Another year has passed, and I am once again proud and privileged to recognize the significant achievements of the City of Plant City’s Public Works Department. During Public Works Week from May 18-24th, we will all have an opportunity to celebrate the accomplishments of 2007. Please join me and take a moment during this time to look around this beautiful community and realize that much of what makes Plant City such a wonderful place to live is related to the efforts that are put forth by the dedicated employees of the Public Works Department.

Our theme for this year’s Public Works Annual Report is The Future is Now. In today’s fast paced technological world, we have come to expect quick and efficient responses to our needs for information and service. In Plant City, the future really is now, as the Public Works Department is able to meet these needs and often exceeds demanding goals today that other agencies are only hoping to meet tomorrow. Years of preparation, planning, and hard work continue to pay off as once again, despite economic stresses and limited resources, Public Works Department employees continue to provide the high level of service that the residents of this community have come to count on.

None of this would be possible without the untiring effort provided by each Public Works employee. On behalf of the many citizens that expressed their appreciation in 2007, I would like to extend a warm thank-you to these hard working individuals. I hope you will take the time to read through this report and get a glimpse of the fascinating variety and volume of work that went into keeping the City of Plant City safe, beautiful, and moving forward during 2007.

Administrative Support

No organization can be successful without support this dedicated! From right to left:
Top—Juanita Graham, Utilities Maintenance, 26 years; Marvella Doyle, Sanitation, 12 years; Holly Collins, General Services, 10 years
Bottom—Patsy Frier, Water Resource Management, 30 years; Sharon Garrison, Utilities Operations, 12 years; Charlene Shiver, Stormwater/Traffic, 17 years
Public Works Capital Improvement Projects
Fiscal Year 2006/2007

- Victoria – Cherry Streets Reclaim Water Mains/Force Mains Extension Project
- Coronet Waterline Extension Project
- Agreement on Coronet Neighborhood Water Service Connection Grant
- Alexander & Ball Streets R/R Surface Crossing Improvement
- Baker Street Lights
- Construction of Utilities Maintenance Building
- Design and Permitting for Citywide Advanced Traffic Management System (ATMS)
- Construction of Washington Street Drainage
- Evers Street Sidewalks Project
- Pig Jam site expansion

Planned Projects for 2008

- General Services Building expansion
- Further Water Reclamation Facility construction
- Woodrow Wilson R/R Surface Crossing improvement
- Wheeler Street R/R Surface Crossing improvement
- Freight Tower
- Implementation of Citywide Advanced Traffic Management System (ATMS)
- SR 39 & Alexander Intersection improvement – left turn lanes
- Construction of Parks & Recreation Maintenance Building
- Alexander Street landscaping
- Construction of Ellis – Methvin Park Soccer Fields
- Lift Station 30 upgrade
- Conversion of irrigation system at Sansone Park to reclaimed water main
- Well #10 water plant
- Charlie Griffin sidewalk
- Courier Park improvements
- Wind Retrofit Projects for General Services Building, Police Headquarters & Fire Stations 1 & 2
General Service’s staff consists of nine diversified multi-skilled employees plus one administrative assistant. This staff conducts approximately 290 services monthly consisting of building repairs, locksmithing, furniture manufacturing, new construction and preventive maintenance. General Services is also responsible for the gas and diesel refueling stations used by the City’s entire fleet. General Services is responsible for the processing of new vehicles and equipment, and disposition documentation including the auction process of all City vehicles, equipment and furniture.

General Services has one staff member who is primarily responsible for supervising the City’s Fleet Maintenance contractor. The Fleet Maintenance Coordinator insures that the Fleet Maintenance contractor is keeping the City’s Fleet in a good state of repair. The Fleet Maintenance Coordinator’s goals for 2008 are to further reduce costs for non-contractual services, increase safety awareness for City employees operating equipment, and to work with the Fleet Maintenance contractor to further increase education for their technician. So far, the Fleet Maintenance Coordinator has saved the City approximately $68,000 by suggesting alternatives for equipment replacement.

Some 2007 highlights include...
- Remodeled the Fleet Maintenance Service Writer office to help with organization and overall aesthetics.
- Built additional cabinets for the new Utility Operations break room.
- Enclosed an overhang at the Stormwater complex for additional storage for traffic lights and road striping equipment.
- Replaced all toilets on the third floor of the 1914 High School with modern water saving fixtures.
- Replaced all plumbing fixtures in the Plant City Stadium restrooms due to outdated fixtures and costly repair parts. There was a cost savings of approximately $2,800 by doing this in-house.
- Remodeled office and storage area at the Parks and Recreation Administrative Building. By doing this in-house, there was a cost savings of approximately $5,000.
- Custom built the book drops and cabinet for the Library makeover. Also assisted with the makeover by demolition of the existing circulation and information desk, dismantled computer carrels, removed shelving, patched walls and moved furniture.
- Installed 225 amp electrical services, poles and water hookups for the Plant City Stadium Pig Jam area. The cost savings was approximately $15,000.
- Installed all Christmas lighting, Lights of Love and the platform for the Model Trains around the Christmas tree in McCall Park. Also installed Christmas lighting at City Hall, Library and Sam Cooper Park.
2007 was a banner year for the Sanitation Division in many areas. Not only did the division continue to provide the citizens of Plant City with excellent service but also met or exceeded goals set for the division in the areas of municipal solid waste (MSW) volume reduction, recycling participation, and customer education.

Some 2007 highlights include...

- Reduced the amount of MSW collected from 43,272 tons to 37,123 tons through a concerted recycling and reuse effort (a 14.3% reduction from 2006). 
- Increased MSW recycling resulted in $112,337.05 being saved for our citizens. 
- There was an overall 71% increase in total recycling volume from 2006 to 2007. This large increase was due mainly to a focused effort in recycling asphalt and concrete products. 
- During 2007, the recycling education program distributed over 3,000 activity books to elementary school students. Division personnel conducted multiple elementary school classroom instruction sessions. These grassroots efforts resulted in a marked increase in residential recycle bin requests. 

Additionally, the division continued providing clean-up support to the following events/activities...

- Twelve Plant City Car Show weekend programs 
- Twelve Plant City Motorcycle weekend programs 
- Four downtown Antique Shows 
- The annual MLK parade and festival 
- The Strawberry Festival 
- Independence Day celebration events 
- The annual Plant City Pig Jam BBQ weekend 
- Multiple Halloween events citywide 
- The Plant City Christmas parade
This year has posed a challenge for the Streets & Stormwater Division. Budget reductions and hiring freezes due to tax cuts are beginning to show declines in services provided by our division, but despite these challenges our employees continue to put their best efforts forward for the betterment of our City.

Our three-person Sidewalk Crew was awarded a gas powered screed during the 2007/2008 budget year, which has enabled them to reduce sidewalk finishing time. During 2007, they installed 2,518 linear feet of sidewalk. In order for them to accomplish jobs requiring larger pours, employees are pulled from the jet-vac and sweeper crews.

During 2007, the Street Construction Crew assisted CSX with railroad crossing repairs on Woodrow Wilson Street and at Alexander & Ball Streets. Other job duties include digging ditches, installing stormwater pipe, repairing potholes, and grading dirt roads and shoulders. In the past year, they have installed 267 tons of hot mix asphalt.

Our Rights-of-Way Crew cares for our roadsides and medians. They make sure that site lines are clear and trash is removed. During 2007, they patrolled 2,177 miles of roadway, picking up trash by hand! They mowed 9,305 miles of medians and roadsides. The Aquatics Crew maintains all city owned ponds, ditches and canals. They mowed 1,098 miles and patrolled 226 miles for trash removal by hand. The Rights-of-Way and Aquatics Crews also put out all barricades, signs and cones for area events such as parades, car shows and Bikefests.

Some 2007 highlights include...

- Mad-Vac litter control clean-up.........987 miles
- Edging of curbs and sidewalks..........1,067 miles
- Ditches cleaned................................6,750 linear feet
- Road shoulder maintenance..............8 miles
- Canals cleaned..................................22 miles
- Street sweeping.............................3,594 miles
- Pond inspections..............................172 each
The Traffic Operations Section consists of ten employees. Although small, the division operates, maintains, and monitors technical equipment and ensures a high level of public safety. Traffic is divided into four sections: Signals, Advanced Traffic Management System (ATMS), Signs, and Street Painting.

The Signals section maintains all forty-three signalized intersections. This includes battery back-up and fiber optic systems, illuminated street name signs, school flashers, and road studies. The ATMS is a new program that will upgrade the traffic signal system to a level of the highest technology available today. The program will start construction in 2008, and is projected to be completed in 2009. The Signals section finished 2007 completing 98% of the light emitting diode (LED) signal change-outs - which must be complete in order for the new ATMS to function - during which each street signal will be equipped with battery back-ups. The Signals section started a new Capital Improvement Project in 2008 that will put LED thin lined illuminated street name signs at every intersection. One of the Signals section’s highlights of 2007 was the Safe Route to School Program grant that was awarded from FDOT, giving the City eleven solar school flashers at $2,500 each. This saved the City $27,500, and gave the City a total of twenty-nine flashers, resulting in all local schools becoming equipped with flashers. The Signals section also reconstructed two traffic signals, Wheeler & Baker and Alexander & Donna, one of which was performed at night due to necessary lane closures.

The Signs and Street Painting sections are composed of a sign fabricator, a field installer and a three-person striping team. The Signs section is working on completing a street name sign change-out by the deadline of 2012 - toward which much progress was made in 2007, with a projected completion slated for the beginning of 2009. The Signs section fabricated 1,324 signs during 2007, some of which were special or non-standard designs. The Street Painting section is responsible for re-striping and upgrading the City’s roads in accordance with FDOT Design Standards. The lead position was reclassified and a crew leader position was created during 2007. The crew had an impressive year-end total of 98,580 linear feet, exceeding their last year total of 68,260 linear feet. The Street Painting section was also responsible for the quick curb installation at Alexander and Ball railroad crossing reconstruction, which was donated by FDOT.

Some 2007 highlights include...
✧ Solar school flashers installed........15
✧ Road studies performed..................43
✧ Work requests completed...............167
✧ Newly fabricated signs..................1,324
✧ Signs repaired or replaced.............1,868
✧ After hours sign call-outs.............143
✧ After hours signal call-outs..........157
The Utilities Maintenance division is a group of six different sections that each work toward the safe distribution of water and the sanitary collection of wastewater.

The year 2007 was an interesting and exciting year for the Mechanical/Electrical crew. They were challenged with the ongoing treatment plant expansion, which required maintaining normal operations of the Water Reclamation Facility as its construction transitioned toward completion – no easy task! During this year, the Mechanical/Electrical crew moved into their new facility located at 902 Mobley Street. This move centralized the crew, who are responsible for the City’s water wells, lift stations, reuse and reclamation treatment plant maintenance. A much-needed electronic controls program was also added. The electronic software used to do preventative maintenance from the wells, lift stations, and reuse was expanded. Adding the new Water Reclamation Facility is currently in progress.

The most significant addition for the Meter Reading crew was automated meter reading (AMR). Originally conceived to handle the growth faced by Plant City, this program has been utilized in areas where traffic and safety have been concerns. We expect this program to grow throughout the City, which will allow meter readers to focus more on maintenance programs.

During the past year, the Collections crew has been able to take on many large projects, including the replacement of 1,880 feet of 24 inch sewer interceptor line along Sydney Road. This project was completed utilizing in-house equipment and personnel, an estimated cost savings of over $200,000! Other in-house projects include repairs along Clark Street, Laura Street, Washington Street and Martin Luther King Jr. Boulevard.

While maintaining a proactive cleaning, televising and grouting program, the Infiltration and Inflow crew added in-house lining and rehabilitation of manholes. This program reduces water and debris from getting into our collection system, where it could cause blockages, overflows, and increase treatment demand on our Water Reclamation Facility.

The Water Line Maintenance crew continued to be tasked with keeping up with all standard duties of maintaining the City’s water distribution system, including mainline services and fire hydrants. They also worked closely with many contracted projects throughout the City, including the expansion of utilities to the Coronet area, the reuse line expansion from Victoria Street to Wilder Road, and major projects involving adding underground utilities throughout the City.

Warehousing and Equipment Control section is solely responsible for supplying all needed materials and equipment to the crews listed above. The inventory is tracked by an electronic barcode system and housed in a warehouse facility at 1804 Spooner Drive. Other major functions provided by this area is job cost reports, equipment maintenance and record keeping, and projected replacement and budget figures for equipment.

Some 2007 highlights include...

- Hydrant repairs and inspections: 2,112
- Replaced sewer lines: 5,173 feet
- Lift station repairs: 172
- Sewer lines grouted: 14,683 feet
- Meters read: 127,149
- Water service lines replaced: 68
- Sewer main repairs: 46
This division...
✧ Is responsible for the operation of the City’s drinking water system and Water Reclamation Facility.
✧ Requires the staff to become certified in both water and wastewater operations.
✧ Supplies ground water from the Floridan Aquifer using four wells that are drilled to depths ranging from 730 – 1,203 feet.
✧ Treats sewage entering the Water Reclamation Facility to meet standards for public access reclaimed water, which is used for industrial reuse and irrigation of orange groves, nurseries and lawns.
✧ Received and treated an average of 5.266 million gallons of wastewater per day, and produced an average of 6.114 million gallons of drinking water per day.

The Water Reclamation Facility has been a long project which started with the planning stage in 2003. The selection of an engineering firm, acquisition of funding for the project, plant layout and design, selection of treatment equipment, contractor selection and construction began in January 2006. The close of 2007 brought us to the opening of our new 10 million gallon per day wastewater treatment plant. Treatment flows were diverted from the existing plant to the new treatment process on January 29, 2008, and water for discharge and industrial reuse was produced by February 2nd. Water for reuse became available on February 22nd. Project completion is scheduled for May 29, 2008. This project, at a cost of $54 million dollars, has prepared Plant City’s wastewater treatment system for growth well into the next decade, and has significantly improved the facility’s reliability and energy efficiency.
In 2007, the Water Resource Management Division enjoyed another year of providing environmentally focused education and support to the residents of the City of Plant City. Six closely managed programs guide the division’s activities. These programs address issues related to water conservation, the protection of the water distribution system, the protection of the sanitary sewer collection and treatment system, the protection of surface water bodies, and environmental education. Through a number of different initiatives, the staff continued its mission in 2007 to help members of our community learn to conserve, protect and enjoy our natural resources. The following are highlights of some of the accomplishments that helped the City and its residents to reach these goals, in addition to maintaining compliance with all applicable state and federal environmental regulations:

- Successfully completed Florida Department of Environmental Protection (FDEP) annual compliance inspections for Industrial Pretreatment Program and the Stormwater Permit Compliance Program.
- Coordinated 52 classes and events to encourage environmental awareness and ensure compliance with applicable state and federal regulations. These programs benefitted City employees, residents of the community, and members of some of our professional associates from other agencies outside of the City.
- Acquired over $8,000 in grants to help fund environmental education initiatives.
- Coordinated the testing and repair of nearly 3,000 backflow prevention assemblies, including the replacement of two very large assemblies at major commercial facilities.
- Continued to implement the unique Grease Management Program to teach our residential, commercial and industrial residents how to better manage and properly dispose of cooking oils and greases. This included hosting a statewide workshop to assist others in developing similar programs.
- Continued to implement a highly successful Water Conservation Program. Promoted initiatives such as the Garden Hose Kit Program that provided support to help residents of the community better utilize our water resources. Successfully completed and submitted the State required Consumer Confidence Water Quality Report and the Public Supply Per Capita Water Use Survey.

Some 2007 highlights include...

- Industrial site visits...........................................949
- Grease Management Inspections.........................35
- Water Conservation Garden Hose kits distributed....42
- Spill Response Incidents managed........................45
- Education Materials Distributed..........................27,185
- Backflow Prevention Assemblies Tested..............1,524
Who Knew?
Interesting stuff...

✧ A typical American family consumes 182 gallons of soda, 29 gallons of juice, 104 gallons of milk and 26 gallons of bottled water a year. That’s a lot of containers—please make sure they are recycled!

✧ The nutrients most often identified in stormwater runoff are phosphorus and nitrogen. Nutrients enter the stormwater system in a variety of ways, including landscaping practices, leaks from sanitary sewers and septic systems and animal waste.

✧ Our water distribution system is under 60 pounds of pressure per square inch on average. The sewer collection system flows by gravity at approximately two feet per second. Even though workers who deal with the water system don’t have to face the same water borne diseases that the sewer crews do, working with pressurized lines makes their job just as dangerous!

✧ During 2007, all Public Works employees were FEMA/NIMS compliant according to Homeland Security directives. This prepared the crews to work with other agencies in the event of a natural disaster. Public Works crews are a vital part of an emergency: they clear roads, stop sewer overflows, and provide safe water during times of crisis.

✧ Polluted stormwater often affects drinking water, which in turn can affect the cost of water treatment.

✧ The average adjusted amount of potable water that a typical City of Plant City resident utilizes daily is 71 gallons. The quality of this water was protected in 2007 by nearly 3000 backflow prevention assemblies that prevent any contaminants from being forced back into, or drawn back into, the distribution lines. These assemblies are tested and repaired on an annual basis to ensure that they do their very important job.

✧ In 2007, seven significant industrial users were monitored by the Industrial Pretreatment Program. These seven industries contributed nearly eighteen percent of the total wastewater flow per month (that’s about 29 million gallons/month) into the City’s Water Reclamation Facility! These same facilities consumed nearly 19.2% of the total potable water distributed per month in the City (that’s 35.96 million gallons per month!)

✧ During 2007, eight Public Works employees received the Employee of the Month award for the entire City. They are: Charlene Shiver (Stormwater/Traffic), Al Miller (Water Resource), Millie Stewart (Stormwater), Wayne Abercrombie (Utilities Maintenance), Ed Dudley (General Services), Omar Cortez (Traffic), Paul Cockrell (Utilities Maintenance), and Wayne Longhurst (Utilities Operations).

New Administrative Staff

From left to right: Cyndi Paz, administrative assistant to the director, Ramon Monreal, engineer, Curtis Jenkins, engineering inspector
<table>
<thead>
<tr>
<th>Division</th>
<th>Frequently Called Numbers</th>
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<tbody>
<tr>
<td>Administration</td>
<td>813.757.9288</td>
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<tr>
<td>General Services</td>
<td>813.707.2282</td>
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<tr>
<td>Sanitation</td>
<td>813.757.9208</td>
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<tr>
<td>Streets/ Stormwater/ Traffic</td>
<td>813.707.7200</td>
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<td>Utilities Maintenance</td>
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<tr>
<td>Utilities Operations</td>
<td>813.757.9191</td>
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<tr>
<td>Water Resource Management</td>
<td>813.757.9289</td>
</tr>
<tr>
<td>Utility Emergency, 24 hours</td>
<td>813.757.9191</td>
</tr>
</tbody>
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This publication was created by the City of Plant City’s Public Works Department in an effort to help the citizens of Plant City become more aware of how their City is maintained and how their valuable tax dollars are used to keep our City clean, safe and livable.

The following contributed information, text, or pictures to this publication: Utility Operations—Patrick Murphy, Steve Saffels, Frank Coughenour; Utilities Maintenance—Wayne Everhart, Wayne Abercrombie, Bill Russell, Jon Stroud, Wayman Kingsley; Administration—Willie Nabong; Traffic Operations—Fred Baxter; Streets and Stormwater—Charlene Shiver; General Services—Pat Austin, Sanitation—Kent Weitz; Water Resource Management—Al Miller, Shawna Everidge, Mark Woodward, Rob Evans.


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