 11 HDPE)	670	LF	\$32.00	\$21,440.00	\$17.00	\$11,390.00	\$52.00	\$34,840.00	\$18.00	\$12,060.00
-/	8-INCH GATE VALVE WITH VALVE BOX (OWNER WILL FURNISH FOUR (4) 8" GATE VALVES AND VALVE BOXES)	4	EA	\$220.00	\$880.00	\$800.00	\$3,200.00	\$1,500.00	\$6,000.00	\$1,500.00	\$6,000.00
8	2-INCH BALL VALVE AND VALVE BOX (OWNER WILL FURNISH ONE (1) 2" BALL VALVE AND VALVE BOX)	1	EA	\$180.00	\$180.00	\$500.00	\$500.00	\$780.00	\$780.00	\$750.00	\$750.00
9	FIRE HYDRANT ASSEMBLY WITH 6-INCH GATE VALVE AND VALVE BOX (OWNER WILL FURNISH TWO (2) FIRE HYDRANTS, IWO (2) 6" GATE VALVES AND VALVE BOXES, TWELVE (12) MECHANICAL JOINT BOLT AND GASKET PACKS (LESS GLAND), AND FOUR (4) 6" ANCHOR COUPLINGS)	2	EA	\$1,850.00	\$3,700.00	\$1,750.00	\$3,500.00	\$3,050.00	\$6,100.00	\$4,500.00	\$9,000.00
10	8" X 8" MJ DUCTILE IRON TEE (OWNER WILL FURNISH ONE (1) 8" X 8" MJ TEE)	1	EA	\$550.00	\$550.00	\$400.00	\$400.00	\$780.00	\$780.00	\$250.00	\$250.00
11	"" 45 DEG MJ DUCTILE IRON BEND (OWNER WILL FURNISH TWO (2) 8" 45 DEG MJ BENDS)	2	EA	\$425.00	\$850.00	\$375.00	\$750.00	\$780.00	\$1,560.00	\$100.00	\$200.00
12	3" X 8" MJ DUCTILE IRON CROSS (OWNER WILL FURNISH ONE (1) 8" X 8" MJ CROSS)	1	EA	\$600.00	\$600.00	\$500.00	\$500.00	\$780.00	\$780.00	\$300.00	\$300.00
13	3" X 6" MJ DUCTILE IRON TEE (OWNER WILL FURNISH ONE (1) 3" X 6" MJ TEE)	1	EA	\$425.00	\$425.00	\$400.00	\$400.00	\$780.00	\$780.00	\$225.00	\$225.00
14	8" MJ DUCTILE IRON PLUG (OWNER WILL FURNISH ONE (1) 8" MJ PLUG)	1	EA	\$200.00	\$200.00	\$200.00	\$200.00	\$780.00	\$780.00	\$100.00	\$100.00
15	8" MJ DUCTILE IRON LONG SLEEVE (OWNER WILL FURNISH ONE (1) 8" MJ SLEEVE)	1	EA	\$425.00	\$425.00	\$400.00	\$400.00	\$780.00	\$780.00	\$150.00	\$150.00
16	8" MJ DUCTILE IRON PLUG W/2" TAP (OWNER WILL FURNISH ONE (1) 8" PLUG WITH 2" TAP)	1	EA	\$200.00	\$200.00	\$200.00	\$200.00	\$780.00	\$780.00	\$100.00	\$100.00
	8" x 6" MJ DUCTILE IRON REDUCER (OWNER WILL FURNISH ONE (1) 8" X 6" REDUCER)	1	EA	\$400.00	\$400.00	\$300.00	\$300.00	\$780.00	\$780.00	\$200.00	\$200.00
18	CONNECT NEW 8-INCH WATER MAIN TO EXISTING 8-INCH WATER MAIN	1	EA	\$850.00	\$850.00	\$5,000.00	\$5,000.00	\$4,600.00	\$4,600.00	\$3,500.00	\$3,500.00
10	CONNECT NEW 2-INCH WATER MAIN TO EXISTING 2-INCH WATER MAIN	1	EA	\$800.00	\$800.00	\$2,000.00	\$2,000.00	\$3,050.00	\$3,050.00	\$1,750.00	\$1,750.00
20	FILL & FLUSHING ASSEMBLY	2	EA	\$4,950.00	\$9,900.00	\$2,400.00	\$4,800.00	\$4,150.00	\$8,300.00	\$2,150.00	\$4,300.00
21	SAMPLE POINT	4	EA	\$450.00	\$1,800.00	\$1,200.00	\$4,800.00	\$1,950.00	\$7,800.00	\$500.00	\$2,000.00
22	CHLORINATING/TESTING	1640	LF	\$5.00	\$8,200.00	\$2.00	\$3,280.00	\$1.50	\$2,460.00	\$2.00	\$3,280.00
23	SINGLE SHORT SERVICE	1	EA	\$1,200.00	\$1,200.00	\$1,200.00	\$1,200.00	\$2,100.00	\$2,100.00	\$600.00	\$600.00
24	SINGLE LONG SERVICE	1	EA	\$1,420.00	\$1,420.00	\$1,600.00	\$1,600.00	\$2,500.00	\$2,500.00	\$900.00	\$900.00
25	DOUBLE SHORT SERVICE	1	EA	\$1,840.00	\$1,840.00	\$2,000.00	\$2,000.00	\$3,000.00	\$3,000.00	\$1,000.00	\$1,000.00
26	DOUBLE LONG SERVICE	2	EA	\$2,476.00	\$4,952.00	\$2,500.00	\$5,000.00	\$3,750.00	\$7,500.00	\$1,500.00	\$3,000.00
27	SODDING	1	LS	\$1,850.00	\$1,850.00	\$12,000.00	\$12,000.00	\$5,500.00	\$5,500.00	\$5,000.00	\$5,000.00
	ASHPHALT DRIVEWAY REPLACEMENT	20	SY	\$110.00	\$2,200.00	\$70.00	\$1,400.00	\$87.00	\$1,740.00	\$40.00	\$800.00
	CONCRETE DRIVEWAY REPLACEMENT	20	SY	\$155.00	\$3,100.00	\$100.00	\$2,000.00	\$110.00	\$2,200.00	\$60.00	\$1,200.00
	SHELLROCK DRIVEWAY REPLACEMENT	60	SY	\$45.00	\$2,700.00	\$35.00	\$2,100.00	\$45.00	\$2,700.00	\$25.00	\$1,500.00
	MISCELLANEOUS RESTORATION	1	LS	\$2,000.00	\$2,000.00	\$4,000.00	\$4,000.00	\$6,750.00	\$6,750.00	\$5,000.00	\$5,000.00
	ASHPHALT PAVEMENT RESTORATION	20	SY	\$145.00	\$2,900.00	\$100.00	\$2,000.00	\$130.00	\$2,600.00	\$90.00	\$1,800.00
33	CONTINGENCY	1	LS d Amount	\$25,000.00 \$141,472	\$25,000.00	\$25,000.00 \$151,00	\$25,000.00	\$25,000.00 \$218,7	\$25,000.00	\$25,000.00 \$140,83	\$25,000.00

NOTICE OF AWARD

DATED: February 14, 2022
BIDDER: PRP Construction Group, LLC
ADDRESS: 8300 Springhaven Ave., Indiantown, FL 34956
PROJECT: CONNERS GABLES WATER MAIN EXTENSION
You are notified that your Bid <u>dated February 7</u> , 2022 for the above Project has been considered. You are the successful bidder and have been awarded a contract for the <u>CONNERS GABLES WATER MAIN EXTENSION.</u>
Four (4) copies of each of the proposed Contract Documents accompany this Notice of Award. Four (4) sets of the Drawings will be delivered separately or otherwise made available to you immediately.
You must comply with the following conditions precedent within fifteen days of the date of this Notice of Award that is by March 1 , 2022 .
1. You must deliver to the ENGINEER four (4) fully executed counterparts of the Agreement including all of the Contract Documents. Each of the Contract Documents must bear your signature on the cover of each of the documents and on Page A-5 of the Agreement.
2. You must deliver with the executed Agreement the Public Construction Bond as specified in the Bid Form and the Agreement (paragraph 7.3) in accordance with Florida Statutes 255.05, as amended.
3. You must deliver with the executed Agreement the Certificates of Insurance as specified in Article 5 of the General Conditions.
4. (The following are additional conditions precedent).
Failure to comply with these conditions within the time specified will entitle OWNER to consider your bid abandoned, to annul this Notice of Award and your Bid Security will become property of OWNER.
Within ten (10) days after you comply with those conditions, ENGINEER will return to you one fully signed counterpart of the Agreement with the Contract Documents attached.
OWNER: OKEECHOBEE UTILITY AUTHORITY
By: John R. Creasman, Chairman
John R. Creasman, Chairman

AGENDA ITEM NO. 15

FEBRUARY 17, 2022

SWSA MASTER PUMP STATION

On December 22, 2021, the OUA received bids for the Southwest Service Area Master Pump Station project. At the January 10, 2022, OUA Board Meeting, a recommendation of award to Felix Associates of Florida, Inc. was approved. The bid amount to construct the Master Pump Station is \$1,894,600.00 which was approved as an element of the Notice of Award.

The Notice of Award was executed and submitted to Felix Associates of Florida, Inc. (Felix). Since that time Felix has obtained the required documents (agreement, insurance, bonds, etc.) and they are attached for review.

Once the NTP is executed, contract time begins and Felix will have 365 calendar days to reach substantial completion and 425 calendar days to reach final completion with time for construction beginning upon issuance of Notice to Proceed.

During the course of their project, it is the intent of the OUA to purchase several pieces of equipment (generator, odor control equipment and pumps/control equipment). All costs associated with the purchases will be deducted from the MPS contract price. The OUA will realize a cost savings to the project since this material will purchased tax-free.

After review, discussion and if approved by the OUA Board, staff is recommending approval of execution of the Notice to Proceed for the SWSA Master Pump Station Project.



February 8, 2022

Okeechobee Utility Authority Board of Directors Attn: John R. Creasman, Chairman 100 SW 5th Avenue Okeechobee, FL 34974

RE: OUA – SWSA Master Pump Station
Recommendation of Notice to Proceed

Mr. Creasman:

The OUA authorized a Notice of Award for the above-referenced project to Felix Associates of Florida, Inc. (Felix) at your last Board meeting. In accordance with that Notice of Award, Felix has submitted the following documents as required by the Contract Documents:

- Four (4) signed copies of the Agreement (copy attached)
- Four (4) signed copies of the required Public Construction (Performance) Bond (copy attached), pursuant to Article 6 of the Standard General Conditions
- Current insurance certificate meeting the requirements defined in the Bid Documents (copy attached)

The Sumner Engineering team has thoroughly reviewed the documents, and we find that all required documents have been submitted. We recommend that OUA issue a Notice to Proceed to Felix Associates of Florida, Inc. We look forward to assisting you as this project moves into construction.

Sincerely,

Sumner Engineering & Consulting, Inc.

Jeffrey M Sumner, PE President

cc: John F Hayford, OUA Executive Director (electronic copy)
Bill Lynch, Jones Edmunds (electronic copy)

SECTION 00500

AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

THIS AGREEMENT is by and between	Okeechobee Utility Authority	("Owner") and
Felix Associates of Florida, Inc.		("Contractor").
Owner and Contractor hereby agree as	follows:	
ARTICLE 1 – WORK		

1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

ARTICLE 2 – THE PROJECT

2.01 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: Completion of duplex Master Pump Station for Okeechobee Utility Authority, as described in the Construction Documents.

NOTWITHSTANDING ANY OTHER PROVISIONS OF THIS CONTRACT, OR ANY OF THE SUPPLEMENTAL DOCUMENTS. INCLUDING THE BID FORM, THE SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS, THE OKEECHOBEE UTILITY AUTHORITY RESERVES THE RIGHT TO PURCHASE ANY AND ALL EQUIPMENT OR SUPPLIES, WHERE TO DO SO WILL LAWFULLY AVOID THE PAYMENT OR OBLIGATION FOR PAYMENT, OF FLORIDA SALES AND USE TAX. CONTRACTOR AGREES TO COOPERATE WITH THE OWNER IN SPECIFYING AND WORKING WITHANY THIRD PARTY EQUIPMENT VENDORS OR SUPPLIERS SELECTED BY THE CONTRACTOR AND/OR THE OWNER, AND APPROVED BY THE OWNER, FOR THE PURCHASE OF END ITEMS AND COMPONENTS OF END ITEMS. CONTRACTOR WILL ADVISE THE OWNER OF ANY AND ALL OPPORTUNITIES TO DIRECT PURCHASE END ITEMS AND COMPONENTS OF END ITEMS, GIVING THE OWNER A REASONABLE TIME PERIOD WITHIN WHICH TO ACCOMPLISH THE PURCHASE OF SUCH ITEMS, AND MEET THE TIME SCHEDULES AND CONTRACT TIMES ALLOWED HEREIN. IN THE EVENT THAT OWNER SHALL DECIDE NOT TO MAKE ONE OR MORE SUCH PURCHASES, OR SHALL NOT MAKE ONE OR MORE SUCH PURCHASES, OR SHALL NOT MAKE ONE OR MORE SUCH PURCHASES WITHIN THE TIME FRAME OF THE WORK, THE CONTRACTOR SHALL MAKE THE PURCHASES AND SHALL PAY ALL REQUIRED TAXES. ANY WAIVER OF THIS PROVISION ON THE PART OF THE OWNER, SHALL NOT CONSTITUTE AN ONGOING WAIVER, AND THE CONTRACTOR SHALL NONETHELESS BE OBLIGATED TO NOTIFY THE OWNER OF ANY AND ALL REMAINING **OPPORTUNITIES TO MAKE DIRECT PURCHASES.**

ARTICLE 3 - ENGINEER

3.01 The part of the Project that pertains to the Work has been designed by <u>Sumner Engineering & Consulting, Inc.</u>, and <u>Jones Edmunds & Associates, Inc.</u>

3.02 The Owner has retained <u>Sumner Engineering & Consulting, Inc.</u> ("Engineer") to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 – CONTRACT TIMES

4.01 Time of the Essence

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 Contract Times: Days

A. The Work will be substantially completed within 365 calendar days after the date when the Contract Times commence to run as provided in Paragraph 4.01 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions within 425 calendar days after the date when the Contract Times commence to run. Contract time will commence to run on the date of the Notice to Proceed.

4.03 Liquidated Damages

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completedand Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):
 - Substantial Completion: Contractor shall pay Owner \$500 for each calendar day that
 expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph
 4.02.A above for Substantial Completion until the Work is substantially complete.
 - Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$250 for each calendar day that expires after such time until the Work is completed and ready for final payment.
 - 3. In addition to the above, Contractor shall reimburse Owner for Engineering / Inspection Services incurred beyond the Contract times specified in Paragraph 4.02 above.
 - 4. Liquidated damages for failing to timely attain Substantial Completion and final completion are additive and will be imposed concurrently.

ARTICLE 5 - CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:

A. For all Work, at the prices stated in the Contractor's Bid, a stipulated price of: \$1.894.600.00

ARTICLE 6 – PAYMENT PROCEDURES

6.01 Submittal and Processing of Payments

A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.02 Progress Payments; Retainage

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the <u>last</u> day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit PriceWork based on the number of units completed) or, in the event there is no Schedule of Values, as provided elsewhere in the Contract.
 - Prior to Substantial Completion, progress payments will be made in an amount equal
 to the percentage indicated below but, in each case, less the aggregate of payments
 previously made and less such amounts as Owner may withhold, including but not
 limited to liquidated damages, in accordance with the Contract
 - 2. Retainage shall be withheld from all progress payments in accordance with Florida Statute 287.735(8), as follows:
 - a. Retainage in the amount of 10% of each progress payment up to completion of 50% of the contract amount.
 - b. If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, retainage shall be reduced to 5%.
- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 100 percent of the Work completed, less such amounts set off by Owner pursuant to Paragraph 15.01.E of the General Conditions, and less 200 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.03 Final Payment

A. Upon final completion and acceptance of the Work in accordance with Paragraph 15.06 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 15.06.

ARTICLE 7 – INTEREST

7.01 **Not Used.**

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Contract, Contractor makes the following representations:
 - A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
 - B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - D. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.
 - E. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
 - F. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
 - G. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
 - H. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
 - Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 Contents

- A. The Contract Documents consist of the following:
 - 1. This Agreement (pages 1 to 7, inclusive).
 - 2. Performance bond (pages <u>1</u> to <u>1</u>, inclusive).
 - 3. Other bonds.
 - a. ____ (pages____to___, inclusive).

- 4. General Conditions (pages 1 to 70 inclusive).
- 5. Supplementary Conditions (pages <u>1</u> to <u>3</u>, inclusive).
- 6. Specifications as listed in the table of contents of the Project Manual.
- 7. Drawings (not attached but incorporated by reference)
- 8. Addenda (numbers 1 to 4, inclusive).
- 9. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (pages 1 to 5, inclusive).
- 10. The following which may be delivered or issued on or after the Effective Date of the Contract and are included in the Appendices of the Contract Documents for reference.
 - a. Notice of Award.
 - b. Notice to Proceed.
 - c. Contractor's Application for Payment.
 - d. Work Change Directives.
 - e. Change Orders.
 - f. Field Orders.
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

ARTICLE 10 - MISCELLANEOUS

10.01 Terms

A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.02 Assignment of Contract

A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party heretowithout the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.03 Successors and Assigns

A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 Severability

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of thestricken provision.

10.05 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
 - "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 - "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

10.06 Other Provisions

A. Owner stipulates that if the General Conditions that are made a part of this Contract are based on EJCDC® C-700, Standard General Conditions for the Construction Contract, published by the Engineers Joint Contract Documents Committee®, and if Owner is the party that has furnished said General Conditions, then Owner has plainly shown all modifications to the standard wording of such published document to the Contractor, through a process such as highlighting or "track changes" (redline/strikeout), or in the Supplementary Conditions.

IN WITNESS WHEREOF, Owner and Contractor have s	igned this Agreement.				
This Agreement will be effective on	(which is the Effective Date of the Contract).				
OWNER: Okeechobee Utility Authority	CONTRACTOR: Felix Associates of Florida, Inc.				
By: John R. Creasman	By: Benjamin Miller				
Title: Chairman	Title: Vice President (If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)				
Attest:	Attest: Russell Combs Title: Controller				
Address for giving notices:	Address for giving notices: 8528 SW Kansas Avenue				
	Stuart, FL 34997				
	License No.: CGC1507744 (where applicable)				
(If Owner is a corneration, attach avidence of authority					

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

END OF SECTION

SECTION 00300-A

BID FORM (REVISED-2)

PROJECT IDENTIFICATION
Project Name: Okeechobee Utility Authority SWSA Master Pump Station
OWNER's Bid Number: N/A
ENGINEER's Project Number: 19775-001-02
Project Dated: December 22, 2021
THIS BID IS SUBMITTED TO
OWNER: Okeechobee Utility Authority
Address: 100 SW 5th Avenue
Okeechobee, FL 34974-4221
BIDDER
Name: Felix Associates of Florida, Inc.
Address: 8528 SW Kansas Avenue, Stuart, Florida 34997
NAME OF PERSON TO CONTACT FOR ADDITIONAL INFORMATION ON THIS BID
Name: Benjamin Miller
Telephone Number: (772) 220-2722
Email Address: bmiller@felixassociates.net

 The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an agreement with OWNER in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

December 22, 2021

- 2. BIDDER accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for forty-five (45) calendar days after the Bid opening. BIDDER shall sign and submit the Agreement inclusive of bonds, insurance certificates, and other documents required by the bidding requirements within ten (10) days following the date of OWNER's Notice of Award.
- 3. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:

BID SUBMITTAL DATE:

A. BIDDER has examined copies of all the Bidding Documents and of the following Addenda (receipt of all which is hereby acknowledged):

November 18, 2021	Number #1
December 9, 2021	#2
December 10, 2021	#3
December 16, 2021	#4

- B. BIDDER has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.
- C. BIDDER has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests and studies which pertain to the subsurface or physical conditions at the site or otherwise may affect the cost, progress, performance or furnishing of the Work as BIDDER considers necessary for the performance or furnishing of the Work at the ContractPrice, withinthe ContractTime and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 5.03 of the GENERAL CONDITIONS; and no additional examinations, investigations, explorations, tests, reports or similar information or data are or will be required by BIDDER for such purposes.
- D. BIDDER has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and assumes responsibility for the accurate location of said Underground Facilities. No additional examinations, investigations, explorations, tests, reports or similar information or data in respect of said Underground Facilities are or will be required by BIDDER in order to perform and furnish the Work at the ContractPrice, withinthe ContractTime and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.04 of the GENERAL CONDITIONS.
- E. BIDDER has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.
- F. BIDDER has given OWNER and ENGINEER written notice of all conflicts, errors, or discrepancies that it has discovered in the Contract Documents and the written resolution thereof by OWNER and ENGINEER is acceptable to BIDDER.
- G. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other Bidding or over OWNER.
- 4. BIDDER agrees that the construction of the Project will be substantially complete within 365 calendar days after the date when the Contract Time commences to run as provided in paragraph 4.01 of the GENERAL CONDITIONS, and completed and ready for final payment within 405 calendar days after the date when the Contract Time commences to run.
 - BIDDER accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work on time.
- 5. BIDDER agrees that all allowances have been included in the Lump Sum Bid.

6. TOTAL LUMP SUM BID

BIDDER agrees to accept as full payment for the lump Sum Work proposed underthis Project as herein specified and as shown on the Drawings, based upon the undersigned 'sown estimate of quantities and costs, the following lump sum of:

One million eight hundred ninety four thousand six hundred Dollars and ______ Zero ___Cents \$ 1,894,600.00

TOTAL LUMP SUM BID BREAKDOWN

For the sole purpose of evaluating bids, the following general breakdown of the total LUMP SUM BID is to be given. If so requested by the ENGINEER, the CONTRACTOR shall substantiate any price or prices with additional detailed price breakdown. In the event of discrepancy between the written lump sum stated in LUMP SUM BID and the arithmetic total of the following BIDDER BREAKDOWN, the lump sum stated in writing above shall have precedence.

 $(The Bidder must submit with this Proposal the apportioned amounts for the items \ listed \ below.)$

Item D	escription			Total Amount
110111				1,790,600.00
1-12	Lump Sum Base Bid	The Company of the Co	\$	1,730,000.00
	Part 1 – Mobilization/Demobilizatio			
	Part 2 – Environmental Protection	\$ 10.000.00		
	Part 3 – Maintenance of Traffic	\$ 600.00		
	Part 4 – Concrete	\$ 287,900.00		
	Part 5 – Pipe and Fittings	\$ 183,000.00		
	Part 6 – Equipment	\$ 442,000.00		
	Part 7 - Electrical and Inst.	\$ 550,000.00		
	Part 8 – Site Work	\$ 164,000.00		
	Part 9 – Valves	\$ 16,000.00		
	Part 10 – Record Drawings	\$ 11,000.00		
	Part 11 – Indemnification	\$ 100.00		
	Part 12 – Safety Compliance	\$ 36,000.00		
13	Testing Allowance		\$	4,000.00
14	Owner's Allowance		\$_	100,000.00
	Total Lump Sum Bid Amount		\$_	1,894,600.00

8. SUPPLEMENTAL BID INFORMATION FOR POSSIBLE OWNER-PURCHASED ITEMS

As described in SECTION 01100 – SUMMARY OF WORK, PART 1.06 OWNER PURCHASE REQUIREMENTS, OWNER may direct purchase certain equipment as described. CONTRACTOR will maintain responsibility for submittals, ordering, delivery, storage and installation of any materials and equipment. Purchase costs for the following equipment is requested:

Generator Set (included in Part 7, above)	\$ 94,113
Submersible Pump Packages (included in Part 6, above)	s 188,730
Odor Control Unit (included in Part 6, above)	s 198,270

BIDDERS should be aware the OWNER may elect to direct purchase the generator set outside of the methods described in the SUMMARY OF WORK.

07/02/2021 19775-001-02 00300-A BID FORM (REVISED-2) 9. BID AMOUNT FOR ALTERNATIVE ITEMS

The following item(s) shall be bid separate from the Total Lump Sum Bid Amount above. Provide the amount to be included, add or (decrease), in the Lump Sum Bid if the following item(s) are constructed. See Specification Section 01010 - Summary of Work.

Total Amount (Written)

Total Amount (Figure)

<u>Item</u> <u>Description</u>

No Alternates.

- 10. The CONTRACTOR shall submit a detailed price breakdown to the ENGINEER at the preconstruction conference. The price breakdown as reviewed and agreed upon by the CONTRACTOR, ENGINEER and OWNER shall be used for preparing future estimates for partial payments to the CONTRACTOR, and shall list the major items of the work and a price for each item. Price breakdownshall be by Specification Section for each area of the project. Overhead, other general costs, and profit shall be prorated to each item so that the total of the prices for all items equals the lump sum price. The price breakdown shall be subject to the review of the ENGINEER, and the CONTRACTOR may be required to verify the prices for any or all items.
- 11. At the preconstruction conference, the BIDDER shall submit a complete detailed schedule of shop drawing submittals which will show lead time for:

Date of Planned submittal.

Date of anticipated receipt of review (usually three weeks after submittal).

Delivery lead time.

Anticipated installation date.

12. If BIDDER is:

An Individual

Bv	(SEAL)
By(Individual's Name)	
doing business as	
Business address:	
Phone No.:	
rtnership	(SEA
By(Firm Name)	(367
(General Partner)	
Business address:	
Phone No.:	

Sociates of Florida, Inc. Corporation Name) Florida State of Incorporation) Benjamin Miller Jame of Person Authorized to Sign) Vice President Title)
Renjamin Miller Jame of Person Authorized to Sign) Vice President
lame of Person Authorized to Sign)
Title)
1. V
/
ecretary) Russec Company Stuart, Florida 34997
772) 220-2722

(Each joint venturer must sign. The manner for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)

END OF SECTION

2021 FLORIDA PROFIT CORPORATION ANNUAL REPORT

DOCUMENT# P09000023795

Entity Name: FELIX ASSOCIATES OF FLORIDA, INC.

Current Principal Place of Business:

8528 SW KANSAS AVENUE STUART, FL 34997

Current Mailing Address:

8528 SW KANSAS AVENUE STUART, FL 34997 US

FEI Number: 26-4299335 Certificate of Status Desired: No

Name and Address of Current Registered Agent:

BUSTAMANTE, NESTOR ESQ. % FERENCIK LIBANOFF BRANDT BUSTAMANTE & WI 150 SOUTH PINE ISLAND ROAD, SUITE 400 FORT LAUDERDALE, FL 33324 US

The above named entity submits this statement for the purpose of changing its registered office or registered agent, or both, in the State of Florida.

SIGNATURE:

Electronic Signature of Registered Agent

Date

FILED Jan 11, 2021

Secretary of State

7387974061CC

Officer/Director Detail :

Title P Title \

Name AMATO, VINCENT Name MILLER, BENJAMIN

Address 8528 SW KANSAS AVENUE Address 8528 SW KANSAS AVENUE

City-State-Zip: STUART FL 34997 City-State-Zip: STUART FL 34997

Title ST

Name COMBS, RUSSELL

Address 8528 SW KANSAS AVENUE

City-State-Zip: STUART FL 34997

I hereby certify that the information indicated on this report or supplemental report is true and accurate and that my electronic signature shall have the same legal effect as a oath; that I aram officer or director of the corporation he receiver or trustee empowered to execute this report as required dayler 607 Florida Statutes; and that my name appear above, or on an attachment with all other like empowered

SIGNATURE: VINCENT AMATO

PRESIDENT

01/11/2021

SECTION 00620

PUBLIC CONSTRUCTION BOND (Performance Bond)

BY THIS BOND, We, Felix	Associates of Florida, Inc.	, as PRINCIPAL, and
Philadelphia Indemnity Insura	ance Company , a corporation, as S	
the Okeechobee Utility Authorit		, herein
called OWNER, in the sum of		for payment of
	(One Million Eight Hundred Ninety Four Tho	ousand Six Hundred Dollars and No/100)
which we bind ourselves, our h and severally.	neirs, personal representatives, succes	ssors and assigns, jointly
and severany.		
THE CONDITION OF THIS	S BOND is that if PRINCIPAL:	
OWNER for construction of Ok	ct dated January 14 , 20 22 be eechobee Utility Authority SWSA M is bond by reference, at the times and	laster Pump Station the
255.05(1), Florida Statutes, sur	ayments to all claimants, as defined in oply PRINCIPAL with labor, materials, otly by PRINCIPAL in the prosecution ot; and	or
 Pays OWNER all loss appellate proceedings, that O\ the contract, and; 	ses, damages, expenses, costs, and a WNER sustains because of a defa	attorney's fees, including ult by PRINCIPAL under
Performs the guarant time specified in the contract, the	tee of all work and materials furnished unen this bond is void; otherwise it rema	nder the contract for the ains in full force.
Any changes in or under the co formalities connected with the c this bond.	ontract documents and compliance or contract or the changes does not affect	noncompliance with any Surety's obligation under
illis bolid.		MINISTES OF
January 40		S.O. CAPORA
Dated on ^{January} 19, <u>20</u> ²	<u>2</u> .	19 () () () () () () () ()
	Principal - Contractor: Felix Associates of	of Florida,∃nc.
	m m	
	Ву:	(Seal)
	(Principal - Contractor) BENJAMIN	MILLER VICE PRESIDENT
	Dhiladalphia Indomnity Incurence	Commany
	Surety: Philadelphia Indemnity Insurance	s Company
	By:	(Seal)
	As Attorney in Fact, Robert C	ulnen
	(Attach Power of Attorney)	[점환경 사람기를 10]
	By: Debarah (Inn Finke	ell .
	(Florida Resident Agent) Deb	orah Ann Finkell, A303837

07/02/2021 19775-001-02 **END OF SECTION**

ACKNOWLEDGEMENT OF SURETY

State of New Jersey] |-ss County of Passaic]

On January 19, 2022, before me personally came Robert Culnen to me known, who, being by me duly sworn, did depose and say that she is an attorney-in-fact of Philadelphia Indemnity Insurance Company the corporation described in and which executed the within instrument; that she knows the corporate seal of said corporation, and that the seal affixed to the within instrument is such corporate seal, and that she signed the said instrument and affixed the said seal as Attorney-in-Fact by authority of the Board of Directors of said corporation and by authority of this office under the Standing Resolutions thereof.

My Commission expires:

Notary Public

LISA NOSAL Notary Public, State of New Jersey My Commission Expires July 30, 2024

PHILADELPHIA INDEMNITY INSURANCE COMPANY

One Bala Plaza, Suite 100 Bala Cynwyd, PA 19004-0950

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS: That PHILADELPHIA INDEMNITY INSURANCE COMPANY (the Company), a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, does hereby constitute and appoint Louis A. Vlahakes, Robert Culnen, Joseph W. Mallory, Lisa Nosal, Stephanie Foy and Pamela J. Boyle of C & H Agency, its true and lawful Attorney-in-fact with full authority to execute on its behalf bonds, undertakings, recognizances and other contracts of indemnity and writings obligatory in the nature thereof, issued in the course of its business and to bind the Company thereby, in an amount not to exceed <u>\$50,000,000</u>.

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of PHILADELPHIA INDEMNITY INSURANCE COMPANY on the 14th of November, 2016.

RESOLVED:

That the Board of Directors hereby authorizes the President or any Vice President of the Company: (1) Appoint Attorney(s) in Fact and authorize the Attorney(s) in Fact to execute on behalf of the Company bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof and to attach the seal of the Company thereto; and (2) to remove, at any time, any such Attorney-in-Fact and revoke the authority given. And, be it

FURTHER

RESOLVED: That the signatures of such officers and the seal of the Company may be affixed to any

such Power of Attorney or certificate relating thereto by facsimile, and any such Power of Attorney so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to

which it is attached.

IN TESTIMONY WHEREOF, PHILADELPHIA INDEMNITY INSURANCE COMPANY HAS CAUSED THIS INSTRUMENT TO BE SIGNED AND ITS CORPORATE SEALTO BE AFFIXED BY ITS AUTHORIZED OFFICE THIS 5TH DAY OF MARCH, 2021.



(Seal)

Glomb, President & CEO Philadelphia Indemnity Insurance Company

On this 5th day of March, 2021 before me came the individual who executed the preceding instrument, to me personally known, and being by me duly sworn said that he is the therein described and authorized officer of the PHILADELPHIA INDEMNITY INSURANCE COMPANY; that the seal affixed to said instrument is the Corporate seal of said Company; that the said Corporate Seal and his signature were duly affixed.

monwealth of Pennsylvania - Notary Sezi Vanessa Mckenzie, Notary Public **Montgomery County** My commission expires November 3, 2024 Commission number 1366394 Member, Pannsylvania Association of Notaries

Notary Public:

Vanessa mcKenzie

residing at:

Bala Cynwyd, PA

My commission expires:

November 3, 2024

I, Edward Sayago, Corporate Secretary of PHILADELPHIA INDEMNITY INSURANCE COMPANY, do hereby certify that the foregoing resolution of the Board of Directors and the Power of Attorney issued pursuant thereto on the 5th day March, 2021 are true and correct and are still in full force and effect. I do further certify that John Glomb, who executed the Power of Attorney as President, was on the date of execution of the attached Power of Attorney the duly elected President of PHILADELPHIA INDEMNITY INSURANCE COMPANY.

In Testimony Whereof I have subscribed my name and affixed the facsimile seal of each Company this

Edward Sayago, Corporate Secretary

PHILADELPHIA INDEMNITY INSURANCE COMPANY

PHILADELPHIA INDEMNITY INSURANCE COMPANY

Statutory Statements of Admitted Assets, Liabilities and Capital and Surplus (in thousands, except par value and share amounts)

Admitted Assets		As of	Decem	ber 31,
		2020		2019
Bonds (fair value \$8,041,263 and \$7,329,360)	\$	7,601,946	\$	7,059,903
Preferred stocks (fair value \$16,537 and \$23,575)		15,673		22,761
Common stocks (cost \$52,609 and \$65,563)		43,373		64,634
Mortgage loans		821,250		803,679
Real estate		29,973		10,305
Other invested assets (cost \$203,028 and \$231,120)		215,589		243,127
Receivables for securities sold		943		684
Cash, cash equivalents and short-term investments		34,279		59,534
Cash and invested assets		8,763,026		8,264,627
Premiums receivable, agents' balances and other receivables		908,602		874,835
Reinsurance recoverable on paid loss and loss adjustment expenses		38,737		54,706
Accrued investment income		74,070		76,312
Receivable from affiliates		7,586		657
Federal income taxes receivable		-,,,,,,,,		28,027
Net deferred tax assets		138,129		134,628
Other assets		4,997		3,541
Total admitted assets	\$	9,935,147	\$	9,437,333
Liabilities and Capital and Surplus				
Liabilities:				
Unpaid loss and loss adjustment expenses	\$	5,218,304	\$	5,007,616
Unearned premiums		1,582,116		1,597,243
Reinsurance payable on paid loss and loss adjustment expenses		30,398		45,391
Ceded reinsurance premiums payable		108,936		100,299
Commissions payable, contingent commissions and other similar charges		214,389		216,136
Federal income taxes payable		8,480		-
Funds held		77,256		66,937
Payable to affiliates		18,486		16,383
Provision for reinsurance		87		78
Payable for securities purchased		17,820		58,784
Accrued expenses and other liabilities		32,170		27,116
Total liabilities		7,308,442		7,135,983
Capital:				
Common stock, par value of \$10 per share; 1,000,000 shares				
authorized, 450,000 shares issued and outstanding		4,500		4,500
Surplus:		,,500		1,500
Gross paid-in and contributed surplus		386,071		386,071
Unassigned surplus		2,236,134		1,910,779
Total surplus		2,622,205		2,296,850
Total capital and surplus	-	2,626,705		2,301,350
Total liabilities and capital and surplus	2	9,935,147	\$	9,437,333
mounted and subtent and surples	<u>a</u>		<u> 19</u>	<u> </u>

The undersigned, being duly sworn, says: That she is the Executive Vice President and Chief Financial Officer of Philadelphia Indemnity Insurance Company; that said Company is a corporation duly organized in the state of Pennsylvania, and licensed and engaged in the State of Pennsylvania and has duly complied with all the requirements of the laws of the said State applicable of the said Company and is duly qualified to act as Surety under such laws; that said Company has also complied with and is duly qualified to act as Surety under the Act of Congress. And that to the best of her knowledge and belief the above statement is a full, true and correct statement of

Attest:

Commonwealth of Pennsylvania - Notary Seal Kimberly A. Kessleski, Notary Public Montgomery County My-commission expires December 18, 2024 Commission number 1245769

Member, Pennsylvania Association of Notaries

Sworn to before me this day of May 2021.

Learen Gilmer-Pauciello

Karengalifet Pauciello, EVP & CFO

Kimberly Kessleski, Notar



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 01/18/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER C. & H. Agenty Face	t	his certificate does not confer rights to	the	certifi	icate holder in lieu of suc						
753 New-leve Dirice Folio Sas 24 Totova NJ 07511 NSWERS 1, Palack Associates of Florda, Inc. Folio Associates of Florda, Inc. Social Palack Associates of Florda	PRO	DDUCER			1-11	CONTACT Jo-Ann Intiso					
753 New-leve Dirice Folio Sas 24 Totova NJ 07511 NSWERS 1, Palack Associates of Florda, Inc. Folio Associates of Florda, Inc. Social Palack Associates of Florda	C	k H Agency				PHONE (973) 890-0900 FAX (973) 812-9860					
RSURBEAL RSUBBEAL	783	B Riverview Drive			E-MAIL jintiso@chagency.com						
NSURED NOTES NOT THE POLICE OF Florida, Inc. SECRET FOR Associaties of Florida, Inc. SECRET FOR Associaties of Florida, Inc. SECRET FOR Associaties of Florida, Inc. SECRET FLORIDA NOTES ASSOCIATED NOTES AS	P.O. Box 324							SUPERIST AFFO	PDING COVERAGE		NAIC#
HISURED Felix Associates of Florida, Inc. 8028 SV Kansas Avenue Stuart, FL 34997 Stuart, FL 34997 SUBSTANCE CERTIFICATE NUMBER: 21-22 HISURER E. Report American Insurance Co. 42307 HISURER E. Septically Insurance Co. 43490 HISURER E. Septical Insurance Co. 43490 HISURER E. Septic	Tot	owa ,			NJ 07511	BIEUDE	E	* '			
Felix Associates of Florida, Inc. INSURER C. Novigators Specially Insurance Co. 42307 INSURER C. See Flue Specialty Inc. Co. 47360 INSURER C. See Flue Specialty Inc. Co. 473460 INSURER C. See Flue Specialty Insurance Co. 473460 INSURER C. See Flue Specialty Insura	INS	JRED			***************************************		Endoud!				
SS2S SW Kansas Avenue Stuart FL 36987 Magurar D. Olear Blue Specially Ins. Co. 37745 Magurar D. Olear Blue Specially Ins. Co. 447460 Magurar D. Olear Blue Special Institution Ins. 447460 Magurar D. Olear Blue Special Institution Ins. 447460 Magurar D. Olear Blue Special Institution Ins. 447460 Magurar D.						—	No.		estrance Co		
Stuart FL 24987 PROJURGE Secrit Projugation Secrit Se	ļ	•					01 51	· · · · · · · · · · · · · · · · · · ·			
COVERAGES CERTIFICATE NUMBER: 21-22 INSURER: REVISION NUMBER: THIS STO CERTIFY THAT THE FOLICIES OF INSURANCE LISTED BELOWHAVE BEBNITSSUEDTO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD MIDIOATED. NOTWITES AND CONTROL ON THE POLICY PERIOD THE POLICY PERIOD MIDIOATED. NOTWITES AND CONTROL ON THE POLICY PERIOD MIDIOATED. NOTWITES AND CONTROL ON THE POLICY PERIOD THE POLICY PERIOD PROBLEM. TYPE OF RIBINANCE INSURED MAN CONTROL OF THE POLICY PERIOD PROBLEM. TYPE OF RIBINANCE INSURED MAN CONTROL OF THE POLICY PERIOD PROBLEM. INSURED MAN CONTROL OF THE POLICY PERIOD PROBLEM. INSURED MAN CONTROL OF THE POLICY PERIOD PROBLEM. TYPE OF RIBINANCE INSURED MAN CONTROL OF THE POLICY PERIOD PROBLEM. INSURED MAN CONTROL OF THE PROBLEM.						INSURE					
COMERAGES CERTIFICATE NUMBER: 21-12 THIS IS TO GERTIFY THAT THE POLICIES OF RISEASE CHARGES AND CONTRACT OR OTHER DOLUMENT WITH RESPECT TO WHICH THIS CERTIFICATE WAY BE ISSUED OR MAY PETRAIN. THE RISUARDE AND RESOURCE OR THE POLICY PERIOD INDUCATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR COMDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE WAY BE ISSUED OR MAY PETRAIN. THE RISUARDE REPORTED BY THE POLICIES DESCRIBED HEREN IS SUBJECT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. COMMITCAL GREEFAL LIMBERTY SCHOOL OF THE CONTRIBUTION SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. SUBJECT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. SUBJECT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. SUBJECT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. SERVING THE TERMS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. SUBJECT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH PAID CLAIMS. SUBJECT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH PAID CLAIMS. SUBJECT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS SUBJECT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH PAID CLAIMS. SUBJECT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH PAID CLAIMS. SUBJECT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH PAID CLAIMS. SUBJECT TO ALL THE TO ALL THE TOAL THE TOAL THE TOAL THE TERMS. SUBJECT TO ALL THE TOAL THE TOAL THE TOAL THE TOAL THE TOAL THE TERMS. SUBJECT TO ALL THE TOAL THE T		Stuart FL 34997				INSURE	RE: Aspen A	merican Insura	ance Co.		43460
THIS IS O CERTIFY THAT THE POLICIES OF MSUPANCE LISTED BELOWTROW ERRONSSIERTOT THE INSURED NAMED ARXIVE TORK THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY FECUREMENT. TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO MUNICIPAL THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN. THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. PRICE OF INSURANCE MAY BE ISSUED OR MAY PERTAIN. THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. PRICE OF INSURANCE SUCH CLAIMS AND CLAIMS. AND COMMERCIAL DESCRIPTION AND OF CHERATION STORM. AND SHAPPING LIBERTY. AND COMMERCIAL DESCRIPTION OF CHERATION STORM. AND SHAPPING LIBERTY. AND COMMERCIAL DESCRIPTION OF CHERATION AND CHARACTERS AND CLAIMS. AND COMMERCIAL DESCRIPTION OF CHERATION AND CHARACTERS AND CLAIMS. AND COMMERCIAL DESCRIPTION OF CHERATION AND CHARACTERS AND CLAIMS. AND COMMERCIAL DESCRIPTION OF CHERATION AND CHARACTERS AND CLAIMS. AND COMMERCIAL DESCRIPTION OF CHERATION AND CHARACTERS AND CLAIMS. AND COMMERCIAL DESCRIPTION OF CHERATION AND CHARACTERS AND CLAIMS. AND COMMERCIAL DESCRIPTION OF CHERATION AND CHARACTERS AND CLAI						INSURE	RF:				
INDICATED. NOTWITSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS SECTION WHICH THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH POLICIES LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. EXCLUSIONS AND CONDITIONS OF SUCH POLICIES LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. EXCLUSIONS AND CONDITIONS OF SUCH POLICIES LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. FURTHER THE OF INSTANCE LIMIT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH POLICIES BEEN REPORTED BY PAID CLAIMS. FURTHER THE OF INSTANCE LIMIT APPLIES FOR POLICY WILD REPORT OF THE POLICY WILD REPORT OF THE PREMISES (Eas sourment) \$ 300,000 MINISTRY OF THE PREMISES (Eas sourment) \$ 2,000,000 MINISTRY OF THE PREMISE OF THE PREMISES (Eas sourment) \$ 2,000,000 MINISTRY OF THE PREMISE OF THE PREM					HORDER		· ·				
CAMBREAL CONTROLLABILITY S4328202 12/31/2021 12/31/2021 12/31/2022 12/3	il C	IDICATED. NOTWITHSTANDING ANY REQUIF ERTIFICATE MAY BE ISSUED OR MAY PERTA	REME NN, T	NT, TI HE IN	ERM OR CONDITION OF ANY SURANCE AFFORDED BY THI	CONTRA E POLICA	ACT OR OTHER IES DESCRIBE	R DOCUMENT D HEREIN IS S	WITH RESPECT TO WHICH	THIS	
CAMBREAL CONTROLLABILITY S4328202 12/31/2021 12/31/2021 12/31/2022 12/3	INSR LTR	TYPE OF INSURANCE	ADDL	SUBR	POLICY NUMBER		POLICY EFF	POLICY EXP	LIMI	TS	
CLAUMS MADE			11100				(MAD DI) (1 (1)	(MANDENTITI)		0.00	0,000
A XCU-Completed Ops Blanket Contractual GEN_AGGREGATE_UNIT Applies PER POLICY PRO_ TROP TO COMBINED SINKEL LIMIT AUTOMOBILE LIABILITY SALESSE LIABILITY AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY BURNETH AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY SALESSE LIABILITY AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY SALESSE LIABILITY AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY BURNETH AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY SALESSE LIABILITY AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY BURNETH AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY BURNETH AUTOMOBI		CLAIMS MADE X OCCUR							DAMAGE TO RENTED	200	
Blanket Contractual Servi. AGGREGATE LIMIT APPLIES PER POLICY PROPERTY Service										10.00	
CRITICATE HOLDER PROCESS PROCE	А				54326202		12/31/2021	12/21/2022		2.00	
POLICY PRODUCTS COMPROP AGG \$ 4,000,000 OTHER AUTOMOBIL LABBLITY ANY AUTO OWNED OWNED AUTOS ONLY					07020202		12/3/12/02/1	12/01/2022	PERSONAL & ADV INJURY		·
AUTOMOBILE LIABILITY AUTOMOBILE LIABILITY									GENERAL AGGREGATE	9	
AUTOMOBILE LIABILITY ANY AUTO ANY AUTO AUTOS ONLY		POLICY SECT LOC							PRODUCTS - COMP/OP AGG	Ψ	
ANY AUTO OWNED AUTOS ONLY AUTOS AUTO				<u> </u>						\$	
B AUTOS ONLY HIRED AUTOS ONLY AUTOS		AUTOMOBILE LIABILITY							(Ea accident)	\$ 2,000),000
AUTOS ONLY									BODILY INJURY (Per person)	\$	
AUTOS ONLY AUTOS ONLY STATUTE AUTOS ONLY STATUTE ABOVE DESCRIPTION S STATUTE S	В			54	54326201		12/31/2021	12/31/2022	BODILY INJURY (Per accident)	\$	•
S SOURCES COURTENCE \$ \$,000,000 BESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required by written and signed contract. Notice of Cancelation applies per policy form. Blanket Installation Floater satisfies requirement for Builder's Risk. SACH OCCURRENCE \$,5,000,000 12/31/2021 12/31/2022 12/3		HIRED NON-OWNED							PROPERTY DAMAGE	\$	
B X EXCESS LIAB CLAIMS-MADE DED RETERTION \$ \$ \$,000,000 AND EMPLOYERS LIABILITY ANY PROPRIETOR/PARTHEMEXECUTIVE (Mandatory in Hi) If yes, describe under DESCRIPTION OF OPERATIONS below DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) Per Incident: \$1,000,000 Per Incident: \$1,000,000 Aggregate: \$2,000,000 Aggregate: \$2,000,000 Aggregate: \$2,000,000 Aggregate: \$2,000,000 Aggregate: \$2,000,000 Aggregate: \$2,000,000 Aggregate: \$3,000,000 Aggregate: \$4,000,000 Aggregate:		7.01.00 0.12							(r er accade n)	s	
B		UMBRELLA LIAB X OCCUP							EAGU GOO! IDDENOT	5.000	0.000
DED RETENTION \$ \$ WORKERS COMPENSATION AND EMPLOYERS' LLABELITY AND PROPRIET CORPARTINE PSECULIVE NO MILE AND PROPRIET CORPARTINE PSECULIVE NO MILE AND PROPRIET CORPARTINE PSECULIVE NO MILE AND PSECRIPTION OF OPERATIONS JUDICATIONS J	В	EVCERCITAD			5671-7285		12/31/2021	12/31/2022		9	
WORKERS COMPENSATION AND EMPLOYERS LIABILITY ANY PROPRIETOR PARTIMENE XECUTIVE IN N / A S4326203 12/31/2021 12/31/2022 12/31/202 12/31/202 12/3		TOD WAS IN SE						, _,	AGGREGATE	1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
ANY PROPRIETOR/PARTNER(EXECUTIVE N 1/10,000,000 12/31/2021 12/31/2022 12/31/2	***************************************								PER OTH-	\$	
Pollution Liability Pollution Section Pollution Propertion of Operations / Vehicles (Acord 101, Additional Remarks Schedule, may be attached if more space is required) Recombed Utility Authority Pollution applies per policy form. Blanket Installation Floater satisfies requirement for Builder's Risk. Pollution Agriculture Pollution Properties Polluti									STATUTE ER	4.000	
If yes, describe under E.L. DISEASE - POLICY LIMIT \$ 1,000,000	В	OFFICER/MEMBER EXCLUDED?	N/A		54326203		12/31/2021	12/31/2022	E.L. EACH ACCIDENT	φ	
Pollution Liability NY21ECPX00454NC Pollution Liability NY21ECPX00454NC Per Incident: \$ 1,000,000 \$2,000,000 \$2,000,000 \$2,000,000 \$2,000,000 Per Incident: \$ 1,000,000 \$2,000,000 \$2,000,000 Per Incident: \$ 1,000,000 \$2,000,000 \$2,000,000 Per Incident: \$ 1,000,000 \$ 2,000,000 Per Incident: \$ 1,000,000 \$ 1,000 \$									E.L. DISEASE - EA EMPLOYEE	φ	·
C Pollution Liability NY21ECPX00454NC 12/31/2021 12/31/2022 Aggregate: \$2,000,000 DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) RE: Southwest Wastewater Master Pump Station Construction of Master Pump Station Located at 3583 SW 16th Street, Okeechobee, FL 34974. Okeechobee Utility Authority, Sumner Engineering & Consulting Inc., Silver Palms Property Owners Association Inc. are included as Additional Insureds on a primary, non-contributory basis with completed operations with respect to this contract, but only if required by written and signed contract. Notice of Cancelation applies per policy form. Blanket Installation Floater satisfies requirement for Builder's Risk. CERTIFICATE HOLDER CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.		DESCRIPTION OF OPERATIONS below								s 1,000	0,000
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) RE: Southwest Wastewater Master Pump Station Construction of Master Pump Station Located at 3583 SW 16th Street, Okeechobee, FL 34974. Okeechobee Utility Authority, Sumner Engineering & Consulting Inc., Silver Palms Property Owners Association Inc. are included as Additional Insureds on a primary, non-contributory basis with completed operations with respect to this contract, but only if required by written and signed contract. Notice of Cancelation applies per policy form. Blanket Installation Floater satisfies requirement for Builder's Risk. CERTIFICATE HOLDER CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.		Pollution Liability							Per Incident:	\$1,00	00,000
RE: Southwest Wastewater Master Pump Station Construction of Master Pump Station Located at 3583 SW 16th Street, Okeechobee, FL 34974. Okeechobee Utility Authority, Sumner Engineering & Consulting Inc., Silver Palms Property Owners Association Inc. are included as Additional Insureds on a primary, non-contributory basis with completed operations with respect to this contract, but only if required by written and signed contract. Notice of Cancelation applies per policy form. Blanket Installation Floater satisfies requirement for Builder's Risk. CERTIFICATE HOLDER CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.	С	_			NY21ECPX00454NC		12/31/2021	12/31/2022	Aggregate:	\$2,00	00,000
RE: Southwest Wastewater Master Pump Station Construction of Master Pump Station Located at 3583 SW 16th Street, Okeechobee, FL 34974. Okeechobee Utility Authority, Sumner Engineering & Consulting Inc., Silver Palms Property Owners Association Inc. are included as Additional Insureds on a primary, non-contributory basis with completed operations with respect to this contract, but only if required by written and signed contract. Notice of Cancelation applies per policy form. Blanket Installation Floater satisfies requirement for Builder's Risk. CERTIFICATE HOLDER CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.											
Okeechobee Utility Authority, Sumner Engineering & Consulting Inc., Silver Palms Property Owners Association Inc. are included as Additional Insureds on a primary, non-contributory basis with completed operations with respect to this contract, but only if required by written and signed contract. Notice of Cancelation applies per policy form. Blanket Installation Floater satisfies requirement for Builder's Risk. CERTIFICATE HOLDER CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.	DES	CRIPTION OF OPERATIONS / LOCATIONS / VEHICLE	S (AC	ORD 1	01, Additional Remarks Schedule,	may be at	tached if more sp	ace is required)		·	
SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.	Oke prin	RE: Southwest Wastewater Master Pump Station Construction of Master Pump Station Located at 3583 SW 16th Street, Okeechobee, FL 34974. Okeechobee Utility Authority, Sumner Engineering & Consulting Inc., Silver Palms Property Owners Association Inc. are included as Additional Insureds on a primary, non-contributory basis with completed operations with respect to this contract, but only if required by written and signed contract. Notice of									
SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.											
SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.	CEF	RTIFICATE HOLDER		•		CANC	ELLATION				
THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. 100 SW 5th Avenue											· · · · · · · · · · · · · · · · · · ·
						THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN					BEFORE
		100 SW 5th Avenue				AUTHORIZED REPRESENTATIVE					

Okeechobee

FL 34974

ACORD [®]	NCY CUSTOMER ID: LOC #: ARKS SCHEDULE	Page	of		
AGENCY C & H Agency	· · ·		NAMED INSURED Felix Associates of Florida, Inc.		
POLICY NUMBER	THANNULUE A	· · · · · · · · · · · · · · · · · · ·			
CARRIER	·	NAIC CODE			
L			EFFECTIVE DATE:		THIM LE
ADDITIONAL REMARKS			,	•	
THIS ADDITIONAL REMARKS	FORM IS A SCH	IEDULE TO ACORD FORM,			
FORM NUMBER: 25	FORM TITLE:	Certificate of Liability Insurance: N	lotes		
D. Excess Liability - Follow Form Carrier: Clear Blue Specialty Ins. C Policy #: WCCN-CEL-0000824-02 Policy Dates: 12/31/21 - 12/31/22 Limits: \$5,000,000 Occurrence/\$5,		9		- 117 Cardinate Control of Car	

E. Installation Floater Carrier: Aspen American Insurance Co. Policy# IM00KG721 Policy# IMONG/21
Policy Dates: 12/31/2021 - 12/31/2022
Limits: \$2,000,000 Each Jobsite Occurrence
\$500,000 Off-Site Storage
\$500,000 In-Transit
Flood- Earthquake Limit \$500,000
Flood- Earthquake Deductible \$25,000



NOTICE TO PROCEED

Owner: Okeechobee Utility Authority Owner's Contract No.:

Contractor: Felix Associates of Florida, Inc. Contractor's Project No.:

Engineer: Sumner Engineering & Consulting, Inc. Engineer's Project No.: 19-04

Project: **SWSA Master Pump Station** Contract Name:

Effective Date of Contract:

TO CONTRACTOR:

Owner hereby notifies Contractor that the Contract Times under the above Contract will commence to run on **February**, **2022**.

On that date, Contractor shall start performing its obligations under the Contract Documents. No Work shall be done at the Site prior to such date. In accordance with the Agreement, the number of days to achieve Substantial Completion is <u>365</u>, and the number of days to achieve readiness for final payment is <u>425</u>.

Before starting any Work at the Site, Contractor must comply with the following: N/A

Owner: Okeechobee Utility Authority

Authorized Signature

By: John R Creasman

Title: Chairman

Date Issued: February _____, 2022

Copy: Engineer

OKEECHOBEE UTILITY AUTHORITY

AGENDA ITEM NO. 16

FEBRUARY 17, 2022

SWSA MASTER FORCE MAIN – MATERIAL BID

On February 9, 2022, the OUA received bids from various materials suppliers for the Southwest Service Area Master Force Main project. This bid was for material only and does not include any construction.

The materials bid was produced for two main reasons. Firstly, due to COVID related issues, the utility industry, like many other industries, has seen significant delays in material deliveries. What the OUA did not want to experience, is to make an award for construction of the force main only to wait 3-6 months for delivery of material prior to initiating the work. Secondly, if the OUA were to purchase the material, the OUA could realize a cost reduction in the project due to the savings on a tax-free purchase. In this case, approximately \$45,000.

An additional materials consideration was the piping material and diameter. The original design called for 10-inch PVC piping. In discussions with various suppliers, the OUA was led to believe that the lead time for PVC piping was longer than HDPE piping.

However, the wall thickness of the HDPE pipe versus a PVC pipe, both the same outside diameter, the inside diameter of the HDPE pipe is smaller than the inside diameter of the PVC pipe. To compensate for this loss of inside diameter, a 12-inch HDPE is required to meet the hydraulic capacity of a 10-inch PVC pipe.

The SWSA MFM project hydraulically connects the SWSA project to the existing OUA owned regional pump station (NW-15) up near the airport soccer fields. This project is in the final planning stages and should go out to bid around the middle of March 2022.

Please find attached a bid tabulation for the SWSA MFM material bid submitted by: Core & Main, Empire Pipe, Ferguson and Fortiline. The OUA set up two different bids: one with using primarily 10-inch PVC piping and the other bid utilizing just 12-inch HDPE piping. In review of the bids, 12-inch HDPE piping does have a lower price and has a shorter delivery time. The final quantities required may be adjusted down.

After review, discussion and if approved by the OUA Board, staff is recommending approval of the bid submitted by Core & Main of a not to exceed amount of \$646,110.98.

10" PVC & 12" HDPE Piping

OKEECHOBEE UTILITY AUTHORITY Purchase of Materials for the SWSA Master Force Main Project

				CORE & MAIN			EMPIRE PIPE	į			FERGUSON			FORTILINE
Piping	Units	Qty	Unit Price	Extended Price	(Unit Price	Extended Price		Unit F	rice	Extended Price	Unit Pr	ice	Extended Price
10" DR18 PVC	LF	23,100	\$ 30.58	706,398.00	\$	31.47	\$ 726,957.	00	\$	34.20	790,020.00	\$ 3	32.67 \$	754,677.00
12" SDR11 HDPE	LF	560	\$ 23.16	12,969.60	\$	26.96	\$ 15,097.	60	\$ 3,	95.60	17,895.36	\$ 2	28.25 \$	15,820.00
Fittings, DI	Units	Qty	Unit Price	Extended Price	1.	Unit Price	Extended Price		Unit F	ice	Extended Price	Unit Pr	ice	Extended Price
10" 45° Bend, MJ DI	EA	28	\$ 553.88 \$	15,508.64	\$	637.78	\$ 17,857.	84	\$ 6	51.60 \$	18,244.80	\$ 6	3.42 \$	17,175.76
10" 22.5° Bend, MJ DI	EA	3	\$ 558.10 \$,	\$	637.28	· · · · · · · · · · · · · · · · · · ·			40.70 \$	1,922.10		9.47 \$	1,828.41
10" 11.25° Bend, MJ DI	EA	5	\$ 557.22 \$	2,786.10	\$	636.26	\$ 3,181.	30	\$ 6	65.50 \$	3,327.50	\$ 62	23.54 \$	3,117.70
10" Plug, DI	EA	1	\$ 524.90 \$	524.90	\$	599.38	\$ 599.	38	\$!	60.50 \$	560.50	\$ 53	86.09 \$	536.09
4" 45° Bend, MJ DI	EA	1	\$ 196.07 \$	196.07	\$	223.88	\$ 223.	88	\$ 2	37.50 \$	237.50	\$ 22	26.26 \$	226.26
12"x10" Reducer, MJ DI	EA	6	\$ 606.78 \$	3,640.68	\$	692.87	\$ 4,157.	22	\$ 9	67.60 \$	5,805.60	\$ 92	20.50 \$	5,523.00
10"x10"X 6" Wye, MJ DI	EA	1	\$ 1,101.58 \$	1,101.58	\$	1,257.88	\$ 1,257.	88	\$ 1,	16.30 \$	1,116.30	\$ 1,06	37.71 \$	1,067.71
10"x10"X 4" Wye, MJ DI	EA	1	\$ 1,046.71 \$	1,046.71	\$	1,195.22	\$ 1,195.	22	\$ 1,0	52.50 \$	1,052.50	\$ 1,00	06.65 \$	1,006.65
4" MJ Kits, less gland	EA	3	\$ 14.69 \$	44.07	\$	16.14	\$ 48.	42	\$	25.70 \$	77.10	\$	5.03 \$	45.09
6" MJ Kits, less gland	EA	1	\$ 20.00 \$	20.00	\$	18.44	\$ 18.	44	\$	30.00 \$	30.00	\$	7.77 \$	17.77
10" MJ Kits, less gland	EA	83	\$ 31.77 \$	2,636.91	\$	27.67	\$ 2,296.	61	\$	48.00 \$	3,984.00	\$ 2	26.52 \$	2,201.16
12" MJ Kits, less gland	EA	6	\$ 27.94 \$	167.64	\$	28.58	\$ 171.	48	\$	52.30 \$	313.80	\$ 3	33.35 \$	200.10
Valve Box Top, Long 5 1/4" DI	EA	25	\$ 27.33 \$	683.25	\$	56.10	\$ 1,402.	50	\$	73.20 \$	1,830.00	\$ 2	26.28 \$	657.00
Valve Box Top, Short 5 1/4" DI	EA	6	\$ 18.47 \$	110.82	\$	45.80	\$ 274.	80	\$	49.40 \$	296.40	\$	7.57 \$	105.42
Valve Box Bottom, Long, 5 1/4" DI	EA	31	\$ 34.72 \$	1,076.32	\$	71.69	\$ 2,222.	39	\$	60.80 \$	1,884.80	\$ 2	23.89 \$	740.59
Valve Box Lid, 5 1/4" DI "SEWER"	EA	31	\$ 11.82 \$	366.42	\$	12.00	\$ 372.	00	\$	20.90 \$	647.90	\$	11.24 \$	348.44
Valves	Units	Qty	Unit Price	Extended Price	L	Unit Price	Extended Price	1	Unit F	rice	Extended Price	Unit Pr	ice	Extended Price
4" Gate Valve, MJ	EA	1	\$ 528.10 \$	528.10	\$	465.34		34		85.00 \$	485.00	_	28.00 \$	528.00
6" Gate Valve, MJ	EA	1	\$ 673.50 \$	673.50	\$	593.81	*			20.00 \$	620.00		73.00 \$	673.00
10" Gate Valve, MJ	EA	29	\$ 1.611.42 \$		\$	1.426.16	•			04.00 \$	43,616.00		1.00 \$	46,719.00
2" ARV	EA	7	\$ 1,012.50 \$	7,087.50	\$	1,632.22	\$ 11,425.	54	\$ 2,	11.20 \$	14,778.40	\$ 2,17	75.00 \$	15,225.00
EBAA Mechanical Joint Restraint 2000PV		1			1			<u> </u>]				ı	
Megalug	Units	Qty	Unit Price	Extended Price	-	Unit Price	Extended Price		Unit F	rice	Extended Price	Unit Pr	ice	Extended Price
4" - 2004PV	EA	3	\$ 30.73 \$	92.19	\$	34.53	\$ 103.	59	\$	34.60 \$	103.80		30.70 \$	92.10
6" - 2006PV	EA	1	\$ 39.43 \$	39.43	\$	41.84	\$ 41.	84	\$	41.90 \$	41.90		37.20 \$	37.20
10" - 2010PV	EA	83	\$ 100.29 \$	8,324.07	\$	117.09				17.30 \$	9,735.90		00.25 \$	8,320.75
12" - 2012PV	EA	6	\$ 109.49 \$	656.94	\$	123.07	\$ 738.	42	\$	23.20 \$	739.20	\$ 10	9.50 \$	657.00
Pipe Joint Restraint Series 1600	Units	Qty	Unit Price	Extended Price		Unit Price	Extended Price		Unit F	rice	Extended Price	Unit Pr	ice	Extended Price
4" - 1604	EA	56	\$ 38.12 \$	2,134.72	\$	42.84	\$ 2,399.	04	\$	42.90 \$	2,402.40	\$ 3	36.65 \$	2,052.40
6" - 1606	EA	6	\$ 52.53 \$	315.18	\$	59.70	\$ 358.	20	\$	59.10 \$	354.60	\$ 5	51.65 \$	309.90
10" - 1610	EA	20	\$ 148.55 \$	2,971.00	\$	168.88	\$ 3,377.	60	\$	\$	0.00	\$ 14	16.10 \$	2,922.00

Material Listing Version 3, dated January 27, 2022

820,505.82

849,826.29

922,123.36

882,830.50

Ferguson quote was missing unit pricing for this item, however overall quote price was above lowest

Ferguson quote was for 600LF, Bid Tab kept at 560LF, this price extension reflects Bid Tab footage

OKEECHOBEE UTILITY AUTHORITY

All 12" HDPE Piping

Purchase of Materials for the SWSA Master Force Main Project

				CORE & MAIN		EMPIRE PIPE			FERGUSON		FORTILINE
Piping	Units	Qty	Unit Price	Extended Price	Unit Price	Extended Price	Unit Pric	e	Extended Price	Unit Price	Extended Price
10" DR18 PVC	LF		\$ \$	0.00	\$	\$ 0.00	\$	\$	0.00	\$	\$ 0.00
12" SDR11 HDPE	LF	23660	\$ 22.54 \$	533,296.40	\$ 24.34	\$ 575,884.40	\$ 2,818	3.20 \$	667,913.40	\$ 27.30	\$ 645,918.00
F.W. 51	I	1 .	1 1	1	ı	1 1	ĺ	1	ı	1	1
Fittings, DI	Units	Qty	Unit Price	Extended Price	Unit Price	Extended Price	Unit Pric		Extended Price	Unit Price	Extended Price
12" 45° Bend, MJ DI	EA	28	\$ 742.17 \$	20,780.76	\$ 863.88	,		1.70 \$	27,767.60	\$ 333.00	\$ 9,324.00
12" 22.5° Bend, MJ DI	EA	3	\$ 700.16 \$	2,100.48	\$ 808.20	· · · · · · · · · · · · · · · · · · ·		9.00 \$	2,667.00	\$	\$ 0.00
12" 11.25° Bend, MJ DI	EA	5	\$ 678.03 \$	3,390.15	\$ 782.65	\$ 3,913.25		9.40 \$	4,297.00	\$	\$ 0.00
12" Plug, DI	EA	1	\$ 565.18 \$ \$ 196.07 \$	565.18	\$ 652.38 \$ 223.88	\$ 652.38	\$ 69	7.50 \$	697.50	\$ 667.00	\$ 667.00
4" 45° Bend, MJ DI	EA	1	- 100.01 φ	196.07	. 220.00			\$	0.00	\$ 24.00	\$ 24.00
12"x10" Reducer, MJ DI	EA	1	\$ \$ \$	0.00	\$ 1 706 82	\$ 0.00	\$	\$	0.00	\$	\$ 0.00
12"x12"X 6" Wye, MJ DI	EA	1	τ 1,470.00 ψ	1,478.66	\$ 1,706.82 \$,	\$ 1,538 \$ 1,489		1,538.20	\$ 1,471.00	\$ 1,471.00
12"x12"X 4" Wye, MJ DI	EA	1	1,121.00 φ	1,421.56		\$ 0.00	. 1,100		1,489.10	\$ 1,424.00	\$ 1,424.00
4" MJ Kits, less gland	EA EA	3	\$ 14.69 \$ \$ 20.00 \$	44.07	\$ 16.14 \$ 18.44			5.70 \$	77.10	\$ 52.00	\$ 156.00
6" MJ Kits, less gland	EA	ı	\$ 20.00 \$	20.00	\$ 18.44 \$	\$ 18.44	\$ 30	0.00 \$	30.00	\$ 76.00 \$	\$ 76.00
10" MJ Kits, less gland		77	· •	0.00		\$ 0.00	_	\$	0.00	•	\$ 0.00
12" MJ Kits, less gland	EA EA	77 25	21.01	2,151.38	20.00	\$ 2,200.66		2.30 \$	4,027.10	\$ 132.00	\$ 10,164.00
Valve Box Top, Long 5 1/4" DI	EA	6	21.00 \$	683.25	- 00.10	\$ 1,402.50	<u> </u>	3.20 \$	1,830.00	\$ 26.00	\$ 650.00
Valve Box Top, Short 5 1/4" DI	EA	31	· 10.11 ψ	110.82	+ 40.00	\$ 274.80	- ''	9.40 \$	296.40	\$ 17.75 \$ 23.85	\$ 106.50
Valve Box Bottom, Long, 5 1/4" DI	EA	31	01:12 ¢	1,076.32		\$ 2,222.39		0.80 \$	1,884.80	20:00	\$ 739.35
Valve Box Lid, 5 1/4" DI "SEWER"	EA	31	\$ 11.82 \$	366.42	\$ 12.00	\$ 372.00	Φ 20	0.90 \$	647.90	\$ 11.25	\$ 348.75
Valves	Units	Qty	Unit Price	Extended Price	Unit Price	Extended Price	Unit Pric	e	Extended Price	Unit Price	Extended Price
4" Gate Valve, MJ	EA	1	\$ 528.10 \$	528.10	\$ 465.34	\$ 465.34	\$ 48	5.60 \$	485.60	\$ 528.00	\$ 528.00
6" Gate Valve, MJ	EA	1	\$ 673.50 \$	673.50	\$ 593.81	\$ 593.81	\$ 620	0.00 \$	620.00	\$ 673.00	\$ 673.00
12" Gate Valve, MJ	EA	29	\$ 2,049.76 \$	59,443.04	\$ 1,785.00	\$ 51,765.00	\$ 1,903	3.00 \$	55,187.00	\$ 2,039.00	\$ 59,131.00
2" ARV	EA	7	\$ 1,012.50 \$	7,087.50	\$ 1,632.22	\$ 11,425.54	\$ 2,11	1.20 \$	14,778.40	\$ 2,175.00	\$ 15,225.00
EBAA											
Mechanical Joint Restraint 2000PV		1	1		1	İ İ	ĺ	1	ĺ	Ì	
Megalug	Units	Qty	Unit Price	Extended Price	Unit Price	Extended Price	Unit Pric	е	Extended Price	Unit Price	Extended Price
4" - 2004PV	EA	3	\$ 30.73 \$	92.19	\$ 34.53	\$ 103.59	\$ 34	4.60 \$	103.80	\$ 23.75	\$ 71.25
6" - 2006PV	EA	1	\$ 39.43 \$	39.43	\$ 41.84	\$ 41.84	\$ 4	1.90 \$	41.90	\$ 32.45	\$ 32.45
10" - 2010PV	EA		\$ \$	0.00	\$	\$ 0.00	\$	\$	0.00	\$	\$ 0.00
12" - 2012PV	EA	77	\$ 105.40 \$	8,115.80	\$ 123.07	\$ 9,476.39	\$ 123	3.20 \$	9,486.40	\$ 56.85	\$ 4,377.45
Pipe Joint Restraint Series	I	I	1 1	I	i	l i		1	I		l I
1600	Units	Qty	Unit Price	Extended Price	Unit Price	Extended Price	Unit Pric	e	Extended Price	Unit Price	Extended Price
4" - 1604	EA	56	\$ 38.12 \$	2,134.72	\$ 42.84	\$ 2,399.04	\$ 42	2.90 \$	2,402.40	\$	\$ 0.00
6" - 1606	EA	6	\$ 52.53 \$	315.18	\$ 59.70	\$ 358.20	\$ 59	9.10 \$	354.60	\$	\$ 0.00
10" - 1610	EA		\$ \$	0.00	\$	\$ 0.00	\$	\$	0.00	\$	\$ 0.00
Material Listing Version 3, dated January	27, 2022			646,110.98		692,161.93			798,623.20		751,106.75
		Empire Pi	pe did not provide u	nit pricing, but their overa	Il price total was ab	ove the lowest bid - no need	to determine	missing	unit bid pricing		

Ferguson quote was for 23,700LF, Bid Tab price extension reflects Bid Quote footage & unit pricing.

Fortiline did not provide unit pricing, but their overall price total was above the lowest bid - no need to determine missing unit bid pricing

OKEECHOBEE UTILITY AUTHORITY

AGENDA ITEM NO. 17

FEBRUARY 17, 2022

SWSA INTERCONNECT

In the design of the Southwest Service Area project, a sanitary force main connecting an existing force main on SW 3rd Avenue to the SWSA Master Pump Station was planned. This interconnect will provide two benefits. Firstly, the flow from an existing force main to the MPS will assist the MPS working early on when the flows from Project 2 and the Okee-Tantie areas are minimal. Secondly, by diverting flow to the SWSA MPS will decrease the flow/loadings sent to SE-2. This station (SE-2), is currently overloaded at times.

To accomplish this task of directing flow to the SWSA MPS, a pump station was needed along the route. Additionally, a planned development (15th Street Homes LLC) needed a pump station to serve their development. The team contacted the developer concerning the need to locate a pump station on their site in return of allowing their development to tie in when needed.

To accomplish this goal, the attached Acquisition Agreement was developed and executed by the property owner. Mr. Tom Conely, OUA Board Attorney, is present today to provide background information regarding this document and to answer questions. A closing date of April 15, 2022 has been proposed.

After review, discussion and if approved by the OUA Board, staff is recommending approval of the Acquisition Agreement and to authorize the OUA Board Chair to execute this agreement.

ACQUISITION AGREEMENT

THIS ACQUISITION AGREEMENT dated _______, 2021 between 15TH STREET HOMES, LLC, a Florida limited liability company (hereinafter referred to as "15TH STREET") and OKEECHOBEE UTILITY AUTHORITY (hereinafter referred to as "OUA").

WITNESSETH

WHEREAS, 15TH STREET is the owner of a parcel of land in Okeechobee County, Florida situate in Section 21, Township 37 South, Range 35 East and having PIN 2-21-37-35-0A00-00006-B000; and

WHEREAS, OUA owns and operates the wastewater/sewage collection and treatment facility for the area; and

WHEREAS, OUA is in the process of extending its water/sewage collection and treatment facility and desires to acquire a portion of the land owned by 15TH STREET for a sewage pumping lift station; and

WHEREAS, 15TH STREET and MONTEBELLO 13, LLC, together own 210 sewage ERCs of OUA pursuant to an Agreement recorded in Official Records Book 618, page 1755 and Addenda recorded in Official Records Book 682, page 1379 and Official Records Book 685, page 654, public records of Okeechobee County, Florida; and

WHEREAS, 15TH STREET and MONTEBELLO 13, LLC, have not divided the 210 sewage ERCs between themselves; and

WHEREAS, 15TH STREET is willing to donate the portion of land desired to OUA on the terms and conditions hereinafter set forth;

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

ARTICLE I: TRANSFER OF ASSET

1.1 Acquired Asset. Upon the terms and subject to the conditions set forth in this Agreement, **15TH STREET** agrees to transfer, assign, convey and deliver to **OUA**, and **OUA** agrees to, acquire and accept from **15TH STREET**, at the Closing (as hereinafter

defined), the following parcel of real property which shall hereinafter be referred to as the "Acquired Asset"):

A PARCEL OF LAND LOCATED IN SECTION 21, TOWNSHIP 37 SOUTH, RANGE 35 EAST, OKEECHOBEE COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SAID SECTION 21; THENCE SOUTH 89°36'31" WEST ALONG THE SOUTH LINE OF SAID SECTION 21, ALSO KNOWN AS THE CENTERLINE OF SW 15TH STREET, A DISTANCE OF 1144.16 FEET; THENCE NORTH 00°30'35" WEST, A DISTANCE OF 25.00 FEET TO THE NORTH RIGHT-OF-WAY LINE OF SAID SW 15TH STREET AND THE POINT OF BEGINNING; THENCE CONTINUE NORTH 00°30'35" WEST, A DISTANCE OF 147.58 FEET; THENCE SOUTH 89°36'31" WEST, A DISTANCE OF 147.58 FEET TO THE EAST RIGHT-OF-WAY LINE OF SW 10TH AVENUE; THENCE SOUTH 00°30'35" EAST ALONG SAID EAST RIGHT-OF-WAY LINE, A DISTANCE OF 147.58 FEET TO THE INTERSECTION WITH THE SAID NORTH RIGHT-OF-WAY LINE OF SW 15TH STREET; THENCE NORTH 89°36'31" EAST ALONG SAID NORTH RIGHT-OF-WAY LINE, A DISTANCE OF 147.58 FEET TO THE POINT OF BEGINNING.

ARTICLE II: PURCHASE PRICE: ADJUSTMENTS: PAYMENTS

- 2.1 Purchase Price. No purchase price ("Purchase Price") shall be paid by **OUA** to **15TH STREET** for the Acquired Asset. Taxes for the current year shall be prorated and payment thereof to the date of closing shall be the sole responsibility of **15TH STREET**.
- 2.2 Consideration. As full and sufficient consideration for this transaction **OUA** agrees as follows:

The sewage pumping station to be constructed by **OUA** on the parcel described above shall include a gravity sewer connection, extending from the pumping station as constructed, to either the north or east boundary line of the parcel, at the option of **15TH STREET**; capped at an invert elevation of 8.5 feet (NAVD88), to provide gravity sewer collection service for **15TH STREET's** parent tract (Parcel No. 2-21-37-35-0A00-00006-B000) and of sufficient size to accommodate gravity sewage flow from a total of 210 equivalent residential connections (ERCs).

ARTICLE III: CLOSING

3.1. Closing Date. The closing of the transaction contemplated by this

Agreement (the "Closing") shall take place at t	he office of Okee-Tantie	Title Company in
Okeechobee, Florida, on or before the	day of,	2021, (such date
being referred to herein as the "Closing Date")		

3.2. At least five (5) days before the Closing Date, **OUA** shall, at **OUA**'s expense, obtain a title insurance commitment (with legible copies of instruments listed as exception) and, after closing, an owner's policy of title insurance.

ARTICLE IV: ACTIONS OF 15TH STREET AT THE CLOSING

At the Closing, **15TH STREET** shall deliver to **OUA** a Warranty Deed, as shall be appropriate to carry out the intent of this Agreement and sufficient to convey and transfer to **OUA** all right, title and interest of **15TH STREET** in and to the Acquired Asset, free and clear of all liens, claims, charges, security interests and encumbrances of any kind.

ARTICLE V: REPRESENTATIONS AND WARRANTIES OF 15TH STREET

- 5.1. Organization, Good Standing and Power and Authority of **15TH STREET**. **15TH STREET** is in good standing under the laws of the State of Florida and has the power and authority to enter into this Agreement and to perform the obligations required of **15TH STREET** under this Agreement.
- 5.2. Effective Agreement of **15TH STREET**. The execution and delivery by **15TH STREET** of this Agreement and the consummation by **15TH STREET** of the transaction contemplated hereby has been duly authorized by all necessary action of **15TH STREET** and this Agreement, and any other agreements or instruments executed and delivered by **15TH STREET** at the Closing, will constitute legal, valid and binding obligations of **15TH STREET** enforceable against **15TH STREET** in accordance with their respective terms. Neither the execution and delivery of this Agreement nor the consummation of the transaction contemplated hereby will (a) with or without the giving of notice and/or the passage of time, violate, conflict with, result in the breach or termination of, constitute a default under, or result in the creation of any material lien,

change or encumbrance upon any of the assets or property of **15TH STREET** pursuant to any contract, agreement, lease or commitment to which **15TH STREET** is a party or by which **15TH STREET** or any of its assets or property may be bound, or (b) violate any judgment, decree, order, statute, rule or governmental regulation applicable to **15TH STREET** of any of its assets, property or business.

- 5.3. Title to Acquired Asset. **15TH STREET** has, and will have at the Closing, and **OUA** will acquire at the Closing, title to the Acquired Asset, free and clear of all liens, claims, charges, security interests or other encumbrances of any kind or description.
- 5.4. Litigation. There are no actions, suits, proceeding, judgments or decrees pending against **15TH STREET** which involve the Acquired Asset.
- 5.5. Condition of Asset. **15TH STREET** is transferring and conveying the real property (the "Acquired Asset") as is. **OUA** acknowledges having had sufficient opportunity to inspect and test the Acquired Asset.

ARTICLE VI: REPRESENTATIONS AND WARRANTIES OF OUA

OUA hereby represents and warrants to **15TH STREET** as follows:

- 6.1. Power, Authority and Capacity of **OUA**. **OUA** has full power, authority and capacity to own property, enter into this Agreement, perform its obligations hereunder and acquire and own the Acquired Asset.
- 6.2. Effective Agreement of **OUA**. This Agreement, and any other agreements or instruments executed and delivered by **OUA** at the Closing, when executed and delivered by **OUA**, will constitute legal, valid and binding obligations of **OUA** enforceable against **OUA** in accordance with their respective terms, neither the execution and delivery of this Agreement nor the consummation of the transactions contemplated hereby will (a) with or without the giving of notice and/or the passage of time, violate, conflict with, result in the breach or termination of, constitute a default under, or result in the creation of any material lien, charge or encumbrance upon any of the assets or property of **OUA** pursuant to, any contract, agreement, lease or commitment to which **OUA** is a party or by which **OUA** or any of **OUA**'s assets or

property may be bound or (b) violate any judgment, decree, order, statute, rule or governmental regulations applicable to **OUA** or any of **OUA**'s assets, property or business.

6.3. Litigation. There are no actions, suits, proceedings, judgments, decrees, or claims pending or, to the knowledge of **OUA**, threatened against or affecting **OUA** which could prevent or interfere with the consummation of the transaction contemplated hereby.

ARTICLE VII: SURVIVAL OF REPRESENTATIONS AND WARRANTIES; INDEMNIFICATION

7.1. Survival of Representations, Warranties and Agreements. All representations, warranties and agreements made by either party in and to this Agreement or in any instrument delivered pursuant to this Agreement shall survive the Closing of this transaction.

ARTICLE VIII: MISCELLANEOUS

- 8.1. Expenses. Whether or not the transactions contemplated by this Agreement shall be consummated and except as otherwise expressly provided in this Agreement, each of the parties hereto shall pay the fees and expenses of their attorneys, accountants and other experts and all other expenses incurred by them in connection with the preparation for, entering to and consummation of the transactions contemplated by this Agreement and all other matters incident thereto. All costs and expenses shall be paid by **OUA**, except for the cost of the preparation of and recording of any corrective instruments that may be required; such costs to be paid by **15TH STREET**.
- 8.2. Brokerage. Each party represents and warrants to the other that neither has done anything which would impose a liability upon the other party hereto for any brokerage or finder's fee with respect to the transaction contemplated by this Agreement.
- 8.3. Notices. All notices, requests, demands and other communications which are required or permitted to be given under this Agreement shall be in writing and shall

be deemed to have been duly

given upon the delivery or mailing thereof, as the case may be, if delivered personally or sent by registered or certified mail, return receipt requested, postage prepaid as follows:

(a) if to **15TH STREET**:

Juan D. Calle, Manager 120 SW 8th Street Miami, FL 33130

(b) if to **OUA**:

John F. Hayford, Executive Director 100 SW 5th Avenue Okeechobee, FL 34974

or to such other person or address as either party hereto shall have specified by notice in writing to the other party hereto.

- 8.4. Entire Agreement. Except as otherwise provided in this section, this Agreement sets forth the entire agreement and understanding of the parties hereto with respect to the transactions contemplated hereby and supersedes any and all prior agreements and understandings relating to the subject matter hereof. No representation, promise or statement of intention has been made by any party hereto which is not embodied in this Agreement, or the written statements, certificates, exhibits or other documents delivered pursuant hereto or in connection with the transactions contemplated hereby, and no party hereto shall be bound by or liable for any alleged representation, promise or statement of intention not set forth herein or therein.
- 8.5. Amendment; Waiver. Except as otherwise expressly provided herein, this Agreement may be amended, modified, superseded or canceled, and any of the terms, representations, warranties, covenants or conditions hereto may be waived, only by a written instrument executed by the parties hereto or, in the case of a waiver, by the party hereto waiving compliance.
- 8.6. Parties in Interest. All of the terms, representations, warranties, covenants and conditions contained in this Agreement shall be binding upon, and shall inure to the

benefit of and be enforceable by, the parties hereto and their respective successors and assigns.

- 8.7. Governing Law. This Agreement is being executed in Okeechobee County, Florida, and shall be governed by and construed and enforced in accordance with the laws of the State of Florida.
- 8.8. Captions. The article and section heading contained in this Agreement are for reference purposes only and shall not in any way affect the meaning or interpretation of this Agreement.
- 8.9. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original instrument and all of which together shall constitute a single agreement.

IN WITNESS WHEREOF, the parties have duly executed this Agreement as of the date first above written.

Signed, sealed and delivered in the presence of:

RAQUEL RODRIGUEZ
MY COMMISSION # GG962973
EXPIRES: March 01, 2024

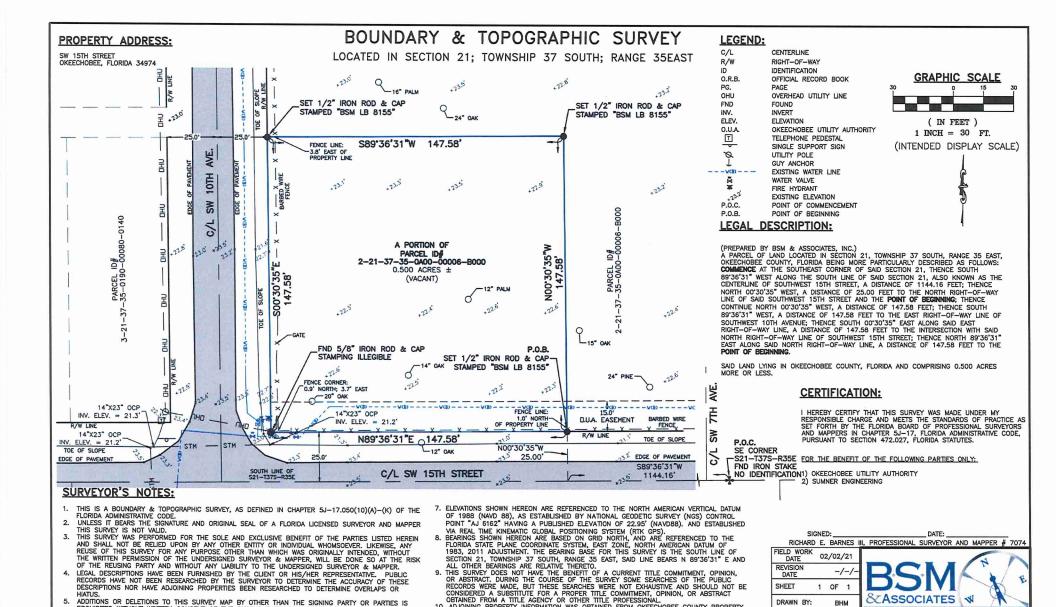
By:

Juan D. Calle, Manager

OKEECHOBEE UTILITY AUTHORITY

By:

John Creasman, Chairman



10. ADJOINING PROPERTY INFORMATION WAS OBTAINED FROM OKEECHOBEE COUNTY PROPERTY

11. SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE X PER FEMA MAP NUMBER 12093C,

PANEL NUMBER 0480C, WITH AN EFFECTIVE DATE OF 07/16/15.

ADDITIONS OR DELETIONS TO THIS SURVEY MAP BY OTHER THAN THE SIGNING PARTY OR PARTIES IS

PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES. UNDERGROUND IMPROVEMENTS, IF ANY, WERE NOT LOCATED EXCEPT AS SHOWN

& ASSOCIATES

DRAWN BY:

CHECKED BY:

ВНМ

REB

21-043

W

LAND SURVEYING SERVICES

ricky.barnes@bsmsurvey.com

863,484,8324

80 SE 31st Lane, Okeechobee, FL 34974

OKEECHOBEE UTILITY AUTHORITY

AGENDA ITEM NO. 18

FEBRUARY 17, 2022

OKEE-TANTIE ENGINEERING RFP

The selected engineering team has begun developing a scope of work and fee schedule for this project. They have also been busy coordinating specific aspects of the field date gathering approach.

Due to delays encountered with previously scheduled time off and COVID, the final scope of work and fee schedule will be delivered at the March OUA Board meeting.

OKEECHOBEE UTILITY AUTHORITY

AGENDA ITEM NO. 19

FEBRUARY 17, 2022

SW 5TH AVENUE ENGINEERING REPORT

Please find attached the SW 5th Avenue Septic to Sewer Conversion Preliminary Evaluation Report prepared by Sumner Engineering & Consulting, Inc. (SEC).

As has been previously stated, the study area primarily was located between SW 7th Avenue, SW 15th Street, Parrott Avenue and SW 28th Street. The evaluation identified three methods of wastewater collection: gravity, vacuum and low-pressure sewer systems. The area is currently served by some gravity sewer, but, mostly by use of septic tank systems.

The report evaluated each type of system for use in the study area and produced a preliminary cost estimate.

SEC will present the report in its' entirety. At the conclusion, SEC will detail the alternative of choice.

OUA staff is looking for OUA Board direction. The options are:

- > Direct staff to negotiate with SEC to develop a path forward with the selective project;
- > Direct staff to negotiate with SEC to develop a path forward with an alternative project as selected by the OUA Board;
- > "Do nothing" option.

As an alternative project, the use of low-pressure system in the SW 7th/SW 5th Avenue corridor from SW 15th Street to SW 28th Street may be effective, but the area east of SW 3rd Avenue could be evaluated as gravity sewer since the "backbone" gravity sewer is already in place.







SW 5TH AVENUE SEPTIC-TO-SEWER CONVERSION PRELIMINARY EVALUATION REPORT

Okeechobee Utility Authority | February 2022

SW 5th AVENUE SEPTIC-TO-SEWER CONVERSION PRELIMINARY EVALUATION REPORT

Prepared for:

Okeechobee Utility Authority

100 SW 5th Avenue Okeechobee, FL 34974

Prepared by:

Sumner Engineering & Consulting, Inc.

410 NW 2nd Street

Okeechobee, FL 34972

In Association with:

Eckler Engineering, Inc.

And

Jones Edmunds & Associates, Inc.

Sumner Engineering Project No.: 20-10

February 2022

Jeffrey M. Sumner, PE

Florida PE No.: 55403

TABLE OF CONTENTS

1	IN	TRO	DUCTION	L
	1.1	Pur	pose	1
	1.2	Pro	ject Scope of Work	1
2	PR	OJE	CT PLANNING	L
	2.1	Loc	ation	1
	2.2	Cor	nmunity Engagement	1
3	EX	ISTI	NG FACILITIES	1
	3.1	Des	scription of Existing Sewer Facilities	1
	3.2	Des	scription of Existing Septic Facilities	5
	3.3	Ant	icipated Project Flows / Impacts on Existing Facilities	7
4	PR	OJE	CT NEED	3
	4.1	Hea	alth and Sanitation	3
	4.2	Agi	ng Infrastructure	3
	4.3	Pop	ulation Growth	Э
5	AL	TERN	NATIVE COLLECTION SYSTEMS CONSIDERED)
	5.1	Des	scription	9
	5.2	Cor	nsiderations	9
	5.2	.1	Design Criteria Used in the Evaluation	Э
	5.2	.2	Maps10)
	5.2	.3	Environmental Impacts)
	5.2	.4	Land Requirements)
	5.2	.5	Potential Construction Issues)
	5.2	.6	Sustainability)
	5.3	Alte	ernatives10)
	5.3	.1	Alternative VS – Vacuum Sewer System)
	5.3	.2	Alternative GS – Gravity Sewer System	2
	5.3	.3	Alternative LPS – Low-Pressure Sewer Systems	1
	5.4	Cos	t Estimates for Each System16	5
6	SEI	LECT	TION OF AN ALTERNATIVE1	7
7	DF	СОМ	MENDED ALTEDNATIVE	2

LIST OF FIGURES

Figure 1	SW 5 th Avenue Project Area	2
Figure 2	Existing Land Use	3
Figure 3	Lots Currently on OUA Sewer	6
Figure 4	Typical Vacuum Sewer Arrangement	
Figure 5	Typical Gravity Sewer Arrangement	
Figure 6	Typical Low-Pressure Sewer Syestem Arrangement	
LIST	OF TABLES	
Table 1	Lift Station SW-8 Data	4
Table 2	Lift Station SW-9 Data	5
Table 3	Wastewater Generated by Proposed Project (Developed Lots Only)	7
Table 4	Wastewater Generated by Proposed Project (All Lots)	7
Table 5	Wastewater Impact on SW-8 by Proposed Project	
Table 6	Factor Ranking	17
ATTA	CHMENTC	

ATTACHMENTS

Attachment A	Alternative Collection System Layouts
Attachment B	Alternative Collection System Capital Cost Estimates
Attachment C	Vacuum Design Memorandum (Eckler Engineering, Inc.)

1 INTRODUCTION

1.1 PURPOSE

This Preliminary Evaluation Report (PER) is to develop and analyze new wastewater collection alternatives needed to convert on-site sewage treatment and disposal systems (OSTDSs) (septic tanks and associated drain fields) in the area of Southwest 5th Avenue and to connect to a new central wastewater collection and transmission system owned and operated by the Okeechobee Utility Authority (OUA). For each alternative, a preliminary design and a preliminary opinion of probable construction cost (POPCC) has been prepared and presented to assist the OUA with its conversion feasibility evaluation.

1.2 PROJECT SCOPE OF WORK

The SW 5th Avenue Project Area is, for the most part, currently served by OSTDSs. OUA has engaged Sumner Engineering & Consulting, Inc. (SEC) to prepare this PER providing for alternative solutions to convert the Project Area from OSTDSs to central sewer.

This PER establishes the basis of design considerations for the project and provides information to support conversion feasibility and design decisions. This includes proposed collection main routes, collection methods for different conditions, materials of construction, and POPCCs.

2 PROJECT PLANNING

OUA is an Independent Special District formed by interlocal agreement in 1995 to acquire, own, improve, and operate water and wastewater utilities within its service area, which includes all of Okeechobee County and a portion of Glades County. Therefore, OUA has purview over the septic-to-sewer conversion within the proposed Project Area.

2.1 LOCATION

Figure 1 shows the SW 5th Avenue Project Area in Okeechobee County. It is mostly developed and is mostly comprised of single-family residences to the west, along with a commercial corridor to the east located along the west side of US Highway 441 – Figure 1-2 shows the existing lands uses within the project area. There are existing wastewater facilities (gravity sewer lines and force mains) along SW 3rd Avenue, which serves some residences and business in the Project Area. However, the majority of the developed lots, though they are OUA water customers, are not currently served by OUA wastewater.

OUA is evaluating this septic-to-sewer conversion due to the OSTDSs age, recent resident complaints about sewage backups during high rainfall events, and the relatively high water table in the area, limiting the replacement of the existing OSTDSs. This area is the focus of the alternatives analysis in this PER. The Project Area is entirely developed, and so no impacts on existing natural resources from this project are expected.

Figure 1 SW 5th Avenue Project Area

PROJECT AREA

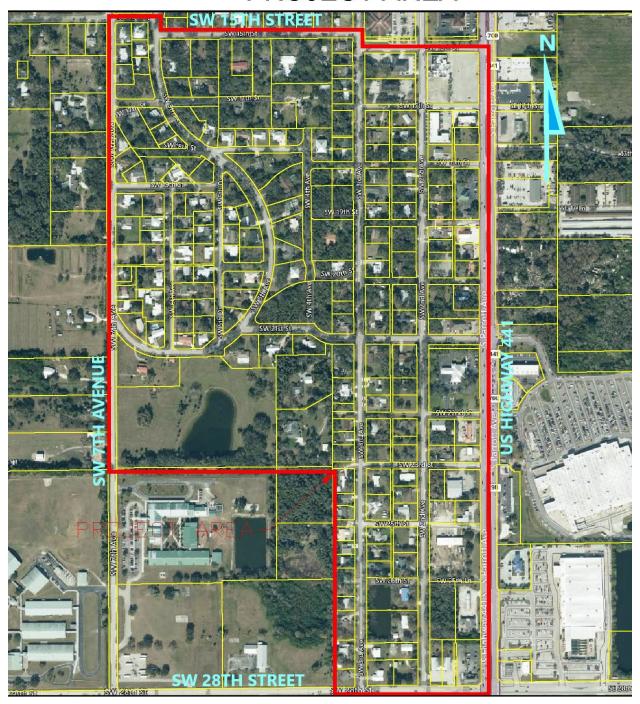
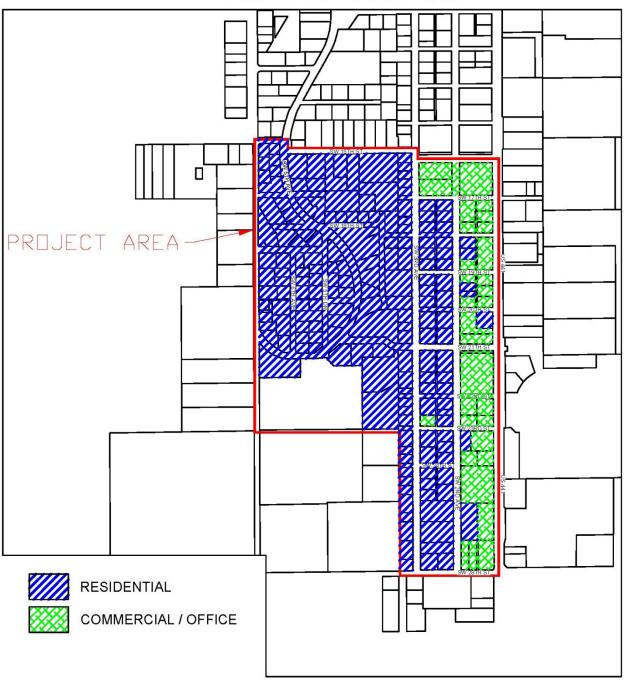


Figure 2 Existing Land Use

EXISTING LAND USE



2.2 COMMUNITY ENGAGEMENT

OUA has been contacted by residents within the project area, health and other local government officials who have expressed concerns over poor septic system function, primarily during the wet season when groundwater elevations are highest. These residents made their concerns clear regarding the existing state of the area's septic systems and their desire to be connected to OUA sewer.

Based on the interest expressed by some residents within the project area, SEC recommends holding at least one public meeting where the project can be specifically discussed at local locations and at times that accommodate the public's attendance for the purpose of soliciting their input. In addition to the in-person public meetings, further public outreach through informational fliers to the project area or website status updates of the project where the public can be made aware and can access are strongly encouraged.

3 EXISTING FACILITIES

3.1 DESCRIPTION OF EXISTING SEWER FACILITIES

There are existing OUA gravity sewer facilities within the Project Area, including a force main, gravity mains and manholes on (and near) SW 3rd Avenue. OUA also owns two existing lift stations within the Project Area, including Lift Stations SW-8 (on SW 5th Avenue near SW 21st Street), and SW-9 (behind Pizza Hut). The current gravity collection system in this area provides services to some residential lots along and near SW 3rd Avenue, collecting wastewater and transferring it to SW-8. SW-9 serves a limited number of commercial lots near the south end of the Project Area. Further, some of the existing commercial properties in the eastern portion of the Project Area are connected to existing OUA facilities, either along SW 3rd Avenue or on the east side of US Highway 441. This report assumes that residential and commercial lots currently connected to OUA sewer will remain connected as they are and are not included in the preliminary design analysis. However, we recognize that should a new system be installed, some of the commercial properties now connected to OUA facilities on the east side of US 441 may be more effectively served by connecting to the new system. Lots with existing OUA wastewater service are shown in Figure 3, and in the proposed Design Alternatives included in Attachment A.

Tables 1 and 2 summarize available data for the existing SW-8 and SW-9. SW-8 is a standard OUA duplex station, six feet in diameter with Flygt effluent pumps. SW-9 is a small "grinder" type station, with much smaller pumps and limited capacity for taking additional flows. This information is approximate and based on available pump data from OUA. Updated information should be gathered and analyzed during any design that may proceed from this PER.

Table 1 Lift Station SW-8 Data

Name		SW-8			
Wet Well Diameter (feet)		6			
Wet Well Depth (feet)	22				
Number of Pumps		Two			
Manufacturer	Flygt	Flygt ¹			

Model	3127.180	3127.180
Motor HP	10	10
Rated Pump Flow (gpm)	460	460
Rated Pump Head (feet)	52	52

¹ Per OUA, tag missing from pump #2, but appears to be identical to Pump 1.

Table 2 Lift Station SW-9 Data

Name		SW-9		
Wet Well Dimensions (feet)	4 x 4			
Wet Well Depth (feet)	9.33			
Number of Pumps	Two			
Manufacturer	Keen	Keen		
Model	KG2-23	KG2-23		
Motor HP	2	2		
Rated Pump Flow (gpm)	35	35		
Rated Pump Head (feet)	80	80		

Note: SW-9 is a relatively shallow, "grinder" type station.

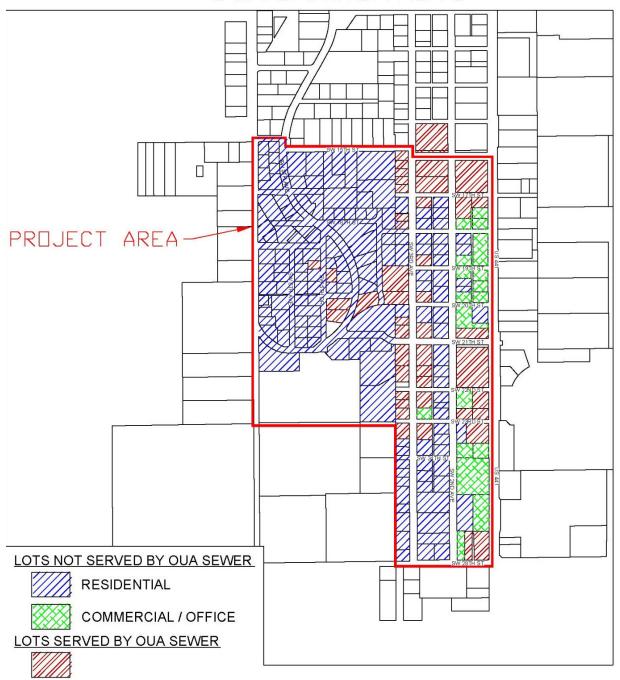
If the current residences and commercial sites on septic tanks are connected to the existing OUA sewer system in the area, it will directly affect the existing lift station (SW-8) [and potentially SW-9] downstream and, concurrently, the OUA Wastewater Treatment Facility (WWTF). The effect from the additional flows should be incidental to the overall wastewater influent seen at the wastewater facility as shown in Table 3 below. The wastewater facility is permitted as a 3.9 million gallons per day (MGD) as a three-month average daily flow (TMADF), extended aeration oxidation ditch domestic wastewater treatment facility. The facility currently treats approximately 0.9 MGD (TMADF).

3.2 DESCRIPTION OF EXISTING SEPTIC FACILITIES

Many of the septic tanks within the project area were installed years ago (some before 1980), and the regulation at that time had different limitations on drain field bottom separation from the mean high water table. These older systems may not meet current OSTDS drain field installation criteria that were changed in 1980 for surficial water table separation. Current standards require a minimum 2-foot separation between the seasonal high water table and the bottom of the drain field for new systems and 12 inches above seasonal high water table for previously installed systems being repaired; lot sizes of 1/2 acre or greater are also required. Systems in high water table areas that meet today's current standards can readily be identified by their mounded drain fields. During project-area site visits, mounded drain fields were not readily observed in all residential units containing septic tanks, indicating that installation of many of these systems predates 1980. This is confirmed by reviewing the property appraiser's information regarding the home construction dates, indicating that many of the homes within the Project Area were constructed in the late 1970s or early 1980s, and therefore, many were either constructed before the criteria was created or before it was regularly enforced the few years following.

Figure 3 Lots Currently on OUA Sewer

OUA SERVICE LOTS



3.3 ANTICIPATED PROJECT FLOWS / IMPACT ON EXISTING FACILITIES

The Project Area is mostly built out with single-family residences, along with a commercial corridor adjacent to US 441. We reviewed metered flow data for developed lots that are currently OUA customers, and used that data to estimate existing wastewater flows.

Table 3 presents an estimate of the flow produced by converting the existing OSTDSs to a collection system. As the flows below are only for existing developed lots, the values presented should be considered the **low** range of average daily flows to OUA system.

Table 3 Wastewater Generated by Proposed Project (Developed Lots Only)

User Category	Number of Wastewater Connections	Projected Average Daily Wastewater Flow per Connection (gpd) ¹	Total Estimated Wastewater Flow (gpd)
Residential	101	147.3	14,877
Commercial	10	120.5	1,205
TOTAL			16,082

¹ gpd = gallons per day, based on metered water analysis.

To estimate the high end of the potential range of daily flows, we considered all platted, undeveloped lots in addition to the developed lots described above (for a total of 153 existing and potential connections). An average daily flow (ADF) of 152 gpd was used in this calculation based historical analysis throughout the Southwest Wastewater Service Area. Table 4 below presents this flow estimate.

Table 4 Wastewater Generated by Proposed Project (All Lots)

User Category	Number of Wastewater Connections	Projected Average Daily Wastewater Flow per Connection (gpd) ¹	Total Estimated Wastewater Flow (gpd)
All	153	152	23,256
TOTAL			23,256

¹ gpd = gallons per day, based on historical SWSA analysis.

Using the 10 States Standards formula recommendation shown below, with the "high" range of average daily flows from Table 4, results in a Peaking Factor of 4.04, based on the assumed population per connection of 2.40.

Q Peak Hourly/Q Design Ave =
$$\frac{18 + \sqrt{P}}{4 + \sqrt{P}}$$
 (P= population in thousands)

Fair, G. M. and Geyer, J. C., "Water Supply and Waste-water Disposal" 1 st Ed., John Wiley & Sons, Inc., New York (1954), p. 136

Table 5 shows the range of potential peak hour flows to the OUA system, based on the range of ADFs and the Peaking Factor calculated utilizing the equation above and the flows in Table 4.

Table 5 Wastewater Impact on SW-8 by Proposed Project

Total Estimated Flow Produced (gpd)	Average Daily Flow (gpm)	Peaking Factor	Peak Hourly Flow (gpm)
16,082 to 23,256	11.2 to 16.2	4.04	45.2 to 65.4

Note: gpm = gallons per minute.

Based on the above, the potential added flow to Lift Station SW-8 (utilizing the high end of the range of flows presented) would be no more than 14-percent of a single pump's operating capacity. Review of OUA's service maps for the area indicates that approximately 40 lots are currently connected to SW-8, or an additional 17 gpm (utilizing the same peaking factor calculated above). So, even with the additional lots contemplated for conversion to sewer, only 20% of a single pump capacity would be utilized. Additional flow information and detailed analysis of SW-8 (including operating depth) should be considered before design, but this preliminary evaluation indicates that the added flow from converting the existing OSTDSs to sewer would not significantly impact the lift station's operation. Additionally, the anticipated high end daily flow of 23,256 gpd is insignificant relative to the permitted and current treatment capacity at the WWTF.

4 PROJECT NEED

4.1 HEALTH AND SANITATION

Some local residents contacted OUA directly to express concerns with apparent sewage odors and/or poor septic system function following heavy rain events in the Project Area. In fact, some residents claimed to have had no septic system function at all during these periods. Further, the Project Area is within the Taylor Creek / Nubbin Slough Watershed, which is known to contribute nutrient loading to Lake Okeechobee. Septic systems, particularly those that function poorly due to high water tables, have been demonstrated to exacerbate the adverse nutrient loading within the watershed.

4.2 AGING INFRASTRUCTURE

As noted above, many of the septic tanks in the project area have aged and likely are not functioning as they were originally designed. The US Environmental Protection Agency (EPA) recommends that septic tanks have solids removed every 3 years to maintain good operational integrity and allow inspection of the septic tank. Operational integrity reviews inspect functionality of the system parts, but do not review the level of treatment. According to the Florida Department of Health, only 100,000 of the 2.6 million septic systems in Florida are recorded as having solids removed annually. On an annual average, this means that only 12-percent state-wide are reviewed and maintained. Applying this to the Southwest 5th Avenue Project Area and assuming that the project area had twice as many pumped out as the state-wide average, it can be forecasted that 75-percent of the septic

tanks have a potential for failure that could discharge into groundwater or impact surface runoff.

The primary purpose of a standard septic system tank is solids separation; that is, removing solids through settling so that the wastewater can be distributed to the drain field without plugging the absorption area. Little nutrient removal is accomplished with septic systems. Failure of OSTDSs can occur including leaking septic tanks and solids build-up in the system. The *out of-site/out-of-mind* syndrome is prevalent with OSTDSs. In addition, introduction of toxic materials can happen if the owner is uninformed on how septic systems work, leading to potential localized groundwater contamination. Groundwater discharges from OSTDSs in the project area may eventually end up in surficial water, directly impacting the watershed.

By removing septic tanks from the Project Area and conveying wastewater to the nearby existing collection / transmission system (and ultimately the wastewater treatment facility), a positive impact will be realized that will enhance the future condition of the environment and help to maintain its sustainability.

4.3 POPULATION GROWTH

The area considered for this project (Figure 1-1) appears to be mostly built-out with no significant undeveloped platted lots. All lots (developed or undeveloped) are considered "built" for the purpose of estimating the "high" range of sewage flows considered in this PER.

5 ALTERNATIVE COLLECTION SYSTEMS CONSIDERED

5.1 DESCRIPTION

Three types of collection systems were evaluated to determine capital cost differences. The alternative systems reviewed are:

Vacuum
 Standard Gravity
 Low Pressure

OUA has experience with all three evaluated alternatives. Those experiences have been factored into the evaluation of "Operational Effort", discussed in the next section. the standard gravity collection systems, both with and without lift stations.

5.2 CONSIDERATIONS

5.2.1 Design Criteria Used in the Evaluation

Each of the three systems were evaluated based on a grading scale from 1 to 3, with 1 being the best and 3 being the worst. The three systems were evaluated on six criteria including:

- 1. Capital investment cost (the direct material and labor cost of installing the system, including engineering design and construction services, and general costs).
- 2. Construction disruption to area (including likely road closures, traffic delays and detours, etc.).

- 3. Constructability of each alternative (ease or difficulty of construction, including water table management, trench safety, maintenance of traffic, etc.).
- 4. Operational effort (maintenance requirements, frequency of service calls, etc.)
- 5. Operational and Life-cycle cost (life expectancy / frequency of equipment replacement or refurbishment, electric costs, etc.).
- 6. Project area coverage / Potential expansion (ability of selected alternative to serve the entire Project Area, potential / ease of expansion beyond the Project Area).

5.2.2 MAPS

Attachment A contains Alternative System maps for each design condition.

5.2.3 ENVIRONMENTAL IMPACTS

All three collection systems have similar environmental impacts; therefore, environmental impacts were not evaluated. Only the vacuum system has any *potential* permanent impacts due to the vacuum collection system building (permanent above-ground construction) and vacuum station site. The manholes, valve pits, and/or low-pressure lift stations have a limited permanent footprint, and would be constructed mostly within existing, disturbed rights-of-way. Since the collection systems are buried in all cases, any impacts from installation, even if significant, would be temporary.

5.2.4 LAND REQUIREMENTS

The vacuum alternative is the only option that has land requirements, due to the need for a permanent vacuum station / building. All other improvements for all design alternatives are assumed to be constructed within existing public rights-of-way.

5.2.5 POTENTIAL CONSTRUCTION ISSUES

The major construction issue with this project will be the difficulty of deep excavations due to the high water table as well as installation in narrow rights-of-way while maintaining continued accessibility for the property owners. These factors, in addition to maintenance of traffic, disruption to local residents, and installation of electrical services (in the case of LPS system) were considered when evaluating each alternative.

5.2.6 SUSTAINABILITY

Based on other septic-to-sewer conversions, once the system is constructed and operational, the added value to each property will be apparent. For example, if an existing system fails and is required by the Florida Department of Health to be replaced and brought up to current standards, the cost to the property owner is between \$10K and \$20K. Further, proper maintenance of septic systems requires pumping out every 5 to 10 years, depending on use. Connection to a central sewage system immediately mitigates that potential cost and frees up the land that is encumbered by the septic system for other uses.

5.3 ALTERNATIVES

5.3.1 ALTERNATIVE VS - VACUUM SEWER SYSTEM

Vacuum sewer systems have been in service in Florida for over 30 years, and their design and engineering criteria are well known. These systems are gaining popularity in Florida as

an alternative to gravity systems in areas with high water tables and/or existing developed areas without existing sewer systems because of their lower capital cost and reasonable operating cost. Vacuum sewer systems can be more reliable than low-pressure sewer systems due to their limited electrical requirements and can be easier and more cost-effective to maintain. In addition, with the new, more stringent Sanitary Sewerage Overflow (SSO) regulations, vacuum collection systems can be more favorable in areas where SSOs could potentially impact the area. Vacuum sewer collection systems are essentially a closed system and minimize or eliminate the potential of an SSO from the collection system compared to the conventional gravity system. This makes them a more environmentally conscious option for installing centralized sewer.

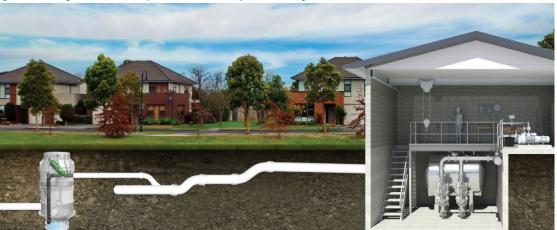
The components of a vacuum sewer system, illustrated in Figure 4 below, include the valve pit and air inlet serving up to four homes (for this evaluation, a ratio of 1.75:1 is used), a vacuum collection system, and a vacuum collection station containing both vacuum pumps and sewage transmission pumps.

In a vacuum system, sewage flows by gravity from the homes/structures through their typical sewage laterals into the bottom of a valve pit. Sewer laterals are small-diameter gravity piping (minimum of 3 inches diameter) installed at relatively shallow depths of no more than six feet. The valve pits are located to facilitate connection of up to four homes and have a pneumatic valve that operates by differential pressure (no electrical power is required at the pits). The pneumatic valve opens automatically when a given quantity of sewage accumulates in the valve pit and is introduced into the vacuum collection system along with a specific amount of air.

The vacuum collection system operates under a constant negative-gauge pressure or vacuum. The sewage is transported pneumatically by the air/liquid-mixed flow up and over each lift until it ultimately discharges into a vacuum collection tank at the vacuum station. Figure 4 provides an overview of a vacuum sewer system and illustrates the vacuum collection lines installed using a sawtooth pattern. The vacuum collection line itself is installed at a 0.2-percent negative grade and uses a 2-foot lift every 1,000 lineal feet as a maximum. This grade allows gravity flow of sewage between lifts so that the sewage collects at the bottom of a lift. When a vacuum valve activates upstream of the lift, the collected sewerage is "lifted" up and into the next gravity section by the air flow. Pumps at the station pull from the collection tank and, via a force main, transmit the sewage to a nearby sewer system. In effect, the system is a pneumatic conveyance system to the collection tank. The vacuum collection/pump station takes the place of a conventional lift station by generating the system vacuum, collecting and storing the wastewater in the vacuum tank, and pumping the sewage with pressure pumps into force main.

Attachment C provides a Vacuum Sewer Design Analysis Report for the SW 5th Avenue Project prepared by Eckler Engineering, Inc.

Figure 4 Proposed Wastewater System Improvements (Courtesy of FloVac, Palm Coast, Florida)



Components to convert the Project Area to the vacuum system are:

Project Expense:

- Installing 87 valve pits with vacuum interface valves.
- Installing 3-inch laterals and 4-inch & 6-inch vacuum mains with isolation valves.
- Installing a vacuum station.
- Connecting the vacuum station to the existing adjacent gravity system.
- Right-of-way restoration.

Property Owner Expense:

- Connecting properties to the new system.
- Decommissioning and abandoning the existing septic tanks.

5.3.2 ALTERNATIVE GS - GRAVITY SEWER SYSTEM

The design and components of a standard gravity sewer collection system are well known and proven. These systems collect and convey sewage passively by gravity to each area lift station. However, to be cost-effective, the gravity systems considered require installations with burial depths constrained to the limits of the existing system depths, between approximately 5 and 13 feet (based on collected survey data), to mitigate the need for an additional lift station. Installation and burial depth of the gravity collection system impact the cost-effectiveness in areas of high water tables due to dewatering and, therefore, increase the capital costs significantly. Installing gravity collection systems is the most disruptive of the alternatives considered because of the excavation depths required for the work and the high water tables within the Project Area.

Significant design and construction difficulties with existing utilities can arise in developed areas with gravity collection system installations. Gravity, as the name suggests, requires a continuous slope to move the sewage to the lift stations. Any critical conflicts in the path of the system can only be avoided by relocating the conflict (utility) or rerouting the gravity collection lines. For example, if a stormwater line conflicts with a gravity system, the gravity line will likely need to be shifted deeper to avoid the conflict at a significant cost and impact to the surrounding area during construction.

From an environmental standpoint, the gravity system is not a closed system and is subject to inflow and infiltration. With the current regulatory interpretation of the SSO rule, gravity systems are more vulnerable to potential overflow and subsequent fines due to infiltration as the system ages.

Gravity systems are composed of four components:

- Gravity lines for collecting and transmitting the wastewater through a minimum of 8inch-diameter pipes to comply with 10 States Standards.
- Manholes for accessing the gravity line, joining different runs of gravity lines, and making directional changes.
- Lift stations into which the gravity lines discharge.
- Force main to transmit the collected sewage.

In a gravity system, waste enters the gravity line via sewer laterals (typically 2 to 4 inches in size) where it flows by gravity through a series of 8-inch or larger collection lines and manholes and discharges into a lift station. The lift station has a wet well that acts as a collection reservoir; when the sewage in the wet well reaches a predetermined level, the sewage pumps start and transmit it via the force main to, ultimately, the wastewater treatment facility.

Figure 5 provides an overview of a standard gravity sewer system. The SW 5th Avenue Project Area gravity collection system would connect the proposed gravity into the existing gravity system along SW 3rd Avenue. The extent of the proposed gravity system is limited by the invert depths of the existing collection system manholes (determined by field survey), along with a minimum upstream cover requirement of 36", and a minimum slope of 0.4% for the proposed 8" gravity lines. It should be noted that the collection system feeding Lift Station SW-8 does not appear to be deep enough to allow gravity expansion covering the entire Project Area. It is possible that the unserved area could be connected to SW-9; however, the nature of SW-9 (low pump capacity grinder station) may make this difficult, if not impossible. Further, review of building finish floors and existing sewer elevations on the homeowner side are outside the scope of this PER. It is possible that some existing homes may have difficulty connecting to the shallower ends of the proposed gravity sewer expansion.

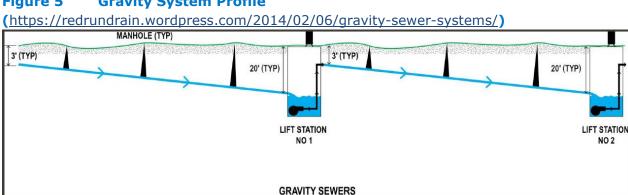


Figure 5 **Gravity System Profile**

SW 5th Avenue Project Area septic system components to convert to the gravity system are:

Project Expense:

- Installing 53 manholes
- Installing approximately 19,000 feet of 8-inch gravity mains
- Pavement and sidewalk restoration

Property Owner Expense:

- Connecting properties to the new system
- Decommissioning and abandoning the existing septic tanks

5.3.3 ALTERNATIVE LPS - LOW-PRESSURE SEWER SYSTEMS

Historically, low-pressure sewer (LPS) systems were originally developed to inexpensively connect properties on septic tanks to a central sewer system by installing a property-owned pump system and small-diameter pressurized discharge line that would use the septic tank as a wet well. This system also avoids the dewatering required for a gravity system installation and is less disruptive to neighborhoods (with considerably less capital investment) than the vacuum system. Basically, it turns the septic tank into an individual property pump station. These LPS systems are also referred to as septic tank effluent pump (STEP) assisted systems. However, as discussed below, these STEP systems are **no longer considered a viable option**.

Over time, the STEP design concept has been abandoned due to issues of having property-owned pump stations controlled by private residents. Florida law now requires that components of the sewer system (with the exception of simple service lines) on private lots be owned by the local utility providing service, or another entity tasked with maintenance of the system (such as a Homeowner Association). Per 62-604.400(3) F.A.C., "....A central management entity, be it public or private, shall be responsible for operation and maintenance of the on-lot facilities associated with alternative collection/transmission systems." It should be noted that this same requirement exists for vacuum systems.

Based on the evolving design concept (and State rules) associated with these LPS systems, their typical design has developed into individual "grinder" pump stations that serve one or more properties that are owned and operated by the utility. The grinder pump stations are placed within or very near the road rights-of-way, similar to the vacuum system valve pits. The homeowner is responsible for abandonment of their septic system, and installation of a sewer service lateral from their home to the grinder pump pit. This is the LPS configuration that is contemplated in this evaluation.

Although the initial capital cost of low-pressure systems is attractive compared to gravity and vacuum, these systems require higher maintenance than other systems and also require individual power drops for each station. An advantage to the low-pressure sewer system is that the lines can be run similar to a water distribution system and can be easily adjusted to minimize conflicts with other utilities. Further, much of LPS line installation can be performed by horizontal directional drill (HDD), largely eliminating both excavation and restoration costs. The low-pressure system is composed of small package grinder pump stations, small 1.5-inch tributary to 2-inch or 3-inch-diameter transmission force mains, and power drops for each series of stations down a street or other public right-of-way. In this design evaluation, the low-pressure system design uses a 1.75:1 connection ratio (identical

to the assumption for vacuum pits in the vacuum sewer alternative analysis); but this could be shifted to a 2 to 4:1 connection ratio, depending on house arrangement and proposed connection location from each home. In the low-pressure system, sewage is collected at each package grinder pump station; once the level in the grinder pump station is at a predetermined point, the pumps start and discharge into their small-diameter tributary force main. The tributary force mains tie into the larger transmission force mains, and the sewage is discharged into an existing gravity manhole or lift station wet well.



Figure 6 provides an overview of a low-pressure sewer system.

Figure 6 Grinder Pump Schematic (https://www.mlwsa.org/police/grinder_pumps/index.php)

Components to convert the Project Area to the low-pressure system are:

Project Expense:

- Installing 87 pump stations (assuming an average 1.75:1 residential connection per station)
- Installing force mains
- Power supply to each pump station
- Restoration of right-of-way (where required)

Property Owner Expense:

- Connecting properties to the new system
- Decommissioning and abandoning the existing septic tanks

5.4 COST ESTIMATES FOR EACH SYSTEM

As part of the Scope of Work, a preliminary opinion of probable construction cost (POPCC) was prepared for each proposed alternative. Attachment B includes the detailed POPCCs. These includes standard front-end conditions, an increased Contractor overhead and profit based on recent observed inflation in the industry, material with complete installation, engineering services at 10-percent (generally including SUE, Survey, Geotechnical, Environmental, and Permitting Services), and construction assistance at 10-percent. Based on this and engineering judgement, a preliminary design contingency at 25-percent was added to account for the early stage of design and significant unknown or unidentified elements at this study phase of the project. General, administrative, and other fees that OUA would incur are not included.

These rough order of magnitude (ROM) construction costs were prepared based on budgetary quotes from equipment and product vendors as well as construction cost data from similar recent projects. The cost opinion contains typical contractor mark-up of labor, materials, and equipment. Right-of-way restoration is a significant cost component within developed areas – in this cost analysis, restoration costs were based on a percentage of installation costs, with higher percentages attributed to deeper construction (gravity) and lower percentage given to shallower construction of smaller lines (low pressure sewer). Notable within the POPCC for vacuum sewer is the expense associated with construction of a proposed vacuum station to serve this area – it is unlikely that this proposed cost would be considered justified for the number of connections being considered in the Project Area. Further, construction of a vacuum station will require acquisition of property - that cost has not been included in this analysis. The range of accuracy for these costs would be expected to narrow through design.

The capital cost estimates for each of the collection systems discussed for this evaluation are:

Vacuum \$ 6,053,000Gravity \$ 5,845,547Low-Pressure \$ 3,166,922

The cost estimates clearly show that the low-pressure system is substantially lower in capital cost than the vacuum or standard gravity systems. Detailed cost estimates for each system are included in Attachment B. Our analysis is focused on capital costs; at this time, high-level life cycle costs have not been analyzed.

6 SELECTION OF AN ALTERNATIVE

The factors that were included in the evaluation were, initial capital cost, construction disruption, constructability, operational effort, operating and life-cycle cost, and project area coverage with potential for expansion. Table 6 shows each system is provided a number between 1 and 3 for each category with 1 the highest ranking and 3 being the lowest ranking.

Table 6 Factor Ranking

Criteria	Vacuum	Gravity	Low Pressure
Capital investment cost	3	3	1
Construction disruption to area	2	3	1
Constructability of the system	2	3	1
Operational effort	2	1	3
Operating / Life-cycle cost	2	1	3
Project Area Coverage / Expansion Potential	1	3	2
Total	12.0	14.0	11.0

This table was based on the following considerations:

Capital Investment Cost:

The capital investment costs, summarized in the previous section and detailed in Attachment B, are based on estimated unit costs and construction quantities for each system. An appropriate contingence for the level of design is included. Capital costs for installation of the vacuum and gravity sewer alternatives were very similar (the higher line installation cost of the gravity system is offset by the additional cost of a vacuum station and building). Initial capital investment for low-pressure sewer is considerably lower than the other alternatives. Comparison of capital investment costs are based on initial installation, and do not take into account life cycle or operational costs (which are assessed under "operating and life cycle cost" below.

Construction Disruption to Area:

Installation of a low-pressure system would cause, bay far, the least disruption to the Project Area. Small-diameter lines can easily be installed within the existing rights-of way, either by open cut or directional drill, with limited need for damaging / restoring asphalt or driveways. Similarly, vacuum lines and valve pits can be installed with limited (though somewhat higher) restoration costs. Extension of gravity lines within the project area would require considerable damage to, and restoration of, existing roads, driveways and sidewalks. This construction and restoration effort would require road closures, detours, and traffic maintenance highly disruptive to residents in the area.

Constructability of System:

Constructability issues include trench safety, management of high water tables (dewatering), etc. The relatively shallow construction of vacuum sewer lines, and even more so with low-pressure lines (which in many cases can be directionally drilled), allow for lower trenching costs, less intensive trench safety considerations, and less dewatering. Gravity sewer lines and manholes, in many cases constructed at considerably greater depths, require significant effort in trenching and water level management, leading to much higher construction costs. It should be noted that limited dewatering may be required for both the vacuum pits and the low-pressure grinder stations, and that significant dewatering would be required for construction of the vacuum station.

Operational Effort:

This evaluation factor takes into account operational activities (maintenance, likelihood of service calls, etc.). and operational costs (equipment repair and replacement cost, power / electric cost, etc.). The gravity system, once installed, has very little if any operational or maintenance requirements. The vacuum system has somewhat higher operational needs, including maintenance of the vacuum valves, vacuum and effluent pumps in the vacuum station, etc. Operational effort associated with the low-pressure system is highest, due to ongoing maintenance of many pump stations, and the likelihood of increased service calls.

Operating and Life Cycle Cost:

This evaluation factor takes into account costs associated with operation of the alternative (equipment repair and replacement cost, power / electric cost, etc.). The gravity system, once installed, has little to no operating costs, and long service life for the manholes and gravity piping. The vacuum system has somewhat higher operational costs, including power requirements at the vacuum station, replacement of valves, vacuum pumps, effluent pumps, etc. Operational costs associated with the low-pressure system are highest, due to power consumption at each grinder station, and shorter life cycles for the grinder pumps (five years as opposed to 10 - 15 years for vacuum or standard sewerage pumps), leading to more frequent equipment replacement.

Project Area Coverage / Expansion Potential:

Both the vacuum and low-pressure sewer systems can serve the entire defined Project area. It also appears likely that low-pressure could be deployed beyond the Project Area (expansion). The vacuum system could easily be expanded beyond the Project Area, and in fact additional connections could help justify the expense of constructing the vacuum station (although there may be limited additional customers in the nearby expansion area). The gravity system is the only alternative that may be unable to serve the entire Project Area and has no potential for expansion.

7 RECOMMENDED ALTERNATIVE

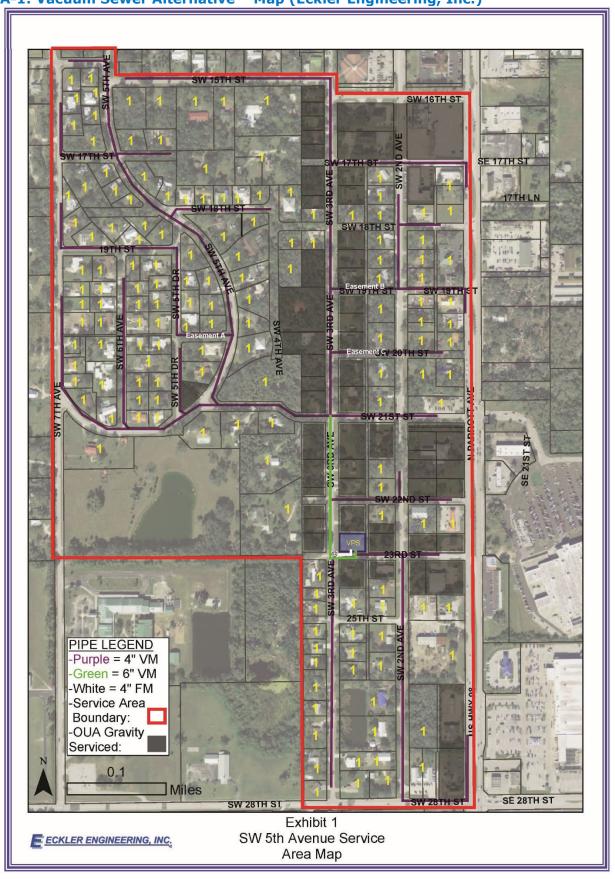
Based on our evaluation, the recommended system is the low-pressure system for the entire project. The capital cost is substantially lower than either the gravity system or the vacuum system. Overall constructability is similar to installation of vacuum lines, and low-pressure system installation is less disruptive than vacuum, and considerably less disruptive than gravity. Operation and maintenance costs do tend to be higher for low-pressure systems, however, and the grinder pumps stations associated with the low-pressure system are vulnerable to power outages. Overall, the low-pressure system is more advantageous than the other options for the SW 5th Avenue Project Area.

Based on the active interest and involvement with the residents in the area, we recommend holding a minimum of one public meeting where the project can be specifically discussed at local locations and at times that accommodate the public's attendance for the purpose of soliciting their input. In addition to the in-person public meeting, further public outreach through informational fliers to the project area or website status updates of the project that the public is made aware of and can access are strongly encouraged.

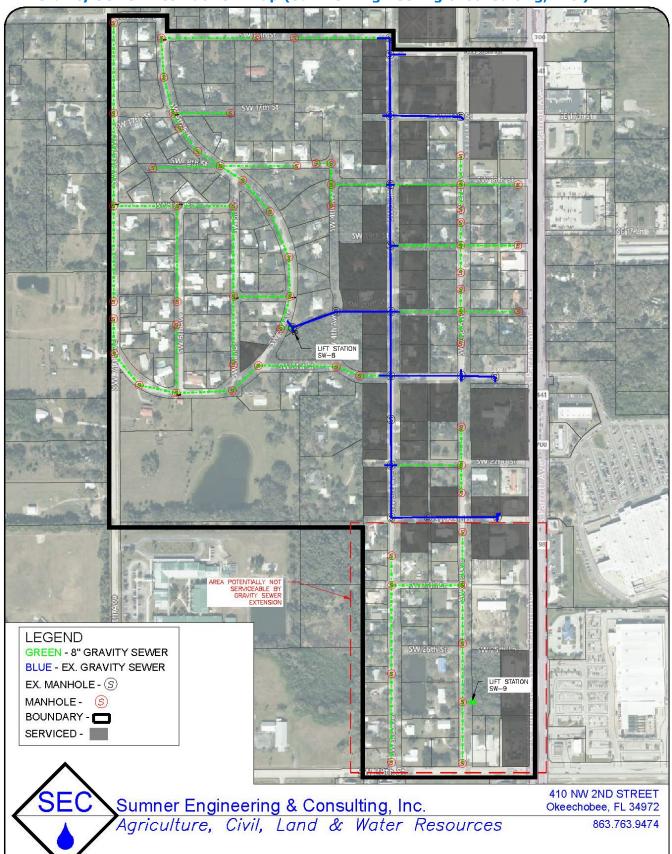
Additional flow information and evaluation related to lift station impacts or wastewater treatment facility impacts should also be considered before design.

Attachment A Alternative Collection System Layouts

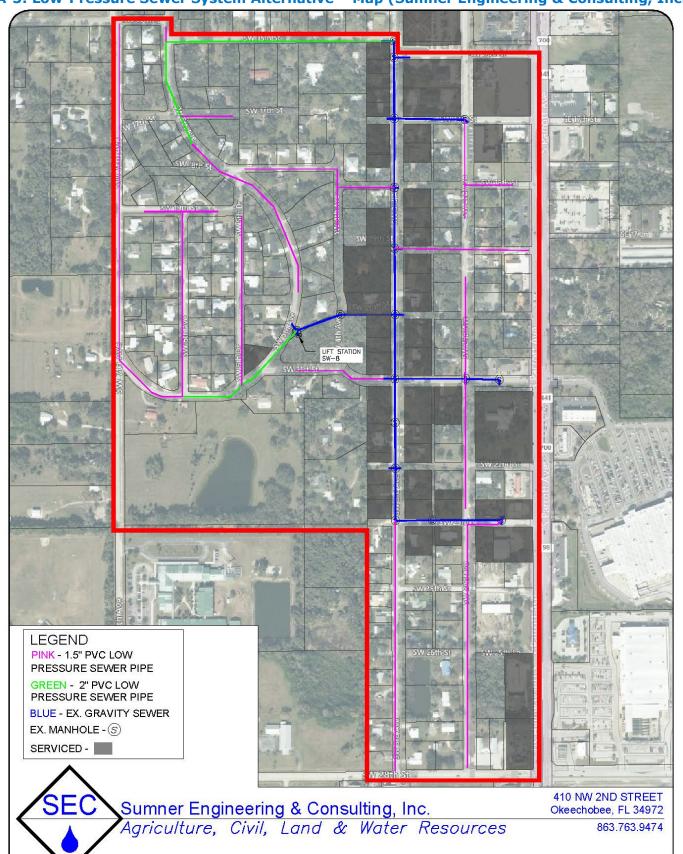
A-1: Vacuum Sewer Alternative – Map (Eckler Engineering, Inc.)



A-2: Gravity Sewer Alternative - Map (Sumner Engineering & Consulting, Inc.)



A-3: Low-Pressure Sewer System Alternative – Map (Sumner Engineering & Consulting, Inc.)



Attachment B

Alternative Collection System Preliminary Opinions of Probable Construction Cost (POPCCs)

B-1: Vacuum Sewer Alternative – Opinion of Probable Cost (Eckler Engineering, Inc.)

		Sub			Extended
Item	Description	Total	Unit	Unit Price	Price
	Vacuum Sewer System				
	Furnish and Install SDR-21 PVC Vacuum Main				
1	a. 4-inch	20,115	LF	\$50.00	\$1,005,750.00
	b. 6-inch	850	LF	\$60.00	\$51,000.00
	Furnish and Install resilient wedge gate (V-3)			70000	¥ 0 1,0 0 0 1 0 0
2	division valves		1	T	
2	a. 4-inch	25	EA	\$1,200.00	\$30,000.00
	b. 6-inch	5	EA	\$1,350.00	\$6,750.00
	Install vacuum collecting pit assemblies, complete.				
3	Type "B" (6-foot depth)			T	Γ
	a. Adjacent to vacuum main	43	EA	\$5,500.00	\$236,500.00
	b. Across street from vacuum main	44	EA	\$6,200.00	\$272,800.00
4	Furnish and Install Vacuum Sanitary Pump Station with skid equipment, complete.	1	EA	\$1,250,000.00	\$1,250,000.00
	Vacuum Sewer System Totals				\$2,700,700.00
	Force Main System	1			
5	Ductile Iron Pipe		1	T	1
	a. 4-inch	170	LF	\$70.00	\$11,900.00
6	Furnish and Install Plug Valve		1	T .	T .
	a. 4-inch	3	EA	\$3,000.00	\$9,000.00
7	F&I Air Release Valve Assembly	1	EA	\$5,000.00	\$5,000.00
8	F&I ductile iron compact fittings with reaction blocking or thrust restraint for force mains.	2	TN	\$12,000.00	\$24,000.00
Force Main System Totals					\$49,900.00
	Restoration	1	1	T	1
9	Trench Restoration	1	LS	30%	\$825,180.00
Restoration Total \$825,180.00					
	SUBTOTAL				\$3,575,780.00
	General	1	1	T	
11	Mobilization / Gen. Requirements	1	LS	8.00%	\$286,062.00
12	Indemnification	1	LS	\$100.00	\$100.00
13	As-Built Survey & Record Drawings	21,435	LF · -	\$4.00	\$83,860.00
14	Maintenance of Traffic	21,435	LF	\$7.50	\$157,238.00
15	Existing Utility Location/Identification	1	LS	1.00%	\$35,758.00
16	NPDES General Construction Permit Compliance	1	LS	1.00%	\$35,758.00
	General Total				\$598,776.00
	SUBTOTAL + GENERAL TOTAL				\$4,174,556.00
17	Miscellaneous Work Allowance / Contingency	1	LS	25%	\$1,043,639.00
18	Engineering Design and Engineering Services during Construction	1	LS	20%	\$834,911.00
					6,053,000.00

B-2: Gravity Sewer Alternative – Opinion of Probable Cost (Sumner Engineering & Consulting, Inc.)



>				
OPINION OF PRO	BABLE CONSTRU	JCTION COST	Γ	
OWNER:		ESTIMATED BY:		
Sumner Engineering & Consulting, Inc.		J. Razo		
CLIENT:		CHECKED BY:		
Okeechobee Utility Authority		J. Sumner		
PROJECT TITLE:		PROJECT SEGM	IENT	
SW 5th AVE - Gravity Sewer Alternative				
PROJECT NUMBER:		DATE:		
20-10		2/27/2022		
DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
Gravity Collection System	15	2.440	ć 47.00	¢ 161.063.04
8" PVC Gravity Sewer 0'-6'	LF	3,446		\$ 161,962.94
8" PVC Gravity Sewer 6'-8'	LF	5,736		\$ 384,289.22
8" PVC Gravity Sewer 8'-10' 8" PVC Gravity Sewer 10'-12'	LF LF	4,386 2,892		\$ 364,030.36
		,	•	\$ 387,532.02
8" PVC Gravity Sewer 12'-16'	LF	2,063		\$ 462,112.00
Manhole 0'-6' Manhole 6'-8'	Ea.	11	\$ 5,318.00 \$ 6,792.00	\$ 58,498.00
	Ea.	23		\$ 156,216.00
Manhole 8'-10'	Ea.	12	\$ 9,158.00	\$ 109,896.00 \$ 99,032.00
Manhole 10'-12' Manhole 12'-16'	Ea.	8		
4" PVC Sewer Laterals	Ea.	8 153		\$ 108,360.00 \$ 5,355.00
Gravity Collection System Totals	Ea.	133	\$ 55.00	\$ 2,297,283.54
Gravity Conection System rotals				\$ 2,237,203.34
Right-of-Way Restoration	LS	1	50%	\$ 1,148,641.77
General				
Mobilization / General Requirements	LS	1	8%	\$ 275,674.03
Locate Existing Utilities	LS	1	1%	
NPDES Compliance	LS	1	1%	
Indemnification	LS	1	\$100	\$ 100.00
As-built & Record Drawings	LF	18,523		
Maintenance of Traffic	LF	18,523		
General Totals				\$ 585,486.57
SUBTOTAL				\$ 4,031,411.88
Engineering Design and CEI	%	20%		\$ 806,282.38
CONTINGENCY	%	25%		\$ 1,007,852.97
		TOTAL		\$ 5,845,547.23

B-3: Low-Pressure Sewer System Alternative – Opinion of Probable Cost (Sumner Engineering & Consulting, Inc.)



CONSTR	UCTION COS	Т			
OWNER:		ESTIMATED BY:			
	J. Razo				
	CHECKED BY:				
	J. Sumner				
	PROJECT SEGM	IENT			
	DATE:				
	2/7/2022				
UNIT	QUANTITY	UNIT COST	TOTAL COST		
LF	12,800	\$ 32.00	\$ 409,600.00		
LF	2,504	\$ 36.00	\$ 90,135.97		
EA	87	\$ 7,200.00	\$ 626,400.00		
EA	87	\$ 5,000.00	\$ 435,000.00		
EA	14	\$ 1,000.00	\$ 14,000.00		
EA	7	\$ 1,200.00	\$ 8,400.00		
EA	87	\$ 600.00	\$ 52,200.00		
			\$ 1,635,735.97		
ıs	1	15%	\$ 245,360.40		
		1370	\$ -		
			Ψ		
LS	1	8%	\$ 150,487.71		
LS	1	1%	\$ 18,810.96		
LS	1	1%	\$ 18,810.96		
LS	1	\$100	\$ 100.00		
LF	15,304	\$ 4.00	\$ 61,215.11		
LF	15,304	\$ 3.50	\$ 53,563.22		
			\$ 302,987.96		
			\$ 2,184,084.33		
	25%		\$ 546,021.08		
			· · · · · · · · · · · · · · · · · · ·		
%	20%		\$ 436,816.87		
	LF LF EA EA EA EA LS LS LS LS LS	STIMATED BY: J. Razo CHECKED BY: J. Sumner PROJECT SEGM DATE: 2/7/2022 UNIT QUANTITY LF 12,800 LF 2,504 EA 87 EA 87 EA 14 EA 7 EA 87 EA 87 EA 14 EA 5 EA 15 LS 1 LS 1 LS 1 LS 1 LF 15,304 LF 15,304 LF 15,304 LF 15,304 LF 15,304 LF 25%	J. Razo CHECKED BY: J. Sumner PROJECT SEGMENT DATE: 2/7/2022 UNIT QUANTITY UNIT COST LF		

Attachment C SW 5th Avenue Vacuum Design Memorandum (Eckler Engineering)

DESIGN MEMORANDUM

ECKLER ENGINEERING, INC.

4700 Riverside Drive, Suite 110 Coral Springs, Florida 33067

CA. LIC. NO. 7803

Project: SW 5th Avenue Vacuum Preliminary Evaluation

Date: January 5, 2021

Sumner Engineering

EEI Proj. No.: 282-003.00

Prepared By: Ahmet Tahaoglu

Reviewed By: Bryant Facey, P.E. Revision No.: 0

Reference: SW 5th Vacuum Preliminary Evaluation Report

A. INTRODUCTION

The purpose of this memorandum is to provide a preliminary evaluation and recommendation for the vacuum collection system for the SW 5th Avenue area of Okeechobee Utility Authority's (OUA) service area. The project consists of laying out a vacuum sewer collection system and performing calculations for sizing of the vacuum mains and pump station within Okeechobee County. This evaluation reviews the available properties and incorporates it into the vacuum system calculations.

The project is located in the Southwest portion of Okeechobee, Florida, west of US Highway 98. Exhibit 1 shows the boundary of the service area and preliminary pipeline layout which currently contains approximately 218 residential and commercial connections. Many of the residents currently use onsite wastewater treatment systems as their method for wastewater treatment and disposal. Portions of the service area are currently served by a gravity sewer system. The proposed project will allow residents to abandon their septic tanks and connect to a centralized vacuum collection system.

The vacuum station site was provided by Sumner Engineering and the collection system was designed to provide vacuum sewer service to all potential connections within the SW 5th Avenue service area.

B. DESIGN CRITERIA

Vacuum Main

Vacuum collection systems are generally designed with a centrally located vacuum pump station

(VPS). This divides the service area into zones with multiple vacuum mains entering the station, resulting in smaller pipe sizes and less vacuum loss. In the event of system issues, the operator can isolate the problem while providing continued service to unaffected zones. When designing this collection system, the longest run of pipe that the VPS collects is used as the starting point for flow calculations as it needs to overcome the most hydraulic losses.

The design criteria below provides the guidelines used to evaluate the wastewater volume and flow from each potential connection, size of the collection system mains, and the transmission force main. Additionally, the design criteria is to comply with the applicable rules and regulations as set forth by the regulatory agencies and industry standards. Table 1 shows the design criteria.

Table 1 General Design Criteria for Vacuum Mains

Design Criteria	Requirements		
Cleanouts	Not required at any point on a vacuum main or branch. Typically used only in gravity laterals per local codes.		
Main Line Length	 Pipe Type: PVC 4 and 6-inch diameter, limited by static and friction losses. 4-inch limited to initial 2,000 ft (max) 		
Distance between Lifts	Minimum 20 ft if uphill and minimum 50 ft before a series of lifts - 300 ft per lift		
Slope	Minimum 0.20%		
Distance between lift and any service lateral	Minimum 6 ft		
Losses (Vacuum) ¹	 Maximum 13 ft in static losses Maximum 5 ft in friction losses⁽²⁾ 		
Isolation Valves	 Maximum 1,500 ft apart and at the beginning of each branch Additional locations per Owner 		
Line Sizing	Pipe Diameter 4-inch 6-inch 8-inch 10-inch	Absolute Max Flow (gpm) 55 152 305 544	Recommended Max Flow (gpm) 38 105 210 374

Notes:

⁽¹⁾ Friction loss is defined as the amount of energy lost by a fluid while moving through conduits. Static loss is defined as the energy required to transport flow through a vacuum lift or vertical profile change. Static and friction losses are of particular concern in Vacuum Sewer Systems because of the limited amount of available vacuum (energy) to move the wastewater through the collection system to the vacuum pump station.

⁽²⁾ Maximum friction loss in vacuum sewer system mains should be 5 feet or less. However, a friction loss of 7 feet has been allowed in other systems on a case-by-case basis.

Friction losses are calculated for pipe that are laid on a downward slope between 0.20% and 2.0% and are cumulative for each flow path from the furthest port on the line to the vacuum station. The friction losses are based on the following formula:

$$F = 2.75 \times 0.2083 \times (100/C)^{1.85} \times Q^{1.85} \times 1/d^{4.8655}$$

Where:

F = friction loss (ft/100 ft)

C = 150 for PVCQ = flow (gpm)

d = inside pipe diameter (inches)

Static losses are calculated by subtracting the pipe diameter from the lift height as shown below:

Static Loss = Lift height – Pipe diameter

Valve Pits

Valve pits house the vacuum valve and provide the interface between the vacuum system and the individual gravity service connection. Wastewater is held in the holding sump of the valve pit until the vacuum valve is opened and the vacuum system evacuates the contents of the sump. Air-terminals connected directly to the valve pits supply the system with atmospheric air to provide propulsion to the liquid. The general design criteria for valve pits is summarized in Table 2.

Table 2 General Design Criteria for Valve Pits

Design Criteria	Requirements		
Valve Pit Depth	Overall Depth: 5-10 ftPit type specific to site and lateral characteristics		
Peak Flow	Maximum 3 GPM.		
Gravity Lines	Gravity Lines Maximum of four incoming gravity laterals. Three if one is used as an air terminal.		
Notes: (1) Valve pit depth of typically available configurations. Depths are selected based on gravity lateral connection depths required			

Vacuum Pump Station

The VPS is designed similarly to that of a conventional lift station with the addition of a vacuum collection tank and vacuum pumps. The design criteria of the vacuum pump station is summarized in Table 3.

Table 3 General Design Criteria for Vacuum Pump Stations

Design Criteria	Requirements
Collection Tank/Sizing	 Carbon steel, 304 or 316 SST, or fiberglass tank construction. Sized based on three times the operational volume of the overall vacuum collection system plus 400 gallon reserve. Minimum tank volume: 1,000 gallons.
Sewage Pumps/Sizing	 Duplicate pumps, each capable of delivering design capacity (triplex for larger flow systems). Horizontal or vertical, non-clog centrifugal pumps, or dry pit submersible pumps. Sized based on peak flow or as necessary to maintain 2 ft/s velocity within the force main, whichever is greater.
Vacuum Pump Sizing	 Sized based on (1) peak flow & A/L ratio and (2) system pump down time. Rotary Vane (Busch R5) or Dry Claw (Busch Mink) vacuum pumps are recommended.
Generator	Recommended to provide a standby generator or portable generator sized appropriately.
Structure	Reinforced CMU walls, concrete floor, engineered wood truss metal joist or precast hollow cire concrete plank roof
Architectural	Exterior design to blend with surrounding neighborhood
Occupancy	Factory-industrial occupancy: Low density of employee population with much of the area occupied by machinery or equipment.
Type of Construction	Type III A, unsprinkled
Occupancy Load	10 or less
Wind Loads	 ASCE 7-16 per FBC 1609 (2020) Basic Wind Speed = 180 mph (3 second gust) Risk Category = II Exposure Category = B Internal Pressure Coefficient = ± 0.18 Directionality Factor = 0.85
Means of Egress	Per Florida Building Code
Exits	Per Florida Building Code

Odor Control

Hydrogen sulfide and other sulfur compounds from the vacuum pump(s) exhaust must be removed or treated for odor control. Typical odor control treatment consists of biomass compost beds, referenced in Table 4. Other treatment methods include chemical neutralization, activated carbon absorption systems, or absorption by manufactured bio-mass filters.

It is important to note that the temperature of the exhaust air over 120 degrees (F) can kill the thermophylic bacteria responsible for odor control. Exhaust air temperatures from vacuum pumps typically exceed this threshold and temperature reduction will need to be considered when evaluating biomass or biological odor control systems.

Table 4 General Design Criteria for Biomass Compost Filter Bed

Design Criteria	Requirements
Filter Bed Surface Area	Based on the number and size of vacuum pumps
Filter Bed Depth	Suggested 3.0 foot minimum.
Filter Bed Loading	Based on the minimum required surface area the number of vacuum pumps and size of vacuum pumps.
Type of Bed Material	Bio-filter with Cypress Mulch.
Temperature Control	Distribution of air over a large area via pipe lateral network.

Air-to-Liquid Ratio

Vacuum systems are designed to operate on two-phase (air/liquid) flows with the air being admitted for a period twice that of the liquid, with open time of the valve being adjustable. The ability of the vacuum main to quickly recover to the same level of vacuum that existed prior to the cycle is commonly referred to as "vacuum response". Vacuum response is a function of line length, pipe diameter, number of connections, and the amount of lift in the system.

Applicable Rules and Regulat ions

General requirements by different regulatory agencies need to be met for designing, constructing, and placing into service a new wastewater collection and transmission system. Listed below are some of the applicable rules and regulations that pertain to this project:

- 1. Florida Administrative Code (F.A.C.) Chapter 62-604, Collection Systems and Transmission Facilities and Vacuum System Permit Checklist.
- 2. Florida Building Code 7th Edition (2020).
- 3. National Fire Protection Association (2021 Edition).

- 4. Florida Department of Environmental Protection (FDEP).
- 5. Recommended Standards for Wastewater Facilities (2014 Edition).
- 6. National Electrical Code (NFPA 70).
- 7. FEMA NFIP Standards.

C. PRELIMINARY EVALUATION AND CALCULATIONS

Hydraulic Calculations

To size the vacuum collection system, hydraulic calculations for the various residential and commercial connections within the service area was completed. An entire spreadsheet inclusive of the vacuum main, pump stations, sewage and biofilter calculations are provided at the end of this report in Exhibit 2.

A per capita wastwater flow of 152 GPD was assigned from historical demand data as the average daily flow (ADF). This is the flow from a residential or commercial parcel to the preliminary vacuum collection system layout resulted in minimum collection system mains. Each of these parcel connections are known as Equivalent Residential Connections (ERCs). Knowing the ADF and number of connections, the peak factor was calculating using the equation below:

Peak Factor =
$$\frac{18 + \sqrt{(c \times p)/1000}}{4 + \sqrt{(c \times p)/1000}}$$

Where: c = Total ERCs = 153

p = Persons per household = 2.40

The persons per household estimation was found at the Town of Lake Clarke Shores data website. The peak flow rate and ADF rate was also calculated, as shown below:

Peak Flow Rate = (Total ERCs) x (ADF) x (Peak Factor) / 1440min

ADF Rate = (Peak Flow Rate) / (Peak Factor)

The hydraulic calculations are summarized in Table 5.

Table 5 Design Flows and Peaking Factor

Parameter	Requirement
Parcel Connections (ERCs)	153
Average Daily Flow per Connection	152 GPD
Peak Factor	4.04
Average Daily Flow Volume	23,040 GPD
Minimum Daily Flow Rate (Q _{min})	8 GPM
Average Daily Flow Rate (Q _{avg})	16 GPM
Peak Flow Rate (Qp)	65 GPM

The proposed vacuum system was modeled and analyzed for friction and static losses in the system. The model output data is summarized in Table 6.

Table 6 Vacuum System Hydraulic Model Summary

Description	Value	Criteria	Meets Criteria
Highest Friction Loss	2.60 ft	≤ 5 ft	YES
Highest Static Loss	11.29 ft	≤ 13 ft	YES
Highest Total Vacuum Loss	13.90 ft	≤ 18 ft	YES

All design criteria is met with the total vacuum loss remaining under 18 feet. The length of each pipe size for the vacuum and force main is summarized in Table 7. Since the total vacuum losses was well within the criteria required, vacuum pipe sizes only needed to consist of 4-inch and 6-inch diameter pipe going into the VPS. The force main was designed based on maintaining a minimum scouring velocity of 2.0 feet per second while not exceeding 6.0 feet per second during peak flow. A 4-inch force main was determined to be adequate to meet these criteria. There were no losses associated with connection pressures since the force main would be tying into a manhole.

Table 7 Vacuum System Piping Summary

Size (inches)	Length (feet)
Vacuu	m Main
4	20,115
6	850

Force	e Main
4	150

Collection Tank

Collection tanks are sized to insure adequate operating volume to prevent short pump cycles as well as emergency storage volume. They are sized based on peak flow to the station where the sewage pumps do not operate more than four times per hour at low flow periods, nor start more than seven times per hour at average flow. The operating volume of the tank is calculated using flows calculated in Table 5, as shown below:

$$V_0 = 15 \times Q_{min}(Q_p - Q_{min}) \div Q_p$$

$$V_0 = 15 \times 8gpm(65gpm - 8gpm) \div 65gpm = 105 gallons$$

Where: V_0 = operating volume (gallons)

 Q_{min} = minimum flow (gpm) = $Q_a/2$

Q_p = peak flow (gpm)

A safety factor of 3.0 is applied for emergency storage as well as an additional 400 gallons for reserve volume for moisture separation and vacuum pump reserve capacity, as shown in the calculations below:

$$V_{ct} = 3 \times V_0 + 400$$

$$V_{ct} = 3 \times 105 + 400 = 716 \text{ gallons}$$

Where: V_{ct} = collection tank size

 V_0 = operating volume (gallons)

Given these parameters, a storage volume of 716 gal is necessary and since collection tanks are manufactured in increments of 500 gallons, the minimum recommended tank size is 1,000 gal.

Sewage Pumps

Two, vertical, non-clog centrifugal pumps each capable of pumping at the design capacity are recommended for the system. The sewage pumps convey wastewater from the vacuum collection tank to an existing manhole 150 ft south of the VPS on the intersection of SW 3^{rd} Avenue and SW 23^{rd} Street. The discharge pump capacity (Q_{dp}) is sized based on the peak flow of the system:

$$Q_{dp} = Q_{avq} x Peak Factor$$

$$Q_{dp} = 16 \text{ gpm } x \text{ 4.04} \approx 65 \text{ gpm}$$

The total dynamic head (TDH) is calculated by adding the static loss (H_s), friction loss (H_f), and vacuum loss (H_v):

$$TDH = H_s + H_f + H_v = 29.21 \text{ ft}$$

Where: H_s = static head loss = 5 ft

 H_f = friction head loss = 1.21 ft

 H_v = vacuum head loss = 23 ft (industry standard)

The static head loss between the vacuum pump invert and the discharge point at the manhole is assumed to be 5 ft. The friction head loss is calculated using the Hazen-Williams formula where the length of pipe includes equivalent lengths for fittings:

$$H_{f} = 10.44 \text{ x L x} \underbrace{\frac{Q^{1.85}}{C^{1.85} \text{ x } D^{4.8655}}} = 10.44 \text{ x } (354 \text{ft}) \text{ x } \underbrace{\frac{(65 \text{gpm})^{1.85}}{(130)^{1.85} \text{ x } (4 \text{in})^{4.8655}}} = 1.21 \text{ ft}$$

Where: 10.44 = conversion factor

L = length of pipe including equivalent length for fittings

Q = peak flow (gpm)

C = Hazen-Williams pipe coefficient = 130

D = diameter of pipe (inches)

By adding the static loss, friction loss, and vacuum loss, the TDH of the system is approximately 30 feet. A system flow curve was generated yielding an estimated design point at 91 GPM and 30 feet of head for the sewage pumps. These pumps are estimated to require a minimum of 2 horsepower each.

Vacuum Pumps

It is recommended that the vacuum pumps be dry claw type because of their high efficiency, lower maintenance, dependability, and quietness. The vacuum pumps are sized based on two factors:

1) peak flow and air/liquid ratio and 2) system pump-down time (t). System pump-down time is the time it takes for the selected vacuum pumps to evacuate the overall system collection piping. System pump-down time is the controlling factor when sizing vacuum pumps. Both criteria should be checked with the larger value being used. A minimum of one (1) spare pump of equal size as the operating pumps is recommended.

Below is an industry standard empirical formula to size vacuum pumps based on the peak flow and line length:

$$Q_{vp} = A \times Q_{max}/7.5 \text{ gal/ft}^3$$

$$Q_{vp} = 6 \times 65 \text{ gpm}/7.5 \text{ gal/ft}^3 = 52 \text{ cfm}$$

Where: $Q_{vp} = vacuum pump capacity$

A = longest line length factor (6 for lengths between 0-5000 ft)

 Q_{max} = peak flow

A line length factor of 6 was used, found in the WEF Manual of Practice No. FD-12 Second Edition and is based on the longest run in the system. Three (3) dry claw vacuum pumps are recommended, each with a capacity of 112 cfm.

The second step in sizing the vacuum pumps is to verify that the pump-down time, t, is no greater than three minutes and no less than one minute. The industry standard empirical formula for calculating pump-down time is:

$$t = (0.045 \text{ cfm-min}) \times (2/3V_p + (V_{ct} - V_o)) \text{ gal}$$
gal
$$Q_{vp} \text{ cfm}$$

Where t = system pump-down time (min)

 V_p = volume of collection system piping (gal) = 15,600 gal

 V_{ct} = volume of collection tank (gal) = 1,000 gal

 V_o = operating volume of collection tank (gal) = 105 gal

 Q_{vp} = vacuum pump capacity (cfm)

Using the above formula the pump-down time with three 112 cfm pumps is 2.34 min.

$$t = (0.045 \text{ cfm-min}) \times (2/3(15,600) + (1,000 - 105)) \text{ gal} = 2.27 \text{ min} < 3.0 \text{ min}$$

gal $3 \times 112 \text{ cfm}$

Therefore, a total of four (4) 112 cfm pumps (three operating and one spare) are recommended for the vacuum system.

D. SUMMARY AND RECOMMENDATION

The preliminary evaluation of the SW 5th Avenue vacuum sewer system layout has been presented above and is shown in Exhibit 1. This sewer layout provides an adequate collection system to transfer wastewater from the 218 connections to the new proposed vacuum pump station. Table 8 summarizes the quantity, size and type of main components in the vacuum pump station.

Table 8 Vacuum Pump Station Component Summary

Component	Quantity	Size/Type
Collection Tank	1	1,000 gallons
Sewage Pumps	2	Minimum of 65 gpm (2 hp)
Vacuum Pumps	4	112 cfm
Odor Control	1	Bio-mass Compost Bed

It should be noted that limitations for this preliminary collection system layout is subject to an environmental assessment and presence of existing underground utilities that may hinder the ability to construct and can only be verified during design. If any portion of the recommended pipe layout is deemed impractical during design, alternative pipe routing may be required.

E. COST ESTIMATE

The total estimated construction cost is in Table 9. Note that this cost does include pumps and pump station appurtenances.

Table 9 Opinion of Probable Construction Cost

	_	Sub			Extended
Item	Description	Total	Unit	Unit Price	Price
	Vacuum Sewer System	T			
	Furnish and Install SDR-21 PVC Vacuum Main				
1	a. 4-inch	20,115	LF	\$50.00	\$1,005,750.00
	b. 6-inch	850	LF	\$60.00	\$51,000.00
	Furnish and Install resilient wedge gate (V-3)		I.	·	. ,
2	division valves		ı	T	
_	a. 4-inch	25	EA	\$1,200.00	\$30,000.00
	b. 6-inch	5	EA	\$1,350.00	\$6,750.00
	Install vacuum collecting pit assemblies, complete.				
3	Type "B" (6-foot depth)	40		#5.500.00	# 000 500 00
	a. Adjacent to vacuum main	43	EA	\$5,500.00	\$236,500.00
	b. Across street from vacuum main	44	EA	\$6,200.00	\$272,800.00
4	Furnish and Install Vacuum Sanitary Pump Station with skid equipment, complete.	1	EA	\$1,250,000.00	\$1,250,000.00
	Vacuum Sewer System Totals				\$2,700,700.00
	Force Main System	•			
5	Ductile Iron Pipe		1	T	
	a. 4-inch	170	LF	\$70.00	\$11,900.00
6	Furnish and Install Plug Valve		l	T .	
	a. 4-inch	3	EA	\$3,000.00	\$9,000.00
7	F&I Air Release Valve Assembly	1	EA	\$5,000.00	\$5,000.00
8	F&I ductile iron compact fittings with reaction blocking or thrust restraint for force mains.	2	TN	\$12,000.00	\$24,000.00
	Force Main System Totals				\$49,900.00
	Restoration	T	1	Γ	
9	Trench Restoration	1	LS	30%	\$825,180.00
	Restoration Total				\$825,180.00
	SUBTOTAL				\$3,575,780.00
	General	T	Г	Γ	
11	Mobilization / Gen. Requirements	1	LS	8.00%	\$286,062.00
12	Indemnification	1	LS	\$100.00	\$100.00
13	As-Built Survey & Record Drawings	21,435	LF ·-	\$4.00	\$83,860.00
14	Maintenance of Traffic	21,435	LF	\$7.50	\$157,238.00
15	Existing Utility Location/Identification	1	LS	1.00%	\$35,758.00
16	NPDES General Construction Permit Compliance	1	LS	1.00%	\$35,758.00 \$598,776.00
	General Total				φοθο,//6.00
4-	SUBTOTAL + GENERAL TOTAL				\$4,174,556.00
17	Miscellaneous Work Allowance / Contingency	11	LS	25%	\$1,043,639.00
18	Engineering Design and Engineering Services during Construction	1	LS	20%	\$834,911.00
		, i	LO		
	Total Estimated Construction Cost			Φ	6,053,000.00

F. ATTACHMENTS

- Exhibit 1: SW 5th Ave, Okeechobee Service Area Map
- Exhibit 2: Vacuum Collection System Calculations





EXHIBIT 2 - VACUUM SEWER CALCULATIONS

SW 5th AVENUE WASTEWATER COLLECTION/ PUMPING SYSTEM

Vacuum Pump Station Design

Line Line Line Line Anisal Line Anisal Line Lin			п	igi iest 3	Total:	13.90	good			C factor =			150	GPIVI	
No. Description Company Comp			Line		Actual		Q	Q			FH		Height	Static	
Manager Risk Morey Sty Off Ave - 50* for Sty Off Yn - 9* 7:10 4 4:10 5 2:11 2:15 5:00 0:00 0:00 7:16 1:00 1			-			ERC's									Loss/Accum
Linguiges May Alberg 1907 Alberg 190		Description	(feet)	(in)	(in)		(GPM)	(GPM)	per 100'	Line	Accum	Lifts	Lifts	(feet)	(feet)
Charles Proceedings Proceedings Proceedings Process Pr		Along SW 5th Ave - SW 15th St to SW 17th St	710	4	4 10	5	2 13	2 13	0.001	0.008171869	0.008	2	1	1.32	1.32
Set Part Commercial between Set			710	7	4.10				0.001	0.000171009		2		1.52	
Proceedings	`														
Allow G W M An Ave - SW 198 Dist Designer A	501)		430	4	4.10				0.012	0.052928688		1	1	0.66	
SW 17th St SE Comment on Section 1.5 S			740	4	4.10				0.036	0.26407526		2	1	1.32	
Page Contribution (1987) 1.5 1		Flow Contribution Easement A						20.47			0.325				3.29
Abrug SV 21 St - SV 59 M 5h Ave D SV 04 Ave S			460	4	4.10				0.078	0.361068097		1	1	0.66	
Price Contraction Style 3nd Anni Informative Style			650	4	4.10				0.203	1.322627416		2	1	1.32	
SW 17th St SW															
Mary SW 3rd Ane - SW 22nd St 10 SW 22nd St 10 SW 22nd St 10 SW 22nd St 10 SW 22nd St 10 SW 22nd St 10 SW 22nd St 10 SW 22nd St 10 SW 22nd St 10 SW 22nd St 10 SW 22nd St 10 SW 22nd St 10 SW 22nd St 10 SW 22nd St 10 SW 22nd St 10 SW 22nd St 10 SW 22nd SW			430	6	5.96				0.064	0.273420411		1	1.5	1.00	
Road into VPS storp SW 2201 SE 100 6 5,06 0 0 0 0 0 0 0 0 0			290	6	5.96				0.070	0.202274477		1	1.5	1.00	
Personal Contention Ending in US New 786 20			400		5.00				0.000	0.000004047		•	4.5	0.00	
Connection NPS 38			100	ь	5.96				0.089	0.088624847		0	1.5	0.00	
SW 17th St End Size			30	6	5.96				0.104	0.031334231		4	1.5	4.02	
SW 17th St End Size		Totals	3840			153				value <5:	good	14		value <13:	good
SW 17th St															
SW 17th St SW 17th St SW 1			590	4	4.10	5	2.13	2.13	0.001	0.006790708		1	1	0.66	
SW 17th St			590			5									
SW 18th St Connection Total Hydraulics 700 and 18	SW/ 17th St	· otalo	000							value <5:				value <13:	
Connection Total Hydraulics Totals SW 18th St Totals SW 18th St Connection Total Hydraulics SW 18th St SW 18	ow marci	CW 17th Ct West	220	4	4.10	4	1 71	1 71	0.001	0.002427415	0.002	4	4	0.66	0.66
Totals 320			320	4	4.10	4	1.71	1.71	0.001	0.002437415		!	'	0.00	
SW 18th St Comedion Total Hydraulics 540 4 4.10 7 2.98 2.98 0.002 0.01158227 0.012 1 1 0.66			320			4					2.599				10.63
SW 18th St										value <5:	good			value <13:	good
Totals		SW 18th St	540	4	4.10	7	2.98	2.98	0.002	0.01158227	0.012	1	1	0.66	0.66
Easement A 1585 4 4.10 16 6.82 6.82 0.010 0.15689854 0.157 4 1 2.63 2.63 7.999	SW 18th St					_									
Easement A 1585 4 4.10 16 6.82 6.82 0.010 0.156898854 0.157 4 1 2.63 2.83 7.999		Totals	540			7				value <5:				value ~13·	
Connection Total Hydraulics Totals 1585 16										value 40.	good			10.00	good
Totals			1585	4	4.10	16	6.82	6.82	0.010	0.156898854		4	1	2.63	
Along SW 21 St - End of SW 7th Ave to SW 6th Ave Flow Contribution SW 6th Ave Flow Contribution SW 6th Ave Flow Contribution SW 6th Ave Along SW 21 St - SW 6th Ave to SW 5th Dr Ave Along SW 21 St - SW 6th Ave to SW 5th Dr Ave Along SW 21 St - SW 6th Ave to SW 5th Dr Ave Along SW 21 St - SW 6th Ave to SW 5th Dr Ave Along SW 21 St - SW 6th Ave to SW 5th Dr Ave Along SW 21 St - SW 6th Ave to SW 5th Dr Ave Along SW 21 St - SW 6th Ave to SW 5th Dr Ave Along SW 21 St - SW 6th Ave to SW 5th Dr Ave Along SW 21 St - SW 6th Ave to SW 5th Dr Ave Along SW 21 St - SW 6th Ave Along SW 21 St - SW 6			1585			16									
Flow Contribution SW 6th Ave SW 6th Ave										value <5:				value <13:	
Flow Contribution SW 6th Ave SW 6th Ave		Along SW 21 St - End of SW 7th Ave to SW 6th Ave	960	4	4.10	Q	3 /11	3 /11	0.003	0.026360658	0.026	3	1	1 08	1 08
Flow Contribution SW 5th Dr Totals			300	7	4.10				0.003	0.020300030		3		1.30	
SW 5th Ave			310	4	4.10				0.018	0.055311087		1	1	0.66	
SW 7th Ave Curve	SW 5th Ave					/	2.98	12.37							
SW 6th Ave Connection Total Hydraulics Totals 860 4 4.10 14 5.97 5.97 0.008 0.066497276 0.066 2 1 1.32 1.32 1.32 1.32 1.32 1.32 1.32	& SW 7th		1270			29									
Connection Total Hydraulics Totals 860	Ave Curve									value <5:	good			value <13:	good
Connection Total Hydraulics Totals 860		SW 6th Ave	860	4	4.10	14	5.97	5.97	0.008	0.066497276	0.066	2	1	1.32	1.32
SW 5th Dr		Connection Total Hydraulics									1.974				7.999
SW 5th Dr Sould		Totals	860			14				volue -Fr				volue 420	
Connection Total Hydraulics Totals 500 7										value <5.	good			value < 13.	good
Totals 500 7			500	4	4.10	7	2.98	2.98	0.002	0.010724324		1	1	0.66	
End of SW 15th St to SW 17th St Flow Contribution SW 17th St Flow Contribution Easement B Along SW 3rd Ave - Easement C SW 21st St			500			7									
Flow Contribution SW 17th St 2		Totals	300			,				value <5:				value <13:	
Flow Contribution SW 17th St 2		End of SW 15th St to SW 17th St	1540	4	4 10	F.	2 12	2 12	0.001	0.017724900		2	1	1 00	
Along SW 3rd Ave - SW 17th St to Easement B Flow Contribution Easement C Along SW 3rd Ave Easement B Along SW 3rd Ave Easement C Along SW 3rd Ave Easement E Along SW 3rd Ave Easement C Along SW 3rd Ave Easement E Along SW 3rd			1540	4	4.10				0.001	0.017724899		3	7	1.98	
Along SW 3rd Ave Easement B to Easement C		Along SW 3rd Ave - SW 17th St to Easement B	690	4	4.10	5	2.13	5.12	0.006	0.040114643	0.058	2	1	1.32	3.29
Flow Contribution Easement C 6 2.56 14.07 0.038 0.120884134 0.179 1 1 0.66 3.95			320	1	4 10				0.026	0 083305282		1	1	0.66	
Along SW 3rd Ave - Easement C to SW 21st St Flow Contribution SW 21st St Connection Total Hydraulics SW 3rd Ave North of SW 21st St Easement B Connection Total Hydraulics Teasement B Connection Total Hydraulics Easement B Connection Total Hydraulics Totals 320			320	4	4.10				0.020	0.000090202		'	'	0.00	
Connection Total Hydraulics Totals 1540 35 0.596 0.774 9.97 value <5: good value <13: good SW 17th St SW 3rd Ave Connection Total Hydraulics Totals 880 4 4.10 5 2.13 2.13 0.001 0.010128514 0.010 2 1 1.32 1.32 0.757 7.999 0.767 0.767 9.316 0.767 9.316 0.767 9.316 0.767 Value <5: good value <13: good Easement B 1620 4 4.10 15 6.40 6.40 0.009 0.142315558 0.717 0.717 0.717 0.681			320	4	4.10	0	0.00		0.038	0.120884134	0.179	1	1	0.66	
SW 3rd Ave North of SW 21st St Easement B Connection Total Hydraulics						2	0.85	14.92							
SW 17th St 880 4 4.10 5 2.13 2.13 0.001 0.010128514 0.010 2 1 1.32 1.32			1540			35									
SW 3rd Ave North of SW 21st St Easement B 1620 4 4.10 15 6.40 6.40 0.009 0.14231558 0.767 0.799 Connection Total Hydraulics 5 0.757 7.999 value <5: good value <13: good value <13: good 0.767 value <5: good 0.14231558 0.142 4 1 2.63 2.63 Connection Total Hydraulics 0.717 6.681										value <5:	good			value <13:	good
SW 3rd Ave North of SW 21st St Easement B 1620 4 4.10 15 6.40 6.40 0.009 0.14231558 0.767 0.799 Connection Total Hydraulics 5 0.757 7.999 value <5: good value <13: good value <13: good 0.767 value <5: good 0.14231558 0.142 4 1 2.63 2.63 Connection Total Hydraulics 0.717 6.681		SW 17th St	880	4	4.10	5	2,13	2,13	0,001	0.010128514	0.010	2	1	1,32	1.32
North of SW 21st St Easement B 1620 4 4.10 15 6.40 6.40 0.009 0.142315558 0.767 9.316 0.76	SW 3rd Ave	Connection Total Hydraulics		•							0.757	-	•		7.999
21st St	North of SW	Totals	880			5				volue .5:				volue 40	
Connection Total Hydraulics 0.717 6.681										value <5:	good			value <13:	good
			1620	4	4.10	15	6.40	6.40	0.009	0.142315558		4	1	2.63	
10tals 102U 15 0.859 9.316			1000			45									
		ruais	1620			15					0.859				9.316

		Line	Line	Actual		Q	Q		FH	FH	Qty	Height	Static	Static
Line	Line	Length	Size	Dia.	ERC's	Mean	Accum.	HL	Loss	Loss	of	of	Loss/Line	Loss/Accum
No.	Description	(feet)	(in)	(in)		(GPM)	(GPM)	per 100'	Line	Accum	Lifts	Lifts	(feet)	(feet)
									value <5:	good			value <13:	good
	Easement C Connection Total Hydraulics	810	4	4.10	6	2.56	2.56	0.002	0.013062713	0.013 0.717	2	1	1.32	1.32 6.681
	Totals	810			6					0.730				7.999
									value <5:	good			value <13:	good
	SW 21st St Connection Total Hydraulics	550	4	4.10	2	0.85	0.85	0.000	0.001162082	0.001 0.596	1	1	0.66	0.66 6.023
	Totals	550			2				value <5:	0.597 good			value <13:	6.681 good
SW 22nd St	SW 22nd St Connection Total Hydraulics	810	4	4.10	5	2.13	2.13	0.001	0.009322836	0.009 0.322	2	1	1.32	1.32 5.019
	Totals	810			5				value <5:	0.332 good			value <13:	6.34 good
SW 3rd Ave	SW 3rd Ave South of VPS Connection Total Hydraulics	1260	4	4.10	17	7.25	7.25	0.011	0.13953064	0.140 0.120	3	1	1.98	1.98 4.015
South	Totals	1260			17				value <5:	0.259 good			value <13:	5.99 good
SW of PS to	SW 23rd St and SW 2nd Ave to US Hwy 98 Connection Total Hydraulics	2660	4	4.10	13	5.54	5.54	0.007	0.179326873	0.179 0.031	7	1	4.61	4.61 4.015
Highway	Totals	2660			13				value <5:	0.031 0.211 good			value <13:	8.63 good

VACUUM PUMP STATION CALCULATION

Project Name	SW 5th Ave WW Collection/Pumping System
Project Number	282-003.00
Date	1/5/2022
City	Okeechobee
Pump Station	Vacuum Pump Station

Enter values for yellow highlighted cells

# EDUs PER CAPITA FLOW PEAK FACTOR PEAK FLOW AVE FLOW MINIMUM FLOW	153 x 152.00 x 4.04 = 65 gpm 16 gpm 8 gpm	Q max (TOTAL PEAK FLOW) Qave Qmin
"A" FACTOR VACUUM PUMP CAPACITY	6 52 cfm 3 112 cfm	(longest line length see Table 4-6 in AIRVAC Design Manual 2018) (capacity req'd based on Qmax, check "t" also) Qvp (SELECTED PUMP)
SEWAGE PUMP CAPACITY	65 gpm	Qdp (SELECTED PUMP)
OPERATING VOLUME COLLECTION TANK VOLUME	105 gal 716 gal	Vo Vct
SELECTED TANK VOLUME RESERVE TANK	1,000 gal 0 gal	400 gal is included when Tank Vol < 6500 gal only use if Selected tank volume > 6,500 gal
SYSTEM PUMP DOWN TIME	2.27 min	min (if >3, consider more pumps or next size)

	LI	NES TO	0		
LINE	4"	6"	8"	10"	12"
SW 5th	20,115	850 0	0	0	0 0
TOTAL	20,115 lf-4"	850 lf-6"	0 lf-8"	0 l	f-10" 0 lf-12"
	4" SERVICE LINE # VALVE PITS B: CROSSOVER LENGTH LENGTH: 4" SERVICE PIPE VOLUME	61 30 ft (ave 1,836 ft 15,600 gal	erage length of service	line)	

Project Number Date Tits Project Name	SW 5th Ave WW Col	lection/Pum	ping Syster						
City Okeechobee Vacuum Pump Station	•			,					
Pump Station Vacuum Pump Station Vacuu	Date	1/5/2021							
Pump Installation Location:									
Description Control			n						
Location: Vacuum Pump Station Service: Wastewater Transmission	Enter values for yellow hig	nlighted cells							
Location: Vacuum Pump Station Service: Wastewater Transmission	Pump Installation Loc	ation:							
Service: Tag Nos: Wastewater Transmission Tag Nos: Tag Nos: Average 23,040 16 Peak 93,943 65 Minimum Factor 0.5 Minimum Factor 0.5 Minimum Factor									
Tag Nos:									
Average = 23,040 16 Peak = 93,943 65 Minimum = 11,520 8 Determination Method = Count of lots/EDU's Friction Head (FH): Stage 1: Dia (in) = 4 ITEM OTY, EQUIV. LENGTH LENGTH 4* Piping 170 1 170 4* Piping 170 1 170 4* Piping 170 1 170 4* Piping 170 0 0 4* Check Valve 3 3 33 990 4* Check Valve 2 2 25 50 0			Transmission						
Average = 23,040 16 Peak = 93,943 65 Minimum = 11,520 8 Determination Method = Count of lots/EDU's Friction Head (FH): Stage 1: Dia (in) = 4 4 Piping 170 1 170 4* Piping 170 1 170 4* Piping 1 70 1 170 4* Piping 0 0 0 0 4* Check Valve 3 3 30 90 4* Check Valve 2 2 25 55 50 0	Tag No).							
Average = 23,040 16 Peak = 93,943 65 Minimum = 11,520 8 Determination Method = Count of lots/EDU's Determination Method = Count of lots/EDU's Determination Method = Count of lots/EDU's Stage 1:									
Peak 93,943 65					Peakir	g Factor =	4.04		
Determination Method = Count of lots/EDU's					Minim	ım Factor =	0.5		
Stage 1:		Minimum = 11,520	8		5		0	(50.11)	
Stage 1: Station piping and FM (VPS to Manhole) Stage 2: Dia (in) = 4					Determination	Method =	Count of lo	S/EDU'S	
Stage 1: Station piping and FM (VPS to Manhole) Stage 2: Dia (in) =	5 · · · · · · · · · · · · · · · · · · ·								
Dia (in) = 4	Friction Head (FH):								
TEM			PS to Manhole)					
ITEM	Dia (in)=	4	EOU!!/	TOTAL	Dia (in	=	0	EOU!!/	TOTAL
4" 90 Bend 4 11 44 44 44 11 44 44 11 44 44 11 44 44	ITEM	QTY.			ITE	М	QTY.		
4" Plug Valve 3 3 30 90 4" Check Valve 2 25 50 0									
4" Check Valve 2 25 50									
0									
0									
0				-			-		
0				ŭ					
Comparison		0	0	0			0		
O O O O O O O O O O O				-			-		
TOTAL EQUIVALENT LENGTH STAGE 1(FT) 354 TOTAL EQUIVALENT LENGTH STAGE 2(FT)				-					
Dia (in)= 0 EQUIV. TOTAL LENGTH Dia (in)= 0 EQUIV. TOTAL LENGTH ITEM QTY. LENGTH LENGTH TOTAL LENGTH LENGTH 0	TOTAL EQUIVALEN		Ü	354	TOTAL	. EQUIVALE	NT LENGTH S		
Dia (in)= 0 EQUIV. TOTAL LENGTH Dia (in)= 0 EQUIV. TOTAL LENGTH ITEM QTY. LENGTH LENGTH TOTAL LENGTH 0<									
EQUIV. TOTAL ITEM QTY. LENGTH Stage 3:	N/A			Stage	4: N/A				
ITEM QTY. LENGTH LENGTH ITEM QTY. LENGTH LENGT 0 <		0			Dia (in)=	0		
0 0 0 0 0 0 0 0 0 0 0 0	ITEM	OTV			175	M	OTV		
$egin{pmatrix} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ \end{array}$	HEIVI				116	VI			
		0	0	0			0	()
		0	0	0)

Stage 3: Dia (in)=	N/A	0			
ITEM			QTY.	EQUIV. LENGTH	TOTAL LENGTH
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
			0	0	0
TOTAL EQUIVALENT	LENGTH S	STAC	GE 3(FT)		0

Notes:	

ħ

ITEM	QTY.	EQUIV. LENGTH	TOTAL LENGTH
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0 0
	0	0	0
	0	0	0
TOTAL EQUIVALEN			0
TOTAL EQUIVALE	VI ELIVOITI OI	/(OL 2(1 1)	Ŭ
Stage 4: N/A			
Dia (in)=	0		
		EQUIV.	TOTAL
ITEM	QTY.	LENGTH	LENGTH
	0	0	0
	0	0	0
	0	0	0
	0		^
			0
	0	0	0
	0	0 0	0 0
	0 0	0 0 0	0 0 0
	0 0 0 0	0 0 0 0	0 0 0 0
	0 0	0 0 0	0 0 0 0
	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
	0 0 0 0	0 0 0 0	0 0 0 0

Estimated St	atic Discha	rge Head (SD	<u>)H):</u>
Static =	ft 5	psi 2.16	

Estimated Vacuum Head (VH):						
	ft	psi				
Vacuum =	23	9.96				

Estimated Total Connection Head (TCH):							
Low =	0.00	0.00					
Average =	0.00	0.00					
High =	0.00	0.00					
, and the second							

SYSTEM CURVES

System Curve (LOW):	_										
			LOW	STAGE 1	STAGE 2	STAGE 3	STAGE 4	TOTAL	VACUUM		
Flow	SDH	VDH	TCH	FH	FH	FH	FH	FH	VH	TDH	Velocity
(GPM)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(ft)	(ft)	(ft)	(ft/s)
0	5.00		0.00	0.00	0.00	0.00	0.00	0.00	23.00	28.00	0.00
22	5.00		0.00	0.16	0.00	0.00	0.00	0.16	23.00	28.16	0.56
43	5.00		0.00	0.57	0.00	0.00	0.00	0.57	23.00	28.57	1.11
65	5.00		0.00	1.21	0.00	0.00	0.00	1.21	23.00	29.21	1.67
87	5.00		0.00	2.07	0.00	0.00	0.00	2.07	23.00	30.07	2.22
109	5.00		0.00	3.12	0.00	0.00	0.00	3.12	23.00	31.12	2.78
130	5.00		0.00	4.38	0.00	0.00	0.00	4.38	23.00	32.38	3.34

System	Curva	(AVERAGE):	

			AVG	STAGE 1	STAGE 2	STAGE 3	STAGE 4	TOTAL	VACUUM		
Flow	SDH	VDH	TCH	FH	FH	FH	FH	FH	VH	TDH	Velocity
(GPM)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(ft)	(ft)	(ft)	(ft/s)
0	5.00		0.00	0.00	0.00	0.00	0.00	0.00	23.00	28.00	0.00
22	5.00		0.00	0.16	0.00	0.00	0.00	0.16	23.00	28.16	0.56
43	5.00		0.00	0.57	0.00	0.00	0.00	0.57	23.00	28.57	1.11
65	5.00		0.00	1.21	0.00	0.00	0.00	1.21	23.00	29.21	1.67
87	5.00		0.00	2.07	0.00	0.00	0.00	2.07	23.00	30.07	2.22
109	5.00		0.00	3.12	0.00	0.00	0.00	3.12	23.00	31.12	2.78
130	5.00		0.00	4.38	0.00	0.00	0.00	4.38	23.00	32.38	3.34

System Curve (HIGH):

Cycloin Curve (File)	1).										
			HIGH	STAGE 1	STAGE 2	STAGE 3	STAGE 4	TOTAL	VACUUM		
Flow	SDH	VDH	TCH	FH	FH	FH	FH	FH	VH	TDH	Velocity
(GPM)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(ft)	(ft)	(ft)	(ft/s)
0	5.00		0.00	0.00	0.00	0.00	0.00	0.00	23.00	28.00	0.00
22	5.00		0.00	0.16	0.00	0.00	0.00	0.16	23.00	28.16	0.56
43	5.00		0.00	0.57	0.00	0.00	0.00	0.57	23.00	28.57	1.11
65	5.00		0.00	1.21	0.00	0.00	0.00	1.21	23.00	29.21	1.67
87	5.00		0.00	2.07	0.00	0.00	0.00	2.07	23.00	30.07	2.22
109	5.00		0.00	3.12	0.00	0.00	0.00	3.12	23.00	31.12	2.78
130	5.00		0.00	4.38	0.00	0.00	0.00	4.38	23.00	32.38	3.34

- Notes:
 1. SDH = Static discharge head.
 2. VDH = Velocity discharge head.
 3. TCH = Total connection head.
- 4. FH = Friction head.
- 5. VH = Vacuum Head. (For vacuum pumping operations only).
- 6. TDH = Total Dynamic head.

See attached specifications for more pump information

Net Positive Suction Head Available (NPSHA):

NPSHA = Atmos (ft) + hs (ft) havt - hf - hvpa

> Atmos = 33.90 ft 1.00 ft 22.60 ft hs = havt = hvpa C= 0.78 ft 130

- Notes:

 1. Atmos (ft) = head available due to atmospheric pressure.
- hs = head available due to static fluid head upstream of pump.
 havt = head loss due to vacuum upstream of pump. (vacuum pump) operation only)

 4. hf = head loss due to friction in suction piping.
- 5. hvpa = absolute vapor pressure of liquid pumped.

Friction Head (hf):

Stage 1: Dia (in)=	Vac PS piping at	ction		
			EQUIV.	TOTAL
ITEM	(QTY.	LENGTH	LENGTH
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
		0	0	0
TOTAL EQUIVALENT	LENGTH STAGE	1(FT)		0

					1
Stage 2: Dia (in)=	N/A				
Dia (III)=			EQUIV.		TOTAL
ITEM		QTY.	LENGTH		LENGTH
	_	C)	0	0
		C)	0	0
		C)	0	0
		C)	0	0
		C)	0	0
		C)	0	0
		C)	0	0
		C)	0	0
		C)	0	0
		C)	0	0
		C)	0	0
		C)	0	0
TOTAL EQU	JIVALENT LE	NGTH STA	AGE 1(FT)		0

Flow (GPM)	Atmos (FT)	hs (FT)	havt (FT)	STAGE 1 hf (FT)	STAGE 2 hf (FT)	TOTAL hf (ft)	hvpa (ft)	NSPHA (ft)
0	33.90	1.00	22.60	0.00	0.00	0.00	0.78	11.52
325	33.90	1.00	22.60	0.00	0.00	0.00	0.78	11.52
800	33.90	1.00	22.60	0.00	0.00	0.00	0.78	11.52

Design Condition per the above calculations is:

65 GPM

@

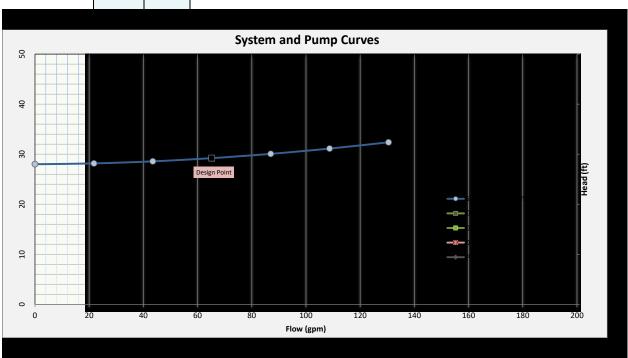
29 ft TDH

1.07 Hp

The following submersible pump has been selected to meet this condition:

	Pump 1	Pump 2
Equipment Tag Numbers:		
Manufacturer:		
Model:		
Curve Number		
Impeller (in)		
Impeller Number		
Speed (rpm)		
Horsepower:		
Electric Service:		
Design GPM:		
TDH (ft):		

0		0				
0		0				
Flow (GPM)	Head (ft)	Flow (GPM)	Head (ft)			
			•			



	1	ſ	Bio Fil	ter Odor Co	ntrol Calcuations	1	<u> </u>		
Proie	ect Name	SW 5th Av	L WW Coll	ection/Pum	ping System				
-	ect Number	282-003.0		ection/i un	ping Gysten				
Date City		1/5/2022							
		Okeechobee							
,	p Station		ump Statior	1					
Enter va	alues for yellow highligh	nted cells							
		BIO FIL	TER OD	OR CO	NTROL SIZI	NG			
1	ENTER NUMBE	R OF VACUU	I IM PUMPS US I	SED		3			
2	ENTER ACFM C	F VACUUM F	PUMPS (e.g. 4	130)		112	ACFM		
3	ENTER MAXIMU	JM VERTICAL	VELOCITY 1	THRU		4	FT/MIN.		
	FILTER BED (s	uggested 4.0 l	Ft/Min or less)						
4	MINIMUM AREA	REQUIRED	 AT MAXIMUM	l 1 AIR		84	SQ. FT.		
7	VELOCITY	LEGOINED				04			_
5	ENTER A FILTE	R BED AREA	(Length x Wi	dth=S.F.)		100	SQ. FT.		
	Example: 30 ft.								
6	ACTUAL FILTER	R BED I OADI	NG.			3.36	FT./MIN.		
)	AOTOALTILIE					3.30	T T./IVIIIN.		
7	ENTER FILTER	BED DEPTH	(sugg. 3.0 ft.)			3.0	FT.		
8	TOTAL FILTER	BED VOLUME	<u> </u>			300	CU.FT.		
9	ENTER COMPO	ST MAT. WT	. (sugg. 50# p	er Cu.Ft.)		50	#/CU.FT.		
10	COMPOST TOT	AL WEIGHT				15000	LBS.		
11	BULK WT. OF C	OMPOST (as	ssuming 75%	void space)		3750	LBS.		
12	BULK WT. OF C	OMPOST IN	KILOGRAMS			1701	KG.		
13	POSSIBLE HYD	 ROGEN SUIT	 FIDE GAS RE	MOVAI		* 3742.2	mG/Min.		
	(Assuming 2.2 r					OT ILL			
14	TOTAL POSS. V	 VT. OF EXHA	UST GAS (in	Kg.)					
	(Assume Wt. Of	Exhaust Gas	= .075#/Cu. F	t.		11.5	KG.		
15	TOTAL POSSIB	 LE H2S IN G4	\S						
10	(Assume Max. 6	0 ppm (60 mg	./kg) concentr	ation)		687.3	mG.		
16	FACTOR OF SA	FETY				5.4			
17	DESIGN IS SAT	 SFAC TORY							
*	Assumes each k	logram of cor	npost materia	capable of r	emoving 2.2mg of	H2S gas/min			
		9 01 001			gg Oi		l	1	

AGENDA ITEM NO. 20

FEBRUARY 17, 2022

SWSA PROJECT 1 ADDITIONAL ENGINEERING FESS

The Okeechobee Utility Authority and Sumner Engineering & Consulting, Inc., entered in to a professional services contract (19-04) in April 2019 for the Southwest Wastewater Service Area project. As provided for in Exhibit B, additional services are authorized on an as need basis.

Please find attached request for Additional work authorization to contract 19-04.

The additional work:

- Changing force main diameters from a previous design diameter to meet the new diameters per current availability (10" to 12" and on the other project from 6" to 8")
- o Adding a pump station to the SE2 Interconnect force main
- Original contract had two projects for bidding (master pump station and master force main). Current design has divided the pump station into two bids and the master force main has been divided in to two bids; we now have a total of four bids.

These changes have brought about additional fees as shown in the attached fee schedule.

OUA staff is recommending approval of the request for Additional Work Authorization as submitted by Sumner Engineering & Consulting, Inc., in the amount of \$36,220.00.

SUMNER ENGINEERING & CONSULTING, INC. Project Number 19-04 SUMNER ENGINEERING & CONSULTING, INC. Project Name SW Wastewater Service Area Project

Additional Work Authorization

to

Professional Services Agreement 19-04 Between the

Okeechobee Utility Authority ("OUA")

and

Sumner Engineering & Consulting, Inc. ("CONSULTANT")

A. SUMMARY OF SERVICES TO BE RENDERED

CONSULTANT has been engaged in preparation of design and bidding documents for the SWSA "Project 1", including a Master Pump Station, Master Force Main, and SE-2 Diversion Main, in accordance with our existing agreement and OUA Purchase Order 10264. Work items beyond those described in the Agreement are required, and we are requesting an adjustment in task budgets as follows:

Task B1 – Project 1 Design and Permitting (Additional Services)

As we near the end of design, pandemic-related supply chain issues have led to a slight redesign of the proposed Master Force Main and SE-2 Diversion Force Main. Specifically, while the completed design drawings included mostly standard construction utilizing C900 PVC piping, we have been informed by numerous suppliers that DR11 HDPE is more readily available (and cost-effective) in the current environment. Therefore, OUA has requested that the current drawings be modified to include all HDPE piping with an equivalent inside diameter. The drawings will be updated to reflect this change, along with changes to all fittings, valves and appurtenances as may be required.

Further, design of the SE-2 Diversion Force Main has led to the addition to the overall design of a lift station on the 15th Street Homes property being acquired by OUA. CONSULTANT has assisted in OUA in that acquisition, and some design of the lift station has already been undertaken. As this lift station was not contemplated in our original scope of work, we are requesting additional budget to offset some of the cost associated with the added work, which will include:

- Construction Plans and Details for the proposed lift station, which is assumed to be a "standard" OUA duplex lift station.
- Electrical design, including provision for a stand-by generator.
- Geotechnical support, including a standard penetration test to a depth of approximately 25 30 feet at the proposed wet well location.

Task B2 - Project 1 Bidding Services (Additional Services)

The scope of work for this task in our original authorization included providing bidding-related services for two construction contracts (one for the Master Pump Station, and a single contract for the two Force Mains). In order to manage workflow and take advantage of a larger contractor pool, OUA requested that the construction for Project 1 be further broken down into separate contracts for the Master Pump Station and *each* of the two force mains. Further, OUA requested that civil site work associated with the Master Pump Station be broken into a separate bid and contract. Two bid processes (Master Pump Station and Master Pump Station Civil Site Work) have already taken place. To complete the project, two remaining bid processes (Master Force Main and SE-2 Diversion Main and Lift Station) are required. We are requesting additional budget to complete the following tasks for two additional bid processes:

- Assist OUA with advertising the contract by preparing digital and hard copies of the bid documents and making them available, at CONSULTANT's location, for purchase and pick-up by prospective bidders. It is assumed that OUA will advertise the bids.
- Conduct a pre-bid conference at the OUA's office.
- Receive, record and issue clarifications to bidders' written questions. Clarifications will be submitted in writing via addendum.
- Prepare up the three addenda to the Contract Documents.
- Prepare bid tabulation, review the bids, review Contractor's credit and performance history, and provide letter of findings for contract award to OUA. CONSULTANT will prepare written letter of findings and bid tabulation, along with a recommendation for award.

B. PROJECT COST:

CONSULTANT is requesting budget adjustments for the above-described services as follows (see attached **Budget Summary**):

Task B1 – Project 1 Design and Permitting:

Original Budget: \$485,036 **Requested Increase: 20,000**

Task B2 – Project 1 Bidding Services:

Original Budget: \$ 27,160 Requested Increase:\$ 16,220 All terms and conditions of the original Agreement remain unchanged.

SUMNER ENGINEERING & CO	NSULTING, INC.	OKEECHOBEE UTILITY AUTHORITY				
Signature	Date	Signature	Date			
Jeffrey M. Sumner, P.E.		John R Creasman				
Name		Name				
President		Chairman				
Title		Title				
Address		Address				
410 NW 2 nd Street		100 SW 5 th Avenue				
Okeechobee, FL 34972		Okeechobee, FL 34974				

	Budget S	Summa	ry				
	Proposed Budget Adjustment	- Project	1 Design a	nd Biddin	g		
		Principal Engineer		Eng Designer			
		Hrs	Rate	Hrs	Rate		
			\$ 170.00		\$ 100.00		
В1	Project 1 Design and Permitting (Additional Fur						
	Force Main Updates	7		28		\$	3,990.00
	Lift Station Design	36		40		\$	10,120.00
	Electrical (Sub-consultant)					\$	11,000.00
	Geotechnical (Sub-consultant)					\$	3,300.00
	TOTAL:					\$	28,410.00
	BUDGET REQUEST:					\$	20,000.00
B2	Project 1 Bidding Services (Additional Funding)						
	Prep Bid Documents	24		10		\$	5,080.00
	Pre-Bid Conference (prep, attend, follow-up)	6		4		\$	1,420.00
	RFIs / Addenda (three per bid)	24		36		\$	7,680.00
	Bid Opening / Tab / Process Award	12				\$	2,040.00
	TOTAL:					\$	16,220.00

AGENDA ITEM NO. 21

FEBRUARY 17, 2022

PUBLIC COMMENTS

AGENDA ITEM NO. 22

FEBRUARY 17, 2022

ITEMS FROM THE ATTORNEY

AGENDA ITEM NO. 23

FEBRUARY 17, 2022

ITEMS FROM THE EXECUTIVE DIRECTOR

Southwest Wastewater Service Area

- Project 1 Design of the pump station & force main
 - Master Pump Station (MPS)
 - MPS Site Civil bids were received on 12/15.

Notice to Proceed: January 24, 2022

Substantial: March 10, 2022 (45 calendar days) Final: March 25, 2022 (60 calendar days)

- Gopher Tortoise Relocation: continuing, permit application has been filed, waiting on issuance, will conduct field work when permitted.
- MPS Construction bids were received on 12/22.

Notice of Award: January 24, 2022
Notice to Proceed: February 17, 2022 (?)
Substantial: TBD (365 calendar days)
Final: TBD (425 calendar days)

- Master Force Main (MFM)
 - Bids for material received February 9, 2022. Purchase possibly approved 2/17
 - Advertisement for construction tentatively set for 1st week of March 2022
- Force Main SE2 Interconnect
 - Continuing

SW 5th Ave Wastewater System Improvements

• Final report presented this month

AMI Project

• Possible award notice during the week of Feb 14-18 with final decision February 24 2022

Meetings Attended

- City Council meeting, January 18, 2022
- Tallahassee Visit, February 8, 2022

John Creasman & John Hayford

Met with:

Representative Erin Grall

Senator Ben Albritton

Representative Kaylee Tuck

Representative Josie Tomkow

- BOCC meeting, February 10, 2022
- Okeechobee County Economic Development Corporation, February 11, 2022

AGENDA ITEM NO. 24

FEBRUARY 17, 2022

ITEMS FROM THE BOARD

2022 OUA BOARD OF DIRECTOR'S MEETING DATES

March 17, 2022	8:30 A.M.
April 21, 2022	8:30 A.M.
May 19, 2022	8:30 A.M.
June 16, 2022	8:30 A.M.
July 21, 2022	8:30 A.M.
August 18, 2022	8:30 A.M.
September 15, 2022	8:30 A.M.
October 20, 2022	8:30 A.M.
November 17, 2022	8:30 A.M.
December 15, 2022	8:30 A.M.