

Manasota Key Beach Restoration A Regional Success Story

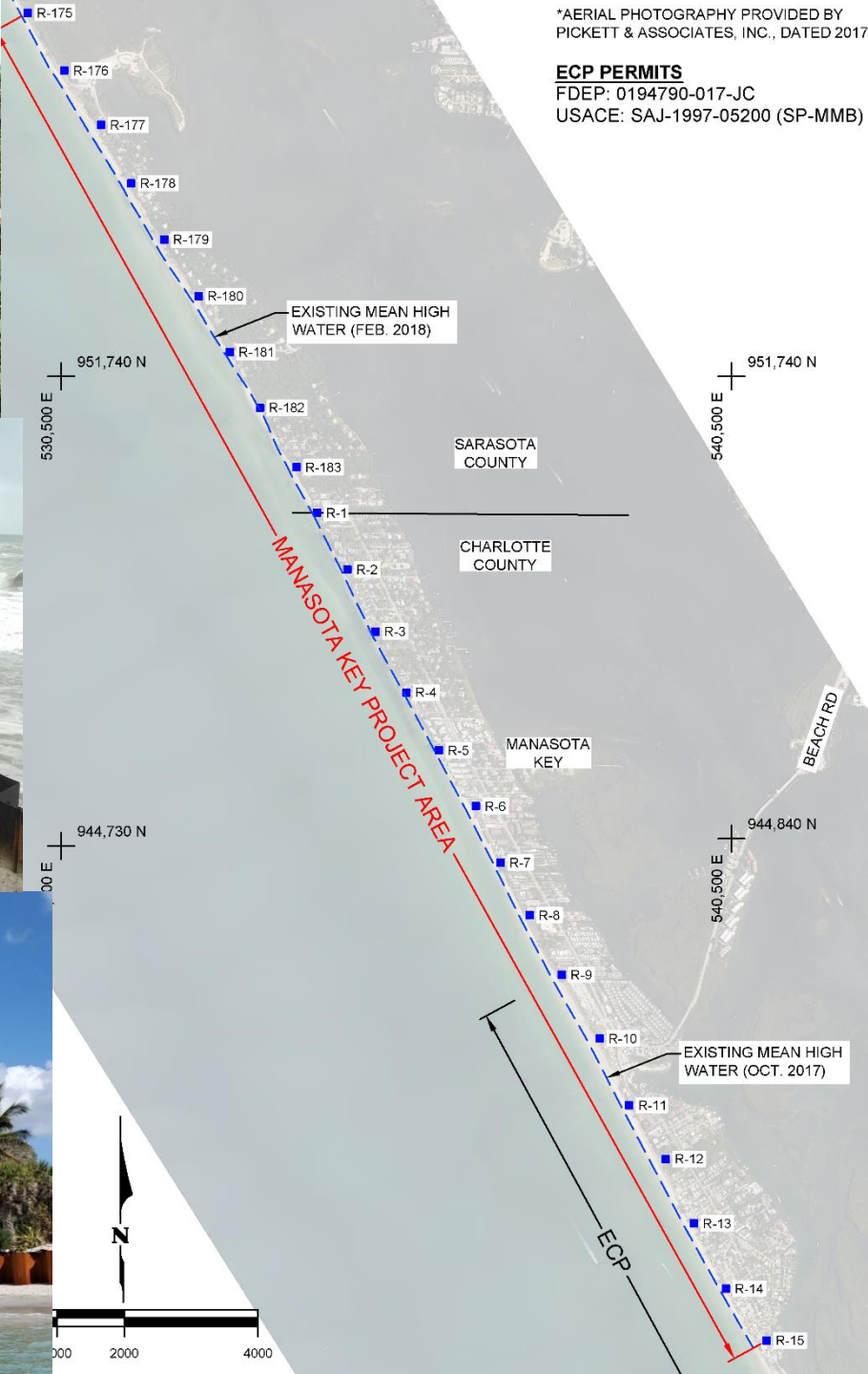
**BOARD OF COUNTY COMMISSIONERS
OCTOBER 13, 2020**



OUTLINE

- Design Plans and Sections
- Construction Details
- Fun Facts
- The Gappers
- South Beach
- Fantastic Shelling
- Mitigation Reef
- Acknowledgments





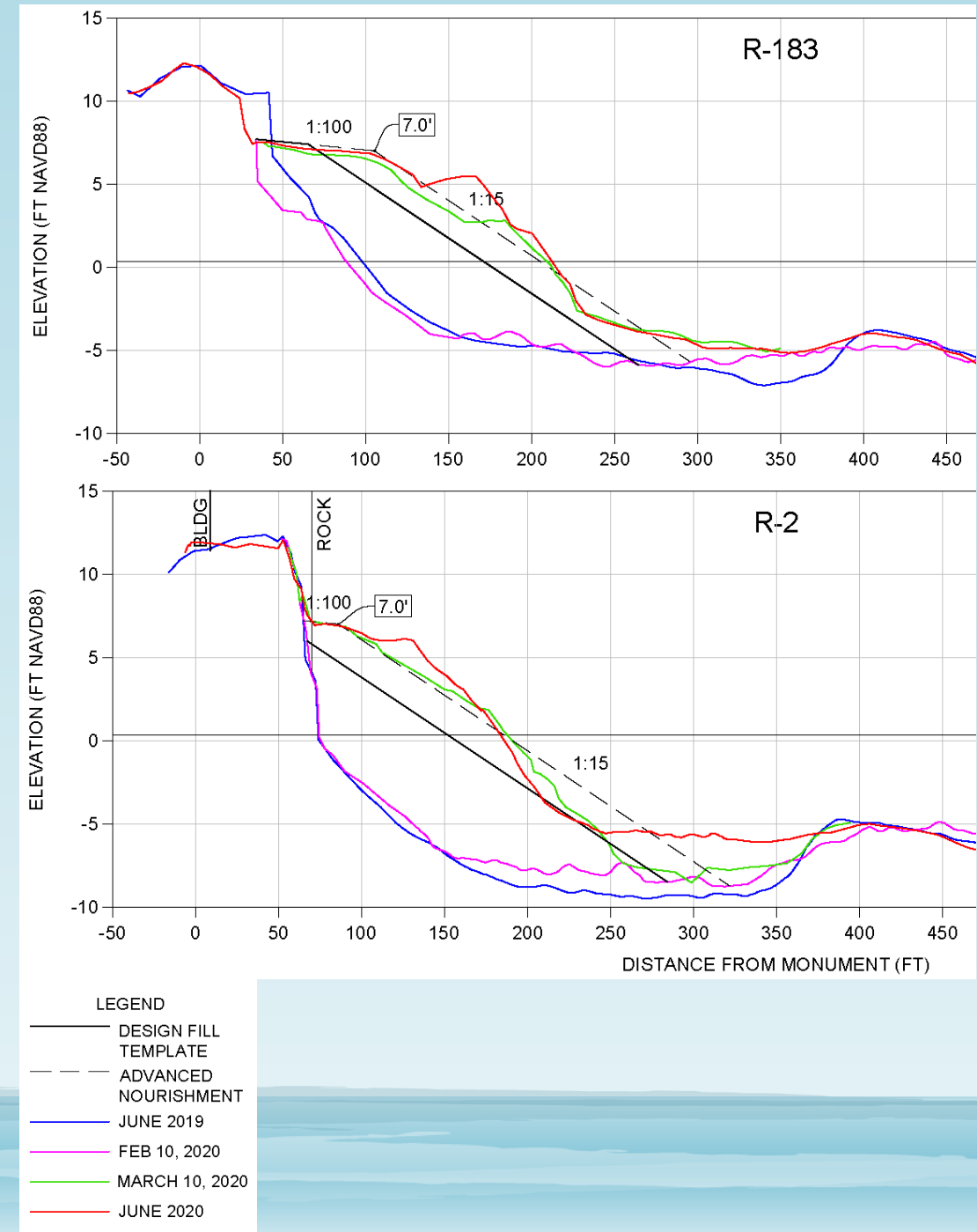
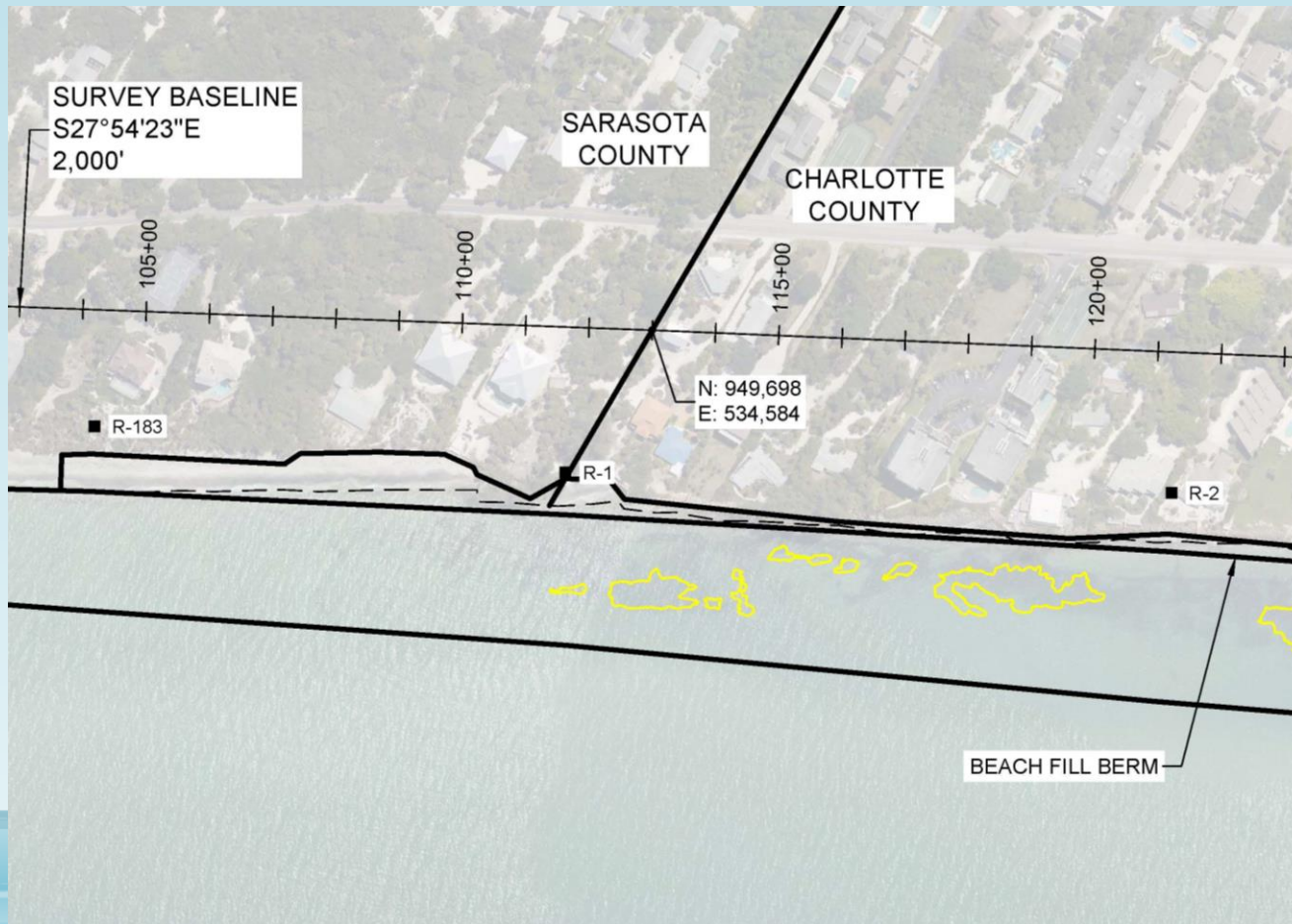
Project Area

- Sarasota-Charlotte Joint Project (R-175 to R-15.4)
- Overlaps With Charlotte's Existing Erosion Control Project (ECP) from Englewood Beach Park to State Park (R-9 to R-15.4)
- Constructed Concurrent with South Beach Fill Renourishment on Knight-Don Pedro Island

Design Plan and Sections

25-Yr Return Storm

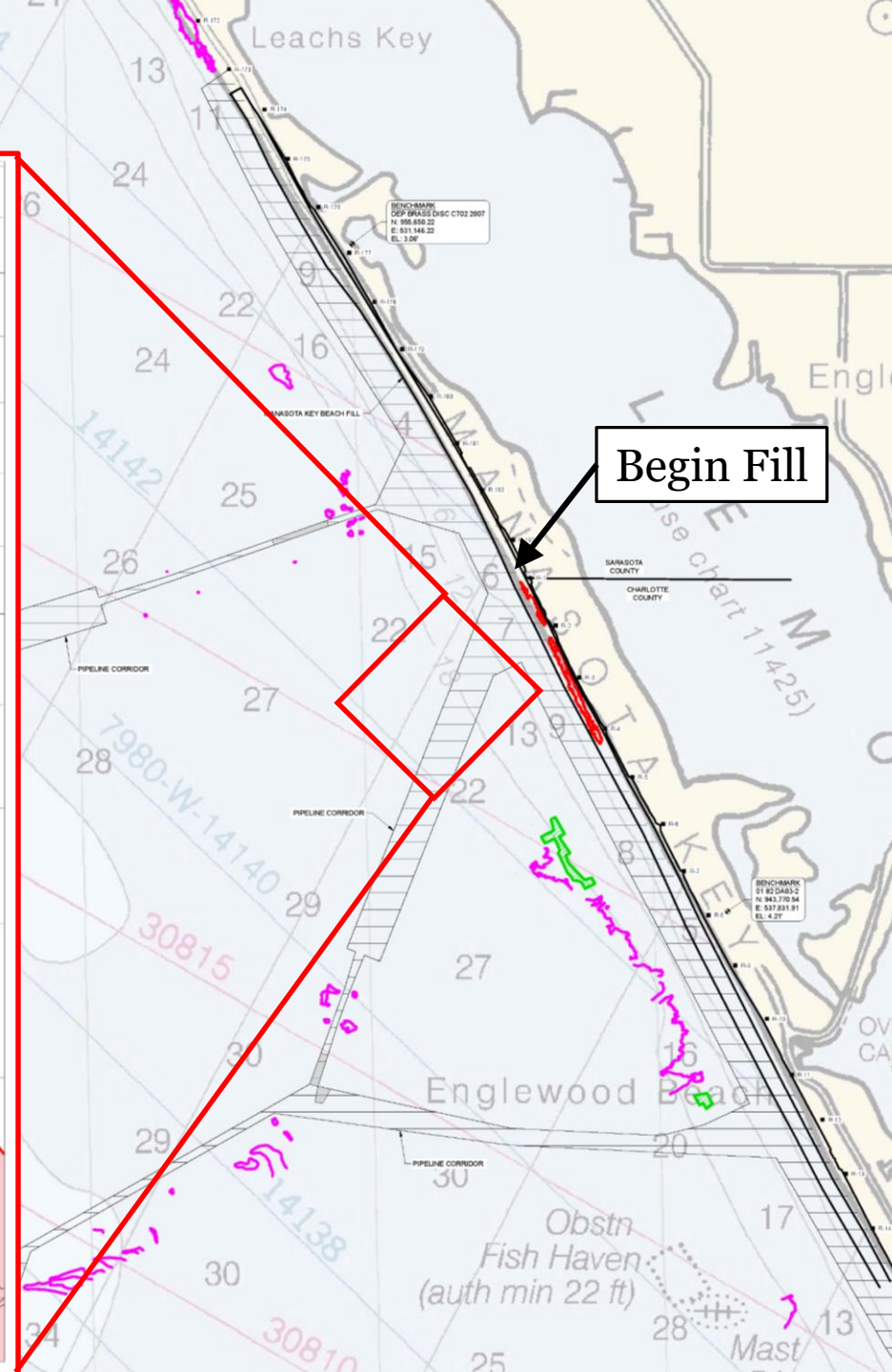
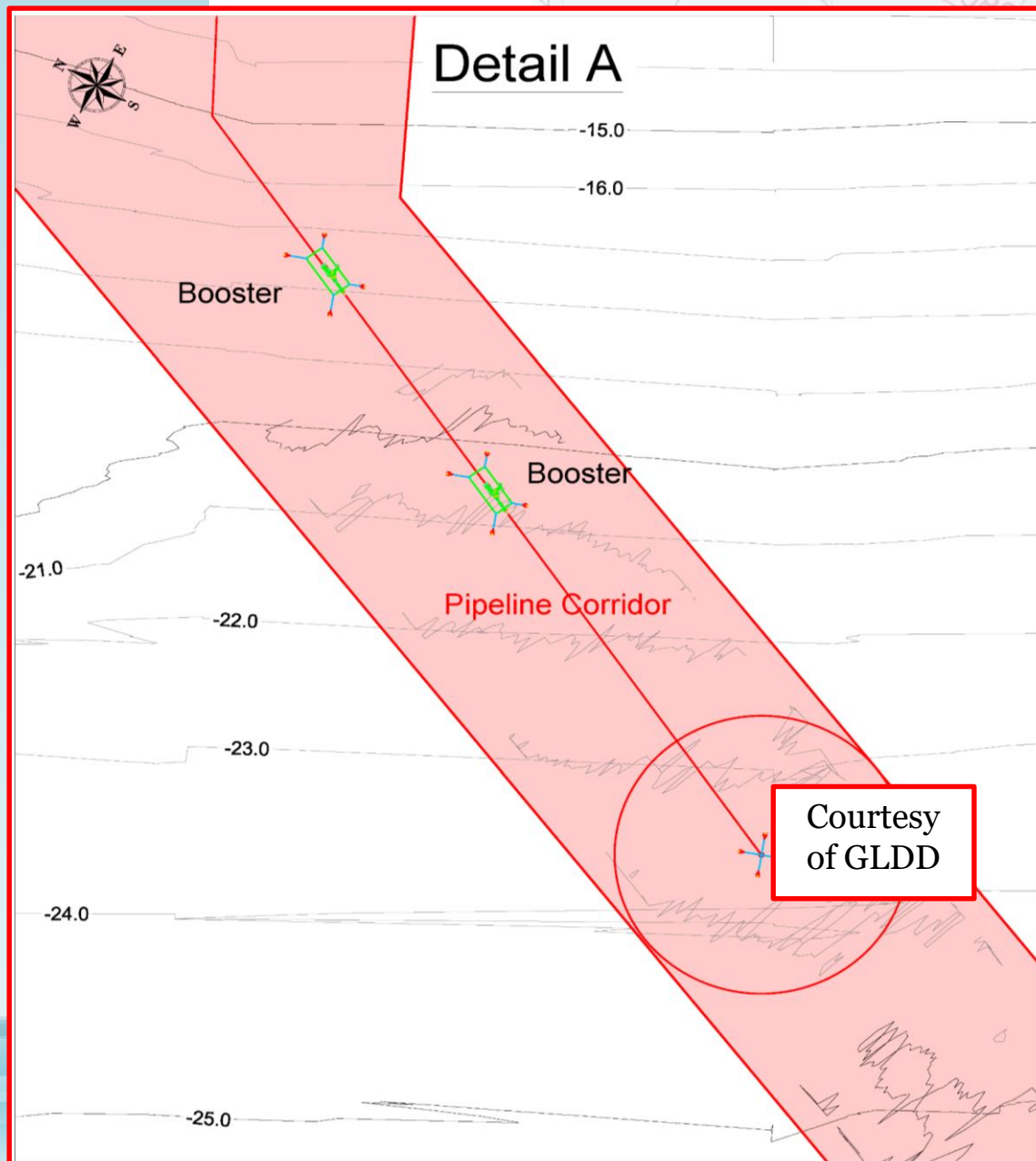
50-Ft Design Berm + Advanced Nourishment





Courtesy of GLDD

LEGEND
- EXISTING HARD BOTTOM TO BE PROTECTED
- EXISTING HARD BOTTOM TO BE IMPACTED
- PROPOSED MITIGATION REEF
- EXISTING DAY BEACONS
- EXISTING CAN/MARK
- EXISTING LIGHTED AID MARKER



Fun Facts

- Length = 3.82 Miles
- Volume Placed = 880,280 CY
- Borrow Area ~ 4.2 NM Offshore
- Contractor: Great Lakes Dredge & Dock
- Dredge Details: Padre Island, Dodge Island
- Engineer's Opinion of Cost: \$30,550,320
- Bid Range: \$30,451,850 - \$32,505,000
- Estimated "Regional" Savings ~ \$\$8 Mil
- Avg Production Rate ~ 18,340 CY/Day
- State Stats: Ranked 3rd(Vol), 4th(Length)

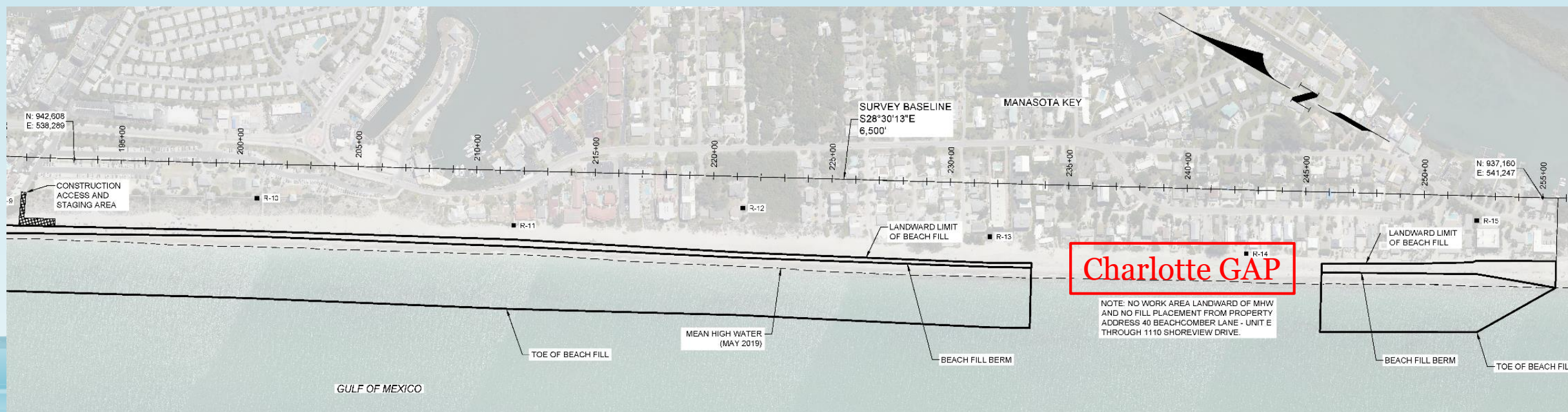
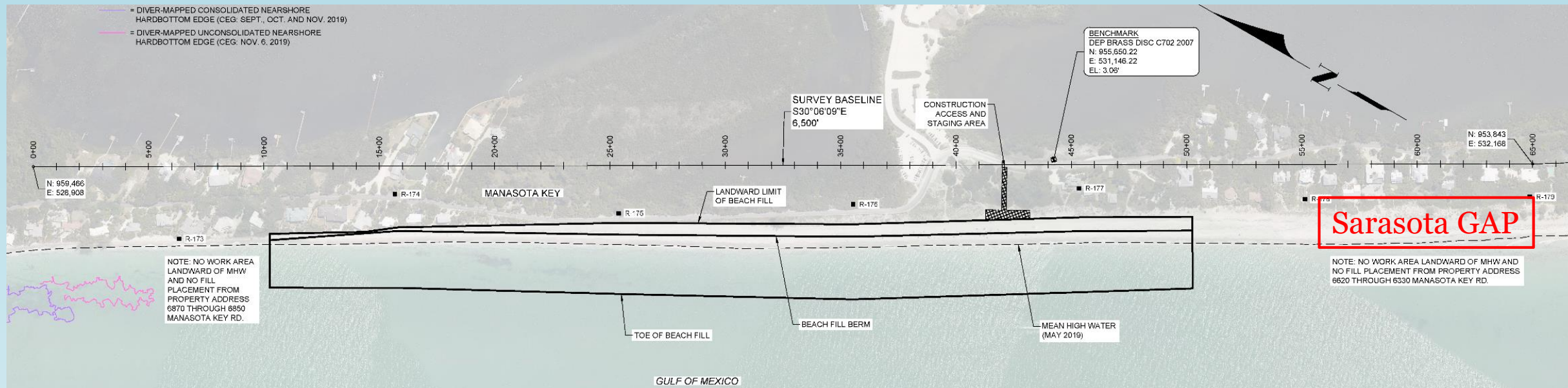


First Hopper Load from Borrow Area to Manasota Key



Cost Share ~ \$12.65 Mil (35%)

The "GAPPERS"



South Beach Fill

- Length = 1.65 Miles
- Volume Placed = 340,980 CY
- Borrow Area ~ 4.2 NM Offshore



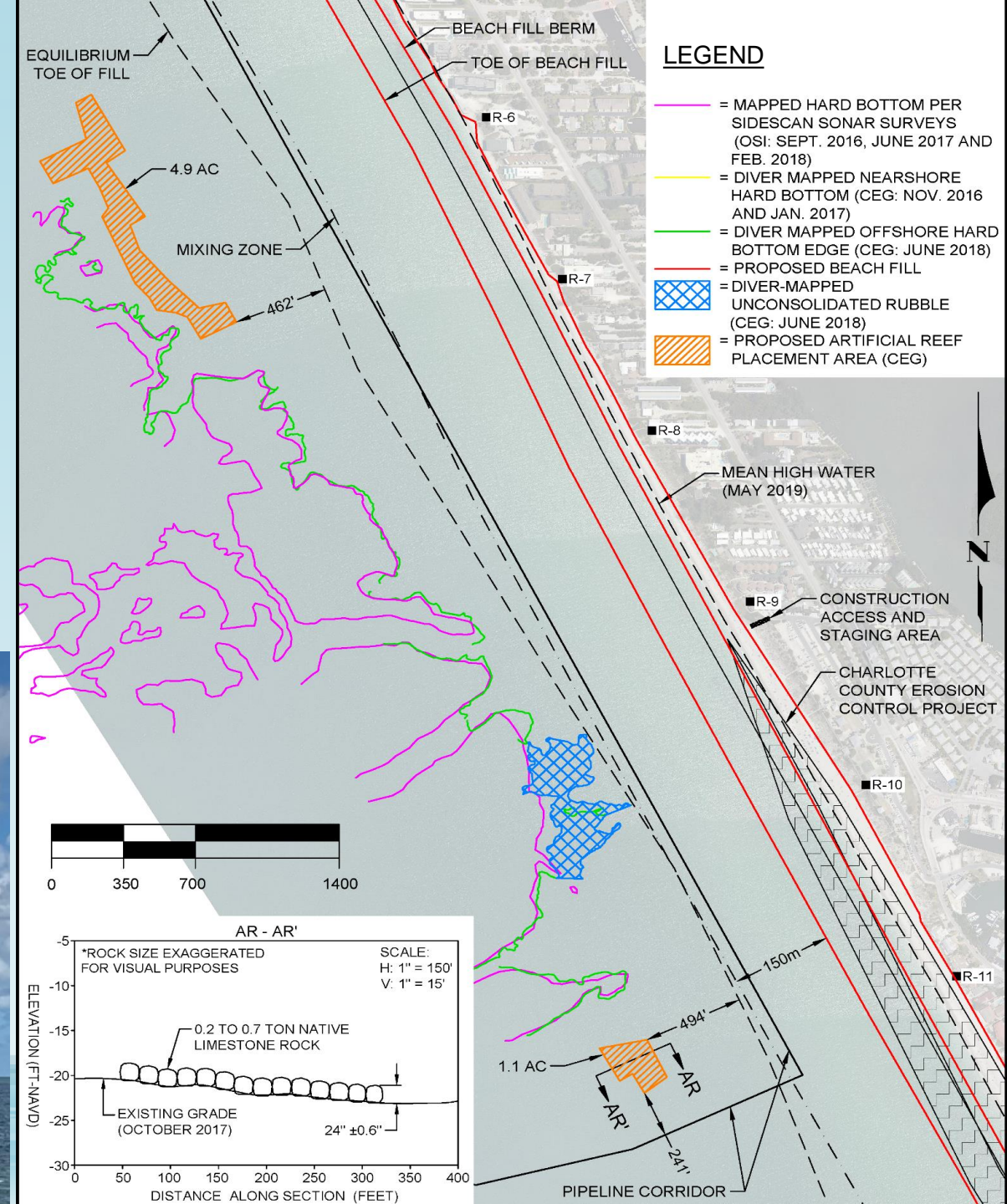
Courtesy of GLDD

Fantastic Shelling



Mitigation Reef

- Area = 3.9 Acres (Net) (80%-N, 20%-S)
- Estimated # of Rocks = 16,472
- Location ~ 1400 Ft Offshore
- Contractor: Cayo LLC
- Engineer's Opinion of Cost: \$6,957,000
- Bid Range: \$6,817,100 - \$9,100,000





THANKS TO
Charlotte and
Sarasota BCC's,
Project Managers,
& Staff





THANKS AND PRAISE Great Lakes Dredge & Dock





THANKS AND PRAISE

Manasota Key Residents, Committees Ambassadors, & Stakeholders





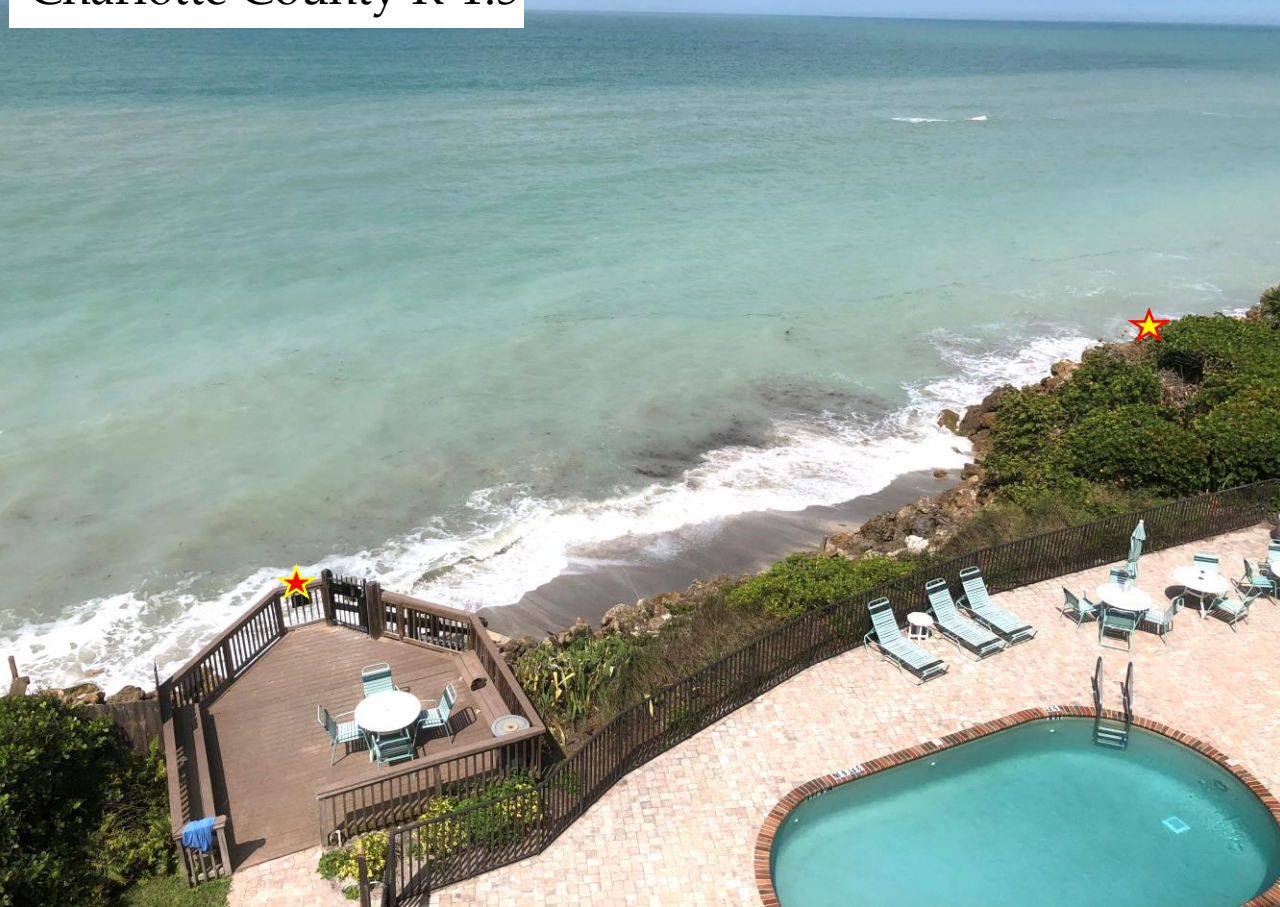
THANKS AND PRAISE

Our Consulting Team: CEG, OSI, RCG, AVS, Sono, and PCI



Charlotte County R-1.5

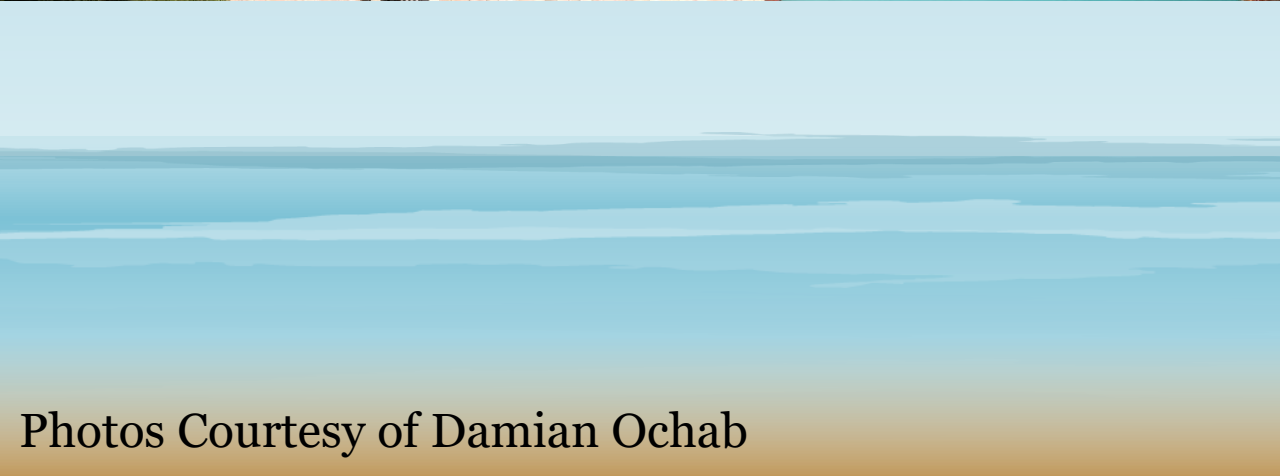
February 2020



THANKS TO
FDEP, FFWCC, USACE,
NMFS, & USFWS

Charlotte County R-1.5

March 2020



Photos Courtesy of Damian Ochab

SPECIAL THANKS TO MY TEAM AT CEC

