

WARWICK SEWER AUTHORITY
Quarterly Report to City Council
October 16, 2017

WSA Budget

See attached line item budget report for FY18 to date as of August 31st (approximately 17% of fiscal year complete). In summary:

- Revenues -- \$3,645,073 (17.3%)
- Expenses -- \$606,759 (2.9%)

Please note that debt service payments are made twice a year (September and April) with the most substantial principal payments due in September. The WSA Finance Committee continues to meet monthly to discuss and work on, among other things, customer assistance programs and sewer connection incentive programs.

Major WSA Board Actions in Last Quarter

At the July meeting, the Board approved the purchase of a John Deere rider mower (\$10,200.00) to maintain the grounds at the facility and remote pumping stations. Permission was granted to purchase a Takeuchi track loader with brush cutter and wheel kit (\$58,525.00) to maintain the elevated levee; the equipment will also be used for snow removal during the winter months. This expense will be charged to the project loan. The Board authorized the repair and replacement (\$14,427.00) of dilapidated garage doors at the treatment facility, and the purchase of two chemical induction mixers (\$17,096.00) which are an integral part of our disinfection process. Bid #2018-067 was awarded to Polydyne, Inc. to supply a cationic polymer equivalent for wastewater treatment. An emergency repair to a sewer lateral in the Greenwood section was formally approved in the amount of \$5,800.00 (vendor Michael Perri & Sons). Emergency pumping service contracts with two local companies, Michael Perri & Sons and Diffley & Sons, Inc. were extended for one year for continuing on-call availability for emergency pump outs as needed. The Board awarded Caruso Scholarships to Tollgate High School graduates Steven Lee and Julia Sharma-Mathias. A sewer usage abatement (\$4,255.04) was approved by the Board for water not returned to the facility for treatment due to burst pipes at a customer's home. The Board approved the annual utility billing software maintenance service contract with Vision Government Solutions, Inc. (\$6,365.40).

At the August meeting, the Board approved a one-year extension of contract with Rhode Island Analytical Laboratories, Inc. to provide analytical laboratory services (Bid #2017-097) to WSA.

On September 28th, the Board approved multiple change orders to close out Contract 91 (AWT-Phosphorus Project) with Hart Engineering (itemized on page 3). The Board approved the sale of fiberglass sheeting (Bid #2018-1318) to Prime Marina for \$16,051.07. An emergency repair to a sewer lateral on Warwick Neck Avenue was formally approved in the amount of \$8,715.50 (vendor Armando Ricci & Sons). The Board approved the purchase of a computer server from PCM (\$16,559.00) as well as the purchase of a new generator (Milton Cat, \$26,175.00) and ancillary electrical work (Kent County Electrical Services, \$8,500). The Board approved a

contract with the Narragansett Indian Tribe for cultural resource monitoring in the Bayside sewer project area (\$11,700.00). A sewer usage abatement (\$1,245.39) was approved by the Board to correct a municipal lien certificate error.

WSA Regulations

WSA’s new draft regulations were finalized for public comment on September 8th. Notice about the draft regulation, public hearing and public comment period was published in the Warwick Beacon on September 12th, 14th, and 19th. A public hearing was held on September 25th. The draft regulations are available on the WSA website and hard copies available at WSA, City Hall and the main branch of the Library. Public comment will be accepted through October 16th. The WSA Regulation Committee will reconvene to review and respond to all comments and revise the draft as necessary.

Treatment Facility Operations and Maintenance (O&M)

Average flows to the treatment facility continue to hover around 4.5 million gallons per day. The WSA was in complete compliance with all permit parameters over the last quarter. Upgrades to the primary treatment process (installation of new mechanical solids removal equipment) are now complete.

The Facilities Plan Reaffirmation was submitted and approved by RIDEM since the last report. WSA continues to focus on its collection system Capacity Management Operations and Maintenance (CMOM) plan and implementation of the computerized asset management system (eRPortal).

Contract 91 (Treatment Facility Construction)

The project is now complete and the WSA is in the process of closing out the contract. The most recent progress report from AECOM has been included with this report.

Contract 91A (Levee Improvements)

This project is complete and WSA is preparing to submit the grant reimbursement request package to the Rhode Island Emergency Management Agency. The WSA held an event on August 17th to celebrate the completion of this project as well as the new phosphorus removal process.

CONTRACT 91/91A EXPENSE SUMMARY (as of September 30, 2017)						
Contractor	Original Contract Amount	Change Orders or Amendments	Total Contract Amount	Amount Paid to Date	%	Contract Amount Remaining
AECOM	\$ 1,803,900.00	\$ 79,865.00	\$ 1,883,765.00	\$ 1,719,676.24	91.3%	\$ 164,088.76
PARE	\$ 78,810.00	\$ 228,900.00	\$ 275,710.00	\$ 258,383.13	84.0%	\$ 49,326.87
Hart	\$14,479,000.00	\$ 410,816.81	\$14,889,816.81	14,644,046.28	95.9%	\$ 619,609.89
DeGregorio	\$ 2,465,460.00	\$(94,669.30)	\$ 2,370,790.70	\$ 1,638,165.88	66.1%	\$ 836,294.12

**Change
Order**

No.	Date	Amount	Reason
1	10/23/2014	\$ 4,051.00	Raise drainage structure in levee for maintenance/access
2	11/20/2014	\$ 21,919.20	Additional clearing of area adjacent to Route 95 to facilitate levee maintenance
3	10/23/2014	\$ 22,247.07	Add drainage to north side of Animal Shelter
4	2/26/2015	\$(530,639.15)	Adjustments to Bid Item No. 8 for floodwall installation
5	<i>reserved</i>		Steel sheeting proposal
6	12/18/2014	\$ 13,198.87	Modifications to sludge grinder pump piping
7	2/26/2015	\$ 911.05	Increase grating area
8	3/26/2015	\$ (35,332.07)	Junction chamber relocation/reconfiguration
9	<i>Rejected</i>		Duplex strainer
10	7/23/2015	\$ 29,151.29	Fiber optic line reroute
11	6/18/2015	\$ 40,100.20	PCB removal work
12	5/20/2015	\$ 3,472.42	Upgraded grinder pump
13	11/19/2015	\$ 58,240.18	Phosphorus analyzers
14	6/18/2015	\$ 61,547.41	New frac tank for sludge storage
15	7/23/2015	\$ 39,576.68	Pre-stressed concrete cylinder pipe
16	9/17/2015	\$ 4,819.68	Extend low pressure scum line
17	10/22/2015	\$ 59,433.79	Clarifier concrete repairs
18	11/19/2015	\$ 9,771.27	Center clarifier electrical work
19	10/22/2015	\$ 14,643.07	Hydrocone modifications
20	<i>withdrawn</i>		Hydrocyclone relocation
21	<i>withdrawn</i>		New mower for levee
22	11/5/2015	(357,276.00)	Credit for levee work
23	<i>withdrawn</i>		Additional PCB floor thickness
24	<i>withdrawn</i>		PS sludge line
25	<i>withdrawn</i>		Scum pipe hole core
26	11/5/2015	\$ 644,375.00	Phase I levee construction
27	11/5/2015	\$ 635,850.00	Phase II levee construction
28	<i>withdrawn</i>		Phase III levee construction
29	<i>withdrawn</i>		Repair of site lighting
30	<i>withdrawn</i>		Flowable fill of abandoned 48-inch pipe
31	4/28/2016	\$ -	TIME EXTENSION -- substantial completion to June 30, 2016
32	9/28/2017	\$ 5,233.60	Seal water piping for propellor pumps
33	<i>withdrawn</i>		HVAC controls - fiber optic lines
34	<i>withdrawn</i>		I-Client
35	6/23/2016	\$ -	TIME EXTENSION -- substantial completion to October 31, 2016
36	9/22/2016	\$ 35,100.00	Install new mixer supplied by Kruger
37	8/25/2016	\$ 911.05	Additional signage
38	<i>reserved</i>		
39	7/28/2016	\$ 8,583.16	Relocate drainage swale for Phase II levee

40	<i>reserved</i>		
41	10/27/2016	\$ -	TIME EXTENSION -- substantial completion to December 31, 2016
42	12/15/2016	\$ -	TIME EXTENSION -- substantial completion to March 31, 2017
43	9/28/2017	\$(195,192.15)	Balancing Change Order -- Levee
44	9/28/2017	\$ (9,890.00)	Credit for Electrical Testing
45	9/28/2017	(173,989.81)	Balancing Change Order - Phosphorus/Other
Total Change Orders:		\$ 410,816.81	

Sewer Extension Planning & Construction (projects included in \$33 million bond authorization)

Governor Francis Farms Phase III (Contract 85 B) – The most recent progress report has been included with this report.

East Natick Phase III/O'Donnell Hill (Contract 69 A) – The most recent progress report has been included with this report.

Northwest Gorton Pond (Contract 88) – The most recent progress report has been included with this report.

Bayside (Contracts 86A & B) – The most recent progress report has been included with this report.

See attached Construction Project Data Table for a summary of information related to projects with revenue bond funding authorization.

Warwick Sewer Authority FY18 Budget Report

Fund 80 - Sewer Operations, Maintenance, and Administration

As of August 31, 2017 (16.7% of fiscal year complete)

	FY18 Budget	Expensed/ Received as of August 31	% Expended/ Collected
Personnel			
Sick Time & Other Leave	\$0	\$4,566	0.00%
Salaries	\$2,260,219	\$250,746	11.09%
Overtime	\$65,000	\$12,957	19.93%
Overtime Storm/Snow	\$10,000	\$0	0.00%
Easement Overtime	\$20,000	\$0	0.00%
Temporary Services	\$7,000	\$1,096	15.66%
Fringe Benefits	\$1,050,768	\$0	0.00%
Commodities			
Office Supplies & Equipment	\$8,250	\$1,457	17.66%
Print, Bind & Reproduction	\$21,700	\$0	0.00%
Advertising	\$4,000	\$0	0.00%
Postage	\$39,000	\$1,318	3.38%
Laboratory Supplies	\$22,500	\$2,335	10.38%
Gasoline	\$50,000	\$3,380	6.76%
Natural Gas	\$55,000	\$1,613	2.93%
Electricity	\$725,000	\$55,889	7.71%
Supplies - Computer	\$2,000	\$201	10.05%
Supplies - Safety Equipment	\$6,500	\$0	0.00%
Chemicals - Ferric Chloride	\$10,000	\$0	0.00%
Chemicals - Polymer	\$144,500	\$19,933	13.79%
Chemicals - Chlorine	\$63,000	\$6,388	10.14%
Chemicals - Dechlor	\$39,000	\$2,766	7.09%
Chemicals - Odor Control	\$168,000	\$14,914	8.88%
Chemicals - Alum	\$109,000	\$9,882	9.07%
Chemicals - Caustic	\$179,000	\$20,360	11.37%
Clothing	\$8,000	\$990	12.38%
Maintenance Materials	\$125,000	\$8,489	6.79%
Small Tools	\$3,000	\$360	12.00%
Deduct Meters	\$5,000	\$2,186	43.72%
Grinder Pumps	\$110,000	\$57,288	52.08%
Easement/CMOM Commodities	\$27,500	\$4,824	17.54%
Services			
Travel	\$1,000	\$146	14.60%
Training & Education	\$11,526	\$3,752	32.55%
Telephone	\$17,000	\$2,755	16.21%
Water Usage	\$16,000	\$0	0.00%
Equipment Repair	\$80,000	\$324	0.41%
Tax Sale	\$25,000	\$0	0.00%

	FY18 Budget	Expensed/ Received as of August 31	% Expended/ Collected
Insurance	\$237,283	\$0	0.00%
Auto Maintenance	\$24,000	\$0	0.00%
Service Contracts	\$90,619	\$20,192	22.28%
Insured Accidents	\$0	\$0	0.00%
Professional Services	\$76,000	\$2,842	3.74%
Construction Services	\$135,000	\$6,671	4.94%
Sludge Removal	\$1,044,400	\$74,633	7.15%
Administration	\$111,716	\$0	0.00%
DEM - User Fees & Permits	\$3,370	\$0	0.00%
Testing & Lab Samples	\$48,400	\$0	0.00%
Engineering Services	\$105,000	\$8,000	7.62%
Sewer Connection Grants	\$41,100	\$0	0.00%
Public Outreach	\$4,000	\$0	0.00%
Services - Other	\$59,960	\$2,506	4.18%
<i>Other Expenditures</i>			
West Warwick WWTF	\$5,000	\$0	0.00%
<i>Debt Service</i>			
Paying Agent Fees	\$13,600	\$1,000	7.35%
Renew & Replacement	\$10,000	\$0	0.00%
Debt Service	\$10,963,712	\$0	0.00%
Debt Interest	\$2,307,529	\$0	0.00%
Sewer Connection Loan Default	\$5,000	\$0	0.00%
Infrastructure Replacement	\$0	\$0	0.00%
Misc Capital Expenditures	\$348,262	\$0	0.00%
<i>Total Expenses</i>	\$21,122,414	\$606,759	2.87%

	FY18 Budget	Expensed/ Received as of August 31	% Expended/ Collected
Revenues			
Industrial Pretreatment Fees	\$359,000	\$0	0.00%
Sewer Usage Fees	\$11,900,000	\$2,636,637	22.16%
Capital Account/Meters	\$5,000	\$2,066	0.00%
Energy Buyback Revenue	\$18,000	\$896	4.98%
Pretreatment Application Fees	\$6,000	\$700	11.67%
Sewer Service Charge	\$4,251,798	\$923,256	21.71%
Engineering Review Fees	\$6,600	\$1,200	18.18%
Sewer Assessment Fees	\$4,127,966	\$0	0.00%
Septage Dumping Fees	\$30,000	\$2,501	8.34%
Sewer Insurance	\$0	\$1,103	0.00%
Lease Income	\$41,100	\$0	0.00%
Pretreatment Fines	\$0	\$0	0.00%
Miscellaneous Income	\$4,000	\$3,646	91.15%
Sewer Connection Permits	\$45,000	\$7,950	17.67%
Reimburse - Grinder Pumps	\$25,000	\$11,207	44.83%
Sewer Tax Title Revenue	\$25,000	\$0	0.00%
Interest on Investments	\$1,200	\$232	19.33%
Interest Income	\$275,000	\$53,679	19.52%
SLA Administrative Fee	\$500	\$0	0.00%
SLA Inspection Fee	\$1,250	\$0	0.00%
Total Revenues	\$21,122,414	\$3,645,073	17.26%

NOTES:

1. **Depreciation expense** of approximately \$1.5 Million will be added by auditors when preparing the Sewer Fund balance sheet.
2. Current balance in **Renewal & Replacement Fund** is approximately \$335,018 (with an additional \$2,030,000 due from Fund 80 and \$397,000 due from billings).
3. **Debt Service Reserve Funds** (created with a portion of the proceeds from all revenue bond loans) currently totals \$3,200,000 to be used for final years of loan payments (starting in about 10 years).
4. There are other smaller Funds established and maintained for various purposes including Inflow & Infiltration Fund approximately (\$86,000), Sewer Line Agency Fund (revolving account for miscellaneous sewer line extensions paid for by private developers and property owners, about \$250,000).

**WARWICK SEWER AUTHORITY
 CONTRACT 91: PHOSPHORUS REMOVAL UPGRADE / FLOOD
 CONTROL AND MITIGATION
 AUGUST/SEPTEMBER 2017 PROGRESS REPORT
 September 25, 2017**

This Progress Report summarizes activity between August 22, 2017 and September 22, 2017 on Contract 91: Phosphorus Removal Upgrade/Flood Control & Mitigation Project, and provides a look ahead.

Look Ahead

- Continuation of punch list/incomplete work items and closeout documents

Progress Items

No.	Item	Task For	Status
1	Administrative		
	Close out paperwork	AECOM, Hart, WSA	Ongoing
	Record drawings	AECOM, Hart	Drafting is approximately 70% complete and ongoing; drafting continues for the remainder of those submitted; received outstanding drawings from Hart
2	Construction		
	Punch list/Warranty Items	Hart, AECOM	Ongoing. Need to establish warranty completion date.
3	Startup, Troubleshooting and Testing		
	Provide two additional polymer pumps	Kruger	Kruger to replace remaining two poly pumps
	Polymer storage and access to polymer in the bottom of the tank	Kruger	Kruger to raise tank to provide gravity access to contents
	Process adjustments; monitoring enhancements	WSA staff/AECOM	Complete ORP probes relocated, RAS pump flow control completed, historian complete; Adjustments to process control including flow splitting and ORP observation and control continue to improve operations. Recommended initiating variable speed of alum feed pumps at the BNR's to dose alum dependent upon ORP. WSA to implement.
	Performance testing	Hart, Kruger,AECOM	Complete.



September 26, 2017

PROGRESS REPORT
GOVERNOR FRANCIS PHASE III

Work this Period: None

Status:

1. The purchase and sales agreement has been signed.
2. The project was advertised and bids were received on August 16, 2017.
3. Administrative Subdivision plan was submitted to the Planning Department on August 3, 2017. We are awaiting review by the Planning Department.
4. The zoning application will be filed for the pump station upon review by the Planning Department.

Design Schedule:

Tasks	2017																	
	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan.	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept
Final Design																		
• Plans and Specifications																		
• Pumping Station																		
- Civil																		
- Mechanical																		
- Electrical																		
• Utility Company Reviews																		
• Land Acquisition & Zoning																		
• RIDEM Order of Approval																		
• RIDEM RICRMC Approval																		
Construction Bid Documents																		
Advertise, Bids & Award																		
Construction																		

Legend
 GRA - Tasks
 WSA - Tasks
 Agency Reviews
 Contractor



Gordon R. Archibald, Inc.
Civil and Environmental Engineers

September 26, 2017

PROGRESS REPORT
BAYSIDE SEWERS PROJECT

Work this Period:

1. GRA continues to coordinate and to collect service connection cards. We have secured over 500 service connection cards.
2. GRA continues to field mark proposed drill pit locations.
3. PAL Inc. continues with archaeological field investigation work at proposed drill pit locations. PAL, Inc. has completed work on approximately 85% of the streets. Work has been completed on the following streets; Height Street, Webb Avenue, Friendship Avenue, River Vue Avenue, Bolster Avenue, Mill Cove Road, Lippett Avenue, Basset Avenue, Beatrice Avenue, Beatrice Terrace, Cady Avenue, Clara Avenue, Pender Avenue, Whipple Avenue, Hope Avenue, Lyndon Avenue, Wentworth Avenue, Hope Avenue, Hamlin Avenue, Ocean Avenue, Payton, Riverside Avenue, Curry Place, Samuel Gorton Avenue, Park Avenue and Van Zandt Avenue.
4. There were no significant archaeological finds noted by PAL, Inc. during this period.
5. Narragansett Improvement Company is on-site weekly to remove pavement and to patch pavement for field investigations.



PROGRESS REPORT
EAST NATICK – PHASE 3 (O'DONNELL HILL)

DATE SEPTEMBER 23, 2017
PROJECT NUMBER 04635.00
INVOICE NUMBER

PROFESSIONAL SERVICES FROM JULY 16, 2017 TO SEPTEMBER 23, 2017

PROJECT SUMMARY:

FILE REVIEW

Completed

BASE PLAN MODIFICATIONS

Completed

DESIGN PLAN, SPECS & EST. MOD.

Completed

ADDITIONAL SERVICES BEYOND SCOPE OF CONTRACT

No work this period

CONSTRUCTION BIDDING SERVICES

No work this period

WETLANDS BIOLOGIST

Completed

PRINTING

No work this period

CONTRACT AMENDMENT #1

Completed

CONTRACT AMENDMENT #2

No work this period

CONTRACT AMENDMENT #3

Attendance at Site Meeting on August 31, 2017



PROGRESS REPORT
SANITARY SEWER IMPROVEMENTS – NORTHWEST GORTON POND

DATE SEPTEMBER 23, 2017
PROJECT NUMBER 6342.01
INVOICE NUMBER

PROFESSIONAL SERVICES FROM JULY 16, 2017 TO SEPTEMBER 23, 2017

PROJECT SUMMARY:

FINAL DESIGN – PLAN PREPARATION
Completed.

FINAL DESIGN – SPECS & QUANTITIES
Completed this Period.

FINAL DESIGN – PUMP STATION & FORCE MAIN PLANS
Completed this Period.

FINAL DESIGN REIMBURSABLES
No work this period

CONTRACT AMENDMENT #4

FILE REVIEW AND PROJECT RESTART
Completed.

LAND SURVEYS
Completed.

AERIAL MAPPING
Completed

PLAN PREPARATION OF COLLECTION SYSTEM
No work this period.

CONTRACT SPECS, QUANTITIES & ESTIMATE
No work this period.

(2) PUMP STATION AND FORCE MAIN DESIGN PLANS / DETAILS
No work this period

WSA Construction Project Data Table as of 9-30-17

As Of: 09/30/17

PROJECT STATUS Updated Since Last Report

Projects Included in \$33 Million Revenue Bond Authorization

Project Name	Design Completion Date	Design Percent Complete	Design Certificate of Approval	Construction Certificate of Approval	Order of Approval	Construction Completion Date	Construction Percent Complete
East Natick III (O'Donnell Hill)	Preparing to bid in 2018	97%	N/A	5/16/16	N/A		
Northwest Gorton Pond	Still Planning for 2017	80%	N/A				
Governor Francis III	Bids submitted 2017	100%	8/4/2008	12/27/2016	9/19/2016		
Bayside 86A-1 (Tidewater Interceptor)	05/01/15	100%	5/16/2006	7/7/2015	7/7/2015	09/04/15	100%
Bayside 86B (Tidewater Interceptor and Lateral Pressure Sewers)	Still Planning for 2017	40%	5/16/2006				

Projects Included in \$23 Million Revenue Bond Authorization

Project Name	Design Completion Date	Design Percent Complete	Design Certificate of Approval	Construction Certificate of Approval	Order of Approval	Construction Completion Date	Construction Percent Complete
AWT Phosphorus Upgrade	12/31/13	100%	N/A	3/14/2014	4/3/2013		100%
AWT Levee Improvement	12/31/13	100%	N/A	3/14/2014	4/3/2013		100%
Primary Clarifier Rebuild	12/01/16	100%	N/A	3/7/2017	N/A		100%

PROJECT EXPENSES

Projects Included in \$33 Million Revenue Bond Authorization

Project Name	Design Expenditures	Land Acquisition	Construction Expenditures	Inspection Expenditures	Traffic Details Expenditures	Miscellaneous Expenditures	Expenditures to Date	RI Infrastructure Bank Payments	To be Reimbursed by FEMA
East Natick III (O'Donnell Hill)	\$30,537.50	N/A	\$0.00	\$0.00	\$0.00	\$800.00	\$31,337.50	\$7,177.50	N/A
Northwest Gorton Pond	\$267,955.83	N/A	\$0.00	\$0.00	\$1,427.43	\$0.00	\$269,383.26	\$0.00	N/A
Governor Francis III	\$213,221.10	\$3,500.00	\$0.00	\$0.00	\$0.00	\$154.00	\$216,875.10	\$50,471.91	N/A
Bayside 86A-1 (Tidewater Interceptor)	\$11,511.25	N/A	\$302,841.88	\$26,793.73	\$1,105.19	\$0.00	\$342,252.05	\$330,740.80	N/A
Bayside 86B (Tidewater Interceptor and Lateral Pressure Sewers)	\$674,237.27	N/A	\$0.00	\$0.00	\$28,558.60	\$103,687.32	\$806,483.19	\$806,483.19	N/A

Projects Included in \$23 Million Revenue Bond Authorization

Project Name	Design Expenditures	Land Acquisition	Construction Expenditures	Inspection Expenditures	Traffic Details Expenditures	Miscellaneous Expenditures	Expenditures to Date	RI Infrastructure Bank Payments	To be Reimbursed by FEMA
AWT Phosphorus Upgrade	\$749,457.85	N/A	\$12,368,222.05	\$1,615,852.82	\$0.00	\$448,190.96	\$15,181,723.68	\$14,970,136.71	N/A
AWT Levee Improvement	\$147,312.96	N/A	\$4,351,262.16	\$411,796.10	\$0.00	\$0.00	\$4,763,058.26	\$0.00	\$3,600,000.00
Primary Clarifier Rebuild	\$42,243.44	N/A	\$127,984.00	\$32,038.00	\$0.00	\$0.00	\$202,265.44	\$0.00	N/A

Cost of Issuance and Debt Service Reserve for all borrowing: \$2,043,432.00 through 2017

Total Bond Authorization Utilized: \$18,208,442.11 loan

Total Bond Authorization Remaining (of \$56 Million): \$37,791,557.89