

JOINT
PUBLIC NOTICE

CHARLESTON DISTRICT, CORPS OF ENGINEERS
69A Hagood Avenue
Charleston, South Carolina 29403-5107
and the
S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT
1362 McMillan Avenue, Suite 400
Charleston, South Carolina 29405

REGULATORY DIVISION

Refer to: P/N #SAC-2014-00680-1W

7 JULY 2014

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1344), and the South Carolina Coastal Zone Management Act (48-39-10 et.seq.) an application has been submitted to the Department of the Army and the S.C. Department of Health and Environmental Control by

THE TOWN OF HILTON HEAD ISLAND, SC
c/o OLSEN ASSOCIATES, INC.
ATTN.: MR. CHRISTOPHER CREED, P. E. (SC 23064)
2618 HERSCHEL STREET
JACKSONVILLE, FLORIDA 32204

for a permit to perform hydraulic dredging and to place fill material along the shoreline of the

ATLANTIC OCEAN and PORT ROYAL SOUND

at four reaches of shoreline that total 40,000 linear feet along areas described as 1) the southern Atlantic shoreline (South Beach), 2) the central Atlantic Ocean shoreline (Central Island), 3) the northeast portion of the island at the intersection of the Atlantic Ocean and Port Royal Sound (The Heel), and 4) along a portion of the Port Royal Sound shoreline in Port Royal Plantation (Port Royal Sound) on Hilton Head Island in Beaufort County, South Carolina, South Beach (Latitude 32.107170°, Longitude -80.818668°), Central Island (Latitude 32.153674°, Longitude -80.727124°), The Heel (Latitude 32.217301°, Longitude -80.667093°), Port Royal Sound (Latitude 32.229812°, Longitude -80.672155°) using sand from two offshore borrow sites: 1) Barrett Shoals, offshore of the southern end of Hilton Head Island (Latitude 32.095469°, Longitude -80.823018°) and 2) Baypoint Shoals, offshore of the northern end of Hilton Head Island (Latitude 32.249013°, Longitude -80.63082°).

In order to give all interested parties an opportunity to express their views

NOTICE

is hereby given that written statements regarding the proposed work will be received by the **Corps** until

30 days from the date of this notice

and **SCDHEC** will receive written statements regarding the proposed work until

30 days from the date of this notice

from those interested in the activity and whose interests may be affected by the proposed work.

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The proposed work consists of the placement of up to 2.0 million cubic yards of beach compatible sand obtained from two offshore borrow areas by hydraulic cutter-suction pipeline dredge and pumped to the four reaches of beachfront shoreline totaling 40,000 linear feet for placement, grading and shaping. The proposed work is described in further detail in Attachment A provided by the applicant and shown in the project drawings.

According to the applicant, the purpose of this project is "to reestablish island wide conditions, relative to those renourished and maintained through past projects, sufficient to sustain an 8 to 10 year renourishment life following project completion." Past projects in these areas were constructed under the following permits: P/N 87-3T-370-P, P/N 96-1A-038-P, 97-1A-459-P(revised), P/N 2004-1W-319-P, SAC-2009-1056-1W-P and SAC-2013-00695-1W.

NOTE: Plans depicting the work described in this notice are available and will be provided, upon receipt of a written request, to anyone that is interested in obtaining a copy of the plans for the specific project. The request must identify the project of interest by public notice number and a self-addressed stamped envelope must also be provided for mailing the drawings to you. Your request for drawings should be addressed to the

**U.S. Army Corps of Engineers
ATTN: REGULATORY DIVISION
69A Hagood Avenue
Charleston, South Carolina 29403-5107.**

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards. The work shown on this application must also be certified as consistent with applicable provisions the Coastal Zone Management Program (15 CFR 930). The District Engineer will not process this application to a conclusion until such certifications are received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact 240 acres of beachfront shoreline and 700 acres of offshore borrow areas including marine and estuarine substrates and emergent wetlands utilized by various life stages of species comprising the red drum, shrimp, and snapper-grouper management complexes. Our initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

The District Engineer has consulted the most recently available information and has determined that the project is likely to adversely affect the loggerhead sea turtle (*Caretta carretta*) and is likely to adversely affect the piping plover (*Charadrius melodus*) and designated critical habitat (USFWS SC Unit-15) for wintering piping plover (*Charadrius melodus*). This public notice serves as a request to the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service to initiate formal consultation on these species and/or critical habitat that may be present in the area which would be affected, pursuant to Section 7(c) of the Endangered Species Act of 1973 (as amended). This public notice also serves as a request for a conference opinion that considers the impacts of this project on the red knot (*Calidris canutus rufa*) which is currently proposed for listing as a threatened species and on proposed critical habitat for the loggerhead sea turtle. A biological assessment (or other similar document) detailing our analysis of the effects of the action will be provided.

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), this public notice also constitutes a request to Indian Tribes to notify the District Engineer of any historic properties of religious and cultural significance to them that may be affected by the proposed undertaking.

In accordance with the NHPA, the District Engineer has also consulted the latest published version of the National Register of Historic Places for the presence or absence of registered properties, or properties listed as being eligible for inclusion therein, and this worksite is not included as a registered property or property listed as being eligible for inclusion in the Register. To insure that other cultural resources that the District Engineer is not aware of are not overlooked, this public notice also serves as a request to the State Historic Preservation Office to provide any information it may have with regard to historic and cultural resources.

Any person may request, in writing, 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.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps of Engineers cannot undertake to adjudicate rival claims.

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7 JULY 2014

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 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 project. 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 activity.

If there are any questions concerning this public notice, please contact Debbie King at 843-329-8044 or toll free at 1-866-329-8187.

ATTACHMENT A - PROJECT DESCRIPTION

2015/16 Hilton Head Island Beach Renourishment Project Hilton Head Island, South Carolina

Applicant: Town of Hilton Head Island
Agent: Olsen Associates, Inc., Jacksonville, Florida

The proposed project will include the placement of approximately 2.0 million cubic yards (Mcy) of sand from two offshore borrow areas along about 40,000 ft of Atlantic Ocean and Port Royal Sound shorefront as part of a continued beach maintenance and management program at Hilton Head Island, SC. The project is an anticipated and scheduled renourishment by the Town of Hilton Island as part of its ongoing comprehensive beach management program. Renourishment events are planned to occur every 8 to 10 years depending upon weather conditions and beach performance during the nourishment life. The last comprehensive event on the island was completed in February 2007. The proposed project will include sand placement along four discrete reaches of the island shorefront which are generally located at: (1) the southern Atlantic Ocean shoreline (i.e., South Beach); (2) along the central portion of the Atlantic Ocean shoreline of the island (i.e., Central Island); (3) the northeast point of the island at the intersection of the Atlantic Ocean and Port Royal Sound shoreline (i.e., "The Heel"); and (4) along a portion of the Port Royal Sound shoreline in Port Royal Plantation (i.e., Port Royal Sound). Sand was placed along portions of South Beach, Central Island, and Port Royal Sound shorelines in 2006/07. Sand was placed along "The Heel" shoreline in 2011/12. The proposed fill at "The Heel" is located within a portion of Critical Habitat Unit SC-15 for wintering piping plovers. Project construction is planned between October 1, 2015 and April 30, 2016. The required sand volume will be reassessed immediately prior to project construction based and will consider the latest available beach condition data.

The purpose of the project is to reestablish island-wide beach conditions, relative to those renourished and maintained through past projects, sufficient to sustain an 8 to 10 year renourishment life following project completion. Sand placement will be limited to areas of need -- defined as those areas where there is a sand volume deficit in the previously constructed design beach and/or where the protective beach width is less than 200 ft and the MHWL erosion rate is greater than about -5 ft/yr.

Past projects on the island were constructed under the following permits: 1990 (P/N 87-3T-370-P); 1997 (P/N 96-1A-038-P); 1999 (P/N 97-1A-459-P (revised)); 2006/07 (P/N 2004-1W-319-P); and 2011/12 (P/N 2009-1056-11W-P). The entire proposed project shoreline has been erosional since completion of the last island-wide renourishment in 2006/07.

Sand will dredged from the two offshore borrow areas with an ocean-certified hydraulic cutter-suction pipeline dredge and pumped hydraulically through a pipeline between the borrow areas

and the beach for eventual placement, grading, and shaping. The sand will be shaped into a typical beach fill construction berm configuration with a maximum upper berm elevation generally equivalent to the adjacent ambient beach elevations. Berm widths will vary. The seaward slope of the construction berm will have a consistent and uniform initial slope of 1V:20H for all project reaches.

South Beach Shoreline. Sand placement along a localized area of the south island shoreline will address erosion that has occurred since 2006/07 along a previously restored area, as well as an unrestored reach of shoreline. The purpose of this sand placement is to address recent sand losses and a high rate of erosion that has accelerated over the last 4 to 5 years. To accommodate these losses and anticipated loss rate over an 8 to 10 year period (based upon the most recent documented sand loss rates, October 2010 to October 2013), approximately 290,000 cy of sand will be placed along approximately 5,000 ft of shoreline. Fill placement will be located generally between beach monitoring station HHI-01C (between Town Beachmarker (BM) 11 and 12) and HHI-04 (between BM 20 and 21). The proposed project will extend sand placement approximately 3,200 ft north of HHI-03, the northern limit of previous project at this location. Sand for this project reach will be sourced from the Barrett Shoals borrow area.

Central Island Shoreline. The planned sand placement along the island's central Atlantic Ocean shorefront falls entirely within the limits of previously-constructed beach fills (i.e., 1990, 1997, and 2006/07). Fill placement will occur generally between Alder Lane in South Forest Beach (southern limit) and *The Folly* (northern limit). This reach of shoreline continues to experience persistent and somewhat uniform shoreline recession due to erosion. Based upon projected shoreline and beach conditions at the time of project construction, the proposed central island sand placement will include placement of about 1.3 Mcy along 28,800 ft of shoreline. This portion of the project fill placement will be located generally between beach monitoring station HHI-11 (Alder Lane, BM 52A) and *The Folly* (BM 97). Roughly half of the sand for this project will be sourced from the Barrett Shoals borrow area and the other half from the Baypoint borrow area.

"The Heel" Shoreline. The proposed project will include sand placement along a portion of the shoreline that was restored at "The Heel" in 2012. The 2012 project included placement of approximately 1.2 Mcy of sand along about 5,700 ft shoreline between the northern side of the Westin Hotel (BM-112) and HHI-29B (BM-122/123), just south of the Port Royal Plantation Beach House, and construction of a low-crested terminal groin. The proposed project will include sand placement along a 3,000 ft reach of the 2012 project shoreline, approximately 2,100 ft immediately north and 900 ft south of the terminal groin.

Sand placement will restore losses since 2012 and bring this area of the Town's managed beach to a design condition consistent with all other areas of the island's shoreline following

completion of the proposed island-wide nourishment project. The goal is to maintain uniform and consistent beach conditions along the entire island such that all areas of the beach are on the same renourishment schedule in the future.

Based upon expected conditions along “The Heel” shoreline, it is anticipated that approximately 200,000 cy of sand will be placed along about 3,000 ft of shoreline. Sand for this project reach will be sourced from the Baypoint borrow area, the same source used for the 2012 project (P/N 2009-1056-IIW-P).

Port Royal Sound Shoreline. The 2015/16 project will include renourishment of previously-restored areas of the Port Royal Plantation Port Royal Sound shoreline where there is a documented sand deficit relative to previous constructed beach conditions and/or where existing and expected future sand loss rates require fill placement to provide uniform beach conditions over the proposed project life. This area of the island’s shoreline is about 7,500 ft in length and located generally between the northern end of Planters Row (between BM 122 and BM 123) and Fish Haul Creek. The 1997 project restored the entire 7,500 ft of shoreline; in 2006/07, only about 3,000 ft between The Beach House and HHI-30A was renourished. Considering expected beach conditions at the time of construction, the project is anticipated to include placement of about 200,000 cy of sand along about 4,000 ft of shoreline. Sand placement will occur generally between the Beach House (HI-29E; between BM-123 and BM-124) and HHI-31A (BM-130). The expected volume considers the placement of 24,000 cy along a portion of this shoreline as part of the Ocean Point Interim Sand Fill project (P/N 2013-00695-1W) which was completed in May 2014. Sand for this project reach will be sourced from the Baypoint borrow area.

Borrow Areas. Two offshore sand borrow areas have been identified for the proposed project. These areas are located at Barrett Shoals at the south end of the island and Baypoint Shoals at the north end of the island, across Port Royal Sound. Both of these areas have been used as sand sources for previous restoration and renourishment projects on Hilton Head Island, and rapid recovery (i.e., within 12 months) of sediment conditions and softbottom benthic communities was documented following dredging (ATM, 2000; Bergquist, et al, 2009; OAI, 2014; Crowe and Sanger, 2014).

The selection and design of project borrow areas has three principal objectives which are intended to conserve available offshore sand resources and minimize the effects of dredging on offshore softbottom habitats. These are:

- 1) provide a suitable source of beach-compatible sand that is reasonably close to the sand placement area and accessible by an ocean-certified cutter-suction pipeline dredge,

- 2) delineate an area that minimizes the spatial extent of the area to be dredged, and
- 3) site and configure the borrow area in such a manner as to avoid and/or minimize the creation of isolated depressions within a shoal feature that may prevent or limit the recovery of sand substrate and softbottom benthic communities. This can be accomplished by designing borrow areas where the material that is expected to infill the dredging site is beach compatible and similar in character to that which was removed.

Barrett Shoals. Two areas of Barrett Shoals have been identified as candidate areas for sand borrowing. Both of these areas have been previously permitted for sand borrowing (P/N 97-1G-234-P (Daufuskie Island), P/N 97-1A-459-P (revised) South Beach and P/N 2004-1W-319-P) and portions of the sites have been dredged for the purposes of sand placement along the beaches of both Hilton Head Island and Daufuskie Island. In sum, these areas occupy approximately 505 acres of seafloor and contain approximately 5.8 Mcy of beach-compatible sand as measured above -20 ft, NGVD29. These areas have been selected based upon the known sand quality and rapid recovery of substrate and benthic communities following past dredging events. Only a fraction of the identified Barrett Shoals borrow areas will be used for the proposed project.

Baypoint Shoals. The proposed Baypoint borrow area is located entirely within the footprint of the shoal area that was permitted and dredged in 2012 (P/N 2009-1056-IIW-P). This borrow area is located on the western side of the larger Baypoint shoal feature at a location toward which the larger shoal tends to migrate.

For the 2012 project, the dredging depth was limited to -20 ft, NGVD29 and approximately 1.4 Mcy of sand were dredged from the Baypoint borrow area. A 2013 sand source investigation of the 2012 site identified extensive beach quality sediments below -20 ft, NGVD29. This was not unexpected as the larger shoal feature has been migrating and filling into the deeper Port Royal Sound channel for decades. Prior to the 2012 project, sediments below about -20 ft, NGVD29 could not be sampled due to the vertical limitations of Vibracoring equipment. The rapid recovery of sediment conditions and benthic invertebrate populations following the 2012 project was due principally to the location and configuration of the borrow area, the abundant ambient sand supply surrounding the site, the tendency of the larger shoal feature to migrate toward to borrow area, and the exposure of the site to strong tidal flows associated with Port Royal Sound.

Given the existence of beach-compatible sand below -20 ft, NGVD29, the proposed project will excavate the Baypoint borrow area to a depth of -30 ft, NGVD. The borrow site will be located and configured similar to the 2012 site with the exception of the deeper dredging depth. Similar to the 2012 borrow area, the proposed site will be excavated into the slope of the larger shoal, rather than as a depression within this shoal, which will expose the site to the strong Port Royal

Sound tidal currents. Based on these design features, the physical and biological recovery of this site following dredging is not expected to be different than that documented following the 2012 project. Use of this area also reduces the spatial extent of disturbance to the Baypoint Shoals and maximizes the use of available beach-compatible sand resources located in the vicinity of Hilton Head Island.

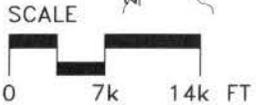
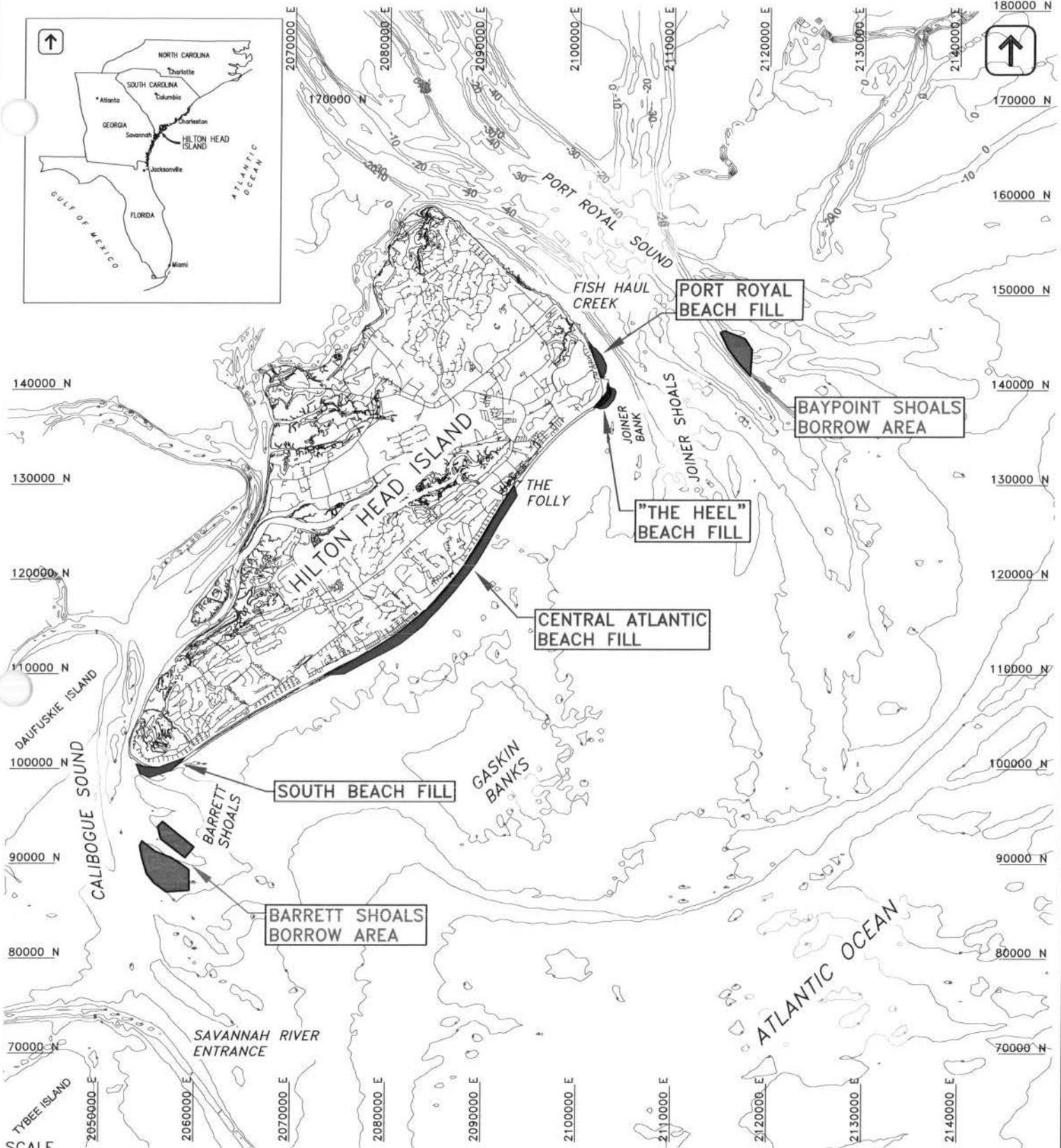
The proposed borrow area occupies approximately 169 acres of seafloor and contains an estimated 2.8 Mcy of beach-compatible sand as measured above -30 ft, NGVD29. Similar to the Barrett Shoals borrow area, however, only a fraction of the sand identified at Baypoint Shoals will be used for the proposed project.

Schedule. It is proposed schedule for hydraulic sand placement along the noted project reaches is as follows:

- Central Island: November 1 to April 30
- “The Heel” and Port Royal Sound: March 1 to October 31
- South Beach: No seasonal restriction

REFERENCES

- Applied Technology & Management, Inc. (ATM) (2000). *"Borrow Area Benthic Community Monitoring: Second Post-Project Report, Daufuskie Island Beach Nourishment Project,"* report prepared for SCDNR and Daufuskie Island Club 7 Resort, Inc., Applied Technology & Management, Inc., Mt. Pleasant SC.
- Bergquist, Derk C., Crowe, Stacie E., and Levisen, Martin (2009). *"The 2006-2007 Hilton Head Island Renourishment Project: Physical and Biological Response of the Joiner and Barrett Shoals Borrow Areas to Dredging,"* report prepared for Town of Hilton Head Island, Marine Resources Research Institute, Marine Resources Division, SCDNR, Charleston, SC.
- Crowe, Stacie E. and Sanger, Denise (2014). *"The 2011-2012 Port Royal Sound Shoreline Restoration and Stabilization Project: Sediment and Benthic Community Responses to the Baypoint Borrow Area Dredging,"* report prepared for Olsen Associates, Inc., Marine Resources Research Institute, Marine Resources Division, SCDNR, Charleston, SC.
- Olsen Associates, Inc. (OAI) (2014). *"2015/16 Beach Renourishment Project: 2013 Offshore Sand Search Investigation, Town of Hilton Head Island, SC,"* report prepared for the Town of Hilton Head Island, SC. Olsen Associates, Inc., Jacksonville, FL.



CONTOUR DATUM - FT (NGVD29)
 SURVEY - SEPT 2013

SAC-2014-00680-1W

NOT FOR PURPOSES OF CONSTRUCTION

olsen
 associates, inc.
 2618 Herschel Street
 Jacksonville, FL. 32204
 (904) 387-6114
 COA No. C00530

TOWN OF HILTON HEAD ISLAND
 2015/16 BEACH RENOURISHMENT PROJECT

PROJECT LOCATION

John R. ...
 06-26-2014

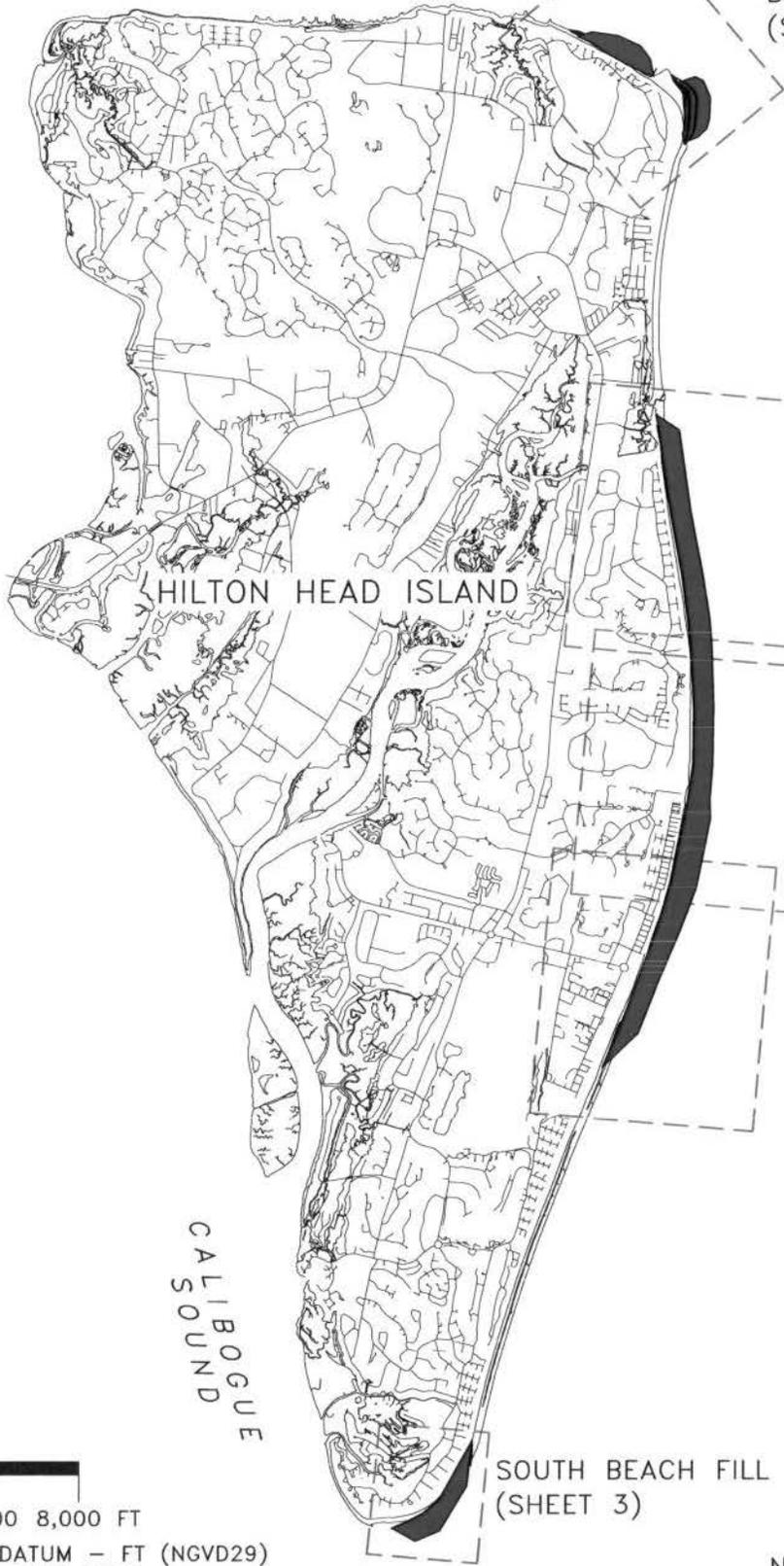
06/23/14
 DRAWN BY:
 ML
 SHEET
 1 of 14

PORT ROYAL
SOUND

EBB ← → FLOOD



"THE HEEL" &
PORT ROYAL
BEACH FILL
(SHEET 9)



CENTRAL ATLANTIC
BEACH FILL
(SHEET 7)

CENTRAL ATLANTIC
BEACH FILL
(SHEET 6)

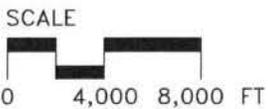
CENTRAL ATLANTIC
BEACH FILL
(SHEET 5)

ATLANTIC OCEAN

CALIBOGUE
SOUND

SOUTH BEACH FILL
(SHEET 3)

SAC-2014-00680-1W



CONTOUR DATUM - FT (NGVD29)
SURVEY - SEPT 2013

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Jacksonville, FL. 32204
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COA No. C00530

TOWN OF HILTON HEAD ISLAND
2015/16 BEACH RENOURISHMENT PROJECT

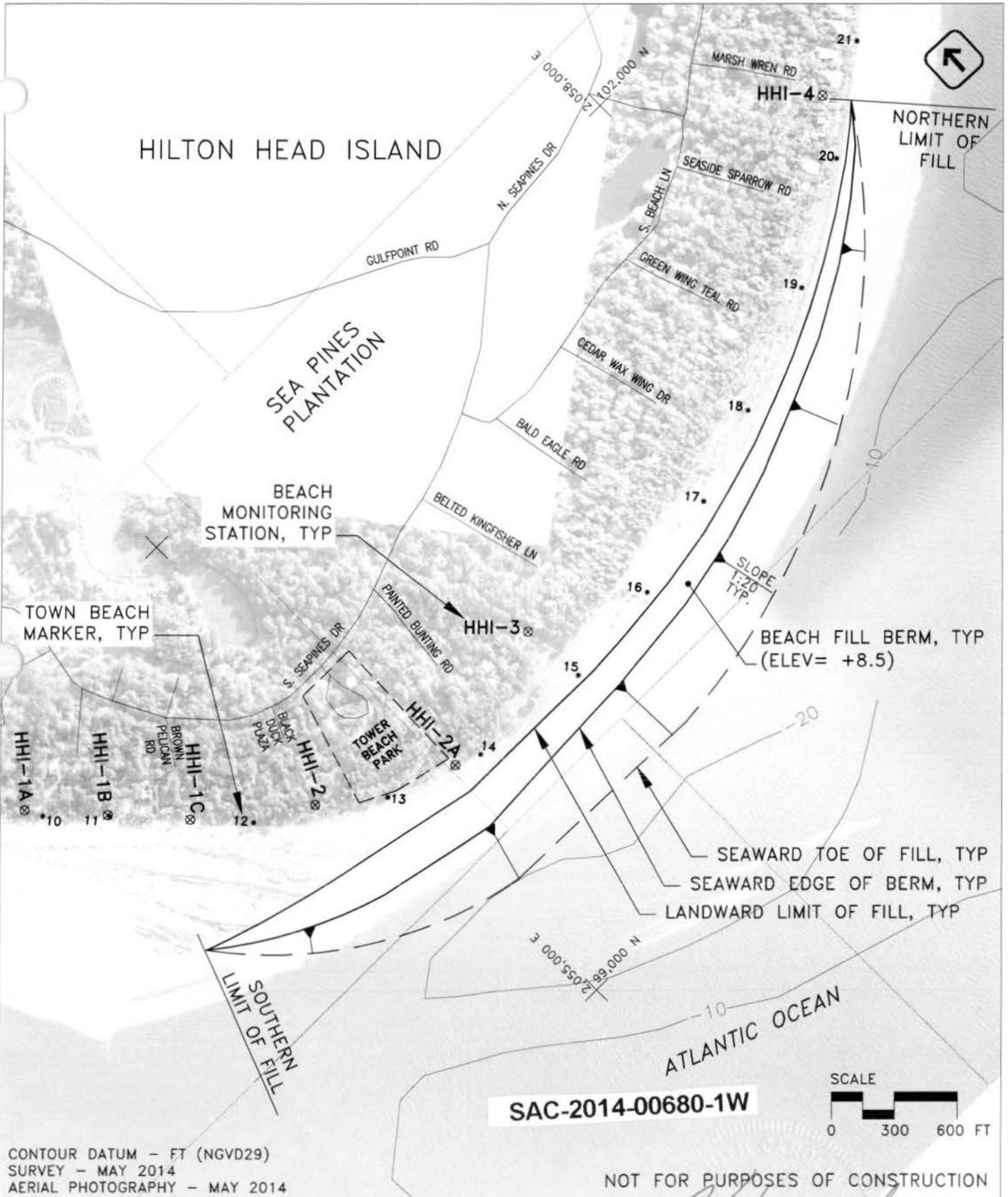
PLAN SHEET LOCATIONS/LAYOUT

Stephen Miller
6-26-2014

06/23/14

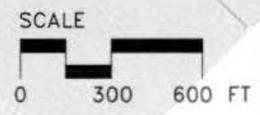
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ML

SHEET
2 of 14



CONTOUR DATUM - FT (NGVD29)
 SURVEY - MAY 2014
 AERIAL PHOTOGRAPHY - MAY 2014

SAC-2014-00680-1W



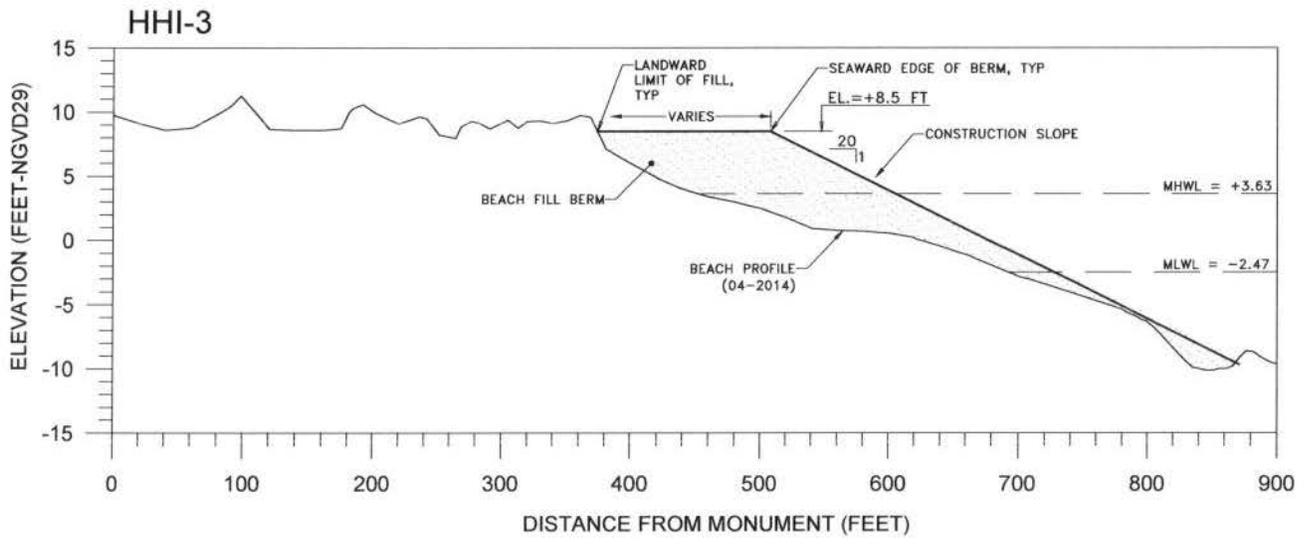
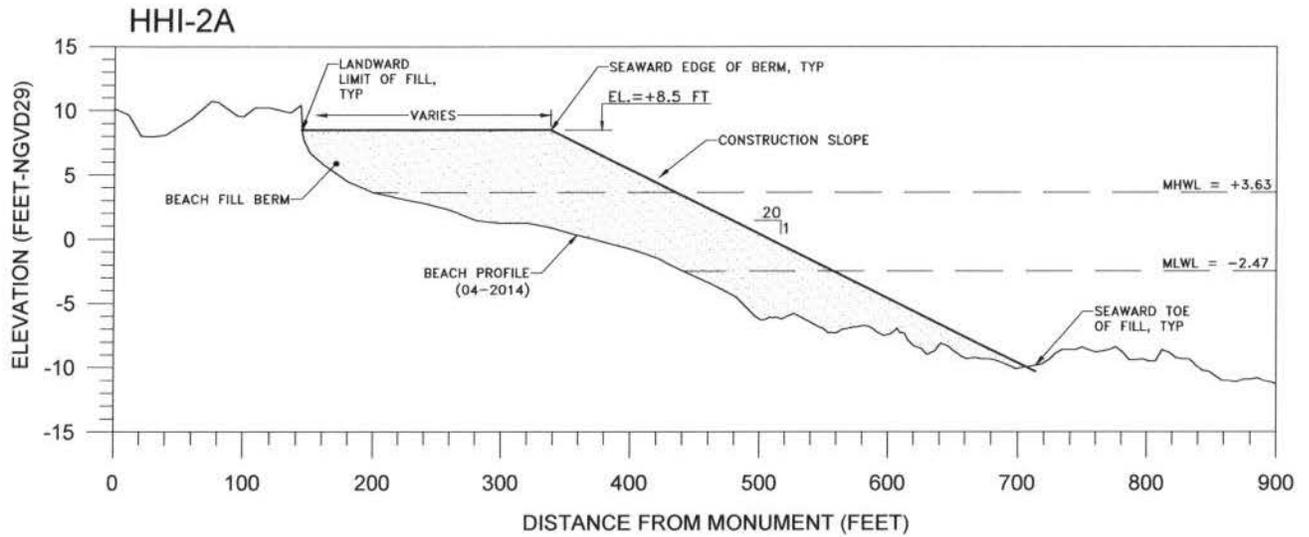
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 (904) 387-6114
 COA No. C00530

TOWN OF HILTON HEAD ISLAND
 2015/16 BEACH RENOURISHMENT PROJECT
 SOUTH BEACH FILL
 PLAN

Chapman
 6-26-2014

06/23/14
DRAWN BY: ML
SHEET 3 of 14



SAC-2014-00680-1W

SURVEY - MAY 2014

NOT FOR PURPOSES OF CONSTRUCTION

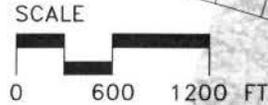
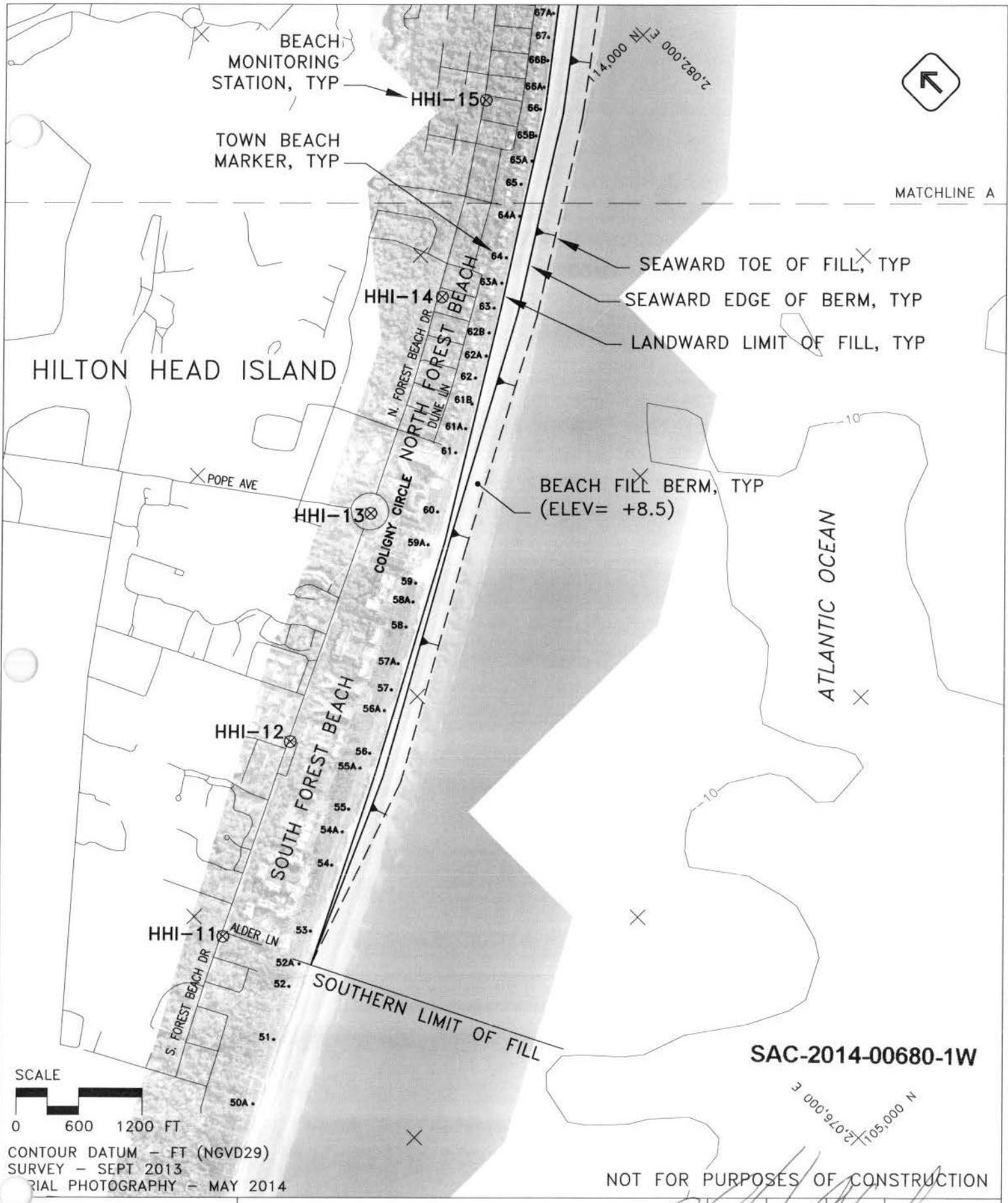


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 (904) 387-6114
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TOWN OF HILTON HEAD ISLAND
 2015/16 BEACH RENOURISHMENT PROJECT
 SOUTH BEACH FILL
 TYPICAL SECTIONS

Stephen H. Wood
 6-26-2014

06/23/14
 DRAWN BY:
 ML
 SHEET
 4 of 14



CONTOUR DATUM - FT (NGVD29)
 SURVEY - SEPT 2013
 AERIAL PHOTOGRAPHY - MAY 2014

SAC-2014-00680-1W

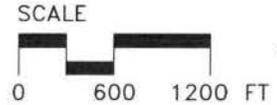
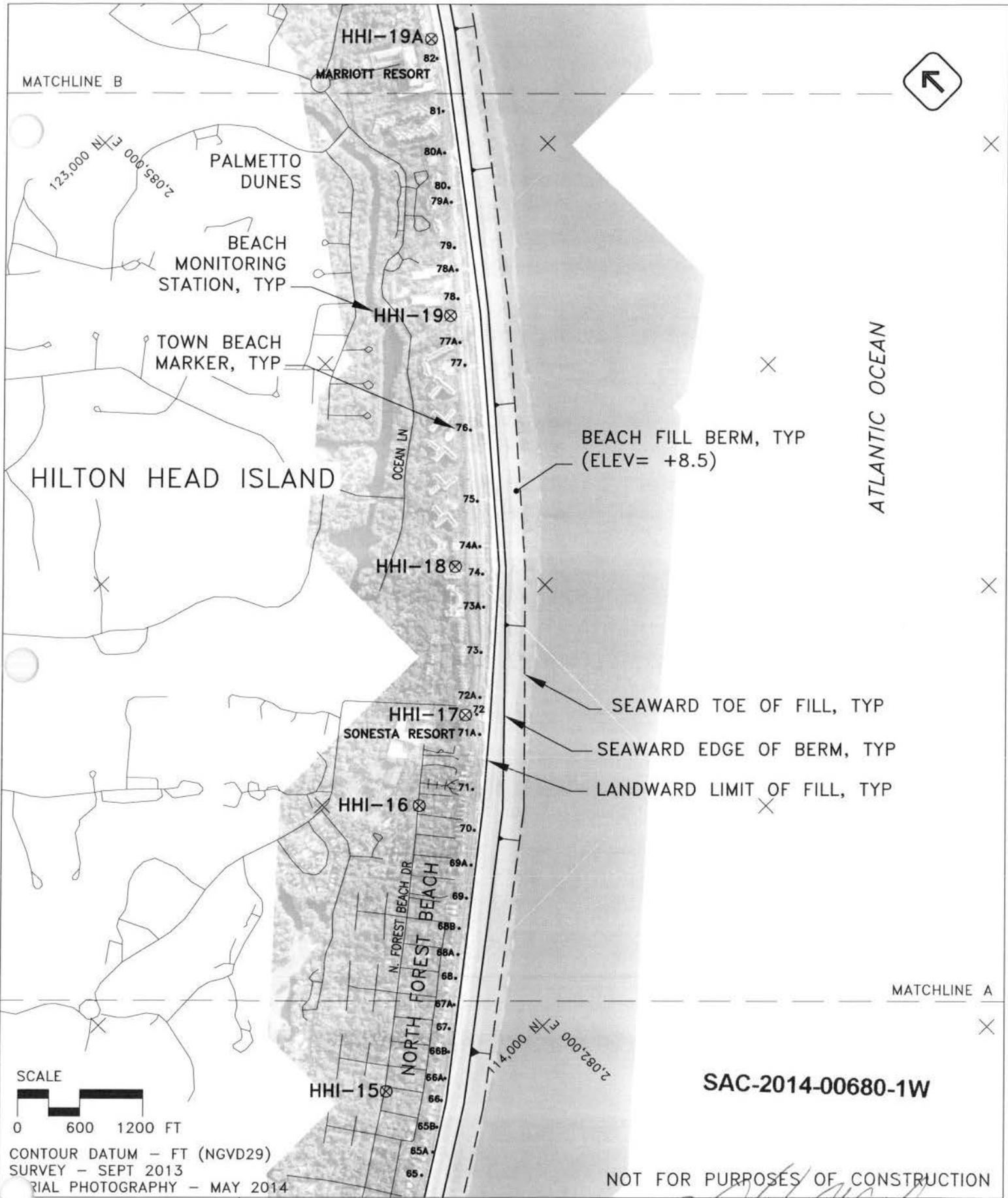
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olsen
 associates, inc.
 2618 Herschel Street
 Jacksonville, FL, 32204
 (904) 387-6114
 COA No. C00530

TOWN OF HILTON HEAD ISLAND
 2015/16 BEACH RENOURISHMENT PROJECT
 CENTRAL ATLANTIC BEACH FILL
 PLAN

06/23/14
 DRAWN BY:
 ML
 SHEET
 5 of 14

Handwritten signature and date: 6-26-2014



CONTOUR DATUM - FT (NGVD29)
 SURVEY - SEPT 2013
 AERIAL PHOTOGRAPHY - MAY 2014

SAC-2014-00680-1W

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 Jacksonville, FL. 32204
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 COA No. C00530

TOWN OF HILTON HEAD ISLAND
 2015/16 BEACH RENOURISHMENT PROJECT
**CENTRAL ATLANTIC BEACH FILL
 PLAN**

Joseph Alford
 6-26-2014

06/23/14
DRAWN BY: ML
SHEET 6 of 14

THE FOLLY

NORTHERN LIMIT OF FILL



SINGLETON BEACH RD

HHI-24

129,000 N
2,094,000 E

BEACH MONITORING STATION, TYP

BEACH FILL BERM, TYP (ELEV= +8.5)

TOWN BEACH MARKER, TYP

HHI-23

SEAWARD TOE OF FILL, TYP

SEAWARD EDGE OF BERM, TYP

LANDWARD LIMIT OF FILL, TYP

PALMETTO DUNES

HHI-22

HILTON HEAD ISLAND

ATLANTIC OCEAN

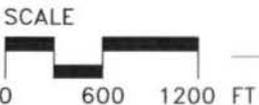
PALMETTO DUNES

MOORING BUOY

HHI-21

SAC-2014-00680-1W

MATCHLINE B



CONTOUR DATUM - FT (NGVD29)
SURVEY - SEPT 2013
AERIAL PHOTOGRAPHY - MAY 2014

HHI-19A

MARRIOTT RESORT

NOT FOR PURPOSES OF CONSTRUCTION

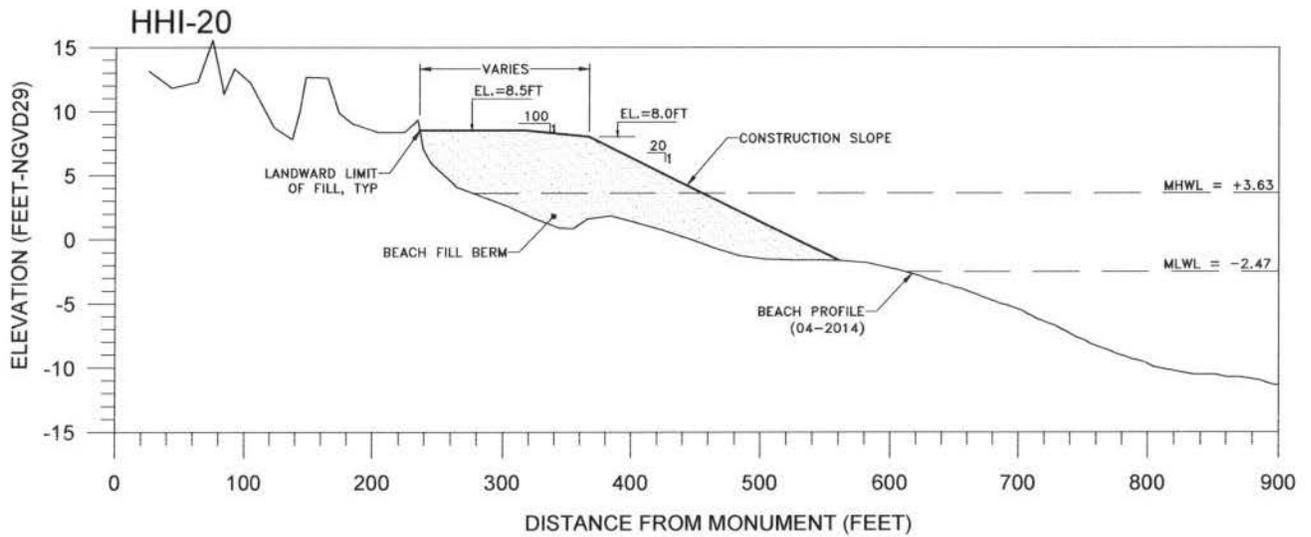
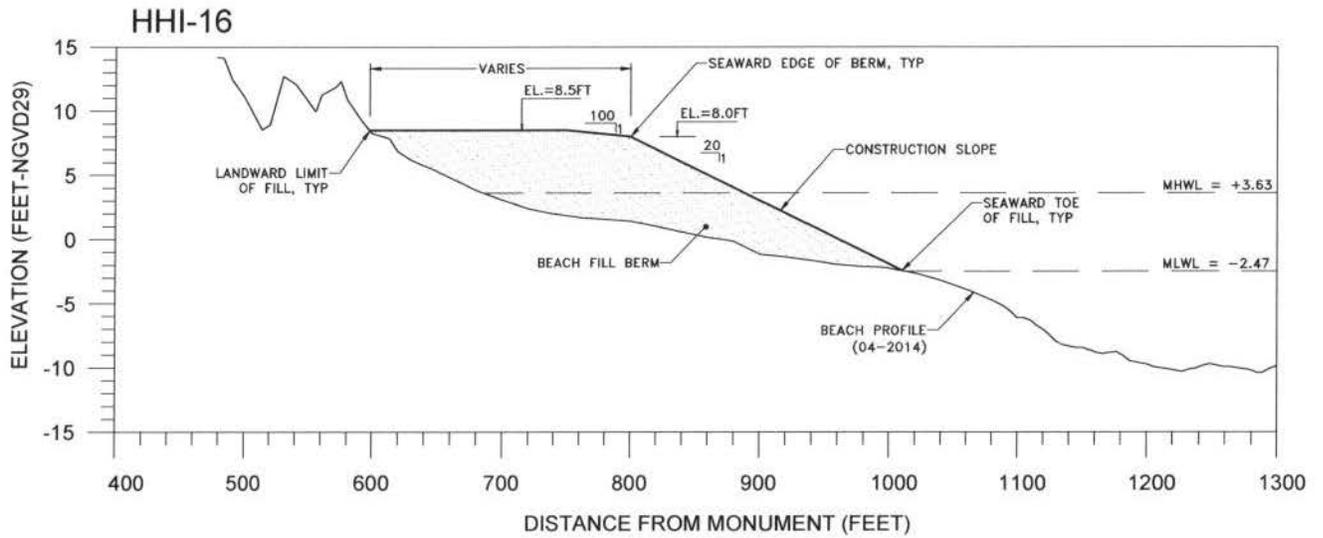


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COA No. C00530

TOWN OF HILTON HEAD ISLAND
2015/16 BEACH RENOURISHMENT PROJECT
CENTRAL ATLANTIC BEACH FILL
PLAN

[Signature]
06-26-2014

06/23/14
DRAWN BY:
ML
SHEET
7 of 14



SURVEY - MAY 2014

SAC-2014-00680-1W

NOT FOR PURPOSES OF CONSTRUCTION

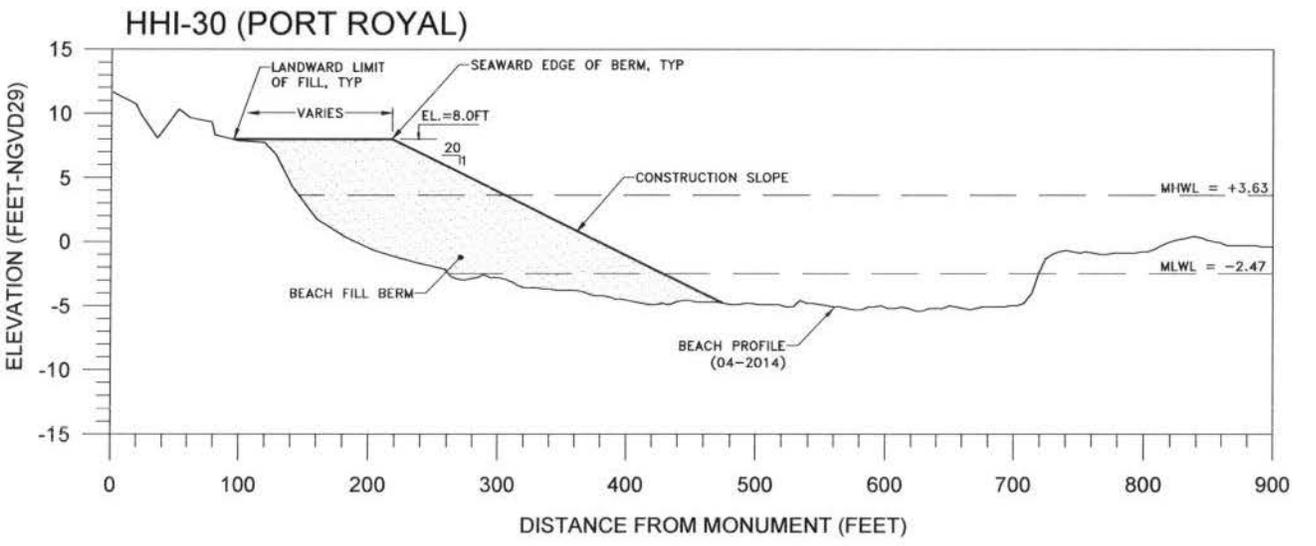
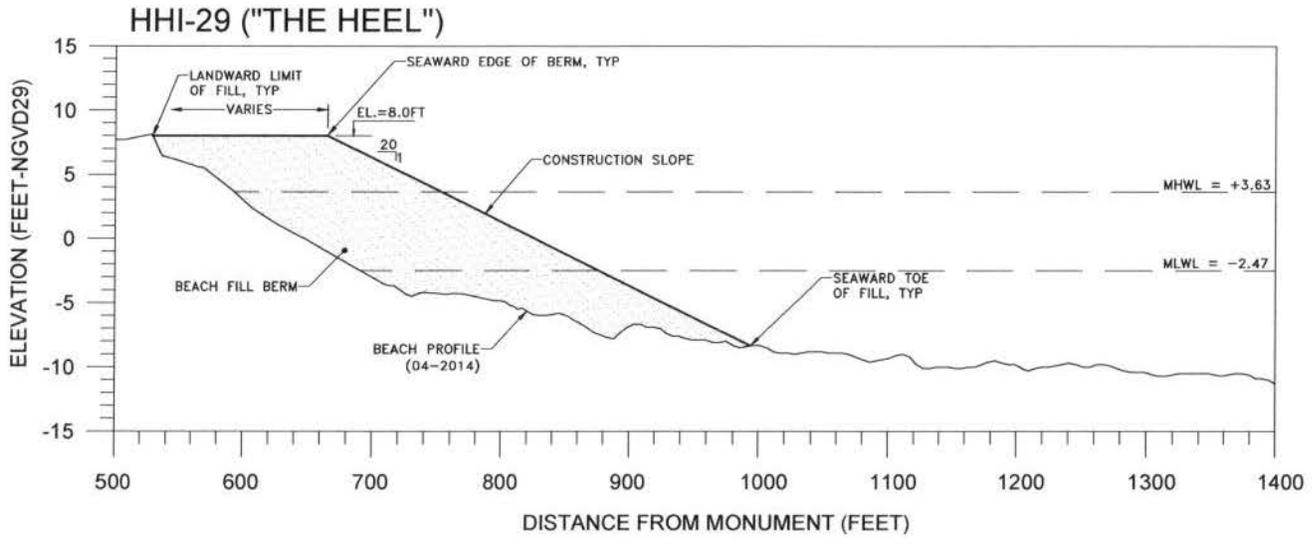


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 associates, inc.
 2618 Herschel Street
 Jacksonville, FL. 32204
 (904) 387-6114
 COA No. C00530

TOWN OF HILTON HEAD ISLAND
 2015/16 BEACH RENOURISHMENT PROJECT
 CENTRAL ATLANTIC BEACH FILL
 TYPICAL SECTIONS

Charles Reed
 6-26-2014

06/23/14
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SHEET 8 of 14



SURVEY - MAY 2014

SAC-2014-00680-1W

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COA No. C00530

TOWN OF HILTON HEAD ISLAND
2015/16 BEACH RENOURISHMENT PROJECT
"THE HEEL" & PORT ROYAL BEACH FILL
TYPICAL SECTIONS

Stephen A. Wood
6-26-2014

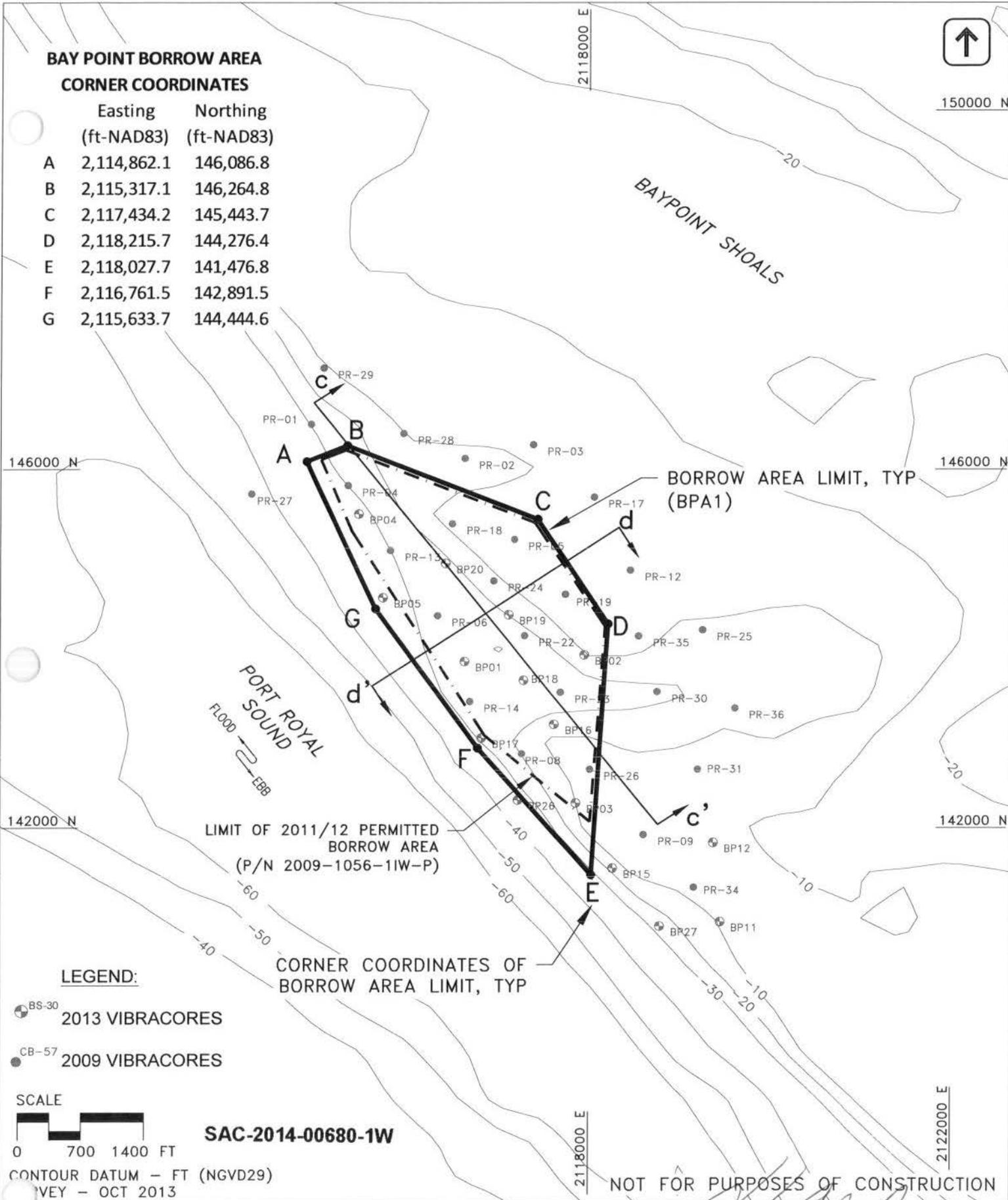
06/23/14
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SHEET 10 of 14



150000 N

BAY POINT BORROW AREA CORNER COORDINATES

	Easting (ft-NAD83)	Northing (ft-NAD83)
A	2,114,862.1	146,086.8
B	2,115,317.1	146,264.8
C	2,117,434.2	145,443.7
D	2,118,215.7	144,276.4
E	2,118,027.7	141,476.8
F	2,116,761.5	142,891.5
G	2,115,633.7	144,444.6



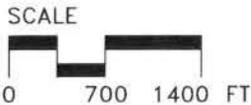
BORROW AREA LIMIT, TYP (BPA1)

LIMIT OF 2011/12 PERMITTED BORROW AREA (P/N 2009-1056-11W-P)

CORNER COORDINATES OF BORROW AREA LIMIT, TYP

LEGEND:

- BS-30 2013 VIBRACORES
- CB-57 2009 VIBRACORES



SAC-2014-00680-1W

CONTOUR DATUM - FT (NGVD29)
VEY - OCT 2013

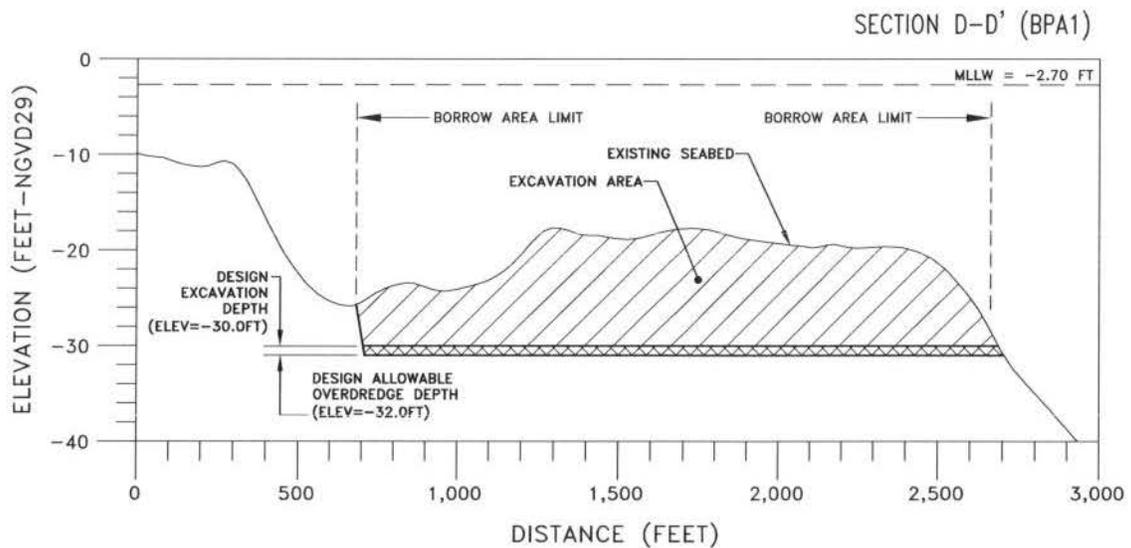
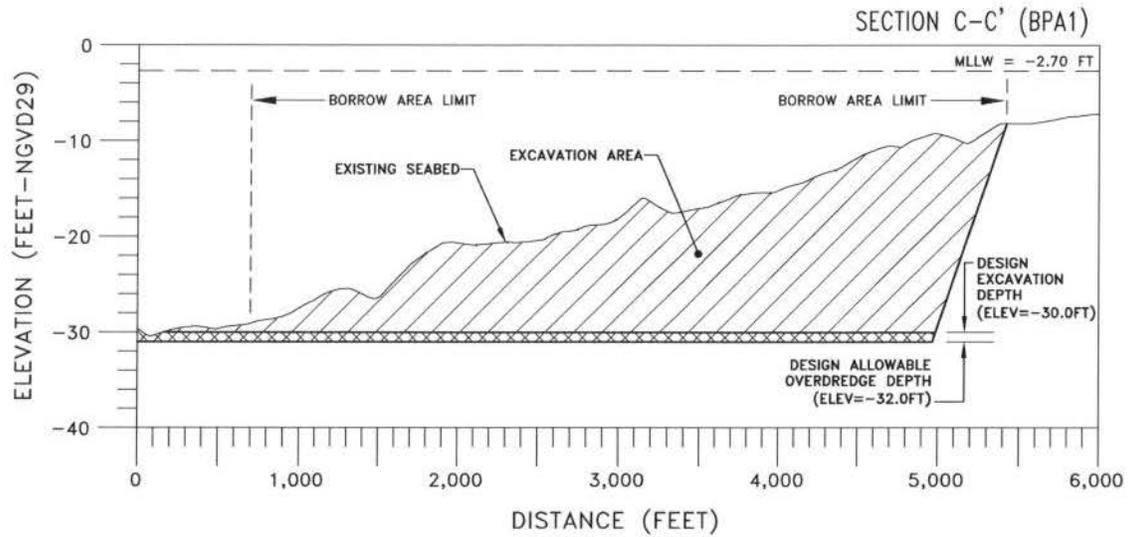
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COA No. C00530

TOWN OF HILTON HEAD ISLAND
2015/16 BEACH RENOURISHMENT PROJECT
BAY POINT SHOALS
BORROW AREA PLAN

Approved
6-26-2014

06/23/14
DRAWN BY:
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11 of 14



CONTOUR DATUM - FT (NGVD29)
 DATE - OCT 2013

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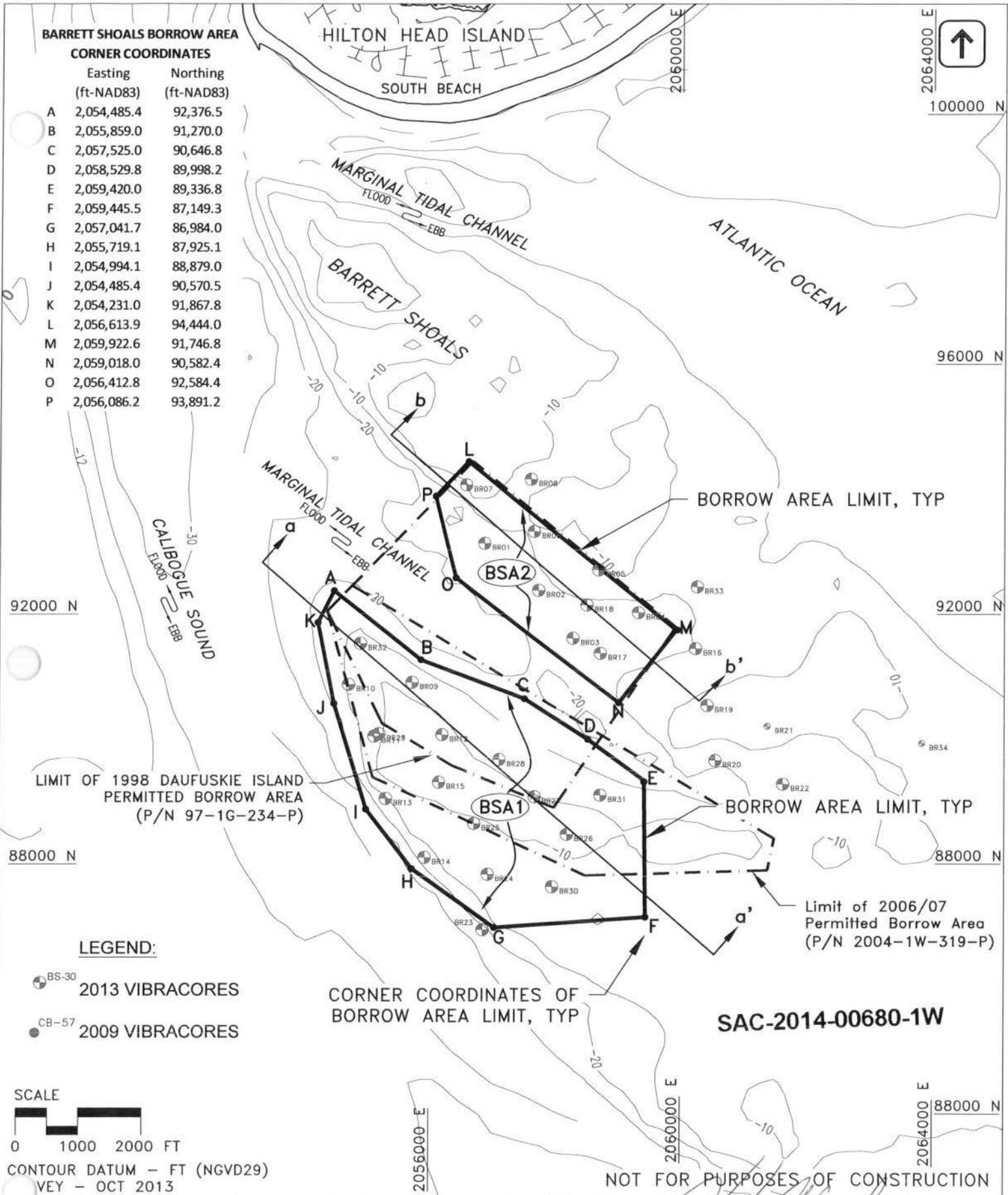
TOWN OF HILTON HEAD ISLAND
 2015/16 BEACH RENOURISHMENT PROJECT
 BAY POINT SHOALS
 BORROW AREA SECTIONS

John Reed
 6-26-2014

06/23/14
 DRAWN BY:
 ML
 SHEET
 12 of 14

**BARRETT SHOALS BORROW AREA
CORNER COORDINATES**

	Easting (ft-NAD83)	Northing (ft-NAD83)
A	2,054,485.4	92,376.5
B	2,055,859.0	91,270.0
C	2,057,525.0	90,646.8
D	2,058,529.8	89,998.2
E	2,059,420.0	89,336.8
F	2,059,445.5	87,149.3
G	2,057,041.7	86,984.0
H	2,055,719.1	87,925.1
I	2,054,994.1	88,879.0
J	2,054,485.4	90,570.5
K	2,054,231.0	91,867.8
L	2,056,613.9	94,444.0
M	2,059,922.6	91,746.8
N	2,059,018.0	90,582.4
O	2,056,412.8	92,584.4
P	2,056,086.2	93,891.2

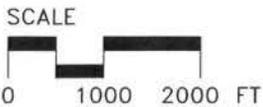


LEGEND:

- 2013 VIBRACORES
- 2009 VIBRACORES

CORNER COORDINATES OF
BORROW AREA LIMIT, TYP

SAC-2014-00680-1W



CONTOUR DATUM - FT (NGVD29)
VEY - OCT 2013

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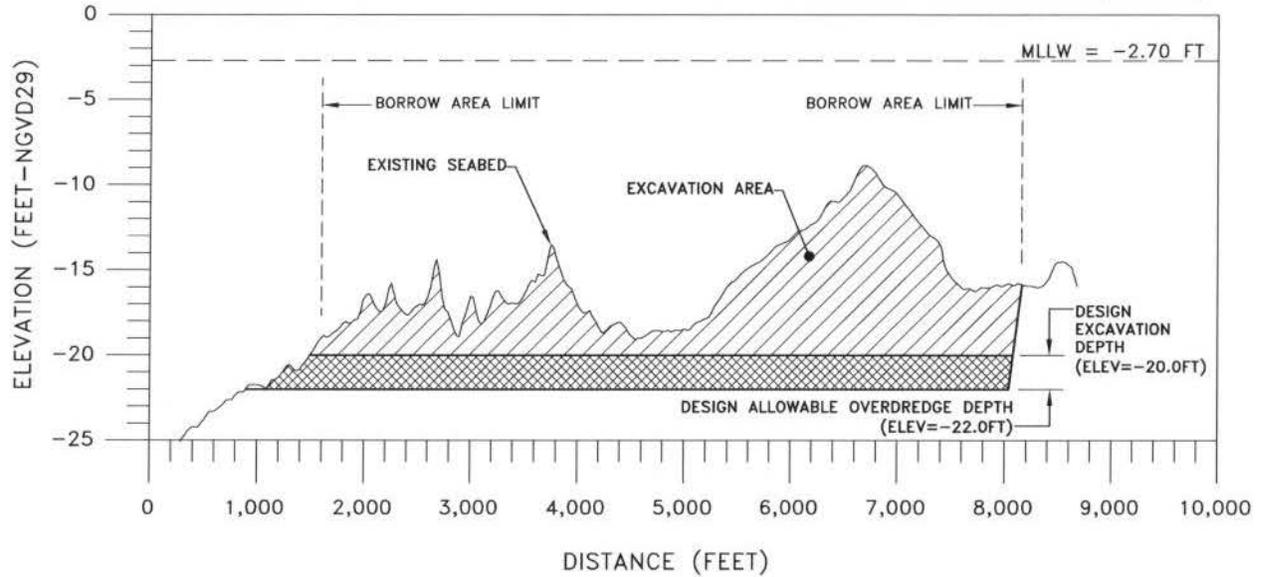
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COA No. C00530

TOWN OF HILTON HEAD ISLAND
2015/16 BEACH RENOURISHMENT PROJECT
**BARRETT SHOALS
BORROW AREA PLAN**

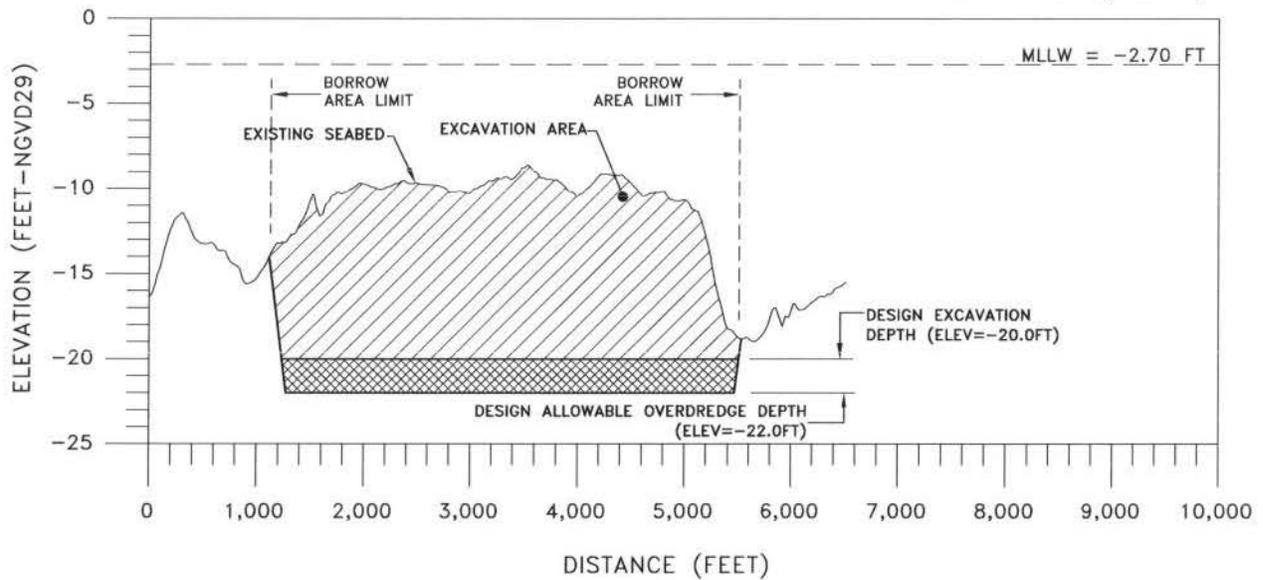
Joseph W. Lee
16-26-2014

06/23/14
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SHEET
13 of 14

SECTION A-A' (BSA1)



SECTION B-B' (BSA2)



CONTOUR DATUM - FT (NGVD29)
 SURVEY - OCT 2013

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TOWN OF HILTON HEAD ISLAND
 2015/16 BEACH RENOURISHMENT PROJECT
BARRETT SHOALS
BORROW AREA SECTIONS

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 6-26-2014

06/23/14
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 14 of 14