

Collier County Stormwater Projects

October 25, 2018

Collier County Stormwater Planning

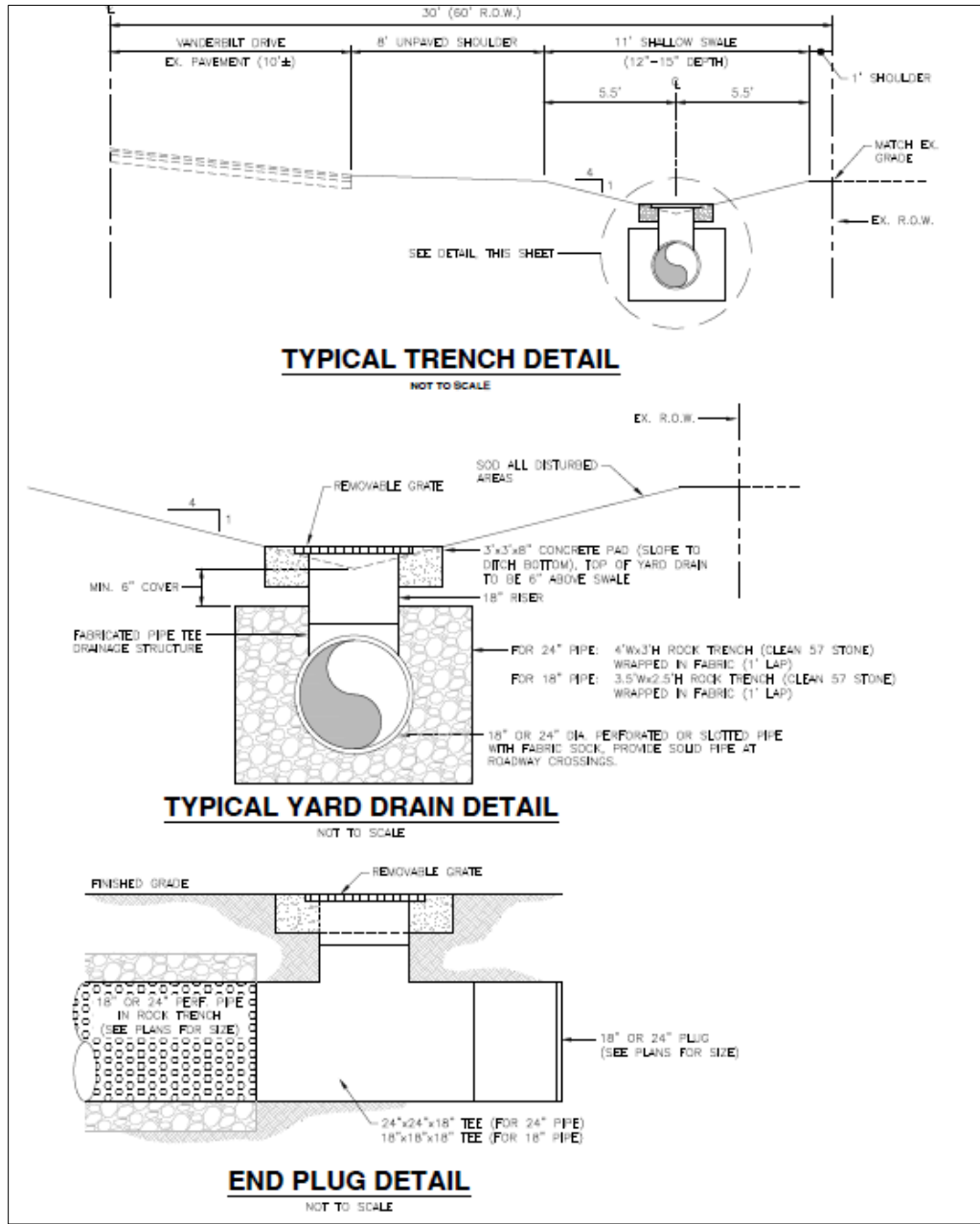


Vanderbilt Drive Cul-de-Sacs SW Improvement Project



- Improvements along:
 - East side of Vanderbilt Drive from Bluebill Ave to Vanderbilt Beach Road
 - Fourteen (14) cul-de-sacs west of Vanderbilt Drive
- On-going construction
 - Contractor: Mitchell & Stark
 - Completion: Aug-2019 (expected)
- Coordinated effort between GMD and PUD
 - Water main replacements
 - Wastewater force main replacements
 - Funded in previous years, no funding in FY19

Vanderbilt Drive Cul-de-Sacs SW Proposed Improvements



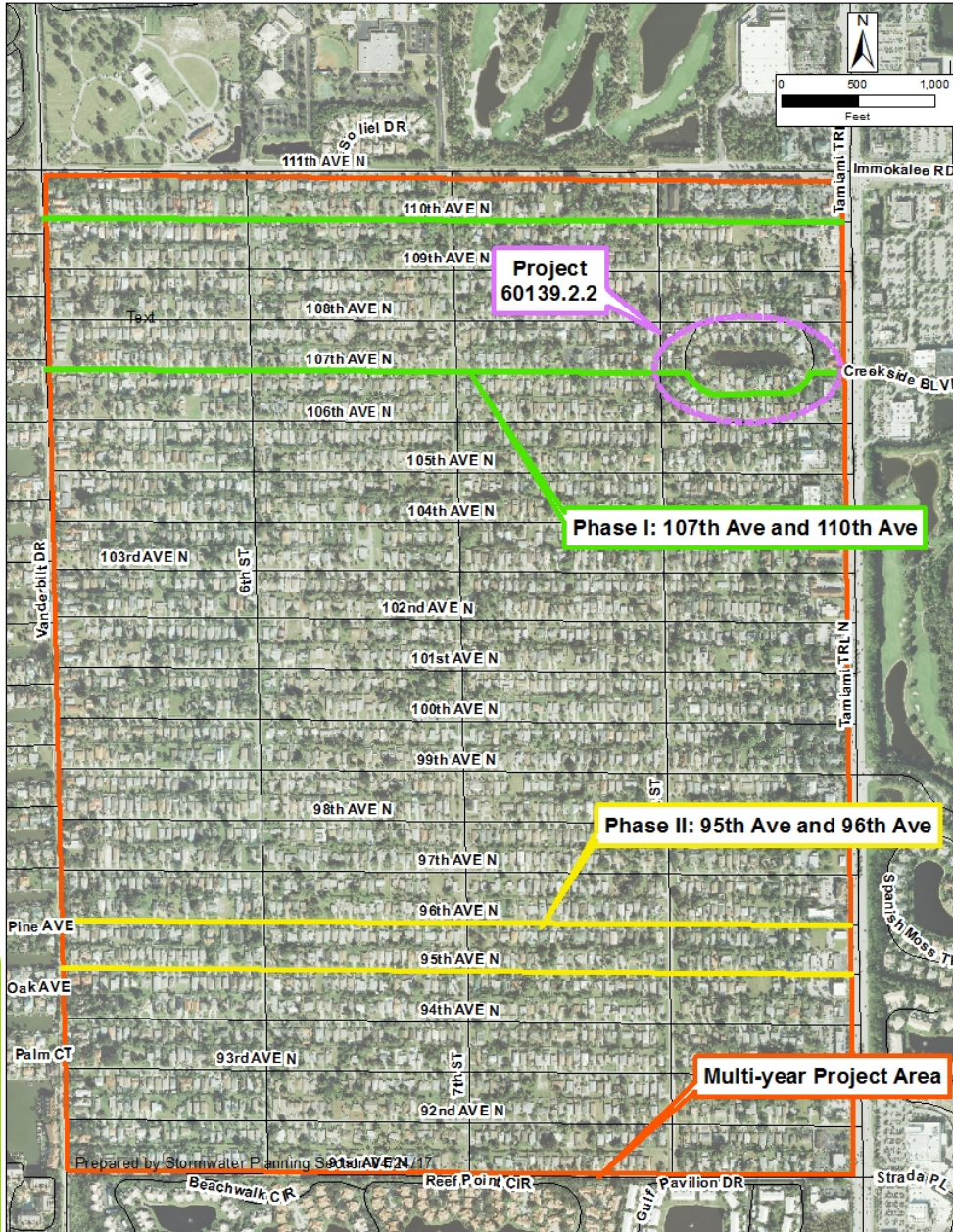
► Vanderbilt Drive

- Replace all existing stormwater infrastructure along the east side
- Perforated pipe placed on gravel bedding to promote exfiltration. And shallow swale on top.
- Catch basin with deep sumps to capture sediments before reaching Vanderbilt Lagoon.

► Cul-de-Sacs

- Supplement the existing drainage system with:
 - HDPE mainline drain pipe
 - Yard drains
 - New swales
 - New driveway culverts

Naples Park Area SW Improvement Project



- Coordinated effort between GMD and PUD
 - Water main replacements
 - Wastewater force main replacements
 - Stormwater Improvements
 - FY19 budget allocation of \$3.2M
 - Approximately \$2.6M anticipated over next 10 years
- Phase I:
 - 110th Ave (Vanderbilt Dr. to US 41) and 107th Ave (Vanderbilt Dr. to 8th St.)
 - Status: Complete
 - Contractor: Douglas N. Higgins Inc.
 - 107th Ave (8th St. to US 41) 800th block
- Phase II:
 - 95th Ave. Design complete. Bids received Construction expected in 2018
 - 96th Ave. Construction expected in 2018

Naples Area SW Improvement Project

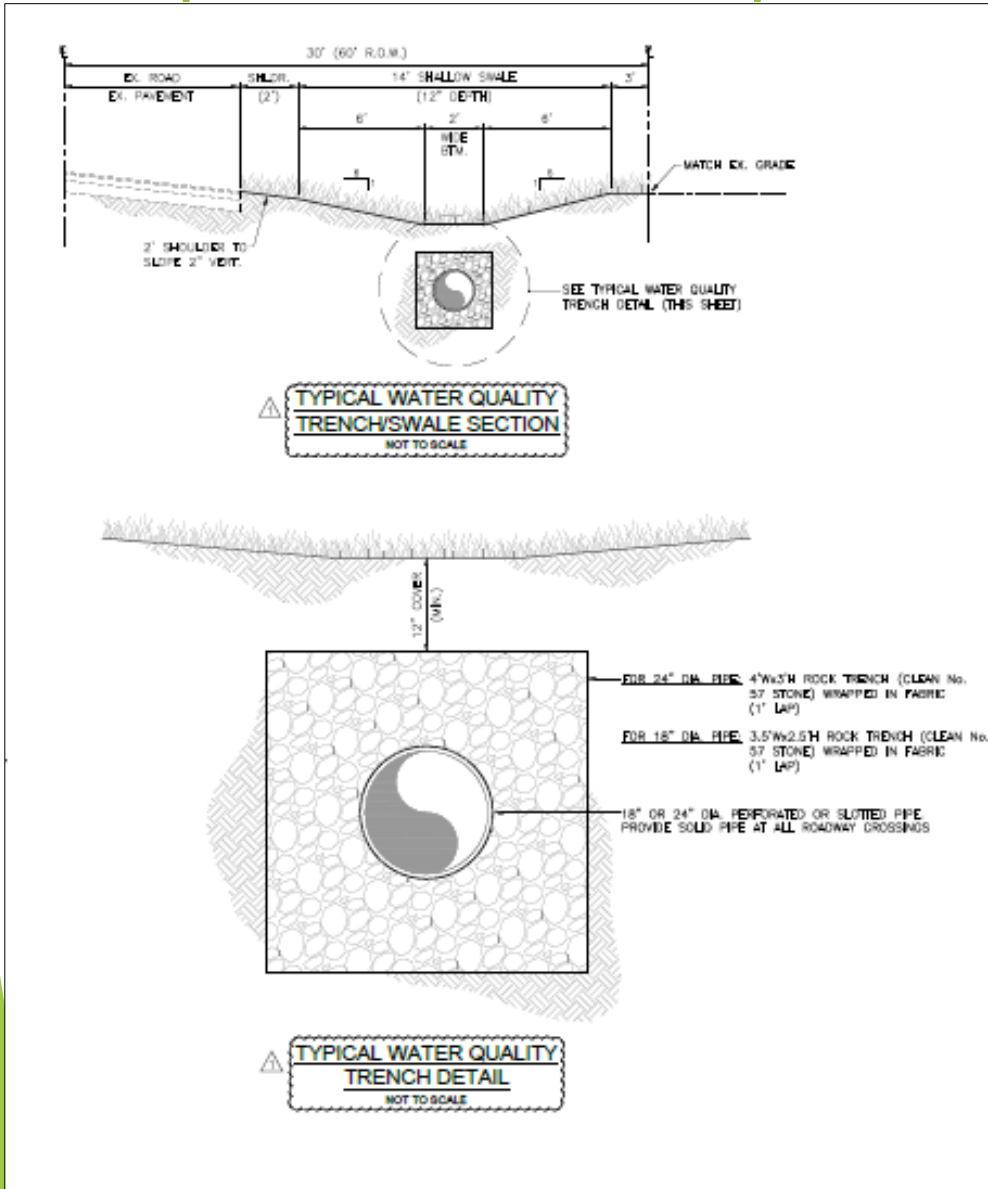
► Existing Conditions

- Combination of open/enclosed swales and culverts
- Aged infrastructure of various materials and sizes (generally under sized)
- Elevation issues causing inappropriate collection and conveyance of runoff

► Phasing

- Target two (2) streets per fiscal year (north to south)
 - Phase I & II - Awarded \$750,000 as part of 2015-16 & 2016-17 Legislative Appropriations.
- Priority is given to streets presenting wastewater and water breakages/malfunctions

Naples Area SW Improvement Project

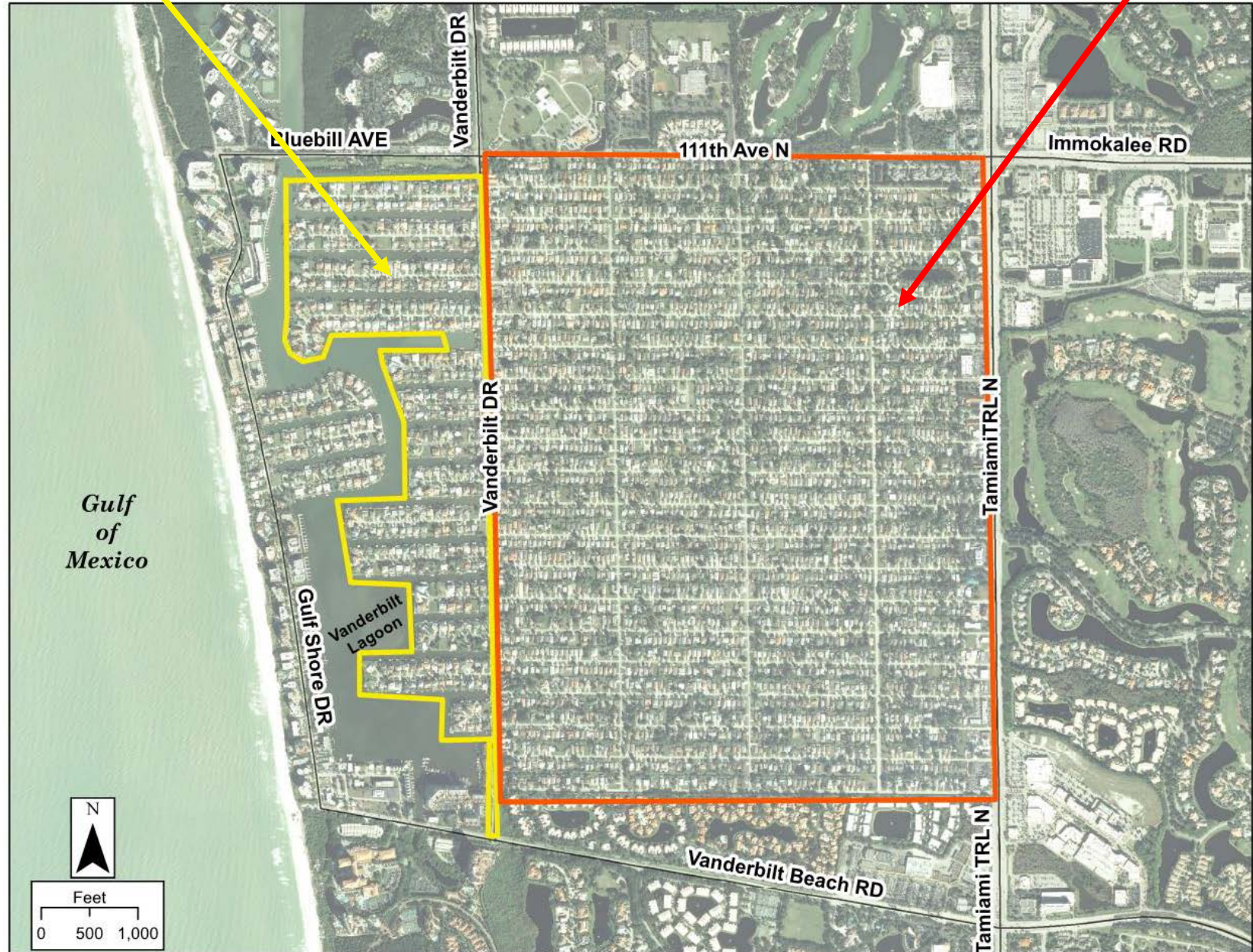


► Proposed Improvements

- Removed aged infrastructure
- Installation of perforated pipe (18" and 24"), yard drains and sedimentation traps with deep sumps to capture sediments.
- Sections between Vanderbilt Dr and 6th Street North will have perforated pipe placed in gravel water quality trench to allow runoff to percolate.

Vanderbilt Drive Cul-de-Sacs
Stormwater Improvements

Naples Park Area Stormwater
Improvements



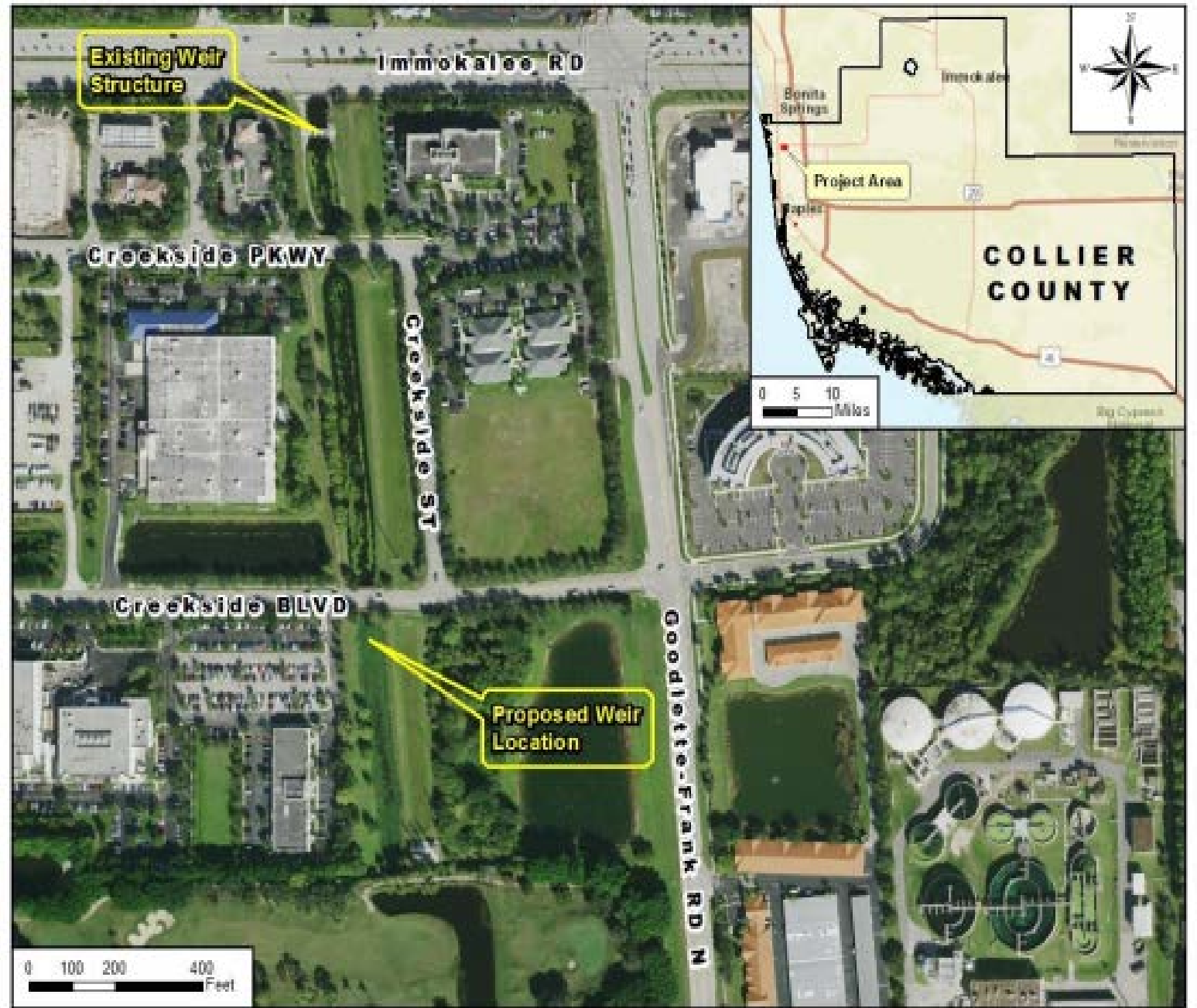
Pine Ridge Weir

► Project:

- Design Completed
- Permitting Completed

► Construction:

- Bid Award: December 2018
- Commencement: Early FY19
- Estimated total cost: \$900,000



West Goodlette-Frank Road Area Joint Stormwater-Sewer Project



- ▶ County/City Partnership
- ▶ Proposed Phasing:
 - ▶ Phase I is southern portion
 - ▶ Phase II is northern portion
- ▶ Project cost:
 - ▶ \$14.3 million
- ▶ Construction time frame:
 - ▶ 2019-2021
- ▶ Project Status:
 - ▶ Design 100% Complete

I-75 Interconnect Project

► Design

- FY19 Allocation: \$500,000
- Joint project between Collier County and Big Cypress Basin /South Florida Water Management District
- Provide greater operational flexibility to manage flows within the Immokalee Road / Cocohatchee Canal & I-75 Canal

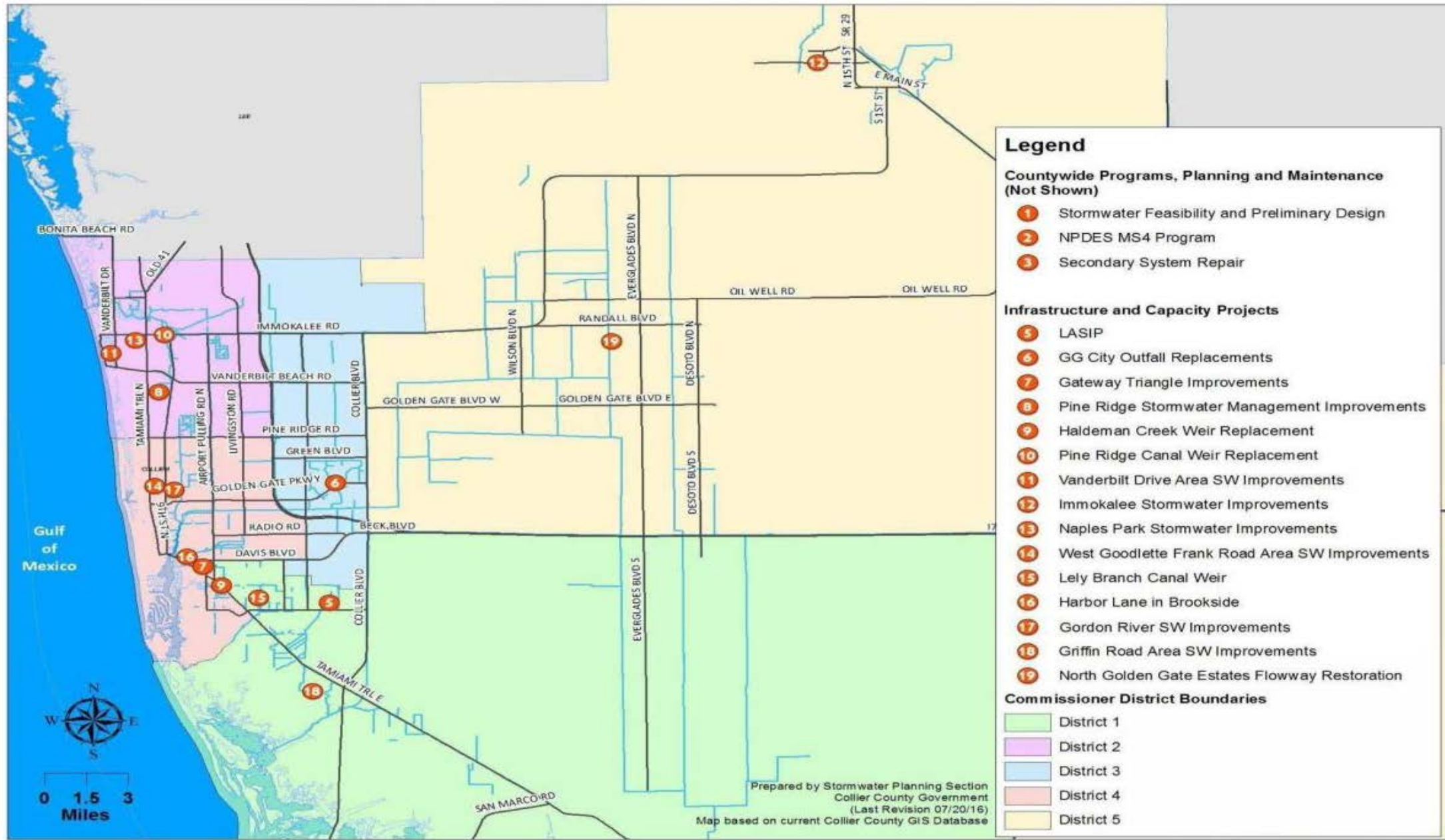


Weir Automation / Control Center

- Weir Automation / Control Center Project
 - Planning and design of powered weir gate operations and remote operation capability
 - Establish a shared local control center at the Collier County Emergency Operation Center (EOC)



Collier County Stormwater FY19 Plan



Collier County Stormwater FY19 Budget

Countywide Programs, Planning & Maintenance	
Stormwater Feasibility and Preliminary Design	\$300,000
NPDES MS4 Program	\$75,000
Stormwater Maintenance	\$100,000
Infrastructure & Capacity Projects	
Gateway Triangle Improvements *	\$20,000
Eagle Creek Weir Replacement *	
Haldeman Creek Weir Replacement *	
Pine Ridge Canal Weir 1 Replacement *	\$900,000
Vanderbilt Drive Swale Rehabilitation *	
Immokalee Stormwater Improvements*	\$15,000
Naples Park SW Improvement	\$3,200,000
W. Goodlette-Frank Area Stormwater Improvements	\$438,000
Lely Branch New Weir*	
Upper Gordon River	\$135,000
LASIP *	
RESTORE **	
Weir Automation / Regional Control Center	\$50,000
I-75 Coco Interconnect	\$500,000

* Denotes FY18 funded projects anticipated to be active through FY19.

** Denotes the initial portion of a multi-year, large scale, RESTORE project.

Questions?