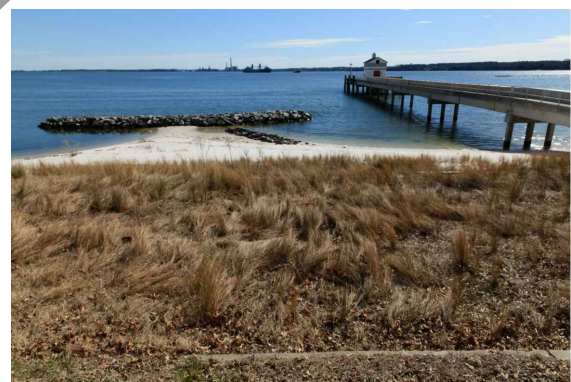
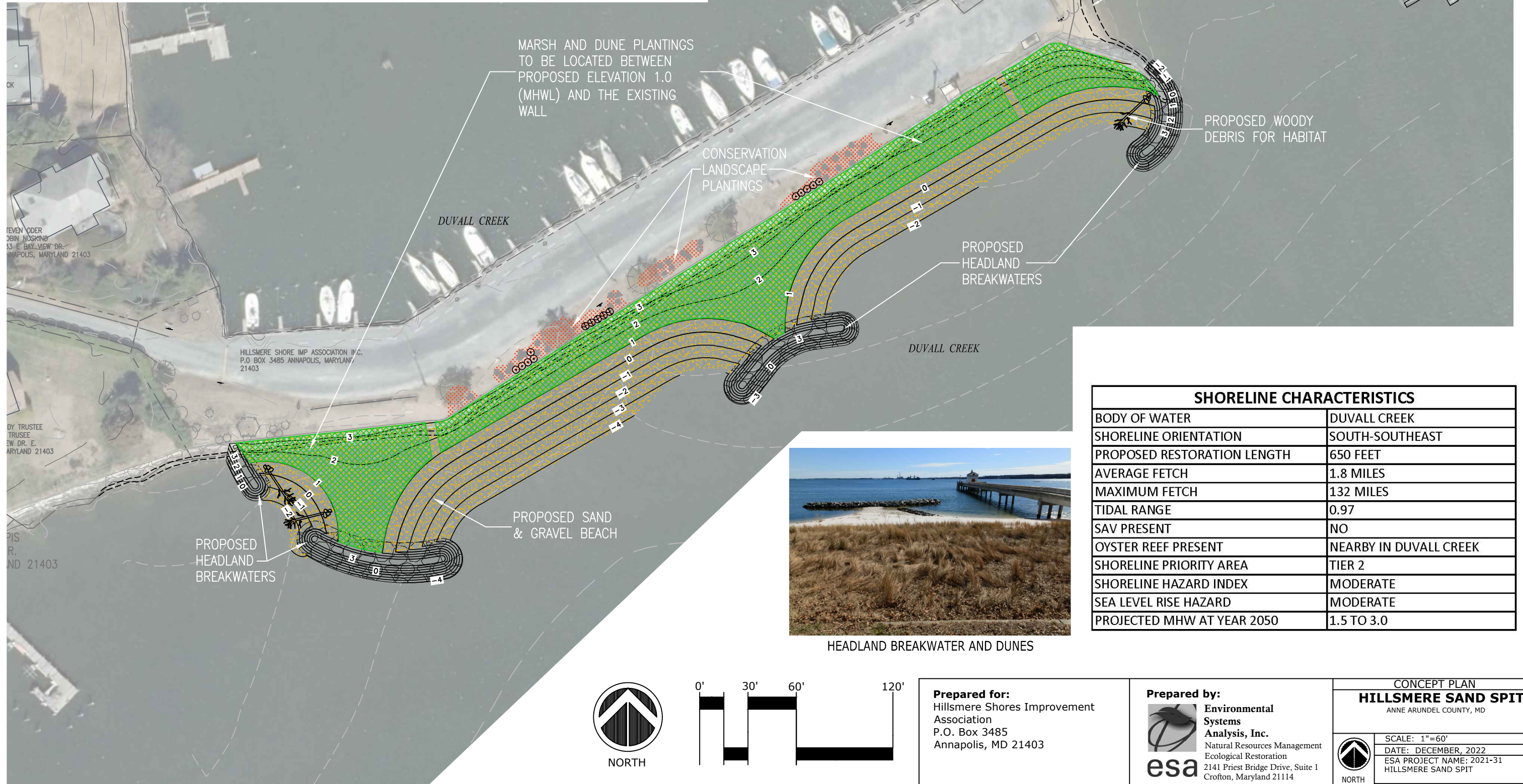


HILLSMERE SHORES SAND SPIT LIVING SHORELINE CONCEPT PLAN VERSION 2.0

PROJECT SUMMARY

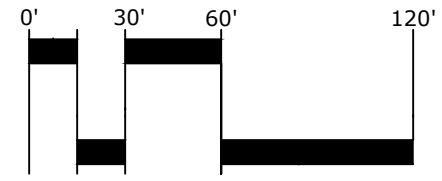
THIS PROPOSED PROJECT WILL PROTECT 650' OF SHORELINE ALONG THE SOUTHERN SIDE OF THE HILLSMERE SAND SPIT BY REPLICATING NATURAL PROCESSES. THE SAND AND COBBLE FILL AND MARSH PLANTINGS WILL MOVE WAVE ENERGY AWAY FROM THE EXISTING CONCRETE WALL WHILE PROVIDING A VARIETY OF TIDAL HABITATS. WIDELY SPACED HEADLAND BREAKWATERS WILL ABSORB AND DIRECT THE WAVE ENERGY TO MAINTAIN STABLE CRESCENT-SHAPED BEACHES. THIS PROJECT WILL PROVIDE ECOLOGICAL LIFT THROUGH WATER QUALITY IMPROVEMENTS AND THE CREATION OF POLLINATOR, DUNE, MARSH, BEACH, AND SHALLOW WATER HABITAT. THE SAND BEACH AREA WILL PROVIDE HABITAT FOR TERRAPINS AND HORSESHOE CRABS. FISH CAN SEEK SHELTER IN THE COVES AND AMONGST THE WOODY DEBRIS. CONSERVATION PLANTINGS AND DUNE GRASSES WILL HELP FILTER STORMWATER RUN-OFF AND HOLD THE SOIL DURING STORMS. THE PROJECT PROVIDES CLIMATE CHANGE RESILIENCY BY BUFFERING STORM SURGE, INSTALLING PLANTS ADAPTED TO WARMING TEMPERATURES, AND CREATING A MIGRATION CORRIDOR FOR TIDAL MARSH AS SEA LEVELS RISE.



HEADLAND BREAKWATER AND DUNES

SHORELINE CHARACTERISTICS

BODY OF WATER	DUVALL CREEK
SHORELINE ORIENTATION	SOUTH-SOUTHEAST
PROPOSED RESTORATION LENGTH	650 FEET
AVERAGE FETCH	1.8 MILES
MAXIMUM FETCH	132 MILES
TIDAL RANGE	0.97
SAV PRESENT	NO
OYSTER REEF PRESENT	NEARBY IN DUVALL CREEK
SHORELINE PRIORITY AREA	TIER 2
SHORELINE HAZARD INDEX	MODERATE
SEA LEVEL RISE HAZARD	MODERATE
PROJECTED MHW AT YEAR 2050	1.5 TO 3.0




Prepared for:
 Hillsmere Shores Improvement Association
 P.O. Box 3485
 Annapolis, MD 21403

Prepared by:
 Environmental Systems Analysis, Inc.
 Natural Resources Management
 Ecological Restoration
 2141 Priest Bridge Drive, Suite 1
 Crofton, Maryland 21114

CONCEPT PLAN
HILLSMERE SAND SPIT
 ANNE ARUNDEL COUNTY, MD

SCALE: 1"=60'
 DATE: DECEMBER, 2022
 ESA PROJECT NAME: 2021-31 HILLSMERE SAND SPIT

 NORTH

SHEET: 1 of 1