PUBLIC NOTICE

US Army Corps of Engineers
Wilmington District

Issue Date: May 1, 2013
Comment Deadline: June 1, 2013
Corps Action ID No: SAW-2013-00404

All interested parties are herby advised that the Wilmington District, Corps of Engineers (Corps) has received a request from the Town of Topsail Beach, Pender County, North Carolina (Town) seeking to nourish beach along the developed shoreline of the Town of Topsail Beach with beach compatible sand removed from the nearby federally maintained channels of New Topsail Inlet, Topsail Creek, Banks Channel, and Banks Channel Connector.

Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans are also available on the Wilmington District Web Site at http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram/PublicNotices.asx

Applicant: Attn: Tim Holloman, Town Manager
Town of Topsail Beach
820 South Anderson Boulevard
Topsail Beach, North Carolina 28465

AGENT (if applicable): Chris Gibson, PE
Gahagan and Bryant Associates of North Carolina
295-A North Green Meadows Drive
Wilmington, North Carolina 28405

Authority

The Corps will evaluate this request and a decide whether to issue, conditionally issue, or deny the proposed modification pursuant to applicable procedures of Section 404 of the Clean Water Act (33 USC 1344) and Section 10 of the River and Harbors Act.

Location

The project site is located on the southern end of Topsail Island, within the Town Limits of the Town of Topsail Beach. Topsail Island is a barrier island located in southeast North Carolina along the beaches of Onslow Bay. The Town of Topsail Beach is bounded to the north by Surf City, the west by Topsail Sound and south by New Topsail Inlet. The island is accessible to the public by highways 50 and 210 with Highway 50 being the only main road to the Town of Topsail Beach. The approximate geographic coordinates of the Topsail Beach are Latitude 34^{o} 22’10” and longitude 77^{o}37’30”.

The project area of Topsail Beach includes approximately 4.5-miles of ocean beach, within the Town limits, and is adjacent to several federally-maintained navigation channels, which have been identified by the applicant as borrow areas for beach compatible sand. The federal navigation channels are located within the New Topsail Inlet, Banks Channel and connector channels along the western side of Topsail Island, and Topsail Creek. Topsail Creek is a federal navigation channel between New Topsail Inlet and the AIWW see attached map.

New Topsail Inlet (8' deep x 150' wide) extends from the 12 foot contour in the ocean to the intersection of Banks Channel connector and Topsail Creek, and it follows deep water rather than being a fixed channel. Banks Channel (7' deep x 80' wide) is a fixed channel, which extends from immediately southwest of the Corps Dock, to the intersection of the AIWW near Disposal Area 186. Topsail Creek (7' deep x 80' wide) extends from the AIWW Disposal Area 203 to where it intersects Banks Channel connector and New Topsail Inlet Channel**.** Topsail Creek is not a fixed channel and must follow deep water. Banks Channel connector (7' deep x 80' wide) is a deep water channel that extends from just immediately southwest of the Corps Dock, to the intersection of Topsail Creek and New Topsail Inlet. Navigational information, including the latest hydrographic surveys for these federal channels, including the latest hydrographic surveys, is available at http://www.saw.usace.army.mil/Missions/Navigation.aspx.

Background

The Corps of engineers maintains two kinds of authorized federal navigation channels of several shallow draft inlets of North Carolina. These include fixed channels and channels that follow deep water. "Fixed channels" are authorized for width and depth and are fixed in location. "Channels that follow deep water" are also authorized for width and depth, but the location of the channel follows deep water. The Corps of Engineers routinely collects hydrographic surveys of its navigation channels and will locate channels that follow deep water based on these surveys in order to minimize dredging requirements of these channels. New Topsail Inlet, along with all other shallow draft inlets in North Carolina, is maintained by the Corps of Engineers with its side cast dredges. The Corps typically conducts maintenance dredging of New Topsail Inlet two or three times per year.

Historically, New Topsail Inlet is subject to large bathymetric and inlet shoreline changes due to daily beach and inlet processes and in response to coastal storms. The latest location of New Topsail Inlet and its connecting channels is available from the website cited above.

A Department of the Army (DA) permit was issued to the town on June 15, 2009 to place approximately 1,000,000 cubic yards of beach quality sand along the 24,700 linear feet of developed shoreline on Topsail Island from an ocean borrow area, designated as "Borrow Area X", located immediately southeast of New Topsail Inlet. In June 2010, the town submitted a proposal to modify its DA permit to eliminate the offshore area, "Borrow Area X" as a sand source for the project and instead utilize material from the above mentioned federal channels and disposal areas. In the winter of 2010/2011, the town completed the placement of approximately

1,000,000 cy from two Corps disposal areas, DA-189 and DA-203 and nearby federal navigation channels.

Following Hurricane Irene, which bypassed the project area on August 27, 2011, town's shoreline experienced substantial storm damage to its beaches. Subsequently, on November 9, 2011, an interagency pre-application meeting was held with the Town regarding the hurricane related storm damage and the Town's potential proposal to dredge the federal channels of New Topsail Inlet and Banks Channel and pump this material to the beaches of Topsail Beach. On December 5, 2011, the Town submitted a permit application to perform dredging within the federal channel of New Topsail Inlet and Banks Channel and to place this material along 12,500 feet of ocean front shoreline, within the Town of Topsail Beach. This proposal including dredging approximately 701,600 cy within the federal channel of New Topsail Inlet and to deepen the authorized channel depth of -16.0 ft plus 2.0 ft. In response to concerns regarding this proposal, on December 12, 2011, the town re-submitted a permit application that reduced the proposed depth of dredging in New Topsail Inlet to -8.0 ft plus 2.0 ft and reduced the proposed dredge volume to approximately 300,000 cy. On February 21, 2012, a DA permit was issued for this project. In March 2012, the project was completed with the placement of approximately 147,500 cy of sand from material obtained from the adjacent federal navigation channels onto Topsail Beach.

Applicant's Stated Purpose

The purpose of the proposed project is to obtain beach compatible sand in a cost-effective manner and to maintain the originally designed beachfill project, protecting property and public infrastructure within the Town of Topsail Beach.

Project Description

As part of a May 2012 monitoring effort, the Town of Topsail Beach conducted a bathymetric survey in the adjacent federally-maintained channels of Topsail Creek, New Topsail Inlet, the Crossover Channel, and Banks Channel. The town's project engineer (C. Gibson, GBA) has determined from that survey and sediment data that enough beach compatible sand is available to warrant a beach nourishment project. Volume of beach compatible sand available from these borrow areas is estimated to be 891,000 cy, (Sheet 20 of 28).

The Town of Topsail Beach is proposing to dredge: (1) approximately 2,500-linear feet of the southern extent of Topsail Creek (Sheets 16 and 17 of 28), (2) approximately 4,100-linear feet of New Topsail Inlet from Topsail Creek to the mouth of the inlet at the ebb shoals (Sheets 21 and 28 of 28), (3) the approximately 4,600-linear foot Cross Channel between New Topsail Inlet and Banks Channel (Sheet 21 of 28), and (4) shoaled areas within Banks Channel along the approximately 28,300-linear feet adjacent to the Town.

A complete set of project plans is available at:
https://gba.egnyte.com/h-s/20130412/5c4ead544e554924

The project proposes to dredge beyond the federally-authorized depths in these sections of Topsail Creek, New Topsail Inlet, and the Crossover Channel to depths of 12+2, 16+2, and 16+2 respectively (Table 1). Bottom widths in Topsail Creek and the Crossover Channel are proposed at 150-ft which exceeds the federally-authorized widths of 80-ft. Proposed dredging within Banks Channel and would maintain federally-authorized dimensions. Proposed dredging would follow the centerline of the channel and **is not proposing to relocate or alter the channel alignments**. The proposed dredging is summarized in the following Table 1 below.

Table 1. Proposed Hydraulic Dredging and Inland Borrow Areas.

Dredge Area	Linear Feet Dredging	Federally-Authorized Depth	Federally-Authorized Width	Proposed Depth	Proposed Width
Topsail Creek*** (southern end)	2,500-lft	7+2-ft	80-ft	12+2-ft	150-ft
New Topsail Inlet***	4,100-lft	8+2-ft	150-ft	16+2-ft	150-ft (no change)
Crossover**** channel (New Topsail Creek to Banks Channel Banks	4,600-lft	7+2-ft	80-ft	16+2-ft	150-ft
Banks Channel (portion adjacent to Town of Topsail Beach incl. Sections 1 and 2)**	~28,300-lft (Shoaled areas along that length)	7+2-ft	80-ft	7+2-ft (no change)	80-ft (no change)

*The application also notes that side channels off Banks Channel may be maintenance dredged as needed to the federally-authorized depth of 7+2-ft and within the federally-authorized 80-ft width.
** Fixed Authorized Navigation Channel
** *Authorized Navigation Channel that follows deep water.
** ** Previously Authorized & Maintained Federal Navigation Channel that follow deep water . (The Corps is not planning to maintain this channel at this time).

All proposed dredging would be conducted from November 16th to March 31st in order to avoid times of peak biologic activity. A hydraulic, or cutter head suction, dredge would be used. No upland borrow sources are requested, and no adjacent coastal marsh fringe would be directly impacted.

The proposed beach fill would be placed in the same footprint previously described in the Supplemental Final Environmental Impact Statement (SFEIS) for the Topsail Beach Interim Beach Nourishment Project and as authorized in the associated 2009 DA permit and its subsequent 2010-2011 modification. These previous authorizations allowed for nourishment of 24,700-lft of beach extending from approximately 1,000-ft south of Goodwin Avenue to approximately 2,000-ft north of the Town limits. All beachfill would be placed within the 30-year easement secured and utilized during the winter 2011 beach nourishment event.

A beach berm of varying width would be constructed to a height of 5-ft (NAVD88) with a 1:25 fill slope extending from the waterward edge of the berm to the intertidal zone of the beach (Sheets 13-15 of 28). Included in the 23,576-lft is an approximately 500-lft transitional zone or fill taper from Goodwin Avenue south and an approximately 500-lft transitional zone or northern fill taper ending just beyond the Town limits.

The current project proposes to place beach compatible sand as defined by the NC CAMA (15A NCAC 07H.0312) on 23,576-lft, or approximately 24,000-lft, of beach (Sheets 3-12 of 28) within the Town limits. Sediment testing has been conducted and found material in the proposed borrow areas will comply with CAMA/CRC definitions of beach compatible material. The full sediment report can be provided upon request.

Project Impacts

Dredging in New Topsail Inlet to a depth of 16+2-ft with 5:1 side slopes would result in an effective dredge width of 310-ft. This footprint would impact 12.4-acres of shallow bottom within the existing maintained channel and 49.7-acres of shallow bottom outside the maintained channel for side slopes. However, the increased depth proposed by the applicant would allow a larger ocean-certified dredge to access the areas and would eliminate the need for a shallow-draft side-cast dredge. According to the application, while the federally authorized channel width of the inlet is 150-ft, use of a side cast dredge has an effective width of 625-ft wide due to the extent of the side cast material deposited on adjacent inlet shoals. Although the proposed depth would exceed the existing, maintained depths, the ability to utilize a hydraulic dredge would reduce the effective area impacted from a 625-ft width to a 310-ft width. The applicant's project engineer has estimated that placement of the dredged material on the beach rather than side casting the material will reduce shallow bottom impacts in New Topsail Inlet by roughly 50%. This is based on an average area of side cast outside the federally-approved channel of 1.6-acres per 100-ft of dredged channel verses bottom impacts proposed by this project of roughly 0.76-acres per 100-ft of dredged channel.

Dredging in Topsail Creek, Banks Channel and the Crossover Channel is estimated to impact 177.4-acres of shallow submerged bottom, of which 152.9-acres are within the maintained federal navigation channel footprint and 24.5-acres are the result of side slopes exceeding the current footprint. All proposed dredging combined, including maintenance of the federal channels, is estimated to impact a total of 239.5-acres of shallow bottoms. Proposed dredging outside the federal navigation channels will impact approximately 74.2 acres (49.7 ac in the inlet, 24.5 ac in the channels) of shallow bottom habitat.

Hydraulic dredging operations will utilize previously approved pipeline routes and entry points onto the island. Established cross-over points on the island from the sound side to beach side would reduce potential impacts to bird habitat at the southern end of the island and to turtle habitat along the beach. The applicant proposes vehicle and equipment access points at Drum Avenue, Crews Avenue, north of Strawberry Lane, and Humphrey Avenue in Topsail Beach.

The proposed beach fill would be placed in the same footprint previously authorized projects. The beach fill would impact approximately 142.2-acres of intertidal areas below MHW and 35.2-acres above MHW.

The proposed project has been designed to avoid and minimize shallow bottom impacts by replacing side cast dredging operations in the inlet with beach material disposal on the beach and reducing the frequency of dredging of shallow bottom habitats within the inlet and connecting channels. In addition, the proposed pipeline routes are designed to avoid impacts to nesting shorebirds and sea turtles. The numbers of equipment access points are reduced to further minimize adverse impacts to shorebirds and sea turtles. The applicant is not proposing any mitigation or monitoring for this project.

Other Required Authorizations

The Corps will generally not make a final permit decision until the North Carolina Division of Water Quality (NCDWQ) issues, denies, or waives State certification required by Section 401 of the Clean Water Act (PL 92-500). In addition, pursuant to 33CFR 325.2(b)(2), the Corps cannot issue a permit for the proposed work until the applicant has demonstrated and the North Carolina Division of Coastal Management (NCDCM) has concurred that the proposed activity complies with and will be conducted in a manner that is consistent with the approved North Carolina Coastal Zone Management Program. This consistency determination may come in the form of a Coastal Area Management Act (CAMA) permit.

Essential Fish Habitat

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The Corps' initial determination is that the proposed project will not adversely impact EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

Cultural Resources

The Corps has consulted the latest published version of the National Register of Historic Places and is not aware that any registered properties, or properties listed as being eligible for inclusion therein are located within the project area or will be affected by the proposed work.

Presently, unknown archeological, scientific, prehistoric, or historical data may be located within the project area and/or could be affected by the proposed work.

Endangered Species

The Corps has reviewed the project area, examined all information provided by the applicant, including the proposal the conduct dredging and beach fill from November 16th to March 31st, and consulted the latest North Carolina Natural Heritage Database. Based on this information, the Corps has determined pursuant to the Endangered Species Act of 1973, that the proposed project will have no effect on federally listed endangered or threatened species or their formally designated critical habitat.

Evaluation

The decision whether to modify the existing permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. 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 proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal 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 (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

Commenting Information

The Corps of Engineers is soliciting comments from the public; Federal, State and local agencies and officials, including any consolidated state viewpoint or written position of the Governor; 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 (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing shall be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

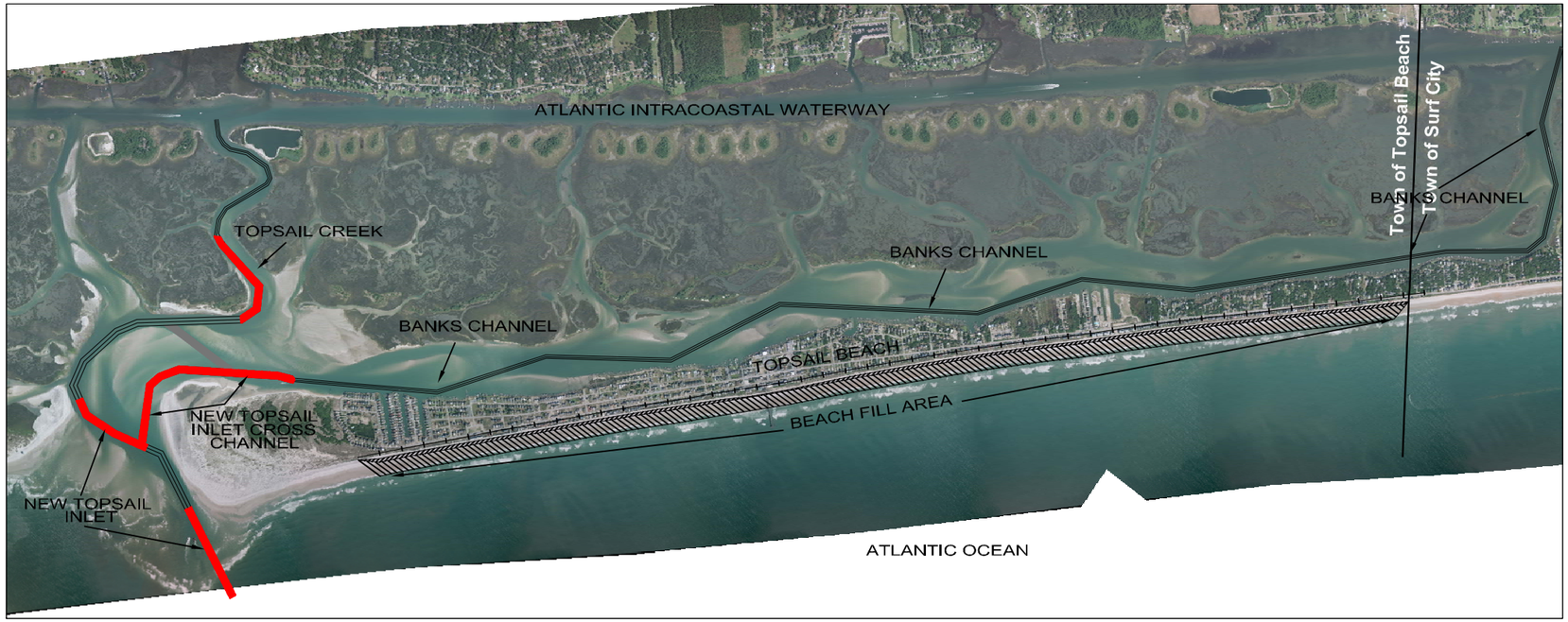
Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5 pm, June 1, 2013. Comments should be submitted to Dave Timpy, Project Manager, 69 Darlington Avenue, Wilmington, N.C. 28403. He may be also reached at (910) 251-4634 or david.l.timpy@usace.army.mil.

Town of Topsail Beach
Beach Nourishment Project
PENDER COUNTY, NORTH CAROLINA

Beach Fill and Dredging of areas including:
Topsail Creek, New Topsail Inlet and Banks Channel

WINTER 2013

Federal Navigation Channel Maintenance & Beach Placement



NOT TO SCALE

DREDGE & FILL AREAS

GAHAGAN & BRYANT ASSOCIATES
OF NC, PLLC, C.O.L. #P-0743
295-A North Green Meadows Drive
Wilmington, NC 28405
Tel: 910.313.3338

11x17 = Half Scale

ALIGNMENT TABLE OF COORDINATES – TOPSAIL CREEK CENTERLINE				
NAME	EASTING	NORTHING	STATION	RANGE
TC–1	2,402,058.53	222,463.46	38+00.0	0'
TC–2	2,402,252.68	222,381.84	40+11.3	0'
TC–3	2,403,485.87	222,127.30	52+70.5	0'
TC–4	2,403,734.09	221,690.94	57+72.5	0'
TC–5	2,403,595.24	221,298.24	61+89.0	0'
TC–6	2,403,586.61	221,291.50	62+00.0	0'
HORIZONTAL COORDINATES ARE REFERENCED TO NAD83				

ALIGNMENT TABLE OF COORDINATES – NEW TOPSAIL INLET CENTERLINE				
NAME	EASTING	NORTHING	STATION	RANGE
NTI–1	2,401,735.39	217,752.82	24+00.0	0'
NTI–2	2,402,066.82	217,584.82	27+81.0	0'
NTI–3	2,402,808.62	217,597.43	35+23.6	0'
NTI–4	2,403,567.58	217,761.29	43+00.0	0'
NTI–5	2,405,110.87	217,219.84	60+00.0	0'
NTI–6	2,407,069.78	216,218.60	82+00.0	0'
HORIZONTAL COORDINATES ARE REFERENCED TO NAD83				

ALIGNMENT TABLE OF COORDINATES – NTI CROSS CHANNEL CENTERLINE				
NAME	EASTING	NORTHING	STATION	RANGE
NTIX–1	2,405,340.36	220,907.85	0+00.0	0'
NTIX–2	2,404,997.31	220,776.54	3+67.3	0'
NTIX–3	2,403,134.68	219,592.53	25+74.4	0'
NTIX–4	2,402,888.09	219,217.55	30+23.2	0'
NTIX–5	2,402,818.81	218,922.06	33+26.7	0'
NTIX–6	2,403,456.82	217,736.61	46+73.0	0'
HORIZONTAL COORDINATES ARE REFERENCED TO NAD83				

ALIGNMENT TABLE OF COORDINATES – BANKS CHANNEL CENTERLINE				
NAME	EASTING	NORTHING	STATION	RANGE
BC–1	2,405,340.36	220,907.85	0.00	0.0
BC–2	2,408,057.75	222,557.13	3,178.74	0.0
BC–3	2,409,545.24	224,617.12	5,719.64	0.0
BC–4	2,411,830.05	226,186.58	8,491.57	0.0
BC–5	2,413,055.54	228,611.12	11,208.22	0.0
BC–6	2,416,722.46	231,039.73	15,606.45	0.0
BC–7	2,418,146.52	233,009.74	18,037.27	0.0
BC–8	2,420,264.00	234,255.40	20,493.98	0.0
BC–9	2,424,320.56	238,268.98	26,200.51	0.0
BC–10	2,425,773.99	239,344.77	28,008.76	0.0
HORIZONTAL COORDINATES ARE REFERENCED TO NAD83				

ALIGNMENT TABLE OF COORDINATES – TOPSAIL BEACH BASELINE				
NAME	EASTING	NORTHING	STATION	RANGE
TI–3	2,407,034.3	221,236.8	0.0	0.0
TI–4	2,407,883.4	221,755.7	995.1	0.0
TI–5	2,408,735.3	222,276.4	1,993.5	0.0
TI–6	2,409,505.8	222,913.8	2,993.5	0.0
TI–7	2,410,248.8	223,582.7	3,993.2	0.0
TI–8	2,410,949.0	224,295.2	4,992.2	0.0
TI–9	2,411,644.0	225,013.0	5,991.3	0.0
TI–10	2,412,350.0	225,719.9	6,990.4	0.0
TI–11	2,413,026.0	226,456.5	7,990.2	0.0
TI–12	2,413,705.3	227,190.1	8,990.0	0.0
TI–13	2,414,454.5	227,853.9	9,991.0	0.0
TI–14	2,415,168.5	228,552.0	10,989.5	0.0
TI–15	2,415,892.5	229,240.6	11,988.7	0.0
TI–16	2,416,613.3	229,932.2	12,987.6	0.0
TI–17	2,417,338.8	230,619.1	13,986.7	0.0
TI–18	2,418,060.8	231,309.3	14,985.6	0.0
TI–19	2,418,798.5	231,982.7	15,984.4	0.0
TI–20	2,419,530.0	232,662.6	16,983.1	0.0
TI–21	2,420,237.3	233,368.5	17,982.4	0.0
TI–22	2,420,974.0	234,043.3	18,981.4	0.0
TI–23	2,421,716.3	234,711.4	19,980.1	0.0
TI–24	2,422,463.0	235,375.1	20,979.1	0.0
TI–25	2,423,208.0	236,040.7	21,978.1	0.0
TI–26	2,423,954.5	236,704.6	22,977.1	0.0
TI–26+839	2,424,580.5	237,263.4	23,816.3	0.0
TI–26+978	2,424,683.1	237,355.0	23,955.8	0.0
HORIZONTAL COORDINATES ARE REFERENCED TO NAD83				

VOLUME TABULATIONS	
AREA	GRADE
	–14.0' MLW
TOPSAIL CREEK	148,500
	–18.0' MLW
NEW TOPSAIL INLET	373,500
	–18.0' MLW
CROSS CHANNEL	369,000
TOTAL MATERIAL AVAILABLE	891,000
QUANTITIES ARE EXPRESSED IN CUBIC YARDS	

Gahagan & Bryant Associates of NC, PLLC, C.O.L. #P-0743
295-A North Green Meadows Drive
Wilmington, NC 28405 910.313.3338

Dwg Date: 04/11/2013

Survey Date: Spring 2013

Drawn By: AML Checked By: CLG

Drawing Name: TopsailBeach2013–Plans.dwg

Scale: 1" = 1200' Sheet 2 of 2

Notes:
Horizontal Datum: North Carolina State Plane NAD83
Vertical Datum: North American Vertical Datum (NAVD88)
US Survey Feet
Survey performed by GBA of NC and the USACE
in the spring 2013 and represent conditions at that time.
Aerial photo flown in April 2012.

1.43 ft MEAN HIGH WATER
3.97 ft 1.00 ft NAVD 1988
1.54 ft NGVD 1929
MEAN LOW WATER

Horizontal Scale: 1" = 1200'

TOPSAIL BEACH NOURISHMENT PROJECT

Pender County, North Carolina

FILL AREA – TOPSAIL BEACH

PLAN VIEW
Control Sheet

11x17 = Half Scale