

# COUNTY MANAGER'S ANNUAL REPORT



# DEPARTMENT ACCOMPLISHMENTS

# 2015

## 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.

## 2015 ACCOMPLISHMENTS

- Paved 22 miles of roads at a cost of approximately \$5 million;
- Constructed 6.7 miles of sidewalks at a cost of \$1.48 million;
- Construction completed on phase 4 of the Seminole Wekiva Trail from SR 436 to the Orange County line. This project is a critical link in the statewide Coast to Coast trail connector project;
- Construction began on the Soldier's Creek Regional Stormwater Facility which is a joint project with FDOT and Seminole County that will use alum injection to reduce the phosphorous pollutants in Soldier's Creek before it flows into Lake Jesup;
- Obtained a grant from FDOT to implement quiet zones throughout Seminole County along the SunRail corridor;
- Completed the Sylvan Lake Outfall project which will help control future lake levels;
- Using 3rd Generation sales tax funds, the County worked with FDOT to advance the widening of SR 46 from Mellonville Avenue to SR 415. The project will start in Spring 2016, two years earlier than originally anticipated;
- Design was initiated for Phase 3 of the Riverwalk Trail. Construction is expected to begin in 2017;
- The Roads-Stormwater Division completed 4,786 work orders generated by residents with respect to roadways and drainage assets;
- Utilized "inmate crews" to edge along curb and sidewalks (versus using a contractor), cutting \$63,000 from the Department's annual budget;
- The Survey Section implemented the "e-Plan" document and plan review system to more efficiently coordinate the review process with the different divisions within the Development Services Department;
- Lake Management Conducted 28 Lake Vegetation Index analyses on TMDL and MSBU lakes;
- Inspected and managed 10 County-owned waterfronts;
- Completed Nutrient Studies for East Crystal Chain of Lakes;
- Completed Lyngbya Source Study for Sweetwater Cove Lakes;
- Commenced the Nutrient Study for Lake Pickett;
- Attained \$100K reimbursement grant for Lake Jesup Shoreline Enhancement Project;

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## PUBLIC WORKS DEPT

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- Completed aquatic vegetation mapping utilizing bio base software and sonar hardware equipment on 5 lakes;
- Mosquito Control responded to 1465 requests from residents. The team executed 2,780 larvicide applications, fogged over 6,293 miles and 228,835 acres;
- Increased the number of mosquito fogging capable trucks to 8 and added 2 ATVs;
- The Mosquito Control Public Service Announcement reached more than 2 million people in Seminole County;
- Mosquito Control responded to 22 positive sentinel chickens and 12 imported mosquito diseases, and treated 78 “green” pools;
- The SERV Program conducted 7 lake restoration events with 382 volunteers working a total of 1,461 hours;
- 4,787 volunteer hours were worked by 1549 SERV volunteers;
- Completed renovations of the Wellness Center at County Services Building;
- Installed new flooring at County Services Building, SGTV, Central Branch Library and Fire Station 43;
- Facilitated the installation of new HVAC at Juvenile Justice Center, Criminal Justice Center, and the 5 Points Wellness Center;
- Designed / implemented a more robust fleet data management program to inform end users of vehicle status, history, PM schedules, etc;
- Replaced 61,239 sq. ft. of damaged sidewalk;
- Excavated 13,115 cubic yards of sediment and vegetation from retention ponds;
- Cleaned 112,669 ft. of roadside ditches;
- Removed 5,169 cubic yards of debris from County rights-of-way;
- Filled 2,287 potholes;
- 858 hours provided by adopt-a-road volunteers who remove litter from rights-of-way;
- 5,171 hours provided by Community Service workers assisting with litter removal from county rights-of-way, cleaning of curbs and inlets, and installation of sod;
- Installed over 38 miles of fiber optic cabling;
- Initiated work on the \$1.3M Fiber Expansion Project. This project was originally funded through MetroPlan, but funding shifts by Engineering allowed the use of 3rd Generation Sales Tax funding to start the project sooner and avoid the FDOT oversight and LAP agreement requirement. This project will install 14 or more links of aerial and underground fiber to connect the few remaining traffic signals we have on radio, as well as work to connect vital County facilities, such as the Hunt Club Library and Fire Station #42. The County also connected four (4) County schools, including Altamonte Elementary, Wekiva Elementary, Walker Elementary and Geneva Elementary. All public schools within the County are now connected to our fiber network;
- Completed the 2nd phase of the Advanced Traffic Management System (ATMS) project. This \$4M project, funded through Metro Plan and FDOT, added several new ITS (Intelligent Transportation Systems) devices/systems around the County, such as traffic adaptive signal timing systems, Bluetooth travel time reader stations, controller and cabinet upgrades, network gear, etc. This was a (procurement only) project where all of the equipment was installed utilizing in-house personnel; and
- Instituted cutting-edge signal performance measuring advanced traffic signal controllers at 279 Seminole County intersections. The performance metrics can be used to evaluate signal timings and better manage traffic along busy arterials. Seminole County is the first agency in the State to initiate this cutting-edge system.

## LOOKING FORWARD

**In 2016, the Public Works Department priorities will include:**

- *Delivery of Sales Tax Capital projects in the most efficient manner and with the highest quality possible for the citizens of Seminole County;*
- *Improve Fleet and Facilities through project enhancements, customer service improvements, and contractor accountability;*
- *Completion of a full audit / evaluation of all large structures / buildings throughout the County; and*
- *Removal/replacement of damaged sidewalk throughout the County. This will reduce sidewalk defects and allow in-house crews flexibility to respond to small area concrete work more efficiently.*