



# Lift Station 87



CITY COMMISSION PRESENTATION

April 21, 2014



# Project Goals

- Protect the City's Investment
- Protect the Environment
- Improve System Reliability



# Phase 1 – Completed on Schedule

## Phase 1 (Investigation and Technical Memorandums)

- Gravity Mains – 60% plans
  - Construction Techniques
  - Hudson Bayou Crossing
  - Lower Invert Elevation
- Lift Station – Initial Evaluation
  - Permit and Code Requirements
  - Worker Safety Issues
  - Operational and Reliability Issues
- Commission Accepted Recommendations January 21, 2014



# Phase 2 – Change Order Documents

## Re-Design, Engineering, and Construction

### Gravity Mains

- 90% Plans Submitted March 26, 2014

### Lift Station Modifications

- Lower Influent Structure
- Revise Emergency Pump System
- Raise Site Grade – Confirmed
  - Reliability and Vulnerability



# Storm Surge Protection

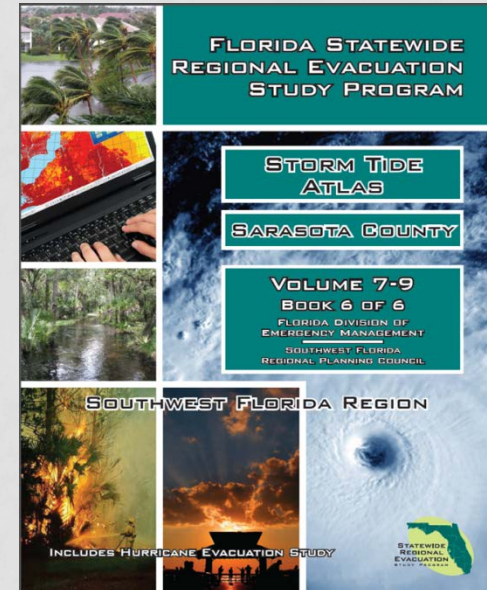
## Sound Engineering Practices

### Raise Site Grade

- Existing Site Elevation = 12 Feet (avg.)
- Top of Structures = 13.0 Feet
- Category 2 Storm Surge = 15.4 Feet
- Consistent with Original Design Intent

*"...to meet FEMA and FDEP standards...the walls of the lift station will need to be above current ground conditions 1 to 3 feet."*

May 5, 2008 Commission Agenda Item  
Site Approval



# Storm Surge Protection

## Sound Engineering Practices

### **Raise Site Grade – Optional Designs**

- Re-locate Electrical Controls and Generators Aboveground
- Re-locate Diesel Fuel tank Aboveground
- Screen with Structure and Landscaping



# Phase 2 – Key Milestone Dates

Milestone	Begin	End
Change Order 1 (Gravity Mains)	May 2014	July 2014
Change Order 2 (Lift Station)	June 2014	August 2014
Gravity Main Construction	October 2014	November 2015
Lift Station 87 Construction	October 2014	June 2015
Lift Station 7 Demolition	November 2015	January 2016
Consent Order Deadline	N/A	May 2016

Note: Change Order 3 Date TBD

# Original Project Costs

AECOM	\$1,655,000
Westra Construction	\$6,372,000
Other Project Costs	\$64,000
<b>Subtotal</b>	<b>\$8,091,000</b>
Standby Operations	\$790,000
<b>Total</b>	<b>\$8,881,000</b>



# Evaluation and Re-Design

McKim & Creed	
Phase 1	\$1,100,000
Phase 2	\$3,451,200
<b>Subtotal</b>	<b>\$4,551,200</b>
Original Project Costs	\$8,881,000
<b>Total Spent/Obligated</b>	<b>\$13,432,200</b>

# Conceptual Project Cost Estimate

Gravity Mains	\$3,544,500
Lift Station	\$6,511,300
Improvements	\$467,600
<b>Subtotal</b>	<b>\$10,523,400</b>
Contingencies (30%)	\$3,157,000
<b>Total Construction</b>	<b>\$13,680,400</b>
Spent/Obligated	\$13,432,200
<b>Total Project</b>	<b>\$27,112,600</b>

- \$24 to \$27 Million Range
- \$12.5 Million Original Project Budget (2008)
- AECOM Litigation Initiated in 2012

# Concurrent Activities

## Monthly Project Team Meetings

- Noticed Public Meetings

## Website Updates and Alerts

- Traffic

## Dedicated Project Hotline

## Community Outreach Meetings

- Landscaping Input



# Questions & Answers

- Protect the City's Investment
- Protect the Environment
- Improve System Reliability

