SIDA/Hilton Head Dredging And Open Water Placement Monitoring Plan

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1. PROJECT DESCRIPTION AND LOCATION

The South Island Dredging Association (SIDA) is seeking permits to dredge existing marina basins and access channels on Hilton Head Island and place approximately 300,000 cubic yards of silt, clay, and sand materials in inshore waters south of the mouth of Calibogue Sound. SIDA is comprised of the Harbour Town Boat Slip Owners Association, South Beach Marina LLC, Sea Pines South Beach Property Owners Association, Gull Point Owners Association Inc. and Baynard Property Owners Association. Proposed dredge areas include Harbour Town Marina, Gull Point Marina, South Beach Marina, Baynard Cove Creek's Community Dock, Port Villas, and channels leading to these areas (Figure 1-1 through Figure 1-7). Maintenance dredge permits for these areas have been issued previously by the US Army Corps of Engineers (USACE), Permit No. 2000-1P-424 and the South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management (SCDHEC-OCRM), Permit Number OCRM-2000-1P-424-P, which remains active.

Maintenance dredging for eight different channel and marina areas will achieve currently (SCDHEC-OCRM) and previously (USACE) permitted navigable depths of 5 to 8 feet mean low water (MLW), plus an allowable 1-foot overdredge, for recreational and commercial navigation. Dredging is needed because shoaling of these areas and the existing shallow depths prevent navigation of recreational and commercial vessels in many areas during much of the tidal cycle. Proposed dredge depths and areas for each waterway are presented below in Table 1-1.

Table 1-1: Dredge Areas and Depths for Each Site

Location	**Area (acres)**	**Depth (ft, MLW)**
Harbour Town Marina		
Entrance Channel	6.5	-8
Marina	8.3	-8
Braddock Cove Creek		
Entrance Channel to South Beach Marina, including Gull Point Marina	12.6	-8
South Beach Marina	2.1	-8
Upstream of South Beach Marina to Port Villas	2.6	-6
Baynard Cove Creek		
Entrance Channel	13.6	-8
Community Dock	1.5	-5
Creek	3.3	-6
TOTAL	**50.5**	

Dredging will not include any "new work" of previously undisturbed areas. All proposed dredging is maintenance dredging within areas dredged in years past and is therefore a maintenance activity. Open water placement of the dredged material, permitted pursuant to and regulated by Section 404(b)1 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act, is planned at an approximately

100-acre submerged aquatic site near the entrance to lower Calibogue Sound. This dredging footprint is smaller than the previously permitted dredge footprint since the portion of Baynard Creek above the Community Dock has been eliminated from the dredge plan except for the first 375 ft. This modification represents an approximately 3,400 foot reduction in the length of Baynard Creek channel to be dredged. The areas removed from this application are significantly naturalized and dredging would cause unavoidable impacts to oyster reefs and vegetation. The placement site is in Waters of the US and is regulated pursuant to the CWA. Numeric modeling indicates the actual area of coverage will be approximately 56 acres.

Hydraulic dredging by cutter head pipeline is proposed, and a dredged material transport pipe ranging in length from 2 to 3.5 miles is necessary to move the material to the placement site. A submerged release will be located 3 ft above the sea floor in approximately 28 ft of water. The project will require up to 6 months due to the quantity of material to dredge and the fact that only a shallow draft, small dredge barge can navigate the channels, creeks and docking areas to excavate the material, which limits the production rate of the dredge. It will be performed primarily during the typical dredge window for the area (November 1 through March 31 of any given year), but the work is likely to extend into April. Dredging will begin in November and continue through the winter and spring months, ending as late as the end of April, one month past the close date of the typical dredge window. This additional time is necessary to complete all of the proposed dredging in one season. Dredging will be conducted continuously (24 hours a day, 7 days a week), except when repositioning the dredge barge, conducting equipment repair or maintenance, or during unforeseen delays (i.e. caused by inclement weather). The duration of the dredging will be significantly less in the tidal creeks than in the marinas and mouths of the creeks. The project is anticipated to begin in November 2013 and be completed by April 2014.

Figure 1-1: Project Location Map

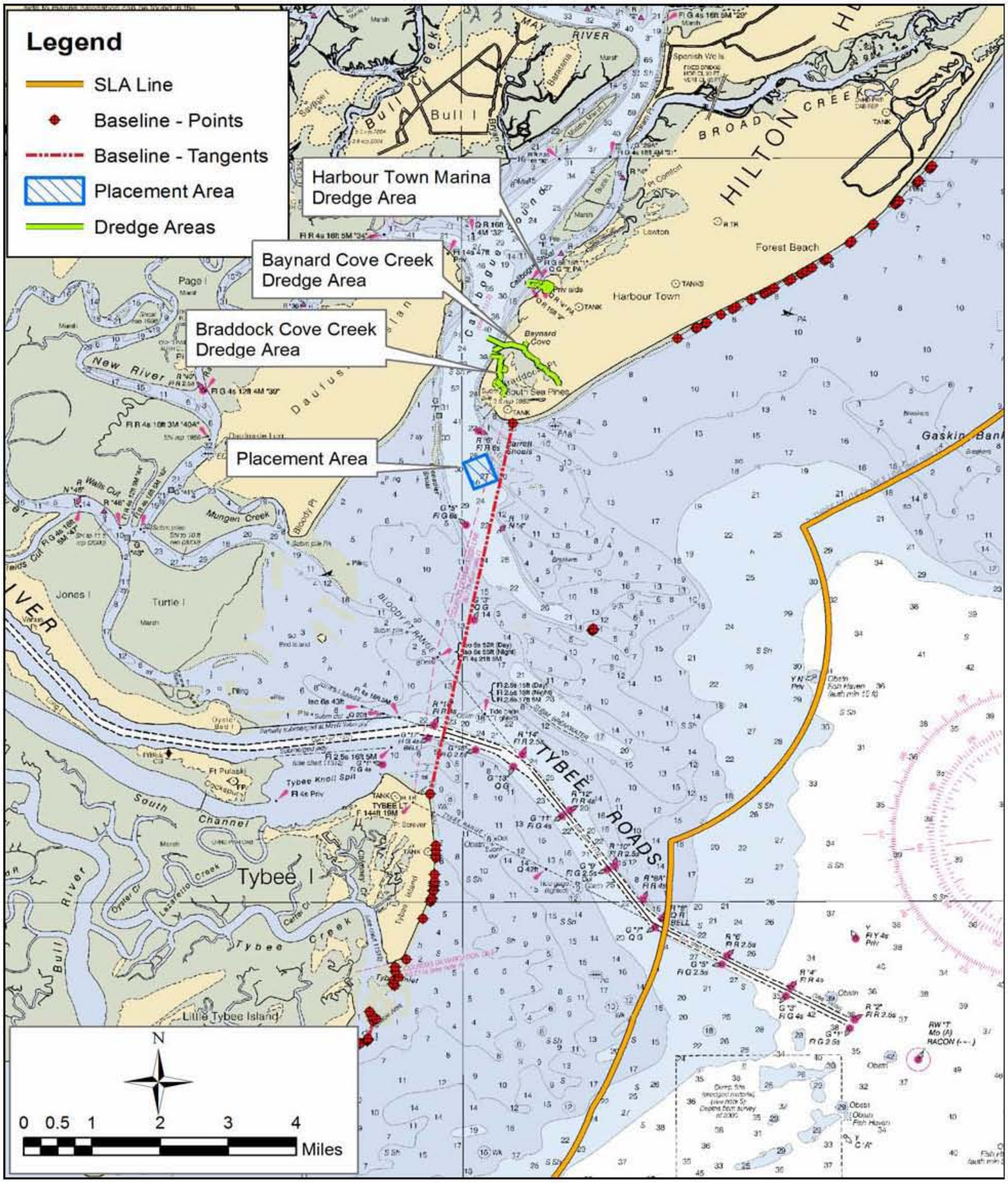


Figure 1-2: Proposed Dredge Areas

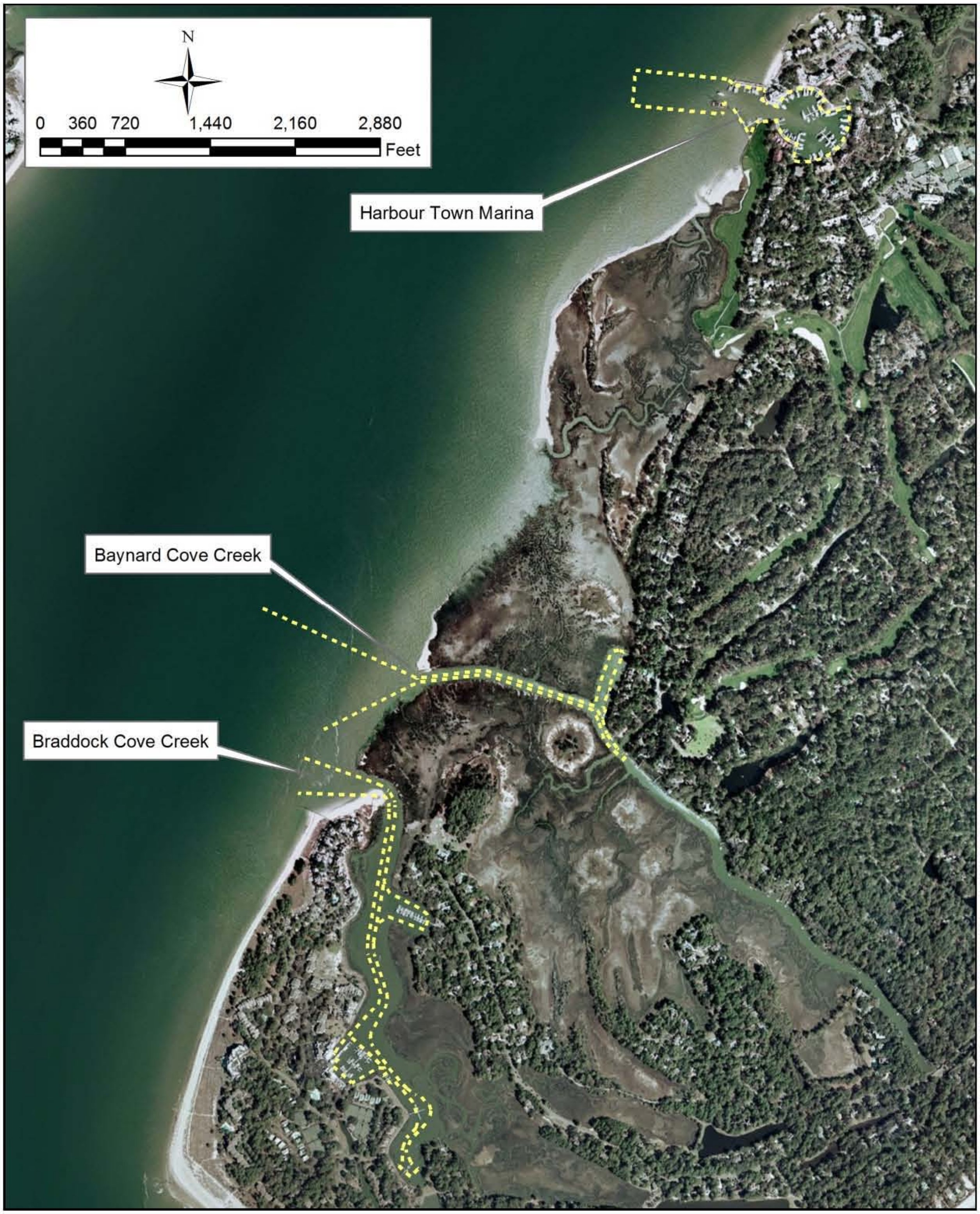


Figure 1-3: Project Area and Proposed Discharge Pipe Route

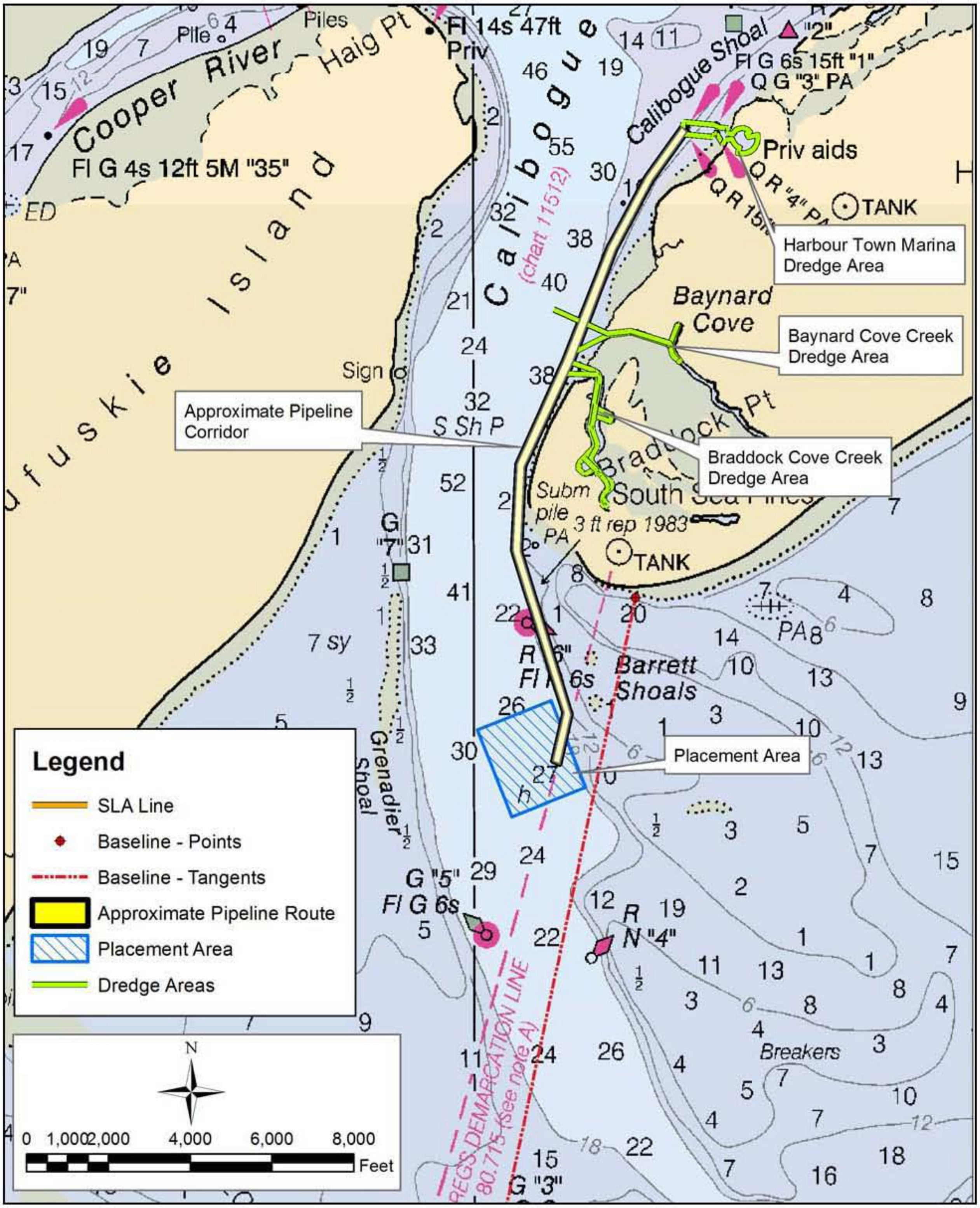


Figure 1-4: Harbour Town Marina Dredge Areas

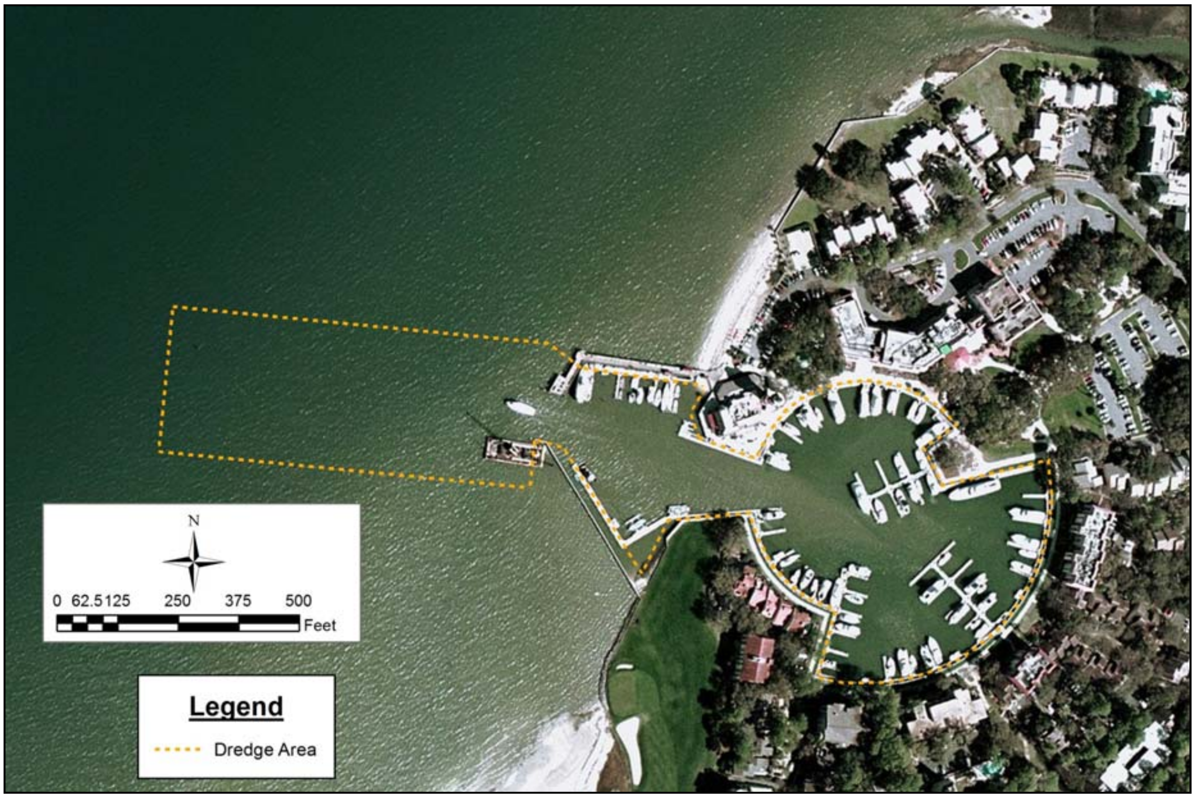


Figure 1-5: Baynard Cove Creek Mouth and Community Dock Dredge Areas

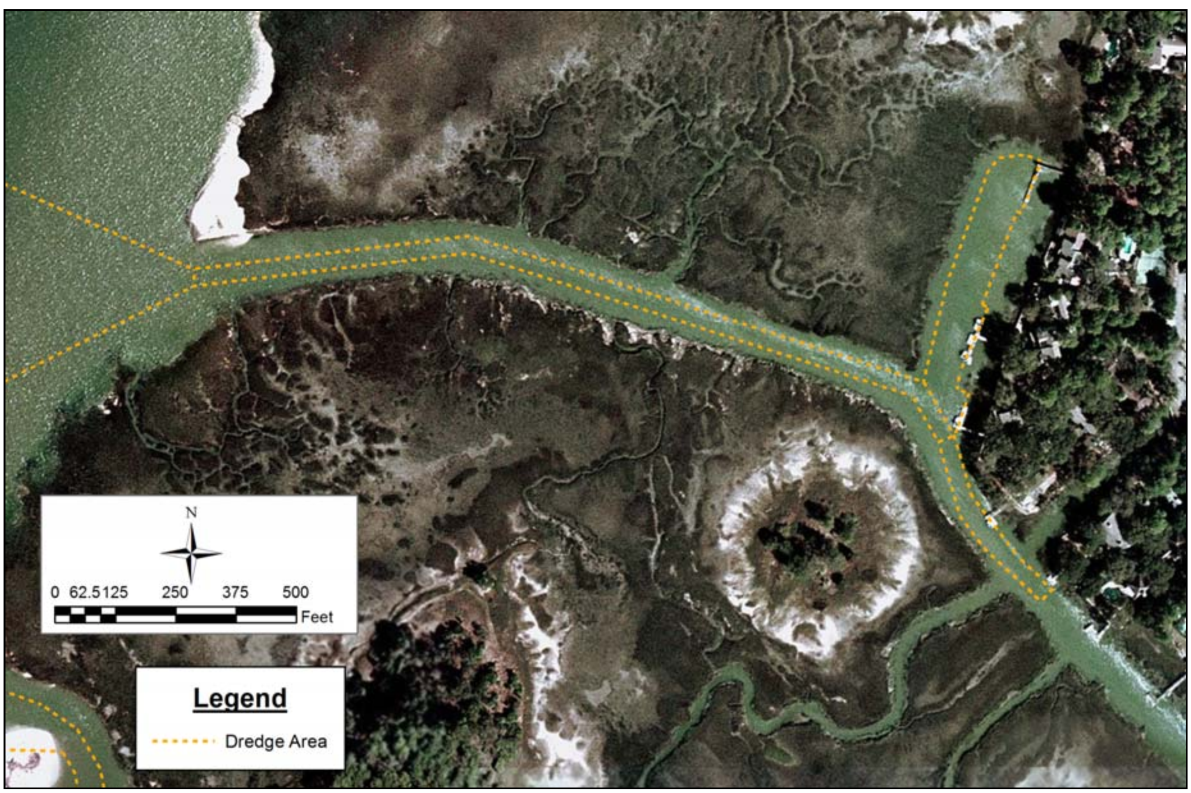
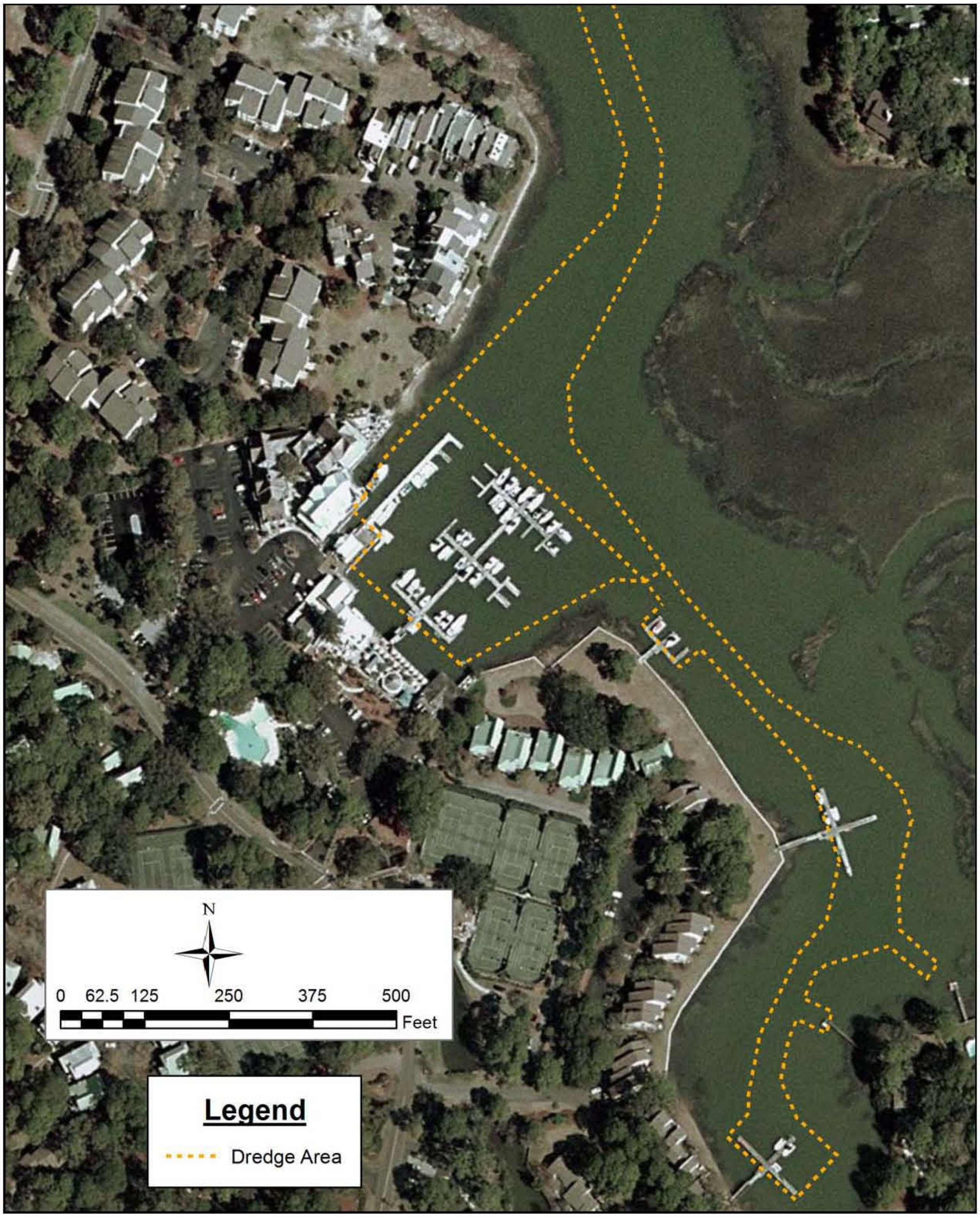


Figure 1-6: Braddock Cove Creek Mouth and Gull Point Marina Dredge Areas

Figure 1-7: Braddock Cove Creek and South Beach Marina Dredge Areas



2. PURPOSE

This Monitoring Plan presents proposed monitoring activities, which may be modified following further coordination with the regulatory agencies during the permitting process to reflect any conditions contained in the final project permit(s).

Further information and assessment for this project can be found in a number of project documents including (but not limited to):

- Permit Application (GEL 2012a)
- Dredge Discharge Analysis Report (MGA 2012a)
- Biological Evaluation (MGA 2012b)
- Essential Fish Habitat Assessment (MGA 2012c)
- Dredging Plan (M&N 2012)
- Alternatives Analysis (GEL 2012b)
- Assessment of Benthic Communities (BVA 2000)

3. DREDGE MATERIAL AND WATER QUALITY

Based on a review of geotechnical data collected by Applied Technology and Management (ATM) (1999) and by GEL Engineering (GEL) (2008), the material to be dredged is mostly silt and clay with a variable fraction of sand. Sediment quality testing in 2008 by GEL Engineering found that the sediment chemistry was similar to that sampled in 2000 by ATM, thereby showing that substantial changes in sediment chemistry in the area does not occur (ATM 2000). The material to be dredged was found to be acceptable for open water placement with no special management provisions.

Water quality within Calibogue Sound has been studied by the SCDHEC and is considered to be excellent with fecal coliform levels currently decreasing (MGA 2012a).

4. DREDGE AND PLACEMENT METHODS

The project proposes to use a small hydraulic dredge with a maximum intake diameter of 10 to 12 inches to transport the material via a pipe to the placement site, a distance of 2 to 3.5 miles depending on the specific dredge location. A booster station will be placed along the pipeline as needed to provide sufficient additional power to transport the material to the placement site. The placement site is located in an area mapped in 2000 as rippled sand bottom habitat (BVA 2000). The location of the proposed pipeline discharge is approximately 4,600 ft from the shoreline of Hilton Head Island and approximately 8,100 ft from the shoreline of Daufuskie Island (Figure 1-3). For all dredging and placement activities, GPS location devices and tracking software will document dredged and placement areas and elevations.

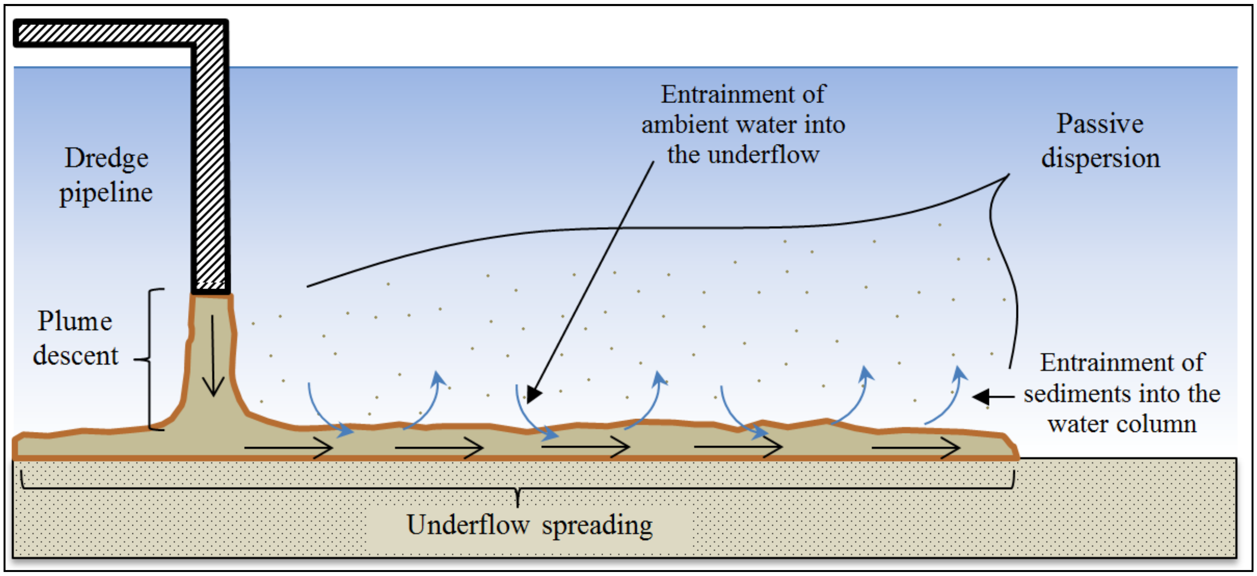
The transport and discharge pipeline corridor will lead from the dredge sites along the shoreline in water depths sufficient for it to remain off the sea floor and convey materials for placement. The pipeline will be floated except when crossing channels, where it will need to be submerged and anchored (using heavy chains with weights on the ends) so that it does not create a navigation impediment. Proper anchorage will result in minimal physical impact to the environment and other uses of the water. A discharge platform (dredge barge) will be anchored in the placement site in such a manner to allow movement of the discharge pipeline as needed within the placement site boundaries to minimize bottom mounding. Tidal dominated currents at the placement site range from a maximum ebb velocity of 1.0 meters per second (m/s) 3.3 feet per second (ft/s) and a maximum flood velocity of 0.8 m/s 2.6 ft/s. Currents will move suspended sediments, as related to tidal cycle and longer term river flow, with dominant sediment movement seaward. The tidal range is about 8 ft. The current regime should pose no problem to the floating pipeline, the discharge platform placement, and the submerged discharge pipe.

The placement site depth is approximately 28 ft MLW. Although the placement site is about 100 acres in size (a rectangular area approximately 2,000 ft wide and 2,300 ft long shown in Figure 1-1), placement will occur within a subset area of approximately 56 acres. Dredged material placement will start on the shallower (east) side of the site and move laterally as needed to prevent substantial mounding. The dredged material will be discharged through a Tremie pipe to proceed vertically through the water column and place the material at about 3 ft above the sediment surface (Figure 4-1). This discharge is used to ensure minimum water column impact or turbidity at the placement site. Submerged discharge will not only minimize water column impact, but will allow for bottom placement in thin lifts within the permitted footprint to minimize impacts to benthic habitat, enhance transport to the ocean, and allow for rapid benthic re-colonization. It is not likely that a sediment diffuser attachment is needed at the end of the Tremie pipe as discussed in the Discharge Dredge Analysis Report (MGA 2012a).

Approximately 99 percent of the discharged material will descend to the bottom as a fluid mud layer within the placement area, as modeled in the Discharge Dredge Analysis Report (MGA 2012a). The deposited sediment will create a relatively flat bottom covering the 56 acres of existing sandy bottom within the 100-acre placement site. It will not cover any of the identified hard bottom areas in Calibogue Sound.

The 1 percent fraction of sediments entrained into the water column and carried away by the currents will create a small plume of suspended sediments (MGA 2012a). The contributions from both entrainment at the pipe outfall as well as entrainment along the spreading fluid mud layer (i.e., referred to as the underflow) are included in the sediment plume calculations completed for this project (MGA 2012a). The peak ebb and flood currents cause temporary increases in suspended sediment concentrations up to 11 milligrams per liter (mg/L) above background concentrations at 3 ft above the bottom over a localized area downstream from the underflow. Increases in concentrations by more than 10 mg/L at 3 ft above the bottom are limited to within 1,900 ft of the discharge location. Because the sediment source is at the bottom, the highest concentrations occur at the bottom and concentrations gradually decrease as the sediments disperse vertically in the water column. At 6 ft above the bottom, the maximum concentrations are less than 1 mg/L above background concentrations, and concentrations at higher elevations are negligible. Effects at the water surface from suspended sediments are not anticipated to be detectable (MGA 2012a). Modeled current speeds equal to half of the peak current speed show very low suspended sediment concentrations. The lower current speed causes much lower entrainment of sediment from the underflow into the overlying water column (6 percent of the peak value). Therefore, the project would cause only a very small increase in suspended sediment concentrations for some of the tidal cycle. Additionally, the predicted far-field suspended sediment concentrations from the proposed open water placement are within the range of concentrations experienced during typical conditions.

Figure 4-1: Dispersion Phases of Placement from Pipeline, from Teeter (Thovenot et al. 1992)



The effect of the suspended sediments is negligible on areas outside of the project area. Sediments suspended into the water column will ultimately settle in quiescent areas with low current velocities. Dispersion of the sediments in areas beyond the immediate Calibogue Sound entrance area would be in very low concentrations, and as a result the deposition thickness of these sediments in quiescent areas would be indistinguishable from the deposition caused by ambient sediments in the environment. Based on these results, and given the distance between the placement site and inland areas, there will be no appreciable increased sedimentation in locations further inland. Furthermore, these suspended sediments will not cause appreciable deposition in the vicinity of Calibogue Sound inlet or Barrett Shoals because the high current speeds in the area will keep these fine sediments in suspension.

5. *MONITORING*

Four basic monitoring activities are proposed for pre-dredge and placement, during dredging and placement activities, and post-dredge and placement (for up to 3 years in some instances):

- Onsite dredging and placement inspector
- Bathymetric surveys

- Water quality monitoring
- Benthic monitoring

They are described in more detail below.

5.1 Dredge and Placement Inspector

An inspector will be present during all dredging and placement activities and will ensure and/or document the following:

- Dredging remains within the permitted boundaries. The project design has incorporated a 10-ft buffer from all oyster reefs and emergent marsh, except in one specified area in the mouth of Braddock Creek where limited impact to a small area of marsh vegetation will occur. This impact is described in the Biological Assessment Report (MGA, 2012b). The dredge areas will be marked with polyvinyl chloride (PVC) stakes in areas where oyster reefs may be obscured by water.
- The extent of surface turbidity from dredging activities will be recorded visually.
- The discharge pipeline will be placed over unconsolidated surfaces that will not suffer shading effects and will be suspended in the water above the sea floor except when crossing channels, where it will need to be submerged and anchored (using heavy chains with weights on the ends) so that it does not create a navigation impediment.
- Regular inspection of the entire length of the discharge and transport pipes. Any damages, leakages, anchor problems, debris, or floating/submerge issues will be recorded and the dredge operator immediately notified for repair.
- The location of the discharge pipeline will be recorded each day and during any repositioning of the pipeline discharge.
- Record the estimated dredge area and volume each day.
- Document compliance with permit conditions.
- Any observation outside regulatory compliance or that jeopardizes the project or surrounding environment will be brought to the attention of the appropriate project team member(s) and regulatory agencies for immediate rectification.
- Written reports will be submitted to the USACE each day during the dredging activity.

The following additional measures apply during the month of April, when both manatees and sea turtles may be in the area. These measures will help ensure that there are no impacts to protected species. During the month of April, a dedicated observer will:

- Routinely inspect for manatee and sea turtles. If presence is observed, the dredge operator will be notified and shut down operations if manatee or sea turtles are within 100 yards of either the dredge intake or discharge location. The activity will not resume until the manatee or sea turtle has departed the 100 yard zone for at least 30 minutes.

- A log describing manatee, sea turtles, and marine mammal observations will be maintained and kept at the project site to document sightings and behavioral responses to the project. The applicant agrees that all personnel associated with the project will be advised that there are civil and criminal penalties for harming, harassing or killing manatees or sea turtles, which are protected under the Endangered Species Act of 1973. It is understood that the selected contractor(s) may be held responsible for any manatee or sea turtle harmed, harassed or killed as a result of dredging activities.
- All vessels associated with dredging work will operate at "no wake/idle" speeds at all times while in water where the draft of the vessel provides less than 4-ft clearance from the bottom and that vessels will follow routes of deep water whenever possible.
- The applicant agrees if a manatee or sea turtle is sighted or if there is a collision with a manatee or sea turtle, this sighting or collision shall be reported immediately to the US Army Corps of Engineers (843-329-8044) and the US Fish and Wildlife Service, Charleston Field Office (843-727-4707).
- The applicant agrees that following project completion, a report summarizing the above incidents and sightings will be submitted to the US Fish and Wildlife Service, at 176 Croghan Spur Road, Suite 200, Charleston SC 29407 and the SC Department of Natural Resources, PO Box 12559, Charleston, SC 29422-2559.

5.2 Bathymetric Surveys

Bathymetric surveys will be conducted prior to, during, and following dredging to document the accumulation of sediment during dredging and its rate of dispersion following dredging.

5.2.1 Dredge Areas: Pre- and Post-dredging

For each dredged area, a bathymetric survey, which measures the elevation of the seafloor, will be conducted once before dredging has started and once after dredging activities have ceased (for a total of two surveys per area) with equipment appropriate for the water depths of the dredging sites. Some of these surveys may be able to be combined (i.e. conduct all pre-dredging surveys at once). Interim surveys may also be conducted to confirm project depths and channel locations are being achieved.

5.2.2 Placement Site: Pre- and Post-placement

Bathymetric surveys of the placement site will be completed before and after placement. The surveys will be completed according to the following schedule:

- Once prior to placement
- Post placement after 3 months and then once every 6 months until sediments have completely eroded (the anticipated outcome) or stabilized for a maximum of 3 years

These routine surveys of the placement site will ensure accurate placement within the GPS coordinates of the area and document behavior of the placed material.

5.3 Water Quality

Water quality monitoring will be conducted in the dredged material placement area and other portions of Calibogue Sound prior to, during and following dredging (Figure 5-1). The water quality monitoring will include discrete water sampling and analysis, as well as continuous monitoring instruments. The monitoring plan includes an inland location in mid-Calibogue Sound near the mouth of the Cooper River that is beyond the modeled area of potentially increased turbidity. This location will help determine the accuracy of the affects predicted by the model.

5.3.1 Dredge Placement Area: Pre-dredging

Prior to the commencement of dredging and placement operations, monitoring data will be collected from the proposed placement site and mid-Calibogue Sound, near the mouth of the Cooper River (total of 3 locations). This data will be collected for the entire months of November 2012 and March 2013 by a qualified scientist(s) to provide baseline water quality data. The monitoring will include three elements:

- Vertical profiles of water quality parameters measured with a hand-held probe
- Water sampling and laboratory analysis
- Continuous measurements of water quality variables and tidal currents

The discrete monitoring will include vertical profile measurements with a hand-held instrument at each of the locations shown in Figure 5-1. The profiles will include a minimum of three observations extending from the surface to 3 ft above the bottom and include the following variables:

- Turbidity
- Dissolved oxygen (DO)
- pH
- Temperature
- Salinity

The discrete water sampling for laboratory analysis will be completed at the same times and station locations as the vertical profile monitoring. The water samples will be collected at the surface and 3 ft above the bottom. These water samples will be analyzed in the laboratory for:

- Turbidity
- Total suspended sediments (TSS)
- Salinity

The vertical profiles and the water sampling will be conducted twice in November 2012 and twice in March 2013. The first of these sampling events will occur immediately after the continuous instruments described below are deployed. The second event will occur prior to recovery of the instruments. This will allow for comparison of the discrete sampling data to the continuous instrument data.

The continuous water quality monitoring will include the following variables:

- Turbidity
- Dissolved oxygen (DO)
- pH
- Temperature
- Salinity

The continuous water quality instruments will be deployed at the sea floor for each monitoring location. Each instrument will be anchored on the bottom approximately 3 ft from the sea floor. The instruments will be outfitted with anti-fouling kits (including a wiper and anti-fouling paint or tape on the probes) to reduce biological growth near the instrument sensors.

A current meter will also be deployed at the two identified locations north and south of the placement site. This instrument will be a bottom-mounted Acoustic Doppler Current Profiler (ADCP) that will continuously measure currents throughout the water column. Therefore, this single instrument will provide surface, mid-depth and bottom current measurements near the placement site. It will also monitor wave height, period and direction (both waves and currents can impact turbidity).

These continuous instruments will allow for data collection over full tidal cycles (including spring tide and neap tide ranges). These data will enable future observations to be compared to baseline conditions to evaluate changes over time.

5.3.2 Dredge Placement Area: During dredging

During dredging activities continuous monitoring instruments will be maintained upstream and downstream of the placement site and in mid-Calibogue Sound (total of 3 locations) and analyzed for:

- Turbidity
- Dissolved oxygen (DO)
- pH
- Temperature
- Salinity

Discrete sampling, similar to that described in Section 5.3.1 will be conducted at each maintenance interval for the continuous instruments. The continuous instruments will be checked and cleaned at least monthly, depending on the rate of biological growth on the instruments. If biofouling is problematic (particularly during warmer water conditions), then bi-weekly instrument maintenance will be conducted as needed.

A bottom-mounted ADCP that will continuously measure currents throughout the water column will also be deployed during dredging in the same locations as the pre-dredging data collection (Figure 5-1).

5.3.3 Dredge Placement Area: Post-dredging

After dredging and placement activities have ceased, water sampling and continuous instrument monitoring similar to that described previously will be collected from all three monitoring locations for a period of one month.

Figure 5-1: Proposed Locations for Water Quality Monitoring at Placement Site and Cooper River

5.4 Benthic Habitat Surveys

Benthic habitat surveys will be conducted by a qualified scientific team at the placement site pre-, during, and post-placement to assess the effects of dredged material placement on biological communities, including fisheries, by evaluating the effects on benthic habitat. The following describes the proposed approach to benthic monitoring.

5.4.1 Pre-Placement

The monitoring efforts will strive to repeat the findings used by Barry Vittor & Associates (BVA) in their July 2000 investigation of the site by employing similar methods and materials. The pre, during, and post-placement monitoring will employ multiple bottom trawls and grab sampling in the proposed impact area as well as control areas. Grab samples will be collected using a stainless steel 0.04 meter square Young grab deployed from a boat. The grab sampler will be thoroughly cleaned prior to field sampling and rinsed between stations. The trawl samples will use a 21-inch oyster dredge. It will be towed along the bottom at idle speed for 100 meters. Beginning and ending latitude and longitude will be recorded and mapped on a chart showing the sampling locations. Grab samples are washed through a 0.5 millimeter (mm) sieve to collect the benthic invertebrate fauna and then identified in the field and released. Any specimens not identified in the field will be preserved for later identification in the lab or with the assistance of the Southeast Regional Taxonomic Center (SERTC) in Charleston. Voucher specimens of each organism will be preserved and donated to SERTC.

Sample locations were selected in an effort to capture the effects of the project and to make best use of the available data collected by BVA. BVA grab sampled 7 locations near the proposed placement area (Table 5-1) and conducted trawls in 2 areas. Using the GPS locations from BVA, the project will obtain a grab sample at 5 of the BVA locations, collect grab samples at 3 new locations (including the discharge site and 2 locations near the south side of the placement area) and conduct 3 trawls along the same north to south orientation within the placement area for a total of 11 impact area samples (Figure 5-2).

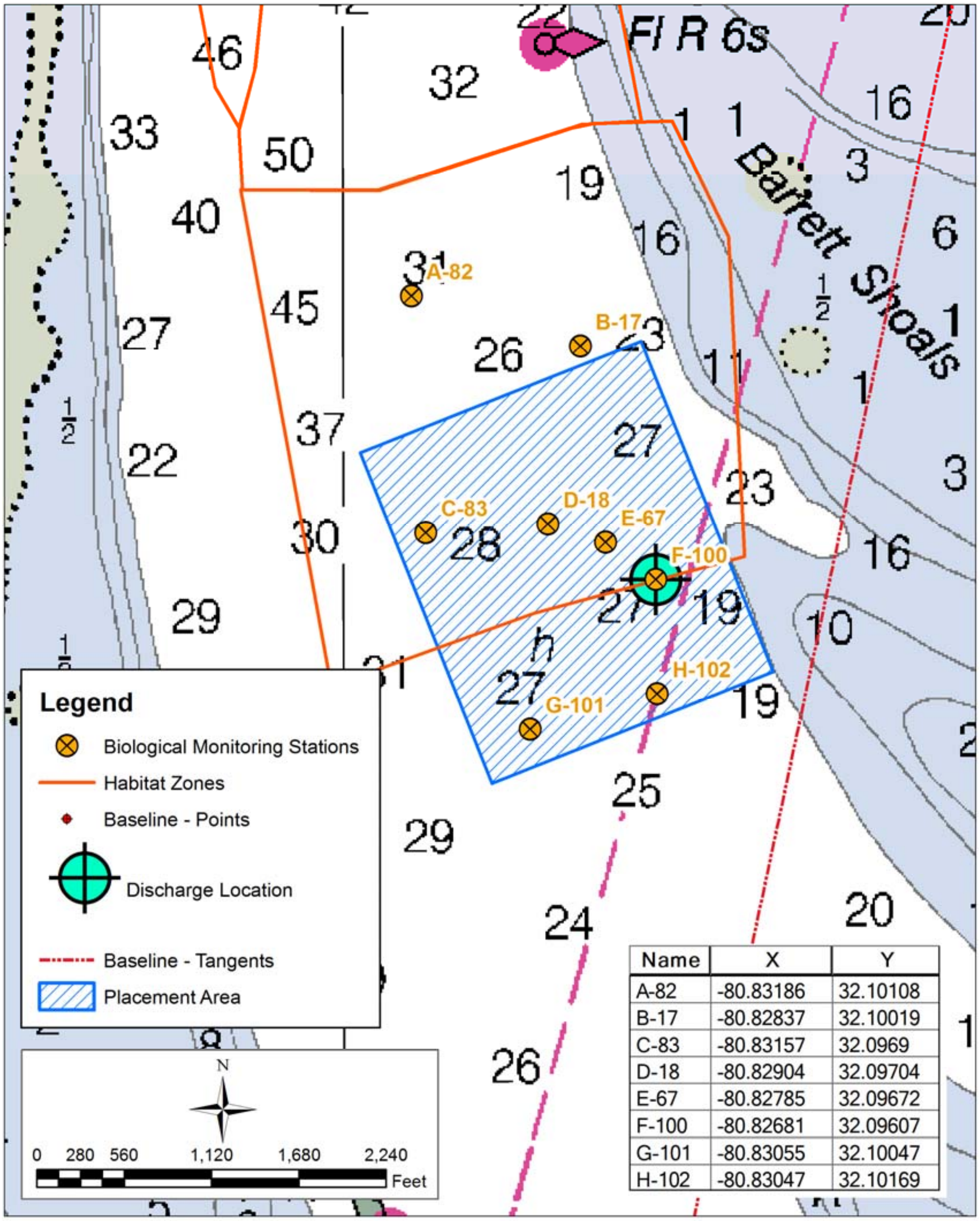
At each of the 7 grab sample locations bottom sediment samples will also be collected for grain size analysis. Bottom grab samples will be collected using a Ponar sampler. At each location 3 bottom grabs will be composited for a laboratory grain size distribution analysis. These sediments will also be tested for organic content and bulk density.

Table 5-1: Monitoring Sites and Methods for Impact Area

BVA Station #	SIDA Label	Method	Latitude	Longitude
7-82	A-82	Grab	32.10108	-80.83186
7-17	B-17	Grab	32.10019	-80.82837
7-83	C-83	Grab	32.09690	-80.83157
7-18	D-18	Grab	32.09704	-80.82904
7-67	E-67	Grab	32.09672	-80.82785
None	F-100	Grab	32.09607	-80.82681
None	G-101	Grab	32.10047	-80.83055
None	H-102	Grab	32.10169	-80.83047
Trawl 6	I-6	Trawl	TBD*	TBD*
Trawl 8	J-8	Trawl	TBD*	TBD*
None	K-7	Trawl	TBD*	TBD*

* TBD (to be determined). The latitude and longitude of the new sampling areas will be reported as they are sampled because they overlap with water quality instrument locations which are yet to be determined.

Figure 5-2: Benthic Monitoring Locations



Name	X	Y
A-82	-80.83186	32.10108
B-17	-80.82837	32.10019
C-83	-80.83157	32.0969
D-18	-80.82904	32.09704
E-67	-80.82785	32.09672
F-100	-80.82681	32.09607
G-101	-80.83055	32.10047
H-102	-80.83047	32.10169

Control areas will be investigated as well, with grab samples collected north of the placement site at 5 BVA-sampled areas and at the 3 sites with continuous water quality monitoring instruments shown in Figure 5-1. Control sites that are repeats of those sampled by BVA are shown in Table 5.2. In addition, 2 trawls will be conducted at the mouth of Calibogue Sound and south of the placement site for a total of 10 control samples. The 11 impact area samples and 10 control samples are expected to provide sufficient data to draw valid scientific conclusions about the effects of the project on the immediate and adjacent benthic communities.

Table 5-2: Location and Method for Control Areas

BVA Station #	SIDA Label	Method	Latitude	Longitude
7-68	N-68	Grab	32.10293	-80.82808
6-77	O-77	Grab	32.10411	-80.83005
6-76	P-76	Grab	32.10461	-80.83205
6-80	Q-80	Grab	32.10432	-80.83473
6-71	R-71	Grab	32.10521	-80.82867
None	S-CR	Grab	TBD*	TBD*
None	T-CS	Grab	TBD*	TBD*
None	U-SP	Grab	TBD*	TBD*
None	V-CS	Trawl	TBD*	TBD*
None	W-SP	Trawl	TBD*	TBD*
7-68	N-68	Grab	32.10293	-80.82808

* TBD (to be determined). The latitude and longitude of the new sampling areas will be reported as they are sampled because they overlap with water quality instrument locations which are yet to be determined.

Monitoring of the authorized placement site will be conducted during the year prior to anticipated placement (between October 2012 and April 2013). All collected species will be identified to the lowest practical identification level (LPIL), which will typically be the species level, and enumerated. If an individual cannot be identified to genus level, a voucher specimen will be preserved for identification at SERTC. Identification will consist of species or genus, and not include measurement, sex, condition, or other parameters.

5.4.2 During Placement

Bottom trawls and grab sampling of the placement site will be conducted once every 3 months after the start of placement until project completion. The same sites as described above will be sampled.

5.4.3 Post-Placement

After all dredging and placement activities have ceased, benthic surveys at the sites described above will be conducted immediately after dredging and then within the same seasons as monitored pre-placement (between October and April). Monitoring will then be conducted once a year during the same seasons until a stable biological structure exists or for a maximum of 3 years. It is not anticipated that the exact same species of organisms will be present in the exact same place following the project. Stable biological structure is defined as containing benthic organisms from the same classes that were there prior to the project at similar levels of abundance.

6. *REPORTING*

Reports for the different monitoring activities described above will be submitted (or made available on an FTP site) to the applicable regulatory and natural resource agencies pre-, during, and post-dredging and placement activities. All monitoring reports will be made available on site during the project and will be maintained by SIDA until all monitoring requirements have been met and completed.

7. REFERENCES

Applied Technology and Management (ATM). 1999. Sampling and Analysis Plan – South Island Dredging Association Long Term Management Strategy. Completed for South Island Dredging Association.

Applied Technology and Management (ATM). 2000. Dredged Material Environmental Effects Evaluation – SIDA LTMS, Calibogue Sound, Hilton Head, SC. Prepared for South Island Dredging Association.

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