



## **ELECTRIC DEPARTMENT**

### **Significant activities for the month of February 2021**

- 12 Streetlights repaired
- 7 Permanent meters installed
- 2 Temporary meters installed
- 1 Meter removed
- 2 Meter check
- 2 Poles removed
- 6 Poles installed
- 3 Voltage check
- 12 Utility Verifications

### **In addition to the activities listed above, the Electric Department also:**

- Conducted daily morning safety meetings.
- Conducted daily truck inspections.
- Trimmed limbs and vines from power lines and poles.
- Unloaded transformers and supplies when they come in.
- Inspect/locate ROW permits.
- Conduct warehouse inventory/order supplies
- 477 Orange Ave., disconnect power for customer to change out meter.
- 4530-3 CR 315., measure the diameter of the buss work.
- 451-457 Jeri Dr., re-insulate 2 poles and replaced 1 transformer and re-work all secondary.
- 701 Houston St., removed service for house fire.
- Chapman Substation., removed feeds to cat bank.
- 965 Worthington Ave., replaced mushroom insulators with tie to jug insulators.
- 4530-3 CR 15A, installed 2 multi-helix anchors for chapman 1 feeder.
- 232 Walnut St., move service to new pole and put new CT's in.
- 1005A Bunker Ave., replaced JD's insulators with polymer insulators.
- 3992 East CR 16A, changed out single-phase dead-end pole that is bad at top.
- 1107 Martin L. King, Jr Blvd., pulled in secondaries to new library building.
- 903 Ferris St, Apt 4., reconnected overhead service conductors.

## **During the month of February, the Electric Department responded to the following outages:**

02/03/2021 – Between 7:00 a.m. – 8:00 a.m., 444 S Vermont Ave., blown fuse on transformer related to cold weather, 7 customers affected.

02/05/2021 – Between 10:00 a.m. – 11:30 a.m., 710 S Highland Ave., blown transformer fuse by squirrel, 4 customers affected.

02/21/2021 – Between 7:45 a.m. – 10:30 a.m., 201 N Oakridge., burnt connections repaired, 3 customers affected.

02/22/2021 – Between 7:30 a.m. – 8:30 a.m., 3776 Randall RD., blown fuse by squirrel, 3 customers affected.

02/26/2021 – Between 7:00 a.m. – 7:30 a.m., 601 N Palmetto Ave., blown transformer lateral fuse by squirrel, 10 customers affected.

02/27/2021 – Between 9:45 a.m. – 12:15 p.m., 100 Joey Circle W, blown transformer fuse, 20 customers affected.

02/27/2021 – Between 12:15 p.m. – 3:15 p.m., 1465 River Ln, blown transformer fuse by squirrel, 10 customers affected.

02/28/2021 – Between 9:10 a.m. – 10:15 a.m., 821 Cove St, blown transformer fuse by squirrel, 5 customers affected.

## **Electric Utility Top Consumption Customers (kwh/meter) for February:**

<b><u>NAME</u></b>	<b><u>SERVICE ADDRESS</u></b>	<b><u>KWH</u></b>	<b><u>AMOUNT</u></b>
St. Johns Landing	1408 N. Orange Ave.	292,100	\$28,675.80
Clay County Jail	901 N. Orange Ave.	264,640	\$23,109.84
BD Of County Commissioner	825 N. Orange Ave.	208,800	\$18,121.80
Kindred Health	801 Oak St.	183,000	\$15,848.00
Winn Dixie Stores, Inc	3260 Hwy. 17 N.	157,400	\$14,353.40
Tamko Roofing Products	914 Hall Park Rd.	136,800	\$12,605.20
Clay County Court House	825 N. Orange Ave.	133,920	\$11,353.52
National Gypsum Company	1767 Wildwood Rd.	108,640	\$ 9,789.84
Governors Creek #436	803 Oak St.	98,400	\$ 9,620.40
Garber Realty/GMC	3340 Highway 17	89,760	\$ 8,462.96
BD Of Public Instruction	2025 State Road 16	83,400	\$ 8,912.40
City of Green Cove Springs	Set Street Lights	66,392	\$ 6,717.59
City of Green Cove Springs	1277 Harbor Road	65,440	\$ 5,553.04
Clay County Driver's License	477 Houston St.	63,360	\$ 6,126.16
VAC-CON	954 Hall Park Rd.	53,280	\$ 5,233.68
BD Of Public Instruction	801 Center St.	51,040	\$ 5,210.64
Coral Ridge Foods	1165 N Orange Ave.	47,520	\$ 4,430.32
City of Green Cove Springs	925 S R 16 East South Wwtp	46,960	\$ 4,247.76
Direct TV/AT&T Services Inc.	512 Center St.	45,280	\$ 3,931.28
Pegasus Technologies	932 Pilot Dr.	44,640	\$ 4,249.64
Duval Asphalt Products, Inc	1921 Jersey Ave (east End)	43,200	\$ 7,248.20
BD Of Public Instruction	1 N Oakridge Ave	42,960	\$ 5,752.16
BD Of Public Instruction	Clay High School	42,720	\$ 5,000.72

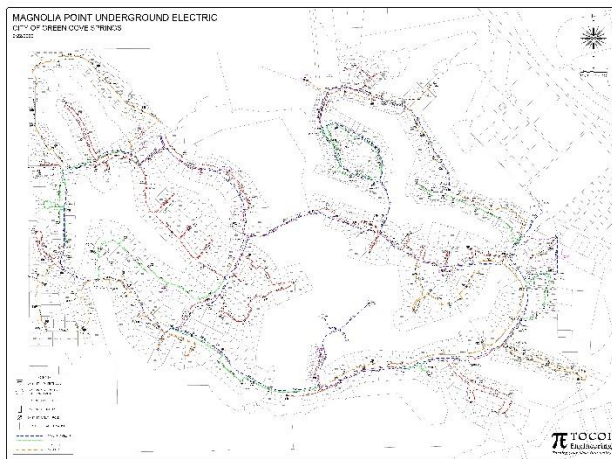
# Electric Utility Department Capital Projects:

## Pole top switch replacement

This project began 09-18-2019 with the installation of switches at Governors Creek for restoration plan if isolation of north feeder across Governors Creek Bridge during extreme emergencies. Project is now in the inspection and evaluation process involving Chapman 2 extension to Harbor Rd and load transfer of Chapman 1 to Chapman 2.

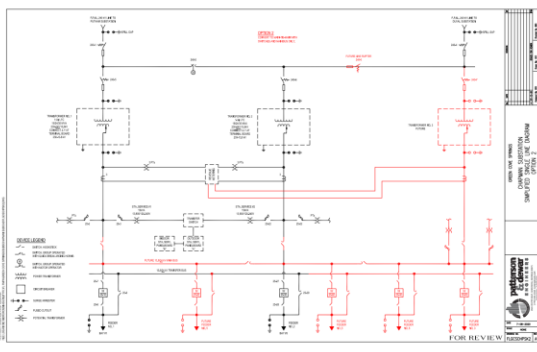
## Magnolia Point Reconductor

The City has provided survey and equipment rating information to Toco Engineering. The project is 100% designed. The backbone switchgear and wire have been ordered and received. Work is expected to start in Spring 2021 with completion by Winter 2021. Work will be completed by City crews with support from contractors as necessary.



## Chapman Substation upgrade

Patterson and Dewar is the City's engineering firm for this project. The transformer has been specified and ordered. Patterson and Dewar is designing the rest of the improvements to the substation as well as SCADA to be installed throughout the system. Design is complete. The construction was awarded to Terry's Electric. They arrived on site the first week of January 2021 to begin work at the substation. The new transformer is set to be delivered in March. The project should be complete in July 2021.



## Chapman 3<sup>RD</sup> Circuit

IRBY Construction began September 21, 2020 and the project is now complete.



## Chapman 1 / Chapman 2

Express circuit feed project of Chapman 1 to north of Governors Creek (a.k.a. **Magnolia Point Third Feed**) and Chapman 2 extension to Harbor Rd project have been combined to balance future load requirements north of Governors Creek and to supply additional restoration procedure options involving electric outages north of Governors Creek. Conductor had been installed on Roberts St. for Chapman 1 alternate path. City crews are now working on additional new line on south right of way that will enable Reynolds Park load to be transferred from Chapman 1 circuit to Chapman 2. Materials for this portion of the project are being funded by a DEO Grant.

## Houston St. re-conductor

Planning for the reconductoring of Chapman 2 with 477 AAC from Martin Luther King Blvd. to Palmetto Ave. has begun. This will support a second circuit extending north of Governors Creek for restoration involving Magnolia Point, provide an alternate tie between Chapman 1 and Chapman 2 (was not possible before due to conductor size) and support AMMCON, PASS and other future expansion north of Governors Creek. Materials for this project are being funded by a DEO Grant.

## 13kv to 23kv Conversion – US17 from Harbor Road to CR 315

Planning for this project has begun. This project will continue the Chapman 1 and Chapman 2 circuits north of Harbor Road to provide capacity and reliability for existing and future customers north of Governors Creek. Materials for this project are being funded by a DEO Grant.

## Governors Creek Hardening Project

This project will allow the overhead conductor crossing Governors Creek to be placed underground from Grove Street to Harbor Road. This project has been split into two phases; (1) design and permitting and (2) construction. It is being 75% funded by a FEMA HMGP grant. Phase 1 is complete. The project is now being evaluated by FDEM and FEMA funding for the construction phase. Once funding is in place and a contract is executed, bidding and construction should take approximately 9 months. This project will also support to extension of Chapman 1 and Chapman 2 circuits north of Governors Creek to provide additional capacity and reliability for all customers north of Governors Creek.



**NOTES FOR MANHOLE LOCATIONS AND UGD CONDUIT SPANS**

- The existing manhole locations are shown in yellow circles on the aerial map. The proposed manhole locations are shown in red circles on the aerial map.
- The UGD conduit spans are shown in red lines connecting the manhole locations. The UGD conduit spans are shown in yellow lines connecting the manhole locations.
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**SURVEY NOTES FOR UNDERGROUND BORE PIPES UNDER GOVERNORS CREEK**

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PROJECT NAME	GREEN COVE SPRINGS
CITY	CLAY COUNTY, FLORIDA
STATE	FLORIDA
DISTRICT	GOVERNORS CREEK CROSSING
PROJECT DESCRIPTION	GOVERNORS CREEK APPROX. MANHOLE LOCATIONS & UNDERGROUND CONDUITS
DWG. NO.	
DATE	
SCALE	
REVISION	
BY	
CHECKED	
DATE	

### North and South Substation Improvements

North and South substation sub-station upgrades have begun with directional bore designs completed to install URD 23KV feeds to substation transformers eliminating the possibility of catastrophic failure in the event of lightning or material failure which could cause conductor to fall into existing bus work.