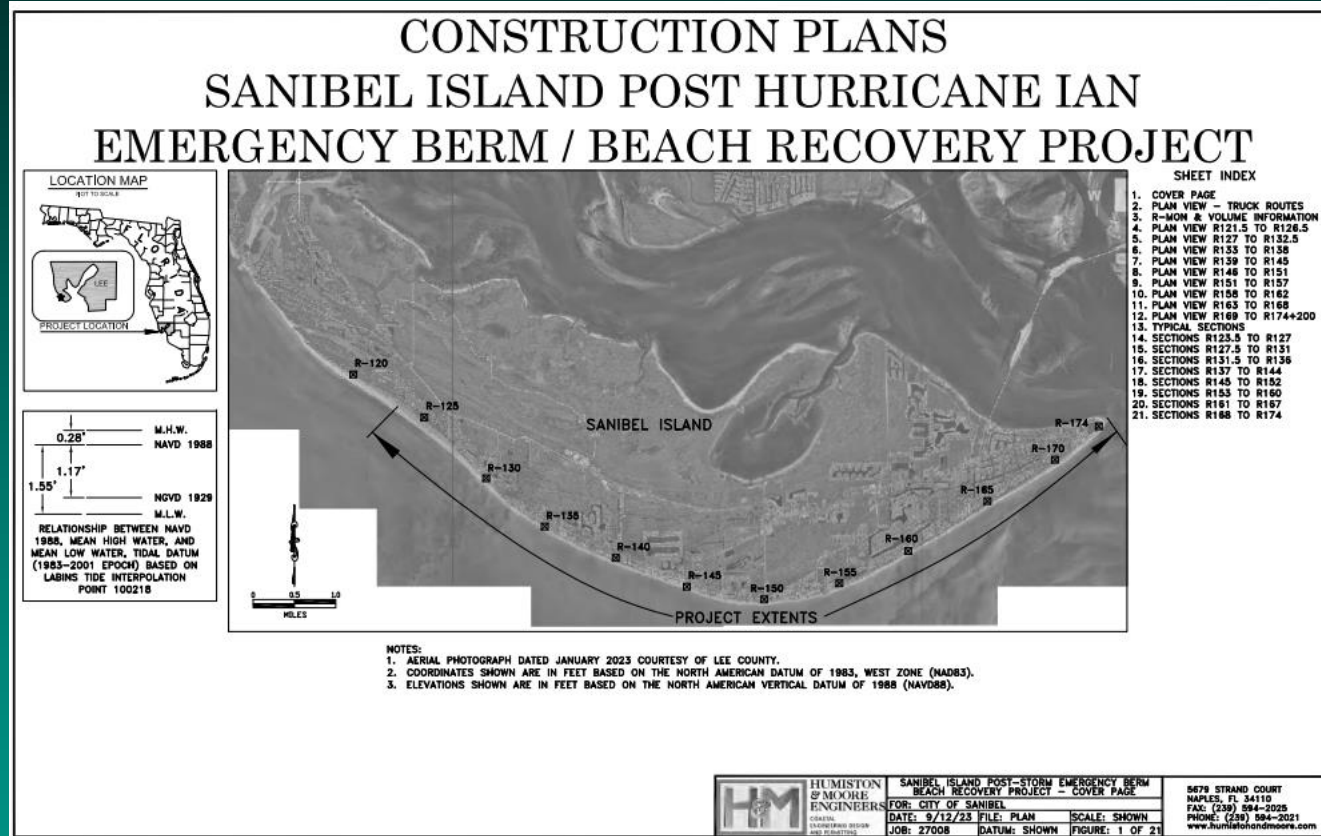


Update on the City of Sanibel Island Post Hurricane Ian Emergency Berm / Beach Recovery Project



Presented by:
Brett D. Moore, P.E., BC.CE.
President

Humiston & Moore
Engineers

Update to the City of Sanibel Island Post Hurricane Ian Emergency Berm / Beach Recovery Project



Photo 2022 Google Earth
September 29, 2022

Presentation Outline

- ✓ *Intent of Project*
- ✓ *Pre and Post Storm Surveys*
- ✓ *Measured Beach Erosion*
- ✓ *Approved Funding FEMA & State*
- ✓ *Design Beach Fill*
- ✓ *Project Design & Construction Access*
- ✓ *Schedule*
- ✓ *Sanibel Lighthouse*

Intent of Project

- ✓ *Add beach compatible sand to upland beach*
- ✓ *Encourage dune recovery*
- ✓ *Address gullies*

Tarpon Bay Road



Date of Photo: September 29, 2022

Image © 2023 Maxar Technologies

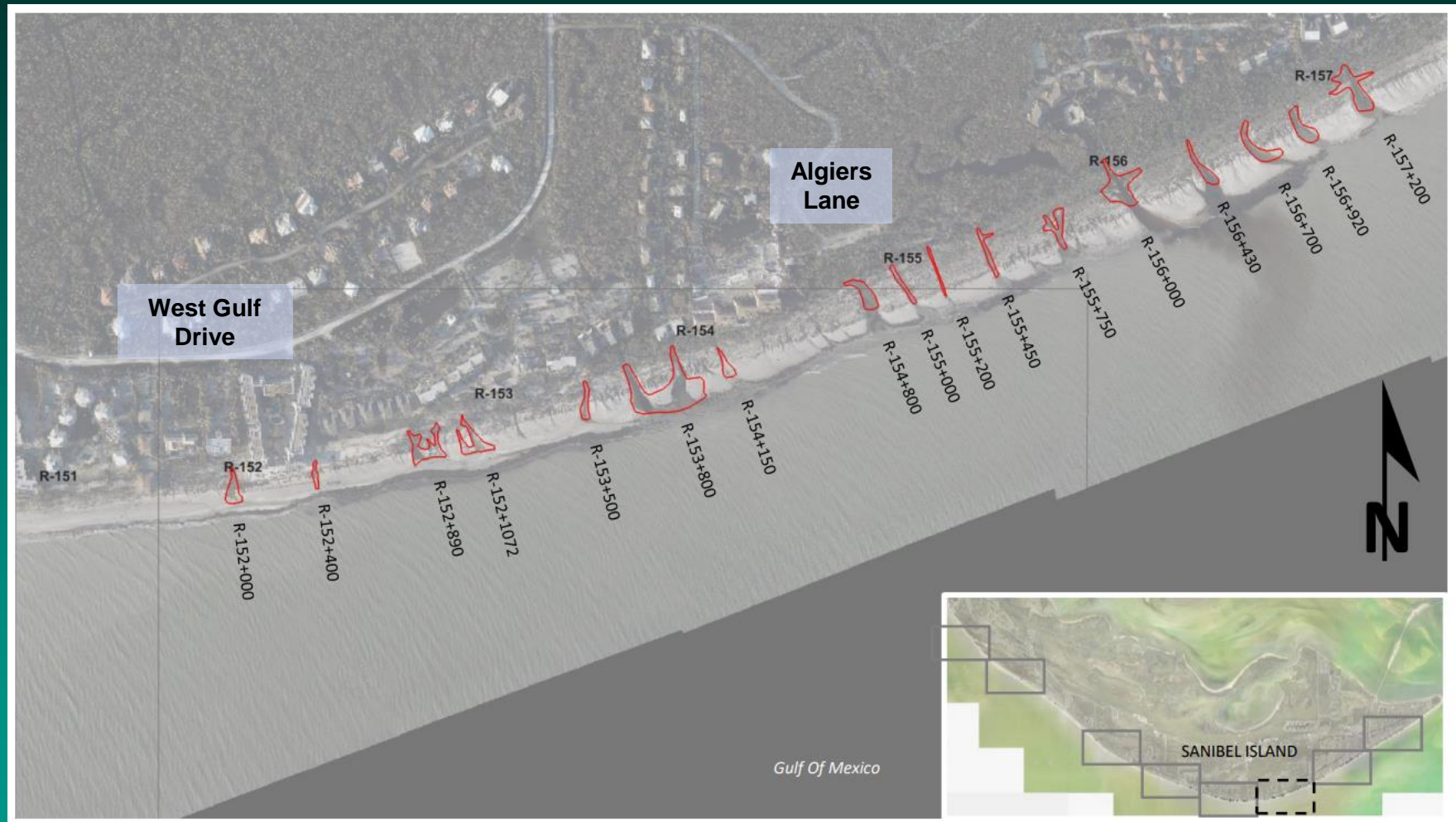
Date of Aerial: 09-21-22

Pre and Post Storm Surveys

- *September 15-26, 2022: Pre-Storm:*
- *September 28, 2022: Hurricane Ian:*
- *December 2022: Post Storm*
- *July 2023: Design*

Pre and Post Storm Surveys

December 2022 & July 2023 Surveys of Washout Gullies



Measured Beach Erosion - Hurricane Ian

Measured losses from Ian (Dune to Wading Depth)

➤ *North Sanibel R-110 to R-122:*
131,600 cy (197,400 tons)

➤ *Sanibel R-123 to R-173.5*
282,700 cy (424,000 tons)

Approved Funding Participation – FEMA & State

FEMA: 99,171 cy (148,756 tons)

Est. Cost \$10,222,954 (Fed 75%, State 25%)

State DEP: (100% State Share)

(Hurricanes Ian and Nicole Recovery Plan)

➤ **North Sanibel R-110 to R-122)**

\$1,542,514.23 (48.5% of 6 cy/ft, or 9 tons/ft)

➤ **Sanibel R-123 to R-174**

\$11,541,210.91 (48.5% of 6 cy/ft, or 9 tons/ft)*

***Additional funds available from State**



Approved Private Funding Participation – State

DEP Hurricane Restoration Grant Program:

Rule: 62ER23-3, Florida Administrative Code

Statute: Section 10, Chapter 2022-272, Laws of Florida

State Funding Participation up to 50% for:

Debris Removal from Beach and Dune

Compatible Beach Fill Placement Area

Eligibility Requirements:

Property Impacted by Hurricane Ian

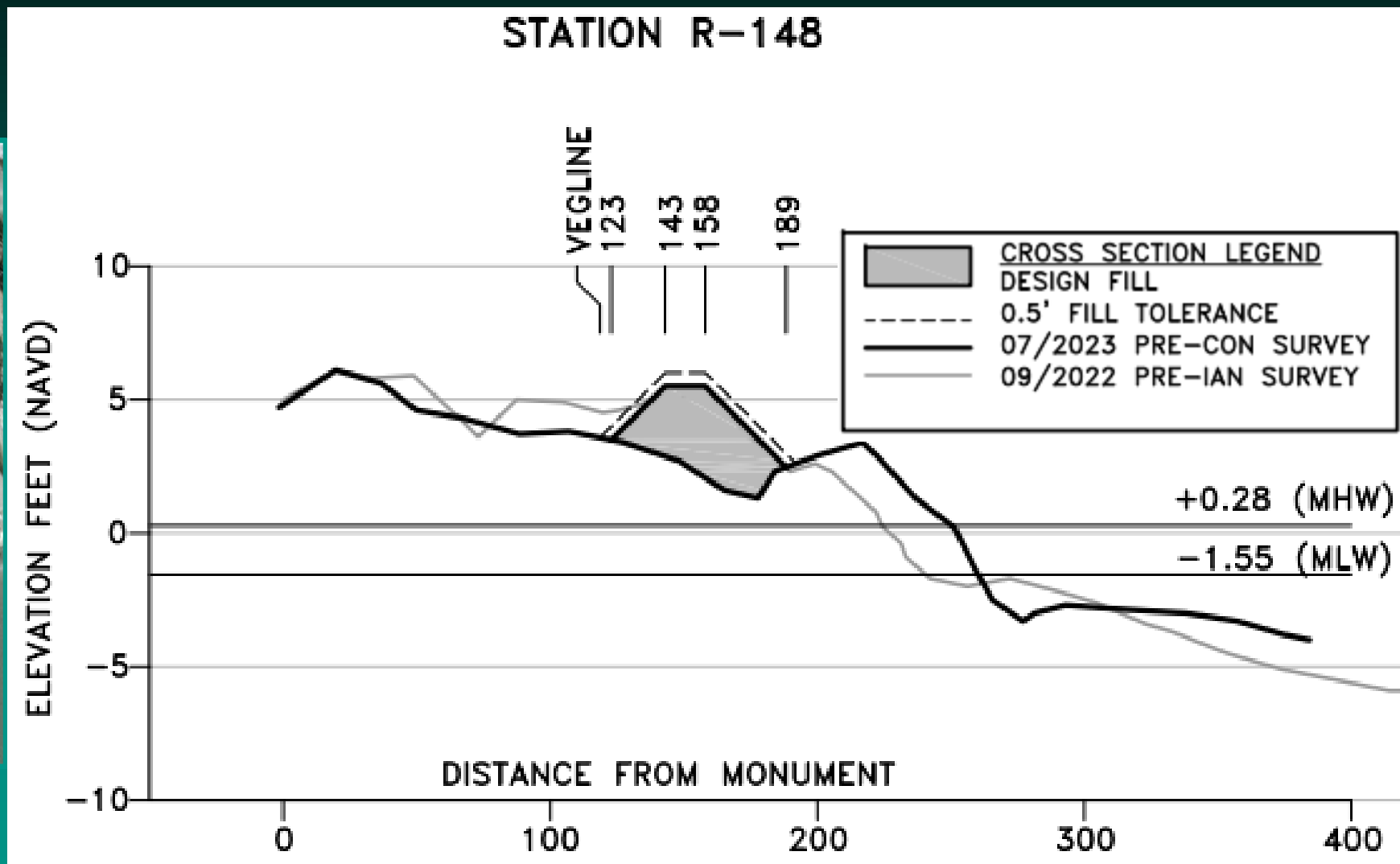
Single-family (homestead), Residential Condo, Cooperative

Maximum reimbursement: \$300,000

State Funds: \$50,000,000+

To be Extended to July 1, 2024

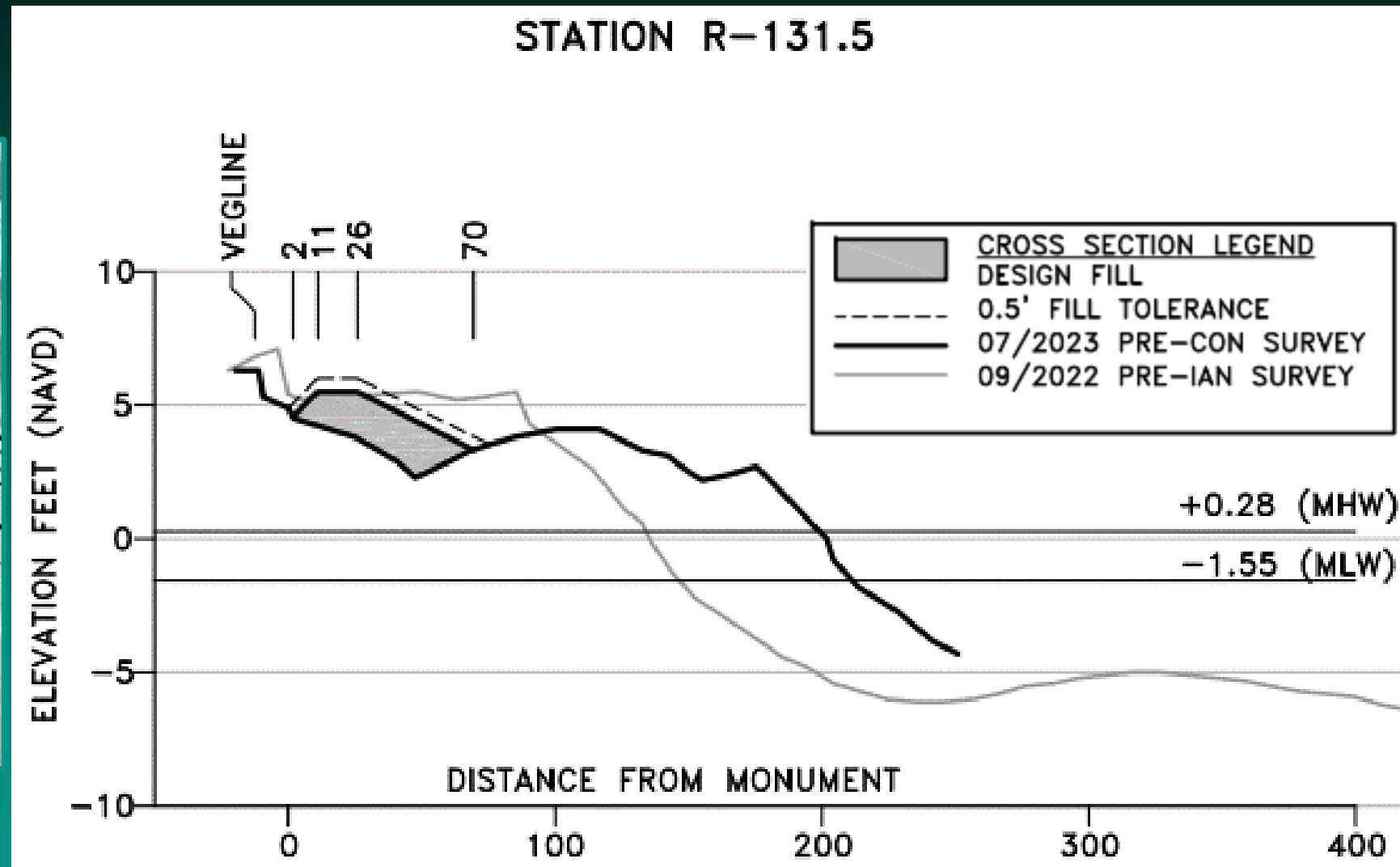
Design: Restore Fill at R-148



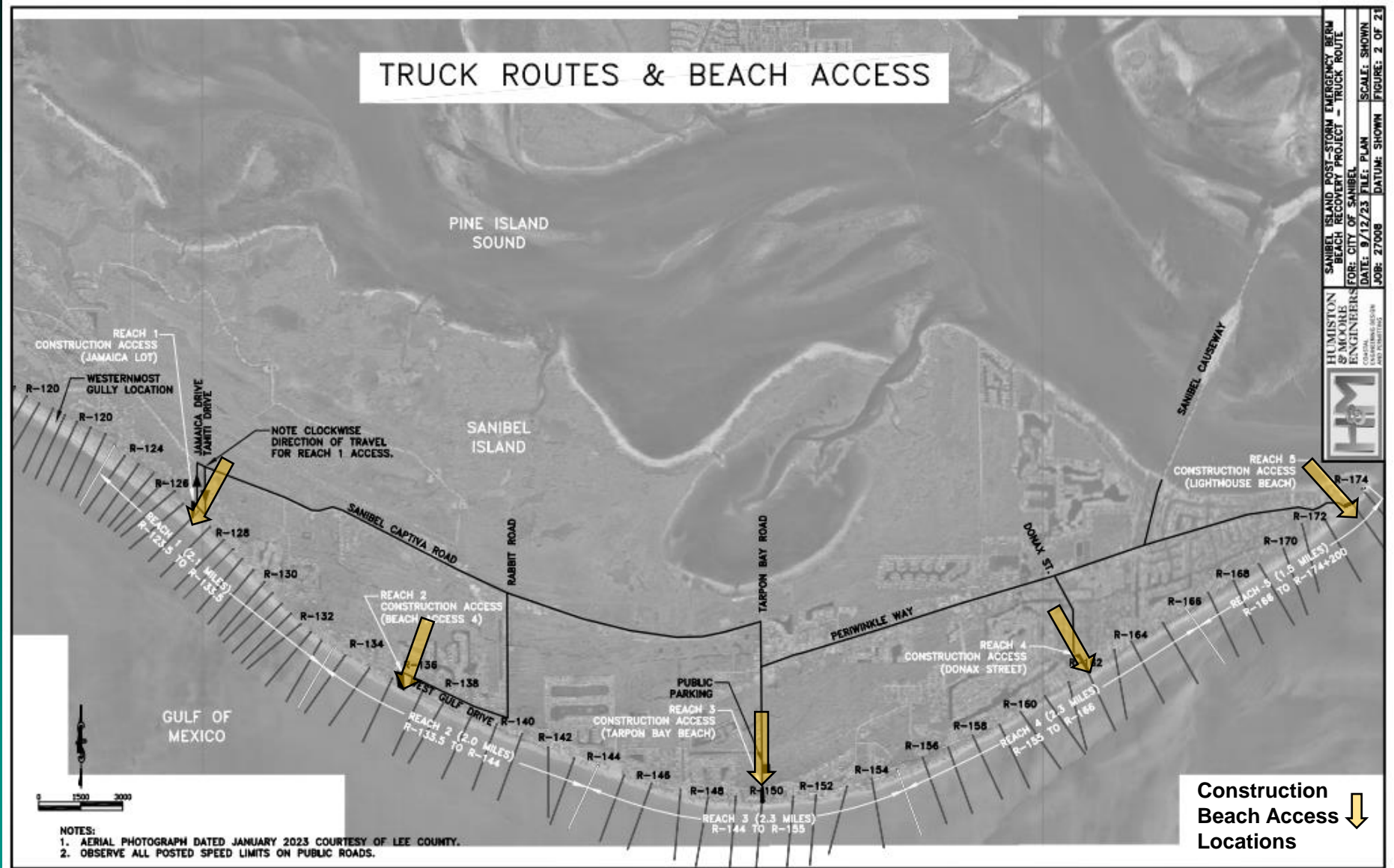
Design: Restore Dune & Gullies at R-131



Washout
Gullies



Project Design & Construction Access



Project Schedule

Oct 5, 2023

Pre-Bid

Oct 20, 2023

Bid Opening

Nov 7, 2023

Award Contract

Construction

Nov 15, 2023 to Feb 14, 2024



Date of Photo: September 21, 2023
Location R-156

Sand Source, Quantity & Quality

Sand: Inland Sand Mine(s) – Contractor Select

Sand Spec: Specific and within State Standards for Beach Quality

City Purchase: Option to purchase sand directly from mine(s)

Total Quantity: Est 410,100 tons



Date of Photo: August 24, 2023
Location R-162, Donax St.



Sanibel Lighthouse

Lighthouse Protection

Short Term:

- *Beach Fill under EFO*
- *File for Critical Erosion Designation (DEP)*
- *Evaluate Siting Options*

Long Term:

- *Erosion Control Options*

Date of Photo: August 24, 2023
Location R-173, Lighthouse Beach

