LOCAL COMPREHENSIVE BEACH MANANGEMENT PLAN

TOWN OF SULLIVAN'S ISLAND

MAY 1992

Prepared for:

TOWN OF SULLIVAN'S ISLAND

Submitted by:

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SECTION 1

BACKGROUND AND SUPPORTING DATA

SECTION 1. BACKGROUND AND SUPPORTING DATA

1.1 Physical Description and Inventory of Shoreline Data

1.1.1 Physical Setting

Sullivan's Island is a four mile long barrier island bounded on the north by Breach Inlet and Isle of Palms, and on the west by Charleston Harbor Entrance (see Figure 1). Beaches along Sullivan's Island are composed of well-sorted, fine sands. The beaches tend to be relatively wide and flat, and are backed by one or more low dune ridges along most of the island's length. The shoreline adjacent to Breach Inlet tends to be narrower and steeper due to the effects of channel migration and inlet shoal bypassing.

Tides in the vicinity are semidiurnal, with a mean range of 5.2 ft and a spring range of 6.1 ft (NOAA, 1990). Wave energy along the shoreline tends to be mild, with a mean significant wave height of 2.4 ft and a mean wave period of 5.7 sec (Jensen, 1983). Winds and waves tend to approach from the south and southeast during the summer months and from the northeast during the winter. The south/southeast direction of approach is more frequent but the northeast winds and waves are usually stronger, leading to a net direction of sediment transport along Sullivan's Island beaches from north to south.

Sediments transported from the Isle of Palms, across Breach Inlet and along the Sullivan's Island shoreline have tended to deposit along a one mile long area just inside the north jetty of Charleston Harbor Entrance. Over 600 ft of accretion have taken place in this area since 1921.

1.1.2 Prior Reports and Studies

Given the accretional nature of the Sullivan's Island shoreline, there has been generally little effort devoted to the description and analysis of shoreline changes and coastal processes there. However, there have been several recent studies to document shoreline changes for the establishment of the South Carolina Coastal Council (SCCC) baseline and 40-year setback line along the Sullivan's Island shoreline using beach profile data and aerial photographs. Some of the more significant reports are summarized below.

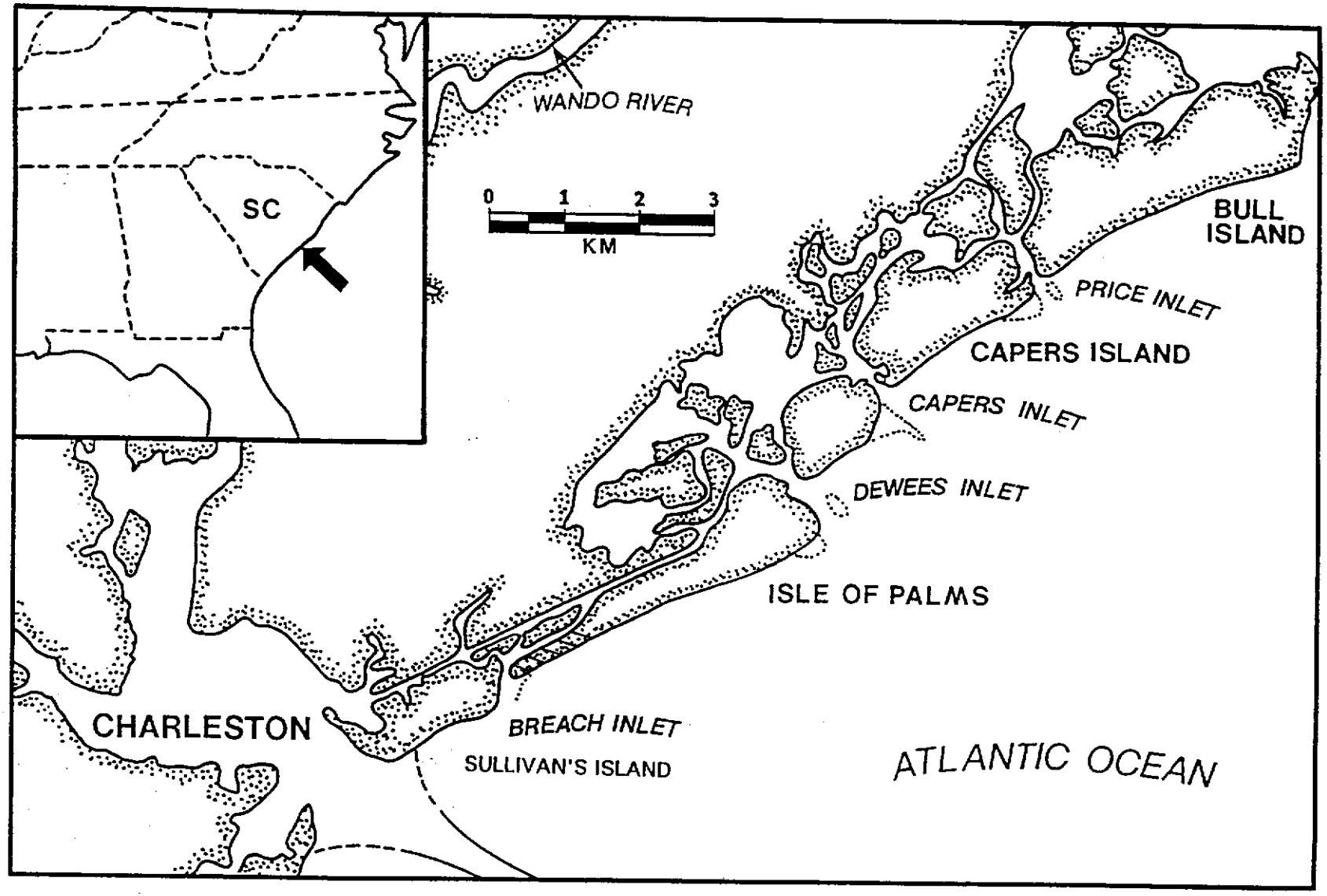


Figure 1. Location Map.

Isle of Palms, Sullivans Island and Charleston, South Carolina, April 1966, by U.S. Army Corps of Engineers. This report summarized historic hurricane damage to the area and proposed a 50-ft wide berm and artificial dune for storm protection.

Beach Erosion Inventory of Charleston County, South Carolina - A Preliminary Report, March 1975, by M.F. Stephen, P.J. Brown, D.M. FitzGerald, D.K. Hubbard and M.O. Hayes. This report provided the first assessment of historic shoreline changes along Sullivan's Island using aerial photographs during the period 1939 to 1973. The report classified most of the island's ocean shoreline as unstable, with an accretional area immediately south of the Charleston Harbor jetty and an erosional section near Breach Inlet (see Figure 2).

Calculation of Interim Baselines and 40-Year Setback Lines, 1988, by. C.P. Jones, D.M. Scaturo, T.W. Kana and W.C. Eiser. This report, prepared for the South Carolina Coastal Council, established the June 1988 locations of the interim baselines and setback lines for 11 islands along South Carolina, including Sullivan's Island.

Sullivan's Island, 1989, Draft SCCC Setback Line Report. The SCCC produced a series of reports documenting the rationale and data used to establish baselines and 40-year setback lines along the SC coastline, including this report for Sullivan's Island. The report divides the island into an unstabilized inlet erosion zone (between the Charleston Harbor jetty [near Station 20] and the Breach Inlet Bridge) and a stabilized inlet erosion zone (between the jetty and Station 12). The report found the majority of the island's ocean shoreline to be stable or accretional; the shoreline near Breach Inlet was found to have a long-term erosion rate of -2.6 ft/yr.

1.1.3 Tidal Inlet Impacts

As was stated previously, the ocean shoreline of Sullivan's Island has a tendency to be accretional over the long term, but may exhibit erosional behavior during certain periods. The exception to this general trend is the area near Breach Inlet at the north end of the island. The shoreline at the extreme north end of the island (i.e., between Station 31 and the bridge) is under continuous erosional pressure as the south end of Isle of Palms tends to build, forcing the Breach Inlet Channel toward Sullivan's Island. The revetment at the bridge and the rock groins in the area have tended to control this erosion somewhat, but have not entirely eliminated the problem.

The shoreline between Station 31 and Station 26 tends to fluctuate in response to inlet channel and shoal changes. Under

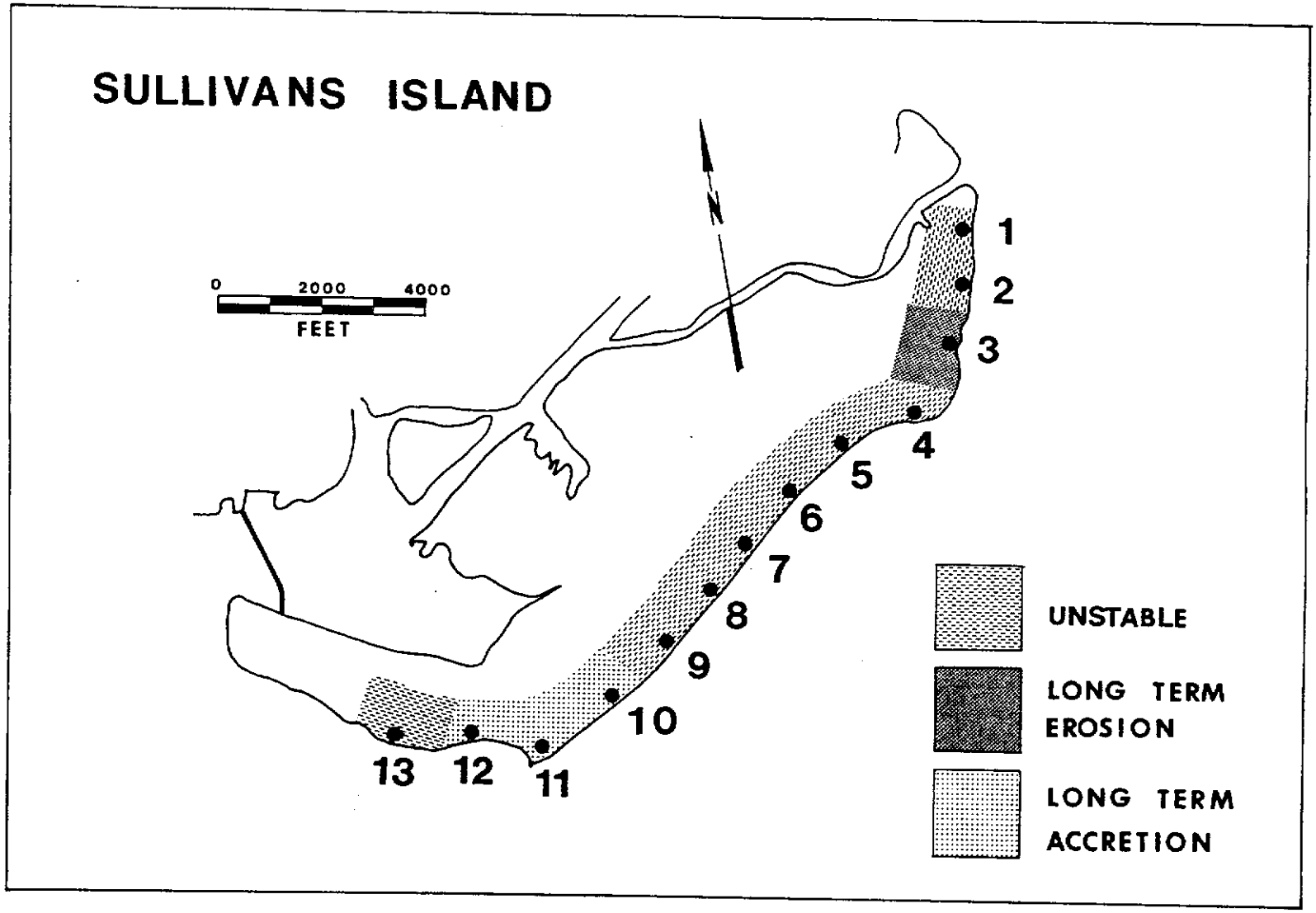


Figure 2. Shoreline Trends Deduced from Historic Aerial Photographs (numbers refer to measurement stations used by Stephen, et al., 1975).

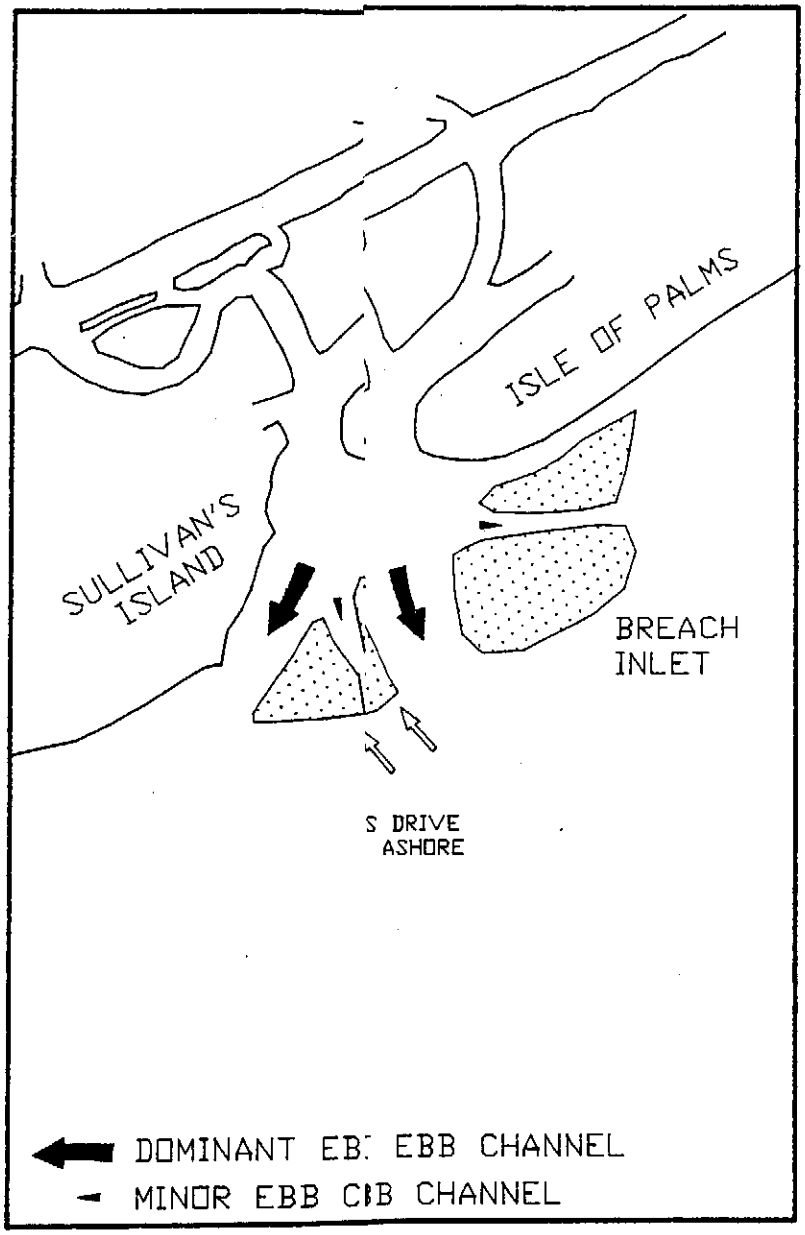


Figure 3a. DomiEmergence of new ebb channel nexannel, abandonment Sullivan's Islandre channel and of shoal.

normal circumstances, the main tidal channel that separates Sullivan's Island from the Isle of Palms divides into several smaller channels as it crosses the ebb tidal delta. One of the channels will tend to be larger than the others and will serve as the dominant channel at any given time. More often than not, the dominant channel will follow a north-south orientation and hug the Sullivan's Island shoreline (see Figure 3a). It is during such times that beach widths along the inlet shoreline are narrowest.

At some point in time one of the lesser channels to the north will begin to enlarge tidal, providing a shorter path for ebb tidal flow (Figure 3b). The channel adjacent to the Sullivan's Island shoreline will gradually diminish in size and fill with sediment as a portion of the ebb tidal delta is driven ashore by wave action and attaches to the beach (Figure 3c). Areas immediately landward of the attaching shoal tend to accrete while areas on either side of the shoal tend to erosion.

Fortunately, the erosion associated with the shoal attachment process is short-lived; the erosion trend reverses once the shoal attaches to the beach and the sand contained in the shoal spreads laterally along Sullivan's shoreline. The beneficial effects of this recovery process are diminished north of the point of shoal attachment due to the inlet channel encroachment mentioned above, but do occur south of the point of shoal attachment.

Although the frequency of shoal attachments has not been determined and the volume and shape of individual shoals vary, the process of channel shifts, main channel abandonment and shoal attachment tends to follow a consistent pattern (see Figure 3), taking several years to complete.

Most of the sand contained in the attaching shoals travels south along the Sullivan's Island shoreline until it reaches the area south of the jetty, where it tends to accrete. Thus, Breach Inlet is responsible for near-continuous erosion at the extreme north end of the island, and unstable but accretional trends along most of the remaining shoreline. The Charleston Harbor jetty is responsible for trapping most of the sediment that bypasses Breach Inlet and travels south along the ocean shoreline.

1.1.4 Beach Profile Data

Repetitive beach profiles measured from fixed starting points provide the best means of quantifying erosion and accretion along ocean beaches. These data allow changes in beach width (in feet) and beach volume (expressed in cubic yards per foot of shore length) to be assessed.

Aside from a few uncontrolled beach profiles measured over the years, the only profiles surveyed have been those measured from SCCC monuments placed along the island in 1987. Initially, eight

SCCC monuments were placed along the ocean shoreline (stations 3010, 3020, 3035, 3050, 3065, 3080, 3090 and 3095). Six of these monuments were damaged or destroyed during *Hugo* -- only stations 3080 and 3090 were undamaged. Replacement monuments were set following the storm (stations 3010B, 3020B, 3035B, 3050B, 3065B and 3095B), at which time three additional monuments were also installed (stations 3083B, 3085B and 3092B). Figure 4 shows the locations of the SCCC beach profile stations. State plane coordinates (NAD '83) and NGVD elevations for the SCCC monuments are listed in Table 1. Appendix A contains monument description sheets for the SCCC monuments.

Copies of beach profile plots from individual stations are included in Appendix B. There are several important conclusions that can be drawn from the plots:

1. Hurricane *Hugo* caused a significant loss of dune and reduction in dune height along the ocean shoreline,

2. The beaches in the vicinity of Station 26 and Station 28 have been highly variable during the past four years, due in large part to changes in the Breach Inlet channel and the attachment of a shoal,

3. Beaches become increasingly narrow and steep toward the north end of the island, as the effects of inlet migration become more dominant.

1.1.5 Historic Shoreline Data

There are two principal sources of historic shoreline data: 1) historic maps and charts, and 2) historic aerial photographs. Both are available for Sullivan's Island. High water shoreline change maps covering the South Carolina coast were produced by the U.S. Department of Commerce, National Ocean Service (NOS, 1984). The maps show shorelines for the years 1875, 1921, 1933/34, 1962/64, and 1983.

Figure 5 shows some of the high water shorelines from the NOS maps. It is apparent that most of the ocean shoreline has undergone accretion, with the exception of the northern shoreline near Breach Inlet, in keeping with the trends mentioned previously. The shoreline in the vicinity of Fort Moultrie advanced seaward over 1,000 ft between 1921 and 1983. During the same period, the southern end of Isle of Palms grew seaward and southward approximately 1,000 ft, while the Sullivan's Island shoreline along Breach Inlet eroded up to 500 ft. According to Anders, et al. (1990), the width of Breach Inlet dropped from approximately 985 ft in 1875 to approximately 690 ft in 1983.

Aerial photographs have also been analyzed to determine historic shoreline positions. Stephen, et al. (1975) conducted the first analysis of historic shorelines on Sullivan's Island using this

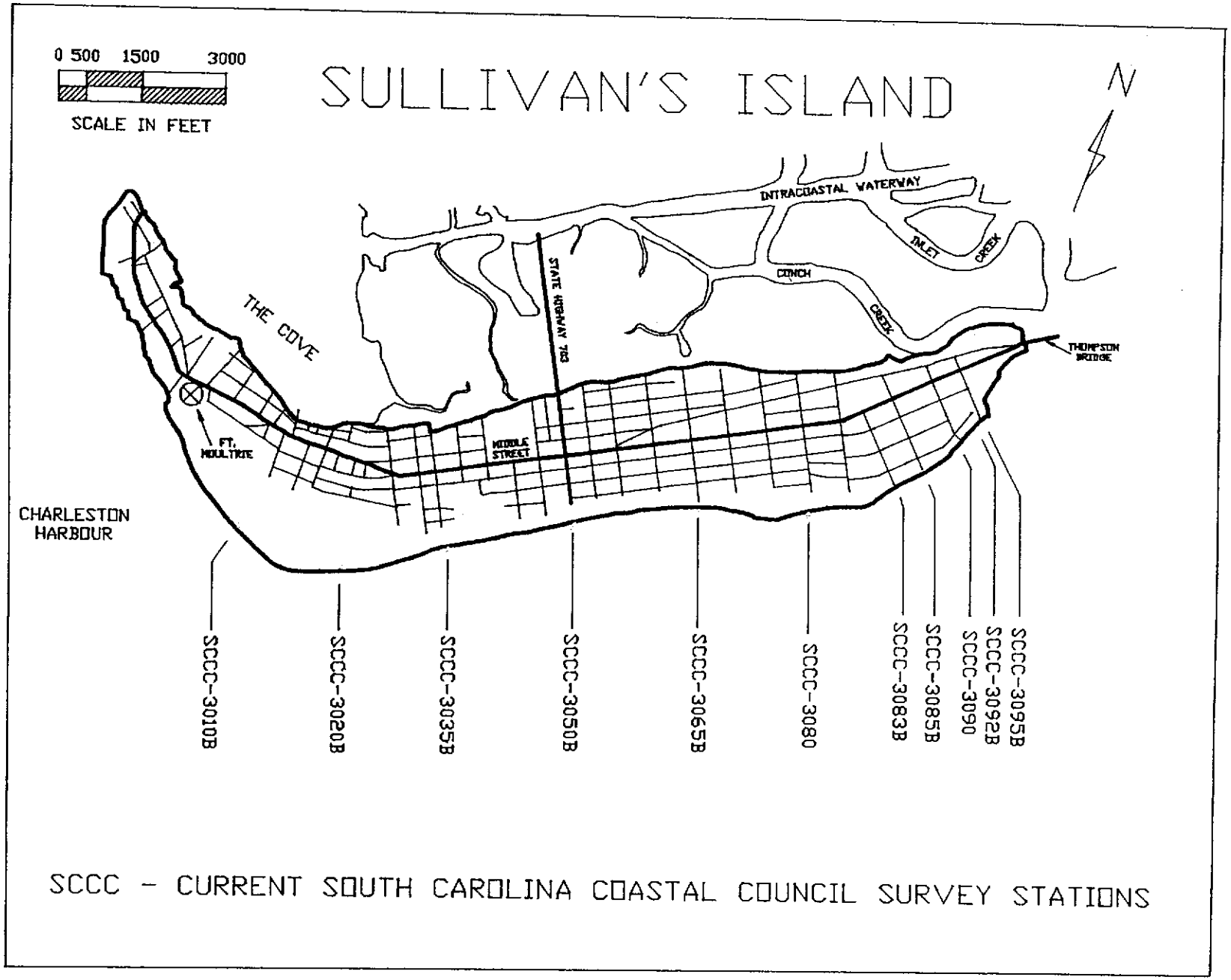

0 500 1500 3000
SCALE IN FEET
SULLIVAN'S ISLAND
N
INTRACOASTAL WATERWAY
INLET
CREEK
CONCH
CREEK
THE COVE
STATE HIGHWAY 703
THOMPSON BRIDGE
FT. MOULTRIE
MIDDLE STREET
CHARLESTON HARBOUR
SCCC-3010B
SCCC-3020B
SCCC-3035B
SCCC-3050B
SCCC-3065B
SCCC-3080
SCCC-3083B
SCCC-3085B
SCCC-3090
SCCC-3092B
SCCC-3095B
SCCC - CURRENT SOUTH CAROLINA COASTAL COUNCIL SURVEY STATIONS

Figure 4.

TABLE 1. Coordinates and elevations of SCCC monuments on Sullivan's Island

Monument	NAD '83 Northing (ft)	NAD '83 Easting (ft)	Elevation (ft NGVD)
3010B	337,326.01	2,352,771.26	9.09
3020B	337,439.65	2,354,505.40	9.28
3035B	338,386.70	2,356,107.79	8.92
3050B	339,773.03	2,357,983.62	8.55
3065B	340,619.20	2,360,060.08	8.23
3080	340,968.78	2,362,078.92	9.71
3083B	341,939.08	2,363,069.83	8.27
3085B	342,428.21	2,363,567.86	8.64
3090	342,985.76	2,364,110.91	9.81
3092B	343,486.30	2,364,192.10	8.79
3095B	343,843.75	2,364,029.35	9.87

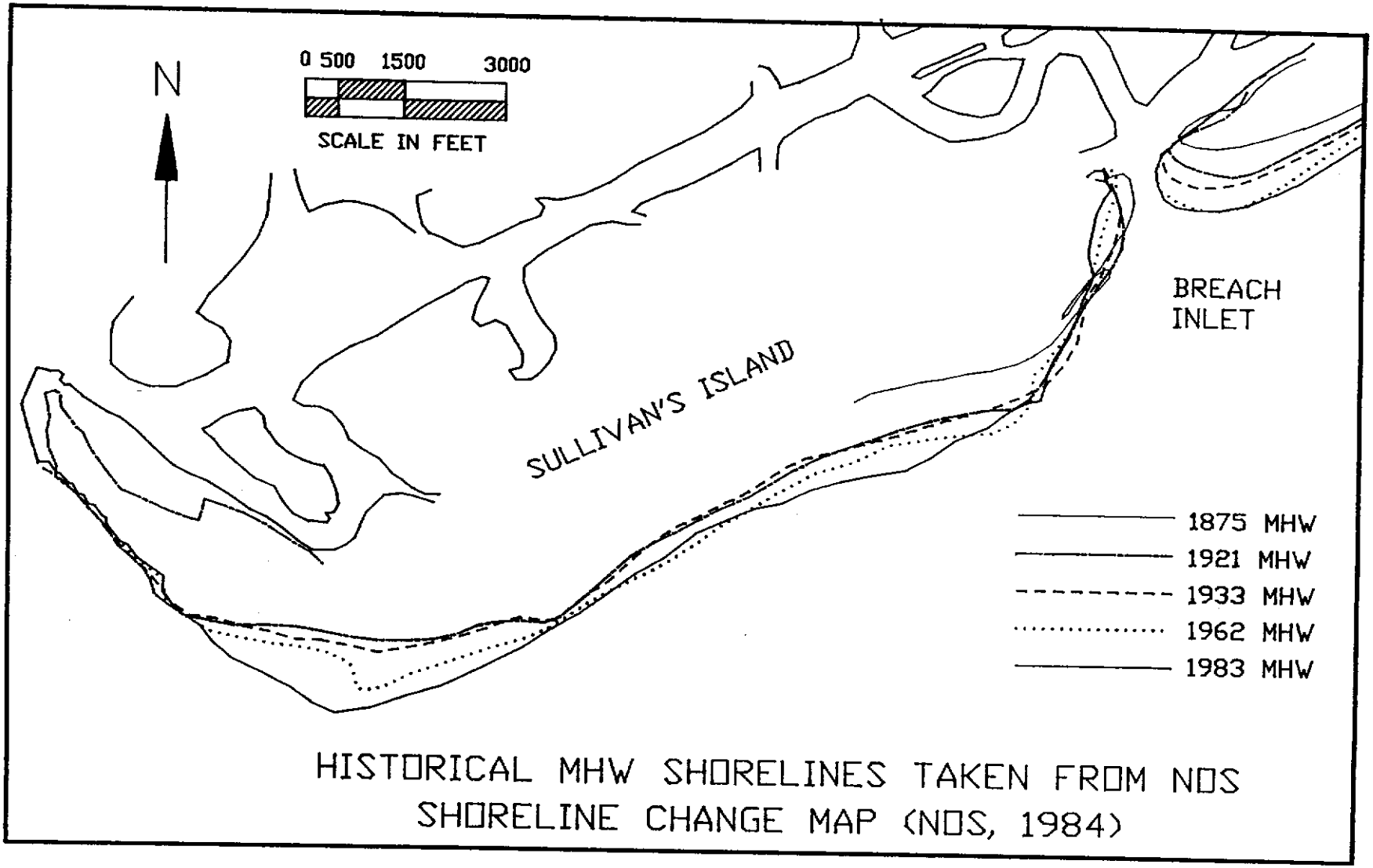

N
0 500 1500 3000
SCALE IN FEET
SULLIVAN'S ISLAND
BREACH INLET
1875 MHW
1921 MHW
1933 MHW
1962 MHW
1983 MHW
HISTORICAL MHW SHORELINES TAKEN FROM NOS SHORELINE CHANGE MAP (NOS, 1984)

Figure 5.

method. Although their results are considered approximate, given the procedures employed, general shoreline trends (see Figure 2) and shoreline change rates (see next section) are useful in understanding coastal processes along the shoreline.

The SCCC also reviewed aerial photographs prior to the establishment of the final baseline and setback line along Sullivan's Island. The SCCC used 1949, 1954, 1958, 1963, 1973 and 1988 aerial photographs in its analysis.

1.1.6 Erosion Rates

Erosion rates have been calculated by three sources. Stephen, et al. (1975) calculated shoreline changes and change rates using aerial photographs for the period 1939 to 1973. Anders, et al. (1990) calculated shoreline change rates for the period 1921 to 1983 using the NOS (1984) shoreline change maps. The SCCC calculated change rates for the period 1949 to 1988 using aerial photographs.

Anders, et al. (1990) found an average accretion rate for the island's mean high waterline of +6.0 ft/yr during the period 1921 to 1983. Stephen, et al. (1975) documented long-term mean high waterline changes between -13 ft/yr and +26 ft/yr. Table 2 shows the long-term erosion rates that were adopted by the SCCC in 1989. The SCCC found long-term accretion along the entire ocean shoreline between Station 10 and Station 29; an average erosion rate of -2.6 ft/yr was adopted for the area between Station 29 and the Breach Inlet Bridge. It should be pointed out here that short-term rates can deviate substantially from the long-term rates, especially near the north end of Sullivan's Island.

1.1.7 Littoral Transport and Sediment Budgets

As was stated previously, the dominant direction of sediment transport along Sullivan's Island is from north to south. However, there may be seasonal or other reversals in the direction of sediment movement along the beaches. There may also be temporary reversals in the direction of transport at near the north end of the island as waves refract around offshore shoals attaching to the beach.

Based on the prevailing transport patters and the accretion rates mentioned above, Sullivan's Island as a whole probably gains between 20,000 cubic yards and 50,000 cubic yards per year. Almost all of this sediment is transported across Breach Inlet from the Isle of Palms in the form of shoal migration and attachment.

The sand contributed to the island by shoal attachment and spreading generally provides an ample supply of sediment for natural post-storm beach recovery and dune formation. With the possible exception of the Breach Inlet shoreline, the large

TABLE 2. **Sullivan's Island long-term annual erosion rates adopted by SCCC, 1989**

SCCC Station	SCCC Adopted Erosion Rate (ft/yr)
3010B	+
3020B	+
3035B	+
3050B	+
3065B	+
3080	+
3083B	- 2.6
30905	- 2.6
3092B	- 2.6
3095B	- 2.6

[- indicates erosion; + indicates accretion]

volume of sand in the littoral system and the wide beaches along Sullivan's Island will allow emergency dune construction by scraping the beach without adverse impact.

1.1.8 Storms and Their Impacts

There are several important reports that describe historic storm impacts and potential storm surge flood levels in the Sullivan's Island area. Information about hurricanes and tropical storms that have affected the area is contained in several references (Ludlum, 1963; Purvis and Landers, 1973; Myers, 1975; Federal Emergency Management Agency, 1988). Descriptions of some of the more significant storms are taken from the 1988 Flood Insurance Study for Charleston County (FEMA, 1988) and are included below:

> August 27, 1813: This storm passed near Charleston causing a large loss of lives and property. This hurricane rates a position close to the top of Charleston's meteorological list for its combination of severe winds, heights of flood tide and general destruction.
>
> September 27, 1822: This small destructive hurricane passed inland between the City of Georgetown and Charleston on September 27. This hurricane caused unprecedented tides at Georgetown and several hundred deaths in Charleston, the Town of Sullivan's Island, Georgetown and North Island.
>
> August 25, 1855: This hurricane, which originated in the Bahamas, moved inland north of Savannah on a northeasterly course and passed to the west of Wilmington, North Carolina. This hurricane is said to have damaged 90 percent of the houses in Charleston and swept some away completely. This extreme hurricane severely damaged all of the South Carolina coast. Damage in Charleston alone was $1.7 million. As a result of this destructive storm it was proposed that a weather reporting network be set up in the West Indies and Mexico. Twenty-one lives were lost in Charleston as a result of this storm.
>
> August 27, 1883: This severe hurricane penetrated the Georgia and lower South Carolina coasts on August 27. An estimate of more than 1,000 people lost their lives on the coastal islands and in the lowlands between the City of Tybee Island, Georgia, and Charleston. The highest tide in this storm was estimated to have ranged from 17.0 to 19.5 feet msl at Savannah Beach, Georgia. At Charleston, the tide was 8.9 feet msl. Extensive property damage was caused along Georgia and South Carolina coasts.
>
> August 23-30, 1911: The center of this hurricane crossed the coast between the City of Savannah and Charleston on August 28. This storm is considered in the same category as the storm of 1940. At Charleston, the barometer fell to 992 millibars (mb) (29.30 inches). The wind at the weather

bureau office reached 81 mph from the southeast. Seventeen lives were lost, and damage totalled about $1 million. The storm passed into the piedmont section of South Carolina and then recurved to the northeast. At Charleston, the tide reached 7.5 feet msl, among the highest in Charleston County records.

August 11, 1940: This hurricane entered the coast from the southeast, between Savannah County, Georgia and Beaufort County, South Carolina, at about 4 p.m. on August 11. Near Beaufort County, the tide is estimated to have reached 14.2 feet msl. Near the southern tip of Edisto Island, a high-water mark indicated a tide of 13.6 feet msl on the open coast. About 175 cottages were destroyed on Edisto Island. On Folly Island, the maximum tide determined from a National Ocean Survey benchmark was 8.3 feet msl. The entire beachfront eroded an average of 75 feet. At Charleston, most of the damage was to buildings, wharfs and boats along the waterfront. Large areas of the waterfront perimeter in the city were inundated and many automobiles were damaged by the storm tide, which reached an elevation of 8.0 feet msl. Estimated damage to the city was $1 million. Sullivan's Island, the City of Isle of Palms, and Pawley's Island suffered minor damage. Overall, this hurricane was responsible for 34 deaths and caused damage estimated at $6.6 million.

September 29, 1959 (Hurricane Gracie): Hurricane Gracie moved inland on September 29. The center passed over the South Carolina coast at St. Helen, about 10 miles east of the City of Beaufort. Damage of disaster proportions occurred in the coastal region from Beaufort to Charleston, and considerable additional damage occurred in the area of Walterboro. An enormous number of trees were felled, causing considerable random damage. There was a great deal of crop damage, especially to unpicked cotton. A barometric pressure of 950 mb (28.06 inches) was reported at Beaufort. The total damage inflicted by the storm was estimated at $14 million. High water marks, which were reported near the Town of Edisto Beach, South Carolina, ranged from 7.3 to 11.9 feet msl.

August 25-September 7, 1979 (Hurricane David): Hurricane David was the most intense storm of the century to affect the islands of the eastern Caribbean. However, the storm was not a major hurricane when it struck the United States. David struck just north of the Town of Palm Beach, Florida, on September 3rd and made a second landfall about 24 hours later near Savannah Beach, Georgia. In the United States David was responsible for five deaths and about $300 million in damages.

September 21, 1989 (Hurricane Hugo): Hurricane Hugo crossed the coast at Charleston at midnight on September 21. The hurricane was one of the most severe to strike the United States, and caused an estimated $7 billion in damages. Beach erosion and overwash were extensive from Folly Beach to the North Carolina line, as were flooding and damage to structures. The storm tide along the Breach Inlet area on Sullivan's Island reached 16 ft above mean sea during the storm (USGS. 1990), several feet higher than the level at Charleston, 10.5 ft. Damage to dunes and structures along the Sullivan's Island shoreline was extensive. Figure 6 shows the approximate storm tide elevations on Sullivan's Island from hugo, as measured during post-storm assessments (USGS, 1990).

Figure 7 shows storm tracks for memorable hurricanes that have passed near the Charleston area during the last century. It is apparent from the figure that relatively few storms make landfall; most travel offshore of or over South Carolina, parallel to the coast. Fortunately, storms that parallel the coast or exit from land to sea will not cause as much damage as those making landfall.

Ho, et al. (1986) describes in detail the tropical storm and hurricane climatology for the gulf and east coasts of the United States. Selected information concerning storms affecting the Sullivan's Island area have been extracted from the report and are included in Table 3.

TABLE 3. Climatological Characteristics of Hurricanes and Tropical Storms affecting the Sullivan's Island Area.

Number of landfalling tropical storms and hurricanes per 10 nmi per 100 years	1.3
Number of exiting tropical storms and hurricanes per 10 nmi per 100 years	0.5
Number of alongshore tropical storms and hurricanes passing within 30 nmi offshore per 100 years	6
Probability that a landfalling storm will have a central pressure less than or equal to:	
980 mb (Category 2)	50%
965 mb (Category 3)	23%
945 mb (Category 4)	7%
920 mb (Category 5)	< 1%

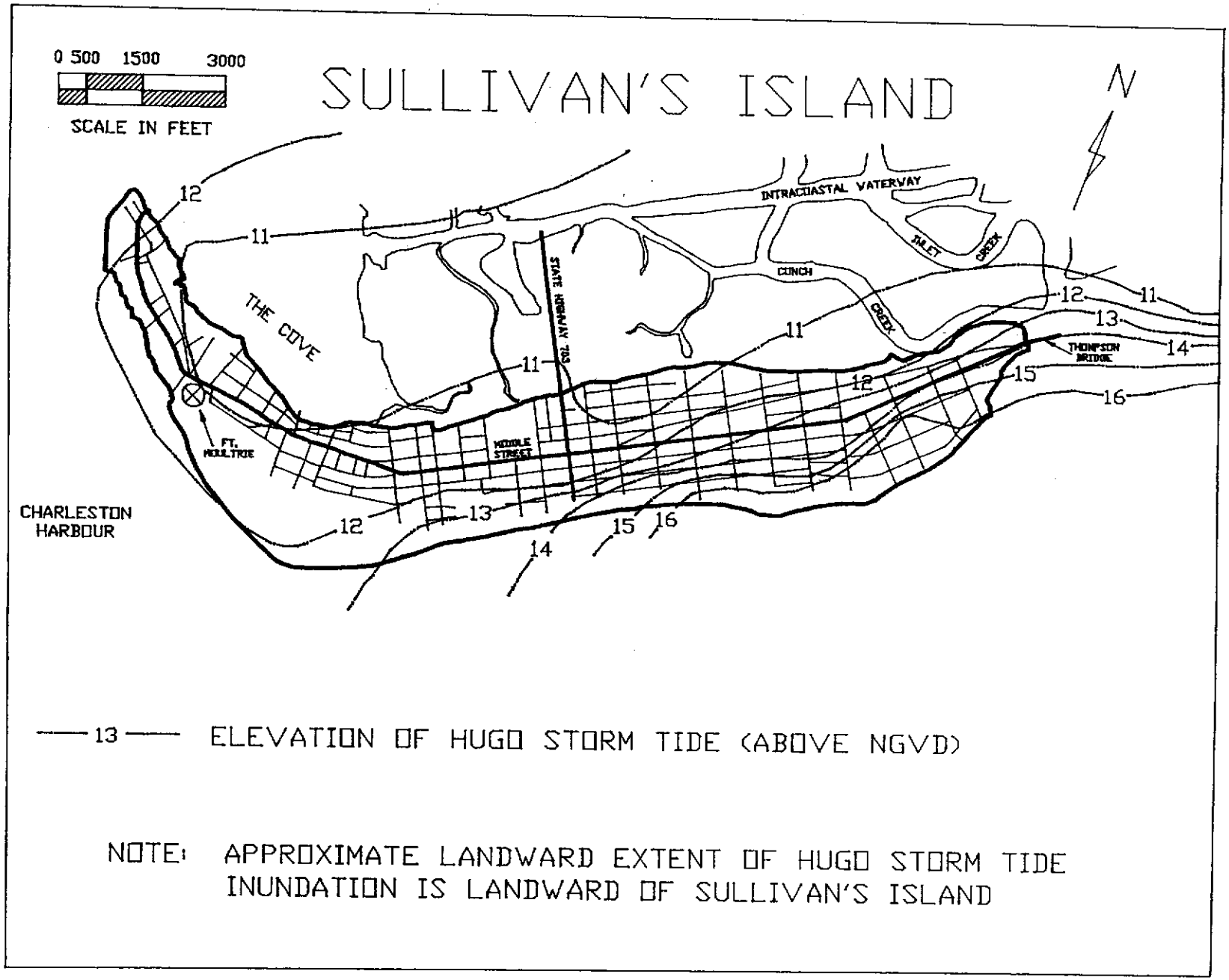
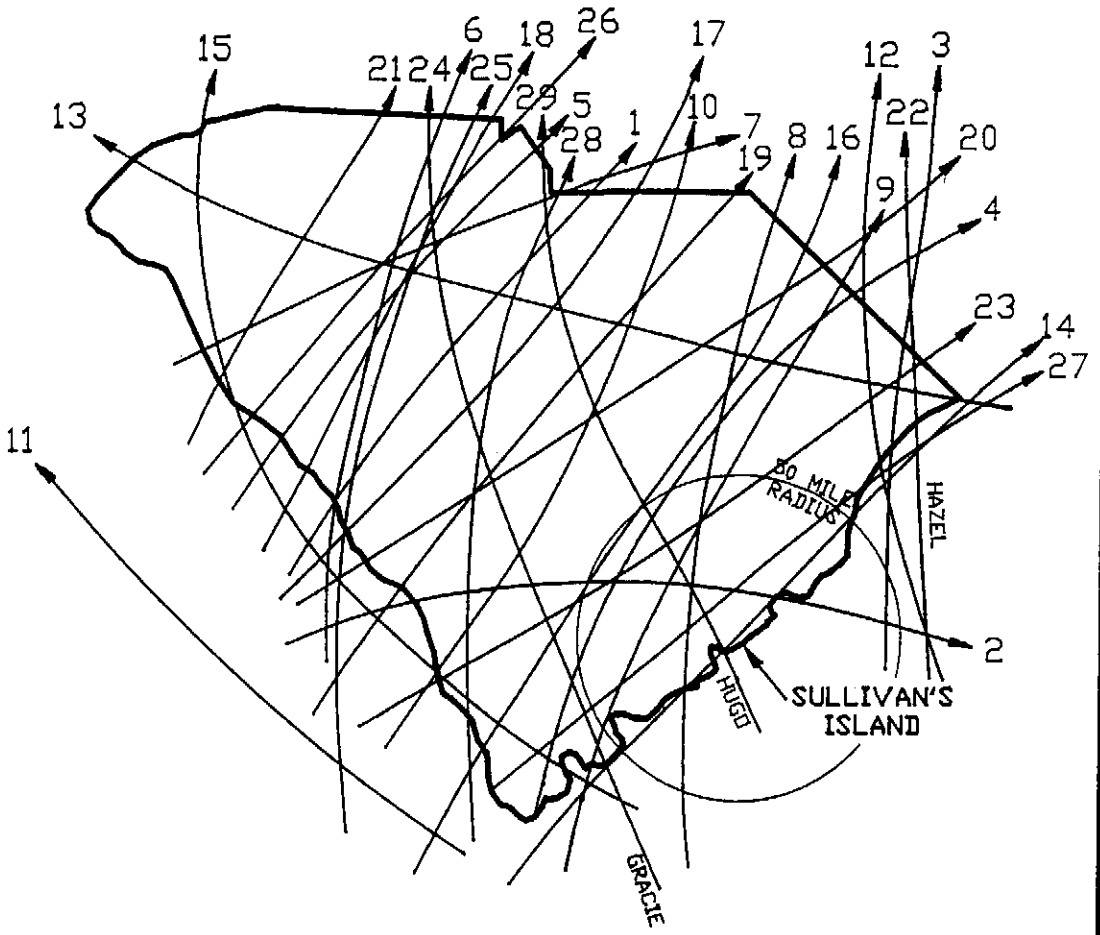


Figure 6. Hurricane Hugo Flooding on Sullivan's Island.



1. Oct. 3-4, 1877
2. Sept. 9, 1882
3. Sept. 11, 1883
4. Aug. 25, 1885
5. June 21-22, 1886
6. Aug. 27-28, 1893
7. Oct. 3, 1893
8. Oct. 13, 1893
9. Sept. 28, 1894
10. Sept. 29, 1896
11. Oct. 2, 1898
12. Oct. 31, 1899
13. Sept. 17, 1906
14. Oct. 19-20, 1910
15. Aug. 28, 1911
16. Sept. 18, 1928
17. Oct. 1, 1929
18. Sept. 6-7, 1933
19. Sept. 5, 1935
20. Oct. 7-8, 1941
21. Aug. 28, 1949
22. Oct. 15, 1954
23. Sept. 25-26, 1956
24. Sept. 29, 1959
25. Aug. 29, 1964
26. Sept. 12-13, 1964
27. June, 10, 1966
28. Sept. 4, 1979
29. Sept. 21, 1989

Figure 7. Historic Hurricane Tracks

A series of maps delineating anticipated flooding during various storm conditions (category 1, 2, 3, 4 and 5 hurricanes) are also available as part of the South Carolina hurricane evacuation study that was completed in 1986 (S.C. Water Resources Commission, 1986). The maps depict anticipated storm surge stillwater levels for hurricanes arriving or passing by the area at mid-tide.

Many northeast storms have also affected the Sullivan's Island shoreline, although they have not been documented as well as hurricanes and tropical storms. One exception is the January 1, 1987 northeaster that affected the entire coastline of South Carolina. The storm caused extensive damage to seawalls, pools and decks in the Grand Strand, but limited damage elsewhere. Tides in Charleston during the storm were as much as 3.3 ft above normal levels, but had relatively little impact on Sullivan's Island.

1.2 Natural Resources

Given the history and dominant coastal processes affecting Sullivan's Island, much of the ocean shoreline has been preserved as open space. The accreted property set aside in the 1991 Open Land Trust agreement (see Appendix C) will be preserved and managed in a natural state, to the benefit of natural communities and island residents.

1.2.1 Endangered Species and Critical Habitat Inventory

The SCCC Guidelines for Protection of Endangered Species list a number of plant and animal species that have been classified by either state or federal agencies as endangered or threatened ("endangered species" include any species which is in danger of extinction throughout all, or a significant portion, of its range; "threatened species" include any species which is likely to become endangered within the foreseeable future). Other species have been identified as being of special concern to the SCWMRD because of diminished population, or because of loss of habitat, food sources or ranging area.

Those species listed below (Table 4) are either endangered, threatened or of special concern, and use the South Carolina beachfront for nesting, feeding or habitat purposes.

Conversations with agency staff during the development of this Plan reveal that the inventory and mapping (of endangered and threatened species, species of special concern and critical habitat areas) required by the Beachfront Management Act has not been completed.

Some historical nesting data for the Loggerhead turtle do exist for Sullivan's Island. The data, summarized in Table 5, have

TABLE 4. Endangered, Threatened and Protected Species Along the South Carolina Shoreline

Name	Status*	Habitat/Activity
Loggerhead turtle	T (f,s)	beaches (nesting)
Eastern brown pelican	SC (s)	beaches
Ipswich sparrow	E (s)	beaches, dunes (wintering)
Least tern	T (s)	beaches, dunes (nesting)
Wilson's plover	T (s)	beaches, dunes (nesting)
Piping plover	E (f,s)	beaches, dunes (wintering)
Island glass lizard	SC (s)	dunes
Seabeach Amaranth	SC (s)	dunes (plant)

notes:
E = endangered
T = threatened
SC = special concern
f = federally protected species
s = South Carolina protected species

TABLE 5. SCWMRD Turtle Nesting Estimates for Sullivan's Island (based on aerial inspections)*

Nesting Season	Estimated Number of Nests	Number of Aerial Inspections
1991	12	12
1990	0	12
1989	17	4
1988	0	4
1987	1	12
1986	2	12
1985	0	12
1984	0	3
1983	0	4
1982	0	?
1981	0	?
1980	12	?

* Personal Communication with Sally Murphy, SCWMRD, September 4, 1991.

been compiled from aerial inspections by SCWMRD staff. Examination of the data indicates nesting densities along Sullivan's Island have been quite low, despite the presence of over two miles of natural beach and dune areas. For example, average nesting densities along Sullivan's Island beaches over the past several years have been 0 to 4 nests/mile, while densities along Kiawah Island have been 18 to 20 nests/mile and densities along Isle of Palms have been 5 to 7 nests per mile (SCWMRD data). The causes behind low nesting densities on Sullivan's Island are not understood at this time.

1.3 Present Land Use

A review of the existing development along Sullivan's Island in July 1991 reveals the following:

1. Approximately 133 oceanfront parcels lie along miles of shoreline between Station 10 and Breach Inlet.

2. Approximately 112 single family residences and seven other structures (Fort Moultrie, Coast Guard Station, school, etc.) have been constructed on parcels with ocean frontage; 113 of the structures are estimated to be less than 5,000 sq ft in size; 26 parcels are undeveloped.

3. Building setbacks from the beach are generous along most of Sullivan's Island. Between Station 10 and Station 28 1/2, habitable structures are, on average, 340 ft landward of the SCCC 40-year setback line (ranging from 100 ft to 1,000 ft landward).

4. Between Station 28 1/2 and Station 32, front row habitable structures lie, on average, 42 ft seaward of the SCCC 40-year setback line (ranging from 50 ft landward to 208 ft seaward). Ten habitable structures lie seaward of the 40-year setback line.

5. There are 28 public access points along the shoreline, approximately evenly spaced at an average spacing of 1/8 mile; there are dune walkover structures at four of these access points (Stations 21, 22 1/2, 29 and 31). There are approximately 16 other private access points leading to the beach from private residences.

6. Off-street public parking at beach access points is limited to approximately 145 spaces on Sullivan's Island. There are four parking areas adjacent to access points: a 16-space area at Station 12 (see area "A" on overlay sheet 154); an 82-space area near Fort Moultrie (see area "B" on overlay sheet 154); an 8-space area at Station 18 (see area "C" on overlay sheet

157); a 41-space area at Breach Inlet (see area "D" on overlay sheet 162).

7. On-street public parking near beach access points is more than sufficient to satisfy SCCC requirements for full and complete public access. Although there are a number of areas where parking is prohibited, the parking inventory found space for over 2,000 vehicles alongside roads between Middle Street and the beach.

8. There was no evidence of outfalls or other pipes draining across the beach at Sullivan's Island.

1.4 Land Use, Zoning and Subdivision Controls

Land use and development on Sullivan's Island are regulated by Town ordinances and by state/federal regulations.

1.4.1 Town of Sullivan's Island

Oceanfront development along Sullivan's Island falls under the RS zoning district. All oceanfront areas seaward of the RS district fall in a conservation area (RC-1 district) subject to development prohibitions per the Town zoning ordinance and the open land trust agreement. Development in the RS district is permissible up to a point 30 ft landward of the platted property line, the dune crest or the seaward face of a functional erosion control device, whichever is more landward. See Appendix D for a map showing the relationship between the RS/RC-1 boundary, seaward property lines and the SCCC 40-year setback line.

Revisions were made to Town ordinances, including the zoning ordinance, to insure compliance with the requirements of the Beachfront Management Act (see Section 4 of this Plan for ordinance changes adopted by the Town Council).

1.4.2 SCCC Oceanfront Setback Lines and Regulations

Table 6 summarizes the impacts of the Act on various development activities. The table makes reference to sections of the Act, and to various rules, administrative interpretations and general permits; these are contained in Appendix E and F.

The SCCC baseline and setback line currently in effect were adopted by the SCCC in 1989, based on a detailed study of the island's shoreline. Locations of the lines are shown on the full size overlays accompanying this report and on the maps included in Section 3 of this Plan. No lines were set north of Station 10 along the Charleston Harbor shoreline.

TABLE 6. Summary of Activities Regulated by 1990 Beachfront Management Act

TYPE OF STRUCTURE	CONSTRUCTION BETWEEN THE SETBACK LINE AND BASELINE	CONSTRUCTION SEAWARD OF THE BASELINE
Habitable Structures		
New Construction	Allowed 48-39-290 (B) (I) 30-13(B)	Not allowed without special permit 48-39-290 (D) R. 30-15(F)
Normal Maintenance and Repair	Allowed 48-39-290 (B) (I) (b) (i) 30-13(A)	Allowed 48-39-290 (B) (I) (b) (i)
Additions	Allowed 48-39-290 (B) (I) (B) (ii)	Not Allowed
Repair and Renovations	Allowed 48-39-290 (B) (I) (B) (iii) 30-13(D)	Allowed 48-39-290 (B) (I) (B) (iii)
Replacement After Destroyed Beyond Repair By Natural Causes	Allowed 48-39-290 (B) (I) (B) (iv) R. 30-13(E)	Not allowed without special permit R. 30-15(F)
Replacement After Destroyed Beyond Repair by Man-Made Causes	Allowed 48-39-290 (B) (I) (B) (v) R. 30-13(E)	Not allowed without special permit R. 30-15(F)
Pools		
New Pools	Allowed if behind existing erosion control structures 48-39-290 (B) (3) (a) 30-16(A) (i) (d)	Not allowed 48-39-290 (B) (3) (a)
Normal Maintenance and Repair	Allowed 48-39-290 (B) (3) (b) 30-5(D)	Allowed 48-39-290 (B) (3) (b) R. 30-5(D)
Additions	Not applicable	Not applicable
Repair and Renovation	Allowed 48-39-290 (B) (3) (d) 30-5(A)(10)	Allowed 48-39-290 (B) (3) (d)
Replacement After Destroyed Beyond Repair By Natural Causes	Allowed 48-39-290 (B) (3) (c)	Allowed 48-39-290 (B) (3) (c)
Replacement After Destroyed Beyond Repair by Man-Made Causes	Allowed 48-39-290 (B) (3) (c)	Allowed if behind existing erosion control structure or by special permit 48-39-290 (B) (3) (c)

TABLE 6. Summary of Activities Regulated by 1990 Beachfront Management Act (Continuation)

TYPE OF STRUCTURE	CONSTRUCTION BETWEEN THE SETBACK LINE AND BASELINE	CONSTRUCTION SEAWARD OF THE BASELINE
Decks		
New	Allowed 48-39-290 (A) (2) (144 square feet)	Allowed 48-39-290 (A) (2) GP-90-E
Normal Maintenance	Allowed GP-90-E	Allowed GP-90-E
Repair and Replacement or Reconstruction	Allowed GP-90-E	Allowed GP-90-E
Walkways		
New	Allowed 48-39-290 (A) (I)	Allowed 48-39-290 (A) (I)
Normal Maintenance and Repair	Allowed R.30-5 (D)	Allowed R.30-5 (D)
Repair and Replacement or Reconstruction	Allowed 48-39-290 (A) (I)	Allowed 48-39-290 (A) (I)
Drainage Structures		
New	Allowed GP-90-B	Allowed GP-90-B
Normal Maintenance and Repair	Allowed GP-90-B Section 48-39-130 (D) (7)	Allowed GP-90-B Section 48-39-130 (D) (7)
Repair and Replacement or Reconstruction	Allowed GP-90-B Section 48-39-130 (D) (7)	Allowed GP-90-B Section 48-39-130 (D) (7)
Utilities		
New	Allowed GP-90-A	Allowed GP-90-A
Normal Maintenance and Repair	Allowed GP-90-A Section 48-39-130 (D) (7)	Allowed GP-90-A Section 48-39-130 (D) (7)
Repair and Replacement or Reconstruction	Allowed GP-90-A Section 48-39-130 (D) (7)	Allowed GP-90-A Section 48-39-130 (D) (7)

TABLE 6. Summary of Activities Regulated by 1990 Beachfront Management Act (Continuation)

TYPE OF STRUCTURE	CONSTRUCTION BETWEEN THE SETBACK LINE AND BASELINE	CONSTRUCTION SEAWARD OF THE BASELINE
Fences, Lighting, Trash Receptacles, Sidewalks, and Signs		
New	Allowed GP-90-D	Allowed GP-90-D
Normal Maintenance and Repair	Allowed GP-90-D Section 48-39-130 (D) (7)	Allowed GP-90-D Section 48-39-130 (D) (7)
Repair and Replacement or Reconstruction	Allowed GP-90-D Section 48-39-130 (D) (7)	Allowed GP-90-D Section 48-39-130 (D) (7)
Sand Fences, Minor Beach Renourishment and Dune Revegetation		
New	Allowed GP-90-F	Allowed GP-90-F
Normal Maintenance and Repair	Allowed GP-90-F Section 48-39-130 (D) (7)	Allowed GP-90-F Section 48-39-130 (D) (7)
Repair and Replacement or Reconstruction	Allowed GP-90-F Section 48-39-130 (D) (7)	Allowed GP-90-F Section 48-39-130 (D) (7)
Golf Courses		
New	Allowed 48-39-290 (A) (4) GP-90-C	Allowed 48-39-290 (A) (4) GP-90-C
Normal Maintenance and Repair	Allowed GP-90-C	Allowed GP-90-C
Repair and Replacement or Reconstruction	Allowed GP-90-C	Allowed GP-90-C

TABLE 6. Summary of Activities Regulated by 1990 Beachfront Management Act (Continuation)

TYPE OF STRUCTURE	CONSTRUCTION BETWEEN THE SETBACK LINE AND BASELINE	CONSTRUCTION SEAWARD OF THE BASELINE
Erosion Control Devices		
New Construction	Not allowed 48-39-290 (B) (2) (a)	Not allowed 48-39-290 (B) (2) (a)
Normal Maintenance and Repair	Allowed R.30-5 (d)	Allowed
Additions	Not allowed	Not allowed
Repair and Renovation	Allowed if not more than 80%, 66 2/3%, 50% destroyed 48-39-290 (B) (2) (b)	Allowed if not more than 80%, 66 2/3%, 50% destroyed 48-39-290 (B) (2) (b)
Replacement After Destroyed Beyond Repair By Natural Causes	Not allowed 48-39-290 (B) (2) (a)	Not allowed 48-39-290 (B) (2) (a)
Replacement After Destroyed Beyond Repair by Man-Made Causes	Not allowed 48-39-290 (B) (2) (a)	Not allowed 48-39-290 (B) (2) (a)
Wing Walls	Allowed GP 91-002	Allowed GP 91-002

Figure 8 shows the erosion zone designations that were adopted by the SCCC. The area between Station 10 and Station 19 (SCCC monument 3035B) has been classified as a stabilized inlet erosion zone; the baseline has been set along the primary dune crest in that area. The shoreline between Station 19 and the Breach Inlet bridge has been classified as an unstabilized inlet erosion zone (the baseline has generally been set along the most landward shoreline in the past 40 years).

The 40-year setback line along most of Sullivan's Island was set 20 ft landward of the baseline, in recognition of long-term accretion (see Table 2). The setback line between Station 29 and the Breach Inlet bridge was set up to 106 ft landward of the baseline, in recognition of the adopted long-term erosion rate of -2.6 ft/yr.

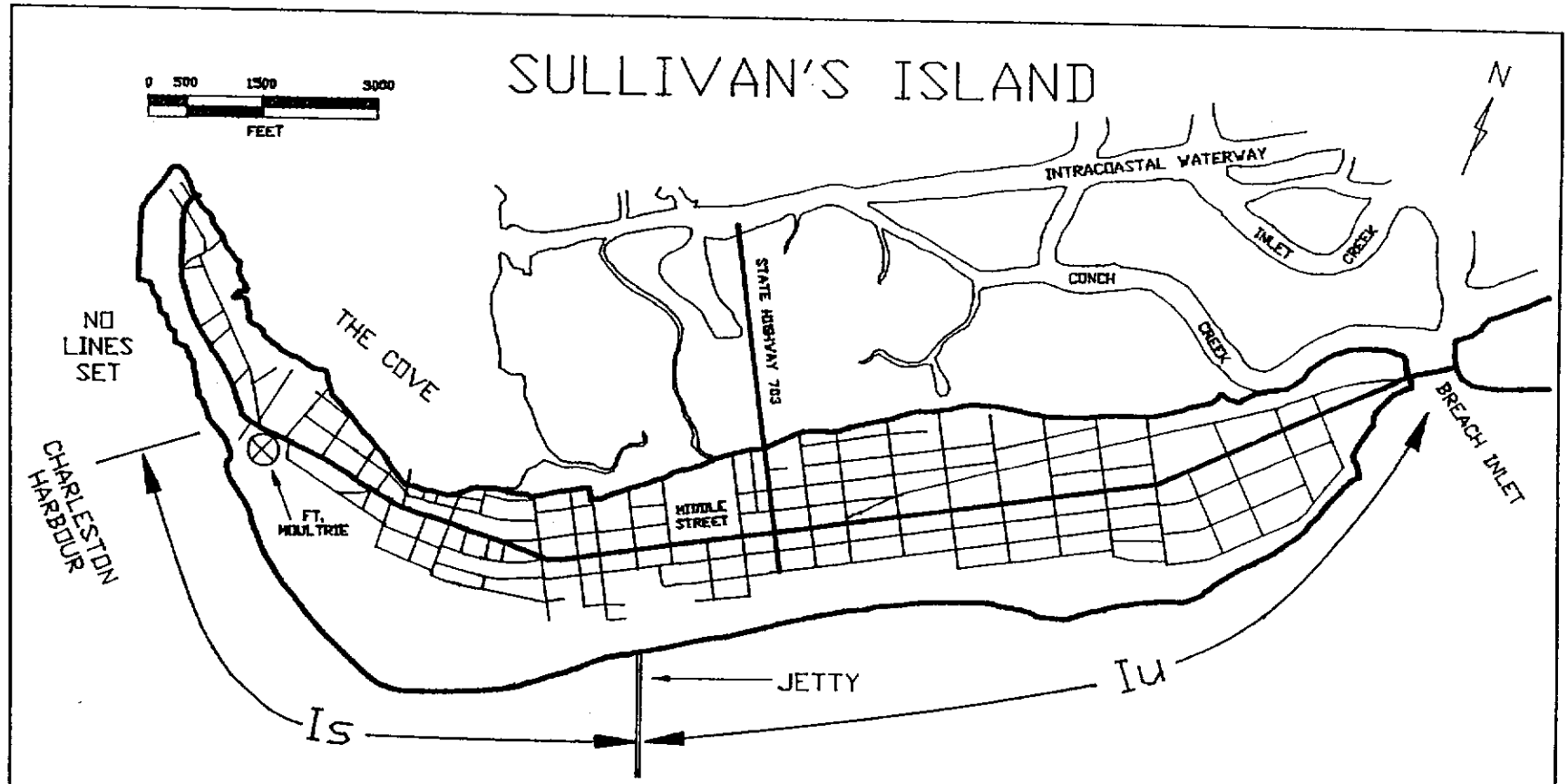
1.4.3 National Flood Insurance Program (NFIP)

The most recent Flood Insurance Study to include Sullivan's Island was the July 1988 Flood Insurance Study for Charleston County (Federal Emergency Management Agency, 1988). According to that report, the 100-year storm surge stillwater elevation for the ocean shoreline of Sullivan's Island is 12.0 ft NGVD. The wave crest elevation for the ocean shoreline is 18.6 ft NGVD. Table 7 shows a comparison of predicted storm surge stillwater levels for 10-, 50-, 100- and 500-year storm conditions.

Table 7. Stillwater Flood Elevations for the Sullivan's Island Shoreline (FEMA, 1988)

Recurrence Interval	Stillwater Elevation ft NGVD
10-year	8.9
50-year	11.2
100-year	12.0
500-year	13.6

The base flood elevation (BFE) for construction along the shoreline of Sullivan's Island is as high as 22 ft NGVD; the BFE drops in the landward direction (due to diminished wave effects) to 13 ft NGVD near the landward side of the island. Velocity zones (V zones) occur along the ocean shoreline; A zones lie inland of the V zones(V zones are those zones where wave heights



EROSION ZONES ADOPTED FOR SULLIVAN'S ISLAND BY SCCC, 1989

NOTES:

1) Iu = UNSTABILIZED INLET EROSION ZONE

2) Is = STABILIZED INLET EROSION ZONE

3) BREACH INLET BRIDGE ABUTMENT AREA CLASSIFIED AS STABILIZED INLET EROSION ZONE

Figure 8.

greater than three feet and/or high velocity waters are expected during a 100-year storm; A zones are zones where flooding is expected during a 100-year storm, but where high waves and high velocity currents are not expected). Construction standards for V zones and A zones are different: fill can be used to elevate structures above the BFE in A zones, but pilings or piers must be used to elevate structures in V zones. These and other construction standards are included in the Town's building ordinance.

One Flood Insurance Rate Map (FIRM) has been published for Sullivan's Island; this March 18, 1991 revised map delineates the various flood hazard zones and should be consulted for more exact flood hazard information.

SECTION 2

BEACH MANAGEMENT PLAN COMPONENTS

SECTION 2. BEACH MANAGEMENT PLAN COMPONENTS

2.1. Town Policies for Beachfront Management

The Town of Sullivan's Island will:

adopt and implement policies, procedures and ordinances to protect, preserve, restore and enhance the natural character of the Sullivan's Island beach/dune system.

encourage full and complete public access to its beaches.

work closely with property owners and government agencies to maintain the protective, ecological and recreational functions of the beach/dune system.

develop strategies for erosion control and beach/dune restoration that will minimize potential adverse environmental impacts.

develop strategies for protecting critical habitats and threatened/endangered species.

develop strategies for improving, protecting and/or relocating structures and facilities along the shoreline.

periodically collect and/or review beach profile and other data to assess changing conditions along the shoreline.

periodically revise this Plan to take into consideration changes in shoreline conditions and oceanfront development.

2.2 Town Beach Management Strategy

The Beachfront Management Act states very clearly that the policy of South Carolina is to protect, preserve, restore and enhance the beach/dune system. As such, the State seeks to encourage wise development of the shoreline, including the adoption of appropriate management strategies to deal with existing and future development. These strategies shall include, where necessary, selective beach/dune restoration and/or relocation of oceanfront structures and facilities. The Town of Sullivan's Island shares the objectives of the State, and will accomplish those objectives through its Local Comprehensive Beach Management Plan. The Town will rely in large part on the following to implement its plan:

- Chapter 3 <u>Animals and Fowl</u> of the Town Code
- Chapter 4 <u>Beaches</u> of the Town Code

- Chapter 5 Buildings of the Town Code
- Chapter 14 Offenses - Miscellaneous of the Town Code
- Chapter 21 Zoning of the Town Code
- Deed restrictions on oceanfront property in the Open Land Trust

2.2.1 Conflicts Between Development and Oceanfront Setbacks

One of Sullivan's Island's greatest assets is its natural beach/dune system. Prudent planning and development practices have protected this natural environment. The Town of Sullivan's Island recognizes the importance of maintaining the natural beach/dune system in the future, and will work cooperatively with property owners and other government agencies to minimize and eliminate conflicts between development and the oceanfront environment. The Town shall employ appropriate erosion control and land use measures to insure this outcome.

2.3 Erosion Control

2.3.1 Identification of Potential Problem Areas

With the exception of the Breach Inlet area, front row development along the Sullivan's Island shoreline (between Station 10 and Station 28 1/2) is generally set back between 100 ft and 1,000 ft from the dune/vegetation line. However, many homes and erosion control structures along the Breach Inlet shoreline (between Station 29 and Station 32) encroach onto the active beach. The June 1991 structural inventory data contained in Section 3 and summarized in Section 1.3 show that front row habitable structures between Station 10 and Station 28 1/2 lie an average of 340 ft landward of the SCCC 40-year setback line. The inventory data show front row habitable structures between Station 28 1/2 and Station 32 lie an average of 42 ft seaward of the SCCC 40-year setback line (ranging from 50 ft landward to 208 ft seaward of the SCCC setback line).

Based on the above information and an understanding of local coastal processes along Sullivan's Island it is apparent that, with the exception of severe storms, few structures are threatened by erosion. Those structures most vulnerable to erosion during high tides and minor storms are situated along the Breach Inlet shoreline, between Station 28 1/2 and Station 32. Unfortunately, this is the region where erosion control efforts are likely to be most costly and least effective due to the lack of beach and the presence of the Breach Inlet channel adjacent to the shoreline. It should be pointed out, however, that without the six groins between the bridge and Station 29 and without the revetment at the abutment of the Thompson Memorial Bridge, the northern end of Sullivan's Island would experience continuing erosion due to inlet channel migration (the Breach Inlet channel

is forced southward by near-continuous accretion at the south end of Isle of Palms).

Despite the relatively wide setbacks along the island not adjacent to Breach Inlet, development along the oceanfront is still vulnerable to major storms. This is partially due to the low-lying nature of the island and partially due to the loss of dune protection during hurricane Hugo. Pre-Hugo dune elevations generally ranged 10 ft to 15 ft above mean sea level, while current dune elevations are generally between eight ft and 10 ft above mean sea level.

2.3.2 Erosion Control Strategies

Given the natural setting that exists along most of the Sullivan's Island shoreline, the Town will encourage erosion control strategies that work in concert with local coastal processes, and will prohibit erosion control strategies that further harden the shoreline.

The Town of Sullivan's Island has already adopted regulations prohibiting construction of erosion control structures in the RC-1 conservation area, and will adopt as part of this Plan a prohibition against such structures in the RS residential district. This prohibition is consistent with the 1990 Beachfront Management Act, which prohibits the construction of bulkheads, seawalls and revetments (except to protect public highways that existed on the effective date of the Act -- June, 25, 1990). The Town will allow sand bagging, dune construction and beach nourishment (see Sullivan's Island Code, Sec. 4-1, Sec. 21-26, Sec. 21-39 and Sec. 21-54; and deed restrictions on the Open Land Trust property).

Sediment borrow sources and methods of transportation and placement for dune and beach nourishment projects must be approved in advance by the SCCC, other appropriate agencies, and the Town. The Town shall consider the following as preferred borrow sources and transportation/placement methods (note that this preference does not constitute Town, SCCC or other agency approval for specific projects):

upland sources of beach-compatible sand, hauled to the site by truck, conveyor or other approved means

offshore borrow sources whose use will not adversely affect the Town shoreline by exposing it to increased wave energy

beach scraping from the low tide beach using land-based equipment, provided other borrow sources cannot be used and provided the scraping will not adversely affect the shoreline.

SCCC rules pertaining to beach nourishment/dune restoration, and SCCC guidelines for sand scraping and sand bagging are included in Appendix F and Appendix G.

2.4 Protection and Restoration of Sand Dunes

The Town of Sullivan's Island recognizes the important protective and ecological functions that a healthy dune system provides. The Town also recognizes that the dune system along the oceanfront must be carefully managed to insure these important functions are not lost.

The Town has adopted regulations protecting dunes and vegetation in the RC-1 conservation area and manages oceanfront property subject to Open Land Trust deed restrictions. All activities related to the alteration, destruction, restoration or enhancement of dune areas shall be governed by these regulations and by those guidelines set forth in Sec. 2.4.1.

Further, the Town incorporates the following policies related to dune protection and restoration into its Local Comprehensive Beach Management Plan:

> The Town shall work with property owners and other government agencies to protect, enhance and restore the dune system along Sullivan's Island.
>
> Dune construction, restoration, revegetation, fencing and walkover construction must be carried out in accordance with Town-approved procedures contained in this Plan and the Sullivan's Island Code.
>
> Any activity, construction or alteration of sand dunes seaward of the SCCC 40-year setback line must be approved, in advance, by the SCCC and the Town. Furthermore, any activity, construction or alteration of sand dunes seaward of the RS/RC-1 boundary must be approved, in advance, by the Town.
>
> Sand dunes seaward of the SCCC 40-year setback line or the RS/RC-1 boundary must not be altered unless there is no feasible alternative. Permanent alterations must be carried out in such a way that the disturbance to the dune system is minimized. In the case of temporary alterations, the dune system must be restored to its pre-existing condition.
>
> The Town may, at its discretion, require mitigation for the permanent alteration or destruction of dune areas seaward of the SCCC 40-year setback line or RS/RC-1 boundary. Such mitigation may include: creation of new dune habitat, enhancement of existing dune habitat, installation of protective fencing or walkover structures, dedication of land or easements for access to the beach, or contribution to the Town's Beach and Dune Restoration Fund.
>
> Sand dunes designated as critical habitat areas must not be altered, except for those activities allowed in Section 2.7.

Despite post-Hugo emergency beach and dune restoration, most areas of the Sullivan's Island dune system need repair or enhancement. The Town will develop a dune restoration plan and

will apply for state funding assistance to carry out the plan (see Sec. 2.5).

2.4.1 Dune Restoration and Revegetation Guidelines

The Town of Sullivan's Island will use the following guidelines in reviewing proposed dune restoration and revegetation projects:

Dunes should be constructed or restored along an alignment consistent with nearby dunes. In instances where natural dunes do not form a well-developed line or where they have been destroyed by storms, dunes should be built above the normal limit of wave uprush and not on the active beach.

Dunes can be constructed by actively placing sand in the desired location and configuration (this method is useful for post-storm dune construction), or by allowing windblown sand to deposit naturally. Sand for use in active dune construction and restoration shall be clean sand, obtained from an approved upland source, or from beach scraping per Town and SCCC guidelines (Appendix G). Dunes shall be built in such a way that existing dunes and dune vegetation are not damaged.

Sand fencing should be used to assist natural dune building, provided the fencing does not block access to the beach. Sand fencing can also be used as a means of eliminating uncontrolled pedestrian/bicycle/vehicle traffic that destroys dunes and dune vegetation. The recommended sand fencing configuration for Sullivan's Island is shown in Figure 9. The fence configuration consists of a row of fence placed along or near the seaward dune, but above the limit of normal wave runup, and an optional row of sand fence placed farther landward. The seaward row of fence should be either a discontinuous series of short, straight segments of fence, or a discontinuous series of inverted "V" segments, with a minimum 5 ft gap between fence segments to allow free movement of nesting sea turtles. The landward row of fencing should be a continuous row of fencing, placed in a more landward location; however, the landward row of fence shall not be placed any farther seaward than the landward trough of the primary oceanfront sand dune. The landward row of sand fence is intended to prevent uncontrolled access and damage to the dune system.

Vegetation should be planted on newly constructed or repaired dunes, once the dune side slopes are stable. Vegetation should not be planted on slopes steeper than 1 on 2 (vertical to horizontal) since there is a greater likelihood that the roots will be exposed as the sand shifts to a more stable slope, and the vegetation will not survive. Vegetation that is planted to restore or repair damaged dune areas should be native to the local dune system. Native dune grasses or ground covers can be used successfully, although the former are preferred because of their extensive root systems and soil binding abilities. Two dune grasses are recommended for use along Sullivan's Island: sea oats and beach panic grass. American beach grass is not native to the area and is not recommended, contrary to recently published SCCC and SCS guidelines. There are two principal

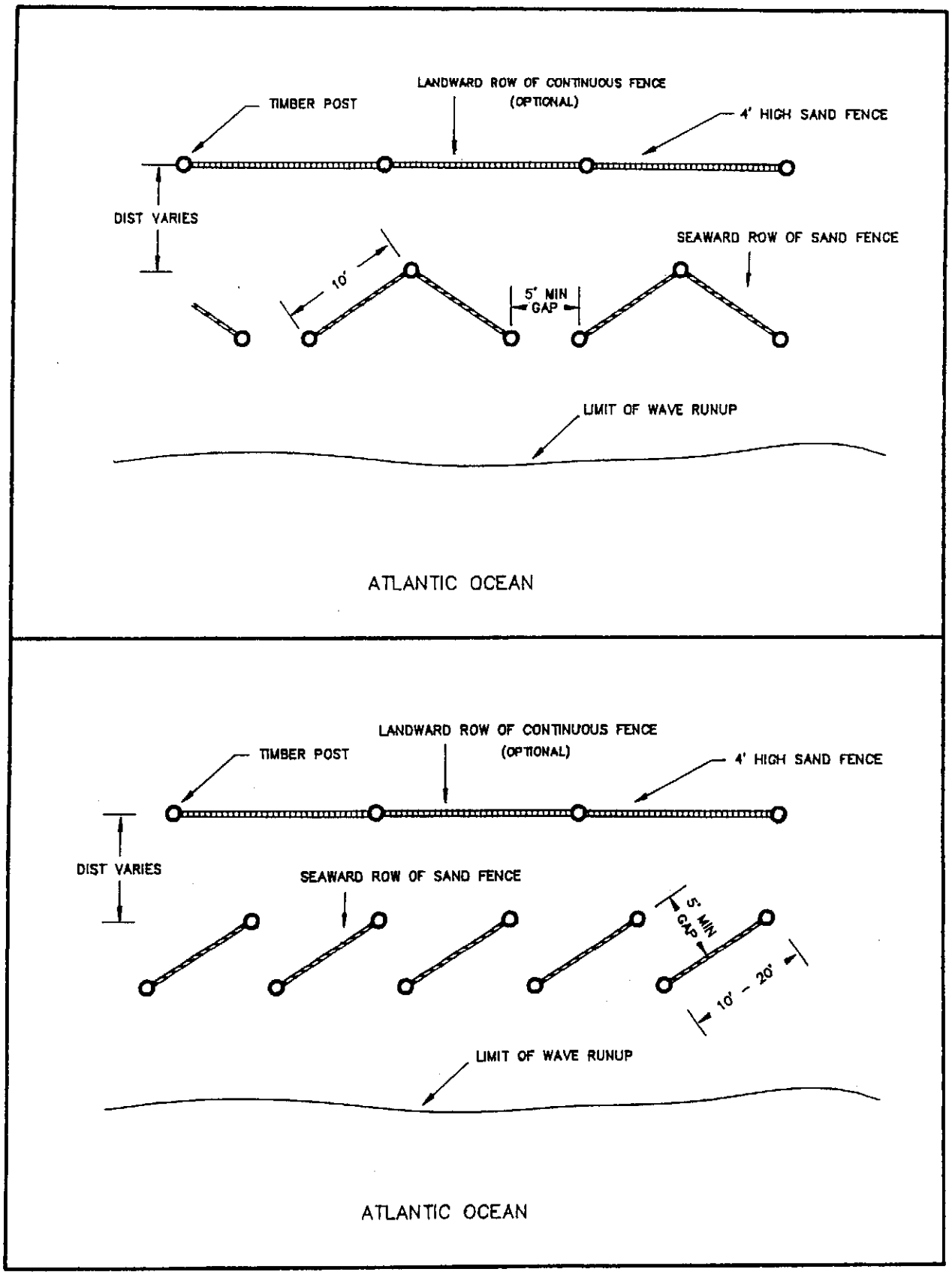


Figure 9. Recommended Sand Fence Configurations for Sullivan's Island.

sources of dune grasses -- field grown stock and nursery grown stock -- and each should be planted using different techniques. The field grown stock should be planted during the winter months, while the nursery grown stock should be planted between late spring and early fall.

Survival of newly planted dune grasses can be increased with watering and fertilization programs, as appropriate (note that too much water or fertilizer can lead to disease problems or to other non-native plants crowding out the dune grasses). Specific planting and maintenance guidelines for these two dune grasses have been developed, based on similar guidelines from Florida (Barnett and Crewz, 1989). These guidelines, developed for use at Sullivan's Island, are contained in Appendix H.

2.5 Funding for Beach/Dune Restoration and Nourishment

No federal funds are presently available for beach/dune nourishment along Sullivan's Island. State funding assistance for beach/dune nourishment along Sullivan's Island will depend on the adoption of a Local Comprehensive Beach Management Plan, the availability of State funds and the ranking assigned to local projects. Availability of State funds will generally be contingent on passage of bond bills in odd-numbered years. Unfortunately the 1991 bill contained money only for matching funds for the federal project at Folly Beach. Ten million dollars in bond money made available by the 1988 General Assembly has been spent, most of it in support of emergency dune and beach restoration projects following hurricane Hugo.

Future funding assistance to local governments will be provided by the SCCC, as more funds become available. The SCCC will consider the following topics in ranking and funding projects: public access and recreation benefits; anticipated project life; environmental impacts; storm protection benefits; local support for the project. The Town will remain in contact with the SCCC to insure any available funds for beach/dune nourishment are obtained.

Another potential source of funding for beach/dune nourishment will be the Town's Beach and Dune Restoration Fund.

2.6 Maintenance of a Dry Sand and Ecologically Stable Beach

The Town of Sullivan's Island recognizes the importance of maintaining a dry sand and ecologically stable beach. The beach affords habitat to a variety of species, protection to upland development and space for recreational activities. In an effort to insure the continued existence of a natural beach along Sullivan's Island, the Town will work closely with property owners and other government agencies to accomplish the following:

to encourage property owners to site oceanfront buildings and structures as far landward as possible. Where appropriate, the Town shall consider variances to reduce front yard (street) setbacks and increase rear yard

(oceanfront) setbacks [see Chapter 21 of the Sullivan's Island Code].

to encourage oceanfront property owners to reduce lot coverage by impervious surfaces and control stormwater discharge.

to require nonconforming structures that are destroyed or damaged 50 percent or more to be removed [see Sec. 21-41(F) of the Sullivan's Island Code]. Rebuilt structures must conform to all provisions of the Sullivan's Island Code, the Local Comprehensive Beach Management Plan, FEMA regulations and SCCC regulations.

to facilitate the relocation and/or abandonment and removal of structures which, because of erosion, encroach onto the active beach. In cases where such encroachment is a result of severe storms or other short-term phenomena not expected to persist, the Town shall work with affected parties to carry out erosion control efforts consistent with Sec. 2.3.2 of this Plan and the Sullivan's Island Code. In cases where long-term erosion and encroachment are likely to persist, and where erosion control efforts are not feasible or successful, the Town shall work with affected parties to remove the structures.

The Town shall not approve construction of buildings or other structures, except for dune walkways and temporary sand bagging, seaward of the RS/RC-1 boundary. Furthermore, the Town shall not approve construction which results in unnecessary destruction of dunes and dune vegetation seaward of RS/RC-1 boundary or SCCC 40-year setback line. The Town may, at its discretion, allow limited alteration or landscaping of areas seaward of the RS/RC-1 boundary or 40-year setback line The Town may require mitigation for construction or permanent alteration of dune areas (see Sec. 2.4).

2.7 Protection of Endangered Species and Critical Habitats

Background information in Sec. 1.2 of this Plan indicates that several species in South Carolina have been classified as threatened, endangered or of special concern by state and federal agencies. Thus far, census and management efforts have concentrated on the loggerhead turtle. State and federal agencies have not identified or mapped other critical habitats. In order to protect threatened, endangered and protected species, and valuable habitat areas, the Town of Sullivan's Island shall:

assist the SCWMRD and other agencies with the identification and mapping of critical habitat areas along the Sullivan's Island shoreline.

adopt and enforce ordinance that prohibit trespassing into designated areas during certain seasons (nesting areas, for example).

enforce the provisions of the Sullivan's Island Code pertaining to free-roaming dogs.

encourage beachfront property owners to eliminate or reduce lighting that shines directly onto the beach, since artificial lighting can interfere with nesting sea turtles and turtle hatchlings.

regulate vehicular traffic on the beach.

regulate erosion control and activities according to the guidelines and requirements in Sec. 2.3.2 of this Plan. Where possible, such approved activities will be restricted to wintertime.

limit acquisition of nourishment sand from areas that have been designated as critical habitat areas.

2.7.1 Town Cooperation with Natural Resource Agencies

The Town of Sullivan's Island stands ready to work with appropriate state and federal agencies to insure the continued existence of natural communities and habitats along the ocean shoreline. Inasmuch as critical habitat areas have not yet been identified and mapped by the SCWMRD, the Town will contact that agency and offer its assistance.

The Town declares as a matter of policy that its representatives shall be fully involved in assisting natural resource agencies with the identification, mapping and management of critical habitat areas. Specifically, designated Town representatives will be available to assist agency personnel during site visits to the Town's beaches, and to assist the agencies during the critical habitat designation process. Town representatives will also assist agencies by monitoring usage of critical habitat areas, and will make recommendations to the agencies when such areas can be delisted.

Education of property owners, guests and other affected groups will be a necessary part of any natural resource management strategies for Sullivan's Island. The Town will work closely with the property owners, the SCCC, the SCWMRD and other interested groups to develop and implement effective education programs.

2.7.2 Regulation of Activities Affecting Protected Species and Habitats

The Sullivan's Island Code provides a mechanism to regulate activities which may affect protected species and habitats. The Town shall supplement the existing regulations and guidelines, where necessary, with ordinances to satisfy the provisions of the Beachfront Management Act.

The Town code currently allows dogs in the beach area (RC-1 area):

> between November 1st and March 15th, provided the owner/keeper or person with custody and control is present with a leash readily at hand;
>
> between March 16th and October 31st, during the hours between 8:00 pm and 8:00 am only, provided the owner/keeper or person with custody and control is present with a leash readily at hand.

The Town shall modify its Town Code to prohibit the disturbance of nesting sea turtles, turtle nests or turtle hatchlings by dogs, and shall modify its Town Code to prohibit dogs in designated critical habitat areas, where such prohibition is posted. Penalties for violation of the above regulations pertaining to pets on the beach may include fines or imprisonment, as outlined in Sec. 3-8 of the Town Code.

The Town shall also adopt an ordinance prohibiting trespassing into designated critical habitat areas, taking into consideration both temporal and spatial usage of those critical habitat areas (see Sec. 4.2). The Town shall work with appropriate agencies to post signs designating these restricted use areas, and to educate property owners and the public about the importance of observing these restrictions.

Sections 4-16 and 4-23 of the Sullivan's Island Code restrict vehicle access to and traffic on the beach. These sections allow only emergency/law enforcement vehicles and temporary use of vehicles trailering boats as part of approved sailing events.

Relative to other S.C. barrier islands, Loggerhead turtle nesting along the Sullivan's Island shoreline has been reported by the SCWMRD to be light and sporadic. Despite this, the Town previously adopted a beach lighting ordinance that applied to the area between Station 12 and Station 21 only. This ordinance was judged to be deficient for two reasons. First, it did not satisfy the requirements of the Beachfront Management Act. Second, the ordinance encouraged artificial lights to be shaded by a red lens, apparently with the understanding that red light will not disorient hatchlings -- this understanding is incorrect.

The Town has since modified its Beach Lighting Ordinance to comply with the requirements of the Beachfront Management Act and SCWMRD. Revisions to Sec. 14-23 are included in Section 4 of the Town's Local Comprehensive Beachfront Management Plan.

All erosion control and activities shall be subject to Town approval and shall take into consideration seasonal and other special restrictions described above (see Sec. 2.7). Specifically, the Town will encourage completion of erosion control projects between November 1 and May 14, and will discourage the use of borrow and fill sites that provide critical habitat area.

2.8 Beach Access and Beach Use

Public access to beaches is a major concern of the Town of Sullivan's Island . There are 28 public access points at street ends along the four-mile ocean shoreline. Four off-street parking areas provide approximately 145 public parking spaces; over 2,000 other public parking spaces exist along road rights-of-way between Middle Street and beach access points. The Town will erect signs at access points directing the public to appropriate parking spaces nearby. The existing and access and parking are sufficient to classify the entire Sullivan's Island shoreline as having full and complete access (see Figure 10 and Table 8).

The Town wishes to encourage property owners and others to use the beach for those recreational uses allowed in Chapter 12, Article IV of the Sullivan's Island Code.

2.9 Regulation of Vehicular Traffic

Vehicular traffic on the beach is prohibited, except for those uses contained in Chapter 4 of the Sullivan's Island Code. However, there may be other vehicular uses which are essential to public health, welfare and safety. The following uses shall be permitted, subject to Town approval, provided the vehicles use designated vehicle access points:

emergency and law enforcement vehicles

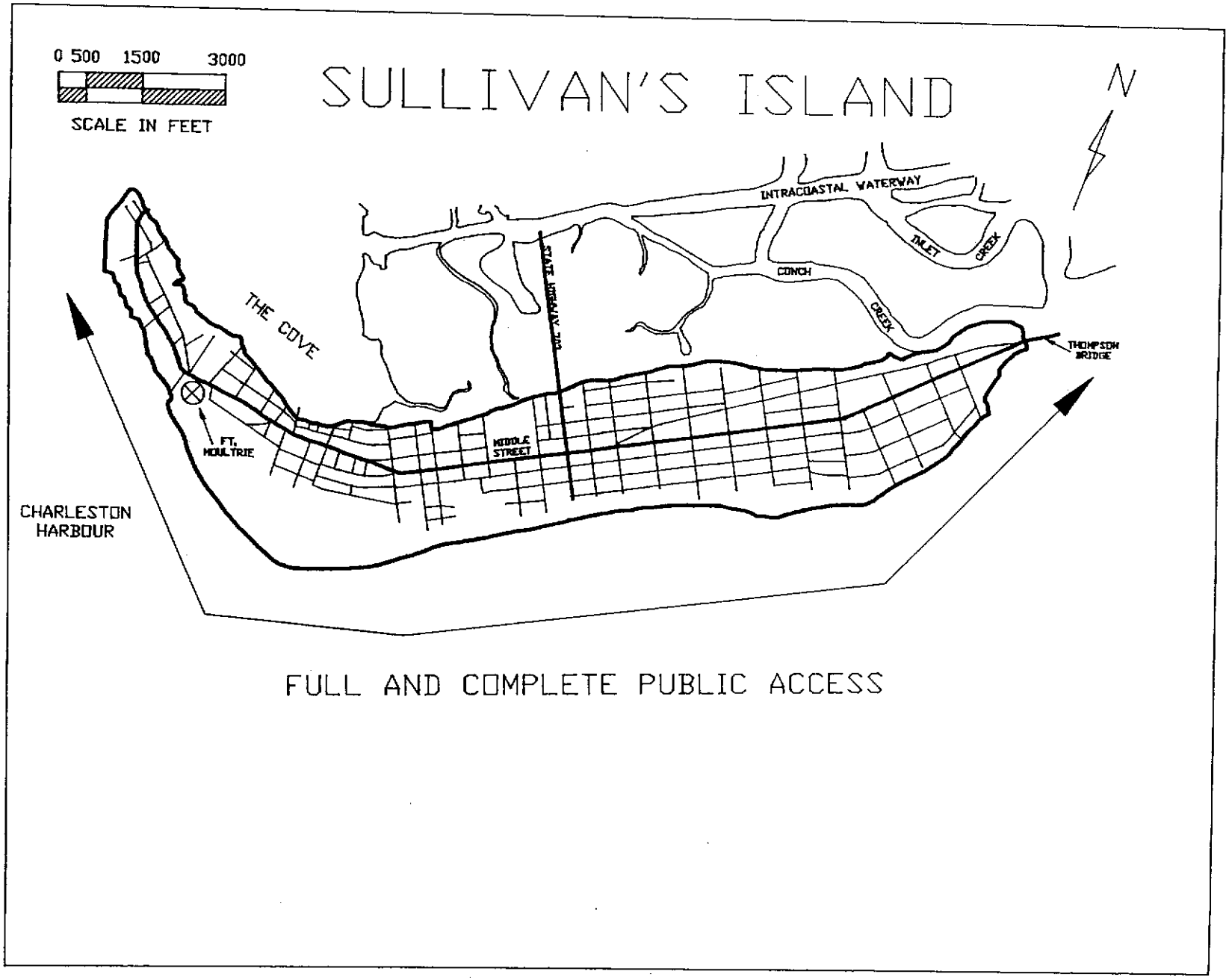
vehicles trailering sail boats as part of approved sailing events, subject to restrictions in Sec. 4-16 and 4-23

other vehicle uses deemed essential by the Town (which may include Town and other government vehicles, vehicles used to conduct beach surveys, etc.)

Vehicles using the beach shall be operated in such a manner that pedestrians and other beachgoers are not endangered or harmed. Further, vehicles shall be driven on the wet sand beach whenever possible and shall not travel on the dry sand or upper beach; vehicles shall not disturb nesting or other sensitive areas.

2.10 Permits and Mitigation for Construction Occurring Seaward of the 40-Year Setback Line

The Town of Sullivan's Island requires a permit be obtained for any destruction, removal or alteration of sand dunes or vegetation seaward of the RS/RC-1 boundary or 40-year setback line. Sections 48-39-310 and 48-39-320 of the Beachfront Management Act require mitigation for any destruction of dune vegetation or construction seaward of the 40-year setback line. Any activities carried out seaward of the RS/RC-1 boundary or the 40-year setback line may require appropriate mitigation, unless the SCCC and the Town determine no adverse impacts will result and no mitigation is required. Mitigation activities shall be subject to the approval of the SCCC and the Town of Sullivan's



FULL AND COMPLETE PUBLIC ACCESS

Figure 10.

Table 8. SCCC Beach Public Access Facility Classification

Type of Facility	Distance on either side of access point which will be considered as having Full and Complete Access	Minimum Facilities
Public Access Point	1/8 mile	Trash Receptacle; walkover/improved surface access; signage; on-street parking for 6 vehicles
Local Public Access Park	1/4 mile	As above, parking for 10 vehicles
Neighborhood Public Access Park	1/2 mile	As above, showers, restrooms, parking for 25 vehicles
Community Public Access Park	3/4 mile	As above, lifeguards, concession, handicapped access and parking, parking for 75 vehicles
Regional Public Access Park	1 mile	As above, parking for 150 vehicles and greater

Island, and shall be consistent with the provisions outlined in this Plan and the Sullivan's Island Code. The Town shall work closely with the SCCC to implement and administer mitigation programs.

In determining whether or not activities will result in adverse impacts and require mitigation, the SCCC and Town will consider the following: beach access; beach movement and erosion; dunes and dune vegetation; protected species and critical habitats.

The Town shall consider the following as acceptable mitigation activities, and may require at its discretion one or more of the following:

1. creation of new dunes and dune habitat

2. revegetation, fencing or enhancement of existing dune habitat

3. beach nourishment with compatible sand from an approved source

4. dedication of new access ways

5. construction of public walkover structures or parking areas

6. contribution to the Town's Beach and Dune Restoration Fund

7. participation in programs to protect endangered species and critical habitats

The Town will work closely with property owners seeking to alter areas seaward of the RS/RC-1 boundary or 40-year setback line, in order to minimize impacts to that area and to coordinate any required mitigation. The Town will administer the mitigation program in order to protect and restore a healthy and productive dune system along the Sullivan's Island shoreline. As such, there are several general guidelines that the Town will follow in reviewing development and mitigation activities.

Destruction of dune vegetation by construction and other activities shall be prohibited unless there is no feasible alternative; in cases where destruction is permitted, it shall be held to a minimum. Destroyed dune vegetation shall be replaced at an approved location on a minimum two-to-one basis. Creation or enhancement of dune areas shall be carried out in accordance with the guidelines in Sec. 2.4.1 of this Plan. The location of any dune creation or enhancement must be approved in advance by the Town; off-site placement may be allowed if it is in the best interest of the Town.

Mitigation in the form of beach nourishment shall require a minimum of two cubic yards of beach compatible sand per foot of shoreline subject to this requirement. The location of sand placement shall be determined by the Town; off-site placement may be allowed if it is in the best interest of the Town.

New access ways that are dedicated shall be at least 10 ft wide, and shall extend from an upland road or path allowing similar use to the mean high water line. New access ways shall be drawn on plats and recorded in Horry County records. These access ways shall be clearly marked at both ends.

New walkover structures and parking areas created for mitigation purposes shall be designed, constructed and maintained in accordance with Town and State standards. The location of these structures shall be subject to approval by the Town.

In certain instances, the Town may decide that mitigation will best serve the Town's interest if it is in the form of a contribution to the Beach and Dune Restoration Fund. The Town shall develop guidelines for determining when such contributions are appropriate and the required contribution levels. Money from the Beach and Dune Restoration Fund shall only be spent to enhance and restore the beach/dune system, to enhance or increase public access to the beach, and to improve the condition and safety of the beach. Purchase or acquisition of land and structures for beach access purposes with money from the Fund will be permitted.

Mitigation may also take the form of financial or other contribution to programs designed to protect and manage endangered species and critical habitats. Contributions to similar programs that promote public education would also be considered appropriate.

2.11 Stormwater Management and Drainage

The Town, as a matter of policy, shall encourage all property owners to use those guidelines and best management practices outlined in the SCCC report, Storm Water Management Guidelines. The Town shall also work closely with property owners and the SCCC to control drainage and stormwater discharges by enforcement of the Town ordinances.

Controlling stormwater and other discharges along the beachfront areas of Sullivan's Island is a priority of the Town. Uncontrolled, direct discharge to the beach can not only lead to erosion of dune and beach areas, but can also affect water quality. The Town of Sullivan's Island has recently completed a shoreline drainage project and adopts as part of this Plan a policy to prohibit any additional outfalls or other means of direct discharge to the beach.

In the event that erosion of dune areas takes place and the potential for direct discharge of stormwater, pool overflow or other runoff to the beach increases, the Town shall require property owners to redirect any potential discharges away from the beach. The Town shall work in conjunction with all affected groups to restore and maintain natural dune areas along the shoreline as a means of reducing or eliminating the potential for direct discharge to the beach. However, property owners should not rely only on the Town's dune program to control discharge.

2.12 Post-Disaster Recovery and Redevelopment

In the wake of Hurricane Hugo, The Town has worked to develop a detailed Disaster Preparedness Plan (see Appendix I). The Town and its designated representatives and committees will work with all appropriate agencies, prior to and after a severe storm or natural disaster, to minimize potential injury and damage, and to expedite recovery and redevelopment.

All recovery and redevelopment shall be consistent with Town regulations, this Local Comprehensive Beach Management Plan, and the requirements of the Beachfront Management Act.

Following a severe storm, one of the first priorities of the Town shall be to assess damage to beaches, dunes and upland development, and to institute emergency protective measures to prevent further damage. Town representatives shall work closely with representatives of the SCCC, FEMA and the Corps of Engineers to complete any damage assessments quickly.

If necessary, the Town shall issue appropriate emergency orders allowing property owners to undertake emergency sand scraping and sand bagging (see Appendix G). The Town shall serve as local sponsor and coordinate any state or federal emergency protection projects; if state or federal funds are available for emergency protection and post-storm renourishment, the Town shall make application for such funds. Emergency orders and protective works shall be consistent with the Town's erosion control plan (see Sec. 2.3).

The Town shall make provisions to control and coordinate a variety of post-disaster activities in beachfront and non-beachfront areas. In addition to actions mentioned above, these shall include:

1. coordination with state and FEMA officials during damage inspections and during the administration of DSRs

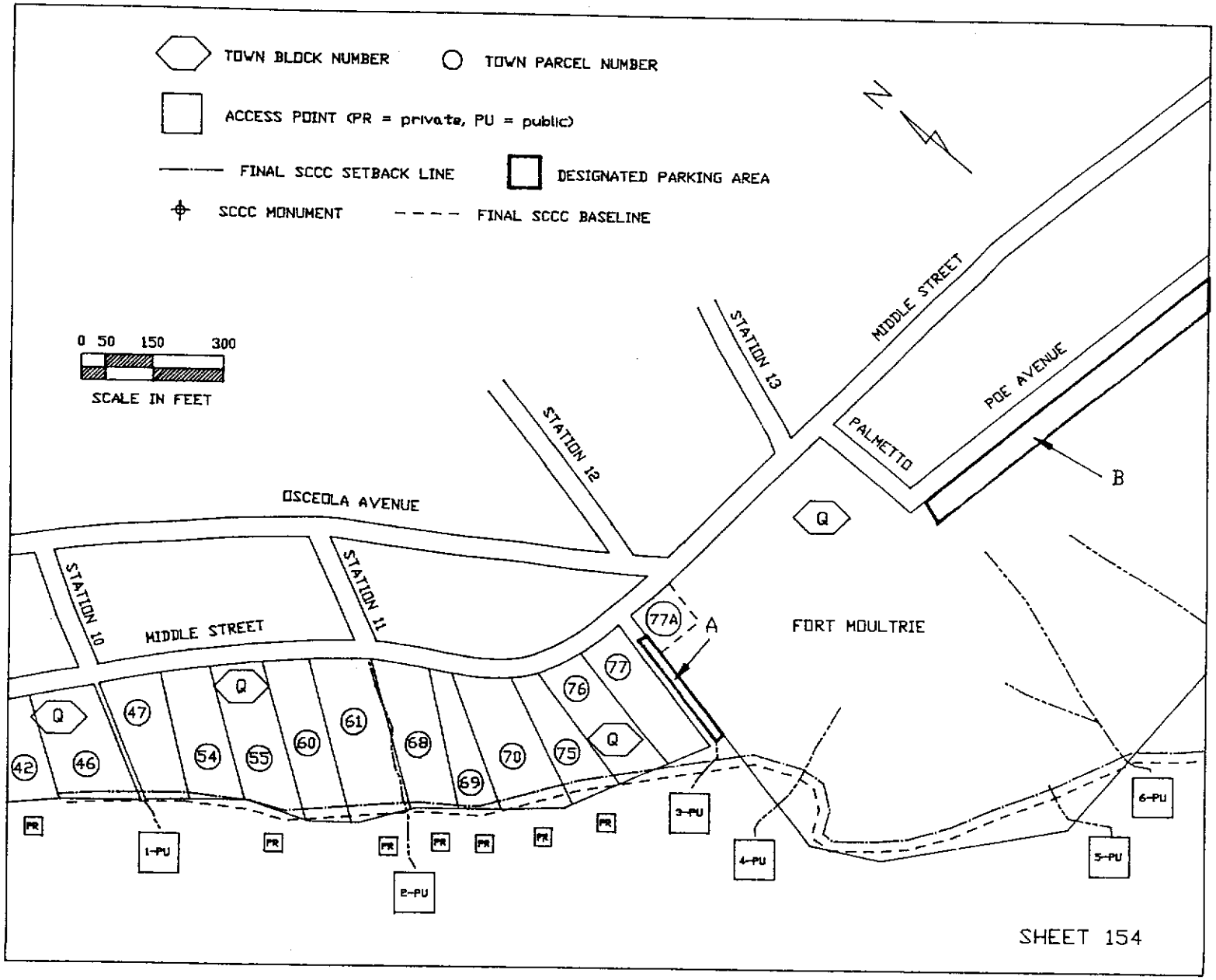
2. access for residents, inspectors, utility crews, contractors and others after the disaster

3. debris removal and restoration of essential services

More details on the above actions and responsibilities can be found in the Town's Disaster Preparedness Plan.

SECTION 3

INVENTORIES AND OVERLAYS



SULLIVAN'S ISLAND, BEACH MANAGEMENT PLAN

Prepared by Applied Technology and Management, Inc.

Charleston, SC

SULLIV'''S ISLAND

SHEET NO. 154

STRUCTURAL INVENTORY

STREET	TOWN BLOCK	TOWN PARCEL	COUNTY PARCEL	STRUCTURE INVENTORY *	STRUCTURE LOCATION **	EROSION CONTROL STRUCTURE
	Q	42	61	A	- 87'	--
	"	"	"	--	+148'	SEAWALL***
	"	46	62	A	-173'	--
	"	"	"	--	+120'	"
STATION 10						
	"	47	63	A	-107'	--
	"	"	"	--	+105'	"
	"	54	64	E	-130'	--
	"	"	"	A	- 36'	--
	"	"	"	--	+153'	"
	"	"	"	G#	+ 10'	
	"	55	65	E	-164'	--
	"	"	"	A	- 78'	--
	"	"	"	P	- 33'	--
	"	"	"	--	+118'	"
	"	60	66	A#	-120'	--
	"	"	"	--	+125'	"
	"	61	67	E	-148'	--
	"	"	"	A	-158'	--
	"	"	"	A	- 57'	--
STATION 11						
	"	68	76	P	-153'	--
	"	"	"	A	- 8'	--
	"	69	77	A	- 41'	--
	"	70	78	E	-105'	--
	"	"	"	A	- 51'	--

NOTE: *

A = HABITABLE STRUCTURE <5,000 SQ. FT.
B = HABITABLE STRUCTURE >5,000 SQ. FT.
P = POOL
C = RECREATIONAL AMENITY
D = PARKING LOT
E = ANCILLARY BUILDING
F = DECK
H = HISTORICAL STRUCTURE
S = SCHOOL BUILDING
G = FENCE
J = PIER

** MEASURED FROM INTERIM SETBACK LINE
(-) INDICATES LANDWARD
(+) INDICATES SEAWARD
(#) INDICATES DAMAGED

*** SEAWALL RUNS CONTINUOUSLY FROM Q-61/Q-66

SULLI' 'S ISLAND

SHEET NO. 154 (CONTINUED)

STRUCTURAL INVENTORY

STREET	TOWN BLOCK	TOWN PARCEL	COUNTY PARCEL	STRUCTURE INVENTORY *	EROSION STRUCTURE LOCATION **	CONTROL STRUCTURE
STATION 11						
	Q	70	78	E	-207'	---
	"	"	"	--	---	GROIN
	"	75	79	A	- 51'	---
	"	"	"	A	-188'	---
	"	76	80	A	- 58'	---
	"	77	81	A	-257'	---
	"	"	"	A	-176'	---
	"	"	"	--	---	GROIN
	"	77A	--	--	---	---
STATION 12						
	"	Ft. Moultrie	84	H (Ft. Moultrie)	-148'	---
	"	"	"	--	+ 18'	REVETMENT
	"	"	"	--	---	GROIN
	"	"	"	E	-690'	---
	"	"	"	H (Bunker)	-528'	---

NOTE: *
A = HABITABLE STRUCTURE <5,000 SQ. FT.
B = HABITABLE STRUCTURE >5,000 SQ. FT.
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F = DECK
H = HISTORICAL STRUCTURE
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G = FENCE
J = PIER

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SULLIVAN'S ISLAND

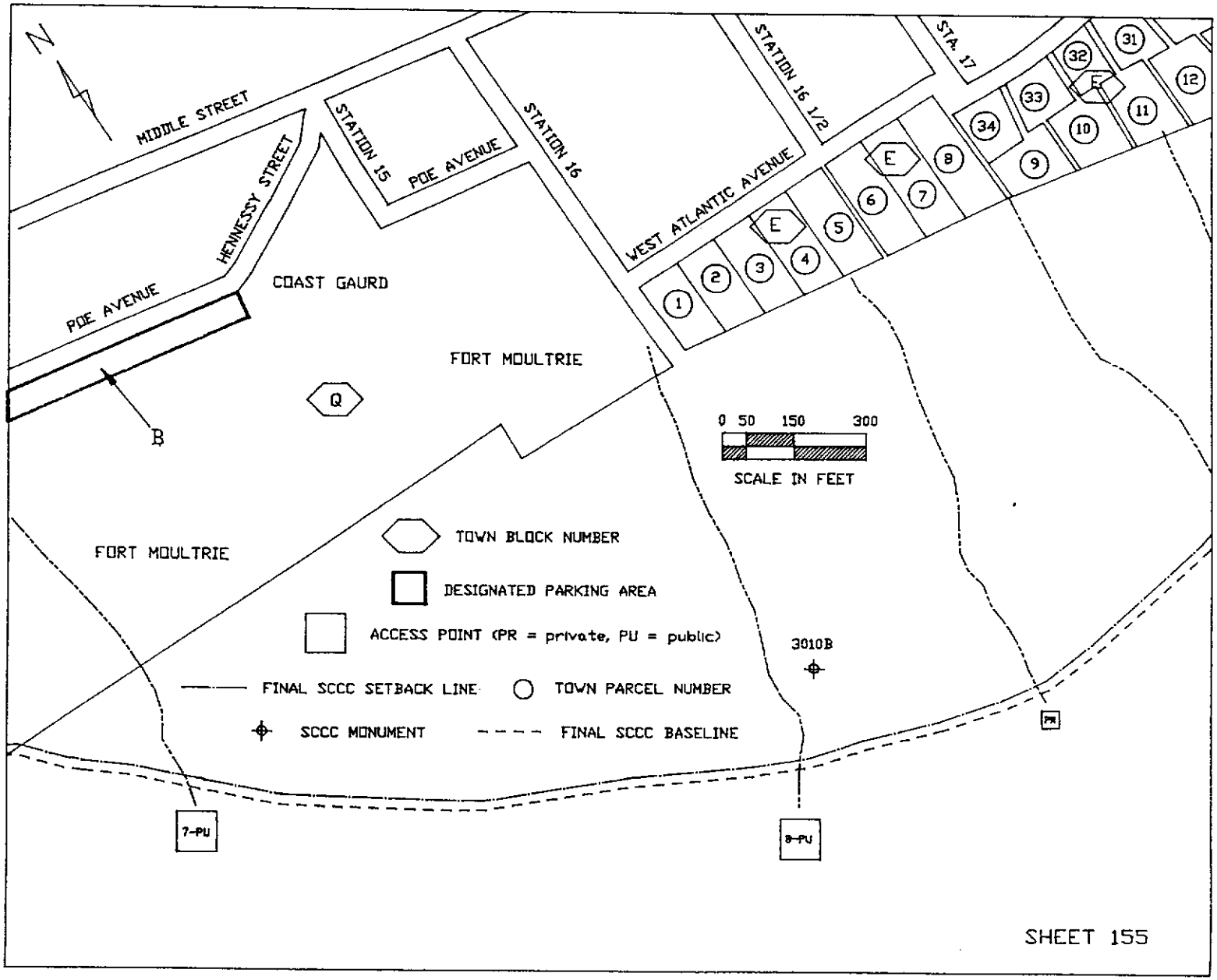
SHEET NO. 154

BEACH ACCESS INVENTORY

STREET	TOWN BLOCK	COUNTY PARCEL	ACCESS SITE	TYPE*	FACILITIES**
	Q	61	--	PR	PI
STATION 10			1	PU	UA
	"	65	--	PR	PI
	"	67	--	PR	UA
STATION 11			2	PU	UA
	"	76	--	PR	UA
	"	77	--	PR	PI
	"	78	--	PR	PI
	"	79	--	PR	PI
STATION 12			3	PU	M, UA, V
	"	84	4	PU	UA
	"	"	5	PU	UA
	"	"	6	PU	UA

NOTE: *
PR = PRIVATE ACCESS STRUCTURE
PU = PUBLIC ACCESS STRUCTURE
( ) = PROPOSED PUBLIC ACCESS SITE

**
W = DUNE WALKOVER
V = VEHICLE ACCESS
UA = UNIMPROVED ACCESS POINT
H = HANDICAPPED
R = RESTROOMS
S = SHOWERS
L = LIFEGUARD
PI = PARTIALLY IMPROVED ACCESS (WOODEN PLANKS, SOME CONCRETE, ETC.)
M = ACCESS POINT INDICATED BY SIGNS



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Charleston, SC

SULLI' 'S ISLAND

SHEET NO. 155

STRUCTURAL INVENTORY

STREET	TOWN BLOCK	TOWN PARCEL	COUNTY PARCEL	STRUCTURE INVENTORY *	STRUCTURE LOCATION **	EROSION CONTROL STRUCTURE
	Q	Ft. Moultrie	84	E	- 692'	---
	"	"	"	H (BUNKER)	- 528'	---
	"	"	"	E (COAST GUARD	- 931'	---
	"	"	"	G (COAST GUARD)	- 762'	---
	"	"	"	A (COAST GUARD)	- 862'	---
	"	"	86	H (BUNKER)	-1169'	---
	"	"	119	--	---	---
STATION 16						
	E	1	1	A	-1030'	---
	"	2	2	A	-1036'	---
	"	3	3	A	-1037'	---
	"	4	4	A	-1017'	---
	"	5	5	A	-1004'	---
STATION 16 1/2						
	"	6	6	A	- 999'	---
	"	7	7	A	- 955'	---
	"	8	8	A	- 906'	---
STATION 17						
	"	34	9	A	- 913'	---
	"	9	10	A	- 801'	---
	"	33	11	A	- 916'	---
	"	10	12	A	- 804'	---
	"	32	13	A	- 935'	---
	"	11	14	A	- 763'	---
	"	"	14	E	- 875'	---

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** MEASURED FROM INTERIM SETBACK LINE
(-) INDICATES LANDWARD
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(#) INDICATES DAMAGED

SULLIVAN'S ISLAND

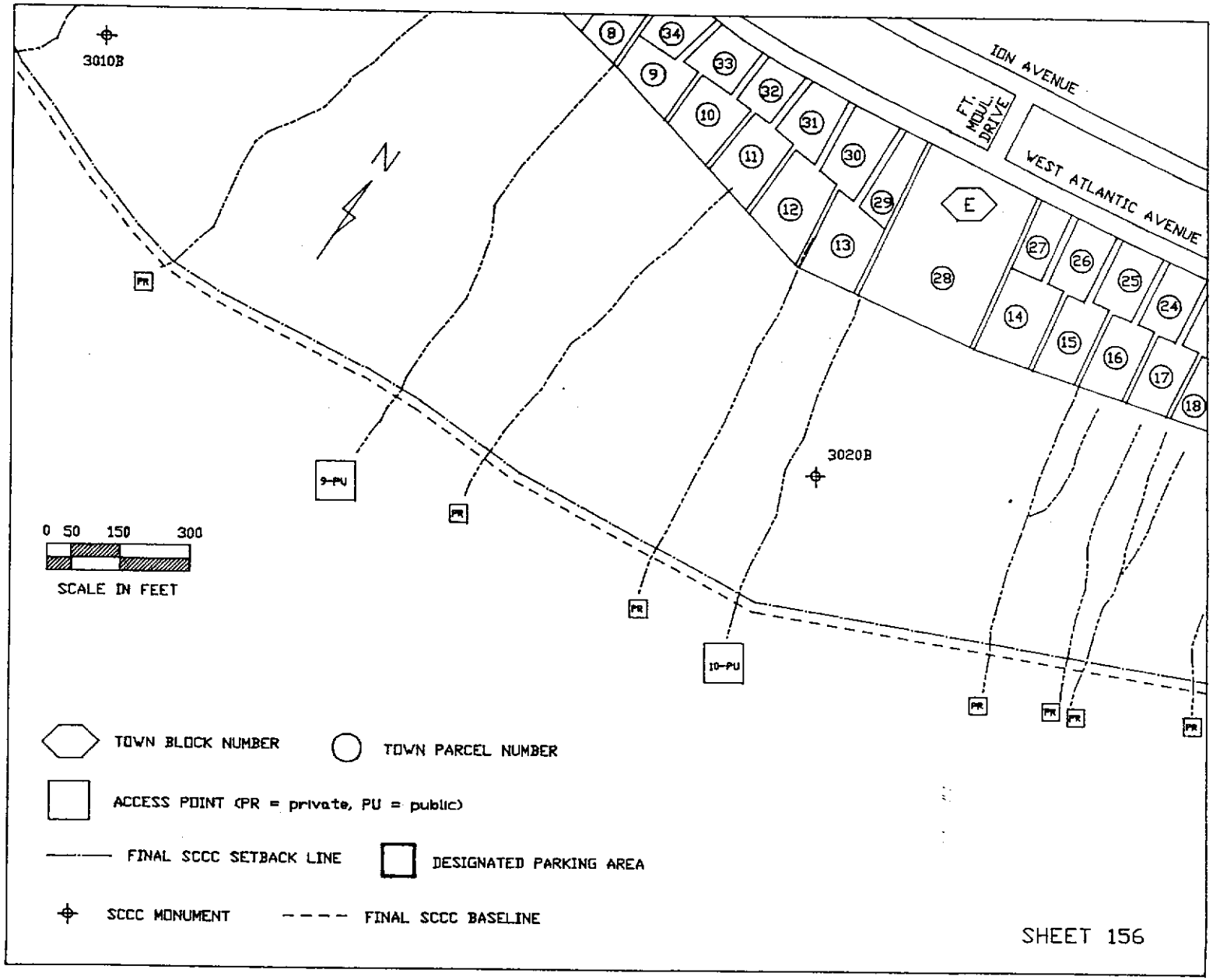
SHEET NO. 155

BEACH ACCESS INVENTORY

STREET	TOWN BLOCK	COUNTY PARCEL	ACCESS SITE	TYPE*	FACILITIES**
	Q	84	7	PU	UA
	"	119	8	PU	UA
STATION 16					
	E	4-5	--	PR	UA

NOTE: *
PR = PRIVATE ACCESS STRUCTURE
PU = PUBLIC ACCESS STRUCTURE
( ) = PROPOSED PUBLIC ACCESS SITE

**
W = DUNE WALKOVER
V = VEHICLE ACCESS
UA = UNIMPROVED ACCESS POINT
H = HANDICAPPED
R = RESTROOMS
S = SHOWERS
L = LIFEGUARD
PI = PARTIALLY IMPROVED ACCESS (WOODEN PLANKS, SOME CONCRETE, ETC.)
M = ACCESS POINT INDICATED BY SIGNS



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Charleston, SC

SULLI\ ` ISLAND

SHEET NO. 156

STRUCTURAL INVENTORY

STREET	TOWN BLOCK	TOWN PARCEL	COUNTY PARCEL	STRUCTURE INVENTORY *	STRUCTURE LOCATION **	EROSION CONTROL STRUCTURE
	E	9	10	A	- 801'	---
	"	33	11	A	- 916'	---
	"	10	12	A	- 804'	---
	"	32	13	A	- 935'	---
	"	11	14	A	- 763'	---
	"	"	"	E	- 875'	---
	"	31	15	A	- 921'	---
	"	12	16	A	- 708'	---
	"	"	"	E	- 798'	---
	"	30	17	A	- 900'	---
	"	13	18	A	- 724'	---
	"	29	19	--	---	---
FT. MOULTRIE DR	"	28	20	B	- 750'	---
"	"	"	"	P	- 678'	---
"	"	"	"	F	- 709'	---
	"	27	21	--	---	---
	"	14	22	F	- 657'	---
	"	26	23	--	---	---
	"	15	24	A	- 620'	---
	"	25	25	A	- 767'	---
	"	"	"	E	- 754'	---
	"	16	26	A	- 602'	---
	"	24	27	--	---	---
	"	17	28	A	- 591'	---

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C = RECREATIONAL AMENITY
D = PARKING LOT
E = ANCILLARY BUILDING
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H = HISTORICAL STRUCTURE
S = SCHOOL BUILDING
G = FENCE
J = PIER

** MEASURED FROM INTERIM SETBACK LINE
(-) INDICATES LANDWARD
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(#) INDICATES DAMAGED

SULLIVAN'S ISLAND

SHEET NO. 156

BEACH ACCESS INVENTORY

STREET	TOWN BLOCK	COUNTY PARCEL	ACCESS SITE	TYPE*	FACILITIES**
	E	4-5	--	PR	UA
STATION 17			9	PU	UA
	"	14	--	PR	UA
	"	16-18	--	PR	PI
FT. MOULTRIE DR.	"	18-20	10	PU	UA, V, M
	"	24-26	--	PR	UA
	"	28	--	PR	UA
	"	30	--	PR	UA
	"	32	--	PR	UA

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**
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V = VEHICLE ACCESS
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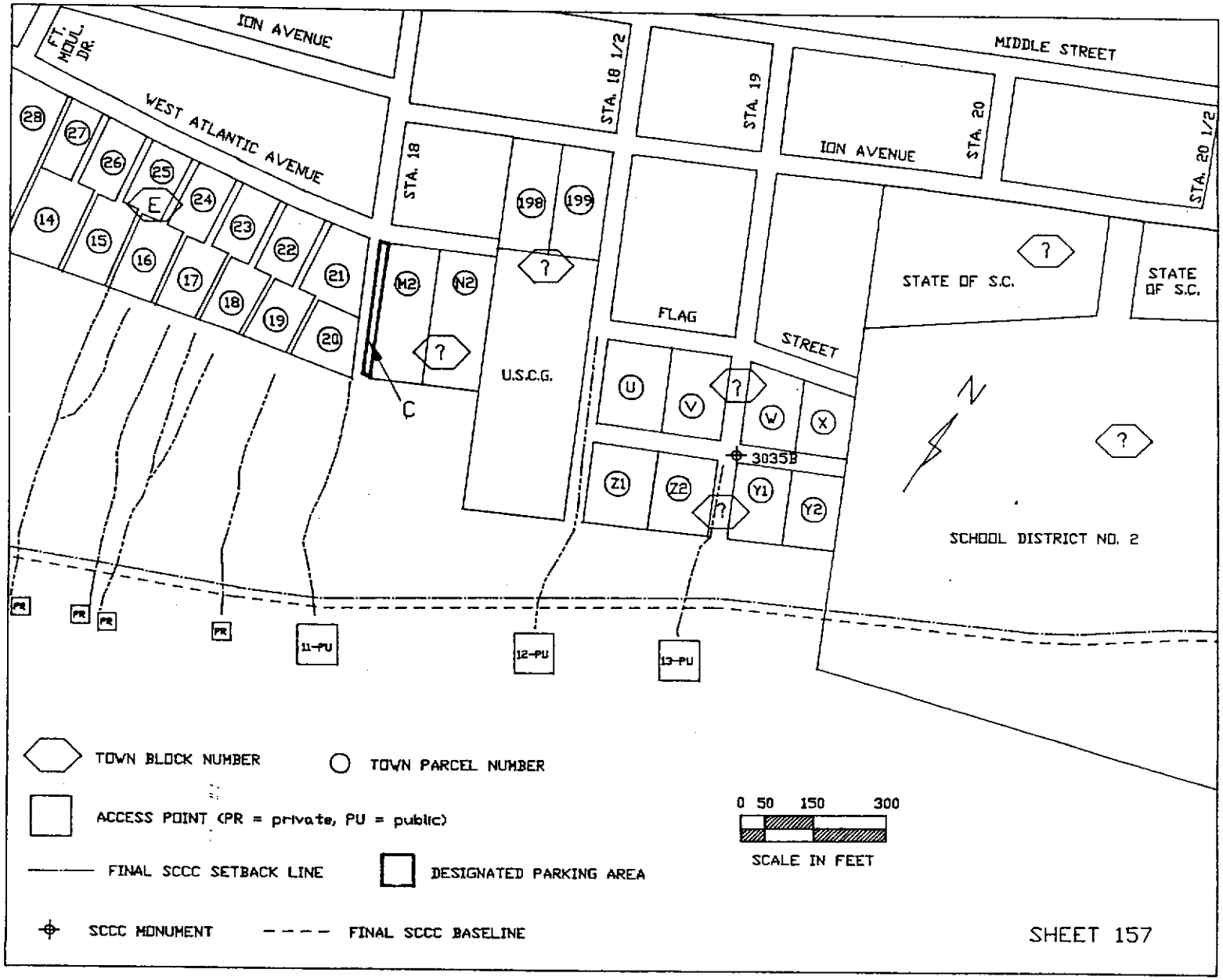
PI = PARTIALLY IMPROVED ACCESS (WOODEN PLANKS, SOME CONCRETE, ETC.)
M = ACCESS POINT INDICATED BY SIGNS



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SULLIV ˜ ISLAND

SHEET NO. 157

STRUCTURAL INVENTORY

STREET	TOWN BLOCK	TOWN PARCEL	COUNTY PARCEL	STRUCTURE INVENTORY *	STRUCTURE LOCATION **	EROSION CONTROL STRUCTURE
FT. MOULTRIE DR						
	E	27	21	--	---	---
	"	14	22	F	- 657'	---
	"	26	23	--	---	---
	"	15	24	A	- 620'	---
	"	25	25	A	- 767'	---
	"	"	"	E	- 754'	---
	"	16	26	A	- 602'	---
	"	24	27	--	---	---
	"	17	28	A	- 591'	---
	"	23	29	A	- 719'	---
	"	18	30	A	- 562'	---
	"	22	31	E	- 803'	---
	"	"	"	A	- 711'	---
	"	19	32	A	- 546'	---
	"	21	33	A	- 647'	---
	"	20	34	A	- 498'	---
STATION 18						
	?	M2	86	A	- 666'	---
	"	N2	87	A	- 670'	---
	"	198	83	A	- 883'	---
	"	"	"	A	- 783'	---
	"	199	"	A	- 872'	---
	"	"	"	E	- 766'	---
	"	COAST GUARD	113	E	- 676'	---
	"	"	"	E (LIGHTHOUSE)	- 595'	---
	"	"	"	E (GUYED TOWER)	- 450'	---

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(-) INDICATES LANDWARD
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(#) INDICATES DAMAGED

SULLI\ ISLAND

SHEET NO. 157 (CONTINUED)

STRUCTURAL INVENTORY

STREET	TOWN BLOCK	TOWN PARCEL	COUNTY PARCEL	STRUCTURE INVENTORY *	STRUCTURE LOCATION **	EROSION CONTROL STRUCTURE
STATION 18 1/2						
	?	Z1	90	--	---	---
	"	Z2	89	A	- 195'	---
STATION 19						
	"	Y1	88	--	---	---
	"	Y2	80	A	- 189'	---
STATION 20	"	STATE OF SC	69	H (BUNKER)	- 625'	---
	"	SCHOOL DISTRIC NO. 2	68	--	---	JETTY
	"	"	"	S	- 492'	---
	"	"	"	S	- 437'	---
	"	"	"	S	- 497'	---
	"	STATE OF SC	67	H (BUNKER)	- 673'	---

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** MEASURED FROM INTERIM SETBACK LINE
(-) INDICATES LANDWARD
(+) INDICATES SEAWARD
(#) INDICATES DAMAGED

SULLIVAN'S ISLAND

SHEET NO. 157

BEACH ACCESS INVENTORY

STREET	TOWN BLOCK	COUNTY PARCEL	ACCESS SITE	TYPE*	FACILITIES**
FT. MOULTRIE DR.					
	E	24-26	--	PR	UA
	"	28	--	PR	UA
	"	30	--	PR	UA
	"	32	--	PR	UA
STATION 18			11	PU	V, M, UA
STATION 18 1/2			12	PU	M, UA
STATION 19			13	PU	UA

NOTE: * PR = PRIVATE ACCESS STRUCTURE
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( ) = PROPOSED PUBLIC ACCESS SITE

** W = DUNE WALKOVER
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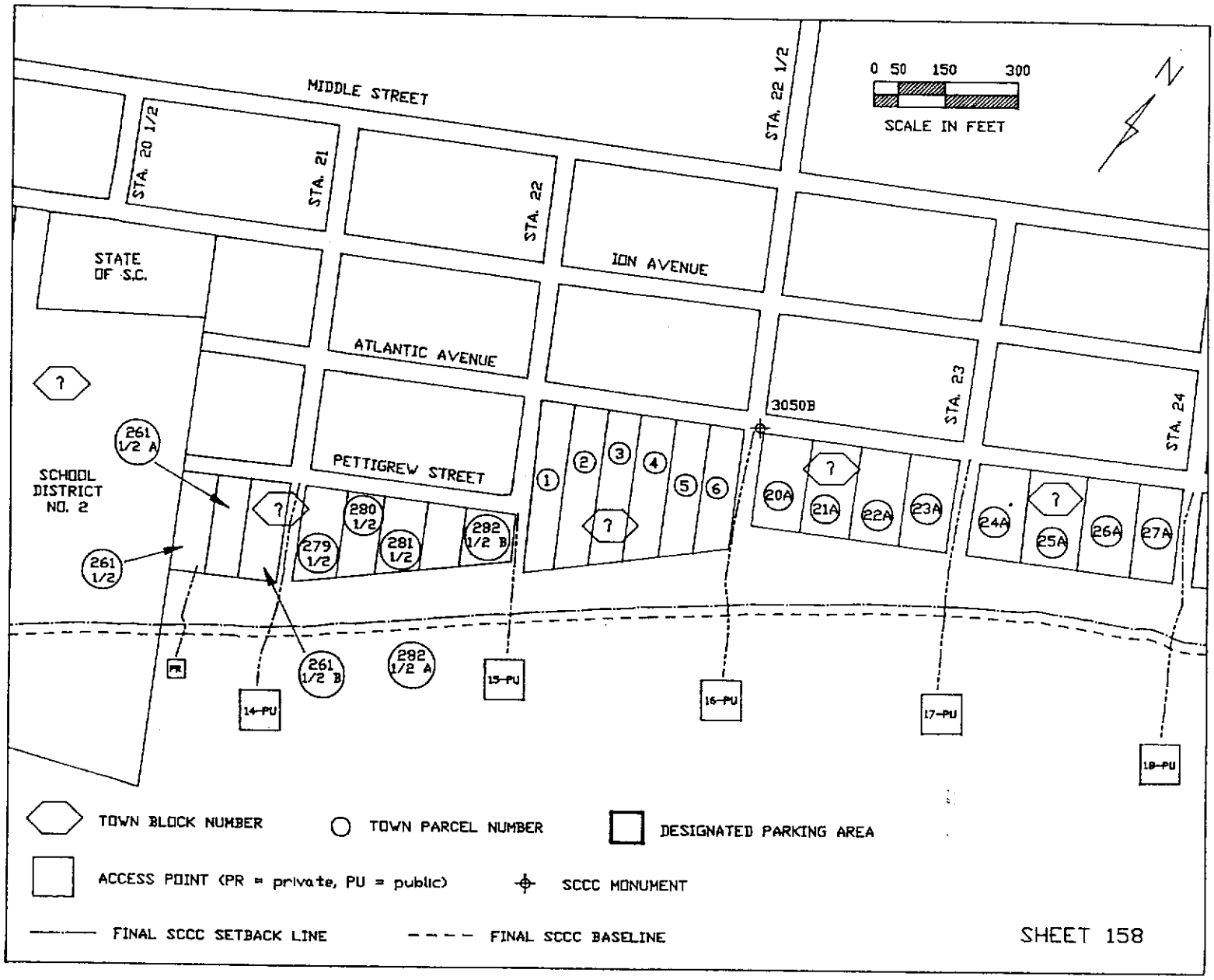

SULLIVAN'S ISLAND, BEACH MANAGEMENT PLAN

Prepared by Applied Technology and Management, Inc.

Charleston, SC

SULLIV ` ISLAND

SHEET NO. 158

STRUCTURAL INVENTORY

STREET	TOWN BLOCK	TOWN PARCEL	COUNTY PARCEL	STRUCTURE INVENTORY *	STRUCTURE LOCATION **	EROSION CONTROL STRUCTURE
	?	SCHOOL DISTRIC NO. 2	68	S	- 445'	---
STATION 20 1/2	"	STATE OF SC	67	H (BUNKER)	- 670'	---
	"	261 1/2	54	A	- 136'	---
	"	261 1/2A	53	A	- 111'	---
	"	261 1/2B	52	E	- 256'	---
	"		"	A	- 188'	---
STATION 21						
	"	279 1/2	51	A	- 171'	---
	"	"	"	E	- 253'	---
	"	280 1/2	50	A	- 136'	---
	"	281 1/2	49	A	- 107'	---
	"	"	"	E	- 218'	---
	"	282 1/2A	48	A	- 147'	---
	"	282 1/2B	47	A	- 157'	---
STATION 22						
	"	1	46	--	---	---
	"	2	45	A	- 259'	---
	"	3	44	A	- 265'	---
	"	4	43	A	- 242'	---
	"	5	42	--	---	---
	"	6	41	A	- 284'	---
STATION 22 1/2						
	"	20A	54	A	- 247'	---
	"	21A	55	--	---	---
	"	22A	56	A	- 244'	---
	"	23A	57	A	- 212'	---

NOTE: *
A = HABITABLE STRUCTURE <5,000 SQ. FT.
B = HABITABLE STRUCTURE >5,000 SQ. FT.
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C = RECREATIONAL AMENITY
D = PARKING LOT
E = ANCILLARY BUILDING
F = DECK
H = HISTORICAL STRUCTURE
S = SCHOOL BUILDING
G = FENCE
J = PIER

** MEASURED FROM INTERIM SETBACK LINE
(-) INDICATES LANDWARD
(+) INDICATES SEAWARD
(#) INDICATES DAMAGED

SULLI' ` ISLAND

SHEET NO. 158 (CONTINUED)

STRUCTURAL INVENTORY

STREET	TOWN BLOCK	TOWN PARCEL	COUNTY PARCEL	STRUCTURE INVENTORY *	STRUCTURE LOCATION **	EROSION CONTROL STRUCTURE
STATION 23						
	?	24A	58	A	- 187'	---
	"	25A	59	A	- 172'	---
	"	26A	60	A	- 167'	---
	"	"	"	E	- 261'	---
	"	27A	61	A	- 119'	---
STATION 24						

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C = RECREATIONAL AMENITY
D = PARKING LOT
E = ANCILLARY BUILDING
F = DECK
H = HISTORICAL STRUCTURE
S = SCHOOL BUILDING
G = FENCE
J = PIER

** MEASURED FROM INTERIM SETBACK LINE
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(#) INDICATES DAMAGED

SULLIVAN'S ISLAND

SHEET NO. 158

BEACH ACCESS INVENTORY

STREET	TOWN BLOCK	COUNTY PARCEL	ACCESS SITE	TYPE*	FACILITIES**
STATION 20 1/2	?	54	--	PR	PI
STATION 21			14	PU	W, M
STATION 22			15	PU	V, M, UA
STATION 22 1/2			16	PU	W, M
STATION 23			17	PU	M, UA
STATION 24			18	PU	M, UA

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V = VEHICLE ACCESS
UA = UNIMPROVED ACCESS POINT
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R = RESTROOMS
S = SHOWERS
L = LIFEGUARD
PI = PARTIALLY IMPROVED ACCESS (WOODEN PLANKS, SOME CONCRETE, ETC.)
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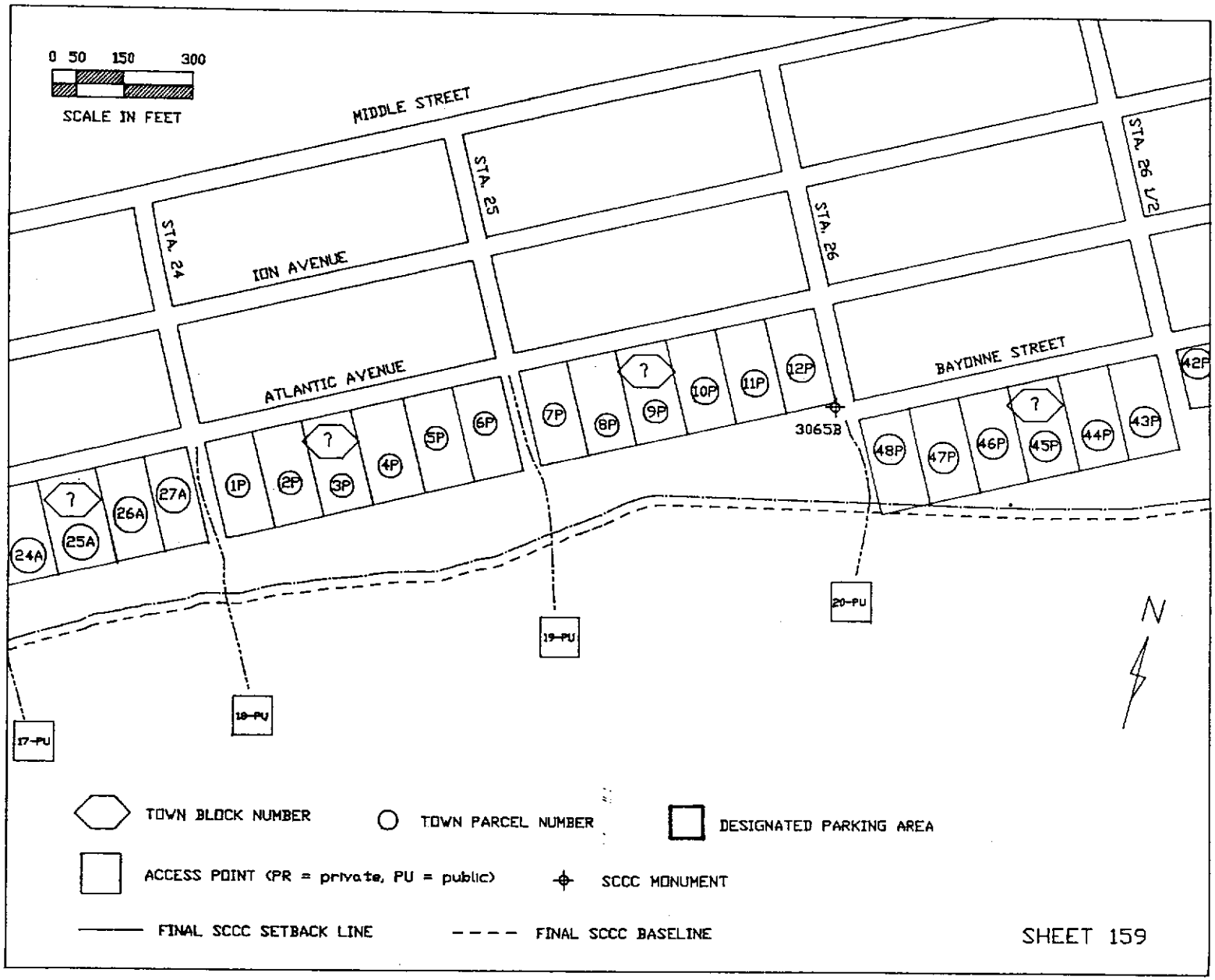

SULLIVAN'S ISLAND, BEACH MANAGEMENT PLAN

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Charleston, SC

SULLI' S ISLAND

SHEET NO. 159

STRUCTURAL INVENTORY

STREET	TOWN BLOCK	TOWN PARCEL	COUNTY PARCEL	STRUCTURE INVENTORY *	STRUCTURE LOCATION **	EROSION CONTROL STRUCTURE
	?	25A	59	A	- 172'	---
	"	26A	60	A	- 167'	---
	"	"	"	E	- 261'	---
	"	27A	61	A	- 119'	---
STATION 24						
	"	1P	62	A	- 219'	---
	"	2P	63	A	- 125'	---
	"	"	"	E	- 314'	---
	"	3P	64	A	- 151'	---
	"	4P	65	A	- 170'	---
	"	5P	66	A	- 188'	---
	"	6P	67	A	- 155'	---
STATION 25						
	"	7P	68	A	- 171'	---
	"	8P	69	A	- 129'	---
	"	9P	70	A	- 142'	---
	"	10P	71	A	- 187'	---
	"	11P	72	E	- 328'	---
	"	"	"	A	- 252'	---
	"	12P	73	A	- 287'	---
STATION 26						
	"	48P	85	A	- 101'	---
	"	47P	84	A	- 122'	---
	"	46P	83	A	- 157'	---
	"	45P	82	A	- 163'	---
	"	44P	81	--	---	---
	"	43P	80	A	- 186'	---
STATION 26 1/2						

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A = HABITABLE STRUCTURE <5,000 SQ. FT.
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C = RECREATIONAL AMENITY
D = PARKING LOT
E = ANCILLARY BUILDING
F = DECK
H = HISTORICAL STRUCTURE
S = SCHOOL BUILDING
G = FENCE
J = PIER

** MEASURED FROM INTERIM SETBACK LINE
(-) INDICATES LANDWARD
(+) INDICATES SEAWARD
(#) INDICATES DAMAGED

SULLIVAN'S ISLAND

SHEET NO. 159

BEACH ACCESS INVENTORY

STREET	TOWN BLOCK	COUNTY PARCEL	ACCESS SITE	TYPE*	FACILITIES**
STATION 23			17	PU	M, UA
STATION 24			18	PU	M, UA
STATION 25			19	PU	M, UA
STATION 26			20	PU	M, UA, V
STATION 26 1/2			--	--	---

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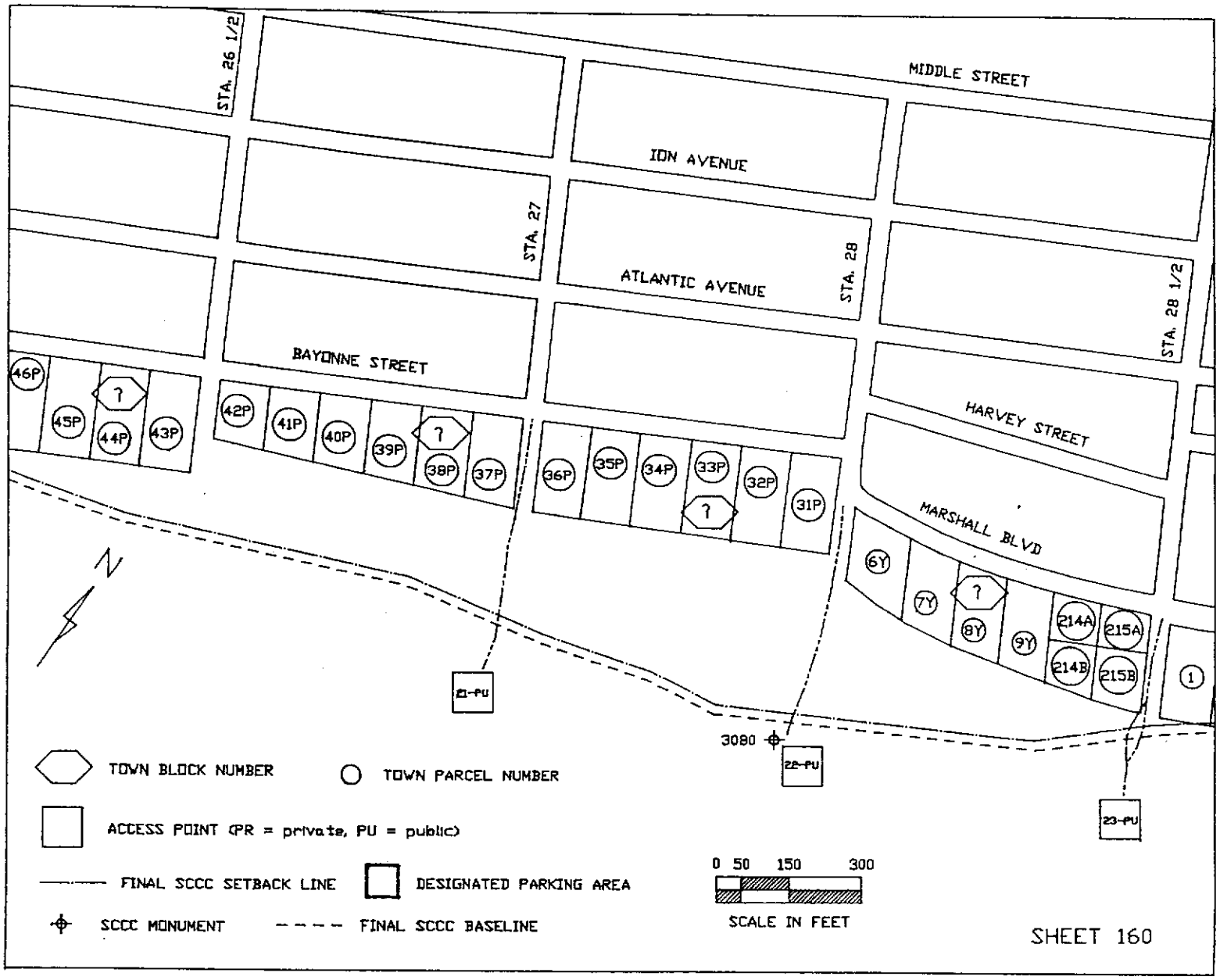

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Charleston, SC

SULLI' ' ISLAND

SHEET NO. 160

STRUCTURAL INVENTORY

STREET	TOWN BLOCK	TOWN PARCEL	COUNTY PARCEL	STRUCTURE INVENTORY *	STRUCTURE LOCATION **	EROSION CONTROL STRUCTURE
	?	46P	83	A	- 157'	---
	"	45P	82	A	- 163'	---
	"	44P	81	--	---	---
	"	43P	80	A	- 186'	---
STATION 26 1/2						
	"	42P	70	A	- 253'	---
	"	41P	69	--	---	---
	"	40P	68	A	- 231'	---
	"	39P	67	A	- 249'	---
	"	38P	66	A	- 260'	---
	"	37P	65	A	- 266'	---
STATION 27						
	"	36P	64	A	- 305'	---
	"	35P	63	A	- 361'	---
	"	34P	62	A	- 324'	---
	"	33P	61	A	- 338'	---
	"	32P	60	--	---	---
	"	31P	59	A	- 361'	---
STATION 28						
	"	6Y	71	A	- 298'	---
	"	7Y	72	--	---	---
	"	8Y	73	--	---	---
	"	9Y	74	A	- 236'	---
	"	214A	75	--	---	---
	"	215A	76	--	---	---
	"	214B	--	--	----	---
	"	215B	--	A	- 93'	---
STATION 28 1/2						
	1		77	A	- 33'	---

NOTE: *
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D = PARKING LOT
E = ANCILLARY BUILDING
F = DECK
H = HISTORICAL STRUCTURE
S = SCHOOL BUILDING
G = FENCE
J = PIER

** MEASURED FROM INTERIM SETBACK LINE
(-) INDICATES LANDWARD
(+) INDICATES SEAWARD
(#) INDICATES DAMAGED

SULLIVAN'S ISLAND

SHEET NO. 160

BEACH ACCESS INVENTORY

STREET	TOWN BLOCK	COUNTY PARCEL	ACCESS SITE	TYPE*	FACILITIES**
STATION 26 1/2					
STATION 27			21	PU	M, UA, V
STATION 28			22	PU	M, UA, V
STATION 28 1/2			23	PU	M, UA, V

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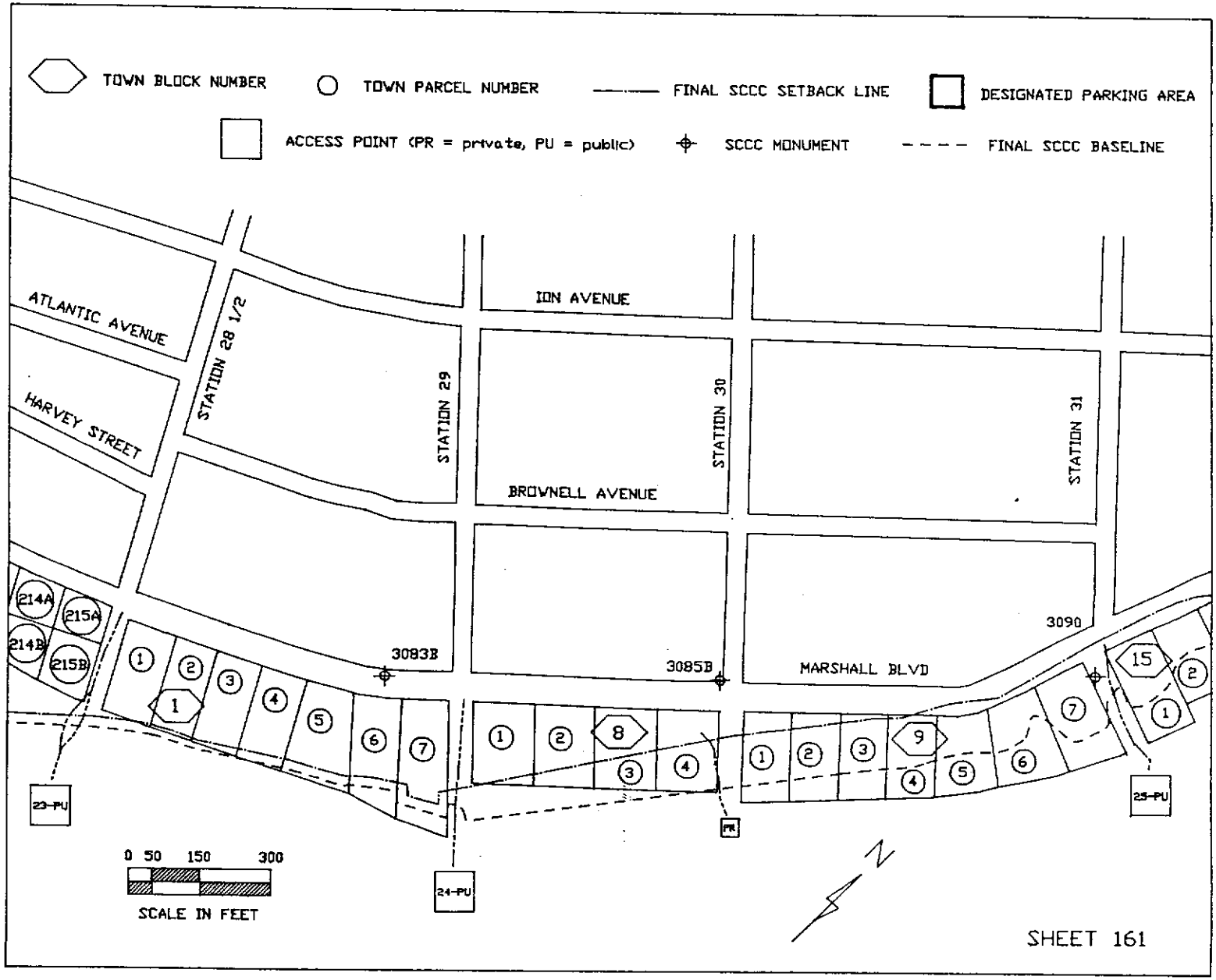

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Charleston, SC

SULLI' ISLAND

SHEET NO. 161

STRUCTURAL INVENTORY

STREET	TOWN BLOCK	TOWN PARCEL	COUNTY PARCEL	STRUCTURE INVENTORY *	STRUCTURE LOCATION **	EROSION CONTROL STRUCTURE
	?	214A	--	--	---	---
	"	215A	75	--	---	---
	"	?	76	A	- 93'	---
STATION 28 1/2						
	1	1	77	A	- 33'	---
	"	2	78	A	- 23'	---
	"	3	79	A	- 37'	---
	"	4	80	A	- 50'	---
	"	5	81	E	- 125'	---
	"	"	"	A	- 19'	---
	"	"	"	--	+ 37'	SEAWALL (SO. PL)#
	"	"	"	--	+ 50'	SEAWALL (NO. PL)#
	"	6	82	--	---	---
	"	7	83	A	- 25'	---
	"	"	"	--	+ 68'	SEAWALL (SO. PL)#
	"	"	"	--	+ 62'	SEAWALL (NO. PL)#
STATION 29						
	8	1	66	A	+ 2'	---
	"	"	"	--	---	GROIN
	"	2	67	A	+ 20'	---
	"	"	"	--	+ 74'	SEAWALL#
	"	3	68	A	+ 54'	---
	"	4	69	E	- 3'	---
	"	"	"	A	+ 90'	---

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** MEASURED FROM INTERIM SETBACK LINE
(-) INDICATES LANDWARD
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(#) INDICATES DAMAGED

SULLI'' 'S ISLAND

SHEET NO. 161 (CONTINUED)

STRUCTURAL INVENTORY

STREET	TOWN BLOCK	TOWN PARCEL	COUNTY PARCEL	STRUCTURE INVENTORY *	STRUCTURE LOCATION **	EROSION CONTROL STRUCTURE
STATION 30				---	GROIN	
	9	1	70	A (FOUNDATION ONLY)	+ 104'	---
	"	2	71	A	+ 108'	---
	"	3	72	--	---	---
	"	4	73	J#	---	GROIN
	"	5	74	A	+ 92'	---
	"	"	74	--	---	GROIN
	"	5-6	74-75	--	+ 163'	REVETMMENT
	"	6	75	A	+ 125'	---
	"	7	76	--	+ 184'	SEAWALL (SO. PL)
	"	"	76	--	+ 205'	SEAWALL (NO. PL)
STATION 31					---	GROIN
	15	1	101	A	+ 139'	---
	"	"	101	--	+ 172'	REVETMENT (SO. PL)
	"	2	102	--	+ 164'	REVETMENT (NO. PL)
	"	"	102	A	+ 115'	---

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B = HABITABLE STRUCTURE >5,000 SQ. FT.
P = POOL
C = RECREATIONAL AMENITY
D = PARKING LOT
E = ANCILLARY BUILDING
F = DECK
H = HISTORICAL STRUCTURE
S = SCHOOL BUILDING
G = FENCE
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(#) INDICATES DAMAGED

SULLIVAN'S ISLAND

SHEET NO. 161

BEACH ACCESS INVENTORY

STREET	TOWN BLOCK	COUNTY PARCEL	ACCESS SITE	TYPE*	FACILITIES**
STATION 28 1/2			23	PU	M, UA, V
STATION 29			24	PU	M, W
	8	69	--	PR	UA
STATION 31			25	PU	W, M

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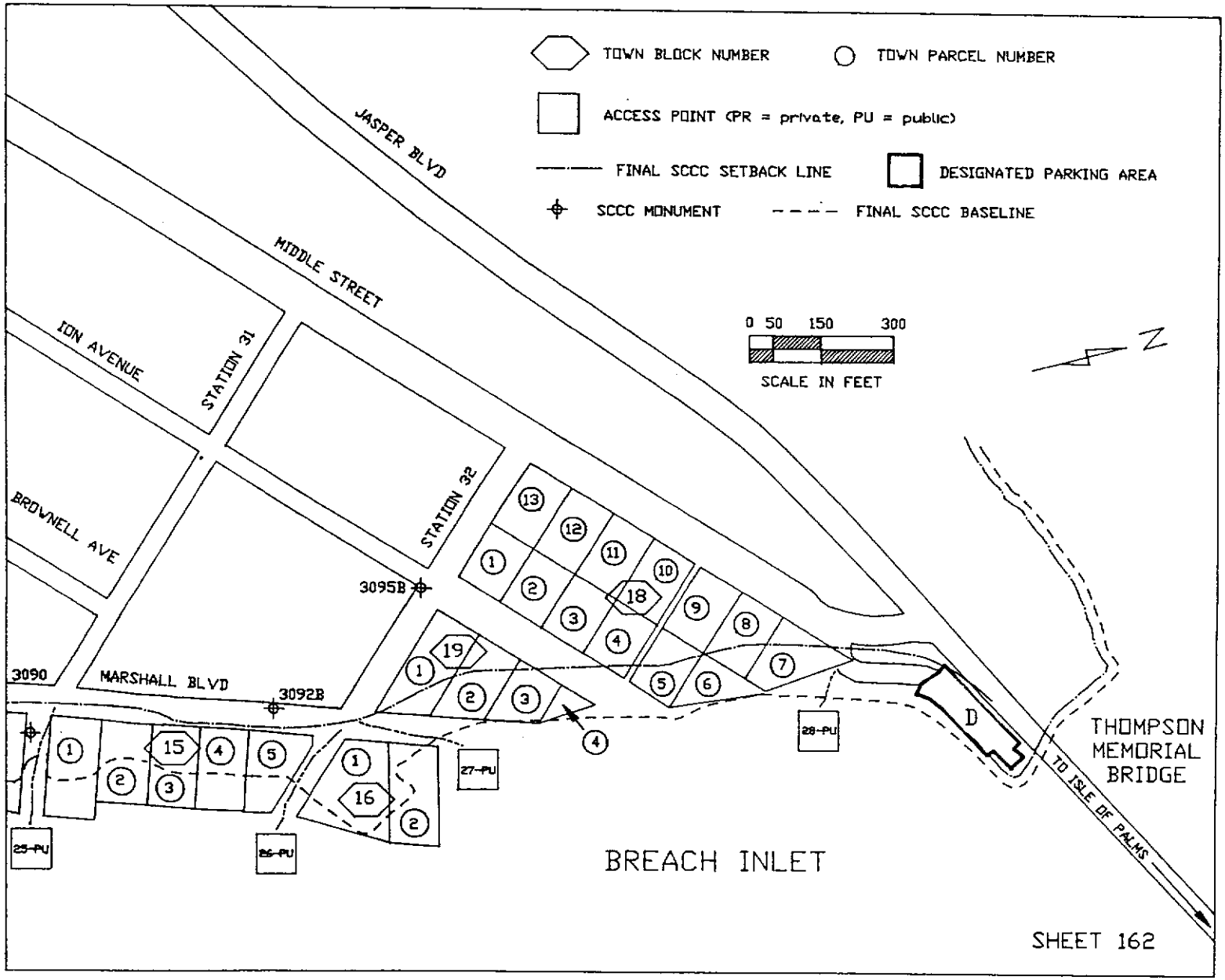

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SULLIVAN'S ISLAND

SHEET NO. 162

BEACH ACCESS INVENTORY

STREET	TOWN BLOCK	COUNTY PARCEL	ACCESS SITE	TYPE*	FACILITIES**
STATION 31			25	PU	W, M
STATION 32			26	PU	M, UA, V
MARSHALL BLVD			27	PU	UA
THOMPSON BRIDGE			28	PU	UA, M
PARKING LOT					

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- S = SHOWERS
- L = LIFEGUARD
- PI = PARTIALLY IMPROVED ACCESS (WOODEN PLANKS, SOME CONCRETE, ETC.)
- M = ACCESS POINT INDICATED BY SIGNS

SULLIV(ISLAND

SHEET NO. 162

STRUCTURAL INVENTORY

STREET	TOWN BLOCK	TOWN PARCEL	COUNTY PARCEL	STRUCTURE INVENTORY *	STRUCTURE LOCATION **	EROSION CONTROL STRUCTURE
STATION 31					---	GROIN
	15	1	101	A	+ 139′	---
	"	1-2	101-102	--	+ 172′	REVETMENT
	"	"	"	--	+ 164′	REVETMENT
	"	2	102	A	+ 115′	---
	"	3	103	A	+ 78′	---
	"	"	"	--	+ 145′	REVETMENT
	"	4	104	--	---	---
	"	5	105	--	---	---
STATION 32						
	16	1	106	--	± 135′	REVETMENT (SOUTH)
	"	"	"	--	± 245′	REVETMENT (MIDDLE)
	"	2	107	--	± 195′	REVETMENT (NORTH)
	"	"	"	--	---	GROIN
	"	"	"	A	+ 208′	---
MARSHALL BLVD						
	19	1	108	A	- 12′	---
	"	2	109	--	---	---
	"	3	110	--	---	---
	"	4	111	--	---	---
ION AVENUE					+ 336′	GROIN
	18	4	26	--	---	---
	"	5	25	--	---	---
	"	6	24	--	---	---
	"	7	23	--	---	---
MIDDLE STREET				D	+ 72′	---
MIDDLE STREET					+ 107′	REVETMENT (SOUTH)
THOMPSON MEMORIAL BRIDGE						

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SECTION 4

TOWN ORDINANCES AND REGULATIONS

SECTION 4. TOWN ORDINANCES AND REGULATIONS

The Beachfront Management Act and SCCC regulations require local governments to adopt a number of ordinances to protect and enhance physical and natural resources along the shoreline. This portion of the Town of Sullivan's Island Local Comprehensive Beach Management Plan contains revisions to the Town Code (adopted by the Town in December 1991) to bring it into compliance with the Act.

December 1991 revisions to Section 14-23 (Beach Lighting Ordinance) have since been modified to insure compliance with SCWMRD requirements. The modified version of Sec. 14-23 follows the December 1991 ammendments to the Town Code.

Adopted Dec. 1991

Amendment To Ordinances Related to Town's Beachfront Management Plan

Whereas, Town Council recognizes the importance of protecting and enhancing physical and natural resources along the shoreline and adopting a Comprehensive Beachfront Management Plan in accordance with the Beach Management Act, and

Whereas, amending the Code of Laws for the Town of Sullivan's Island is necessary to be in conformance with the intent of the Act, and

Whereas, the Sullivan's Island Planning and Zoning Commission concurred with this effort in its public meeting of September 11, 1991.

NOW, THEREFORE, BE IT ORDAINED that Town Council, in meeting duly assembled amends Section 3-8; Section 4-1, 2,4, 4.4, 5.1, 5.2, 23; Section 5-10, 80; Section 14-23; Section 21-3, 5(A), 28(K), 38(K), 39.2, 41, 31, 54(G) of the Code of the Town of Sullivan's Island as follows, effective upon its ratification,

<u>Sec. 3-8. Offenses by dog or owners and penalties.</u>

A....

(2) A dog owner/keeper or other person with custody and control of a dog may allow his dog to run at large on the beach (RC-1) between March 16th and October 31st before 8:00 AM and after 8:00 PM provided said person is present with a leash readily at hand. Nothing in the exceptions listed above allows a dog owner/keeper or other person with custody and control to not abide by the requirements of Section B through K below.

J. Allow a dog to disturb nesting sea turtles, turtle nests or turtle hatchlings.

K. Allow a dog to enter a designated critical habitat area unless the signs marking the critical habitat area permit pets, and unless the dog has a chain, substantial thong or leash attached which is in the hand of some responsible person.

<u>Sec. 4-1. Definitions for Article.</u>

C. The words "area of conservation" in Section 4-2 shall mean that the land shall remain in its natural state (except as provided in Section 4-4 below) with no man-made, artificial changes other than erosion control devices constructed with the consent of the Town of Sullivan's Island.

Sec. 4-2. Establishment of conservation area.

All portions of Sullivan's Island extending from the mean low water mark to the landward boundaries of the RC-1 and RC-2 Recreation and Conservation Areas (established in the Zoning Ordinance of the Town of Sullivan's Island adopted August 1, 1977 and readopted August 21, 1978, and owned by the Town of Sullivan's Island, the State of South Carolina, the United States Government, or by persons, shall be retained and preserved by the Town of Sullivan's Island in trust as an area of conservation for the purpose of protecting the ecology of such property, of the adjoining property and of the beaches of Sullivan's Island; for enhancing the environment, and for the health, safety and welfare of the residents and property owners of Sullivan's Island.

Sec. 4-4. Restrictions on trimming, pruning and removing vegetation in the RC-1 area.

D. Nothing in this section shall permit alteration, destruction or removal of vegetation seaward of the SCCC 40-year setback line, without permission of the Town and SCCC.

Sec. 4-4.4 Regulations for landscaping and dune vegetation.

Property owners along the oceanfront are encouraged to install and maintain native dune grasses, ground covers and shrubs. Vegetation on the seaward and landward sides of the primary oceanfront sand dunes shall be selected, installed and maintained in accordance with the Town's Local Comprehensive Beach Management Plan. Non-native vegetation shall not be allowed seaward of the RS/RC-1 boundary line. In instances where the 40-year setback line is landward of the RS/RC-1 boundary, the Town may allow non-native vegetation between the 40-year setback line and the RS/RC-1 boundary, provided however, that mitigation for any landscaping with non-native vegetation seaward of the 40-year setback line may be required by the Town. Mitigation requirements are set forth in Section 2-10 of the Town's Local Comprehensive Beachfront Management Plan.

Sec. 4.5.1 Critical habitat areas.

Pedestrian, vehicle and other traffic in critical habitat areas designated along the ocean shoreline by the South Carolina Wildlife and Marine Resources Department shall be subject to certain restrictions. When critical habitat areas are designated, the Town shall post appropriate signs, as recommended by the SCWMRD, and enforce traffic restrictions.

Sec. 5.3 Consistency of Article with Zoning Chapter.

This article shall be read in conjunction with and in harmony with the Zoning Ordinance of the Town of Sullivan's Island adopted August 1, 1977 and readopted August 21, 1978, and the amendments thereto.

Sec. 4-23. Motor driven vehicles on beaches prohibited; exceptions.

Except as provided in this chapter, no motor-driven vehicles shall be allowed on beaches of the Town of Sullivan's Island for any purpose whatsoever; provided that this shall not apply to police and emergency vehicles. The Town Council, upon written request, may waive this section upon a showing by the party so requesting that to allow a vehicle on the beach for a specific purpose will not be injurious to the public health and safety and welfare or injurious to natural resources and habitats.

Sec. 5-10. Application.

.....

For property that lies in whole or in part seaward of the SCCC 40-year setback line, plans submitted with the application for a building permit must show the location of the SCCC baseline, the SCCC 40-year setback line, and any other SCCC jurisdictional lines established in the field by SCCC staff. Any proposed erection, construction, improvement, alteration or repair seaward of the SCCC 40-year setback line must be in compliance with SCCC regulations. The applicant must include with the application written SCCC approval for the activity, where such approval is required by SCCC regulations.

Sec. 5-80. General Standards.

K. Any alteration, repair, reconstruction or improvements to a building seaward of the SCCC 40-year setback line shall satisfy SCCC regulations governing such activities.

Sec. 14-23. Beach Lighting Ordinance.

~~A. Definitions.~~

~~For the purpose of this ordinance, the following definition shall apply:~~

~~1. Artificial Light: any source of light emanating from a manmade device external to or outside of a house or structure that may be visible from the beach area designated as a protected area for sea turtle nesting.~~

2. Beach: area between the dune line or line of stable vegetation, whichever is more landward, and the mean low water line.

3. Existing development: any structure for which a building permit has been issued by the Town of Sullivan's Island prior to the effective date of this ordinance.

4. Nesting season: nesting season will be observed from May 15 until October 31.

5. New development: any new construction and remodeling of existing structures when such remodeling includes alteration of exterior lighting.

B. Restrictions

1. New development: no artificial light shall be allowed to illuminate the beach during nesting season between Station 12 and the Breach Inlet bridge, unless such artificial light is shaded with a yellow or opaque lens approved by the SCCC and SCWMRD.

2. Existing development: no artificial light shall be allowed to illuminate the beach during nesting season between Station 12 and Station 28 1/2, unless such artificial light is shaded with a yellow or opaque lens approved the SCCC and SCWMRD. Existing development must be brought into compliance with this requirement within one year following the effective date of this ordinance.

3. Nothing herein shall prohibit the U. S. Coast Guard from operating the lighthouse.

C. Enforcement

Lighting restrictions shall be enforced during the nesting season for sea turtles as defined:

A. First offense: a warning shall be issued for a first offense of this ordinance.

B. Second offense: a second offense and any offense thereafter shall be subject to the penalties prescribed by Sec. 21-4 of Town of Sullivan's Island ordinances.

Sec. 21-3. Definitions and interpretation of certain terms and words.

Baseline. The South Carolina Coastal Council final baseline

depicted on the SCCC orthophoto maps of Sullivan's Island, sheets 154 through 162.

Forty-year Setback Line. The South Carolina Coastal Council final setback line depicted on the SCCC orthophoto maps of Sullivan's Island, sheets 154 through 162. Also referred to as SCCC Setback Line.

Primary Oceanfront Sand Dune. A line marked in the field by SCCC staff that designates the location of the crest of a sand dune.

SCCC. The South Carolina Coastal Council.

Sec. 21-5A. RC-1 Area.

A. RC-1 Area. The RC-1 Area, referred to in Section 21-4 shall be defined as follows: all that area within the corporate limits of the Town of Sullivan's Island between, on the one hand, a line commencing at a point being the center line of Breach Inlet between Sullivan's Island and the Isle of Palms on the north side of the bridge across Breach Inlet serving as South Carolina Highway 703 and running southerly along the center line of Breach Inlet to a point opposite the low water mark of the Atlantic Ocean on the southeastern most part of the front beach of Sullivan's Island; thence running with the curve of Sullivan's Island in a direction that is first generally southwesterly, then generally westerly, and then generally northerly along the low water mark of the Atlantic Ocean on the font beach of Sullivan's Island to a point in the center line of Cove Inlet and the Intracoastal Waterway opposite the low water mark of the Atlantic Ocean on the northernmost part of the front beach of Sullivan's Island and, on the other hand, (1) the property platted on Sullivan's Island or (2) the primary oceanfront sand dune as marked in the field by SCCC staff or (3) the seaward face of a functional erosion control device, whichever line includes more area within the RC-1 area, including but not limited to, those areas owned by the Town of Sullivan's Island, by the State of South Carolina, by the United States Government, or by persons, and also including that area between the aforesaid low water mark of the Atlantic Ocean and a line beginning at the southeast corner of the lot on Sullivan's Island bordered on Pettigrew Street on the north and Station 22nd Street on the east and running in a generally easterly direction to the southwest corner of the lot bordered on the west by Station 22 1/2 Street and on the north by Atlantic Avenue. *

Nothing in this section shall be construed to prevent a property owner from repairing an existing building, erosion control structure or other structure that extends into the RC-1 area, provided permission for such repairs is obtained from the SCCC and the Town.

Sec. 21-26. Permitted uses in RS Districts; Condominiums

prohibited.

K. Erosion control structures shall not be permitted in RS zoning districts.

Sec. 21-38. General requirements in RS District.

K. Setback from the RC-1 Zoning District: for the purpose of creating a buffer zone that allows passive treatment of stormwater run-off before entering the waters surrounding Sullivan's Island and of providing a buffer zone from floodwater and erosion caused by storms, sea level rise, and other natural conditions, the following setback requirements shall apply to lots bordering the RC-1 Zoning District: In addition to meeting the above minimum setback requirements, structures constructed or placed on lots adjoining the RC-1 Zoning District shall not be constructed or erected within thirty (30') feet of the lot line bordering the RC-1 Zoning District boundary line or the RC-1 boundary line established as of the date of the building permit is issued, whichever is further landward. Any building permit issued for construction governed by this section shall be valid for six months, and if construction of the residence is not commenced within six months, a new application for a building permit must be submitted and accompanied by a plat showing the RC-1 boundary line and all lot line distances as of the date the application is submitted; provided, in addition, that a structure shall not be constructed or moved on a lot so that the seaward most point of the structure is further from the center line of the right of way forming the landward boundary of the property and running generally parallel with the ocean shoreline than the greatest distance between the centerline of the said right of way to the most seaward point of any other structure on the block on which the property is located.

Sec. 21-39.2 Erosion control structures.

No fill material, seawalls, jetties, bulkheads, revetments, groins, breakwaters, boardwalks, fences, or other erosion control structures shall be constructed, erected, or placed within the RC-1 Zoning District or the RC-2 Zoning District, except as provided in Section 21-54(F) and Section 21-54(G) of this Ordinance. There shall be no excavation of sand and/or disturbance of vegetation in the RC-1 Zoning District or the RC-2 Zoning District, without Town permission and permission of other agencies as appropriate.

Nothing in this section shall be construed to prevent the Town or other property owners from repairing groins, seawalls, bulkheads, revetments or other erosion control structures, provided permission for such repairs is obtained from the SCCC and the Town, where applicable. It shall be the responsibility of property owners, within 90 days following the effective date of this ordinance, to furnish the Town with plans or other

information pertaining to erosion control structure location, elevation, construction materials, etc.

For the purpose of this chapter, repair of erosion control structures shall not be allowed when such structures are determined by the Town to be damaged fifty (50%) percent or more. The Town shall make the damage determination using procedures developed and adopted by SCCC.

Erosion control structures damaged fifty (50%) percent or more shall not be rebuilt or replaced, and shall be removed at the owner's expense, except for structures protecting a public highway which existed on July 1, 1988.

Erosion control structures damaged less than fifty (50%) percent may be repaired in place, provided such repairs comply with all Town and SCCC repair regulations. In the event that Town and SCCC repair regulations are in conflict, the more restrictive shall apply.

Damaged erosion control structures must not be enlarged, strengthened beyond pre-damage condition or rebuilt during permitted repairs; repairs must be made with materials similar to those of the existing erosion control structure. However, in the event that an adjacent erosion control structure is destroyed and is not permitted to be repaired, a property owner shall be allowed to construct a wing wall, provided permission is obtained from the SCCC and Town.

The Town may require as a condition of erosion control structure repair that the property owner renourish the beach seaward of the erosion control structure on an annual basis with two (2) cubic yards of sand per foot of structure length as measured along the shoreline. This condition shall remain in effect as long as the erosion control structure remains in place and exposed, in whole or in part. Renourishment sand must come from an upland source and must be approved by the SCCC as beach-compatible. The timing and location of renourishment sand placement shall be governed by Town and SCCC regulations.

<u>Sec. 21-41. Non-conforming uses in all districts.</u>

F. Whenever a building being put to a non-conforming use shall be destroyed more than fifty (50%) percent, either by intent or by neglect, but not caused by natural disaster, civil strife or uncontrollable accident, then such non-conforming use shall cease, and the property shall thereafter be put only to a conforming use. A non-conforming use destroyed more than fifty (50%) percent by a natural disaster, fire, civil strife or uncontrollable accident shall not be rebuilt as a non-conforming use unless rebuilt and completed within two (2) years of the destruction, and unless such rebuilding conforms

with all applicable SCCC and FEMA requirements.

Sec. 21-51. Application for building permit.

All applicants for building permits shall be accompanied by plans in duplicate drawn to scale, showing the actual dimensions and shape of the lot to be built upon, the exact sizes, elevations and locations on the lot of buildings already existing, if any, and the location and dimensions of the proposed building or alteration. The application shall include such other information as may be required by the Town Council, including existing or proposed buildings or alterations, existing or proposed uses of buildings and land, the number of families, housekeeping units, or rental units the building is designed to accommodate, conditions existing on the lot, and such other matters as may be necessary to determine conformance with, and provide for the enforcement of, this chapter.

One copy of the plans shall be returned to the applicant by the Zoning Administrator, after he shall have marked such copy either as approved or disapproved and attested to same by his signature on such copy. The original copy of the plans, similarly marked, shall be retained by the Town.

For property that lies in whole or in part seaward of the SCCC 40-year setback line, plans submitted with the application for a building permit must show the location of the SCCC baseline, the SCCC 40-year setback line, and any other SCCC jurisdictional lines established in the filed by SCCC staff. Any proposed erection, construction, improvement, alteration or repair seaward of the SCCC 40-year setback line must be in compliance with SCCC regulations. The applicant must include with the application written SCCC approval for the activity, where such approval is required by SCCC regulations.

Sec. 21-54. Temporary Uses.

F. Temporary erosion control structure(s) constructed of sandbags and beach compatible fill placed on the beach or seaward of the dune line.

G. Beach nourishment - using beach or offshore borrow sources subject to Town, SCCC and other agency approval. Use of offshore borrow sources, including channel location projects at Breach Inlet, shall be allowed only when such projects will not adversely affect the Town shoreline by exposing it to increased wave energy. Beach scraping from the low tide beach may be permissible when other borrow sources cannot be used and when the scraping will not adversely affect the shoreline.

Ratified this _____ day of December, 1991.

TOWN OF SULLIVAN'S ISLAND

_____

Mayor

ATTEST:

_____

Town Clerk

Revisions to Sec. 14-23, Beach Lighting Ordinance

Note that underlined text below represents proposed additions to the adopted ordinance; text struck through represents proposed deletions.

Sec. 14-23 Beach Lighting Ordinance

A. Definitions.

For the purposes of this ordinance, the following definitions shall apply:

1. Artificial Light: any source of light emanating from a manmade device external to or outside of a house or structure that may be visible from the beach area designated as a protected area for sea turtle nesting.

2. Beach: area between the dune line or line of stable vegetation, whichever is more landward, and the mean low water line.

3. Existing Development: any structure for which a building permit has been issued by the Town of Sullivan's Island prior to the effective date of this ordinance.

4. Nesting Season: nesting season will be observed from May 15 until October 31.

5. New Development: any new construction and remodeling of existing structures when such remodeling includes alteration of exterior lighting.

6. Floodlight: reflector type light fixture which is attached directly to a building and which is unshielded.

7. Low Profile Luminaire: light fixture set on a base which raises the source of the light no higher than forty-eight (48) inches off the ground, and designed in such a way that light is directed downward from a hooded light source.

8. Pole Lighting: light fixture set on a base or pole which raises the source of the light higher than forty-eight (48) inches off the ground.

B. Restrictions

1. New Development: no artificial light shall be allowed to illuminate the beach during nesting season between Station 12 and the Breach Inlet bridge, unless such artificial light satisfies the following provisions: ~~is shaded with a yellow or opaque lens approved by the SCCC and SCWMRD.~~

   a. Floodlights shall be prohibited. Wall mounted light fixtures shall be yellow bug lights or low pressure sodium bulbs fitted with hoods so that no light illuminates the beach.

   b. Pole lighting shall be shielded in such a way that light will be contained within an arc of three (3) to seventy-three (73) degrees on the seaward side of the pole. Outdoor lighting shall be held to the minimum necessary for security and convenience.

   c. Low profile luminaries shall be used in parking lots and such lighting shall be positioned so that no light illuminates the beach.

   d. Dune crosswalks shall utilize low profile shielded luminaries.

   e. Lights on balconies shall be fitted with hoods so that lights will not illuminate the beach.

   f. Tinted or filmed glass shall be used in windows facing the ocean above the first floor of multi-story structures. Shade screens can be substituted for this requirement.

2. Existing development between Station 12 and Station 28 1/2: no artificial light shall be allowed to illuminate the beach during nesting season ~~between Station 12 and Station 28 1/2~~, unless such artificial light satisfies the following provisions: ~~is shaded with a yellow or opaque lens approved by the SCCC and SCWMRD.~~

   a. Lights illuminating buildings or associated grounds for decorative or recretional purposes shall be shielded or screened such that they are not visible from the beach, or

turned off after 10:00 p.m. during the period of May 1, to October 31, of each year.

b. Lights illuminating dune crosswalks of any areas oceanward of the dune line shall be turned off after 10:00 p.m. during the period of May 15, to October 31, of each year.

c. Window treatments in windows facing the ocean above the first floor of multi-story structures are encouraged so that interior lights do not illuminate the beach. The use of black-out draperies or shade screens are preferred. The addition of tint or film to windows or awnings is also encouraged, as is turning off unnecessary lights if the light illuminates the beach.

Existing development must be brought into compliance with this requirement within one year following the effective date of this ordinance.

3. Existing development between Station 28 1/2 and Breach Inlet: exterior lights must be equipped with motion detector sensors or changed to yellow bug lights or low ~~density-yellow~~ pressure sodium lights, as approved by the SCCC and SCWMRD. Existing development must be brought into compliance with this requirement within one year following the effective date of this ordinance. In the event that the beach in this area is nourished or recovers naturally to the extent that successful turtle nesting occurs, this provision shall be amended

4. Publicly owned lighting: street lights and lighting at parks and other publicly owned beach access areas shall be subject to the following:

a. Whenever possible, street lights shall be located so that the bulk of their illumination will travel away from the beach. These lights shall be equipped with shades or shields that will prevent backlighting and render them not visible from the beach.

b. Lights at parks or other public beach access points shall be shielded or shaded or shall not be utilized during the period May 15, to October 31, of each year.

5. Nothing herein shall prohibit the U.S. Coast Guard from operating the lighthouse.

C. Enforcement

Lighting restrictions shall be enforced during the nesting season for sea turtles as defined:

1. First offense: a warning shall be issued for a first offense of this ordinance.

2. Second offense: a second offense and any offense thereafter shall be subject to the penalties prescribed by Sec. 21-57 of Town of Sullivan's Island ordinances.

SECTION 5

REFERENCES

SECTION 5. REFERENCES

Anders, F.J., David W. Reed, Edward P. Meisburger. 1990. "Shoreline Movements: Tybee Island, Georgia, To Cape Fear, North Carolina, 1851-1983, Report 2". Technical Report CERC-83-1. 147 p + appendix.

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National Oceanic and Atmospheric Administration, 1990. Tide Tables 1990, High and Low Water Predictions, East Coast of North and South America (including Greenland). 289 p.

Purvis, J. and H. Landers. 1973. "South Carolina Hurricanes or a Descriptive Listing of Tropical Cyclones That Have Affected South Carolina". Prepared for the South Carolina Disaster Preparedness Agency. 52 p.

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U.S. Geological Survey. 1990. Storm-Tide Elevations Produced by Hurrican Hugo along the South Carolina Coast, September 21-22, 1989. Open File Report 90-386.

APPENDIX A

SCCC Monument Descriptions

DATE: OCTOBER 1991

SOUTH CAROLINA COASTAL COUNCIL
CONTROL SURVEYS
SULLIVANS ISLAND

PROJECT: SCCC SURVEY MONUMENTATION STATION NO.: SCCC 3010 B

STATE: SOUTH CAROLINA COUNTY: CHARLESTON

NAD 83 – SINGLE ZONE SPC – CONVERGANCE: 00°38'10" SCALE FACTOR: 0.99991992

NORTHING: 337,326.01 FEET LAT: 32°45'18".17621

EASTING: 2,352,771.26 FEET LONG: 79°51'08".90029

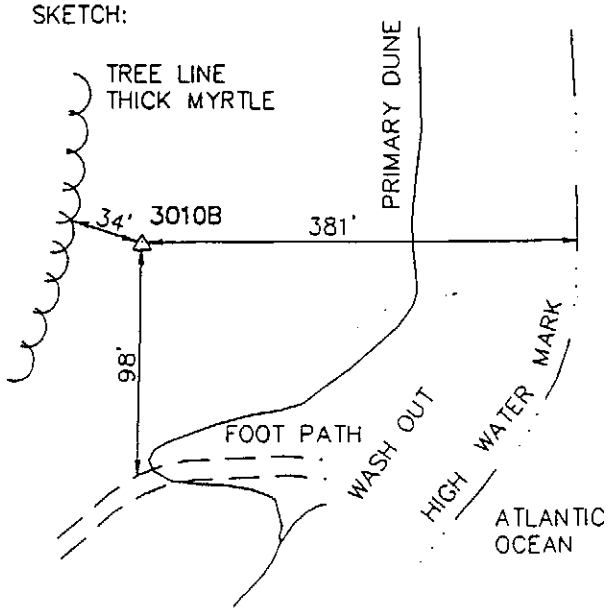
ELEVATION (NGVD 29) 9.09 FEET

OBJECT	GEODETIC AZIMUTH	GRID BEARING	GRID DISTANCE
3020	N 86° 53' 12" E	N 86° 15' 02" E	1737.86 FEET

DESCRIPTION:

LOCATED ON SULLIVAN'S ISLAND, TO REACH THE STATION FROM THE JUNCTION OF STATION 18TH STREET AND ATLANTIC AVENUE, TURN RIGHT ON ATLANTIC AVENUE FOR 0.20 MILE TO THE ENTRANCE OF THE SANDS DUNES BEACH CLUB ON THE LEFT, TURN LEFT AND GO SOUTH FOR 0.05 MILE TO THE END OF THE DRIVE AND A TRACK ROAD LEADING TO THE BEACH 0.10 MILE. TURN RIGHT ALONG THE BEACH FOR 0.40 MILE TO A WASH-OUT AND THE STATION ON THE RIGHT. A STANDARD BERNTSEN ALUMINUM ROD WITH A SCCC ALUMINUM DISK ATTACHED TO THE ROD AND ENCASED IN A 4" PVC PIPE WITH A THREADED CAP THAT PROJECTS 6" ABOVE THE GROUND.

SKETCH:



DATE: OCTOBER 1991

SOUTH CAROLINA COASTAL COUNCIL
CONTROL SURVEYS
SULLIVANS ISLAND

PROJECT: SCCC SURVEY MONUMENTATION STATION NO.: SCCC 3020 B

STATE: SOUTH CAROLINA COUNTY: CHARLESTON

NAD 83 – SINGLE ZONE SPC – CONVERGANCE: 00°38'21" SCALE FACTOR: 0.99991985

NORTHING: 337,439.65 FEET LAT: 32°45'19".10966

EASTING: 2,354,505.40 FEET LONG: 79°50'48".57962

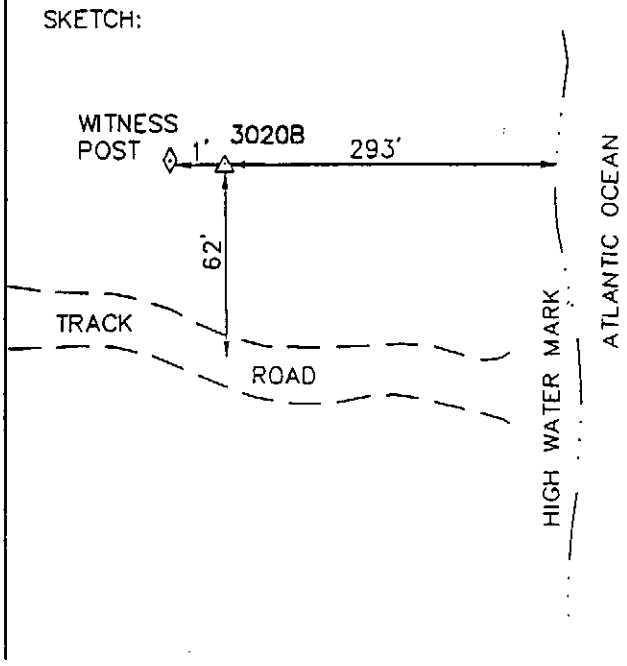
ELEVATION (NGVD 29) 9.28 FEET

OBJECT	GEODETIC AZIMUTH	GRID BEARING	GRID DISTANCE
3010 B	S 86° 53' 23" W	S 86° 15' 02" W	1737.86 FEET
3035 B	N 60° 03' 18" E	N 59° 24' 57" E	1861.33 FEET

DESCRIPTION:

LOCATED ON SULLIVAN'S ISLAND, TO REACH THE STATION FROM THE JUNCTION OF STATION OF 18TH STREET AND ATLANTIC AVENUE, TURN RIGHT ON ATLANTIC AVENUE FOR 0.20 MILE TO THE ENTRANCE OF THE SAND DUNES BEACH CLUB ON THE LEFT, TURN LEFT AND GO SOUTH FOR 0.05 MILE TO THE END OF THE DRIVE AND A TRACK ROAD LEADING TO THE BEACH, CONTINUE ALONG THE TRACK ROAD FOR 0.05 MILE TO THE STATION ON THE LEFT. A STANDARD BERNTSEN ALUMINUM ROD WITH A SCCC ALUMINUM DISK ATTACHED TO THE ROD AND ENCASED IN A 4" PVC PIPE WITH A THREADED CAP THAT PROJECTS 6" ABOVE THE GROUND.

SKETCH:



DATE: OCTOBER 1991

SOUTH CAROLINA COASTAL COUNCIL
CONTROL SURVEYS
SULLIVANS ISLAND

PROJECT: SCCC SURVEY MONUMENTATION STATION NO.: SCCC 3035 B

STATE: SOUTH CAROLINA COUNTY: CHARLESTON

NAD 83 – SINGLE ZONE SPC – CONVERGANCE: 00°38'32" SCALE FACTOR: 0.99991915

NORTHING: 338,386.70 FEET LAT: 32°45'28".30287

EASTING: 2,356,107.79 FEET LONG: 79°50'29".69216

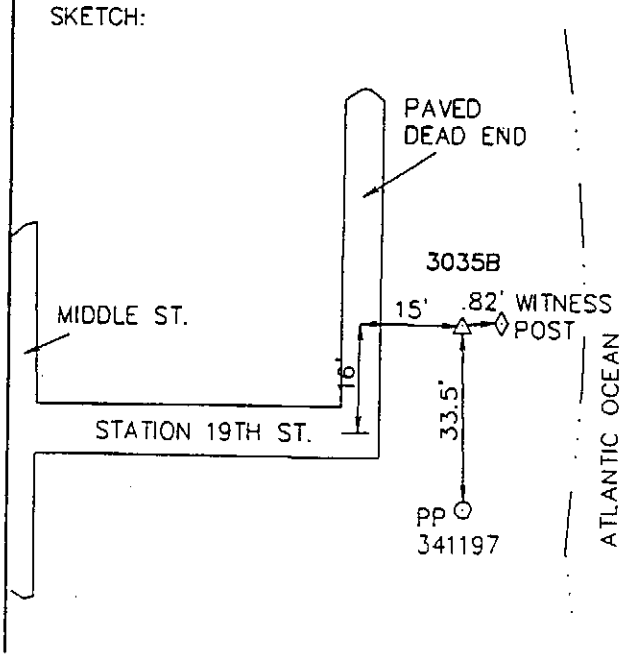
ELEVATION (NGVD 29) 8.92 FEET

OBJECT	GEODETIC AZIMUTH	GRID BEARING	GRID DISTANCE
3020 B	S 60° 03' 29" W	S 59° 24' 57" W	1861.33 FEET
3050 B	N 54° 10' 34" E	N 53° 32" 02" E	2332.52 FEET

DESCRIPTION:

LOCATED ON SULLIVAN'S ISLAND, TO REACH THE STATION FROM THE JUNCTION OF MIDDLE STREET AND STATION 19TH STREET, GO SOUTHEAST ON STATION 19TH STREET FOR 0.15 MILE TO THE END OF STATION 19TH STREET AND THE STATION ON TOP OF THE EAST SIDE OF THE CONCRETE FOUNDATION OF A SEWER MANHOLE COVER. A STANDARD SCCC BRONZE SURVEY DISK SET IN TOP OF THE EAST SIDE OF THE CONCRETE FOUNDATION OF A SEWER MANHOLE COVER, ABOUT FLUSH WITH THE SAND.

SKETCH:



DATE: OCTOBER 1991

SOUTH CAROLINA COASTAL COUNCIL
CONTROL SURVEYS
SULLIVANS ISLAND

PROJECT: SCCC SURVEY MONUMENTATION STATION NO.: SCCC 3050 B

STATE: SOUTH CAROLINA COUNTY: CHARLESTON

NAD 83 - SINGLE ZONE SPC - CONVERGANCE: 00°38'44" SCALE FACTOR: 0.99991812

NORTHING: 339,773.03 FEET LAT: 32°45'41".81127

EASTING: 2,357,983.62 FEET LONG: 79°50'07".54366

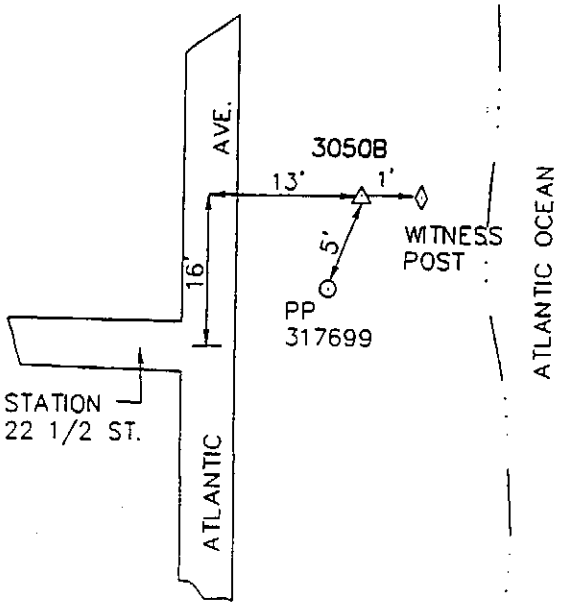
ELEVATION (NGVD 29) 8.55 FEET

OBJECT	GEODETIC AZIMUTH	GRID BEARING	GRID DISTANCE
3035 B	S 54° 10' 46" W	S 53° 32' 02" W	2332.52 FEET
3065 B	N 68° 28' 27" E	N 67° 49' 43" E	2242.26 FEET

DESCRIPTION:

LOCATED ON SULLIVAN'S ISLAND, TO REACH THE STATION FROM THE SOUTHEAST END OF THE STAKE HIGHWAY 703 BRIDGE OVER THE INTERCOSTAL WATERWAY, GO SOUTHEAST ON STATE HIGHWAY 703 FOR 0.58 MILE TO A POINT WHERE STATE HWY. 703 TURNS LEFT (JASPER BOULEVARD) AND STATION 22 1/2 STREET FOR 0.15 MILE TO THE JUNCTION OF ATLANTIC AVENUE AND THE STATION ON THE SOUTHEAST SIDE OF ATLANTIC AVENUE. A STANDARD ALUMINUM ROD WITH A SCCC ALUMINUM DISK ATTACHED TO THE ROD, AND ENCASED IN A 4" PVC PIPE WITH A THREADED CAP THAT PROJECTS 6" ABOVE THE GROUND.

SKETCH:



DATE: OCTOBER 1991

SOUTH CAROLINA COASTAL COUNCIL
CONTROL SURVEYS
SULLIVANS ISLAND

PROJECT: SCCC SURVEY MONUMENTATION STATION NO.: SCCC 3065 B

STATE: SOUTH CAROLINA COUNTY: CHARLESTON

NAD 83 - SINGLE ZONE SPC - CONVERGANCE: 00°38'58" SCALE FACTOR: 0.99991750

NORTHING: 340,619.20 FEET LAT: 32°45'49".95153

EASTING: 2,360,060.08 FEET LONG: 79°49'43".11529

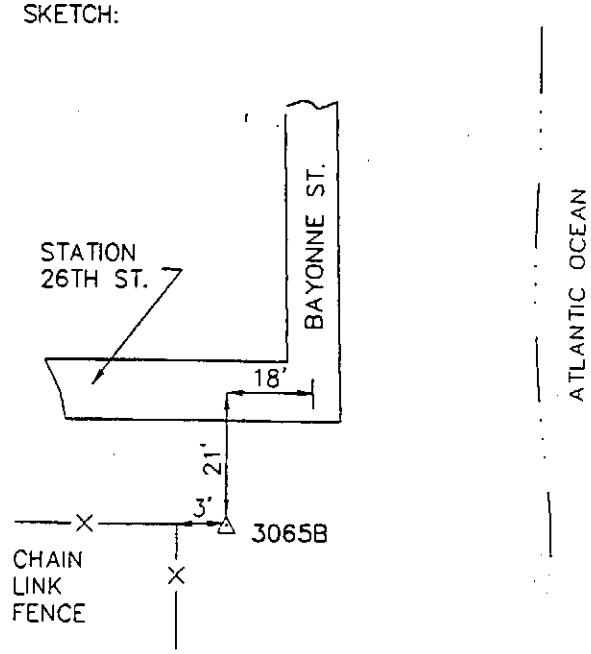
ELEVATION (NGVD 29) 8.23 FEET

OBJECT	GEODETIC AZIMUTH	GRID BEARING	GRID DISTANCE
3050 B	S 68° 28' 41" W	S 67° 49' 43" W	2242.26 FEET
3080	N 80° 49' 32" E	N 80° 10' 34" E	2048.88 FEET

DESCRIPTION:

LOCATED ON SULLIVAN'S ISLAND, TO REACH THE STATION FROM THE JUNCTION OF STATE HIGHWAY 703 AND STATION 26TH STREET, TURN RIGHT, AND GO SOUTHEAST ON STATION 26TH STREET FOR 0.15 MILE TO IT ENDS AND THE STATION ON THE RIGHT AND THE JUNCTION OF BAYONNE STREET LEADING NORTHEAST. A STANDARD BERNTSEN ALUMINUM ROD WITH A SCCC ALUMINUM DISK ATTACHED TO THE ROD AND ENCASED IN A 4" PVC PIPE WITH A THREADED CAP THAT IS FLUSH WITH THE SAND.

SKETCH:



DATE: OCTOBER 1991

SOUTH CAROLINA COASTAL COUNCIL

CONTROL SURVEYS
SULLIVANS ISLAND

PROJECT: SCCC SURVEY MONUMENTATION STATION NO.: SCCC 3080

STATE: SOUTH CAROLINA COUNTY: CHARLESTON

NAD 83 – SINGLE ZONE SPC – CONVERGANCE: 00°39'11" SCALE FACTOR: 0.99991725

NORTHING: 340,968.78 FEET LAT: 32°45'53".18334

EASTING: 2,362,078.92 FEET LONG: 79°49'19".42681

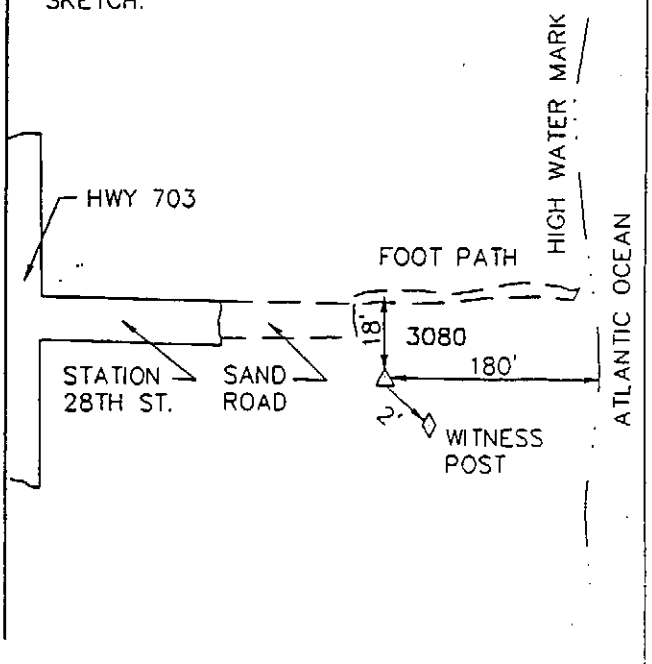
ELEVATION (NGVD 29) 9.71 FEET

OBJECT	GEODETIC AZIMUTH	GRID BEARING	GRID DISTANCE
3065 B	S 80° 49' 45" W	S 80° 10' 34" W	2048.88 FEET
3083 B	N 46° 15' 18" E	N 45° 36' 07" E	1386.86 FEET

DESCRIPTION:

LOCATE ON SULLIVAN'S ISLAND, TO REACH THE STATION FROM THE JUNCTION OF STATE HIGHWAY 703 AND STATION 28TH STREET, TURN RIGHT AND GO SOUTHEAST ON STATION 28TH STREET FOR 0.20 MILE TO ITS END AND A SAND ROAD LEADING TO THE BEACH, CONTINUE STRAIGHT AHEAD ON SAND ROAD FOR 0.10 MILE TO THE STATION ON THE RIGHT. A STANDARD BERNTSEN PRE-FAB BREAK-AWAY PVC PIPE WITH A BRONZE DISK ATTACHED AND ENCASED IN A 6" PVC PIPE THAT PROJECTS ABOUT 6" ABOVE THE SAND.

SKETCH:



DATE: OCTOBER 1991

SOUTH CAROLINA COASTAL COUNCIL
CONTROL SURVEYS
SULLIVANS ISLAND

PROJECT: SCCC SURVEY MONUMENTATION STATION NO.: SCCC 3083 B

STATE: SOUTH CAROLINA COUNTY: CHARLESTON

NAD 83 – SINGLE ZONE SPC – CONVERGANCE: 00°39'17" SCALE FACTOR: 0.99991654

NORTHING: 341,939.08 FEET LAT: 32°46'02".67206

EASTING: 2,363,069.83 FEET LONG: 79°49'07".69273

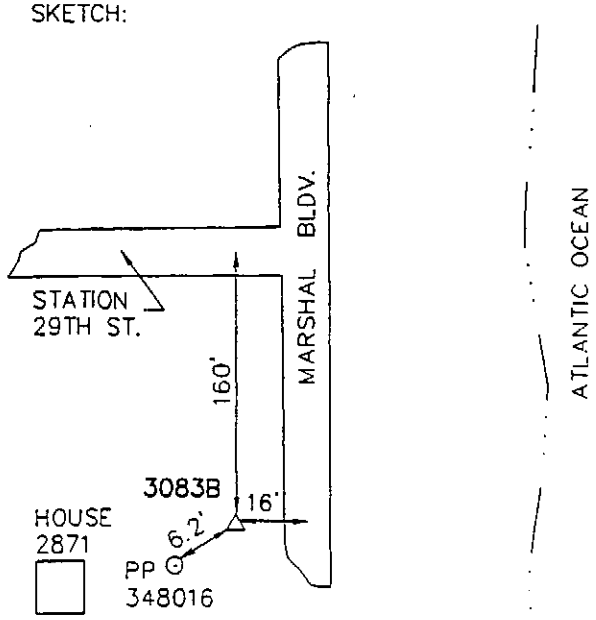
ELEVATION (NGVD 29) 8.27 FEET

OBJECT	GEODETIC AZIMUTH	GRID BEARING	GRID DISTANCE
3080	S 46° 15' 24" W	S 45° 36' 07" W	1386.86 FEET
3085 B	N 46° 10' 16" E	N 45° 30' 59" E	698.06 FEET

DESCRIPTION:

LOCATED ON SULLIVAN'S ISLAND, TO REACH THE STATION FROM THE JUNCTION OF STATE HIGHWAY 703 AND STATION 30TH STREET, TURN RIGHT SOUTHEAST ON STATION 30TH STREET FOR 0.30 MILE TO THE JUNCTION OF MARSHALL BOULEVARD. TURN RIGHT, SOUTHWEST ON MARSHALL BOULEVARD FOR 0.15 MILE TO THE STATION ON THE RIGHT. A STANDARD BERNTSEN ALUMINUM ROD WITH A SCCC ALUMINUM DISK ATTACHED TO THE ROD AND ENCASED IN A 4" PVC PIPE WITH A THREADED CAP THAT PROJECTS ABOUT 0.1' ABOVE THE GROUND.

SKETCH:



DATE: OCTOBER 1991

SOUTH CAROLINA COASTAL COUNCIL
CONTROL SURVEYS
SULLIVANS ISLAND

PROJECT: SCCC SURVEY MONUMENTATION STATION NO.: SCCC 3085 B

STATE: SOUTH CAROLINA COUNTY: CHARLESTON

NAD 83 – SINGLE ZONE SPC – CONVERGANCE: 00°39'21" SCALE FACTOR: 0.99991618

NORTHING: 342,428.21 FEET LAT: 32°46'07".45543

EASTING: 2,363,567.86 FEET LONG: 79°49'01".79469

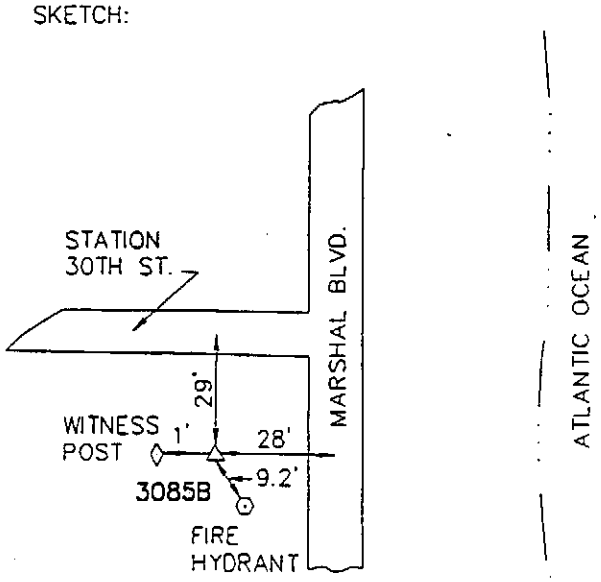
ELEVATION (NGVD 29) 8.64 FEET

OBJECT	GEODETIC AZIMUTH	GRID BEARING	GRID DISTANCE
3083 B	S 46° 10' 20" W	S 45° 30' 59" W	698.06 FEET
3090	N 44° 54' 05" E	N 44° 14' 44" E	778.30 FEET

DESCRIPTION:

THE STATION IS LOCATED ON SULLIVAN'S ISLAND, TO REACH THE STATION FROM THE JUNCTION OF STATE HIGHWAY 703 AND STATION 30TH STREET, TURN RIGHT ON STATION 30TH STREET AND GO SOUTHEAST FOR 0.30 MILE TO THE JUNCTION OF MARSHALL BOULEVARD AND THE STATION ON THE RIGHT. A STANDARD BERNTSEN ALUMINUM ROD WITH A SCCC ALUMINUM DISK ATTACHED TO THE ROD AND ENCASED IN A 4" PVC PIPE WITH A THREADED CAP THAT PROJECTS 2" ABOVE THE GROUND.

SKETCH:



DATE: OCTOBER 1991

SOUTH CAROLINA COASTAL COUNCIL
CONTROL SURVEYS
SULLIVANS ISLAND

PROJECT: SCCC SURVEY MONUMENTATION STATION NO.: SCCC 3090

STATE: SOUTH CAROLINA COUNTY: CHARLESTON

NAD 83 – SINGLE ZONE SPC – CONVERGANCE: 00°39'24" SCALE FACTOR: 0.99991576

NORTHING: 342,985.76 FEET LAT: 32°46'12".91047

EASTING: 2,364,110.91 FEET LONG: 79°48'55".36007

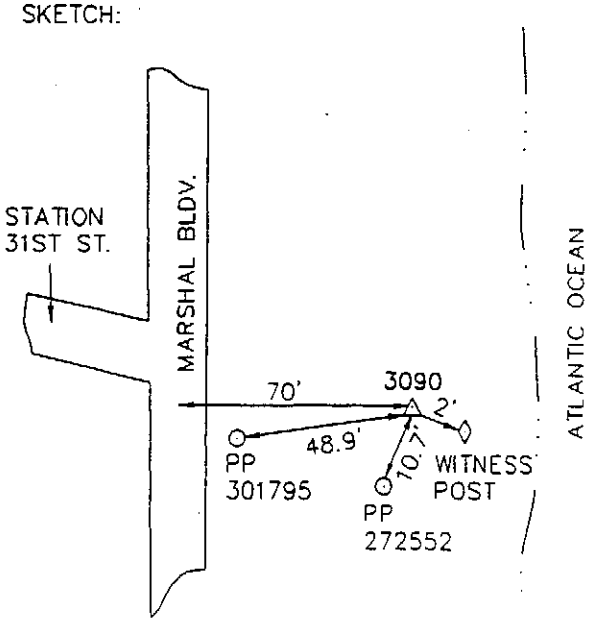
ELEVATION (NGVD 29) 9.81 FEET

OBJECT	GEODETIC AZIMUTH	GRID BEARING	GRID DISTANCE
3085 B	S 44° 54' 08" W	S 44° 14' 44" W	778.30 FEET
3092 B	N 09° 52' 12" E	N 09° 12' 48" E	507.09 FEET

DESCRIPTION:

LOCATED ON SULLIVAN'S ISLAND, TO REACH THE STATION FROM THE JUNCTION OF STATE HIGHWAY 703 AND STATION 30TH STREET, TURN RIGHT AND GO SOUTHEAST FOR 0.30 MILE TO THE JUNCTION OF MARSHALL BOULEVARD, TURN LEFT AND GO NORTHEAST FOR 0.15 MILE TO THE JUNCTION OF STATION 31TH STREET AND THE STATION ON THE RIGHT ON THE EAST SIDE OF A POWER POLE. A STANDARD BERNTSEN PRE-FAB BREAK-AWAY PVC PIPE WITH A BRONZE DISK ATTACHED AND ENCASED IN A 6" PVC PIPE THAT PROJECTS 6" ABOVE THE GROUND.

SKETCH:



DATE: OCTOBER 1991

SOUTH CAROLINA COASTAL COUNCIL
CONTROL SURVEYS
SULLIVANS ISLAND

PROJECT: SCCC SURVEY MONUMENTATION STATION NO.: SCCC 3092 B

STATE: SOUTH CAROLINA COUNTY: CHARLESTON

NAD 83 – SINGLE ZONE SPC – CONVERGANCE: 00°39'25" SCALE FACTOR: 0.99991539

NORTHING: 343,486.30 FEET LAT: 32°46'17".85393

EASTING: 2,364,192.10 FEET LONG: 79°48'54".34199

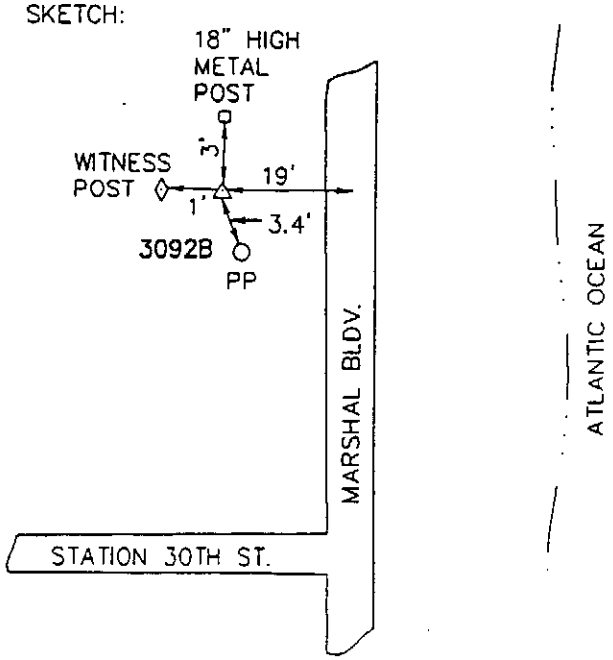
ELEVATION (NGVD 29) 8.79 FEET

OBJECT	GEODETIC AZIMUTH	GRID BEARING	GRID DISTANCE
3090	S 09° 52' 13" W	S 09° 12' 48" W	507.09 FEET
3095 B	N 23° 49' 24" W	N 24° 28' 49" W	392.75 FEET

DESCRIPTION:

LOCATED ON SULLIVAN'S ISLAND, TO REACH THE STATION FROM THE JUNCTION OF STATE HIGHWAY 703 AND STATION 30TH STREET, TURN RIGHT AND GO SOUTHEAST FOR 0.30 MILE TO THE JUNCTION OF MARSHALL BOULEVARD, TURN LEFT ON MARSHALL BOULEVARD FOR 0.30 MILE TO THE STATION ON THE LEFT. A STANDARD BERNTSEN ALUMINUM ROD WITH A SCCC ALUMINUM DISK ATTACHED TO THE ROD AND ENCASED IN A 4" PVC PIPE WITH A THREADED CAP THAT PROJECTS ABOUT 3" ABOVE THE GROUND.

SKETCH:



DATE: OCTOBER 1991

SOUTH CAROLINA COASTAL COUNCIL
CONTROL SURVEYS
SULLIVANS ISLAND

PROJECT: SCCC SURVEY MONUMENTATION STATION NO.: SCCC 3095 B

STATE: SOUTH CAROLINA COUNTY: CHARLESTON

NAD 83 – SINGLE ZONE SPC – CONVERGANCE: 00°39'24" SCALE FACTOR: 0.99991512

NORTHING: 343,843.75 FEET LAT: 32°46'21".40914

EASTING: 2,364,029.35 FEET LONG: 79°48'56".20007

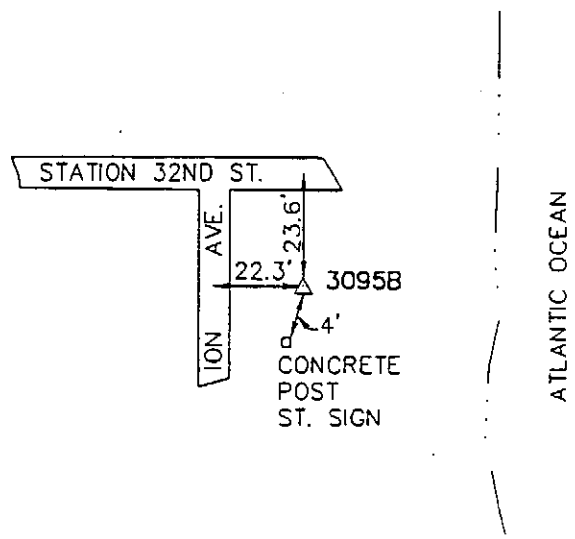
ELEVATION (NGVD 29) 9.87 FEET

OBJECT	GEODETIC AZIMUTH	GRID BEARING	GRID DISTANCE
3092 B	S 23° 49' 25" E	S 24° 28' 49" E	392.75 FEET

DESCRIPTION:

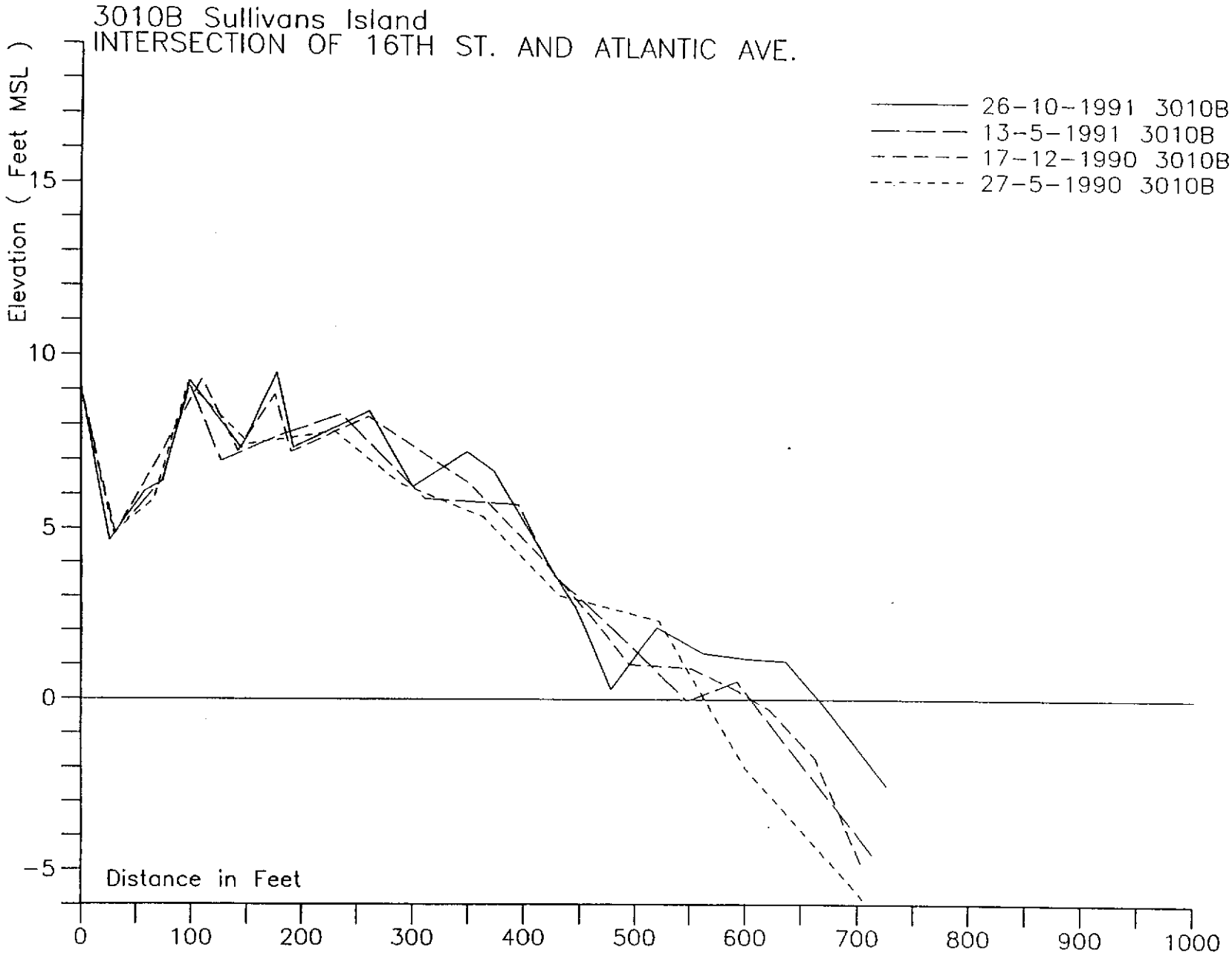
LOCATED ON SULLIVANS ISLAND, TO REACH THE STATION FROM THE JUNCTION OF STATE HIGHWAY 703 AND STATION 30TH STREET, TURN RIGHT AND GO SOUTHEAST ON STATION 30TH STREET, FOR 0.15 MILES TO THE JUNCTION OF ION AVE. TURN LEFT ON ION AVE. FOR 0.30 MILES TO ITS END AND THE STATION ON THE RIGHT. A STANDARD NGS STAINLESS STEEL ROD WITH TOP OF THE DATUM POINT CENTER PUNCHED, ENCASED IN A 1" PVC PIPE FILLED WITH GREASE AND SURRONDED BY A 5" PVC PIPE WITH AN ALUMINUM LOGO CAP FLUSH WITH THE GROUND.

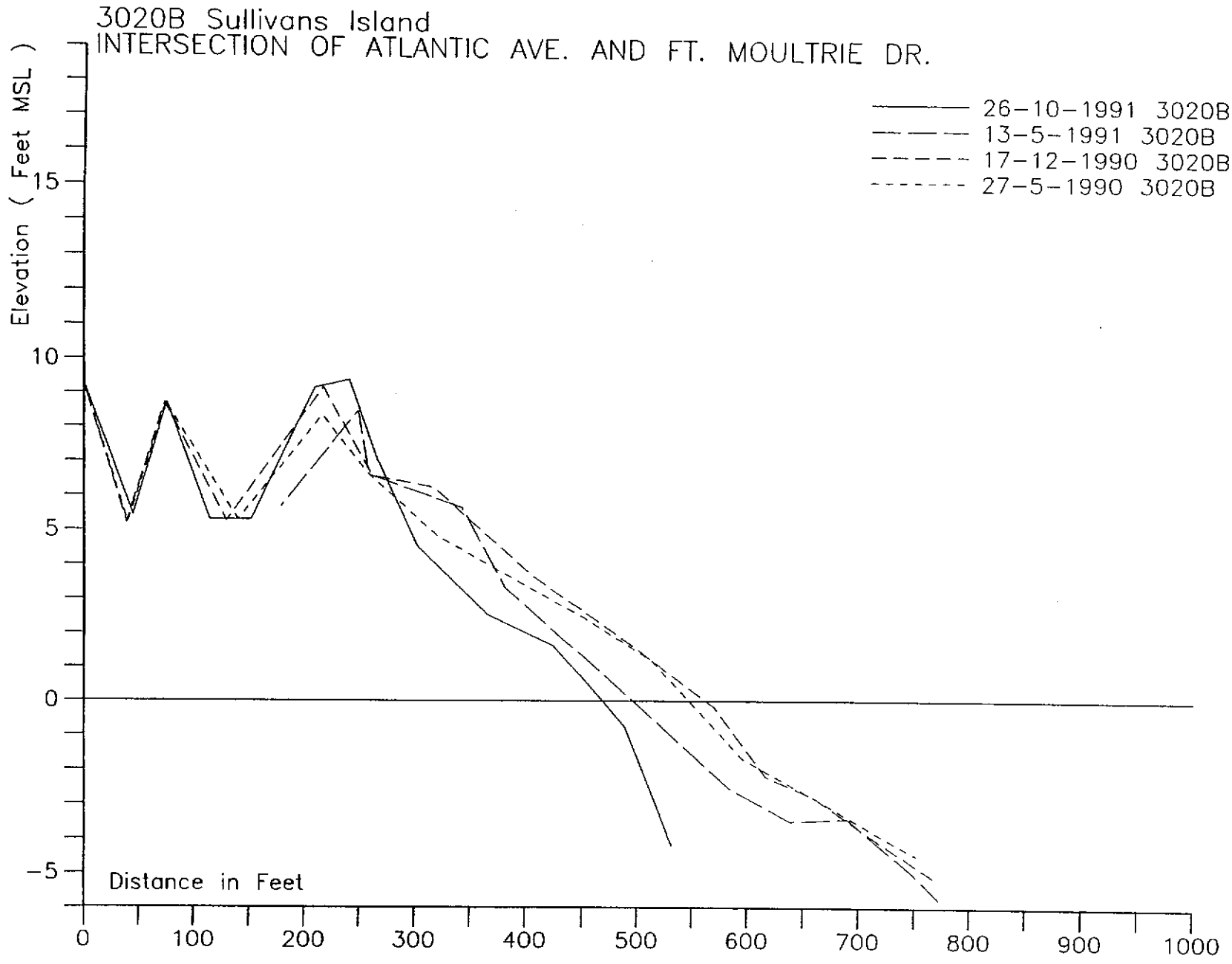
SKETCH:



APPENDIX B

Beach Profile Plots


3010B Sullivans Island
INTERSECTION OF 16TH ST. AND ATLANTIC AVE.
26-10-1991 3010B
13-5-1991 3010B
17-12-1990 3010B
27-5-1990 3010B
Elevation (Feet MSL)
15
10
5
0
-5
Distance in Feet
0
100
200
300
400
500
600
700
800
900
1000


3020B Sullivans Island
INTERSECTION OF ATLANTIC AVE. AND FT. MOULTRIE DR.
26-10-1991 3020B
13-5-1991 3020B
17-12-1990 3020B
27-5-1990 3020B
Elevation (Feet MSL)
15
10
5
0
-5
Distance in Feet
0
100
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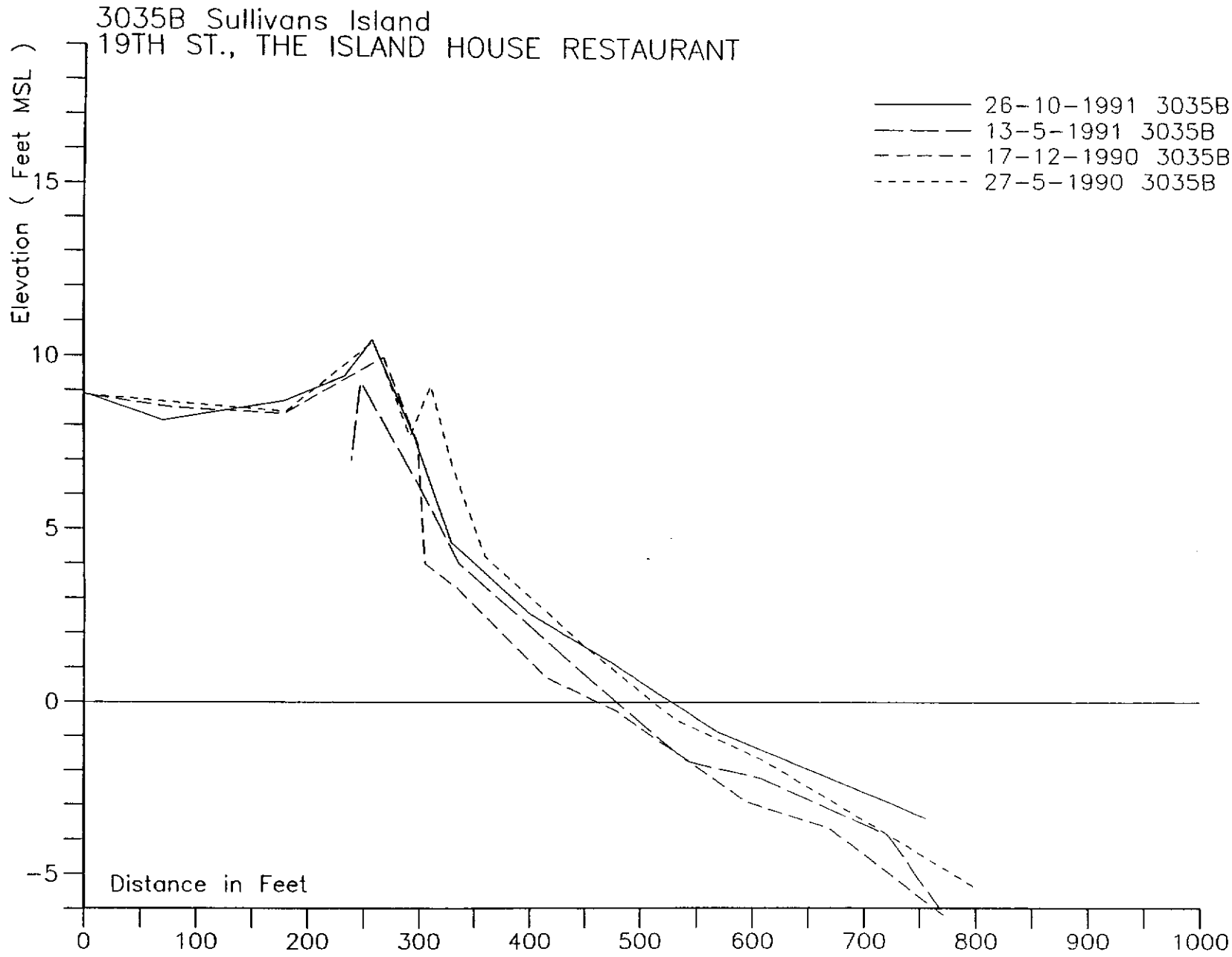
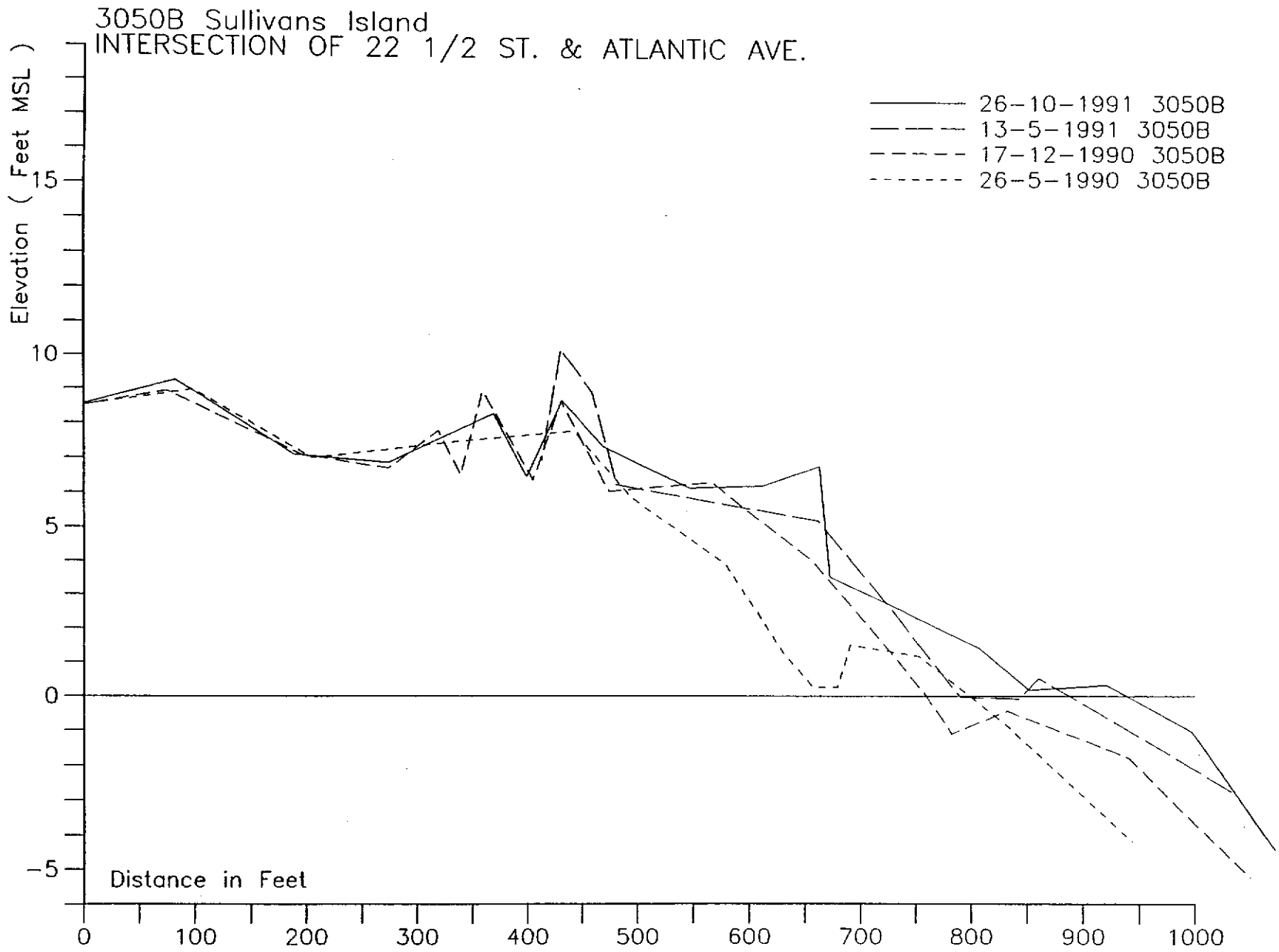

3035B Sullivans Island
19TH ST., THE ISLAND HOUSE RESTAURANT
26-10-1991 3035B
13-5-1991 3035B
17-12-1990 3035B
27-5-1990 3035B
Elevation (Feet MSL)
15
10
5
0
-5
Distance in Feet
0
100
200
300
400
500
600
700
800
900
1000


3050B Sullivans Island
INTERSECTION OF 22 1/2 ST. & ATLANTIC AVE.
26-10-1991 3050B
13-5-1991 3050B
17-12-1990 3050B
26-5-1990 3050B
Elevation (Feet MSL)
15
10
5
0
-5
Distance in Feet
0
100
200
300
400
500
600
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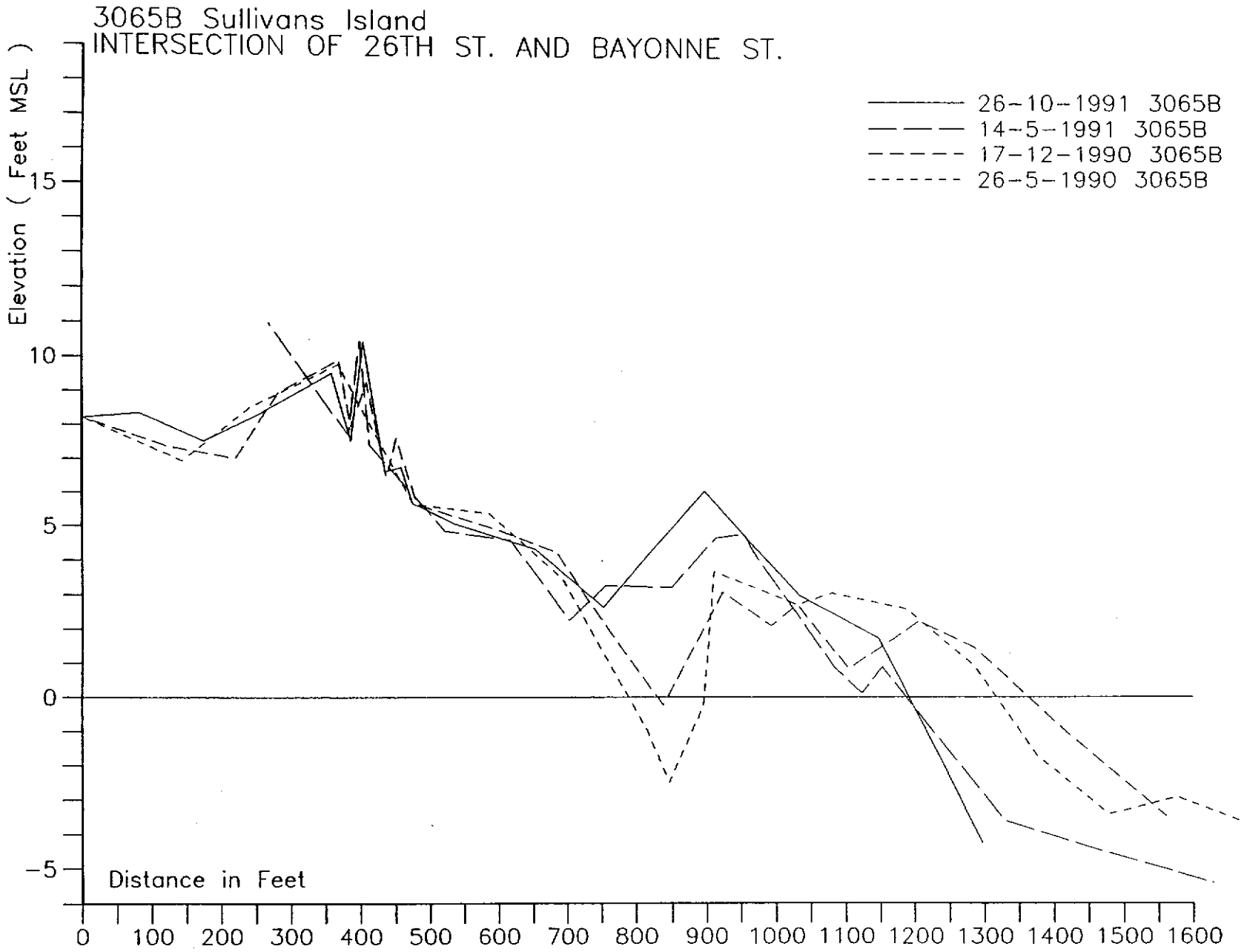
3065B Sullivans Island
INTERSECTION OF 26TH ST. AND BAYONNE ST.
26-10-1991 3065B
14-5-1991 3065B
17-12-1990 3065B
26-5-1990 3065B
Elevation (Feet MSL)
15
10
5
0
-5
Distance in Feet
0
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1000
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1200
1300
1400
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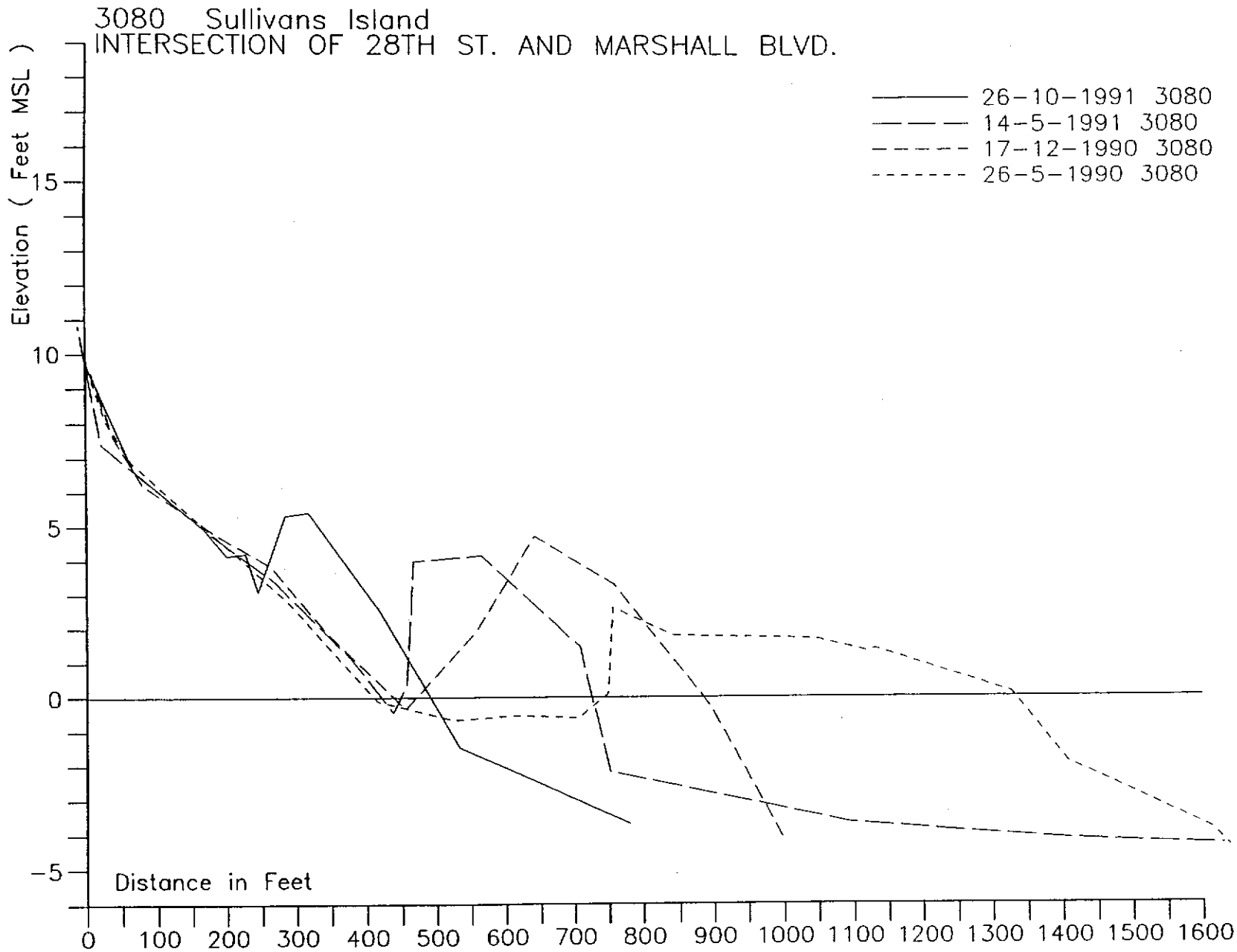
1600


3080 Sullivans Island
INTERSECTION OF 28TH ST. AND MARSHALL BLVD.
26-10-1991 3080
14-5-1991 3080
17-12-1990 3080
26-5-1990 3080
Elevation (Feet MSL)
15
10
5
0
-5
Distance in Feet
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1200
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1400
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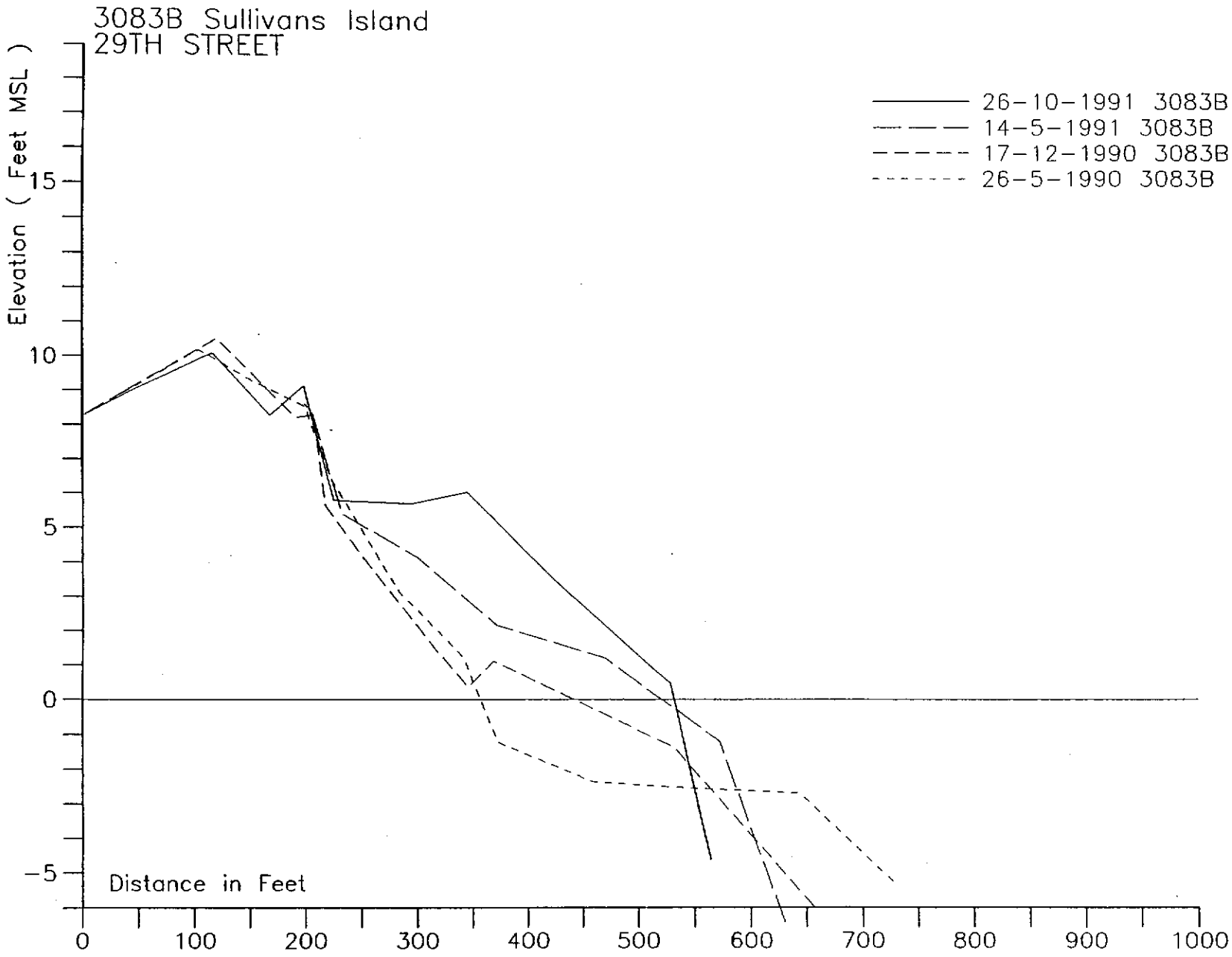
1600


3083B Sullivans Island
29TH STREET
26-10-1991 3083B
14-5-1991 3083B
17-12-1990 3083B
26-5-1990 3083B
Elevation (Feet MSL)
15
10
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-5
Distance in Feet
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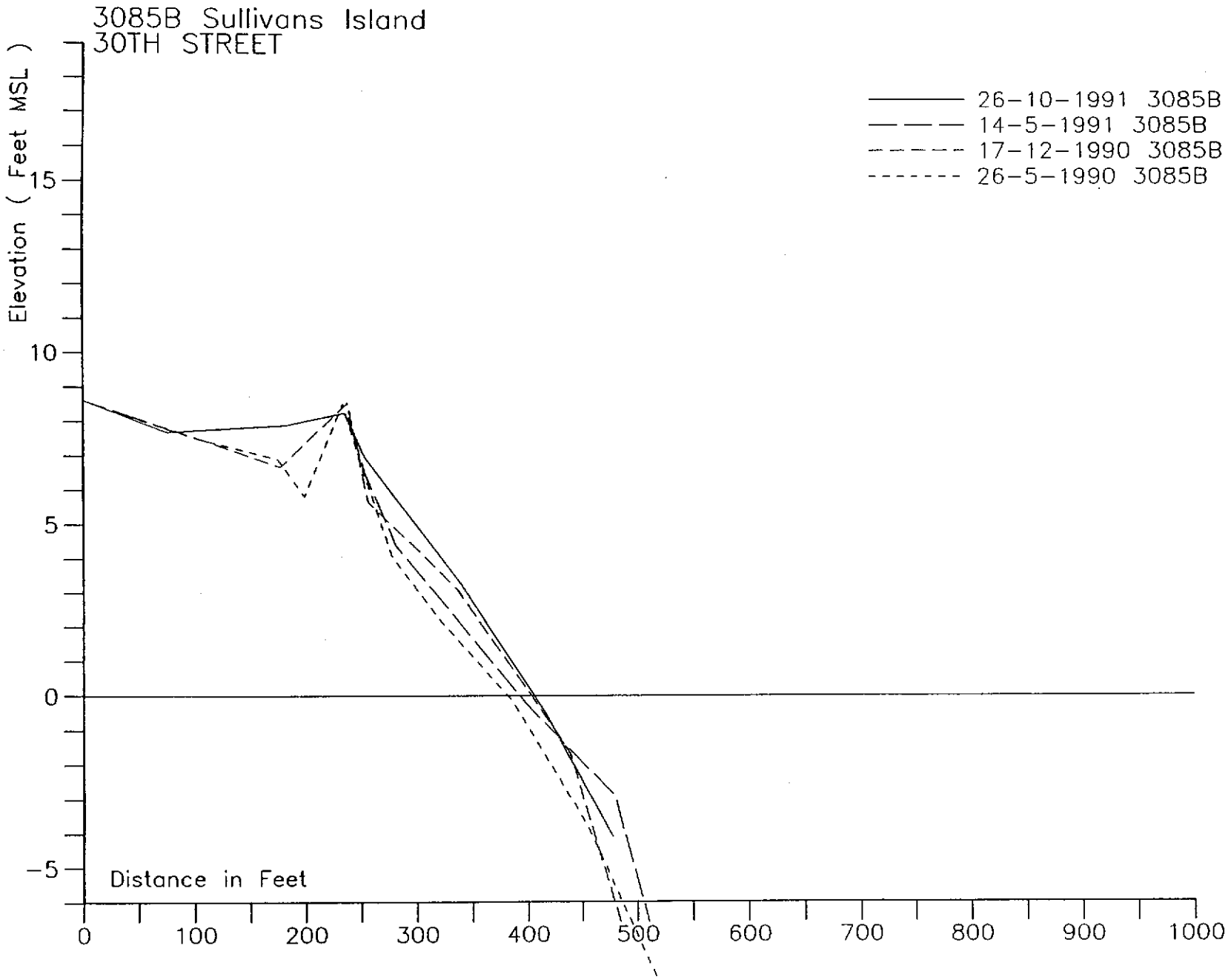
3085B Sullivans Island
30TH STREET
26-10-1991 3085B
14-5-1991 3085B
17-12-1990 3085B
26-5-1990 3085B
Elevation (Feet MSL)
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Distance in Feet
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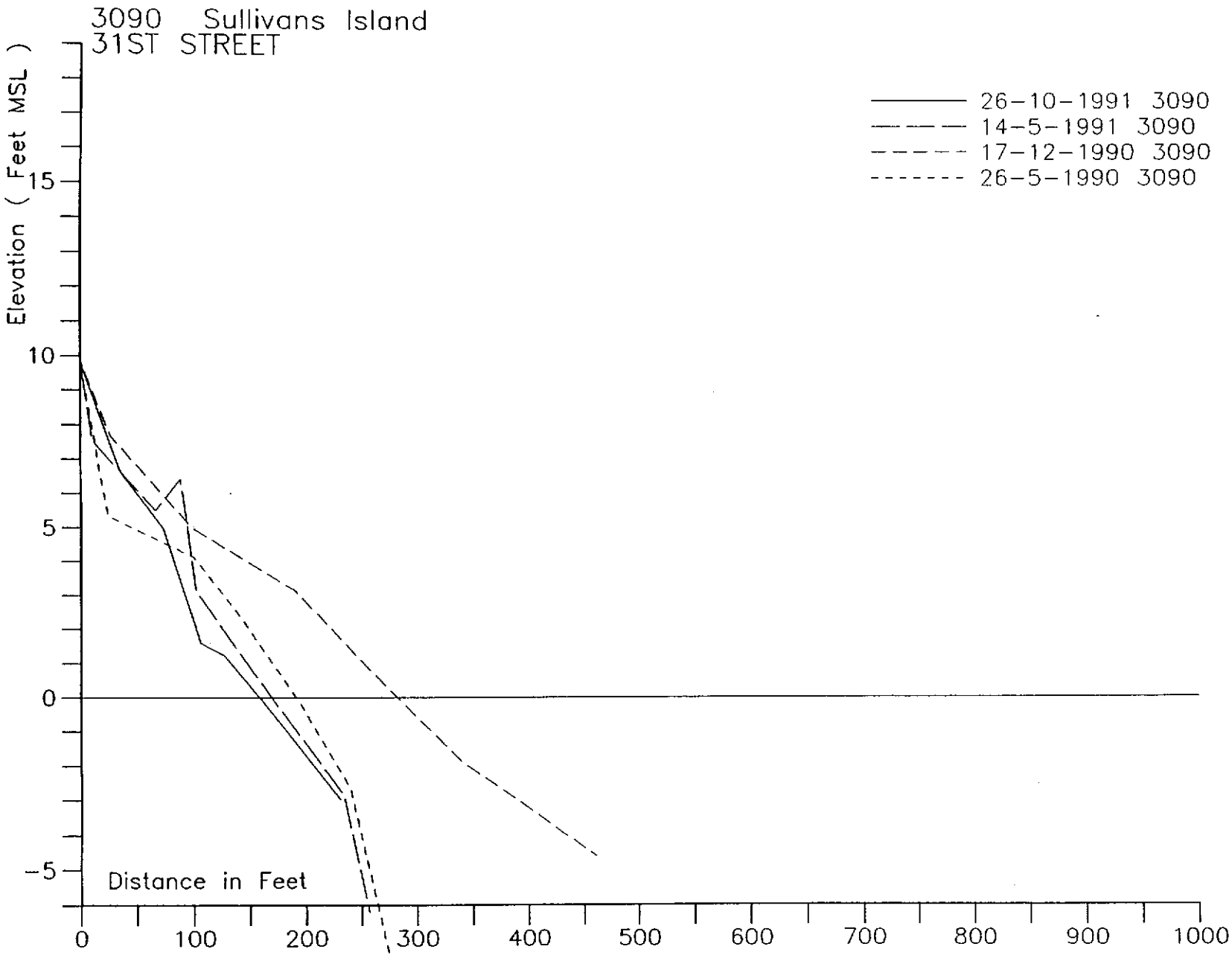
3090 Sullivans Island
31ST STREET
26-10-1991 3090
14-5-1991 3090
17-12-1990 3090
26-5-1990 3090
Elevation (Feet MSL)
15
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-5
Distance in Feet
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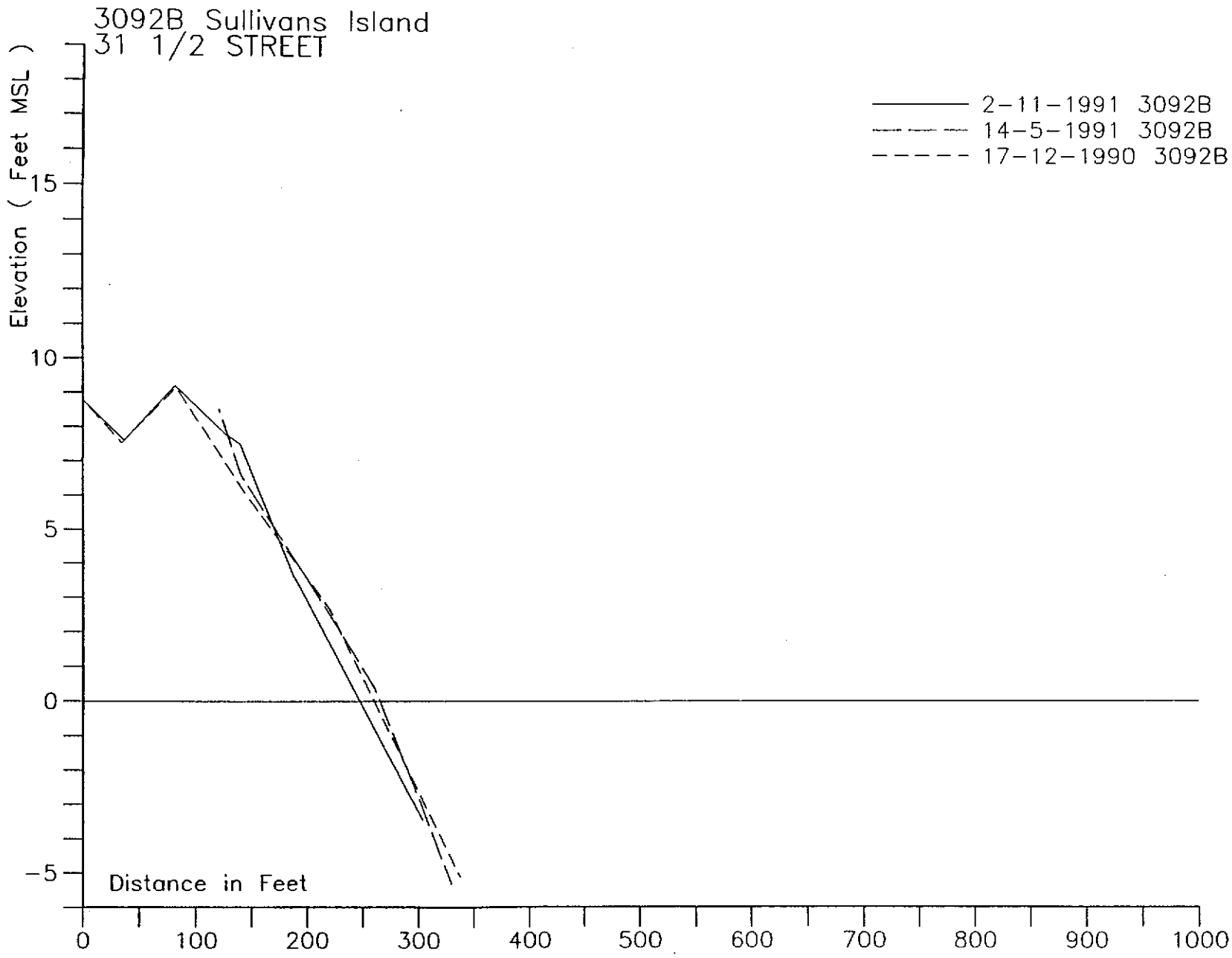
3092B Sullivans Island
31 1/2 STREET
2-11-1991 3092B
14-5-1991 3092B
17-12-1990 3092B
Elevation (Feet MSL)
15
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5
0
-5
Distance in Feet
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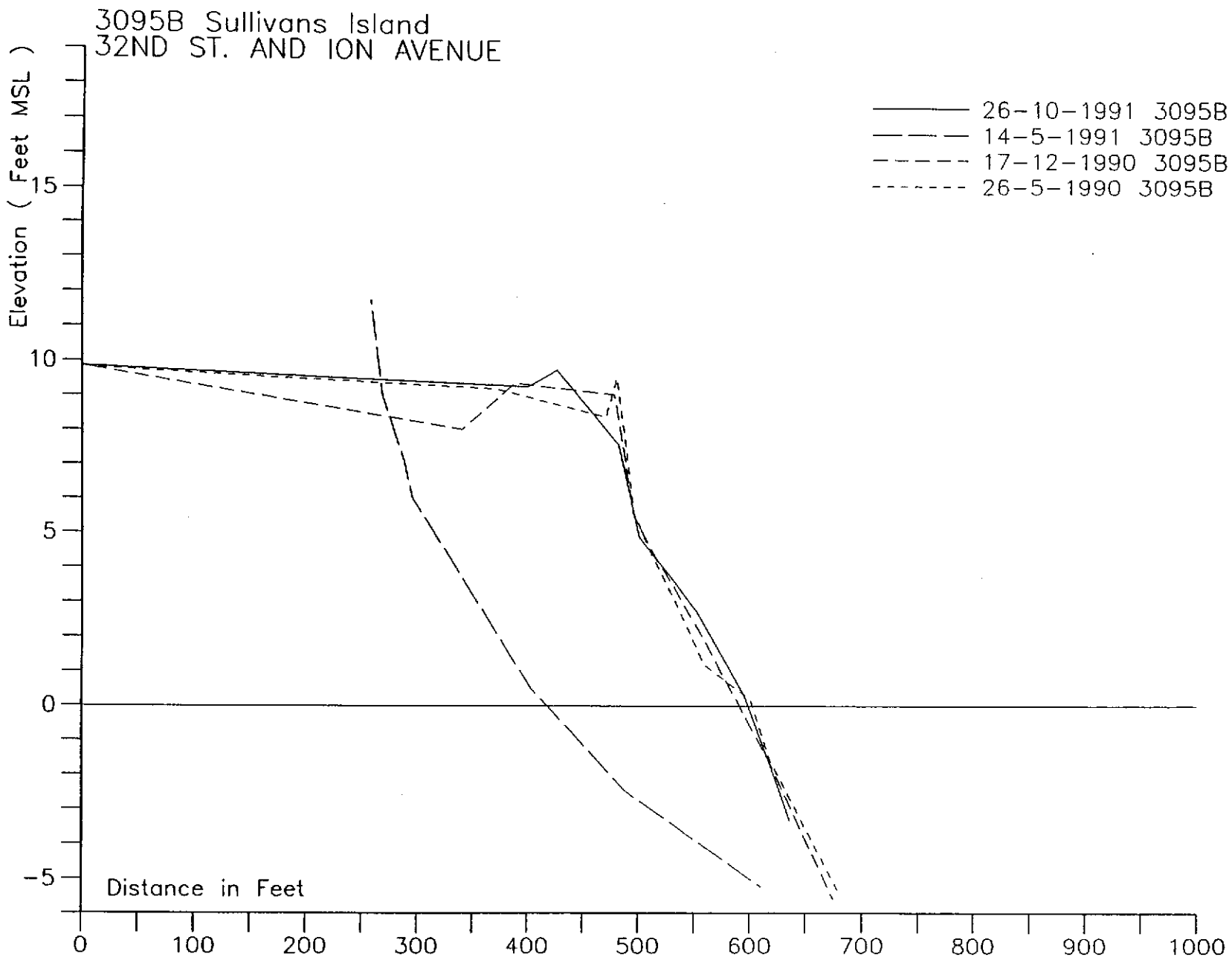
3095B Sullivans Island
32ND ST. AND ION AVENUE
Elevation (Feet MSL)
15
10
5
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-5
Distance in Feet
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26-10-1991 3095B
14-5-1991 3095B
17-12-1990 3095B
26-5-1990 3095B

APPENDIX C

Open Land Trust Agreement

STATE OF SOUTH CAROLINA)
) TITLE TO REAL ESTATE
COUNTY OF CHARLESTON)

WHEREAS, the Lowcountry Open Land Trust (the "Grantor") is a nonprofit corporation whose purpose is to preserve and conserve natural areas; and

WHEREAS, the Grantor is the owner in fee simple of certain real property (hereinafter referred to as the "Property" which has aesthetic, scientific, educational, and ecological value in its present state as a natural area which has not been subject to development or exploitation, which property is described more on the attached Exhibit A;

WHEREAS, the parties desire to place restrictions upon the Property for the purposes of, inter alia retaining land or water areas predominantly in their natural, scenic, open or wooded condition or as suitable habitat for fish, plants, or wildlife; and

WHEREAS, "natural, scientific, educational, aesthetic, scenic and recreational resource," as used herein shall, without limiting the generality of the terms, mean the condition of the Property at the time of this grant, evidenced by:

A) The appropriate survey maps from the United States Geological Survey, showing the property line and other contiguous or nearby protected areas;

B) An aerial photograph of the Property at an appropriate scale taken as close as possible to the date hereof; and

C) On-site photographs taken at appropriate locations on the Property;

and other documentation, which documentation shall be sufficient to establish the condition of the Property as of the date hereof which documentation shall be maintained in duplicate by both the Grantor and the Grantee hereof and made available to interested members of the public upon reasonable request for purposes of enforcing the restrictions contained herein.

KNOW ALL MEN BY THESE PRESENTS THAT the Lowcountry Open land Trust, a non-profit corporation, organized and existing under the laws of the State of South Carolina (the "Grantor"), in the state aforesaid in consideration of the sum of Ten and 00/100 ($10.00) Dollars, and other valuable consideration, to it in hand paid at and before the sealing of these presents by the Town of Sullivan's Island, South Carolina (the "Town"/"Grantee"), in the State aforesaid the receipt whereof is hereby acknowledged, have granted, bargained, sold and released and by these Presents do grant, bargain, sell and release unto the said the Town of Sullivan's Island, South Carolina, its successors and assigns, the following described property:

FOR DESCRIPTION OF PROPERTY SEE EXHIBIT A ATTACHED HERETO AND INCORPORATED HEREIN BY REFERENCE (THE "PROPERTY").

This conveyance is made subject to the following terms, conditions, restrictions, and covenants (hereinafter the "Restrictions"):

1. Except as otherwise provided or permitted in Paragraphs 2 and 3 hereof, the Property shall remain in its natural state, no changes shall be made to its topography or vegetation and no structures or improvements shall be erected on the Property.

2. Notwithstanding the provisions of Paragraphs 1 and 3 and subject to the limitations of Paragraph 4, the Town Council is given the unrestricted authority to trim and control the growth of vegetation for the purposes of mosquito control, scenic enhancement, public and emergency access to the Atlantic Ocean and providing views of the ocean and beaches to its citizens.

3. Notwithstanding the provisions of Paragraph 1 hereof, and subject to the limitations of this Paragraph 3 and of Paragraphs 2 and 4, the Town Council of Sullivan's Island (the "Council") shall have the right to improve, change, modify or alter the Property only if such actions are to further or effect one or more of the following enumerated public objectives or policies ("Public Policies"):

a) Drainage
b) Mosquito control
c) Public walkways and emergency access to the Atlantic Ocean
d) Beach renourishment
e) Erosion control
f) Vegetation management
g) Educational programs
h) Public safety
i) Public health; and
j) Scenic enhancement.

Prior to taking any action affecting the Property to further or effect a Public Policy ("Public Action"), the Council shall make specific written findings of fact;

1) that the proposed Public Action is proposed solely for the purpose of furthering or effecting one or more of the enumerated Public Policies,

2) that the proposed Public Action is necessary for the health, safety or general welfare of the Town,

3) that the benefits of the proposed Public Action outweigh the damage done to the aesthetic, ecological, scientific, or educational value of the Property in its natural state, and

4) that in making its findings of fact, the Council has given due and reasonable consideration to

i) the cumulative effect of the proposed Public Action and past Public Actions on the natural state of the Property,

ii) the alternative methods, if any, of furthering or effecting the proposed Public Policy which do not impact adversely on the natural state of the Property, and

iii) the probable results of not taking the proposed Public Action.

The above described written findings of fact must be made prior to each individual Public Action relating to the Property and shall be specific to the circumstances of the proposed Public Action and not merely conclusive in nature. In no event shall any Public Action violate the provisions of Paragraph 4 hereof.

4. In all events, the following activities, improvements and structures shall be prohibited on the Property:

a) any building or structure with a roof

b) Asphalt pavement, concrete pavement or pavement of a non-porous material

c) electrical power lines, wires, conduit, stations or pads

d) sewer lines, pipes or lift stations

e) water lines, pipes or lift stations

f) commercial activities in any way related to the buying or selling of things, goods or services.

Notwithstanding the provisions of Paragraph 4(c), (d) and (e) the Council may allow utility easements for electrical, sewer and water lines to cross through the Property, provided no utility services are provided as a result to any improvements on the Property.

5. These Restrictions may be enforced by the Town, any property owner within the Town, or by any voter registered within the Town. Such persons may seek any appropriate remedy for any violation, including, but not limited to, injunctive relief to force a termination of the violation or to permit restoration of the area damaged by an prohibited activity. The forbearance to

enforce the terms and provisions thereof in the event of a breach shall not be deemed a waiver of any rights granted hereunder. The Town shall not be liable to any person for any violation of these Restrictions by any person other than itself.

6. During the term of these restrictions, the Town shall cause to remain in effect an ordinance of the Town making it a violation of law for any person to violate the provisions of these Restrictions, as such Restrictions may be modified pursuant to Paragraph 8 hereof. The Town may enact ordinances and regulations affecting the Property which are more restrictive than these Restrictions or which are not inconsistent with these Restrictions.

7. If any provision of these Restrictions shall be invalid or for any reason become unenforceable, no other provision shall thereby be affected or impaired.

8. These Restrictions may be modified or repealed only upon an affirmative vote of both (a) seventy-five (75%) percent of the registered voters of the Town who vote in the referendum held pursuant to the terms hereof, and (b) one hundred (100%) percent of the members of Town Council. For purposes of these Restrictions, a registered voter in the Town shall mean any voter eligible to vote in Town elections who is registered 30 days prior to the referendum held pursuant to the terms hereof. At least 45 days prior to any referendum held pursuant to the terms hereof, the Council shall adapt reasonable regulations concerning the manner of voting hereunder. Nothing herein shall prohibit the Council from adopting regulations which allow voting by ballot on a designated day or days or by circulation of written petitions over a period of time.

9. These Restrictions shall remain in full force and effect for a period of 50 years and shall be automatically renewed and continued in effect for additional periods of 50 years each until such time as these Restrictions are repealed in accordance with the provisions of Paragraph 8 hereof. The terms of this Paragraph may be modified in accordance with the provisions of Paragraph 8 hereof.

GRANTEE'S ADDRESS: Town of Sullivan's Island
Town Hall
P. O. Box 427
Sullivan's Island, SC 29482

TOGETHER with all and singular, the Rights, Members, Hereditaments and Appurtenances to the said Premises belonging, or in anywise incident or appertaining.

TO HAVE AND TO HOLD, all and singular, the said Premises before mentioned unto the said Town of Sullivan's Island, South Carolina, its Successors and Assigns forever.

AND it does hereby bind itself and its Successors, to warrant and forever defend, all and singular the said Premises unto the said Town of Sullivan's Island, South Carolina, its Successors and Assigns, against it and its Successors, lawfully claiming, or to claim the same or any part thereof.

WITNESS its Hand and Seal, this 12 day of February, in the year of our Lord one thousand nine hundred and ninety-one and the two hundred and fifteenth year of the sovereignty and Independence of the Untied States of America.

SIGNED, SEALED AND DELIVERED
IN THE PRESENCE OF:

LOWCOUNTRY OPEN LAND TRUST

By: _____
Its:

By: Susan A. Kidd
Its:

STATE OF SOUTH CAROLINA)

CHARLESTON COUNTY)

PERSONALLY appeared before me the undersigned witness and made oath that (s)he saw the within named LOWCOUNTRY OPEN LAND TRUST by its authorized officer(s), sign, seal and as its act and deed, deliver the within written Deed, and that (s)he with the other witness named above witnessed the execution thereof.

SWORN to before me this 12
day of February A.D. 1991

_____ (SEAL)
Notary Public for South Carolina
My commission expires: 4-2-96

_____
(Signature of Witness)

STATE OF SOUTH CAROLINA)
) **TITLE TO REAL ESTATE**
COUNTY OF CHARLESTON)

WHEREAS, the Town of Sullivan's Island is the owner in fee simple of certain real property, which has aesthetic, scientific, educational, and ecological value in its present state as a natural area, which has not been subject to development or exploitation, which property is described more specifically on Exhibit A attached hereto and incorporated herein by reference thereto.

WHEREAS, the Town of Sullivan's Island desires to convey said property to the Lowcountry Open Land Trust, which is a non-profit corporation whose purpose is to preserve and conserve natural areas.

WHEREAS, the Town Council and the Town of Sullivan's Island, in meetings duly assembled, enacted an Ordinance, ratified on the 15th day of January, 1991, which authorized the Town of Sullivan's Island to convey to the Lowcountry Open Land Trust the below described property and, further authorized and directed the Mayor and the Town Clerk to so execute the Deed of Conveyance on behalf of the Town Council and the Town of Sullivan's Island.

NOW KNOW ALL MEN BY THESE PRESENTS that the Town of Sullivan's Island in consideration of Ten and 00/100 ($10.00) Dollars, and other valuable consideration to it in hand paid at and before the sealing of these presents by the Lowcountry Open Land Trust in the County and State aforesaid, the receipt whereof is hereby acknowledged have granted, bargained, sold, and released, and by these Presents do grant, bargain, sell, and release unto the said Lowcountry Open Land Trust, its successors and assigns, the following described property:

FOR DESCRIPTION OF PROPERTY SEE EXHIBIT A
ATTACHED HERETO AND INCORPORATED HEREIN BY REFERENCE

Together with all and singular the rights, members, hereditaments, and appurtenances to the said Premises belonging, or in anywise, incident, or appertaining.

TO HAVE AND TO HOLD, all and singular, the said premises before mentioned unto the said Lowcountry Open Land Trust, its successors and assigns, forever.

WITNESS Its hand and seal this 12 day of February in the year of our lord one thousand nine hundred and ninety-one, and in the two hundred and fifteenth year of the sovereignty and independence of the United States of America.

In the Presence of

TOWN OF SULLIVAN'S ISLAND

By: C. Melvin Anderegg
C. Melvin Anderegg, Mayor

Attest: Carolyn R. Kruger
Carolyn R. Kruger, Clerk

STATE OF SOUTH CAROLINA)
COUNTY OF CHARLESTON)

Personally appeared before me the undersigned witness and made oath that he/she saw the within named Town of Sullivan's Island by C. Melvin Anderegg, Mayor, and the Attested to by Carolyn R. Kruger, Clerk, sign, seal, and as the act and deed of the Town of Sullivan's Island and of the said Council deliver the foregoing written deed, and that he/she with the other witness witnessed the execution thereof.

SWORN to before me this 12 day of February, 1991.

Notary Public for South Carolina
My Commission Expires: 4-2-96

APPENDIX D

RS/RC-1 Boundary, SCCC 40-Year Setback Line and Seaward Property Boundaries

APPENDIX E

1990 Beachfront Management Act

Beachfront Management Act

July, 1990

SOUTH CAROLINA COASTAL COUNCIL

(R748, S391)

AN ACT TO AMEND THE CODE OF LAWS OF SOUTH CAROLINA, 1976, BY ADDING SECTIONS 48-39-250 AND 48-39-260 SO AS TO PROVIDE FOR THE FINDINGS AND POLICY RELATING TO THE BEACH/DUNE SYSTEM; TO AMEND SECTION 48-39-130, AS AMENDED, RELATING TO COASTAL COUNCIL PERMITS TO UTILIZE A CRITICAL AREA, SO AS TO REVISE THE PROVISIONS DETAILING WHEN A PERMIT IS NOT NECESSARY; TO AMEND SECTIONS 48-39-270 THROUGH 48-39-360, RELATING TO THE BEACH MANAGEMENT ACT, SO AS TO ADD SECTIONS 48-39-305 AND 48-39-355, REVISE DEFINITIONS, THE PROVISIONS FOR AND THE DETERMINATION OF THE BASELINE AND THE SETBACK LINE, THE DUTIES OF THE COASTAL COUNCIL, THE REQUIREMENTS RELATING TO CONSTRUCTION, RECONSTRUCTION, HABITABLE STRUCTURES, EROSION CONTROL STRUCTURES OR DEVICES, POOLS, AND BUILDING PERMITS, AND THE EXEMPTIONS, PROVIDE FOR A PETITION TO THE CIRCUIT COURT BY LANDOWNERS AND THE COURT'S DETERMINATION, PROVIDE FOR THE PLANTING OF VEGETATION, REVISE THE REQUIREMENTS FOR THE BEACH MANAGEMENT PLAN AND OF A DISCLOSURE STATEMENT IN A CONTRACT OF SALE OR TRANSFER OF REAL PROPERTY, AND PROVIDE FOR THE CIRCUMSTANCES UNDER WHICH A PERMIT IS NOT REQUIRED AND FOR DOCUMENTATION; TO REPEAL SECTIONS 1 AND 2 OF ACT 634 OF 1988 RELATING TO FINDINGS AND POLICY RELATING TO THE BEACH/DUNE SYSTEM; TO PROVIDE FOR THE PLACEMENT OF SAND ON BEACHES; TO AMEND SECTION 48-39-40, RELATING TO THE MEMBERS OF THE COASTAL COUNCIL, SO AS TO PROVIDE FOR THEIR ELECTION INSTEAD OF APPOINTMENT AND DELETE THE PROVISIONS FOR INITIAL APPOINTMENTS; TO PROVIDE FOR THE SERVICE OF THE CURRENT NONLEGISLATIVE MEMBERS OF THE COUNCIL; AND TO PROVIDE FOR APPLICATION OF THE ACT ON LEGAL ACTIONS.

Be it enacted by the General Assembly of the State of South Carolina:

Beach/dune system findings

SECTION 1. The 1976 Code is amended by adding:

"Section 48-39-260. The General Assembly finds that:

(1) The beach/dune system along the coast of South Carolina is extremely important to the people of this State and serves the following functions:

(a) protects life and property by serving as a storm barrier which dissipates wave energy and contributes to shoreline stability in an economical and effective manner;

(b) provides the basis for a tourism industry that generates approximately two-thirds of South Carolina's annual tourism industry revenue which constitutes a significant portion of the state's economy. The tourists who come to the South Carolina coast to enjoy the ocean and dry sand beach contribute significantly to state and local tax revenues;

(c) provides habitat for numerous species of plants and animals, several of which are threatened or endangered. Waters adjacent to the beach/dune system also provide habitat for many other marine species;

(d) provides a natural healthy environment for the citizens of South Carolina to spend leisure time which serves their physical and mental well-being.

(2) Beach/dune system vegetation is unique and extremely important to the vitality and preservation of the system.

(3) Many miles of South Carolina's beaches have been identified as critically eroding.

(4) Chapter 39 of Title 48, Coastal Tidelands and Wetlands, prior to 1988 did not provide adequate jurisdiction to the South Carolina Coastal Council to enable it to effectively protect the integrity of the beach/dune system.

Consequently, without adequate controls, development unwisely has been sited too close to the system. This type of development has jeopardized the stability of the

beach/dune system, accelerated erosion, and endangered adjacent property. It is in both the public and private interests to protect the system from this unwise development.

(5) The use of armoring in the form of hard erosion control devices such as seawalls, bulkheads, and rip-rap to protect erosion-threatened structures adjacent to the beach has not proven effective. These armoring devices have given a false sense of security to beachfront property owners. In reality, these hard structures, in many instances, have increased the vulnerability of beachfront property to damage from wind and waves while contributing to the deterioration and loss of the dry sand beach which is so important to the tourism industry.

(6) Erosion is a natural process which becomes a significant problem for man only when structures are erected in close proximity to the beach/dune system. It is in both the public and private interests to afford the beach/dune system space to accrete and erode in its natural cycle. This space can be provided only by discouraging new construction in close proximity to the beach/dune system and encouraging those who have erected structures too close to the system to retreat from it.

(7) Inlet and harbor management practices, including the construction of jetties which have not been designed to accommodate the longshore transport of sand, may deprive downdrift beach/dune systems of their natural sand supply. Dredging practices which include disposal of beach quality sand at sea also may deprive the beach/dune system of much-needed sand.

(8) It is in the state's best interest to protect and to promote increased public access to South Carolina's beaches for out-of-state tourists and South Carolina residents alike.

(9) Present funding for the protection, management, and enhancement of the beach/dune system is inadequate.

(10) There is no coordinated state policy for post-storm emergency management of the beach/dune system.

(11) A long-range comprehensive beach management plan is needed for the entire coast of South Carolina to protect and manage effectively the beach/dune system, thus preventing unwise development and minimizing man's adverse impact on the system.

Section 48-39-260. In recognition of its stewardship responsibilities, the policy of South Carolina is to:

(1) protect, preserve, restore, and enhance the beach/dune system, the highest and best uses of which are declared to provide:

(a) protection of life and property by acting as a buffer from high tides, storm surge, hurricanes, and normal erosion;

(b) a source for the preservation of dry sand beaches which provide recreation and a major source of state and local business revenue;

(c) an environment which harbors natural beauty and enhances the well-being of the citizens of this State and its visitors;

(d) natural habitat for indigenous flora and fauna including endangered species;

(2) create a comprehensive, long-range beach management plan and require local comprehensive beach management plans for the protection, preservation, restoration, and enhancement of the beach/dune system. These plans must promote wise use of the state's beachfront to include a gradual retreat from the system over a forty-year period;

(3) severely restrict the use of hard erosion control devices to armor the beach/dune system and to encourage the replacement of hard erosion control devices with soft technologies as approved by the South Carolina Coastal Council which will provide for the protection of the shoreline without long-term adverse effects;

(4) encourage the use of erosion-inhibiting techniques which do not adversely impact the long-term well-being of the beach/dune system;

(5) promote carefully planned nourishment as a means of beach preservation and restoration where economically feasible;

(6) preserve existing public access and promote the enhancement of public access to assure full enjoyment of the beach by all our citizens including the handicapped and encourage the purchase of lands adjacent to the Atlantic Ocean to enhance public access;

(7) involve local governments in long-range comprehensive planning and management of the beach/dune system in which they have a vested interest;

(8) establish procedures and guidelines for the emergency management of the beach/dune system following a significant storm event."

Beach/dune system policy

SECTION 2. Section 48-39-130(D)(1) and (6) of the 1976 Code, as last amended by Act 634 of 1988, are further amended to read:

"(1) The accomplishment of emergency orders of an appointed official of a county or municipality or of the State, acting to protect the public health and safety, upon notification to the council. However, with regard to the beach/dune critical area, only the use of sandbags, sandscraping, or renourishment, or a combination of them, in accordance with guidelines provided by the council is allowed pursuant to this item.

(6) Emergency repairs to an existing bank, dike, fishing pier, or structure other than oceanfront erosion control structures or devices which has been erected in accordance with federal and state laws or provided for by general law or acts passed by the General Assembly, if notice is given in writing to the council within seventy-two hours from the onset of the needed repairs."

Coastal Council permits to utilize a critical area

SECTION 3. Sections 48-39-270 through 48-39-360, as added by Act 634 of 1988, are amended to read:

"Section 48-39-270. As used in this chapter:

(1) Erosion control structures or devices include:

(a) seawall: a special type of retaining wall that is designed specifically to withstand normal wave forces;

(b) bulkhead: a retaining wall designed to retain fill material but not to withstand wave forces on an exposed shoreline;

(c) revetment: a sloping structure built along an escarpment or in front of a bulkhead to protect the shoreline or bulkhead from erosion.

(2) Habitable structure means a structure suitable for human habitation including, but not limited to, single or multifamily residences, hotels, condominium buildings, and buildings for commercial purposes. Each building of a condominium regime is considered a separate habitable structure, but if a building is divided into apartments, then the entire building, not the individual apartment, is considered a single habitable structure. Additionally, a habitable structure includes porches, gazebos, and other attached improvements.

(3) Council means the South Carolina Coastal Council.

(4) Beach nourishment means the artificial establishment and periodic renourishment of a beach with sand that is compatible with the existing beach in a way so as to create a dry sand beach at all stages of the tide.

(5) The beach/dune system includes all land from the mean highwater mark of the Atlantic Ocean landward to the setback line described in Section 48-39-280.

(6) A standard erosion zone is a segment of shoreline which is subject to essentially the same set of coastal

processes, has a fairly constant range of profiles and sediment characteristics, and is not influenced directly by tidal inlets or associated inlet shoals.

(7) An inlet erosion zone is a segment of shoreline along or adjacent to tidal inlets which is influenced directly by the inlet and its associated shoals.

(8) Master plan means a document or a map prepared by a developer or a city as a policy guide to decisions about the physical development of the project or community.

(9) Planned development means a development plan which has received local approval for a specified number of dwelling and other units. The siting and size of structures and amenities are specified or restricted within the approval. This term specifically references multifamily or commercial projects not otherwise referenced by the terms, master plan, or planned unit development.

(10) Planned unit development means a residential, commercial, or industrial development, or all three, designed as a unit and approved by local government.

(11) Destroyed beyond repair means that more than sixty-six and two-thirds percent of the replacement value of the habitable structure or pool has been destroyed. If the owner disagrees with the appraisal of the council, he may obtain an appraisal to evaluate the damage to the building or pool. If the appraisals differ, then the two appraisers must select a third appraiser. If the two appraisers are unable to select a third appraiser, the clerk of court of the county where the structure lies must make the selection. Nothing in this section prevents a court of competent jurisdiction from reviewing, de novo, the appraisal upon the petition of the property owner.

(12) Pool is a structure designed and used for swimming and wading.

(13) Active beach is that area seaward of the escarpment or the first line of stable natural vegetation, whichever first occurs, measured from the ocean.

Section 48-39-280. (A) A forty-year policy of retreat from the shoreline is established. The council must implement this policy and must utilize the best available scientific and historical data in the implementation. The council must establish a baseline which parallels the shoreline for each standard erosion zone and each inlet erosion zone.

(1) The baseline for each standard erosion zone is established at the location of the crest of the primary oceanfront sand dune in that zone. In standard erosion zones in which the shoreline has been altered naturally or artificially by the construction of erosion control devices, groins, or other manmade alterations, the baseline must be established by the council using the best scientific and historical data, as where the crest of the primary oceanfront sand dunes for that zone would be located if the shoreline had not been altered.

(2) The baseline for inlet erosion zones that are not stabilized by jetties, terminal groins, or other structures must be determined by the council as the most landward point of erosion at any time during the past forty years, unless the best available scientific and historical data of the inlet and adjacent beaches indicate that the shoreline is unlikely to return to its former position. In collecting and utilizing the best scientific and historical data available for the implementation of the retreat policy, the council, as part of the State Comprehensive Beach Management Plan provided for in this chapter, among other factors, must consider: historical inlet migration, inlet stability, channel and ebb tidal delta changes, the effects of sediment bypassing on shorelines adjacent to the inlets, and the effects of nearby beach restoration projects on inlet sediment budgets.

(3) The baseline within inlet erosion zones that are stabilized by jetties, terminal groins, or other structures must be determined in the same manner as provided for in item (1). However, the actual location of the crest of the primary oceanfront sand dunes of that erosion zone is the baseline of that zone, not the location if the inlet had remained unstabilized.

(4) Notwithstanding any other provision of this section, where a council-approved beach nourishment project has been completed, the local government or the landowners, with notice to the local government, may petition the council to move the baseline as far seaward as the landward edge of the erosion control structure or device or if there is no existing erosion control structure or device, then as far seaward as the post project baseline as determined by the council in accordance with Section 48-39-280(A)(1) by showing that the beach has been stabilized by council-approved beach nourishment.

If the petitioner is asking that the baseline be moved seaward pursuant to this section, he must show an ongoing commitment to renourishment which will stabilize and maintain the dry sand beach at all stages of the tide for the foreseeable future.

If the council grants the petition to move the baseline seaward pursuant to this section, no new construction may occur in the area between the former baseline and the new baseline for three years after the initial beach nourishment project has been completed as determined by the council.

If the beach nourishment fails to stabilize the beach after a reasonable period of time, the council must move the baseline landward to the primary oceanfront sand dune as determined pursuant to items (1), (2), and (3) for that section of the beach.

(B) To implement the retreat policy provided for in subsection (A), a setback line must be established landward of the baseline a distance which is forty times the average

annual erosion rate or not less than twenty feet from the baseline for each erosion zone based upon the best historical and scientific data adopted by the council as a part of the State Comprehensive Beach Management Plan.

(C) The council, before July 3, 1991, must establish a final baseline and setback line for each erosion zone based on the best available scientific and historical data as provided in subsection (B) and with consideration of public input. The baseline and setback line must not be revised before July 1, 1998, nor later than July 1, 2000. After that revision, the baseline and setback line must be revised not less than every eight years, but not more than every ten years after each preceding revision. In the establishment and revision of the baseline and setback line, the council must transmit and otherwise make readily available to the public all information upon which its decisions are based for the establishment of the final baseline and setback line. The council must hold one public hearing before establishing the final baseline and setback lines. Until the council establishes new baselines and setback lines, the existing baselines and setback lines must be used. The council may stagger the revision of the baselines and setback lines of the erosion zones so long as every zone is revised in accordance with the time guidelines established in this section.

(D) In order to locate the baseline and the setback line, the council must establish monumented and controlled survey points in each county fronting the Atlantic Ocean. The council must acquire sufficient surveyed topographic information on which to locate the baseline. Surveyed topographic data typically must be gathered at two thousand foot intervals. However, in areas subject to significant near term development and in areas currently developed, the interval, at the discretion of the council, may be more frequent. The resulting surveys must locate the crest of the primary oceanfront sand dunes to be used

as the baseline for computing the forty-year erosion rate. In cases where no primary oceanfront sand dunes exist, a study conducted by the council is required to determine where the upland location of the crest of the primary oceanfront sand dune would be located if the shoreline had not been altered. The council, by regulation, may exempt specifically described portions of the coastline from the survey requirements of this section when, in its judgment, the portions of coastline are not subject to erosion or are not likely to be developed by virtue of local, state, or federal programs in effect on the coastline which would preclude significant development, or both.

(E) A landowner claiming ownership of property affected who feels that the final or revised setback line, baseline, or erosion rate as adopted is in error, upon submittal of substantiating evidence, must be granted a review of the setback line, baseline, or erosion rate, or a review of all three. The requests must be forwarded to the appropriate committee of the council and handled in accordance with the council's regulations on appeals.

Section 48-39-290. (A) No new construction or reconstruction is allowed seaward of the baseline except as follows:

(1) wooden walkways no larger in width than six feet;

(2) small wooden decks no larger than one hundred forty-four square feet;

(3) fishing piers which are open to the public. Those fishing piers with their associated structures including, but not limited to, baitshops, restrooms, restaurants, and arcades which existed September 21, 1989, may be rebuilt if they are constructed to the same dimensions and utilized for the same purposes and remain open to the public. In addition, those fishing piers with their associated structures which existed on September 21, 1989, that were privately owned, privately maintained, and not open to the public on this date also may

be rebuilt and used for the same purposes if they are constructed to the same dimensions;

(4) golf courses;

(5) normal landscaping;

(6) structures specifically permitted by special permit as provided in subsection (D);

(7) pools may be reconstructed if they are landward of an existing, functional erosion control structure or device.

A permit must be obtained from the council for items (2) through (7).

(B) Construction, reconstruction, or alterations between the baseline and the setback line are governed as follows:

(1) Habitable structures:

(a) New habitable structures: If part of a new habitable structure is constructed seaward of the setback line, the owner must certify in writing to the council that the construction meets the following requirements:

(i) The habitable structure is no larger than five thousand square feet of heated space. The structure must be located as far landward on the property as practicable. A drawing must be submitted to the council showing a footprint of the structure on the property, a cross section of the structure, and the structure's relation to property lines and setback lines which may be in effect. No erosion control structure or device may be incorporated as an integral part of a habitable structure constructed pursuant to this section.

(ii) No part of the building is being constructed on the primary oceanfront sand dune or seaward of the baseline.

(b) Habitable structures which existed on the effective date of Act 634 of 1988 or constructed pursuant to this section:

(i) Normal maintenance and repair of habitable structures is allowed without notice to the council.

(ii) Additions to habitable structures are allowed if the additions together with the existing structure do not exceed five thousand square feet of heated space.

Additions to habitable structures must comply with the conditions of new habitable structures as set forth in subitem (a).

(iii) Repair or renovation of habitable structures damaged, but not destroyed beyond repair, due to natural or manmade causes is allowed.

(iv) Replacement of habitable structures destroyed beyond repair due to natural causes is allowed after notification is provided by the owner to the council that all of the following requirements are met:

a. The total square footage of the replaced structure seaward of the setback line does not exceed the total square footage of the original structure seaward of the setback line. The linear footage of the replaced structure parallel to the coast does not exceed the original linear footage parallel to the coast.

b. The replaced structure is no farther seaward than the original structure.

c. Where possible, the replaced structure is moved landward of the setback line or if not possible, then as far landward as is practicable, considering local zoning and parking regulations.

d. The reconstruction is not seaward of the baseline unless permitted elsewhere in Sections 48-39-260 through 48-39-360.

(v) Replacement of habitable structures destroyed beyond repair due to manmade causes is allowed provided the rebuilt structure is no larger than the original structure it replaces and is constructed as far landward as possible, but the new structure must not be farther seaward than the original structure.

(2) Erosion control devices:

(a) No new erosion control structures or devices are allowed seaward of the setback line except to protect a public highway which existed on the effective date of this act.

(b) Erosion control structures or devices which existed on the effective date of this act must not be repaired or replaced if destroyed:

(i) more than eighty percent above grade through June 30, 1996;

(ii) more than sixty-six and two-thirds percent above grade from July 1, 1996 through June 30, 2006;

(iii) more than fifty percent above grade after June 30, 2006.

(iv) Damage to seawalls and bulkheads must be judged on the percent of the structure remaining intact at the time of damage assessment. The portion of the structure or device above grade parallel to the shoreline must be evaluated. The length of the structure or device parallel to the shoreline still intact must be compared to the length of the structure or device parallel to the shoreline which has been destroyed. The length of the structure or device parallel to the shoreline determined to be destroyed divided by the total length of the original structure or device parallel to the shoreline yields the percent destroyed. Those portions of the structure or device standing, cracked or broken piles, whalers, and panels must be assessed on an individual basis to ascertain if these components are repairable or if replacement is required. Revetments must be judged on the extent of displacement of stone, effort required to return these stones to the prestorm event configuration of the structure or device, and ability of the revetment to retain backfill material at the time of damage assessment. If the property owner disagrees with the assessment of a registered professional engineer acting on behalf of the council, he may obtain an assessment by a registered professional engineer to evaluate, as set forth in this item, the damage to the structure or device. If the two assessments differ, then the two engineers who performed the assessments must select a registered professional engineer to perform the third assessment. If the first two engineers are unable to select an engineer to

perform the third assessment, the clerk of court of the county where the structure or device lies must make the selection of a registered professional engineer. The determination of percentage of damage by the third engineer is conclusive.

(v) The determination of the degree of destruction must be made on a lot by lot basis by reference to county tax maps.

(vi) Erosion control structures or devices must not be enlarged, strengthened, or rebuilt but may be maintained in their present condition if not destroyed more than the percentage allowed in Section 48-39-290(B)(2)(b)(i),(ii), and (iii). Repairs must be made with materials similar to those of the structure or device being repaired.

(c) Erosion control structures or devices determined to be destroyed more than the percentage allowed in Section 48-39-290(B)(2)(b)(i),(ii), and (iii) must be removed at the owner's expense. Nothing in this section requires the removal of an erosion control structure or a device protecting a public highway which existed on the effective date of Act 634 of 1988.

(d) The provisions of this section do not affect or modify the provisions of Section 48-39-120(C).

(3) Pools, as defined in Section 48-39-270(12):

(a) No new pools may be constructed seaward of the setback line unless the pool is built landward of an erosion control structure or device which was in existence or permitted on the effective date of this act and is built as far landward as practical.

(b) Normal maintenance and repair is allowed without notice to the council.

(c) If a pool, existing on July 1, 1988, is destroyed beyond repair, as determined by the council pursuant to Section 48-39-270(11), it may be replaced if the owner certifies in writing to the council that:

(i) It is moved as far landward as practical. This determination of practicality must include the consideration of local zoning requirements.

(ii) It is rebuilt no larger than the destroyed pool.

(iii) It is constructed according to acceptable standards of pool construction and cannot be reinforced in a manner so as to act as an erosion control structure or device.

(d) If a pool is not destroyed beyond repair as determined by the council pursuant to Section 48-39-270(11) but the owner wishes to replace it, the owner may do so if:

(i) The dimensions of the pool are not enlarged.

(ii) The construction conforms to sub-subitem (iii) of subitem (c).

(4) All other construction or alteration between the baseline and the setback line requires a council permit. However, the council, in its discretion, may issue general permits for construction or alterations where issuance of the general permits would advance the implementation and accomplishment of the goals and purposes of Sections 48-39-250 through 48-39-360.

(C) (1) Notwithstanding the provisions relating to new construction, a person, partnership, or corporation owning real property that is affected by the setback line as established in Section 48-39-280 may proceed with construction pursuant to a valid building permit issued as of the effective date of this section. The person, partnership, or corporation may proceed with the construction of buildings and other elements of a master plan, planned development, or planned unit development notwithstanding the setback line established in this chapter if the person, partnership, or corporation legally has begun a use as evidenced by at least one of the following:

(a) All building permits have been applied for or issued by a local government before July 1, 1988.

(b) There is a master plan, planned development, or planned unit development:

(i) that has been approved in writing by a local government before July 1, 1988; or

(ii) where work has begun pursuant to approval as evidenced by the completion of the utility and infrastructure installation designed to service the real property that is subject to the setback line and included in the approved master plan, planned development, or planned unit development.

(2) However, repairs performed on a habitable structure built pursuant to this section are subject to the guidelines for repairs as set forth in this section.

(3) Nothing in this section prohibits the construction of fishing piers or structures which enhance beach access seaward of the baseline, if permitted by the council.

(D) Special permits:

(1) If an applicant requests a permit to build or rebuild a structure other than an erosion control structure or device seaward of the baseline that is not allowed otherwise pursuant to Sections 48-39-250 through 48-39-360, the council may issue a special permit to the applicant authorizing the construction or reconstruction if the structure is not constructed or reconstructed on a primary oceanfront sand dune or on the active beach, and if the beach erodes to the extent the permitted structure becomes situated on the active beach, the permittee agrees to remove the structure from the active beach if the council orders the removal. However, the use of the property authorized under this provision, in the determination of the council, must not be detrimental to the public health, safety, or welfare.

(2) The council's Permitting Committee is the committee to consider applications for special permits.

(3) In granting a special permit, the committee may impose reasonable additional conditions and safeguards as

in its judgment, will fulfill the purposes of Sections 48-39-260 through 48-39-360.

(4) A party aggrieved by the committee's decision to grant or deny a special permit application, may appeal to the full council pursuant to Section 48-39-160(D).

(E) The provisions of this section and Section 48-39-280 do not apply to an area in which the erosion of the beaches located in its jurisdiction is attributed to a federally authorized navigation project as documented by the findings of a Section 111 Study conducted under the authority of the federal Rivers and Harbors Act of 1968, as amended by the federal Water Resources Development Act of 1986, and approved by the United States Army Corps of Engineers. Nothing contained in this subsection makes this area ineligible for beach renourishment funds.

The baseline determined by the local governing body and the council is the line of erosion control devices and structures and the council retains its jurisdiction seaward of the baseline. In addition, upon completion of a council approved beach renourishment project, including the completion of a sand transfer system if necessary for long-term stabilization, an area under a Section 111 Study becomes subject to all the provisions of this chapter.

For the purposes of this section, a beach nourishment project stabilizing the beach exists if a successful restoration project is completed consisting of at least one hundred fifty cubic yards a foot over a length of five and one-half miles, with a project design capable of withstanding a one in ten-year storm, as determined by council, and renourishment is conducted annually at a rate, agreed upon by the council and local governing body, equivalent to that which would occur naturally if the navigation project causing the erosion did not exist. If the two parties cannot agree then the council must obtain the opinion of an independent third party.

Any habitable structure located in an area in which the erosion of the beaches located in its jurisdiction is attributed to a federally authorized navigation project as documented by the findings of a Section 111 Study, which was in existence on September 21, 1989, and was over forty years old on that date and is designated by the local governing body as an historical landmark may be rebuilt seaward of the baseline if it is rebuilt to the exact specifications, dimensions, and exterior appearance of the structure as it existed on that date.

Section 48-39-300. A local governing body, if it notifies the council before July 1, 1990, may exempt from the provisions of Section 48-39-290, relating to reconstruction and removal of erosion control devices, the shorelines fronting the Atlantic Ocean under its jurisdiction where coastal erosion has been shown to be attributed to a federally authorized navigation project as documented by the findings of a Section 111 Study conducted under the authority of the Rivers and Harbors Act of 1968, as amended by the Water Resources Development Act of 1986 and approved by the United States Army Corps of Engineers. Erosion control devices exempt under this section must not be constructed seaward of their existing location, increased in dimension, or rebuilt out of materials different from that of the original structure.

Section 48-39-305. (A) A person having a recorded interest or interest by operation of law in or having registered claim to land seaward of the baseline or setback line which is affected by the prohibition of construction or reconstruction may petition the circuit court to determine whether the petitioner is the owner of the land or has an interest in it. If he is adjudged the owner of the land or to have an interest in it, the court shall determine whether the prohibition so restricts the use of the property as to deprive the owner of the practical uses of

it and is an unreasonable exercise of police power and constitutes a taking without compensation. The burden of proof is on the petitioner as to ownership, and the burden of proof is on the State to prove that the prohibition is not an unreasonable exercise of police power.

(B) The method provided in this section for the determination of the issue of whether the prohibition constitutes a taking without compensation is the exclusive judicial determination of the issue, and it must not be determined in another judicial proceeding. The court shall enter a judgment in accordance with the issues. If the judgment is in favor of the petitioner, the order must require the State either to issue the necessary permits for construction or reconstruction of a structure, order that the prohibition does not apply to the property, or provide reasonable compensation for the loss of the use of the land or the payment of costs and reasonable attorney's fees, or both. Either party may appeal the court's decision.

Section 48-39-310. The destruction of beach or dune vegetation seaward of the setback line is prohibited unless there is no feasible alternative. When there is destruction of vegetation permitted seaward of the setback line, mitigation, in the form of planting of new vegetation where possible, for the destruction is required as part of the permit conditions.

Section 48-39-320. (A) The council's responsibilities include the creation of a long-range and comprehensive beach management plan for the Atlantic Ocean shoreline in South Carolina. The plan must include all of the following:

(1) development of the data base for the state's coastal areas to provide essential information necessary to make informed and scientifically based decisions concerning the maintenance or enhancement of the beach/dune system;

(2) development of guidelines and their coordination with appropriate agencies and local governments for the accomplishment of:

(a) beach/dune restoration and nourishment, including the projected impact on coastal erosion rates, cost/benefit of the project, impact on flora and fauna, and funding alternatives;

(b) development of a beach access program to preserve the existing public access and enhance public access to assure full enjoyment of the beach by all residents of this State;

(c) maintenance of a dry sand and ecologically stable beach;

(d) protection of all sand dunes seaward of the setback line;

(e) protection of endangered species, threatened species, and important habitats such as nesting grounds;

(f) regulation of vehicular traffic upon the beaches and the beach/dune system which includes the prohibition of vehicles upon public beaches for nonessential uses;

(g) development of a mitigation policy for construction allowed seaward of the setback line, which must include public access ways, nourishment, vegetation, and other appropriate means;

(3) formulation of recommendations for funding programs which may achieve the goals set forth in the State Comprehensive Beach Management Plan;

(4) development of a program on public education and awareness of the importance of the beach/dune system, the project to be coordinated with the South Carolina Educational Television Network and Department of Parks, Recreation and Tourism;

(5) assistance to local governments in developing the local comprehensive beach management plans.

(B) The plan provided for in this section is to be used for planning purposes only and must not be used by the council to exercise regulatory authority not otherwise

granted in this chapter, unless the plan is created and adopted pursuant to Chapter 23 of Title 1.

Section 48-39-330. Thirty days after the initial adoption by the council of setback lines, a contract of sale or transfer of real property located in whole or in part seaward of the setback line or the jurisdictional line must contain a disclosure statement that the property is or may be affected by the setback line, baseline, and the seaward corners of all habitable structures referenced to the South Carolina State Plane Coordinate System (N.A.D.-1983) and include the local erosion rate most recently made available by the council for that particular standard zone or inlet zone as applicable. Language reasonably calculated to call attention to the existence of baselines, setback lines, jurisdiction lines, and the seaward corners of all habitable structures and the erosion rate complies with this section.

The provisions of this section are regulatory in nature and do not effect the legality of an instrument violating the provisions.

Section 48-39-340. Funding for local governments to provide for beachfront management must be distributed in a fair and equitable manner. Consideration must be given to the size of the locality, the need for beach management in the area, the cost/benefits of expenditures in that area, and the best interest of the beach/dune system of the State as established by priority by the council.

Section 48-39-350. (A) The local governments must prepare by July 1, 1991, in coordination with the council, a local comprehensive beach management plan which must be submitted for approval to the council. The local comprehensive beach management plan, at a minimum, must contain all of the following:

(1) an inventory of beach profile data and historic erosion rate data provided by the council for each

standard erosion zone and inlet erosion zone under the local jurisdiction;

(2) an inventory of public beach access and attendant parking along with a plan for enhancing public access and parking;

(3) an inventory of all structures located in the area seaward of the setback line;

(4) an inventory of turtle nesting and important habitats of the beach/dune system and a protection and restoration plan if necessary;

(5) a conventional zoning and land use plan consistent with the purposes of this chapter for the area seaward of the setback line;

(6) an analysis of beach erosion control alternatives, including renourishment for the beach under the local government's jurisdiction;

(7) a drainage plan for the area seaward of the setback zone;

(8) a post disaster plan including plans for cleanup, maintaining essential services, protecting public health, emergency building ordinances, and the establishment of priorities, all of which must be consistent with this chapter;

(9) a detailed strategy for achieving the goals of this chapter by the end of the forty-year retreat period. Consideration must be given to relocating buildings, removal of erosion control structures, and relocation of utilities;

(10) a detailed strategy for achieving the goals of preservation of existing public access and the enhancement of public access to assure full enjoyment of the beach by all residents of this State.

The plan must be updated at least every five years in coordination with the council following its approval. The local governments and the council must implement the plan by July 1, 1992.

(B) Notwithstanding the provisions of Section 48-39-340, if a local government fails to act in a timely manner to establish and enforce a local coastal beach management plan, the council must impose and implement the plan or the State Comprehensive Beach Management Plan for the

local government. If a local government fails to establish and enforce a local coastal beach management plan, the government automatically loses its eligibility to receive available state-generated or shared revenues designated for beach/dune system protection, preservation, restoration, or enhancement, except as directly applied by the council in its administrative capacities.

Section 48-39-355. A permit is not required for an activity specifically authorized in this chapter. However, the council may require documentation before the activity begins from a person wishing to undertake an authorized construction or reconstruction activity. The documentation must provide that the construction or reconstruction is in compliance with the terms of the exemptions or exceptions provided in Sections 48-39-280 through 48-39-360.

Section 48-39-360. The provisions of Sections 48-39-250 through 48-39-355 do not apply to an area which is at least one-half mile inland from the mouth of an inlet."

Beach Management Act revised

SECTION 4. Sections 1 and 2 of Act 634 of 1988 are repealed.

Placement of sand on beaches

SECTION 5. The General Assembly hereby recognizes the need for maintaining navigation inlets to promote commercial and recreational uses of our coastal waters and their resources. The General Assembly further recognizes that inlets alter the natural drift of beach-quality sand resources, which often results in these sand resources being deposited around shallow outer-bar areas instead of providing natural nourishment to the downdrift beaches. Therefore, it is the intent of the General Assembly that:

(1) All construction and maintenance dredgings of beach-quality sand be placed on the downdrift beaches; or, if placed elsewhere, an equivalent quality and quantity of sand from an alternate location be placed on the downdrift beaches at no cost to the State and at a location acceptable to the South Carolina Coastal Council.

(2) On an average annual basis, a quantity of sand be placed on the downdrift beaches equal to the natural net annual longshore sediment transport, at no cost to the State. The placement location and quantities based on natural net annual longshore transport be established by the Council, and the sand quality be acceptable to the Council.

(3) The Council may promulgate regulations necessary to implement the provisions of this section."

Election of Coastal Council members

SECTION 6. Section 48-39-40 of the 1976 Code is amended to read:

"Section 48-39-40. (A) There is created the South Carolina Coastal Council which consists of eighteen members as follows: eight members, one from each coastal zone county, to be elected by a majority vote of the members of the House of Representatives and a majority vote of the Senate members representing the county from three nominees submitted by the governing body of each coastal zone county, each House or Senate member to have one vote; six members, one from each of the congressional districts of the State, to be elected by a majority vote of the members of the House of Representatives and the Senate representing the counties in that district, each House or Senate member to have one vote; and the following legislative members who serve ex officio: two state senators, one to be appointed by the President of the Senate and one to be elected by the Senate Fish, Game and Forestry Committee; and two members of the House of Representatives to be appointed

by the Speaker of the House. The council shall elect a chairman, vice-chairman and other officers it considers necessary.

(B) Terms of legislative members are coterminous with their terms as members of the General Assembly. Terms of all nonlegislative members are for four years and until successors are appointed and qualify. Members from congressional districts serve terms of two years only as determined by lot at the first meeting of the council. Vacancies must be filled in the original manner of selection for the remainder of the unexpired term."

Current nonlegislative Coastal Council members

SECTION 7. The current nonlegislative members of the South Carolina Coastal Council representing the eight coastal zone counties serve until their present terms of office expire at which time their successors elected in the manner provided in Section 48-39-40 of the 1976 Code, as amended by this act, take office.

Application on legal actions

SECTION 8. Except as otherwise specifically provided in this act, the provisions of this act shall be applied only prospectively and shall not affect any legal action commenced or any cause of action accruing as a result of an event or events which occurred before the effective date of this act. Any such action must be governed by the provisions of Sections 48-39-10 through 48-39-360, as amended by Act 634 of 1988, and in existence before the effective date of this act.

Time effective

SECTION 9. This act takes effect upon approval by the Governor.

In the Senate House the 19th day of June
In the Year of Our Lord One Thousand Nine Hundred Ninety.

Nick A. Theodore,
President of the Senate

Robert J. Sheheen,
Speaker of the House of Representatives

Approved the 26th day of June, 1990.

Carroll A. Campbell, Jr.,
Governor

Printer's Date -- 07/26/90 -- S.

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APPENDIX F

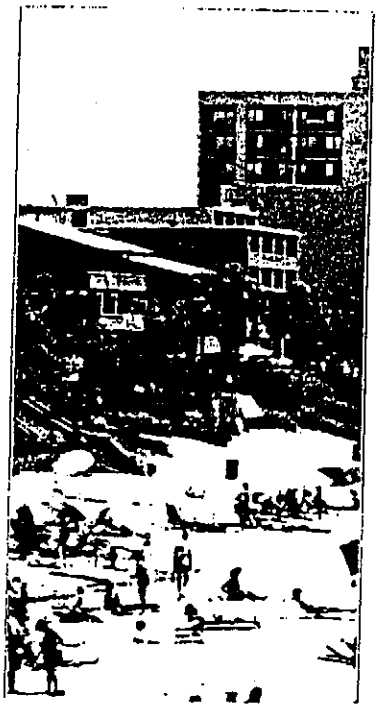
SCCC Regulations and General Permits

South Carolina Coastal Council

Regulations

for permitting in critical areas
of the state's coastal zone

May 1991



For Additional Information:

Should you have questions regarding this document or any other aspect of the South Carolina Coastal Council or South Carolina's Coastal Zone Management Program, please contact the Coastal Council at one of their four offices:

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Chapter 30, R.30-1 - 30-14, South Carolina Coastal Council. Statutory Authority: Sections 48-39-10 - 48-39-360, Code of Laws of South Carolina, 1976, as amended.

30-1. STATEMENT OF POLICY.

The South Carolina Coastal Management Act was passed by the 1977 General Assembly of South Carolina to provide for the protection and enhancement of the State's coastal resources. This legislation creates the South Carolina Coastal Council which is given the task of promoting the economic and social welfare of the citizens of this State while protecting the sensitive and fragile areas in the coastal counties and promoting sound development of coastal resources.

Through the efforts of an overall coastal zone management program and permitting process, the Coastal Council seeks to guide the wise preservation and utilization of coastal resources. These rules and regulations are intended to:

(1) aid developers and others in taking advantage of state-of-the-art techniques in developing projects compatible with the natural environment;

(2) insure consistent permit evaluations by Council and staff; and

(3) serve as a stimulus for implementation of better and more consistent management efforts for the coastal zone.

These regulations are Coastal Council statements of general public applicability that implement and prescribe policy and practice requirements of the Coastal Council. They are to be read as part of, and to be construed with, the policies set forth in the South Carolina Coastal Management Program.

A. The Value of Tidelands and Coastal Waters.

The tidelands and coastal waters of the South Carolina coast are a very dynamic ecosystem and an extremely valuable natural resource for the people of the State. The tides regularly ebb and flood through the coastal inlets, bays and marshes which constitute a fragile area, vulnerable to the impacts of many of man's activities. Tidelands and coastal waters are identified as "critical areas" over which the Coastal Council has direct permitting authority.

The saline marshes are highly productive components of the marine food web of coastal waters and estuaries. Decaying plant materials, called detritus, serve as the basis of the food web and are the major biological contribution of the saline marshes. Many commercially and recreationally important fish and shellfish species depend on the marshlands and estuaries for all or part of their life cycle. In addition, many birds and other forms of wildlife utilize wetlands as habitat as well as a source of food. Tidelands and coastal waters also have become increasingly important in recent years for the purposes of aquaculture.

Among the more important functions of the salt and brackish marshes is their role in protecting adjacent highlands from erosion and storm damage. Marsh vegetation absorbs and dissipates wave energy and establishes a root system which stabilizes the soils. Its effectiveness as a buffer depends on the surface area available which, combined with the composition of the underlying substrate, allows tidelands to act as "sponges," absorbing and releasing waters during storms or times of heavy riverine discharge.

Marshes also perform a valuable waste treatment function since the dense vegetation acts as a filter, trapping sediments and pollutants which enter as run-off from the upland areas. The trapping of sediments helps maintain water clarity, a factor important to clam, oyster, and phytoplankton productivity. The marshes also assimilate pollutants and recycle nutrients through various biochemical processes.

Coastal waters and the adjacent marshes are also significant as aesthetic, recreational and educational resources. Much of the expenditure for recreation and tourism in the South Carolina coastal zone is for purposes of enjoying outdoor activities and the aesthetic pleasures of undisturbed tideland areas. These natural areas lend themselves to meaningful and important academic pursuits such as bird-watching and wildlife population and nutrient recycling studies.

These same unique natural resource areas face increasing land development pressure and negative impacts from man's activities in and around them. The marshes constitute a fragile ecosystem; consequently, indiscriminate dredging and filling, degradation of water quality or unsound building and development practices can have long-term detrimental effects. All development need not be prohibited; rather, the range of favorable and unfavorable results needs to be realized, and analysis made to determine priorities, evaluate alternatives, anticipate impacts, and suggest the best methods and designs to carry out wise development of these resources.

B. The Value of Beaches and Dunes.

In 1977, the South Carolina General Assembly enacted the Coastal Tidelands and Wetlands Act (Coastal Zone Management Act) to protect, preserve, restore and enhance the coastal resources of South Carolina. The Act created a new state agency, the South Carolina Coastal Council, and charged it with the responsibility of administering and enforcing the statute. This legislation, however, proved ineffective for managing the beach/dune system because regulatory authority over these areas given to the Coastal Council was not sufficient. From the State's beaches, Coastal Council could regulate landward only to the primary oceanfront sand dune or to the highest uprush of the waves where no such dune existed.

Lacking adequate authority, the Coastal Council was unable to prevent structures from being sited unwisely close to the eroding shore, thus making them extremely vulnerable to the effects of storms and high tides. The owners of the structures, in most instances, quickly sought permits from the Coastal Council to construct hard erosion control devices in order to protect their erosion threatened structures. Unfortunately, hard erosion control devices can result in increased erosion, a lowering of the beach profile (thereby reducing the beach/dune system's tourist and recreational value), and a decrease in the ability of the beach/dune system to protect upland property from storms and high tides. Often the result of attempting to protect upland property with hard erosion control structures is that dry sand beaches disappear, thereby placing many millions of tourist dollars in jeopardy and destroying this natural legacy for future generations.

In 1986, the Blue Ribbon Committee on Beachfront Management was formed in response to the growing recognition that existing law was inadequate to protect the fragile beach/dune resource. The Committee determined that the beach/dune system of the State was in a state of crisis. The report concluded that "over fifty-seven miles of our beaches are critically eroding. This erosion is threatening the continued existence of our beach/dune system and thereby threatening life, property, the tourist industry, vital State and local revenue, marine habitat, and a national treasure". The 1988 Beachfront Management Act was enacted by the South Carolina General Assembly in response to the concerns presented in this report.

It has been clearly demonstrated that the erosion problems of this State are caused by a persistent rise in sea level, a lack of comprehensive beach management planning, and poorly planned oceanfront development, including construction of hard erosion control structures, which encroach upon the beach/dune system. Sea level rise in this century is a

scientifically documented fact. Our shoreline is suffering from its effects today. Moreover, a 1983 study conducted by the U. S. Environmental Protection Agency predicts a one foot rise in sea level over the next thirty to forty years and approximately three feet over the next hundred years. It must be accepted that regardless of attempts to forestall the process, the Atlantic Ocean, as a result of sea level rise and periodic storms, is ultimately going to force those who have built too near the beachfront to retreat.

There are three basic approaches to beachfront management:

(1) armor the beach with hard erosion control devices;

(2) nourish the beach with sand;

(3) retreat from the beach.

The 1977 Coastal Zone Management Act, as amended, rejects construction of new erosion control devices and adopts retreat and renourishment as the basic state policy towards preserving and restoring the beaches of our state. The Coastal Council, as steward of the State's coastal resources, has the responsibility under the new statute to implement the forty-year retreat policy by designating a baseline and setback line on all oceanfront properties of the State, developing a long-range comprehensive State plan for management of the beach/dune resource, and supporting the efforts of local governments in developing local long-range beach management plans. In addition, the Coastal Council shall require property owners to move new construction and reconstruction as far landward as possible, to limit the size of structures within the constraints of the Act, and to seek innovative ways to ameliorate the effects of beach erosion.

In the final analysis, the long-range public good is the same as the long-range private good. If the dry sand beaches of this State disappear because of the failure of its people and governmental natural resource managers to protect the beach/dune system, future generations will never have the opportunity to use and enjoy this valuable resource.

C. Definitions:

1. Barrier Islands - There is a listing of all barrier islands in South Carolina on page III-70 of the South Carolina Coastal Management Program.
2. Coastal Waters - the navigable waters of the United States subject to the ebb and flood of the tide and which are saline waters, shoreward to their mean high-water mark.
3. Coastal Zone - all coastal waters and submerged lands seaward to the State's jurisdictional limits and all lands and waters in the counties of the State which contain any one or more of the critical areas. These counties are Beaufort, Berkeley, Charleston, Colleton, Dorchester, Horry, Jasper, and Georgetown.
4. Critical Areas - any of the following: (1) coastal waters, (2) tidelands, (3) beach/dune systems.
5. Erosion Control Structures and Beach Nourishment:

(a) Seawall - a special type of retaining wall that is specifically designed to withstand wave forces.

(b) Bulkhead - a retaining wall designed to retain fill material, but not to withstand wave forces on an exposed shoreline.

(c) Revetment - a sloping structure built along an escarpment or in front of a bulkhead to protect the shoreline or bulkhead from erosion.

(d) Groin - a shore protection structure designed to build a protective beach or to retard erosion of an existing or restored beach by trapping littoral drift. Groins are usually perpendicular to the shore and extend from the shoreline into the water far enough to accomplish their purpose. Groins are narrow and vary in length from less than 100 feet to several

hundred feet.

(e) Jetty - a structure extending into the water to direct and confine river or tidal flow into a channel and to prevent or reduce shoaling of the channel by littoral material. Jetties also stabilize inlet location.

(f) Minor Development Activity - the construction, maintenance, repair or alteration of any private pier or erosion control structure, the construction of which does not involve dredging.

(g) Offshore Breakwater - a structure designed to protect an area from wave action. Breakwaters interfere with natural wave action and wave induced currents; therefore, their construction may cause harmful side effects.

(h) Beach Nourishment - the artificial establishment and periodic renourishment of a beach with sand that is compatible with the beach in such a way as to create a dry sand beach at all stages of the tide.

6. Feasible (feasibility) - As used within these rules and regulations (e.g., "unless no feasible alternative exists"), feasibility is determined by the Coastal Council with respect to individual project proposals. Feasibility in each case is based on the best available information, including, but not limited to, technical input from relevant agencies with expertise in the subject area, and consideration of factors of environmental, economic, social, legal and technological suitability of the proposed activity and its alternatives. Use of this word includes, but is not limited to, the concept of reasonableness and likelihood of success in achieving the project goal or purpose. "Feasible alternatives" applies both to locations or sites and to methods of design or construction, and includes a "no action" alternative.

7. GAPC (Geographic Areas of Particular Concern) - areas within South Carolina's coastal zone which have been identified in the State's Coastal Management Program as being of such importance as to merit special consideration during Council review of permit applications. GAPC's consist of: (1) areas of unique natural resource value; (2) areas where activities, development, or facilities depend on proximity to coastal waters, in terms of use or access; and (3) areas of special historical, archeological or cultural significance.

8. Joint Public Notice - a permit application public notice issued jointly between the South Carolina Coastal Council and the United States Army Corps of Engineers or the United States Coast Guard and processed independently by the Coastal Council.

9. Nonwater-dependent - a facility which cannot demonstrate that dependence on, use of, or access to coastal waters is vital to the functioning of its primary activity.

10. Previously Undisturbed Wetlands - those wetlands having no visible, physical evidence of previous impoundment; that is, separation from adjacent rivers or estuaries by artificial diking

11. Public Interest - As used within these Rules and Regulations, public interest refers to the beneficial and adverse impacts and effects of a project upon members of the general public, especially residents of South Carolina who are not the owners and/or developers of the project. To the extent that, in the opinion of the Council, the value of such public benefits is greater than the public costs embodied in adverse environmental, economic and fiscal effects, a proposed project may be credited with net public benefits.

12. Tidelands - all areas which are at or below mean high tide and coastal wetlands, mudflats, and similar areas that are contiguous or adjacent to coastal waters and are an integral part of the estuarine systems involved. Coastal wetlands include marshes, mudflats, and shallows and means those areas periodically inundated by saline waters whether or not the

saline waters reach the area naturally or through artificial water courses and those areas that are normally characterized by the prevalence of saline water vegetation capable of growth and reproduction. Provided, however, nothing in this definition shall apply to wetland areas that are not an integral part of an estuarine system. Further, until such time as the exact geographic extent of this definition can be scientifically determined, the Council shall have the authority to designate its approximate geographic extent.

13. Water-dependent - a facility which can demonstrate that dependence on, use of, or access to coastal waters is vital to the functioning of its primary activity.

14. Marinas - facilities that provide boat launchings, storage, moorage, supplies, and/or services. There are three basic types of marinas: (a) the open water type where open pilings and/or appurtenances are used; (b) the inland harbor type where moorings are provided in a lagoon connected to navigable waters; (c) the dry storage type where boats are stored in specially designed warehouses placed entirely on high land.

15. Habitable Structure - a structure suitable for human habitation including, but not limited to, single or multi-family residences, hotels, condominium buildings, and buildings for commercial purposes. Each building of a condominium regime is considered a separate habitable structure, but if a building is divided into apartments, then the entire building, not the individual apartment is considered a single habitable structure. Additionally, a habitable structure includes porches, gazebos, and other attached improvements.

16. Master Plan - a document or a map prepared by a developer or a city as a policy guide to decisions about the physical development of the project or community.

17. Planned Development - a development plan which has received local approval for a specified number of dwelling and other units. The siting and size of structures and amenities are specified or restricted within the approval. This term specifically references multi-family or commercial projects not otherwise referenced by the terms master plan or planned unit development.

18. Planned Unit Development - a residential, commercial, or industrial development, or all three, designed as a unit and approved in writing by local government.

19. Beach/Dune System - all land from the mean high-water mark of the Atlantic Ocean landward to the 40 year setback line described in §48-39-280.

20. Standard Erosion Zone - a segment of shoreline which is subject to essentially the same set of coastal processes, has a fairly constant range of profiles and sediment characteristics, and is not directly influenced by tidal inlets or associated inlet shoals.

21. Inlet Erosion Zone - a segment of shoreline along or adjacent to tidal inlets which is directly influenced by the inlet and its associated shoals.

(a) Unstabilized Inlets - inlets that have not been stabilized by jetties, terminal groins, or other structures.

(b) Stabilized Inlets - inlets that have been stabilized by jetties, terminal groins, or other structures.

22. Baselines:

(a) Within a standard erosion zone the baseline is established at the location of the crest of the primary oceanfront sand dune in that zone. In a standard erosion zone in which the shoreline has been altered naturally or artificially by the construction of erosion control devices, groins, or other man-made alterations, the baselines must be established by the Coastal Council using the best scientific and historical data, as where the crest of the primary ocean
front sand dune for that zone would be located if the shoreline had not been altered.

(b) Within an unstabilized inlet zone the baseline must be determined by the Coastal Council as the most landward point of erosion at anytime during the past forty years, unless the best available scientific and historical data of the inlet and adjacent beaches indicate that the shoreline is unlikely to return to its former position. In collecting and utilizing the best scientific and historical data available for the implementation of the retreat policy, the Coastal Council as part of the State Comprehensive Beach Management Plan provided for in this chapter, among other factors, must consider: historical inlet migration, inlet stability, channel and ebb tidal delta changes, the effects of sediment bypassing on shorelines adjacent to the inlets, and the effects of nearby beach restoration project on inlet sediment budgets.

(c) Within a stabilized inlet zone the baseline location must be determined in the same manner as provided for in a standard erosion zone. However the actual location of the crest of the primary oceanfront sand dune of that erosion zone is the baseline of that zone, not the location if the inlet had remained unstabilized.

23. Setback Line - the line landward of the baseline that is established at a distance which is forty times the average annual erosion rate as determined by historical and other scientific means and adopted by the Coastal Council in the State Comprehensive Beach Management Plan. However, all setback lines shall be established no less than twenty feet landward of the baseline, even in cases where the shoreline has been stable or has experienced net accretion over the past forty years.

24. Garage - a structure built and used for the purpose of parking and protecting vehicles. The structure may be open or enclosed. An open parking area under a habitable structure will not be counted when computing the square footage of a habitable structure.

25. Normal Maintenance and Repair - work performed on any structure within the critical area as part of a routine and ongoing program to maintain the integrity of the structure provided that the structure is still generally intact and functional in its present condition and the work only extends to the original dimensions of the structure. See R.30-5(D).

26. Destroyed Beyond Repair:

(a) Habitable Structures - destroyed beyond repair means more than sixty-six and two-thirds percent of the replacement value of the habitable structure has been destroyed. See R.30-14(D)(3)(a).

(b) Pools - destroyed beyond repair means more than sixty-six and two-thirds percent of the replacement value of the pool has been destroyed. See R.30-14(D)(3)(b).

(c) Seawalls and Bulkheads - damage to seawalls and bulkheads must be judged on the percentage of the structure remaining intact at the time of the damage assessment. Erosion control structures or devices must not be repaired or replaced if destroyed:

(i) more than eighty percent above grade through June 30, 1995;

(ii) more than sixty-six and two-thirds percent above grade from July 1, 1995, through June 30, 2005;

(iii) more than fifty percent above grade after June 30, 2005. See R.30-14(D)(3)(c).

(d) Revetments - must be judged on the extent of displacement of the stone, effort to return this stone to the pre-storm event configuration of the structure or device, and the ability of the revetment to retain backfill material at the time of the damage assessment. See R.30-14(D)(3)(d).

27. Emergency Repairs - repairs due to emergencies as defined in Section 48-39-10(U) to an existing bank, dike, fishing pier, or structure other than ocean front erosion control structures or devices which have been erected in accordance with federal and state laws or provided for

by general law or acts passed by the General Assembly, if notice if given in writing to the Coastal Council within 72 hours of the onset of the needed repair.

28. Emergency Orders - orders issued by an appointed official of a county or municipality or of the state acting to protect the public health and safety, upon written notification to the Coastal Council. However, with regard to the beach/dune critical area, only the use of sand bags, sand scraping, or renourishment, or a combination of them, in accordance with guidelines provided by the Coastal Council is allowed pursuant to emergency orders.

29. Best Management Practices - measures to reduce adverse environmental impacts.

30. Coastal Council - designation for South Carolina Coastal Council.

31. Pool - a structure designed and used for swimming and wading.

32. Active Beach - the area seaward of the escarpment or the first line of stable natural vegetation, whichever first occurs, measured from the ocean landward.

30-2. APPLYING FOR A PERMIT.

A. Preliminary Review: The Council encourages the submission of development plans for preliminary review. If a permit is necessary, the Council will make every effort to assist the applicant in expediting the administrative aspects of filing an application.

B. Permit Application: Except for those exemptions as specified in the 1977 Coastal Zone Management Act, as amended, any person wishing to alter a critical area must receive a permit from the Coastal Council. Section 14(b) of the Act [Section 48-39-140(b)] directs that certain information be included in the permit application submitted to the Council. The following minimum information shall ordinarily be required before a permit application is considered complete:

(1) Name and address of the applicant;

(2) A plan or drawing showing the applicant's proposal and the manner or method by which the proposal shall be accomplished;

(3) A plat or a copy of a plat of the area in which the proposed work will take place;

(4) A certified copy of the deed, lease or other instrument under which the applicant claims title, possession or permission from the owner of the property to carry out the proposal;

(5) A list of all adjoining landowners and their addresses or a sworn affidavit that with due diligence such information is not ascertainable. When considered appropriate by the Council or its staff, additional information may be required concerning affected landowners;

(6) A brief description of the proposed alteration, its purpose and intended use, including a drawing of the type of structure, a description of the method of construction, and identification of materials and equipment to be used;

(7) A copy of the newspaper public notice:

(a) Minor developments (see R.30-2(G)): In the case of applications for minor development permits, the applicant shall publish notice at least once in a newspaper of local circulation in the county of the proposed activity. The newspaper notice should be published within 15 days of the date of Public Notice (see R.30-2(C)). No permit shall be issued by the Council until at least 10 days following the date of newspaper publication. The following form shall be used for newspaper publication:

PUBLIC NOTICE
SOUTH CAROLINA COASTAL COUNCIL

(Name of applicant) will apply (has applied) to the South Carolina Coastal Council for a permit to (description of work) for (public/private) use, at/in (location and name of waterway). Comments will be received by the South Carolina Coastal Council, 4130 Faber Place, Suite 300, Charleston, South Carolina 29405 until (insert date, 10 days after date of this newspaper notice).

(b) Other activities: In the case of applications for other than minor development permits, the applicant shall publish notice at least once in both a newspaper of general statewide circulation (The State, News and Courier, or The Greenville News) and a newspaper of local circulation in the county of the proposed activity. The newspaper notices should be published within 15 days of the date of Public Notice (see R.30-2(C)). No permit shall be issued by the Council until at least 15 days following the date of the last published newspaper publication. The following form shall be used for newspaper publication:

PUBLIC NOTICE
SOUTH CAROLINA COASTAL COUNCIL

(Name of applicant) will apply (has applied) to the South Carolina Coastal Council for a permit to (description of work) for (public/private) use, at/in (location and name of waterway). Comments will be received by the South Carolina Coastal Council, 4130 Faber Place, Suite 300, Charleston, South Carolina 29403 until (insert date, 15 days after date of this newspaper notice).

(8) When considered appropriate by the Council or its staff, additional information may be required. The plat or copy of a plat submitted for those activities subject to the Beach Management Act (Sections 48-39-270 through 350) shall show the location of the baseline, twenty-foot minimum setback line, and forty-year setback line, applicable to the subject property. The lines shall be derived from information available from the Coastal Council. The lines shall be part of the plat and sealed by the engineer and may not be placed on the application by anyone other than a registered engineer or member of the Coastal Council staff.

C. Notification: The Council is directed in Section 14(C) of the Act [Section 48-39-140(C)] and shall within thirty days of receiving either a Joint Public Notice or South Carolina Coastal Council permit application, notify in writing interested agencies, all adjoining landowners, local government units in which the land is located and other interested persons. This notice shall indicate the nature and extent of the applicant's proposal.

D. Permit Processing: Permit processing shall commence immediately upon receipt of either a Joint Public Notice or a South Carolina Coastal Council permit application and shall proceed concurrently but separately from any Federal authorization.

E. Comments on Application: Section 14(C) of the Act [Section 48-39-140(C)] allows all interested federal and state agencies, all adjoining landowners, local government units and other interested persons to have thirty days after the receipt of Public Notice of permit application from the Council to file written comments pertaining to the application. Only those comments received within the thirty day period must be considered in the Council's decision on a permit application. Any persons wishing to receive notice of the initial decision on a permit application shall notify the Council within this comment period. Provided, comments on permit applications for minor development activities, as defined in Section 3(N) of the Act [Section 48-39-10(N)], must be received within fifteen days after

receipt of Public Notice of permit application.

F. Public Information: The complete file on each permit application, including all comments received, will be available for inspection by any member of the general public during regular business hours at the principal Council office.

G. State Comment: Issuance or denial of the permit by the Coastal Council shall be the State comment on the corresponding federal permit application.

H. Water Quality Certificate: If a water quality certificate, is not required by a Federal permitting agency under Section 401 of P.L. 92-500, the Coastal Council may require a statement of water quality certification from the South Carolina Department of Health and Environmental Control.

30-3. PUBLIC HEARINGS

Section 14(C) of the Act [Section 48-39-140(C)] directs the Council to hold public hearings on permit applications if it is deemed necessary. Section 15(B) of the Act [Section 48-39-150(B)] requires the Council to convene a public hearing before acting on an application if twenty or more citizens or residents of the affected county or counties request such a hearing. Each request must be in writing and on a separate sheet of paper and be received within thirty days after publication of a Public Notice of the permit application. In all cases, the public hearing shall be held in the county where the land is located, and if in more than one county, the Council shall determine in which county to hold the hearing or may hold hearings in more than one county. When applicable and practical, joint public hearings will be held with the United States Army Corps of Engineers and/or other agencies.

30-4. DECISIONS ON A PERMIT

A. Permit Approval: The Council is allowed, under Section 15(B) of the Act [Section 48-39-150(B)], to issue a conditional permit approval. Under this provision, the Council may direct the applicant to amend his proposal to take specific measures necessary to protect the public interest. The Council, at its discretion, may seek additional public comment on major modifications to a permit application.

If the Council has approved an application, Section 15(B) of the Act [Section 48-39-150(B)] also allows the Council, at its discretion, to support the applicant in a Federal permitting process for the same activity.

B. Permit Denial: A Permit denial shall cite facts upon which the denial was based and the reasons for denial.

C. Action Upon a Permit: The Council, according to Section 15(c) of the Act, [Section 48-39-150(C)] shall act upon an application for a permit within ninety days. This ninety day period shall begin when the application is complete and filed in approved form. Exceptions of the 90-day deadline are applications for minor developments on which action must be taken in thirty days.

D. Completion of Work: Section 15(F) of the Act [Section 48-39-150(F)] requires a permit holder to complete work within three years from the date of permit issuance. The Council may extend this three-year period upon showing of good cause indicating that due diligence toward completion of the work has been made, evidenced by significant work progress. Work shall be continuous and expeditious whenever possible.

E. Property Rights Not Affected; No State Liability; Other Permit Requirements: No permit shall convey, not be interpreted to convey, a property right in the land or water in which the permitted activity is located. No permit shall be construed as

alienating public property for private use or as alienating private property for public use. In no way shall the State be liable for any damage as a result of the erection of permitted works. A South Carolina Coastal Council permit in no way relieves the holder from responsibility for compliance with other applicable Federal, State, or local permit requirements.

F. Legally Commenced Use: Section 13(C) of the Act [Section 48-39-130(C)] reads as follows, "Ninety days after the effective date of this act no person shall fill, remove, dredge, drain or erect any structure on or in any way alter any critical area without first obtaining a permit from the Council. Provided, however, that a person who has legally commenced a use such as those evidenced by a state permit, as issued by the Budget and Control Board, or a project loan approved by the rural electrification administration or a local building permit or has received a United States Corps of Engineers or Coast Guard permit, where applicable, may continue such use without obtaining a permit. Any person may request the Council to review any project or activity to determine if he is exempt under this section from the provisions of this act. The Council shall make such determinations within forty-five days from the receipt of any such request."

30-5. EXCEPTIONS.

A. List of Exceptions: Section 13(D) of the Act [Section 48-39-130(D)] lists several exceptions which do not require a permit. These are as follows:

(1) The accomplishment of emergency orders of an appointed official of a county or municipality or of the state acting to protect the public health and safety, upon written notification to the Coastal Council. However, with regard to the beach/dune critical area, only the use of sandbags, sand scraping, or renourishment, or a combination of them, in accordance with guidelines provided by the Coastal Council is allowed. See R.30-5(B).

(2) Hunting, erecting duckblinds, fishing, shellfishing and trapping when and where otherwise permitted by law; the conservation, replenishment and research activities of State agencies and educational institutions; or boating or other recreation provided that such activities cause no material harm to the flora, fauna, physical, or aesthetic resources of the area.

(3) The discharge of treated effluent as permitted by law; provided, however, that the Council shall have the authority to review and comment on all proposed permits that would affect critical areas.

(4) Dredge and fill performed by the United States Corps of Engineers for the maintenance of harbor channels and the collection and disposal of the materials so dredged; provided, however, that the Council shall have authority to review and certify all such proposed dredge and fill activities.

(5) Construction of walkways over sand dunes in accordance with Section 12 of the Act [Section 48-39-120]. (See R.30-13(B).).

(6) Emergency repairs to an existing bank, dike, fishing pier, or structure other than oceanfront erosion control structures or devices which have been erected in accordance with federal and state laws or provided for by general law acts passed by the General Assembly, if notice is given in writing to the Coastal Council within 72 hours of the onset of needed repairs.

(7) Maintenance and repair of drainage and sewer facilities constructed in accordance with federal or State laws, and normal maintenance and repair of any utility or railroad.

(8) Normal maintenance or repair to any pier or walkway, provided that such

maintenance or repair shall not involve dredge or fill.

(9) Construction or maintenance of a major utility facility where the utility has obtained a certificate for such facility under "The Utility Facility Siting and Environmental Protection Act" (Sections 58-33-10 through 58-33-430 of the 1976 Code). Provided, however, that the South Carolina Public Service Commission shall make the Council a party to certification proceedings for utility facilities within the coastal zone.

(10) Habitable structures and pools determined to be damaged less than sixty-six and two-thirds percent pursuant to R.30-14(D)(3)(a) and (b) may be repaired after acceptable documentation is provided to Coastal Council.

(11) Erosion control structures or devices determined to be damaged less than eighty percent above grade through June 30, 1995, sixty-six and two-thirds percent above grade from July 1, 1995, through June 30, 2005, or fifty percent above grade after June 30, 2005, pursuant to R.30-14(D)(3)(c) and (d) may be repaired after acceptable documentation is provided to Coastal Council.

B. Notification to Council of Emergency Orders:

(1) As in A(1) above, the Council must be notified of emergency orders that normally would require a Council permit. Notification to the Council must be made in writing prior to commencement of the activity and must state the following:

(a) the nature of the emergency;

(b) the substance of the emergency order;

(c) the time the order will be issued, or if circumstances preclude prior notice, when the order was issued;

(d) the name of the local official executing the order and the authority under which that person is acting;

(e) the location of the activity ordered;

(f) the estimate of when such order shall be withdrawn.

(2) If the Council is not notified within seventy-two hours of the issuance of the emergency action taken, the official issuing such order or ordering such emergency action shall be in violation of the Act and these rules and regulations. Within seventy-two hours after the emergency order, the official ordering the emergency action shall put the above six elements in writing and file them with the Council.

(3) The official issuing the emergency order shall be deemed in violation of the Act if the emergency conditions do not conform with the definition of emergency in Section 3 of the Act [Section 48-39-10].

C. Emergency Repairs to any Existing Bank and Dike or Fishing Pier: As in A(6) above, notice by telephone, telegram or radio of emergency repairs to any existing bank, dike or fishing pier must be given to the Council within seventy-two hours from the onset of needed repairs. Within five days after the commencement of repairs, written notification must be filed with the Council. If such notification is not received, the person(s) performing the work will be in violation of the Act and these rules and regulations.

D. Normal Maintenance and Repair: Normal maintenance and repair applies only to work on a structure which has been previously permitted or is grandfathered or exempted and is still generally intact and functional in its present condition. The work may only extend to the original dimensions of the structure, and any expansion, additions, or major rebuilding will require either a Coastal Council permit or documentation to and written approval from Council.

30-6. COUNCIL APPEALS.

A. Notice of Intention to Appeal: Any person adversely affected by the Council's initial action has the right of direct appeal to the Council. Notice of Intention to Appeal an initial permit application decision must be filed in writing within fifteen days of the date of notification to the applicant and other persons who requested notification of the initial Council action. (See R.30-2(E).)

B. Filing of Appeal: Within fifteen days of filing the Notice of Intention to Appeal, appellant must file in writing an appeal with the grounds for appeal clearly stated. The grounds for appeal must contain a statement showing how the party seeking review is adversely affected by the Council's action. Appellant will be limited to the grounds as stated. The appeal may be filed simultaneously with the Notice of Intention to Appeal (and in the same document) if done so within fifteen days of the date of notification to the applicant and other interested persons of the initial Council decision.

C. Public Notice: The Council, within ten days of receiving the Appeal, shall notify in writing interested agencies, all adjoining landowners, local government units and other interested persons. This notice shall indicate the nature and extent of the Appeal.

D. Intervenors: Affected parties, if they wish to intervene, must give Notice of Intent to Intervene and grounds for intervention within twenty days of the date of the Appeals Public Notice ((C) above). The Notice of Intent to Intervene and accompanying statements must be in writing with grounds clearly stated. The Notice of Intent to Intervene and grounds for intervention must contain a statement indicating that the party seeking to intervene has standing to do so by way of being a person affected by the Council's initial decision. Intervenors will be limited to the grounds as stated. All intervenors shall become parties to the action. Permit applicants will be made a party to all appeals involving their permit applications.

E. Comments: Written comments for Council consideration regarding an Appeal will be accepted for thirty days after the date of the Appeals Public Notice.

F. Notification of Hearing: The Council shall notify parties to the action of the date, time and place of the Appeals hearing. The Appeal shall be heard within 65 days of the date of the Appeals Public Notice but not less than thirty days after the date of Appeals Public Notice. By agreement of all parties to the Appeal, the hearings and/or oral presentations before the Council may be waived.

G. Hearing of Appeal: If a hearing is to be held, the Council may appoint a hearing officer to conduct all or part of the hearing. The hearing officer shall hear all relevant evidence offered from all parties and shall be responsible for compiling the complete record of the Appeal. Written statements for the record shall be welcomed. The transcript of the Appeal shall be distributed to all Council members before the Council meets on the Appeal. After receipt of the transcripts, parties to the Appeal shall be provided an opportunity to present oral arguments to the Council. Each party shall be given an allotted period of time to present oral arguments. Questions from Council members within the allotted time period shall be within a time frame prescribed by the Council. The Council shall notify each party of the hearing schedule at least ten days in advance.

H. Record of Appeal: A Record of Appeal shall be kept and filed in the Council's office. Oral proceedings or any part thereof shall be transcribed upon the request of a party. The Council may, in its discretion, require persons requesting a transcript to pay reasonable printing costs.

I. Decision on Appeal: A decision on the Appeal may be made by the Council immediately after the presentation of oral arguments but, in any case, no later than 35 days after the presentation. Each party shall be notified in writing of the decision.

J. Final Order: The final Council decision shall be in the form of written Findings of Fact and Conclusions of Law. The Findings of Fact and Conclusions of Law must be approved by a vote of the full Council after which they are signed by the Chairman of the Council. The Findings of Fact and Conclusions of Law shall be served on each party to the appeal.

30-7. JUDICIAL APPEAL.

A. Exhaustion of Administrative Remedies: Section 18 of the Act allows judicial review of Council action. Before seeking judicial relief from a Council permit application decision, a person must seek relief through the Council appeal process in 30-6 above.

B. Time Period for Filing: The 20 day time period for filing an appeal in the circuit court will commence to run from date of receipt of the Council's Findings of Fact and Conclusions of Law.

30-8. ENFORCEMENT.

A. Permit Revocation and Modification: One of the needs in administering a permit system to manage coastal resources is the enforcement of the provisions of the system and the identification of unpermitted and unauthorized activities. The Council has initiated a routine aerial surveillance program for the coastal counties which identifies and reports illegal dredging, filling, or other alterations in the critical areas.

As the state agency responsible for managing the critical areas, the Council is adamant in its enforcement of terms of an approved permit. Section 15(E) of the Act [Section 48-39-150(E)] empowers the Council to revoke a permit for noncompliance with or violation of its terms after written notice of intention to do so has been given the holder, and the holder, in return, has been given the opportunity to present an explanation to the Council. Financial hardship on the part of a holder shall not be a defense to the revocation of a permit. The Council may also revoke a permit if it finds that the holder or his agent submitted false information to the Council.

B. Cease and Desist Directive: When any person is found altering a critical area without a permit and such activity is not exempted by Section 13(D) of the Act [Section 48-39-130(D)], has not been authorized by a permit, is in violation of the terms of a Council permit or is violating provisions of the Coastal Management Act [Section 48-39-10 et seq.] in any manner, the Council, or its duly appointed agent, may issue a cease and desist directive. This directive shall inform the person that he is in violation of the Act and that such person should cease unauthorized activity. The Council may then request the person to restore the area to its original condition. If the person responsible for the unauthorized activity refuses to comply with the Council directive, the Council may then file suit in the appropriate circuit court as outlined in Section 16 of the Act [Section 48-39-160].

C. Arrest Warrants: When a person is found altering a critical area without a permit and such activity is not exempted by Section 13(D) of the Act [Section 48-39-130(D)], has not been authorized by a permit, is in violation of the terms of a Council permit or is violating provisions of the Coastal Management Act [Section 48-39-10 et seq.] in any manner, the Council may cause to be issued a warrant for the arrest of the violator.

D. Penalties: As stated in Section 17 of the Act [Section 48-39-170] any person

found guilty of violation of the Act shall be punished by imprisonment of not more than six months or by a fine of not more than five thousand dollars, or both for the first offense; and by imprisonment of not more than one year or by a fine of not more than ten thousand dollars, or both, for each subsequent offense.

E. Judicial Enforcement: Section 16 of the Act [Section 48-39-160] provides the Council, the Attorney General or any person adversely affected with a remedy to restrain violations of the Act.

30-9. OTHER PROVISIONS.

A. Savings Clause: If any provisions of the Act or of these Rules and Regulations are adjudged invalid or unconstitutional, the remainder of the Act and these Rules and Regulations and/or the application of their provisions to other persons or circumstances shall not be affected thereby.

B. Bonding by Council: To insure that the holder complies with all limitations and conditions of the permit, the Council may, at its discretion, require a secured bond before issuance of the permit. The Council may also require the applicant to submit proof of financial responsibility.

C. Transfer of Permits: Permits are issued in the name of the applicant and may not be assigned to another without written permission of the Council.

D. Declaratory Rulings: Interested persons may petition to the Council for declaratory rulings. The Council shall rule on each petition, in writing, within 45 days of receipt.

30-10. CRITICAL AREA BOUNDARIES.

A. Coastal Waters and Tidelands:

(1) The Council has permit authority over the coastal waters and tidelands critical areas defined in Section 3 of the Act [Section 48-39-10] as follows:

"'Coastal waters' means the navigable waters of the United States subject to the ebb and flood of the tide and which are saline waters, shoreward to their mean high-water mark. Provided, however, that the Council may designate boundaries which approximate the mean extent of saline waters until such time as the mean extent of saline waters can be determined scientifically.

'Tidelands' means all areas which are at or below mean high tide and coastal wetlands, mudflats, and similar areas that are contiguous or adjacent to coastal waters and are an integral part of the estuarine systems involved. Coastal wetlands include marshes, mudflats, and shallows and means those areas periodically inundated by saline waters whether or not the saline waters reach the area naturally or through artificial water courses and those areas that are normally characterized by the prevalence of saline water vegetation capable of growth and reproduction. Provided, however, nothing in this definition shall apply to wetland areas that are not an integral part of an estuarine system. Further, until such time as the exact geographic extent of this definition can be scientifically determined, the Council shall have the authority to designate its approximate geographic extent."

Using biological field surveys and aerial photography, the Council has found the point on the upper reaches of the estuarine systems where tideland vegetation changes from predominately brackish to predominately fresh and has established a boundary using the nearest recognizable physical features within this area. This boundary has been posted on an official map in the Coastal Council's principal office of business and is available for public review. An approximate description of this boundary is as follows: On the south at the

intersection of the South Carolina-Georgia border and the old track bed of the Seaboard Coastline (SCL), approximately 1.75 miles above the U. S. Highway 17A bridge across the Savannah River; thence, northeastward along the track bed until its intersection with U. S. Highway 278 near Eutaw Creek; thence, northward along U. S. 278 for approximately one mile until its intersection with S. C. 462; thence, north-northwestward along S. C. 462 until its intersection with U. S. Highway 17 near Coosawhatchie; thence, northeastward along U. S. 17 until its intersection with S-15-26, approximately two miles east of Green Pond; thence, southward along S-15-26 until its intersection with the old SCL track bed near Airy Hall; thence, east-northeastward along the track bed to its intersection with S. C. 174; thence, northward along S. C. 174 for approximately 1.5 miles until its intersection with S. C. 164; thence, east-northeastward approximately three miles along S. C. 164 until its intersection with S. C. 165; thence, northward along S. C. 165 until its intersection with S. C. 642; thence, southeastward along S. C. 642 until its intersection with U. S. Interstate 26; thence, southward along I-26 until its intersection with S. C. 7; thence, northeastward on S. C. 7 until its intersection with the SCL track bed adjacent to Spruill Avenue; thence, northward along this track bed until its intersection with the Charleston County/Berkeley County line, approximately one-fifth mile north of Remount Road; thence, east-northeastward along the county line until its intersection with the Cooper River at Goose Creek; thence, eastward by a straight line across the Cooper River and Yellow House Creek to Yellow House Landing on Yellow House Creek; thence, southward along the only dirt road leading from the landing to S-8-33; thence, northeastward along S-8-33 until its intersection with S-8-100; thence, northeastward along S-8-100 until its intersection with S-10-98; thence, southward along S-10-98 until its intersection with U. S. Highway 17; thence, northeastward along U. S. Highway 17 until its intersection with S-27-30 north of the North Santee River; thence, eastward along S-27-30 for approximately five miles; thence, northward along S-27-30 until its intersection with S-27-18; thence, northwestward along S-27-18 until its intersection with U. S. Highway 17; thence, northeastward along U. S. 17 until its intersection with the South Carolina-North Carolina border. In determining the exact location of this boundary, only those lands seaward of the road beds and track beds described shall be included in the tidelands and coastal waters critical areas.

(2) All coastal waters and tidelands seaward from this boundary to the State jurisdictional limit are included within the critical areas.

B. Beach/Dune System:

The Coastal Council has permitting authority over the beach/dune system. In determining the boundaries of this critical area, the Coastal Council will be guided by Section 48-39-270, Section 48-39-280 and Section 48-39-360.

30-11. GENERAL GUIDELINES FOR ALL CRITICAL AREAS.

A. Preface: The critical areas are of vital importance to the State, and there is strong and growing pressure for the development of these areas. The South Carolina Coastal Council has established these rules and regulations for permit applications in an effort to reduce the irreversible loss of productive tidelands, coastal waters, beaches, and dunes while meeting long-range State development needs.

B. General Considerations: In assessing the potential impacts of projects in critical areas, the Council will be guided by the policy statements in Section 1 and 2 of the Act [Sections 48-39-20, 48-39-30] and the following ten considerations in Section 15 of the Act [Section 48-39-150]:

(1) The extent to which the activity requires a waterfront location or is economically enhanced by its proximity to the water;

(2) The extent to which the activity would harmfully obstruct the natural flow of navigable water. If the proposed project is in one or more of the State's harbors or in a waterway used for commercial navigation and shipping, or in an area set aside for port development in an approved management plan, then a certificate from the South Carolina State Ports Authority declaring that the proposed project or activity would not unreasonably interfere with commercial navigation and shipping must be obtained by the Council prior to issuing a permit;

(3) The extent to which the applicant's completed project would affect the production of fish, shrimp, oysters, crabs, or clams or any marine life or wildlife, or other natural resources in a particular area, including but not limited to water and oxygen supply;

(4) The extent to which the activity could cause erosion, shoaling of channels or creation of stagnant water;

(5) The extent to which the development could affect existing public access to tidal and submerged lands, navigable waters and beaches, or other recreational coastal resources;

(6) The extent to which the development could affect the habitats for rare and endangered species of wildlife or irreplaceable historic and archeological sites of South Carolina's coastal zone;

(7) The extent of the economic benefits as compared with the benefits from preservation of an area in its unaltered state;

(8) The extent of any adverse environmental impact which cannot be avoided by reasonable safeguards;

(9) The extent to which all feasible safeguards are taken to avoid adverse environmental impact resulting from a project;

(10) The extent to which the proposed use could affect the value and enjoyment of adjacent owners."

C. Further Guidelines: In the fulfilling of its responsibility under Section 15(A) of the Act, the Council must in part base its decisions regarding permit applications on the policies specified in Sections 1 and 2 of the Act, and thus, be guided by the following:

(1) The extent to which long-range, cumulative effects of the project may result within the context of other possible development and the general character of the area.

(2) Where applicable, the extent to which the overall plans and designs of a project can be submitted together and evaluated as a whole, rather than submitted piecemeal and in a fragmented fashion which limits comprehensive evaluation.

(3) The extent and significance of negative impacts on Geographic Areas of Particular Concern (GAPC). The determination of negative impacts will be made by the Coastal Council in each case with reference to the priorities of use for the particular GAPC. The priorities of use are found in Chapter IV of the Coastal Management Program.

D. General Guidelines for Beaches and Dunes:

In addition to the provisions of the South Carolina Coastal Management Act of 1977, the policies of the South Carolina Coastal Management Program, and applicable rules and regulations, the Coastal Council shall base its decisions on activities in the beach/dune system on the findings and policies specified in Section 48-39-250 and Section 48-39-260 of the 1977 Coastal Zone Management Act, as amended, and the following:

1. The Coastal Council shall discourage new construction in the beach/dune

system and encourage those who have erected structures within the system to retreat.

2. The Coastal Council shall promote soft-solutions to erosion within the context of a policy of retreat of development from the shore and prevent the strengthening and enlargement of existing erosion control structures.

3. The Coastal Council shall promote public access to the beaches of this state.

4. The Coastal Council shall consider state and local comprehensive plans. No permit shall be issued which is inconsistent with the state plan, and all permits issued shall be consistent with local plans to the maximum extent practicable.

5. The Coastal Council shall be guided by the prohibitions against construction contained in Section 290 and Section 300 of the Act which are based upon the conclusion that ill-planned development, whether habitable structures, recreational amenities, erosion control devices or other manmade structures, will now and in the future adversely impact the fragile beach/dune system. These structures interfere with the natural system and impact the highest and best uses of the system.In order to protect the highest and best uses of the beach/dune system, the Coastal Council, in its management capacity, shall encourage minimal development therein.

6. The destruction of beach or dune vegetation seaward of the setback line is prohibited unless there is no feasible alternative. When there is destruction of vegetation permitted seaward of the setback line, mitigation, in the form of planting new vegetation to rectify the destruction is required as a permit condition. In no event shall any part of a building be constructed on a primary oceanfront sand dune.

30-12. SPECIFIC PROJECT STANDARDS FOR TIDELANDS AND COASTAL WATERS.

A. Docks and Piers:

(1) A dock or pier is a structure built over and/or floating on water and is generally used for the mooring of boats. Docks and piers are the most popular method of gaining access to deep water. Although they are least objectionable from an ecological point of view, docks and piers sometimes pose navigational problems, restrict public use of the water and, under certain circumstances, possess potential for creating environmental problems.

(2) The following standards are applicable for construction of docks and piers:

(a) Docks and piers shall not impede navigation or restrict the reasonable public use of State lands and waters;

(b) Docks and piers shall be constructed in a manner that does not restrict waterflow;

(c) The size and extension of a dock or pier must be limited to that which is reasonable for the intended use;

(d) Docks and piers should use the least environmentally damaging alignment;

(e) All applications for docks and piers should accurately illustrate the alignment of property boundaries with adjacent owners;

(f) To preclude the adverse effects of shading marsh vegetation, walkways which are built over vegetated marsh and lead to the dock or pier shall not exceed four feet in width (unless the applicant can justify a need for a wider structure) and should be

elevated at least three feet above mean high water;

(g) Dry storage in uplands will be encouraged in preference to moorage in crowded areas;

(h) Developers of subdivisions and multiple family dwellings are encouraged to develop joint-use or community docks when their plans are in the development stage. However, community docks may be considered a marina if any services are offered besides moorage for those having a right to use the dock or if the size and location of the community dock creates the potential for significant impact;

(i) Project proposals shall include facilities for the proper handling of litter, waste, refuse and petroleum products, where applicable;

(j) Where docks and piers are to be constructed over tidelands utilized for shellfish culture or other mariculture activity, the Council will consider rights of the lessee and the public prior to approval or denial.

B. Boat ramps:

(1) Boat ramps provide access to the water for those who do not have water access by means of docks, piers, or marinas. However, boat ramp construction may require filling or, in some cases, dredging of wetland areas.

(2) Specific standards which shall apply are as follows:

(a) Filling of vegetated wetlands for boat ramp construction is prohibited unless no feasible alternatives exist in non-vegetated wetland areas. In addition, the area to be filled must be limited to that which is reasonable for the intended use;

(b) Boat ramps must consist of environmentally acceptable materials, demonstrate sound design and construction so that they could reasonably be expected to be safe and effective, and minimize adverse effects.

(c) Justification for boat ramp construction in environmentally sensitive areas shall be considered using the following priorities:

(i) public use - open to all citizens;

(ii) restricted use - open to citizens of a particular area or organization only;

(iii) private use - use for one citizen or family;

(d) In cases where private use is necessary, siting of ramps must, wherever feasible, be located in areas where the least environmental impact will accrue to the area;

(e) Boat ramp location requiring dredging or filling of wetlands to provide deepwater access to the ramp, parking areas for the ramp, or other associated facilities are prohibited unless no feasible alternatives exist and environmental impacts can be minimized;

(f) The siting of "public use" boat ramps is encouraged in easily accessible areas such as bridges and existing, abandoned causeways, provided that these sites comply with other applicable regulations.

C. Bulkheads and Revetments (Rip-rap) (Other than ocean front, as covered under R.30-13(A)):

(1) In an attempt to mitigate certain environmental losses that can be caused by these structures, the following standards are adopted:

(a) Structures must be designed to conform to the existing shoreline (upland boundary), to the maximum extent feasible, and constructed so that reflective wave energy does not destroy stable marine bottoms or constitute a safety hazard;

(b) Where possible, sloping rip-rap structures should be used rather than vertical seawalls;

(c) Where feasible, bulkhead and revetment construction shall avoid sharp angle turns that may collect debris or cause shoaling or flushing problems;

(d) Bulkheads and revetments will be discouraged where marshlands are adequately serving as an erosion buffer, where adjacent property could be detrimentally affected by erosion, sedimentation, or obstruction of view, or where public access is adversely affected;

(e) Bulkheads and revetments will not be approved where public access is adversely affected unless no feasible alternative exists.

D. Cables, Pipelines, and Transmission Lines:

(1) Installation of cables, pipelines, and transmission lines is preferred in non-wetland areas; however, excavating activities in critical areas are sometimes required. Excavation and filling also are sometimes required to construct foundation structures attendant to the installation of overhead transmission line crossings. These installations shall be designed to minimize adverse environmental impacts.

(2) In addition to standards for dredging and filling, the following standards are applicable:

(a) To the maximum extent feasible, alignments must avoid crossing the critical areas;

(b) Creation of permanent open water canals to install pipelines is generally prohibited since such projects usually interfere with drainage patterns and may adversely affect water quality through accelerated bank erosion;

(c) Dimensions of excavated canals for cables and pipelines should be minimal. Silt curtains are recommended for all excavations;

(d) Wherever feasible, all excavations in wetland areas must be backfilled with the excavated material after installation of the appropriate structure, while being careful to maintain the original marsh elevation;

(e) Appropriate erosion control measures shall be employed during the crossing of wetland areas. Where appropriate, revegetation with suitable wetland species will be required;

(f) Alignments of new projects should be designed to utilize existing rights-of-way and topographic features, wherever feasible;

(g) The extension of public services, such as sewer and water facilities, involving the expenditure of public funds or issuance of government revenue bonds to previously undeveloped barrier islands will not be approved unless an overriding public interest can be demonstrated.

E. Marina Location and Design:

(1) Each applicant for a marina in the critical areas of the coastal zone must utilize the "Coastal Marina Permit Application" as published by the South Carolina Coastal Council. Each application must be accompanied by a Coastal Marina Report developed in accordance with the "Guidelines for Preparation of Coastal Marina Report" also published by the South Carolina Coastal Council. In addition, each applicant who is issued a marina permit by the Coastal Council must submit an operation and maintenance plan in accordance with the Coastal Council's "Coastal Marina Operations and Maintenance Manual", and have that plan approved by the Coastal Council before actual construction of the facility may commence.

(2) Commercial docks are also considered a marina type facility. The standards that apply to marinas will also be used as criteria in the evaluation of permit applications for commercial docks.

(3) All marinas affect aquatic habitats to some degree, but adverse effects can be minimized by utilizing proper location and design features. Application for marinas shall include a comprehensive site plan showing location and number of all water-dependent and upland facilities such as parking and storage facilities.

(4) In addition to standards for bulkheads and seawalls, docks and piers, dredging and filling, and navigation channels and access canals, the following standards are applicable:

(a) Marinas should be located in areas that will have minimal adverse impact on wetlands, water quality, wildlife and marine resources, or other critical habitats;

(b) Where marina construction would affect shellfish areas, the Council must consider the rights of the lessee, if applicable, and the public, and any possible detrimental impacts on shellfish resources;

(c) Marinas should be located in areas where maximum physical advantages exist and where the least initial and maintenance dredging will be required;

(d) Marinas must avoid or minimize the disruption of currents. Dead-end or deep canals without adequate circulation or tidal flushing will not be permitted unless it can be demonstrated that water quality will not be adversely affected;

(e) Marina design must minimize the need for the excavation and filling of shoreline areas;

(f) Open dockage extending to deep water is usually preferable to excavation for boat basins, and it must be considered as an alternative to dredging and bulkheading for marinas;

(g) Turning basins and navigation channels shall be designed to prevent long-term degradation of water quality. In areas where there is poor water circulation, the depth of boat basins and access canals should not exceed that of the receiving body of water to protect water quality;

(h) Project proposals shall include facilities for the proper handling of petroleum products, sewage, litter, waste, and other refuse with regard to the South Carolina Department of Health and Environmental Control (DHEC) specifications.

Adequate restroom facilities shall be required in order to discourage any overboard discharge of sewage from boats and, thus, to protect water quality. The number of toilets required for any given marina shall be determined by the nature and size of the marina and by its specific site location. However, regardless of size, two toilets and one lavatory for women and one toilet, one urinal, and one lavatory for men shall be required for all marinas, and unless there are mitigating circumstances, the Council shall require one toilet and one lavatory for women and one toilet, one urinal, and one lavatory for men for every additional 100 boat slips or fraction thereof over the original 100 boat slips. Toilet facilities should be constructed in a location that would encourage their use by the users of the marina.

If there are more than 100 slips, there shall be provided one additional toilet, lavatory and shower for each sex for each additional 40 slips or fraction thereof and one additional men's urinal for each 100 additional slips or fraction thereof.

Additional facilities are required by DHEC where restaurants, motels, laundries, and other nonwater-dependent structures are provided.

All pump-out and sewage facilities must be included in the public notice and certified

by DHEC before permit approval. Also, DHEC can provide advice regarding the necessity of having hose connections from boats to shore-based sewage facilities where these boats are used as residences.

Trash receptacles or similar facilities should be plentiful and convenient for the proper disposal of trash, waste and noxious materials such as paints, rags and oil cans required for normal boat maintenance and repair.

Where feasible, boat maintenance areas must be designed so that all bottom scraping and painting be accomplished over dry land allowing for proper control and deposition of residues, spills and storm water runoff;

(i) Dry storage type marinas are preferred, wherever feasible;

(j) Applications for construction of marina and commercial dock facilities will be considered by the Council only after adequate demonstration by the applicant of demand for the facilities;

(k) Applications for marinas must include maintenance dredging schedules and dredged material disposal sites when applicable.

F. Transportation:

(1) There is often a strong public need for transportation projects. Unfortunately, such projects can pose a significant risk of environmental degradation. However, careful consideration of environmental factors can guide development toward more favorable results. To the maximum extent possible, environmental considerations shall be harmonious with public safety considerations.

(2) The specific standards are as follows:

(a) In the planning of major transportation routes and airports, these projects should be sited for location inland from the critical areas;

(b) The location and design of public and private transportation projects must avoid the critical areas to the maximum extent feasible. Where coastal waters and tidelands cannot be avoided, bridging rather than filling of these areas will be required to the maximum extent feasible;

(c) Where wetlands will be destroyed, their value as wetlands will be assessed by the Council and weighed against public need for their destruction;

(d) To the maximum extent feasible, transportation structures must be designed so as not to alter the natural waterflow and circulation regimes or create excessive shoaling or erosion. Where applicable, adequate clearance for commercial and pleasure craft must be provided;

(e) Where feasible, maximum care shall be taken to prevent the direct drainage of runoff water from transportation routes and associated facilities from entering adjacent water bodies;

(f) Where appropriate, bridges and approaches should be designed to provide for the enhancement of public access by the utilization of fishermen, catwalks, boat launching ramps, and other structural features;

(g) During the planning of a multi-lane widening or improvement project, it is preferable to follow the existing alignment in wetland areas. Existing causeway and fill areas must be utilized wherever possible. The degree to which any existing causeway through wetlands can be widened must be reasonably proportionate to the expected traffic load of the causeway in the near future and the size and use of the area being provided access. The width of medians of divided highways must be reduced as much as possible wherever they cross wetland areas;

(h) Roadway embankments and fill areas shall be stabilized by utilizing appropriate erosion devices and/or techniques in order to minimize erosion and water quality degradation problems. Culverts shall be required, where appropriate, in order to maintain normal tidal influence and minimize disruption of drainage patterns;

(i) The Council will require applicants for transportation project permits to consider the accommodation of other public utilities in facility design, thus avoiding unnecessary future alteration such as that caused by the laying of cables or transmission lines in wetlands adjacent to an existing roadway;

(j) New road or bridge projects involving the expenditure of public funds to provide access to previously undeveloped barrier islands will not be approved unless an overriding public interest can be demonstrated.

G. Dredging and Filling:

(1) Development of wetland areas often has been considered synonymous with dredging and filling activities. Dredging and filling in wetlands can always be expected to have adverse environmental consequences; therefore, the Council discourages dredging and filling. There are cases, however, where such unavoidable environmental effects are justified if legitimate public needs are to be met.

(2) The specific standards are as follows:

(a) The creation of commercial and residential lots strictly for private gain is not a legitimate justification for the filling of wetlands. Permit applications for the filling of wetlands and submerged lands for these purposes shall be denied, except for erosion control, see R.30-12(C), or boat ramps, see R.30-12(B). All other dredge and fill activities not in the public interest will be discouraged;

(b) Dredging and filling in wetland areas should be undertaken only if that activity is water-dependent and there are no feasible alternatives;

(c) To the maximum extent feasible, dredging and filling activities should be restricted in nursery areas and shellfish grounds and during periods of migration, spawning, and early development of important sport and commercial species;

(d) Dredging and excavation shall not create stagnant water conditions, lethal fish entrapments, or deposit sumps or otherwise contribute to water quality degradation;

(e) Designs for dredging and excavation projects shall, where feasible, include protective measures such as silt curtains, diapers, and weirs to protect water quality in adjacent areas during construction by preventing the dispersal of silt materials;

(f) Dredged materials shall be deposited and contained in such a manner so as to prevent dispersal into adjacent wetland areas;

(g) Applications for dredging in submerged and wetland areas for purposes other than access, navigation, mining, or drainage shall be denied, unless an overriding public interest can be demonstrated. Dredging permits for mining will be issued only as specified in (2)(h) below. Drainage permits must be consistent with the provisions in R.30-12(L);

(h) Applications for dredging for mining activities within the critical areas will be denied unless a significant portion of the resource is located in the critical area, extraction of the resource is clearly necessary, and benefits derived from extraction would outweigh resultant detrimental impacts on coastal ecosystems. For any permit issued to allow dredging for mining operations in the critical areas, a complete site reclamation plan shall be required;

(i) Wetlands shall not be utilized as depositories for waste materials except as discussed in R.30-12(I);

(j) In all cases, dredging activities shall not be approved until satisfactory disposal sites have been acquired.

H. Navigation Channels and Access Canals:

(1) Certain dredging activities involve the creation and maintenance of navigation channels and access canals. These activities have a potential for severe environmental impacts and should meet a demonstrated public need.

(2) Where the Council determines that such activities are justified, the following standards will be applied:

(a) Dredging for establishment of new canals which involves permanent alteration of wetland habitats will be prohibited unless no feasible alternative exists. Establishment of canals for purposes of creating waterfront lots from inland property will be prohibited unless it can be demonstrated that there will be no significant environmental impacts on critical areas;

(b) To the extent feasible, project plans must utilize piers or catwalks, rather than channels or canals, to reach deeper water areas;

(c) Access canals shall be designed to insure adequate flushing and shall not create dead-end or stagnant water pockets. Open-ended, U-shaped, or semicircular canals are generally preferred over dead-end canals, since they usually provide better water circulation;

(d) Highland waterway construction that is slated to be tied into wetland areas shall be constructed in the dry, if feasible, so that sloping and stabilization of the banks can be completed before the plug is removed for the connection to open waters. Where dry construction is not possible, temporary plugs or silt curtains at the end of canals connected to waterways should be maintained until all sediment settles out;

(e) The sides of navigation channels and access canals should be gently sloping rather than vertical to facilitate biological as well as physical stabilization of the canal banks;

(f) When several landowners are to be served by a project, dredging for navigation channels and access canals should be well planned to prevent unnecessary excavation. Tributary canals in the highlands leading to a central navigation channel should be utilized rather than separate channels for each waterfront landowner;

(g) The berm of access canals should be raised so that there is a gradual slope away from the canal edge. This will help prevent introduction of contaminants into adjacent wetland areas;

(h) Alignment of channels and canals should make maximum use of natural or existing channels. Alignment of channels and canals should avoid shellfish beds, nursery areas, and spawning areas in wetlands.

I. Deposition of Dredged Material:

(1) The deposition of dredged materials resulting from numerous dredging activities along the coast has serious environmental effects separate from the original dredging activity. Thousands of acres of productive wetland habitat have been destroyed by such deposition. Recognizing that additional disposal sites will be required, it is important that site acquisition proposals include plans for mitigating any adverse impacts upon the environment.

(2) The following standards are to be utilized:

(a) Upland disposal of dredged material shall always be sought in preference to disposal in wetlands. Vegetated wetlands and mudflats shall not be utilized for disposal of dredged materials unless there are no feasible alternatives. Any other wetlands should not be utilized for disposal of dredged materials when other alternatives exist;

(b) Open water and deep water disposal should be considered as an alternative if highland alternatives are not feasible. However, open and deep water disposal sites should be seriously considered only after careful consultation with the Council and other relevant State and Federal agencies;

(c) Dredged materials containing hazardous levels of toxic material must be disposed of with extraordinary caution. These materials shall never be disposed of in wetland areas and only in highland areas which are lined and diked with impervious materials. These materials will only be disposed in open water ocean dumping sites when maximum safety has been demonstrated after thorough review by the Coastal Council and other appropriate state and federal agencies;

(d) Dikes surrounding disposal areas should be shaped and vegetated immediately to minimize erosion, with outfalls positioned to empty into non-wetland areas;

(e) Future disposal sites shall be reviewed on a case-by-case basis;

(f) Wherever feasible, existing disposal areas shall be utilized to the fullest extent possible; this would include raising the height of the embankments to increase the holding capacity of the disposal area;

(g) Consideration must be given to the temporal aspects of spoil deposition - for example, impacts on spawning, fish migrations, shellfish harvesting, waterfowl nesting and wintering areas, and mosquito control. Attention must be given to possible adverse impacts of various alternative sites on the public health and welfare as well as on critical fish and wildlife areas;

(h) In all cases, dredging activities shall not be approved until satisfactory disposal sites have been acquired.

J. Waste Treatment Systems:

(1) Several agencies regulate the installation and operation of waste water treatment facilities, septic tanks, and landfills. Council permits will be coordinated with these relevant agencies. Normal maintenance and repair of sewer facilities are exempted from Council permit requirements by Section 13(D) of the Act [Section 48-39-130(D)]. The discharge of treated effluent is also exempted; provided, however, that the Council shall review and comment on these discharges. The Council is concerned primarily with wetland degradation problems which could involve commercially important shellfish, recreational fisheries, and critical wildlife habitats.

(2) Standards applicable to these installations are as follows:

(a) Applications for the construction of lagoons or impoundments for waste treatment facilities, solid waste disposal sites and similar activities in the critical areas shall be denied unless there are no feasible alternatives and it can be demonstrated that there will be no significant environmental impacts;

(b) Wherever feasible, construction and design of waste treatment facilities shall be accomplished in such a manner that no effluent will be discharged into areas where shellfish and other marine resources would be adversely affected. Where waste treatment facilities would affect open, productive shellfish harvesting areas, the Council must consider the rights of the lessee, if applicable, or the public in the case of public oyster grounds, as well as impacts on shellfish resources;

(c) The siting of sewage treatment systems should avoid the critical areas. The location of structures other than actual pipelines, such as pump or lift stations, in critical areas will be prohibited unless no feasible alternatives exist;

(d) The construction of sewage treatment facilities and associated discharge pipes should be located and designed so as not to have adverse impacts upon areas of significant public use.

K. Marsh Impoundments for Recreational and Commercial Activities:

(1) Marsh impoundments totalling nearly 69,000 acres comprise a significant portion (approximately 16 percent) of our coastal wetlands. An additional acreage, perhaps equaling this figure, has been impounded in the past but consists today of tidally influenced areas where embankments are no longer maintained. Once important rice growing areas, the majority of these impoundments are managed primarily for recreational waterfowl hunting, wildlife sanctuaries, and other commercial, agricultural, and preservation uses.

(2) Proposals will be reviewed on a case-by-case basis according to the following standards:

(a) Permit applications to impound previously unimpounded wetlands or areas inundated by SAA waters shall be denied unless an overriding public interest is clearly demonstrated.

(b) The following factors will be considered in the review of permit applications for the impoundment of wetlands:

(i) Condition of existing dikes. Projects should require a minimum of new bank construction in wetlands.

(ii) Amount of wetlands proposed to be impounded.

(iii) The extent to which the project would block waters presently used for recreation or navigation by the public.

(iv) Degree of salinity of waters impacted by the proposed project.

(v) Quality of waters affected by the proposed project.

(vi) Primary purpose of the impoundment.

(c) All applications for the impoundment of wetlands must be accompanied by a detailed management plan setting forth the intent and method of managing the impounded areas. This plan must contain, but not necessarily be limited to, the following information:

(i) Applicant's objective(s) for the impoundment.

(ii) Schedule of water level manipulations.

(iii) Methods of pest and predator control (i.e., use of pesticides, prescribed burning, etc.).

(iv) Water quality management plan.

The management plan must be approved by the Council prior to permit issuance and shall become a condition of the permit.

L. Drainage Canals or Ditches:

(1) Drainage canals or ditches should follow the least damaging alignment and should meet one or more of the following needs:

(a) insect or vector control as a public health necessity;

(b) other public health purposes;

(c) the control of runoff as part of a comprehensive flood plain management plan.

(2) In addition to the application standards for dredging and filling and navigation channels and access canals, the following standards shall apply:

(a) Drainage canals and ditches shall not create dead water or stagnant pockets;

(b) To the extent feasible, the alignment of drainage canals should avoid the more productive wetlands;

(c) To the extent feasible, alignments of canals shall make maximum use of existing deep water channels to avoid unnecessary excavation;

(d) To the extent feasible, the quantity and quality of any discharged waters shall not result in extensive alteration of wetlands or the quality of coastal waters;

(e) All dredged material must be disposed of in accordance with the regulations under R.30-12(I).

M. Nonwater-dependent Structures: Nonwater-dependent structures, as defined in Section R.30-1(C), have been built in the past on pilings over coastal waters and tidelands critical areas. Nonwater-dependent structures shall be prohibited from being constructed over or in tidelands and coastal waters critical areas unless there is no significant environmental impact, an overriding public need can be demonstrated and no feasible alternatives exist.

30-13. SPECIFIC PROJECT STANDARDS FOR BEACHES AND DUNES.

A. Normal Maintenance and Repair of Habitable Structures: Normal maintenance and repair of habitable structures is allowed without notice to Coastal Council. See R.30-14(D)(3)(a) and R.30-1(C)(28).

B. Construction of New Habitable Structures: If any part of a new habitable structure is constructed seaward of the setback line, the owner shall certify to the Coastal Council that construction meets the following requirements:

(1) The habitable structure is no larger than five thousand square feet of heated space.

(2) The structure is located as far landward on the property as practicable.

(3) A drawing has been submitted to the Coastal Council showing a footprint of the structure on the property, a cross section of the structure, and the structure's relation to property lines and setback lines which affect the property.

(4) No erosion control structure or device is incorporated as an integral part of the habitable structure pursuant to Section 48-39-290.

(5) No part of the building is being constructed on the primary oceanfront sand dune or seaward of the baseline.

C. Additions to Habitable Structures: Additions to habitable structures between the baseline and setback line are allowed provided the following requirements are met:

(1) The additions together with the existing structure do not exceed five thousand square feet of heated space.

(2) Additions to habitable structures comply with the conditions of new habitable structures as set forth in R.30-13(B).

D. Repair and Renovation of Habitable Structures: Repair and renovation of a habitable structure between the baseline and setback line damaged but not destroyed beyond repair, due to natural or man-made causes is allowed after notice and written documentation to Coastal Council.

E. Replacement or Rebuilding of Habitable Structures:

(1) A habitable structure in excess of five thousand square feet of heated space between the baseline and setback line which has been destroyed beyond repair due to natural causes may be replaced or rebuilt provided all of the following requirements are met:

(a) The total square footage of the replaced structure seaward of the setback line does not exceed the total square footage of the original structure seaward of the setback line.

(b) The linear footage of the replaced structure parallel to the coast does not exceed the original linear footage parallel to the coast.

(c) The replaced structure is no farther seaward than the original structure.

(d) Where possible, the replaced structure is moved landward of the setback line or if not possible, then as far landward as practicable, considering local zoning and parking regulations.

(e) The reconstruction is not seaward of the baseline unless permitted elsewhere in Section 48-39-250 through 48-39-360.

(f) Replacement of a habitable structure destroyed beyond repair due to man-made causes is allowed provided the rebuilt structure is no larger than the original structure it replaces and is constructed as far landward as possible, but the new structure must not be farther seaward than the original structure.

(2) A habitable structure up to five thousand square feet of heated space between the baseline and setback line which has been destroyed beyond repair by natural or man-made causes may be replaced or rebuilt provided the requirements of new habitable structures are met pursuant to R.30-13(B).

F. Landscaping, Earthmoving and Fill for Landscaping.

Within the beach/dune system, the installation of materials and associated amenities, moving of earth and placing of fill to accomplish these installations are allowed provided all of the following requirements are met:

(1) A comprehensive landscaping plan is submitted to and approved in writing by Coastal Council.

(2) The construction of a retaining wall which extends below existing grade will not be allowed;

(3) No sand from the beach shall be used as backfill;

(4) No native plant material growing on the frontal dunes may be disturbed unless it can be demonstrated that the condition of the dune will be improved;

(5) Only native salt tolerant plant species may be planted on dunes and shall be approved by Coastal Council staff;

(6) Adequate measures shall be taken to contain fill and irrigation runoff;

(7) No leveling of dunes is allowed;

(8) All work shall be in compliance with applicable local ordinances.

G. Fences, Lighting, Trash Receptacles, Sidewalks, and Signs.

Seaward of the setback line the placement, maintenance and repair, and replacement of fences, lighting, trash receptacles, sidewalks, and signs are allowed provided all of the following requirements are met:

(1) Construction shall not alter or impact existing sand dunes, dune vegetation, or the beach;

(2) Existing concrete sidewalks attendant to public streets may be replaced

within their original footprint;

(3) Trash receptacles (not dumpsters) may be attached to access ways or placed on the beach when the local government determines there is a need for such receptacles;

(4) Signs are limited to only those attached to attendant structures or mail receptacles or informational signs deemed necessary by federal, state, or local government for public health and safety. Advertisements are not allowed except on the walls or roofs of commercial structures;

(5) No fence may be used as a retaining wall;

(6) Any additional lighting seaward of the setback line shall be designed to shield the beach from illumination.

H. Emergency Vehicle Access Ways, Non-attached Decks, Gazebos and Other Structures Which Enhance Beach Access.

Seaward of the setback line the placement, maintenance and repair, and replacement of emergency vehicle access ways, decks, gazebos, and other structures which enhance beach access are allowed provided all of the following requirements are met:

(1) Emergency vehicle access ways shall:

(a) Be constructed at sites which preclude alteration of existing sand dunes and dune vegetation to the maximum extent practicable;

(b) Be constructed above the existing grade except for points of entry and exit;

(c) Be constructed of wood.

(d) Be located at least one-half mile from any other vehicle access to the beach unless, after review by Coastal Council, this provision is determined to be unreasonable due to site specific circumstances concerning health and safety needs;

(e) Be approved by the local government with jurisdiction;

(f) Provide for pedestrian access use.

(2) Non-attached decks, gazebos and other structures (other than walkways) which enhance beach access shall:

(a) Be constructed of wood.

(b) Not be constructed seaward of the no-construction zone;

(c) Not exceed one hundred forty-four square feet (this square footage is not included in the five thousand square-foot limitation on habitable structures);

(d) Be limited to no more than one of these structures per lot unless a limit of one would cause an unnecessary hardship as determined by the South Carolina Coastal Council;

(e) Not be put to a commercial use;

(f) Be in compliance with applicable local ordinances.

I. The Construction and/or Repair of Drives and Parking Lots.

Within the setback area, the construction and/or repair of drives and parking lots within the setback area is allowed provided all of the following requirements are met:

(1) On front row lots, new driveways and/or parking lots shall not extend seaward of habitable structures;

(2) Existing drives and/or parking lots shall not be expanded beyond their original size;

(3) No sand from the beach may be used during construction and/or repair;

(4) No alteration of the primary oceanfront sand dune or its dune vegetation is

allowed;

(5) At the Coastal Council's discretion, a Stormwater Management Plan may be required;

(6) The work shall comply with applicable local ordinances;

(7) Best Management Practices (BMP's) such as hay bales, silt fences, mulches, or other appropriate measures shall be used as necessary during the construction phase to prevent sedimentation reaching adjacent waters and wetlands. Upon project completion the disturbed areas shall be stabilized as soon as possible with grass or other appropriate vegetative cover;

(8) No new driveway or parking lot may be constructed seaward of the baseline unless a special permit as provided in Section 48-39-290(D) is obtained.

J. Installation or Repair of Underground and Overhead Water, Sewer, Gas, Electrical, Telephone Lines and Cable Service Lines.

Within the setback area the placement, maintenance, repair, and replacement of service lines are allowed provided the following requirements are met:

(1) All service lines shall be located as far landward as possible on each individual lot;

(2) Lines, junction boxes, poles, and accessory features will be relocated landward as far as possible in the event there is a need for replacement;

(3) Dunes allowed to be altered during construction shall be reconfigured and revegetated in accordance with Coastal Council guidelines;

(4) All work shall be in compliance with applicable local ordinances;

(5) A comprehensive plan for new or replacement utilities shall be approved in writing by the Council.

K. Drainage Structures.

Seaward of the setback line the placement, maintenance and repair, and replacement of drainage structures are allowed provided the following requirements are met:

(1) For new construction, the structures shall be part of a Coastal Council approved storm water management plan or drainage plan which must be submitted either prior to or at the time the permit application is submitted.

(2) The replacement of drainage structures shall not involve an increase in the size of the existing structures, unless this change is approved by the Coastal Council as a part of the Stormwater Management Plan or drainage plan.

(3) Any disturbance to the dunes and dune vegetation shall be restored to pre-project conditions as soon as possible, and the restoration shall be approved by the Coastal Council staff.

(4) The drainage structure shall comply with the local drainage plan for the area seaward of the setback line.

(5) New drainage structures may be placed on the beach only if:

(a) Existing structures are eliminated;

(b) No feasible alternative exists.

(6) All work shall be in compliance with applicable local ordinances.

(7) Areas disturbed during construction shall be revegetated to the Coastal Council's satisfaction.

L. Sand Fences, Minor Beach Renourishment, Dune Revegetation.

In an effort to provide beachfront property owners with passive, low-cost dune stabilization methods, the placement, maintenance and repair, and replacement of sand fencing,

dune revegetation, and minor renourishment may be allowed seaward of the setback line under the following conditions (Note: These steps may not be viewed as being undertaken for erosion control but rather as dune enhancement and stabilization measures. Since a broad beach and a healthy dune provide a storm buffer, these methods should aid the natural processes affecting the beach/dune system.):

(1) Sand fencing requirements:

(a) The fence material shall be degradable.

(b) The fences shall be installed according to guidelines established by Coastal Council staff.

(c) The fences shall be installed in a manner so as not to impede turtle nesting. The Coastal Council may require sand fences be moved or removed entirely if the fences are found to impact turtle nesting activities or, in the Coastal Council's opinion, have the potential to impact turtle nesting activities.

(d) The fence shall be placed above the highest up rush of the waves as determined by Coastal Council staff.

(e) The fencing shall not impede public access.

(f) The fence shall be installed with the understanding that this is a temporary measure.

(g) If fence material is damaged, debris shall be removed expeditiously from the beach area by the owner.

(h) If the Coastal Council determines that the fence has a detrimental impact to the beach/dune system, it shall be removed by the owner as directed by the Coastal Council.

(2) Revegetation requirements:

Property owners are encouraged to plant vegetation as a means of stabilizing oceanfront dunes. The roots of plant material tend to bind sand to dunes, while plant foliage serves to trap wind blown sand. Suggested plant varieties include, but are not limited to, American beach grass (Ammophila breviligulata), bitter panicum (Panicum amarum), and sea oats (Uniola paniculata).

(a) Vegetation shall be planted in early spring, before May 30 if possible, and shall be planted, irrigated and fertilized according to nursery instructions or Coastal Council's "How to Build a Dune" guidelines.

(b) Coastal Council staff shall inspect the site first and determine that there is a need for vegetative stabilization.

(3) Minor renourishment is allowed in an attempt to build and maintain healthy dunes. Minor renourishment requirements are:

(a) Sand shall be compatible in size and grain color, shall be from an upland source, and its use approved in writing by Coastal Council staff.

(b) Minor renourishment shall be performed between November 1 and March 1.

(c) Coastal Council staff shall inspect the site and establish that there is a need for the project.

(d) All projects shall be in compliance with applicable local ordinances.

M. Returning Sand to the Beach/Dune System.

Seaward of the setback line sand that has drifted out of this critical area may be returned to it if the following requirement is met:

(1) A description of the proposed work shall be submitted to and approved in writing by the Coastal Council prior to any initiation of work.

N. Erosion Control.

(1) Groins and Jetties:

Groins and jetties interfere with the natural transport of sediment and this is not always beneficial. Therefore, applications for these structures shall be carefully reviewed to determine their overall effect. The following standards shall apply:

(a) Groins shall be constructed so that they can be altered or removed if they cause undesirable effects;

(b) Where feasible, jetties shall be designed to provide public recreational fishing opportunities;

(c) Construction activities shall be scheduled so as not to interfere with nesting and brood-rearing activities of sea birds, sea turtles, or other wildlife species.

(2) Offshore Breakwaters:

Permits for offshore breakwaters may be issued only after careful review and in each case with the provision for removal of the structure to mitigate harmful effects which might be manifested after construction.

(3) Protection of Beaches and Artificial Beach Nourishment:

The following requirements apply to the Coastal Council's consideration of projects for the nourishment of beaches:

(a) Careful study shall be given to the type (grain size and quality) of material most suitable for nourishment of a particular beach area;

(b) Borrow areas and sand for artificial nourishment shall be carefully selected to minimize adverse effects. Where possible, artificial beach nourishment shall be performed in concert with inlet stabilization or navigation projects;

(c) Dredging in the borrow areas shall not be in conflict with spawning seasons or migratory movements of significant estuarine or marine species. Nourishment of beach areas shall be scheduled so as not to interfere with nesting and brood-rearing activities of sea birds, sea turtles, or other wildlife species;

(d) All policies concerning dredging and filling cited at R.30-12G shall be applied to beach nourishment proposals;

(e) Nourishment projects shall have a minimum projected life of ten years.

(4) Erosion Control Structures or Devices

(a) No new erosion control structures or devices are allowed seaward of the setback line except to protect a public highway which existed on June 25, 1990.

(b) No erosion control structures or devices may be incorporated as an integral part of a habitable structure.

(c) Erosion control structures or devices must not be enlarged, strengthened, or rebuilt but may be maintained in their present condition if not destroyed more than the percentage allowed in Section 48-39-290(B)(2)(b)(i), (ii) and (iii). Repairs must be made with materials similar to those of the structure or device being repaired.

(d) Erosion control structures or devices determined to be destroyed more than the percentage allowed in Section 48-39-290(B)(2)(b)(i), (ii) and (iii) must be removed at the owner's expense. Nothing in this section requires the removal of an erosion control structure or device which existed on July 1, 1988, that protected a public highway.

(e) Erosion control structures or devices which existed on June 25,1995;

1990, must not be repaired or replaced if destroyed:

(i) more than eighty percent above grade through June 30,

(ii) more than sixty-six and two-thirds percent above grade from July 1, 1995, through June 30, 2005.

(iii) more than fifty percent above grade after June 3, 2005.

[See R.30-14(D)(3)(c) and (d) for damage assessment.]

O. Sand Dune Management.

(1) Walkways over dunes, as provided in §48-39-130(D), shall meet the following requirements:

(a) Be constructed of wood;

(b) Have a maximum width of six feet;

(c) Conform with the contour of the dunes;

(d) Displace no sand in a critical area;

(e) Be constructed with as little environmental damage as possible;

(f) Not be located within fifty feet of another walkway on the same parcel of property;

(g) Be limited to no more than one of these structures per lot unless a limit of one would cause an unnecessary hardship as determined by the Coastal Council.

(2) Projects to protect, restore, or build dunes shall conform to the following standards:

(a) Except for walkways over sand dunes, as provided in §48-39-130(D), no alteration of a sand dune in the beach/dune system shall be permitted unless it can be demonstrated that there shall be no permanent deleterious effects.

(b) The use of natural beach vegetation to trap wind blown sand is encouraged. Where pedestrian traffic has destroyed natural vegetation, the use of temporary sand fencing or its equivalent may be permitted.

(c) The construction of a dune by using beach sand and mechanical equipment shall be permitted only for restoration after unusual damage, such as that caused by a hurricane.

(d) Artificial dunes shall not be constructed seaward of the normal spring high-tide line.

(e) Any artificially constructed dunes shall be aligned to the greatest extent possible with existing dune ridges and shall be of the same general configuration as adjacent dunes.

P. Nonwater-dependent Structures.

Nonwater-dependent structures, including but not limited to residences, restaurants, motel/hotel facilities, other commercial activities, and parking facilities, have been constructed in the past within the beach/dune system. The siting of new nonwater-dependent structures seaward of the baseline is prohibited unless a special permit is obtained pursuant to Section 48-39-290(D) and R.30-15(F) herein.

Q. Golf Courses.

(1) Golf Courses are allowed seaward of the baseline because they can adjust to a changing shoreline more readily than other types of land uses. Sandscraping or sandbagging is not allowed as protection for golf courses.

(2) Specific standards which shall apply are as follows:

(a) Leveling or damaging of dunes or dune fields is prohibited.

(b) Golf courses should be located as far landward as practicable to

minimize encroachment into the setback area.

(c) Any lighting seaward of the setback line must be low intensity and adequately shielded to prevent impact on sea turtle nesting.

(d) Measures must be taken to protect the integrity of the primary oceanfront sand dune from foot traffic. These measures may include:

(i) courses designed in a manner that will minimize adverse effects on the sand dunes;

(ii) physical barriers such as sand fencing placed at the landward trough of the dune;

(iii) certain types of vegetation that would discourage pedestrian traffic, or;

(iv) any other measures Coastal Council may deem necessary.

R. New Fishing Piers:

(1) New fishing piers are allowed seaward of the baseline in order to provide public access to our coastal resources.

(2) Specific standards which shall apply are as follows:

(a) They must be dedicated to public use. A reasonable fee may be charged to the public but the general public may not be excluded from use.

(b) No restaurant, arcade or other nonwater-dependent structure shall be placed on the pier seaward of the baseline.

(c) The height of the pier stringers and spacing of the piles must be able to accommodate vehicular traffic associated with emergency operations and renourishment projects.

R. 30-14 ADMINISTRATIVE PROCEDURES.

A. Procedures for Local Beach Management Plan Approval and Amendments [§48-39-350(A)].

(1) South Carolina local governments with jurisdiction fronting the Atlantic Ocean shall submit to Coastal Council by no later than July 1, 1990, a local beach management plan after the local government has afforded the opportunity for adequate public review.

(2) Upon receipt of the local plan, the Coastal Council shall:

(a) Afford the public a thirty day comment period;

(b) Afford the opportunity for a public hearing on the local beachfront management plan;

(c) After considering all comments, approve, modify or remand the local beachfront management plan.

(3) The Coastal Council shall issue a public notice of the approval of any local beach management plan or amendment thereto. The implementation date of the local beach management plan or amendment thereto will be specified in such public notice.

B. Procedures for State Implementation of Local Responsibilities [§48-39-350(B)].

(1) If a local government fails to develop and implement a local beach management plan as required by §48-39-350, the Coastal Council shall implement the local government's responsibilities by:

(a) Issuing public notice that the Coastal Council has found that the local government has failed to develop and implement a local beach management plan as

required;

(b) Carrying out the tasks enumerated in §48-39-350(A)(1-10);

(c) Providing a thirty day public comment period for public review of Coastal Council's proposed local beach management plan;

(d) Affording the opportunity for a public hearing;

(e) After reviewing all public comments, modify and/or adopt and implement the local plan.

(2) The Coastal Council may delegate responsibility for the implementation of the Coastal Council sponsored and approved local beach management plan to the local government, but the Coastal Council shall have the right to assume responsibility for administering and enforcing the plan if the local government fails to do so.

C. Procedures for State/Local Coordination During and in Response to Emergency Situations (Sections 48-39-320 & 350).

The issuance of a Coastal Council emergency order automatically supersedes any local emergency order for the same emergency situation.

D. Procedures for Determining Destroyed Beyond Repair (Section 48-39-290(B)].

(1) The Coastal Council shall be required to make a determination as to whether or not a habitable structure is destroyed beyond repair under Section 48-39-290 in any of the following cases:

(a) Upon the written request of an owner of the habitable structure or local government official;

(b) Upon its own election;

(c) As part of a damage assessment effort conducted solely by the Coastal Council or in cooperation with a local government in response to an emergency situation.

(2) The Coastal Council shall provide a copy of its determination of whether a habitable structure is destroyed beyond repair to the property owner and the local government with jurisdiction over such habitable structure.

(3) The Coastal Council shall employ the following procedures in determining whether a structure is destroyed beyond repair:

(a) Habitable Structure:

(i) Following a natural disaster, Coastal Council shall coordinate a post-storm damage appraisal with the affected unit of local governments. The Coastal Council will develop guidelines pursuant to Section 48-39-270(11) for performing damage appraisals. The Coastal Council staff shall make the initial damage appraisal. When appropriate, the Coastal Council may use the property owner's insurance adjustor's figures to determine the damage.

(ii) If an owner disagrees with the appraisal of the Coastal Council, he may obtain a second appraisal to evaluate the damage to the building. An owner who disagrees with the appraisal of the Coastal Council must notify the Coastal Council in writing, within 90 days of receipt of the Coastal Council's determination that he intends to obtain an appraisal. If the two appraisals differ, then the two appraisers must select a third appraiser. If the two appraisers are unable to select a third appraiser, the Clerk of Court of the county in which the structure lies must make the selection. All third appraisers must be registered, professional engineers, registered architects or licensed adjustors. All third appraisers must not have been involved in either the insurance adjustment of the property or the first or second appraisal and the cost of the third appraisal will be divided equally between the

Coastal Council and the property owner. In no event may the property owner begin rebuilding or repairing (other than emergency repairs) a structure until the appraisal process described herein has been completed. Nothing in this section prevents a court of competent jurisdiction from reviewing, de novo, the appraisal upon the petition of the property owner.

(b) Pools:

(i) Following a natural disaster, Coastal Council shall coordinate a post-storm damage assessment with the affected unit of local government. The Council will develop guidelines pursuant to Section 48-39-270(11) for performing damage appraisals. The Coastal Council shall make the initial assessment.

(ii) If an owner disagrees with the appraisal of the Coastal Council, he may obtain an appraisal to evaluate the damage to the pool. An owner who disagrees with the appraisal of the Coastal Council must notify the Coastal Council in writing, within 90 days of receipt of the Coastal Council's determination, that the owner intends to obtain an appraisal. If the two appraisals differ, then the two appraisers must select a third appraiser. If the two appraisers are unable to select a third appraiser, the Clerk of Court of the county where the pool lies must make the selection. All third appraisers must be registered, professional engineers and the cost of the third appraisal will be equally divided between the Coastal Council and the property owner. In no event may the property owner begin rebuilding or repairing a pool (other than emergency repairs) until the appraisal process described herein has been completed. Nothing in this section prevents a court of competent jurisdiction from reviewing, de novo, the appraisal upon the petition of the property owner.

(c) Seawalls and Bulkheads: In determining whether a seawall or bulkhead as defined in Section 48-39-270(1)(a) and (b) is destroyed more than eighty percent above grade through June 30, 1995, more than sixty-six and two thirds percent above grade from July 1, 1995, through June 30, 2005, and more than fifty percent above grade after June 30, 2005, the damage assessment shall be accomplished as follows:

Damage to seawalls and bulkheads will be judged on the percent of the structure remaining intact at the time of damage assessment. The portion of the structure or device above grade parallel to the shoreline must be evaluated. The length of the structure or device parallel to the shoreline still intact must be compared to the length of the structure or device parallel to the shoreline which has been destroyed. The length of the structure or device parallel to the shoreline determined to be destroyed divided by the total length of the original structure or device parallel to the shoreline yields the percent destroyed. Those portions of the structure or device standing, cracked or broken piles, whalers, and panels must be assessed on an individual basis to ascertain if these components are repairable or if replacement is required.

If the property owner disagrees with the assessment of a registered professional engineer acting on behalf of the Coastal Council, he may obtain an assessment by a registered professional engineer to evaluate, in the same manner set forth herein, the damage to the structure or device. An owner who disagrees with the assessment of the Coastal Council must notify the Coastal Council in writing, within 90 days of receipt of the Coastal Council's determination, that he intends to obtain an independent assessment. If the two assessments differ, then the two engineers who performed the assessment must select a registered professional engineer to perform the third assessment. If the first two engineers are unable to select an engineer to perform the third assessment, the Clerk of Court of the county where the structure or device lies must make the selection of a registered professional engineer. The cost of the third engineer will be equally divided between the Coastal Council

and the property owner. The determination of the percentage of damage by the third engineer is conclusive. In no event may the property owner begin rebuilding or repairing a seawall or bulkhead until the appraisal process described herein has been completed. The determination of the degree of destruction must be made on a lot by lot basis by reference to county tax maps.

(d) Revetments: Revetments must be judged on the extent of displacement of the stone, the effort to return these stones to the pre-storm event configuration of the structure or device, and the ability of the revetment to retain backfill material at the time of the damage assessment. If the property owner disagrees with the assessment of a registered professional engineer acting on behalf of the Coastal Council, he may obtain an assessment by a different registered professional engineer to evaluate, as set forth in this item, the damage to the structure or device. An owner who disagrees with the appraisal of the Coastal Council must notify the Coastal Council in writing, within 90 days of receipt of the Coastal Council's determination, that the owner intends to obtain an appraisal. If the two assessments differ, then the two engineers who performed the assessment must select a registered professional engineer to perform the third assessment. If the first two engineers are unable to select an engineer to perform the third assessment, the Clerk of Court of the county where the structure or device lies must make the selection of a registered professional engineer. The cost of the third engineer will be equally divided between the Coastal Council and the property owner. The determination of the percentage of damage by the third engineer is conclusive. In no event may the property owner begin rebuilding or repairing a structure until the appraisal process described herein has been completed. The determination of the degree of destruction must be made on a lot by lot basis by reference to county tax maps.

E. Procedures for Adopting Baselines and Erosion Rates (Section 48-39-280).

(1) Following the establishment of the interim baselines, erosion rates, and setback lines pursuant to Section 48-39-280(C) and any amendments or revisions thereto, the Coastal Council will adopt final baselines, erosion rates, and setback lines as part of the state comprehensive beach management plan pursuant to Section 48-39-280. The following procedure will be used for the establishment of final baselines, erosion rates, and setback lines:

(a) The proposed baseline, erosion rate, and setback line for a region, island or part thereof, or other geographic area of South Carolina's ocean shoreline shall be made available to the public for inspection at each of the Coastal Council's offices;

(b) The Coastal Council shall afford the public a thirty-day comment period;

(c) The Coastal Council shall afford the opportunity for a public hearing.

(2) The Coastal Council shall, following the consideration of all public comments, adopt in final form the baselines, erosion rates, and setback lines and shall include such information in the state plan.

F. Procedures for Appealing Baselines and Erosion Rates [Section 48-39-280(E)].

(1) Any coastal riparian landowner adversely affected who feels that the setback line, baseline or erosion rate as adopted by the Coastal Council is in error, upon submittal of substantiating evidence, shall be granted a review of the setback line, baseline, erosion rate, or a review of all three. The Permitting Committee of the Coastal Council shall hear all such requests for review.

(2) The landowner may appeal the decision of the Permitting Committee according to the general provisions of R.30-6. However, no intervenors are allowed to join

the appeal and no public notice is required for appeals under this section.

G. Procedure for Movement of Baseline After Renourishment.

(1) Coastal Council must receive a petition from the local government; or the landowners with notice to the local government, before the baseline can be moved pursuant to Section 48-39-280(A)(4). The petition cannot be submitted until the permitted beach nourishment project, which must have a minimum five-year design life, has been completed. The local government must certify to the Coastal Council that the proposal to move the baseline is consistent with the objectives and policies of its local comprehensive beachfront management plan.

(2) Petitioner must demonstrate an ongoing commitment to fund a future renourishment project with the same or greater design life than the original project using an acceptable funding option.

(3) The Petitioner must prove that it possesses or has obtained all necessary legal authority to perform the nourishment project in the future, excluding environmental regulatory permits.

(4) Petitioner must submit survey data in the following format to demonstrate the beach has been stabilized by the nourishment project:

(a) A minimum of three sets of survey data from the stations (monuments) designated in the project permit must be submitted. This will include all stations within the construction limits (maximum allowable profile spacing is 1,000 feet) and stations within 2,000 feet of each end of the project. These surveys will be taken at three month intervals, beginning at the time of project construction completion.

(b) Semi-annual surveys of the project beach during years two and three after project construction must be performed and submitted to Council to document beach stability.

(5) Coastal Council will evaluate the survey data to determine beach stability. Stability is defined in (10) below. If the beach has not stabilized in the first six months following construction, additional subsequent surveys will be evaluated to determine stability.

(6) The project must be constructed according to the permit design at an elevation which will maintain a dry sand beach. The maintenance of the dry sand beach will be evaluated in the same manner as stability, using the survey data.

(7) The Petitioner must show an ongoing financial commitment to renourishment which will stabilize and maintain the dry sand beach at all stages of the tide for the foreseeable future. The Council defines foreseeable future as at least ten years from the date the original project achieved stability.

(8) The Coastal Council will move the baseline when all of the above criteria have been met. The new baseline will be located on the landward edge of the existing erosion control device or at a position determined by Coastal Council using the method described in Section 48-39-280(A)(1).

(9) No new construction may occur in the area between the former baseline and the new baseline for three years after the initial beach nourishment project has been completed. The project is "completed" when it has stabilized in the manner described in (10) below. Reconstruction of habitable structures and pools is not considered new construction for purposes of this section. Additions are considered new construction.

(10) The following definition will be used by Coastal Council to define

"stability": A renourished beach is stabilized when field observations and quarterly surveys of the project beach, conducted for a minimum of six months following construction completion, demonstrate only normal long-term erosion patterns and losses are affecting the nourished beach. Council may consider any or all of the following in determining stability: profile characteristics and changes (volumetric and contour changes) and sediment analyses.

R.30-15. ACTIVITIES ALLOWED SEAWARD OF BASELINE.

A. Wooden Walkways:

Wooden walkways no larger in width than six feet are the only structures allowed seaward of the baseline that do not require a Coastal Council permit.

B. Small Wooden Decks:

Wooden decks seaward of the baseline require a Coastal Council permit. These decks should be no larger than one hundred and forty-four square feet.

C. Fishing Piers:

(1) New fishing piers require a Coastal Council permit and must be open to the public. See R.30-13(R).

(2) Those fishing piers with their associated structures including, but not limited to, bait shops, restrooms, restaurants, and arcades which existed September 21, 1989, may be rebuilt if they are constructed to the same dimensions and utilized for the same purposes and remain open to the public. In addition, those fishing piers with their associated structures which existed on September 21, 1989, that were privately owned, privately maintained, and not open to the public on this date may be rebuilt and used for the same purposes if they are constructed to the same dimensions. A Coastal Council permit is required.

D. Golf Courses:

Golf Courses require a Coastal Council permit pursuant to the criteria set forth in R.30-13(Q).

E. Normal Landscaping:

Normal landscaping requires a Coastal Council permit pursuant to the criteria set forth in R.30-13(F).

F. Special Permits:

The Coastal Council's Permitting Committee is the committee to consider applications for special permits.

Special permits are to be issued only in situations where without such a permit, the property owner would have no reasonable use of his property, or when an overriding public benefit can be demonstrated.

When issuing special permits, the Permitting Committee shall consider the legislative findings and policies as set forth in Sections 48-39-30, 48-39-250 and 48-39-260. Specifically, the following criteria shall serve as guidelines when issuing special permits:

(1) The property suffers a singular disadvantage through the operation of this Act, which disadvantage does not apply to neighboring properties, and because of this disadvantage, the property owner is unable to make any reasonable use of the affected property.

(2) A structure cannot be constructed or reconstructed on a primary oceanfront dune or on the active beach, and in the event that the beach erodes so that in the future the permitted habitable structure is located on the active beach, the property owner agrees to remove the structure at his own expense.

(3) The decision to grant a special permit shall not be based purely on economic considerations.

(4) There shall be no adverse impact on the stated policies of the Beachfront Management Act, including the policies protecting the sand dunes and preservation of the dry sand beach.

(5) The granting of a special permit shall not create a situation contrary to the public health, safety or welfare.

(6) In determining whether or not a permit is contrary to the public health, safety or welfare, the Permitting Committee shall consider a) the erosion rate at the site, b) how soon the structure will be located on the active beach, c) whether or not the proposed structure meets American National Standards Institute building standards, and/or d) the potential cumulative effect that similar structures will have upon the beach/dune system.

(7) Necessary components of habitable structures, such as sewer lines, septic tanks and utilities, do not require separate special permits. However, decking, patios, driveways, etc., are not considered as necessary components of habitable structures and therefore these items must be shown on the permit application.

G. Pools:

Pools may be reconstructed if they are landward of an existing functional erosion control structure or device provided a Coastal Council permit is obtained.

R.30-16. DOCUMENTATION REQUIREMENTS BEFORE COMMENCING ACTIVITIES BETWEEN SETBACK LINE AND BASELINE.

A. Notification Procedure:

(1) Activities requiring written notification to and written response from Coastal Council:

(a) Construction of new habitable structures at least partially seaward of the forty year setback line.

(b) Additions to habitable structures.

(c) Replacement of habitable structures.

(d) Construction of new pools between the baseline and the setback line and landward of an erosion control device which existed June 25, 1990.

(e) Replacement of pools.

(2) Information required:

(a) New habitable structures and additions to habitable structures:

(i) heated square footage of the proposed habitable structure or proposed addition.

(ii) plat showing footprint and cross section showing foundation of new structure as located on lot. Also, all property lines, setback lines and any parking requirements which may be in effect must be shown. The structure or addition must be located as far landward on the property as practicable as determined by Coastal Council.

(iii) for additions, the plat must clearly differentiate between the original structure and proposed additions.

(b) Replacement structures:

(i) heated square footage of original and proposed replacement structure.

(ii) linear footage along the coast of proposed replacement and original structure.

(iii) plat showing footprint and cross section showing foundation of proposed replacement structure.

(c) Replacement of destroyed pools will require a plat showing footprint and cross section of the original and replacement pool.

R.30-17. APPLICATION PROCEDURES FOR GENERAL PERMITS PURSUANT TO SECTION 48-39-290(B)(4).

A. General Guidelines:

Applicants for general permits shall be required to submit the following information:

(1) Completed Coastal Council application form.

(2) Proof that the adjacent property owners and the local governmental body having jurisdiction over the site have been notified of the proposed activity by certified mail through the use of the following notification:

(Applicant) has applied to the South Carolina Coastal Council for a General Permit to (description of activity) at (address or legal description of property) in (city and county). Comments on this application should be mailed to South Carolina Coastal Council at the following address: 4130 Faber Place, Suite 300, Charleston, South Carolina 29405, by (insert date, fifteen days after date of certified mailing).

The applicant must furnish the certified mail stubs to the South Carolina Coastal Council at the time of mailing. The General Permit cannot be issued until the fifteen day comment period has expired.

(3) Proof of publication that the above public notice was placed in a newspaper published in the county where the proposed activity is taking place must be forwarded to the Coastal Council office processing the application. General Permits cannot be issued until the fifteen day comment period as advertized in the newspaper has expired.

(4) A brief description of the proposed work, its purpose and intended use. A drawing or plat may be required as well as a description of the method of construction, and identification of materials and equipment to be used.

Information on activities eligible for General Permits may be obtained from Coastal Council.

R.30-20 BEACH RESTORATION FUND.

A. Funding for Projects: Beach restoration projects will follow a cyclical pattern that is conditioned by the availability of funds. The Council will make an initial announcement when applications are to be submitted. The announcement will specify the time of submission and the format to be used. There will be at least a 90 day period for receiving applications. Projects that are not funded during the initial cycle will be eligible for consideration at the next cycle which will start when additional funds become available. Communities will be given the opportunity to update their applications for subsequent cycles to show any changed conditions.

B. Application Process: Applications for beach nourishment must be submitted to the Coastal Council. The applications will be reviewed by the staff for completeness and eligibility requirements. The applications will then be considered by the Administration and Finance Committee of the Coastal Council, where input from the applicant and the public will be solicited and considered. In evaluating the project applications the Council will be guided by the legislated criteria and guidelines, and, the following consideration:

(1) Environmental impact of the project.

(2) Public recreational benefit.

(3) Expected useful life of project.

(4) Protection benefit of project.

(5) Extent of support for project.

C. Ranking of Projects: The Committee will rank the projects in priority sequence and will make a recommendation to the Council. Council approval of the Committee recommendation will establish project priorities and subsequent commitment of funds as funds become available.

D. Necessary Permit Application Information: Any eligible local government desiring to submit an application for Beach Restoration Funds should submit a completed permit application to the South Carolina Coastal Council. The following information should be submitted on or attached to the permit application form.

(1) The name, address, and telephone number of the local government making the application and the name and telephone number of the designated liaison agent.

(2) The name, address, and telephone number of the project consulting engineer or other agent.

(3) A resolution adopted by the applicant's governing body approving the submittal of an application for beach restoration funds, and committing to the local funding requirements necessary to complete the project.

(4) The Chief Executive Officer of the governing body should sign the application.

(5) A narrative description of the project to include:

(a) Project limits.

(b) Quantity of fill.

(c) Borrow sites.

(d) Expected design life of project.

(e) Project construction duration and time of year.

(f) Estimated first cost and annual maintenance costs.

(g) A statement as to the source and availability of all local, state, and federal funds for the project.

(h) Benefits to be realized by the project.

(i) Environmental impacts.

(j) Public access to renourished area.

(6) Map or maps showing:

(a) Project site plan and borrow area locations.

(b) Upland ownership of property, indicating federal, state, local, or private ownership.

(c) Public access points.

(d) Public parking areas.

(e) Private parking areas.

(f) Baseline and setback line(s).

(7) Any engineering studies that have been completed concerning the project, and plans for post-project monitoring.

(8) Approved beach restoration plan for the community which includes an analysis of beach erosion control alternatives.

E. Minimum Regulatory Requirements: All applications will be evaluated to determine if the project meets the minimum regulatory requirements and then ranked on a relative basis according to the five considerations listed in 20.F. The minimum regulatory re-

quirements are:

(1) Prior to July 1, 1991:

(a) A state-approved shorefront management plan or a state-approved local nourishment plan, and

(b) A state and locally approved beach access plan with an implementation schedule. The plan must include an inventory of current access and parking, an analysis of current and future demand, and a strategy for enhancing public access and parking, and

(c) A complete application.

(2) After July 1, 1991:

(a) A state approved beach management plan developed in accordance with Section 48-39-350 of the South Carolina Coastal Zone Management Act, as amended, and

(b) A complete application.

F. Project Evaluation Considerations: If the project meets the minimum regulation requirements, the project is then evaluated and ranked using the following considerations:

(1) Environmental impact of project.
(2) Public recreational benefit.
(3) Expected useful life of project.
(4) Protection benefit of project.
(5) Extent of support for project.

G. Administration of the Project: The execution and administration of the project will be coordinated by the Coastal Council according to regulations of the State Budget and Control Board regarding procurement of architectural/engineering services and for construction of permanent improvements projects.

CPJ

SOUTH
CAROLINA
COASTAL
COUNCIL

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130 Faber Place
uite 300
harleston, S.C. 29405
03) 744-5838
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illiam W. Jones, Jr.
hairman

Wayne Beam, Ph.D.
recutive Director

PUBLIC NOTICE

TO ALL INTERESTED PARTIES

General Permit GP-91-002

The South Carolina Coastal Council is proposing to issue General Permit GP-91-002 to allow the construction of wingwalls in conjunction with existing, functional erosion control devices seaward of the 40 year setback line. The Council does not assess wingwalls when it performs a damage assessment of a shore parallel seawall, pursuant to the mandates of Section 48-39-290 of the Coastal Zone Management Act. Wingwalls generally do not have the same deleterious effects on the beach that seawalls do, as they are not parallel to the shore. Wingwalls may be authorized under this proposed General Permit to allow a property owner to protect the sides of his lot when an adjacent seawall has been destroyed or when adjacent property does not contain an erosion control device. The Coastal Council is proposing the issuance of this General Permit to allow for the construction, reconstruction and repair of wingwalls when, in their opinion, they cause no harm to the beach.

To avail themselves of this general permit, applicants will be required to complete a general permit application and submit drawings. The adjacent property owners and local government body having jurisdiction over the site must be notified of the proposed activity by certified mail. The applicant must use the following format for this notification:

(Applicant) has applied to the South Carolina Coastal Council for a General permit to install a wingwall at (address or legal description of property) in (city and county). Comments on this application should be mailed to the South Carolina Coastal Council at the following address: 4130 Faber Place, Suite 300, Charleston, South Carolina 29405 by (insert date, 10 days after date of certified mailing).

The applicant must furnish the certified mail stubs to the South Carolina Coastal Council at the time of mailing. The General Permit cannot be issued until the 10 day comment period has expired.

Comments will be received on this General Permit at the address listed below until December 21, 1991.

South Carolina Coastal Council
4130 Faber Place, Suite 300
Charleston, South Carolina 29405

November 21, 1991

Printed on Recycled Paper

SOUTH CAROLINA COASTAL COUNCIL PERMIT

Permittee: General Public - State of South Carolina

Permit Number: GP-91-002

Date of Issuance:

Expiration Date: Three years after date of issuance

Location: on the Atlantic Ocean seaward of the 40 year setback line in Charleston, Dorchester, Berkeley, Beaufort, Jasper, Colleton, Horry, Georgetown counties

This permit is issued under the provisions of the Beach Management Act of 1990 of the South Carolina General Assembly and the Final Rules and Regulations of the South Carolina Coastal Council. Please carefully read the project description and any Special Conditions which may appear on this permit as they will affect the work which is allowed . If no Special Conditions have been placed on this permit, then the work is authorized as described in the project description. The general conditions are also a part of this permit and should be read in their entirety.

DESCRIPTION OF PROJECT:

The plans submitted by you, attached hereto, show the proposed work consists of installing wingwalls. This permit has been approved as stated, subject to the following conditions.

SPECIAL CONDITIONS:

1. Wingwalls shall be constructed perpendicular to existing, functional, shore-parallel erosion control devices.

2. Wingwalls may only be built where shoreline retreat is occurring on adjacent property.

3. Wingwall materials may not exceed side property boundaries.

4. If the shore parallel erosion control device is determined by the Council to be destroyed beyond repair pursant to Section 48-39-290 (2) (iv) then all wingwall material must be removed.

SEE NEXT PAGE

GENERAL CONDITIONS for the GENERAL PERMITS:
This permit is expressly contingent upon the following conditions which are binding on the permittee:

1. That the permittee, in accepting this permit, covenants and agrees to comply with and abide by the provisions and conditions herein and assumes all responsibility and liability and agrees to save the South Carolina Coastal Council and the State of South Carolina, its employees or representatives, harmless from all claims of damage arising out of operations conducted pursuant to this permit.

2. That if the activity authorized herein is not constructed or completed within one year of the date of issuance, this permit shall automatically expire. A request, in writing, for an extension of time shall be made not less than sixty days prior to the expiration date.

3. That all authorized work shall be conducted in a manner that minimizes any adverse impact on fish, wildlife and water quality.

4. That this permit does not relieve the permittee from the requirements of obtaining a permit from the U. S. Army Corps of Engineers or any other applicable federal agency, nor from the necessity of complying with all applicable federal, state and/or local laws, ordinances, and zoning regulations. This permit is granted subject to the rights of the State of South Carolina in the navigable waters and shall be subject, further to all rights held by the State of South Carolina under the public trust doctrine as well as any other right the State may have in the waters and submerged lands of the coast.

5. That this permit does not convey, expressly or impliedly, any property rights in real estate or material nor any exclusive privileges; nor does it authorize the permittee to alienate, diminish, infringe upon or otherwise restrict the property rights of any other person or the public; nor shall this permit be interpreted as appropriating public properties for private use.

6. That the permittee shall permit the Council or its authorized agents or representatives to make periodic inspections at any time deemed necessary in order to ensure that the activity being performed is in accordance with the terms and conditions of this permit.

7. That any abandonment of the permitted activity will require restoration of the area to a satisfactory condition as determined by the Coastal Council.

8. That this permit may not be transferred to a third party without prior written notice to the Coastal Council, either by the transferee's written agreement to comply with all terms and conditions of this permit or by the transferred subscribing to this permit and thereby agreeing to comply with all terms and conditions of this permit.

9. That if the display of lights and signals on any structure or work authorized herein is not otherwise provided for by law, such lights and special signals as may be prescribed by the United States Coast Guard shall be installed and maintained by and at the expense of the permittee.

10. That the Council shall be notified in writing upon the commencement of work and that the permit placard or a copy of the placard shall be posted in a conspicuous place at the project site during the entire period of work.

11. That the structure or work authorized herein shall be in accordance with the plans and drawings attached hereto, and shall be maintained in good condition. Failure to build in accordance with the plans and drawings attached hereto, or failure to maintain the structure in good condition shall result in the revocation of this permit.

12. That the authorization for activities or construction of structures herein constitutes a revocable license. The Coastal Council may require the permittee to modify any permitted activity or to remove structures authorized herein, if and when it is determined by Council that such activity or structure violates the public's health, safety, or welfare, or the activity is inconsistent with the public trust doctrine. Modification of an activity or removal of a structure shall be ordered only after reasonable notice stating the reasons therefore and the opportunity for the permittee to respond in writing. When the permittee is notified that Coastal Council intends to revoke or modify the permit, permittee agrees to immediately stop work pending resolution of the revocation.

13. That the Coastal Council shall have the right to revoke, suspend, or modify this permit in the event it is determined the permitted structure (1) significantly impacts the public health, safety, and welfare, and/or is violative of Section 48-39-150, (2) that the information and data which the permittee or any other agencies have provided in connection with the permit application is either false, incomplete or inaccurate, or (3) that the activity is not in compliance with the drawings submitted by the applicant. That the permittee, upon receipt of the Coastal Council's
written intent to revoke, suspend, or modify the permit has the right to a hearing. Prior to revocation, suspension, or modification of this permit, the Coastal Council shall provide written notification of this permit, the Coastal Council shall provide written notification of intent to revoke to the Permittee, and Permittee can respond with a written explanation to the Coastal Council. (South Carolina Code Section 1-023-370 shall govern the procedure for revocation, suspension or modification herein described).

14. That any modification, suspension or revocation of this permit shall not be the basis of any claim for damages against the Coastal Council or the State of South Carolina or any employee, agent, or representative of the Coastal Council or the State of South Carolina.

15. That all activities authorized herein shall, if they involve a discharge or deposit into navigable waters or ocean waters, be at all times consistent with all applicable water quality standards, effluent limitations and standards of performance, prohibitions, and pretreatment standards established pursuant to applicable federal, state and local laws.

16. That extreme care shall be exercised to prevent any adverse or undesirable effects from this work on the property of others. This permit authorizes no invasion of adjacent private property, and Council assumes no responsibility or liability from any claims of damage arising out of any operations conducted by the permittee pursuant to this permit.

SOUTH CAROLINA COASTAL COUNCIL

Ashley Corporate Center
4130 Faber Place
Suite 300
Charleston, S.C. 29405
(803) 744-5838
FAX 744-5847

William W. Jones, Jr.
Chairman

H. Wayne Beam, Ph.D.
Executive Director

PUBLIC NOTICE

It has come to the attention of the South Carolina Coastal Council that many property owners having erosion control devices damaged or destroyed during Hurricane Hugo have not applied for HUB permits to rebuild erosion control devices destroyed beyond repair or for release letters to repair such structures if damaged. Further, property owners who have obtained release letters or HUB permits have not completed the work. The Council has determined that all repair and restoration work on erosion control structures damaged or destroyed during Hurricane Hugo must be completed by March 1, 1992. Any person who has not obtained a release letter for repair or a HUB permit for reconstruction must immediately apply for a permit and complete the work by that date. Likewise, all holders of HUB permits or release letters must complete the work by the same date.

In order to confirm that your structure is still subject to repair, you must contact the local Coastal Council office prior to construction. It is important to timely complete these repairs for the following reasons:

1. If there has been further deterioration of your erosion control structure since September of 1989, repair or restoration may become legally impossible. This is particularly true if there is another storm.

2. The law has changed in recent years, and there is no certainty that existing permits or release letters will continue to be honored indefinitely.

This notice does not relate to any additional obligation that you may have to obtain permission or a permit from local government. Should you have any questions concerning this matter, please notify the South Carolina Coastal Council office by calling 626-7217.

South Carolina Coastal Council

September 23, 1991

Printed on Recycled Paper

South Carolina Coastal Council

General Permit

HU B

WORK: The replacement of erosion control devices destroyed beyond repair which protect a habitable structure

WHERE: Seaward of the Coastal Council 40 year setback zone in the Counties of Horry, Georgetown, and Charleston

DESCRIPTION: The replacement of erosion control devices destroyed beyond repair is allowed by this general permit provided that:

1. Vertical erosion control devices are prohibited. Replacement devices must have a slope no steeper than 1 on 1 (45 degrees).

2. A drawing must be submitted showing the location, dimensions and design of construction including a cross-section of the structure.

3. An easement or letter of permission must be obtained if the structure crosses a property line or is physically connected to an adjacent structure.

4. A plan must be submitted showing the existing habitable structure and the replaced erosion control device. The plan must document that the erosion control device is moved as far landward as possible. The Council has determined, to meet this requirement, that the top of the revetment must be placed ten feet from the foundation of the habitable structure. If the revetment can be placed entirely outside of the setback, this requirement does not apply.

5. The plan must show the location of the destroyed erosion control structure. The replaced structure must be shown to be consistent with (Section 48-39-290(C)(2).

The replacement erosion control device protects a habitable structure and is moved as far landward as possible, and the most seaward point of the replaced erosion control device does not extend further seaward than the original vertical erosion control device or the landward crest of the original sloping revetment unless this requirement would result in the replaced

which would intersect with or damage the existing habitable structure.

6. The location and design of the structure must be approved by council.

7. Wing walls or revetments, may be allowed under certain circumstances but must be approved by Council.

8. The owner renourishes the beach on a yearly basis with not less than one and one-half times the volume of sand lost due to erosion. The owner must notify the Council of such renourishment on a periodic basis. Property owners have until one year from onset of construction of the erosion control device to perform the initial renourishment. All sand sources must first be approved by Coastal Council staff.

9. A permit letter of approval or letter of intent from the local governing body must be submitted to the Council. A concurrent application may be made, however, the Council will not act on the permit until local approval is received.

Any construction or alteration which is beyond normal maintenance and repair as defined by law requires the owner to notify the Council and/or apply for a permit.

EFFECTIVE DATE: September 29, 1989

EXPIRATION DATE: September 29, 1992

SOUTH CAROLINA COASTAL COUNCIL
GENERAL PERMIT
GP-90-A

WORK: Installation or Repair of Underground and Overhead Water, Sewer, Gas, Electrical, Telephone Lines,and Cable Service Lines.

WHERE: Within the Coastal Council 40-year setback zone and landward of the baseline of the Counties of Horry, Georgetown, Charleston, Colleton, Beaufort, and Jasper

DESCRIPTION: The placement, maintenance, repair, and replacement of service lines is allowed under this general permit provided that following conditions are met:

1) All service lines must be located as far landward as possible on the individual lots of record.

2) Lines, junction boxes, poles, and accessory features will be relocated landward as far as possible in the event there is a need for replacement.

3) Dunes altered during construction must be reconfigured and revegetated in accordance with Council's guidelines.

4) All work performed pursuant to this permit must be in compliance with local ordinances governing such work.

5) The permittee must obtain a construction placard from the Council before any work may be performed pursuant to this permit.

6) The Council reserves the right to require an individual permit if, in its descretion, conditions warrant.

SOUTH CAROLINA COASTAL COUNCIL
GENERAL PERMIT
GP-90-B

WORK: Drainage Structures

WHERE: Within the Coastal Council 40-year setback zone and landward of the baseline of the counties of Horry, Georgetown, Charleston, Colleton, Beaufort, and Jasper

DESCRIPTION: The placement, maintenance and repair, and replacement of drainage structures which do not go directly to the beach is allowed under this general permit provided the following conditions are met:

1) For new construction, the structures are part of a Coastal Council approved storm water management plan or drainage plan.

2) The replacement of drainage structures does not involve an increase in the size of the existing structures.

3) Any construction involving drainage structures does not disturb the existing dune and its accompanying vegetation system.

4) Provided the drainage structure complies with the local drainage plan for the setback zone.

5) No new drainage structures can be put onto the beach under this permit.

6) All work performed pursuant to this permit must be in compliance with all local ordinances governing such work.

7) The permittee must obtain a construction placard from the Council before any work may be peformed pursuant to this permit.

8) The disturbed areas must be revegetated.

9) The Council reserves the right to require an individual permit if, in its discretion, conditions warrant.

SOUTH CAROLINA COASTAL COUNCIL
GENERAL PERMIT
GP-90-C

WORK: Landscaping
Fill for Landscaping

WHERE: Seaward of the Coastal Council 40 year setback line in the counties of Horry, Georgetown, Charleston, Colleton, Beaufort, and Jasper

DESCRIPTION: The installation of landscape and plants, materials and associated amenities and fill for this landscaping is allowed under this general permit provided the following conditions are met:

1) The entire landscaping plan is submitted to and approved by Council. No retaining wall that extends below existing grade will be allowed.

2) No sand from the beach is used as backfill.

3) No native plant material on the frontal dunes is disturbed unless it can be demonstrated the condition of the dune will be improved.

4) Only native salt tolerant species may be planted on dunes and must be approved by Council staff.

5) Adequate measures are taken to contain fill and irrigation run off.

6) No leveling of dunes is allowed.

7) All work performed pursuant to this general permit must be in compliance with all local ordinances governing such work.

8) The permittee must obtain a construction placard from the Council before any work may be performed under this permit.

9) The Council reserves the right to require an individual permit if, in its discretion, condition warrant.

SOUTH CAROLINA COASTAL COUNCIL
GENERAL PERMIT
GP-90-D

WORK: Fences, Lighting, Trash Receptacles (dumpsters, etc.), Sidewalks, and Signs

WHERE: Within the Coastal Council 40-year setback zone and landward of the baseline of the counties of Horry, Georgetown, Charleston, Colleton, Beaufort, and Jasper

DESCRIPTION: The placement, maintenance and repair, and replacement of fences, lighting, trash receptacles, sidewalks, and signs is allowed under this permit provided the following conditions are met:

1) Provided construction does not alter or impact in <u>any way</u> existing sand dunes, dune vegetation, or beach areas.

2) Provided existing concrete sidewalks attendant to public streets may be replaced within the same footprint.

3) Provided trash receptacles (not dumpsters) may be attached to access ways or placed on the beach for a limited period when the local government determines there to be a need for such receptacles.

4) Provided signs are attached to attendant structures or mail receptacles or be informational signs deemed necessary by state or local government for public health and safety.

5) Provided that no fence can be used or designed as a retaining wall.

6) Provided that all work performed pursuant to this permit must be in compliance with all local ordinances governing such work.

7) Provided that the permittee must obtain a construction placard from the Council before any work may be performed pursuant to this permit.

8) The Council reserves the right to require an individual permit if, in its discretion, conditions warrant.

SOUTH CAROLINA COASTAL COUNCIL
GENERAL PERMIT
GP-90-E

WORK: Non-Attached Decks

WHERE: Seaward of the Coastal Council 40-year setback line and the baseline of the Counties of Horry, Georgetown, Charleston, Colleton, Beaufort, and Jasper

DESCRIPTION: The placement, maintenance and repair, and replacement of decks is allowed under this permit provided that following conditions are met:

Non-attached decks

a) Provided the structures are constructed of wood.

b) Provided the size of any decks do not exceed 144 square feet.

c) Provided the deck does not extend seaward of the primary dune or on the active beach.

d) Provided there are no more than one of these structures per lot unless a limit of one would cause an unnecessary hardship.

e) Provided that if the beach erodes to the point that the structure is located on the active beach, it will be removed or relocated landward by the owner.

f) All work performed pursuant to this permit must be in compliance with all local ordinances governing such work.

g) The permittee must obtain a construction placard from the Council before any work may be performed pursuant to this permit.

h) The Council reserves the right to require an individual permit if, in its discretion, conditions warrant.

SOUTH CAROLINA COASTAL COUNCIL
GENERAL PERMIT
GP-90-F

WORK: Sand Fences, Minor Beach Renourishment, Dune Revegetation

WHERE: Within the Coastal Council 40-year setback zone of the Counties of Horry, Georgetown, Charleston, Colleton, Beaufort, and Jasper.

DESCRIPTION: In an effort to provide beachfront property owners with passive, low-cost stabilization methods, this permit is issued to allow for placement, maintenance and repair, and replacement of sand fencing, dune revegetation, and minor renourishment. These methods should not be viewed as erosion control, but rather as enhancement and stabilization techniques. Since a broad beach and a healthy dune provide the best storm buffer, these methods will aid in the natural beach process.

Sand Fencing

a) The fence material is biodegradable.

b) The fences are installed according to Attachment "A".

c) The fences are installed in a manner so as not to impede turtle nesting. The Coastal Council may at any time have sand fences moved or removed entirely if the fences are found impacting nesting activities or, in the Council's opinion, have the potential to impact turtle nesting activities.

d) Provided the fence is placed above the highest wave up rush.

e) The fencing in no way impedes public access.

f) The fence is installed in a temporary manner.

g) If fence material is damaged, debris must be removed from the beach area by the owner in an expeditious manner.

h) If the fence is judged to be having a detrimental impact by the Council, it must be removed by the owner.

Revegetation

Property owners are encouraged to plant vegetation as a means of stabilizing oceanfront dunes. The roots of plant material tend to bind sand to dunes, while plant foilage serves to trap blowing sand. Suggested plant varieties include, but are not limited to, american beach grass (Ammophila breviligulata), bitter panicum (Panicum anarum), and sea oats (Uniola paniculata).

Vegetation shall be planted in early spring, before May 30 if possible, and should be planted, irrigated and fertilized according to nursery instructions or Coastal Council's "Dunes Restoration" guidelines. Coastal Council staff must inspect the site first and establish a need.

Minor Renourishment

Minor renourishment is allowed in an attempt to build and maintain healthy dunes.

a) Sand must be compatible in size and grain color and from an upland source approved by Council staff.

b) Must be performed between November and March.

c) Council staff must inspect the site and establish that there is a need for the project.

d) Sand which has drifted off the beach and dunes may be returned to the active beach and used to repair gaps in dunes as part of this permit. This may include sand which has accumulated in parking lots, roadways, pool areas and against buildings.

All projects pursuant to this general permit must be in compliance with local ordinances governing such actions.

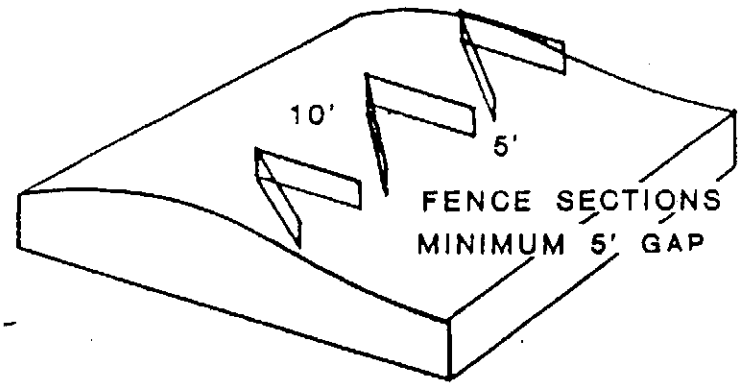
The permittee must obtain a construction placard from the Council before any work can be performed under this permit.

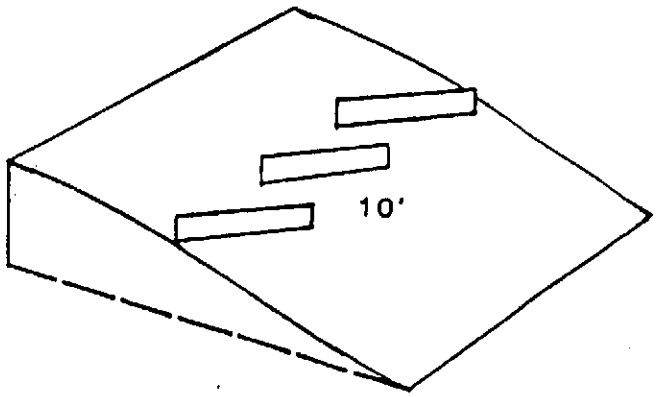
The Council reserves the right to require an individual permit if, in its discretion, conditions warrant.

SAND FENCING

PERMITTED CONFIGURATIONS OF FENCE TO TRAP WIND-BLOWN SAND

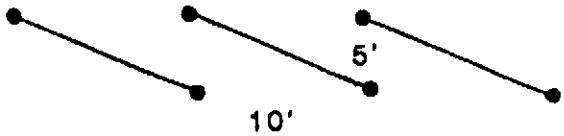
NORMAL DUNE





SECTION ANGLE MAY VARY
90 TO 140 DEGREES

PERMITTED VARIATION



SOUTH CAROLINA COASTAL COUNCIL
GENERAL PERMIT
GP-90-G

WORK: The Construction or Reconstruction of Drives and Parking Lots

WHERE: Within the Coastal Council 40-year setback zone and landward of the baseline of the counties of Horry, Georgetown, Charleston, Colleton, Beaufort, and Jasper

DESCRIPTION: The construction or reconstruction of drives and parking lots within the setback area are allowed under this General Permit provided the following conditions shall be met:

1) On front row lots, new driveways and/or parking lots shall not extend seaward of habitable structures.

2) Reconstruction of existing drives and/or parking lots shall not exceed the footprint of the original drive or parking lot.

3) No sand from the beach may be used as foundation material.

4) No alteration of the dune or dune vegetation is allowed unless no alternative exists.

5) At the Council's discretion, a Stormwater Management Plan may be required before a construction placard is issued pursuant to this general permit.

6) Parking lots of more than ten spaces will require a separate Council permit.

7) Expansion of parking lots is approved by this general permit provided the above criteria are met and the completed lot does not exceed ten spaces.

8) Provided that the work complies with all local zoning and building codes.

9) Provided that the permittee obtains a construction placard from the Council before any work can be performed under this permit.

10) Best Management Practices (BMPs) such as hay bales, silt fences, mulches, or other appropriate means must be used as necessary during the construction phase to prevent erosion to adjacent waters and wetlands. Upon project completion the disturbed areas must be stabilized as soon as possible with grass or other appropriate vegetative cover.

11) The Council reserves the right to require an individual permit if, in its discretion, conditions warrant.

APPENDIX G

SCCC Guidelines for Sand Scraping and Sand Bagging

SOUTH CAROLINA COASTAL COUNCIL

Guidelines for Emergency Use of Sandbags

Sandbags may be used to construct temporary protection for coastal structures, in emergency situations. A public official may declare an emergency if he determines that a structure is in imminent danger as a result of extreme erosion or damage to an erosion control structure. The Coastal Council reserves the right to evaluate the need for the declared emergency and the appropriate use of sand bags.

1. The bags should be commercially manufactured for the purpose of holding sand or made of burlap.

2. The bags shall be of a maximum size of 5 gallons. (0.66 Cu. ft.)

3. The bags shall be filled and installed by hand.

4. The bags may be placed no farther seaward than is necessary to protect a habitable structure or to allow repair to an erosion control structure. In no case may sandbags protect a dune or be used to retard normal shoreline movement.

5. The bags shall be stacked at an angle not steeper than 45 degrees and may not exceed 10 feet from the base of the structure.

6. Only clean sand may be placed in these bags.

7. Beach sand may be used to fill these bags but must be returned to the beach when the bags are removed.

8. The bags must be removed within 3 months of installation unless they are completely buried by a dune.

9. The property owner is responsible for day-to-day maintenance of the sandbags to insure that they remain in place and in good repair.

10. The property owner is responsible for complete removal of the bags if they remain uncovered or become uncovered at some future time, and restoration of the area to a natural or pre-emergency condition as determined by the Coastal Council.

SOUTH CAROLINA COASTAL COUNCIL

Guidelines for Emergency Sand Scraping

Scraping of beach sand shall be discouraged. This practice has been shown to be of little practical value and in many cases produces an overall adverse effect on the beach system. However, in view of no feasible alternative, a public official may issue an emergency order and allow sand scraping for a building which is in imminent danger as a result of storm related erosion. Sand scraping must be minimized to only that necessary to prevent further damage to buildings from storm related erosion. The Coastal Council reserves the right to evaluate the need for the declared emergency and the appropriateness of scraping sand.

1. Emergency sand scraping may only be ordered and performed seaward of existing buildings. It may not be allowed in front of erosion control devices.

2. Sand may be scraped only from the intertidal beach and only between extended property lines of the affected property.

3. The depth of scraping may not exceed one foot.

4. Sand may be placed against an erosional escarpment or to replace an eroded dune. This dune shall not exceed 6 feet above grade or 20 feet in width. Sand may be used to shore up a habitable structure in imminent danger of collapse. (see number 5).

5. No sand may be placed behind an erosion control device.

6. The sand scraping may be performed one time only under one emergency order.

7. The applicant shall provide before and after photographs to assist in the determination of an emergency and compliance with these guidelines. Photos shall be site specific, labeled, and dated.

8. A copy of these guidelines signed by the property owner or his agent shall be forwarded to the nearest Coastal Council office when the order is issued.

9. A copy of these signed guidelines shall be in the possession of anyone performing beach scraping.

10. All work performed pursuant to this emergency order must be in compliance with all local ordinances governing such work.

APPENDIX H

Planting Guidelines for Dune Vegetation

Uniola paniculata L. - Sea-Oats

PLANT CHARACTERISTICS

Ecological Function/User Applications - sand stabilization; food source and cover for birds and small mammals; aesthetics.

Natural Geographic Distribution/Cold Hardiness - coastal dunes; Virginia to Florida and Gulf states.

Optimum Soil Type - well-drained, sandy or calcareous soils.

Resistance to Erosion - good, once established; withstands wind erosion well, but waves wash away soil and plants.

Potential Growth Rate - highly dependant on environmental conditions and maintenance; plants can grow laterally up to four feet per year after establishment; dense cover possible in three growing seasons; flowers in second or third year.

PLANT AVAILABILITY

Nursery Sources - liners, two- and four-inch pots, one- and three-gallon pots.

Natural Sources - generally not available in large quantities. Available as seeds or transplants on private property behind the 40-year setback line.

PLANTING GUIDELINES

Elevation - above limit of wave uprush.

Ground Slope - up to 30^0 (1 to 2).

Depth - top of root-ball four inches below sand surface (many planting failures have been attributed to not planting deeply enough).

Planting Window - Nursery stock: April through October; Field stock: November through March.

Density - one- and two-inch pots one and one-half feet O.C., increased spacing to three feet O.C. for large plants (three-gallon).

MAINTENANCE GUIDELINES

Watering - when planted, and weekly for first few months depending on rainfall.

Fertilization - one teaspoon per plant of a balanced, time-released fertilizer (14-4-14) incorporated when planted.

Weeding - remove and control exotics.

Pruning - after establishment may respond to careful clipping by producing more tillers; this activity may be prohibited - check with local/state authorities.

Source: Applied Technology and Management, Inc., 1991

Panicum amarum - Bitter Panicum; Beach Panicgrass

PLANT CHARACTERISTICS

Ecological Function/User Applications - sand trapping and stabilization; food source and cover for birds and small mammals.

Natural Geographic Distribution/Cold Hardiness - coastal dunes; Connecticut to Florida and Gulf states.

Optimum Soil Type - well-drained, sandy soils.

Resistance to Erosion - good, once established; withstands wind erosion well, but waves wash away soil and plants.

Potential Growth Rate - rapid (dense coverage in two to three growing seasons).

PLANT AVAILABILITY

Nursery Sources - liners, two- and four-inch pots; advance notice of plant quantities and/or a growing contract may be necessary for large quantities.

Natural Sources - cuttings or seeds from private property behind the 40-year setback line or from out-of-state sources.

PLANTING GUIDELINES

Elevation - above limit of wave uprush and highest spring tides.

Ground Slope - up to 30^0 (1 to 2).

Depth - top of root-ball four inches below sand surface.

Planting Window - Nursery stock: April through October; Field stock: November through March.

Density - small plants one and one-half feet O.C., large plants three feet O.C.

MAINTENANCE GUIDELINES

Watering - when planted, and during the first month unless heavy rainfall occurs.

Fertilization - incorporate one teaspoon per plant of a balanced, time-released fertilizer (14-4-14) when planted.

Weeding - remove and control exotics.

Pruning - lateral spread improved by clipping. This activity may be prohibited - check with local/state authorities.

Source: Applied Technology and Management, Inc., 1991