



COUNTY MANAGER'S ANNUAL REPORT

DEPARTMENT ACCOMPLISHMENTS

2016

PUBLIC WORKS DEPT

JOHN JREIJ, P.E., DIRECTOR



The Public Works Department is comprised of five Divisions: Engineering, Roads/Stormwater, Traffic Engineering, Watershed Management, and Fleet and Facilities. The Department provides engineering support and manages the design and construction of the County's roads, bridges, trails and sidewalks. In addition to construction infrastructure, the Department also maintains the County's roads/rights-of-way, drainage facilities, roadside ditches, canals, and retention ponds. It also repairs pavement, sidewalks, curbs, and pipes. Other functions include surveying, work zone safety operations, mowing, concrete work, asphalt patching and shoulder repairs. The Department keeps traffic moving safely by managing directional signage, traffic signals, roadway striping, and the fiber optic network. The health of the County's resources and residents is advanced as the Department monitors, protects, and restores the water quality of the County's natural lakes and streams and through its mosquito control efforts. The Public Works Department also protects the integrity of the County's operating infrastructure through repairs and minor renovations for all County buildings and structures, and the provision of maintenance services and fueling for all County vehicles and equipment.

2016 ACCOMPLISHMENTS

- *Improvements were completed on the Lake Howell Road bridge replacement project, which improved wear-and-tear on the older structure.*
- *At the CR 419 and Sanctuary Drive intersection, a directional median was installed. Additionally, a large section of CR 419 was repaved to improve roadway and intersection safety.*
- *The IFAS Midway Regional Stormwater Facility was constructed. This project included the installation of stormwater pipes along Celery Avenue and Sipes Road which will alleviate flooding. The project also controls turbidity flows into the drainage basin.*
- *As part of the Rinehart Road Trail project, several gaps along the trail system were filled. This project constructed missing trail links along Rinehart Road between SR 46 and CR 46A.*
- *The Southwest Road drainage improvement project included upgrades to roadside ditches along Southwest Road to improve stormwater conveyance.*
- *A sediment dredging project was completed within the Wekiva Basin at Sweetwater Cove. This project improved drainage flows and decreased the amount of settlement flows into the river. This project also included drainage structure improvements and plantings along the cove.*
- *The Lincoln Heights drainage improvement project improved flood hazard attenuation to mitigate flooding within the Lincoln Heights and Revena Park neighborhoods.*
- *More than 9,300 feet of pipe was lined in 2016.*
- *More than 120 lane miles of roads were resurfaced, including:*
 - Lake Mills Road
 - Fort Christmas Road
 - Several neighborhood streets in the Chuluota area
 - Gladwin Avenue
 - Spartan Drive
 - Streets in the English Estates neighborhood
 - Streets in the Osprey Point neighborhood
 - Cameron Avenue (north and south)
 - Streets in the Mandarin neighborhood
 - Streets in the Carillon neighborhood
 - East McCulloch Road
 - Slavia Road
 - Lockwood Blvd
 - Streets in the Stillwater neighborhood
 - Oak Lane
 - Oranole Road
 - West Highland Street
 - Douglas Avenue

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- The Facilities Division completed exterior painting, caulking and sealcoating to several County-owned structures, including Fire Station 16, Fire Station 22, Roads Administration and Stormwater Buildings. Interiors were painted at Fire Station 22, the Public Safety Building, Fire Station 36's Vehicle Bay, Fire Station 43's Vehicle Bay, the County Services Building, and the Animal Services Kennel Floor. Additionally, new flooring was installed in the County Attorney and Tax Collector Offices.
- Parking Lot Striping was applied at the Fire Training Center, Purchasing & Contracts Building, East Branch Library, West Branch Library, Central Branch Library, North Branch Library, and Fire Station 23. The Museum of Seminole County History and its Exhibit Building were re-roofed and the Public Safety Call Center was upgraded.
- The Facilities Team completed 12,820 work orders that were fully executed within FY2015-16. These work orders included 5,752 in-house maintenance repairs, 5,234 preventative maintenance actions, 1,369 contracted maintenance repairs, 331 janitorial services, 83 support services, and 19 facilities projects.
- The Fleet Division serviced 10,761 work orders in FY 2015-16 and 185 warranty repairs were made.
- A street sweeping cycle was developed for Unincorporated Seminole County roads with the purpose of clearing debris on the roads and in the curb lines.
- The Roads and Stormwater Division paved 31 dirt roads in 6 ½ months, totaling 2.75 miles of surfacing. More than 5,000 work orders were completed. The Survey Section completed 99 survey requests and reviewed 30 plats.
- A \$1.3M fiber expansion project included installation of nearly 30 miles of aerial and underground fiber to connect the few remaining isolated traffic signals within Unincorporated Seminole County. The project connects vital County facilities, such as the Hunt Club library and several County schools. When the project was completed in the summer of 2016, all schools in the County were connected to the fiber network. The County now has communications with 99.9% of County signals, allowing remote monitoring and troubleshooting of equipment to more quickly and efficiently move traffic and respond to incidents.
- Work continued as part of the new Every Day Counts 4 program to promote Automated Traffic Signal Performance Metrics. Seminole County is a member of the Technical Team for the implementation of the program nationwide. Signal performance metrics (SPM) utilizes state-of-the-art traffic signal controllers to evaluate signal timings and better manage traffic flow along busy arterials. Seminole County was the first agency in Florida to initiate this cutting-edge system, which is currently running more than 300 signals within the County.
- The Lake Management Program aerielly treated 150 acres of invasive plants in Lake Jesup.
- Watershed Management collected a total of 1,310 surface water quality parameters from 363 waterbodies.
- Construction began on the Soldiers Creek regional storm water treatment project. This water quality project will divert runoff from Soldiers Creek into a storm water pond and is estimated to remove up to 2,137 pounds per year of phosphorous and 4,675 pounds of nitrogen annually.
- The Mosquito Control Program experienced record increases in service requests and human disease vector cases for 2016 with the onset of Zika Virus. With the support of State funds, eight additional temporary positions were staffed, additional pesticide product was purchased, and increases to both fleet and capital equipment were used to service Zika related cases. Mosquito Control has conducted source reduction activities at 400,000 county residences, treated 343 reported green pools, conducted 7,899 inspections, serviced 2,507 citizen requests, and collected 988 mosquito traps for identification and enumeration. Given, the timeliness related to Zika response, a Zika Response Plan has been established in coordination with federal, state, and local officials to ensure public safety which included tabletop training exercises involving Emergency Management personnel and Zika phone-bank to help manage citizen inquiries in the event if activation is needed.
- Mosquito Control responded to 2,507 service requests from residents and fogged over 7,481 miles and 272,064 acres.
- Mosquito Control responded to six positive sentinel chickens and 99 imported mosquito-borne diseases, of which, 27 were confirmed travel related cases (24 Zika, 3 Dengue).
- Mosquito Control dedicate 19,582 staff hours to Mosquito Control activities, increased trucks with educational Drain & Cover message wraps to four total, increased the number of fogging capable trucks to 10, added eight electric foggers.

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LOOKING FORWARD

In 2017, the Public Works Department priorities will include:

- *Long Range Transportation Master Plan will review Seminole County's multi-modal transportation system plan for the next 25 years. It will include long-range and short-range strategies/actions that will lead to the development of an integrated multimodal system to facilitate the safe and efficient movement of Seminole County residents and visitors.*
- *The stormwater Master Plan will create a comprehensive understanding of Seminole County's Stormwater infrastructure needs as documented in the multiple Stormwater studies, basin plans, and capital planning reports that have been previously developed. The final plan will implement a cost-effective Stormwater program, which minimizes flooding and the adverse impacts of uncontrolled Stormwater runoff.*
- *The Northwestern Avenue Bridge will be replaced.*
- *The E.E. Williamson Road Trail Connector will be improved.*
- *The SR 434 & CR 427 Intersection will be enhanced with a left-turn lane on SR 434 and right-turn lane and bike lanes on CR 427.*
- *Sidewalks will be constructed and ADA improvements will be made at Riverview Avenue between SR 46 and US 17-92.*
- *Sidewalks will be constructed and ADA improvements will be made between SR 46 and Grassendale Ave.*
- *CR 427 Pavement Rehabilitation – Mill and resurface CR 427 between SR 417 and Airport Blvd.*
- *East Airport Boulevard Pavement Rehabilitation – Mill and resurface between Red Cleveland and SR 46.*
- *Soldiers Creek Alum facility will be completed and operating in March 2017.*