Operational Impacts of Capital Improvement Projects

Capital improvement projects generally have one of two impacts. New or expanded facilities usually result in staffing requirements along with new operating costs such as utilities, supplies and maintenance requirements. Replacement of older facilities has the opposite effect; efficiencies gained from more efficient equipment, lower maintenance costs, and on occasion, lower staffing requirements reduce operating and personnel costs.

In the water, wastewater and stormwater departments, the city has embarked on a multi-million dollar, multi-year program to accelerate replacing aging infrastructure. Over the last few years, the city has been experiencing more frequent and more costly failures. Often, these failures "detour" employees from their planned preventative maintenance schedules and incur significant overtime costs. By accelerating the replacement program, primarily through bond issues, the city will improve service to its customers and reduce costly repairs for parts, materials and overtime.

Improvements to parks and recreation centers throughout the city are budgeted for $1 million. These improvements include new fencing, resurfacing parking lots, building renovations, new lighting and irrigation systems, and ballfield refurbishment. Each improved facility will have lower maintenance, repair and utility expenses.

Annual funding of $200,000 is also provided for courts, sidewalks and trail improvements. These improvements include lighting upgrades that improve visibility and reduce energy consumption, maintenance and repair costs. Four areas are projected to be impacted with the FY07 funding.

Specific projects include:

- **District III Police Headquarters:** A contract for construction of a new police headquarters for District III was awarded in FY06 with a projected completion date of summer 2007. Annual operating expenses are estimated to be $127,000. Utilities including electrical, telephone, cable television, internet, solid waste, wastewater and water services are projected to cost $70,000 annually. Contractual services including lawn maintenance and irrigation, custodial, carpet cleaning, fire alarms and sprinklers are projected to cost $37,200 annually. In-house preventative maintenance and repair costs are expected to be $19,800 annually. Operating expenses will be appropriated as necessary.
- **New/Replacement Fire Stations:** This project provides for constructing two new fire stations (FS) and replacing two stations over the next five years. In FY07, design and construction will begin for FS #19 in Port Tampa. Due to the larger building size, the cost to operate the new facility will increase by approximately $9,000. Construction of FS #22 in New Tampa will commence in FY09. Operating and one-time capital costs for FS #22 will include: $1.8 million for payroll and benefits for 30 firefighters; $33,000 for bunker gear and clothing; $913,000 for a ladder truck; $313,000 for a fire engine; and $42,000 for utilities. Similar expenses are projected for the two stations, one replacement and one new, programmed in fiscal years 2010 and 2011.
- **Traffic Signal Upgrade to Light Emitting Diodes (LED):** This project provides for the upgrade of traffic signal displays to LED signal heads for emergency operation of signals on backup power systems. This project will be directed at the top 100 emergency priority intersections and will free up Tampa police officers from traffic duty during emergency situations. LED traffic signals reduce power demand by an average of 75%, enabling the use of batteries or generators as backup power sources. With an average annual cost of $887 per signal, the savings for 100 signals will be approximately $67,000 per year.
- **Climate Control/HVAC Systems:** Funding is provided in the amount of $152,180 annually, for the replacement of deteriorated HVAC (heating, ventilating, air conditioning) systems at various locations throughout the city. Many of these systems have exceeded their useful lives and repair parts are becoming more difficult and costly to obtain. Energy savings will accrue with their replacement. In FY08, several HVAC air handlers at the Tampa Municipal Office Building need to be replaced. Many of the units are over 29 years old. Energy savings will also accrue from replacement of these air handlers.
- **Energy Management Systems:** In FY08-FY10 funding is programmed for the installation of energy management systems at various city facilities. Benefits from the project include remote control and monitoring of air conditions in facilities, early identification of system problems and energy savings.
- **Howard F. Curren Advanced Wastewater Treatment Plant Frequency Drive Replacement:** During FY07 the wastewater department will replace and standardize seven variable frequency drives and related controls necessary to operate the nitrification pumps at the diffused air reactor facility. The variable frequency drives and control systems are no longer reliable. Replacement of this equipment will increase system reliability and reduce overall operation and maintenance costs. The new drives will be standardized to match other drives used throughout the treatment plant. More importantly, standardization of equipment reduces operation and maintenance costs by minimizing the need to store multiple types of spare parts thereby reducing the downtime of equipment.