



Capital Construction Project Update

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Bureau Chief

Engineering and Construction Bureau

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Engineering & Construction Bureau Services Provided

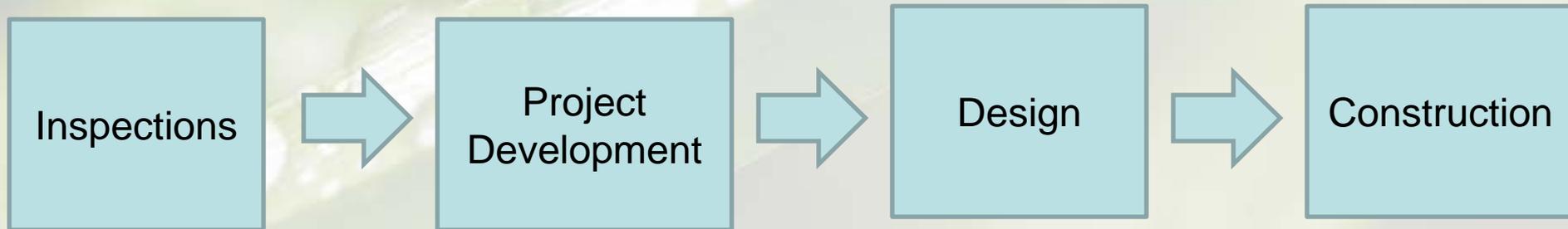
- Project Management
- Coordinate External Design Services
- Development of Water Quality Regional Solutions
- Value Engineering
- Internal Engineering Design
- Technical and Quality Control Review
- Engineering During Construction
- AutoCad Drafting
- Project Specific Modeling
- Investigative Forensics
- Engineering Support for Office of Counsel
- Standards and Guidelines
- Engineering Analysis for Planning efforts
- Commissioning of Projects
- Coordination of District requirements with USACE
- Training on Engineering Services

Engineering & Construction Bureau Section Employees

- Design Section:
 - 18 Full-Time Employees (FTEs)
- Project Development Section:
 - 17 Full-Time Employees
 - 1 Contract Support
- Project Management Section:
 - 33 Full-Time Employees
 - 4 Contract Support

(Total 69 FTEs and 5 Contract Support)

Project Delivery Process



Infrastructure Management Section Annual Inspection Programs

Objectives

- Identify structure deficiencies and generate recommendations for corrective action

Benefits

- Information to assist in:
 - Identification & prioritization of capital projects
 - Identification & prioritization of maintenance repairs
 - Baseline Information – Trend analysis of components
 - Provides basis for design including cost estimates & schedule
 - Reduces emergency work
 - Warranty repairs
 - Permit compliance
 - Report data is used to validate any findings from the USACE

PROJECT DEVELOPMENT SECTION

- Provide coordination and support of projects associated with the Operations, Maintenance and Construction 50-year Capital Improvement Plan and Everglades Restoration Projects.
- Services include:
 - scoping and prioritization of projects
 - updating design standards (plans, specifications and guidelines)
 - coordinating technical reviews and USACE 408 application submittals
 - providing cost estimating and constructability support and review
 - reviewing project schedules for progress and claim analysis
 - providing commissioning support and direction
 - updating Bureau processes and providing training where necessary
 - coordinating levee inspections and repairs

Engineering and Construction Bureau Review Process

- Technical Review Process
 - Maintains SFWMD engineering details and design guidelines
 - Provides technical guidance and procedures for each phase of design
 - Coordinates technical aspects between the SFWMD and USACE for projects designed jointly
 - Provides comprehensive technical reviews of all design plans, technical specifications and reports

Engineering and Construction Bureau Reviews Per Year

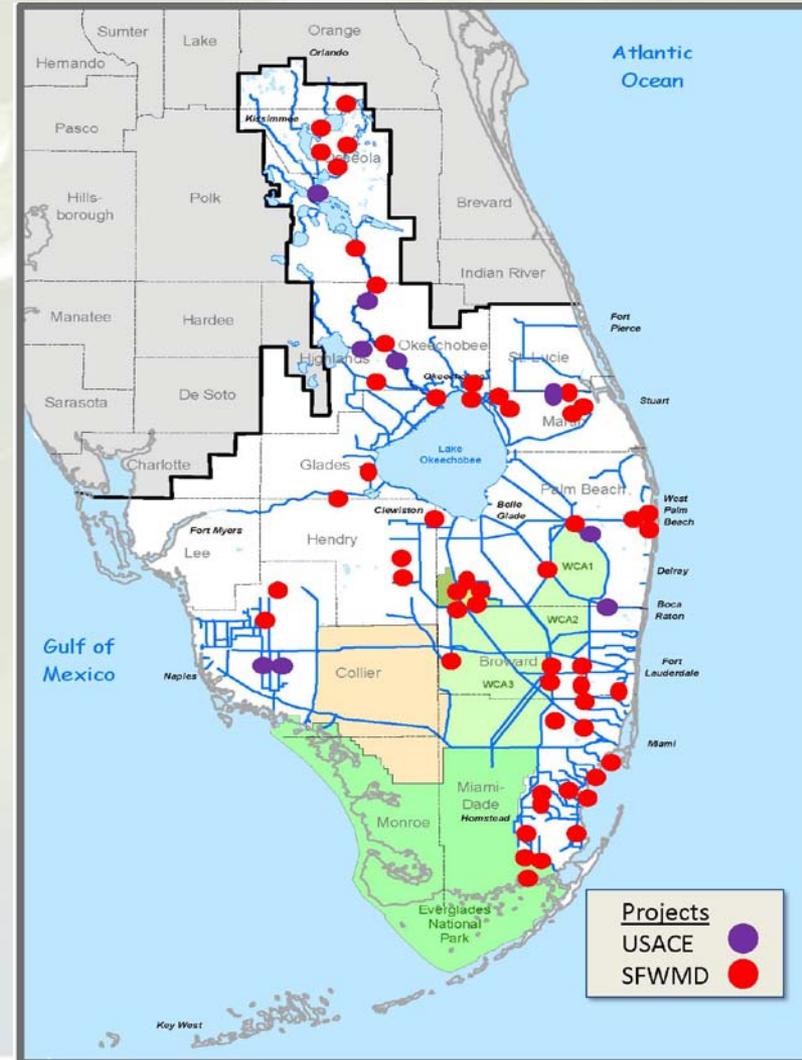
- Technical Reviews by year:
 - 2006 – 2008 (Acceler8) – 80 reviews
 - 2009 – 140 reviews
 - 2010 – 370 reviews
 - 2011 – 300 reviews
- External dollars spent on reviews - \$2.26M over four years

Engineering and Construction Bureau Change Orders

- Construction Change Orders (2008 – 2011)
 - Industry average is 7% of construction contract
 - Since 2008, projects that did not utilize current technical review process had \$6.9M worth of change orders on \$109M construction (6.3%)
 - Projects that went through Technical Review had \$4.8M worth of change orders on \$363M construction (1.3%)
 - Net estimated savings of \$15.7M to SFWMD
 - All projects now go through Technical Review

Total Bureau Budget

- Bureau Budget:
 - \$165,725,098
- Restoration/Other Projects Budget:
 - \$105,751,700
- O&M Capital Budget:
 - \$59,973,397



FY12 Budget Restoration/Other Projects

Restoration Budget: \$105,751,700

Compartment B & C

Environmental Laboratory

C-111 Spreader Canal

Southern Crew

L-8 Reservoir

C-44 Reservoir/STA

Lakeside Ranch

Lake Hicpochee

Deering Estates

EAA A1 FEB

Water Quality Projects

Faka Union Pump Station Construction Collier County



Lakeside Ranch S-650 Pump Station Martin/Okeechobee Counties



Compartment B & C STA

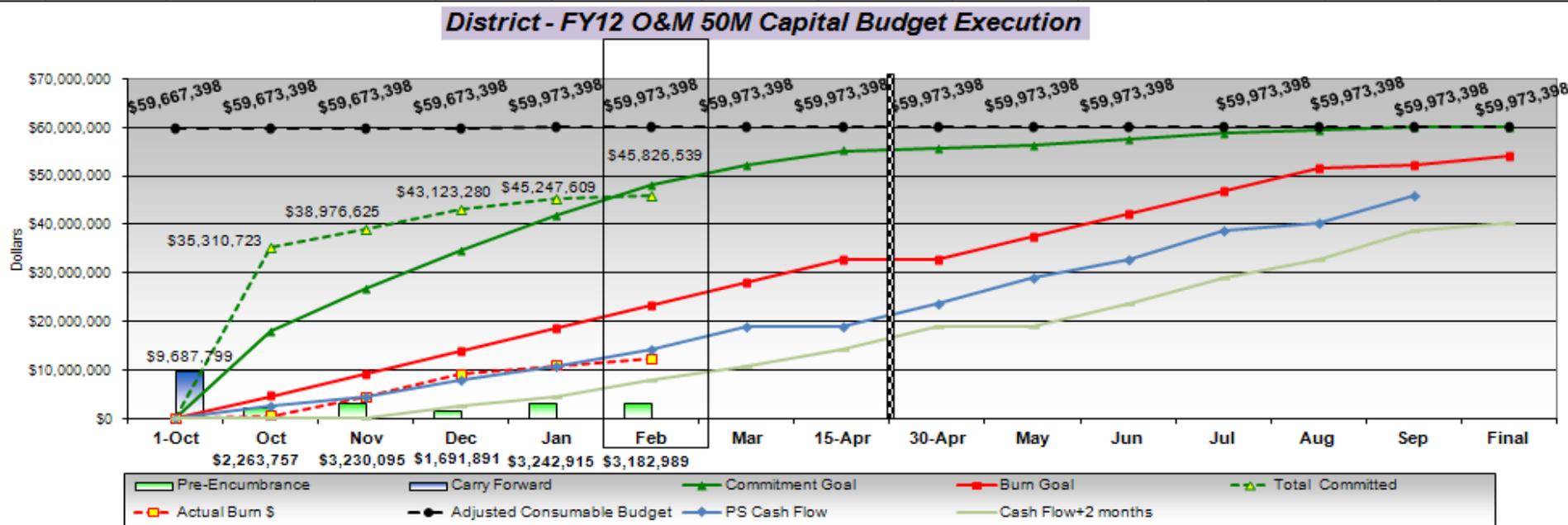


C-111 Spreader Canal – Aerojet Canal



FY12 Budget O&M Capital Projects

- Capital Budget: \$59,973,397
- FY11 Rollover \$ 9,687,799
- Project Related \$ 57,008,635
- Process Related \$ 2,958,761



FY12 Budget

O&M Capital Projects

Capital Budget: \$59,973,397

East Coast Protective Levee Broward
County

S-197 Replacement

Diesel Oxidation Catalyst Installation

C-41A Bank Stabilization

T-5 Monitoring Site Replacement

East Coast Protective Levee Palm
Beach County

C-4 Canal Bank Improvements

Operations Decision Support System
(ODSS)

Critical Infrastructure Field Equipment
Replacement (CIFER)

S-140 Pump Station Repowering

S-5A Pump Station Refurbishment

Hillsboro Canal Bank Stabilization

East Coast Protective Levee Broward County



C-4 Canal Bank Improvements



C41A Bank Stabilization



Hillsboro Dredging & Bank Stabilization



C-24 Canal Bank Repair



S-197 Structure Replacement



S-44 and G-57 Gate Operator Replacement



S-193 Navigational Lock Refurbishment

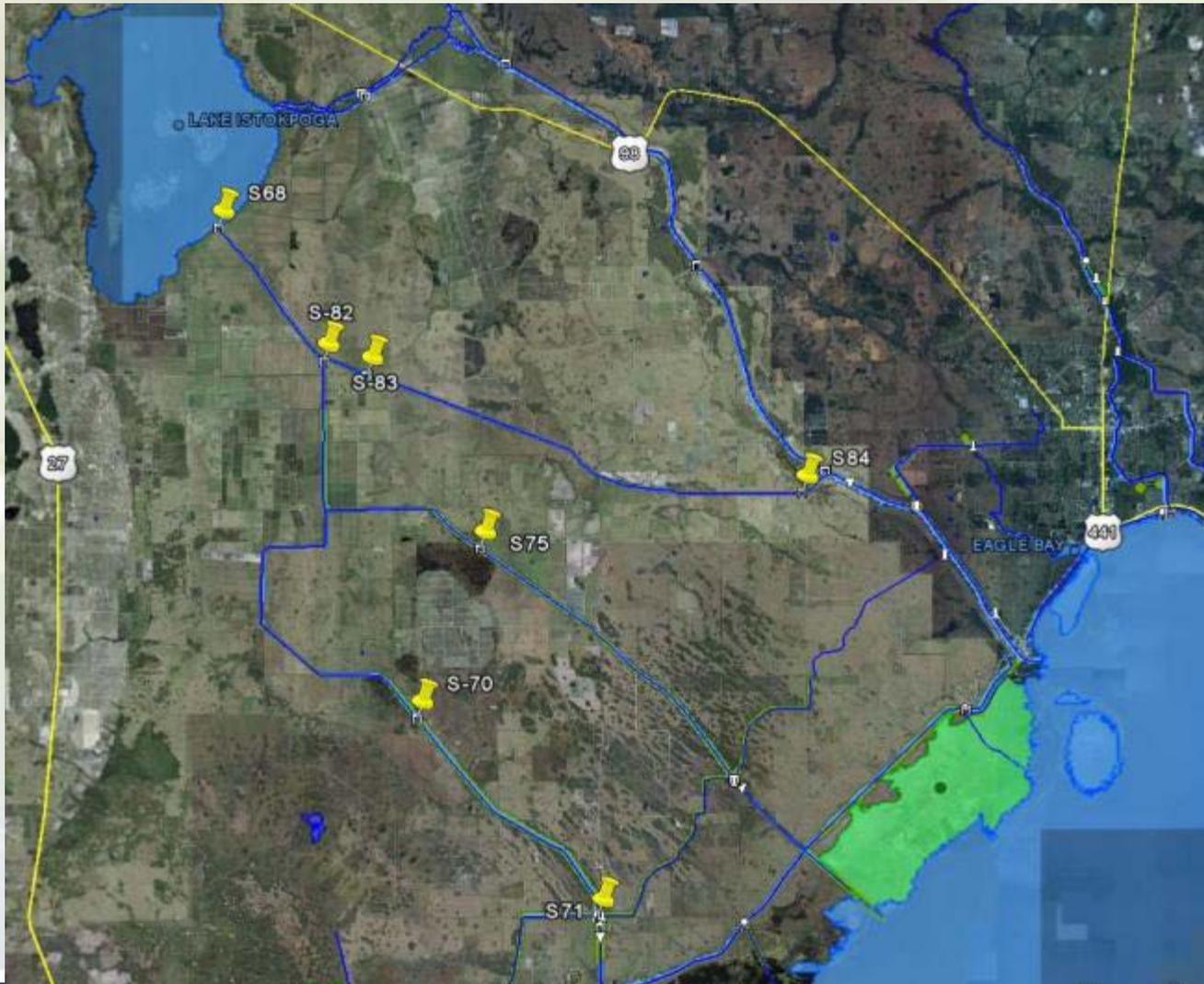


Golden Gate 6 & 7 Replacement



Existing Structures

S68/S70/S71/S75/S82/S83/S84 Concrete Repairs



G-78/G-79/G-81 Automation



S-46 Repair/Replacement



Corrosion (G93/G54/G56/G57)

G54



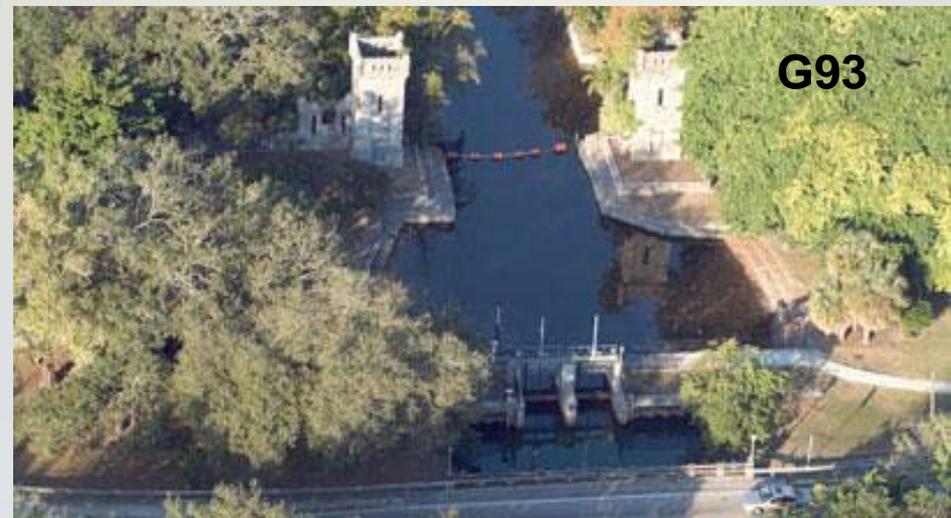
G57



G56



G93



Corrosion (S21A/S22/S25B/S26/S27/S29)

S21A



S27



S25B



S22



S26



S29



S-140 Pump Station Refurbishment



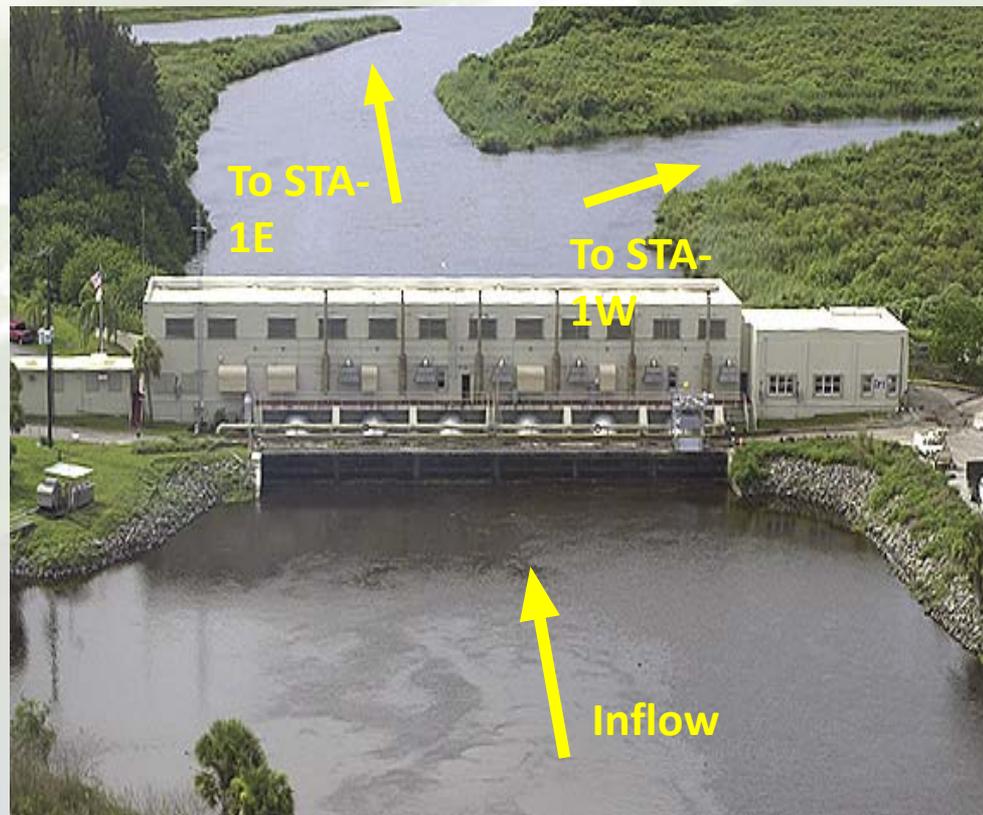
Diesel Oxidation Catalyst Installations



Photo: G-310

S-5A Pump Station Rehab

Raw Water Pump



Fuel Tank Platforms (North)



S-131



S-133



S-135



S-127



S-129

S-331 Repower & Gearbox Replacement



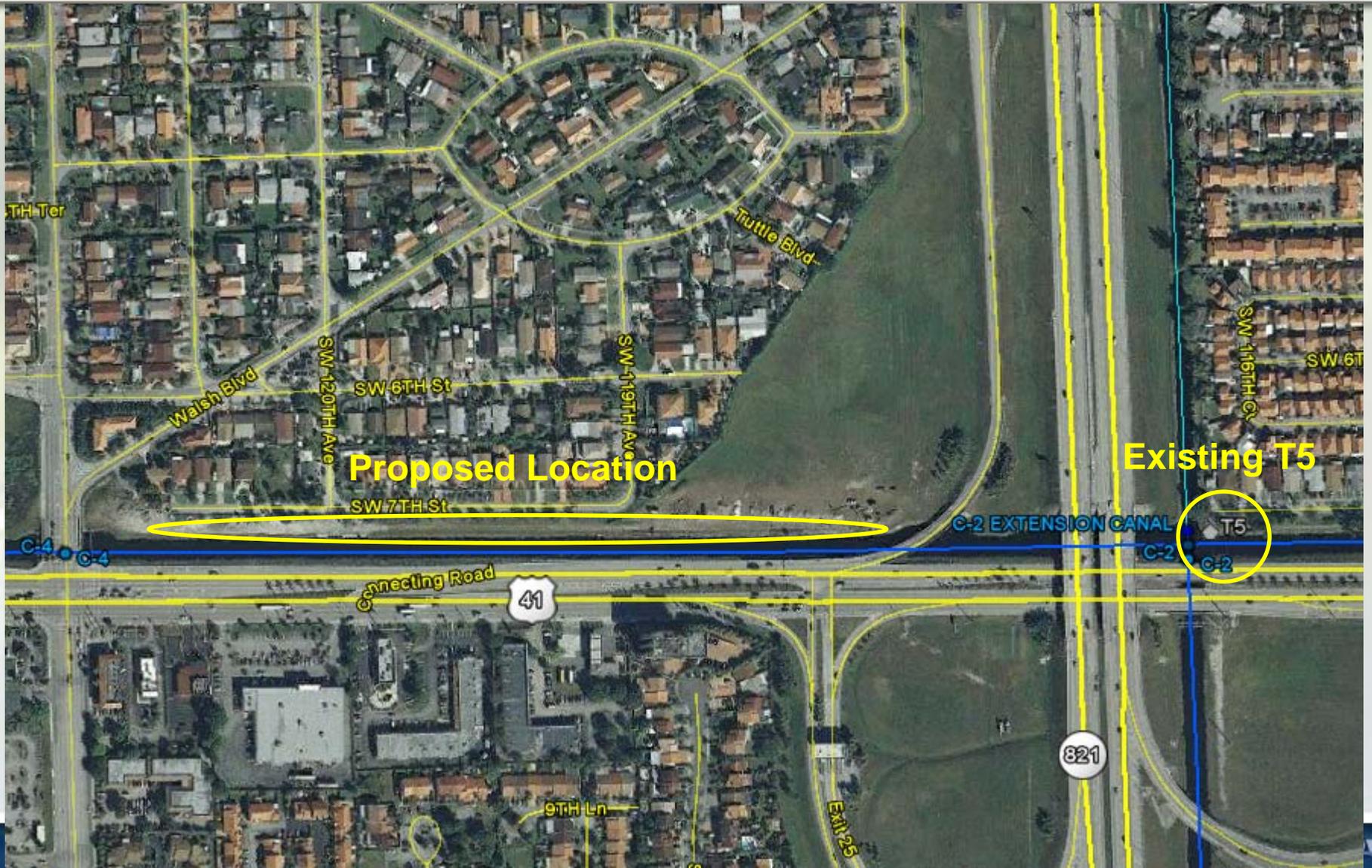
G-251 Trash Rake Replacement



S-140 Trash Rake



T5 Replacement (C4 Basin)

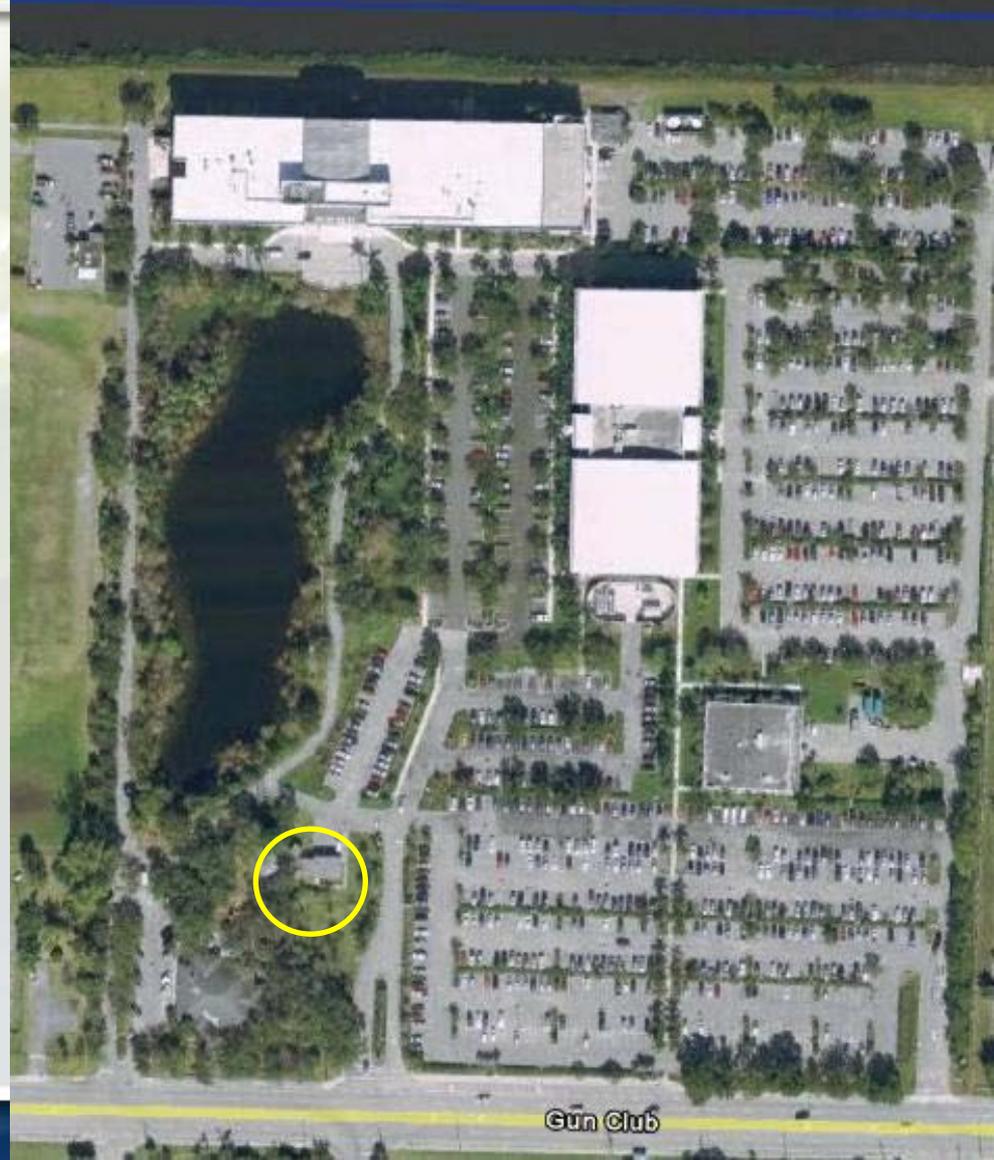


S-6 Tower Replacement

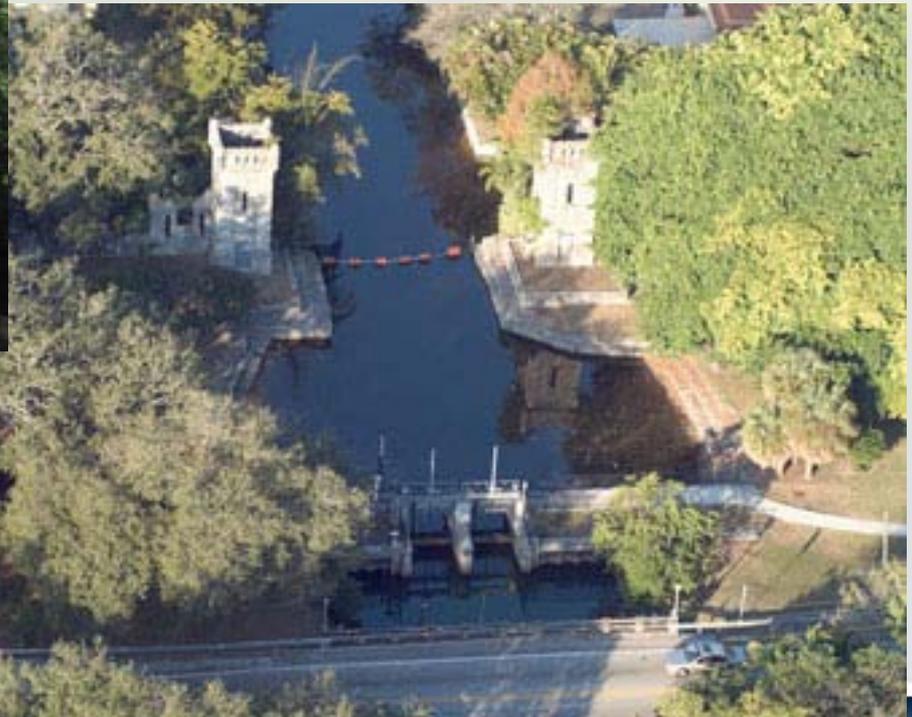
S-6 Existing Tower



B-66 Tower Replacement



G-93 New Control Building





Questions?