



Public Works Monthly Executive Summary August 2023

Street Department

During the month of August, The Street Department has been busy throughout the city repairing potholes and sinkholes throughout Cove Life. The Street Department has been busy throughout the city. Additional activities included:

- Trim back limbs and vegetation on the city rights-of-way.
- Setup for traffic control for Food Truck Friday, **rained out.**
- Assisted the contractor with Public Works compound construction.
- Prepared for Hurricane Idalia and staffed operations 24/7 until the storm had passed.

The Street Department completed 32 additional work orders that pertained to street and stormwater issues.

Parks Department

During the month of August, the Parks Department mowed, trimmed, and edged all areas one time including the DOT rights-of-way, all City rights-of-way, City Parks, and FCT property. Additional activities included:

- Monthly playground equipment inspection and necessary repairs.
- Food Truck Friday Setup for traffic control for Food Truck Friday, **rained out.**
- Clean storm drains City Wide.
- Cleaned the pool 4 times.
- Prepared for Hurricane Idalia

The Parks Department completed 2 additional work orders outside of their normal daily work schedules.

Equipment Maintenance

The Equipment Maintenance Shop, as always, works hard to keep the equipment and vehicles going so the city can continue to provide our citizens with the exceptional service they are accustomed to. During the month of August, Danny, John, and Donald completed **84** work orders. Prepped all emergency equipment for Hurricane Idalia.

Tradesworker

During the month of August 38 work orders were completed. Prepped City facilities for Hurricane Idalia.

Solid Waste Department

Cove Life, Litter Cleanup Program & New Services:

- Picked up everything around the rollout cans.
- Picked up as much loose trash, palm fronds, and sticks as possible on the streets, along the R.O.W. and ditches regardless of if it is near a container or not.
- Delivered 7 trash cans and 7 recycle bins to new customers.
- Delivered 12 recycle bins to current customers.
- Repaired 40 trash cans.
- Replaced 4 trash cans.
- Prepped for Hurricane Idalia.

This month August, the city collected:

- **391.11** tons of Class I garbage (18% increase)
- **15.67** tons of recycling (5 % decrease)
- **123.51** tons of yard waste (4 % increase)
- **61.68** tons Sludge
- **0** tons Street Sweeping
- **14.04** tons of white goods and other junk

For comparison during August 2022, the city collected:

- **330.35** tons of Class I garbage
- **16.53** tons of recycling
- **118.44** tons of yard waste
- **89.19** tons Sludge
- **12.49** Street Sweeping
- **30.58** tons of white goods and other junk

Water/Wastewater

- W/WW crews/management had personal interaction with several citizens regarding water/sewer issues.
- Contacted all customers on water and irrigation “Highest Users” report that had unusual consumption (not usually on report)
- Staff continues to refine the scope and financials of the consolidated AWWTP, expanded reclaimed water system, wastewater collection system improvements and water system capital improvements to obtain maximum grant potential, optimize loan conditions and minimize impact to customers.
- W/WW/RW Projects;
 - Design of the improvements to the city’s wastewater treatment system (all phases) is complete. In order to maximize grant opportunities, the initial construction phase was split into two pieces, for a total of four phases;
 - Phase I is construction of the on-site reclaimed water system (storage tanks, high service pumps, electrical) at the existing Harbor Road Facility, and rehabilitation of Master Lift Stations #2 and #4. This phase went out to bid in January in two parts – plant reclaimed water improvements & lift station #2 & #4. **Construction was completed in June 2020.** The total Phase I cost is

\$6,120,600. Staff received \$4,063,425.00 in “Principal Forgiveness” (grant) from FDEP (SRF).

- Phase II:
 - Construction of the new 1.25 million gallon per day (MGD) advanced wastewater treatment plant (AWWTP) at the Harbor Road site. **Construction approximately 85% complete. Contractor has abandoned site and filed for bankruptcy protections. Working with bonding agency to obtain a new general contractor to complete construction.**
 - Phase III:
 - A new force main from Lift Station #2 diverting the sewage from the South Plant to Harbor Road (all sewage generated in the City will be treated at the new Harbor Road AWWTP).
 - Decommissioning and “mothballing” of the South Wastewater Treatment Plant. The permit will remain in place and the plant could be re-commissioned at a later date depending on future activities at the Reynolds site. **Staff has applied for a grant from a new program at FDEP for this construction. This is a grant only. A private loan would be required to pay the balance between grant amount and actual project cost. A full analysis will take place upon results of grant application.**
 - Phase IV (future – determined by growth) is a second identical 1.25 MGD AWWTP built at the Harbor Road site. An alternative would be construction of this train at the South Plant site in Reynolds Park if the southern /Reynolds portion of our service territory is where significant growth occurs
 - Phase V (future – determined by growth) is a third identical 1.25 MGD AWWTP built at the Harbor Road or Reynolds site.
- Sanitary Sewer Evaluation Survey (SSES) of the Core City wastewater collection system is **complete**, including Mittauer final report. Staff utilizes this data daily in evaluating collection system repairs and requests for sewer connections.
 - Continuing to work with FDOT and Clay County on utility relocations associated with the First Coast Expressway and Clay County road expansions (CR 315 & CR 209 / Russel Road). Project schedules and designs continue to change.
 - **Senate Bill 64, The Surface Water Discharge Elimination Act:** In 2021 the Florida Senate approved SB 64, which requires wastewater treatment plants to eliminate surface water discharges by 2035, which has become a significant financial burden to utilities. This requires the city to eliminate effluent discharge from the Harbor Road and South wastewater treatment plants to the St. Johns River. While the city has been implementing reclaimed water projects for several years, there are not enough uses to take all of the city’s treated wastewater.

In November 2021, as required, the city submitted to FDEP a plan as to how surface water discharges will be eliminated. That plan, which is to re-pipe Magnolia Point irrigation to reclaimed water, was approved by FDEP. As Magnolia Point is a large user of potable / aquifer water for irrigation, this project has two benefits – reducing surface water discharges and reducing withdrawals from the Floridan Aquifer for irrigation.

Staff have applied for a loan / grant from the Drinking Water SRF Program for design and permitting of the Magnolia Point Reclaimed Water Project.

Potable Water:

- Staff and Mittauer have completed a full review of the future capital needs of the water system. A comprehensive capital improvement program (CIP) has been developed as part of the Water Master Plan. As in the past, the timing of many of these improvements is driven by future activities in Reynolds Industrial Park and other areas of our service territory. The city has received an FDEP – SRF loan for Planning and Engineering of several of the CIP improvements so that as the need for the improvements occur, the City is ahead of the game and can apply very quickly to SRF for actual construction dollars as “shovel-ready” projects. The total design project cost is \$356,800.00, with a \$178,400.00 (50%) principal forgiveness (grant), leaving an actual loan of \$180,100.00.
- Reynolds Water System Improvements:
 - New water mains along two primary streets to remedy fire hydrants that were inadequate.
 - New 12” water main crossing under SR 16 to replace aging mains that endanger the integrity of the road. This eliminated four existing crossings.
 - New water main along Red Bay Road eliminating existing aging and leaking pipes. In addition remediating fire hydrants that were inadequate.
 - New water main and sewer force main extension from Reynolds Park to and across the MOBRO complex. This extension is designed to supply water, fire protection & sewer needs to MOBRO and future developments to the east.
 - **Completed September 2021**

South Service Territory Improvements:

- New 12” water main loop from US17 along CR 209 S to the existing 12” water main that terminated at 4600 CR 209 S. This also included a new 4” sewer force main from US 17 along CR 209 S to the First Coast Expressway crossing. **Completed September 2021**
- The City has received grants from the State of Florida Hazard Mitigation Grant Program (HMGP) to install auxiliary generators at 17 sewage lift stations, and install generators / raise infrastructure at four additional stations. The grant funds 75% of the improvements. **Approximately 99% complete**
- Continued remediation of malfunctioning or out-of-service hydrants.
- Operated and maintained the Harbor Rd. and South Wastewater Treatment Plants as well as the Harbor Rd. and Reynolds Water Treatment Plants to meet the requirements of Regulatory Agencies.
- Continued to make process control adjustments at the Harbor Rd. and South WWTP in efforts to further lower Total Nitrogen and Total Phosphorus levels being discharged to the St. Johns River.
- Continued landscape maintenance at Water and Wastewater Treatment Facilities as well as lift stations.
- Continued preventative maintenance on all treatment facility generators.
- Completed 9 new services.
- Completed 53 water-related work orders.
- Completed 22 sewer related work orders.
- Responded to 137 utilities locate requests.

TOP 10 WATER CUSTOMERS AUGUST 2023

Largest (By Consumption)		Largest (By Dollar Amount)	
Rank	CONSUMER	Rank	CONSUMER
1	Sheriff's Department	1	Sheriff's Department
2	AMH Development NON Res	2	AMH Development NON Res
3	Vallencourt Construction	3	Mobro Marine INC
4	Mobro Marine INC	4	Vallencourt Construction
5	Georg & Darlene Guess	5	Permabase Building Products
6	Permabase Building Products	6	George & Darlene Guess
7	Magnolia Point Investments	7	Magnolia Point Investments
8	Hut American Group LLC	8	Edgewater Landing HOA
9	Vystar Credit Union	9	Hut American Group LCC
10	Rosewood Homes LLC	10	Rosewood Homes LLC

TOP 10 IRRIGATION CUSTOMERS AUGUST 2023

Largest (By Consumption)		Largest (By Dollar Amount)	
Rank	CONSUMER	Rank	CONSUMER
1	Sheriff's Department	1	Sheriff's Department
2	Green Cove Springs Marina	2	Governors Creek#436
3	Premier Surface Design LLC	3	Premier Surface Design LLC
4	Wiggins Construction CO	4	Wiggins Construction CO
5	Kindred Health	5	Green Cove Springs Marina
6	Governors Creek #436	6	Kindred Health
7	Leeman & Patrica Bennett	7	Clay County Court House
8	Clay Port INC	8	Leeman & Patricia Bennett
9	Clay County Court House	9	Clay Port INC
10	Diamond Assisted Living	10	Diamond Assisted Living

TOP 10 SEWER CUSTOMERS AUGUST 2023

Largest (By Consumption)		Largest (By Dollar Amount)	
Rank	CONSUMER	Rank	CONSUMER
1	St. John's Landing	1	St John's Landing
2	Sheriff's Department	2	Sheriff's Department
3	Premier Surface Design LLC	3	Governors Creek#436
4	Wiggins Construction CO	4	Premier Surface Design LLC
5	Kindred Health	5	Wiggins Construction CO
6	Governors Creek \$436	6	Kindred Health
7	Leeman & Patricia Bennett	7	Clay Court House
8	Clay Port INC	8	Clay Port INC
9	CLAY County Court House	9	Diamond Assisted Living
10	Diamond Assisted Living	10	Vac-Con

Wastewater Plant Capacity Status

South Plant: TMDL Capacity 0.350 MGD*,

- Current Loading 0.268 MGD*, 77% Capacity (July 2023 Annual Average)
- Current & Committed (.065) Loading 0.324 MGD*, 95% Capacity
- Current, Committed (.065) & Requested (0.40) Loading 0.364 MGD*, 104% Capacity

Harbor Road: TMDL Capacity 0.650 MGD*

- Current Loading 0.493 MGD*, 76% Capacity (July 2023 Annual Average)
- Current & Committed (0) Loading 0.493 MGD*, 76% Capacity
- Current, Committed & Requested (0) Loading 0.493 MGD*, 76% Capacity

*MGD = Million Gallons per Day

Note: No Reynolds growth or loading projections included in above.