



Public Works Monthly Executive Summary October 2020

Street Department

During the month of October, The Street Department has been busy throughout the City. Additional activities included:

- Clean storm drains City Wide.
- Food Pantry Improvement project (CARES Act).
- 2 Critter Control removal.
- Chapman Substation road improvements.

The Street Department completed 25 additional work orders that pertained to street issues.

Parks Department

During the month of October, the Parks Department mowed, weed-eated, and edged all areas one time including the DOT right-of-ways, City Parks, and FCT property. Additional activities included:

- Monthly playground equipment inspection and necessary repairs.
- Upgrade flower beds on Walnut Street East.
- Clean storm drains City Wide.
- Cleaned the pool 4 times.

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 78 work orders.

Tradesworker

During the month of October, 35 work orders were completed.

Solid Waste Department

Cove Life, Litter Cleanup Program & New Services:

- Picked up everything around the rollout cans including large piles of furniture and trash.
- 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.
- Picked up debris in the parks and cleaned the park restrooms on Fridays.
- Delivered 10 trash cans and 20 recycle bins to new customers
- Delivered 6 blue bins to current customers
- Repaired 2 trash cans.
- Replaced 5 trash cans.

This month, the City collected:

- 333.58 tons of Class I garbage (9.5% increase)
- 20.16 tons of recycling (12% increase)
- 140.38 tons of yard waste. (69% increase)

For comparison during October 2019, the City collected:

- 304.86 tons of Class I garbage
- 18.00 tons of recycling
- 83.00 tons of yard waste

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 is in progress with the plant portion at approximately 75% completion and lift stations #2 & #4 at 85% completion. The total Phase I cost is \$6,120,600. Staff received \$4,063,425.00 in “Principal Forgiveness” (grant) from FDEP (SRF). **Project Complete June 2020**
 - Phase II:
 - Construction of the new 1.25 million gallon per day (MGD) advanced wastewater treatment plant (AWWTP) at the Harbor Road site. **Submitting Request for Inclusion (loan application) for Phase II June 2020**

- 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.
 - Phase IV (future – determined by growth) is a second identical 1.25 MGD AWWTP built at the Harbor Road site.
 - Phase V (future – determined by growth) is a third identical 1.25 MGD AWWTP built at the Harbor Road 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 on utility relocations associated with the First Coast Expressway.
 - Updated Water Rate Study **complete**.
- Staff and Mittauer have initiated 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, timing of these improvements is largely driven by future activities in Reynolds Industrial Park. 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: In May 2020 the City awarded construction of the upgrades to the system to General Underground. The system improvements include;
 - New water mains along two primary streets to remedy fire hydrants that are inadequate.
 - New 12” water main crossing under SR 16 to replace aging mains that endanger the integrity of the road. This will eliminate four existing crossings.
 - New water main along Red Bay Road to eliminate existing aging and leaking pipes. In addition will remedy fire hydrants that are 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.
 - The City Manager and staff have applied for a grant to ease the financial burden on MOBRO and the City for this project.
- 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. This project is underway.
- 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 13 new services.
- Completed 138 water related work orders.
- Completed 44 sewer related work orders.
- Responded to 160 utilities locate requests.

TOP 10 WATER CUSTOMERS October 2020

| Largest (By Consumption) | | Largest (By Dollar Amount) | |
|-----------------------------|--------------------------------|-------------------------------|-------------------------------|
| Rank | CONSUMER | Rank | CONSUMER |
| 1 | Sheriff's Department | 1 | Sheriff's Department |
| 2 | Garden Highway SE LLC | 2 | Garden Highway SE LLC |
| 3 | Kindred Health | 3 | Kindred Health |
| 4 | Public Instruction | 4 | Clay High |
| 5 | Governors Creek #436 | 5 | Governors Creek #436 |
| 6 | Clay High | 6 | Public Instruction |
| 7 | Clay County Court House | 7 | Clay County Court House |
| 8 | Premier Surface Design LLC | 8 | Green Cove Spring Junior High |
| 9 | R C Bannerman Learning Center | 9 | Premier Surface Design LLC |
| 10 | Green Cove Springs Junior High | 10 | Garden Highway SE LLC |

TOP 10 IRRIGATION CUSTOMERS October 2020

| Largest (By Consumption) | | Largest (By Dollar Amount) | |
|-----------------------------|-------------------------------|-------------------------------|-------------------------------|
| Rank | CONSUMER | Rank | CONSUMER |
| 1 | Magnolia Point Investments | 1 | Magnolia Point Investments |
| 2 | Magnolia Point Association | 2 | Magnolia Point Association |
| 3 | National Gypsum Company | 3 | Edgewater Landing HOA of Clay |
| 4 | Vallencourt Construction | 4 | National Gypsum Company |
| 5 | Governors Creek #436 | 5 | Vallencourt Construction |
| 6 | Edgewater Landing HOA of Clay | 6 | Governors Creek#436 |
| 7 | Sheriff's Department | 7 | Sheriff's Department |
| 8 | AMH Development LLC | 8 | AMH Development LLC |
| 9 | Sheriff's Department | 9 | AHM Development LLC |
| 10 | AMH Development LLC | 10 | AHM Development LLC |

TOP 10 SEWER CUSTOMERS October 2020

| Largest (By Consumption) | | Largest (By Dollar Amount) | |
|-----------------------------|-------------------------------|-------------------------------|-------------------------------|
| Rank | CONSUMER | Rank | CONSUMER |
| 1 | St Johns Landing | 1 | St. John's Landing |
| 2 | Sheriff's Department | 2 | Sheriff's Department |
| 3 | Garden Highway SE LLC | 3 | Garden Highway SE LLC |
| 4 | Kindred Health | 4 | Kindred Health |
| 5 | Public Instruction | 5 | Clay High |
| 6 | Governors Creek #436 | 6 | Governors Creek#436 |
| 7 | Clay High | 7 | Public Instruction |
| 8 | Clay County Court House | 8 | Clay County Court House |
| 9 | Premier Surface Design LLC | 9 | R C Bannerman Learning Center |
| 10 | R C Bannerman Learning Center | 10 | Premier Surface Design LLC |

Wastewater Plant Capacity Status

South Plant: TMDL Capacity 0.350 MGD*,

- Current Loading 0.266 MGD*, 76% Capacity (September 2020 Annual Average)
- Current & Committed (.033) Loading 0.300 MGD*, 86% Capacity
- Current, Committed & Requested (0) Loading 0.300 MGD*, 86% Capacity

Harbor Road: TMDL Capacity 0.650 MGD*

- Current Loading 0.495 MGD*, 76% Capacity (September 2020 Annual Average)
- Current & Committed (.092) Loading 0.590 MGD*, 91% Capacity
- Current, Committed & Requested (0) Loading 0.576 MGD*, 91% Capacity

*MGD = Million Gallons per Day

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