



**US Army Corps  
of Engineers**  
Philadelphia District

Wanamaker Building  
100 Penn Square East  
Philadelphia, PA 19107-3390  
ATTN: CENAP-OPR

# Public Notice

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Public Notice No.	Date
<b>CENAP-OPR-2020-00454-86</b>	<b>October 8, 2020</b>

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Application No.	File No.
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In Reply Refer to:  
**REGULATORY BRANCH**

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This District has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344).

The purpose of this notice is to solicit comments and recommendations from the public concerning issuance of a Department of the Army permit for the work described below.

**APPLICANT:** Tim Dillingham  
American Littoral Society  
18 Hartshorne Drive, Suite 1  
Highlands, NJ 07732

**AGENT:** Shane Godshall  
American Littoral Society  
1025 N High Street  
Millville, NJ 08332

**WATERWAY:** Maurice River/Delaware Bay

**LOCATION:** The project is located along the mouth of the Maurice River between Commercial Township and Maurice River Township, Cumberland County, New Jersey. There are two proposed locations, the first is Basket Flats (Block 268, Lot 9) and the second is Northwest Reach (Block 316, Lots 44 & 45).

**ACTIVITY:** American Littoral Society is proposing to construct a combination of hybrid breakwaters and oyster reef/ribbed mussel beds along with salt marsh restoration. This project will achieve storm protection of fragile and rapidly eroding shorelines that shelter the port and surrounding communities. Work will be conducted in three phases beginning at Basket Flats for the first two phases and the third at Northwest Reach. Phase 1 will involve the creation of up to a 400-foot, planted, hybrid rock revetment at the tip of Basket Flats; Phase 2 will involve the creation of up to 2,025 feet of hybrid living shoreline breakwaters and subtidal oyster reefs/ribbed mussel beds placed landward of the breakwaters at Basket Flats; and Phase 3 will involve the creation of up to 4,600 feet of hybrid living shoreline breakwaters and oyster reefs/ribbed mussel beds placed landward of the breakwaters at Northwest Reach.

Phase 1 rock revetment is approximately 400 feet in length, with an approximately 11-foot-wide crest at elevation +8 feet NAVD88. The crest will be graded into existing conditions on a 1V:1.5H slope. The head of the revetment will have a 10.5-foot-wide crest at +8 feet NAVD88 and will be graded into the existing conditions at a 1V:2H slope.

Phase 2 will consist of the creation of 9 nearshore breakwaters at Basket Flats. Each breakwater will be 200 feet long with 25-foot wide gaps between each breakwater. Each breakwater will be 3 feet wide at the top and 24 feet at the base with a 1:1 slope. Breakwaters will be constructed with uniform size rock weighing about 230 pounds each founded on a 12-inch thick Tensar mat that is 40 feet wide. The applicant intends to place spat-on-shell in the second year to seed some gaps on the windward side of the breakwater. The breakwaters will be placed approximately 100 feet offshore from the Mean High Water line and shell will be layered on the bottom behind the breakwaters to create acres of subtidal/intertidal oyster reef habitat. Phase 2 also includes the creation of ribbed mussel beds closer to shore along with two layers of coir logs (1-8 inch diameter and 1-12 inch diameter coir logs), seeded and planted with *Spartina alterniflora*.

Phase 3 consists of the creation of 18 breakwater structures. Each will be approximately 200 feet long with 50-foot wide gaps between them. A 100-foot-long breakwater/groin will be located landward of the eastern end of the system to prevent erosion by currents along the shoreline. The breakwaters would be constructed of nearly uniform size stones with an average weight of 165 pounds. The breakwater base would be constructed using a Tensar Triton® marine mattress that includes a geotextile filter. The elevation of the structure crest would be +4 feet NAVD88 datum putting it at approximately 0.8 feet about the Mean High Water line. The elevations for the bottoms of the breakwaters will vary from about -5 feet to -3 feet NAVD88 datum. Breakwaters will be placed approximately 2,500 feet from the Mean High Water line and shell will be layered on the bottom behind the breakwaters to create acres of subtidal/intertidal oyster reef habitat. Intertidal oyster reefs will be created slightly landward of each breakwater gap. Phase 3 also includes the creation of ribbed mussel beds closer to shore along with and seeding and planted with *Spartina alterniflora*.

**PURPOSE:** The primary purpose of the proposed activity is to protect eroding marsh at the mouth of the Maurice River. The marsh erosion is a direct result of historic land uses and a lack of cohesive protection strategy for the Delaware Bay shoreline. The proposed actions will have secondary benefit of providing protection for the communities and facilities along the river's edge.

A preliminary review of this application indicates that species listed under the Endangered Species Act or their critical habitat pursuant to Section 7 of the ESA as amended, may be present in the action area. The ACOE will forward this PN to the US Fish and Wildlife Service and/or National Marine Fisheries Service with a request for technical assistance on whether any ESA listed species or their critical habitat may be present in the area which would be affected by the proposed activity. The Philadelphia District will evaluate the potential effects of the proposed actions on ESA listed species or their critical habitat and will consult with the US Fish and Wildlife Service and/or NOAA Fisheries as appropriate. ESA Section 7 consultation will be concluded prior to the final decision on this permit application.

The decision whether to issue a permit will be based on an evaluation of the activity's probable impact including its cumulative impacts on the public interest. The decision will reflect

the national concern for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the work must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the work will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs and welfare of the people. A Department of the Army permit will be granted unless the District Engineer determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Due to COVID-19, comments on the proposed work are encouraged to be submitted, by email, within 30 days to the District Engineer, U.S. Army Corps of Engineers, Philadelphia District at [PhiladelphiaDistrictRegulatory@usace.army.mil](mailto:PhiladelphiaDistrictRegulatory@usace.army.mil). If it is necessary to provide a paper copy, comments should be submitted, by traditional mail. Within 30 days to the District Engineer, U.S. Army Corps of Engineers, Philadelphia District, Wanamaker Building, 100 Penn Square East, Philadelphia, Pennsylvania 19107-3390.

The USACE Cultural Resource Specialist is currently reviewing the proposed permit action for potential impacts to Historic Properties eligible for or listed on the National Register of Historic Places. A determination of effects will be coordinated with the State Historic Preservation Office, the Tribes and other consulting parties.

The Magnuson-Stevens Fishery Conservation and Management Act requires all federal agencies to consult with the NOAA Fisheries all actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH). A preliminary review of this application indicates that EFH is present within the project area. The Philadelphia District will evaluate the potential effects of the proposed actions on EFH and will consult with NOAA Fisheries as appropriate. Consultation will be concluded prior to the final decision on this permit application.

Compensatory mitigation is not required by this office because the proposed project does not result in a loss of function and values of the waterbody. The project is expected to result in a net increase in functions of values by the creation of the living shoreline and marsh plantings, the oyster/mussel beds in the nearshore area, and the reduction in shoreline erosion by the breakwaters reducing the erosive forces on the shoreline.

In accordance with Section 307(c) of the Coastal Zone Management Act of 1972, applicants for Federal Licenses or Permits to conduct an activity affecting land or water uses in a State's coastal zone must provide certification that the activity complies with the State's Coastal Zone Management Program. The applicant has stated that the proposed activity complies with and will be conducted in a manner that is consistent with the approved State Coastal Zone Management (CZM) Program. No permit will be issued until the State has concurred with the applicant's certification or has waived its right to do so. Comments concerning the impact of the proposed and/or existing activity on the State's coastal zone should be sent to this office, with a copy to the State's Office of Coastal Zone Management.

In accordance with Section 401 of the Clean Water Act, a Water Quality Certificate is necessary from the State government in which the work is located. Any comments concerning the work described above which relate to Water Quality considerations should be sent to this office with a copy to the State.

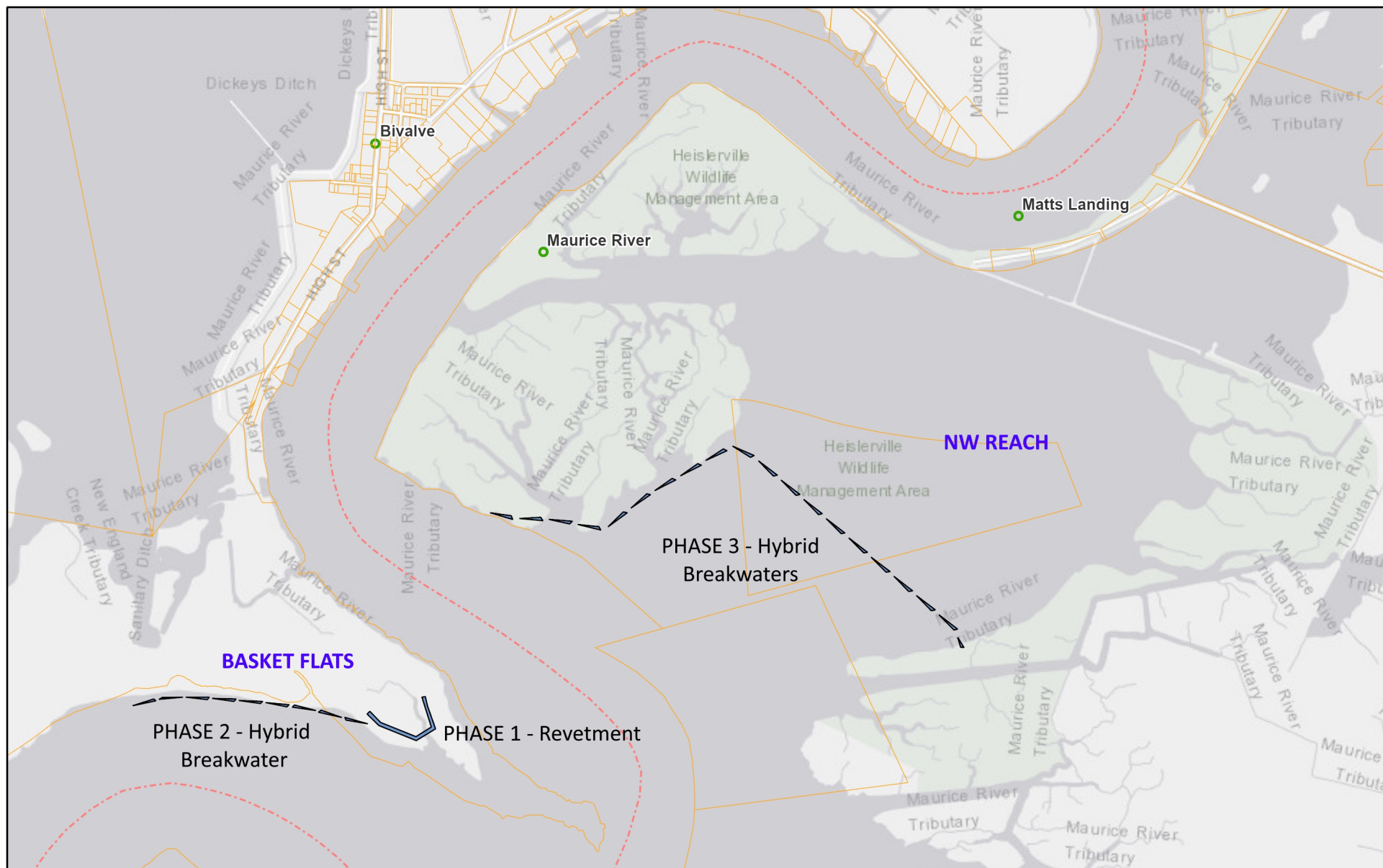
The evaluation of the impact of the work described above on the public interest will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act.

Due to COVID-19, any person may request, by email, to the District Engineer at the [PhiladelphiaDistrictRegulatory@usace.army.mil](mailto:PhiladelphiaDistrictRegulatory@usace.army.mil), within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing. If it is necessary to provide a written request by traditional mail, such request should be submitted within the comment period specified in this notice to the District Engineer, U.S. Army Corps of Engineers, Philadelphia District, Wanamaker Building, 100 Penn Square East, Philadelphia, Pennsylvania 19107-3390.

Additional information concerning this permit application, CENAP-OPR-2020-00454-86 may be obtained by emailing Genevieve Sarlo at [Genevieve.T.Sarlo@usace.army.mil](mailto:Genevieve.T.Sarlo@usace.army.mil).

Todd A. Schaible  
Chief, Regulatory Branch

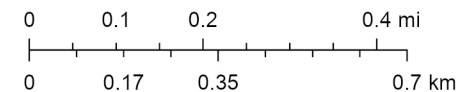
# Mouth of the Maurice River Restoring Ecologically Beneficial and Resilient Infrastructure



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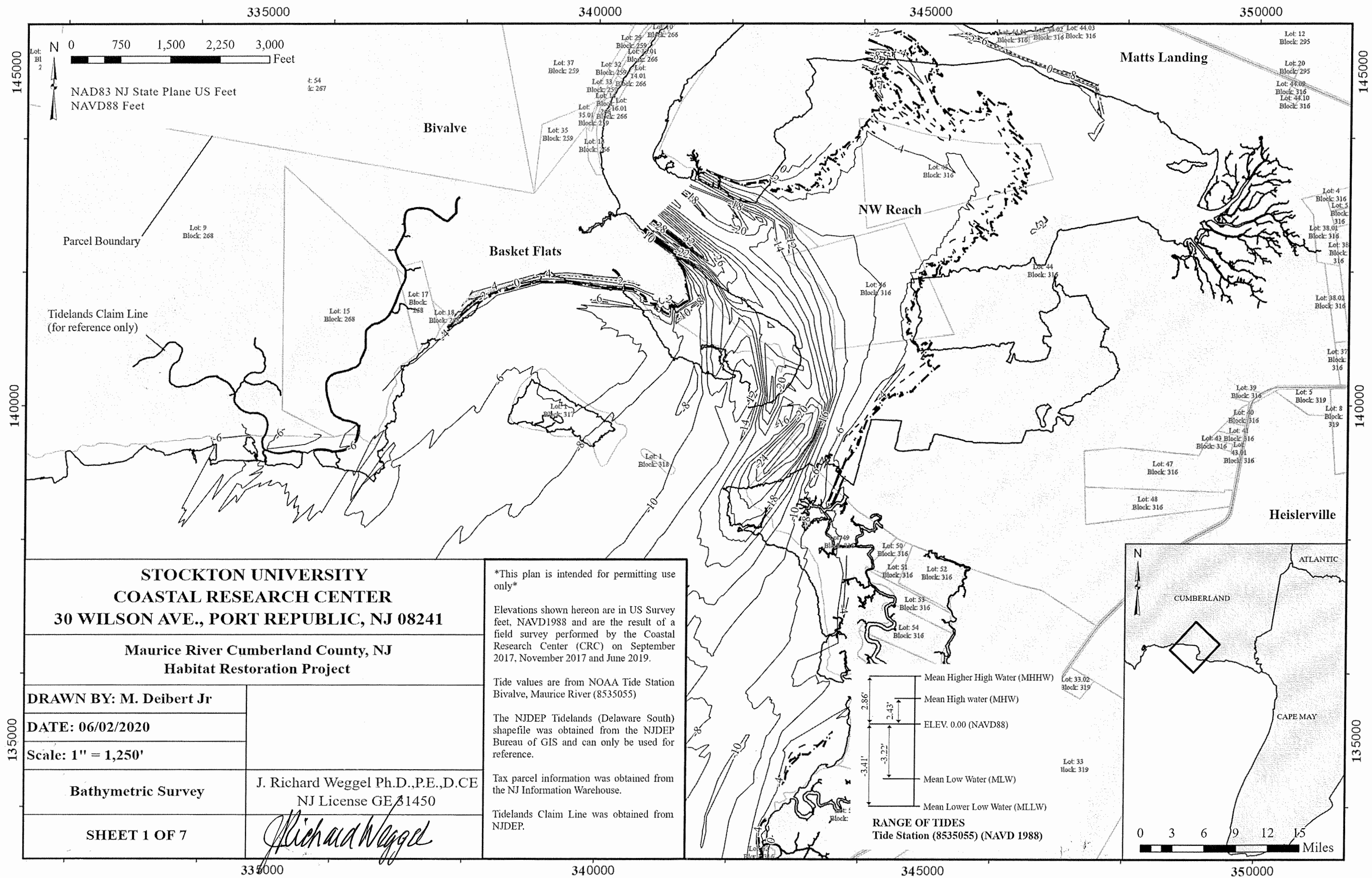


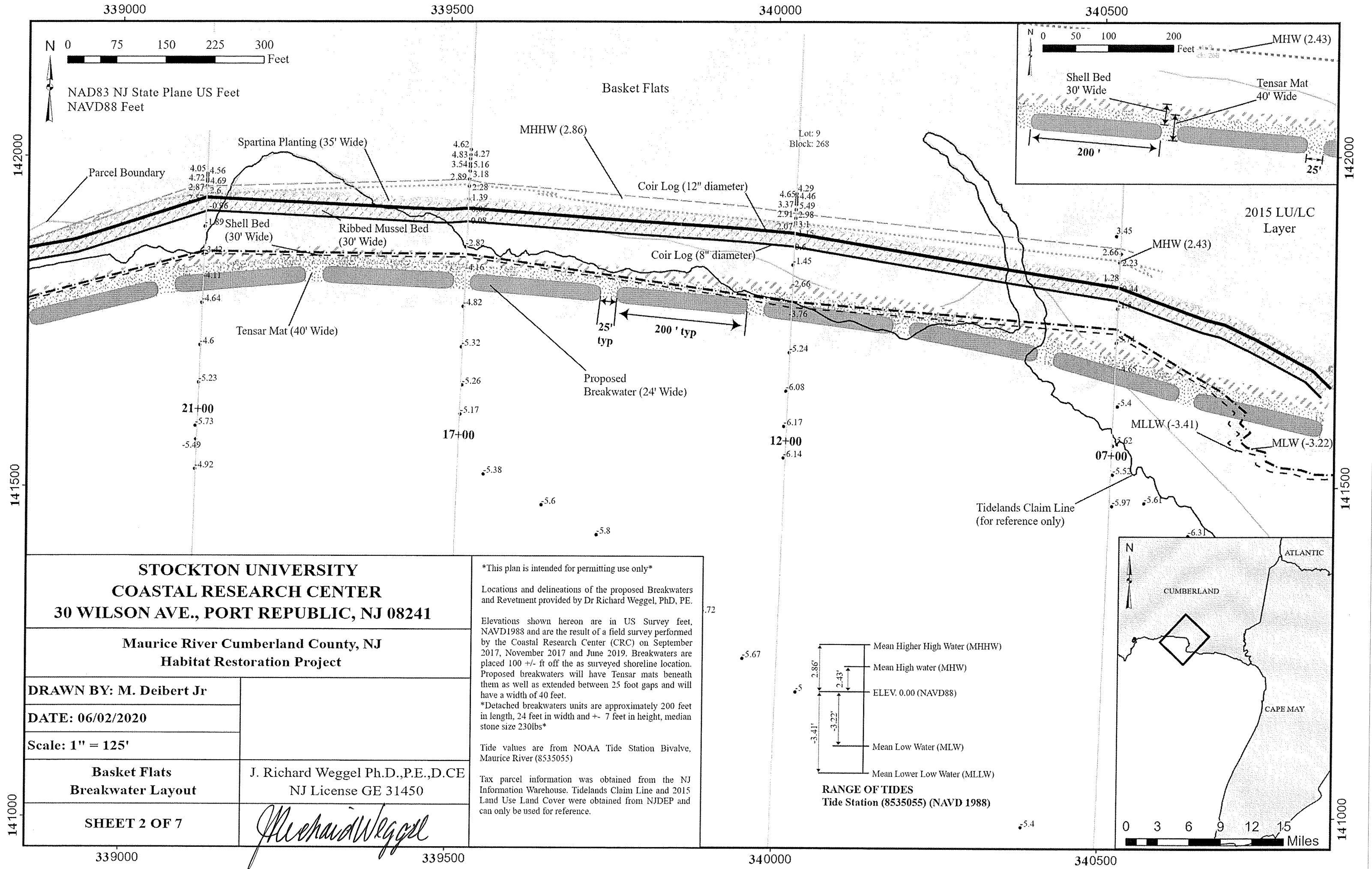
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user

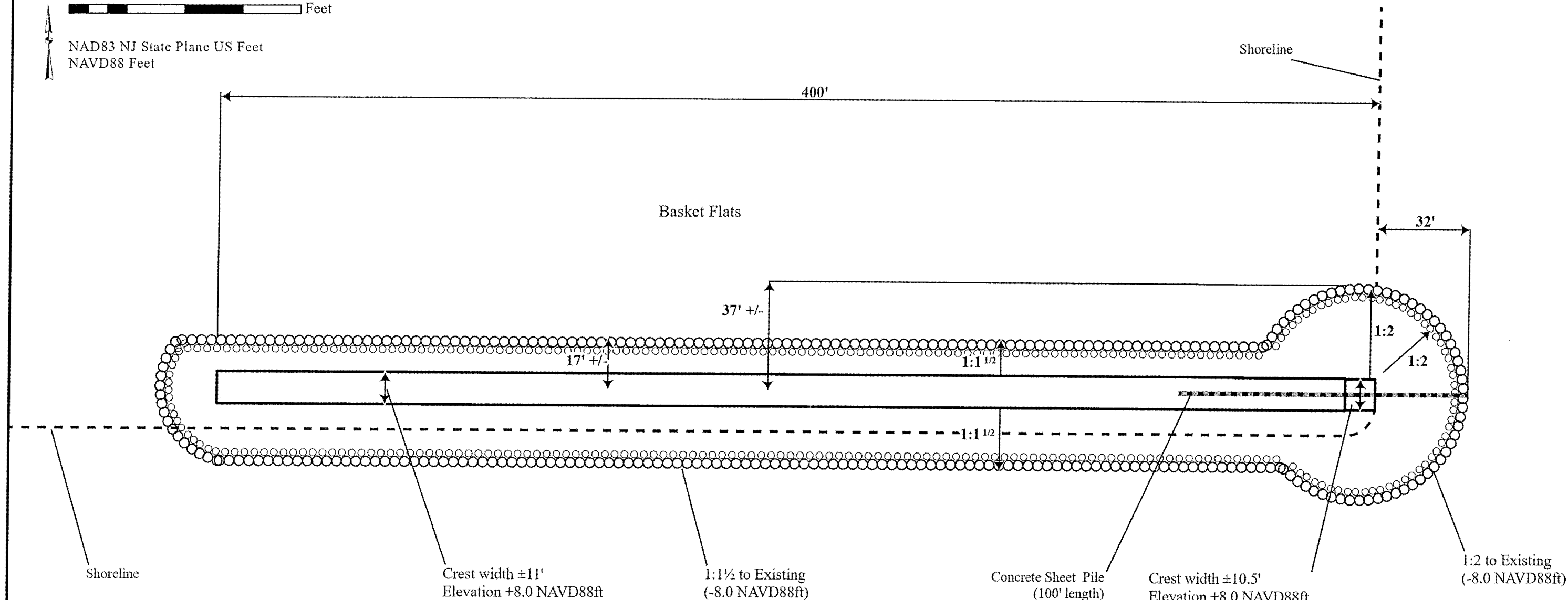
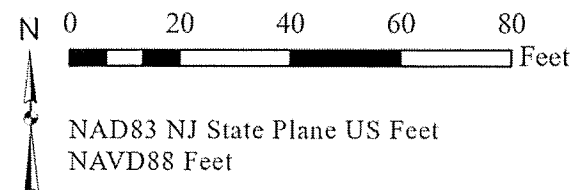
New Jersey Department of Environmental Protection

State of New Jersey, Esri, HERE | NJDEP | NJDEP, Bureau of Energy and Sustainability Edition 20190327 | New Jersey Office of Information Technology (NJGIT), Office of Geographic Information Systems | NJDEP, USEIA | NJ Department of Environmental









**STOCKTON UNIVERSITY**  
**COASTAL RESEARCH CENTER**  
**30 WILSON AVE., PORT REPUBLIC, NJ 08241**

**Maurice River Cumberland County, NJ**  
**Habitat Restoration Project**

**DRAWN BY: M. Deibert Jr**

**DATE: 06/02/2020**

**Scale: 1" = 35'**

**Basket Flats**  
**Revetment Layout**

**SHEET 3 OF 7**

J. Richard Weggel Ph.D., P.E., D.CE  
NJ License GE 31450

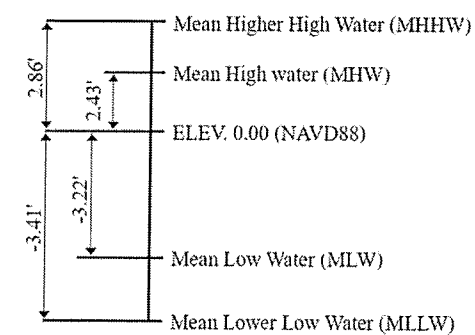
*J. Richard Weggel*

*\*This plan is intended for permitting use only\**

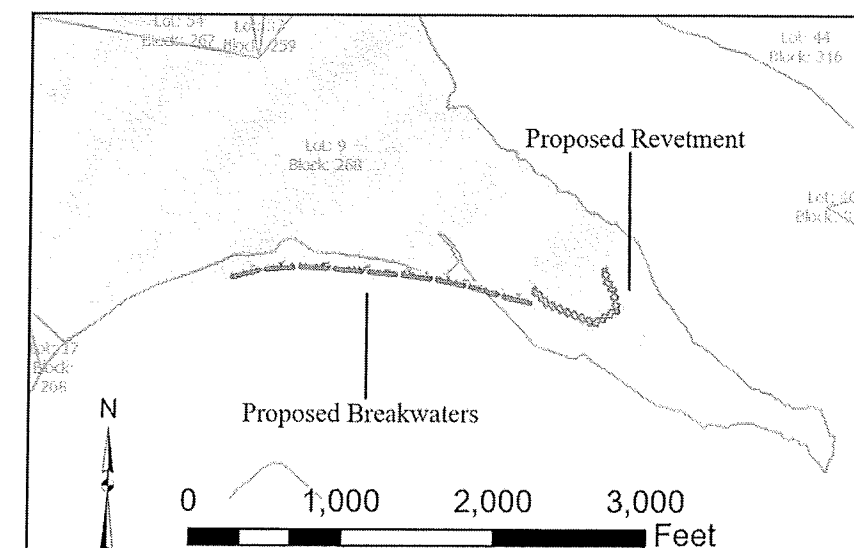
Locations and delineations of the proposed Breakwaters and Revetment provided by Dr Richard Weggel, PhD, PE.

Elevations shown hereon are in US Survey feet, NAVD1988. This drawing represents the general layout of the revetment. The placement and orientation of the structure will be determined by the shoreline position.

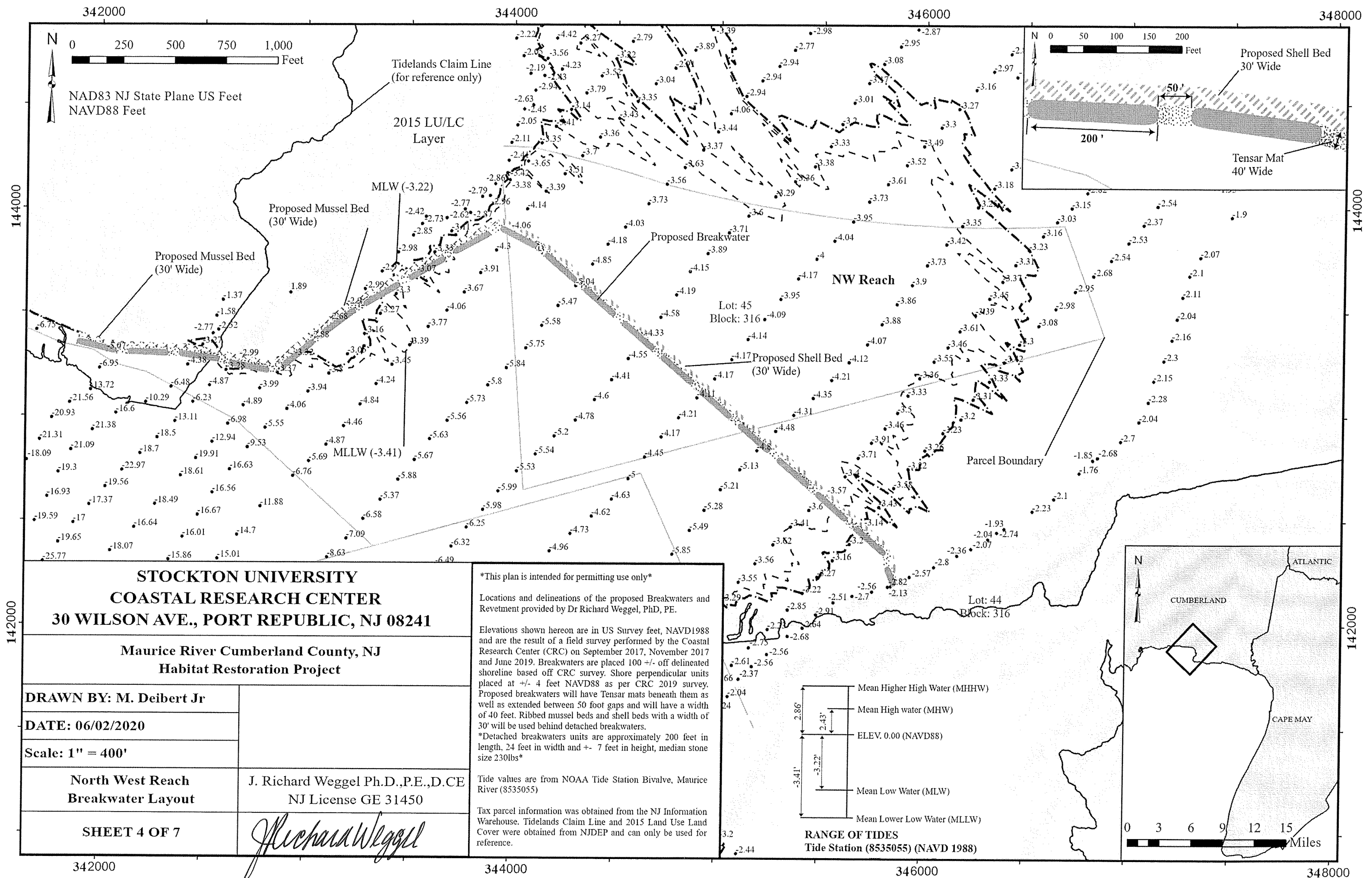
The designed revetment is approximately 400' in length, with an ±11' wide crest at elevation +8.0 NAVD88ft. The crest will be graded into existing conditions on 1 on 1 1/2 slope. The head of the revetment will have a 10.5' wide crest at +8.0 NAVD88ft and will be graded into existing conditions on a 1 on 2 slope.

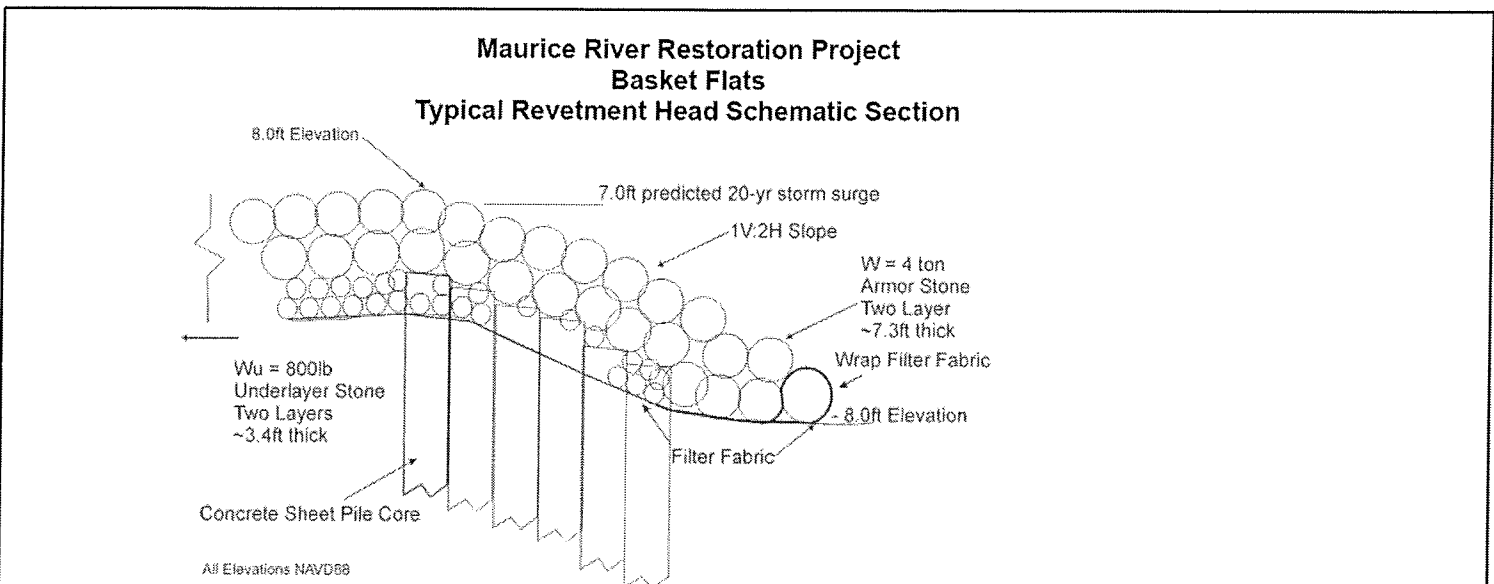
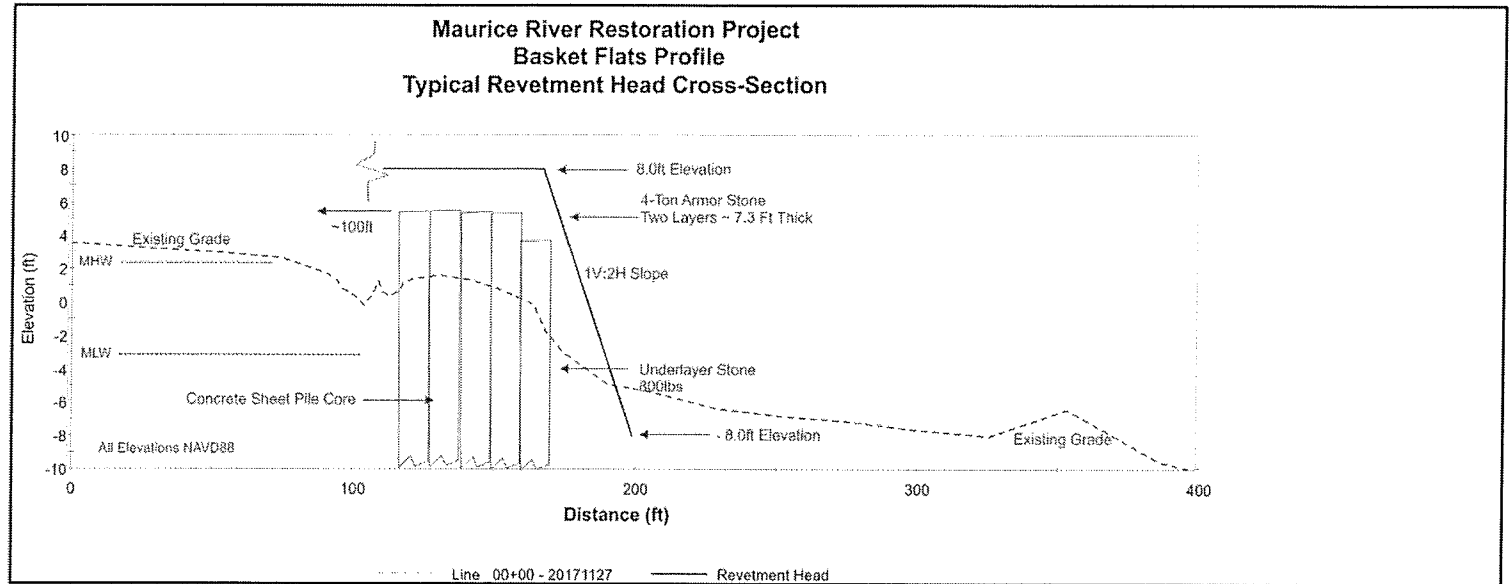
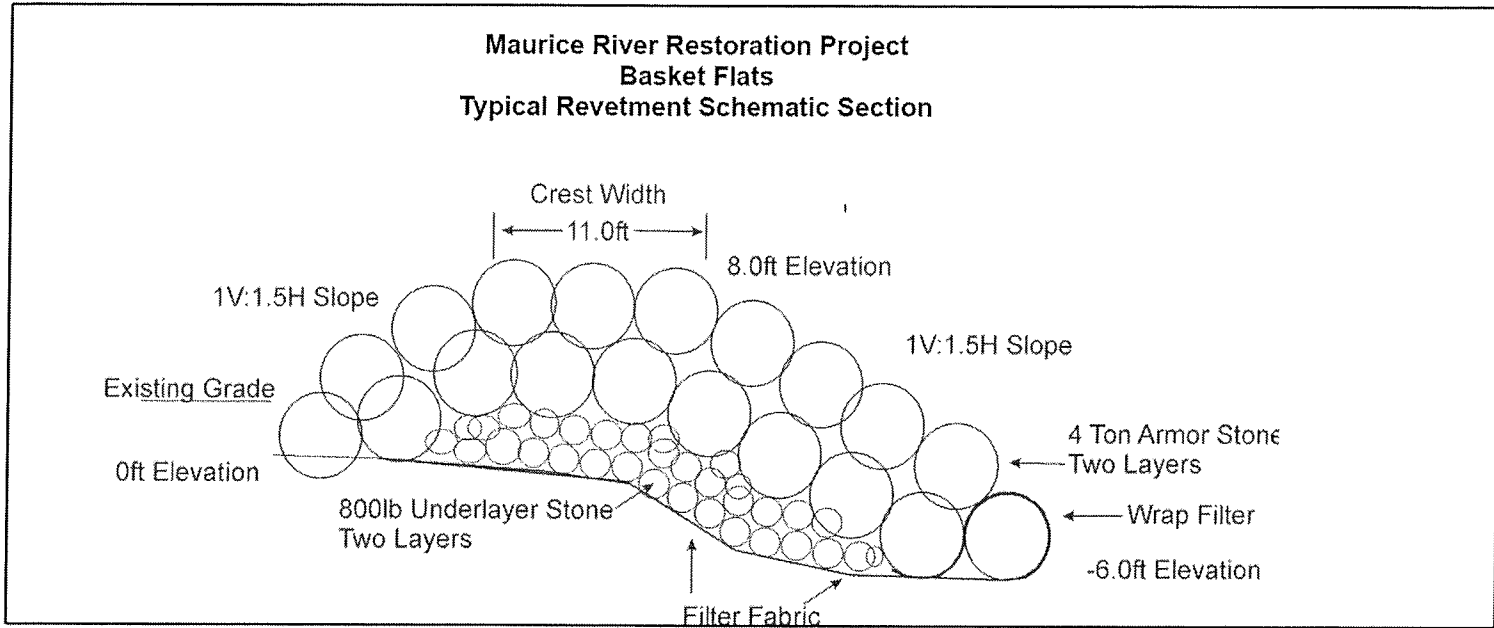
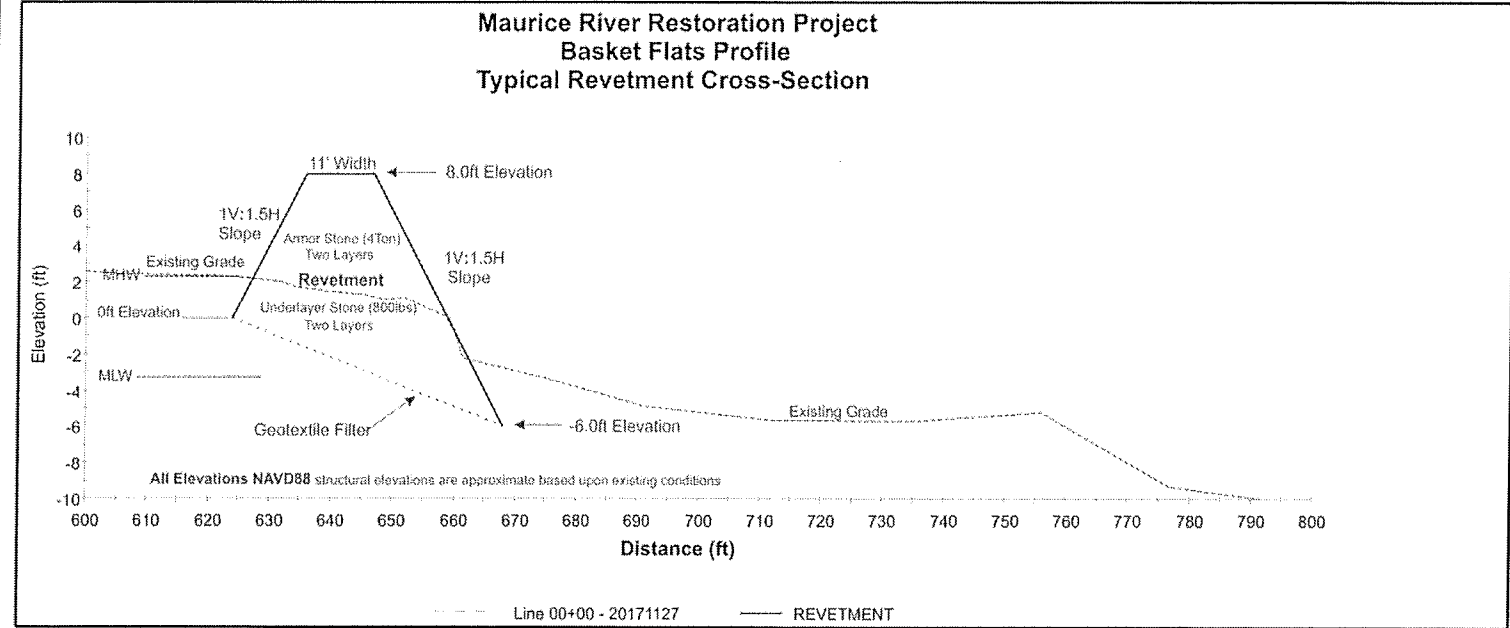


**RANGE OF TIDES**  
Tide Station (8535055) (NAVD 1988)









<b>STOCKTON UNIVERSITY</b> <b>COASTAL RESEARCH CENTER</b> <b>30 WILSON AVE., PORT REPUBLIC, NJ 08241</b>	
<b>Maurice River Cumberland County, NJ</b> <b>Habitat Restoration Project</b>	
<b>DRAWN BY: M. Deibert Jr</b>	
<b>DATE: 06/02/2020</b>	
<b>Scale: 1" = Per Drawing</b>	
<b>Basket Flats Revetment &amp; Breakwater Cross-Sections</b>	<b>J. Richard Weggel Ph.D., P.E., D.CE</b> NJ License GE 31450
<b>SHEET 5 OF 7</b>	

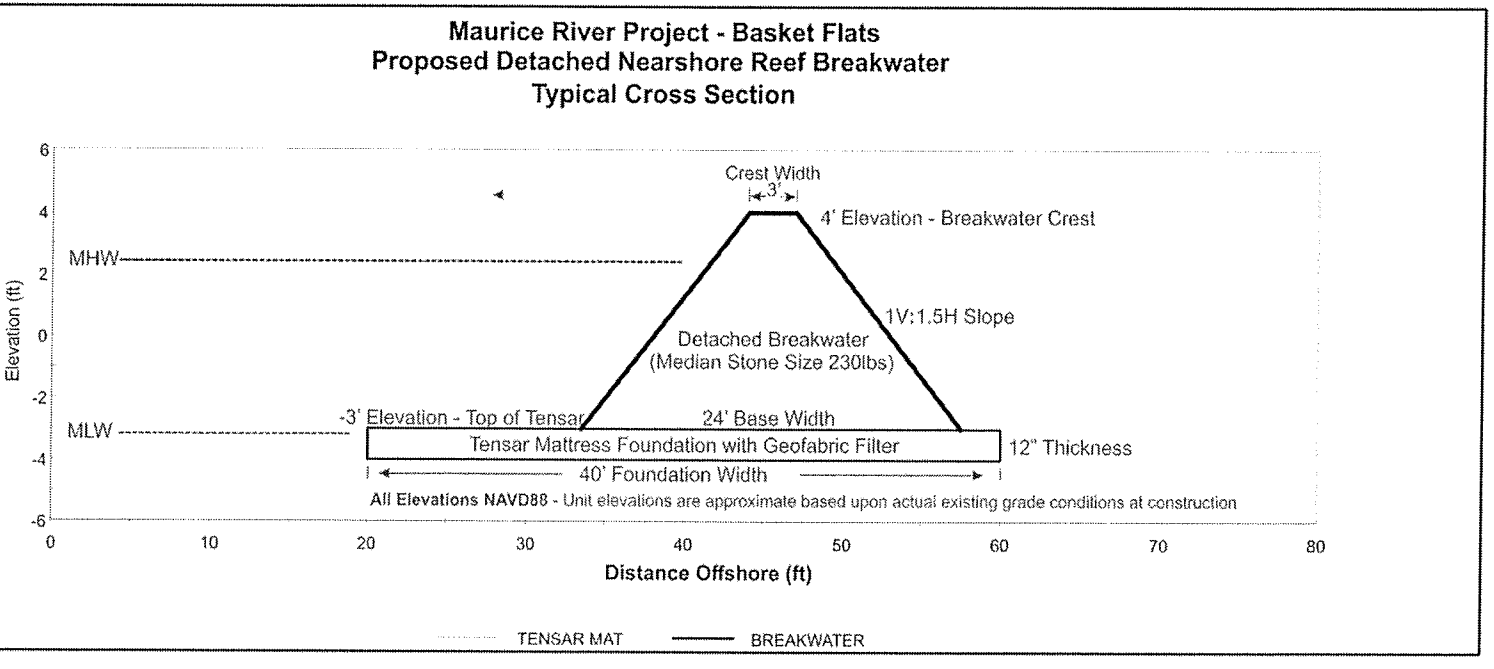
\*This plan is intended for permitting use only\*

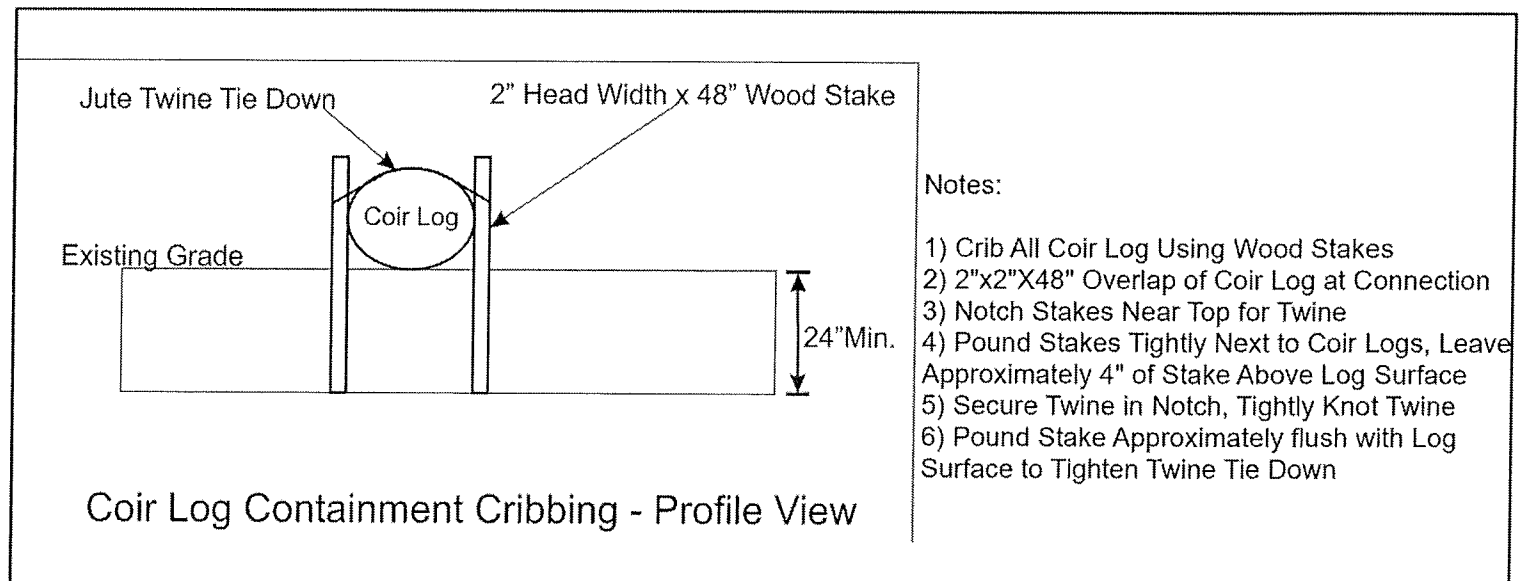
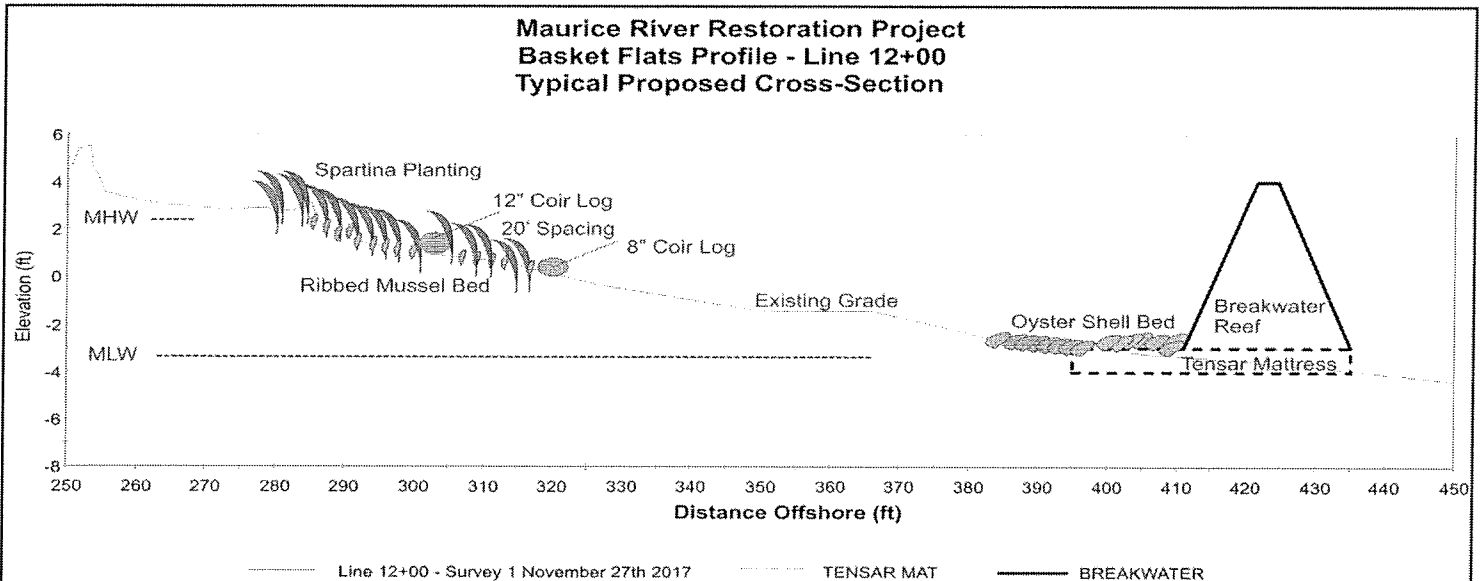
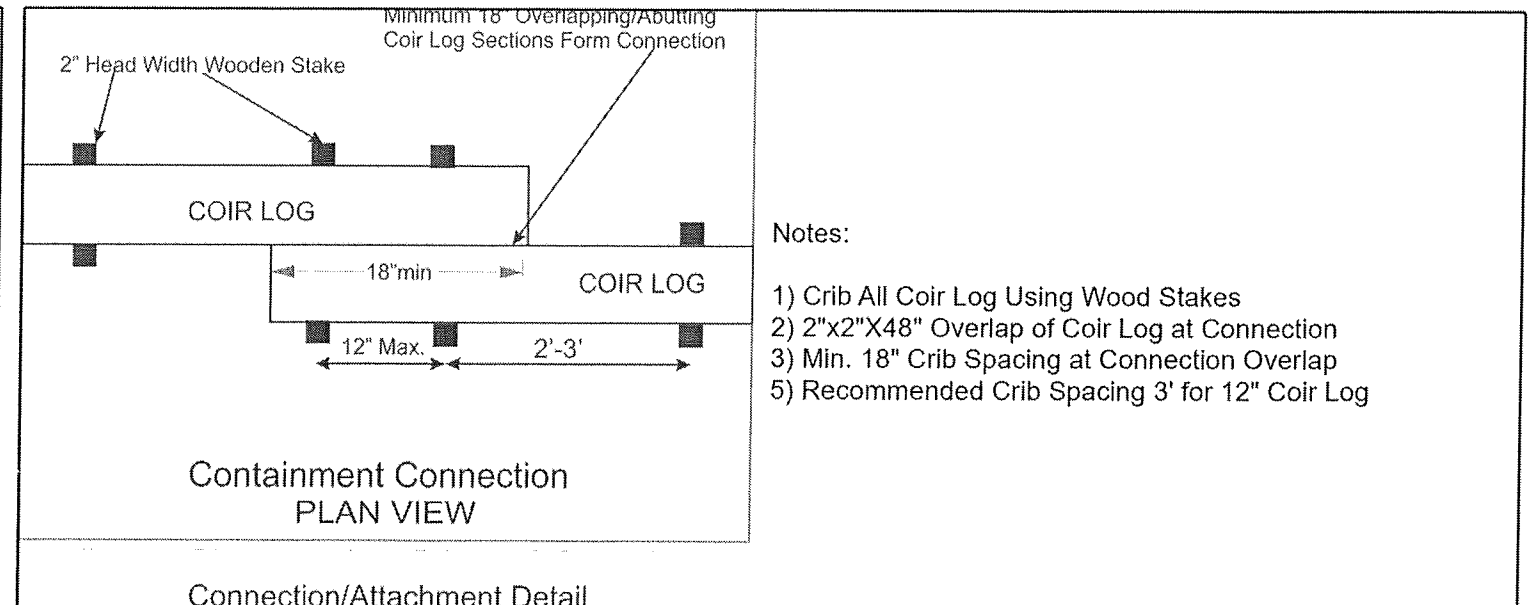
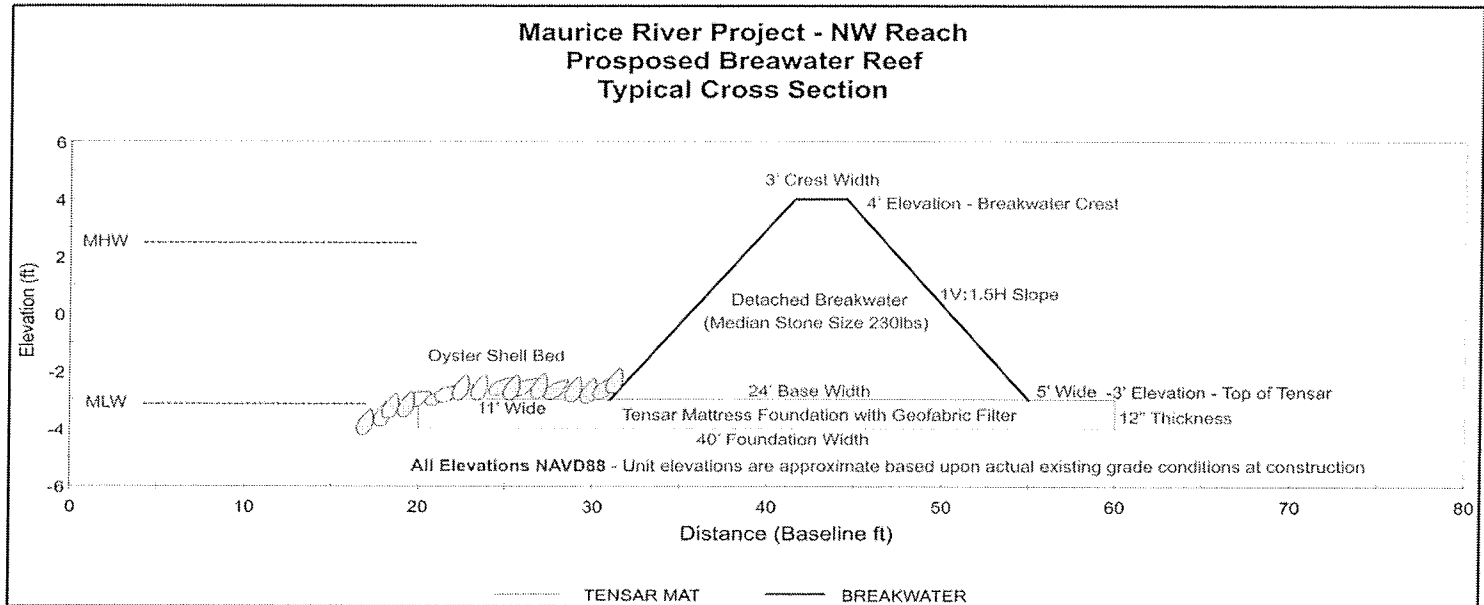
The figures on this page represent typical cross sections for proposed revetment and breakwaters for Basket Flats.


Figures drawn by Steven Hafner based on report provided by Dr. J. Richard Weggel

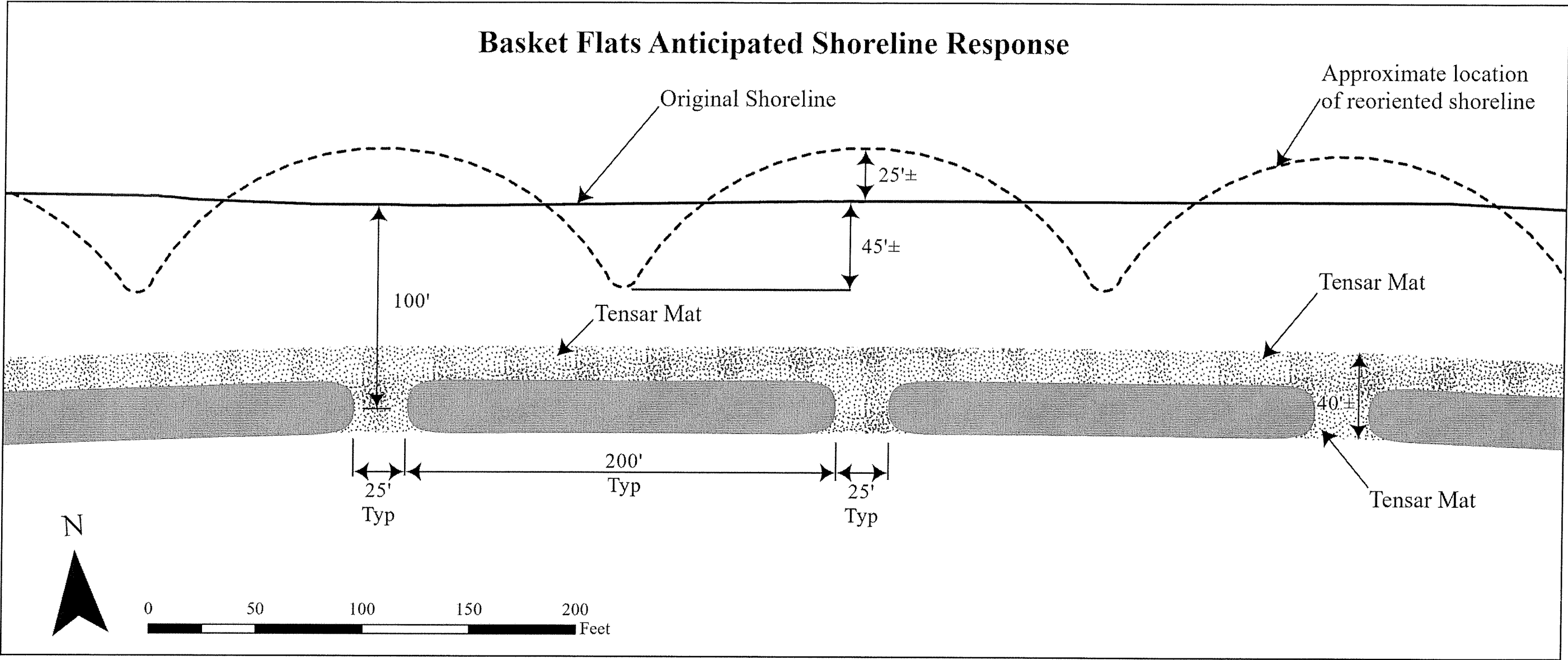
2015 Landuse Land Cover data was obtained from NJDEP.

All elevations shown are in NAVD88.





<b>STOCKTON UNIVERSITY</b> <b>COASTAL RESEARCH CENTER</b> <b>30 WILSON AVE., PORT REPUBLIC, NJ 08241</b>		<b>*This plan is intended for permitting use only*</b>  The figures on this page represent typical cross sections for proposed revetment and breakwaters for Basket Flats and Northwest Reach.  Figures drawn by Steven Hafner based on report provided by Dr. J. Richard Weggel.  All elevations shown are in NAVD88.
<b>Maurice River Cumberland County, NJ</b> <b>Habitat Restoration Project</b>		
<b>DRAWN BY: M. Deibert Jr</b>		
<b>DATE: 06/02/2020</b>		
<b>Scale: 1" = Per Drawing'</b>		
<b>North West Reach &amp; Coir Log Cross-Sections</b>	<b>J. Richard Weggel Ph.D.,P.E.,D.CE</b> <b>NJ License GE 31450</b>	
<b>SHEET 6 OF 7</b>		



**STOCKTON UNIVERSITY  
COASTAL RESEARCH CENTER  
30 WILSON AVE., PORT REPUBLIC, NJ 08241**

**Maurice River Cumberland County, NJ  
Habitat Restoration Project**

**DRAWN BY: M. Deibert Jr**

**DATE: 06/02/2020**

**Scale: 1" = 50'**

**Basket Flats  
Shoreline Response**

**SHEET 7 OF 7**

J. Richard Weggel Ph.D.,P.E.,D.CE  
NJ License GE 31450

*J. Richard Weggel*

*\*This plan is intended for permitting use only\**

The figure on this page represent anticipated shoreline response for Basket Flats. The shoreline will reorient itself in response to wave energy passing through the gaps and intercept 89% of incident wave energy. The shore line will recede behind the gaps and form a salient behind the breakwaters. The salient will extend 46 feet from the original shoreline.

Figures drawn by Steven Hafner based on report provided by Dr. J. Richard Weggel.