

If other NPS areas which use ferryboats for public transportation--such as Cumberland Island National Seashore--are used as examples, then we should expect that soon after scheduled ferryboat service is instituted at Cape Lookout National Seashore, the boats will be filled to capacity on many days during the summer months. Therefore, a ferryboat reservation system may have to be instituted at some future time; but this will be a management decision.

E. General Development

1. Overview

This plan for Cape Lookout National Seashore emphasizes minimum development on the barrier islands. There is no bridge access to the islands, and none is proposed. There are no hotels, motels, or restaurants on the islands, and none are proposed. The islands will remain without improved roads. The private vehicles that were abandoned on the islands will be removed to the extent possible. In general, development will be in accord with the attempt to reestablish a natural condition, to preserve and maintain the diversity of natural habitats and the native flora and fauna, and to allow natural coastal processes to continue undisturbed by man as much as possible. Visitor activities will be based on the characteristics of the resources and in the context of using the islands on their own terms.

Development will occur on Harkers Island and at five locations on the seashore islands. It will be phased in the following order of priority: administrative site on east Harkers Island, Cape Lookout Point area, Shingle Point, North New Drum Inlet, Portsmouth Village, and east Shackleford Banks. (See the General Development Plan map.)

Due to the nature of contracting and construction, and similarities of work to be done at each site, development at various sites will probably overlap. Public ferryboat transportation from east Harkers Island to the new landing point north of the Cape Lookout lighthouse and to east Shackleford Banks will commence after development at these sites is sufficient to accommodate visitor demand.

Because the barrier islands of the seashore are low lying, it is not possible to avoid the 100-year floodplain or coastal high hazard area in locating development. Consequently, only minimal facilities that are expendable are proposed for the islands. At Harkers Island, facilities not requiring a waterfront location or close proximity to the waterfront will be located out of the 100-year floodplain.

The landing points providing access to the seashore islands will be carefully sited. The east Shackleford Banks dock site is along the sandy inlet shoreline, whereas the sites at the Cape Lookout Point area, Shingle Point, North New Drum Inlet, and Portsmouth Village are fringed by saltwater marsh. Where possible, landing points will be located at existing channels to minimize dredging and associated impacts. Where necessary, there will be a boardwalk over the marsh between the dock and firm land.

The development proposed for the national seashore is consistent with the North Carolina Coastal Management Program. Applications for permits from the state and the Corps of Engineers, as required, will be filed after the projects are designed.

In general, the development proposals are energy conserving. For example, all administrative, maintenance, and mainland visitor facilities will be located at a centralized site at east Harkers Island. Structures requiring heating and cooling systems will also be designed for energy efficiency.

Site layout and design of all new facilities, such as buildings, docks, roads, trails, and utilities, will be done during the comprehensive design phase of planning. Similarly, the precise emphasis of interpretation and the design of interpretive facilities will be done at a later date. However, guidelines and suggestions for layout and design are included in this document.

2. Access to the Islands

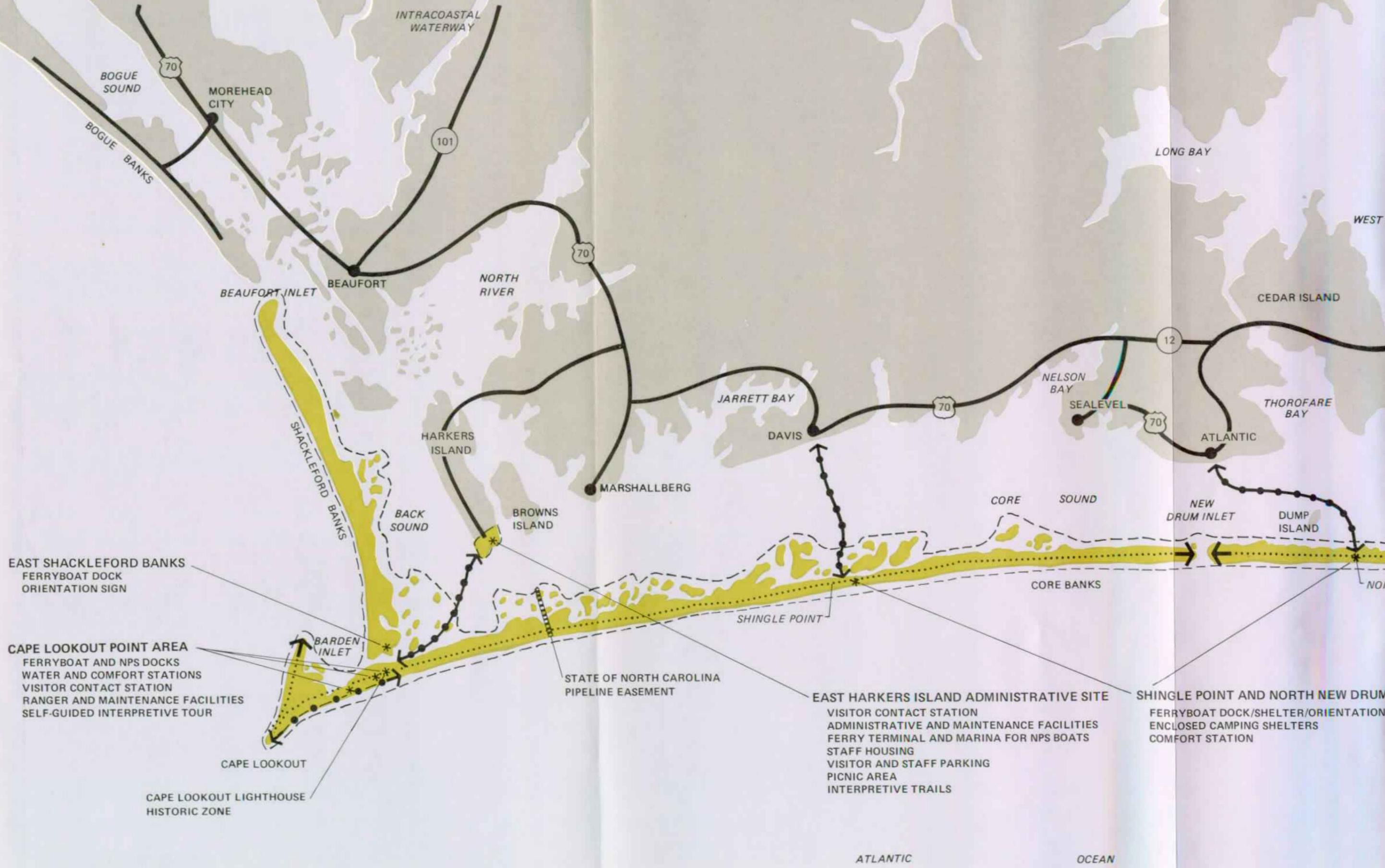
Access to the barrier islands will be by boat, either by public ferry or private boats, as shown on the General Development Plan map. For the ensuing decade, the present type of ferryboats will continue to use existing "natural" channels and will maintain them by "kicking-out." Ferries serving Shackleford Banks and the Cape Lookout Point area will be based at the administrative site (gateway port) on east Harkers Island. Ferry service to Shingle Point will be based at Davis, service to North New Drum Inlet will originate from Atlantic, and another ferry will operate between Ocracoke Village and Portsmouth Village.

Many visitors will continue to arrive by private boat and they may land anywhere that they can gain access. Shallow water prevents landing on much of the sound side of the islands. Private boat landings will be monitored by management to ensure there is no harm to the environment, such as damage to marshes or marine grass beds on submerged lands. If damage is great in some areas, the landing of private boats may be temporarily restricted to allow the resource to recover. There are no docks planned specifically for the use of private boats. However, private boats will be allowed to land at the ferryboat docks for embarking and debarking passengers and their gear as long as they do not interfere with ferryboat services.

3. On-Island Circulation

There will be a public transportation service along approximately 3 miles of the beach from the ferryboat dock near the Cape Lookout lighthouse to Cape Lookout Point. It will connect the boat dock to the lighthouse complex and the ranger station and will stop on demand anywhere along the route to the point.

Official and private vehicles will be permitted to operate only in designated corridors on Core Banks/Portsmouth Island. (See discussion on "Management Zoning, Park Development Zone.") Official vehicles will be allowed to operate on Shackleford Banks only in an emergency.



EAST SHACKLEFORD BANKS
 FERRYBOAT DOCK
 ORIENTATION SIGN

CAPE LOOKOUT POINT AREA
 FERRYBOAT AND NPS DOCKS
 WATER AND COMFORT STATIONS
 VISITOR CONTACT STATION
 RANGER AND MAINTENANCE FACILITIES
 SELF-GUIDED INTERPRETIVE TOUR

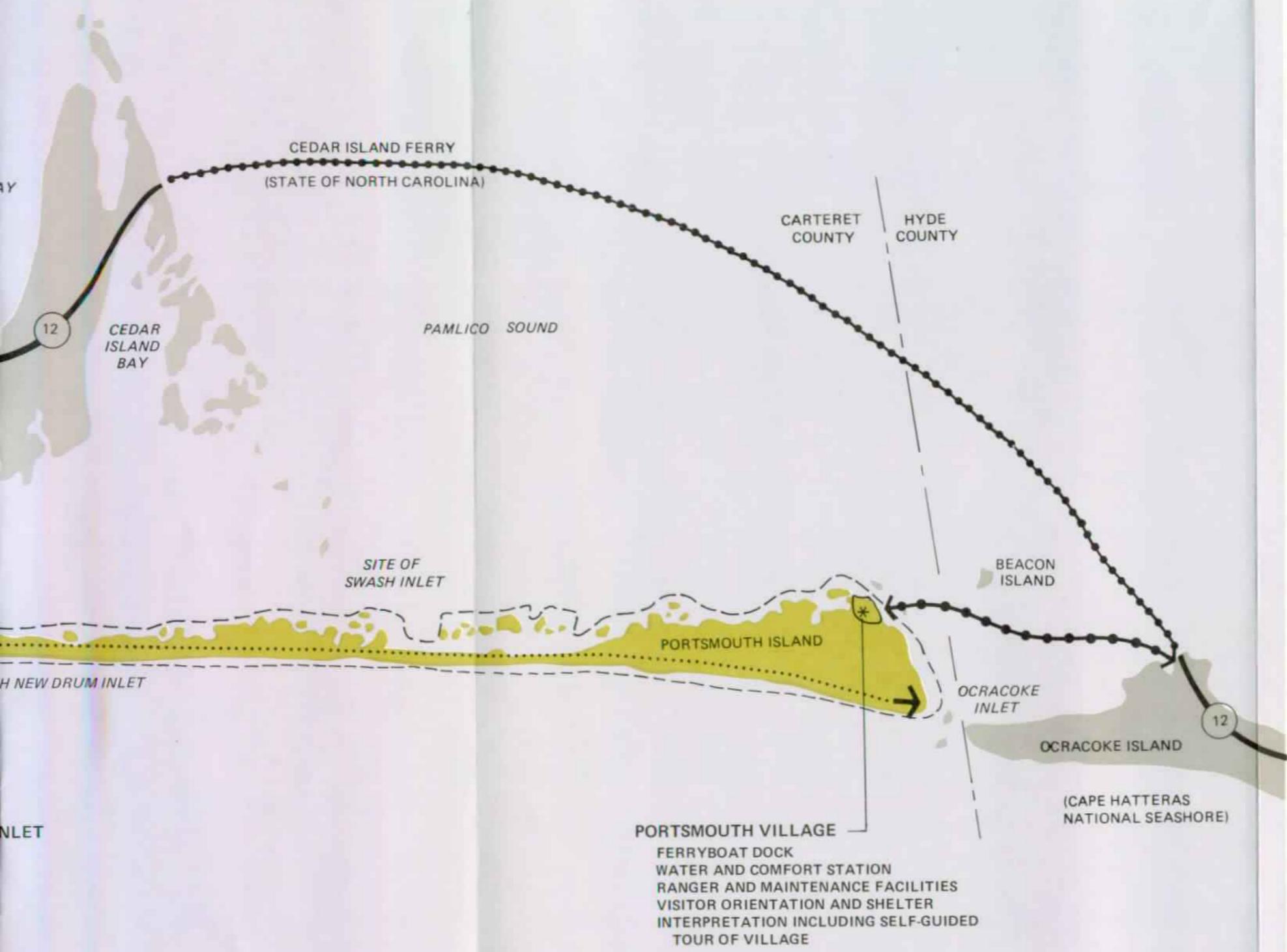
CAPE LOOKOUT LIGHTHOUSE
 HISTORIC ZONE

STATE OF NORTH CAROLINA
 PIPELINE EASEMENT

EAST HARKERS ISLAND ADMINISTRATIVE SITE
 VISITOR CONTACT STATION
 ADMINISTRATIVE AND MAINTENANCE FACILITIES
 FERRY TERMINAL AND MARINA FOR NPS BOATS
 STAFF HOUSING
 VISITOR AND STAFF PARKING
 PICNIC AREA
 INTERPRETIVE TRAILS

SHINGLE POINT AND NORTH NEW DRUM
 FERRYBOAT DOCK/SHELTER/ORIENTATION
 ENCLOSED CAMPING SHELTERS
 COMFORT STATION

ATLANTIC OCEAN



ACCESS — PUBLIC FERRYBOAT & PRIVATE BOAT

ON-ISLAND TRANSPORTATION — PUBLIC BETWEEN CAPE LOOKOUT LIGHTHOUSE AND CAPE POINT; PRIVATE ENTIRE LENGTH OF CORE BANKS/PORTSMOUTH ISLAND

DEVELOPMENT — FERRYBOAT DOCKS AT FIVE LANDING POINTS AND LIMITED FACILITIES FOR VISITOR USE, INCLUDING SHELTERS, SIGNS, AND COMFORT STATIONS AT FOUR LANDINGS. RANGER AND MAINTENANCE OPERATIONS AT CAPE LOOKOUT POINT AREA AND PORTSMOUTH VILLAGE. ADMINISTRATIVE SITE DEVELOPMENT AT HARKERS ISLAND. FOR ADDITIONAL DETAIL REFER TO DEVELOPMENT CONCEPT PLAN MAPS FOR EAST HARKERS ISLAND, CAPE LOOKOUT POINT AREA, AND PORTSMOUTH VILLAGE.

INTERPRETATION — MAJOR INTERPRETATION AT HARKERS ISLAND VISITOR CONTACT STATION. ON-ISLAND INTERPRETATION RANGES FROM SELF-DISCOVERY (NO FACILITIES) TO MINIMAL FACILITIES AND PROGRAMS (INTERPRETIVE SIGNS AND GUIDED TOURS) AT CAPE LOOKOUT POINT AREA AND PORTSMOUTH VILLAGE.

- FERRYBOAT ROUTES
- PUBLIC TRANSPORTATION
- PRIVATE TRANSPORTATION
- NATIONAL SEASHORE BOUNDARY, ENCLOSING 28,400 ACRES, INCLUDING WATER AND SOUND-SIDE ISLANDS



GENERAL DEVELOPMENT PLAN
CAPE LOOKOUT NATIONAL SEASHORE / NORTH CAROLINA
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

623 | 20037D
DSC | Oct 82

ON MICROFILM

Based on the existing resource studies of vehicle use and the results of new studies in the future, management will identify routes and operating conditions that take into consideration the safety of other users, that will minimize damage to natural resources, and that will protect nesting birds and sea turtles from harm. Vehicle operators will be informed as to where they can and cannot drive. Authority to direct vehicle traffic away from bird and turtle nesting areas is contained in section 4 of PL 89-366 and in title 36 of the Code of Federal Regulations.

On many barrier islands, such as Assateague Island in Virginia/Maryland, heavy foot traffic on the foredunes, which is damaging to the dunes, is controlled by such methods as directing pedestrians to use boardwalks over the dunes. Along most of Core and Shackleford banks, the necessity for boardwalks should be slight due to the expected low visitor numbers and types of visitor use, plus the distribution of sand dunes. People will be encouraged to walk between the dunes rather than over them. Careful monitoring of pedestrian traffic on and around dunes will be necessary. If significant alteration of or damage to the environment occurs, such traffic will be relocated.

The other ecological zone most vulnerable to foot and vehicular traffic is the marsh. (Refer to the graphic, Interpretation of Ecosystems/Suitability for Recreational Use.) People will be discouraged from walking through the marsh, because that would damage marsh grasses and infauna and compact marsh peat. Vehicular traffic will be prohibited.

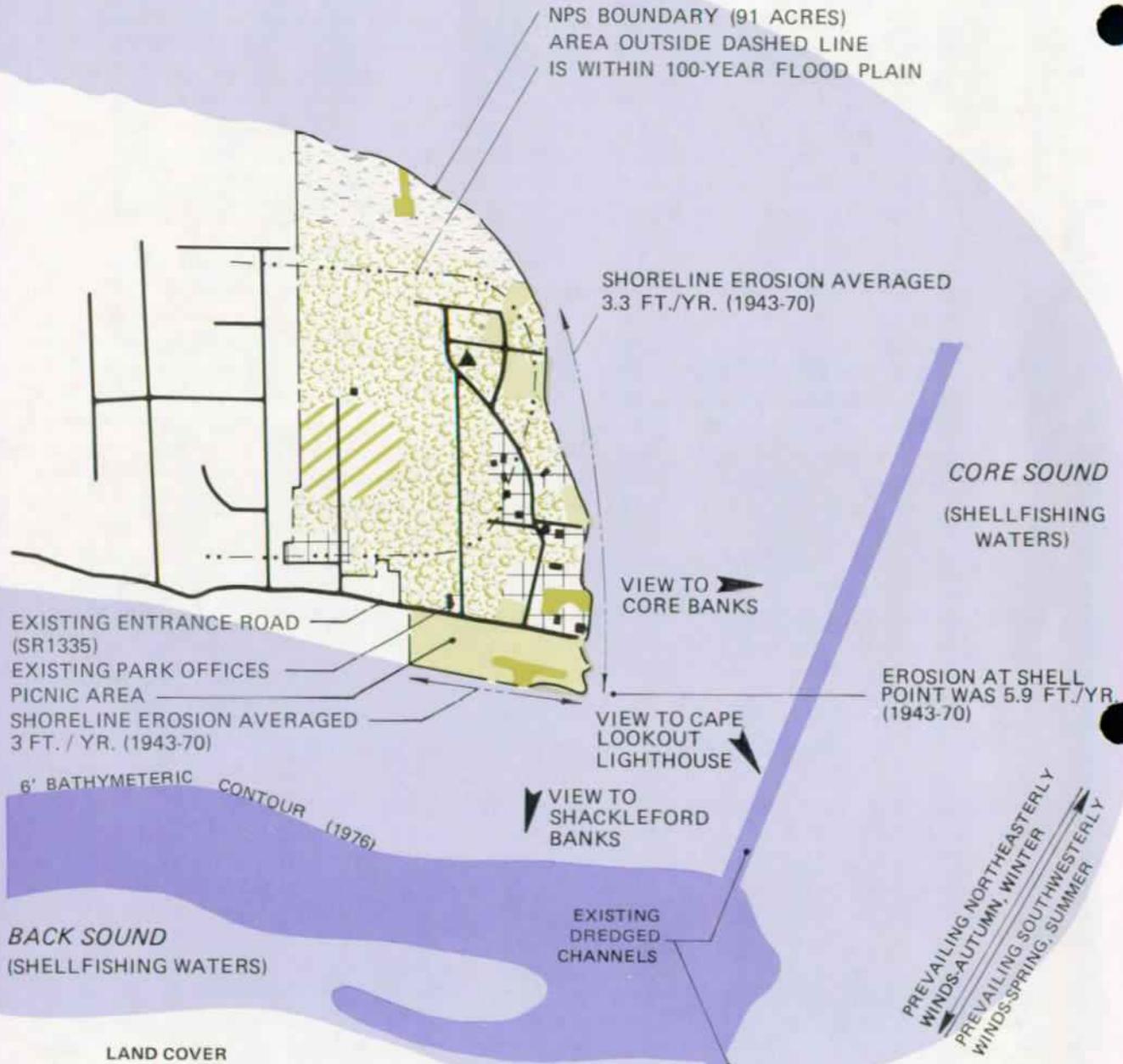
4. Administrative Site on East Harkers Island

Existing administrative facilities for Cape Lookout National Seashore are located in an office building in downtown Beaufort. Existing maintenance facilities are also located at Beaufort. A trailer for visitor contact and ranger services is now at the NPS east Harkers Island site. NPS maintenance and patrol boats are currently docked in a private marina just west of this site.

Subsection 2(e) of the legislation authorizing establishment of Cape Lookout National Seashore (PL 89-366) states that lands at or near Beaufort, North Carolina, not to exceed 100 acres, are to be acquired as an administrative site. The site that was selected, less than a 20-mile drive from Beaufort, is shown on a map referenced in section 406(1) of the amended legislation (PL 93-477). (These laws are printed in appendix C.) Since 1974, when the law was passed, the 91 acres for the administrative site have been acquired at the east end of Harkers Island. Because of public concern about the location of this site, the NPS reevaluated it as part of the development of this plan and reaffirmed its earlier decision as approved by the Congress. The discussion is in appendix A of the Final Environmental Impact Statement. (See the graphics for east Harkers Island, Site Analysis/Existing Conditions and Development Concept Plan.)

All new development and the obliteration of existing roads and facilities will be done according to a comprehensive design of the entire administrative site. NPS standards for site planning, building design, and environmental considerations will be followed. For example,

EASTMOUTH BAY

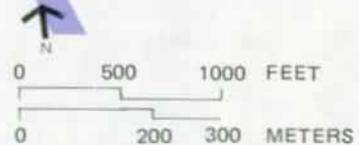


- LAND COVER**
- Predominantly Loblolly Pine Forest
 - Cleared Area with Scattered Trees
 - Fresh-Water Marsh
 - Salt Water Marsh
 - Salt-Water Basin
 - Development
 - Building/Trailer
 - Existing Vehicle Route
 - Water Depth in Excess of 6'

The site is relatively flat, with the highest point of elevation at 11'. ▲

The site is comprised of sandy soils, which present severe to very severe limitations for development.

There are no known significant archeological or historic sites, nor endangered or threatened plant or animal species.



**SITE ANALYSIS /
EXISTING CONDITIONS
EAST HARKERS ISLAND
ADMINISTRATIVE SITE**

CAPE LOOKOUT NATIONAL SEASHORE
NORTH CAROLINA

United States Department of the Interior
National Park Service

623 | 20034C
DSC | Oct 82

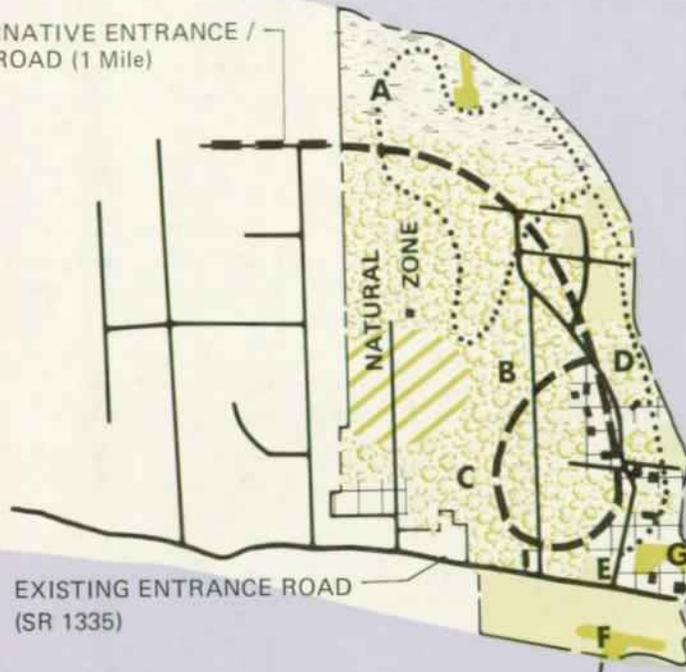
ON MICROFILM

EASTMOUTH BAY

DEVELOPMENT ZONES

- A** INTERPRETIVE TRAIL (Design for Handicapped, 1 Mile)
- B** EMPLOYEE HOUSING (1 ea. single family unit, 2 ea. four-plexes)
PARK OFFICES (2,500 Sq. Ft.)
- C** MAINTENANCE FACILITIES (3,000 Sq. Ft.)
STAFF PARKING (20 Spaces)
- D** PICNIC AREA (25 Sites, 1 Comfort Station, Parking – Design for Handicapped)
VISITOR CONTACT STATION (2,500 Sq. Ft.)
- E** VISITOR PARKING (80 Cars + 20 Oversized)
PEDESTRIAN AREA CONNECTING PARKING WITH VISITOR CONTACT STATION & MARINA
- F** MARINA FOR FERRY & MAINTENANCE BOATS
- G** OBLITERATE EXISTING BOAT BASIN

ALTERNATIVE ENTRANCE / LOOP ROAD (1 Mile)



CORE SOUND

EXISTING ENTRANCE ROAD (SR 1335)

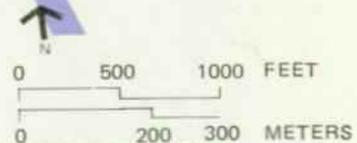
6' BATHYMETRIC CONTOUR (1976)

BACK SOUND

PASSENGER FERRYBOAT TO CAPE LOOKOUT POINT AREA AND EAST SHACKLEFORD BANKS (3.3 Miles)

LAND COVER

- Predominantly Loblolly Pine Forest
- Cleared Area with Scattered Trees
- Fresh-Water Marsh
- Salt Water Marsh
- Salt-Water Basin
- Development
- Building/Trailer
- Existing Vehicle Route
- Water Depth in Excess of 6'



DEVELOPMENT CONCEPT PLAN

EAST HARKERS ISLAND ADMINISTRATIVE SITE

CAPE LOOKOUT NATIONAL SEASHORE
NORTH CAROLINA

United States Department of the Interior
National Park Service

623 | 20035D
DSC | Oct 82

ON MICROFILM

site planning will take into account the existing forest of live oaks and loblolly pines. The forest will be preserved as a buffer zone to separate NPS development from Harkers Island village development.

The site will contain a new 2,500-square-foot office building with parking for 20 vehicles; a new 2,500-square-foot visitor contact station, including space for interpretation and restrooms, plus adjacent parking for 100 vehicles; a new 3,000-square-foot building for maintenance facilities, with a 2,000-square-foot paved area; a marina for passenger ferryboats and maintenance boats; a 25-site picnic area, including a comfort station with flush toilets and adjacent parking; a one-mile-long paved interpretive trail (elevated boardwalk over marshes); and staff living quarters. Housing, which will consist of one single family unit and two four-plexes, will be provided in accordance with Bureau of the Budget circulars A-18 (10/18/57) and A-45 (10/31/64). Government housing is required on the site for reasons of security and because housing for seasonal employees is nearly impossible to find on Harkers Island. Until new buildings are constructed for the facilities, existing structures will be used where possible. However, these structures are substandard and unsuitable for long-term use by the NPS. New structures will be built to applicable standards.

The interpretive trail will include a variety of ecological zones such as pine forest, freshwater and saltwater marshes, and shoreline. The trail will be accessible from the visitor contact station and the picnic area, and like all other facilities, it will be designed to accommodate the handicapped.

The eastern shoreline of the administrative site has been eroding in excess of 3 feet per year. (See the graphic, Site Analysis/Existing Conditions for East Harkers Island). This fact must be considered in the comprehensive design stage of planning. It is especially important in laying out picnic sites and locating the contact station. These developments in particular should be near the shore to take advantage of views to Core Banks and Shackelford Banks, and to draw visitors to the interesting land/water interface.

The most severe erosion is occurring at the southeast tip of Harkers Island next to a former marina and near the site of the proposed ferryboat marina. A separate study should be done to determine the feasibility, desirability, and alternative methods of placing engineering structures along the shoreline to protect the marina basin. The results of this study will affect the siting and design of the proposed marina.

For the foreseeable future, SR 1335 will provide visitor access to the east Harkers Island administrative site. However, the NPS will explore with appropriate state and local officials the desirability and feasibility of an alternative access road north of SR 1335.

The boat basin on the eastern shore of Harkers Island will be obliterated. This should be done in conjunction with the construction of the new marina to reduce costs. The boat basin is a logical place to deposit dredge spoil when the new ferryboat marina is constructed.

Water and electricity for the administrative site will be provided by the local utility companies--Harkers Island Water and Sewage Corporation and Harkers Island Electric Membership Corporation, respectively. Electric power lines and an 8-inch-diameter water pipe now enter the site along SR 1335. All telephone and utility lines will be placed underground wherever possible.

Harkers Island does not have a municipal sewage disposal system but is exploring ways and means of developing one. If the municipal system is built, the NPS will probably connect to it. Meanwhile, if new NPS development requires a sewage disposal system prior to that time, it will plan on developing its own for the immediate future. One method is to install individual septic tank/leaching fields for four development sites: park offices/maintenance area, visitor contact station, picnic area with a comfort station, and housing. A more expensive alternative is to centralize sewage disposal at one location within the administrative site, using a method such as activated sludge treatment and spray irrigation. This alternative could require about 1 acre of land, and the facility would be located near the maintenance shop. There is a good aquiclude of silty sandy clay between 25 and 60 feet below the surface of the ground. Solid waste will be removed by a private contractor, to be disposed of in accordance with federal, state, and local regulations.

All NPS maintenance boats and ferries to Shackleford Banks and Cape Lookout Point will originate from east Harkers Island. To accommodate these craft, approximately 700 feet of maintenance dredging from the marina to the main channel in Back Sound may be required.

5. Seashore in General

Initially, there will be no designated campground on the islands. Camping will be allowed along the entire length of the national seashore in environmentally appropriate zones, such as grasslands and scattered dune fields. (See the graphic, Interpretation of Cape Lookout Ecosystems/Suitability for Recreational Use.) However, portable, self-contained comfort stations will be placed at suitable locations where sufficient density of campers or boaters warrants their use.

All abandoned vehicles, structures, and discarded objects will be removed from the seashore wherever feasible. Removal is underway and will continue until complete. Private use of some structures is administered under 25-year leases or life estates. Guidelines for removal or use of structures on Shackleford Banks will be applied when they are acquired by the United States.

The design and construction of all future NPS and concessioner facilities will be compatible with the aesthetics of the barrier-island environment and the harshness of the coastal climate. They will be constructed with materials and utility equipment resistant to flood damage, and with anchorage to protect them from flotation, collapse, or lateral movement. Sewage disposal systems will be designed to avoid discharges into flood waters. Wherever feasible, water supply systems will also be designed to prevent infiltration of flood waters. The quality

of drinking water supplied on the seashore islands and at Harkers Island will be in compliance with all national primary drinking water regulations, in addition to the applicable state regulations.

No effluent from the sewage systems will be disposed of into the sound waters (Class SA for shellfishing). Sewage disposal systems that will be considered at the seashore include (1) a septic tank with or without an elevated sand mound leaching field--the choice depends on the depth of the freshwater aquifer; (2) pit toilets with pump-out holding tanks; and (3) chemical-type toilets with circulation/pump-out capabilities. The first two types would allow for flush toilets and require water and power. The chemical toilet (type 3) can be operated by foot power. The septic tank/leaching field appears to be most favorable.

Electrical power will be provided on site for development facilities in the Cape Lookout Point area and at Portsmouth Village. The power units might consist of fossil-fuel-driven electric generators, solar photo-voltaic systems, or windmills with storage tanks.

NPS personnel will conduct scheduled pickups of trash in heavy-use areas. All backcountry users, whether hiking or using vehicles, will be expected to carry out their trash. Concessioners are required to remove all trash to the mainland. Trash will then be disposed of in a manner that will conform to federal, state, and local regulations.

6. Development on the Seashore Islands

a. Cape Lookout Point Area

Visitors arriving by ferryboat will disembark at a new dock on the sound shoreline about 1 mile north of the lighthouse. (A dock was built here years ago.) Some dredging might be required for ferry access. (See the Cape Lookout Point maps, Site Analysis/Existing Conditions and Development Concept Plan.) A boardwalk from the boat dock will be built over approximately 400 feet of marsh fringing the shore. Facilities here will include visitor orientation, a simple shelter for protection from rain and sun, drinking water, and a comfort station with flush toilets.

Official boats will continue to land at the NPS boat dock about a mile south of the lighthouse. Facilities south of the lighthouse will include a visitor contact station (manned in season, unmanned out of season) with water and public comfort station, a ranger station, NPS living quarters, a maintenance facility, and garage space. These facilities will be housed as much as possible in existing buildings.

A self-guided interpretive tour of the lighthouse complex will be considered. Site improvements may include boardwalks on the sand dunes where necessary to channelize pedestrian traffic. The comfort station now located in a structure near the lighthouse will be removed, and a new toilet facility will be located elsewhere. Adaptive use of the keeper's quarters will be considered for this purpose. Water will be obtained from a drilled well, and it may have to be treated to make it potable.

The Cape Lookout Point area is expected to receive more ferryboat visitors than any other landing place on the barrier islands because most of the recreational pursuits will originate from here. At the ferryboat dock, visitors will be able to board the on-island transportation system, which will take them to Cape Lookout Point, the lighthouse complex, the ranger station, and return. This area will also be used by people who have driven there from Shingle Point.

b. Shackleford Banks

The landing point on Shackleford Banks will be located at the east end on the Barden Inlet shoreline. No dredging will be required. There will be a ferryboat dock and an orientation sign.

The orientation sign will contain a map, information and suggestions for backcountry hikers and backpackers, and the ferryboat schedule. Most backpackers are expected to spend at least one night on Shackleford Banks. They will carry in their own water.

c. Portsmouth Village

The former Coast Guard station is the proposed landing place at Portsmouth Village for passenger ferries arriving from Ocracoke Village and for NPS maintenance boats. A study of initial and future maintenance dredging requirements is necessary to assess the feasibility of this location. (See the Portsmouth Village maps, Site Analysis/Existing Conditions and Development Concept Plan.) A ferryboat dock will be built and near it there will be an orientation sign and a shelter for visitors waiting to depart. Toilets will also be provided.

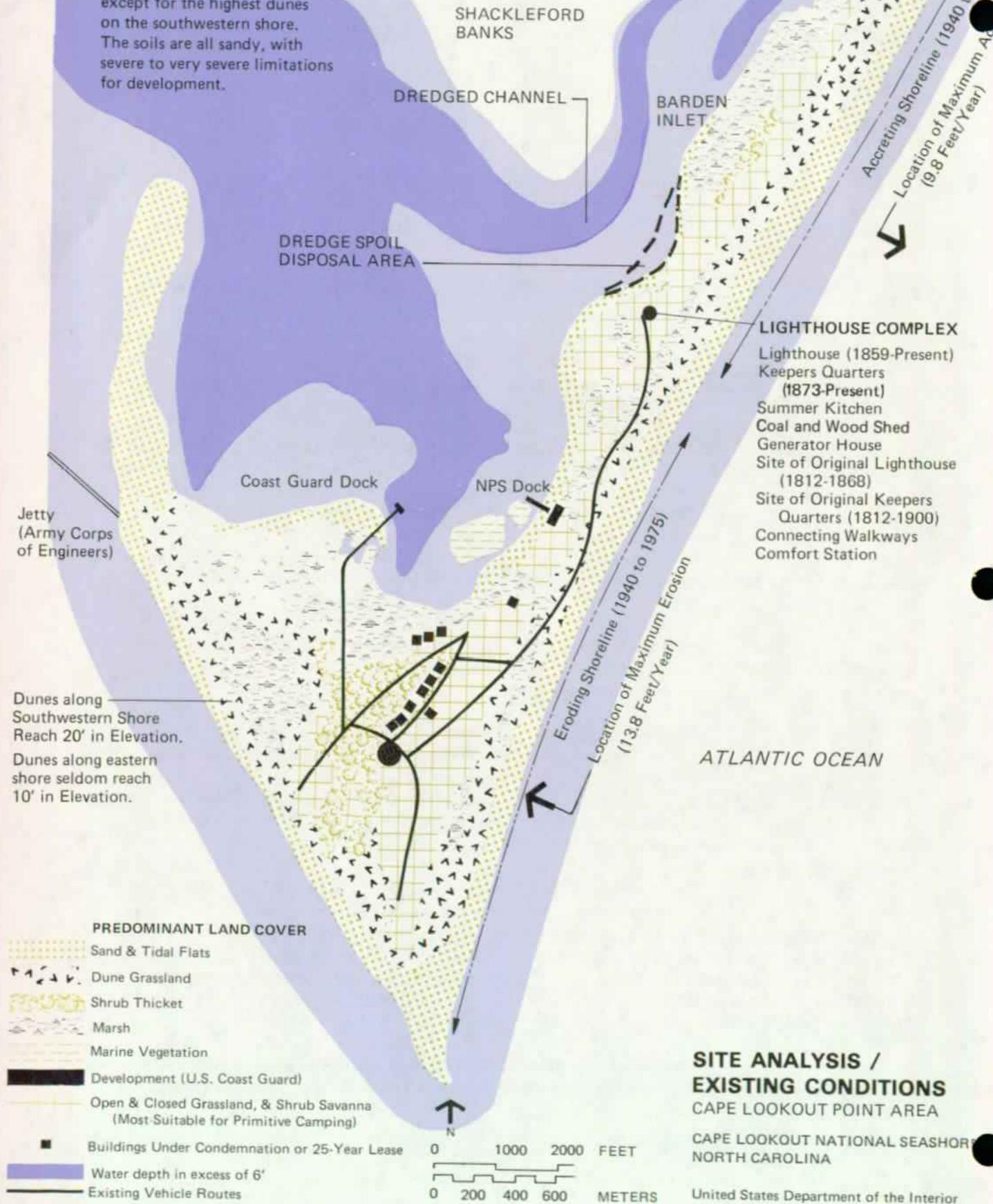
Development proposed for the village will be oriented towards preserving the 250-acre historic district and providing a worthwhile visitor experience. Self-guided tours will help visitors to understand the history of the village.

Some existing buildings will be adapted for use, pending a cultural resources management plan and historic resources reports. Facilities will include a ranger station, staff housing, interpretive exhibits, public comfort station, and a maintenance building. The latter will be of low profile and will be designed and sited so as to minimize visual intrusion. Water will be obtained from a drilled well and treated to make it potable.

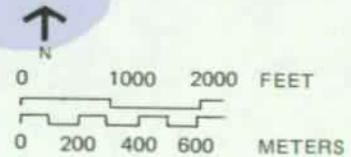
Development at Portsmouth will serve a limited number of day users visiting the village and will provide water supply for them and others who are heading to the ocean beach and south towards New Drum Inlet. The integrity of the historic village will be retained by having visitors park their vehicles in a peripheral area while they explore the village on foot.

A small air field in Portsmouth Village, designated as a developed zone within the historic district, will be maintained by the NPS.

NOTE: The entire site is within the 100-year flood plain and coastal high hazard area, except for the highest dunes on the southwestern shore. The soils are all sandy, with severe to very severe limitations for development.



- PREDOMINANT LAND COVER**
- Sand & Tidal Flats
 - Dune Grassland
 - Shrub Thicket
 - Marsh
 - Marine Vegetation
 - Development (U.S. Coast Guard)
 - Open & Closed Grassland, & Shrub Savanna (Most-Suitable for Primitive Camping)
 - Buildings Under Condemnation or 25-Year Lease
 - Water depth in excess of 6'
 - Existing Vehicle Routes



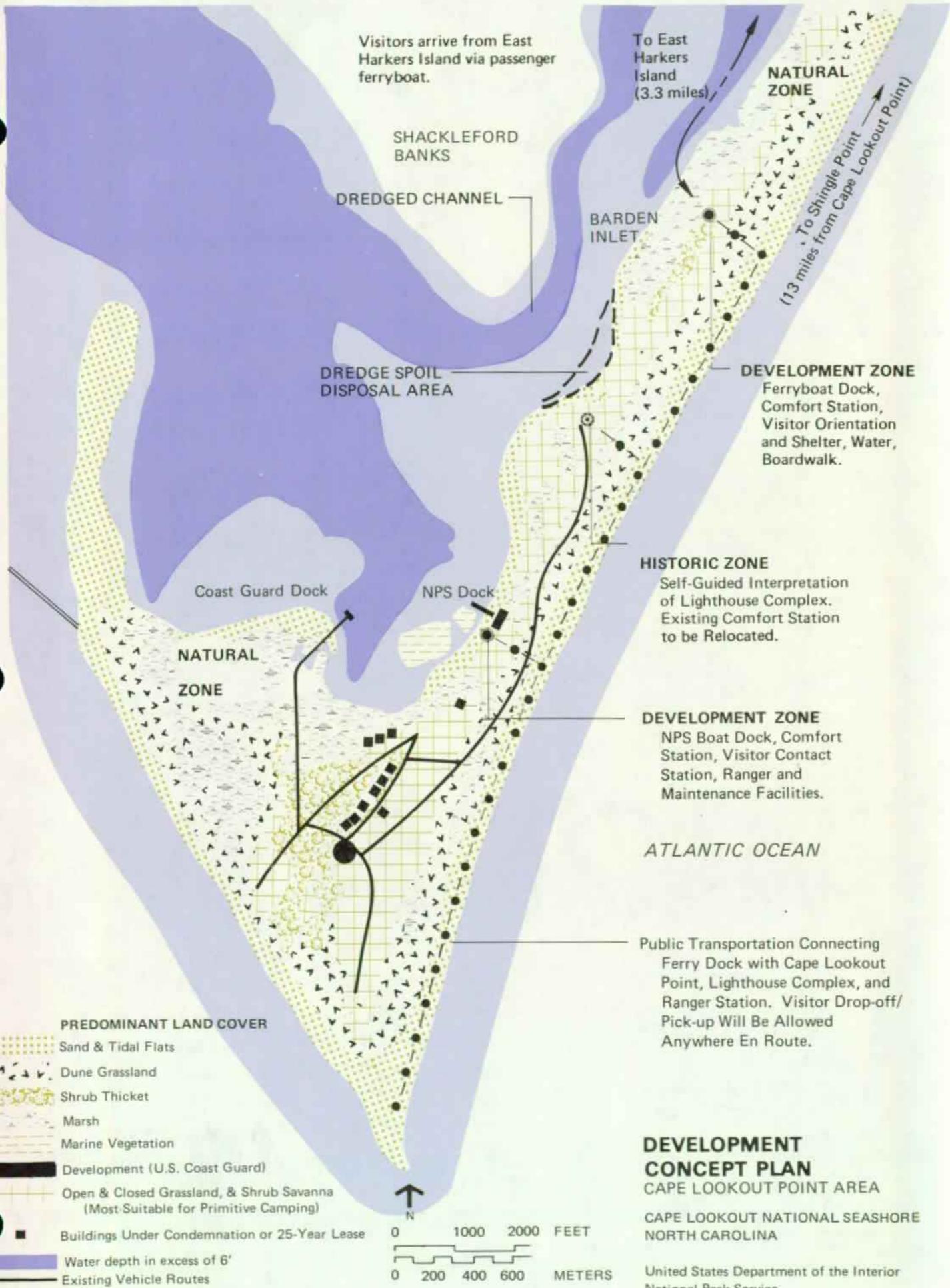
SITE ANALYSIS / EXISTING CONDITIONS
 CAPE LOOKOUT POINT AREA

CAPE LOOKOUT NATIONAL SEASHORE
 NORTH CAROLINA

United States Department of the Interior
 National Park Service

623 | 20026B
 DSC | Oct 82

ON MICROFILM



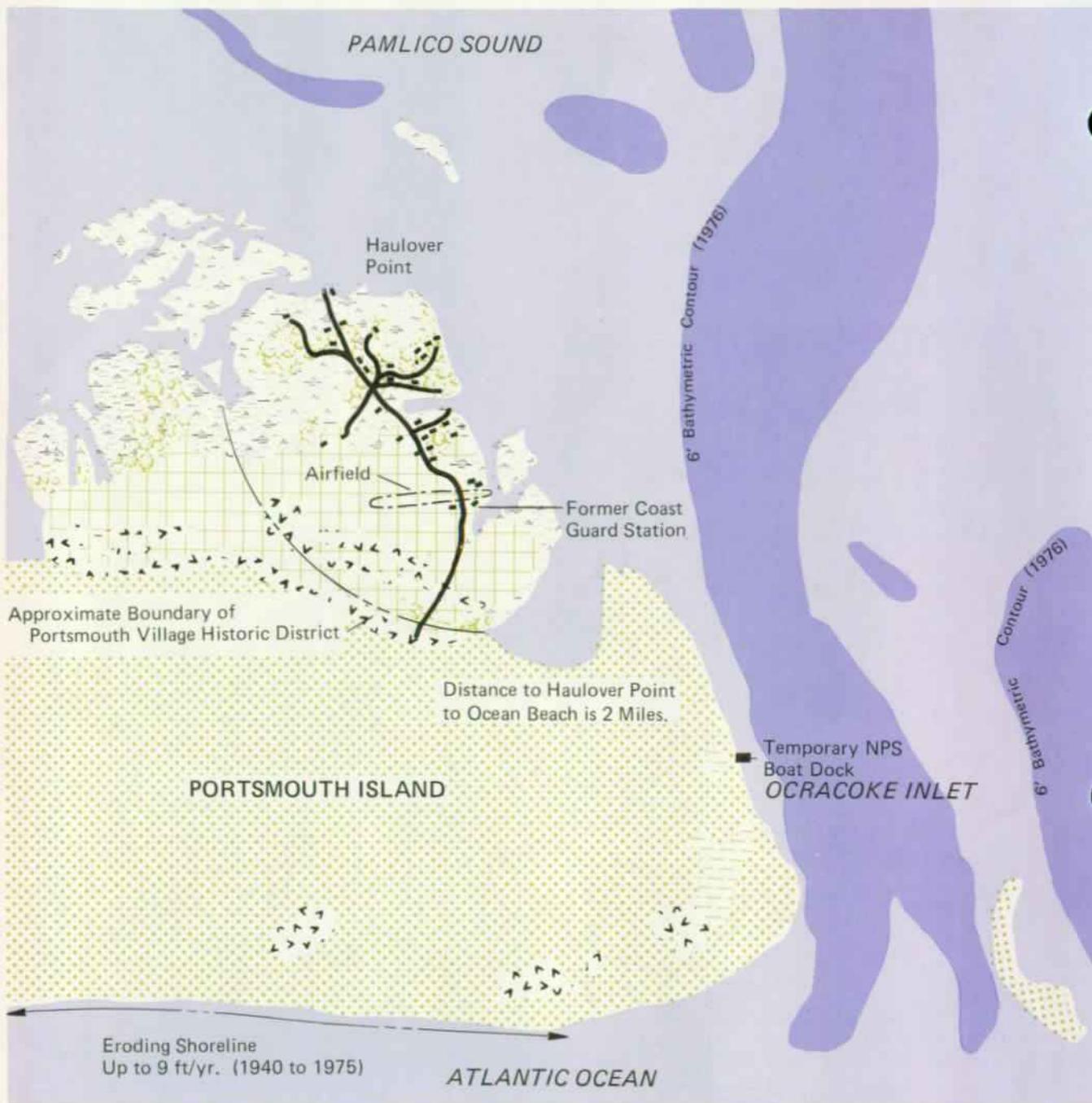
DEVELOPMENT CONCEPT PLAN
CAPE LOOKOUT POINT AREA

CAPE LOOKOUT NATIONAL SEASHORE
NORTH CAROLINA

United States Department of the Interior
National Park Service

623 | 20027D
DSC | Oct 82

ON MICROFILM



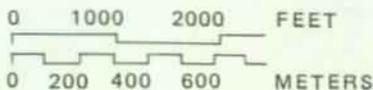
LAND COVER

- Sand & Tidal Flats
- Dune Grassland
- Open & Closed Grassland, & Shrub Savanna
- Shrub Thicket
- Marsh
- Water
- Existing Vehicle Routes
- Existing Buildings
- Water depth in excess of 6'

The entire site is within the 100-year flood plain, and coastal high hazard area.

The highest point of elevation is 8 feet.

The entire site is comprised of sandy soils, which present severe to very severe limitations for development.



SITE ANALYSIS / EXISTING CONDITIONS

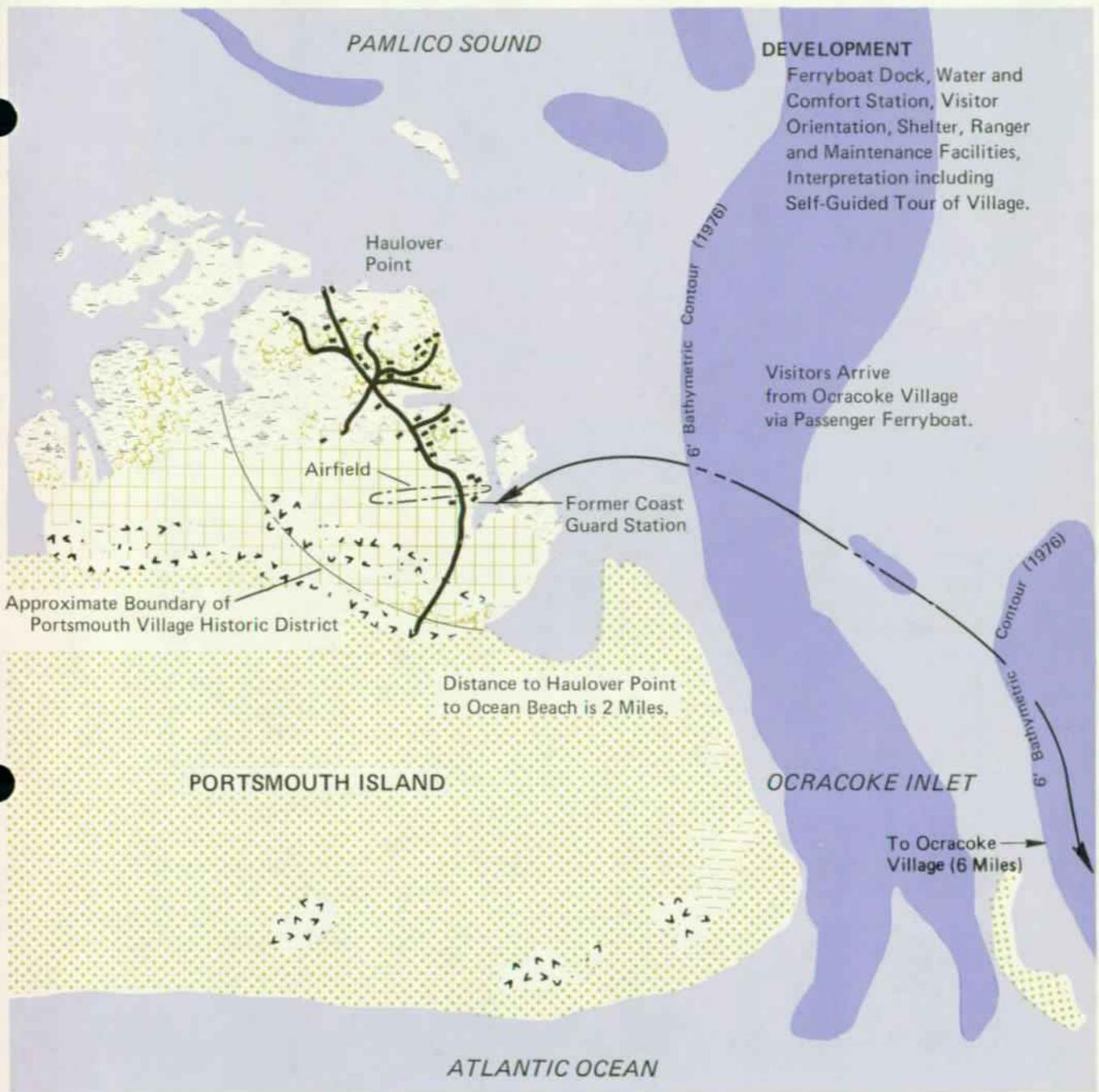
PORTSMOUTH VILLAGE

CAPE LOOKOUT NATIONAL SEASHORE
NORTH CAROLINA

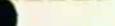
United States Department of the Interior
National Park Service

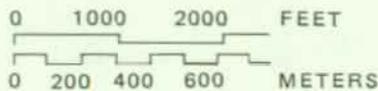
623 | 20032C
DSC | Oct 82

ON MICROFILM



LAND COVER

-  Sand & Tidal Flats
-  Dune Grassland
-  Open & Closed Grassland, & Shrub Savanna
-  Shrub Thicket
-  Marsh
-  Water
-  Existing Vehicle Routes
-  Existing Buildings
-  Water depth in excess of 6'



**DEVELOPMENT
 CONCEPT PLAN**

PORTSMOUTH VILLAGE

CAPE LOOKOUT NATIONAL SEASHORE
 NORTH CAROLINA

United States Department of the Interior
 National Park Service

623 | 20033C
 DSC | DEC 81

ON MICROFILM

d. Shingle Point

The landing place at Shingle Point on Core Banks will be served from the mainland village of Davis. Shallow-draft ferryboats, like those used presently, will follow "natural" channels across Core Sound. They transport passengers and can also carry one or two vehicles per trip. Whenever the turning basin at Shingle Point silts in, the NPS will undertake maintenance dredging after securing the necessary permits in conformance with the state's Coastal Management Program and under the U.S. Army Corps of Engineers' section 10/404 regulations.

All structures comprising the existing fish camps will be removed. They are unsightly and do not meet minimal health and safety standards.

At a site in the Shingle Point vicinity, a new camp will be built, and it will be served by a ferryboat dock. A concessioner will continue to operate the ferryboat and will charge NPS-approved rates to those who occupy the new enclosed camping shelters. They are intended for overnight use, affording protection from the elements and from biting insects. Their design and the materials used in their construction will be compatible with the barrier-island environment. Twenty camping shelters will be constructed to accommodate a total of 80 persons. The floors of the shelters will be about 3 feet above ground, on pilings, to withstand normal flooding. Although they will be sturdy, they will be of low-cost construction, and only minimal furnishings will be provided to minimize loss in case of storm damage or destruction.

A central comfort station with flush toilets will be provided using groundwater from existing wells. Potable water will be provided for the public if Public Health Service standards can be met economically. There will be an approved sewage disposal system. The NPS Public Health Service consultant will approve all water and sewage systems to ensure compliance with applicable federal and state laws and regulations.

A dockside bus-stop-type shelter will provide protection from inclement weather for daytime visitors. The central comfort station will serve both daytime and overnight visitors.

Visitors entering the national seashore at Shingle Point will continue to have access by foot or their own motorized vehicles to all of Core Banks from New Drum Inlet south to Cape Lookout Point.

e. North New Drum Inlet

Shallow-draft ferryboats carry passengers and from one to three vehicles per trip across Core Sound from the village of Atlantic on the mainland to North New Drum Inlet. They also follow "natural" channels, but the island turning basin will probably require periodic dredging. The existing fish camp cabins will be replaced with 20 of the same type of camping shelters previously described for Shingle Point. Water and sanitation requirements are also similar, as is exposure to storm hazards. A concessioner will rent the new camping shelters.

As at Shingle Point, a dockside bus-stop-type shelter will be provided for daytime visitors.

North New Drum Inlet is the entry point for visitors with vehicles and for pedestrians desiring to use north Core Banks and Portsmouth Island.

7. Dredging Requirements

The old marina on the south shore of the Harkers Island administrative site will probably become the NPS ferryboat and maintenance boat marina. (This will be confirmed following a proposed separate study.) A channel connecting this marina to the deep water ship channel in Back Sound would be used. Both the marina and the channel have silted in and may have to be dredged out as part of the administrative site development. When these improvements are designed, the data required to apply for a section 10/404 permit will be available, including means of disposing of dredge spoil materials.

Every four to five years, it may become necessary to dredge the ferryboat turning basins at Cape Lookout Point, Shingle Point, North New Drum Inlet, and Portsmouth Village. The extent of dredging and recommended placement of dredge spoil material will all be included in the permit application.

Ferryboats follow the "natural" channels across Core Sound and Ocracoke Inlet they have been using for decades. Depth has been maintained by propeller wash ("kicking-out"), and this practice will continue.