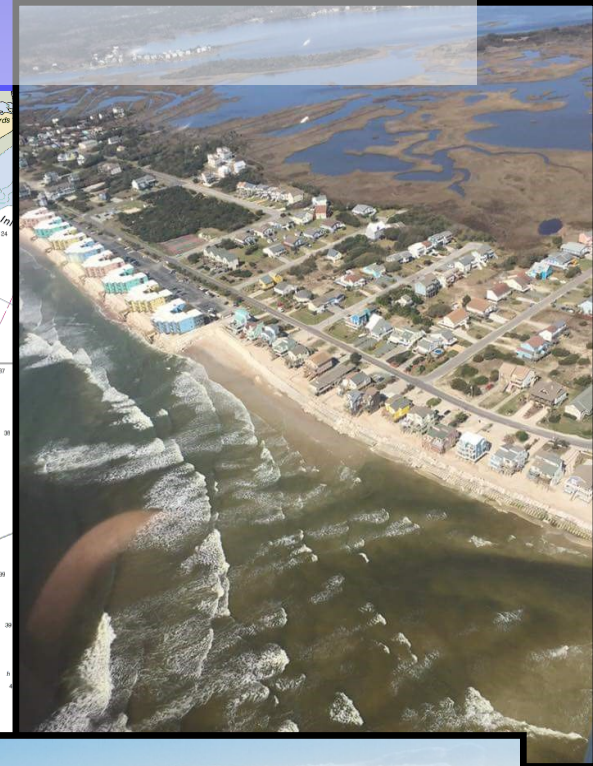
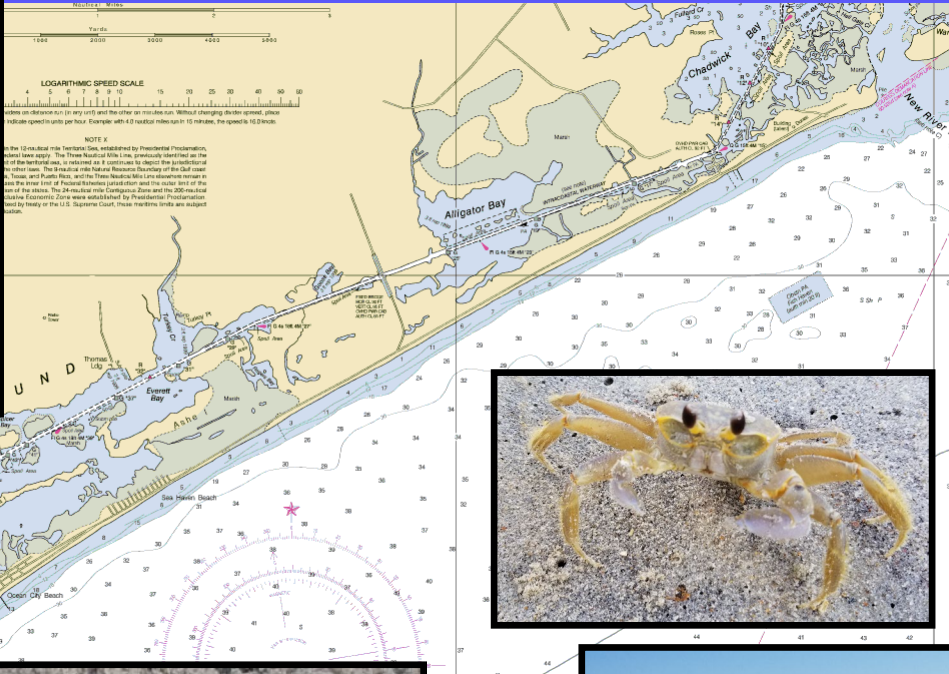


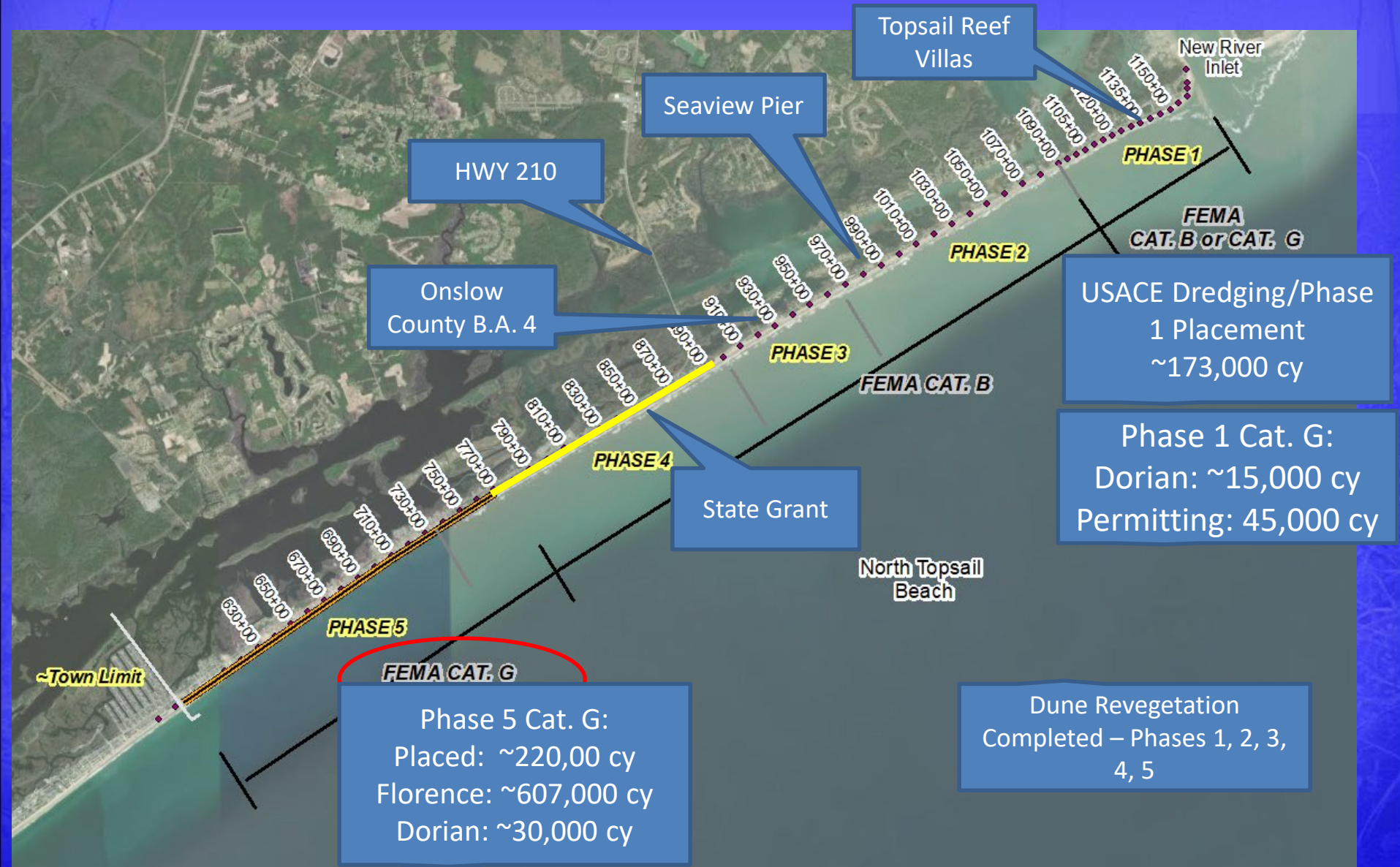
North Topsail Beach Coastal Update February 2023



Marina, Coastal, Environmental
& Water Resources Engineers

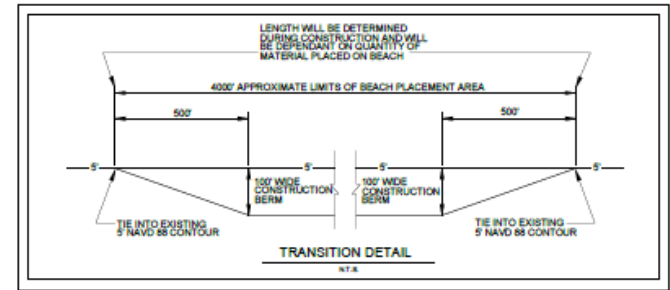
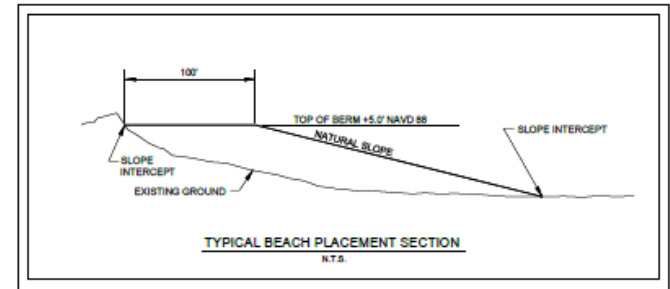
Ongoing and Upcoming Projects Overview

State Grant, Dorian and Florence FEMA Category G., USACE

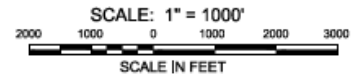


USACE (Corps) AIWW/Channel Dredging.

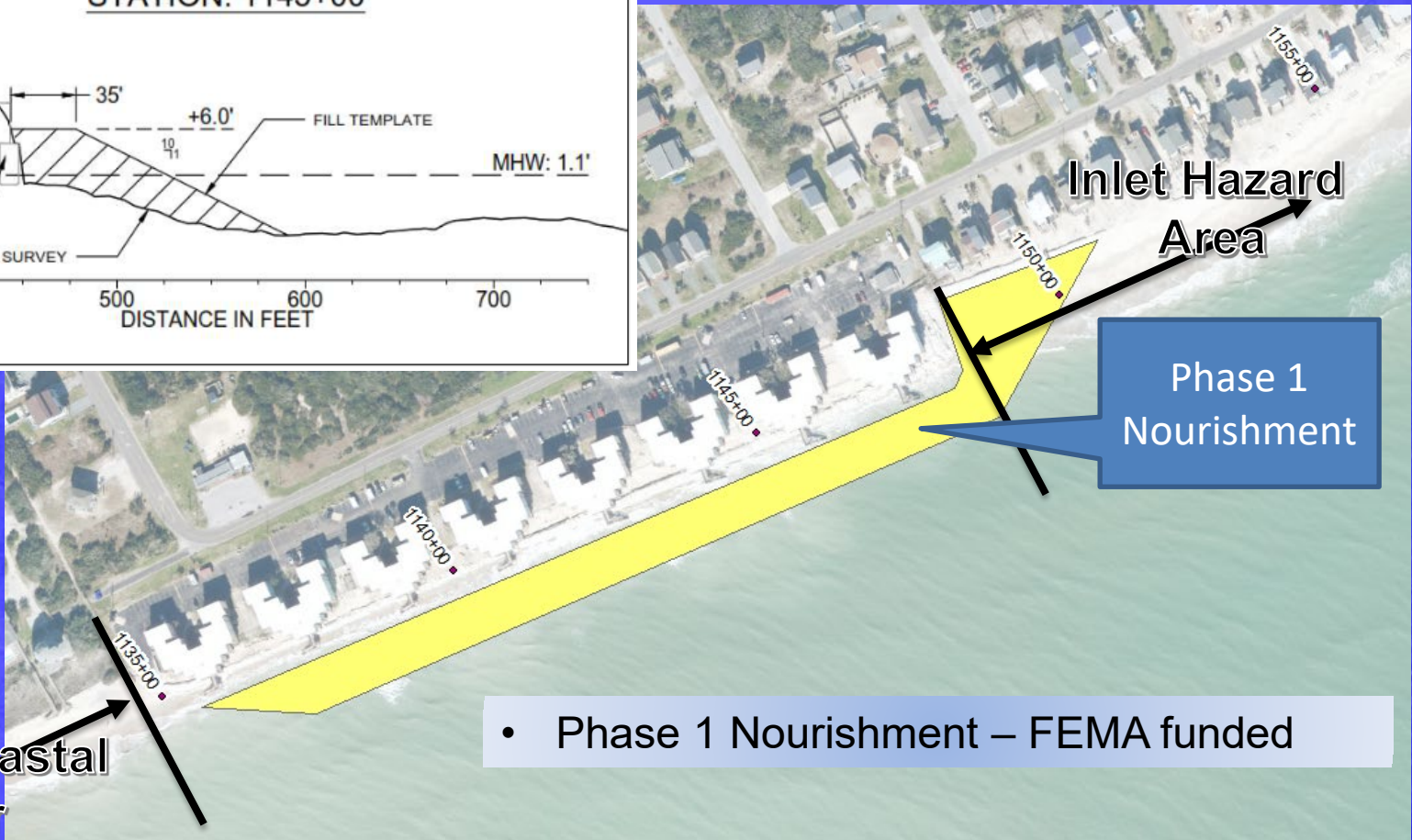
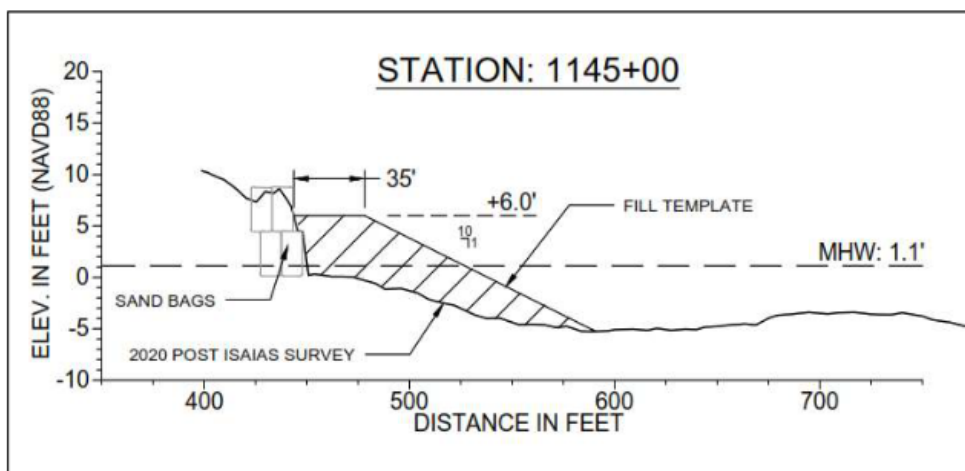
~173,000 cy.



- NOTES**
1. DUE TO AGE OF PHOTOGRAPHY, PIPELINE ROUTE IS APPROXIMATE. THE CONTRACTOR SHALL NOTIFY THE TOWN OF NORTH TOPSAIL BEACH NO LATER THAN 15 DAYS PRIOR TO COMMENCEMENT OF PIPELINE PLACEMENT. POINT OF CONTACT WITH THE TOWN OF NORTH TOPSAIL BEACH IS STEVE FOSTER, TOWN MANAGER PHONE NO.: 910-358-3546. PRIOR TO THE PLACEMENT OF PIPE, THE CONTRACTOR SHALL MEET ON SITE WITH THE CONTRACTING OFFICER OR HIS/HER DESIGNATED REPRESENTATIVE AND A REPRESENTATIVE OF THE NORTH CAROLINA WILDLIFE RESOURCES COMMISSION TO DETERMINE THE EXACT PIPELINE ROUTE. AS PIPELINE IS BEING Laid, CONTRACTOR SHALL CONSTRUCT BARRIERS WHERE NECESSARY TO ALLOW PASSAGE OF VEHICLES OVER PIPELINE; THIS INCLUDES BUT IS NOT LIMITED TO, ALL DRIVEWAYS FOR HOMEOWNERS.
 2. VERTICAL DATUM NAVD88. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING HORIZONTAL AND VERTICAL CONTROL PRIOR TO PLACEMENT OF DREDGED MATERIAL IN THE DESIGNATED PLACEMENT AREA.
 3. HORIZONTAL DATUM NAD 83.
 4. PHOTOGRAPHY DATE: FEBRUARY 2019, COPYRIGHT 2019 DIGITAL GLOBE.
 5. AREA TO BE DREDGED SHOWN THIS:
 6. FOR DETAILS OF AREAS TO BE DREDGED, SEE SHEETS CH106, CH107, CH108, & CH109.
 7. THE CONTRACTOR SHALL BEGIN PLACEMENT OF DREDGED MATERIAL ON THE BEACH IN THE VICINITY OF THE INTERSECTION OF RIVER DRIVE AND NEW RIVER INLET ROAD. DUE TO ONGOING CHANGES TO THE SHORELINE CAUSED BY OCEAN WAVES, THE EXACT BEGINNING POINT FOR PLACEMENT OF DREDGED MATERIAL WILL BE ESTABLISHED BY THE CONTRACTING OFFICER OR HIS/HER DESIGNATED REPRESENTATIVE IMMEDIATELY PRIOR TO THE START OF DREDGING AND PLACEMENT OPERATIONS. PLACEMENT OF THE 100-FOOT WIDE BERM SHALL CONTINUE DOWN THE BEACH AS FAR AS THE QUANTITY OF DREDGED MATERIAL WILL ALLOW.
 8. ALL CONTRACTOR OPERATIONS SHALL BE PERFORMED IN A MANNER THAT AVOIDS DAMAGE TO EXISTING SANDWEDGE, STRUCTURES AND ROADS. SANDWEDGE, STRUCTURES AND ROADS DAMAGED BY CONTRACTOR OPERATIONS SHALL BE REPAIRED TO THE SATISFACTION OF THE CONTRACTING OFFICER OR HIS/HER DESIGNATED REPRESENTATIVE AT NO COST TO THE GOVERNMENT OR TO THE OWNERS OF THE DAMAGED PROPERTY. IN ORDER TO MINIMIZE THE RISK OF DAMAGE, WHEELS OR TRACKED EARTH MOVING EQUIPMENT SHALL NOT WORK CLOSER THAN 10 FEET FROM STRUCTURES DURING ALL WORK INCLUDING DISTRIBUTION AND MOVEMENT OF BEACH FILL MATERIAL. EXISTING SANDWAGES BELOW ELEVATION 5 FEET THAT LIE WITHIN THE BEACH FILL LIMITS SHALL BE COVERED WITH FILL EXCEPT EXISTING SANDWAGES AT TOPSAIL BEACH. FILLS SHALL NOT BE COVERED. IN AREAS WHERE IT IS NOT POSSIBLE TO TIE INTO THE 5-FOOT CONTOUR, THE CONTRACTOR SHALL CONSTRUCT THE BACKSLOPE TO THE NATURAL ANGLE OF REPOSE.
 9. NORTH TOPSAIL BEACH AND THE INLET BEACH ARE CONSIDERED SUITABLE HABITAT FOR SHORE BIRDS AND SEA TURTLES. ALL WORK ON THE BEACH INCLUDING PIPE REMOVAL SHALL BE COMPLETED BY 31 MARCH 2023. SEE PARAGRAPH ENVIRONMENTAL WINDOWS OF SECTION 01 57 19 OF THE SPECIFICATIONS FOR ENVIRONMENTAL WINDOWS AND RESTRICTIONS.



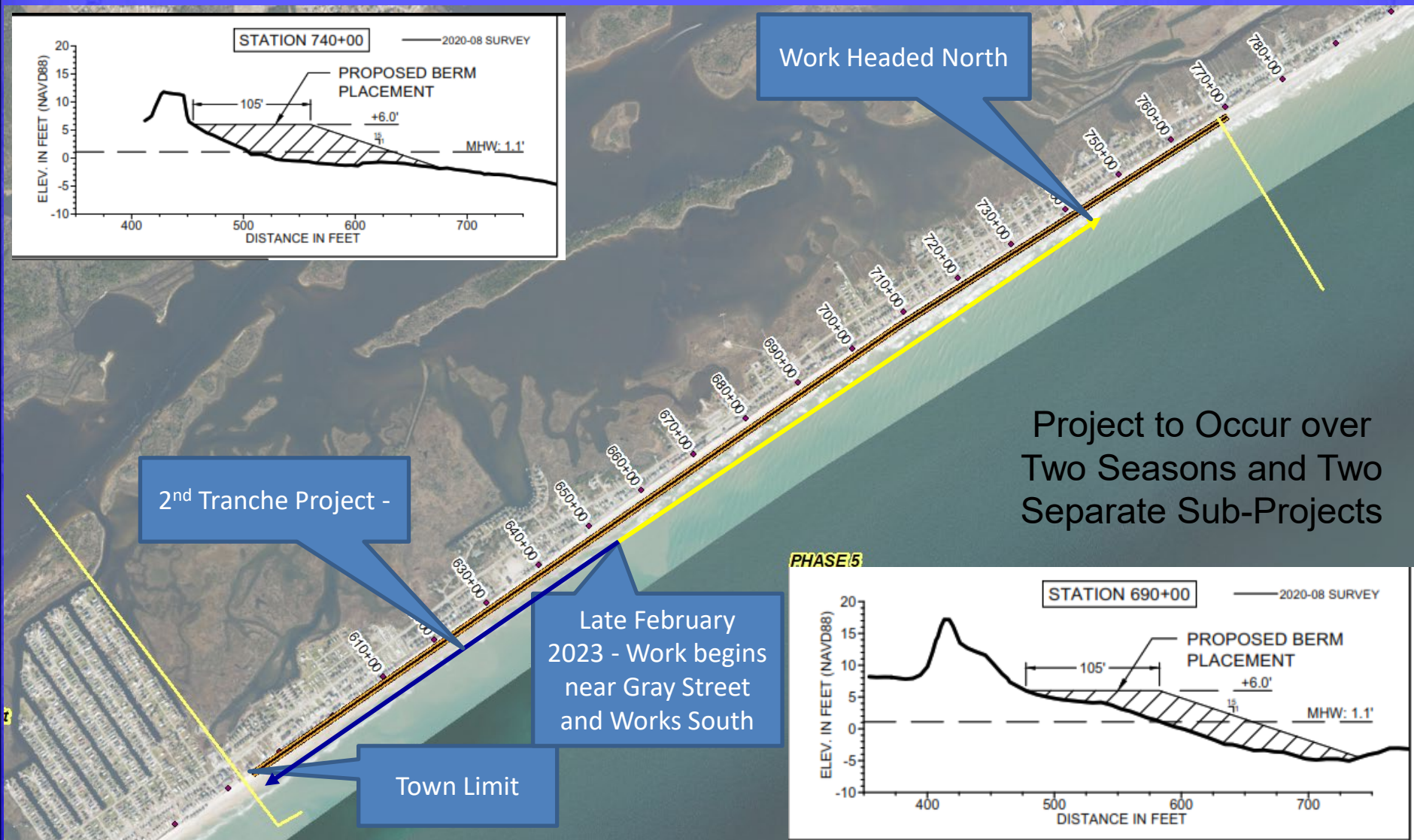
Permitted Nourishment NON-COBRA Areas in Phase 1 Beach (not Dune) Nourishment



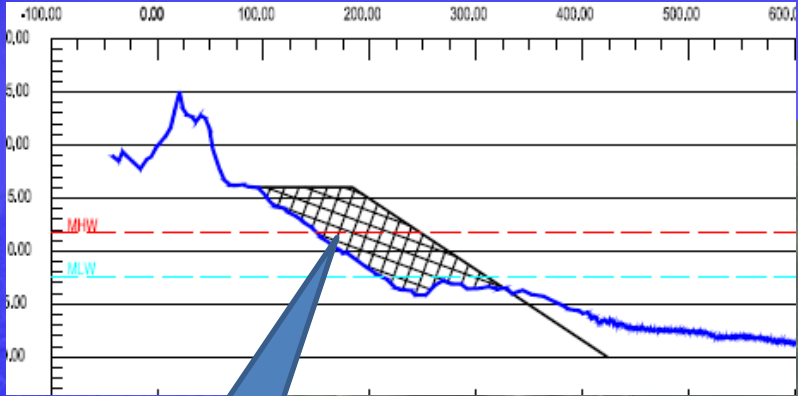
USFWS Coastal
Barrier
Resources Act Unit

- Phase 1 Nourishment – FEMA funded

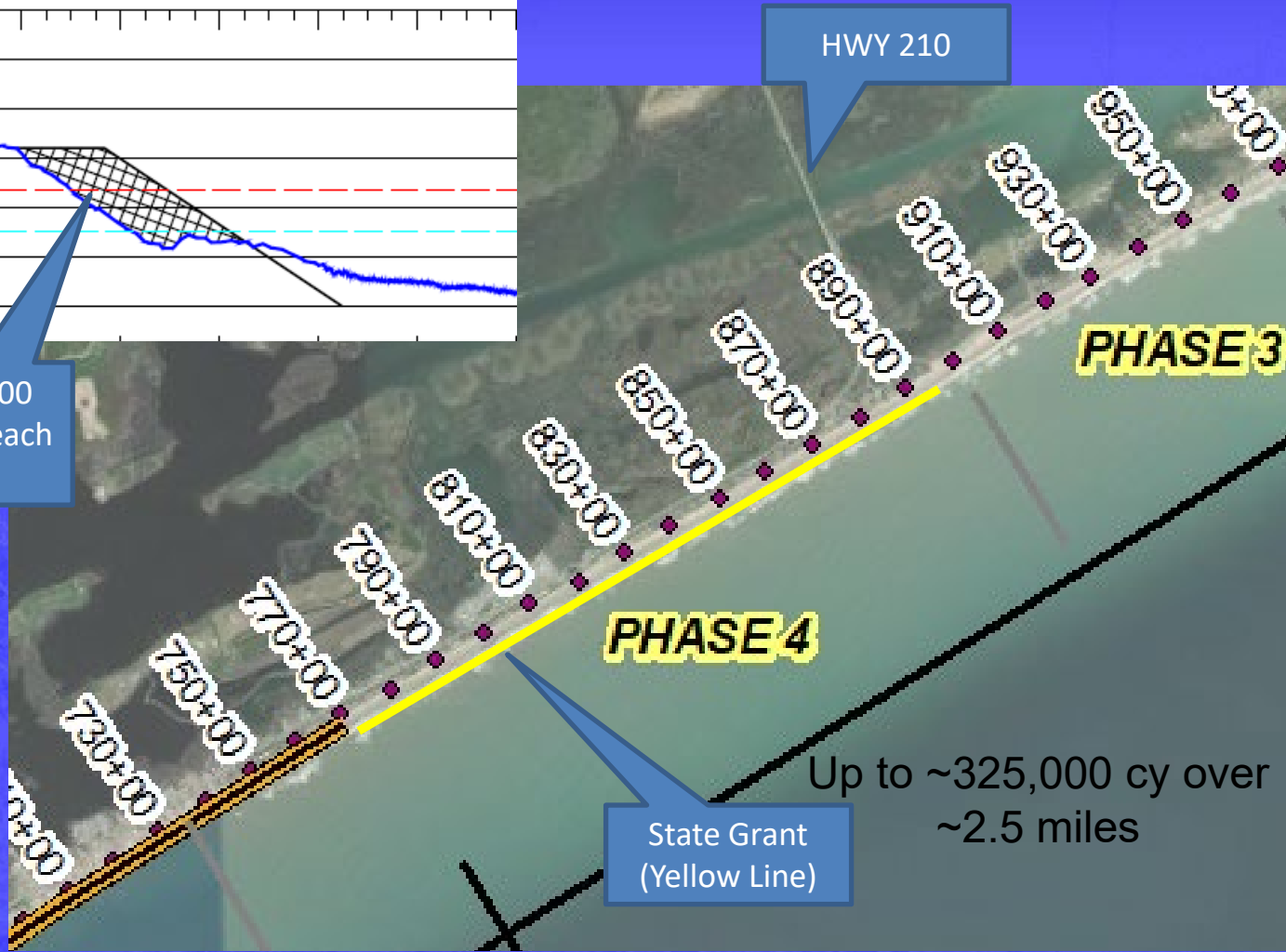
Florence & Dorian Nourishment in Phase 5 Has Begun. Beach (not Dune) Nourishment



Successful State Grant in Phase 4. Beach (not Dune) Nourishment



~80 to 100 Feet of Beach Width



Project to Occur Next Season –
Permitting Ongoing

County Beach Access Dune Rehabilitation

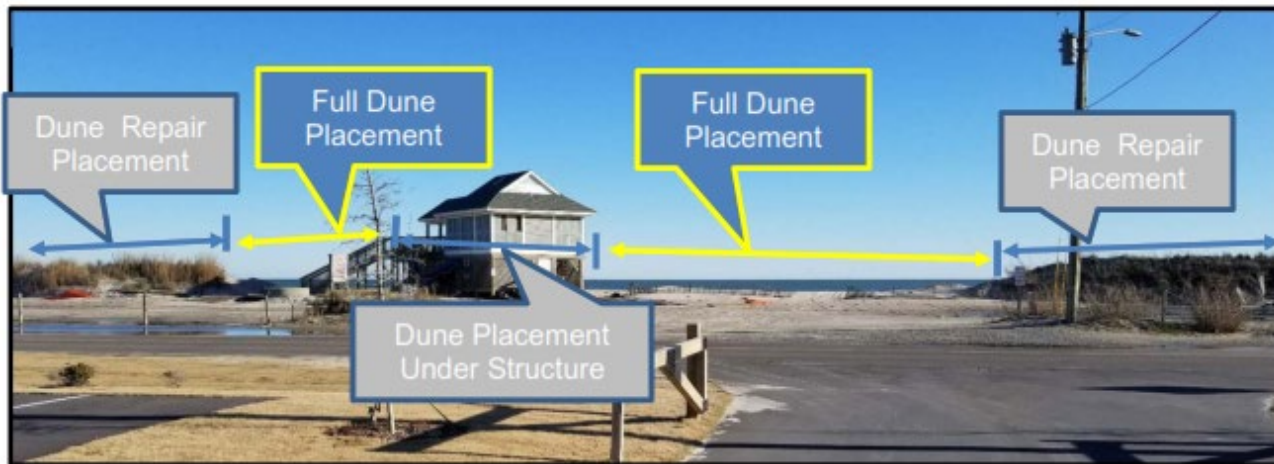


Figure 1: Dune Material Placement (photo taken February 3, 2021).

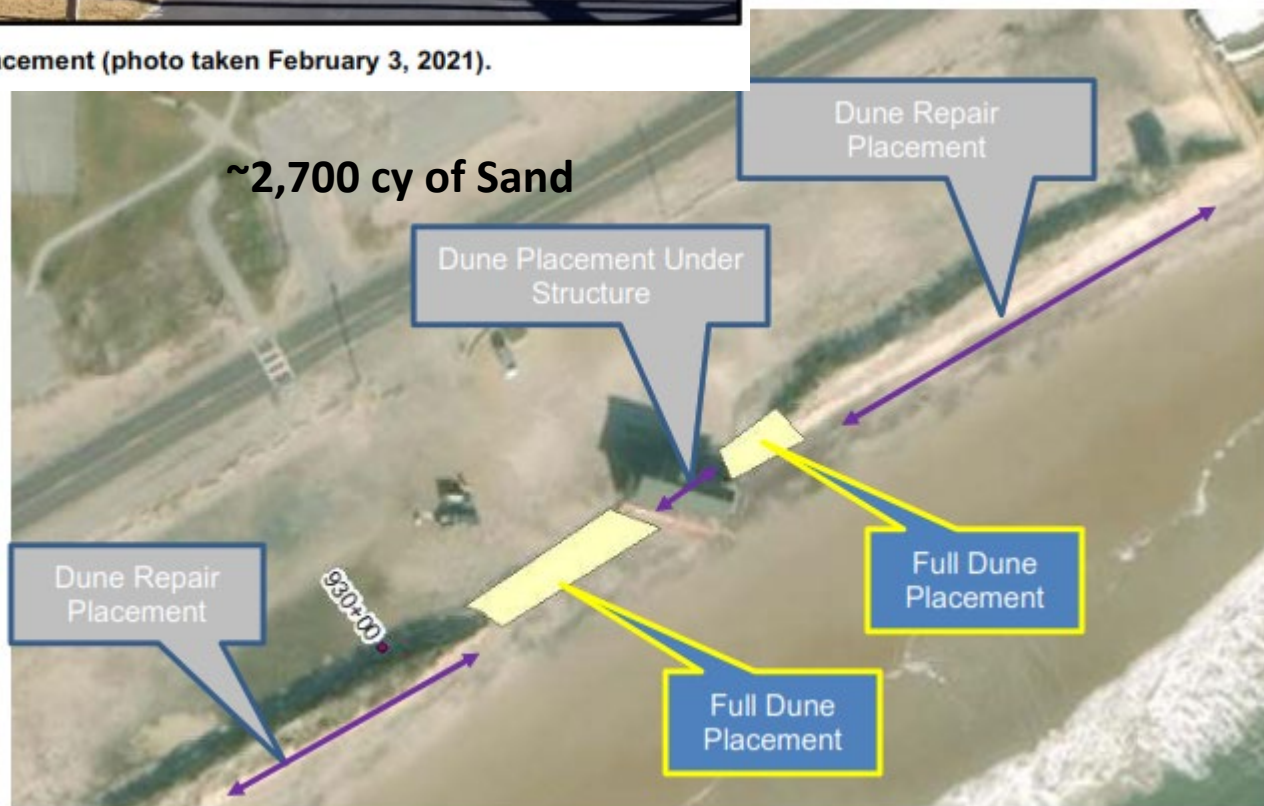
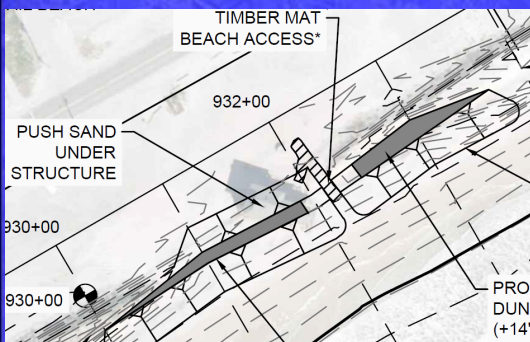


Figure 2: Plan view dune placement schematic.

Town Beach Projects Updates

- USACE AIWW/Channel Dredging and Phase 1 Placement (~173,000 cy)
- Hurricane Dorian Phase 1 FEMA Category G (~15,000 cy) near Topsail Reef Villas and ~45,000 cy permitted (Nov 16, 2022, to April 1, 2023).
- New River Inlet Management Master Plan EIS: Continued EIS processing and meetings. Additional Modeling Completed.
- County Beach Access (Phase 3)
- State Grant Nourishment (Phase 4 and connects with Phase 5 Truck Haul)
- Phase 5 Beach Nourishment - ST Wooten started hauling and working north. ~220,000 cy placed, ~80,000 cy remain.
- Separate 2nd Tranche Truck Haul for Phase 5 - ~290,000 cy. Start at Gray Street and work south – Late February 2023
- Working with NTB Finance Officer and DEC Associates regarding funding for FEMA and State funded projects
- Permitting Coordination (all projects)

