



# 2026 ISLE OF PALMS RENOURISHMENT

## City Council Update

*June 24<sup>th</sup>, 2026*

*Isle of Palms, SC*



# PRESENTATION OUTLINE

## 1. BEACH NOURISHMENT

- What is beach nourishment?
- How will it affect your time at IOP?
- How does beach nourishment affect wildlife?
- How is public safety ensured?
- Other FAQs

## 2. 2026 PROJECT OVERVIEW

- Purpose and goals
- Nourishment design
  - Dune
  - Sandbags
- Schedule

## 3. SCHEDULE

## PARTNERS & SUPPORTERS



**US Army Corps  
of Engineers®**



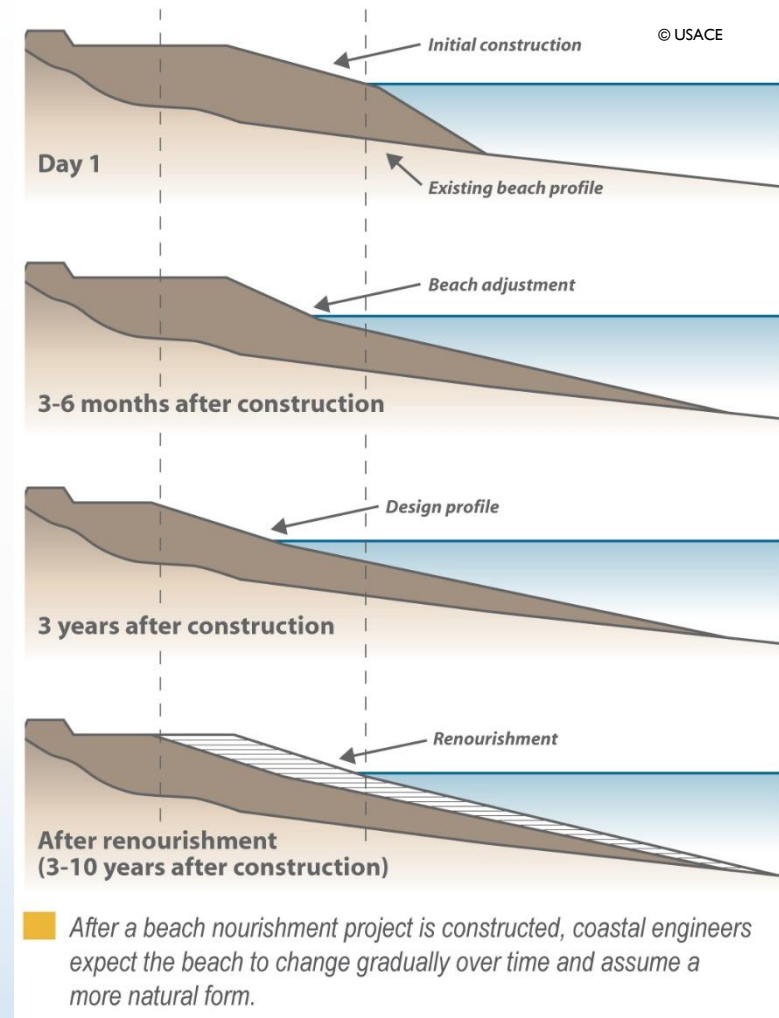
# WHAT IS BEACH NOURISHMENT?

- The process of dredging sand from offshore or an upland source to place on the beach to provide increased storm protection, wider recreational beaches, and restored habitat
- Sand Sources
  - Sandbar/shoal
  - [Offshore borrow area](#)
  - Upland mine
- Sand is placed on the beach in an engineered template
  - Design based on current condition and expected erosion trends



# WHY DO WE NOURISH BEACHES?

- Combat beach erosion
- Protect property and infrastructure
- Enhance the recreational beach by building a wider beach
- Add additional wildlife habitat (Sea Turtle nesting, Shorebird habitat, etc.)
- Eliminate the need for emergency erosion control measures
- Maintain property value and tax base



# HOW WILL IT AFFECT YOUR TIME AT IOP?

## WHAT TO EXPECT:

- Construction occurs 24/7 everyday until completion
- Temporary beach closures
  - 500-1,000 feet at a time
  - Typically last to 3-5 days at any one location
  - Access is maintained around and behind the fill areas where possible
- Large construction equipment and materials
  - Bulldozers, Loaders, Excavators, Fuel Trucks
  - Pipe stacks
  - Mobile offices
- Backup alarms and nighttime lighting
- Increased boat traffic and offshore dredge

## CHANGES TO THE BEACH:

- Temporary dark material on beach and in ocean
- Temporary localized turbidity
- Temporary shell accumulation
- Access ramps over pipe



# HOW DOES BEACH NOURISHMENT AFFECT WILDLIFE?

## Shorebirds

- Surveys already completed to monitor shorebird nesting areas
- Construction will avoid areas of nesting
- Summer work window away from inlets proposed by USFWS to avoid impacts

## Sea Turtles

- Morning surveys and nightly observers to locate turtles/nests
- Work with Island Turtle Team to relocate turtle nests in construction areas
- Nighttime lighting in accordance with USFWS guidelines
- Max construction of 500 feet at night
- Limited movement of equipment and materials at night
- Offshore impact to turtles is limited as the dredge is slow moving

## Other Species

- Follow guidance of USFWS and SCDNR
- Ensure offshore equipment is prepared and maintained correctly

**One of the project goals is to add more habitat for flora and fauna**



# HOW IS PUBLIC SAFETY ENSURED?

## Beach Closures

- Up to 1,000 ft at a time around active construction
- Storage Areas

## Site security and safety fencing

## Escorts for heavy equipment

## Safety equipment

- Back-up alarms
- Nighttime Lighting

## Suggestions to the public

- Avoid active construction areas
- Stay outside safety fencing
- Exercise caution around heavy equipment
- Avoid sitting between ruts and equipment tracks
- No climbing on the pipe
- Avoid swimming near pipeline landing sites



# OTHER FAQs

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## What should I expect after nourishment?

- The beach will be significantly wider, but erosion of the construction berm and scarping can be expected directly after nourishment as the constructed profile adjusts to a natural beach shape.
- The sand may appear darker in areas, but will lighten up to its natural color in time.
- The transition into the water (swash zone) may be steeper until the profile is reshaped by waves.
- Temporary ponding may occur on the nourished beach after storms or king tides.



# 2026 PROJECT OVERVIEW

- Owner: City of Isle of Palms & Wild Dunes Community Association
- Contractor: Marinex
- Engineer: CSE
- Project Cost: **21.47 million dollars**
- Three Reaches
  - Reach 1: Wild Dunes Property Owners Beach House to the Wild Dunes Links Golf Course (**900,000 cy**)
  - Reach 2: 53rd Avenue to Wild Dunes Property Owners Beach House (**800,000 cy**)
  - Reach 3: Breach Inlet to the Pier (**800,000 cy**)
  - Total: **2.5 Million Cubic Yards or 166,000 dump trucks**
- Construction Schedule – **July-November 2026**

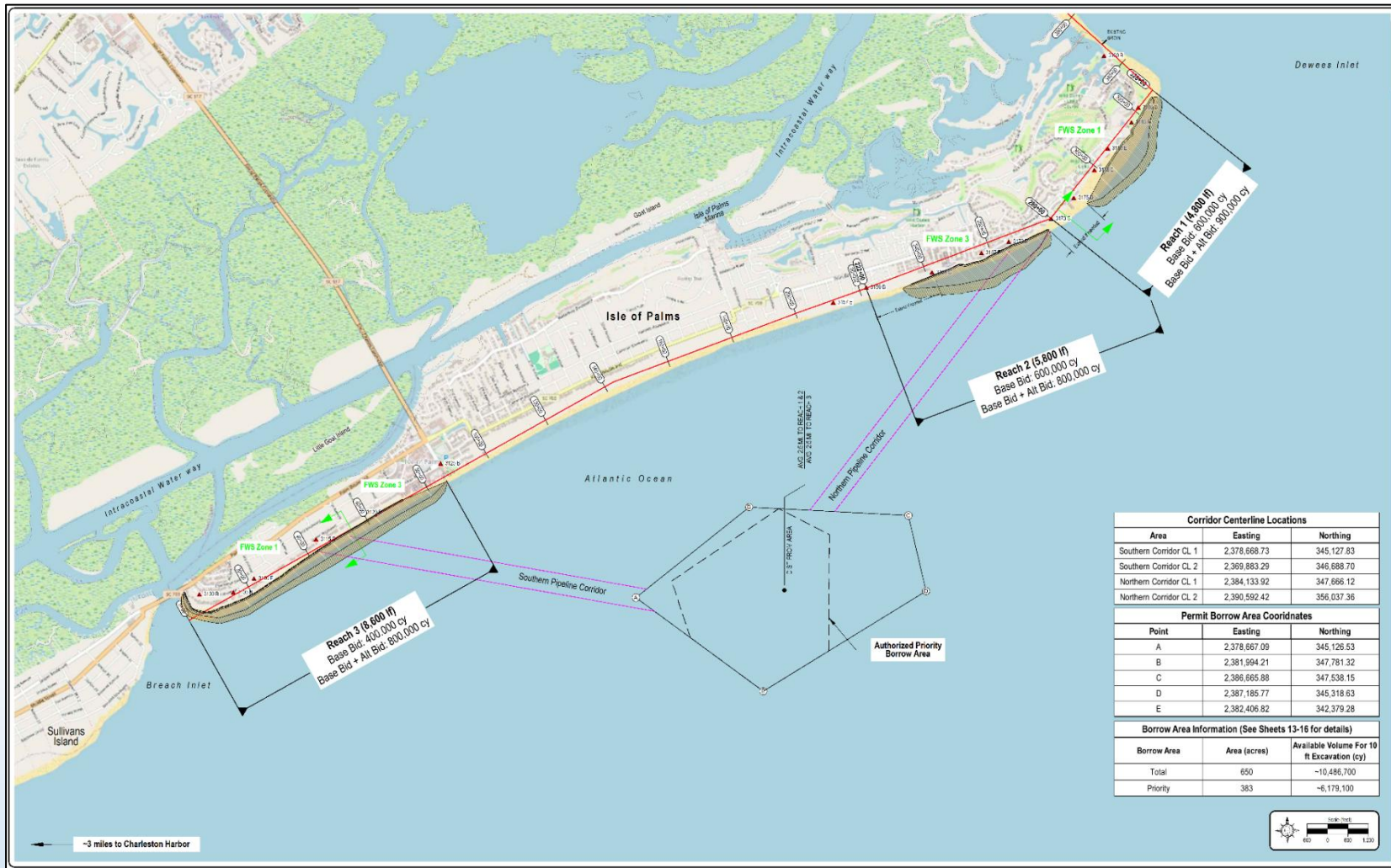


# What will it look like?

- What is a cubic yard (cy)? 1 dumptruck = 15 cy
- 1 cy per foot of beach equals 1.5 ft of added beach width
- Reaches 1-2: Beach width increased by up to 600 ft
  - Design considers future sediment transport patterns – more sand in center of reach
- Reach 3: Average beach width increase of 150 ft
- Downcoast spreading of sand expected south of 53<sup>rd</sup> Ave



# 2026 PROJECT OVERVIEW



# CUTTERHEAD SUCTION DREDGE

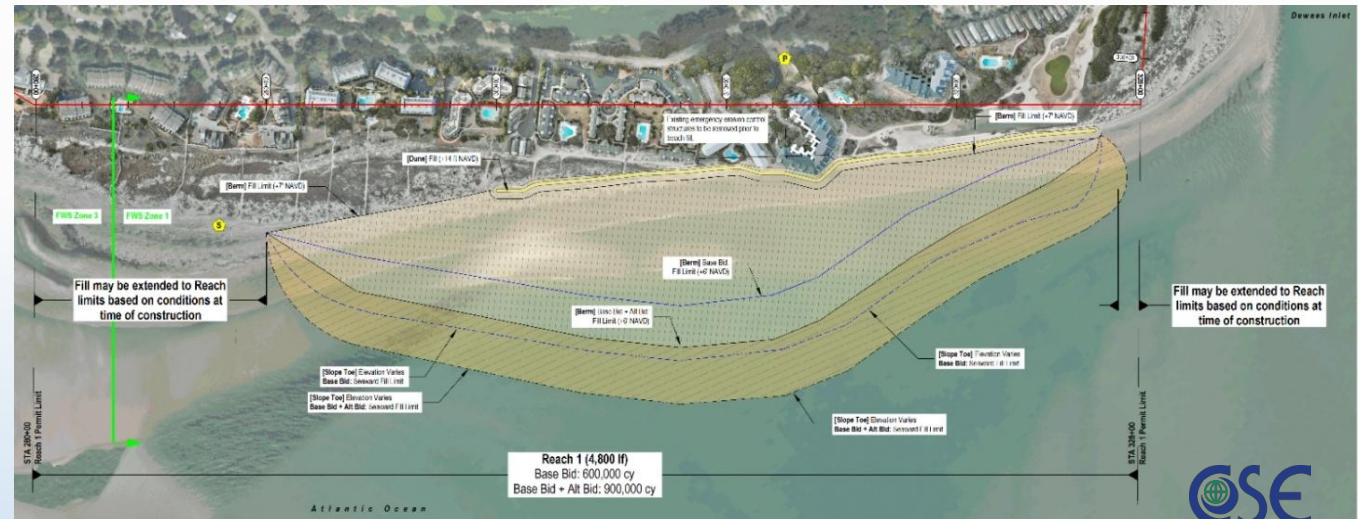
## The *Wadmalaw*

- 30 in cutterhead
- 12,800 hp
- Max 50,000 cy/day
  - Expected 25,000 to 30,000 cy/day
  - ~100-250 feet/day
- Anticipated to arrive in July
- Pumping at the north end first



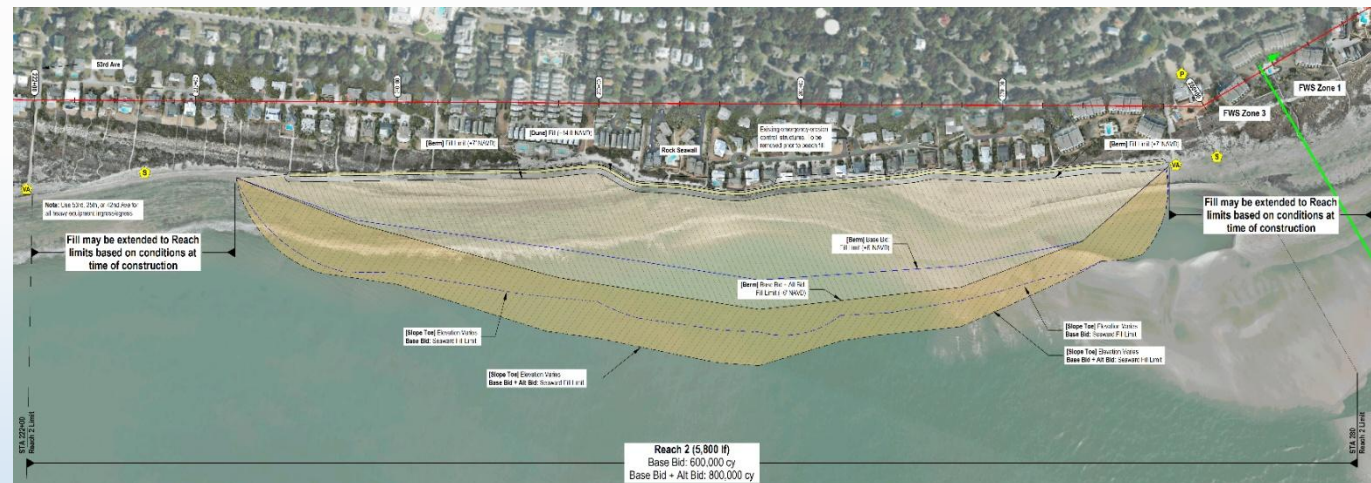
# REACH 1 – NOURISHMENT

- Project Length = 4,800 ft (.9 miles)
- Nourishment Volume = **900,000 Cubic Yards**
- Template Specifications
  - Average Fill Density = 187.5 cy/ft
  - Berm Elevation = 6-7 ft NAVD
  - Dune Elevation = 14 ft NAVD
  - Max berm width = ~700 ft
- Tentative Construction Schedule – **Jul-Aug 2026**
- No work on or under decks, patios, porches, or erosion control structures
- Dune constructed between Shipwatch and Ocean Club
- Includes dune planting after the project



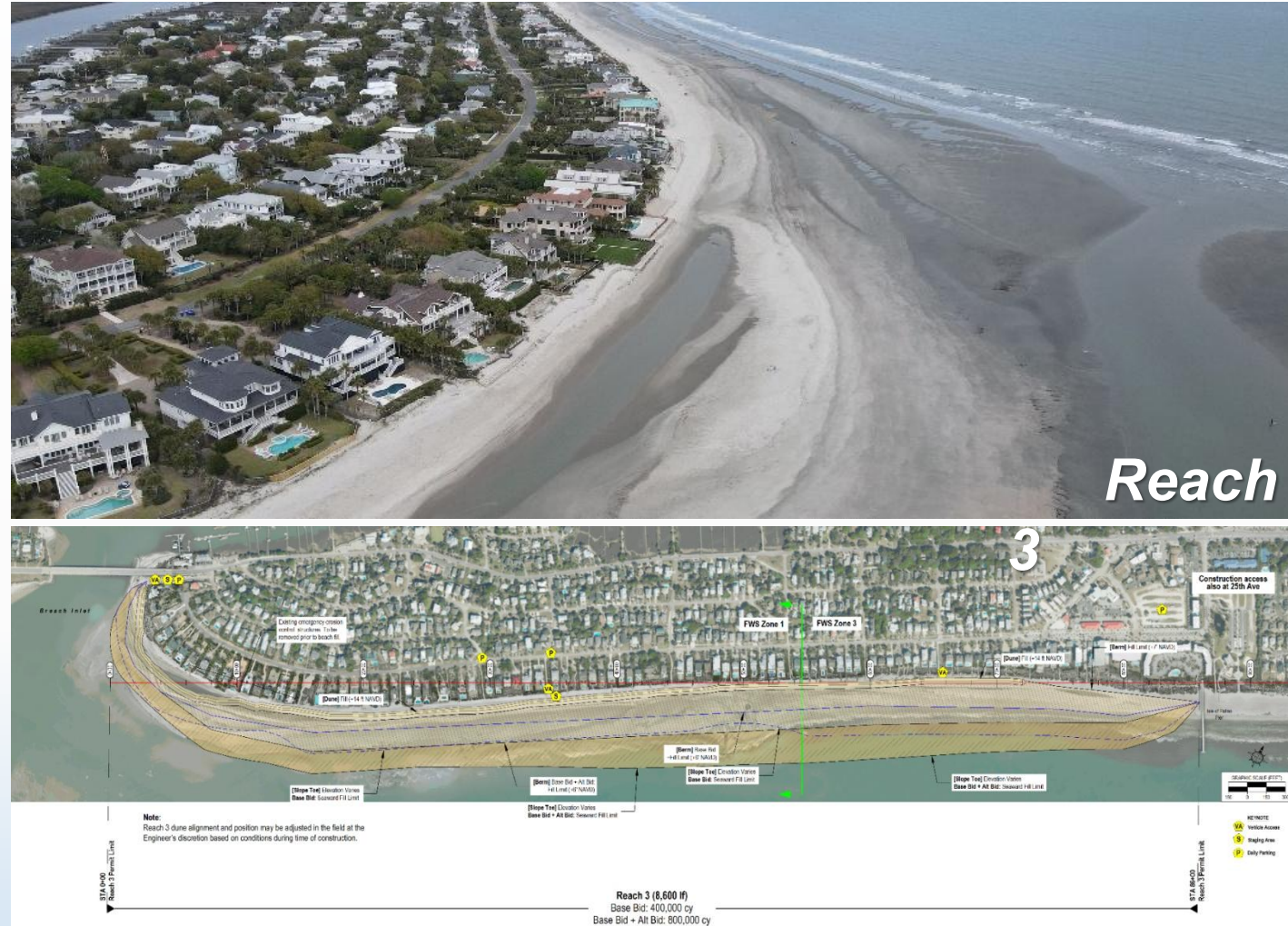
# REACH 2 - NOURISHMENT

- Project Length = 5,800 ft (1.1 miles)
- Nourishment Volume = **800,000 Cubic Yards**
- Template Specifications
  - Average Fill Density = 137.9 cy/ft
  - Berm Elevation = 6-7 ft NAVD
  - Dune Elevation = 14 ft NAVD
  - Max berm width = ~545 ft
- Tentative Construction Schedule –**Aug-Sep 2026**
- No work on or under decks, patios, porches, or erosion control structures
- Dune constructed between 57<sup>th</sup> Ave – Dunecrest Ln
- Includes dune planting after project



# REACH 3 - NOURISHMENT

- Project Length = 8,600 ft (1.6 miles)
- Nourishment Volume = **800,000 Cubic Yards**
- Template Specifications
  - Average Fill Density = 93.0 cy/ft
  - Berm Elevation = 6-7 ft NAVD
  - Dune Elevation = 14 ft NAVD
  - Max berm width = ~325 ft
- Construction Schedule –**Oct-Early Nov 2026**
- No work on or under decks, patios, porches, or erosion control structures
- Dune constructed along most areas south of 9th
- Includes dune planting after project



# EMERGENCY EROSION CONTROL STRUCTURES

## *Sandbags*

- Structures will be removed in conjunction with the project by separate contractor
- No sand placed on top of or landward of sandbags



# Additional Work

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## *Work along Private Property*

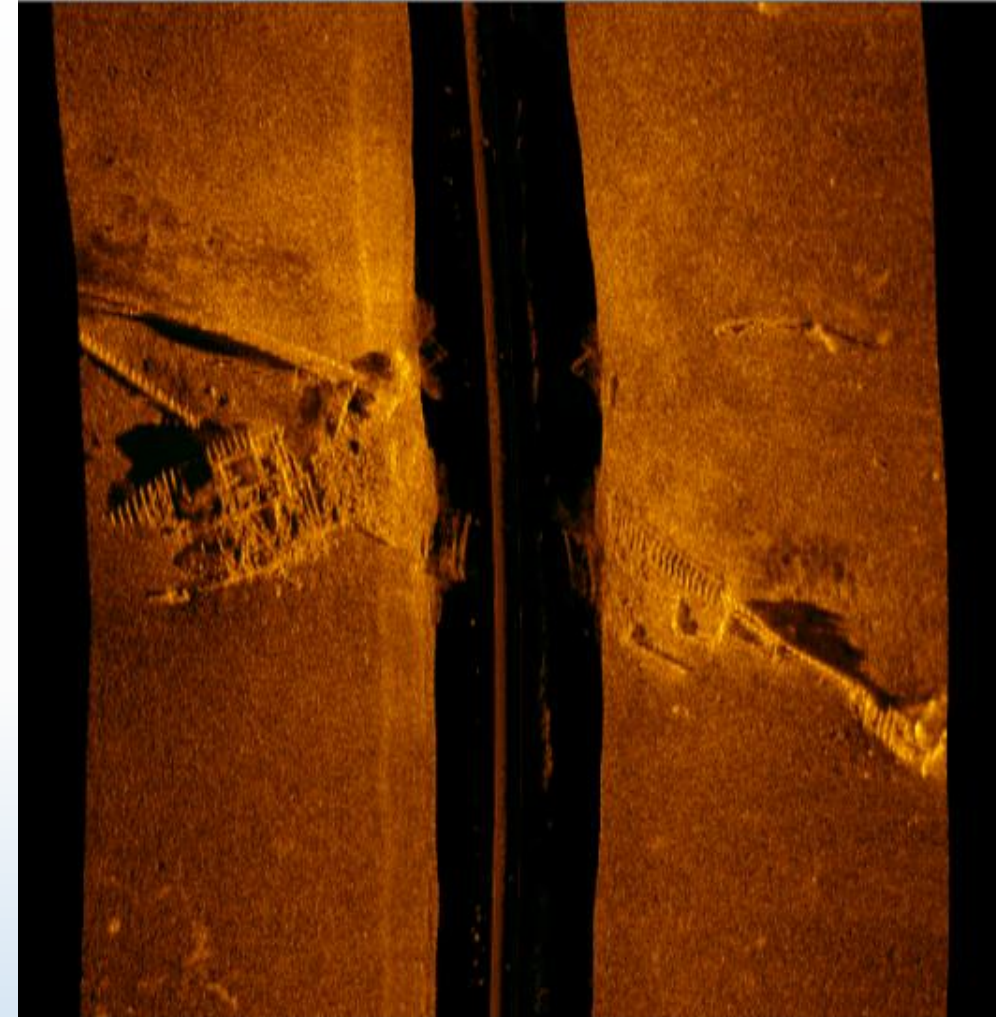
- Any work beyond the City's fill area will require an independent permit from SCDES-BCM.
- Minor Dune Nourishment, backfill, plantings, sand fence
- This will include any areas landward of the easement line, work under walkovers, or work between structures
- Private dune walkovers can be extended without a permit provided they follow BCM guidelines

# CULTURAL RESOURCES

## ***Contractor is aware of all cultural resources in borrow area***

- *Avoidance buffers suggested by the State Historical Preservation Office (SHPO) and the South Carolina Institute of Archeology and Anthropology (SCIAA)*
- *Covers known shipwrecks such as the Constance, Mary Bowers, and Georgiana*
- *Other anomalies identified through CSE's extensive surveys*

***Contractor will notify SCIAA, City, and CSE if unexpected cultural resources are encountered***



# ANTICIPATED CONSTRUCTION TIMETABLE

## Tentative Construction Schedule

Pre-Construction Meeting	30 June
Contractor mobilization	July
<b>Anticipated First day pumping in Reach 1</b>	<b>17 July</b>
Reach 1 nourishment duration	50 Days
<b>Anticipated First day pumping in Reach 2</b>	<b>9 Sept</b>
Reach 2 nourishment duration	45 Days
<b>Anticipated First day pumping in Reach 3</b>	<b>1 Nov</b>
Reach 3 nourishment duration	45 Days
Demobilization	Dec



# THANK YOU!

