

Brunswick-Glynn County Joint Water and Sewer Commission 1703 Gloucester Street, Brunswick GA 31520 Wednesday, July 24, 2019 at 3:00 PM Commission Meeting Room

FACILITIES COMMITTEE MEETING AGENDA

COMMITTEE MEMBERS: Chairman Ben Turnipseed

Commissioner Bob Duncan Commissioner Steve Copeland

Interim Executive Director Andrew Burroughs

PUBLIC COMMENT PERIOD

Public Comments will be limited to 3 minutes per speaker. Comments are to be limited to relevant information regarding your position and should avoid being repetitious. Individuals should sign in stating your name, address and the subject matter on which you wish to speak. Your cooperation in this process will be greatly appreciated.

APPROVAL

- 1. Minutes from July 11, 2019 Facilities Committee Meeting (subject to any necessary changes)
- **2. PS4105 Engineering Agreement** A. Burroughs

DISCUSSION

- 1. Academy Creek Rehab Project Update A. Burroughs
- **2. WPCF Plant Flows Report** A. Burroughs
- **3. Project Report** A. Burroughs

MEETING ADJOURNED



Brunswick-Glynn County Joint Water & Sewer Commission 1703 Gloucester Street, Brunswick, GA 31520 Commission Meeting Room Wednesday, July 24, 2019 at 3:00 PM

FACILITIES COMMITTEE MINUTES

PRESENT:

Ben Turnipseed, Chairman

Steve Copeland, Commissioner Bob Duncan, Commissioner

Andrew Burroughs, Interim Executive Director

ALSO PRESENT:

Tripp Stephens, Commissioner

Todd Kline, Director of Engineering

Janice Meridith, Exec. Commission Administrator

MEDIA PRESENT:

Taylor Cooper, The Brunswick News

Pamela Permar-Shierling, The Islander

Chairman Turnipseed called the meeting to order at 3:00 PM.

Chairman Turnipseed provided the invocation.

PUBLIC COMMENT PERIOD

There being no citizens that wished to address the Committee, Commissioner Turnipseed closed the Public Comment Period.

APPROVAL

1. Minutes from Facilities Committee Meeting July 11, 2019

Commissioner Duncan made a motion seconded by Chairman Turnipseed to approve the minutes from the Facilities Committee Meeting held on July 11, 2019. Motion carried 2-0-1. (Commissioner Copeland abstained due to not being present at the July 11 Facilities Committee Meeting.)

2. **PS4105 Engineering Agreement** – A. Burroughs

Andrew Burroughs provided that the PS4105 project was discussed earlier that day in the Finance Committee Meeting. The scope of the project was revised during that meeting, however the proposed project and requested budget were approved by the Finance Committee to be moved forward to the full Commission. Mr. Burroughs advised that this request was for approval to enter into an agreement with Roberts Civil Engineering for the engineering portion of the project. Roberts Civil Engineering has already been working on engineering improvements for PS4105 and 4107 that are needing further improvements. Staff reviewed the cost proposal from Roberts and believes the proposal is reasonable and acceptable in the amount of \$65,000.00 with an estimated engineering time of 120 days for design and 150 days for construction administration.

Commissioner Duncan made a motion seconded by Commissioner Copeland to move that the Facilities Committee recommend to the full Commission that the BGJWSC enter into contract with Roberts Civil Engineering in the amount of \$65,000.00 for Engineering Services related to the PS4105/4107 Expansion and Downstream Rehab Project. Motion carried 3-0-0.

DISCUSSION

1. Academy Creek Rehab Project Update – A. Burroughs

Mr. Burroughs provided to the Committee that on the previous week at the GAWP Conference in Savannah Mr. Kline, Mr. Ryals, Chairman Turnipseed and he had met with five vendors that provide the array of equipment that will be considered for the Academy Creek Plant Rehab. They discussed ways in which the project could be done, what those suppliers have available, and also possible trials of products such as odor control, screening, and filtering technologies. Their discussions were very productive and allowed considerations of various products and equipment possible to move forward with.

Chairman Turnipseed requested an update on PS4003 and the use of the "Smart Ball" technology used for inspecting the force main. Mr. Burroughs recalled for the Commissioners that PS4003 is located at "K" Street and Reynolds Street. He noted that the "Smart Ball" does a sonar image of the interior of the force main as it is pumped through. The inspection was completed on the previous day and the report should be expected within four weeks. Mr. Burroughs added that they were able to look at the force main from PS4002 and PS4003 since those force mains manifold together, and highlighted the process for this inspection.

2. WPCF Plant Flows Report – A. Burroughs

Mr. Burroughs provided the Committee with the WPCF Plant Flows Report. He highlighted the various influent and effluent flows and concentrations for the Academy Creek, Dunbar, and Southport plants. Mr. Burroughs noted that the BOD did increase at Academy Creek, however that is due to the lower amount of water to dilute it. He also commented that the Phosphorous level has been on watch for the last few months and that level is going down. All plants are operating within compliance at this time. The truck for hauling sludge to the landfill has come in and preparations are in process with the expectation of JWSC beginning to haul its own sludge to the landfill and incur significant savings.

3. Project Report – A. Burroughs

Mr. Burroughs provided an update on the current project report. Projects reported on included:

- Project 417 Ridgewood Water Production Facility
- Project 703 PS4003 Decommission and Gravity Sewer
- Project 704 Canal Road to Glynco
- Project 801 FEMA Hazard Mitigation Academy Creek
- Project 806 Academy Creek Oxygen System Rehab
- Project 807 SSI Phase II Smoke & Dye Testing
- Project 904 Lift Station 4021 Improvements
- Project 907 Sewer Expansion Study Brunswick

There being no further committee business, Chairman Turnipseed adjourned the meeting at 3:21 p.m.

G. Ben Turnipseed, Chairman

Attest:

Janice Meridith, Executive Commission Administrator



Brunswick-Glynn County Joint Water and Sewer Commission

Memo

To: JWSC Facilities Committee

From: Andrew Burroughs, Interim Executive Director

Date: July 24, 2019

Re: APPROVAL – PS4105 Engineering Agreement

Background

Roberts Civil Engineering (RCE) has been working with the developer of the Bergen Woods apartment complex to make improvements to the pumping capacity at PS 4105. With the additional comprehensive agreement in place with Wade Jurney Homes and staff requesting to increase capacity to handle an additional 200-300 REUs of development, additional engineering work is required on PS 4105 as well as PS 4107 upstream. RCE has previously provided a preliminary engineering report for both stations outlining potential upgrades to the stations that would be necessary to handle the apartment complex flow.

Staff Report

Considering that RCE has already been working on engineering improvements for the two pump stations that are needing further improvements, staff requested a proposal from RCE to complete the additional work. RCE provided the attached proposal for engineering services to include CCTV review, surveying, design, and construction administration. The total proposal for the engineering work totals \$65,000. After reviewing the cost proposal, staff believes the proposal is reasonable and acceptable. Estimated engineering time is 120 days for design and 150 days for construction administration.

An overall project schedule is attached showing the estimated engineering and construction timeframes.

Recommended Action

Staff recommends awarding the engineering contract to Roberts Civil Engineering in the amount of \$65,000.

Recommended Motion

"I make a motion that the Facilities Committee recommend to the full Commission that the BGJWSC enter into contract with Roberts Civil Engineering in the amount of \$65,000 for Engineering Services Related to the PS 4105/4107 Expansion and Downstream Rehab Project."

Enclosures:

Engineering Proposal Potential Project Schedule



St Simons Island | Savannah www.robertscivilengineering.com

Civil Engineering Proposal Lift Station 4105 and 4107 Additional Capacity Attachment A – Scope of Work

Roberts Civil Engineering (RCE) is pleased to present the following proposal for civil engineering services for improvements to Lift Station 4105 and Lift Station 4107 in order to accommodate an additional sewer flow of 250 to 300 REUs. The following summarizes the scope of services that RCE proposes to perform.

- 1. Preliminary Engineering Report for Lift Station 4105 and 4107 JWSC has created a concept to increase capacity for Lift Station 4105 by shortening its force main by connecting to an existing sanitary manhole on Wrangler Road or an alternative manhole on Cate Road. In addition, the concept proposes to bypass some gravity flow from Lift Station 4107. These concepts will be analyzed and a report will be generated that includes the following items.
 - a. Existing System
 - b. Proposed Upgrades
 - c. Analysis
 - d. Total Additional Capacity
 - e. Opinion of Probable Cost

Lump Sum \$5,800

- 2. Review of CCTV JWSC has obtained closed circuit television (CCTV) videos for approximately 12,000 linear feet of gravity sewer main. RCE will evaluate the video tapes and rate each section according to the PACP grading system below:
 - a. Severity Grade 5 Pipe segment has failed or will likely fail within the next five years requires immediate attention.
 - b. Severity Grade 4 Pipe segment has severe defects risk of failure within the next five to ten years.
 - c. Severity Grade 3 Pipe segment has moderate defects deterioration may continue, at a ten to twenty year timeframe.
 - d. Severity Grade 2 Pipe segment has minor defects pipe unlikely to fail for at least 20 years.
 - e. Severity Grade 1 Pipe segment has minor defects failure unlikely in the foreseeable future.

Lump Sum <u>\$3,850</u>

- 3. Route Survey A topographic survey will be provided that includes the route for the new force main for Lift Station 4105 and the re-route for the gravity sewer to bypass Lift Station 4107.
 - a. Pavement
 - b. Underground and above ground utilities
 - c. Right of way
 - d. Easements
 - e. Structures
 - f. Trees within right of way

Lump Sum <u>\$5,950</u>

- 4. Civil Engineering Construction Plans A set of detailed construction plans will include the following:
 - a. Existing conditions and demolition plan
 - b. Force main plan view and profiles
 - c. Pump station plan view
 - d. Erosion and sediment control plans
 - e. Pump station details
 - f. General details

Lump Sum \$12,900

- 5. **EPD Water/Sewer Extension Permit** The submittal package for the EPD Water and Sewer Extension permits will be assembled including the following:
 - a. Sewer Extension Forms
 - b. Flow diagrams
 - c. AHJ Certifications
 - d. Utility Report
 - e. Specifications

Lump Sum \$3,800

- 6. CSX Railroad Crossing Survey Data The survey data required for CSX permitting includes the following items:
 - a. Right of Ways
 - b. Rail and bed locations
 - c. Underground utilities
 - d. Above ground structures
 - e. Adjacent property owners

Lump Sum \$5,700

- 7. CSX Railroad Crossing Plan Plans will be created that show the proposed pipe crossing over the CSX right of way for use in permitting the crossing. The plans will include the following:
 - a. Plan view of proposed crossing
 - b. Cross section view
 - c. Profile view
 - d. Details

Lump Sum \$4,500

- **8.** Construction Administration The following tasks will be included in Construction Administration assuming 20 hours per week for the duration of the project.
 - a. Site visits
 - b. Responses to contractor RFIs
 - c. Weekly observation reports
 - d. Review of pay applications

Lump Sum \$2,250 per week Budget Estimate: \$22,500

9. Hourly Services – Tasks not specifically stated in the Scope of Work are available at the hourly rates below. These tasks could include but are not limited to revisions, permitting, addressing JWSC comments, addressing Glynn County comments, meetings, calls, and bidding.

Hourly Rate Schedule

Professional Engineer	\$190
Project Manager	\$160
Field Engineer/Draftsman	\$110
Administration	\$ 60

Notes:

- 1. Permit fees will be paid by client. CSX access fees and flagman fees to be paid by Client for survey data within the CSX right of way.

 2. Record drawings, wetland delineation, and wetland permitting (if required) are the responsibility of the
- Client.

ID	Task Name	Duration	Duration Type	Start	Finish	Budget	Status
0	PS 4105 and 4107 Expansion	276 days				\$2,250,000.00	On Schedule
1	1 Project Planning	21 days	Calendar Days		Wed 7/31/19	N/A	On Schedule
2		1 day	Work Days Only		Thu 7/11/19	N/A	Complete
3	1.2 Finance Committee	1 day	Work Days Only		Wed 7/24/19	N/A	Future Task
4	1.3 Full Commission	1 day	Work Days Only		Thu 7/25/19	N/A	Future Task
5	1.4 Engineering Selection	1 day	Work Days Only	· · ·	Thu 7/25/19	N/A	Future Task
6		5 days	Work Days Only		Tue 7/30/19	N/A	Future Task
7	1.6 Notice to Proceed	1 day	Work Days Only	Wed 7/31/19	Wed 7/31/19	N/A	Future Task
8	2 Engineering	256 days	Calendar Days	Wed 7/31/19	Fri 4/17/20	\$150,000.00	Future Task
9	2.1 Preliminary Engineering Report	10 days	Work Days Only	Wed 7/31/19	Tue 8/13/19	N/A	Future Task
10	, , , ,	30 days	Work Days Only	•	Fri 9/13/19	N/A	Future Task
11		5 days	Work Days Only	• •	Tue 8/20/19	N/A	Future Task
12	·	47 days	Calendar Days	Wed 8/14/19	Mon 9/30/19	N/A	Future Task
13	2.5 EPD Permitting	47 days	Calendar Days	Wed 8/14/19	Mon 9/30/19	N/A	Future Task
14		60 days	Work Days Only	• •	Tue 11/12/19	N/A	Future Task
15	2.7 Construction Admin	90 days	Work Days Only		Fri 4/17/20	N/A	Future Task
16	3 Procurement	105 days	Calendar Days		Tue 12/31/19	N/A	Future Task
17	3.1 Advertise CIPP	31 days	Calendar Days	Sat 9/14/19	Mon 10/14/19	N/A	Future Task
18	3.2 Award CIPP	1 day	Work Days Only	Thu 10/17/19	Thu 10/17/19	N/A	Future Task
19	3.3 Contract Signing	10 days	Work Days Only			N/A	Future Task
20	3.4 Advertise Construction	32 days	Calendar Days	Wed 11/13/19	Mon 12/16/19	N/A	Future Task
21	3.5 Award Construction	1 day	Work Days Only	Thu 12/19/19	Thu 12/19/19	N/A	Future Task
22	3.6 Contract Signing	10 days	Work Days Only	Fri 12/20/19	Tue 12/31/19	N/A	Future Task
23	4 CIPP Downstream	68 days	Calendar Days	Mon 10/21/19	Tue 12/31/19	\$1,000,000.00	Future Task
24	4.1 Notice to Proceed	1 day	Work Days Only	Mon 10/21/19	Mon 10/21/19	N/A	Future Task
25	4.2 ROW Permitting	5 days	Work Days Only	Mon 10/21/19	Fri 10/25/19	N/A	Future Task
26	4.3 Order CIPP Bags	30 days	Calendar Days	Mon 10/21/19	Tue 11/19/19	N/A	Future Task
27	4.4 CIPP	30 days	Work Days Only	Wed 11/20/19	Tue 12/31/19	\$1,000,000.00	Future Task
28	5 Force Main Improvements	61 days	Calendar Days	Mon 1/6/20	Fri 3/6/20	\$770,000.00	Future Task
29	5.1 Notice to Proceed	1 day	Work Days Only	Mon 1/6/20	Mon 1/6/20	N/A	Future Task
30	5.2 ROW Permitting	5 days	Work Days Only	Mon 1/6/20	Fri 1/10/20	N/A	Future Task
31	5.3 4107 Force Main Installation	10 days	Work Days Only	Mon 1/13/20	Fri 1/24/20	\$55,000.00	Future Task
32	5.4 4105 Force Main Installation	30 days	Work Days Only	Mon 1/27/20	Fri 3/6/20	\$715,000.00	Future Task
33	6 PS Improvements	82 days	Calendar Days	Mon 1/27/20	Fri 4/17/20	\$330,000.00	Future Task
34	6.1 PS 4107 Improvements	30 days	Work Days Only	Mon 1/27/20	Fri 3/6/20	\$140,000.00	Future Task
35	6.2 PS 4105 Improvements	30 days	Work Days Only	Mon 3/9/20	Fri 4/17/20	\$190,000.00	Future Task

Project: PS 4105 and 4107 Expansion
Date: Fri 7/19/19

Task
Summary
Project Summary
Project Summary

ACADEMY CREEK WWTP		FLOW ((MGD)		рН	Influer BOD	nt Concentr	ations NH3	Phos	рН	D.O.	BOD	ffluent Con	centration NH3	s TRC	Fecal	Phos.	Removal BOD	Efficiency TSS	Rain Maximum	fall Total	Water Meter Monthly	Sludge Tons to
Month	INF	PINOVA	EFF	% Cap.	s.u.	mg/L	mg/L	mg/L	mg/L	s.u.	mg/L	mg/L	mg/L	mg/L	mg/L	#/100 mL	mg/L	%	%	Inches	Inches	MGal	Landfill
January 2018	6.5	0.7	7.3	54%	7.3	173	175	<u> </u>	<u> </u>	6.5	7.1	7	12	3.9	0.03	9	3.4	95.95%	93.14%	1.62	3.26		
February 2018	6.9	0.7	7.8	58%	7.2	192	203			6.6	6.8	8	12	6.8	0.03	1	4.3	95.83%	94.09%	0.30	0.44		1 1
March 2018	5.8	0.7	6.8	50%	7.4	198	190			6.6	6.6	11	11	5.8	0.04	1	3.7	94.44%	94.21%	0.51	1.16		1 1
April 2018	6.7	0.6	7.8	58%	7.3	165	149			6.7	6.7	8	12	7.4	0.04	11	3.2	95.15%	91.95%	1.57	3.32		1 1
May 2018	6.4	0.7	7.5	56%	7.3	158	161			6.6	6.2	6	10	8.3	0.04	13	3.2	96.20%	93.79%	0.73	2.99		1 1
June 2018	8.9	1.0	9.2	68%	7.2	125	132	13.4	3.4	6.5	5.5	6	10	2.7	0.04	13	3.4	95.20%	92.42%	1.75	7.20		1 1
July 2018	9.0	0.8	9.3	69%	7.5	126	140	16.0	5.9	6.7	5.8	6	11	4.2	0.02	13	3.5	95.24%	92.14%	2.60	7.00		1 1
August 2018	7.6	0.7	7.9	59%	7.8	127	168	20.8	4.7	6.8	5.7	8	13	5.3	0.08	11	3.1	93.70%	92.26%	1.20	2.70	0.219	67.32
September 2018	6.3	0.8	7.3	54%	7.7	153	155	17.6	4.4	6.6	5.8	7	13	2.7	0.05	9	4.3	95.42%	91.61%	0.95	3.22	0.163	71.23
October 2018	6.1	0.5	7.0	52%	7.4	172	172	31.8	5.2	6.6	6.0	7	9	9.4	0.02	41	2.6	95.93%	94.77%	1.72	4.54	0.164	65.55
November 2018	6.1	0.7	7.2	53%	7.6	212	335	23.4	5.3	6.6	6.2	8	12	4.8	0.04	44	3.5	96.23%	96.42%	3.00	5.81	0.165	88.25
December 2018	10.0	0.8	11.4	84%	7.9	121	130	17.4	11.0	6.7	6.6	9	15	8.0	0.02	182	4.3	92.56%	88.46%	2.67	8.41	0.149	73.21
January 2019	7.4	0.7	8.1	60%	7.6	169	193	13.1	8.4	6.8	6.5	11	13	11.6	0.03	24	2.9	93.49%	93.26%	0.90	3.07	0.589	114.16
February 2019	6.8	0.7	8.0	59%	7.6	190	213	18.4	15.2	6.7	6.8	9	12	10.8	0.06	16	8.4	95.26%	94.37%	1.00	1.48	0.653	85.01
March 2019	6.2	0.7	7.2	53%	7.4	258	272	22.0	13.2	6.7	6.2	10	12	8.5	0.04	24	8.8	96.12%	95.59%	0.60	1.72	0.926	68.53
April 2019	6.3	0.7	7.2	53%	7.5	219	231	24.1	15.8	6.9	6.3	9	15	11.2	0.01	23	6.8	95.89%	93.51%	1.83	3.56	0.890	93.13
May 2019	5.7	0.6	6.3	47%	7.5	246	251	31.0	15.0	6.5	5.3	11	9	11.7	0.04	55	10.8	95.53%	96.41%	0.66	1.16	0.900	86.50
June 2019	5.7	0.8	6.7	50%	7.4	251	230	27.2	9.4	6.6	6.0	10	11	10.7	0.10	23	3.7	96.02%	95.22%	1.68	6.58	0.800	100.71
July 2019																							1 1
August 2019																							1 1
September 2019																							1 1
October 2019																							1 1
November 2019																							1 1
December 2019																							
Average	6.9	0.7	7.8	58%	7.5	180.8	194	21.2	8.99	6.7	6.2	8.4	11.8	7.4	0.04	28	4.7	95.23%	93.53%	1.41	3.76	0.511	83.05
Max	10.0	1.0	11.4	84%	7.9	258.0	335	31.8	15.8	6.9	7.1	11.0	15.0	11.7	0.10	182	10.8	96.23%	96.42%	3.00	8.41	0.926	114.16
Min	5.7	0.5	6.3	47%	7.2	121.0	130	13.1	3.40	6.5	5.3	6.0	9.0	2.7	0.01	1	2.6	92.56%	88.46%	0.30	0.44	0.149	65.55
Permit Limits	N/A	N/A	13.5	N/A	N/A	N/A	N/A	N/A	N/A	6.0-9.0	2.0	20.0	30.0	17.4	0.14	200	Report	85.00%	85.00%				

BOD - Biochemical Oxygen Demand

TSS - Total Suspended Solids

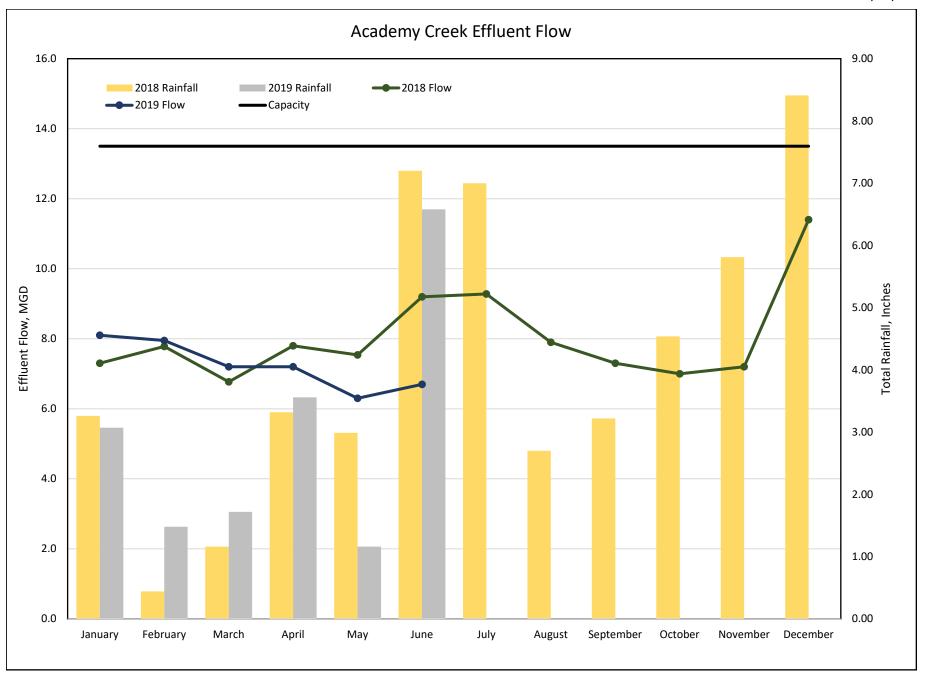
NH3 - Ammonia

Phos - Phosphorus

D.O. - Dissolved Oxygen

TRC - Total Residual Chlorine

Fecal - Fecal Coliform Bacteria



DUNBAR CREEK WWTP	F	LOW (MG	D)			nt Concentr		_				nt Concentr				Removal	,	Raint		Water Meter	Sludge Tons to
				рН	BOD	TSS	NH3	Phos	рН	D.O.	BOD	TSS	NH3	Entero.	Phos.	BOD	TSS	Maximum	Total	Monthly	Landfill
	INF	EFF	% Cap.	s.u.	mg/L	mg/L	mg/L	mg/L	s.u.	mg/L	mg/L	mg/L	mg/L	#/100 mL	mg/L	%	%	Inches	Inches	M/Gal	
January 2018	3.4	2.9	74%	7.1	135	133			7.1	8.2	3.0	2.0	0.4	9	1.7	97.78%	98.50%	2.03	3.47		
February 2018	3.5	3.1	77%	7.0	149	129			7.0	7.3	6.0	3.0	1.6	48	1.6	95.97%	97.67%	0.79	1.32		
March 2018	3.3	2.8	71%	7.3	169	147			7.3	9.0	5.0	1.0	0.3	15	3.0	97.04%	99.32%	0.60	1.80		
April 2018	3.5	3.1	77%	7.2	162	163			7.6	8.4	2.0	1.0	0.1	6	2.7	98.77%	99.39%	1.18	4.16		
May 2018	3.3	2.9	72%	7.2	165	158			7.7	8.3	2.0	2.0	0.6	24	2.9	98.79%	98.73%	0.75	2.99		
June 2018	3.5	2.9	73%	7.1	161	139	22.0	3.20	7.7	7.7	2.1	1.0	1.3	17	2.8	98.70%	99.28%	1.30	3.52		
July 2018	3.6	3.3	83%	7.2	157	153	26.7	4.10	7.5	6.6	2.2	1.0	0.2	3	2.7	98.60%	99.35%	1.52	4.74		
August 2018	2.7	2.8	70%	7.5	139	114	28.6	3.45	7.7	7.5	1.0	1.0	0.9	8	3.1	99.28%	99.12%	0.68	2.03	0.070	22.86
September 2018	2.6	2.6	64%	7.5	134	137	21.9	3.95	7.7	7.9	2.0	1.0	0.6	30	2.9	98.51%	99.27%	0.87	3.57	0.030	22.06
October 2018	2.8	2.4	61%	7.4	131	123	20.9	3.25	7.8	7.7	2.0	2.5	0.4	29	2.3	98.47%	97.99%	1.27	2.87	0.033	18.36
November 2018	3.6	2.6	65%	7.5	143	131	20.6	3.85	7.8	8.2	1.0	3.0	0.8	8	3.8	99.30%	97.71%	2.79	4.99	0.041	21.84
December 2018	4.4	3.6	90%	7.1	98	116	14.5	2.35	7.7	8.8	2.0	2.3	0.9	46	1.4	97.96%	98.02%	2.05	8.62	0.058	17.20
January 2019	3.8	2.9	72%	7.3	132	142	16.3	2.85	7.6	8.9	2.0	2.0	0.7	22	2.2	98.48%	98.59%	1.50	2.90	0.044	19.62
February 2019	3.5	2.9	72%	7.5	148	161	20.9	2.65	7.5	8.7	2.0	1.8	0.5	11	2.0	98.65%	98.86%	1.00	2.60	0.015	7.41
March 2019	3.2	2.8	70%	7.3	192	195	23.5	3.40	7.5	8.4	1.0	1.8	0.5	5	2.3	99.48%	99.08%	0.60	2.30	0.035	18.11
April 2019	3.5	2.8	70%	7.2	205	230	23.3	3.90	7.5	7.6	2.0	2.3	0.9	5	2.4	99.02%	99.00%	0.90	3.00	0.037	26.76
May 2019	3.4	2.5	63%	7.2	206	237	35.3	5.30	7.5	7.2	2.0	3.1	0.5	3	3.0	99.03%	98.69%	0.98	1.72	0.035	21.03
June 2019	3.7	2.8	70%	7.3	189	267	22.0	4.80	7.5	7.4	2.0	2.5	0.5	5	3.3	98.94%	99.06%	1.62	5.25	0.043	4.52
July 2019																					
August 2019																					
September 2019																					
October 2019																					
November 2019																					
December 2019																					
Average	3.4	2.9	72%	7.3	156.4	159.7	22.8	3.62	7.5	8.0	2.3	1.9	0.7	16	2.6	98.49%	98.76%	1.2	3.4	0.040	18.16
Max	4.4	3.6	90%	7.5	206.0	267.0	35.3	5.30	7.8	9.0	6.0	3.1	1.6	48	3.8	99.48%	99.39%	2.8	8.6	0.070	26.76
Min	2.6	2.4	61%	7.0	98.0	114.0	14.5	2.35	7.0	6.6	1.0	1.0	0.1	3	1.4	95.97%	97.67%	0.6	1.3	0.015	4.52
Permit Limits	N/A	4.0	N/A	N/A	N/A	N/A	N/A	N/A	6.0-9.0	6.0	5.0	20.0	2.0	35	Report	85.00%	85.00%				

BOD - Biochemical Oxygen Demand

TSS - Total Suspended Solids

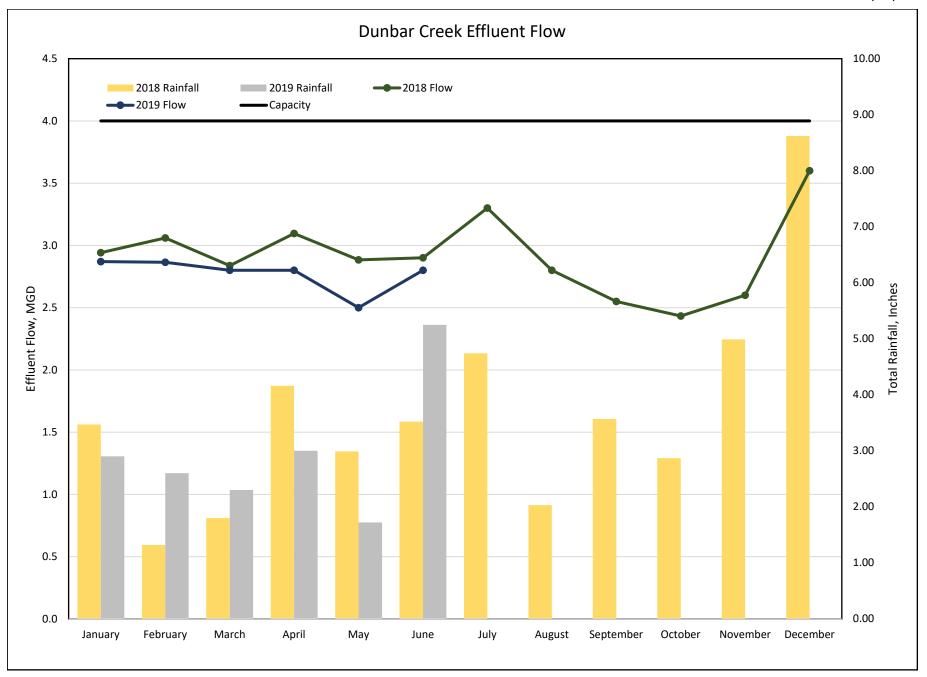
NH3 - Ammonia

Phos - Phosphorus

D.O. - Dissolved Oxygen

TRC - Total Residual Chlorine

Entero. - Enterococci Bacteria



SOUTHPORT WWTP	F	LOW (MGI	D)	pН	Influer BOD	nt Concentr TSS	ations NH3	Phos	рН	D.O.	Effluer BOD	nt Concentr	ations NH3	Fecal	Phos.	Removal BOD	Efficiency TSS	Rain Maximum	fall Total	Water Meter Monthly	Sludge Tons to
Month	INF	EFF	% Cap.	s.u.	mg/L	mg/L	mg/L	mg/L	s.u.	mg/L	mg/L	mg/L	mg/L	#/100 mL	mg/L	%	%	Inches	Inches	M/Gal	Landfill
January 2018	0.446	0.426	28%	6.8	121	131	<u> </u>		6.8	8.5	4.1	8.5	5.3	12	0.3	96.61%	93.51%	2.51	4.66		
February 2018	0.376	0.370	25%	6.9	143	129			7.1	8.2	6.0	8.0	6.0	6	1.1	95.80%	93.80%	0.86	1.67		
March 2018	0.363	0.359	24%	7.2	157	174			7.2	8.7	4.0	4.0	0.1	15	0.4	97.45%	97.70%	0.96	2.24		
April 2018	0.382	0.387	26%	6.8	138	114			6.8	8.9	3.3	4.9	0.1	65	0.6	97.61%	95.70%	1.51	5.55		
May 2018	0.384	0.383	26%	6.8	120	103			7.3	8.0	3.9	3.2	0.6	9	0.7	96.75%	96.89%	2.14	8.43		
June 2018	0.399	0.425	28%	7.0	121	109	23.0	4.4	7.0	7.0	4.0	3.0	0.5	9	0.4	96.69%	97.25%	2.61	7.97		
July 2018	0.382	0.398	27%	6.8	132	119	25.9	3.2	7.3	7.3	4.0	2.4	0.1	3	0.6	96.97%	97.98%	2.65	8.15		
August 2018	0.393	0.412	27%	6.6	128	138	31.1	5.0	6.8	8.0	4.4	4.5	0.7	8	0.3	96.56%	96.74%	1.36	5.06	0.009	3.57
September 2018	0.353	0.377	25%	6.6	142	131	26.6	3.8	7.2	8.0	4.8	5.2	0.6	6	0.7	96.65%	96.03%	1.18	3.26	0.006	9.06
October 2018	0.354	0.359	24%	6.7	143	124	25.6	4.1	7.5	8.8	5.0	5.0	0.3	10	1.5	96.50%	95.97%	0.88	1.95	0.005	7.52
November 2018	0.356	0.357	24%	7.0	166	149	35.1	4.5	7.9	9.0	4.0	7.0	1.4	3	1.1	97.59%	95.30%	1.64	3.53	0.004	2.16
December 2018	0.384	0.450	30%	7.0	115	94	25.0	1.6	7.5	8.6	3.0	3.0	0.7	6	0.4	97.39%	96.81%	3.48	10.68	0.004	4.64
January 2019	0.376	0.394	26%	6.9	128	376	23.3	3.7	7.3	9.0	3.0	3.0	0.6	6	0.1	97.65%	99.20%	1.00	2.20	0.006	3.37
February 2019	0.377	0.390	26%	7.5	111	93	29.8	1.20	7.5	8.9	3.0	4.0	0.5	8	0.5	97.31%	95.70%	0.06	1.90	0.007	6.79
March 2019	0.358	0.400	27%	6.9	111	109	31.7	3.90	7.2	8.9	4.0	4.0	0.5	6	0.1	96.40%	96.33%	0.50	2.10	0.008	6.50
April 2019	0.359	0.364	24%	6.8	113	78	30.8	3.95	7.7	8.3	6.0	2.0	0.8	4	1.0	94.69%	97.44%	0.13	3.90	0.008	5.35
May 2019	0.350	0.357	24%	6.9	121	92	40.2	4.40	7.3	8.0	5.8	4.7	0.6	5	0.7	95.21%	94.89%	1.68	4.00	0.007	3.56
June 2019	0.358	0.364	24%	6.8	98	124	27.9	3.80	7.2	6.6	4.0	5.0	0.3	4	0.7	95.92%	95.97%	1.26	7.16	0.006	5.25
July 2019																					
August 2019																					
September 2019																					
October 2019																					
November 2019																					
December 2019																					
Average	0.375	0.387	26%	6.9	128.2	132.6	28.9	3.65	7.3	8.3	4.2	4.5	1.1	10	0.6	96.65%	96.29%	1.5	4.7	0.006	5.25
Max	0.446	0.450	30%	7.5	166.0	375.7	40.2	5.00	7.9	9.0	6.0	8.5	6.0	65	1.5	97.65%	99.20%	3.5	10.7	0.009	9.06
Min	0.350	0.357	24%	6.6	98.0	78.0	23.0	1.20	6.8	6.6	3.0	2.0	0.1	3	0.1	94.69%	93.51%	0.1	1.7	0.004	2.16
Permit Limits	N/A	1.500	N/A	N/A	N/A	N/A	N/A	N/A	6.0-9.0	5.0	30.0	30.0	13.0	200	Report	85.00%	85.00%				

BOD - Biochemical Oxygen Demand

TSS - Total Suspended Solids

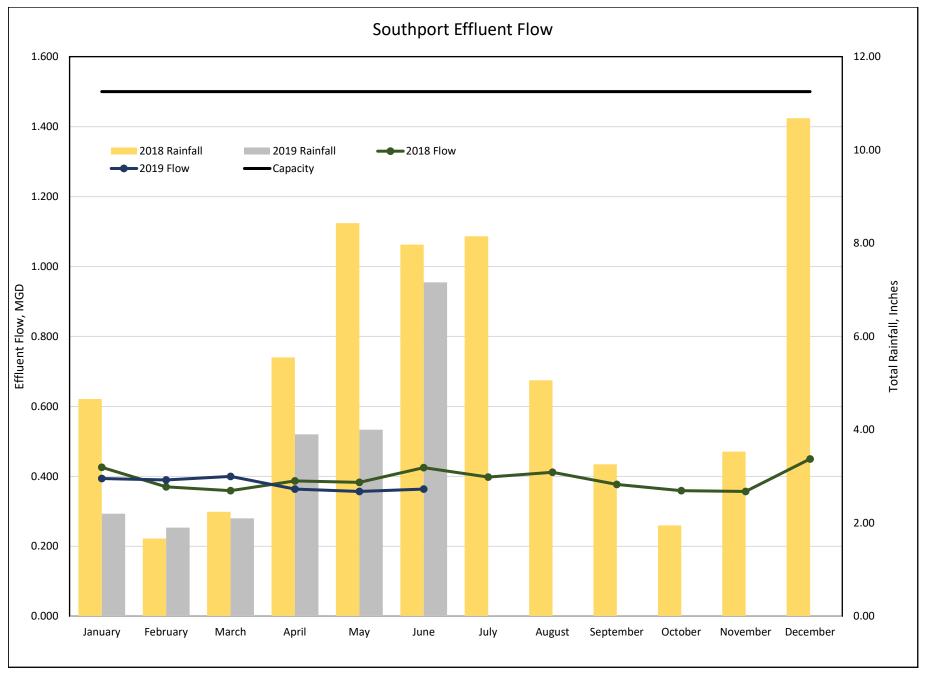
NH3 - Ammonia

Phos - Phosphorus

D.O. - Dissolved Oxygen

TRC - Total Residual Chlorine

Fecal - Fecal Coliform Bacteria



PROJECT REPORT

Financial Data as of 06-30-2019

	Financial Data as of 06-30-2019					,								BUDGET VS	. EXPENDIT	URES							
							BOC A	PPROVED FUN	DING & SOU	RCE(1)		COMMITTED			EXPENDIT	JRES		BALAN	CE			PROJECT	STATUS
roj #	Project Namel	Original Project Estimate	Proj Mgr.	Concept Design	Detail Design	Construction	R&R Reserve	CIF Reserve	SPLOST	Total Approved Funds	Purchase Orders Issued	BOC Approved Change Orders	Total PO+CO	Expenditures Paid to PO's	Remaining Encumbrances	Expenditures Misc.	Total Expenditures	Uncommitted \$\$\$ (App Fund - Exp)	% Approved Budget Available	Current Phase Completion	Next Phase Length of Time	Total Project Anticipated Completion	Status
232	SR-99 Water Main Extension	2,200,000	T. Kline	EMC	RGA / EMC	Seaboard		2,200,000		2,200,000	1,263,167	287,693	1,550,860	1,478,971	177,373	282,572	1,938,916	261,084	11.87%	TBD	TBD	TBD	JWSC potholing existing utilities for onsite GDOT mtg to move forward. Change Order w be necessary to complete Ph.1.
417	Ridgewood Water Production Facility	1,000,000	T. Kline	JWSC	RGA	TBD	1,000,000			1,000,000	0	0	0	0	104,450	65,943	170,393	829,607	82.96%	TBD	TBD	TBD	Projected Bid early August
501	Alder Circle/Sea Palms W&S Improvement	300,000	T. Kline/ A. Burroughs	JWSC	EMC	TBD	35,300		178,599	213,899	45,296	14,550	59,846	45,546			45,546	168,353	78.71%	TBD	TBD	TBD	SPLOST V funded. Reallocated to other S Palms East water improvements. WM crossing @ Frederica/Colonial - COMPLE
	Holly Street/Sea Palms W&S Improvements	650,000	T. Kline/ A. Burroughs	JWSC	HHNT	TBD	46,000		561,795	607,795	46,700		46,700	41,963	0	0	41,963	565,832	93.10%		TBD	TBD	Reallocating to collection system rehab; possibly Sea Palms East & West.
702	North Mainland Sewer Improvements	14,900,000	T. Kline	JWSC/ EMC	T&H	TBD		11,700,000	3,200,000	14,900,000	3,918,587	286,264	4,204,851	4,264,433	606,911	0	4,871,344	10,028,656	67.31%	Winter 2019	180 days	Fall 2020	Kickoff meeting 07/23/2019
703	PS 4003 Decommission and Gravity Sewer	3,300,000	T. Kline	JWSC	HGB	TBD			3,300,000	3,300,000	248,599	0	248,599	26,710	218,274	7,204	252,188	3,047,812	92.36%	Winter 2019	120 days	Fall 2020	Force Main assessment 07/22/2019
704	Canal Road to Glynco 12" Watermain Loop	1,200,000	T. Kline	JWSC	JWSC	TBD		1,200,000		1,200,000	48,000	0	48,000	48,000	0	0	48,000	1,152,000	96.00%	TBD	TBD	TBD	Potential construction October 2019, JW in-house forces to construct
801	FEMA Hazard Mitigation-Academy Creek	3,188,000	A. Burroughs	Haggerty	TBD	TBD	3,188,000			3,188,000	33,908		33,908	28,083	0	96,079	124,162	3,063,838	96.11%	TBD	TBD	TBD	Awaiting FEMA decision.
804	Magnolia Water Improvements	1,150,000	T. Kline	JWSC	City of BWK / EMC	TBD	1,150,000			1,150,000	117,050	0	117,050	44,684	72,366	0	117,050	1,032,950	89.82%	Winter 2019	270 days	Winter 2019	City Project/contract. EOR completing bidocs and EOPC for waterline route in shoulder. City has determined JWSC 50/5 cost sharing for paving. Need to compare estimates and finalize bidding options.
805	L Street Water Improvements	650,000	T. Kline	JWSC	City of BWK / EMC	Georgia Asphalt Producers	787,334			787,334	751,780	0	751,780	71,956	679,824	0	751,780	35,554	4.52%	Winter 2019	180 days	Fall 2019	Construction in process. WM installation revised to obtain separation from exisiting gas main, structures and existing water main. Meeting held with Pinova to disculum Crossing at entrance.
806	Academy Creek Oxygen System Rehab	650,000	A. Burroughs	HGB	HGB	A&G / Matheson	1,040,000			1,040,000	1,012,002	a	1,012,002	713,978	288,486	0	1,002,464	37,536	3.61%	July 2019	N/A	July 2019	Waiting on programming of LELs and connection of Tank 1 to new system
807	SSI Phase II Smoke & Dye Testing	150,000	E. Zettler	TBD	TBD	McKim & Creed	150,000			150,000	119,656	o	119,656	94,556	0	0	94,556	55,444	36.96%	Spring 2019	30 Days	Fall 2019	Awaiting final billing
903	SR 27 Resurfacing from Yellow Bluff Creek to US 25	77,000	T. Kline	JWSC/GDOT	GDOT	GDOT	102,000			102,000	77,250	24,750	102,000	0	0	0	0	102,000	100.00%	TBD	TBD	TBD	Budget adjusted 06/20
904	Lift Station 4021 Improvements	275,000	T. Kline	JWSC	JWSC	TBD		275,000		275,000	0	0	0	0	0	0	0	275,000	100.00%	TBD	TBD	Summer 2019	In-House Engineering in progress. Staff evaluating options for duplex or triplex pump setup.
905	Glynn County Village Storm Improvements Phase 1	60,000	T. Kline	JWSC	GWES/ GlynnCo	Hiers/Griffin Utility	60,000			60,000	60,000	0	60,000	0	60,000	0	60,000	0	0.00%	Winter 2019	60 days	Winter 2019	Construction Complete. Finalizing shared costs with County.
906	Water Pollution Rehab-Academy & Dunbar	15,000,000	A. Burroughs	JWSC	GMC	TBD			1,480,647	16,480,647	0	0	0	0	0	0	0	16,480,647	100.00%	March 2020	270 days	Fall 2021	Kickoff held 06/24/19, NTP dated 7/1/19
-	Sewer Expansion Study - Brunswick		A. Burroughs	JWSC	GWES	TBD	60,000		. ,	60,000	17,636	0	17,636	8,703	8,933	0	17,636	42,364	70.61%		Complete	Complete	Complete, awaiting final billing
	TOTALS	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			1	1	7,618,634	15,375,000	8,721,041	46,714,675		613.257	8,372,888			451,798	9.535.998	37,178,677	79.59%	<u> </u>			

UNSOLICTED PROPOSALS	DESCRIPTION	Concept	Application P	reliminary Engineering	Comprehensive Agreement	Project	Capital Fees Generated	STATUS
Sinclair S/D residential development (SSI)	121 Lot S/D; proposed improvements to PS2056 and force main.	Complete	Complete	Complete	Complete	*	*	Development still in planning review with Glynn County.
Bergen Woods Apartments	Proposed 252 apartment development; PS4105 and force main improvements.	Complete	Complete	Complete	Complete	*	*	Waiting on offiste forcemain & PS improvement plans for approval.
Frederica Township	Downstream upgrades to accommodate 200 additional lots; cooperative w/ Sinclair U.P.	Complete	Complete	Complete	Complete	*	*	Waiting on offiste forcemain & PS improvement plans for approval.
Oak Grove/Carolina Partners	Force main improvements to serve proposed development on Oak Grove Island.	Complete	Complete	Complete	Under review	*	*	Executed.
Saddlebrook Subdivision / Wade Jurney Homes	Improve PS4105 sewer capacity for the addition of 41 new homes	Complete	Complete	Complete	Complete	*	*	Executed. Capital fees paid.
Hillpointe LLC Apts. (link to Proj 904)	Improve PS4056 & 4059 for proposed 240 unit apt. complex 3061 Old Cypress Mill Rd.	Complete	Under review			*	*	Application under review.
Boomers Bakery (fmr. Pumpkin Patch) W& FM extension	Extend W&S from Friendly Exp #71 to 341; obtain easement	In discussions				*	*	In discussions with developer to obtain easement access to US341.

BULL PEN (Proposed)	
Glynn County Village Storm Improvements- Phase II	Opportunity project with Glynn County to replace/upgrade sections of W&S in common with areas of storm improvements.
JWSC 2020 SPLOST projects	Proposed list under Staff/BOC review.

<u>COMPLETED</u>		
213 NM WTP NPDES Permit	418 Southport Water Production Facility	706 Dunbar Creek WWTP Project Evaluation
225 CMMS System Upgrade	419 Canal Rd to Old Jesup W/S Improvements	707 Academy Creek WWTP Project Evaluation
301 SCADA Upgrade Project	424 Low Pressure Sewer Design-Community Rd	708 Academy Creek WWTP Odor Control
304 SSI Village Area Water Improvements	425 Low Pressure Sewer Design-Epworth Acres	709 Mainland Sewer Transmission Sys Cap
319 Urbana	503 Canal Crossing W/S Improvements	710 LF 2002 Upgrades
421 Mansfield	504 Canal Rd Pump Station	802 VT SCADA
403 SCADA Upgrade	505 Lift Station 2032 and Forcemain	803 SSI Sanitary Sewer Flow Monitoring
409 LS 2030 and FM Rehab	701 PS 4048 Force Main Improvements	901 Lift Station 3114 Upgrades Ph 1
413 Frederica/Atlantic Sewer & FM Rehab	702 (P1) North Mainland Sewer Improvements	902 Friendly Express
416 Hampton Water Production Facility	705 Hautala to Old Jesup Watermain Loop	909 CCTV Pump Station 4105 Reroute