

Hereford Inlet to Cape May Inlet

Draft Feasibility Report and Integrated Environmental Assessment

Public Hearing

NJDEP-Bureau of Coastal Engineering - Chris Constantino, Project Manager

U.S. Army Corps of Engineers, Philadelphia District Coastal Planning Section – Brian Bogle, Project





The State of New Jersey's Shore Protection Program



State of New Jersey
Chris Christie, Governor

Dept. of Environmental Protection
Bob Martin, Commissioner

Natural & Historic Resources
Rich Boornazian, Assistant Commissioner

Office of Engineering & Construction
David Rosenblatt, Administrator

Bureau of Coastal Engineering
William Dixon, Acting Manager



U.S. Army Corps of Engineers Philadelphia District



**Philadelphia District Colonel
LTC Chris Becking, District Commander**

**Planning Division Chief
Peter Blum**

**Project Development Chief
Erik Rourke**

**Coastal Planning Chief
Jeff Gebert**



Bureau of Coastal Engineering Purpose....



To administer beach nourishment, shore protection and navigational dredging projects throughout the State to:

- ...Provide for protection of life and property along the coast
- ...Preserve our State's vital coastal resources
- ...Maintain safe and navigable waterways



Shore Protection Fund is Dedicated...



“To protect existing development and infrastructure from storm surges, sea-level rise, and shoreline migration, through dune creation and maintenance, beach nourishment projects and construction and repair of shore protection structures.”

**\$25 million dedicated annually
Realty Transfer Tax (N.J.S.A. C. 13:19-16.1)**



Report Summary



- Presents a hurricane and storm damage reduction plan for North Wildwood, Wildwood, Wildwood Crest and Lower Township
- Engineering, economic, social, and environmental analyses described
- Evaluated cultural and environmental resources impacts -
 - National Environmental Policy Act (NEPA)
 - Section 106 of the National Historic Preservation Act



Selected Plan



- Back passing sand from the beach in Wildwood, Wildwood Crest and Lower Township.
- Utilizing the sand to develop an engineered dune and beach berm in North Wildwood, and an engineered dune in Wildwood, Wildwood Crest and Lower Township for the purposes of hurricane and storm damage reduction **



Project Milestone Dates

-New Jersey Shore Protection Study Authorized – 12/17/1987

-Study the changing coastal processes along the coast of New Jersey

-Report of Limited Reconnaissance - 09/1990

-Reconnaissance Study Completed - 2001

-Feasibility Cost Sharing Agreement (FCSA) – 09/30/2002

-PL-113-2 ("Sandy Supplemental Bill") – 01/2013

-Draft Feasibility Report – 12/20/2013



Estimated Project Costs



-Initial Construction – \$21,860,000

-Costs shared

-Renourishment Costs - \$58,749,881 (over 50 years)

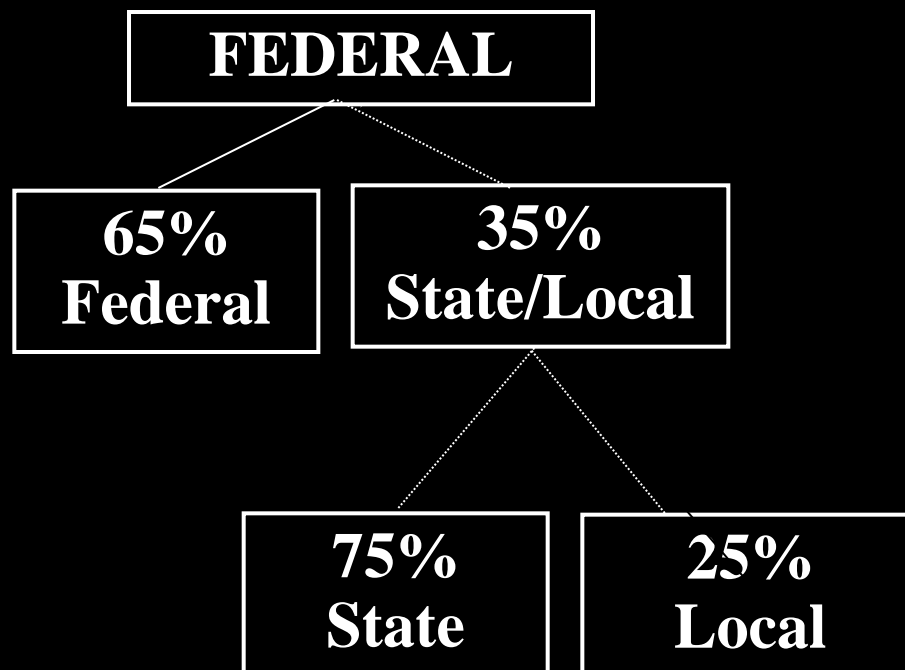
-Costs shared



Initial Cost Share Breakdown



Shore Protection Projects

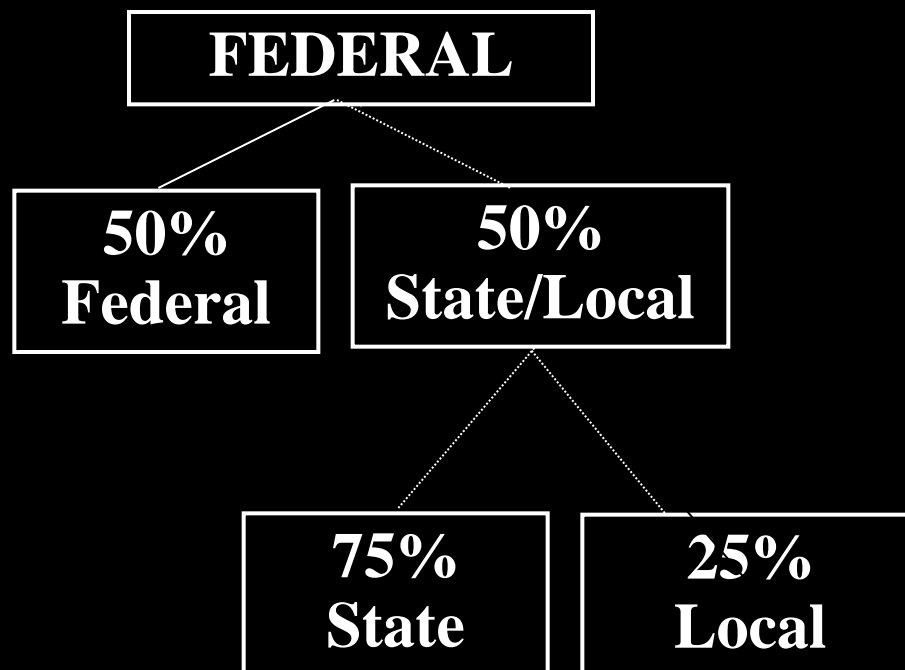




Renourishment Cost Share Breakdown



Shore Protection Projects





Project Plan Parameters



- Berm Elevation – 6.5 feet NAVD88**
- Berm Width – 75 feet (dune toe to edge of beach)**
- Seaward Berm Slope – 1:30**
- Dune Elevation – 16 feet NAVD88**
- Dune Crest Width – 25 feet**
- Dune Side Slopes – 1:5**
- Dune offset – varies (20 to 30 feet)**



Project Plan Parameters



- Project Length – 25,000 feet**
- Initial Quantity – 1,362,000 cubic yards**
- Periodic Nourishment – 305,000 cubic yards**
- Major Replacement Quantity – 153,000 cubic yards**
- Dune Crest Width – 25 feet**
- Dune Side Slopes – 1:5**
- Dune offset – varies (20 to 30 feet)**

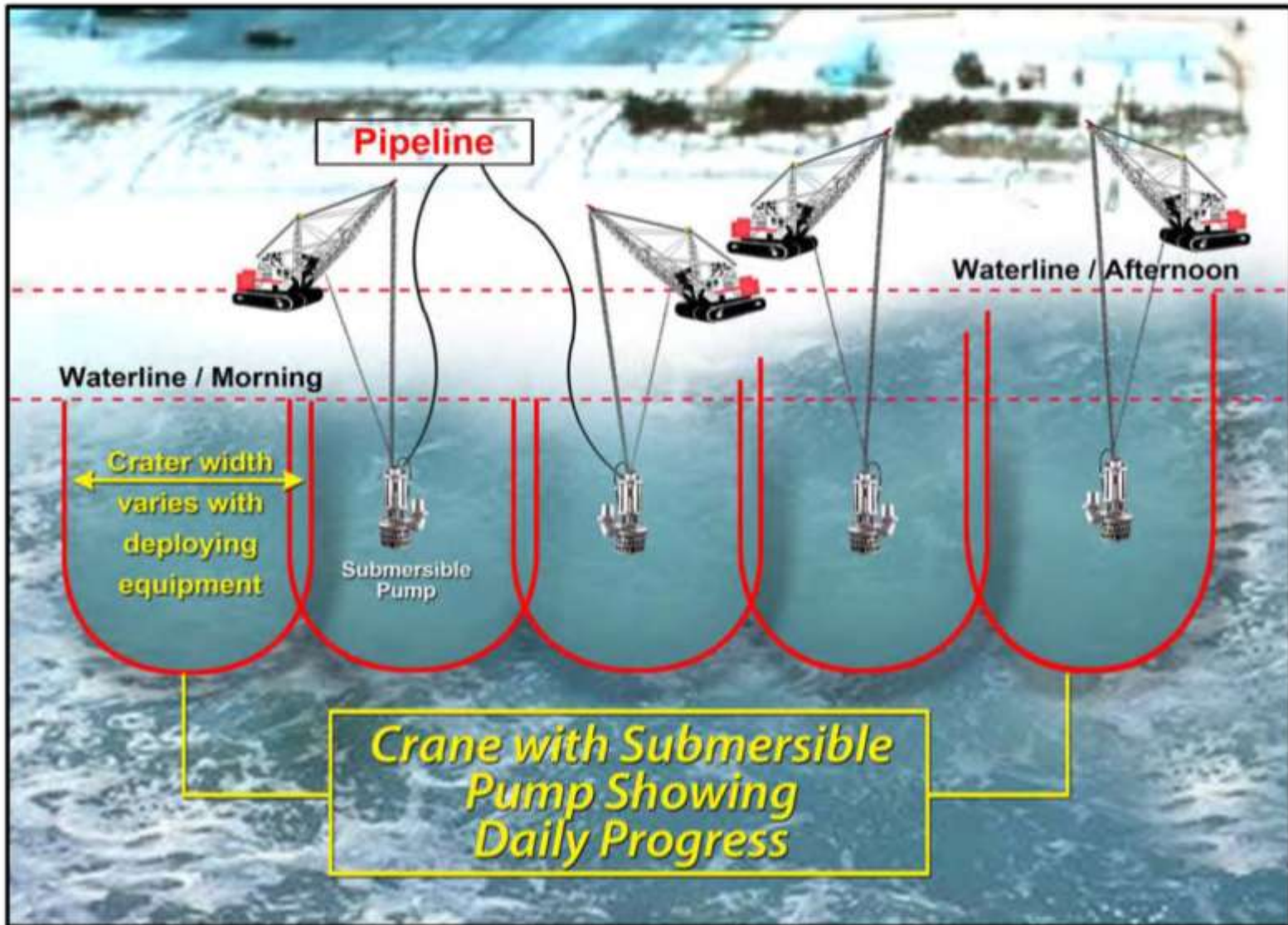


Other Important Features

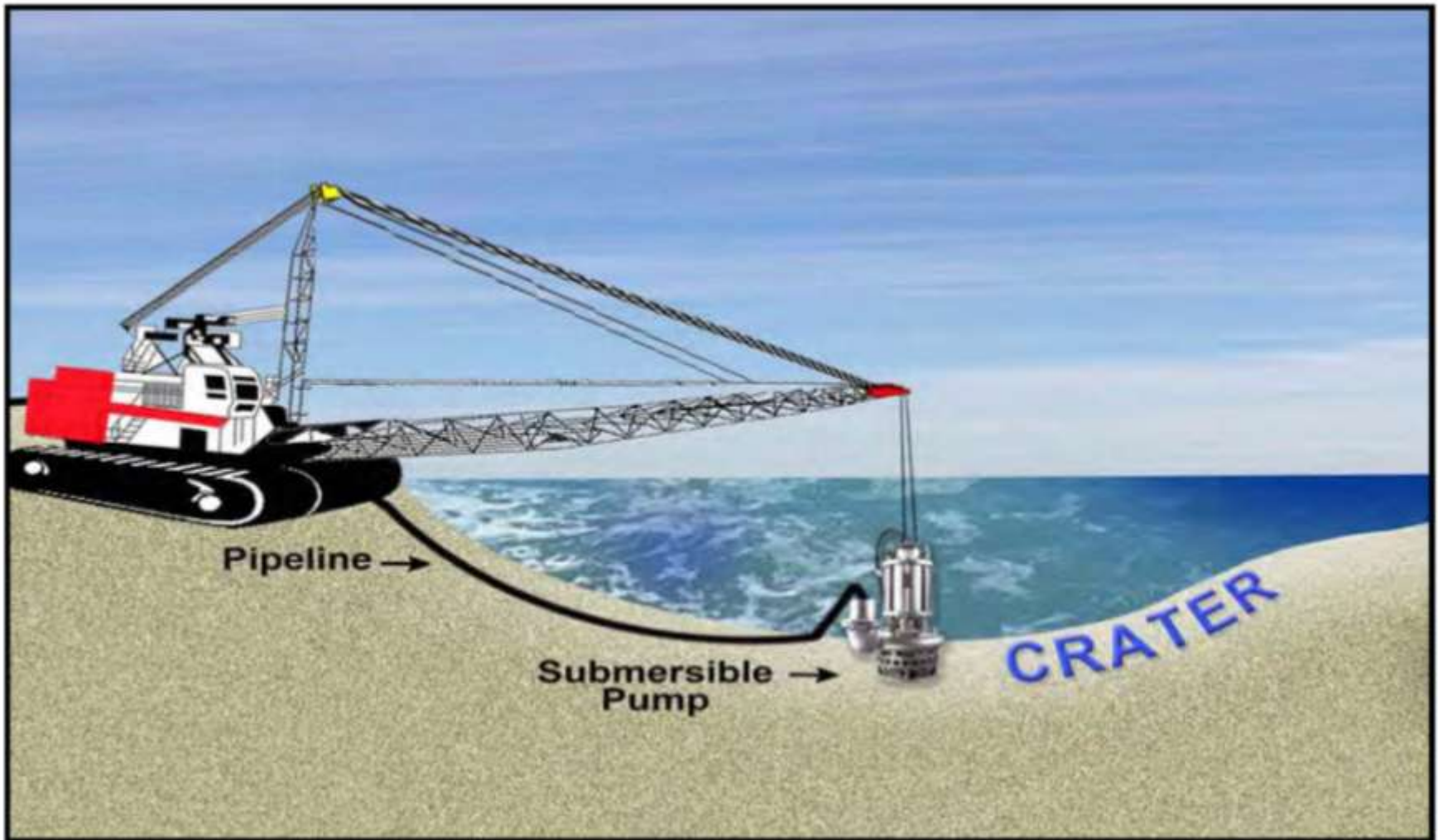


- Tapers – At ends of dune and beach features**
- Borrow Source – seaward beach sections and intertidal area**
- Dune Grasses – 64 acres**
- Sand Fence – Dune toe and on crossovers**
- ADA Crossovers – approximately 13**
- Pedestrian Crossovers – approximately 51**
- Vehicular Crossovers – approximately 13**

How will it be constructed?



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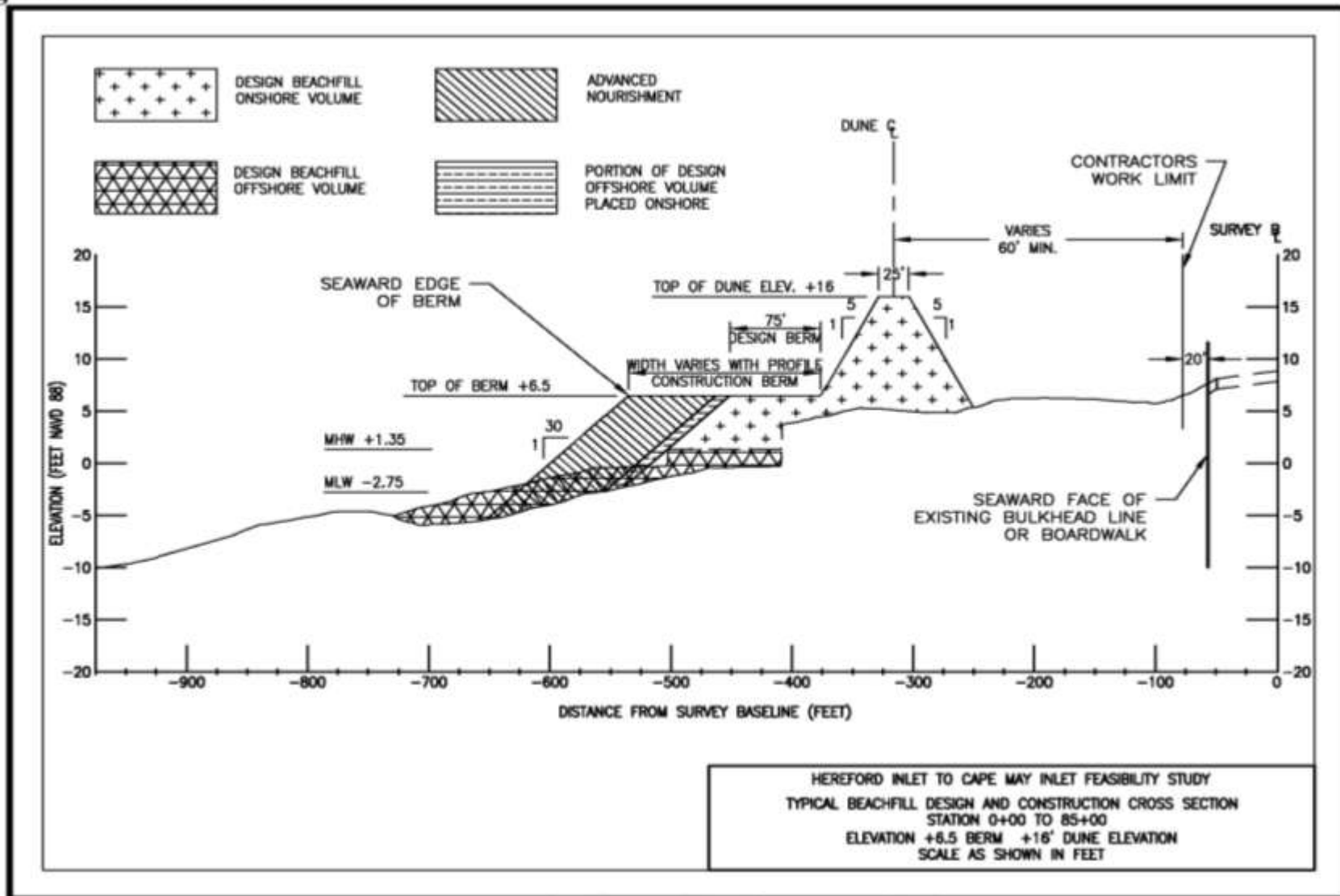


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Typical Cross Section North Wildwood



Figure ES-2 North Wildwood

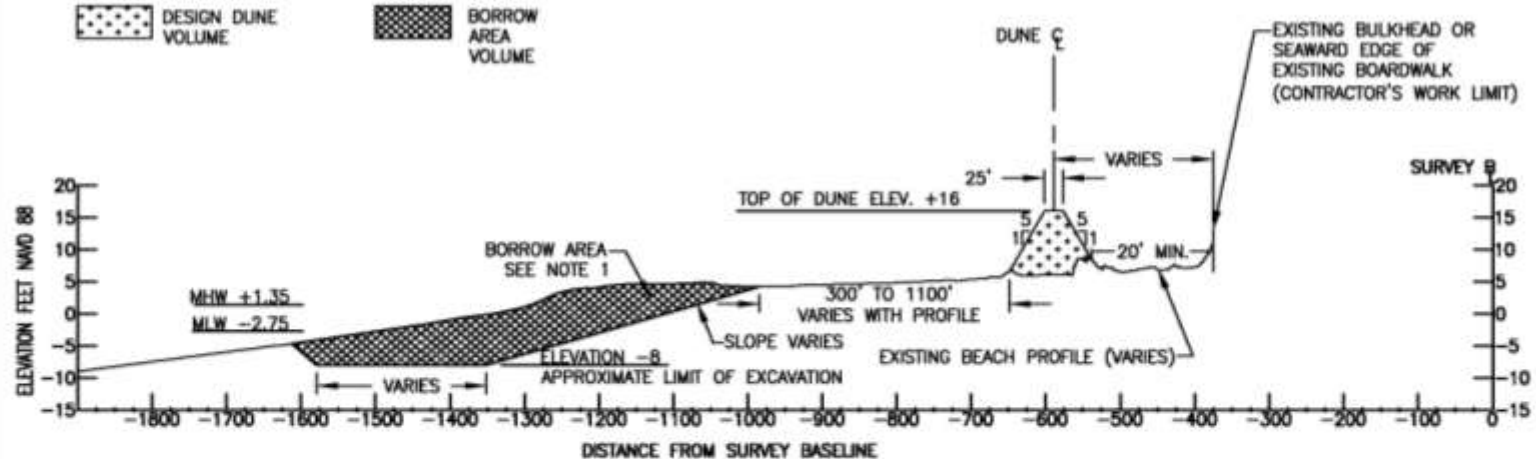


Typical Cross Section

Wildwood, Wildwood Crest and Lower Township



Figure ES-3 Wildwood and Wildwood Crest



NOTES:

1. EXACT LIMITS OF BORROW AREA MAY VARY FROM THAT SHOWN HERE, BASED ON EXISTING BEACH CONDITIONS AND DREDGING EQUIPMENT SELECTED AT TIME OF CONSTRUCTION.
2. NEW DUNE VEGETATION IS NOT SHOWN.

HEREFORD INLET TO CAPE MAY INLET FEASIBILITY STUDY
TYPICAL DESIGN CROSS SECTION STATION 85+00 TO 240+00
BEACH BORROW AREA WITH ELEVATION +16 DUNE
SCALE AS SHOWN IN FEET

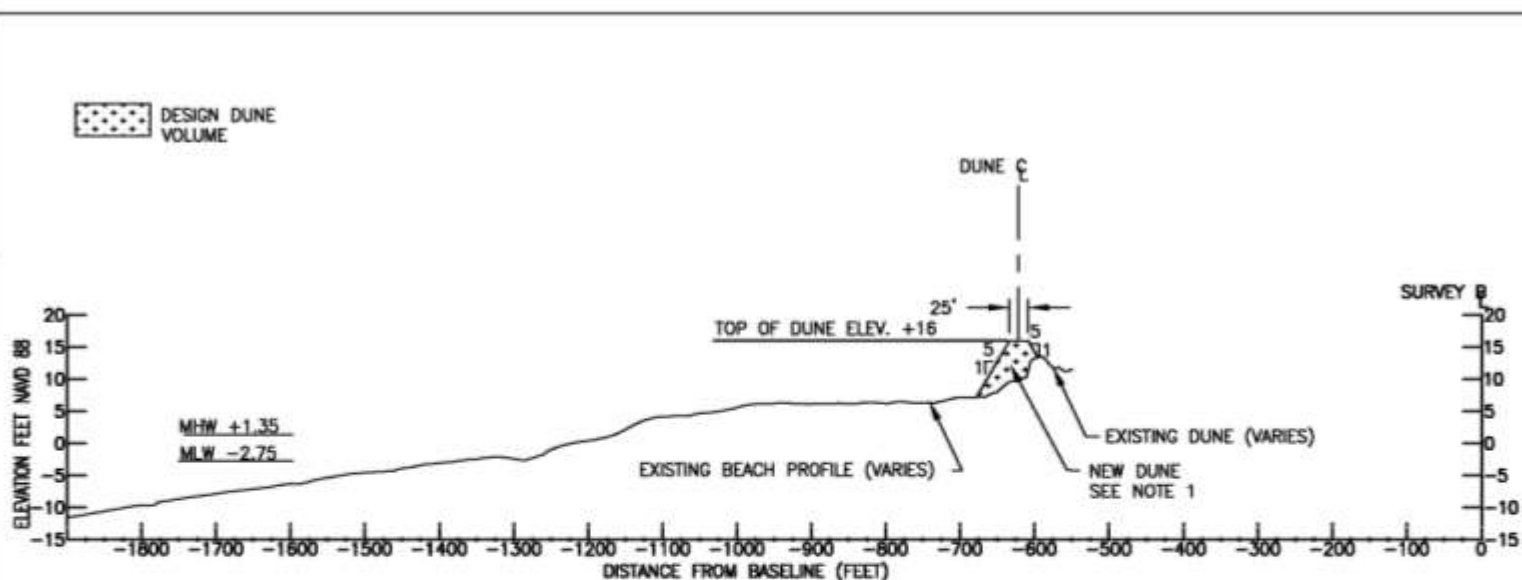


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Typical Cross Section Lower Township



Figure ES-4 Lower Township, Dune Only.



NOTES:

1. CENTERLINE OF NEW DUNE IS LOCATED ALONG THE SEAWARD EDGE OF THE EXISTING DUNES IN ORDER TO MINIMIZE SAND VOLUME REQUIRED.
2. NEW DUNE VEGETATION IS NOT SHOWN.

HEREFORD INLET TO CAPE MAY INLET FEASIBILITY STUDY
TYPICAL DESIGN CROSS SECTION
STATION 240+00 TO 314+03
ELEVATION +16 DUNE
SCALE AS SHOWN IN FEET

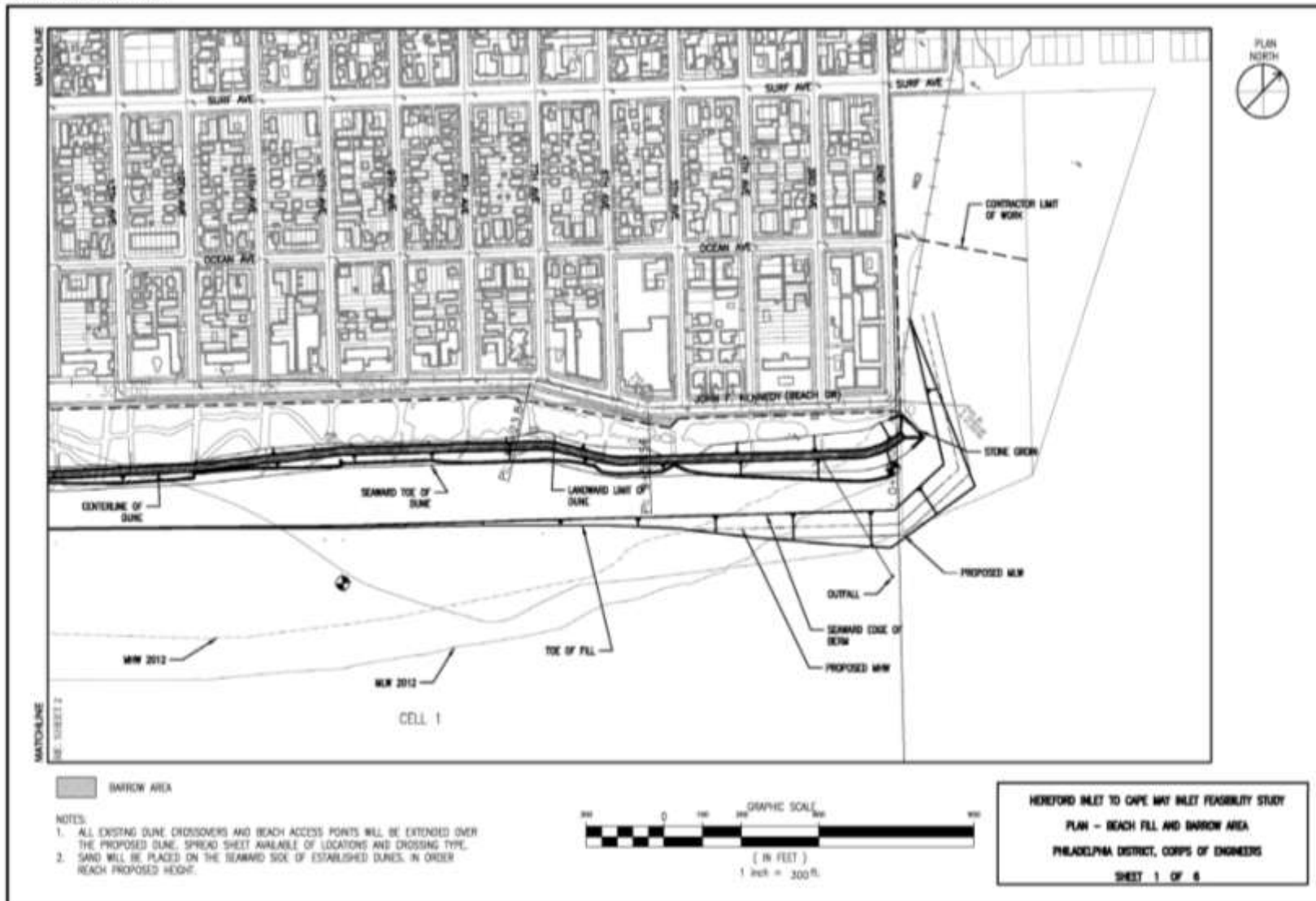


Plan View

North Wildwood



Figure 111 North Wildwood Plan View





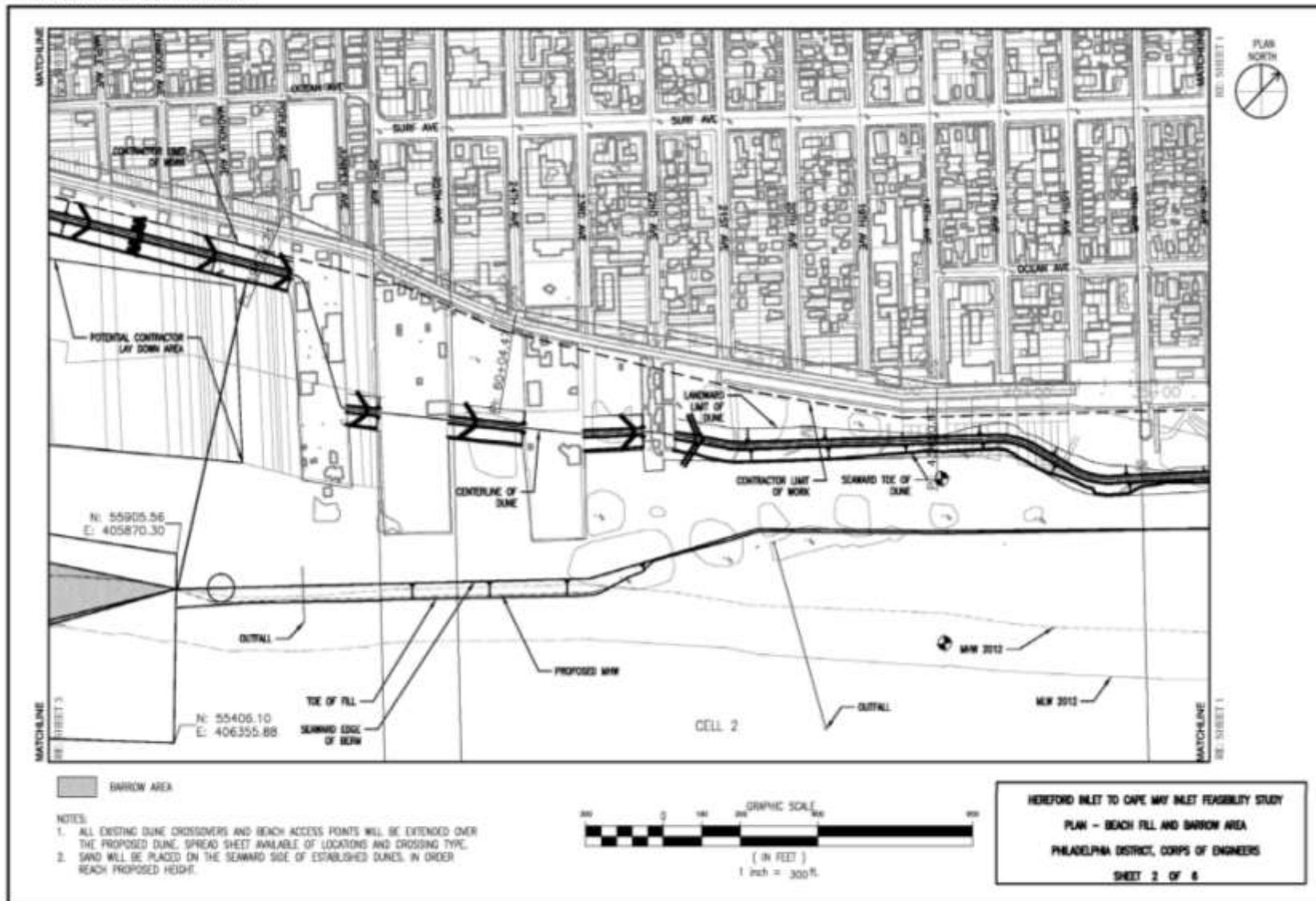
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Plan View

North Wildwood/Wildwood



Figure 112 North Wildwood/Wildwood Plan View



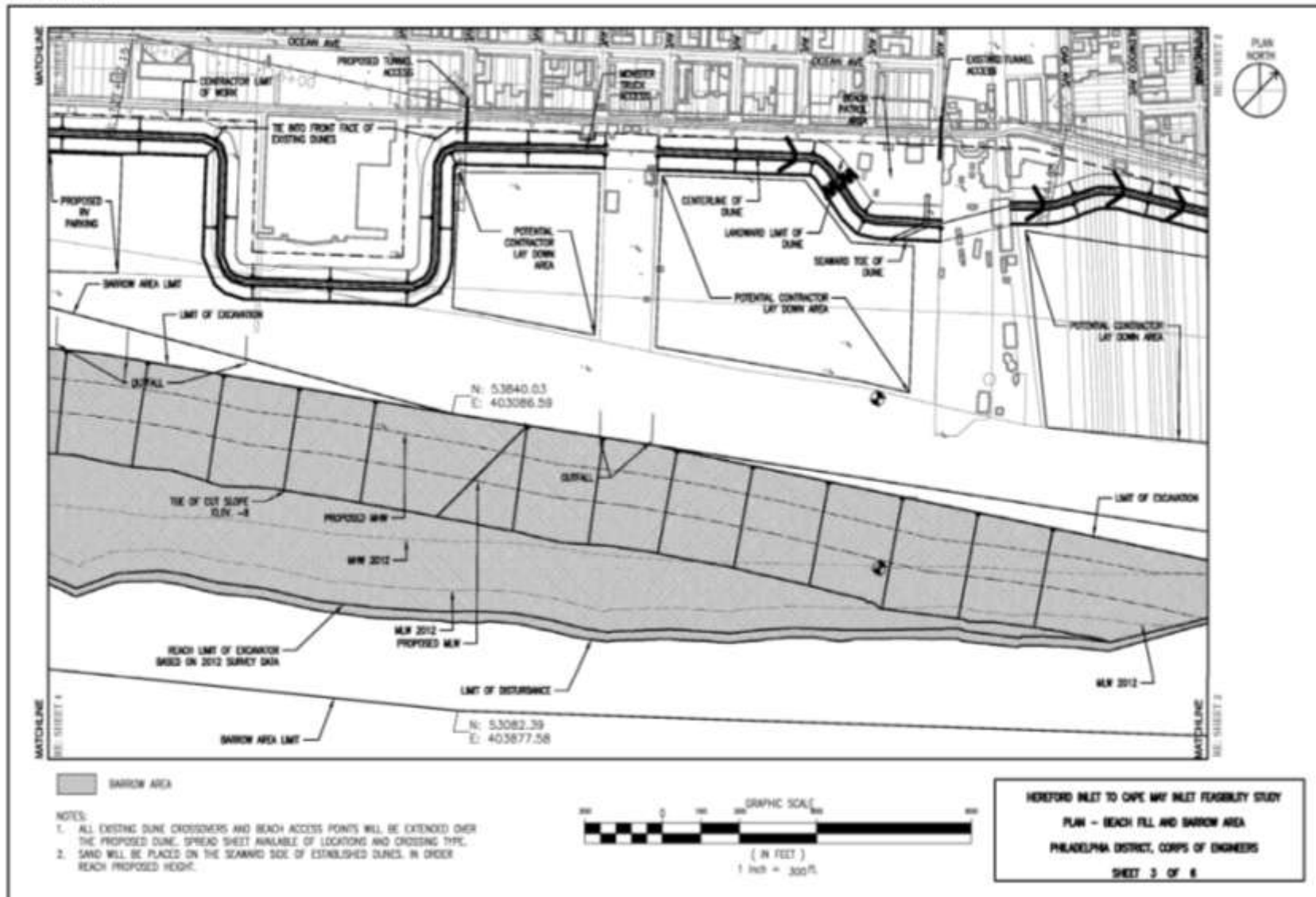


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Plan View Wildwood



Figure 113 Wildwood Plan View



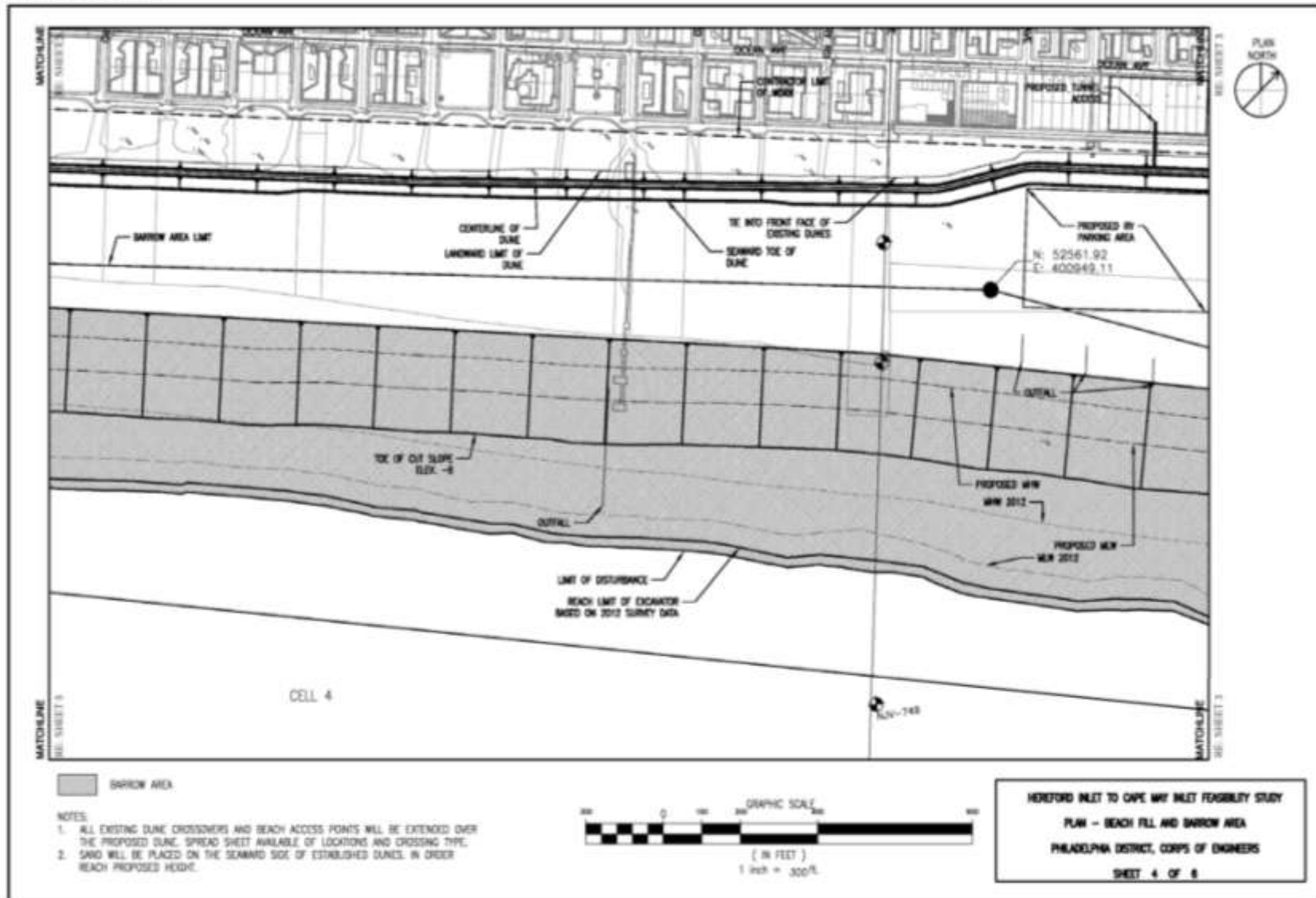


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Plan View Wildwood/Wildwood Crest



Figure 114 Wildwood Crest Plan View



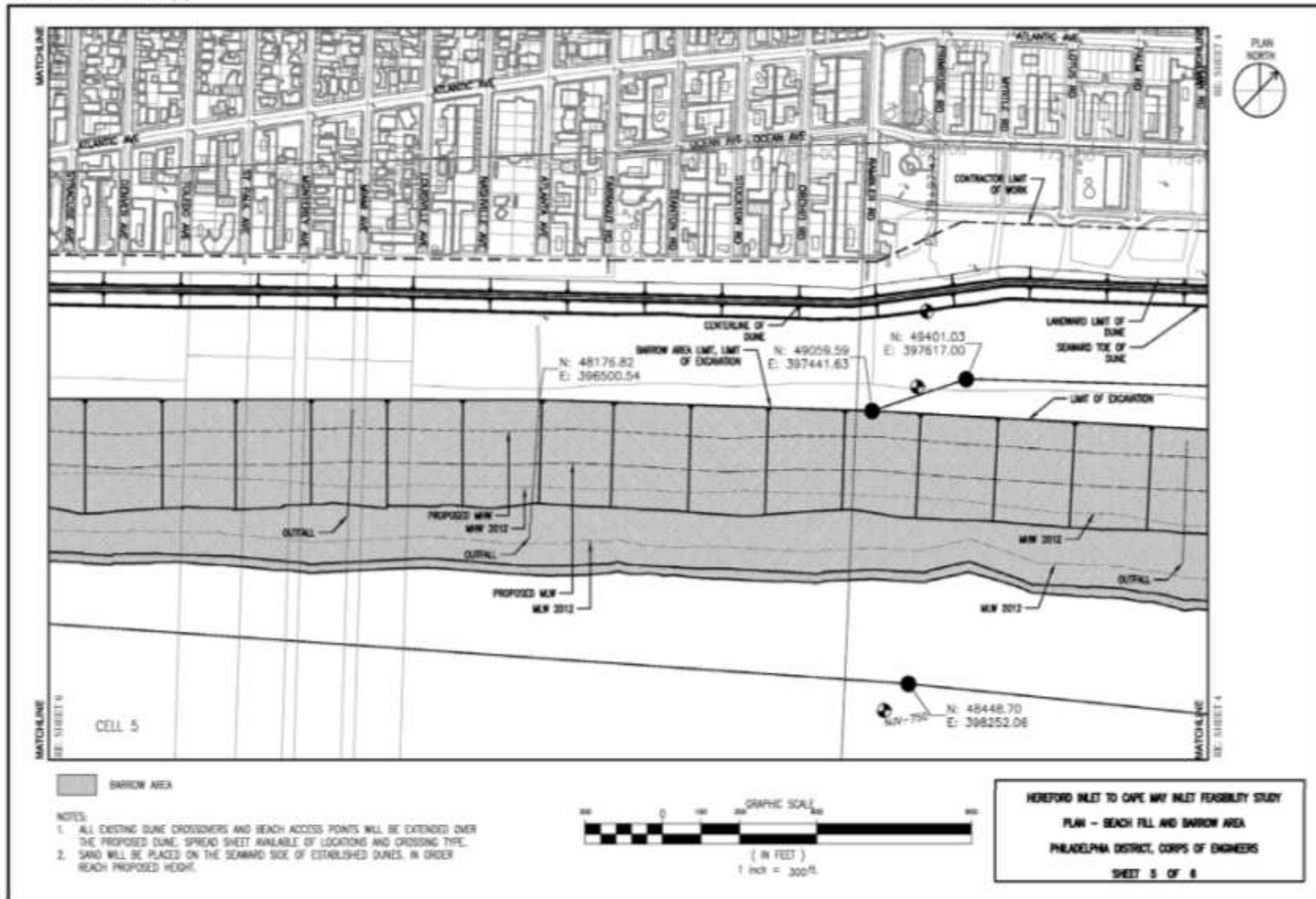


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Plan View Wildwood Crest



Figure 115 Wildwood Crest Plan View (2)



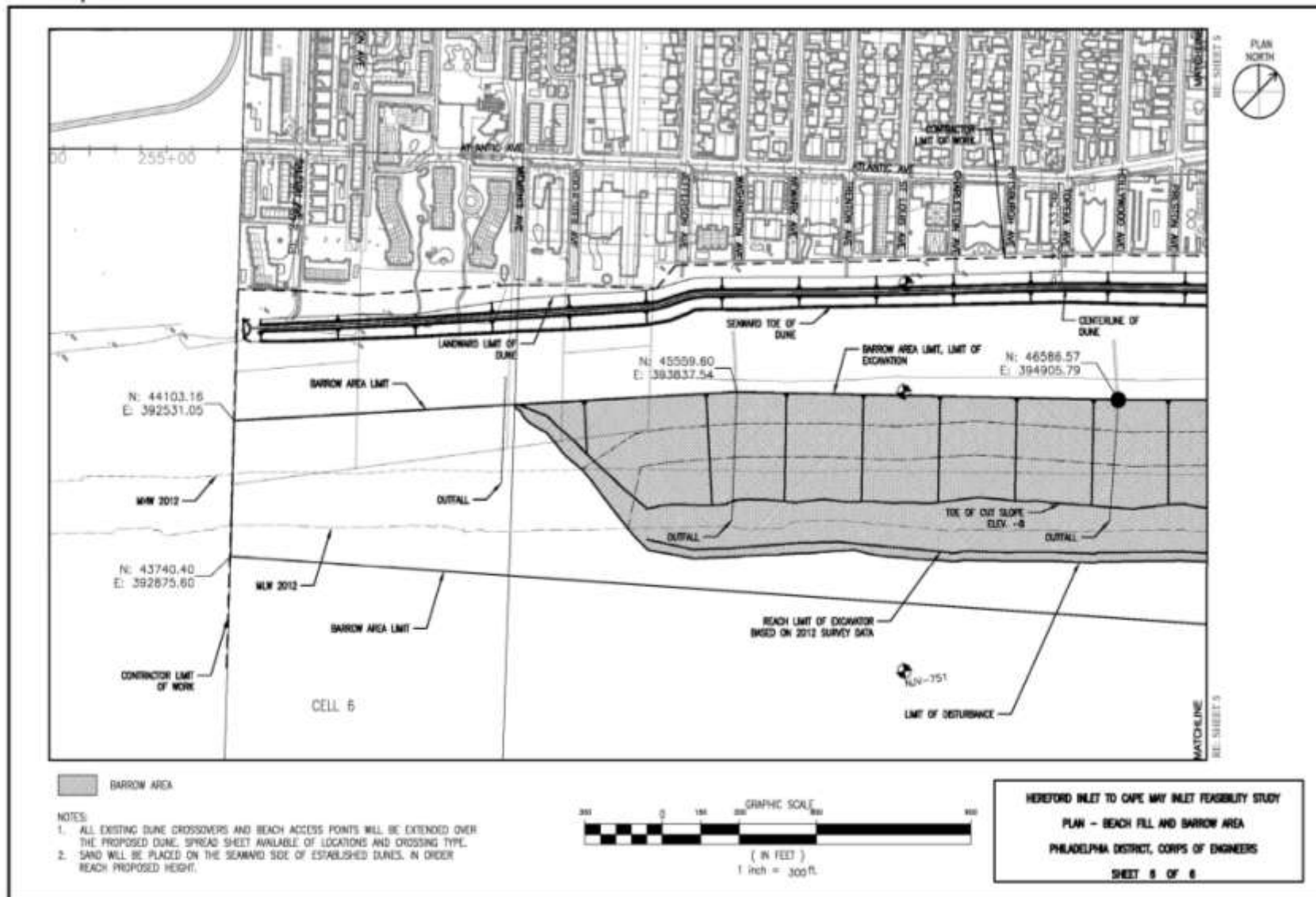


Plan View

Wildwood Crest/Lower Township



Figure 116 Lower Township Plan View



New Jersey Department of Environmental Protection

Shore Protection Program



http://www.nap.usace.army.mil/Portals/39/docs/Civil/Public%20Notice/Hereford_Volume_1_DraftReport.pdf

www.nj.gov/dep/shoreprotection

<http://www.nap.usace.army.mil/Missions/CivilWorks.aspx>

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