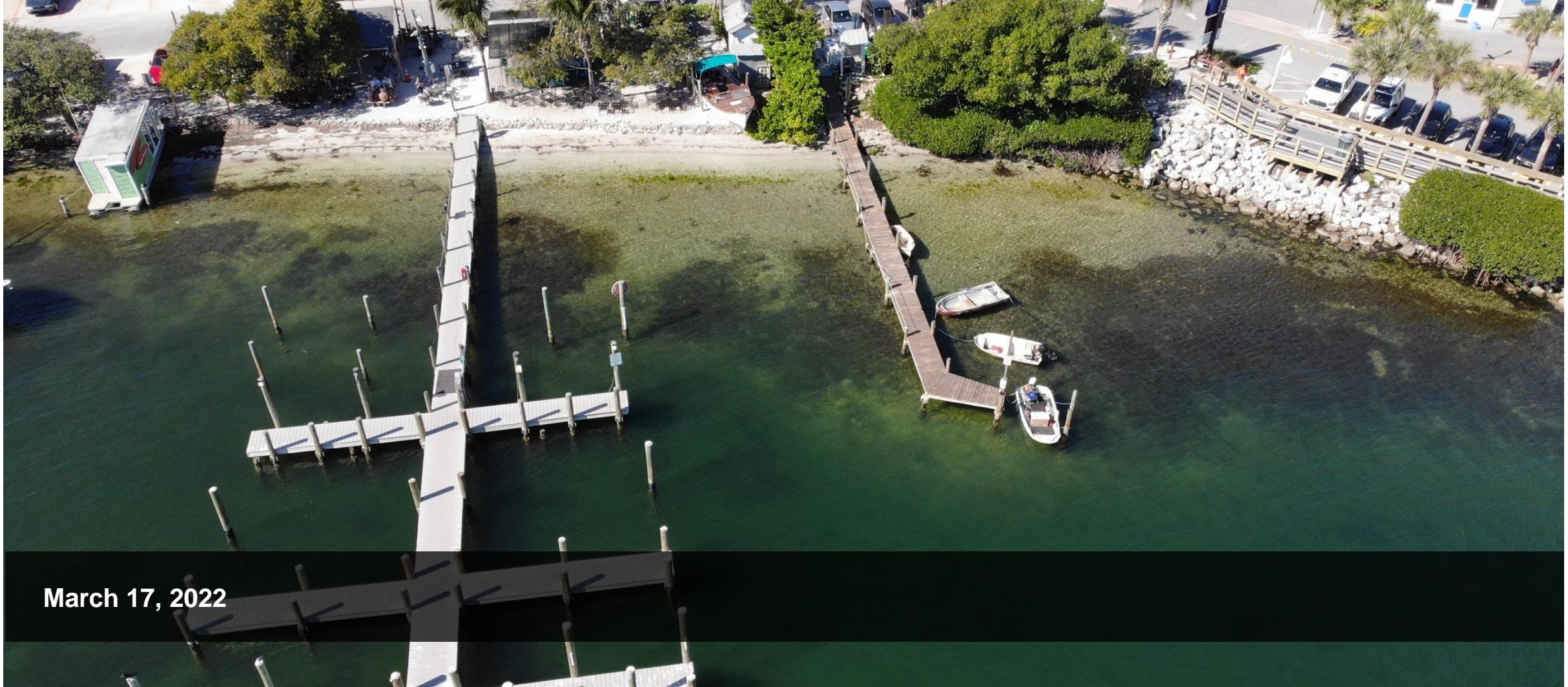


Bradenton Beach - Bay Drive South Shoreline Adaptation Project

Draft 60% Plan Review



Project Summary

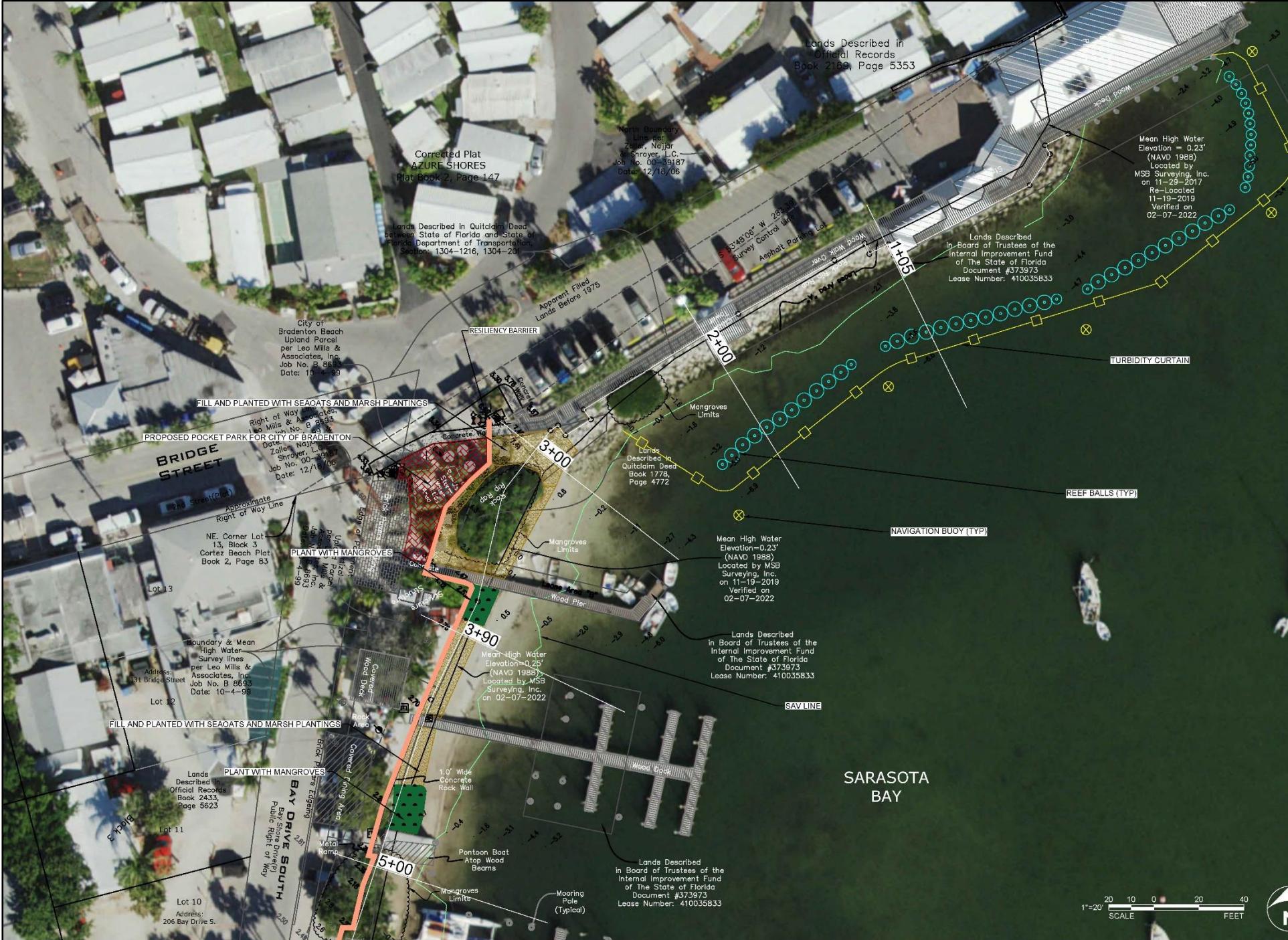
- Integrate best practices, per **Tampa Bay Regional Resiliency Coalition**, to design and implement living shorelines
- Incorporate regional sea level rise projections in conjunction with shoreline characteristics
- Project Limits - Bay Drive South from Bridge Street to 5th Street South, including the public pier and dinghy dock
- Workshops - Engage and inform the community on the design, construction, and functionality of living shorelines – [Held January 25, 2022 at 3rd Street S and Bay Drive South](#)

Scope of Work

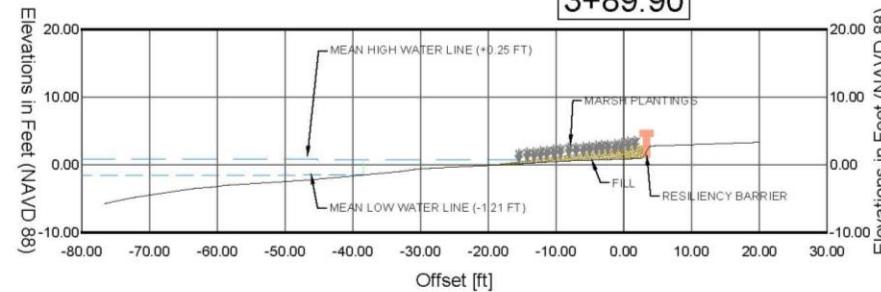
- Design, develop, and permit a resilient shoreline along a highly vulnerable section of Bay Drive S.
 - Living shorelines will be designed to create a breakwater parallel to the shore
 - Breakwaters options such as reef balls or natural materials such as oysters, clam beds, limestone boulders, mangrove planter islands, or bio-logs to restore natural contours and/or improve water quality

Project Outcomes

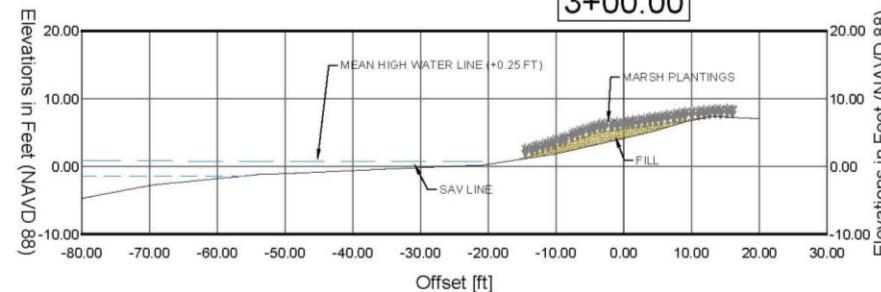
- Provide natural protection and enhance terrestrial and estuarine habitats to increased resiliency related to sea level rise
- Educational component will promote the awareness of sustainable and resilient adaptation concepts



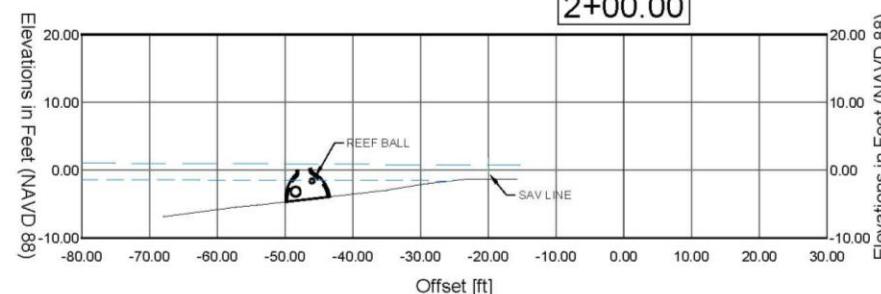
3+89.90



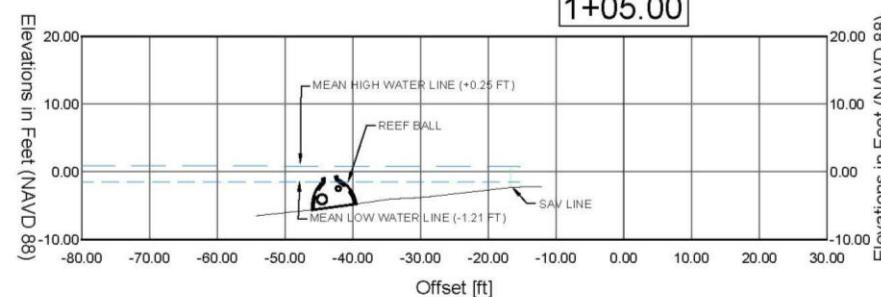
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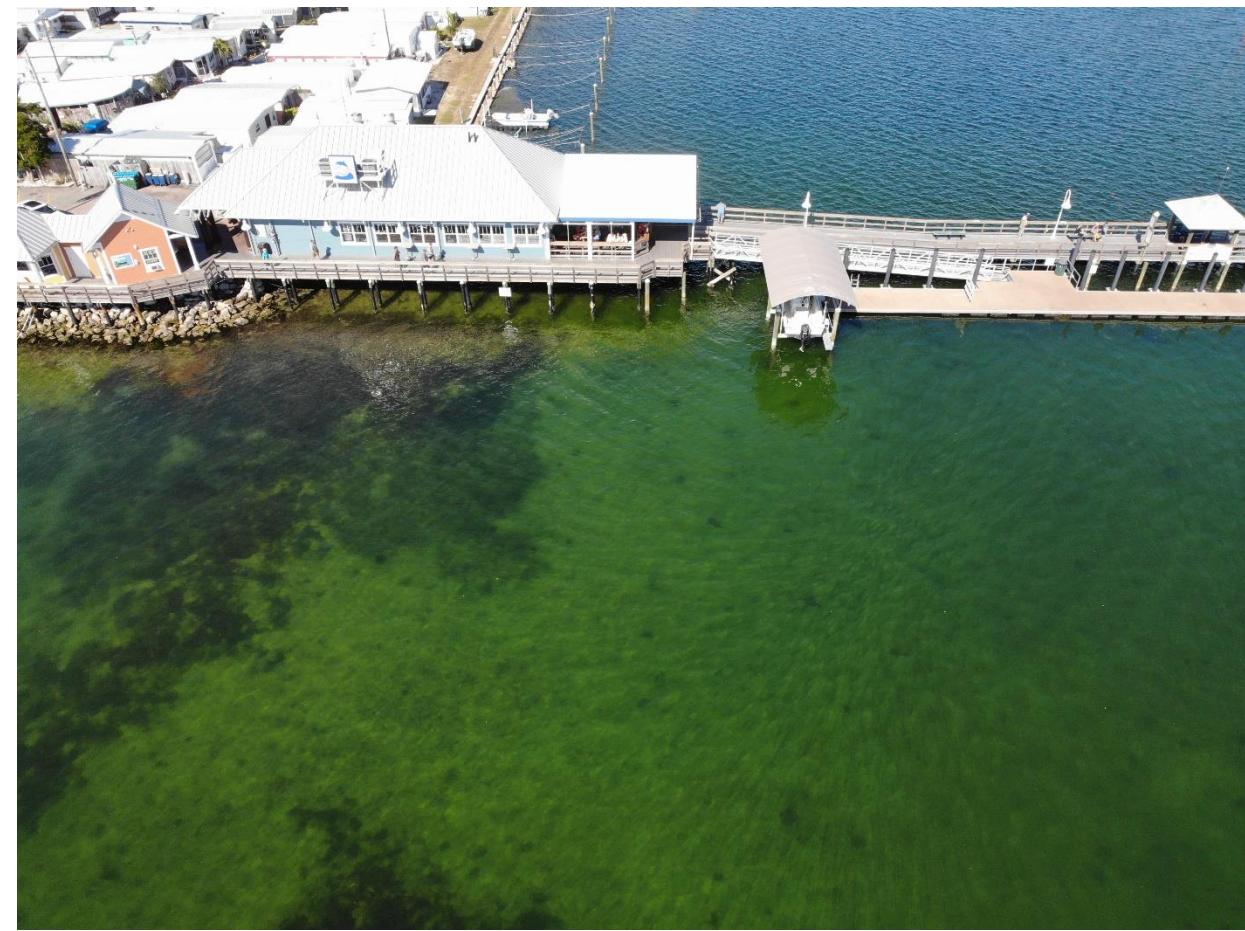


2+00.00



1+05.00


 VERTICAL SCALE: 1"=10'
 HORIZONTAL SCALE: 1"=10'





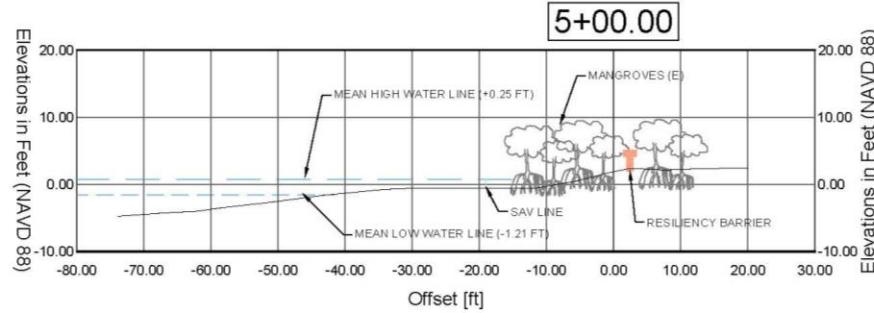
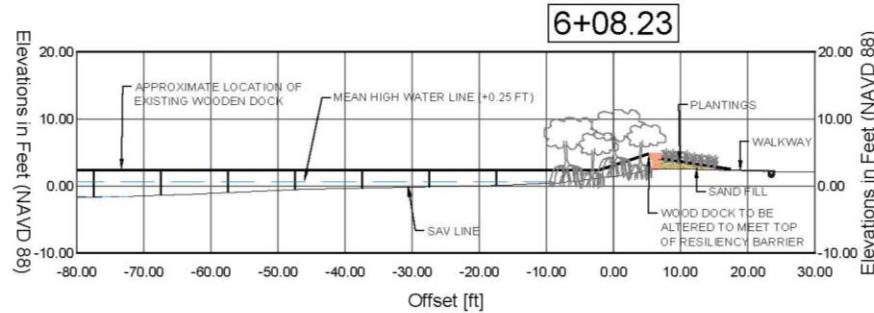
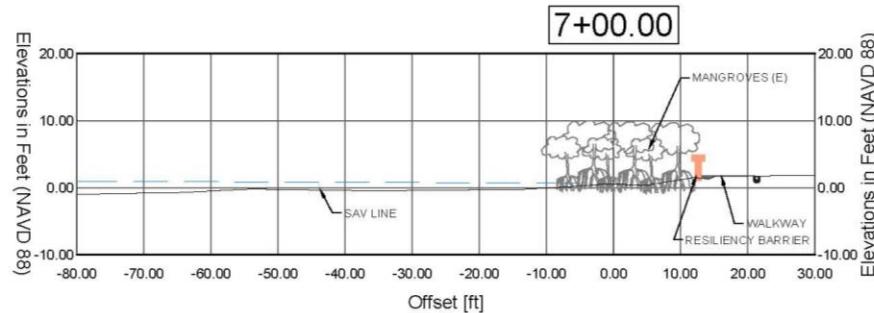
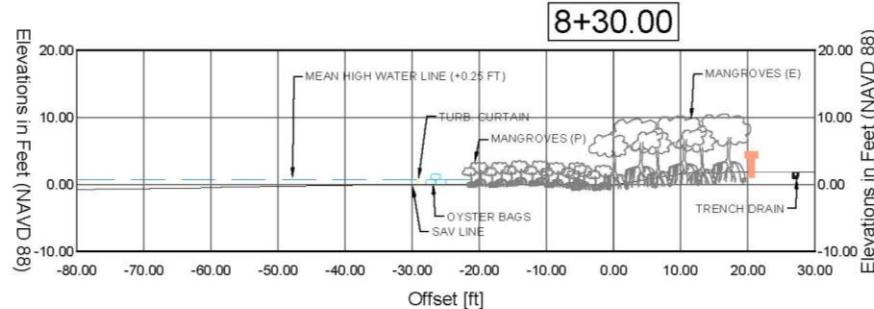
Clearwater Beach



Smathers Beach, Key West

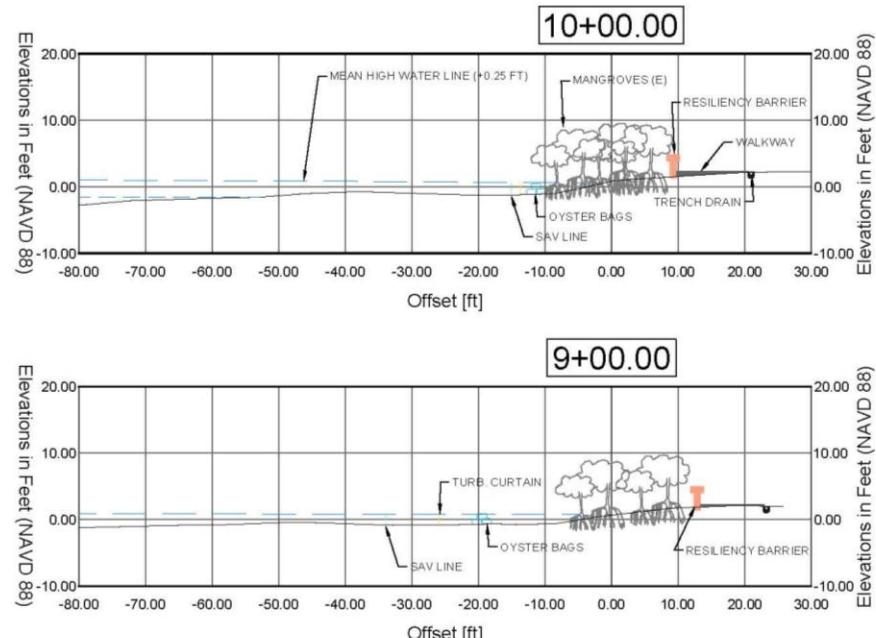






VERTICAL SCALE: 1"=10'
HORIZONTAL SCALE: 1"=10'





VERTICAL SCALE: 1"=10'
HORIZONTAL SCALE: 1"=10'

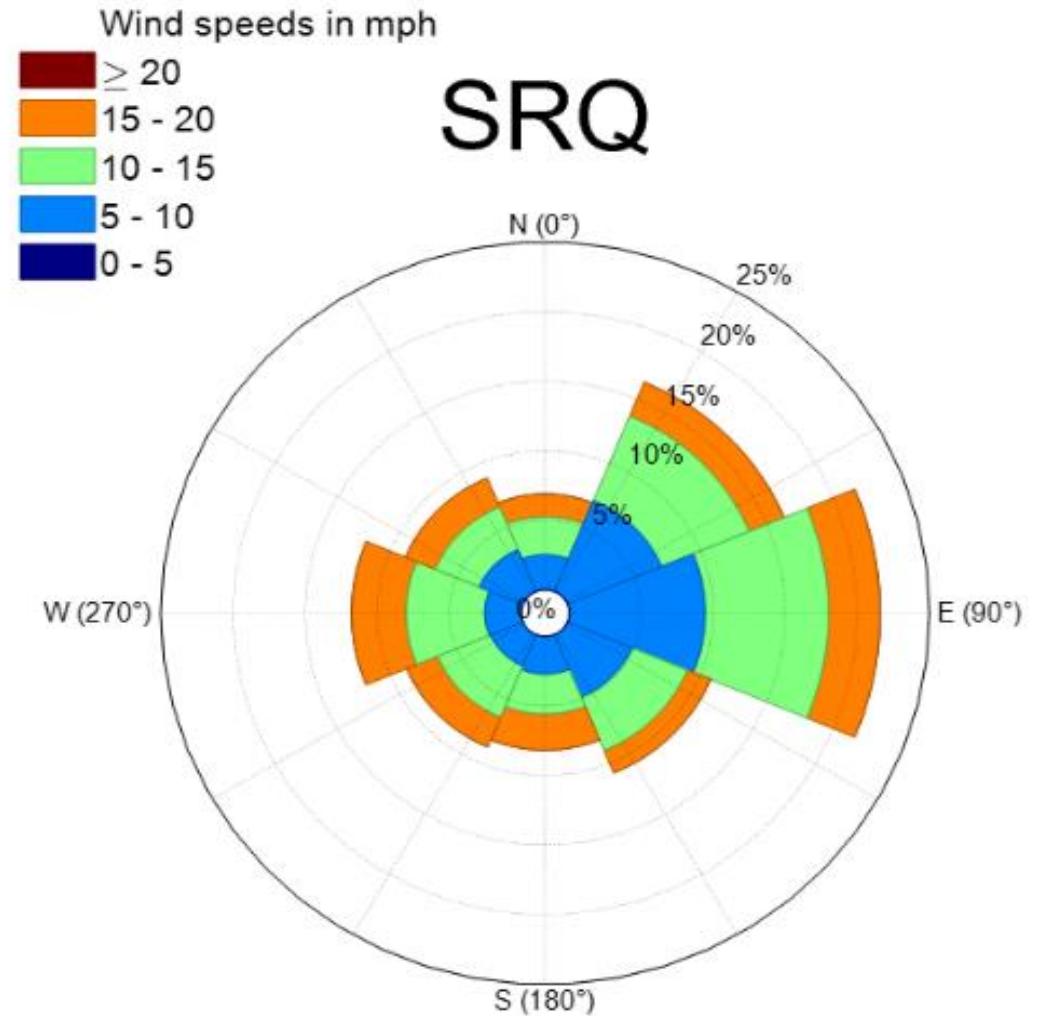


Coastal Conditions Analysis - Sea Level Rise

Year	NOAA Int-Low (feet)	NOAA Intermediate (feet)	NOAA High (feet)
2000	0	0	0
2030	0.56	0.79	1.25
2040	0.72	1.08	1.77
2050	0.95	1.44	2.56
2060	1.15	1.87	3.48
2070	1.35	2.33	4.56
2080	1.54	2.82	5.71
2090	1.71	3.38	7.05
2100	1.90	3.90	8.50

**SEA-LEVEL CHANGE
RELATIVE TO THE YEAR
2000 FOR ST. PETERSBURG,
FLORIDA IN FEET ABOVE
LOCAL MEAN SEA LEVEL
(LMSL) (TAMPA BAY
CLIMATE SCIENCE ADVISORY
PANEL, 2019)**

Coastal Conditions Analysis – Wind Rose



Coastal Conditions Analysis – Wave Analysis

Run ID	Event	Water Level [ft NAVD]	WIND DIRECTION FROM SOUTH-EAST			
			SOUTH EAST, 130°			
			Hsig [ft]	Tp [s]	W, Median rock size (lb)	d, Median Rock Diameter (ft)
WW1	10 yr. event	[MHHW]	1.7	3.0	175.3	1.3
WW2		[MHHW + Surge]	2.0	3.1	268.6	1.5
WW3	25 yr. event	[MHHW]	1.8	3.1	215.1	1.4
WW4		[MHHW + Surge]	2.2	3.3	369.6	1.7