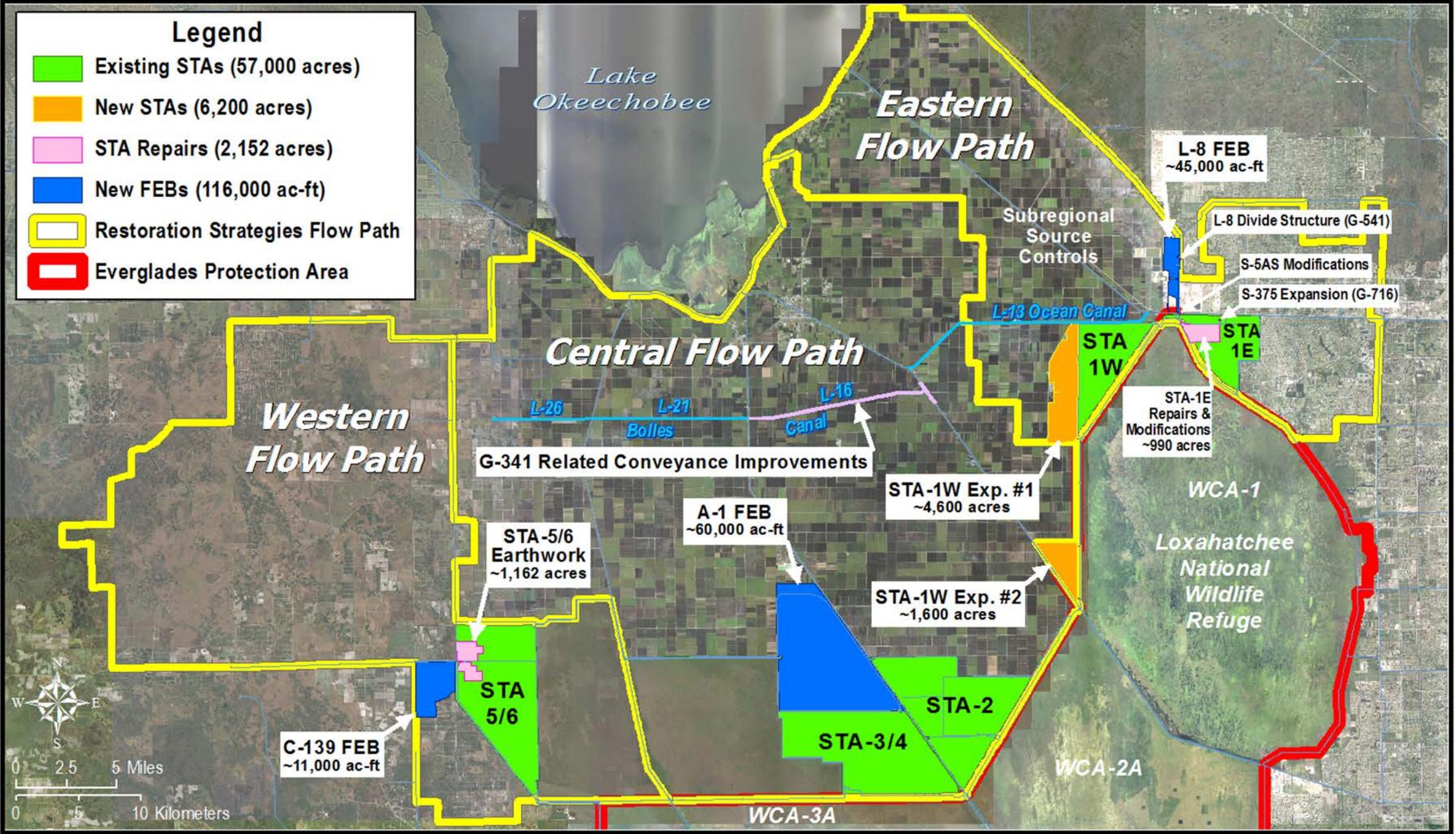


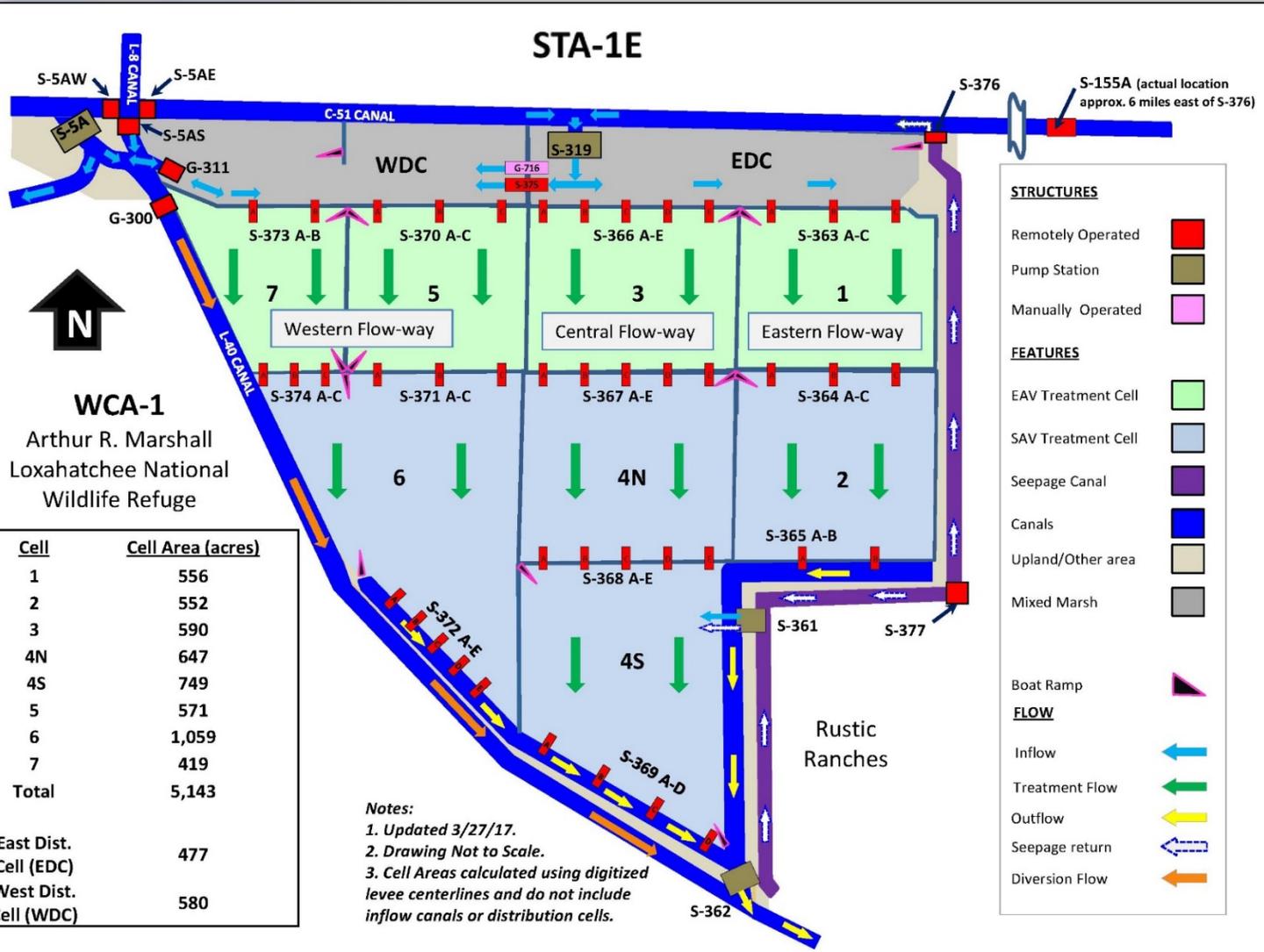
Restoration Strategies Engineering and Construction Update

Lucine Dadrian, P.E.
Section Administrator
Engineering and Construction Bureau

17th Annual Public Meeting on the Long-Term Plan
for Achieving Water Quality Goals for the
Everglades Protection Area Tributary Basins
February 24, 2020



STA-1E Repairs & Modifications Project



Purpose

- Raise and regrade ~990 acres in Cells 5 and 7 to achieve sustainable Emergent Aquatic Vegetation

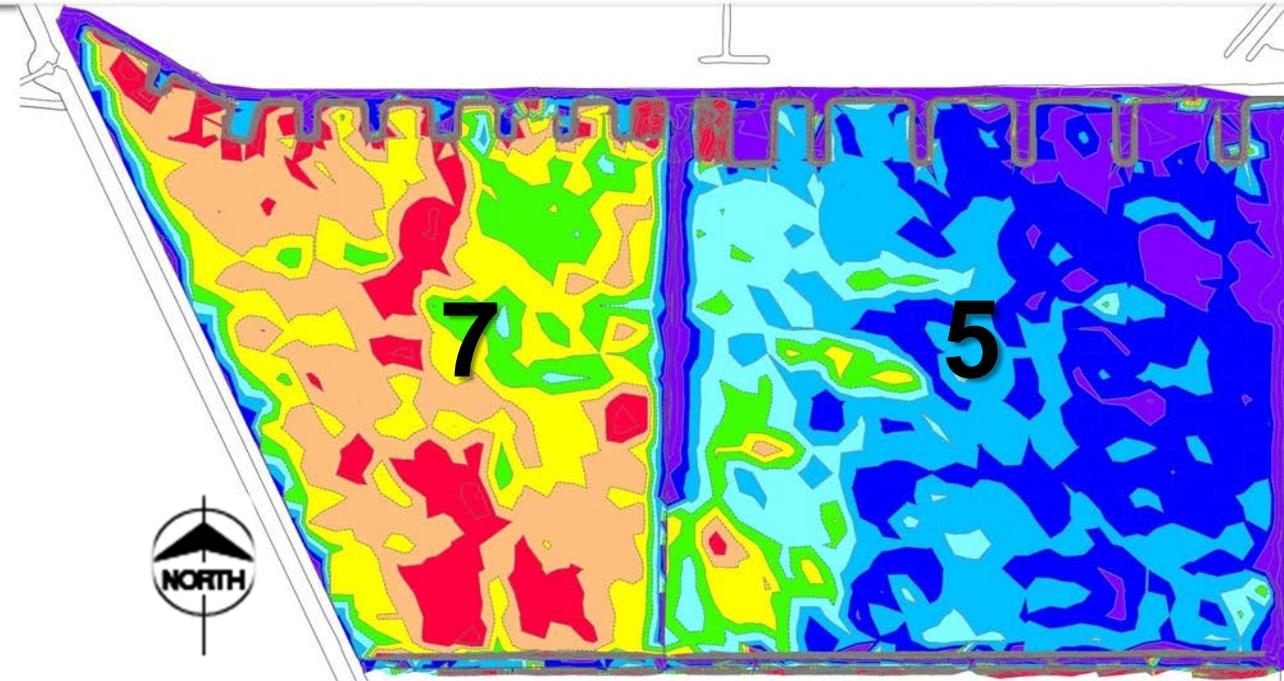
Design complete

Construction

- Contract for import of fill and hauling awarded at February Governing Board Meeting
- Contract for regrading of cells is scheduled for March Governing Board Meeting

STA-1E Repairs & Modifications Project

- **Regrade Cells 5 & 7 to 11.5-ft NAVD**
- **Cell 5 (560-acres)**
 - Net balance regrading
 - Level and redistribute existing material
 - Cut east areas and use to fill west areas
- **Cell 7 (430-acres)**
 - Net import raise and regrade
 - Entire cell is below target elevation
 - Soil import requirements:
1.6 million tons (1.1 million cubic yards)

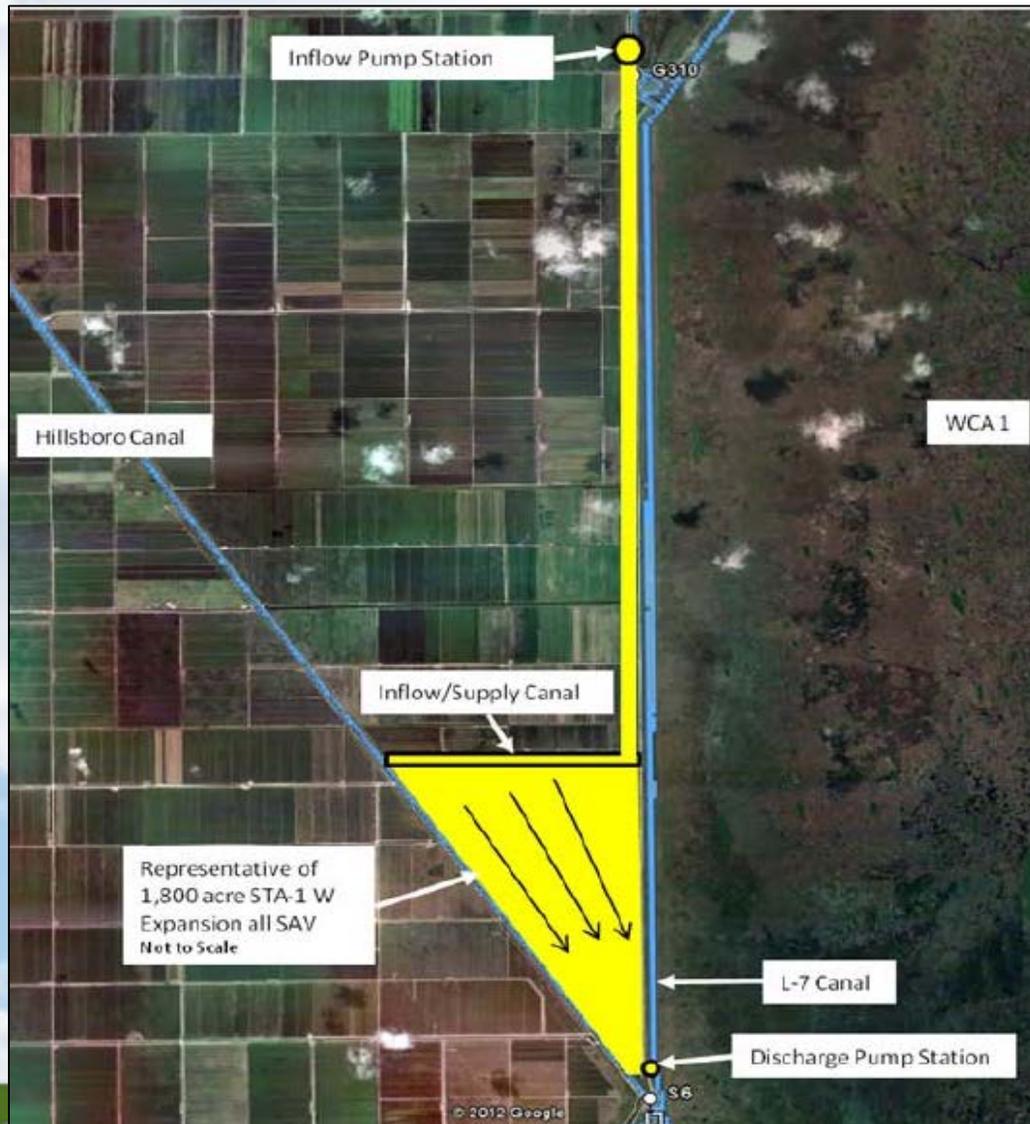


Source: 2012 Degrove Surveyors, Inc. (200-ft x200-ft grid)

EXISTING GRADE NAVD			
NUMBER	MINIMUM	MAXIMUM	COLOR
1	3.1	9.5	Red
2	9.5	10.0	Orange
3	10.0	10.5	Yellow
4	10.5	11.0	Green
5	11.0	11.5	Cyan
6	11.5	12.0	Blue
7	12.0	12.5	Dark Blue
8	12.5	14.0	Purple

TARGET ELEVATION →

STA-1W Expansion No. 2



- **Purpose**
 - Extend treatment flow ways for STA-1W
- **Estimated Cost \$180M**
- **Features**
 - 1,600 acres of additional treatment area
- **Inflows**
 - S-5A and C-51 West Basins via STA-1W
- **Outflow**
 - Water Conservation Area 1
- **Design phase in progress**
- **Construction phase for pipe crossing for North Inflow PS in progress**

**STA 1W
Expansion No. 1**

**NORTH INFLOW
PUMP STATION
(FUTURE
CONTRACT)**

**DISCHARGE
CANAL
UNDERGROUND
PIPE
INSTALLATION**



STA 1W

- Restoration Strategies requires STA1W to discharge to Expansion #1 and #2 separately
- Expansion #2 inflow is from the south end of STA1W discharge canal, pipe installation is to cross under Expansion #1 discharge canal and route STA1W water south along a lined channel to the Expansion #2 footprint
- Construction contract requires excavation and installation of four 60-inch by 310 feet long steel pipes purchased through separate Contract
- Approved at February 1, 2020 Governing Board meeting

STA-1W Expansion No. 2

➤ Underground Piping Package

- Complete Design - December 2019 ✓
- Start Construction - February 2020 ✓
- Complete Construction - October 2020

➤ STA Package

- Complete RTA Design - June 2020
- Start Construction - September 2020
- Complete Construction - December 2022

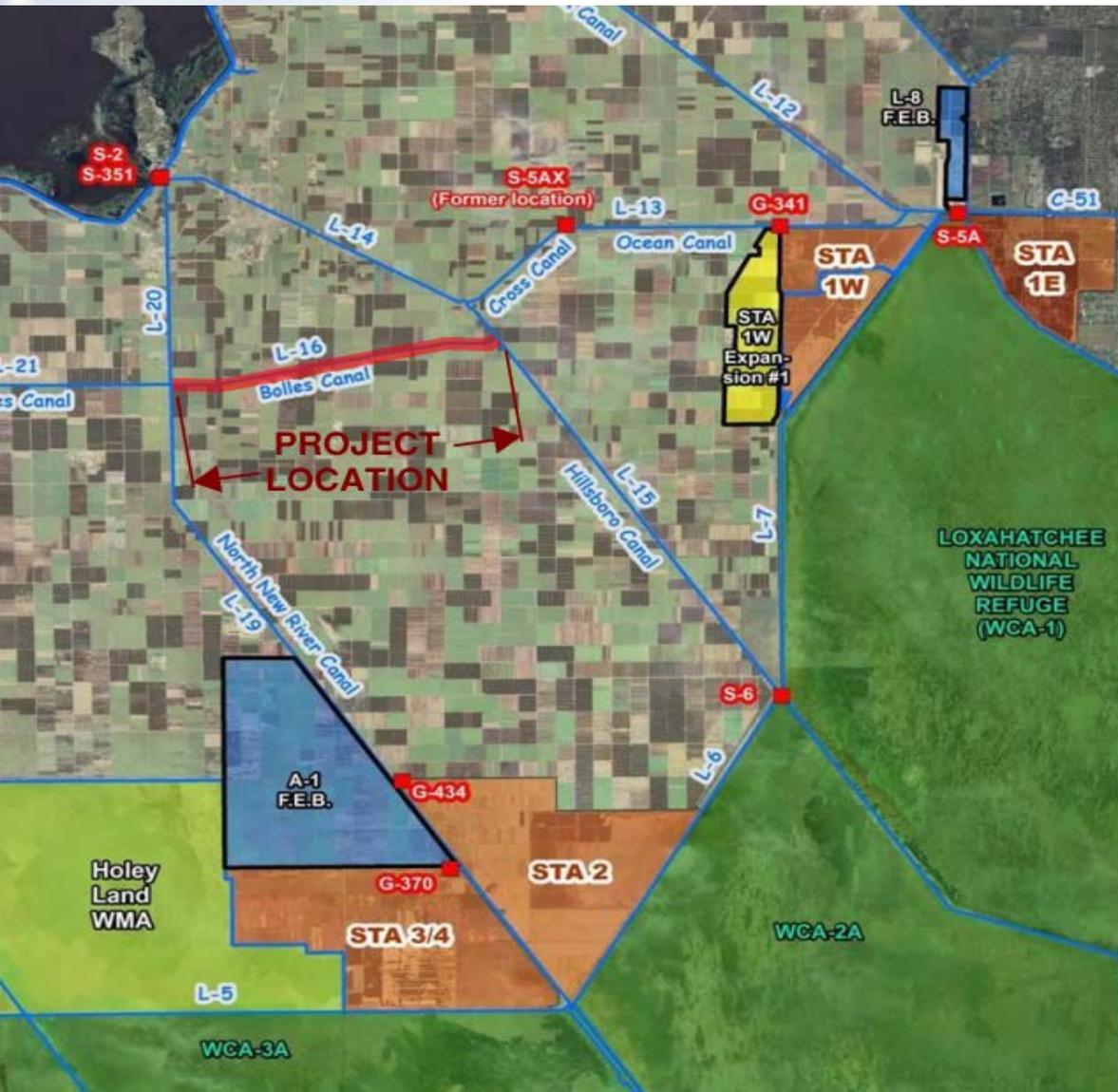
➤ Inflow Pump Stations Package

- Complete RTA Design – October 2020
- Start Construction – November 2020
- Complete Construction – December 2022

➤ Outflow Pump Station Package

- Complete RTA Design – October 2020
- Start Construction – November 2020
- Complete Construction – December 2022

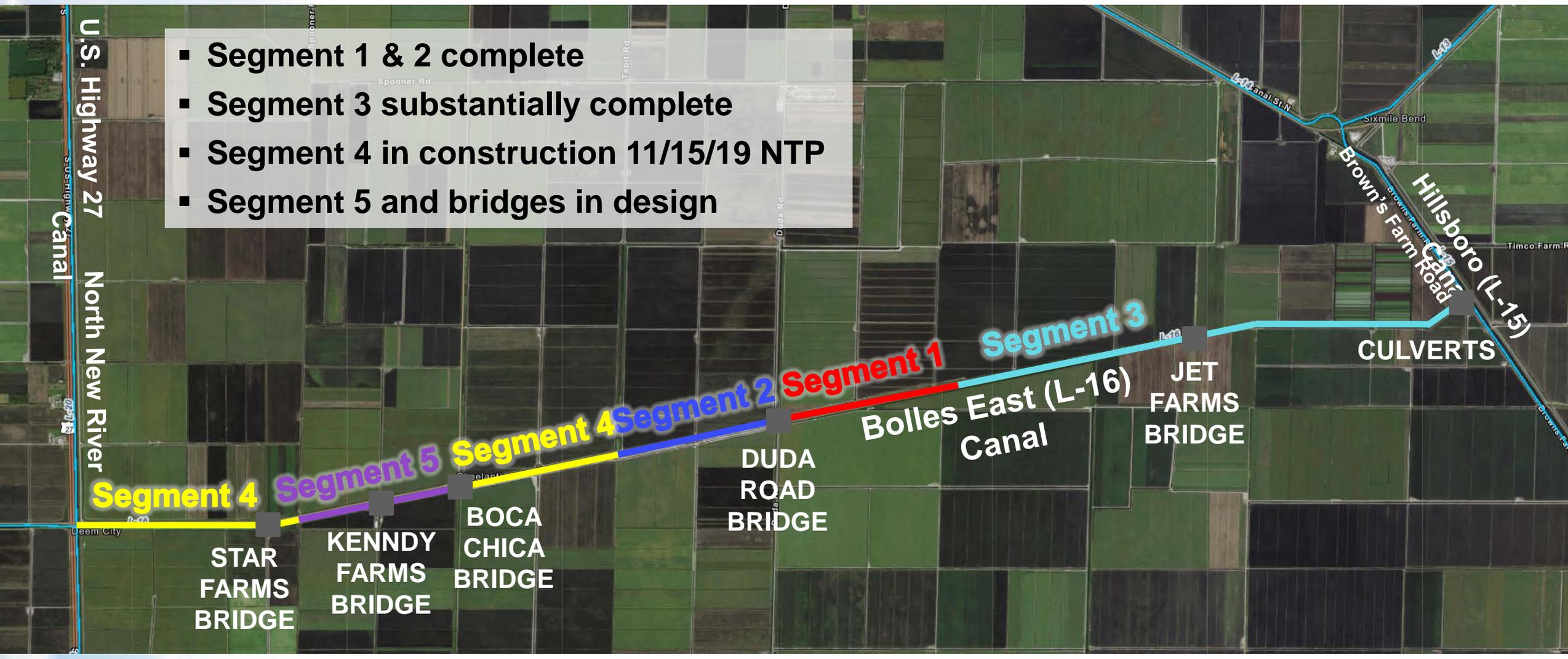
G-341 Related Conveyance Improvements Bolles East Canal



- Project boundary between Hillsboro Canal and North New River
- Deepening and widening of the L-16 Bolles Canal to construct largest possible cross-section within District right of way to increase operational flexibility
- Replace impacted farm ditches and roads outside of right of way
- Relocation of existing electrical services

G-341 Related Conveyance Improvements Bolles East Canal

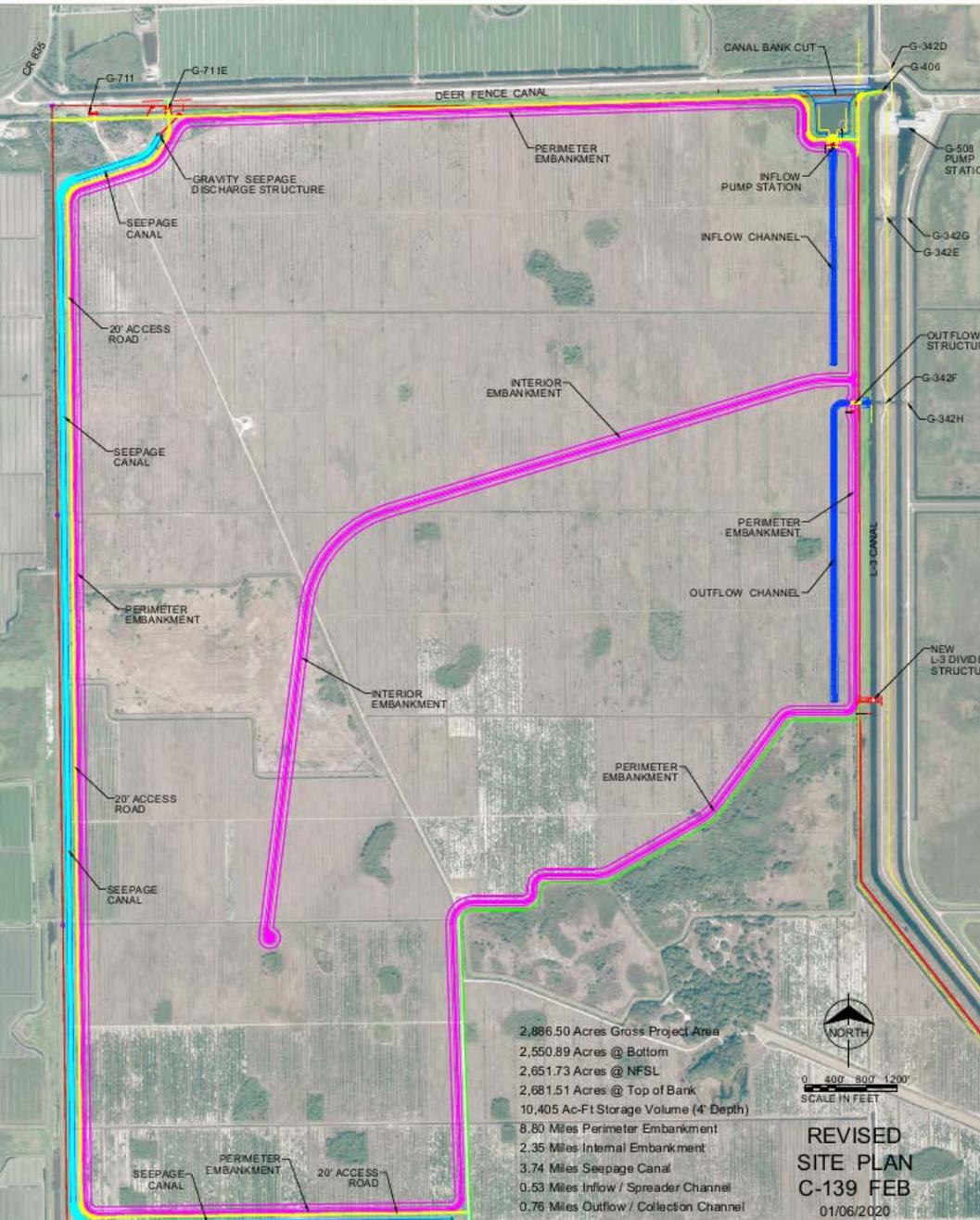
- Segment 1 & 2 complete
- Segment 3 substantially complete
- Segment 4 in construction 11/15/19 NTP
- Segment 5 and bridges in design



Excavation of Segment 3



C-139 Flow Equalization Basin



➤ Purpose

- Attenuate high flows into STA-5/6

➤ Features

- 2,800 acres located south of Deer Fence Canal and west of STA-5/6 Flow way 3
- 11,000 acre-ft shallow impoundment

➤ Inflows

- C-139 Basin Runoff

➤ Outflows

- STA-5/6

➤ Design in progress

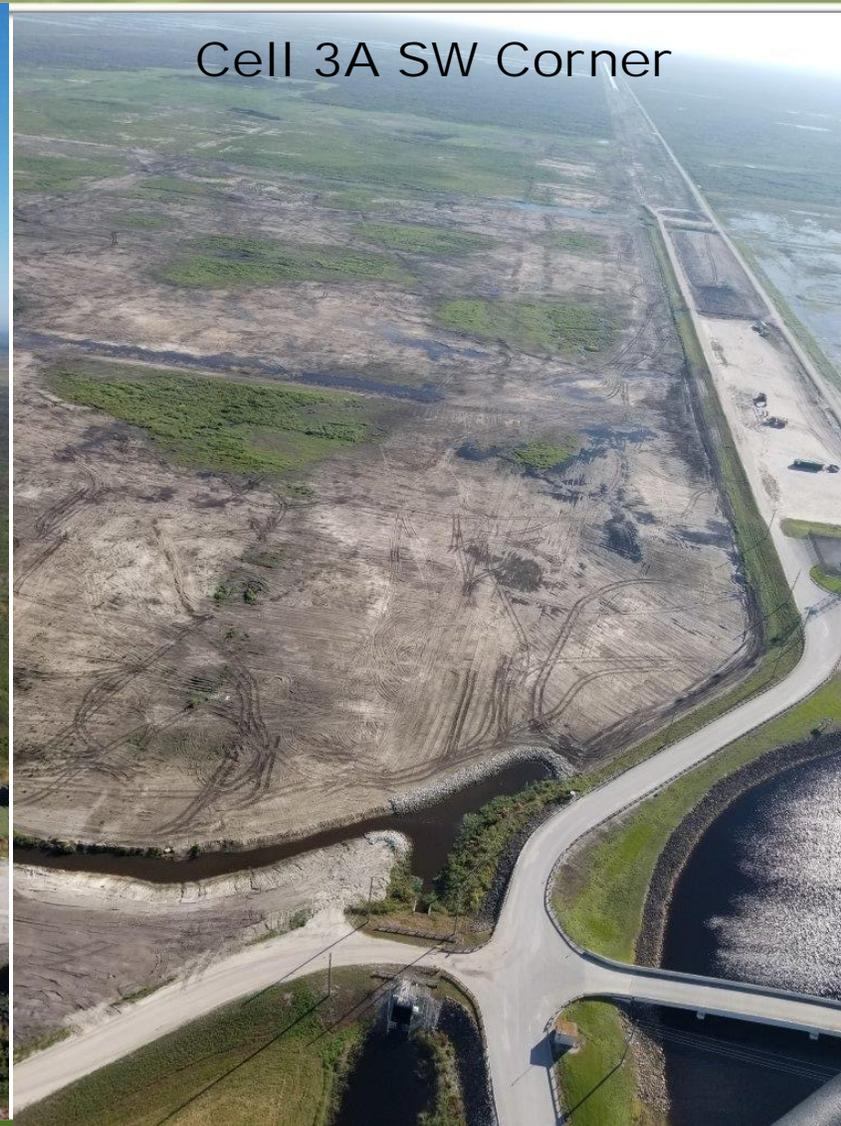
- Corrected Final / RTA Submittal 9/29/20
- Design Consent Order Deadline 10/31/20

STA-5/6 Earthwork Improvements

Cell 2A SE Corner



Cell 3A SW Corner



Spoil Pile from Cell 3A on
C139 FEB Footprint



Questions

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