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GEORGETOWN COUNTY
COMPREHENSIVE BEACH MANAGEMENT PLAN

SECTION

APPENDICES

Introduction

The South Carolina Coastal Management Act was amended on July 1, 1988 to expand the beach management authority in the State's Coastal zone. Among other requirements, the new provisions require the State and coastal communities to prepare comprehensive beach management plans within 2 years of the effective date of the legislation, and to implement the plan within one year thereafter. Hurricane Hugo required caused these deadlines to be pushed back one year.

The Statute requires the beach management plan to address beach access, parking, oceanfront structures and buildings, erosion control devices, erosion rates, drainage structures and plans, endangered species, land use and post-hurricane preparedness. The purpose of the plan is to provide a detailed strategy to protect the beach and oceanfront property from erosion and to provide a healthy, dry beach for all citizens to enjoy.

Georgetown County contracted with the Waccamaw Regional Planning and Development Council to prepare the beach management plan. The plan consists of nine sections, which are included within. In addition to the text, there are twenty-five orthophoto base maps, each with a series of overlays which represent a portion of the plan.

STUDY AREA DESCRIPTION

Georgetown County is located on the coast of South Carolina, bounded on the north by the Pee Dee River, on the west by Williamsburg County and on the south by the South Santee River. The County is the eighth largest county in the State with 822 square miles of land area and 54 square miles of water area. Georgetown County is situated on the lower coastal plain and contains over 34 miles of coastline and seven inlets.

The study area for the beachfront management plan consists of the Waccamaw Neck portion of Georgetown County which is depicted on the following page. The Waccamaw Neck contains approximately 24 miles of beachfront and four inlets. It is bisected longitudinally by U.S. 17 and may be described as a growing resort community. The study area excludes the municipal jurisdiction of the Town of Pawleys Island. There are three inlet segments addressed by the Plan. They are referred to as DeBordieu, Litchfield and Garden City Point.

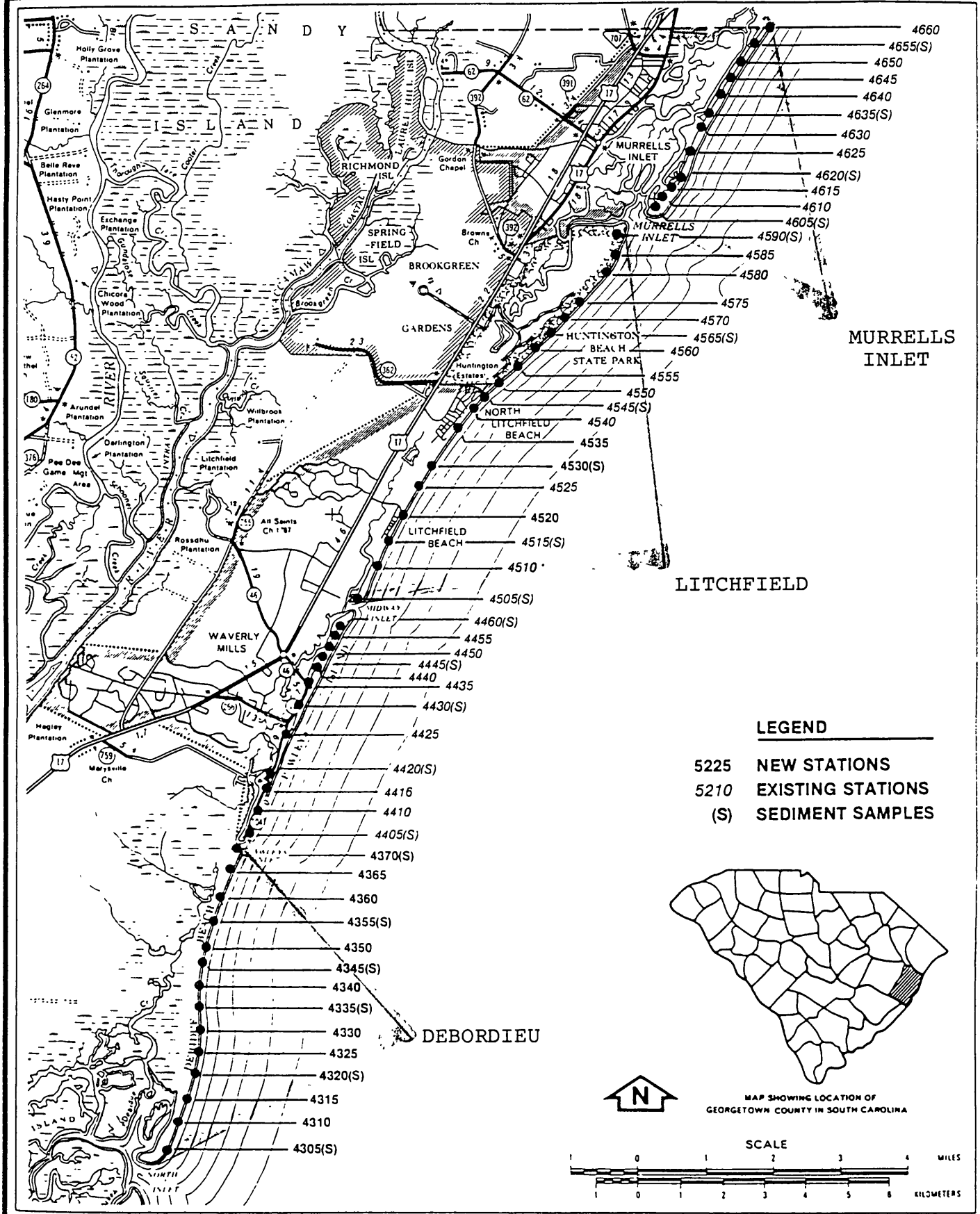

ILLUSTRATION 1

BEACH PROFILE SURVEY AND SEDIMENT SAMPLE STATION LOCATION MAP

Beach Use

It is difficult to quanitatively assess the County's current level of beach use. In order to attempt an assessment, it is necessary to make several assumptions. Logically, beachgoers on a given day will consist of a percentage of permanent residents living in the area, persons renting a house or motel room in the area and day visitors who drive to spend a day at the beach and the return home. In 1984, the Waccamaw Regional Planning and Development Council published a report entitled "Horry and Georgetown Counties, Socio-Economic Data by Study Periods Each Five Years, 1980 through 2005". A portion of this report was devoted to peak day population projections for very specific geographic areas, including the Waccamaw Neck.

Two traffic zones comprise the Waccamaw Neck. The dividing line between the two is the southern boundary of Brookgreen Gardens. Traffic zone 100002 consists of Murrells Inlet, Garden City Point and Brookgreen Gardens. Traffic zone 100001 consists of the remainder of the Waccamaw Neck. Projections for these traffic zones is shown on the table on the following page. It is projected that the peak day population of the Waccamaw Neck area in 1990 was 68,170 persons. This expected to increase by almost 62 percent by the year 20005 to over 110,000 persons.

Peak Day Population Projections for the Waccamaw Neck
1990 - 2005

YEAR AND TRAFFIC ZONE	PERMANENT POPULATION	OVERNIGHT VISITORS	DAY VISITORS	TOTAL
1990				
10001	7,511	32,898	8,684	49,093
10002	3,985	12,400	2,692	19,077
TOTAL	**11,496**	**55,298**	**11,376**	**68,170**
1995				
10001	8,842	40,797	10,678	60,317
10002	4,714	13,723	3,310	21,747
TOTAL	**13,556**	**54,520**	**13,988**	**82,064**
2000				
10001	10,274	48,695	12,671	71,640
10002	5,463	15,046	3,927	24,436
TOTAL	**15,737**	**63,741**	**16,598**	**96,076**
2005				
10001	11,923	56,593	14,665	83,181
10002	6,262	16,368	4,546	27,176
TOTAL	**18,185**	**72,961**	**19,211**	**110,357**

SOURCE: Horry and Georgetown Counties, Socio-Economic Data By Study Periods Each Five Years, 1980 - 2005, Waccamaw Regional Planning and Development Council, January 1, 1984.

Georgetown County
South Carolina

Beach Profile Inventory and Historic Erosion Rate Data in accordance with Sections 48-39-320 and 350 S. C. Coastal Zone Management Act, as amended

S. C. Coastal Council
4280 Executive Place North, Suite 300
Charleston, SC 29405

August 18, 1989

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INTRODUCTION

The purpose of this document is to assist with the development of local beachfront management plans in accordance with section 48-39-320 and section 48-35-350 of the South Carolina Coastal Zone Management act. This report addresses erosion rates, hurricanes and storms, inlet dynamics, littoral transport, sediment budgets and an erosion analysis. Four large, unincorporated beachfront areas of Georgetown County are encompassed in this document which includes Litchfield Beach, Huntington State Park Beach, Debidue Beach, and portions of Garden City Beach. A separate plan has been done for Pawleys Island. In addition, several other undeveloped areas are also a part of the Georgetown Coastal County beachfront; however, these areas have not been addressed by this study because they are held in ownership and managed for conservation purposes by either the State of Federal Governments. Because coastal development will not occur in those areas, beachfront monitoring stations and periodic sand surveys are not conducted on these islands. Those areas include Cedar Island, South Island, Sand Island, and North Island.

BEACH PROFILES

Under the new Beach Management Law a methodology was adopted that requires the use of beach profiles to establish the position of the beach lines in standard zones and stabilized inlet zones. These profiles generally depict a cross-section of a primary oceanfront sand dune or erosion control structure and the beach face at a particular position along the shore. Included in this document are copies of the profiles generated from the Fall '88 beach survey.

In standard zones and stabilized inlet zones, the methodology adopted in the law states that the baseline is to be located at the crest of the ideal dune. The ideal dune is simply the average of all the natural profiles (i.e., no erosion control structures) in a particular area (Figure 1.). Using the ideal dune profile, a volume of sand is calculated which represents the volume of sand that should be on the beach to maintain the natural conditions. By comparing that volume to the volume calculated from each of the actual profiles, the position of the baseline can be determined, and from that the other beach lines.

Beach profiles will be surveyed at least once a year to aid the Coastal Council in establishing a current and accurate record of the condition of the beach from year to year. These profiles will also be used when the lines are updated within the 10 year period established by the law.

The calculated beach survey profiles completed by Coastal Science and

Engineering, Inc. in the Fall of 1988 are shown in the following series of graphs (Figure 2-5.). The heading indicates the monument location descriptions, the corresponding number, and the date the survey was taken. The horizontal axis depicts the distance in feet that the measurements were taken from the survey instrument. The elevation of the beach in terms of mean sea level is shown along the vertical axis.

Ideal Present Dune Profile

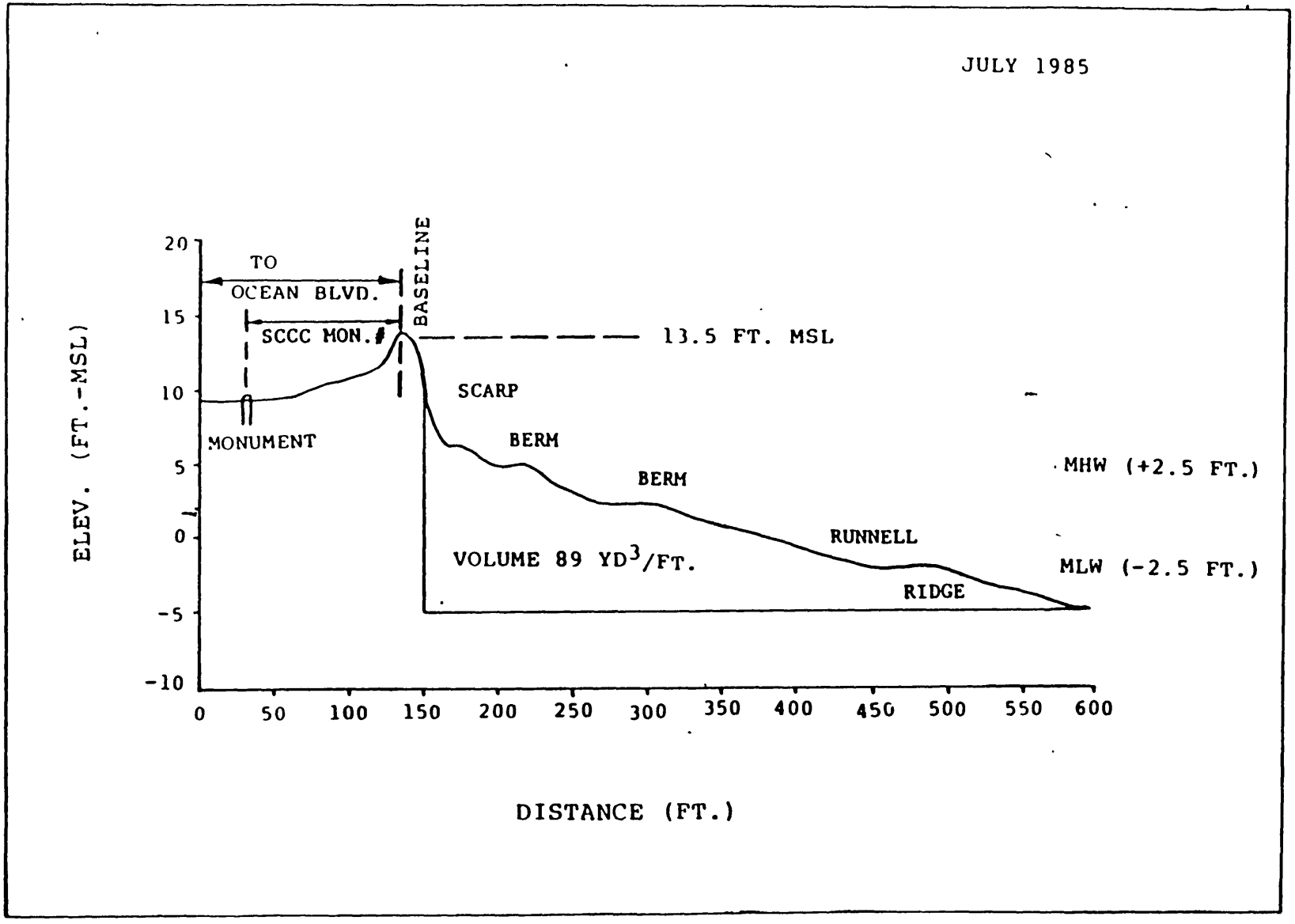
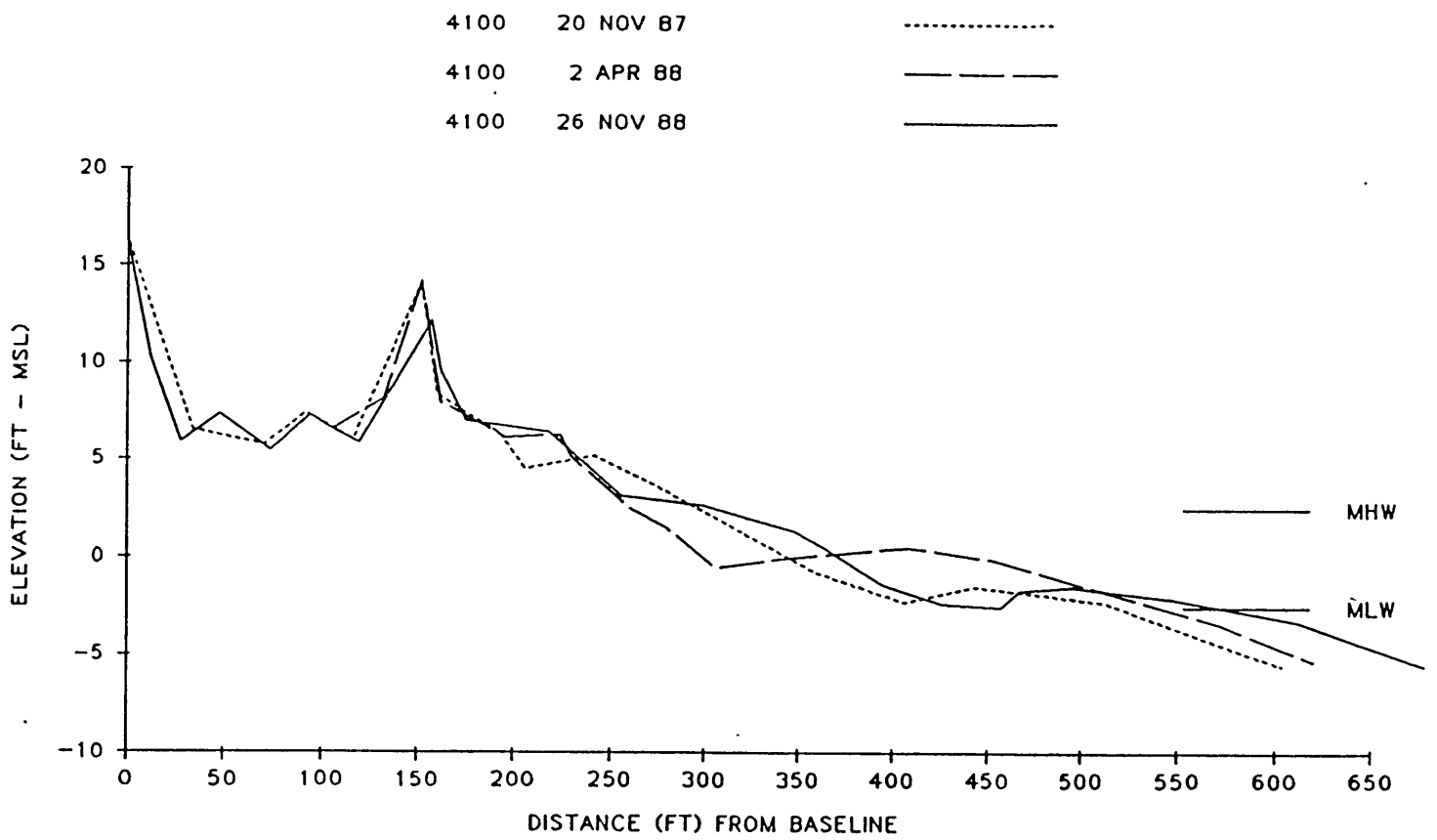


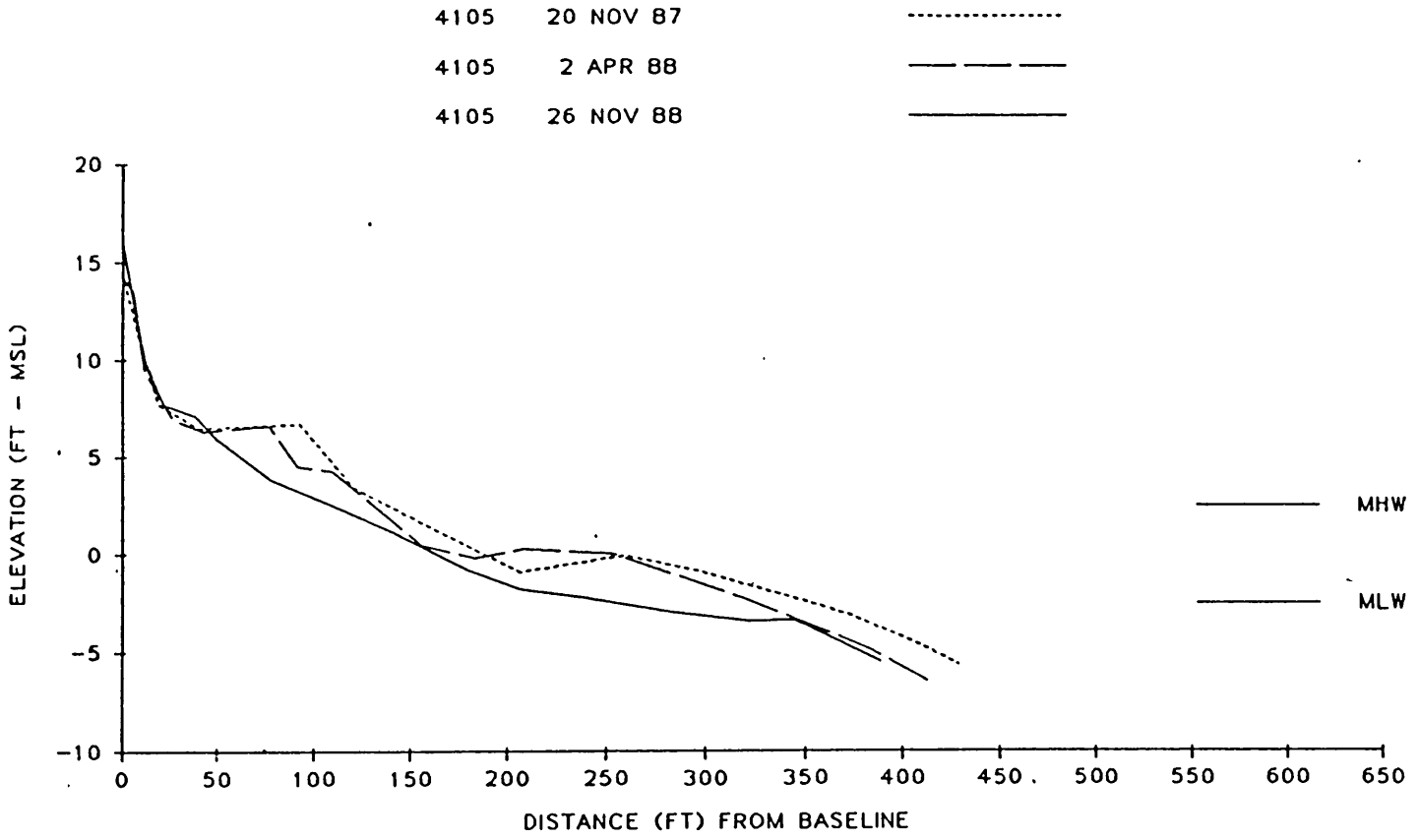
Figure 1

Diagram courtesy of:
Coastal Science and Engineering, Inc., 1988, "Calculation of Interim Baselines and 40-Year Setback Lines", prepared for South Carolina

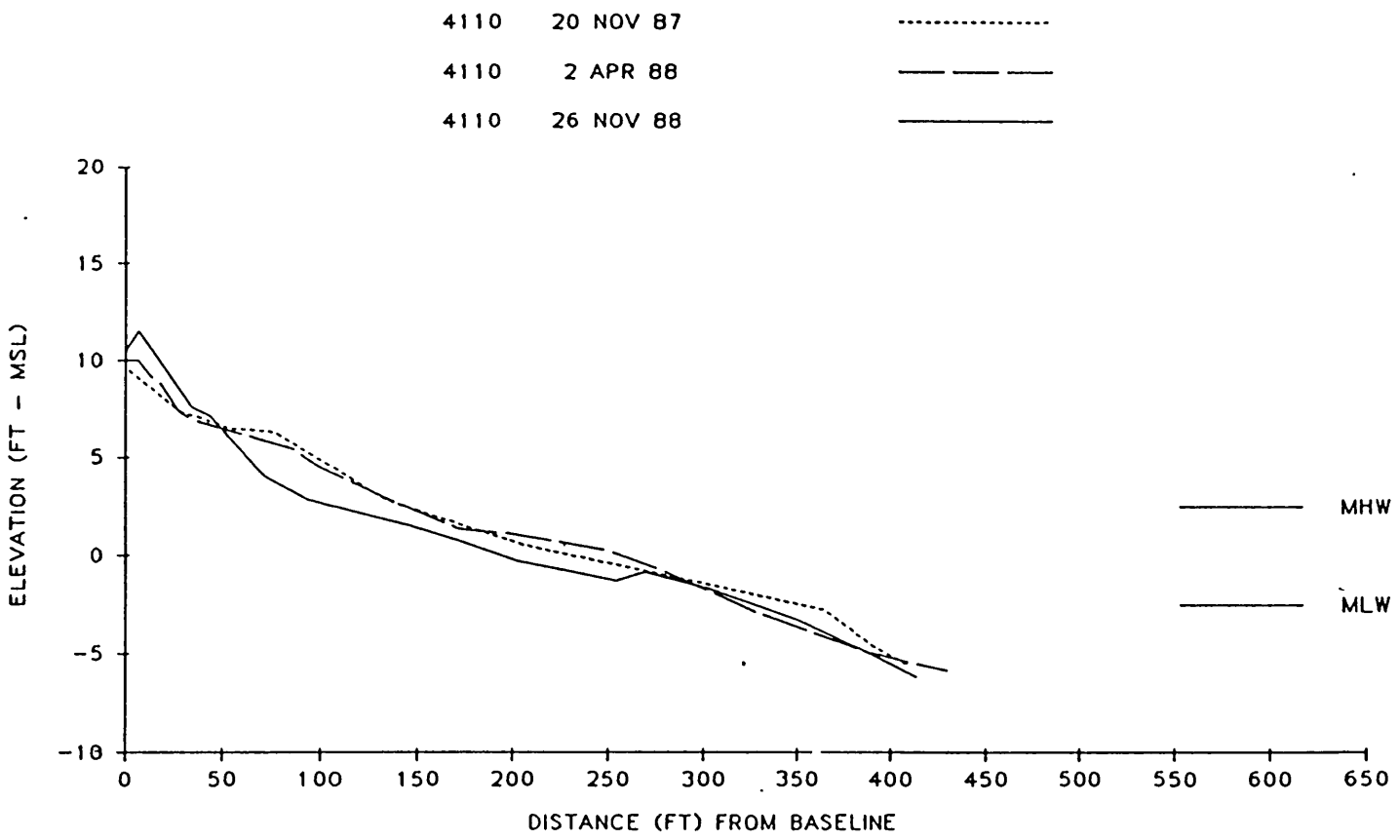
Figure 2 Calculated Beach Survey Profiles - Debidue Beach
1.85 MI SOUTH OF SOUTH BEACH ENTRANCE



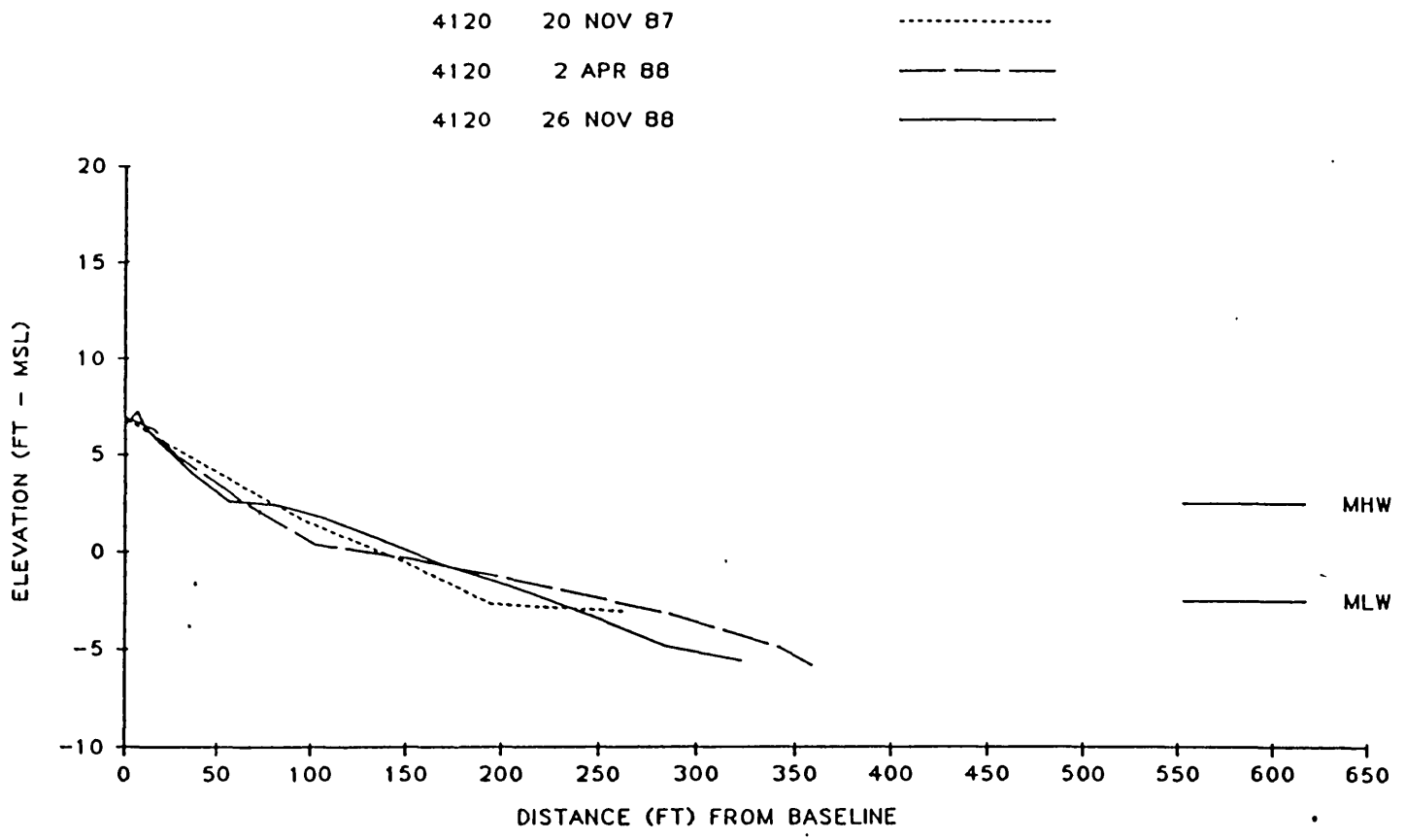
1.55 MI SOUTH OF SOUTH BEACH ENTRANCE



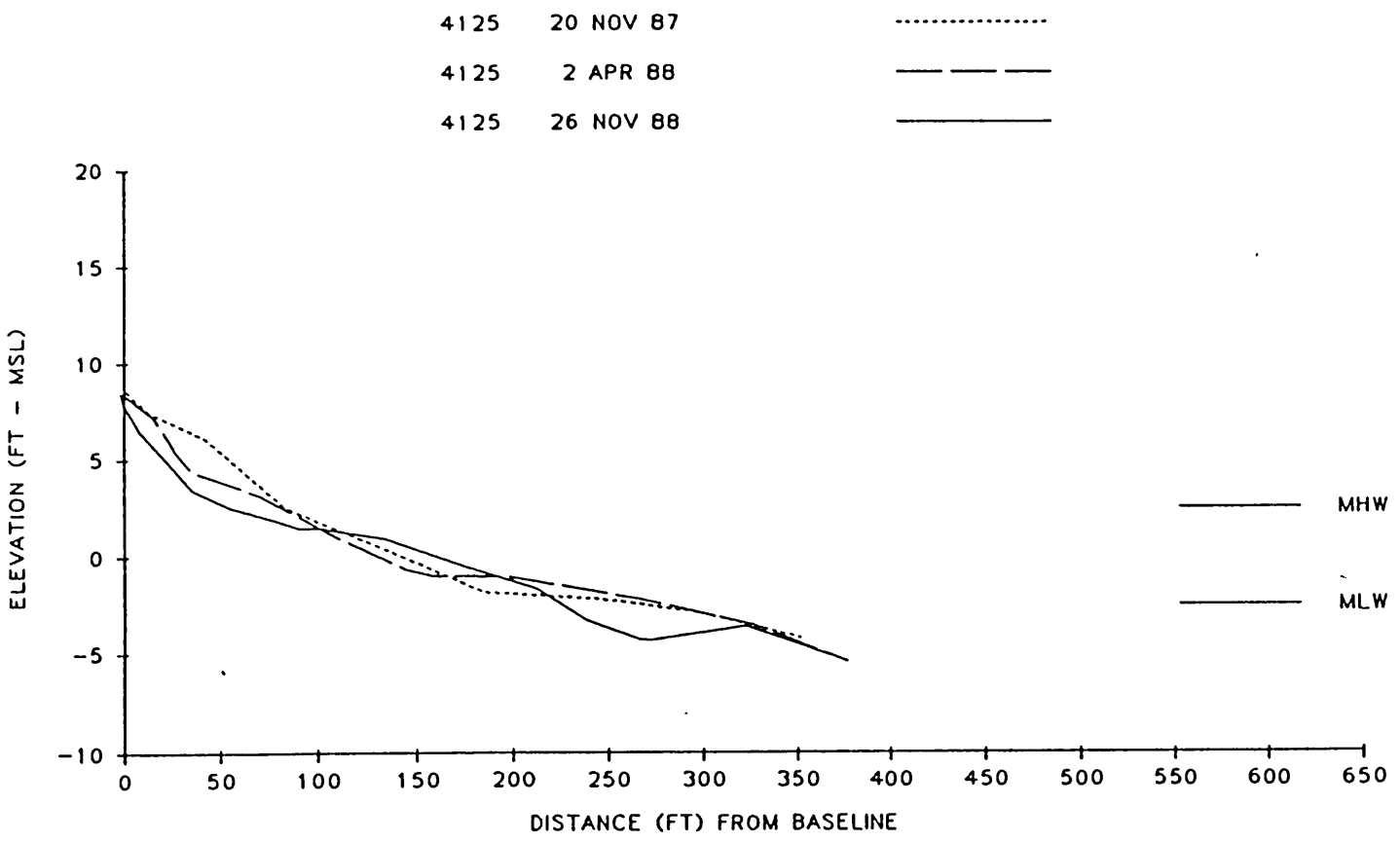
1.2 MI SOUTH OF SOUTH BEACH ENTRANCE



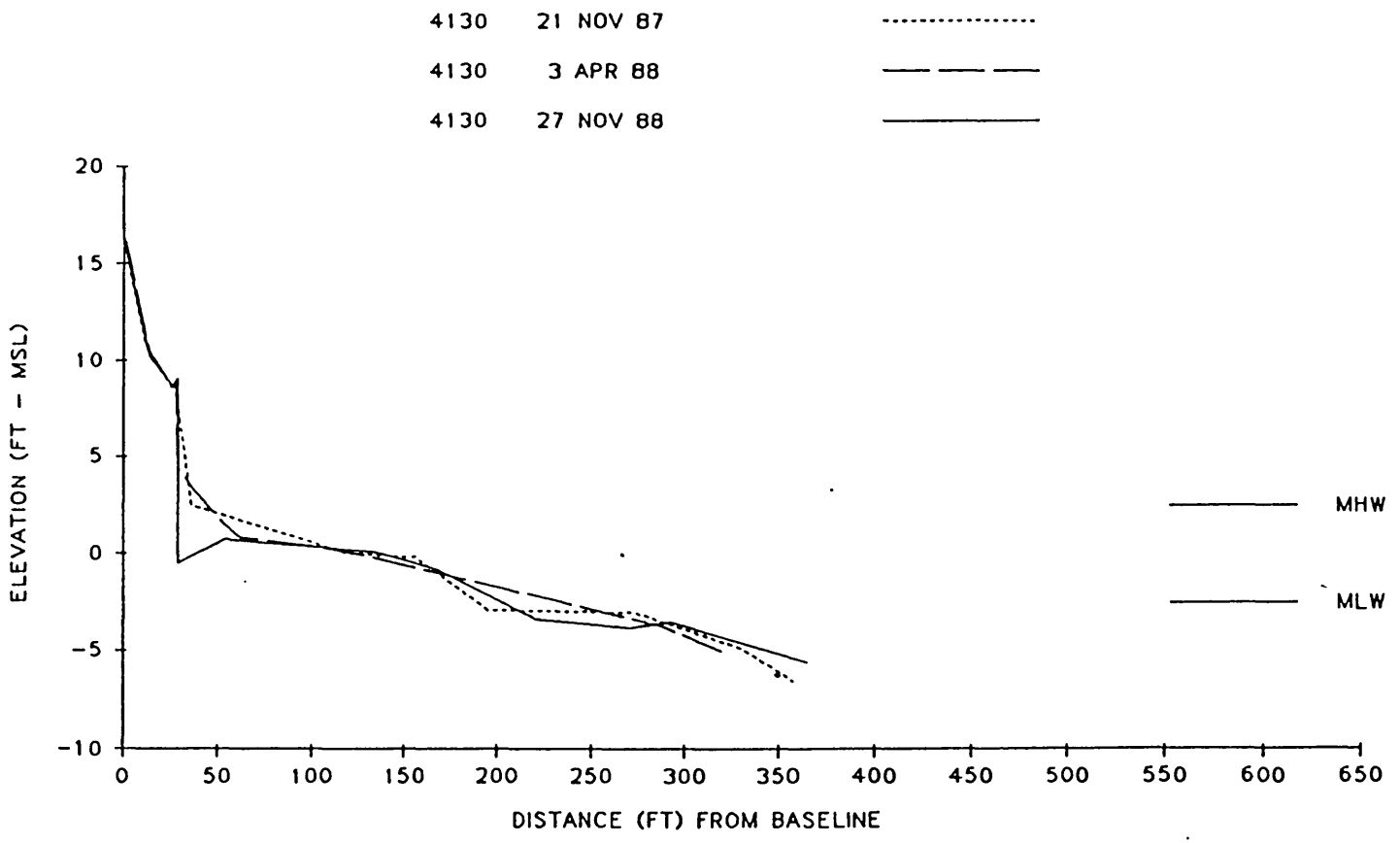
0.5 MI SOUTH OF SOUTH BEACH ENTRANCE



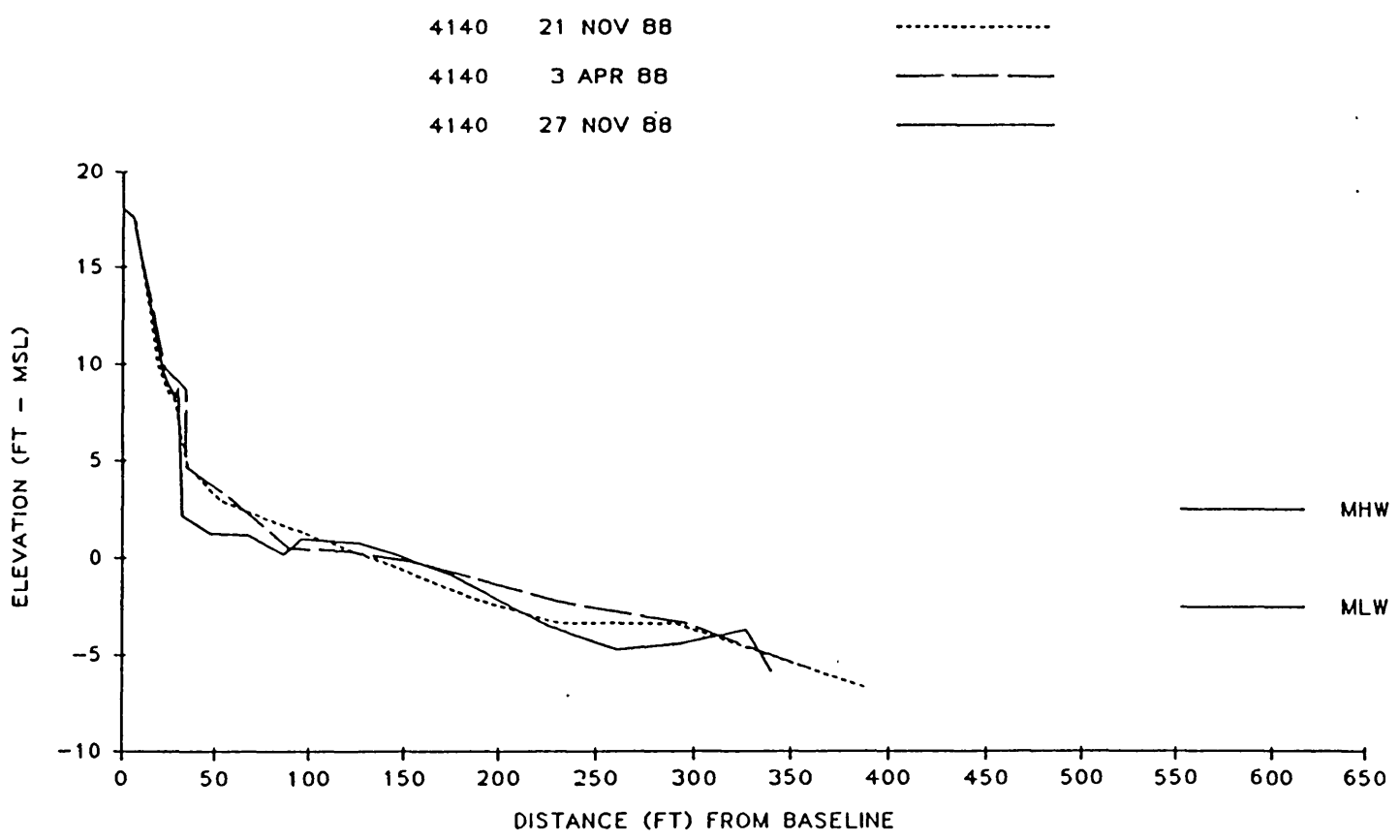
NORTH OF BOARD WALK SOUTH OF EASTLAND WAY



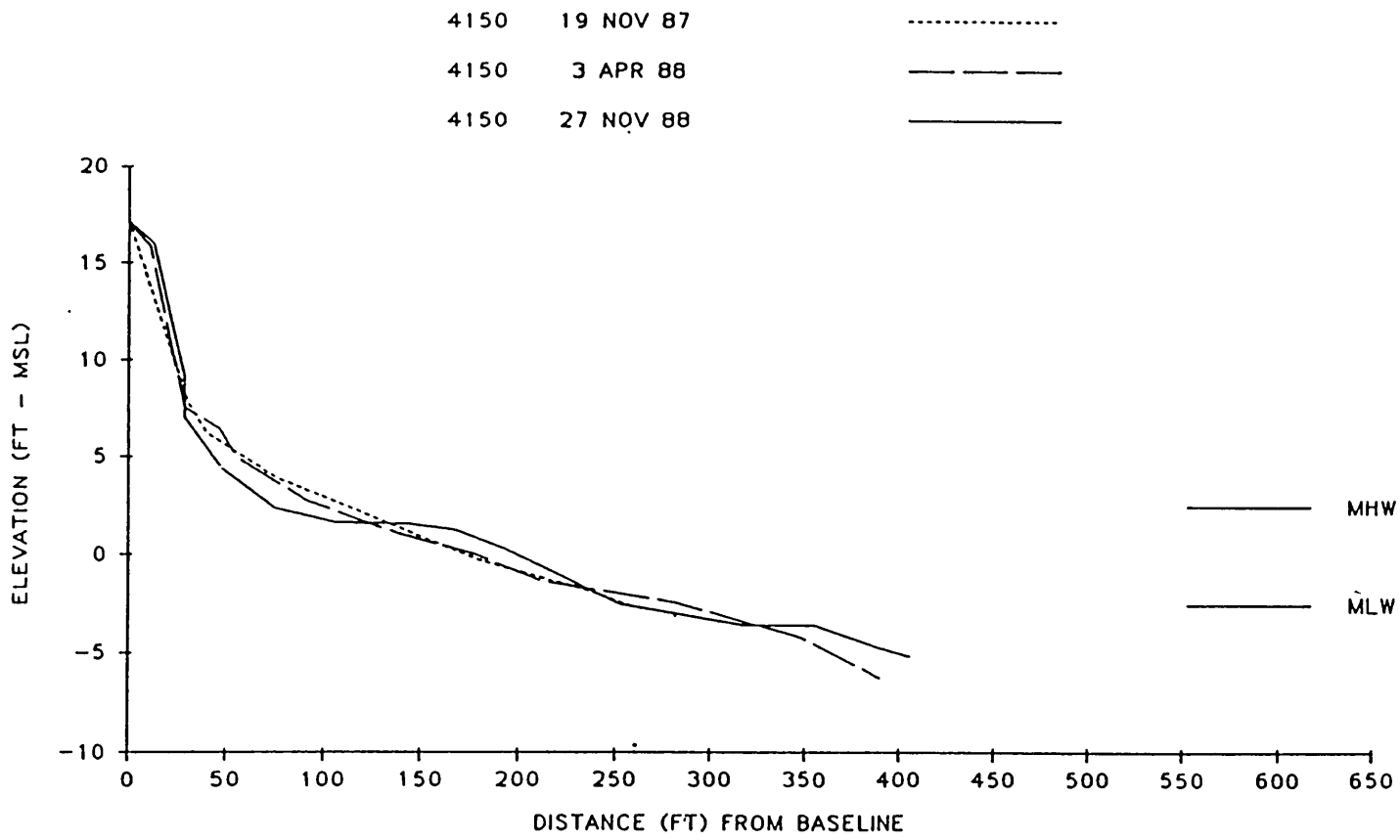
SOUTH LAFAYETTE BLVD., AT DUNE CROSS OVER NORTH OF HOUSE 31-E



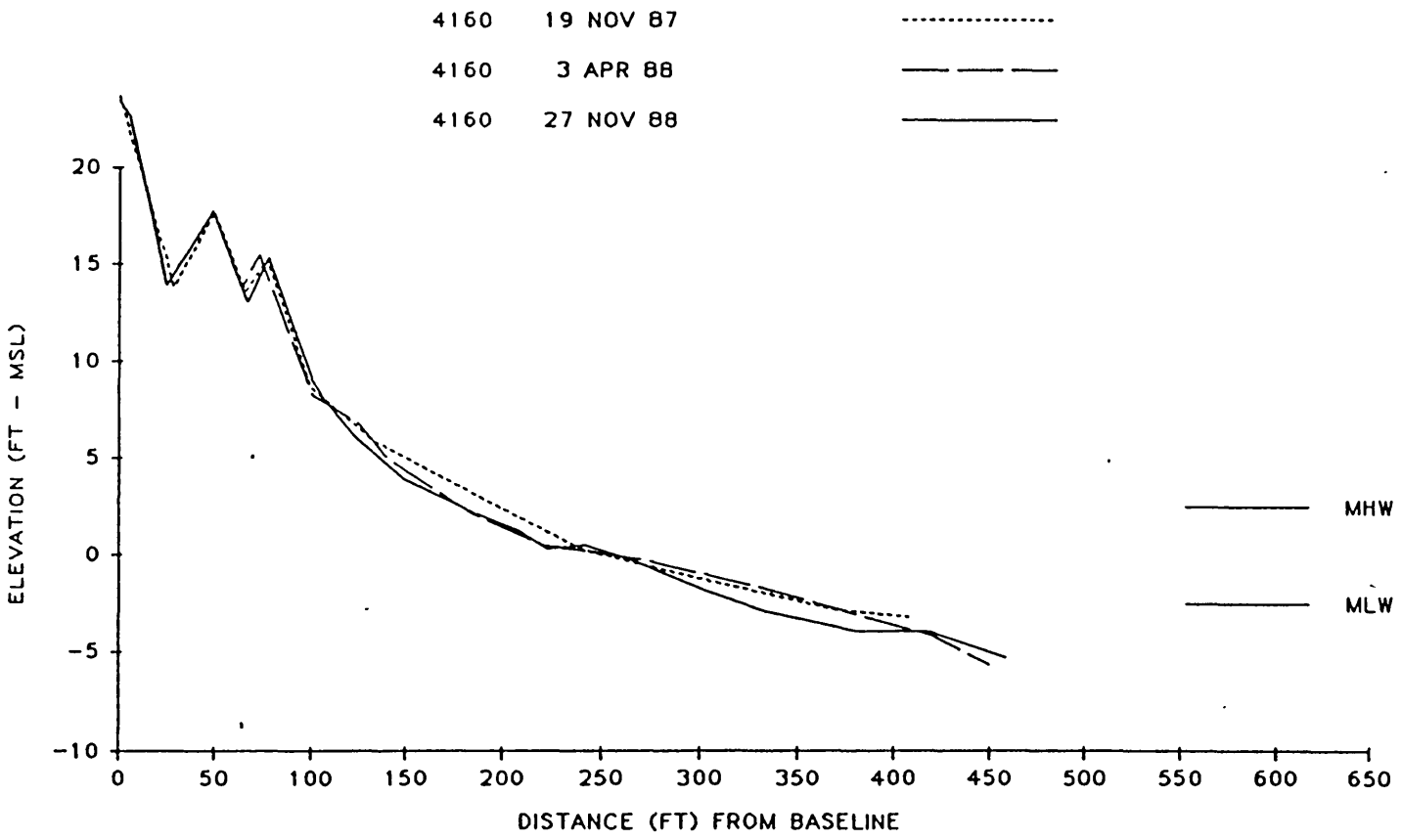
SOUTH OF DUNE CROSS OVER OPPOSITE PROSPECT PLACE



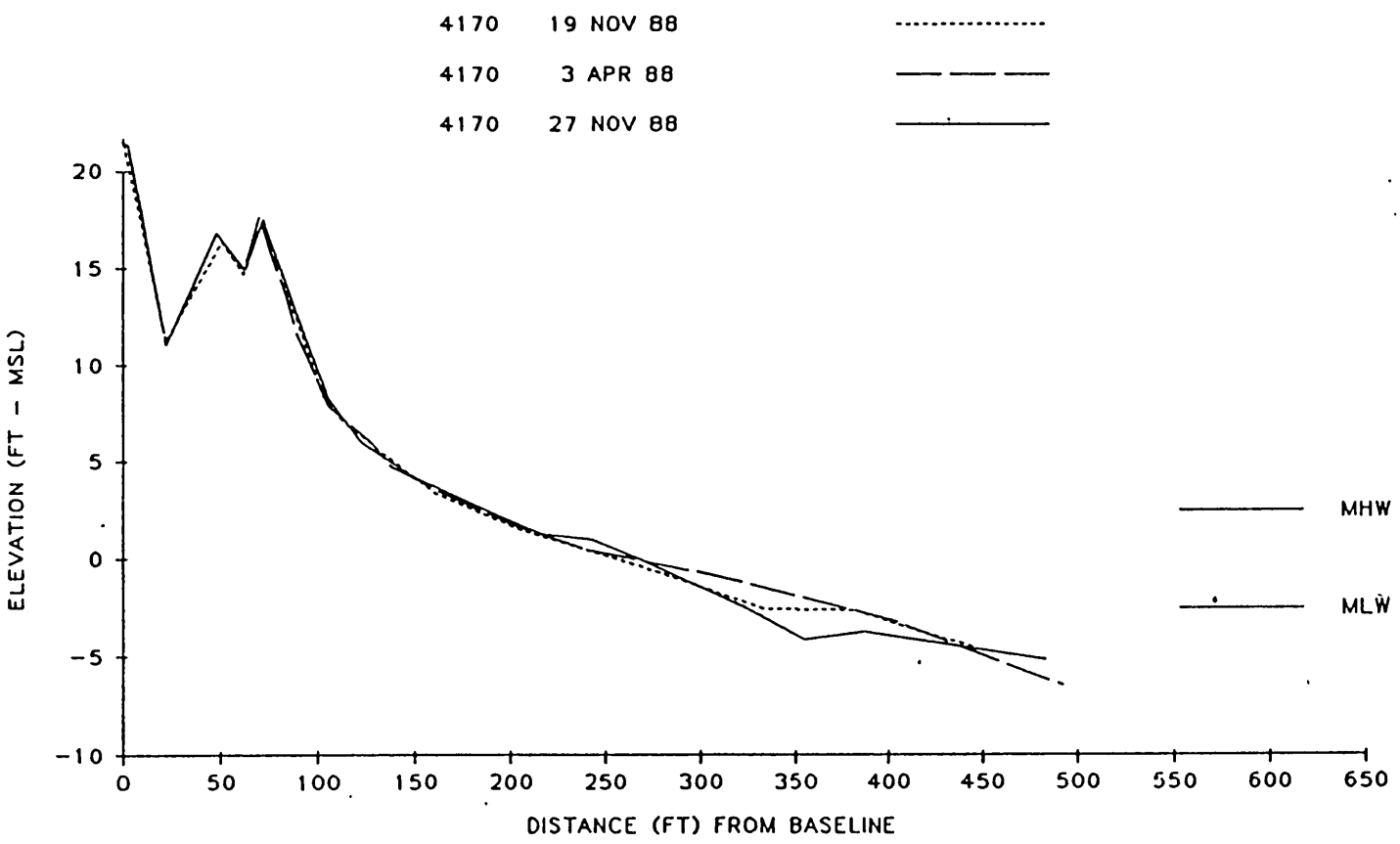
SOUTH OF DUNE CROSS OVER AT NORTH END OF PIONEER COURT



0.28 MI NORTH OF NORTH BEACH ENTRANCE



0.67 MI NORTH OF NORTH BEACH ENTRANCE



1.08 MI NORTH OF NORTH BEACH ENTRANCE

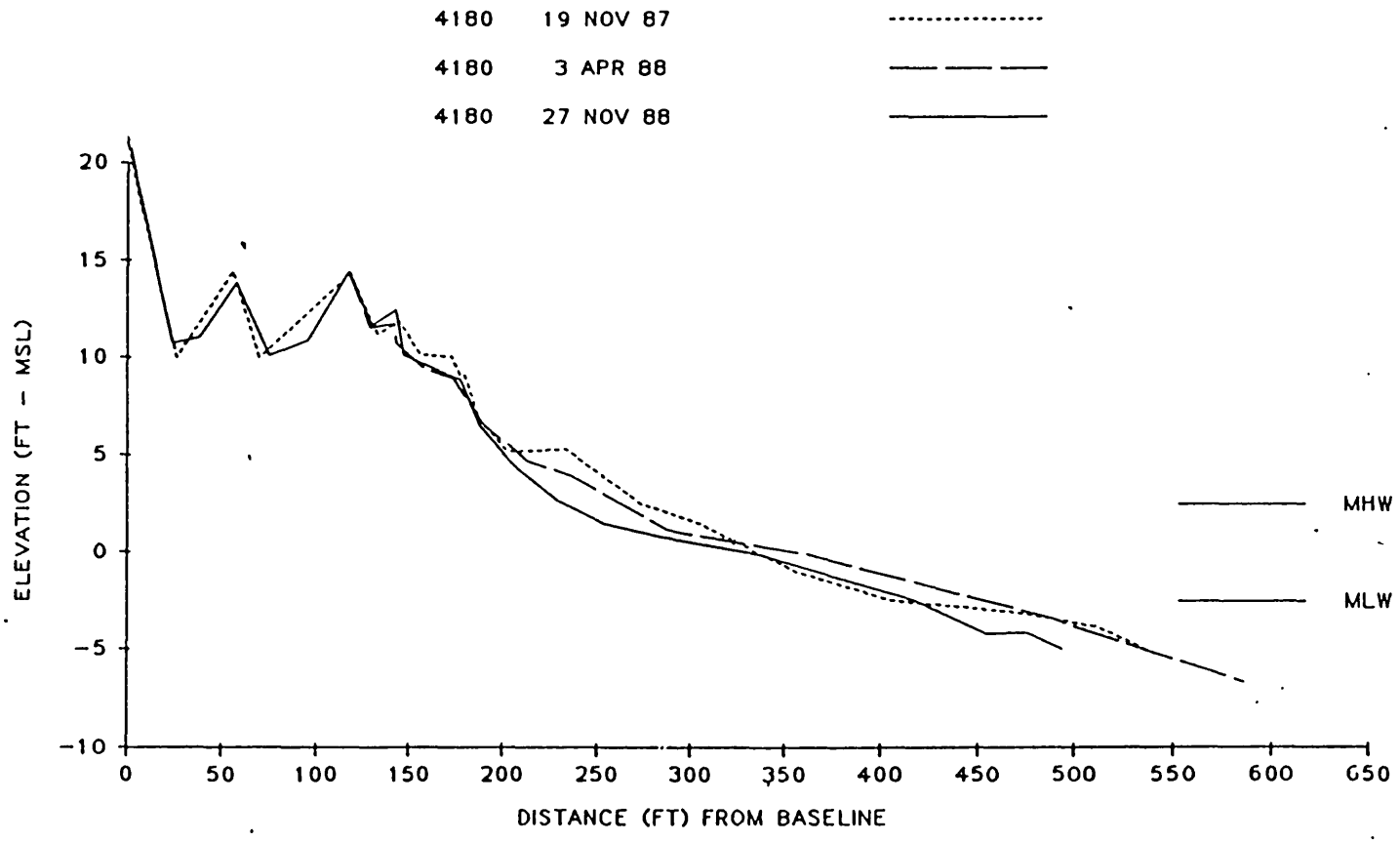
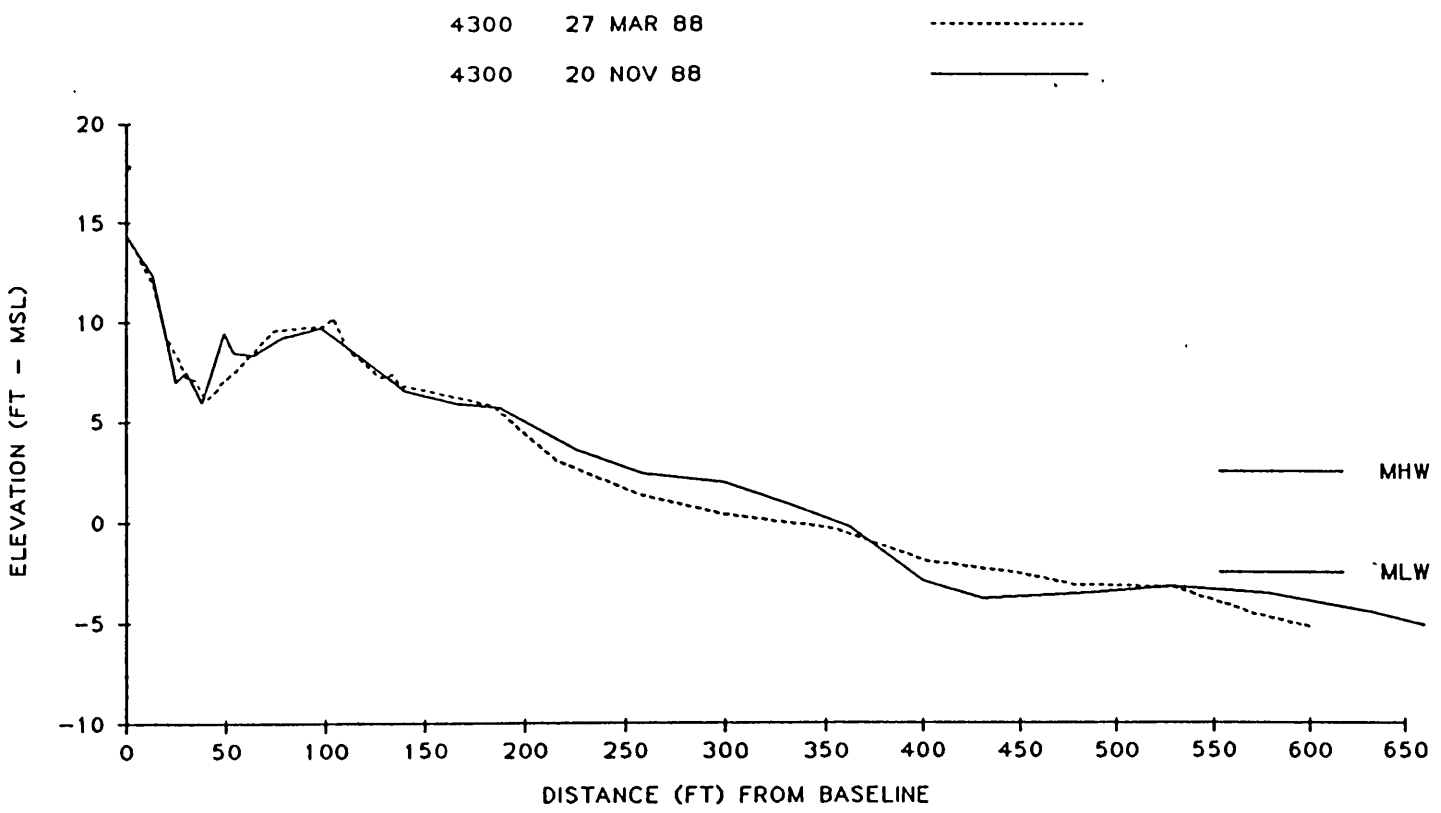
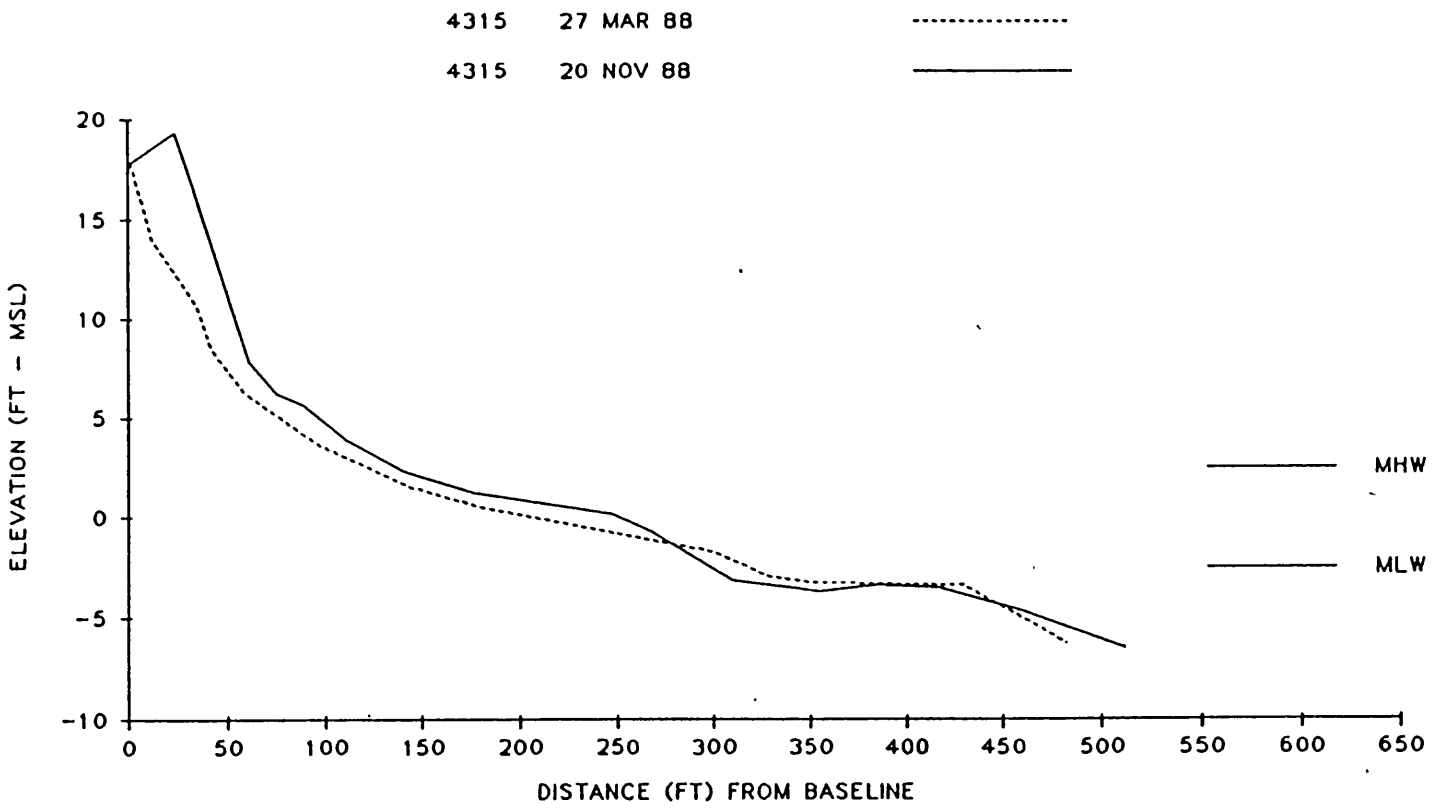


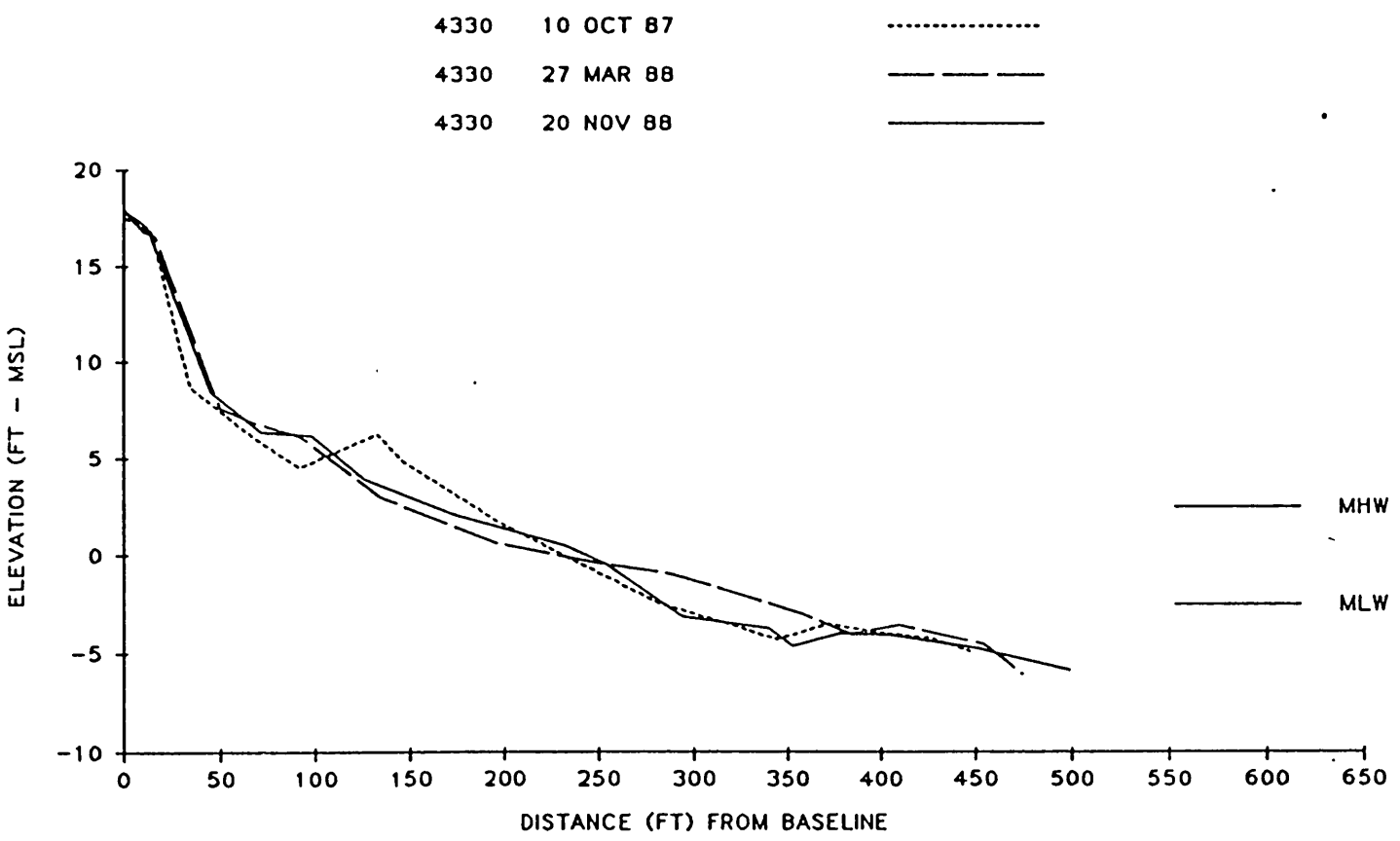
Figure 3 Calculated Beach Survey Profiles - Litchfield Beach
1.5 MI SOUTH OF LITCHFIELD INN, 1 MI SOUTH OF CONDOS



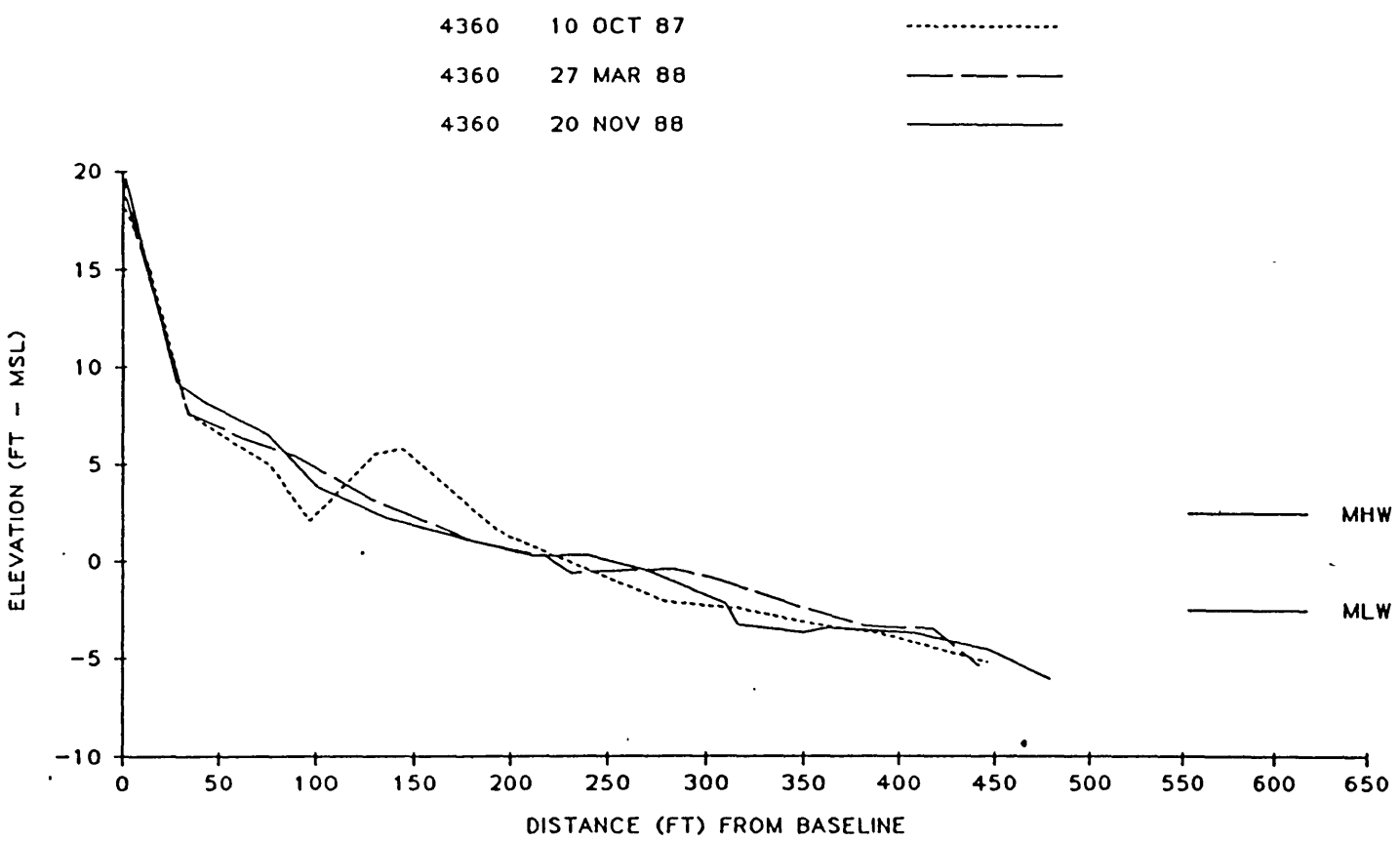
1.10 MI SOUTH OF LITCHFIELD INN, 0.5 MI SOUTH OF CONDOS



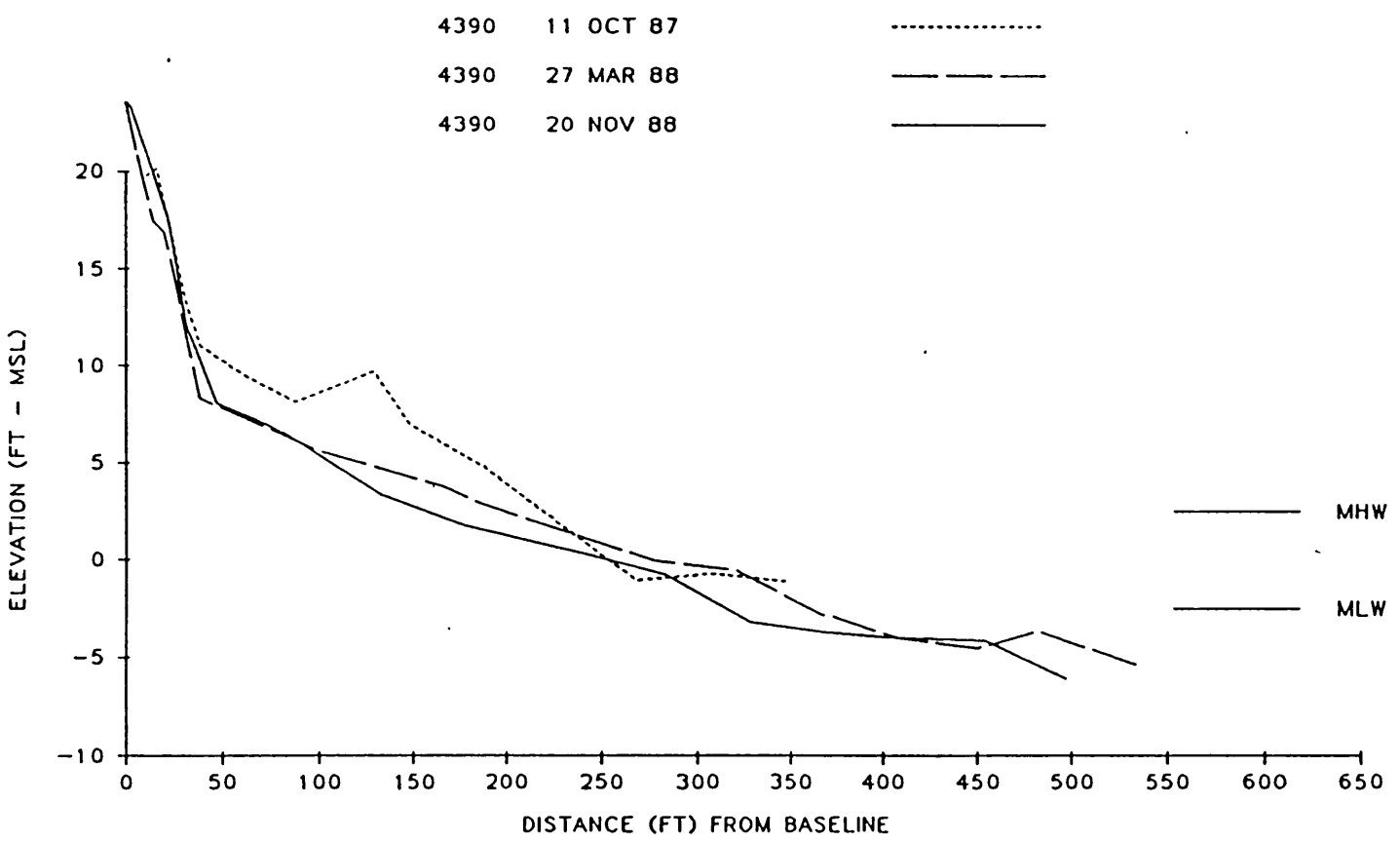
0.4 MI SOUTH OF LITCHFIELD INN, BETWEEN HOUSE 53 AND 55



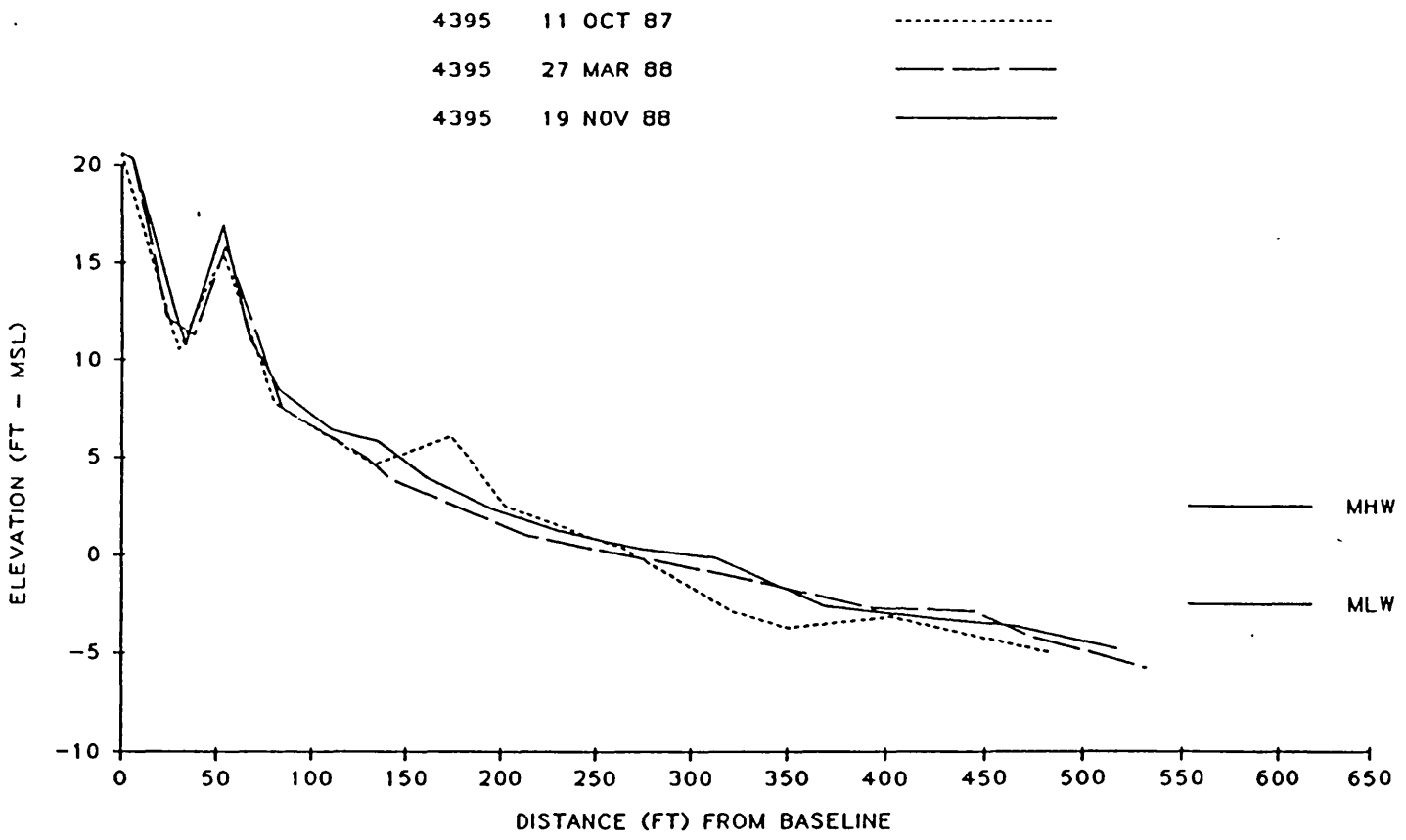
BEACH ACCESS NO2, BETWEEN HOUSES DUTCHESS AND MOYD



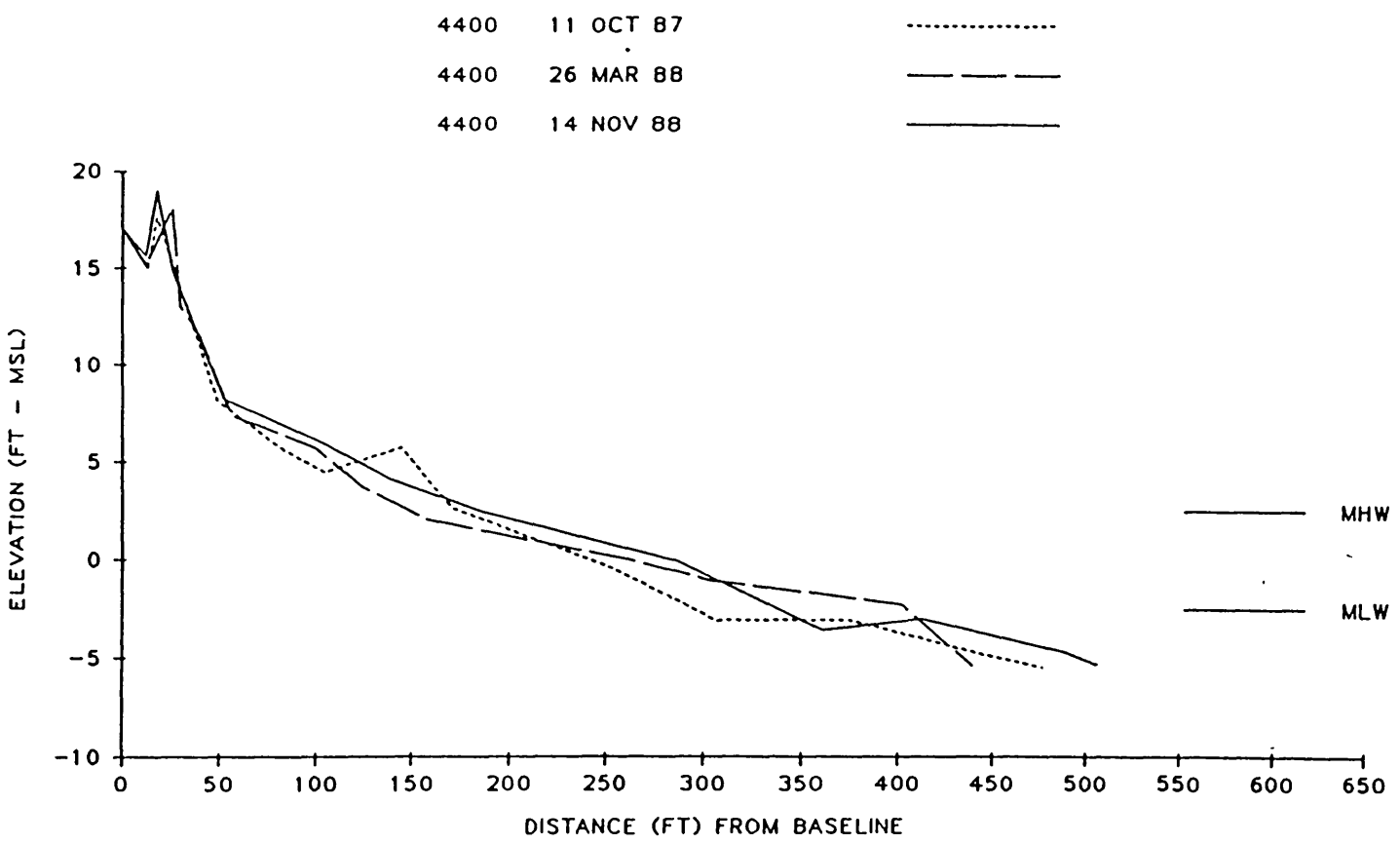
LITCHFIELD BY THE SEA, SHIPYARD VILLAGE IN FRONT OF BUILDING B



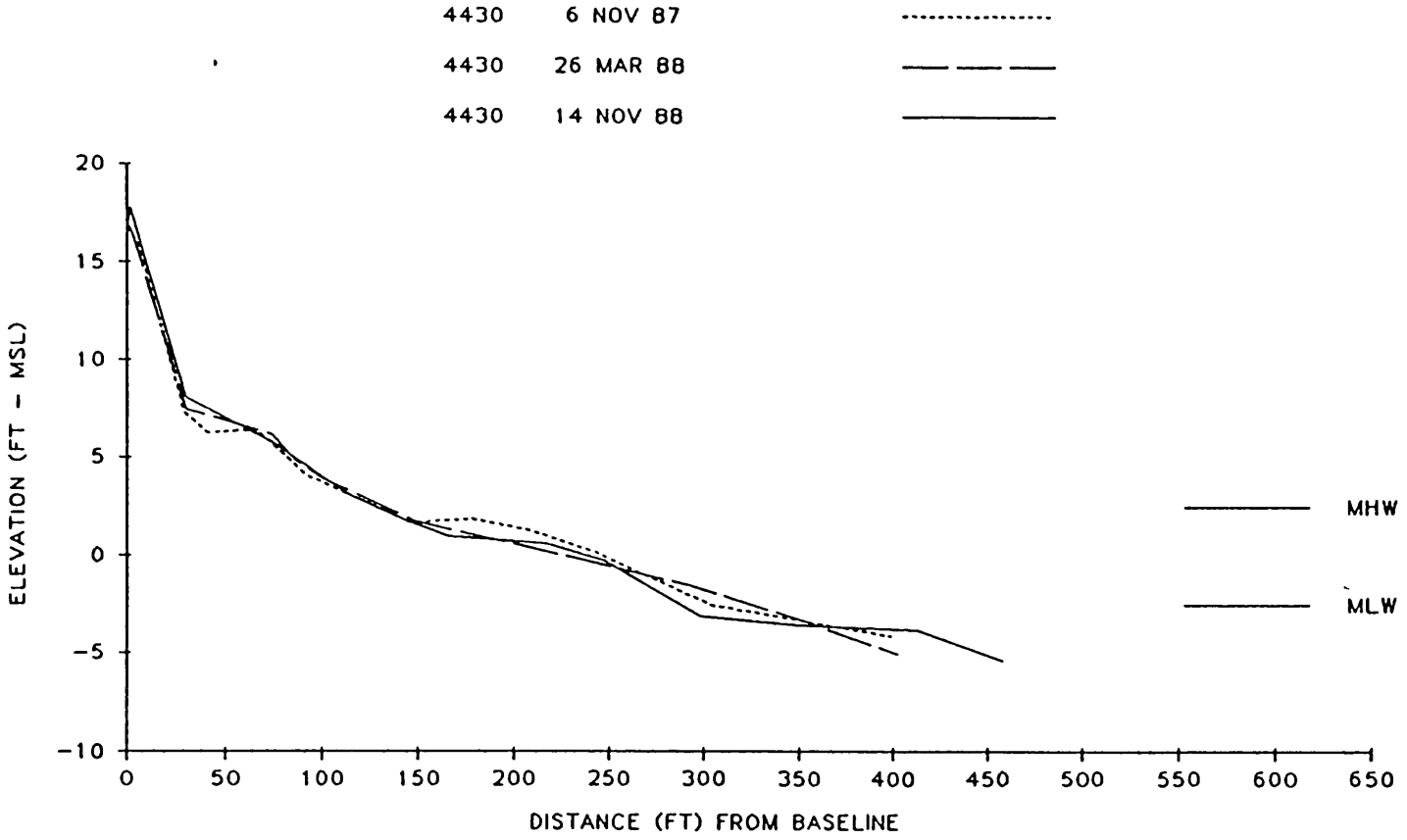
LITCHFIELD BY THE SEA, SOUTH OF BEACH HOUSE SOUTH OF SANDPIPER RUN



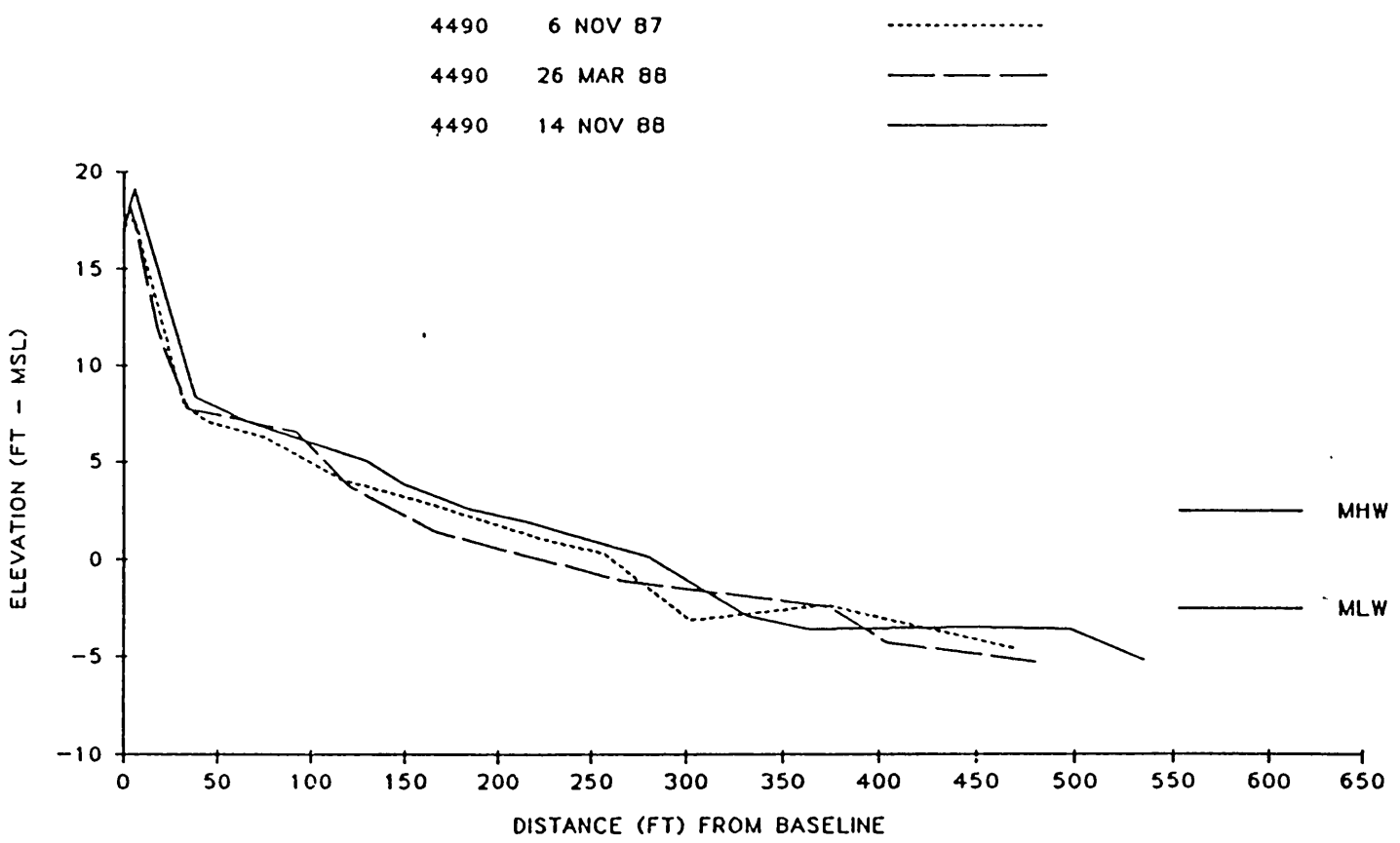
LITCHFIELD BY THE SEA IN FRONT OF NORTHERN SECTION OF BREAKERS REEF



NORTH OF BEACH ACCESS NO 12



BETWEEN BEACH ACCESS NO7 AND HOUSE INDIGO PELICAN



BETWEEN HOUSES WIKOFF AND LAWTONS

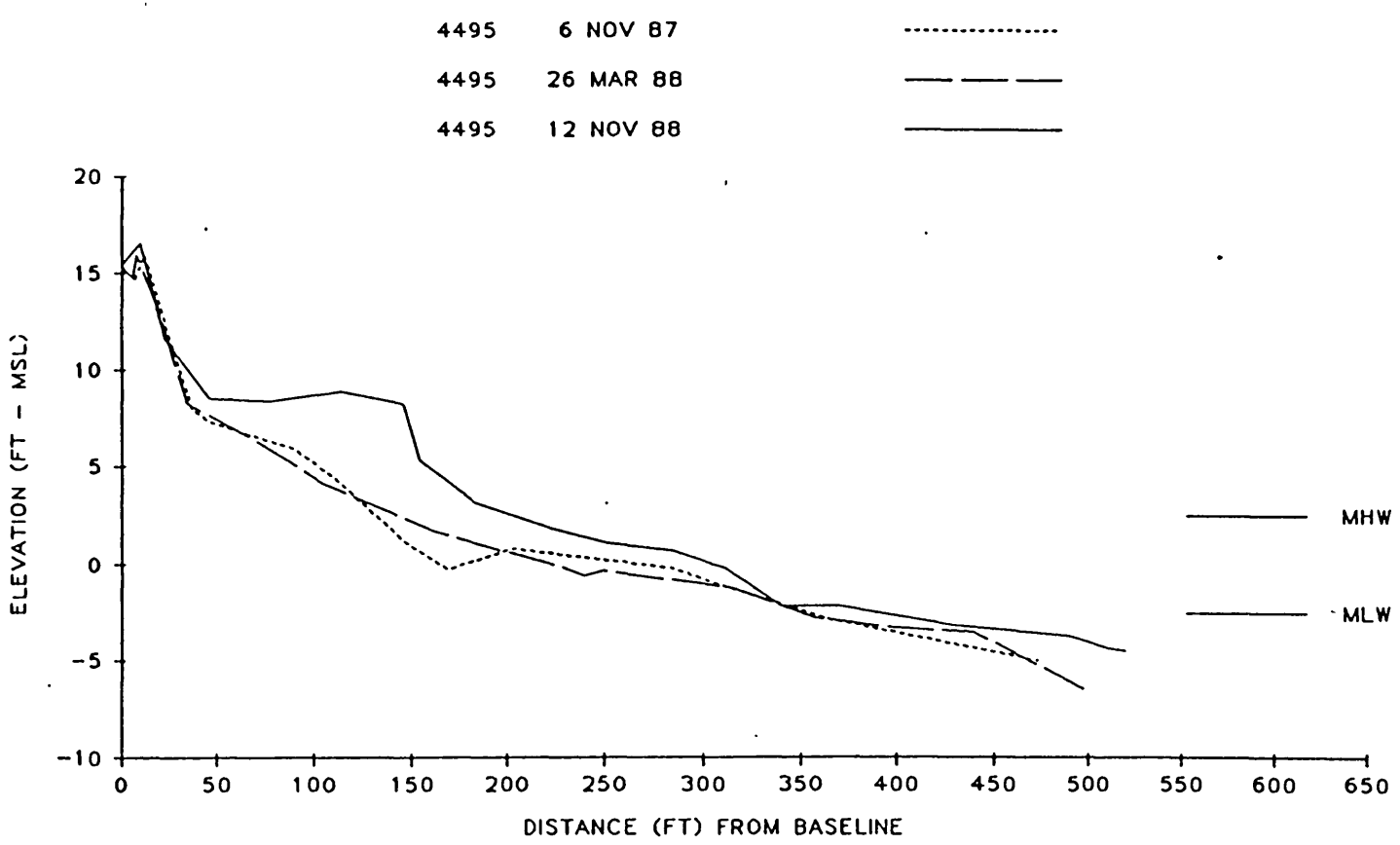
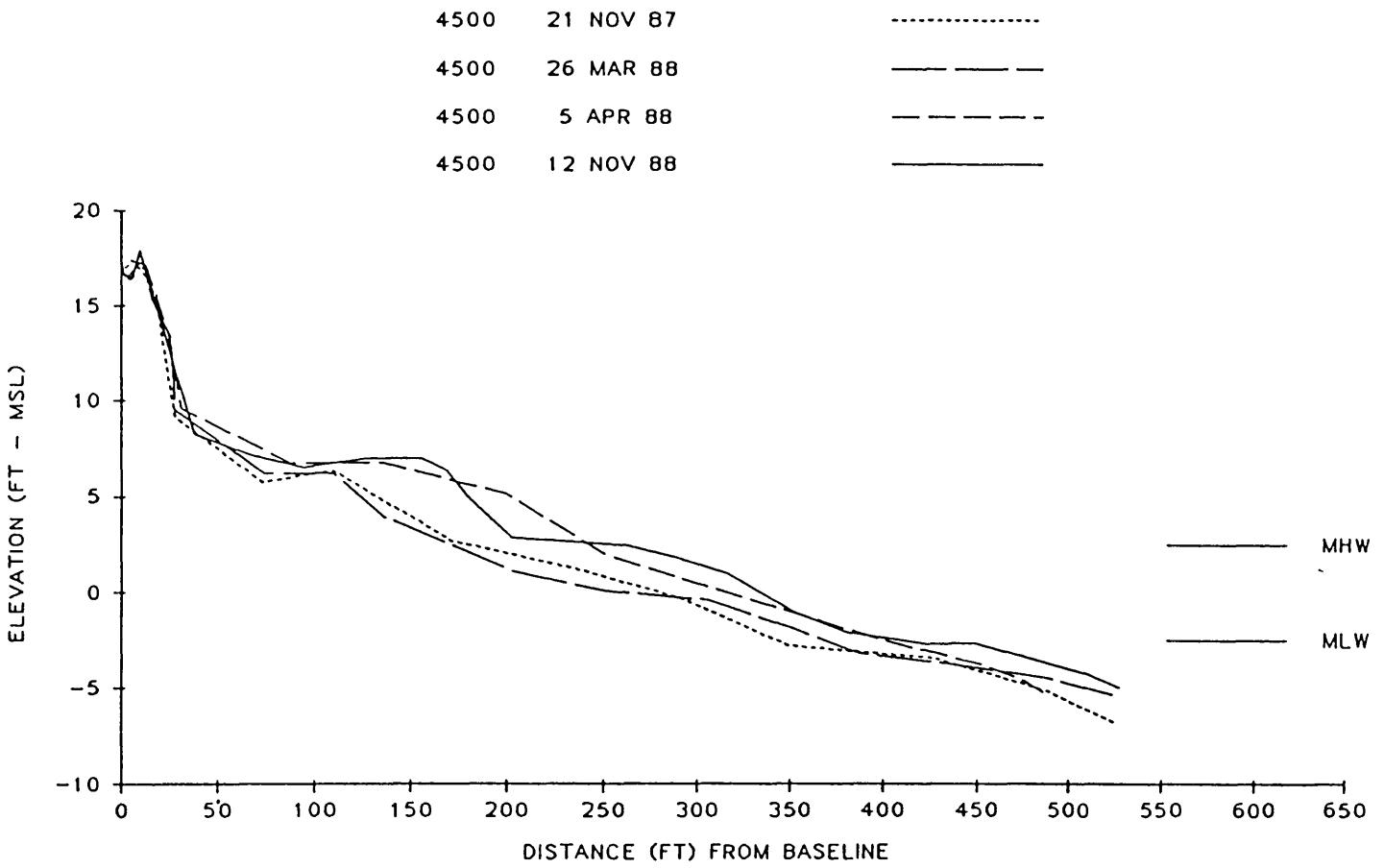
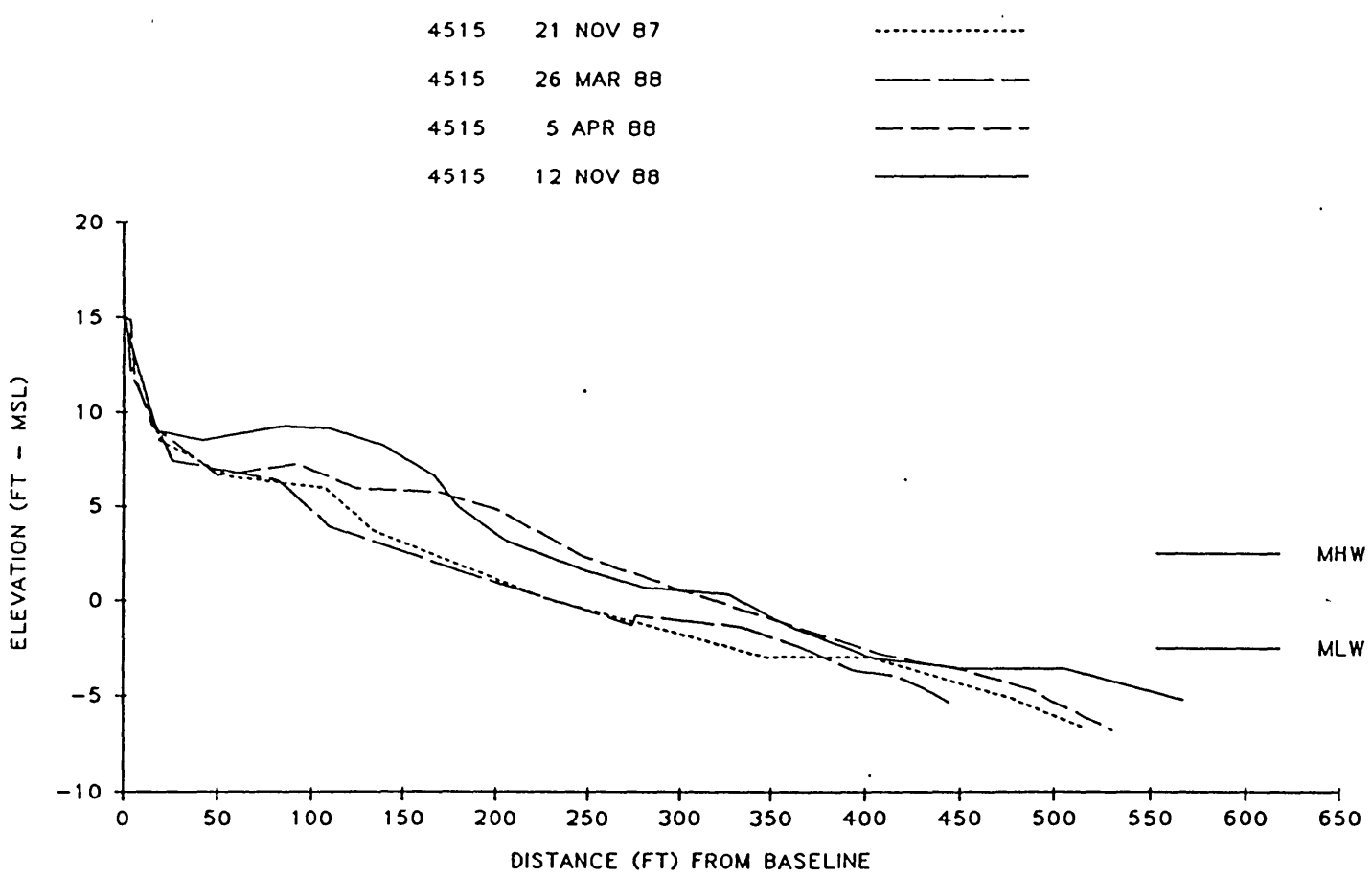


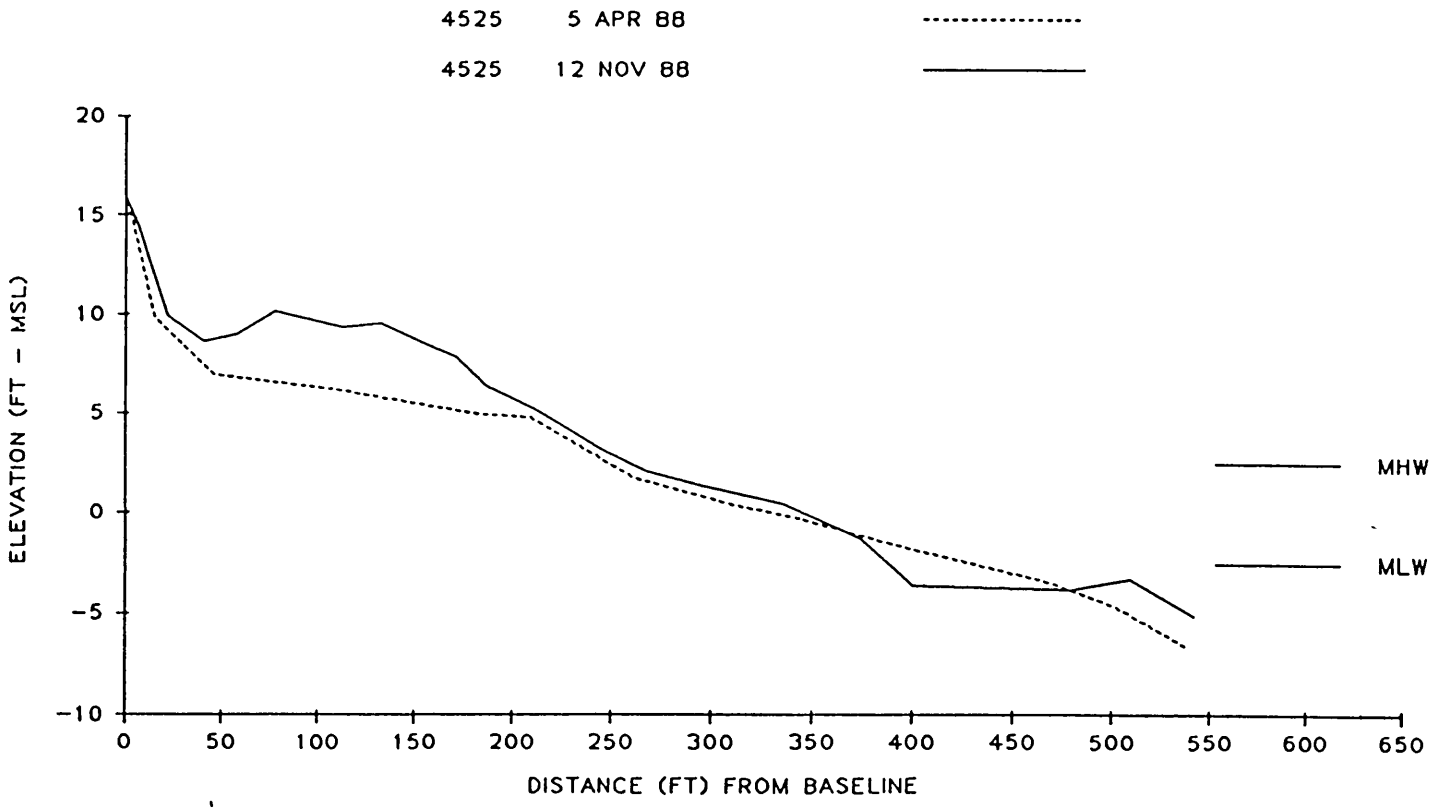
Figure 4 Calculated Beach Survey Profiles - Huntington Beach
200 FT NORTH OF NORTH LITCHFIELD 200 FT S OF S CAMPGRND



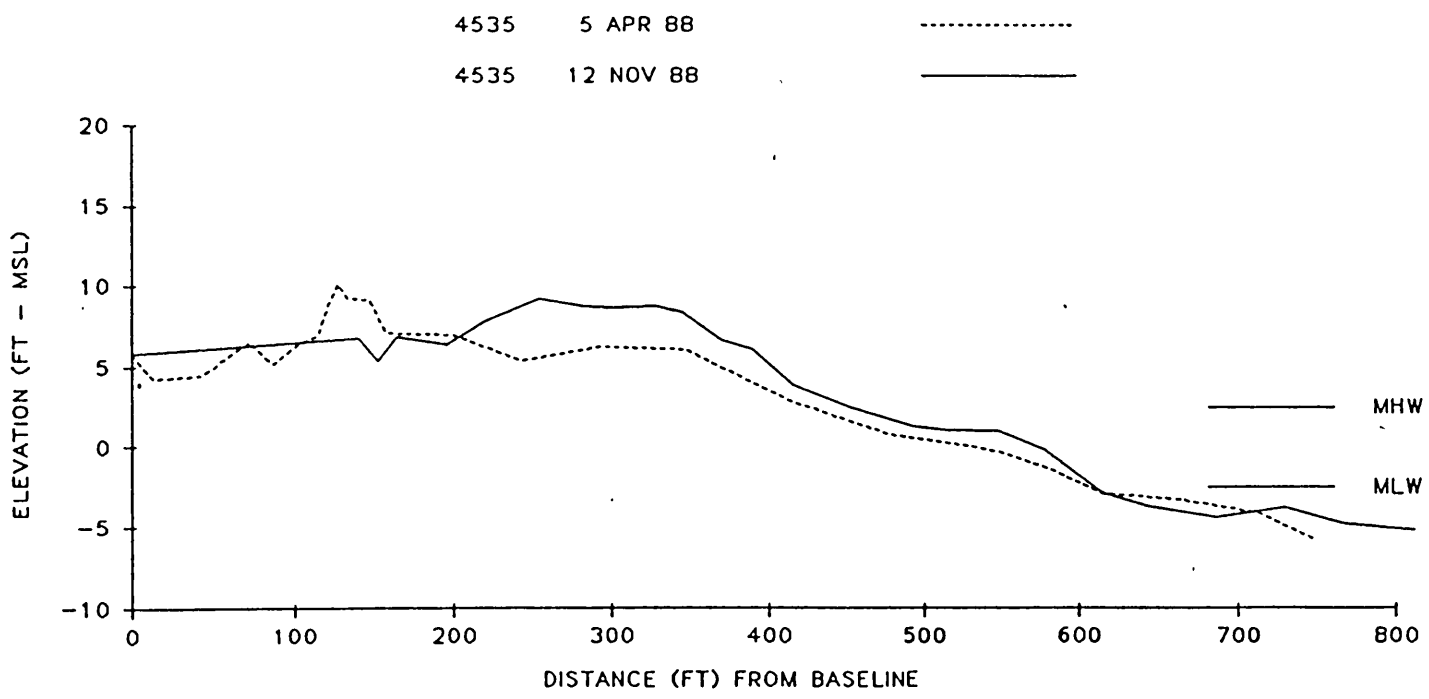
50 FT SOUTH OF ATALAYA



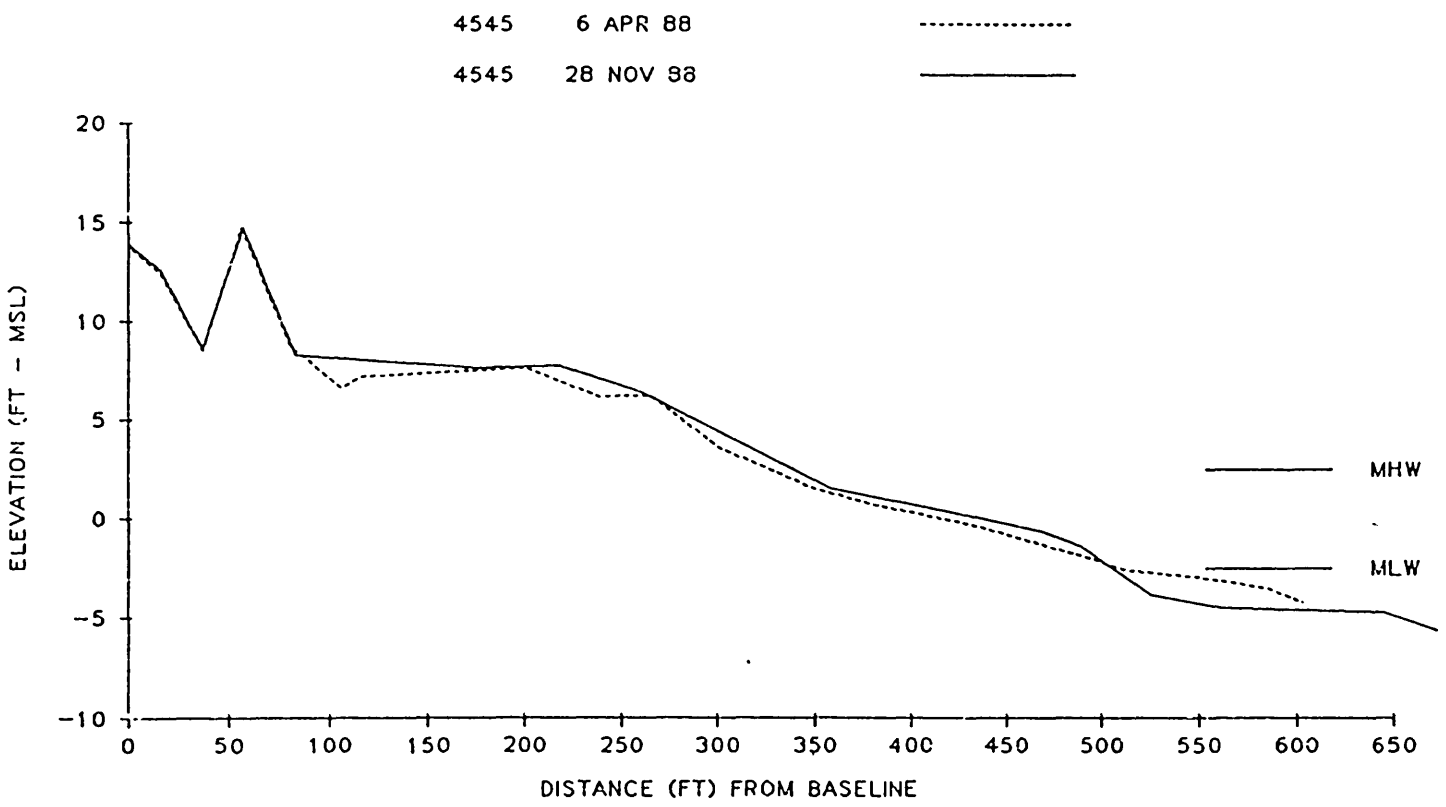
120 FT N OF SOUTHERN BEACH TRAIL FROM N CAMPGROUND



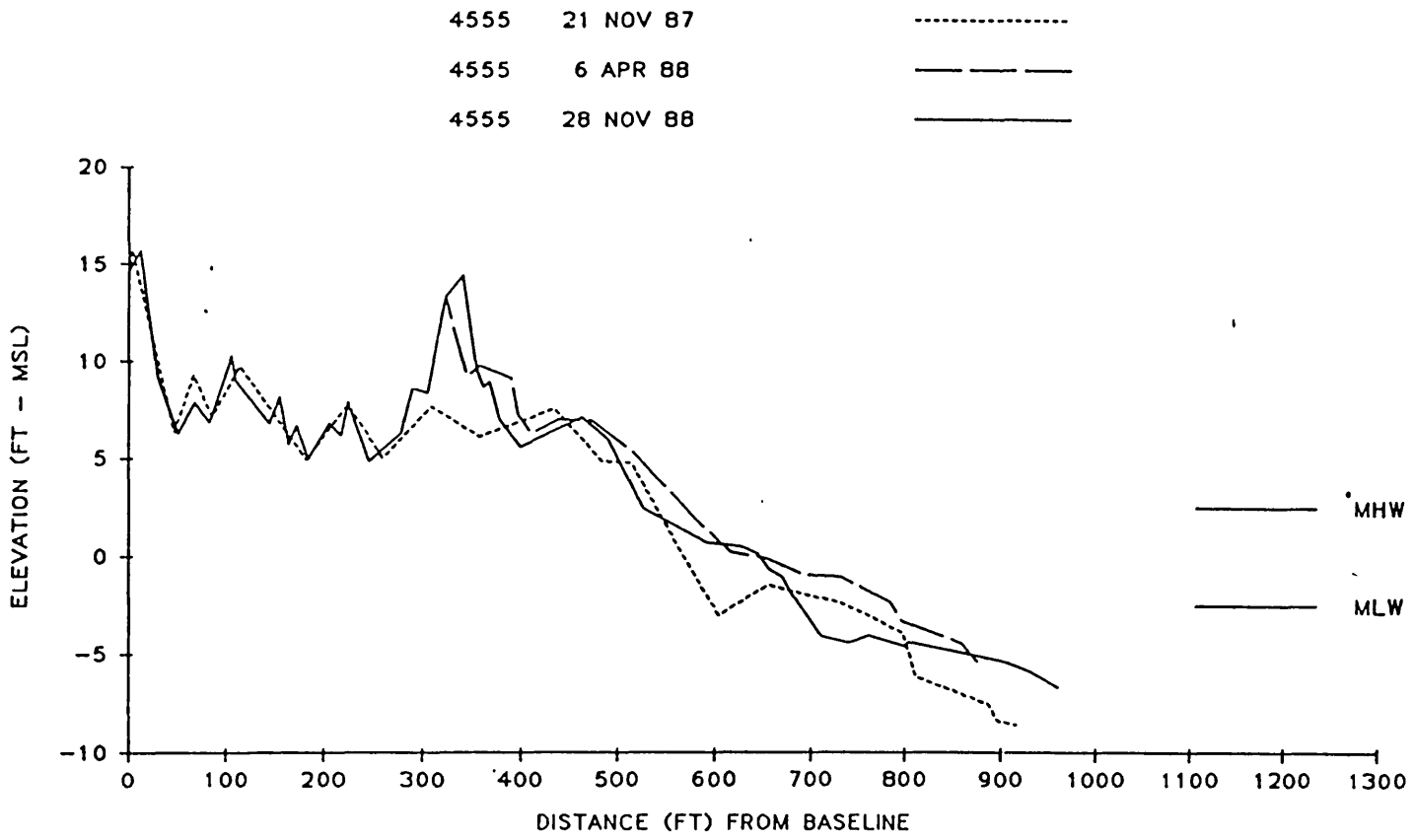
250 FT NORTH OF NORTH BEACH TRAIL, NORTH CAMPGROUND



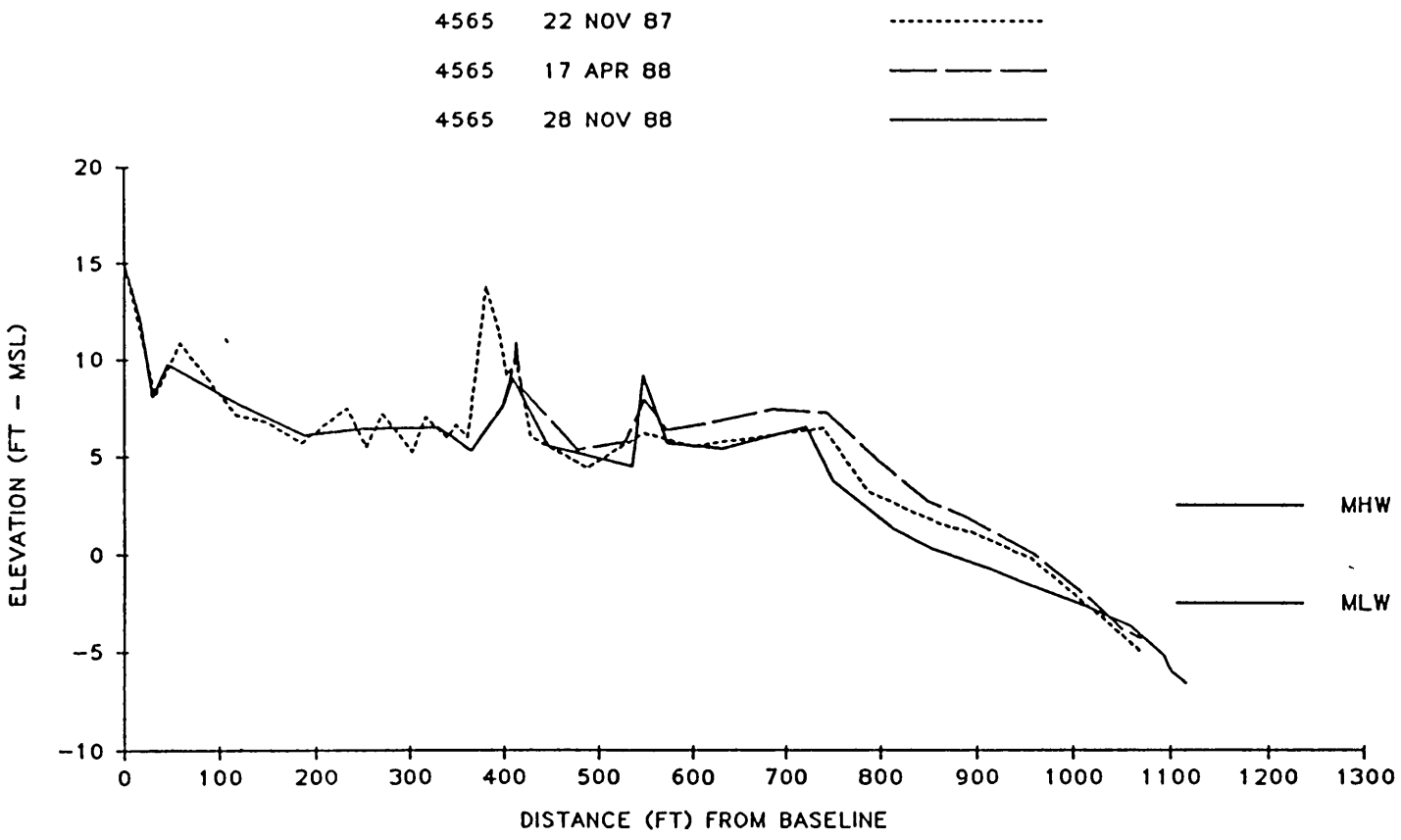
0.2 MI SOUTH OF NORTH PARKING AREA



0.6 MI NORTH OF NORTH PARKING AREA



AT S END OF CONSTRUCTION ROAD WHERE ROAD TURNS EAST



1.05 MI NORTH OF NORTH PARKING

4575 22 NOV 87 ----------

4575 6 APR 88 — — —

4575 28 NOV 88 ————

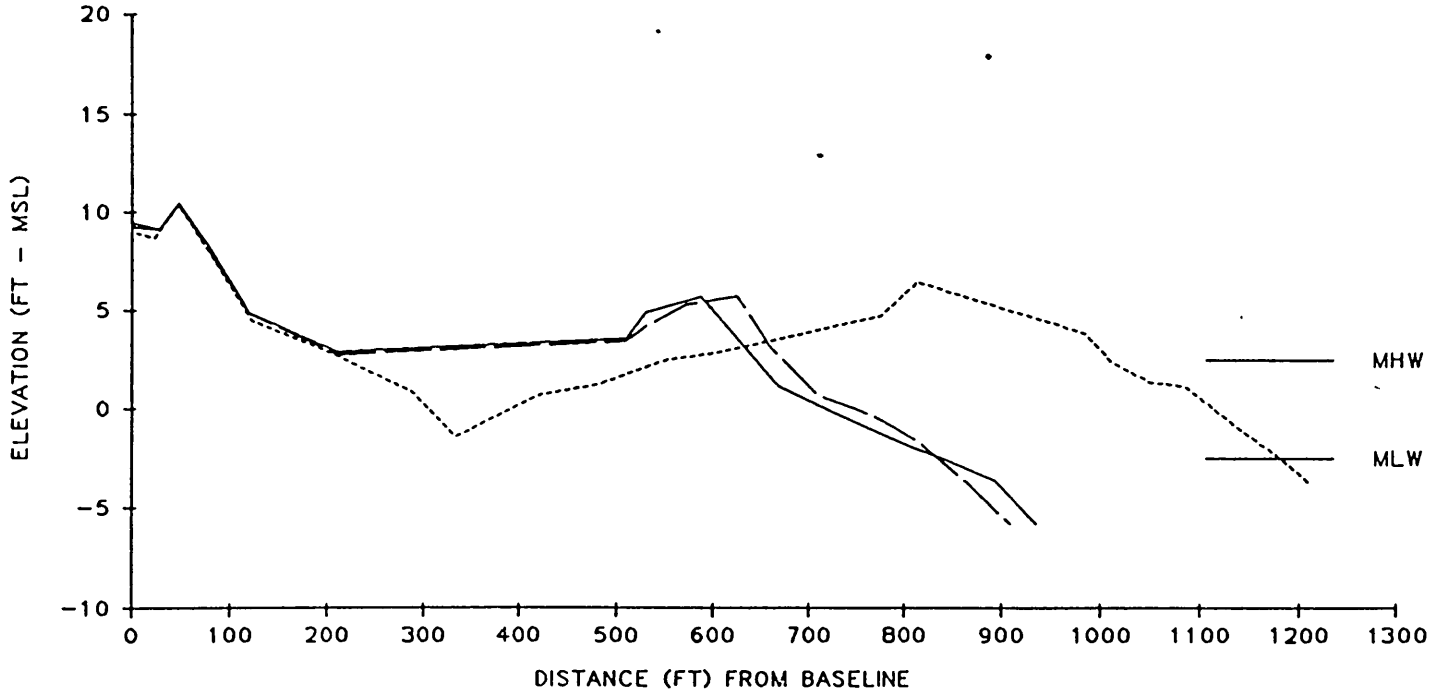
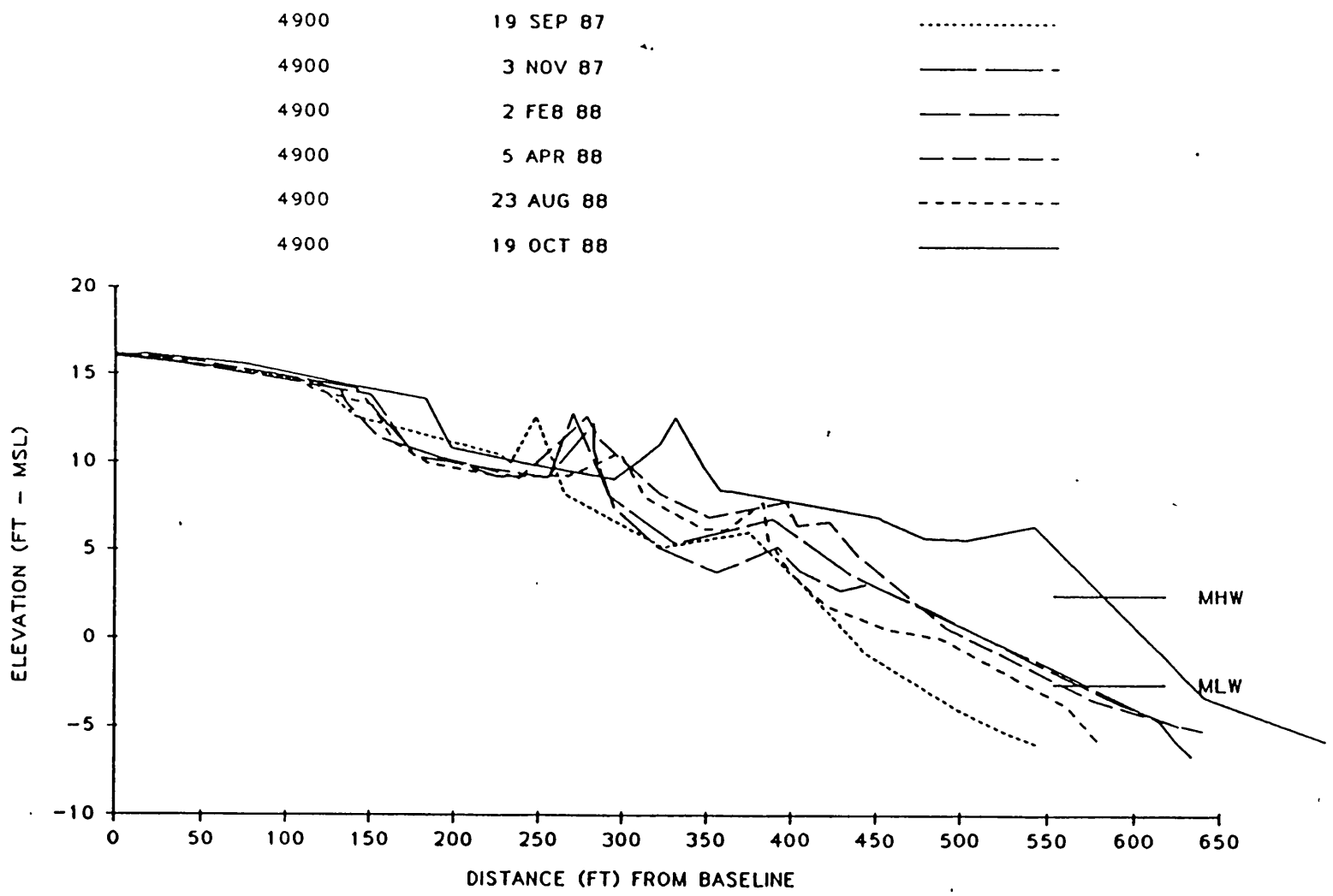
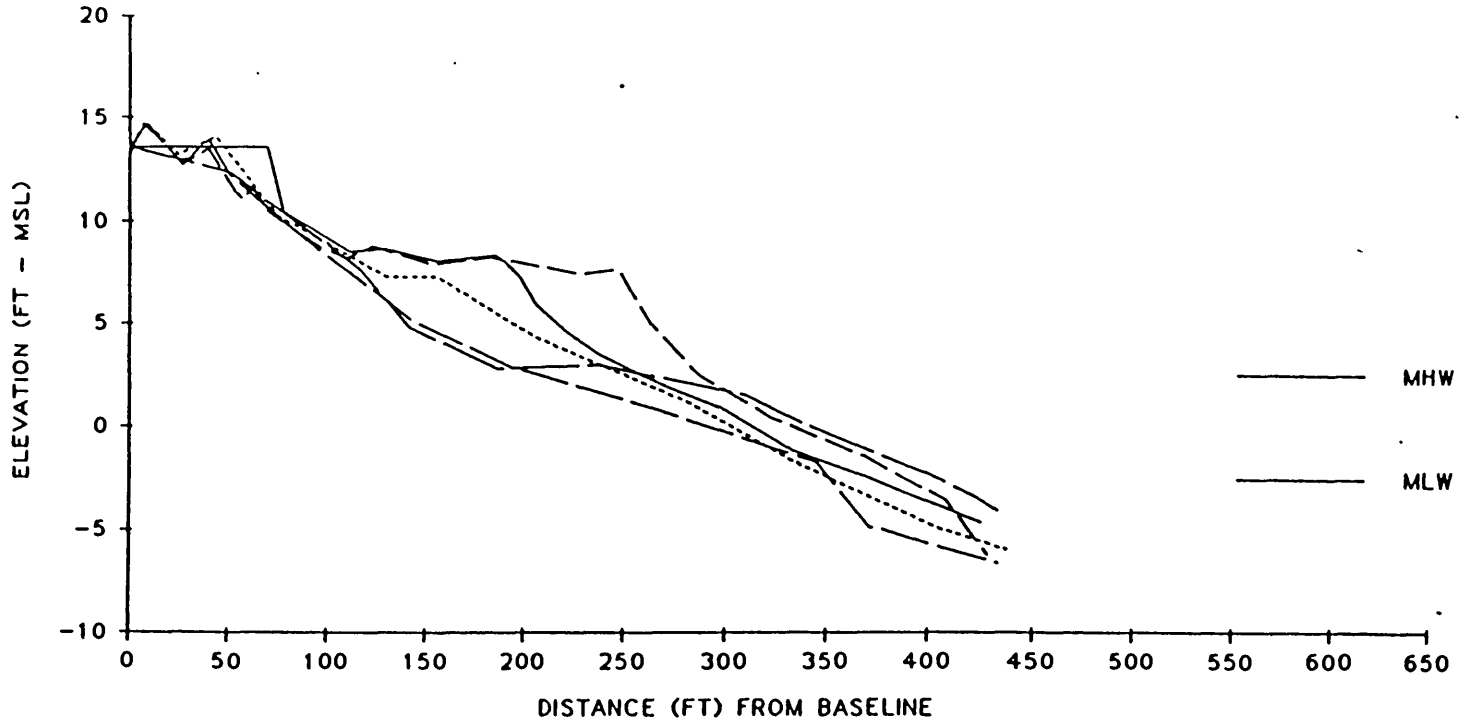


Figure 5 Calculated Beach Survey Profiles - Garden City Beach
108 FT SW OF CORPS OF ENGINEERS BM 131.49



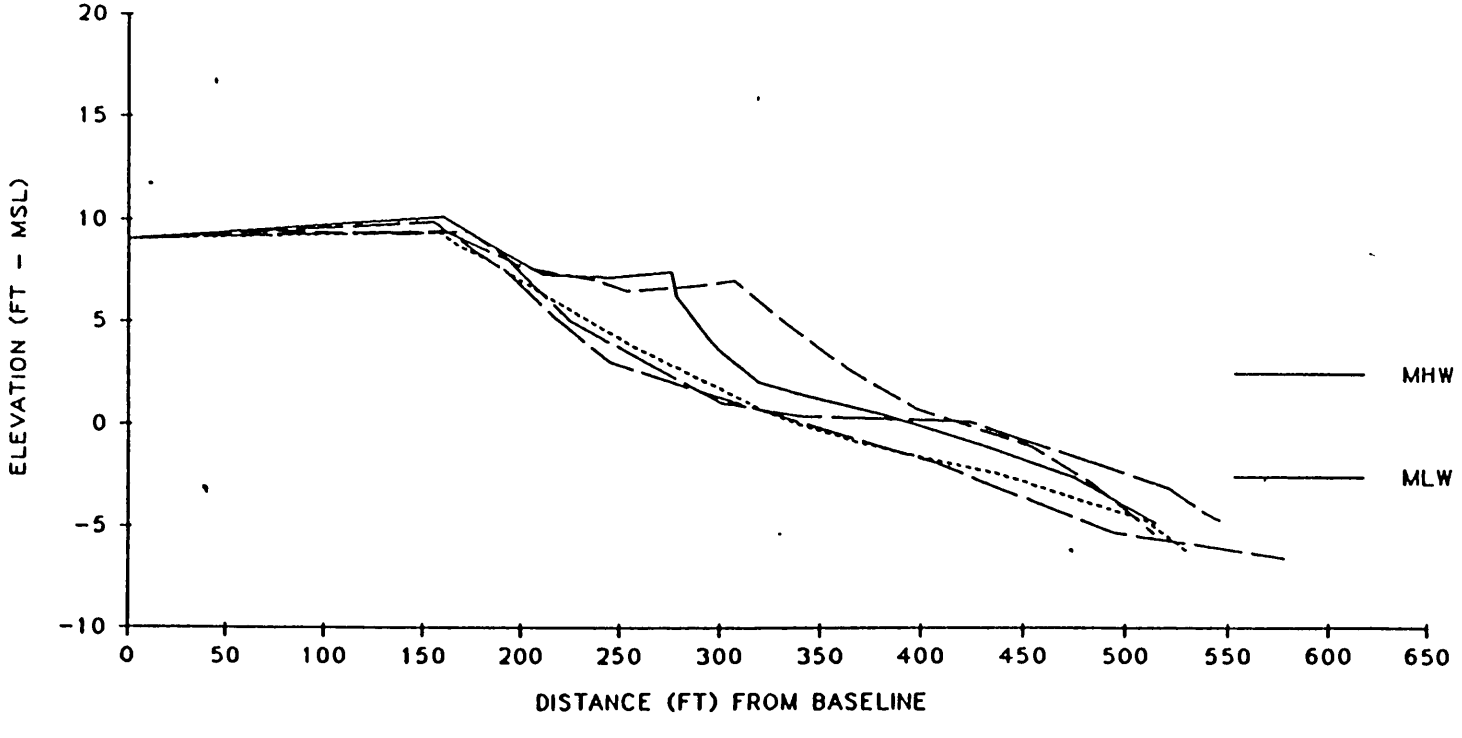
54 FT SEAWARD OF INLET HARBOR GUARD HOUSE

4910	19 SEP 87	.....
4910	2 FEB 88	— — — -
4910	7 APR 88	— — —
4910	23 AUG 88	— — — — -
4910	17 NOV 88	———



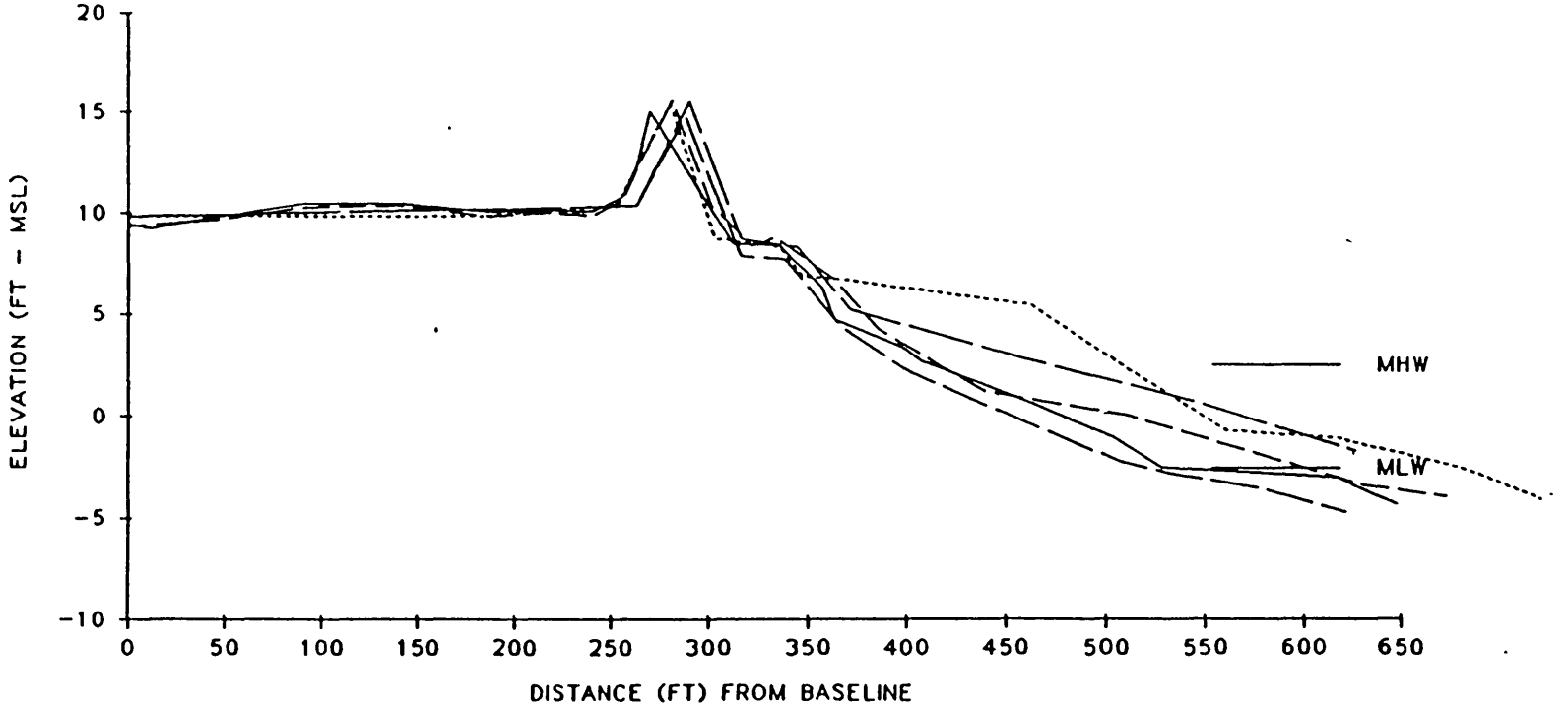
SW CORNER OF INTERSECTION OF WACCAMAW DR AND POMPANO DR

4920	24 OCT 87	.....
4920	2 FEB 88	— — — -
4920	7 APR 88	— — —
4920	23 AUG 88	— — — — -
4920	17 NOV 88	———



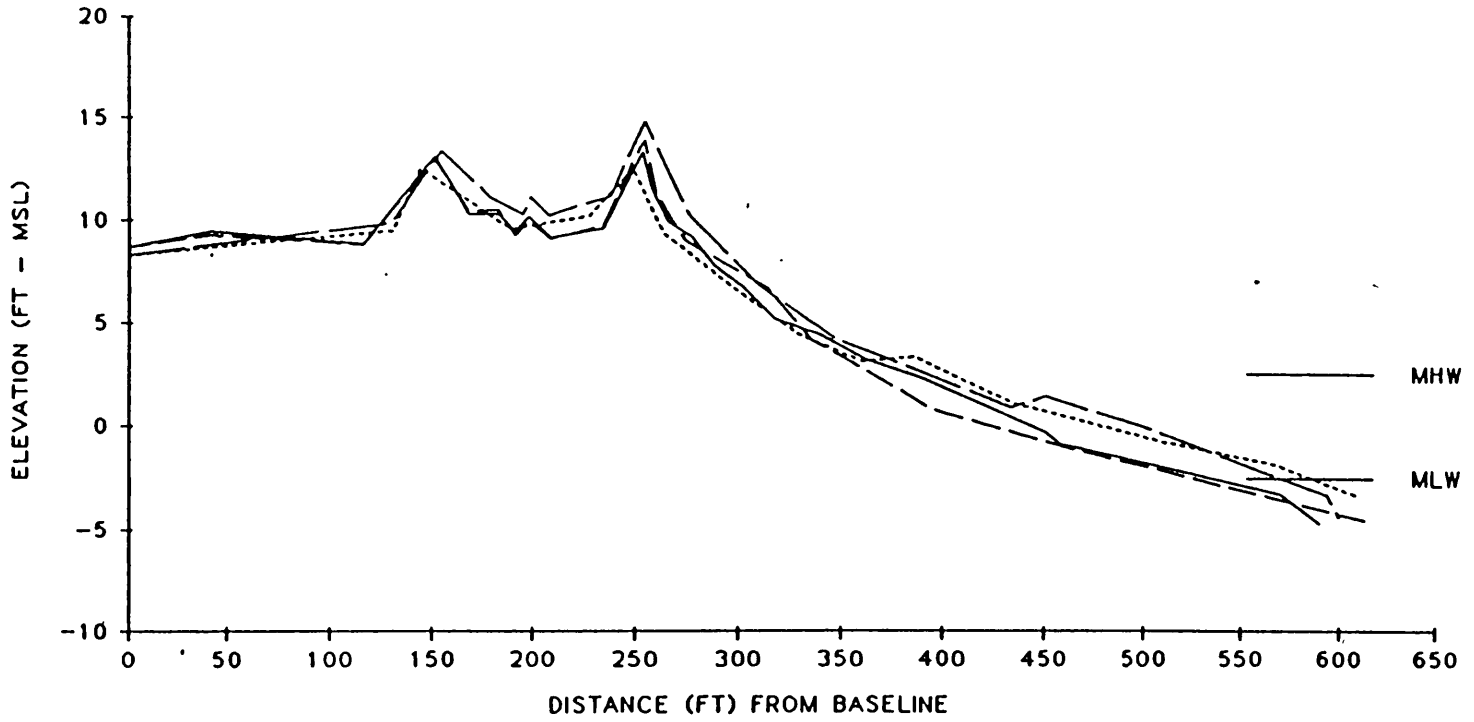
IN FRONT OF THE SANDPIPER ACROSS FROM 352 WACCAMAW DR

4930	24 OCT 87	.....
4930	30 JAN 88	— — — -
4930	7 APR 88	— — —
4930	24 AUG 88	— — — -
4930	17 NOV 88	———



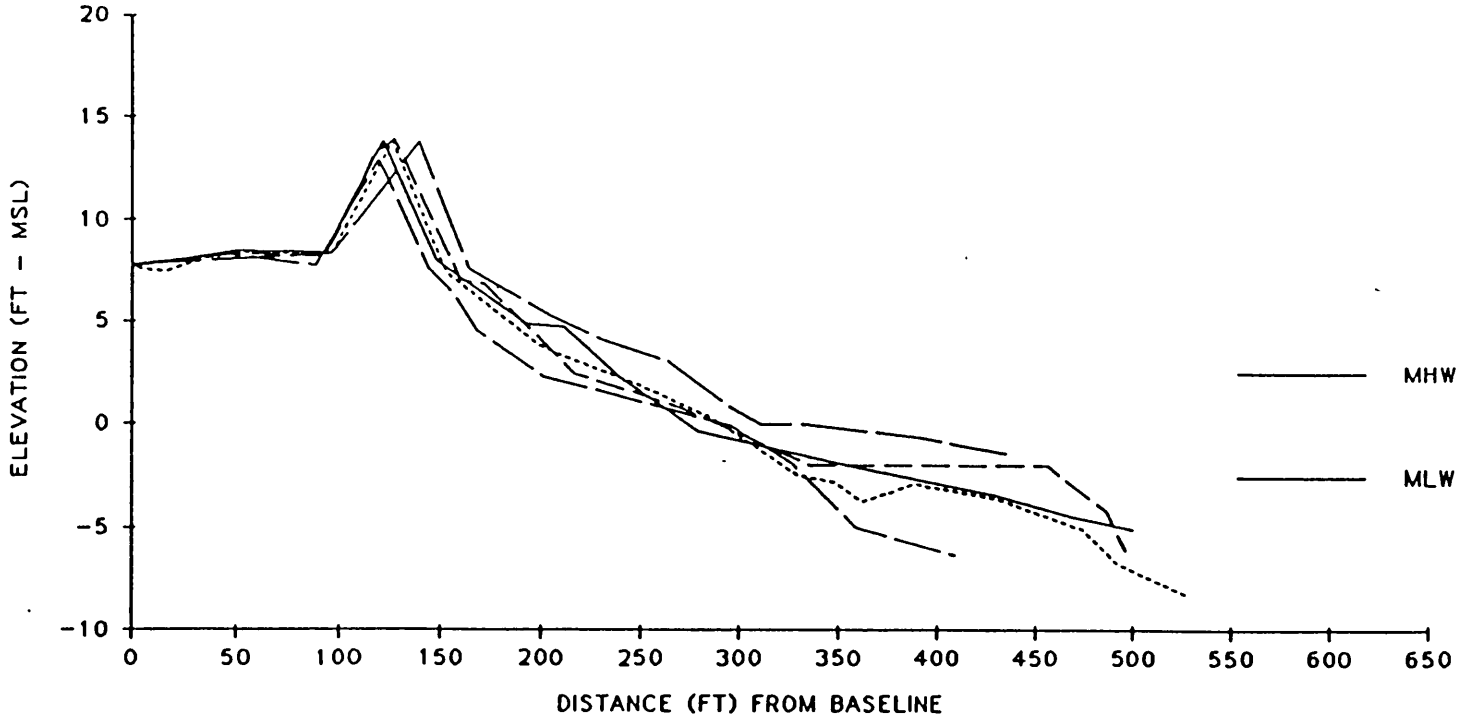
ACROSS FROM 312 WACCAMAW DR

4940	30 JAN 88	.....
4940	7 APR 88	— — —
4940	24 AUG 88	— — — —
4940	17 NOV 88	———



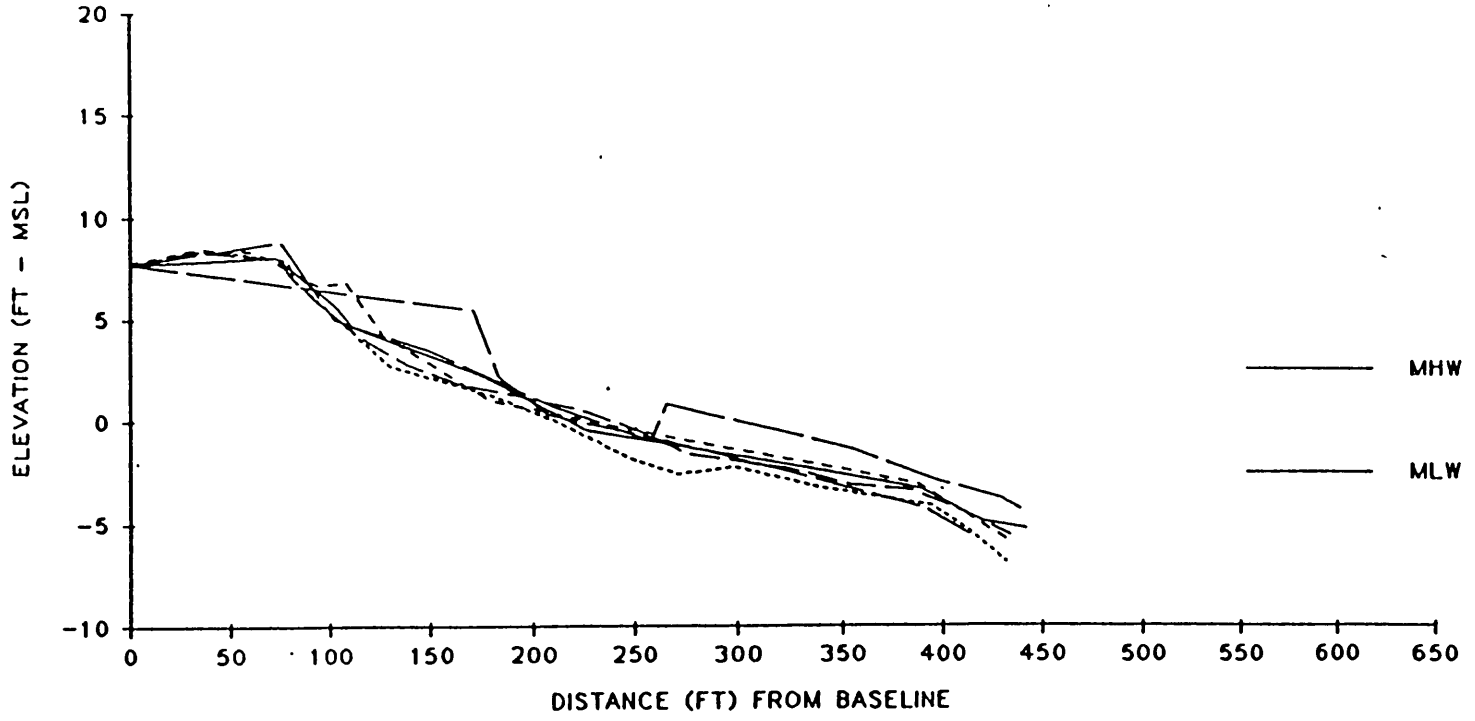
AT BEACH ACCESS NORTH OF 262 WACCAMAW DR, SANDERLING III

4950	3 NOV 87	.....
4950	30 JAN 88	—— —— -
4950	7 APR 88	—— —— ——
4950	24 AUG 88	—— —— —— -
4950	15 OCT 88	————



AT PUBLIC ACCESS SOUTH OF 204 WACCAMAW DR, WINDFALL

4960	3 NOV 87	.....
4960	30 JAN 88	—— —— -
4960	7 APR 88	— — —
4960	5 MAY 88	— — — — -
4960	24 AUG 88	- - - - - - - -
4960	15 OCT 88	————



AT PUBLIC BEACH ACCESS NORTH OF 156 WACCAMAW DR, SEA BIRD

4970	3 NOV 87	.....
4970	30 JAN 88	—— —— -
4970	7 APR 88	—— —— ——
4970	24 AUG 88	—— —— —— -
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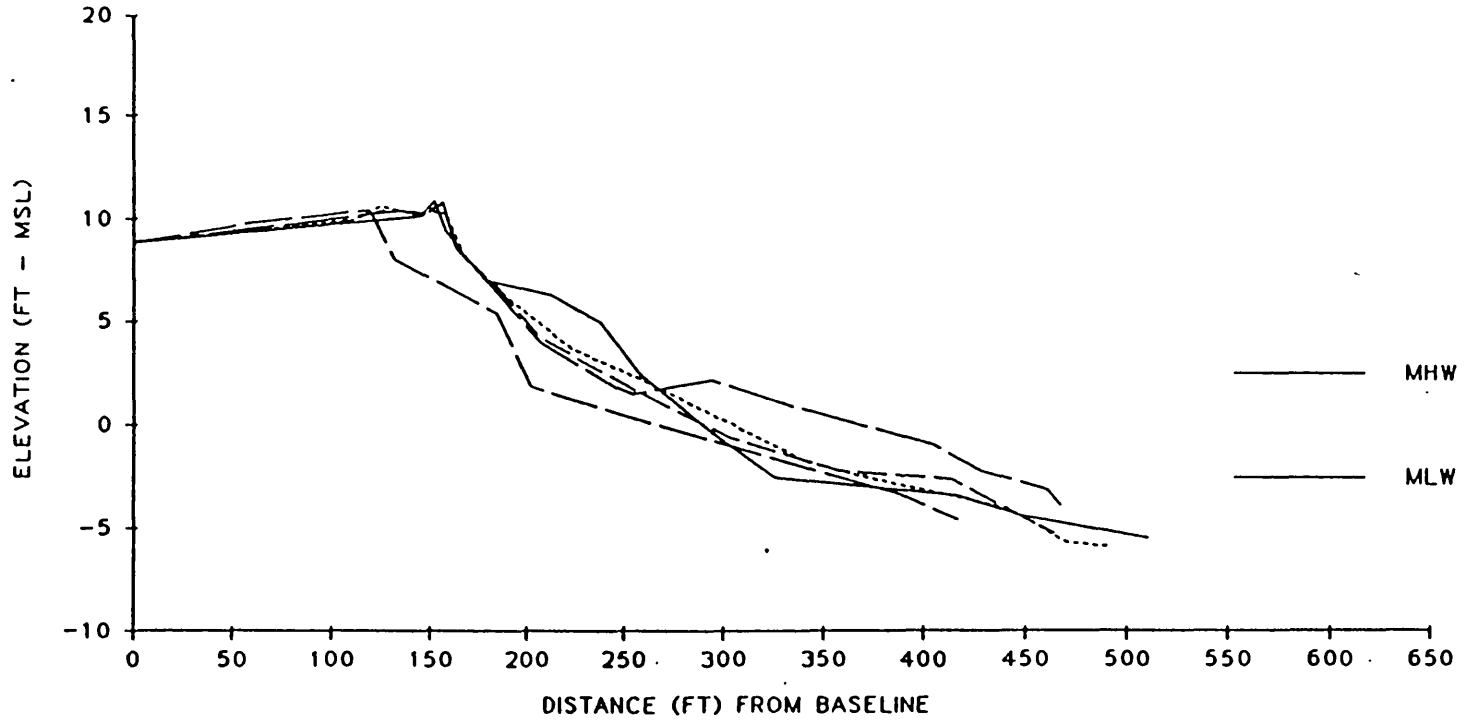

NE CORNER OF INTERSECTION OF WACCAMAW DR AND YUCCA AVE

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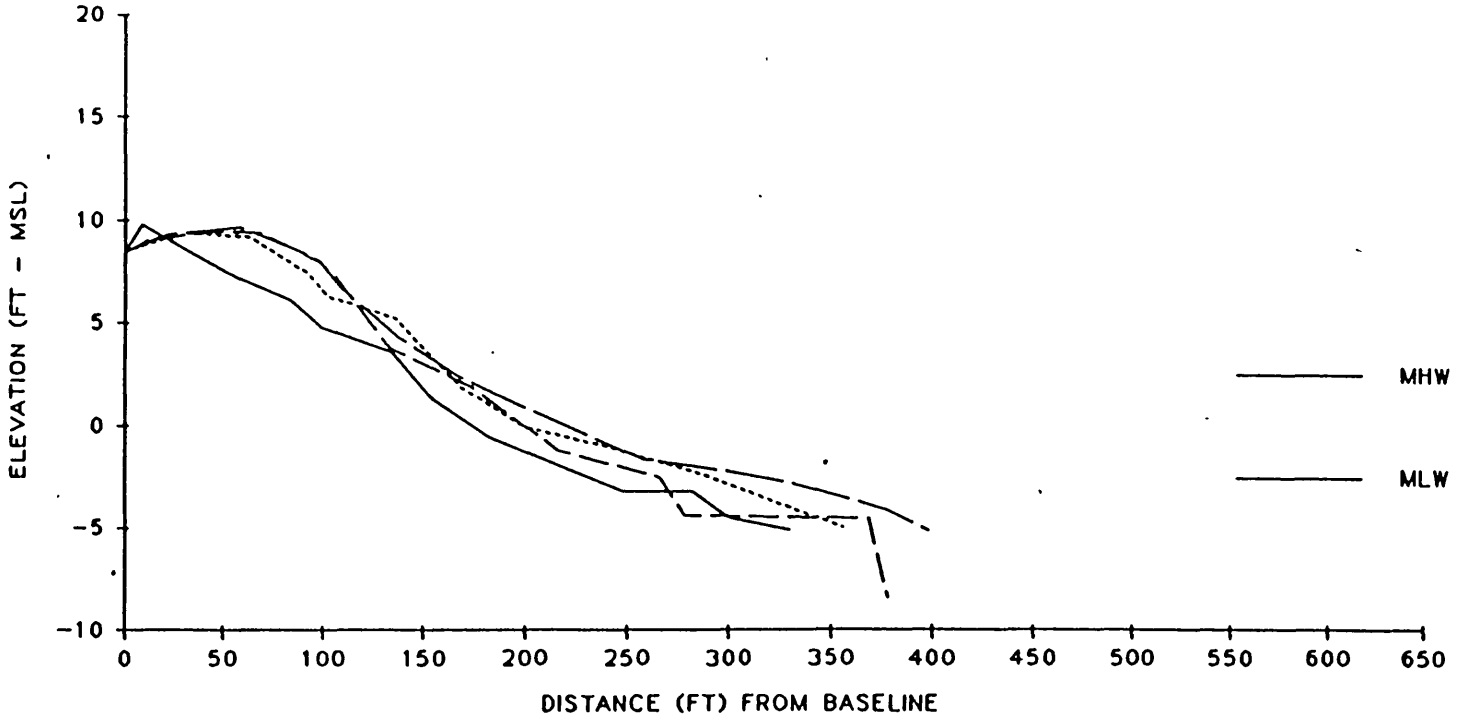
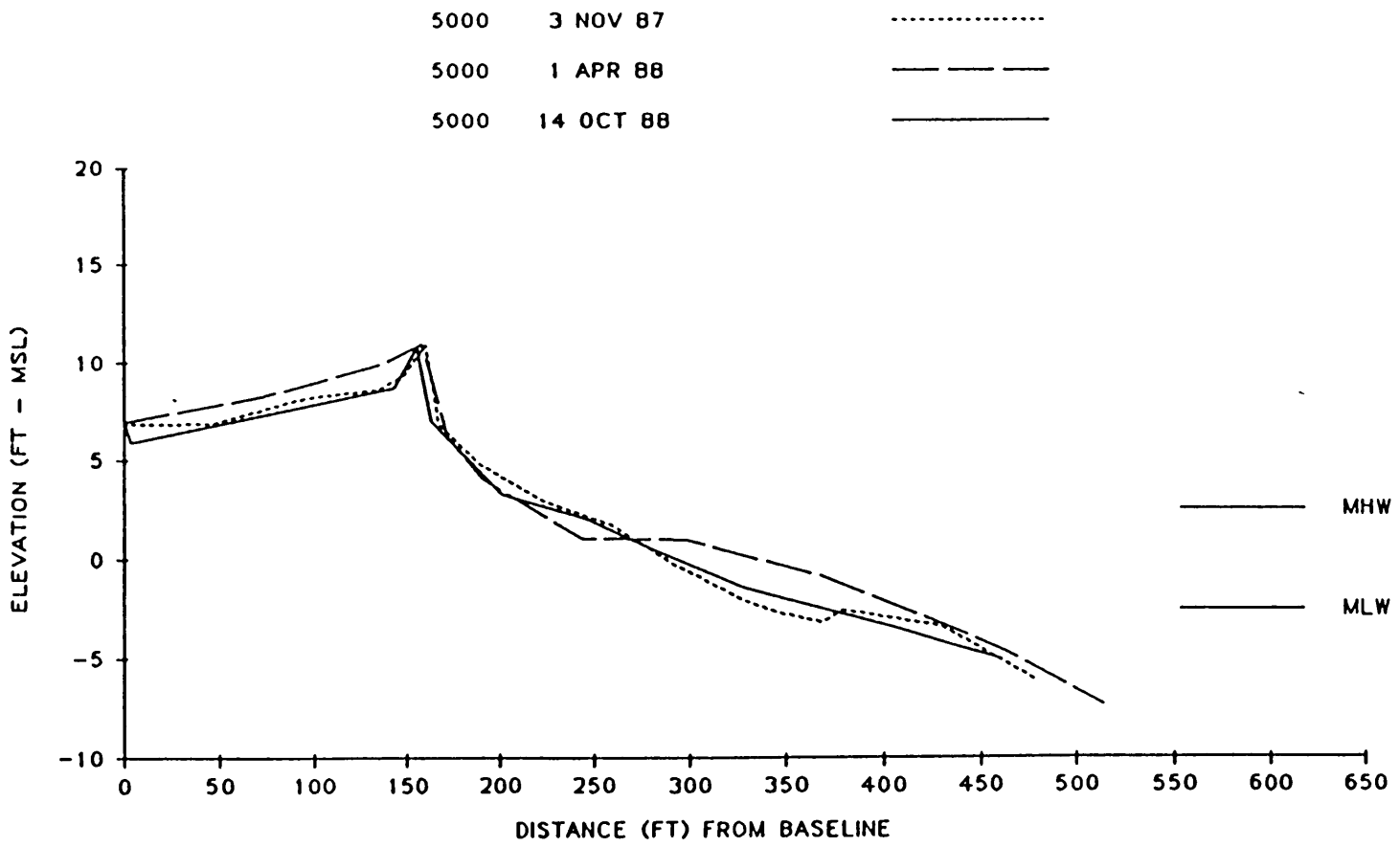
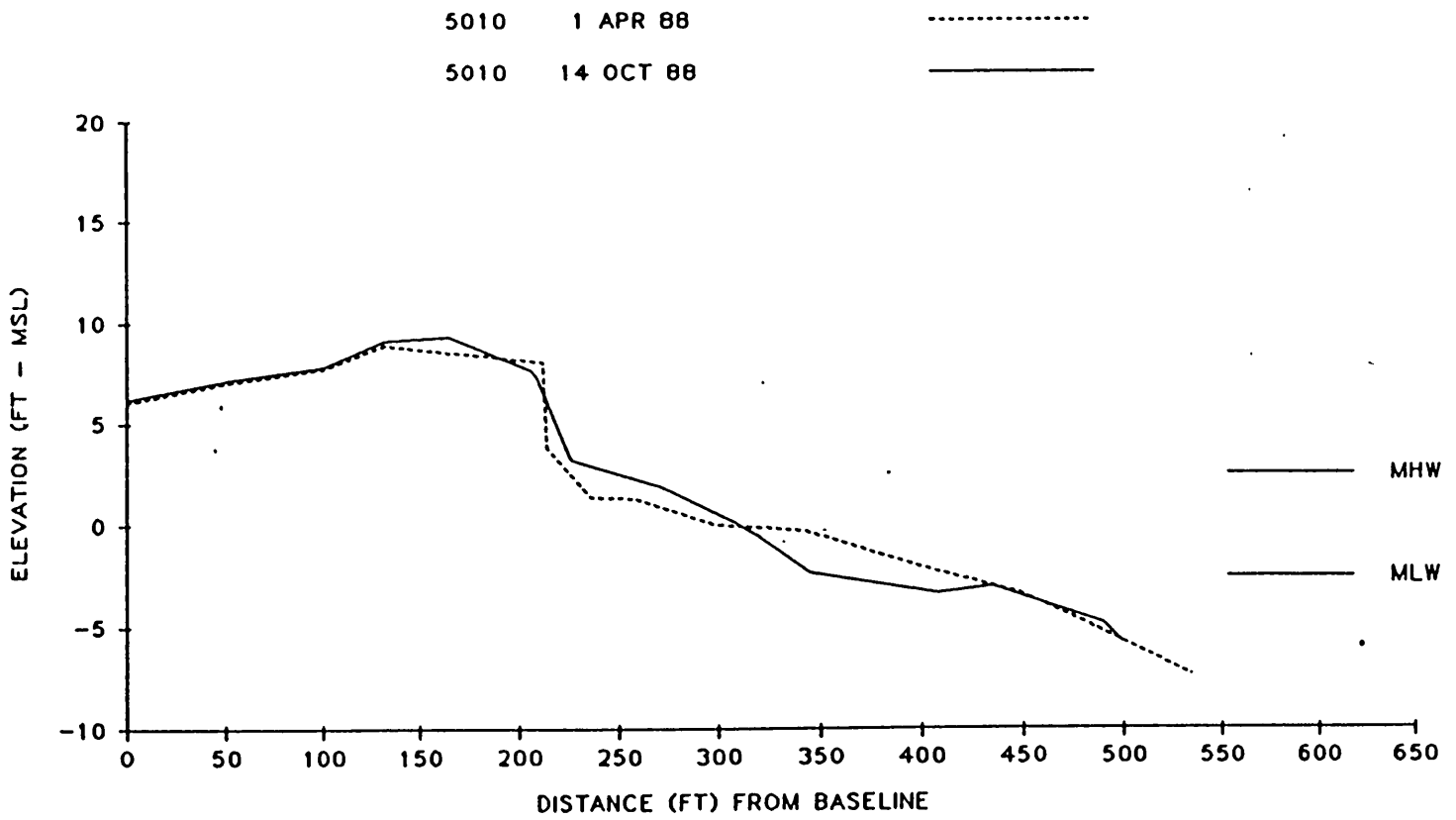


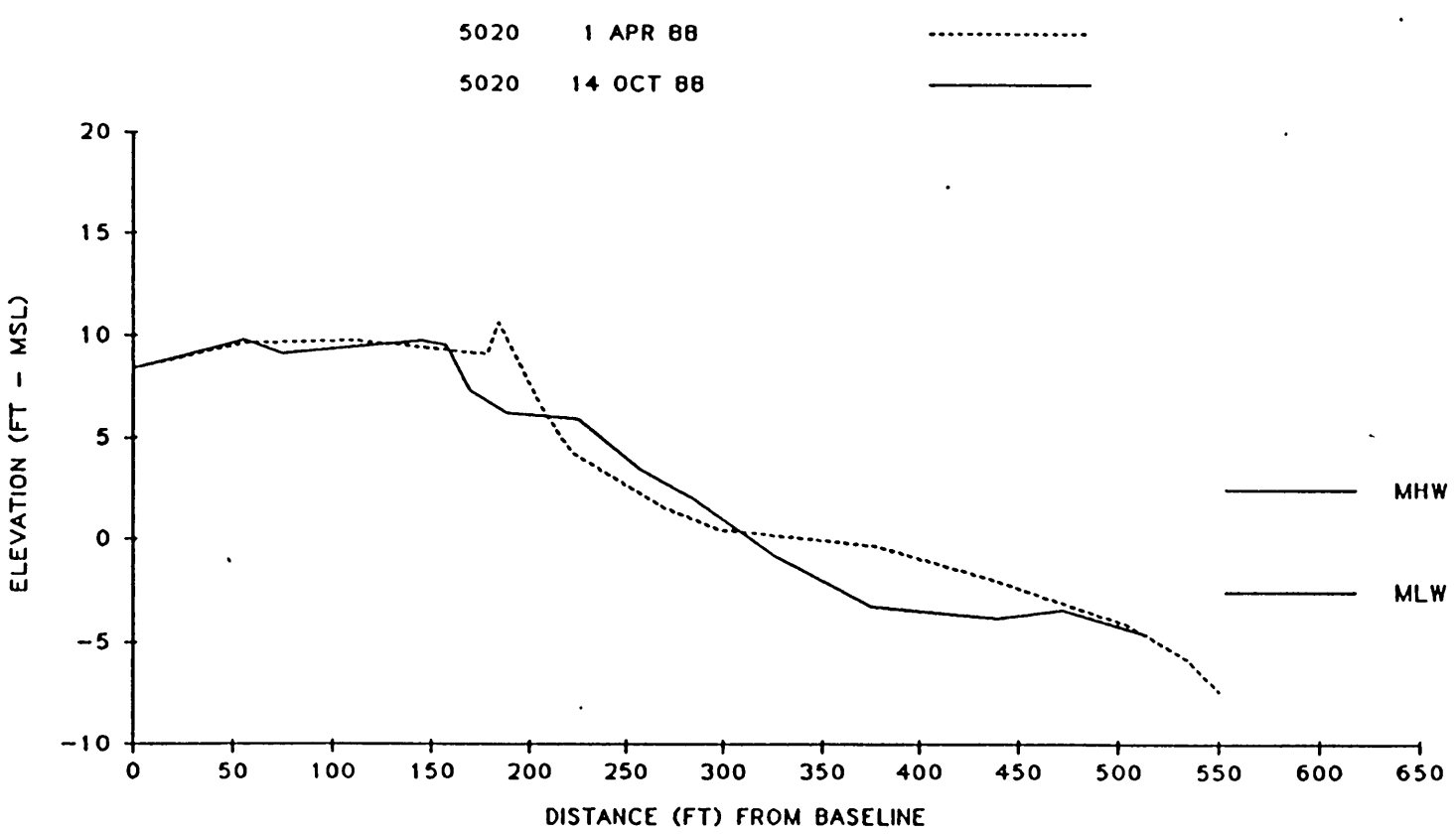
SW CORNER OF INTERSECTION OF WACCAMAW DR AND AZALEA AVE



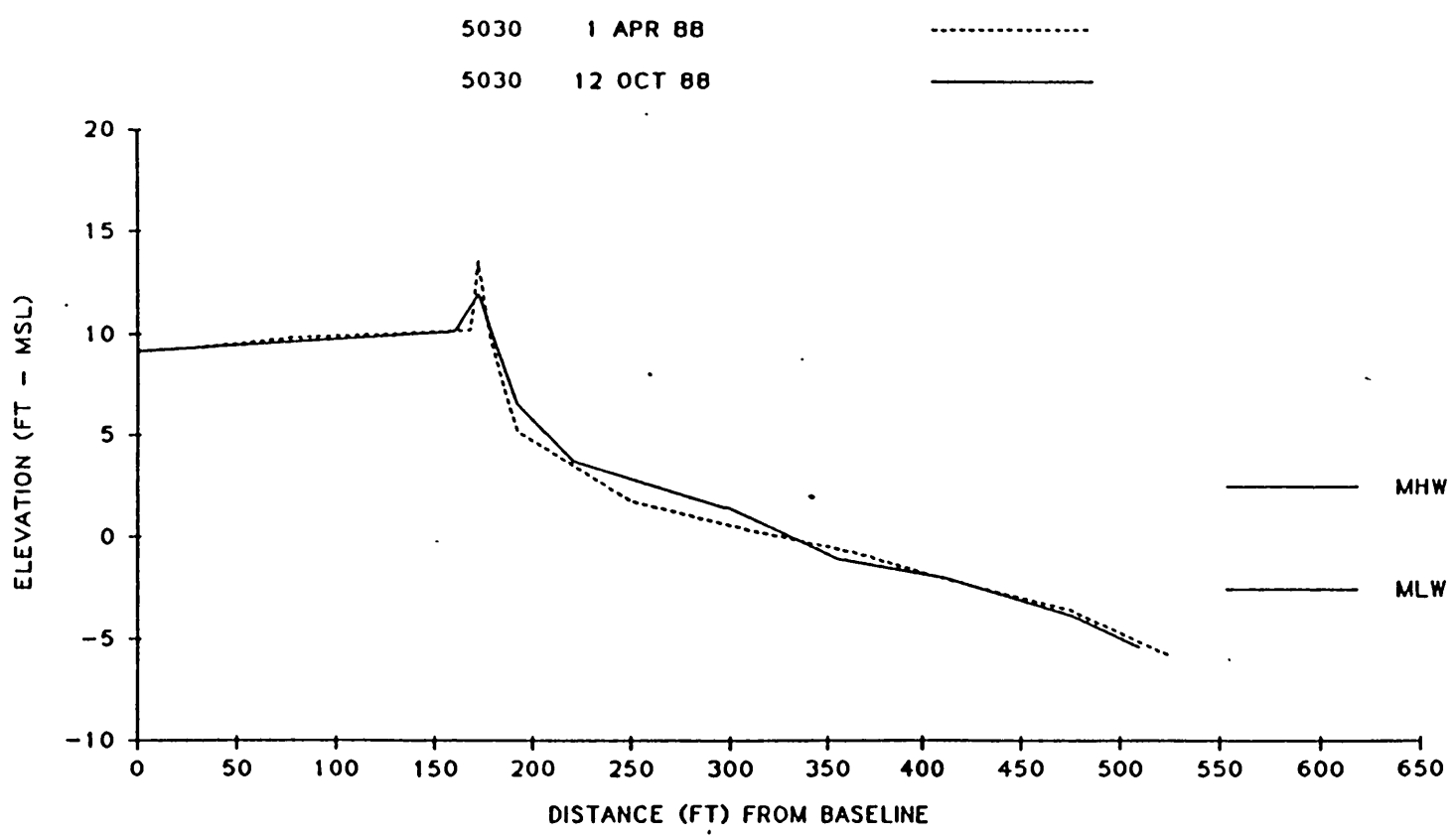
105 FT N OF CYPRESS AVE, S OF WHISPERING SANDS



NE CORNER OF WACCAMAW DR AND SEABREEZE DR



WACCAMAW DR NORTH OF SURFMASTER CONDOS



HURRICANES AND STORMS

GENERAL INFORMATION

Major storm systems that may have an immediate destructive effect on the South Carolina coastal zone fall into three categories: northeasters; tropical storms; and hurricanes. "Northeasters" is the term given to the particular type of intense Atlantic storm which occurs periodically throughout the fall, winter, and on into the spring months. A northeaster is characterized by high winds circulating around an essentially stationary low pressure area and produces high wind tides, large waves, and heavy rainfall along the coast. The combination of large waves from the northeast and high tides for several days may cause more sand movement than some hurricanes of the same tide levels. Winds are usually from the northeast quadrant relative to the study area, hence the term "northeaster".

In contrast, tropical storms and hurricanes are more localized wind storm systems that develop at tropical latitudes and travel in a generally northwestward direction toward land. Hurricanes and tropical storms also differ from northeasters in that they usually generate a significant storm surge, which is a rise in the ocean surface above its normal high tide level. A hurricane is characterized by low barometric pressure, high winds over 75 miles per hour, heavy rainfall, large waves, and tidal surges.

Hurricanes and severe storms moving nearshore can produce significant changes in water levels along the coast. The term "storm surge" is used to

indicate a rise in water level above normal due to the action of storms. In addition to the obvious flooding implications of storm surge, these conditions can also contribute significantly to beach erosion. The beach berms are built naturally about the highest elevation reached by normal waves. The storm surge allows large, steep storm waves to act at high beach elevations not normally subjected to wave action.

When the storm waves with high storm tides attack and erode the beach and dune system (see Figure 6.), the sand is moved seaward until the offshore beach slope becomes stabilized. An offshore bar often forms which acts to dissipate the storm wave energy further offshore. After the storm passes away from the beach, the offshore bar material is gradually returned to the beach under more favorable wave conditions.

HISTORICAL ANALYSIS

Over sixty storms have affected South Carolina's coast since the early 1800's. The five most damaging storms to date are listed as: the hurricane of 1893; the hurricane of 1940; Hurricane Hazel in 1954; Hurricane Gracie in 1959; and the New Year's Day northeaster storm in 1987 (Purvis, 1986).

The "Great Storm of 1893" was reported the worst during the 1800's (USACOE, 1966). It struck the southern coast at high tide, pushing an enormous storm surge ahead of it, creating a "tidal wave" that swept and submerged whole islands. Maximum winds in the Beaufort area were reported at 125 mph; those in Charleston at 120 mph. Water from the first wave probably stacked up in the marshes and was held there by winds until the next high

Beach Erosion and Rebuilding Sequence

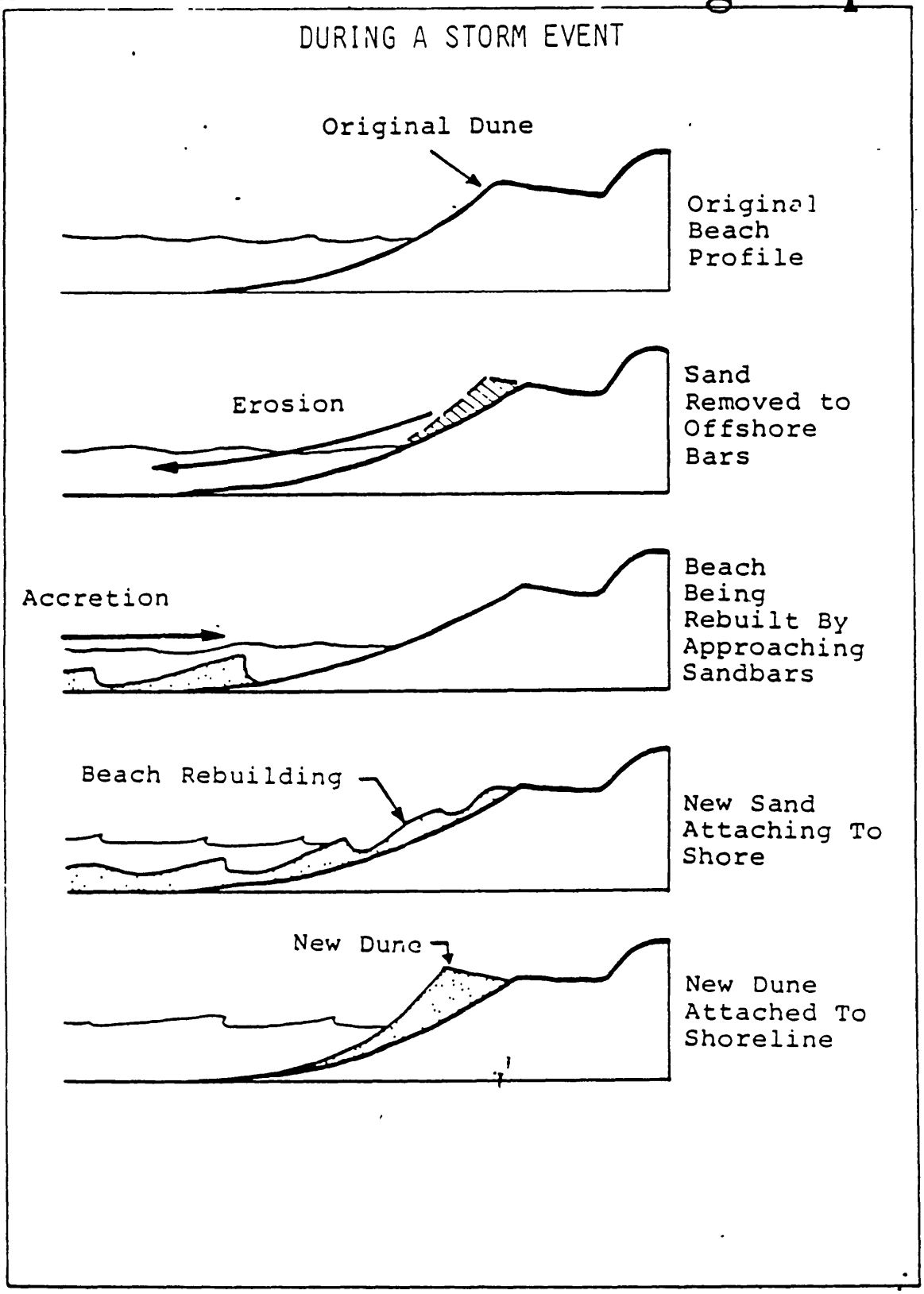


Figure 6

Diagram courtesy of
Zarillo, and others, 1985, "An Illustrated History of Tidal Inlet Changes in South CArolina" Funds provided by South Carolina Sea Grant Consortium and South Carolina Coastal Council.

tide, which came after the storm had passed. Lowered barometric pressure and the amount of "stacked" water created resonance effect destruction equal to that of the "tidal wave." An estimated 2000 people lost their lives on the coastal islands and lowlands. It approached land in the general vicinity of lower Beaufort County creating a maximum water level reported variously as 10.9 and 11.2 feet, NGVD. This hurricane contributed to the demise and eventual disappearance of the wealthy community of Edingsville Beach, located just north of Edisto Beach, at the turn of the century.

Potentially the most damaging hurricane of this century reached the shoreline near Savannah, Georgia on August 11, 1940. The hurricane carried winds estimated in the range of 80-100 mph at Edisto Beach. One report of the maximum storm tide at Edisto Beach was 9.2 feet, NGVD. Based on the high-water mark near the southern tip of the island, the tide height is reported to have reached 13.6 feet, NGVD on the open coast. The beach front itself receded from 30 to 120 feet; about 175 homes were destroyed while nearly every structure in the coastal zone suffered some damage. On the same day at Folly Beach, the low tide was about 3 feet above normal low tide. The elevation of maximum tide was about 6 feet above normal high tide. The entire front of Folly Beach was eroded an average width of 75 feet, and property damage was estimated at $250,000 (Myers, 1975).

Hurricane Hazel in 1954, one of the most severe storm tides to hit the South Carolina coast, made landfall near Little River, South Carolina, with 106 mph winds. It produced peak storm tides of 6.0 to 10.0 feet along portions of the Georgetown County shoreline. Horry County along Myrtle Beach

was severely impacted by Hazel's 15.5 feet storm tides. One person was killed and property damage was estimated at $27 million.

The most intense storm making landfall in the Edisto Beach area was likely Hurricane Gracie in late September of 1959. It landed on St. Helena Island with 140 mph winds, then weakened and crossed the center of Edisto Beach with winds of 130 mph. Peak storm tides of 8.6 feet were produced by its intensity. Heading in a north-northwest direction, Gracie migrated inland toward Columbia and into North Carolina near Gastonia. No one was killed during the storm, but some crops were heavily damaged. Folly Beach reported severe damages along the front beach on the southern part of the island, whereas the northern front beach was protected by 12 groins and sand dunes. Total damage on the island was estimated at $150,000 of which $100,000 resulted from the wind, and $50,000 from wave and tidal action.

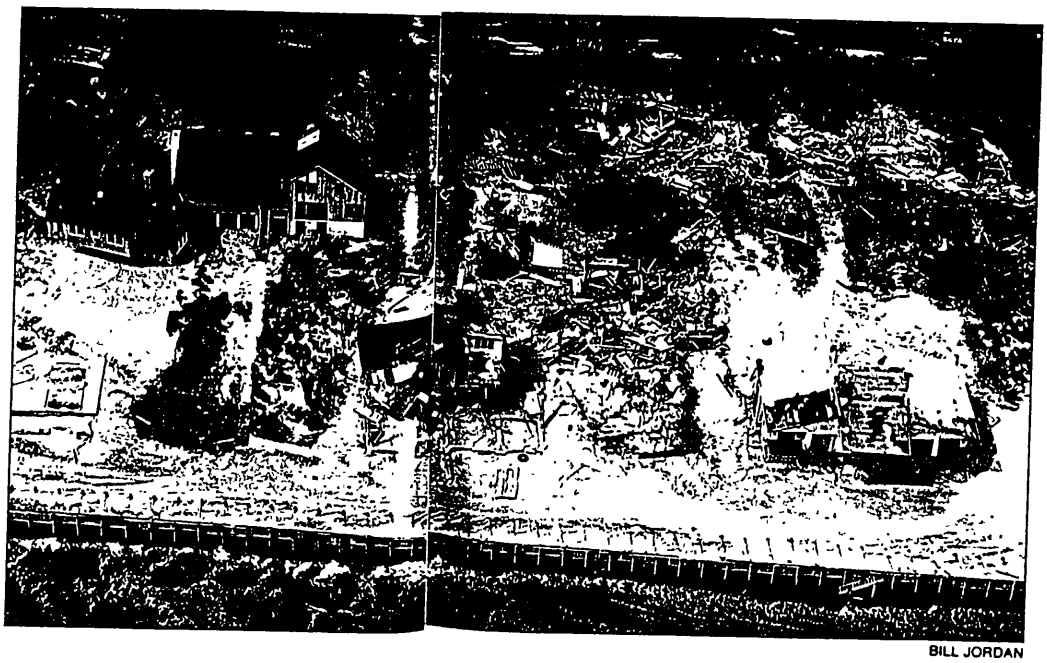
On January 1, 1987, the New Year's Day northeaster caused major flooding and erosion on the South Carolina coastline. Average winds of 30 mph gusting to 50 mph, blew steadily from the northeast for 12 hours prior to the storm. The storm raised sea levels to 9.4 feet at Myrtle Beach and 8.9 feet at Charleston. Southern coastal areas were spared a great deal of damage due to a higher tide range and the weakening of the storm as it moved southward and the tide fell (USACOE, 1987).

In 1979, Hurricane David landed in South Carolina. The storm was relatively mild, but it did affect the shorelines of Georgetown and Horry Counties. No other storms have made landfall in Georgetown County, although the area has felt the brunt of several of the aforementioned storms.

On Thursday evening, September 21, 1989, a storm named Hugo rewrote the history book and made names like David, Gracie and Hazel storms to be forgotten. By nightfall, Hugo's winds increased to 135 mph and it was upgraded to a Category 4 hurricane. By 11 P.M., the full force of the storm was devastating coastal areas in the Lowcountry. A wall of water poured across Pawleys Island and breached the island near the south end. Beach homes on Garden City Point were torn off of their pilings and parked across Murrells Inlet. A tidal wave pushed across the beach at DeBordieu and rolled inland destroying homes in its path. At 11:50 P.M., the eye of the storm passed over Charleston. Hugo's backside whipped the coastal area for more than two hours. Leaving the Lowcountry, the storm wreaked havoc across the rest of the State, then North Carolina, Virginia, West Virginia and Pennsylvania felt it's wrath.

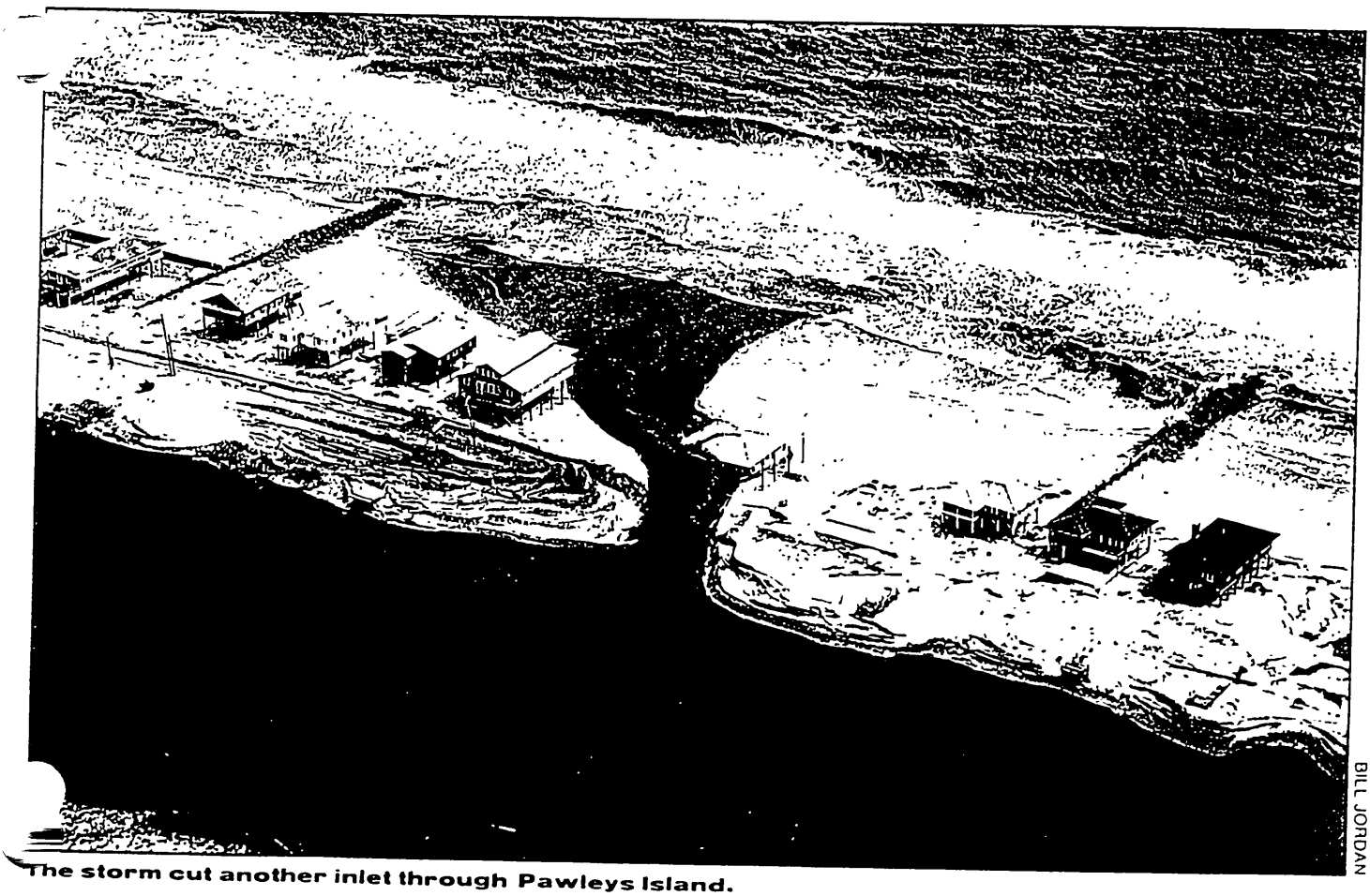
Twenty-six people died in South Carolina and damage from the storm exceeded $4 billion. More than 64,500 people were evacuated from their homes. Over 5,100 housing units were destroyed and almost 12,000 units were severely damaged. The timber industry, fishing, tourism, government, agriculture, and the military sustained heavy losses that were felt for years.

In Georgetown County, one person was killed and damage was estimated at $267 million. Some areas of the County were without electricity or up to 3 weeks. Almost 100 homes were destroyed on Pawleys Island and at least that many at DeBordieu, Garden City and Litchfield were lost. Heavy rains three days after Hugo added to the damage that the storm had wrought.



BILL JORDAN

Homes in Debordieu Colony, near Georgetown, were not spared.



BILL JORDAN

The storm cut another inlet through Pawleys Island.

Charles Lawrimore

The Boardwalk in Georgetown.

Roads were washed away and houses smashed at Garden City, one of the hardest hit areas.

INLET DYNAMICS

A tidal inlet is generally a short and narrow channel that divides barrier islands and provides access to the ocean from interior bodies of water. The inlet is greatly affected by enviromental forces which can cause the inlet to shoal and/or migrate. Tidal currents, wave climate, longshore currents, inlet configuration and bathymetry, and sediment supply all have a major impact on the size and stability of inlets and their associated shoals. Naturally stable inlets are those in which the deposition of sediments is balanced by the scouring effects of tidal currents (figure 8).

A major inlet feature is the ebb tidal delta or shoal (Figure 9.). These large, generally horseshoe-shaped sand deposits are formed as a result of the interruption of the longshore sediment transport by strong tidal currents near the inlet channel. Longshore sediment transport refers to sediments that are stirred up and transported parallel to the shore whose direction and quantity is primarily controlled by the angle and force of the breaking waves (figure 7). Flood or incoming tidal currents transport and deposit these sediments within the lagoon or bay, whereas ebb or outflowing tidal currents transport the sediments to the ebb tidal shoal.

Typically an unstabilized inlet migrates in the direction of the predominating longshore current (Figure 10). This process usually occurs as the updrift end of the inlet builds in the form of an accretional spit while the downdrift side of the inlet experiences some erosion. The relatively

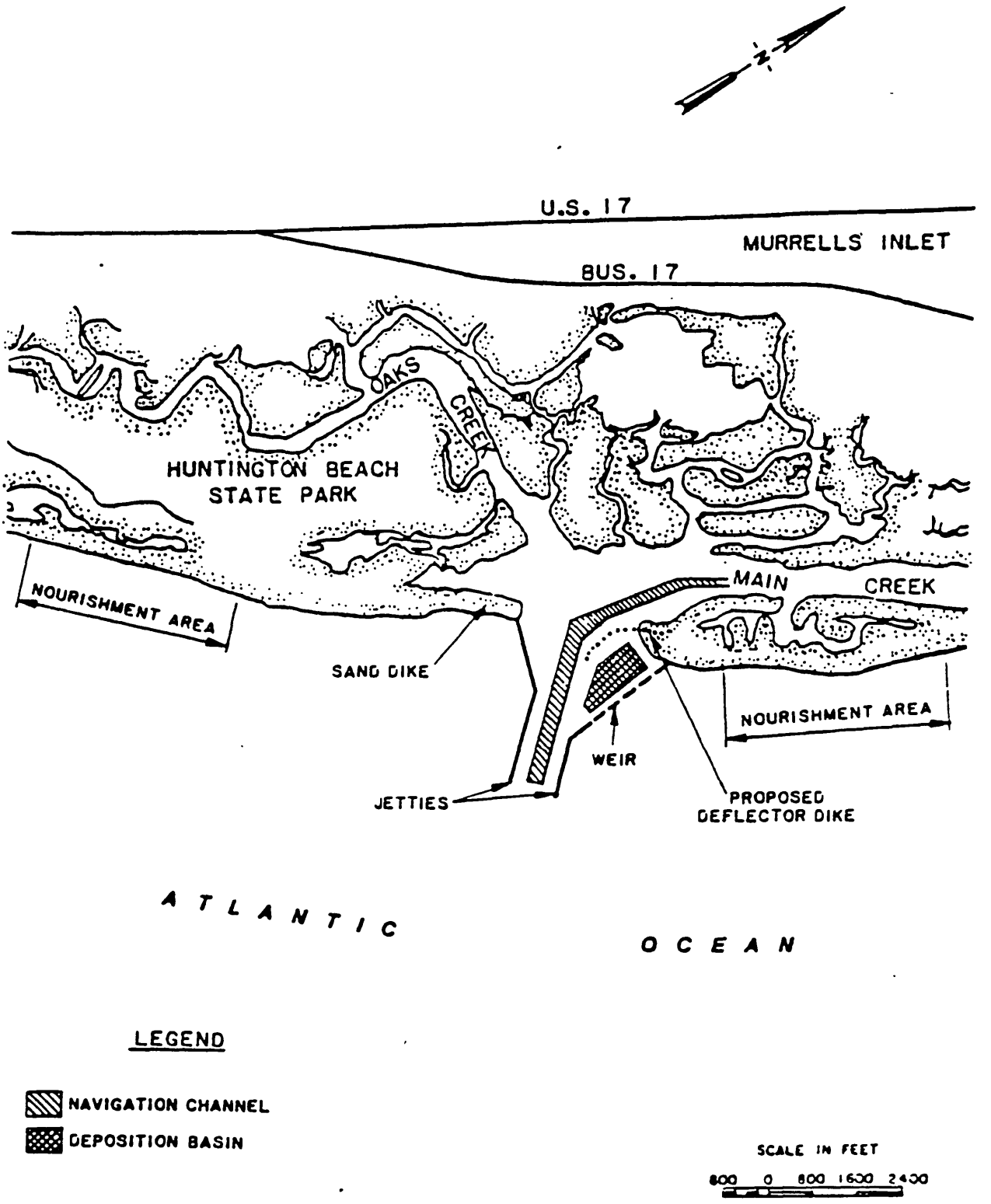
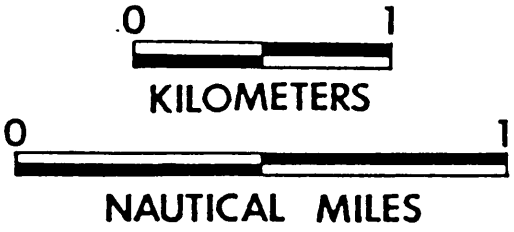
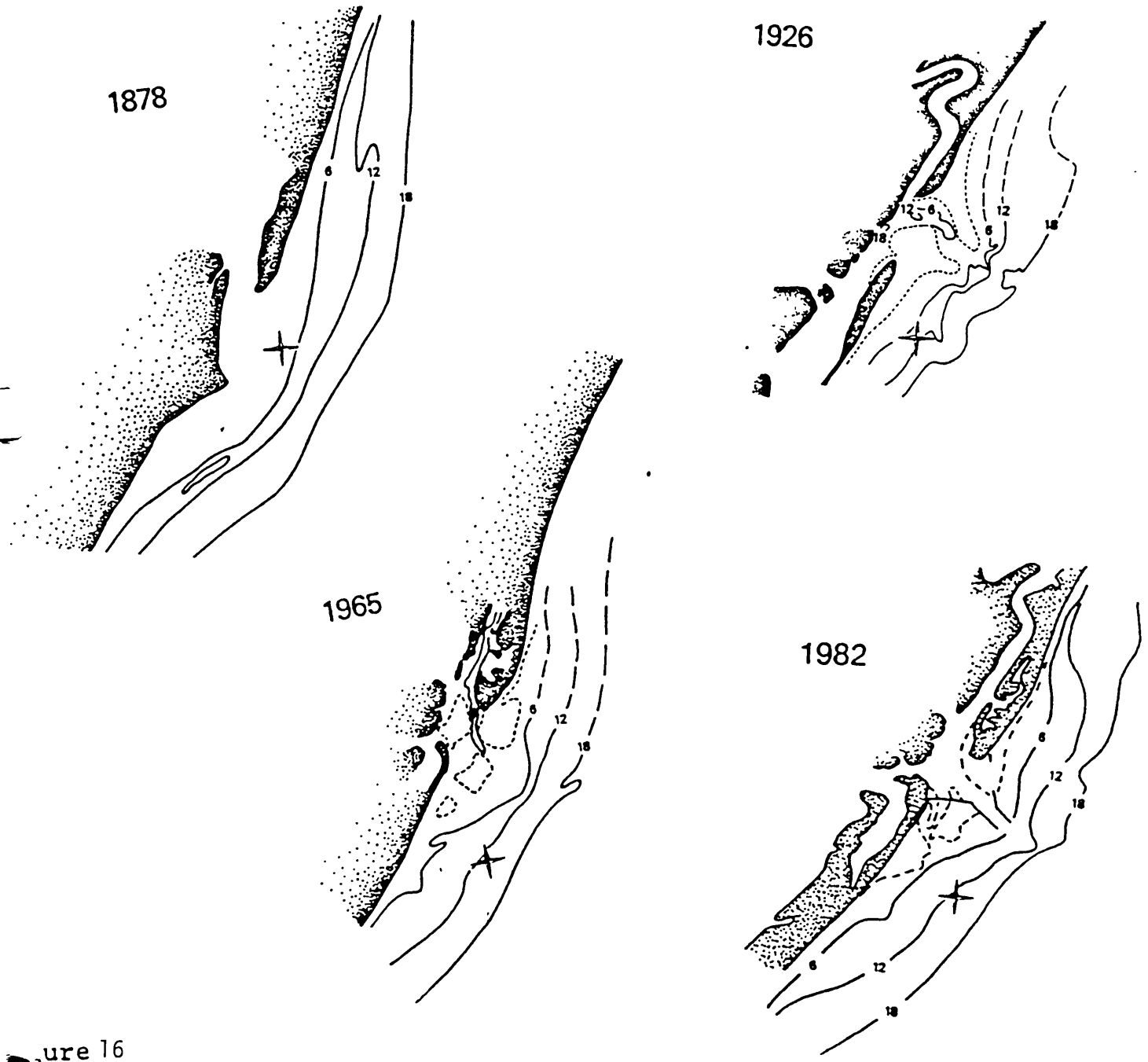


Figure 15 Murrells Inlet navigation improvement project.

Bathymetric Changes
Murrells Inlet
1878-1982





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ram courtesy of:
Zarillo, and others, 1985, "An Illustrated History of Tidal Inlet Changes in South Carolina" Funds provided by South Carolina Sea Grant Consortium and South Carolina Coastal Council.

Shoreline Changes
Murrells Inlet
1939-1982

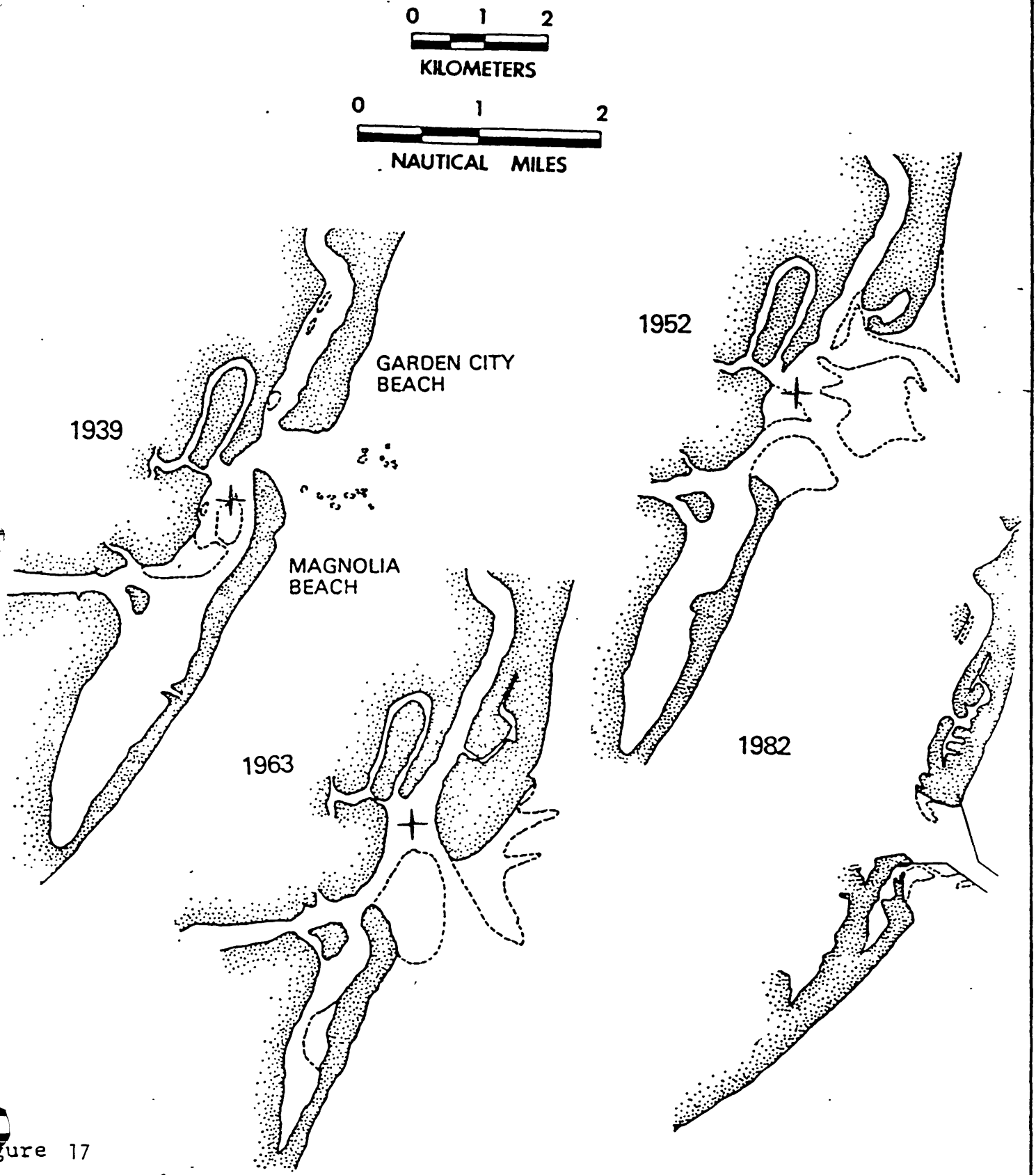

Figure 17

Diagram courtesy of:
Zarillo, and others, 1985, "An Illustrated History of Tidal Inlet Changes in South Carolina" Funds provided by South Carolina Sea Grant Consortium and South Carolina Coastal Council.

LITTORAL TRANSPORT

Littoral transport is the movement of sediments in the near-shore zone by waves and currents. Littoral transport parallel to the shore is termed longshore transport; littoral transport perpendicular to the shore is known as onshore-offshore transport. The transported material in the form of sediments is littoral drift.

Onshore-offshore transport is determined primarily by wave steepness, sediment size, and beach slope. High steep waves move material offshore, and low waves with long periods (low steepness waves) move material onshore.

Longshore transport results from the stirring up of sediment by the breaking wave and the movement of this sediment by both the components of the wave energy, and the longshore current. The direction of longshore transport is directly related to the direction of wave approach and the angle of the wave crest to the shore. Similarly the rate of longshore transport is dependent on the angle of wave approach, wave duration and energy (Shoreline Protection Manual, 1984).

Seasonal trends within the study area indicate southerly transport during the months of autumn, winter, and early spring. These trends, however, vary annually as well. As a result, annual gross transport volumes often far exceed annual net transport volumes. The direction and quantity of net transport depends primarily on the wave climate over the time period and the

shoreline location. Shores erode, accrete, or remain stable, depending on the rates at which sediment is supplied to and removed from the shore. Excessive erosion or accretion may endanger the structural integrity or the functional usefulness of a beach. Therefore, an understanding of littoral processes is needed to predict erosion or accretional rates and effects.

The presence of stabilized and unstabilized inlets, and the orientation of the shoreline to these inlets results in significant localized variation in sediment transport rates. For example, longshore sediment transport is continually directed toward an inlet channel or gorge. Tidal shoals are formed as the result of the interruption of this longshore transport by strong tidal currents near the inlets. Flood tidal currents transport and deposit these sediments within the lagoon, whereas ebb tidal currents transport the sediments to the ocean shoals. A stable inlet has balanced the deposition of littoral drift with the scouring effects of tidal currents. Typically the ebb tidal shoal, seaward of the inlet, builds and migrates in the predominating downdrift direction. This is the basic mechanism by which the inlet naturally migrates in the direction of the predominating longshore currents.

Inlets, swashes, channels, etc. are examples of natural non-structural barriers to littoral processes, whereas groins and jetties are man-made structural barriers. Significant erosion problems can result when a barrier effectively blocks a large portion of the longshore sediment transport thereby resulting in sand starvation at some locations. Jetties, which control the

navigation of the inlet, interrupt longshore sediment transport by storing sand against the updrift side (Figure 18.).

Groin fields likewise interrupt, to various degrees, longshore sediment transport. The groin is a long, low, narrow structure, usually starting at a point landward of the predicted shoreline and running perpendicular to the coast into the water (Figure 19.). Groins are classified by their design and may be high or low, long or short, permeable or impermeable, as well as fixed or adjustable. Groins must always be built as a system covering the desired area. A single groin should never be used except as a terminal structure to retain sand at the end of a project or to keep it out of an inlet.

The moving sand, that is trapped in the littoral zone by the groin field, is deposited on the beach in the vicinity of the updrift side of the groin (Figure 20.). Unfortunately, if a single groin is used, the downdrift side is deprived of the moving sand; therefore, the groin may actually cause erosion immediately downdrift.

In South Carolina, the groin normally extends out into the water to approximately the six foot contour on the South Atlantic coast. To extend the groin farther out is uneconomical as most of the littoral drift movement is within the zone landward of the normal breaker line. If the groin is too long and completely blocks the littoral drift, the downdrift area will be severely eroded. A second possibility is that the littoral drift will be pushed offshore and lost to the area entirely. Often groins are used in conjunction with beach nourishment to slow the rate of erosion from the beach face. It must be emphasized that groins will not work unless there is some sand drifting by to trap (London and others, 1981, pp. 32-2).

Jettied Inlet

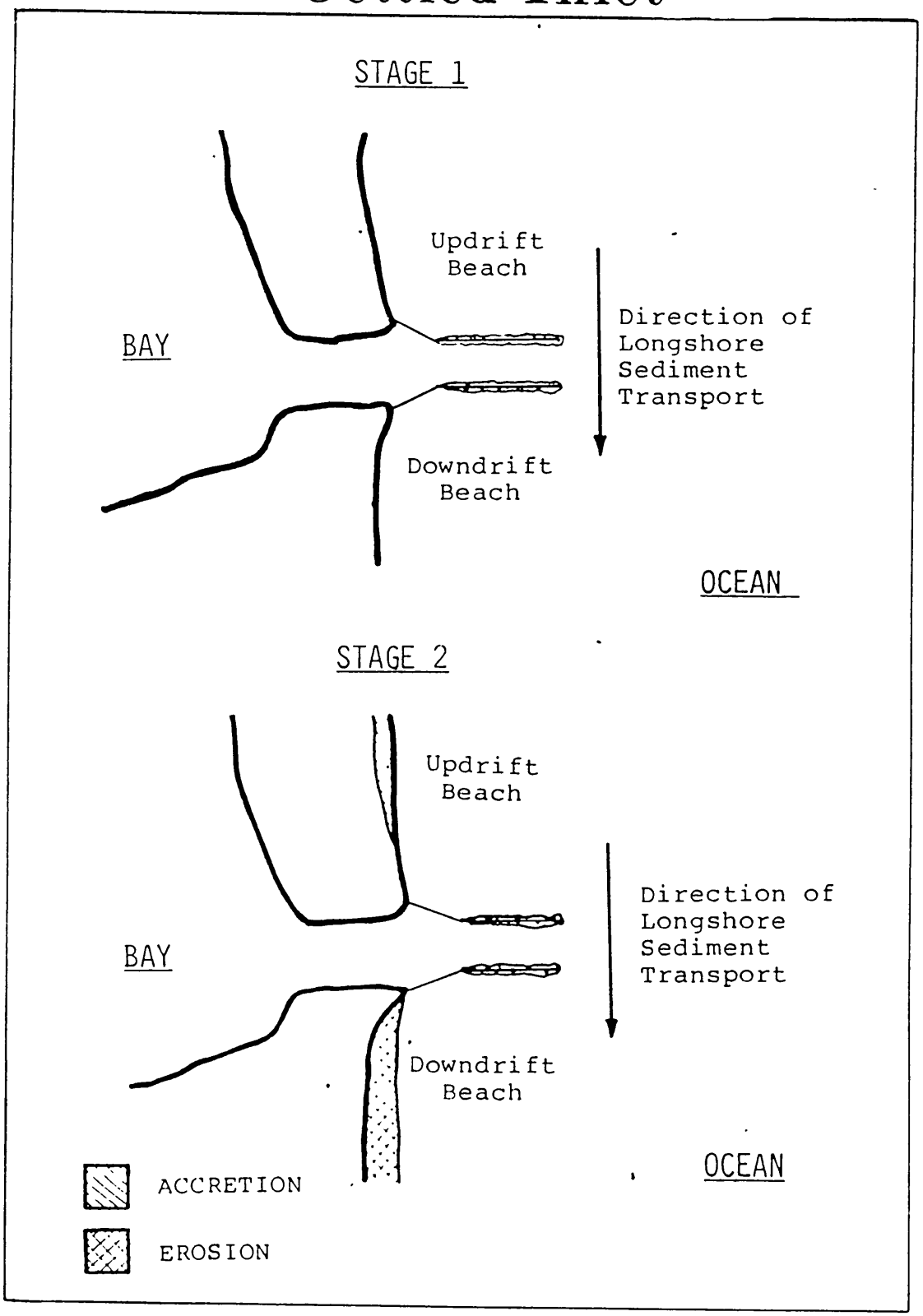

Figure 18

Diagram courtesy of
Zarillo, and others, 1985, "An Illustrated History of Tidal Inlet Changes in South Carolina" Funds provided by South Carolina Sea Grant Consortium and South Carolina Coastal Council.

Groin Adjusted Shorelines

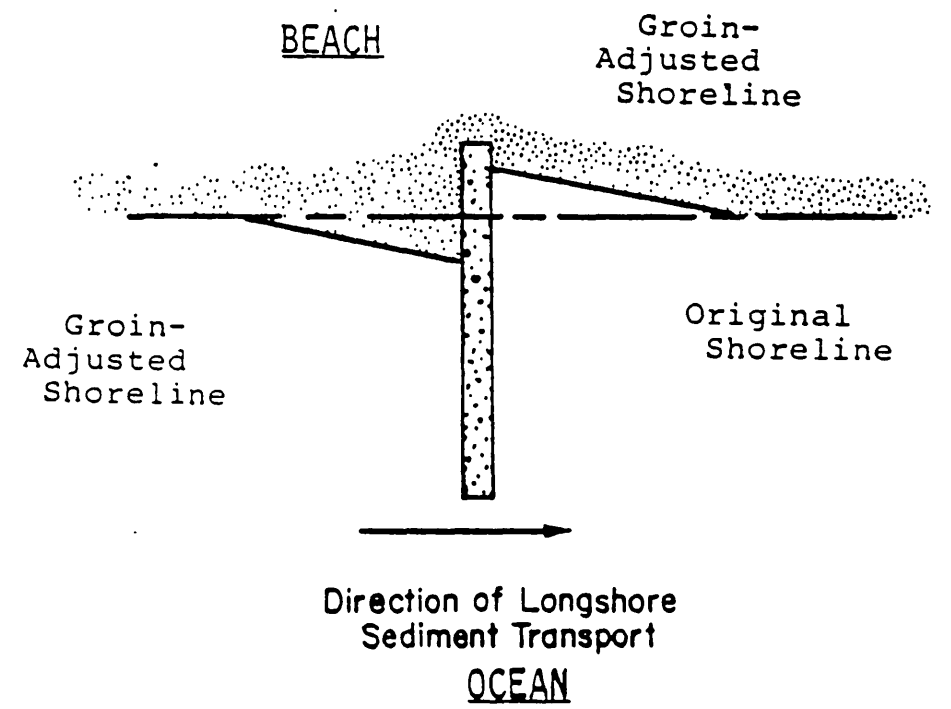

Figure 19 General shoreline configuration for a single groin.

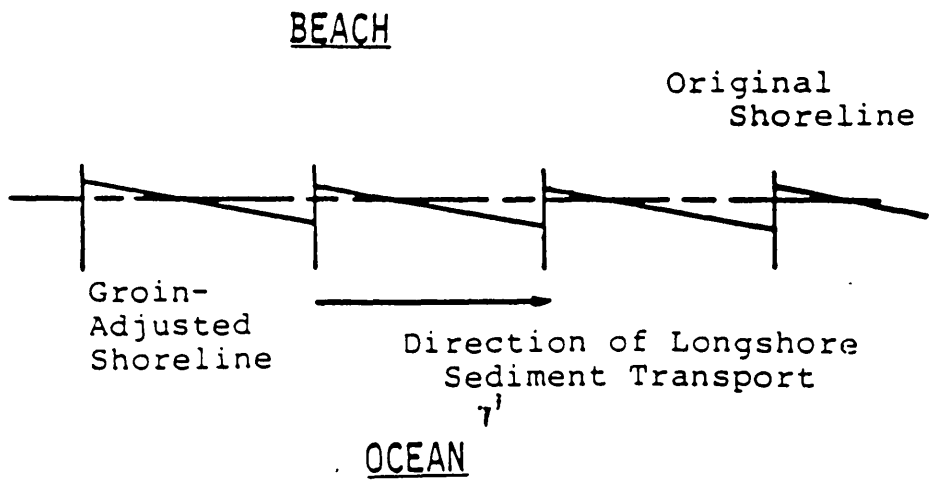

Figure 20 General shoreline configuration for two or more groins.

Diagram courtesy of
Zarillo, and others, 1985, "An Illustrated History of Tidal Inlet Changes in South Carolina" Funds provided by South Carolina Sea Grant Consortium and South Carolina Coastal Council.

EROSION CONTROL STRUCTURES

DEBIDUE BEACH GROINS

Approximately 82% of the Debidue Beach shoreline remains void of any shoreline structures except for a 4,100 foot wooden seawall along the central portion of the island. Constructed of pressure treated timber, the seawall is intended to protect residents form storm surges and moderate storms and to protect artificially placed backfill along the developed portion of the beach from being washed away by daily wave run-up.

The remnants of two timber groins are located on the beachface approximately .7 miles south of the southern end of the Debidue seawall. The groins were built in 1971 by the Belle W. Baruch Plantation Institute in an attempt to stabilize the receding beach at that location. The groins were unsuccessful and only remnant piles and a few sheet sections currently remain. A timber groin also exists at the northern end of Debidue Beach approximately .4 miles south of Pawleys Inlet. The groin was built in the 1970's to prevent further southerly migration of Midway Inlet channel. Presently, the shoreline is not threatened by channel migration.

LITCHFIELD BEACH

With the exception of approximately 920 feet of concrete block bulkhead fronting the Litchfield Inn, this entire stretch of shoreline is structure-free. The bulkhead at the Litchfield Inn was constructed to retain backfill for the swimming pool, patio and other upland amenities.

HUNTINGTON BEACH STATE PARK

The north tip of Huntington Beach shoreline is bounded by the south jetty at Murrells Inlet, which dramatically affects the shoreline. This, however, is the only erosion control structure along this stretch of shoreline.

GARDEN CITY

Garden City Beach is located partially in both Horry County and Georgetown County. The northern 1.5 miles of Garden City Beach, in Horry County, has a shoreline severely altered by shorefront development. High rise developments have been constructed at or in close proximity of the high water line and often are protected by a series of bulkheads.

There are ten groins along Garden City Beach which were constructed by the South Carolina Highway Department between 1968 and 1974. The groins have been reasonably successful in controlling erosion along the beach and are presently still fuctioning. The length of the groins range from 200 to 270 feet. The groins at Garden City are the only ones between Little River Inlet and Murrells Inlet.

SEDIMENT BUDGET ANALYSIS

Sediment budgets are simply an accounting of sand gains or losses within a defined littoral zone. The methodology to analyze the sediment budget is to apply the unit volume change, calculated by beach profile surveys, to a representative shoreline length. For example, if the total accretion measured at eight consecutive stations is 10,000 cubic yards per year then the sediment budget for that reach of beach indicates there is more sand, i.e. 10,000 cubic yards, moving on the beach than is moving off. This may then be compared with an adjacent reach with higher or lower deposition. Profiling that shows a decrease in sand volume indicates an erosional length of shoreline; therefore, more sand is leaving than is coming on the beach. This method only applies in the simplified a manner if the shoreline and nearshore zone are relatively straight with parallel contours. Those areas near inlets, with curved shorelines, and those with offshore sand bars require more in depth analysis to determine how much and where the sand is going.

Specific sediment budget analysis are not available for Litchfield Beach, Huntington State Park or Garden City Beach. Furthermore, no specific sediment budget analysis has been done for Debidue Beach; however, one can be estimated. By comparing volumetric calculations of Debidue to volumetric calculations of similiar beaches with known sediment budgets, a net southwesterly littoral drift of 150,000 to 200,000 cubic yards can be approximated for Debidue.

EROSION ANALYSIS

Coastal Science and Engineering, Inc. calculated the erosion rates for Garden City Beach using historical shoreline change maps. These interim erosion rates were officially adopted by the Coastal Council in 1988 (Table 1 - 4) with the intention that they be reviewed by Council before 1990.

DEBIDUE ISLAND EROSION ANALYSIS

DeBordieu

~~Debidue~~ Beach can be most accurately assessed by dividing the beach into three shoreline sections. Generally, shoreline change maps indicate that Debidue Beach appears to be long term and short term erosional along the central and southern reaches of the beach. The northern section is also short term erosional, but is long term accretional.

The undeveloped southern spit section of the Debidue Beach shoreline extends north from North Inlet. The majority of this spit has formed over the last 100 years and is significantly affected by the shoaling and migration cycles of North Inlet. This reach is moderately vegetated lending stability to the back beach dune system which consists of two distinct dune ridges. These dune ridges are typically associated with an accreting beach; however, in this case they can be attributed to the effects of the North Inlet shoal system. Unexpectedly, the high tide beach at the location of the dune ridges is virtually non-existent which can be attibuted to wave run-up into the seawardmost extent of the vegetation. Such apparent contrasts serve as evidence of the highly unstable shoreline conditions along this southern section of Debidue Beach.

The central island section begins at the north extent of the Debidue Beach spit and continues to the northern extent of the existing Debidue Tract development. The southern half of this shoreline reach remains in its natural state although it has undergone erosion in the recent past. In early 1986, developers constructed an artificial dune in response to the erosion. The northern half of this shoreline reach has been armored by a wooden seawall landward of the artificial dune.

The undeveloped northern section of the Debidue Beach shoreline extends north from the northern limit of development along the Debidue Tract. The back beach system along this section of shoreline is typified by a well-developed and well vegetated dune system. The northernmost end of the beach exhibits an even wider beachface due to the influence of the Pawleys Inlet shoal system. However, the beachface is also subject to short term erosion should Pawleys Inlet continue to shift south.

DEBIDUE BEACH
EROSION LOSSES

TABLE 1

SCCC Station	Preliminary Erosion Rate (Ft/Yr)
4100	-11.5
4105	-11.0
4110	-10.0
4115	-6.0
4120	-4.5
4125	-3.6
4130	-3.0
4140	0
4150	+1.0
4160	+0.8
4170	--
4180	--

NOTE: These rates are interim. The staff of the Coastal Council is in the process of updating the eroision rates for all beaches in South Carolina. When that information is available we will forward it to you.

FOOTNOTE:

* Coastal Science and Engineering, Inc., 1988, "Analysis of Beach Survey Data Along the South Carolina Coast": prepared for South Carolina Coastal Council.

LITCHFIELD BEACH EROSION ANALYSIS

Shoreline movement along Litchfield Beach exhibits great variability. In the last two decades, the beach in this area has generally experienced erosion with the exception of the southern region of Litchfield Beach.

Litchfield Beach's southernmost end is accreting due to a recurved spit developing on the tip. Along the remaining 3.3 miles of South Litchfield Beach, the back beach system is growing while the beachface. maintains consistent profiles. Because of the well-vegetated and well-developed dune system, a dry beach of 60 feet to 80 feet in width exists at high tide along this shoreline.

Along the northernmost 2000 feet of Lithchield Beach, the shoreline has been affected by the Murrells Inlet Navigation Project. This shoreline has undergone localized accretion resulting from the landward migration of the southern portion of the inlet ebb tidal shoal system. Typically this area is narrow and the high tide beach along this stretch of shoreline is non-existent.

LITCHFIELD BEACH
EROSION LOSSES

TABLE 2

SCCC Station	Preliminary Erosion Rate (Ft/Yr)
4300	-1.3
4315	-1.3
4330	-1.3
4360	-1.3
4390	-1.3
4395	-1.3
4400	-1.3
4430	-1.3
4490	-1.3
4495	-1.3

NOTE: These rates are interim. The staff of the Coastal Council is in the process of updating the eroision rates for all beaches in South Carolina. When that information is available we will forward it to you.

FOOTNOTE:

* Coastal Science and Engineering, Inc., 1988, "Analysis of Beach Survey Data Along the South Carolina Coast": prepared for South Carolina Coastal Council.

HUNTINGTON BEACH STATE PARK EROSION ANALYSIS

The entire 3.5-mile stretch of Huntington Beach State Park shoreline has been significantly affected by the Murrells Inlet Navigation Project which authorized the construction of jetties in order to stabilize the inlet. The northern half of Huntington Beach State Park has a much wider beach than the southern half having undergone localized accretion as a result of the landward migration of the southern portion of the inlet ebb tidal shoals following the construction of the jetties. This is a typical process generally associated with inlet stabilization and is not expected to change in the near future.

The southern half of Huntington Beach State Park exhibits a much narrower beachface than the northern end of the beach. Erosion patterns reversed around 1926 and the entire area began experiencing erosion. Following the jetty construction around Murrells Inlet the northern reach began an accretional pattern. The southern reach, however, continued to erode. Presently, the southern stretch is experiencing erosion rates of 1.3 feet per year.

HUNTINGTON BEACH
EROSION LOSSES

TABLE 3

SCCC Station	Preliminary Erosion Rate (Ft/Yr)
4500	-1.3
4515	-1.3
4525	-1.3
4535	-1.3
4545	-1.3
4555	-1.3
4565	-1.3
4575	-1.3

NOTE: These rates are interim. The staff of the Coastal Council is in the process of updating the eroision rates for all beaches in South Carolina. When that information is available we will forward it to you.

FOOTNOTE:

* Coastal Science and Engineering, Inc., 1988, "Analysis of Beach Survey Data Along the South Carolina Coast": prepared for South Carolina Coastal Council.

GARDEN CITY EROSION ANALYSIS

A long term erosional analysis indicated that changes along Garden City Beach shoreline are moderately erosional except along the southern reach which has experienced a recent accretional trend. Renourishment of the area with dredge spoil material is predicted to have influenced this accretional trend .

Furthermore, the shoreline has been influenced by the significant amount of coastal construction over the past 20 years. Because the buildings have been built too close to the water and the beach has not been given adequate time or space to respond to short periods of erosion, property owners have constructed erosion control structures to protect property from erosion damages. The repercussions of these structures have been the loss of a dry sand beach during high tide caused by the scouring effect as waves striking the walls and moving sand seaward.

When comparing the shoreline characteristics of developed areas that include bulkheads and groins, to the unaltered, natural shoreline sections, a distinct variation in beach morphology becomes apparent. The armored sections of shoreline, which are located at the immediate north and south ends of the Garden City reach, are characterized by a relatively flat plateau. Any dunes that may have once existed appear to have been leveled. The beachface itself extends from the bulkhead and drops sharply to the apparent limit of wave uprush where it then begins to flatten out.

The unaltered beach along the central portion of the shoreline exhibits

well-developed and well-vegetated dune ridges with crest elevations of up to 15 feet. Houses in this area are generally located further landward from the beach which helps to maintain the overall integrity of the natural dune system. In addition, at this location the intertidal beach advances seaward at a more gradual slope than along the armored sections of shore.

GARDEN CITY BEACH
EROSION LOSSES

TABLE 4

SCCC Station	Preliminary Erosion Rate (Ft/Yr)
4900	-1.5
4910	-1.5
4920	-1.5
4930	-1.5
4940	-1.5
4950	-1.5
4960	-1.5
4970	-1.5
4980	-1.5
5000	-1.5
5010	-1.5
5020	-1.5
5030	-1.5

NOTE: These rates are interim. The staff of the Coastal Council is in the process of updating the eroision rates for all beaches in South Carolina. When that information is available we will forward it to you.

FOOTNOTE:

* Coastal Science and Engineering, Inc., 1988, "Analysis of Beach Survey Data Along the South Carolina Coast": prepared for South Carolina Coastal Council.

SHORELINE CHANGES

According to the South Carolina Beachfront Management Bill, as amended, South Carolina shorelines have been divided into either standard erosion zones or inlet erosion zones. A standard erosion zone is a segment of shoreline subject to a fairly constant range of profiles and coastal processes and is not directly influenced by tidal inlets or associated inlet shoals. An inlet erosion zone is a segment of shoreline along or adjacent tidal inlet which is directly influenced by the inlet and its associated shoals.

In a standard erosion zone, long-term erosional or accretional trends are influenced primarily by changes in the sediment budget, eroding storm events, man-made structures, and sea level rise. On the contrary, inlet dynamics significantly affect shorelines in an inlet erosion zone.

More specifically, naturally stabilized small inlets, and large inlets such as Port Royal Sound north of Hilton Head Island, have complex delta systems for bypassing sand. Inlets stabilized by man-made structures also allow the bypassing of sediments, but these structures may cause considerable alterations to neighboring shorelines. Dramatic changes are seen on shorelines adjacent to inlets which naturally meander in a cycle over a given reach. The inlet is forced downshore by the accretion of a spit on the updrift side. Over time the spit becomes unstable. Eventually the spit is breached, normally in a storm, and a new channel is formed upshore. Smaller inlets referred to as "swashes" are found in the Grand Strand area. Inlet erosion zones around swashes tend to have a minimal length.

The NOS shoreline change maps represent the translation of aerial photography, field survey data, and U.S. Geological Survey maps onto a common base to show shoreline movement. Prepared by the National Ocean Service (NOS) in cooperation with the U.S. Army Corps of Engineers, these shoreline change maps cover the entire study area. The maps provide the primary source of long term shoreline change data since they represent both horizontal and vertical data. As additional shoreline change data is made available to the Coastal Council staff, through historical aerial photographs and beach profile surveys, the erosion rates will be updated appropriately before 1990.

Shoreline Movement Maps for section 3 (Cape Fear, N.C. to Tybee Island, GA) can be obtained either through the Coastal Council office or through National Ocean Service. The address for N.O.S. is 6501 Lafayette Avenue, Riverdale, Maryland, 20736.

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Ebb Delta Breaching

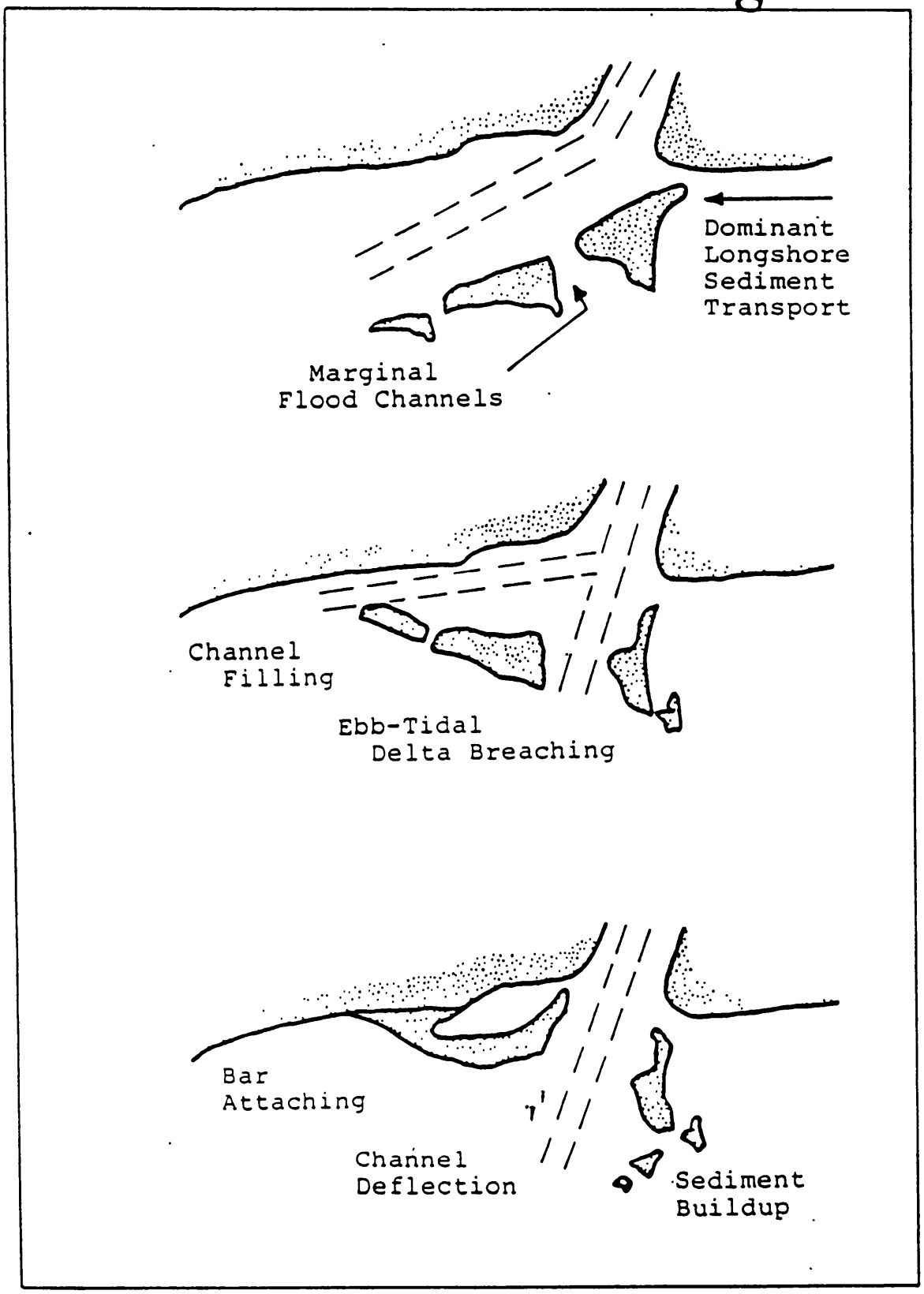


Figure 7

Diagram courtesy of.
Zarillo, and others, 1985, "An Illustrated History of Tidal Inlet Changes in South Carolina" Funds provided by South Carolina Sea Grant Consortium and South Carolina Coastal Council.

Stable Inlet

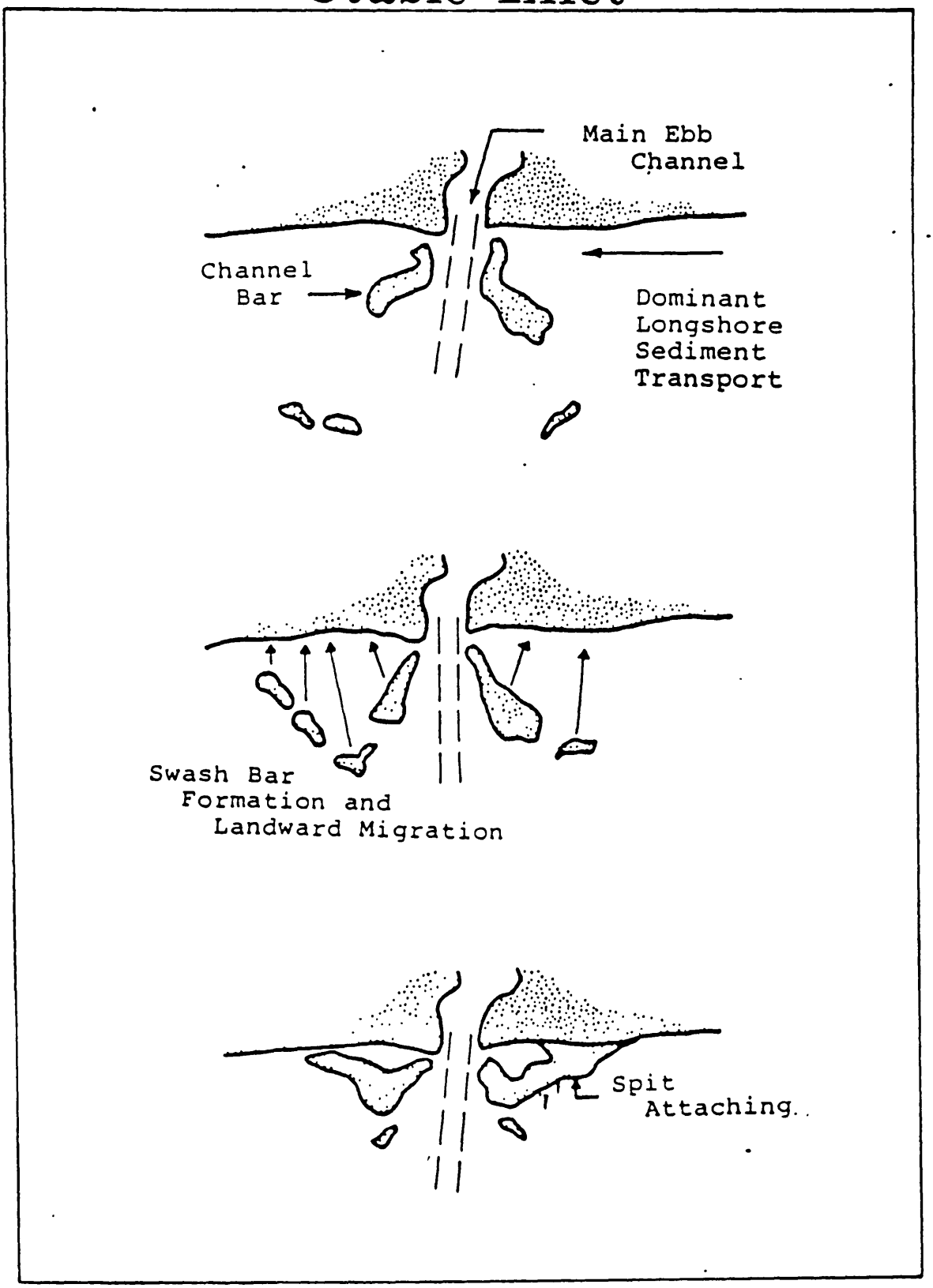


Figure 8

Diagram courtesy of:
Zarillo, and others. 1985, "An Illustrated History of Tidal Inlet Changes In South Carolina" Funds provided by South Carolina Sea Grant Consortium and South Carolina Coastal Council.

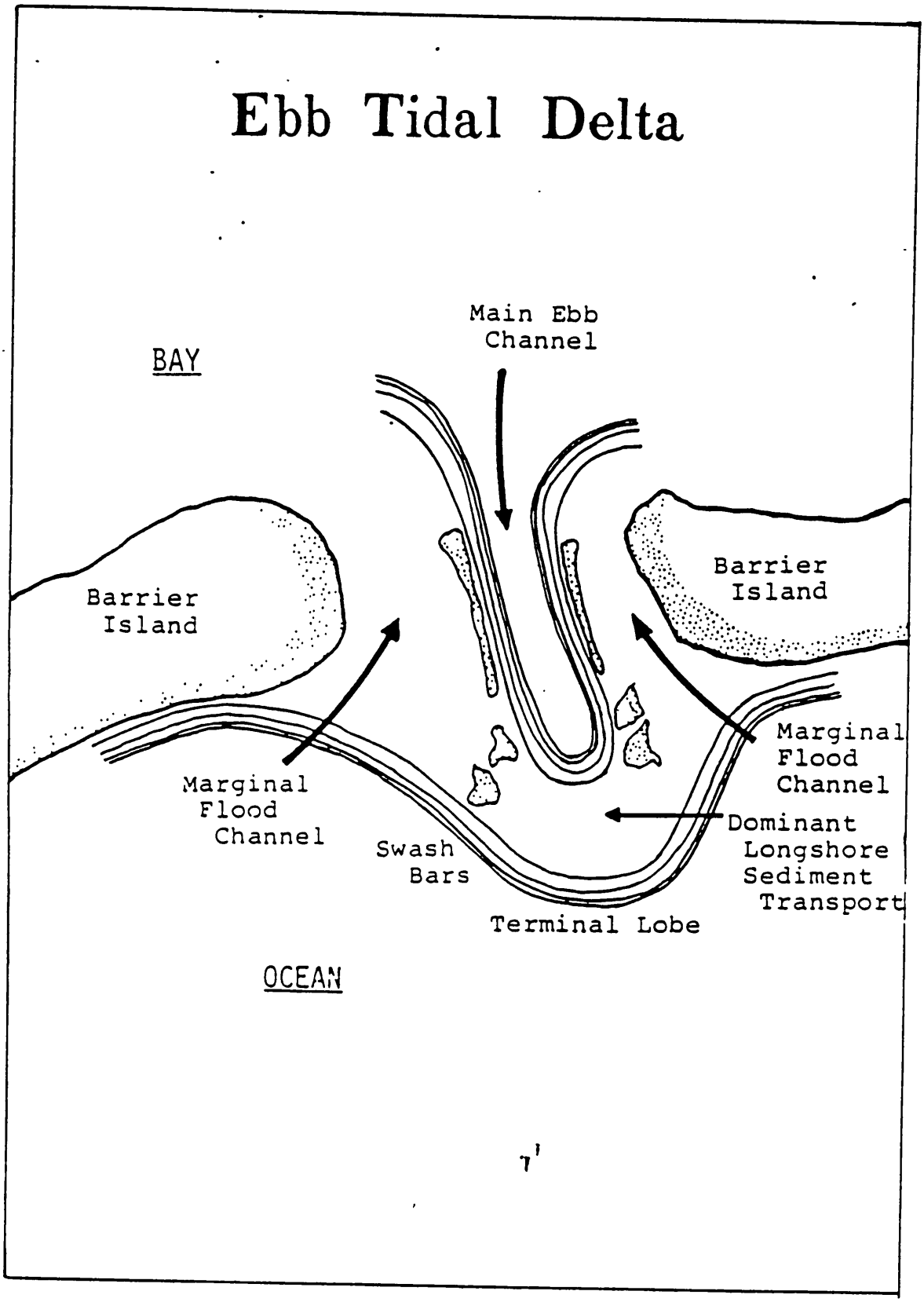


Figure 9

Diagram courtesy of
Zarillo, and others, 1985, "An Illustrated History of Tidal Inlet Changes in South Carolina" Funds provided by South Carolina Sea Grant Consortium and South Carolina Coastal Council.

Inlet Migration

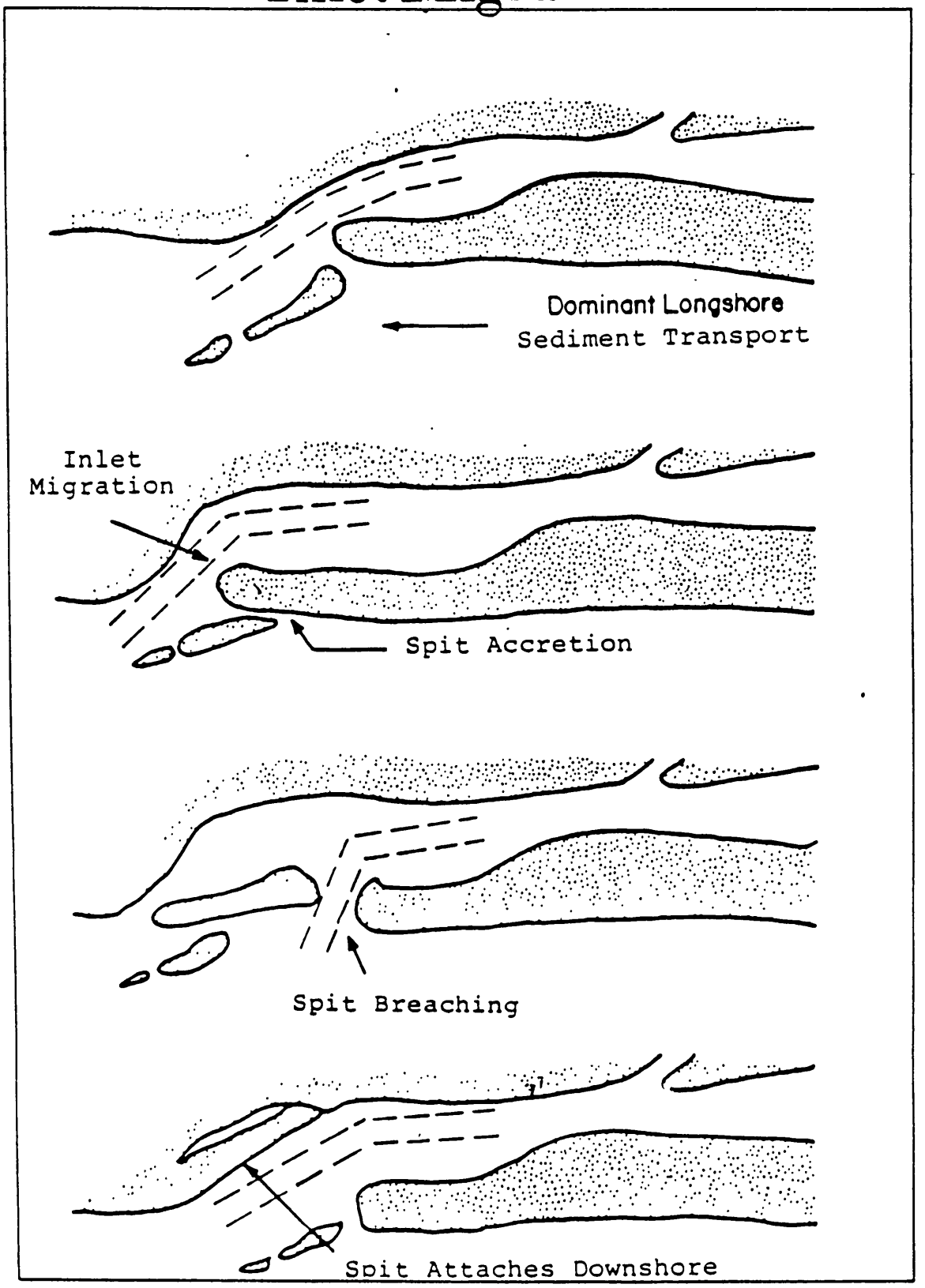


Figure 10

Diagram courtesy of:
Zarillo, and others, 1985, "An Illustrated History of Tidal Inlet Changes in South Carolina" Funds provided by South Carolina Sea Grant Consortium and South Carolina Coastal Council.

narrow and low sand spit can be breached, or broken through during storm events thus relocating the inlet. The new inlet is located in a position updrift of where the inlet was prior to the storm. The migrating process then starts again from the newly created inlet position.

Inlets, swashes, and channels are some of the examples of natural non-structural barriers to littoral processes; whereas groins and jetties are man-made structural barriers. Significant erosion problems can result when a barrier effectively blocks a large portion of the longshore sediment transport thereby resulting in sand starvation at some locations. Inlets are continuously affected by reversals in longshore transport and wave refraction around the ebb tidal shoals. The shorelines in the immediate vicinity of inlets typically experience the greatest variation in erosion rates and fluctuations of the beach and dune system. The stabilization of any natural inlet is usually accompanied by dredging or jetty construction. The consequence is the initiation of a new balance between hydraulic and sedimentary forces which usually results in a reconfiguration of tidal shoal formations and adjacent shorelines.

The shorelines adjacent to most natural inlets, formed of unconsolidated sand, are dynamic landforms easily subjected to the effects of storm surge flooding. During a hurricane, the surge and wave set-up along the open coastline are the primary driving mechanisms of flow patterns into the bay areas. Extraordinary high discharges flowing through inlets during hurricane storm tides characteristically both erode and flood adjacent channel banks as the increased flow converges in the vicinity of the inlet. Channel migration, often associated with unstabilized inlets, may have severe effects on the stability of adjacent inlet channel banks during these severe storm events.

DEBIDUE BEACH INLETS

Debidue Beach is bordered by North Inlet to the south and by Pawleys Inlet to the north. The beach is affected by inlet migration. The most dramatic influence was probably associated with North Inlet and occurred as a result of the shift in position of the main-ebb channel between 1878 and 1925 and the stabilization of the channel after 1925. After the shift in the channel's position, Debidue Beach extended approximately one mile southward and nearly a half-mile section of North Island eroded away (figure 11).

North Inlet has historically been unstable. Since the 1940s, however, the inlet throat has remained relatively stable. The shoals associated with the ebb-tidal delta, on the other hand, have undergone significant morphologic changes over this same time span..

According to Zarrillo, the earliest bathymetric record of North Inlet indicates that the main-ebb channel was offset towards the north in 1878. Between 1916 and 1925 the northern end of North Island eroded significantly. As a result of this erosion, a wide, shallow north channel existed in 1925. During this time period, recurved spits grew southward from Debidue Beach and the north channel closed as the south channel became more efficient (figure 12).

From 1925 through 1964 the position of the inlet throat remained nearly constant as the inlet became anchored in resistant sediments. The main-ebb channel increased in length as the ebb-tidal delta increased in area. By 1939, Debidue Beach extended southward from its 1925 position. In addition, the ebb-tidal delta had begun to develop at its present location and by 1963,

a well developed ebb-tidal delta was present. Between 1925 and 1964, while the ebb-tidal delta was changing, the position of the inlet throat remained constant and the main-ebb channel increased in length (figure 13).

Pawleys Inlet is located between the northern end of Debidue Beach and the southern tip of Pawleys Island. The inlet appears to follow a cycle whereby the inlet migrates southward while simutaneously accreting along the Pawley's Island spit. During a storm, the channel breaches through the spit and the inlet is relocated northward. The severed portion of the spit attaches to the adjacent shorefront at Debidue Beach, and the cycle begins anew. Presently, the south end of Pawleys Island has experienced accretion along the narrow spit and the inlet may have temporarily stabilized due to the groin fields protecting Pawleys Island. The shoreline immediately north of the inlet, however, is considered vulnerable to breaching during severe storms.

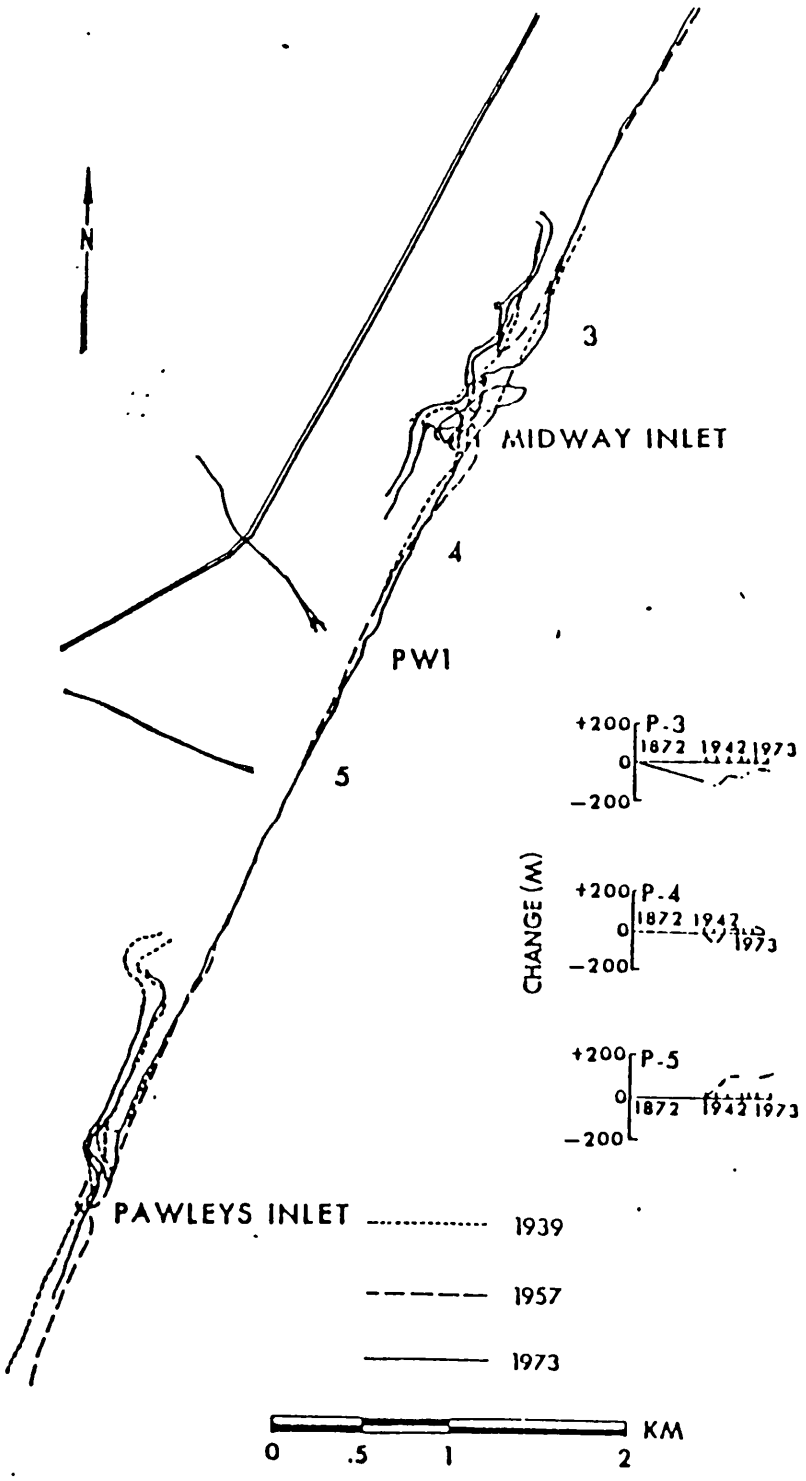
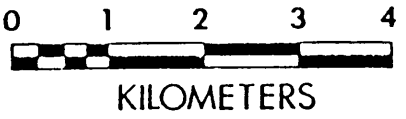


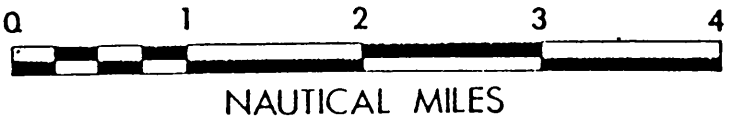
Figure 11 Changes in shoreline position on Pawleys Island based on aerial photo surveys from 1939 to 1973. Numbers (3, 4 and 5) indicate fixed reference points for graphed shoreline data. PWI indicates location of single beach profile.

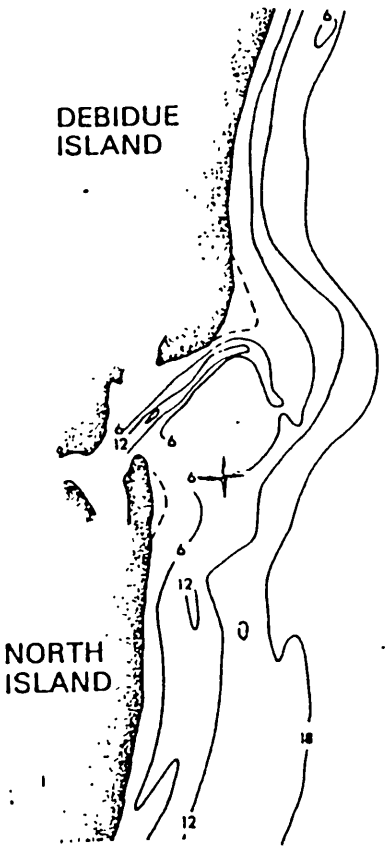
Diagram courtesy of:

Hubbard, D.K. and others, 1977,"Beach Erosion Inventory of Horry, Georgetown and Beaufort Counties, South Carolina", Prepared for South Carolina Sea Grant Consortium.

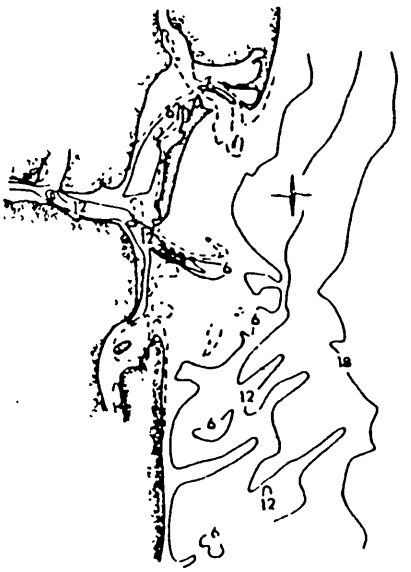
Bathymetric Changes
North Inlet
1878-1964



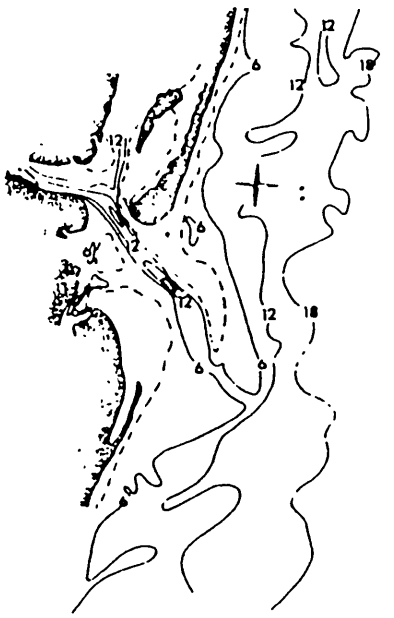




1878



1925

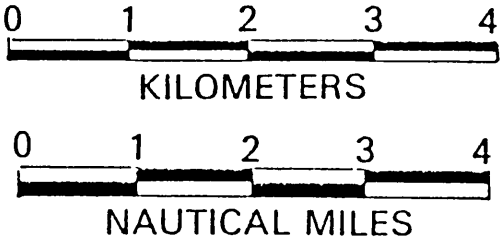


1964

gure 12

Diagram courtesy of
Zarillo, and others, 1985, "An Illustrated History of Tidal Inlet Changes in South Carolina" Funds provided by South Carolina Sea Grant Consortium and South Carolina Coastal Council.

Shoreline Changes
North Inlet
1939-1979



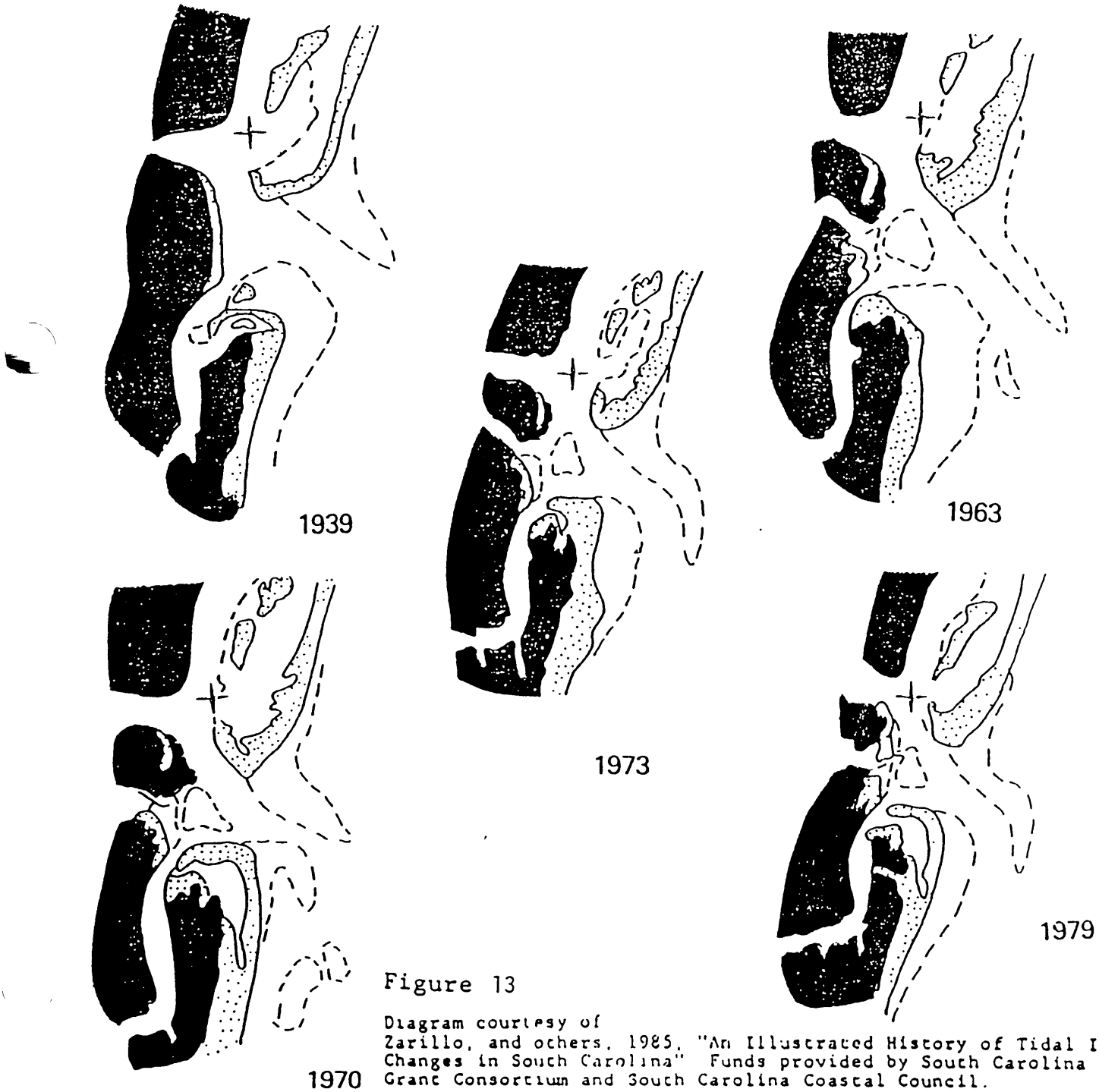


Figure 13

Diagram courtesy of
Zarillo, and others, 1985, "An Illustrated History of Tidal Inlet Changes in South Carolina" Funds provided by South Carolina Sea Grant Consortium and South Carolina Coastal Council.

LITCHFIELD BEACH INLETS

The southernmost 1,500 feet of South Litchfield Beach is dynamically influenced by the migration of Midway Inlet and the shoaling process along the north bank of the inlet. Long term trends indicate that Midway Inlet has consistently migrated south to its present position over the last 63 years except for breeching during Hurricane Hazel. According to inlet movement analysis, between 1872 and 1926, the north bank migrated 600 feet northward toward Litchfield Beach. However, as of 1926 the inlet began migrating south toward Pawleys Island to its present location (figure 14).

Deposition of southerly littoral drift has resulted in the formation of an ebb tidal shoal extending southward from Litchfield Beach. The development of the shoal has directed the main channel against the south bank of the inlet causing moderate erosion on the north end of Pawleys Island. In addition, as the shoal moves landward and attaches to the southern tip of Litchfield Beach, it continues to created a recurved spit. At this time, the spit averages 300 feet in width and increases to 700 feet at it southern most end. Based on the development of the shoal, further shoreline growth should be expected unless a severe storm impacts the area.

Although the Litchfield Beach has been accretional along the south side due to the recurved spit, the shoreline along Litchfield Beach has fluctuated during this period due to changes in Midway Inlet's position. In 1957, the recurved spit extending from Litchfield Beach breached during Hurricane Hazel. This change eroded much of the beach and shifted Midway Inlet northward. From this location, Midway cut a more southerly route through the

inlet shoal system. Subsequently, the Litchfield spit preceded in its original accretional pattern.

Again in 1979, during Hurricane David, the main ebb channel broke through surrounding shoals along a curved route toward the south causing erosion along Pawleys Island. This erosional trend began to reverse. In 1980 the inlet channel breached through the shoals in a seaward direction and the swash bar sand bodies migrated onshore reducing the previous erosional trend of the south bank of Midway Inlet. Since then, a terminal groin has been built on Pawleys Island in order to stabilize the inlet.

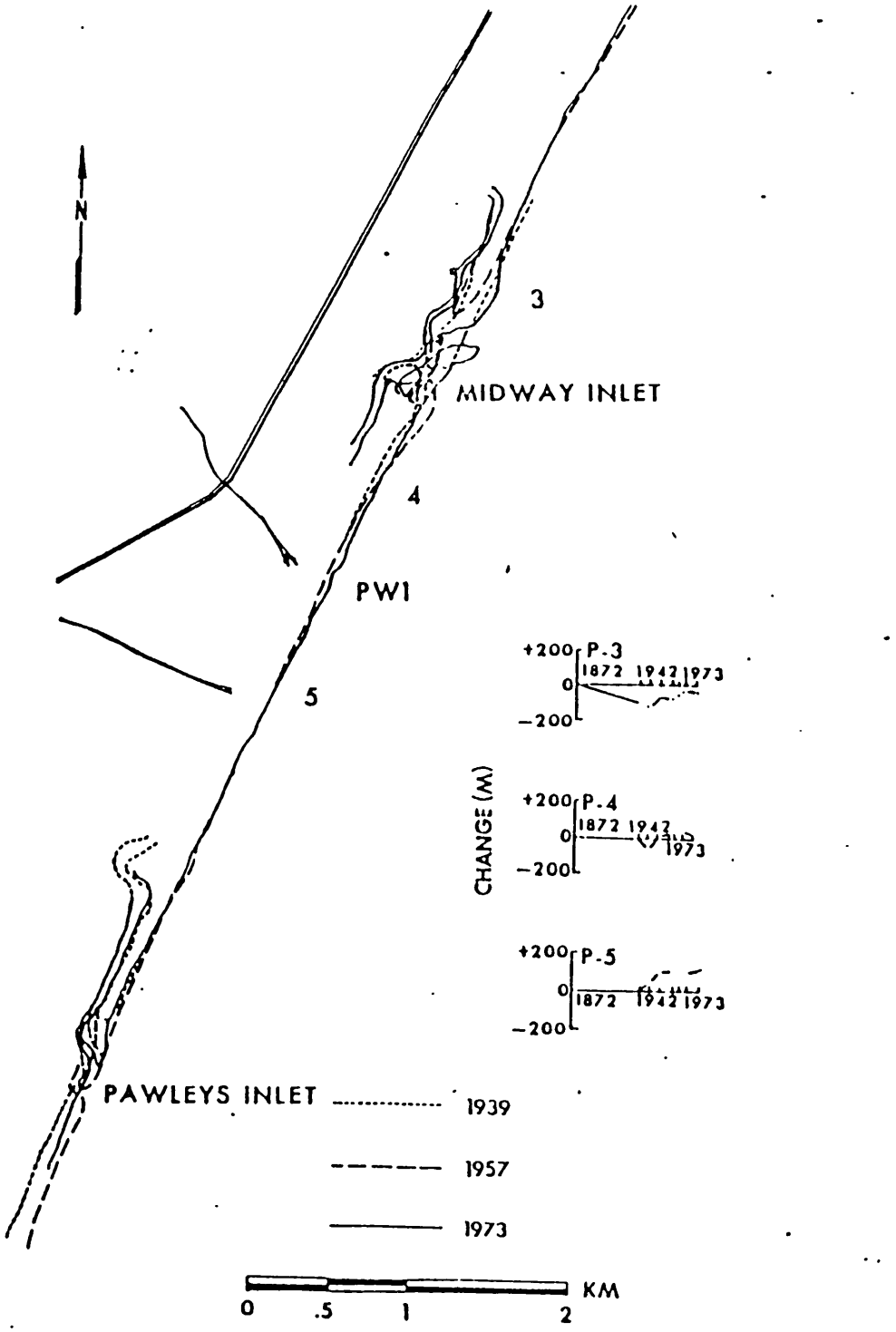


Figure 14 Changes in shoreline position on Pawleys Island based on aerial photo surveys from 1939 to 1973. Numbers (3, 4 and 5) indicate fixed reference points for graphed shoreline data. PWI indicates location of single beach profile.

Diagram courtesy of:

Hubbard, D.K. and others, 1977,"Beach Erosion Inventory of Horry, Georgetown and Beaufort Counties, South Carolina", Prepared for South Carolina Sea Grant Consortium.

"MURRELLS INLET"

Murrells Inlet is located south of Garden City and north of Magnolia Beach along the South Carolina coast. Murrells Inlet is very unstable, undergoing extensive channel migrations and changes in shoal morphology. In an effort to stabilize the inlet, jetty construction on either side of the inlet was begun 1977 and completed in 1980. Furthermore, a navigable channel is maintained by dredging and a catch basin lies along each jetty and is used to trap sediment to renourish the beach (figure 15). The beach was renourished through this process in March of 1988.

Prior to jetty construction, Murrells Inlet was approximately 2,500 feet wide at the throat and channel depths were highly variable. An 1878 hydrographic survey indicates the inlet had one main channel that extended seaward in a southerly direction. Between 1878 and 1926, the inlet shifted more than 2500 feet to the northeast, as a result of breaching of the updrift barrier (Garden City Beach). Between 1926 and 1969, the channel migrated approximately 2000 feet to the southwest and the axis of the throat section oriented from a northwest-southwest trend to a nearly northsouth direction (figure 16). Cross sectional area at the inlet throat increased approximately 2000 square feet; however, the maximum depth at the inlet throat remained nearly unchanged.

Shoreline changes around Murrells Inlet are directly influenced by the migration of the main ebb channel (figure 17). Between 1878 and 1926 a northeast shift of the main channel resulted in a loss of more than a mile of

shoreline. Over the same period the barrier spit on the southeast side grew substantially. Between 1939 and 1952 the downdrift barrier (Huntington Beach) was cut back by nearly one mile. Shoal configuration at the inlet entrance indicates a dual channel inlet. By 1963, the updrift barrier extended more than a half mile to the southwest, closing off the northeast channel and re-establishing a single channel configuration. This general configuration remained until the inlet stabilization project.

Structure and Erosion Control Inventory

The study area has 97 structures located seaward of the baseline, 84 structures located seaward of the setback line(s) and 96 structures located within 50' of the setback line. Since the majority of Litchfield's developable oceanfront property is relatively stable, this inlet zone had the fewest number of structures seaward of the setback lines. Each inlet zone is described in more detail below.

The DeBordieu study area has a total of 17 structures located seaward of the baseline, all of which are single-family dwellings. There are 13 single-family dwellings, a 16 unit condominium complex and an 18 unit condominium complex located seaward of the setback line. Five structures are located within 50' of the setback line, all of which are single-family dwellings. The only erosion control structure identified in the study area is a wooden seawall approximately .8 mile in length.

The Litchfield area has only one single-family dwelling located beyond the baseline and six structures located seaward of the setback line, two of which are single-family structures. The others are a 142 room hotel complex and three condominium buildings at Inlet Point that contain 4 units each. Fifty-eight single-family dwellings were located within 50 feet of the setback line, in addition to a four unit condominium, two 40 unit condominiums and a clubhouse building at Litchfield By-The-Sea. No erosion control structures were identified in the Litchfield area except for the concrete wall in front of the Litchfield Inn.

The Garden City area contained the greatest number of encroaching structures. Seventy-nine single-family dwellings are located seaward of the baseline. A total of sixty-one single family structures, a 14 unit condominium and a 42 unit condominium building are located seaward of the setback line. Twenty-eight structures are located within 50' of the setback line. They consist of twenty-five single-family dwellings, an eight unit condominium, a twelve unit condominium and a 42 unit apartment complex. Garden City is the most heavily armored inlet zone with two separate seawalls and eight groins. The seawalls run for a total of 1.3 miles. There is a private seawall approximately 50' in length that protects the swimming pool for A Place at the Beach.

Critical Areas of Concern

With the assistance of the SCCC's Guidelines for Protection of Endangered Species, Georgetown County identified critical habitat areas on the overlay maps. The species of concern are listed below:

NAME	STATUS	HABITAT/ACTIVITY
Loggerhead Turtle	threatened, FS	beaches (nesting)
Eastern brown pelican	special concern, S	beaches
Ipswich sparrow (or savannah sparrow)	endangered, S	beaches, dunes (wintering)
Least tern	threatened, S	beaches, dunes (nesting)
Wilson's plover	threatened, S	beaches, dunes (nesting)
Piping plover	endangered, FS	beaches, dunes (wintering)
Island glass lizard	special concern, S	dunes
Seabeach Amaranth	special concern, S	dunes (plant)

F = Federally Protected Species

S = South Carolina Protected Species

In an attempt to protect the endangered species habitat areas, Georgetown County has adopted an amendment to the existing animal control ordinance, a dune protection ordinance, a beach protection ordinance and a beach lighting ordinance. Copies of these ordinances may be found in the Appendix.

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 182

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
04-191A-6	B	2 1	
7	A	2 1	
9	A	2 1	
21	A	3	
24	A	1 2	1
26	A	1 2	1
33	A	2	1

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 183

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
04-191A-1	A	1	1
2	A	2	1
13	A	3	
04-191-1	A	1	1
5	A	1	1
6	A	3	1
58	A	2	1
58.1	A	2	1
.			1
.			1
58.8	A	2	1
58.11	C	1	1
59	A	1	1
60	A	2	1
62	A	2	1
63	A	1	1
65	A	1	1
67	A	1	1
69	A	1	1
70	A	2	1
71	A	1	1
99	A	3	1

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 184

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
04-191-7	B	1	1
9	A	1	1
10	A	3	1
11	A	1	1
13	B	1	1
15	A	1	1
04-190-16	A	2	1
16.2	A	2	1
16.3	B	1	1
29	A	2	1
31	A	2	1
33	A	2	1
36	A	2	1

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 185

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
04-190-43	A	2	
04-190-45	A	3	
.			
.			
.			
04-190-62	A	3	
04-190-72	C	3	

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 201

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
04-149-2.4	B	3	
2.5	B	3	
2.6	B	3	
2.7	B	3	
04-149-2.0	B	1	
2.1	B	1	
2.2	B	1	
2.3	B	1	
04-146-125	B	1	
126	B	1	
127	B	1	
128	B	1	
04-146-121	B	1	
122	B	1	
123	B	1	
124	B	1	
04-146-120	B	3	
120.1	B	3	
120.2	B	3	
120.3	B	3	
120.4	B	3	
120.5	B	3	
120.6	B	3	
04-146-119	A	3	
04-146-118	A,E	3	
04-146-117	A	3	
04-146-52.2	A	3	
04-146-114	A	3	
04-146-113	A	3	
04-146-112	A	3	
04-146-111	A	3	
04-146-110	A	3	
04-146-109	A	3	
04-146-108	A	3	

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 201

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
04-146-107	A	3	
106	A	3	
103	A	3	
102	A	3	
101	A	3	
100	A	3	

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 202

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
04-146-99	A	3	
04-146-98	A	3	
04-146-97	A	3	
04-146-96	A	3	
04-146-95	A	3	
04-146-94	A	3	
04-144-94	A	3	
04-144-92	A	3	
04-144-91	A	3	
04-144-90	A	3	
04-144-89	A	3	
04-144-88	A	3	
04-144-87	A	3	
04-144-95	B	2	1
.			
.			
04-144-194	B	2	1
04-144-84	A	3	

- other buildings?

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
1. Seaward of Baseline
2. Seaward of Setback Line
3. Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
1. Functional Seawalls
2. Nonfunctional Seawalls
3. Functional Revetment
4. Nonfunctional Revetment
5. Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 203

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
04-142-89	B	3	
90	B	3	
91	B	3	
92	B	3	
93	B	3	
94	B	3	
95	B	3	
96	B	3	
97	B	3	
98	B	3	
99	B	3	
100	B	3	
101	B	3	
102	B	3	
103	B	3	
104	B	3	
105	B	3	
106	B	3	
107	B	3	
108	B	3	
109	B	3	
110	B	3	
111	B	3	
112	B	3	
113	B	3	
114	B	3	
115	B	3	
116	B	3	
117	B	3	
118	B	3	
119	B	3	
120	B	3	
121	B	3	
122	B	3	

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 203

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
04-142-123	B	3	
124	B	3	
125	B	3	
126	B	3	
127	B	3	
128	B	3	
04-142-49	B	3	
50	B	3	
51	B	3	
52	B	3	
53	B	3	
54	B	3	
55	B	3	
56	B	3	
57	B	3	
58	B	3	
59	B	3	
60	B	3	
61	B	3	
62	B	3	
63	B	3	
64	B	3	
65	B	3	
66	B	3	
67	B	3	
68	B	3	
69	B	3	
70	B	3	
71	B	3	
72	B	3	
73	B	3	
74	B	3	
75	B	3	

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 203

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
04-142-76	B	3	
77	B	3	
78	B	3	
79	B	3	
80	B	3	
81	B	3	
82	B	3	
83	B	3	
84	B	3	
85	B	3	
86	B	3	
87	B	3	
88	B	3	

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 204

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
04-140-1.03	C	3	

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 206

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
04-135-156	A	3	
04-135-155	A	3	

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 207

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
04-135-149	E	2	
04-133-175	A	3	
04-133-173	A	3	
04-133-172	A	3	
04-133-171	A	3	
04-133-170	A	3	
04-133-167	A	3	
04-133-165	A	3	
04-133-164	A	3	
04-133-163	A	3	
04-133-162	A	3	
04-133-161	A	3	
04-133-160	A	3	
04-133-159	A	3	
04-133-158	A	3	
04-133-157	A	3	
04-133-155	A	3	
04-133-154	A	3	
04-133-153	A	3	

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 208

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
04-133-152	A	3	
04-133-149	A	3	
04-133-148	A	3	
04-133-147	A	3	
04-133-146	A	3	
04-133-145	A	1	

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 217

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
41-131-47	A	3	
41-131-45	A	3	
41-131-44	A	3	
41-131-42	A	3	
41-131-41	A	3	
41-131-40	A	3	
41-131-39	A	3	
41-131-38	A	3	
41-131-35	A	2	
41-131-34.01	A	2	
41-131-34	A	2	1
41-131-23	A	2	1
41-131-22	A	1	1
41-131-20	A	1	1
41-131-8	A	1	1,5

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 218

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
41-131-7	A	1	1
6	A	1	1
5	A	1	1
4	A	1	1
3	A	1	1
2	A	1	1
1	A	1	1,5
41-130-20.8	A	1	1
20.7	A	2	1
20.6	A	2	1
20.5	A	2	1
20.4	A	2	1
20.4	C	1	1
20.3	A	2	1
20.2	A	2	1,5
20.1	A	2	1
41-130-19	A	2	1
18	A	2	1
17	A	2	1
16	A	2	1
15	A	2	1
14	A	2	1
13	A	2	1
41-130-13.1	A	2	1

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 219

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
41-129A-36	A	2	
34	A	2	
33	A	2	
32	A	2	
30	A	2	
29	A	2	
28	A	2	
27	A	2	
26	A	2	
25	A	2	
24	A	2	
23	A	3	
41-129-7.1.5	A	3	
7.1.4	A	3	
7.1.3	A	3	
7.1.2	A	3	
7.1.1	A	3	
41-129-49	B,C	2,2	
.			
.			
41-129-72	B,C	2,2	
41-129-7.1	A	2	
41-129-7.1.8	A	2	
41-129-7.1.7	A	2	
41-129-13.6	B,C	3,2	
13.7	B,C	3,2	
13.8	B,C	3,2	
13.9	B,C	3,2	
41-129-6.2	B,C	3,2	
41-129-6.6	B,C	3,3	
.			
.			
41-129-6.13	B,C	3,3	

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 220

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
41-129-8	B	2	
.	C	2	1
.			
.			
41-129-8.41	B	2	
	C	2	1
41-128-68	A	3	
67	A	3	
52	A	3	

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
1. Seaward of Baseline
2. Seaward of Setback Line
3. Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
1. Functional Seawalls
2. Nonfunctional Seawalls
3. Functional Revetment
4. Nonfunctional Revetment
5. Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 221

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
41-128-50	A	3	
49	A	3	
48	A	3	
47	A	3	
46	A	3	
45	A	3	
43	A	2	
42	A	2	
41	A	2	
40	A	2	
39	A	2	
38	A	2	
41-116-77	A	2	
76	A	2	
75	A	2	
74	A	2	
73	A	2	
72	A	2	
71	A	2	
70	A	2	
69	A	2	
68	A	2	

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
1. Seaward of Baseline
2. Seaward of Setback Line
3. Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
1. Functional Seawalls
2. Nonfunctional Seawalls
3. Functional Revetment
4. Nonfunctional Revetment
5. Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 222

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
41-116-67	A	2	
66	A	2	
65	A	2	
64	A	2	
63	A	2	
62	A	2	
61	A	2	
59	A	2	
57	A	2	
56	A	2	
55	A	2	
54	A	2	
51	A	2	
50	A	2	
49	A	2	
48	A	2	
47	A	2	1 (CONCRETE)
41-112-104	A	2	
103	A	1	1
102	A	1	1
101	A	1	1
100	A	1	1
99	A	1	1
98	A	1	1
97	A	1	1
96	A	1	1
95	A	1	1,5
94	A	1	1
93	A	1	1
92	A	1	1

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 223

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
41-112-91	A	1	1
90	A	1	1
89	A	1	1,5
88	A	1	1
87	A	1	1
86	A	1	1
85	A	2	1
84	A	1	1
83	A	1	1
82	A	1	1
81	A	1	1,5
80	A	1	1
79	A	1	1
78	A	1	1
77	A	1	1
76	A	1	1
75	A	1	1
74	A	2	1
73	A	1	1
72	A	1	1,5
71	A	1	1
70	A	1	1
41-107-111	A	1	1
110	A	1	1
109	A	1	1
108	A	1	1
107	A	1	1
106	A	1	1
105	A	1	1
104	A	1	1
103	A	1	1
102	A	1	1
101	A	1	1
100	A	1	1

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 223

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
41-107-99	A	1	1
98	A	1	1,5

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

STRUCTURAL INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN
SHEET # 224

PARCEL NUMBER	STRUCTURAL INVENTORY[1]	STRUCTURAL LOCATION[2]	EROSION CONTROL INVENTORY[3]
41-107-97	A	1	1
96	A	1	
95	A	1	
94	A	1	
93	A	2	
92	A	1	
91	A	1	
41-107-23	A	1	1
22	A	1	1
21	A	1	1
20	A	1	1
17	A	1	1
16	A	1	1
15	A	1	1

KEY OF CLASSES:

[1]STRUCTURAL INVENTORY
- A Habitable Structures (<5000 SF)
- B Habitable Structures (>5000 SF)
- C Recreational Amenities (Pool, Piers, Etc.)
- D Parking Lot
- E Ancillary Buildings (Gazebos, Garages, Etc.)

[2]STRUCTURAL LOCATION
- 1 Seaward of Baseline
- 2 Seaward of Setback Line
- 3 Within 50' of Setback Line

[3]EROSION CONTROL INVENTORY
- 1 Functional Seawalls
- 2 Nonfunctional Seawalls
- 3 Functional Revetment
- 4 Nonfunctional Revetment
- 5 Groins/Jetties

BEACH MANAGEMENT PLAN
NEW SINGLE FAMILY RESIDENCES
(POST HUGO)

PARCEL #	BLDG PERMIT #	NAME	LOCATION
04-133-157	6804	Julia Burr	Lot 17, Sec.B, N.Litch
04-133-163	6768	Fred C. Wickoff	Lot 11, Sec.B, N.Litch
04-136-49.10	6821	Bettye Cecil	Lot 6, Sec.U, N.Litch
04-191-7	7232	Summertide Inc.	Lot 9, Blk.1, Debord.
04-191-69	6457	Larry D. Young	Lot 11, Blk.1, Debord.
04-191A-24	7119	Robert Schulze	Lot 8 OcnGrn, Debord **
41-107-22	7521	Forest Evans	Lot 2, Blk.21, G.C.
41-107-92	7437	W.C. Hancock	Lot C, Blk.19, G.C. **
41-107-97	6213	Thomas G. Faison	Lot 5, Blk.19, G.C.
41-107-102	6244	W.R. Dempsy	Lot 10, Blk.19, G.C.
41-112-82	6625	L.H. Fenters	Lot 13, Blk.17, G.C.
41-112-85	6312	Richard Anthony	Lot 16, Blk.17, G.C.
41-112-86	7269	Dr. McElveen	Lot 17, Blk.17, G.C.
41-112-91	6276	Miriam V. Brickle	Lot 22, Blk.17, G.C.
41-112-92	7190	David Durant	Lot 23, Blk.17, G.C.
41-112-93	6327	CP Mincey, Jr.	Lot 24, Blk.17, G.C.
41-116-54	7568	Wendell Johnson	Lot 8, Blk.A, G.C.
41-116-58	7320	John Montgomery	Lot 1, Blk.A, G.C. **
41-116-64	6788	John Robinson	Lot 7, Blk.C, G.C. **
41-116-67	6539	Grady Kirven	Lot 10, Blk.A, G.C.
41-116-70	6891	Robert Metzler	Lot 13, Blk.A, G.C. **
41-116-72	7454	Don M. Brown	Lot 15, Blk.A, G.C.
41-128-60	6189	Ella Earle Benson	Lot 23, Blk.B, G.C.
41-130-18	6856	Harris DeLoache	Lot 7, Inlet Point

41-131-33.01	4382	Neil Ammons	Well Lot, Inlet Point
41-131-51	7248	Larry McSpadden	Lot 4, Inlet Harbour

** Denotes there are no details describing the structure on the plat.

BEACHFRONT MANAGEMENT PLAN
NEW SINGLE FAMILY DWELLINGS

PARCEL #	BLDG PERMIT #	NAME	LOCATION
04-133-172	6458	David Webster	Lot 2, Sec.B, N.Litch
04-149-1.08	6307	Neal McGuiness	Lot 8, Magnolia Beach
04-191A-21	3469	Mrs. Cater Glover	Lot 5, OcnGrn, Debord
04-191A-26	3601	K. Donald Jensen	Lot 10, OcnGrn, Debord
04-191A-33	3346	John Fox, Jr.	Lot 17, OcnGrn, Debord
41-116-61	7369	Barbara Rogers	Lot 4, Blk.C, G.C.
41-116-65	6521	J.M. Dawson	Lot 8, Blk.C, G.C.

Single family dwellings with nothing on record. No survey plats, some with elevation certificates and one with just a building permit application.

Beach Access and Parking Analysis

There were 94 beach access locations identified within the study area, over half of which are public accesses. A brief description of the types of accesses for each of three inlet zones follows. Included in the description is an analysis of the existing situation and recommendations regarding future needs.

The DeBordieu study area contains 14 private beach access areas consisting of dune crossovers to the beach. The main beach access facility is the clubhouse which has over 100 parking spaces. Future oceanfront development will be required to provide beach access for residents. Due to the private nature of DeBordieu Colony, no public beach access is feasible. The conceptual plan for the Prince George development contains provisions for a large beach access facility designed to accommodate residents of the development.

The Litchfield study area contains 28 private access locations, six community association crossovers and five public beach access areas. Virtually no parking facilities other than limited on-street parking is available in the South Litchfield area for the 14 beach access areas. A large parking lot is located across Norris Drive from the Litchfield Inn, however, parking is reserved for guests. Litchfield By-The-Sea has five private access locations and a 50 car parking lot at their oceanfront clubhouse. The North Litchfield Subdivision contains

15 beach access areas that are maintained by property owners association. Parking is mostly restricted to limited areas on the street, however, several off-street areas are provided. Huntington Beach State Park contains five public beach access areas, a 200+ car parking lot with restrooms and bathhouses, camping facilities along the oceanfront and other park amenities. The area most lacking in regards to public access is the South Litchfield area. Vacant property south of Allston Inlet should be investigated for it's potential as a future access area. In addition, the County needs to delineate all existing access locations in the North and South Litchfield areas and expand parking facilities where possible.

A total of 46 public beach access areas were identified in the Garden City study area. Unfortunately, most of these areas were designed to accommodate foot traffic from second row lots, therefore very limited parking areas were identified (only 24 spaces). It is important that these existing areas be delineated to prevent encroachment from adjoining development. In addition, the County should explore the feasibility of acquiring oceanfront parcels that adjoin existing access areas in order to allow for the development of a neighborhood beach access park. In 1990, Georgetown County applied for funds from FEMA's 1362 Program to purchase five oceanfront lots after Hurricane Hugo. The application was subsequently denied, but future efforts to acquire

property should continue. In addition, the County should determine the feasibility of acquiring two tracts of land on the tip of Garden City Point. The tracts consist of over 8 acres. One tract is owned by the federal government and the second tract is owned by the S.C. Department of Parks and Recreation. The property has tremendous potential as a major public access facility, due to its close proximity to the jetty, inlet and the ocean.

PARKING AND BEACH ACCESS INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN

	PARKING				BEACH ACCESS		
SHT #	OFF-STREET PARKING LOCATION	PARKING CLASSIFICATION[1]	# SPACES	DISTANCE TO ACCESS POINT	BEACH ACCESS LOCATION	TYPE OF ACCESS[2]	FACILITIES INVENTORY[3]
182					BTWN 4-191A-18 & 21	PA	
					BTWN 4-191A-25 & 32	PA	
					4-191A-33	PA	
183					BTWN 4-191A-1 & 4-191-71	PA	
					BTWN 4-191-59 & 58.13	PA	
					BTWN 4-191-58.14 & 58.15	PA	
					BTWN 4-191-58 & 1	PA	
184					BTWN 4-191-15 & 4-190-16.3	PA	
					BTWN 4-190-16 & 29	PA	
185	Debordieu Beach Club	2	26	250'	Pier Place Villa	PA	
	Debordieu Beach Club	2	26	250'	Pier Place Villa	PA	
	Debordieu Beach Club	2	31	300'	Pier Place Villa	PA	
	Debordieu Beach Club	2	18	300'	Pier Place Villa	PA	
					Debord Beach Club	PA	
					Debord Beach Club	PA	

KEY:

[1]PARKING CLASSIFICATION
1 On-Street
2 Off-Street Private Lot
3 Off-Street Public Lot
4 Beach Transit Lot

[2]TYPE OF ACCESS
P.U. Public Access Point
P.A. Private Access Point
P.A.C. Private (Community Assoc.)

[3]FACILITIES INVENTORY
1 Walkover Structure
2 Restrooms
3 Showers
4 Lifeguard Stations
5 Handicapped Access Ramps
6 Vehicle Access Ramps

PARKING AND BEACH ACCESS INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN

SHT #	PARKING: OFF-STREET PARKING LOCATION	PARKING: PARKING CLASSIFICATION[1]	PARKING: # SPACES	PARKING: DISTANCE TO ACCESS POINT	BEACH ACCESS: BEACH ACCESS LOCATION	BEACH ACCESS: TYPE OF ACCESS[2]	BEACH ACCESS: FACILITIES INVENTORY[3]
201					BTWN 4-149-2.6 & 2.0	PA	
					BTWN 4-146-128 & 121	PA	
					BTWN 4-146-124 & 120	PA	
					BTWN 4-146-114 & 113	PAC	
					BTWN 4-146-111 & 110	PAC	
					BTWN 4-146-105 & 104	PAC	
					BTWN 4-146-100 & 99	PAC	
202					BTWN 4-146-94 & 4-144-94	PAC	
					BTWN 4-144-90 & 89	PAC	
					Litchfield Inn	PA	
					Litchfield Inn	PA	
					4-144-84	PA	
					4-144-84	PA	
					4-144-84	PA	
203					LBTS Clubhouse	PA	
					Shipyard Bldgs A & C	PA	

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GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN

	PARKING				BEACH ACCESS		
SHT #	OFF-STREET PARKING LOCATION	PARKING CLASSIFICATION[1]	# SPACES	DISTANCE TO ACCESS POINT	BEACH ACCESS LOCATION	TYPE OF ACCESS[2]	FACILITIES INVENTORY[3]
204	4-140-1.03	2	50	200'	4-140-1.03	PA	
					BTWN 4-140-114 & 153	PA	
205					4-138-56	PA	
					BTWN 4-138-53 & 52	PAC	
					BTWN 4-136-60.01 & 4-138-45	PAC	
					BTWN 4-136-59 & 55	PAC	
					BTWN 4-136-51 & 52	PAC	
206	BTWN 4-136-46 & 45	3	10	100'	BTWN 4-136-50 & 49.12	PAC	
					BTWN 4-136-46 & 45	PAC	
					4-136-48	PAC	
					BTWN 4-136-37 & 4-135-133	PAC	
					BTWN 4-145-137 & 157	PAC	

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PARKING AND BEACH ACCESS INVENTORY
GEORGETOWN COUNTY BEACHFRONT MANAGEMENT PLAN

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Litchfield 207	4-133-156	3	7	100'	BTWN 4-135-151 & 152	PAC	
					BTWN 4-135-147 & 4-133-176	PAC	
					BTWN 4-133-168 & 167	PAC	
					BTWN 4-133-162 & 161	PAC	
					BTWN 4-133-156 & 155	PAC	
208					BTWN 4-133-149 & 148	PAC	
209	Huntington Beach	3	200	300'	Camping Area	PU	
					Atalaya	PU	
					Parking Lot	PU	
					Parking Lot	PU	
210					Huntington	PU	1,2,3,4
Garden City 217					BTWN 41-131-19 & 18	PU	
218		1	18	300'	BTWN 41-130-20.8 & 20.7	PU	
					BTWN 41-130-20.2 & 20.1	PU	
					BTWN 41-130-14 & 13	PU	

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219					BTWN 41-129A-33 & 32	PU	
					BTWN 41-129A-28 & 27	PU	
					BTWN 41-129A-23 & 41-129A-7.1.5	PU	
220					BTWN 41-129-12 & 5.2.1	PU	
					BTWN 41-129-11 & 10	PU	
					BTWN 41-129-9 & 8	PU	
					BTWN 41-128-68 & 69	PU	
					BTWN 41-128-66 & 65	PU	
					BTWN 41-128-64 & 63	PU	
					BTWN 41-128-61 & 62	PU	
					BTWN 41-128-60 & 59	PU	
					BTWN 41-128-58 & 57	PU	
					BTWN 41-128-56 & 55	PU	
					BTWN 41-128-54 & 53	PU	

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221					BTWN 41-128-53 & 54	PU	
					BTWN 41-128-51 & 52	PU	
					BTWN 41-128-49 & 50	PU	
					BTWN 41-128-47 & 48	PU	
					BTWN 41-128-45 & 46	PU	
					41-128-44	PU	
					BTWN 41-128-41 & 42	PU	
					BTWN 41-128-39 & 40	PU	
					BTWN 41-116-77 & 41-128-38	PU	
					BTWN 41-116-75 & 76	PU	
					BTWN 41-116-73 & 74	PU	
					BTWN 41-116-71 & 72	PU	
					BTWN 41-116-69 & 70	PU	
222					BTWN 41-116-68 & 67	PU	
					BTWN 41-116-66 & 65	PU	
					BTWN 41-116-64 & 63	PU	
					BTWN 41-116-62 & 61	PU	

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222					41-116-52	PU	
					BTWN 41-116-47 & 41-112-104	PU	
					BTWN 41-112-100 & 99	PU	
					BTWN 41-112-96 & 95	PU	
223					BTWN 41-112-90 & 89	PU	
					BTWN 41-112-85 & 84	PU	
					BTWN 41-112-80 & 79	PU	
					BTWN 41-112-75 & 74	PU	
					BTWN 41-107-111 & 41-112-70	PU	
					BTWN 41-107-99 & 98	PU	
224	BTWN 41-107-91 & 23	3	6	50'	BTWN 41-107-91 & 23	PU	

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LAND USE & ZONING ANALYSIS

The land use along the oceanfront study area is unique in that there was only one commercial use observed. A total of 880 residential units were counted. Of this total, 557 or 63 percent, were multi-family units. In addition to the residential uses, three clubhouses were observed. A total of 415 parcels of land were included in the survey. A more detailed analysis of each of the three inlet areas follows.

The DeBordieu area contained 72 multi-family units, 43 single-family dwellings and one clubhouse. A total of 69 individual parcels were surveyed. There are three multi-family complexes on the oceanfront: Pioneer Place Villas (40 units); Beach Villas (16 units); and North Beach Villas (16 units). The future land use pattern is expected to remain the same, except for 25 planned units at Ocean Park, nine additional units at North Beach Villas, the in-filling of vacant single-family lots at DeBordieu and the development of the oceanfront of the Prince George development of the north end of the study area. Oceanfront development at Prince George was conceptually approved to allow approximately 40 patio lots and a portion of an 18 hole golf course.

The Litchfield study area is the largest of the three in terms of the number of residential units. It contains 339 residential units. 142 hotel rooms and two clubhouses. A total of 140 parcels were surveyed. Almost 70 percent of the residential units (237) were multi-family: Inlet Point South (22): Litchfield Villas (13); Shipyard Village I & II (80); Sandpiper I and II

(100); and Breakers Reef (22). The largest concentration of multi-family homes was found in Litchfield By-the-Sea, along with two clubhouses. The single-family homes were in North Litchfield (70) and South Litchfield (32). There were 142 hotel rooms located at the Litchfield Inn. Also included in this study area is Huntington Beach State Park, which is the County's largest beach access facility. Detailed information regarding this facility may be found in the beach access section of the Plan. Future land use patterns include single-family development along the oceanfront in the Allston Inlet Development (42 lots), in-filling vacant single-family lots at North and South Litchfield, and development of Charlestown Grant (14 units), which is the last oceanfront phase at Litchfield By-The-Sea. No long-range predictions concerning the development of Brookgreen/Huntington Beach State Park tract are offered.

The Garden City Point study area contained 106 multi-family units and 178 single-family units. There were 206 parcels of land surveyed. The multi-family units were found in five complexes: Compass Rose (8); A Place at the Beach (24); A Place at the Beach II (41); Waterforde (19); and Gulf Stream Villas (14). Very few vacant parcels were observed. It is anticipated that future development of the oceanfront will consist of minor in-filling of vacant lots with single-family homes.

As a part of Georgetown County's Comprehensive Plan, the County adopted fifteen specific goals which are contained in the Waccamaw Neck Land Use Element. Five of these goals are directly related to beachfront management and are listed below:

To provide for the protection of the coastal beaches, dunes and natural vegetation of those areas. Sand dunes are small sand hills formed by waves and wind and, where unstabilized, are extremely vulnerable to these same factors. The particular grasses and woody plants which thrive in this area of salt spray, soils lacking humus and an oscillating water supply, form a dense mat of roots which stabilize the dune. The stems and leaves of this vegetation catch wind blown sand and further builds up the dunes. The sum total of this process is a seawall to storm driven tides and waves which is not so easily breached or washed away as unprotected sand. In addition, adequate setbacks from the dunes need to be enforced to stop any encroachment from development.

To promote beach access in redevelopment or in new developing areas. Where areas are undergoing redevelopment, efforts should be made by the County to encourage adequate beach access for the general public. In new developing areas, public beach access should be designed as part of the project.

To provide for the protection of the saltwater and freshwater estuaries of Georgetown County. Georgetown County is unique in that it

contains large portions of the State's estuarine land and water formations. These areas possess great natural beauty and are the breeding grounds and refuges for marine life, birds and land animals whose survival is economically important to sport and commercial fishing, hunting activity, and nature study by our citizens and visitors to the area.

To provide protection from flooding and tidal action. Certain areas in Georgetown County are subject to periodic inundation by flood waters. These areas should be identified and development curtailed or developed along adopted regulations for construction within flood prone areas.

To provide for the enhancement of its recreation potential. Specific attention should be given to conflicts between development (industrial and otherwise) and the environment.

The entire study area has been zoned for almost eighteen years. Georgetown County adopted zoning for the eastern third of the County in 1973. Included in that area was the entire Waccamaw Neck. The following is an analysis of the zoning as it affects each of the three study areas.

The DeBordieu area is encompassed by two Planned Unit Developments (DeBordieu and Prince George), except for the

southern tip of the area which is part of the Hobcaw Barony. The PUD's require that a conceptual plan be submitted for review and approval by the County. North Beach Villas represents the last developable oceanfront parcel at DeBordieu and it is under construction. The Prince George Development has not yet begun. The approved plan for the oceanfront shows approximately 42 patio lots and a portion of a golf course along the oceanfront. Prior to final approval for any oceanfront development, plans are required to be submitted to show that all requirements of the Beachfront Management Act and other applicable regulations are adhered to.

The Litchfield study area includes three PUD's (Allston Inlet, Inlet Point and Litchfield By-The-Sea), two single-family subdivisions (North and South Litchfield), a resort area (Litchfield Inn and Litchfield Villas) and Huntington Beach State Park. The park is zoned Forest and Agriculture. The single-family areas are zoned R-10, which is a restrictive single-family zoning classification. The resort area is zoned Resort Commercial. Except for the State Park, there is little vacant land available for development along the oceanfront.

The Garden City Point area contains a single-family PUD known as Inlet Harbor. The remainder of the peninsula's oceanfront is zoned General Resort Residential except for a 2,000 foot long strip south of Marlin Quay Marina that is zoned Resort Commercial. Both of these classifications allow either single-family or multi-family development. In addition, the Resort Commercial District allows a myriad of resort-related uses such as hotels,

restaurants, etc. Due to the lack of vacant land, it is not anticipated that the current land use patterns will change significantly.

A copy of pertinent sections of the Georgetown County Zoning Ordinance may be found in the Appendix. The Ordinance, since it's inception, has always been sensitive to protection of the dune systems and wetland areas. As a point of clarification, an amendment to the General Provisions (Article IV) will be processed by the County. This amendment will read as follows:

PROPOSED AMENDMENT TO THE GEORGETOWN COUNTY ZONING ORDINANCE

ADD 416 Compliance with South Carolina Beachfront Management Act: In any zoning district, the development of property that falls within the jurisdiction of the 1990 Beachfront Management Act, as amended, shall conform to those requirements, in addition to the requirements contained in this Ordinance.

The purpose of this amendment is to reference the Act and directly apply it's requirements to the zoning approval process. This has always been in practice in an informal manner.

DRAINAGE ANALYSIS

Georgetown County is fortunate in that there are presently no drainage or stormwater discharges onto the beach. Natural topography along the oceanfront drops as you move off of the beachfront, providing natural grades away from the beach. Typical drainage systems along the oceanfront consist of collection ponds with overflow outlets into natural watercourses.

In 1984 Georgetown County adopted a Stormwater Management Ordinance that applies Countywide. In most cases, the County's requirements for stormwater controls exceed the requirements contained in the SCCC report Stormwater Management Guidelines. The County's ordinance does not allow for any direct discharge of stormwater into any natural water body or onto the beach.

Georgetown County will continue to work closely with SCCC staff to insure that any future oceanfront development complies with SCCC guidelines as well as the County's stormwater management guidelines.

Beach Erosion and "Control Alternatives"

Beach erosion is generally occuring along the Georgetown County coast and there appears to be no way to stop this erosion. Based on this conclusion there are two strategies that may be pursued. Move the building line back (retreat) and beach nourishment both are only delaying tactics or short term solutions. These "control alternatives" are discussed in the following sections. The retreat strategy is presented by sections because of the different erosion rates found in each inlet zone.

Garden City

Analysis of shoreline processes along the Garden City Beach shoreline indicates a long-term erosion and associated recession. Garden City Beach can be expected to undergo highly variable rates of shoreline migration including accelerated rates of erosion and recession. In areas where the shoreline location has been fixed by means of seawalls, groins, etc., landward recession may be terminated but vertical erosion of the wet or dry beachface is expected to continue to occur.

On the average, the 50-year future shoreline recession for Garden City Beach, resulting from analysis of shoreline movement rates, is expected to be approximately 75 feet landward of the existing dune line. This landward recession is based on historical long-term shoreline recession rates and does not account for short-term effects. This analysis indicated that the impact zone of the 50-year storm is expected to be twice that of the predicted 50-year recession of the existing dune line. Similarly, the impact zone of the 25-year storm is computed to be

about 116 feet landward of the duneline or approximately one and one-half times the 50-year long-term linear rate.

In consideration of these findings and their relevant application to the shoreline in its present developed state, the minimum recommended setback from the existing dune line along the Georgetown County portion of Garden City Beach should be that distance dictated by the 50-year future shoreline location as predicted from historical long-term recession rates. This corresponds to a distance of 75 feet landward of the existing dune line which is more specifically defined in this application as the crest of the seawardmost dune. In locations where the shoreline has been seawalled, the setback line would default to a point 75 feet landward of the top of the seawall.

Allowances for construction of major habitable structures seaward of the setback line should **only** be made if a building cannot be constructed or reconstructed landward of that location, and if the setback would result in denial of "reasonable use" of property. It is recommended that the latter should be considered to be no more than single family residence usage. Non-habitable structures should not be allowed seaward of this point except for dune overwalks, sand fencing, and erosion control measures, where warranted. In no event should these recommendations take precedence over existing or future setbacks or regulatory programs which are considered to be more stringent. It is recommended that no future major habitable structure be constructed in Inlet Impact Zones.

Litchfield-Huntington Beach

Analysis of shoreline processes along this reach extending from Murrells Inlet to Midway Inlet continue to indicate a relatively uniform long-term erosion rate and associated shoreline recession along its majority. An exception to this is the shoreline immediately south of Murrells Inlet where considerable accretion has occurred as a result of the construction of the navigation project there. It should be noted, however, that accelerated erosion has occurred at the south end of Huntington Beach State Park and along the adjacent residential section that is North Litchfield Beach as a result of the Murrells Inlet Navigation Project.

The Huntington Beach State Park shoreline is currently undeveloped and is very likely to remain that way. Single family residences line the central portion of the shoreline reach comprising Litchfield and North Litchfield Beach. South of this, several, low-density multi-family resort complexes have been constructed. The southernmost tip of this reach is currently undeveloped. With the exception of the concrete block wall fronting the Litchfield Inn, this entire shoreline reach is unarmored. These development trends and the aforementioned shoreline processes are important factors in the determination of a setback line along the Litchfield-Huntington Beach shoreline.

The quantification of shoreline erosion trends for this section of the study area, based upon analysis of historical shoreline movement rates, indicated shoreline recession rates which, when extrapolated into the future, result in a predicted

50-year shoreline location approximately 65 feet landward of the existing dune line. This analysis indicated that the impact zone of the 50-year storm is expected to be about 100 ft landward of the existing dune line or one and one-half times the predicted 50-year shoreline recession. The impact zone associated with the 25-year storm, at 59 ft from the existing dune line, is actually expected to be less than the predicted 50-year shoreline recession. The relatively narrow storm impact zones, as compared to the 50-year predicted shoreline recession, is attributable primarily to the relationship between the beach profile and the volume of sand associated with the profiles on this shoreline reach.

In consideration of these findings and their relevant application to the shoreline in its present developed state, the minimum recommended setback from the existing dune line along the Litchfield-Huntington Beach shoreline should be that distance dictated by the 50-year future shoreline location as predicted from historical long-term recession rates. This corresponds to a distance of 65 ft landward of the existing dune line which is more specifically defined in this application as the crest of the seawardmost dune.

Again, allowance for construction of major habitable structures seaward of an adopted setback should **only** be made if a building cannot be constructed or reconstructed landward of that location, and if the setback would result in denial of "reasonable use" of property. The latter should be considered to be no more than single family residences. In no event should these

recommendations take precedence over more stringent future or existing setbacks. Non-habitable structures seaward of the proposed setback should be limited to dune overwalks, sand fencing and erosion control measures, where warranted and fully permitted. It is recommended that no additional major habitable structures be constructed in designated Inlet Impact Zones.

DeBordieu

The DeBordieu shoreline exhibits both the largest magnitude and variation in shoreline migration rates over the entire study area. The southern end of the island is experiencing extremely high erosion rates while the northern end has of late been undergoing mild accretion. The central portion of the shoreline exhibits a mild erosional trend. The majority of the island is undeveloped with the exception of the DeBordieu Tract along the center of the island where the shorefront is hardened by a seawall. Predictably, the beach in front of the seawall has undergone vertical erosion such that virtually no dry beach exists at high tide. The south end of the area is part of the Belle W. Baruch nature preserve and is unlikely to be developed in the future while the north end of the area is slated for future development.

The quantification of shoreline erosion trends along the DeBordieu shoreline, as based on linear shoreline migration, resulted in varying locations of the 50-year shoreline. This was a result of the spatial variation in shoreline erosion rates over the length of the island shoreline. The southernmost extend of the island was designated as an Inlet Impact Zone and,

accordingly, the entire peninsula making up this section should be subject to the restrictions of the prescribed setback program. As mentioned previously, this area is designated as a nature preserve which should preclude any future development there. North of this point a setback of 315 feet corresponding the predicted 50-year future shoreline is recommended to a point 1700 feet south of the DeBordieu seawall, whereupon the setback reduces to 170 feet, reflecting the milder recession rates observed there. These setbacks are relative to the existing dune line or seawall, whichever applicable. The 170 feet setback continues north to a point approximately 4000 feet south of Pawley's Inlet where historical inlet migration trends, low-lying uplands and inlet effects necessitate a setback gradually increasing to 450 feet near the inlet and the designation of this area as an Inlet Impact Zone.

Once again, allowance for construction of major habitable structures seaward of an adopted setback should **only** be made if a building cannot be constructed or reconstructed landward of that location, and if the setback would result in denial of "reasonable use" of property. The latter should be considered to be no more than single family residences. In no event should these recommendations take precedence over more stringent future or existing setbacks. Non-habitable structures seaward of the proposed setback should be limited to dune overwalks, sand fencing and erosion control measures, where warranted and fully permitted. It is recommended that no future major habitable structure be constructed in designated Inlet Impact Zones.

As previously mentioned, large scale beach restoration or "nourishment" is the preferred erosion control alternative for a section of shoreline for the following major reasons:

* It can result in substantial protection of upland property;
* It results in the creation and/or maintenance of a beach suitable for active and passive recreational activities; and,
* It compensates for the long term effects of erosional forces by offsetting deficits in the littoral budget.

Since the success of beach nourishment projects constructed to date has generally been demonstrated to be directly related to the length of shoreline restored, the solution does not necessarily lend itself to small scale applications in either a practical or cost-effective manner. The determination of applicability is best performed on a case-by-case basis. There is no question, however, that the beach nourishment experience has been proven to be a technically viable approach to mitigating beach erosion.

In cases where large scale beach restoration is not feasible, the combination of smaller sand fills in combination with stabilizing structures should be considered. Typically, the latter take the form of terminal groins at the ends of barrier islands and/or groin fields. The utilization of stabilizing structures is generally most viable when the adverse effects of inlets must be accounted for such as in lower Georgetown County.

Short-term, smaller scale erosion control measures which can address either limited or emergency type erosional conditions without restoring to armoring would include:

* Beach scraping from the intertidal beach;

* Jet-pumping of sediment from the outer reaches of the alongshore bar or littoral zone; and,

* Trucking of beach quality fill from an acceptable upland source or inlet shoals.

Except for the placement of compatible fill from a remote source, both scraping and jet-pumping should not be carried out on a frequent basis without the requirement for monitoring to determine the response of the local shoreline to the removal of sediment from the intertidal beach, since the latter could potentially adversely affect adjacent properties and the beach/dune system.

40 YEAR RETREAT STRATEGY

Numerous recommendations are contained throughout this document related to the long-term strategy for protecting and enhancing the Georgetown County shoreline. The recommendations listed below represent the County's intentions in regards to long range beach management:

* Long term erosion rates vary greatly from one inlet zone to another. Any new construction seaward of the forty year setback line should be allowed only if it is necessary to allow reasonable use of the property. In some cases, mitigation measures such as dune vegetation, dune restoration, etc. may be required by the County.
* The areas subject to extremely high erosion rates near inlets should be restricted from any type of development that would increase the probability of loss of life, property, etc. Such areas are better suited to remain as open space or access areas without permanent structures.
* In order to enforce the proposed setback restrictions, it will be necessary to amend the Georgetown County Zoning Ordinance to incorporate the forty year setback line into the local permitting process.
* New data regarding erosion rates, etc. will be submitted to the County Planning Department for review. Upon consultation with SCCC staff, the County will initiate any adjustments to the Beachfront Management Plan warranted by the new data.
* In the event of damage or destruction from major storms, any nonconforming structure that sustains damage exceeding 70

percent of its replacement cost shall not be rebuilt. Any new construction must comply with the Georgetown County Beachfront Management Plan.

* In order to maintain the Plan's currency, it shall be reviewed and updated at least once every five years. Any proposed changes must first be submitted to the South Carolina Coastal Council for approval.

Implementation Strategy

The Georgetown County Beachfront Management Plan contains numerous recommendations and actions required by the County to implement the Plan. Some of the activities can be undertaken immediately, while others will require years for implementation. Each recommended activity is presented below:

(1) **Research, Locate and Improve Existing Beach Accesses in the County**. The Plan identified 94 beach access locations, over half of which were determined to be public. The major problem with the access locations is lack of signage to define location, encroachment by adjoining residential development and the need for physical improvements to the facility (dune crossovers, etc.).

(2) **Expand Beach Access Facilities**. In order to qualify for beach renourishment funds, the County is required to expand or develop beach access facilities in particular areas. The beach access analysis indicated the need for facility expansion in all three sub areas. The most obvious area lacking public beach access facilities is the DeBordieu area, which presently has no public access. Areas which require additional public access include the South Litchfield area and the Garden City Point area. The County needs to investigate the possibilities of acquiring the two tracts

at the southern tip of Garden City, the two tracts of land identified in North Litchfield, the tract of land south of Allston Inlet PUD, and a tract of land between the DeBordieu Colony and the Prince George development for future development of beach access parks.

In addition, the County needs to continue to pursue opportunities to expand existing beach access facilities when the opportunity presents itself. The 1362 FEMA Program application for a beach access park on Garden City Point after Hurricane Hugo is a good example.

Funding for new access areas and improvements may be exacted from user fees charged at the larger access areas or SCDPRT and FEMA grants. Om addition, it is recommended that the County set aside a percentage of the annual allocation of accommodation tax revenues into a beach access account.

(3) **Formally Adopt Setback and Erosion Control Restrictions for Future Oceanfront Development.**

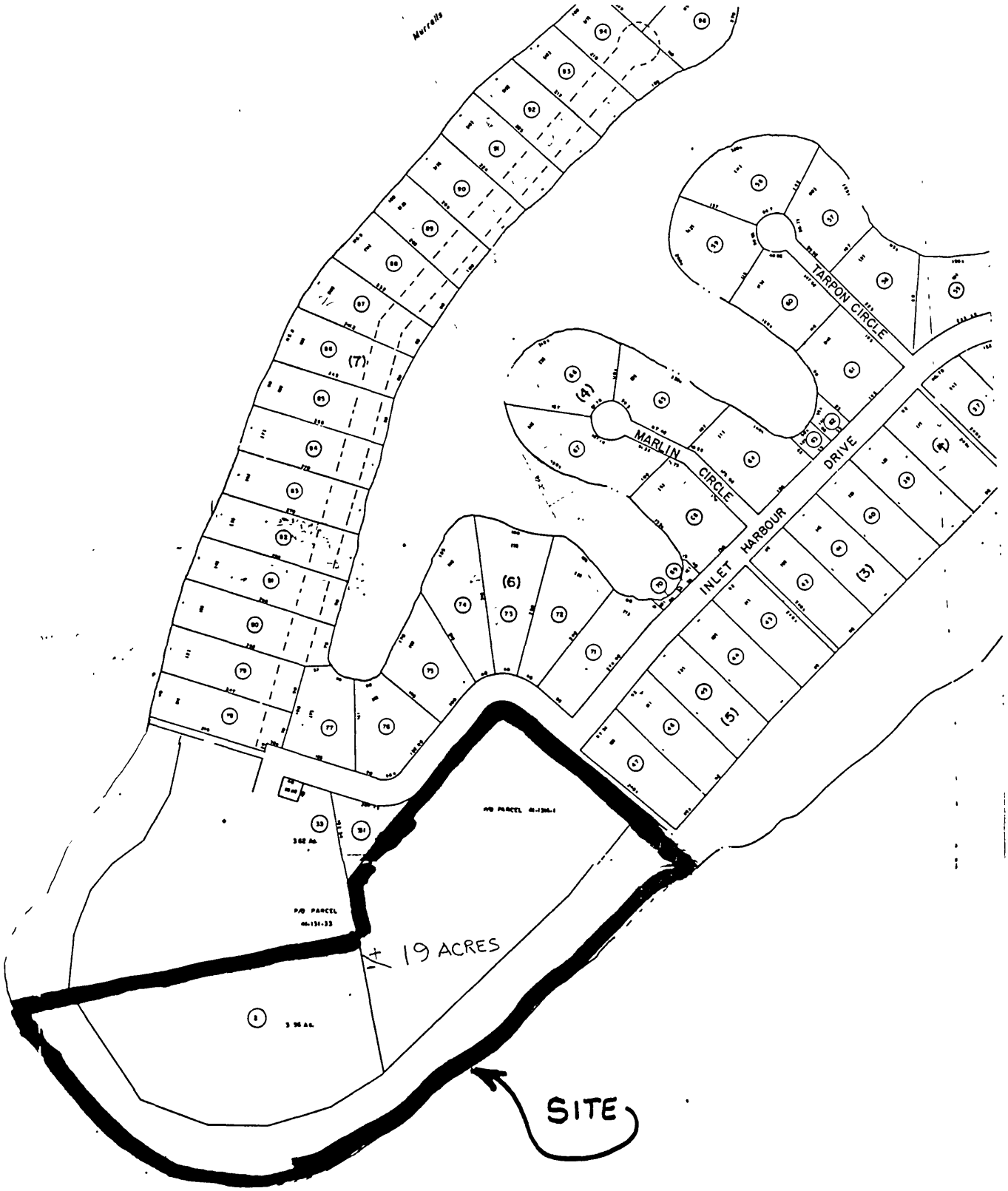
The County needs to insure that future development does not encroach seaward of the setback lines established by the Coastal Council, unless the setback lines render the lot non-buildable. In such case, the Zoning Board of

Appeals may grant a variance to allow for reasonable use of the lot. In addition, the County needs to work with the Coastal Council and individual property owners to restrict the future use of improper erosion control devices on the beachfront.

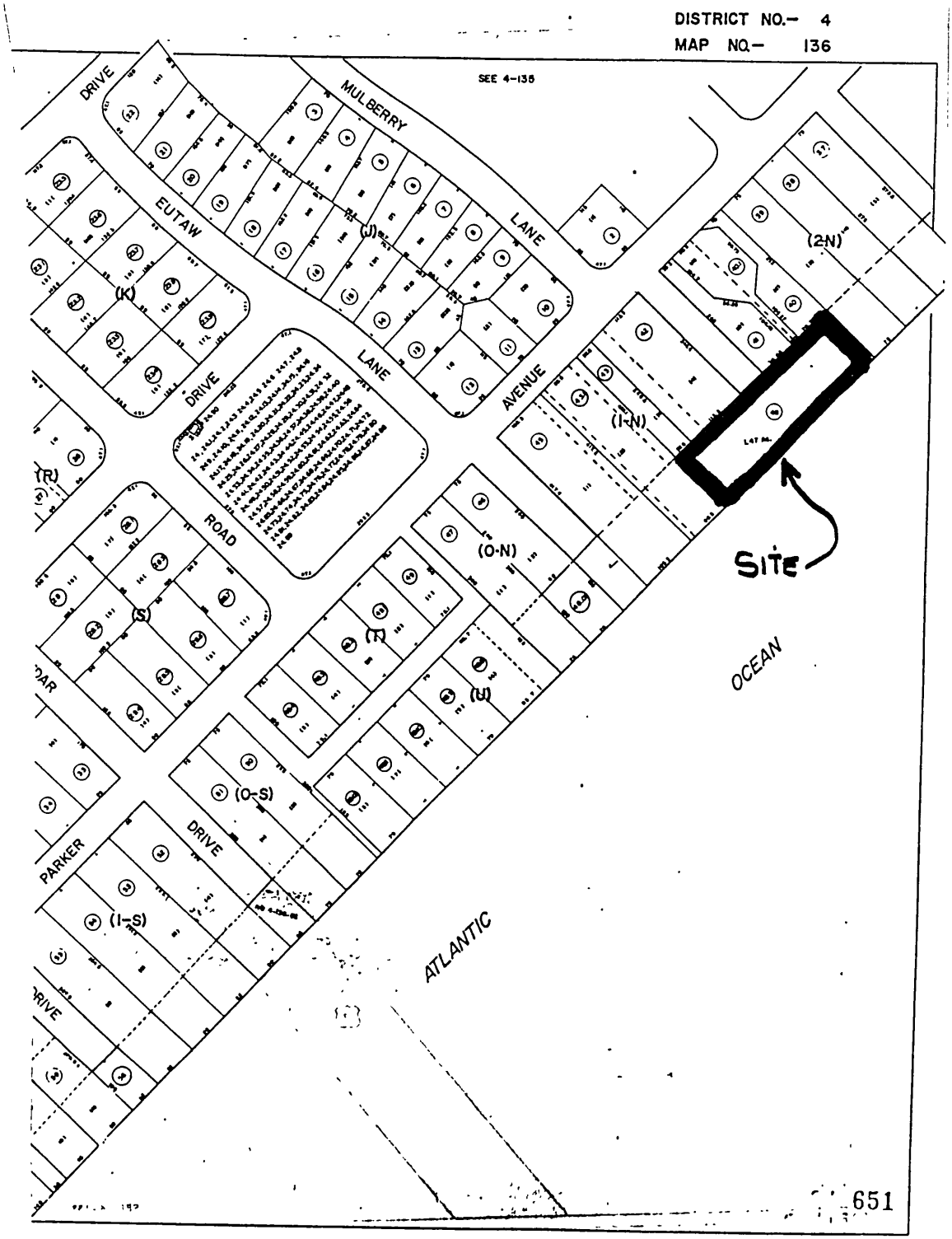
(4) **Adopt Regulations to Protect Endangered Species and Critical Habitats**. In order to protect endangered species and critical habitat areas along the beach, the County needs to adopt and enforce beach laws in certain designated areas, regulate vehicular traffic on the beach, adopt a beachfront lighting ordinance, and develop a public information program to inform citizens about the various plant and animal species that live along the beach and how they can help protect them.

(5) **Periodically Update the Beachfront Management Plan**. To be effective, it will be necessary that the County revise and update the policies, procedures and ordinances that collectively represent the Management Plan. Such update shall be necessary at least once every five years.

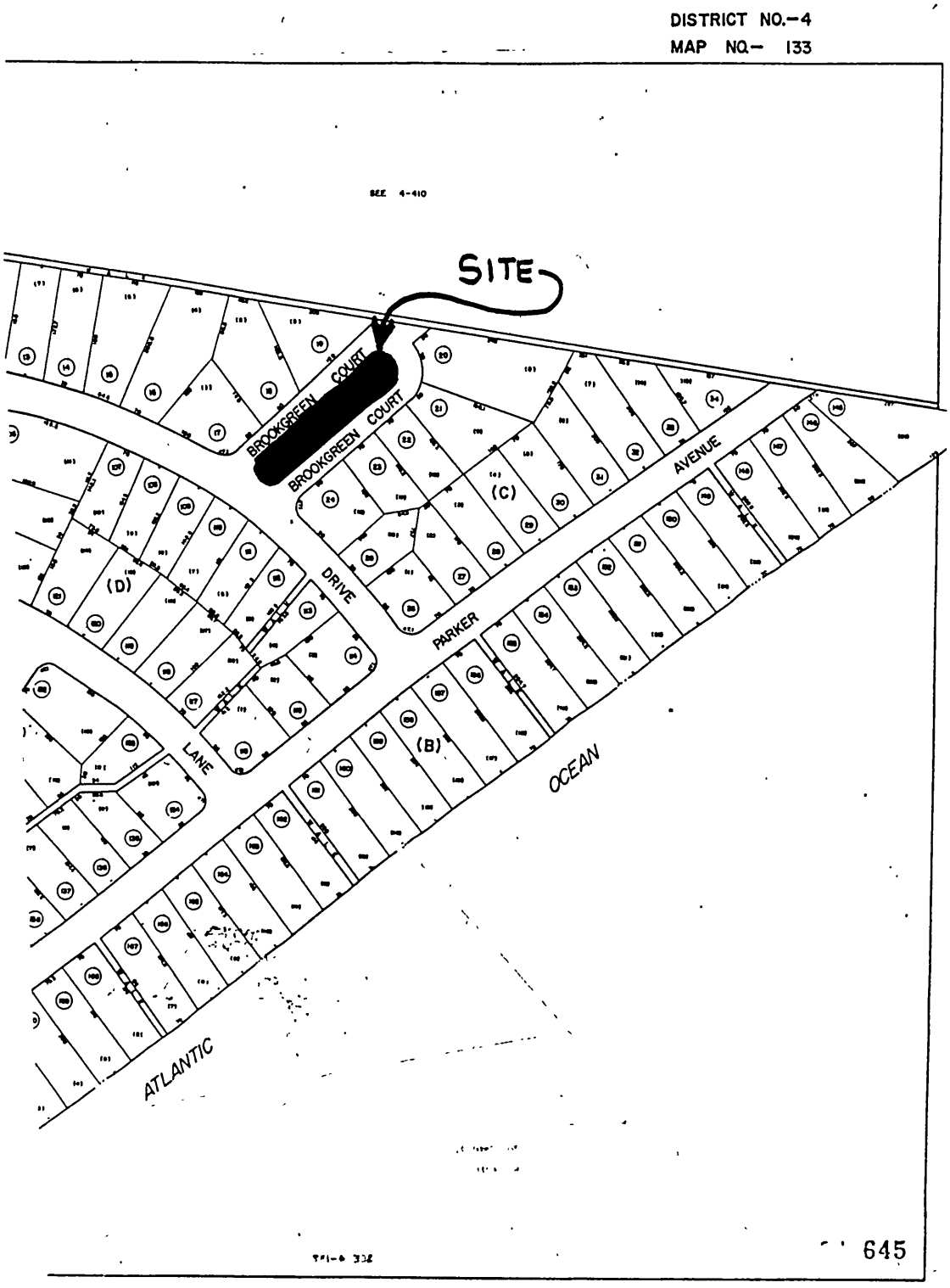
FUTURE ACCESS SITE- GARDEN CITY



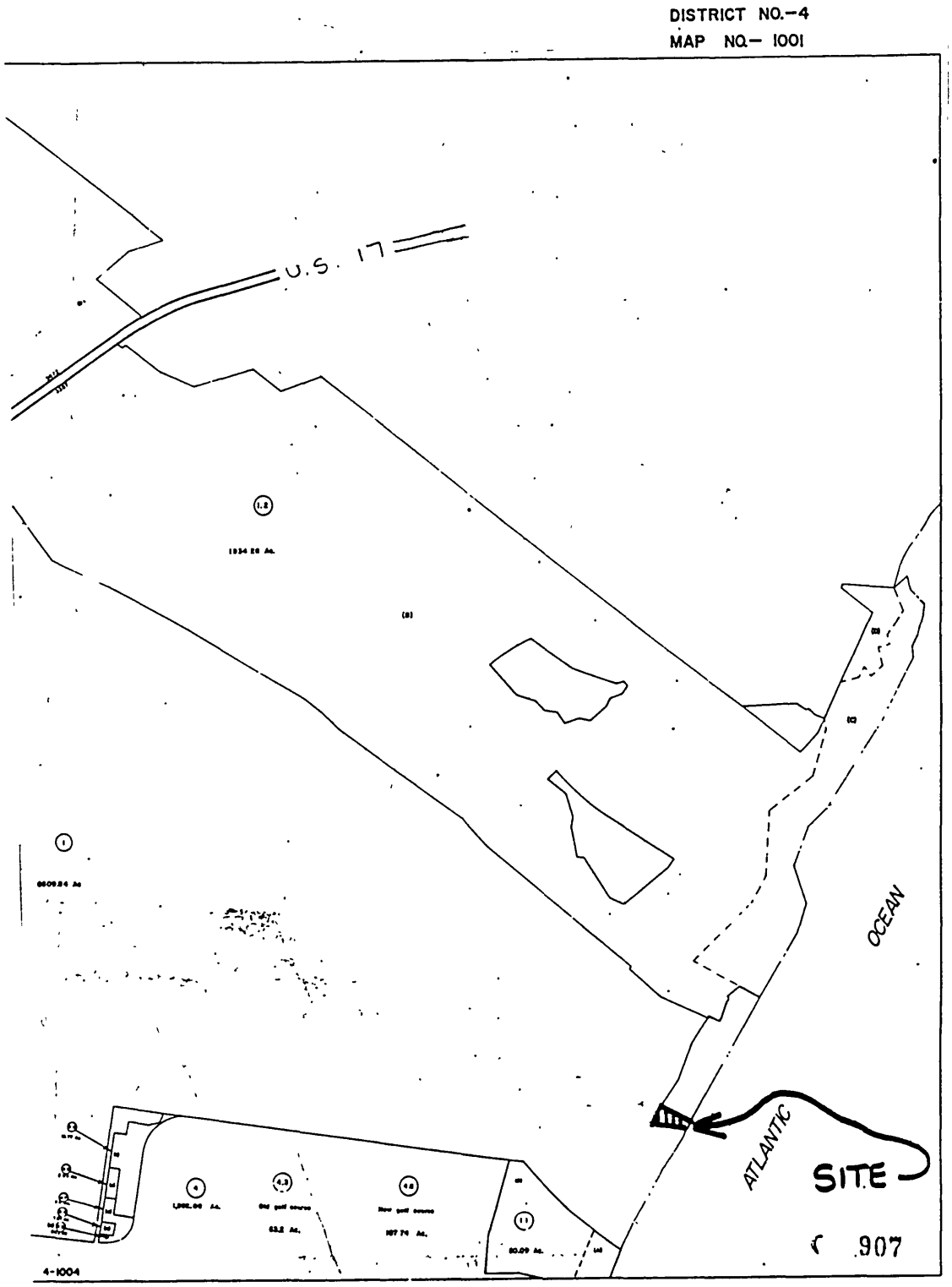
FUTURE ACCESS SITE- NORTH LITCHFIELD



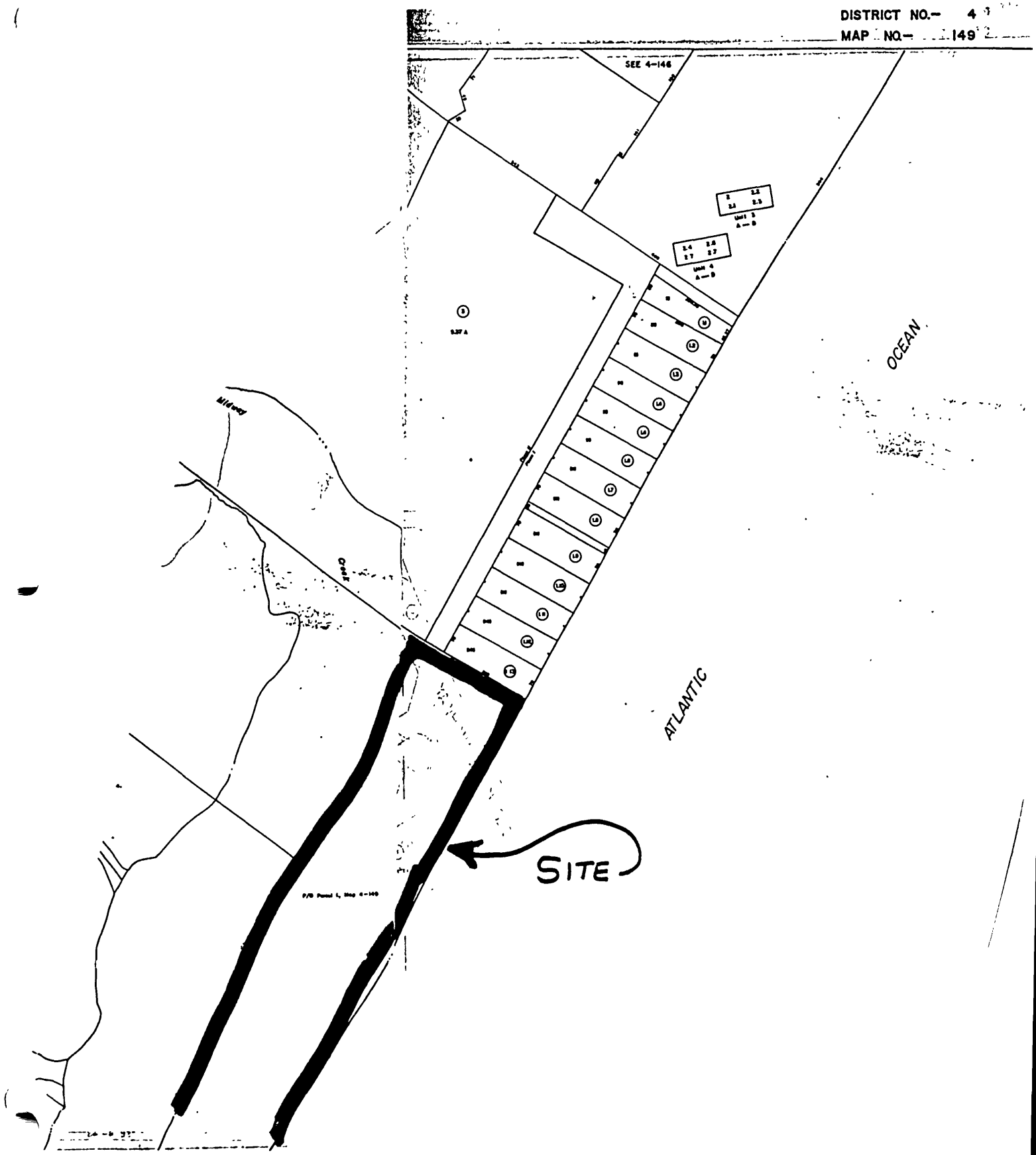
FUTURE ACCESS SITE- NORTH LITCHFIELD



FUTURE ACCESS SITE- DEBORDIEU



FUTURE ACCESS SITE-SOUTH LITCHFIELD



ANNEX U, TO THE GEORGETOWN COUNTY EMERGENCY OPERATIONS PLAN

DISASTER RECOVERY

I. GENERAL

A. Purpose

The purpose of this Annex is to develop the procedures and methods for Georgetown County to recover during the Recovery Phase of any major disaster. Its intention is to organize, assign and detail responsibility with respect to recovery operations.

B. Authority

1. Georgetown County Ordinance dated April 9, 1985
2. South Carolina Act Number 223 of 1967 as amended.
3. South Caorlina Act Number 199, July 30, 1979.

C. Concept

To define the procedure of emergency and non-emergency forces in the restoration of vital services and facilities, and provide the residents of the county the necessities of life until normal facilities and services have been re-established. There is no limited period of time for the recovery phase to last. The determination when this period will end will depend upon the magnitude of the recovery, and when the Disaster Recovery Coordinator determines functions can be scaled down or terminated.

D. Coordination

The Georgetown County Emergency Operations Center (EOC) is located in the County Courthouse at 133 Screven Street in Georgetown S. C. and is the primary headquarters for coordinating all activities of the Disaster Recovery Phase.

II. ORGANIZATION AND RESPONSIBILITY

A. The County Administrator has overall responsibility for all functions of the recovery process, and is responsible for establishing the policies and procedures for recovery.

B. The County Civil Defense Director is the Disaster Recovery Coordinator and is responsible to the County Administrator for the coordination of the emergency and non-emergency forces that are responsible for the restoration of vital services and facilities, and the necessities of life until normalcy of facilities and services have been re-established. Also the establishment of a Disaster Application Center (DAC) and a warehouse for storage of Disaster Relief Supplies.

C. The Utilities Coordinator is the person designated by the County Administrator to be responsible for coordinating the activities of all utility forces of water, sewage and electric function in the county. This person or his designated assistant will be in the Georgetown County EOC.

D. The Public Works/Engineering Coordinator is the person designated by the County Administrator to be responsible for coordinating the activities of all engineering, public works, and private owned engineering resources in the county. This person or his designated assistant will be in the Georgetown County EOC.

E. The Disaster Relief Coordinator is the person designated by the County Administrator to be responsible for coordinating the activities of all forces responsible for basic human needs, shelter, food, clothing, and counseling. This person or his designated assistant will be in the Georgetown County EOC.

F. The Law Enforcement Coordinator is the county Sheriff and is responsible to the County Administrator for coordinating all the forces involved in security of disaster damaged areas in Georgetown County. The Sheriff or his designated representative will be in the Georgetown County EOC.

G. The Resources Assistance Coordinator is the person designated by the County Administrator to be responsible for coordinating the resource requirements for the recovery operations. This person or his designated assistant will be in the Georgetown County EOC.

H. Public Information Coordinator - is responsible for coordinating all directives and informational releases to the news media and general public during the Recovery Phase. Is responsible for setting up and designating a media briefing area separate from the EOC Operations Area. Is to request from the County Administrator personnel to handle in-coming phone calls. The P.I. Coordinator or his designated assistant will be in the Georgetown County EOC.

I. Communications Coordinator - is responsible for coordinating all radio communication systems in the County Emergency Operations Center (EOC) during the Recovery Phase. Is to provide an adequate staff of radio operaotrs. Is to assist with shelter communications when required. Is to provide portable radios to essential officials that are required to be in constant communications with the County EOC. The Communications Coordinator or his designated assistant will be in the Georgetown County EOC.

III. RECOVERY FORCES

A. Disaster Relief Group

1. Department of Social Services
2. American Red Cross
3. Salvation Army
4. Camp Baskerville
5. United Way
6. Department of Education

B. Public Works Group

1. County Roads & Bridges Department
2. State Highway Maintenance Department

3. City of Georgetown Public Works Department
4. Industry
5. Commercial Engineering Companies
6. County Recreation Department
7. County Solid Waste Department

C. Utilities Group

1. County Water & Sewer
2. City of Georgetown Utility Department
3, City of Andrews Utility Department
4. Rural Water & Sewer
5. Commercial Electric & Gas Companies

D. Law Enforcement Group

1. County Sheriffs Department
2. City of Georgetown Police Department
3. City of Andrews Police Department
4. SLED
5. National Guard

E. Resources Group

1. County
2. Municipalities
3. State
4. Federal
5. Industry
6. Commercial Enterprises
7. Volunteers

IV. EXECUTION

As soon as a disaster is evident, and recovery services are essential for the preservation of life and health, the Civil Defense Director will coordinate recovery operations from the county EOC.

A. Disaster Relief Group

1. The Disaster Relief Coordinator and representative officials of the various disaster relief groups will meet in the EOC and analyse the relief situation and outline the actions to be undertaken.

2. Designate responsibility for the handling of food, clothing, water, shelter, counseling, and other essential needs.

3. Identify a warehouse or warehouses to receive and store relief supplies.

4. Designate a Warehouse Supervisor and the necessary personnel to supervise the distribution of supplies as follows:
   a. Record keeping of incoming supplies
   b. Sorting and distribution
   c. Vehicles for delivery of supplies

d. Loading and unloading personnel
e. Locate a forklift to use for unloading supplies

5. Request refrigerated van for ice and perishable food storage.

6. Request water buffalows as soon as crisis is determined.

7. Utilize County Fire Stations as information and distribution centers. (See Appendix #3, Page 10).

8. Designate facilities to use as food serving centers if needed.

9. All incoming supplies are to be routed to the warehouse for storing and sorting.

10. Arrange for a computer to be set up to keep up with recovery supplies, needs, distribution, etc.

11. All relief groups are required to have a representative in the EOC during the initial stages of the operations. The duration will be determined by the Disaster Relief Coordinator.

12. Communications will be supplied by the County Civil Defense Communications Officer in the county EOC.

13. The Disaster Relief Group supervisors will meet with the Relief Coordinator at 7:00 A.M. each day at the EOC to review the situation.

B. Public Works/Engineering Group

1. The Public Works/Engineering Coordinator and representatives of the various public works/engineering groups will meet in the EOC and analyse the recovery situation and outline the actions to be undertaken.

2. Designate areas of responsibility for road & highway clearance of trees and debris, road & bridge maintanance, debris pickup & removal, debris dump and burning sites, garbage disposal sites, waterway clearance.

3. Review resource needs.

4. Designate critical facilities and systems for priority restoration. (See Appendix #4, Page 12).

5. All recovery assistance requests for equipment and supplies are to be requested through the Public Works Coordinator in the EOC.

6. The Public Works/Engineering group will meet each morning at 7:00 A.M. in the EOC to review the situation.

C. Utilities Group

1. The Utilities Coordinator and representatives of the various utility groups will meet in the EOC to analyse the utility situation and outline the actions to be undertaken.

2. Designate areas of responsibility for water, sewage, electric natural gas restoration.

3. Designate critical facilities for priority restoration.

4. Review additional resource needs.

5. Survey priority facilities listings for emergency power generators. (See Appendix #5, Page 13).

6. All recovery assistance requests for equipment and supplies are to be requested through the recovery group coordinator in the EOC.

7. The Utility group supervisors will meet at 7:00 A.M. each day at the EOC to review the situation.

D. Law Enforcement Group

1. The Law Enforcement Coordinator and representatives of the various law enforcement groups will meet in the EOC at the beginning of the recovery operations to review the situation and outline the actions to be undertaken.

2. Identify areas that require security patrols.

3. Outline restricted areas and re-entry restrictions.

4. Requests for additional manpower is to be requested through the EOC Recovery Coordinator. In turn the requests are to be routed through the S. C. Emergency Preparedness Division EOC. Any deviation from this procedure will delay assistance from this resource.

5. The Law Enforcement group supervisors will meet at 7:00 A.M. each day at the EOC to review the situation.

E. Resource Assistance Group

1. The Resource Assistance Coordinator will organize his staff in the EOC and coordinate the available county resources and request for additional outside assistance.

2. Will coordinate those persons who want to volunteer help in the recovery.

3. Will be responsible for the operating and staffing of volunteer coordination centers.

4. Will be liaison between volunteer groups, churches and private agencies in their relief activities.

5. Will coordinate commercial enterprises offering assistance to county government in its recovery.

6. Will be responsible for a EOC staff to answer telephones.

7. Will coordinate building maintenance and janitorial service for the EOC.

8. Will organize and supervise all disaster relief funds that are not specified for a particular agency. This money will go into the County Disaster Relief Fund.

9. At 8:00 A.M. each day a status report on the resource situation will be submitted to the Disaster Recovery Coordinator.

V. ADMINISTRATION AND LOGISTICS

A. Administration

1. Each municipality will have a representative in the County EOC to coordinate municipal operations with the county and to avoid duplication of effort and proper utilization of resources.

2. All State and Federal resource assistance requested by the County, the Municipalities, and Public Service Districts are to be requested through the Emergency Operations Center (EOC).

3. The County, Municipalities and Public Service Districts will each designate a Federal Applicant Agent to serve as the FEMA contact for disaster funding. Each agency will be responsible for handling their own applications for FEMA funding. They are also responsible for maintaining all financial and verification records for recovery.

4. All funds donated for disaster relief will go into the County Disaster Relief Fund. This fund will be supervised by the County Administrator.

B. Logistics

1. The Georgetown County Disaster Recovery Group will use local resources to the fullest extent including all reasonable substitutions and improvisions until nearing depletion before requesting assistance from the State Emergency Operations Center (EOC).

2. Before purchasing any emergency supplies, the County Purchasing Officer will coordinate with the Disaster Recovery Coordinator to avoid any unnecessary purchases and to assure that all county resources have been depleted.

3. Authorization of all disaster related purchase requests must come from the County Administrator.

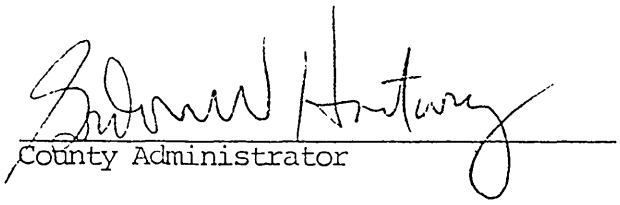
VI. DIRECTION AND CONTROL

A. Recovery activities will be coordinated through the County Emergency Operations Center (EOC) and controlled by the County Administrator.

B. The County Emergency Operations Center is located in the County Courthouse, 133 Screven Street, Georgetown, S. C.

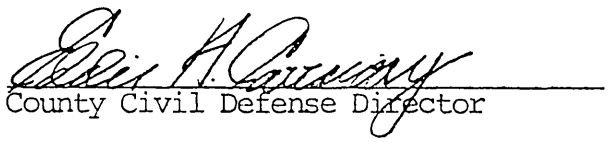
C. Line of Succession:

1. County Administrator
2. Asst. County Administrator
3. County Civil Defense Director



County Administrator

9/7/90
Date



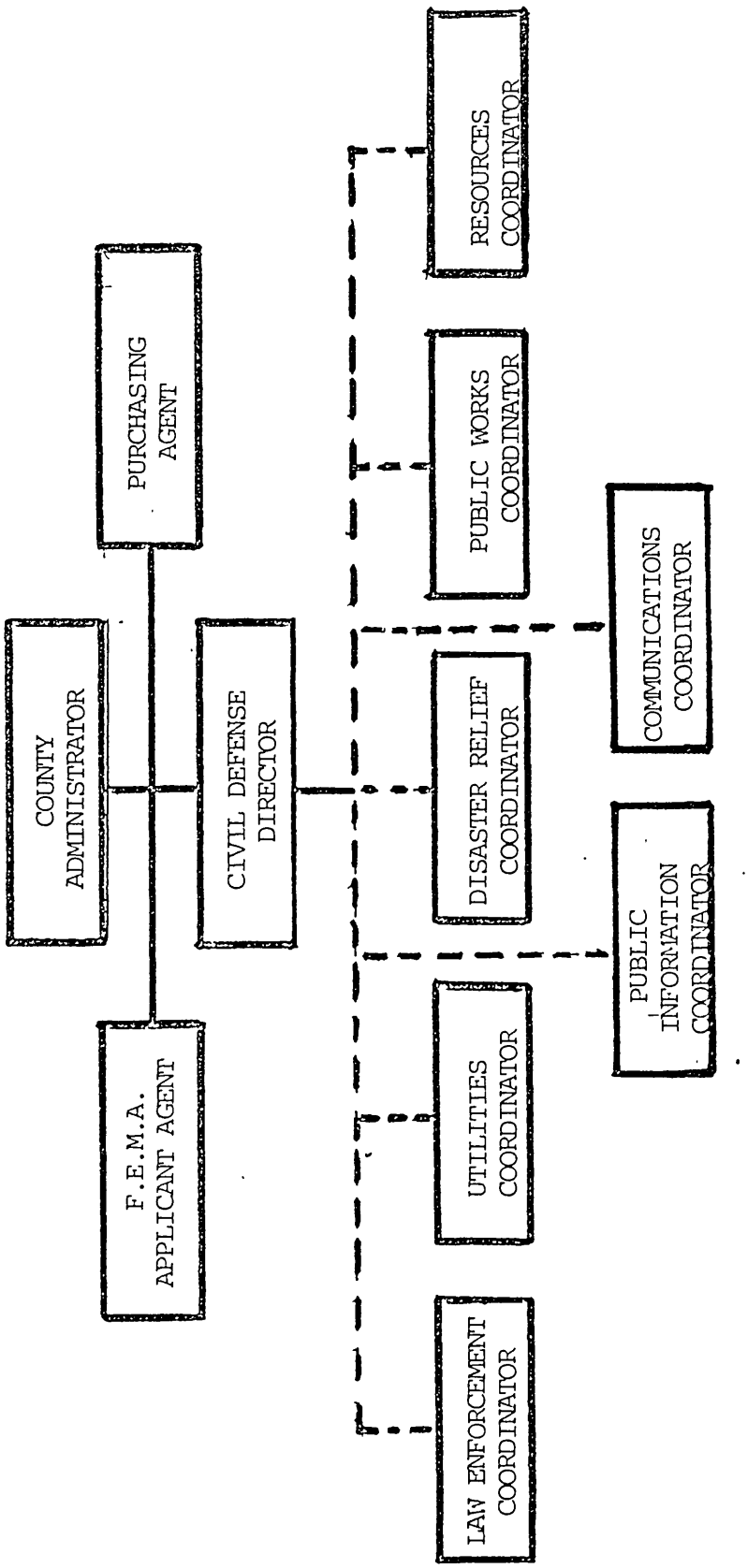
County Civil Defense Director

9/7/90
Date

APPENDICES:

1. Organization Chart (General)
2. Disaster Recover Operations Phone Directory
3. Area Contact Centers (County Fire Stations)
   Tab #1, Map Locations of Assistance Centers
4. Critical Facilities Listings
5. Vital Facilities Requiring Emergency Generators

APPENDIX #1, TO ANNEX U, DISASTER RECOVERY OPERATIONS CHART



APPENDIX #2, TO ANNEX U, DISASTER RECOVERY OPERATIONS PHONE DIRECTORY

COUNTY EMERGENCY OPERATIONS CENTER (EOC) 546-6869 & 546-4787

NAME	POSITION	BUS. PHONE	RES. PHONE
ALFRED SCHOOLER	COUNCIL CHAIRMAN	546-4189	546-4687
GORDON HARTWIG	COUNTY ADMINISTRATOR	546-4189	527-8306
EDDIE CARRAWAY	CIVIL DEFENSE DIRECTOR	546-6869	546-8329
PATRICIA M. BYRD	CIVIL DEFENSE ADMIN. ASST.	546-6869	546-8636
MARY GRAHAM	COUNTY PURCHASING AGENT	546-4189	546-1757
TEZ BONNOITT	MAYOR, CITY OF GEORGETOWN	546-3434	546-8710
MITCH SIZEMORE	ADMIN., CITY OF GEORGETOWN	546-2556	546-3910
MICHAEL CARTER	COUNTY SHERIFF	546-5101	546-3013
JAMES ELDERS	POLICE CHIEF, GEORGETOWN	527-4454	527-4454
HANK STROUP	D. S. S.	546-2333	546-8816
MARGIE HARVEY	A. R. C.	546-5422	546-9418
NANCY STRICKLAND	SALVATION ARMY	546-4632	546-2755
CLIFF DODSON	SUPERINTENDENT OF EDUCATION	546-2561	546-7448
REV. TONY CAMPBELL	CAMP BASKERVILLE	237-3459	237-4844
JOHNNY THOMAS	COUNTY ROADS SUPERVISOR	546-7447	546-6762
SIMON FORBES	SUPERVISOR, HIGHWAY DEPT.	546-2405	546-9075
ELDER HOLMES	DIRECTOR, CITY PUBLIC WORKS	546-5003	546-6405
BOB BARKER	COUNTY WATER & SEWER	546-8408	546-1191
JACK BLAND	MAYOR, PAWLEYS ISLAND	237-1698	237-2575
T. K. HASELDEN	MAYOR, CITY OF ANDREWS	264-8666	264-8222
ALBERT WILLIAMS	POLICE CHIEF, ANDREWS	264-8222	264-8222
MACK REED	COUNTY FIRE DEPARTMENT	546-0344	546-0344
JOEY TANNER	GEORGETOWN CITY FIRE DEPT.	546-5152	546-5152
MIKE MOCK	MIDWAY FIRE DEPT.	237-4841	237-4841
TERRY SMITH	MURRELLS INLET FIRE DEPT.	651-5143	651-5143
TAD FOGEL	C.D. PUBLIC INFORMATION OFFICER	237 1734	237-8774
LES COTTON	C.D. COMMUNICATIONS OFFICER	546-0520	546-2920
NELL JACKSON	DIRECTOR, UNITED WAY	546-6317	546-1401
MIKE OBENSHAIN	DAMAGE ASSESSMENT	546-1241	651-2878

APPENDIX #3, TO ANNEX U, DISASTER RECOVERY EMERGNECY ASSISTANCE CENTERS

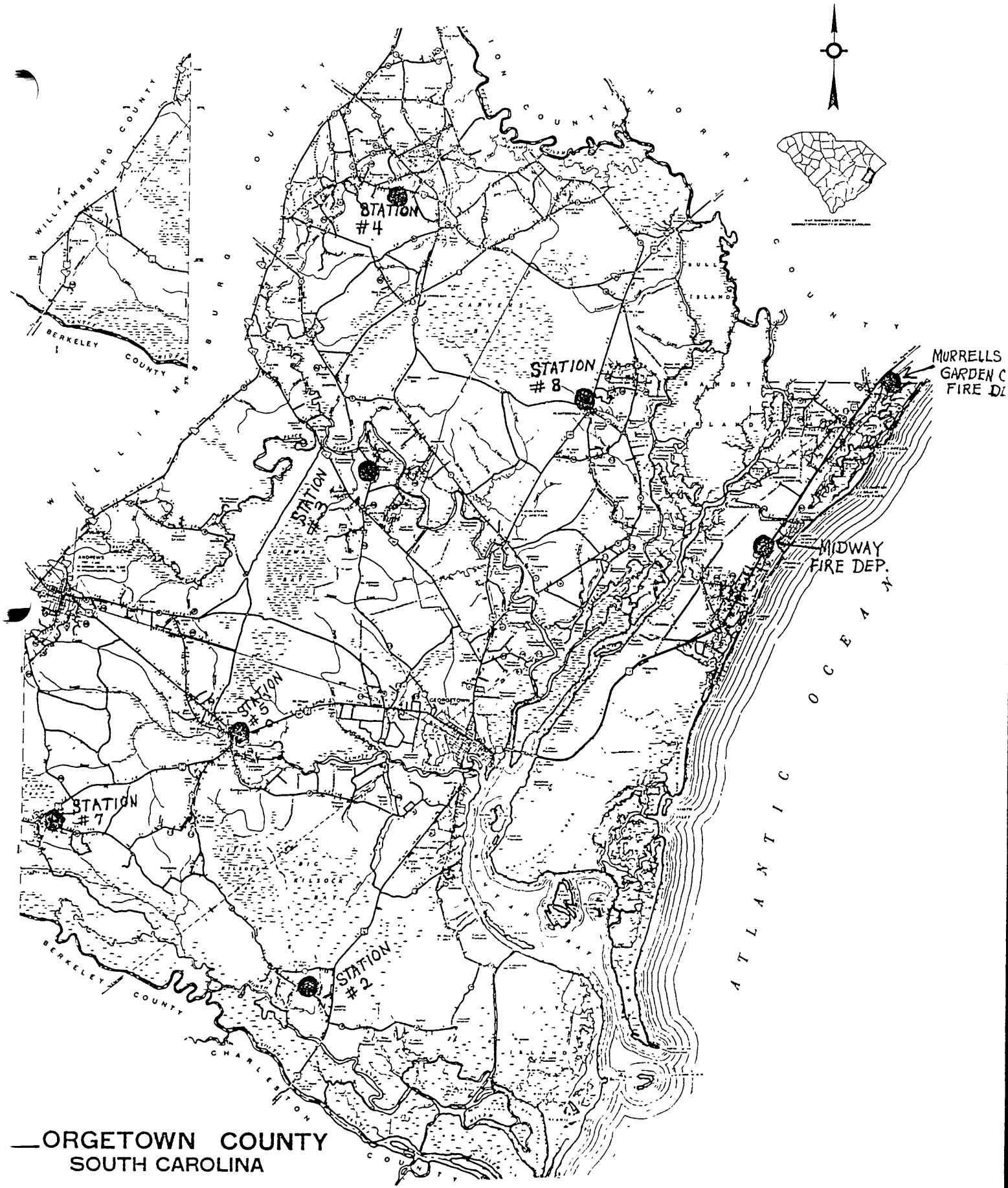
The Fire Stations in Georgetown County will assist in the Disaster Recovery Operations of the county as Emergency Assistance Centers for information in their district regarding damage conditions, relief requirements and other essential needs for the necessities of life.

County Fire Service Mack Reed, Chief	546-0344
Station #2, North Santee Area (Hwy. 24)	546-2683
Chief, Joseph Abrams	546-2003
Station #3, Dunbar Area (Hwy. 179)	527-2691
Chief, Norman Holmes	546-1032
Station #4, Pleasant Hill (Hwy. 513)	558-9304
Chief, Jimmy Rowe	558-2190
Station #5, Sampit (Hwys. 521 & 17A)	527-2708
Chief, Franklin Nelson 527-2065	527-2065
Station #7, Saints Delight (Hwy. 389)	264-3654
Chief, Byron Toney	264-3127
Station #8, Plantersville (Hwy. 701)	527-2730
Chief, George Avant	546-3750

NOTE: All of the above stations are on the County Fire Radio Net. Contact through E.O.C. Communications

Midway Fire Dept. Mike Mock,Chief 237-4841
Has separate Radio Net. Contact through E.O.C. Communications

Murrells Inlet/Garden City Fire. Terry Smith, Chief 651-5143
Has separate Radio Net. Contact through EOC Communications. If can't reach relay through Midway Fire.


STATION #4
STATION #8
STATION #3
STATION #5
STATION #7
STATION #2
MURRELLS GARDEN C FIRE DI
MIDWAY FIRE DEP.
WILLIAMSBURG COUNTY
BERKELEY COUNTY
CHARLESTON COUNTY
ATLANTIC OCEAN
GEORGETOWN COUNTY
SOUTH CAROLINA

APPENDIX #4, TO ANNEX U DISASTER RECOVERY, CRITICAL FACILITIES LISTING FOR PRIORITY RESTORATION

I. GOVERNMENT FACILITIES

1. County

a. County Emergency Operations Center (EOC) & Council Building. County Courthouse, 133 Screven Street, Georgetown, S. C.
b. County Sheriff Department
120 Screven STreet, Georgetown, S. C.
c. County Jail, North Merriman Raod

2. City of Georgetown

a. City Hall, Prince & Dozier Streets, Georgetown, S. C.
b. City Police/Fire Department, Fraser & Prince Street, Georgetown, S. C.

3. City of Andrews

a. City Hall/Police/Fire Department, 101 North Morgan Ave.

4. Pawleys Island

a. City Hall, Myrtle Avenue & North Causeway, Pawleys Island

II. HEALTH & MEDICAL

1. Georgetown Memorial Hospital, Black River Road
2. County Health Department, N. Hazzard & Duke Street
3. Georgetown Dialysis Center, 722 N. Fraser Street
4. Waccamaw Neck Medical Center, U.S. 17 By-Pass, Murrells Inlet

III. UTILITIES

1. City of Georgetown Water & Sewer Department, North Street
2. Georgetown County Water & Sewer District, U. S. Highway 521
3. Browns Ferry Water Company, Highway 51 & Lanes Creek
4. Rural Water Company, Highway 701
5. S. C. Electric & Gas Company, Highway 521
6. Santee Cooper-Winyah Generating Station, Pennyroyal Road
7. City of Andrews Water & Sewer

IV. NURSING HOMES

1. Winyah Extended Care, South Island Road
2. Pinedale Residential Center, 2902 South Island Road

1. Georgetown County E. O. C.
   Eddie Carraway, Director — 546-6869

   1 25 KW Single Phase
   1 15 KW Single Phase

2. Georgetown Dialysis Center
   John A. Pilchard, Chief Technicial — 527-3431

   1 125 KW Three Phase
   1 82.5 KW Single Phase

3. WGTN Radio Station (E.B.S.)
   Bill Nichols, Manager — 546-1400

4. County Water & Sewer District
   Bob Barker, Director — 546-8408

   8 230 Volt, Three Phase, 100 Amp.
   2 480 Volt, Three Phase, 100 Amp.

5 City of Georgetown Water & Wastewater Dept.
   W. D. Gunter, Manager — 546-2124

   2 250 KW Three Phase, 480 Volts
   1 100 KW Three Phase, 480 Volts
   1 75 KW Three Phase, 480 Volts (Portable)
   2 50 KW Three Phase, 480/240 (Dual Voltage)

6. Browns Ferry Water Co.
   Raymond Vereen, Pres. — 546-9191

   2 60 KDA

7. Murrells Inlet/Garden City Fire Dep.
   Terry Smith, Chief — 651-5143

   1 25 KW, Single Phase

8. County Roads & Bridges Dept.
   Johnny Thomas, Supt. — 546-7447

   1 25 KW, Single Phase
   1 5 KW, Single Phase

9. Pinedale Residential Center
   Roger Grier, Administrator — 527-1797

   1 50 or 100 KW, Three Phase 240 Volts.

10. Georgetown Mental Retardation Home
   Elizabeth Kilbourne, Director — 546-8228

   1 40 KW Single Phase 120-240 Wats

Beachfront Management

Act - 1990

While waiting for a final copy of this legislation, please use this conference report, which mirrors the legislation signed by Governor Campbell on Monday, June 25, 1990.

Pages 5 - 13 were deleted, as these pages represent the old legislation made null by the new amendments.

F R E E C O N F E R E N C E R E P O R T

The General Assembly,
Columbia, S.C., June 15, 1990

(Doc. #1857A)

The COMMITTEE OF FREE CONFERENCE, to whom was referred:

S. 391
Reference is to Printer's Date 6/4/90--H.

Beg leave to report that they have considered the same and recommend that the bill, as and if amended, pass as amended as follows:

Amend the bill, as and if amended, by striking all after the enacting words and inserting:

/SECTION 1. The 1976 Code is amended by adding:

"Section 48-39-250. 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 realty, 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."

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 ~~any duly~~ 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, ~~or~~ sandscraping, or renourishment, or ~~both~~ a combination of them, in accordance with guidelines provided by the council is allowed pursuant to this item.

(6) Emergency repairs to ~~any~~ an existing bank, dike, ~~or~~ fishing pier, or structure other than oceanfro : 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 ~~of South Carolina~~, if notice is given in writing to the council within seventy-two hours from the onset of the needed repairs."

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 (rip-rap): a sloping structure built along a scarp or in front of a bulkhead to protect the shoreline or bulkhead from erosion.~~

~~(2) Habitable structure includes any structure suitable for habitation or any structure used for commercial purposes. If a building, as defined in Section 27-31-20, is divided into apartments, as defined in Section 27-31-20, then the entire building, not the individual apartments, is considered as a single habitable structure for the purposes of this chapter.~~

~~(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-~~

~~Section 48-39-360. The provisions of this chapter do not apply to any areas which are at least one-half mile inland from the mouth of an inlet.~~

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.

IN WRITING

(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 stag s 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 bet een 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 48-39-2 J. (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 contructed 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 48-39-250 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, 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.

(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 those 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 48-39-250 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 48-39-150(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 clean up, 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."

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

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."

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

"Section 48-39-40. (A) There is ~~here~~ created the South Carolina Coastal Council which ~~shall consist~~ consists of eighteen members as follows: eight members, one from each coastal zone county, to be ~~appointed~~ elected by ~~the local county governing body~~ 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 ~~such~~ that district, each ~~such~~ House or Senate member to have one vote; and the following legislative members who ~~shall~~ 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 ~~such~~ other officers as it deems

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

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.

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 48-30-10 through 48-39-360, as amended by Act 634 of 1988, and in existence before the effective date of this act.

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

Amend title to conform.

Sen. Glenn F. McConnell

Sen. J. M. Long, Jr.

Sen. John C. Hayes, III

On Part of the Senate.

Rep. C. Lenoir Sturkie

Rep. L. Edward Bennett

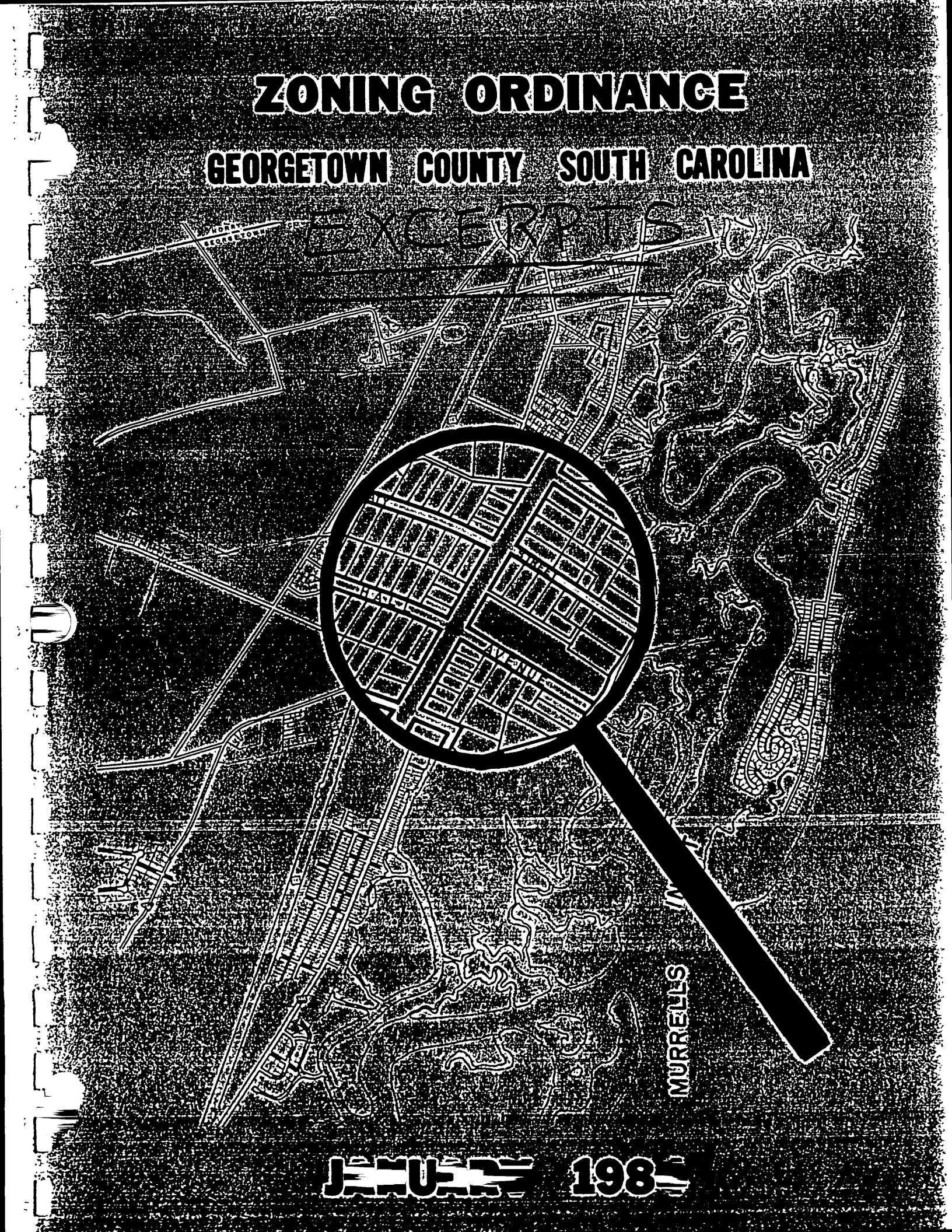
Rep. Robert A. Barber

On Part of the House.

ZONING ORDINANCE

GEORGETOWN COUNTY SOUTH CAROLINA

EXCERPTS



MURRELLS

JUNE 198

ARTICLE IV
GENERAL PROVISIONS

400. Nonconforming Buildings or Uses: Nonconforming buildings or land uses are declared by this Ordinance to be incompatible with permitted uses in the Districts involved. However, to avoid undue hardship, the lawful use of any building or land use at the time of enactment or amendment of this Ordinance may be continued even though such use does not conform with the provisions of this Ordinance except that the nonconforming building or land use shall not be:

400.1 Changed to another nonconforming use;

400.2 Reused or reoccupied after discontinuance of use or occupancy for a period of 30 days or more or complete season in the case of a seasonal nonconforming use;

400.3 Reestablished, reoccupied or replaced with the same or similar building, structure or mobile home after physical removal or relocation from its specific site location at the time of passage of this Ordinance;

400.4 Repaired, rebuilt, or altered after damage exceeding seventy (70%) percent of its replacement cost at the time of destruction. Reconstruction or repair, when legal, must begin within six (6) months after damage is incurred or completed before the next season in the case of seasonal structures. An extension of six (6) months may be granted if building materials or labor is not available;

400.5 Enlarged or altered (refers to a non conforming use) in excess of an additional twenty (20%) percent of the original existing floor area, in a way which increases its nonconformity, provided that such expansion meets all other requirements of the district;

400.6 Nothing in this section shall be deemed to prevent the strengthening or restoring to a safe condition any building or part thereof declared to be unsafe by an official charged with protecting the public safety, upon order of such official.

401. Nonconforming Building or Use Discontinuance: Notwithstanding other provisions of this Ordinance, certain nonconforming buildings or land uses, after this Ordinance is enacted into law, shall be discontinued and/or shall

ARTICLE VI

REQUIREMENTS BY DISTRICT

600. Conservation Preservation District (CP).

Intent. Georgetown County is unique in that within its bounds are a large portion of the State's estuarine land and water formations. These areas possess great natural beauty and are the breeding grounds and refuges for marine life, birds and land animals whose survival is economically important to sport and commercial fishing, hunting activity, and nature study by our citizens and visitors to the area. In addition, these areas provide needed open space for general outdoor recreational use so necessary for the health and general welfare of the residents of the County. The regulations which apply within this District are designed to reserve such areas for the purposes outlined herein and to discourage any encroachment by residential, commercial, industrial or other uses capable of adversely affecting the relatively undeveloped character of the District.

600.1 Permitted Uses. The following uses shall be permitted in any Conservation Preservation District:

600.11 Hunting, fishing, aqua farming, recreational boating, swimming and nature study;

600.12 Hunting preserves and wildlife refuges including the planting of grain for wildlife and the repairing of dikes for such purposes;

600.13 Harbors, channels essential to connect harbors, boat ramps, marine facilities, and major wharves and docks of industrial or recreational areas to the main streams and estuaries of the area;

600.14 Waterways, channels, and other essential aids to navigation, shortening the intracoastal waterways,or providing for a more direct connection between harbors, wharves and boat ramps;

600.15 Publicly owned and/or operated park, dock, boat landing, open space, recreational facility or use,

and the equipment necessary to operate such areas;

600.16 Directional markers or official signs of public agencies;

600.17 Private dock or boathouse; and,

600.18 Such other uses, including alteration of land, shall be permitted when the Building Inspector is presented with valid State and Federal permits required for such use; PROVIDED that the use so permitted shall be compatible with the nearest zoned district other than the Conservation Preservation District.

601. Forest Agriculture District (FA).

Intent. It is the intent of this section that the Forest Agriculture District be utilized and reserved for agricultural and forestry uses. The regulations which apply within this district are designed to encourage the formation and continuance of a compatible environment for livestock ranches, dairies, forest managment areas, horticultural nurseries and other agricultural uses which involve the growing of crops, livestock, animals and/or trees and discourage any encroachment by premature housing development, scattered commercial and/or industrial operations, or other uses capable of adversely affecting the basic agricultural or open character of the District.

601.1 Permitted Uses. The following uses shall be permitted in any Forest Agriculture District:

601.11 Commercial and recreational fishing activity including docking and repair of vessels and minimum necessary processing for shipping of seafood, (not including cooking or canning);

601.12 Farms, nurseries or other establishments for the growing, care and handling of field crops, truck gardening products, fruit and/or nut trees, poultry and/or animals and livestock;

601.13 Tree farm and/or forest management areas;

605.23 Private kindergarten, pre-school nursery or day care center, provided that:

605.231 Such uses must meet the minimum standards set forth for such facilities by the Department of Social Services;

605.232 The Planning Commission shall review and approve the vehicular traffic impact upon the immediate area in which the facility is to locate; and,

605.233 A buffer strip may be required by the Planning Commission if deemed necessary in order to reduce the noise factor generated by the facility.

605.3 Other Requirements:

605.31 All allowed uses shall be required to conform to the standards set forth in Article VII;

605.32 Uses allowed in this district shall meet all standards set forth in Article X, pertaining to off-street parking, loading and other requirements; and,

605.33 Signs permitted in MR-10 Residential Districts, including the conditions under which they may be located, are set forth in Article IX.

606. Resort Residential District (RR).

Intent. It is the intent of this section that the Resort Residential District be established and appropriate land be reserved for medium density resort residential purposes. The regulations which apply within the district are designed to encourage the formation and continuance of a stable, healthy environment for one and two-family dwellings in areas having unique aesthetic, environmental and recreational characteristics conducive to resort living; and to discourage any encroachment by any multi-family residential, commercial, industrial or other use incompatible with or capable of adversely affecting the resort residential character of the District.

606.1 Permitted Uses. The following uses shall be permitted in any Resort Residential District:

606.11 Single family dwellings, except mobile homes;

606.12 Two-family dwellings; and,

606.13 Accessory uses, including telephone booths associated with non-residential uses.

606.2 Conditional Uses. The following uses shall be allowed in any Resort Residential District on a conditional basis, subject to the conditions set forth:

606.21 Church, synagogue, temple and other places of worship, provided that:

606.211 Such use is housed in a permanent structure;

606.212 Such use is located on a lot not less than one acre in area;

606.213 No structure on the lot is closer than twenty-five (25) feet to any abutting residential property line; and,

606.214 If operated as a part of a church, synagogue, temple, or other place of worship, a private kindergarten, pre-school nursery or day care center shall be considered an accessory use to said church, synagogue, temple or other place of worship. Otherwise, such use shall be required to observe the requirements for private kindergartens and pre-school nurseries as set forth in Section 606.23.

606.22 Public buildings, uses, utility substations or sub-installations including water towers, provided that:

606.221 Such use is enclosed by a fence or a wall at least six (6) feet in height above finished grade;

606.222 There is neither office nor commercial operation nor storage of vehicles or equipment on the premises;

606.223 A landscaped strip not less than five (5) feet in width is planted and suitably maintained around the facility; and,

606.224 The location of these facilities shall be reviewed and approved by the Planning Commission.

606.23 Private kindergarten, pre-school nursery or day care center, provided that:

606.231 Such uses must meet the minimum standards set forth for such facilities by the Department Social Services;

606.232 The Planning Commission shall review and approve the vehicular traffic impact upon the immediate area in which the facility is to locate; and,

606.233 A buffer strip may be required by the Planning Commission if deemed necessary in order to reduce the noise factor generated by the facility.

606.24 Boarding Homes, provided that:

606.241 There shall be at least 1,000 square feet of land area for each rental room;

606.242 Food service facilities shall accommodate only boarders of the establishment and their guests. Where food is provided there shall be at least fifty (50) square feet of dining area for each rental room; and,

606.243 There shall be a minimum of one (1) off street parking space per rental room, plus one for each employee.

606.3 Other Requirements:

606.31 All allowed uses shall be required to conform to the standards set forth in Article VII;

606.32 Uses allowed in this district shall meet all standards set forth in Article X, pertaining to off-street parking, loading and other requirements; and,

606.33 Signs permitted in Resort Residential Districts, including the conditions under which they may be located, are set forth in Article IX.

607. General Residential District (GR).

Intent. It is the intent of this section that the General Residential District be established for medium-to-high density residential purposes. These areas need to be served with public water and sewer and have direct access to collector or arterial streets. Medium to high density projects should be designed to insure preservation of the critical areas, to be compatible with the existing development and to discourage any encroachment of commercial, industrial or other uses capable of adversely affecting the charm and residential character of this district.

607.1 Permitted Uses. The following uses shall be permitted in any General Residential District:

607.11 Single-family dwellings;

607.12 Two family dwellings;

607.13 Multi-family dwellings; and,

607.14 Accessory uses including telephone booths associated with non-residential uses.

607.2 Single Family and Two Family Dwellings Requirements. Unless otherwise specified in this Ordinance, single family and two family dwellings shall meet the following requirements:

607.21 Front yard setback - twenty-five (25) feet;

607.22 Side yard setback - ten (10) feet for single story and fifteen (15) feet for two story;

607.23 Rear yard setback - twenty (20) feet;

607.24 Minimum lot area:

Single family - six thousand (6,000) sq.ft.

Two family - eight thousand (8,000) sq.ft.

607.25 Minimum lot width at building line - sixty (60) feet;

607.26 Maximum height of structure - thirty-five (35) feet from grade except in A or V flood zones as shown on the F.I.R.M. maps, in such case it shall be thirty-five (35) feet measured from the one hundred year flood elevation level (not to exceed three habitable stories); and,

607.27 Building coverage shall not exceed thirty-five (35) percent of the lot.

607.3 Multi-Family Requirements. The minimum lot area for a multi-family project shall be at least one acre. The minimum lot frontage shall be at least 150 feet of frontage on an approved street. The lot depth shall be no greater than three (3) times the lot width. Unless otherwise specified in this Ordinance, multi-family dwellings shall meet the following requirements:

607.31 Front yard setback - thirty (30) feet;

607.32 Side yard setback - twenty (20) feet;

607.33 Rear yard setback shall be twenty (20) feet except where the property adjoins the marsh or ocean, in which case the rear yard setback shall be thirty (30) feet;

607.34 There shall be a minimum twenty (20) foot separation between structures;

607.35 The maximum height of the structure shall be thirty-five (35) feet from grade except in A or V flood zones as shown on the F.I.R.M. maps, in such case it shall be thirty-five (35) feet, measured from the one hundred year flood elevation level (not to exceed three [3] habitable stories);

607.36 At least fifty (50) percent of the lot shall be pervious surface; and,

607.37 Site plans shall be reviewed and approved by the Planning Commission. Site plans shall include landscaping, sign location, surface water drainage and other features required by the Commission.

607.4 Townhouses - Special Requirements.

607.41 The regulations, as contained in this subsection, shall be applied to townhouses where permitted in any district in addition to the multi-family requirements.

607.42 Site Plans and Design Criteria:

607.421 The front of the buildings shall not form long, unbroken lines of row housing, but shall be staggered at the front building lines;

607.422 No more than six (6) contiguous townhouses nor fewer than three (3) shall be built on a row;

607.423 No portion of a townhouse or accessory structure in or related to one group of contiguous townhouses shall be closer than twenty (20) feet to any portion of a townhouse or accessory structure related to another group, or to any building outside the townhouse area; and,

607.424 Insofar as practicable, off street parking facilities shall be grouped in bays either adjacent to streets or in the interior of blocks.

607.5 Net Density Limits For Multi-Family Developments (Excludes Streets):

MINIMUM LOT AREA PER UNIT

Dwelling Unit Type	1 Story Sq.ft	Dwelling Units*	2 Story Sq.ft	Dwelling Units*	3 Story Sq.ft	Dwelling Units*
Efficiency	3,000	14	2,700	16	2,400	18
1 Bedroom	3,600	12	3,000	14	2,700	16
2 Bedroom	4,300	10	3,600	12	3,000	14
3 bedroom	5,400	8	4,300	10	3,600	12
4 Bedroom	7,200	6	5,400	8	4,300	10

*PER ACRE

607.6 Conditional Uses. The following uses may be allowed in any General Residential District subject to the provisions set forth:

607.61 Boarding homes, provided that:

607.611 There shall be a minimum of 1,000 square feet of land area for each rental room;

607.612 Food service facilities will accommodate only boarders of the establishment and their guests. Where food service is provided there shall be a minimum of fifty (50) square feet of dining area for each rental room; and,

607.613 There shall be at least one (1) off street parking space per rental room, plus one for each employee.

607.62 Church, synagogue, temple and other places of worship, provided that:

607.621 Such use is housed in a permanent structure;

607.622 Such use is located on a lot not less than one acre in area;

607.623 No structure on the lot is closer than twenty-five (25) feet to any abutting residential property line; and,

607.624 If operated as part of a church, synagogue, temple or other place of worship, a private kindergarten, pre-school nursery or day care center shall be considered an accessory use. Otherwise, such use shall be required to observe the requirements for private kindgergartens and pre-school nurseries as set forth in Section 607.64.

607.63 Public buildings, uses, utility substations or sub-installations including water towers, provided that:

607.631 Such use is enclosed by a fence or wall at least six (6) feet in height above finished grade;

607.632 There is neither office nor commercial operation nor storage of vehicles or equipment on the premises;

607.633 A landscaped strip not less than five (5) feet in width is planted and suitably maintained around the facility; and,

607.634 The location of these facilities shall be reviewed and approved by the Planning Commission.

607.64 Private kindergarten, pre-school nursery or day care center, provided that:

607.641 Such use meets the minimum standards set forth for such facility by the Department of Social Services;

607.642 The Planning Commission shall review and approve the vehicular impact upon the immediate area in which the facility is to locate; and,

607.643 A buffer strip may be required by the Planning Commission if deemed necessary in order to reduce the noise factor generated by the facility.

607.7 Other Requirements:

607.71 All allowed uses shall be required to conform to the standards set forth in Article VII;

607.72 Uses allowed in this district shall meet all standards set forth in Article X, pertaining to off-street parking, loading and other requirements;

607.73 Signs allowed in General Residential Districts,including the conditions under which they may be located, are set forth in Article IX; and,

607.74 Solid Waste Requirements. In all multi-family developments, the developer is responsible for providing adequate solid waste storage areas and collection service. The location for these facilities shall be shown on the site plan and approval is required as stated in Subsection 607.37.

608. General Resort Residential District (GRR).

Intent. It is the intent of this district that adequate areas be established and appropriate land be reserved for medium-to-high density resort residential purposes. The regulations which apply within the District are designed to encourage the formation and continuance of a stable, healthy environment for single and multi-family dwellings in areas having unique aesthetic, environmental and recreational characteristics conducive to resort living; and to discourage any encroachment by residential, commercial, industrial or other use incompatible with or capable of adversely affecting the resort residential character of the District.

608.1 Permitted Uses. The following uses shall be permitted in the General Resort Residential District:

608.11 All uses permitted in the General Residential District, as shown in Section 607.1 except mobile homes; and,

608.12 Accessory uses, including telephone booths associated with non-residential uses.

608.2 Conditional Uses. The following uses shall be allowed in any General Resort Residential District on a conditional basis, subject to the conditions set forth:

608.21 All conditional uses listed in the General Residential District, as shown in Section 607.6.

608.3 Other Requirements:

608.31 All allowed uses shall be required to conform to the standards set forth in Article VII;

608.32 Signs allowed in General Resort Residential Districts shall meet the requirements contained in Article IX; and,

608.33 Uses allowed in this District shall meet all standards set forth in Article X pertaining to off-street parking, loading and other requirements.

609. Resort Commercial District (RC).

Intent. The purposes of the Resort Commercial District are to create and protect areas wherein compatible residential, recreational, and commercial uses may be established and maintained on a sound basis. Standards are so designed as to encourage both seasonal and permanent occupancy of dwellings within the district. It is the intent of this district to permit commercial activities, such as marinas, boat service stations, restaurants, and other selected retail establishments which are compatible with resort-oriented residential and recreational development to, encourage the discontinuance of nonconforming uses and to prohibit any use that would substantially interfere with the development or continuation of resort-oriented commerical establishments or recreational and residential structures in the District.

609.1 Permitted Uses. The following uses shall be permitted in any Resort Commercial District:

609.11 All permitted uses listed in the General Residential District as shown in Section 607.1;

609.12 Hotels, motels and tourist homes;

609.13 Restaurants, excluding drive-in eating establishments; and,

609.14 Accessory uses, including telephone booths.

609.2 Conditional Uses. The following uses shall be allowed in any Resort Commercial District on a conditional basis, subject to the conditions set forth:

609.21 Publicly owned buildings, facilities or land, provided that the location of these uses shall first be reviewed and approved by the Planning Commission;

609.22 Public utility substations or sub-installations including water towers, provided that:

609.221 Such use is enclosed by a fence or wall at least six (6) feet in height above finished grade;

609.222 There is neither office nor commercial operation nor storage of vehicles or equipment on the premises;

609.223 A landscaped strip not less than five (5) feet in width is planted and suitably maintained around the facility; and,

609.224 The location of these facilities shall be reviewed and approved by the Planning Commission.

609.23 Private kindergarten, pre-school nursery or day care center, provided that:

609.231 Such uses must meet the minimum standards set forth for such facilities by the Department of Social Services;

609.232 Such uses shall be located on a lot of at least 10,000 square feet in area;

609.233 The Planning Commission shall review and approve the vehicular traffic

impact upon the immediate area in which the facility is located; and,

609.234 A buffer strip may be required by the Planning Commission if deemed necessary in order to reduce the noise factor generated by the facility.

609.24 Commercial marinas which provide boat slips on a rental basis in addition to some or all of the following activities: sale of fuel, tackle, drinks and similar convenience merchandise, but does not include the selling of boats, motors and trailers as a principal activity (the intent is not to prohibit the occasional sale of used boats by individuals or their agent leasing slips). Marinas that provide a boat ramp will be required to have additional off-street parking areas. The conditions for approval are as follows:

609.241 An application for such uses shall be accompanied by a site plan to be reviewed and approved by the Planning Commission and which shows the following:

609.2411 Proposed uses of buildings and land;

609.2412 Proposed location of buildings and their general exterior dimensions;

609.2413 Surface water drainage plan;

609.2414 Facilities for sanitary waste disposal;

609.2415 Traffic, parking and circulation plan showing proposed location and

arrangement of parking spaces and ingress and egress to and from adjacent streets;

609.2416 Location of fuel storage tanks; and,

609.2417 A buffer strip shall be provided to screen the marina activities from residential uses.

609.242 Other Requirements:

609.2421 A minimum lot area of 15,000 sq.ft for marinas without landing facilities shall be required. Minimum lot areas for marinas with boat ramps shall be determined by the Planning Commission upon review of the site plan;

609.2422 Off-street parking - one and one-half off-street parking spaces shall be required for each boat slip, plus one space for each 1,000 sq.ft. of retail sales area; and,

609.2423 Setbacks - 100 feet front yard and 25 feet side yard.

609.3 Other Requirements. Unless otherwise specified elsewhere in this Ordinance, uses allowed in Resort Commercial Districts shall be required to conform to standards as set forth below:

609.31 Area, yard and height requirements are the same as for GR Districts as shown in Section 607.2 and 607.3 and Article VII. For hotels, motels and tourist homes, the following shall be required:

609.311 Minimum Lot Area Per Accommodation: For one and two story structures, one thousand (1,000) square feet per room; for three-story structures, seven hundred (700) square feet per room.

609.312 Maximum Building Height: 35 feet.

609.32 Uses allowed in Resort Commercial Districts shall meet all standards set forth in Article X pertaining to off-street parking, loading and other requirements; and,

609.33 Signs permitted in Resort Commercial Districts, including the conditions under which they must be located, are set forth in Article IX.

610. Neighborhood Commercial District (NC).

Intent. It is the intent of this Section that the Neighborhood Commercial District be established and appropriate land be reserved for local or neighborhood oriented business purposes. The regulations which apply within this District are designed to encourage the formation and continuance of a stable, healthy and compatible environment for uses that are located so as to provide nearby residential areas with convenience shopping and service facilities; reduce traffic congestion; avoid the development of "strip" business districts; and to discourage industrial and other development capable of adversely affecting the localized commercial character of the District.

610.1 Permitted Uses. The following uses shall be permitted in the Neighborhood Commercial District:

610.01 Single-family dwellings;

610.02 Grocery stores;

ARTICLE VII
AREA, YARD AND HEIGHT REQUIREMENTS

ZONING DISTRICT	MINIMUM LOT AREA IN: SQUARE FEET	ACRES	MINIMUM LOT WIDTH AT BUILDING LINE	MINIMUM SETBACK REQUIREMENTS: FRONT [7]	SIDE	REAR	MAXIMUM HEIGHT OF STRUCTURES	SPECIAL REQUIREMENTS ORDINANCE SECTION
CP	-	-	-	-	-	-	-	
FA	-	1	100	50	20	30	35	IV, 601.2, VIII
R-1 Ac.	-	1	100	50	20	30	35	IV, 602.2, VIII
R-1/2 Ac.	20,000	-	90	40	15	25	35	IV, 603.2, VIII
R-10 and MR-10	10,000	-	70	25	10	15	35	IV, 604.2, 605.2, VIII
RR	5,000	-	50	20	7	15	35	IV, 606.2, VIII
GR AND GRR:								
SINGLE-FAMILY	6,000	-	60	25	10[6]	20	35	IV, 607.6, VIII
TWO-FAMILY	8,000	-	60	25	10[6]	20	35	IV, 607.6, VIII
MULTI-FAMILY	SEE SPECIAL REQUIREMENTS SECTIONS 607.3, 607.4 and 607.5							
RC:								
SINGLE-FAMILY	6,000	-	60	20	7	15	35	IV, 609.2, VIII
COMMERCIAL	5,000	-	60	20	7	15	35	IV, 609.2, VIII
NC	10,000	-	60	25	10[1]	15[1]	35	IV, 610.2, VIII
GC:								
COMMERCIAL	10,000	-	60	50	10[2]	15[1]	35	IV, 611.2, VIII
HOSPITAL/CLINICS	-	1	60	50	10[2]	15[1]	35	-
MD	10,000	-	60	50	10[2]	15[1]	35	IV, 612.2, VIII
RS	-	1	150	65	40[5]	35[8]	35	IV, 612.2, VIII
LI	-	1	100	75	50[1]	50[1]	35	IV, 613.2, VIII
HI	-	10	400	500[3]	50[4]	50[4]	35	IV, 614.2, VIII
MHP	-	5	SEE SPECIAL REQUIREMENTS SECTIONS 615.3, 615.4, 615.5 and 615.6					
DPD	-	10	SEE SPECIAL REQUIREMENTS SECTION 616.3					
PUD:								
COMMERCIAL	-	3	SEE SPECIAL REQUIREMENTS SECTIONS 410.7, 410.8 and 410.9					
RESIDENTIAL AND INDUSTRIAL	-	10	SEE SPECIAL REQUIREMENTS SECTIONS 410.7, 410.8 and 410.9					

FOOTNOTES:

[1] Where the district abuts any residential zoning district not separated by a street right-of-way, a suitable planted screen, fence, or wall at least six (6) feet in height above finished grade shall be required.

[2] Where the district abuts any residential zoning district not separated by a street right-of-way, a minimum side yard of thirty (30) feet on the side abutting said residential district, together with a suitable planting screen, fence, or wall at least six (6) feet in height above finished grade shall be required.

[3] Minimum front yard measured from the nearest abutting major street right-of-way line five hundred (500) feet; the setback from all other streets shall be one hundred fifty (150) feet.

[4] Where the property abuts another zoning district two hundred (200) feet shall be required on that particular side. If the abutting district is residential footnote 1 would also apply.

[5] Minimum side yard: No less than forty (40) feet on each side shall be required except that when the property abuts another zoning district at least seventy-five (75) feet on that particular side shall be required. Where the district abuts any residential zoning district not separated by a right-of-way, a suitable planting screen, fence, or wall of at least six (6) feet in height above finished grade shall be required.

[6] Two story structures shall have a minimum side yard setback of fifteen (15) feet.

[7] Front yard setback on divided portion of U.S. 17 shall be ninety (90) feet (See Section 409).

[8] Thirty-five (35) feet except that when the property abuts another zoning district a minimum of seventy-five (75) feet shall be required. Where the district abuts any residential zoning district not separated by a right-of-way, footnote 1 would also apply.

individual building units in such housing projects, a special exception to the terms of this Ordinance may be made by the Planning Commission in a manner that will be in harmony with the character of occupancy and an intensity of land use no higher and a standard of open space no lower than that permitted by this Ordinance in the District in which the project is to be located. However, in no case shall the Planning Commission authorize a use prohibited in the District in which the project is located, or a smaller lot area per family than the minimum required in such District, or a greater height, or a greater lot coverage than the requirements of this Ordinance permit in such a District.

805. Exception to Height in Velocity Flood Zones: The maximum building height of thirty-five (35) feet from grade may be exempt in V Flood Zones, as shown on the Flood Insurance Rate Maps. Structures located within V Flood Zones may be constructed forty (40) feet from grade but shall not exceed two and one-half stories.

806. Exception to Minimum Lot Sizes for Certain Uses: Public buildings, facilities, uses, utility substations or subinstallations shall be exempt from the minimum lot sizes as required in Article VII. Such exceptions shall not exempt these uses from the requirements as contained in the conditional use sections within the district regulations. The Planning Commission may approve smaller lot sizes for these uses in individual situations as site plans are submitted for their review and approval.

807. Setback Exceptions for Certain Structures: On grade patios, fences, sidewalks, pavement, business identification signs and off-site signs on unoccupied lots shall be exempt from the minimum setback requirements as required in Article VII. Such exception shall not exempt these uses from other requirements contained elsewhere in this Ordinance.

ARTICLE XII
ZONING BOARD OF APPEALS

1200. Establishment of Zoning Board of Appeals. A Zoning Board of Appeals is hereby established. Said Board shall consist of seven (7) members, who shall be citizens of Georgetown County and shall be appointed by the County Council for overlapping terms of three (3) years. Any vacancy in the membership shall be filled for the unexpired term in the same manner as the original appointment. Members shall serve without pay but may be reimbursed for any expenses incurred while representing the Board.

1201. Proceedings of the Board of Appeals. The Board of Appeals shall elect a chairman and a vice-chairman from its members who shall serve for one (1) year or until re-elected and appoint a secretary, who may be a County Officer, an employee of the County, a member of the Planning Commission, or a member of the Board of Appeals. The Board shall adopt rules and by-laws in accordance with the provisions of this Ordinance and of the General Statutes of South Carolina, Title 6, Chapter 7, Article 9, Code of Laws of S. C., 1976 as amended. Meetings of the Board shall be held at the call of the Chairman and at such other times as the Board may determine. All meetings of the Board shall be open to the public.

1202. Decisions of the Board of Appeals. The concurring vote of at least three (3) members of the Board of Appeals shall be necessary to reverse any order, requirement, decision or determination of the Building Official or to decide in favor of the applicant on any matter upon which it is required to pass under this Ordinance or to affect any variation of this Ordinance. The Board shall keep minutes of its proceedings, showing the vote of each member upon each question, or if absent or failing to vote, indicating such fact, and shall keep records of its examinations and other official actions, all of which shall be immediately filed in the office of the Board and shall be public record. On all appeals, applications and matters brought before the Board of Appeals, the Board shall inform in writing all the parties involved of its decisions and the reasons thereof.

1203. Appeals, Hearing, and Notice. Appeals to the Board may be taken by any person aggrieved or by an officer, department, board or bureau of the County. Such appeal shall be taken within a reasonable time, as provided by the rules of the Board, by filing with the Building Official and with the Board of Appeals notice of said appeal specifying the

grounds thereof. The Building Official shall forthwith transmit to the Board all papers constituting the record upon which the action appealed from was taken.

An appeal stays all legal proceedings in furtherance of the action appealed from, unless the Building Official certifies to the Board, after the notice of appeal shall have been filed with him, that by reason of facts stated in the certificate a stay would, in his opinion, cause imminent peril to life and property. In such case, proceedings shall not be stayed otherwise than by a restraining order which may be granted by the Board or by a court of record on application, on notices to the officer from whom the appeal is taken and on due cause shown.

The Board shall fix a reasonable time for the hearing of the appeal or other matter referred to it and give public notice thereof, as well as due notice to the parties in interest and decide the same within a reasonable time. Notice of the time and place of the public hearing shall be published in a newspaper of general circulation in the County at least fifteen (15) days in advance of the scheduled hearing date. At the hearing any party may appear in person or by agent or by attorney.

1204. Powers and Duties of the Board of Appeals. The Board of Appeals shall have the following powers and duties:

1204.1 To hear and decide appeals where it is alleged there is error in any order, requirement, decision, or determination by the Building Official in the enforcement of this Ordinance.

1204.2 To authorize upon appeal in specific cases a variance from the terms of the Ordinance as will not be contrary to the public interest, where, owing to special conditions, a literal enforcement of the provisions of the Ordinance will in an individual case, result in unnecessary hardship, so that the spirit of the Ordinance shall be observed, public safety and welfare secured, and substantial justice done. Such variance may be granted in case of unnecessary hardship upon a finding by the Board of Appeals, provided that:

1204.21 There are extraordinary and exceptional conditions pertaining to the particular piece of property in question because of its size, shape, or topography;

1204.22 The application of the Ordinance on this particular piece of property would create an unnecessary hardship;

1204.23 Such conditions are peculiar to the particualr piece of property involved; and,

1204.24 Relief, if granted, would not cause substantial detriment to the public good or impair the purpose and intent of the Ordinance or the comprehensive plan, provided, however, that no variance may be granted for a use of land or building or structure that is prohibited in a given district.

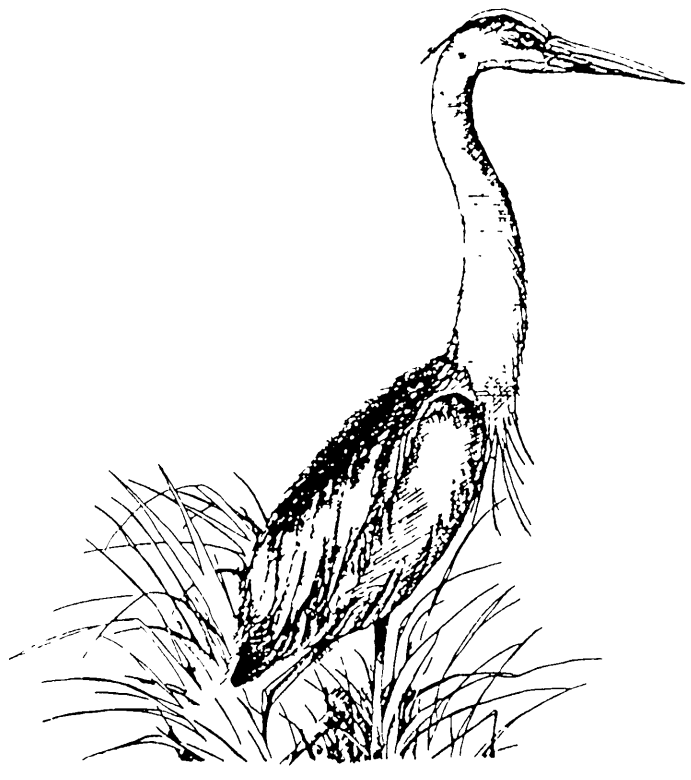
1204.3 To decide on other matters where a decision of the Board of Appeals may be specifically required by the provisions of this Ordinance.

1204.4 In exercising the above powers, the Board of Appeals may, in conformity with the provisions of this Ordinance, reverse or affirm, wholly or in part, or may modify the order, requirements, decision, or determination and to that end shall have all the powers of the Building Official from whom the appeal is taken and may issue or direct the issuance of a permit. The Board, in execution of the duties for which appointed, may subpoena witnesses and in case of contempt may certify such fact to the Circuit Court having jurisdiction.

1205. Appeals from Decisions of the Board of Appeals. Any person who may have a substantial interest in any decision of the Board of Appeals may appeal from any decision of the Board to the Circuit Court in and for the County of Georgetown by filing with the clerk of said Court a petition in writing setting forth plainly, fully and distinctly wherein such decision is contrary to law. Such appeal shall be filed within thirty (30) days after the decision of the Board is rendered.

LAND USE UPDATE

WACCAMAW NECK



AUGUST, 1985

LAND USE UPDATE

WACCAMAW NECK

AUGUST, 1985

LAND USE UPDATE

FOR THE

WACCAMAW NECK

PREPARED FOR THE

GEORGETOWN COUNTY PLANNING COMMISSION

BY THE

WACCAMAW REGIONAL PLANNING AND
DEVELOPMENT COUNCIL

AUGUST, 1985

WACCAMAW NECK LAND USE UPDATE

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INTRODUCTION

The Waccamaw Neck area of Georgetown County is developing at an extremely rapid rate, much more so than other parts of the County. The Georgetown County Land Use Plan was published in 1977 and those portions of the Plan dealing with the Waccamaw Neck are outdated. The purpose of this report is to provide up-to-date baseline data for this growing section of the County, as well as projections and recommendations regarding future development.

The Land Use Update contains three major parts. The first portion of the report analyzes and projects physical and socio-economic data pertaining to the area. The second section sets forth the existing land use patterns within the Waccamaw Neck, the relationship between these various uses and existing developmental problems. The last part of the report discusses and projects future spatial requirements for each land use classification and proposes goals and policies designed to obtain the optimal physical development of the area.

GENERAL INFORMATION

LOCATION

The Waccamaw Neck area is one of six major planning areas within Georgetown County. It is bordered on the north by Horry County, on the west by the Waccamaw River/Intracoastal Waterway, on the south by Winyah Bay and on the east by the Atlantic Ocean. Illustration 1 on page 3 shows the general location of the Waccamaw Neck in relation to the other five planning areas within Georgetown County.

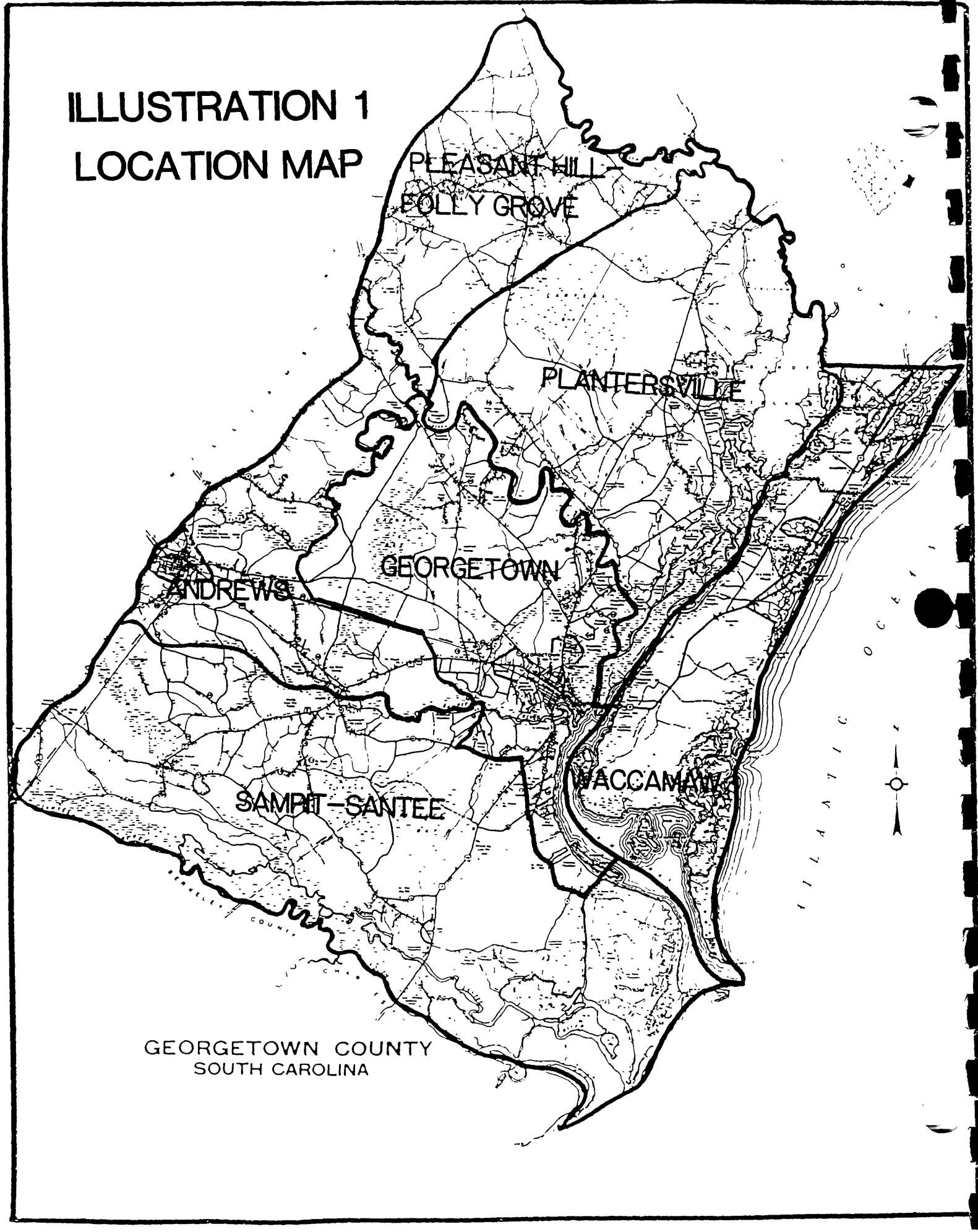
HISTORY

The first attempted Spanish settlement on this continent was made on the Waccamaw Neck in 1526, near the Bellefield House within the Hobcaw Barony. The 600 men and 90 horses suffered from "fever" (probably malaria) and internal dissension and the surviving 150 men returned to Spain in 1527. These Spaniards had named their settlement San Miguel de Gualdape.

Early records of explorers who followed Columbus indicate that the oaks and wild grapes of the Carolina Coast were too reminiscent of Europe for them to believe there was likelihood of their finding the gold they knew to be in the equatorial region. The closest thing to a precious natural resource they found were the pearls offered to them by the Indians of Waccamaw.

Grants from British kings eventually divided the Waccamaw Neck into numerous plantations. The principal crop that was

ILLUSTRATION 1
LOCATION MAP



produced was rice. In the 1840's, almost half of the rice produced in the United States was grown on plantations in Georgetown County. Following the Civil War, the loss of slave labor and the competition from more mechanized farms in the southwest caused the rice culture in the area to decline. By the turn of the twentieth century, commercial production of rice in the County had nearly ceased.

The Waccamaw Neck has been dominated by wood industries in this century as completely as the rice culture's dominance in the 1800's. During the first three decades of this century, the Atlantic Coast Lumber Company prevailed; after the mid - 1930's, the International Paper Company became the dominant factor in the region.

Today, the Waccamaw Neck's plantations are being transformed into residential communities for permanent and seasonal residents. Remnants of the long, tranquil avenues between the live oaks have become entrances for developments such as Wachesaw Plantation, Litchfield Plantation and Waverly Mills. Tourism has assumed a major role in the economy of the area as visitors tour Brookgreen Gardens and Hobcaw Barony, recreate on Pawleys Island and Huntington Beach State Park, or dine on seafood in Murrells Inlet.

As manor houses are transformed into restaurants and slave cabins become real estate sales offices, it is important to protect, retain and enhance the qualities of the area that make it attractive to visitors and residents alike. Failure to do

so will result in the loss of a relatively unique part of the heritage of both Georgetown County and the State of South Carolina. With care, a quality of life can be maintained as development progresses.

GEOMORPHOLOGY

The Waccamaw Neck is located in the Lower Coastal Plain of South Carolina, which consists chiefly of unconsolidated to semi-indurated sands, clays and limestones of Cretaceous to Recent age over a crystalline basement rock of schist, gneisses and granite. The principal landforms present are marsh plains, barrier islands and bar hills. Geomorphically, the Lower Coastal Plain is an area of youth. The landforms present are of continental and marine origin and reflect erosive, transportative and depositional environments.

CLIMATE

The climate of the Waccamaw Neck area is classified as temperate. It is mild and generally conducive to pleasant living conditions and year-round outdoor activities. With the exception of heat and humidity experienced frequently during the summer months, temperature extremes are uncommon and rainfall is moderate.

The mean annual temperature is 65.0 degrees Fahrenheit. Temperatures range from an average of 48.5 degrees in the month of December, to an average of 80.9 degrees in July. Rainfall is moderate with annual precipitation averaging 49.81

inches, and the heaviest rainfall occurs during the summer months. Table 1 on page 7 shows climatological data collected at Brookgreen Gardens.

An average frost-free growing season of 253 days extends from mid-March to mid-November. Moderated by the Atlantic Ocean, the temperate climate has exerted a major influence on the life and development patterns within the Waccamaw Neck. Climate makes an important contribution to the development of the coastal area for seasonal and permanent residences.

SOIL CHARACTERISTICS

There are six major soil associations present in the Waccamaw Neck. Table 2 on page 8 displays the soils data and limiting characteristics.

Along the coast, where development pressure is the greatest, the soils are thick beds of level or duned sand. They are usually well drained and infiltrate septic sewerage easily. The problem associated with this soil is that it does not adequately filter contaminates from the effluent before it moves into surface water. Illustration 2 on page 9 shows the location of the various soil associations on the Waccamaw Neck.

DRAINAGE

As shown in Table 2, the majority of soils on the Waccamaw Neck are poorly to moderately drained because of high water tables created by the very flat topography and the lack of well-defined drainage ways. The lack of many drainage collectors or

TABLE 1
Comparison of Average Temperatures and Total Precipitation from 1966-1971
Brookgreen Gardens

	TEMPERATURE						PRECIPITATION					
MONTHS	1966	1967	1968	1969	1970	1971	1966	1967	1968	1969	1970	1971
January	43.4	49.0	42.0	43.5	40.4	47.3	6.94	5.88	2.93	3.03	3.22	4.55
February	48.2	47.4	41.8	45.6	47.0	48.7	4.72	3.43	1.61	2.04	2.23	2.61
March	52.8	57.2	54.9	50.0	56.6	51.0	3.24	1.95	1.28	5.33	6.92	4.97
April	61.7	66.0	63.7	62.7	65.7	61.9	.91	1.77	2.54	4.47	.96	4.46
May	69.4	69.4	69.5	69.0	71.9	69.4	7.89	5.48	4.54	2.48	2.57	3.51
June	72.2	73.9	76.1	78.1	77.3	77.0	6.01	7.36	2.35	3.98	3.62	11.50
July	80.0	78.2	79.4	81.6	80.8	79.3	8.32	8.58	8.73	5.44	6.60	10.73
August	78.6	76.7	80.6	77.7	80.5	79.1	5.06	6.06	4.36	12.54	6.62	20.70
September	74.1	69.5	73.9	73.7	76.8	76.0	4.81	1.54	.47	9.54	3.00	.83
October	65.2	62.2	66.2	67.8	67.6	69.9	.98	1.03	11.37	1.68	12.47	10.22
November	54.7	52.4	54.6	52.8	54.7	56.3	.54	1.23	4.13	9.43	.59	2.57
December	46.7	53.0	45.5	44.9	51.9	58.4	4.70	4.43	3.95	3.83	3.07	1.11
Annual	62.3	62.9	62.4	62.3	64.3	64.5	54.12	48.74	48.26	63.79	51.87	77.76

SOURCE: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Environmental Data Service, Climatological Data For South Carolina, 1966, 1967, 1968, 1969, 1970 and 1971.

TABLE 2

GENERAL SOIL CHARACTERISTICS
WACCAMAW NECK

ASSOCIATION	CHARACTERISTICS	LIMINTATIONS			ACREAGE
		DRAINAGE	SEPTIC TANKS	BUILDING FOUNDATIONS	
Capers	tidal marshes, acidic high organic content	severe	severe	severe	16,752
Lynchburg-Coxville	sandy surface soil, clay subsoil, acidic	moderate to severe	moderate to severe	moderate to severe	2,253
Chastain-Chewacla	sandy surface soil, clay subsoil, acidic	severe	severe	severe	3,686
Wando-Coastal	sandy surface soil and subsoil	slight to moderate	moderate to severe	moderate to severe	9,933
Lakeland-Chipley	sandy surface soil and subsoil	slight to moderate	moderate to severe	moderate to severe	9,830
Leon-Rutlege	coarse sandy surface soil and subsoil	moderate to severe	moderate to severe	moderate to severe	13,414

SOURCE: U.S. Soil Conservation Service.

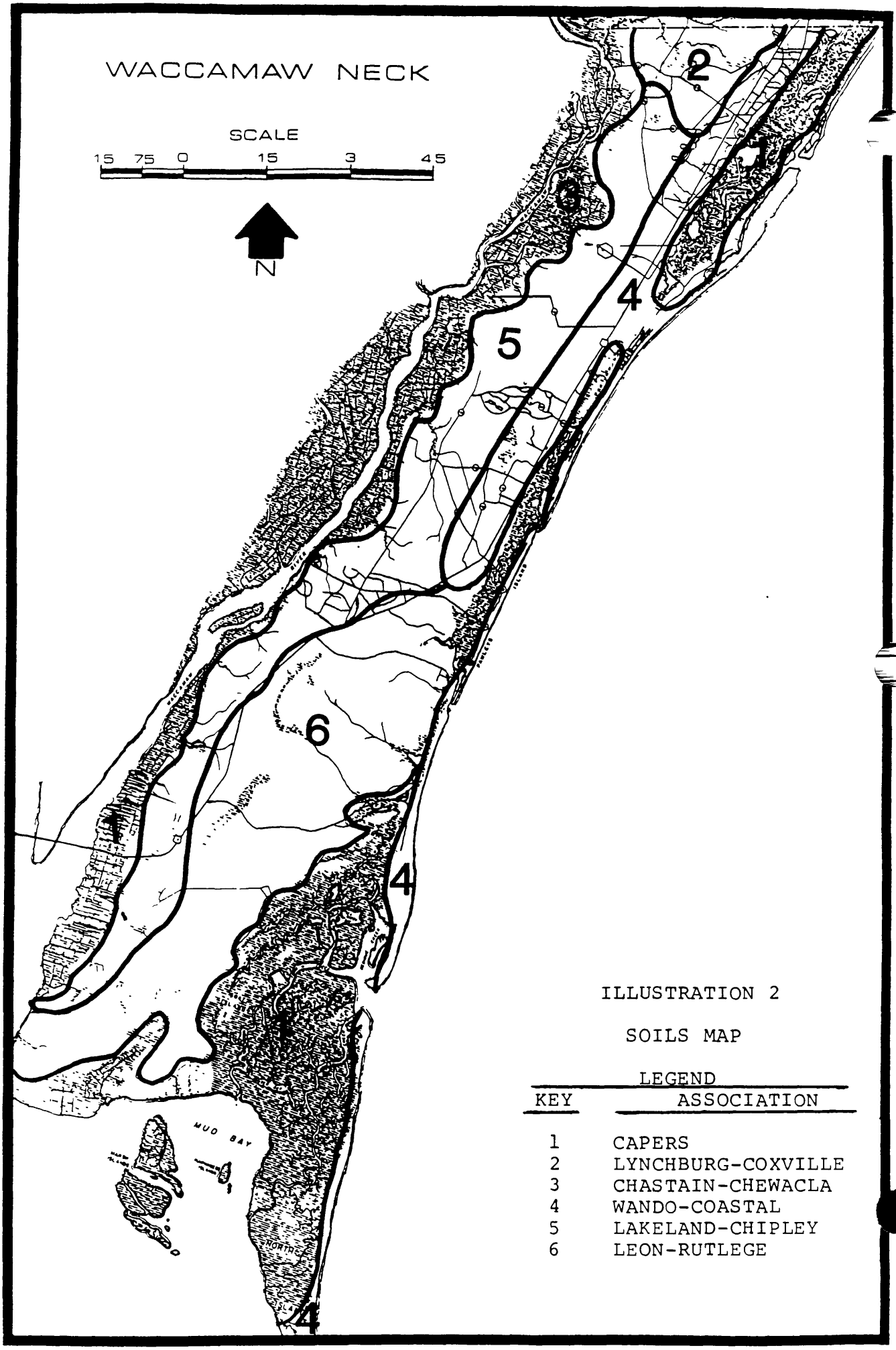


ILLUSTRATION 2

SOILS MAP

LEGEND

KEY	ASSOCIATION
1	CAPERS
2	LYNCHBURG-COXVILLE
3	CHASTAIN-CHEWACLA
4	WANDO-COASTAL
5	LAKELAND-CHIPLEY
6	LEON-RUTLEGE

outfalls on the Waccamaw Neck is shown in the report prepared by the U.S. Soil Conservation Service, Water Runoff Study for Main Drainageways and Outfalls, Georgetown County - 1979.

Many rainfall events in the area are short-duration high-intensity or tropical storms which drop large amounts of water that the soil cannot absorb fast enough. With the relatively low elevations of the Waccamaw Neck surrounded by the Waccamaw River/Intracoastal Waterway on the West and the Atlantic Ocean on the East, the potential for flooding is significantly increased when either or both of these water bodies is at flood stage. The flood levels of the rivers and ocean have been studied by the Federal Emergency Management Agency and they have produced a series of Flood Insurance Rate Maps for the National Flood Insurance Program. The most recent maps were promulgated in March 1984 and they define the flood boundaries, base flood elevations and velocity zones for flood plain management. These maps also delineate the flood insurance zones. In response to the FEMA Flood study and the flooding and water quality problems created by new development, the Georgetown County Stormwater Management Ordinance and the Georgetown County Flood Prevention Ordinance were passed in 1984.

WATER SUPPLY

The public water supply source is groundwater wells in the Black Creek Aquifer. There are many private wells in the area, however, the public system provided by the Georgetown County

Water and Sewer District is expanding and absorbing many of the individual well users. Almost all new land development on the Waccamaw Neck is being tied onto the public water supply. The areas presently served by water systems are shown in Illustration 3. This illustration also shows the location of the 12 wells and 3 elevated storage tanks. Table 3 shows the size and capacities of each of these facilities. The long-range problems associated with water quality and quantity are being addressed in a 20 year water master plan to be published by the Georgetown Water and Sewer District in the fall of 1985 and in the Capital Improvements Budget.

SEWER

Sewer service is provided either by individual septic tanks or by centralized collection, transmission and treatment systems. There are three entities presently providing centralized services on the Waccamaw Neck. Debordieu and Brookgreen Garden have small facilities which only serve their areas and both dispose of their effluent through spray irrigation on the land. The Georgetown County Water and Sewer District provides sewage treatment at 3 facilities. The location of the treatment facilities and their service areas are shown on Illustration 3. Table 4 describes the treatment facility capacities.

The Murrells Inlet/Garden City area sewage is treated by the Grand Strand Water and Sewer Authority. The long-range plans for sewer service on the Waccamaw Neck are described in

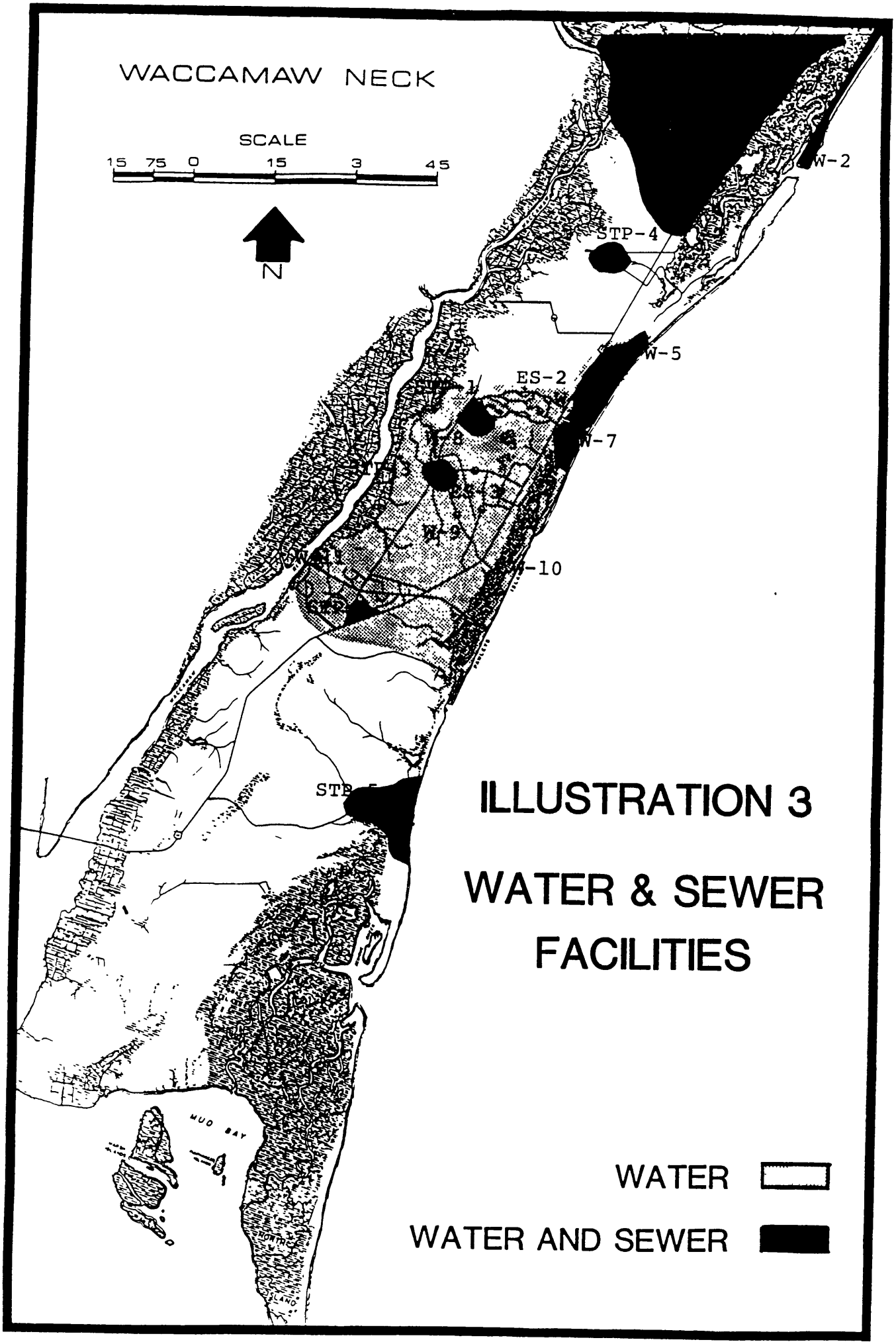

WACCAMAW NECK
SCALE
15 75 0 15 3 45
N
W-2
STP-4
W-5
ES-2
W-7
W-10
MUD BAY
ILLUSTRATION 3
WATER & SEWER
FACILITIES
WATER
WATER AND SEWER

TABLE 3

WATER SUPPLY FACILITIES*

Area	Feet of Pipe	# Wells	# Customers	# Residential Equivalents	Capacity Gallons/Day
Garden City	43,920	2	535	739	580,000
Murrells Inlet	196,039	2	1581	2415	650,000
Litchfield/ Pawleys	392,079	8	2381	3229	1,900,000

TABLE 4

SEWER FACILITIES*

Area	Feet of Pipe	Plant Capacity Gallons/Day	# Pump Stations	# Customers	# Residential Equivalen
Garden City	33,000	110,000	7	501	704
Murrells Inlet	130,153	730,000	14	1369	1456
Pawleys/ Litchfield	85,127	537,000	21	1310	1960
Litchfield Plantation	N/A	20,000		50	N/A
Hagley	N/A	50,000		50	N/A

*"Capital Improvements Budget FY1986" 1985, Georgetown Water and Sewer District"

the "Waccamaw 208 Areawide Water Quality Management Plan" which incorporates the Water and Sewer District's Sewer Master Plan. The Capital Improvements Budget also outlines the proposed capacities and improvements.

POPULATION

Population trends for the Waccamaw Neck differ greatly from other portions of the County. While most of the County has experienced a modest increase in population, the Waccamaw Census County Division's (CCD) population has grown at a much faster rate. Table 5 on page 15 compares the Waccamaw CCD with the other portions of the County in regards to past, present and projected populations. It is obvious that the Waccamaw Neck is increasing at a rate of at least three times faster than the other CCD's.

Equally important as permanent population trends are the impacts associated with the seasonal population. The Waccamaw Neck area is a popular summer resort and estimated peak day populations swell to almost 47,000 people during certain times of the summer. These visitors cause severe strains on service delivery systems such as potable water, sewer and electricity. Adequate planning and scheduled upgrading of existing facilities is important in order to adequately accomodate the future permant population and the seasonal influxes. Table 6 on page 16 displays socio-economic data for the Waccamaw Neck.

The 1980 Waccamaw Neck population was 6,513 people. Of

TABLE 5
Permanent Population Trends By CCD
Georgetown County, 1960-2000

Census County Division	1960	1970	1980	1990	2000	% Change, 1980 - 2000
Andrews	5,482	5,174	6,914	7,607	9,320	34.8 %
Town[1]	2,940	2,831	3,129	3,219	3,305	5.6
Georgetown[2]	16,683	15,638	19,281	23,477	26,303	36.4
City	12,261	10,449	10,144	10,956	11,782	16.1
Plantersville	3,102	2,499	2,706	3,419	3,999	47.8
Pleasant Hill/Folly Grove	3,339	3,059	3,518	4,192	5,214	48.2
Sampit/Santee[2]	3,576	3,977	3,519	3,792	4,569	29.8
Waccamaw	2,614	3,153	6,523	11,913	16,295	149.8
County Total	34,796	33,500	42,461	54,400	65,700	54.7

NOTE: Municipal figures are shown as portions of their respective CCD's Population

[1]Includes a small portion of the town located in Williamsburg County

[2]In 1980, a small change was made in the CCD Boundaries

SOURCE: U.S. Department of Commerce, Bureau of the Census, Census of Population 1960, 1970, and 1980; and Waccamaw Regional Planning and Development Council, 1983.

TABLE 6
Waccamaw Neck Socioeconomic Data, 1980-2005

	1980	1985	1990	1995	2000	2005
Permanent Population	6,523	9,138	11,913	14,024	16,295	18,910
Employment	2,838	3,976	5,184	6,103	7,091	8,229
Dwelling Units	4,792	6,713	8,752	10,303	11,971	13,892
School Enrollment	1,625	2,276	2,967	3,493	4,058	4,709
Auto Registration	3,480	4,875	6,356	7,482	8,693	10,088
Peak Population*	30,156	38,985	51,725	64,902	78,969	93,385

*Includes Permanent Population, Seasonal Overnight Tourists and Day Vistors.

SOURCE: Waccamaw Regional Planning and Development Council, Horry and Georgetown Counties Socio-Economic Data By Study Periods Each Five Years, 1980-2005.

this total, 4,537, or seventy percent were white and 1,976 persons were non-white. There were 3,465 females and 3,048 males, for a ratio of 53:47. Mean family size for the Waccamaw Neck was 3.6 persons/family. The average household size was 2.7 persons. Median household income was $14,938 and per capita income was $7,343. Approximately sixteen percent of the Waccamaw Neck's population was below the poverty level. Illustration 4 on page 18 displays the age/sex distribution for the Waccamaw Neck.

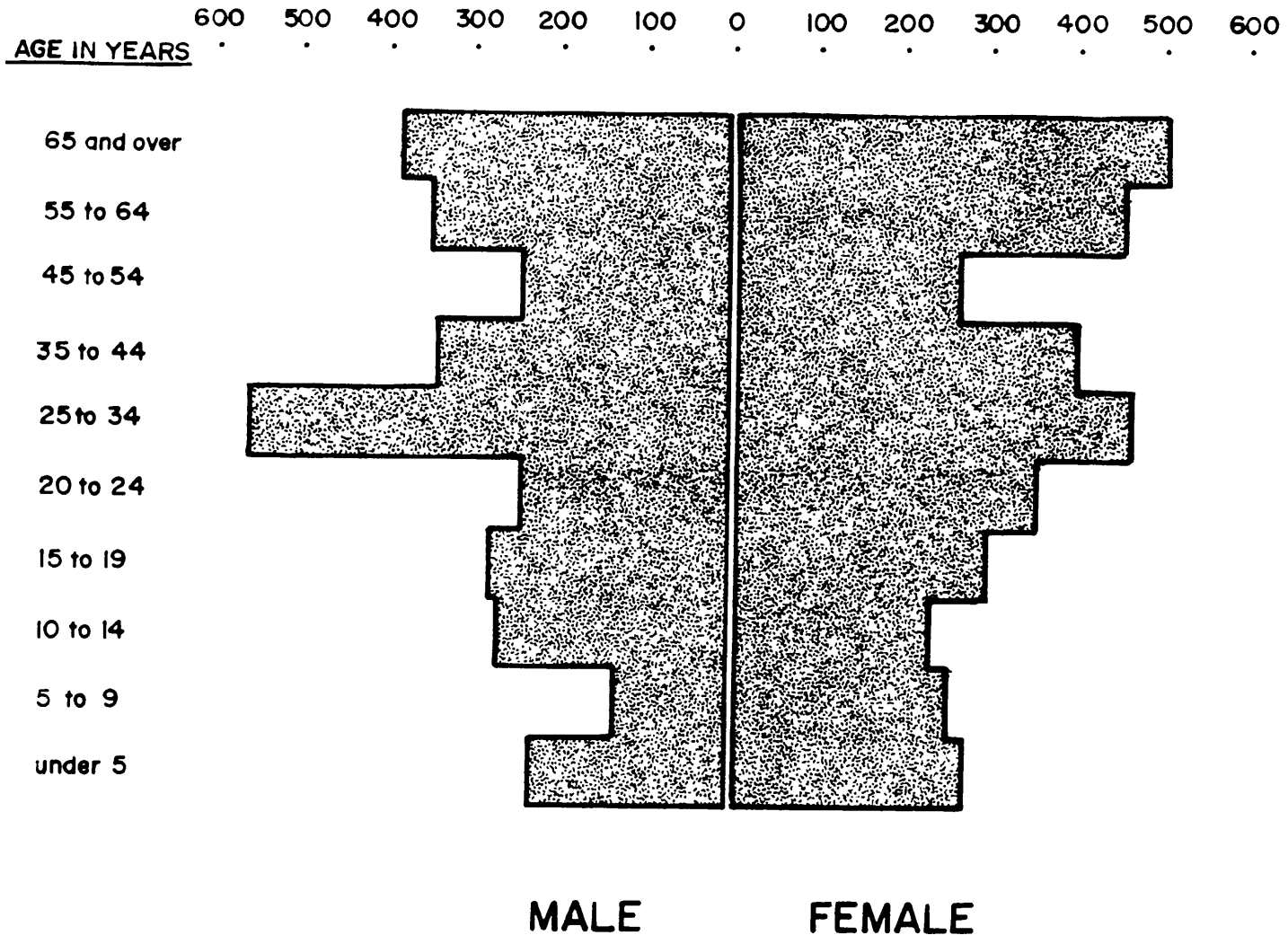
ECONOMY

The economy of the Waccamaw Neck is as different from the remainder of the County as their respective population trends. While the County's economic mainstay is manufacturing; the Waccamaw Neck relies heavily upon retail trade, which is directly tied to the reliance upon tourism. Illustration 5 on page 19 provides a comparison of employment categories and it is obvious that retail trade, professional services and entertainment provide the bulk of employment opportunities on the Waccamaw Neck.

TRANSPORTATION

The transportation network within the Waccamaw Neck consists of secondary state routes radiating east and west off of a federal primary highway. U.S. 17 bisects the area as it extends north from the Harrell Siau Bridge to the Horry County line, a distance of twenty miles. At Murrells Inlet, U.S. 17

ILLUSTRATION 4
AGE/SEX DISTRIBUTION
WACCAMAW NECK

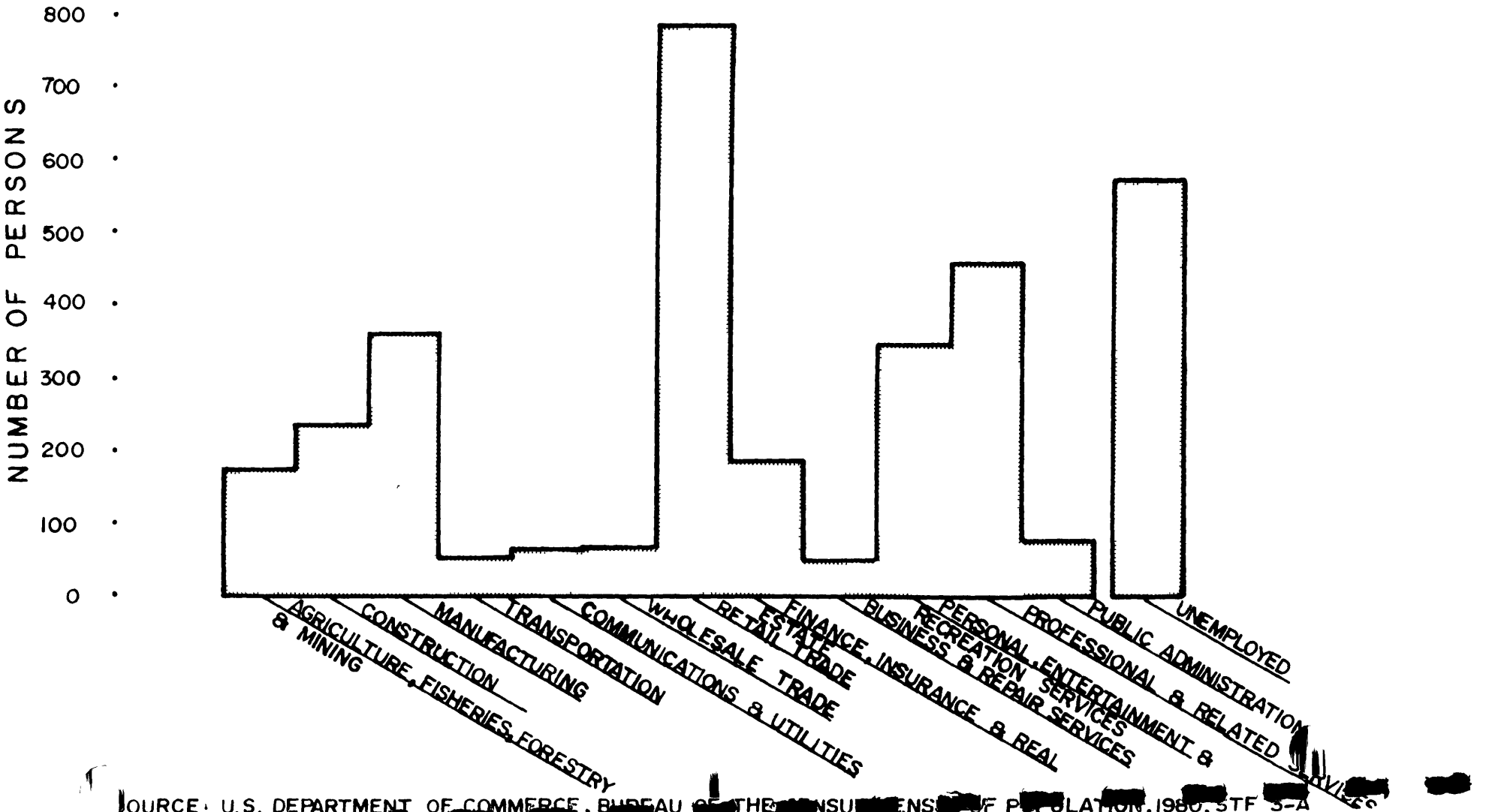


SOURCE: WRPDC, 1985.

ILLUSTRATION 5

COMPARISON OF EMPLOYMENT BY INDUSTRY FOR 1979

WACCAMAW NECK



SOURCE: U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS. CENSUS OF POPULATION, 1980. STF 3-A

splits and a business route runs adjacent to the creek and the popular seafood restaurants. Secondary routes of significance include: 266 (South Causeway, Pawleys Island); 46 (North Causeway-Shell Road); 255 (River Road); 302 (South Litchfield Causeway); 98 (Boyle Drive); and 62 (Wachesaw Road).

An analysis of average traffic volumes reveals significant increases in traffic along U.S. 17, particularly at Murrells Inlet and Pawleys Island. Traffic counts on U.S. 17 in 1975 revealed an average of 6,500 vehicles per day in Murrells Inlet, 8,300 at Pawleys Island and 7,300 near Hagley Estates. In 1983, these same areas averaged 12,300; 13,400; and 11,500 respectively. Traffic on U.S. Business 17 also increased significantly, from 4,400 vehicles in 1975 to 6,200 vehicles in 1983. The secondary roads carried a much lower volume of traffic. Counts on these roads ranged from a low of 70 trips per day on River Road in 1980 to a high of 1,350 trips on Shell Road.

An important consideration in the analysis of the Waccamaw Neck's transportation system is the seasonal influx. In 1983, the South Carolina Department of Highways and Public Transportation published a Traffic Flow Map for the State's primary highway system. This map provides data for seasonal traffic as well as normal traffic flows. Typical seasonal traffic increases are 23 percent on U.S. 17 and almost 73 percent on U.S. Business 17. No seasonal data was provided for the secondary roads.

The critical problem in providing a safe and efficient roadway network is to maintain capacities on the existing roads,

particularly U.S. 17. This can be accomplished by reducing the need for local traffic to utilize this major roadway. The proposed development of River Road as a major collector street would allow for developments west of U.S. 17 to utilize this road instead of placing a burden on the east-west secondary roads and U.S. 17. Preventing strip commercial developments along U.S. 17 will also maintain maximum capacity by keeping the number of access points on the highway to a minimum. The importance of an adquate roadway system will become evident further on in this report as discussion and recommendations concerning future development are presented.

HISTORICAL ASSESSMENT

Presently, many tangible symbols of the Waccamaw Neck's rice plantation heritage remain intact. There are many plantations which are listed on the National Register of Historic Places. In addition, other historic districts and sites are on the Register, such as Pawleys Island, Murrells Inlet and All Saints Espiscopal Church. Since many of these sites are in areas that are likely to be developed, the remnants of existing sites should be preserved and incorporated into development plans. This will not only preserve and protect the historical features, it will inevitably enhance the development.

ENVIRONMENTAL ASSESSMENT

The principal environmental concerns of the Waccamaw Neck involve the protection of wetlands. The benefits provided by

marshes and other wetlands are numerous. They serve as spawning and nursery areas for much of the marine life, valuable habitat for a wide range of plant and animal life, limited tertiary treatment of polluted water and valuable open space. Developments which could possibly impact wetlands should be assessed thoroughly. Developments which project adverse impacts on wetlands should be discouraged. The overall aquatic nature of the Waccamaw Neck characterizes an area of abundant wildlife and valuable environmental heritage. The public must be educated as to the benefits resulting from preservation of the ecological areas. Future generations should be afforded an opportunity to experience these natural areas through our effective management and protection of these resources.

LAND USE SURVEY AND ANALYSIS

Method of Survey

This section of the report will analyze the existing land use for the Waccamaw Neck. Land use patterns and problems associated with existing developments will be discussed. The base data presented here will assist in the preparation and implementation of a long-range development plan for the Waccamaw Neck area.

To obtain current data for the existing land use, a field survey was conducted in June, 1985, by a team of experienced land use surveyors. The principle use for each parcel of land was recorded on the three base maps for the Waccamaw Neck. Aerial photographs and County tax maps were also used to verify the data before being plotted. The windsheld survey is relatively limited in accuracy in regards to the identification of seasonal uses and duplex units. Due to the time of the year that the survey was implemented, most of the residential units identified were occupied and it was impossible to determine whether the occupancy was permanent or seasonal.

The categories usedto classify the land uses on the Waccamaw Neck are single-family residential, multi-family residential, commercial, public/semi-public, golf courses, other public uses, streets, wetlands and vacant or undeveloped land.

Classification of Land Uses

The nine land use categories identified above are explained in detail as follows:

Single-family residential - This category consists of all single-family detached residential units, including mobile homes.

Multi-family residential - This category includes duplexes, triplexes and attached apartments and condominiums.

Commercial - This category consists of all retail and wholesale trade outlets; repair, business and resort services; finance, insurance and real estate services; personal and professional services; hotels and motels.

Public/Semi-public - This category includes all religious, educational, governmental, cultural and fraternal uses; public utilities; parks and recreation areas; and cemeteries.

Golf Courses - This category includes all golf courses, public or private.

Other Public Uses - This catetory includes large land holdings in the public trust (Brookgreen Gardens, Huntington Beach State Park and Hobcaw Barony).

Streets - This category includes all roads, whether public or private, which are used for access to property. Driveways to individual property are not included.

Wetlands - This category includes land subject to frequent or continuous inundation as indicated by vegetative cover.

Vacant or Undeveloped Land - This category includes all land not otherwise coded and includes farmland and vacant structures not suitable for re-use.

Study Areas

For the purposes of this report, the Waccamaw Neck was divided into four study areas, which are shown on Illustration 6. The study areas are: Murrells Inlet/Garden City Point; Litchfield; Pawleys Island; and Arcadia/Hobcaw. The existing and future land use data will be presented and analyzed for each of these areas.

Existing Land Use Analysis

The Waccamaw Neck consists of approximately 51,504 acres,

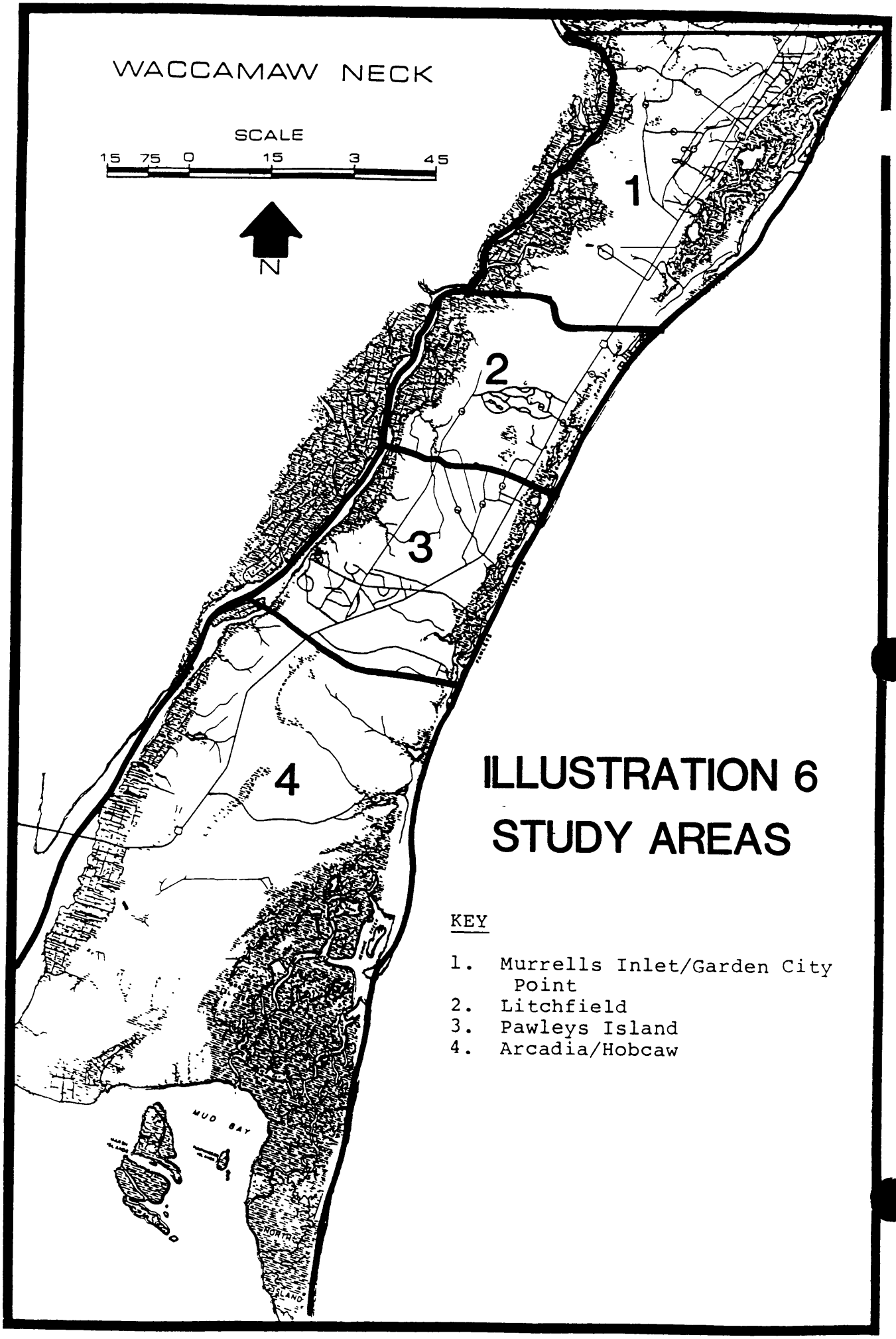


ILLUSTRATION 6
STUDY AREAS

KEY

1. Murrells Inlet/Garden City Point
2. Litchfield
3. Pawleys Island
4. Arcadia/Hobcaw

or 80.5 square miles. Of this total, only 4,172 acres, or eight percent, is presently developed. There are two large tracts of land within the area that are held in public or semi-public trusteeship: Brookgreen Garden/Huntington Beach State Park (7,940 acres) and Hobcaw Barony (15,671 acres). These two tracts combined represent almost 46 percent of the Waccamaw Neck. Taking into account the existing development, the two tracts discussed previously and the wetlands not suitable for development, only about 17,467 acres, or one-third of the Waccamaw Neck's land area is available for future development. Table 7 on the following page provides a summary of existing land use. The following sections will discuss existing land use patterns in each study area.

Murrells Inlet/Garden City Point - Study area 4 contains 13,575 acres of land, which represents 26 percent of the Waccamaw Neck. Garden City Point contains 244 acres and Murrells Inlet encompasses 13,331 acres. Single-family residences on Garden City Point average 11,418 square feet of land area per unit; multi-family residences average 3,853 square feet. In Murrells Inlet, single-family residences average 12,309 square feet of lot area and multi-family residences average 5,143 square feet. Approximately 3,342 acres of developable land is presently vacant within the study area; 21 acres on Garden City Point and 3,321 acres in Murrells Inlet. Table 8 on page 28 displays the land use data for this area.

The principal developmental problems present on Garden City Point

TABLE 7

EXISTING LAND USE FOR THE WACCAMAW NECK
BY STUDY AREA

Land Use Category	1 Murrells Inlet Garden City Point	2 Litchfield	3 Pawleys Island	4 Arcadia Hobcaw	Total For Waccamaw Neck
Single-Family Residential	623	379	679	89	1,770
Multi-Family Residential	40	91	19	20	170
Residential Sub-Total	663	470	698	109	1,940
Commercial	88	62	81	0	321 231
Public/Semi-Public	34	46	76	2	158
Golf Courses	139	349	326	101	915
Other Public Uses	7,664	276	0	15,671	23,611
Streets	325	249	300	54	928
Wetlands	2,960	1,589	1,593	13,155	19,297
Vacant or Undeveloped Land	3,342	3,072	4,314	6,739	17,467
TOTAL ACREAGE OF STUDY AREA	13,575	6,105	7,387	24,437	51,504

SOURCE: Waccamaw Regional Planning and Development Council, Field Survey, June, 1985.

TABLE 8

EXISTING LAND USE DATA
STUDY AREA 1

Land Use Category	Garden City Point	Murrells Inlet	Study Area Total
Single-Family Residential	146	477	623
Multi-Family Residential	23	17	40
Residential Sub-Total	(169)	(494)	(663)
Commercial	1	87	88
Public/Semi-Public	*	34	34
Golf Courses	0	139	139
Other Public Uses	0	7,664	7,664
Streets	34	292	326
Wetlands	18	2,942	2,960
Vacant or Undeveloped Land	21	3,321	3,342
TOTAL ACREAGE	244	13,331	13,575

*Indicates less than one acre.

SOURCE: WRPDC, Field Survey, June, 1985.

are access and sewer capacity. Waccamaw Drive runs the length of the Point and provides access from Garden City. This places the southern tip of the peninsula approximately six miles from the fire station in Murrells Inlet. Sewer capcity is extremely limited along the Point, with a reserved capacity required for the existing vacant lots.

Murrells Inlet is presently experiencing an increase in construction activity, primarily as a result of the recently installed sewerage collection system. Coupled with the long-term development of Wachesaw Plantation, the Murrells Inlet area is one of the fastest growing areas on the Waccamaw Neck. The safe and efficient movement for vehicular traffic is a prime concern, especially during the summer months. Strip commercial developments along U.S. 17 should be avoided, keeping the number of turning movements along this major thoroughfare at a minimum.

Litchfield - The Litchfield Study Area contains 6,105 acres and represents approximately 12 percent of the Waccamaw Neck's land area. Only about 19 percent of the Litchfield area is developed, with the principal land use being single-family residential development. Single-family uses average 16,362 square feet of lot area per unit, while multi-family uses average 5,763 square feet. The existing ratio of single-family to multi-family is 1.7:1. There are three principal single-family subdivisions within the study area: North Litchfield, Litchfield Country Club and South Litchfield. The principal multi-family developments are: Litchfield by-the-Sea; Waccamaw River Club, Litch-

field Plantation and Salt Marsh Cove. Approximately 3,072 acres of land remain undeveloped, much of which is located within the confines of the proposed development at Willbrook Plantation. Table 9 on page 31 displays the land use data for the Litchfield Area.

The principal problems associated with the study area are transportation and the provision of adequate infrastructure. The extension of River Road to U.S. 17 and the planned construction of a sewerage treatment plant will benefit both existing and future development. Additional concerns which should be planned for include solid waste collection, public safety and recreation.

Pawleys Island - The Pawleys Island area encompasses 7,387 acres, or 14 percent of the Waccamaw Neck. Approximately one-fifth of the study area is presently developed, with 4,314 acres undeveloped. The most developed portion of the study area is Pawleys Island, which has only 5 acres of vacant land available for future development. The average lot area for single-family residential uses is 23,969 square feet and 4,645 square feet for multi-family residential uses. Table 10 on page 32 displays the land use data for the Pawleys Island Study Area.

The primary development problem in this area is the lack of a central sewerage collection system. The reliance upon individual septic treatment systems has created pollution problems in the tidal creeks and causes an annual closing of these waters to summer shellfishing. The traffic problems associated

TABLE 9

EXISTING LAND USE DATA
STUDY AREA 2

Land Use Category	North Litchfield	Litchfield By-The-Sea	South Litchfield	Remainder East of U.S. 17	Litchfield Country Club	Litchfield Plantation	Waccamaw River Club	Waverly	Remainder West of U.S. 17	Study Area Total
Single-Family Residential	107	0	40	28	76	12	0	38	78	379
Multi-Family Residential	3	31	17	25	0	5	9	0	0	91
Residential Sub-Total	(110)	(31)	(57)	(53)	(76)	(17)	(9)	(38)	(78)	(470)
Commercial	0	0	5	35	0	0	0	0	22	62
Public/Semi-Public	1	0	*	3	0	0	0	0	42	46
Golf Courses	0	0	0	0	149	0	200	0	0	349
Other Public Uses	0	0	0	0	0	0	0	0	276	276
Streets	36	10	14	48	49	18	11	17	46	249
Wetlands	22	29	69	283	0	254	0	92	840	1,589
Vacant or Undeveloped Land	108	220	4	131	150	169	118	108	2,064	3,072
TOTAL ACREAGE	277	291	141	553	424	458	338	255	3,368	6,105

*Indicates less than one acre.

SOURCE: WRPDC, Field Survey, June, 1985.

TABLE 10

EXISTING LAND USE DATA
STUDY AREA 3

Land Use Category	Pawleys Island	Between Arcadia & South Causeway East of U.S. 17	Between North & South Causeway East of U.S. 17	North of North Causeway East of U.S. 17	Hagley Estates	Between Shell Road & Hagley West of U.S. 17	North of Shell Road West of U.S. 17	Study Area Total
Single-Family Residential	116	63	96	34	121	124	125	679
Multi-Family Residential	5	0	*	*	0	14	0	19
Residential Sub-Total	(121)	(63)	(96)	(34)	(121)	(138)	(125)	(698)
Commercial	3	5	10	20	8	15	20	81
Public/Semi-Public	4	3	1	0	3	12	53	76
Golf Courses	0	0	0	0	151	175	0	326
Other Public Uses	0	0	0	0	0	0	0	0
Streets	24	37	24	14	83	72	46	300
Wetlands	344	442	39	268	32	384	84	1,593
Vacant or Undeveloped Land	5.1	1,464	121	85	574	1,675	383	4,314
TOTAL ACREAGE	508	2,015	291	420	971	2,471	711	7,387

*Indicates less than one acre

SOURCE: WRPDC, Field Survey, June, 1985.

with the seasonal population increase is not as significant in this area as in Murrells Inlet. The development of a major collector road parallel to U.S. 17 to accommodate proposed development along the Waccamaw River will be needed, however. Planned developments in the area consist of Heritage Plantation, Ricefields, River Club and Cypress Point.

Arcadia/Hobcaw - Study area 4 is the largest of the study areas and also the least developed. This area encompasses 24,437 acres, or almost one-half of the Waccamaw Neck. Included within this area is the 15,671 acre Hobcaw Barony, which was donated to the State of South Carolina for wildlife and marine research. The remaining acreage consists of DeBordieu Colony and Arcadia Plantation. DeBordieu presently has 266 acres which have been developed. Single-family uses average 34,615 square feet of lot area per unit. Multi-family uses average 20,535 square feet. Other than a small golf course, the remainder of the tract is undeveloped. Table 11 on page 34 displays the land use data for the area.

A major portion of the Arcadia Plantation and the undeveloped areas within DeBordieu Colony have recently been sold and are planned for development. Normal considerations for traffic movement, utilities and services should be adhered to in the developmental process.

SUMMARY - The principal land use on the Waccamaw Neck is land devoted to single-family residential development. It accounts for 45 percent of the developed land. These 1,769 acres accomodate over 4,400 dwellings. Table 12 on page 35 provides

TABLE 11

EXISTING LAND USE DATA
STUDY AREA 4

Land Use Category	Arcadia and DeBordieu	Remainder of Area	Study Area Total
Single-Family Residential	89	0	89
Multi-Family Residential	20	0	20
Residential Sub-Total	(109)	(0) 0	(109)
Commercial	0	0	0
Public/Semi-Public	2	0	2
Golf Courses	101	0	101
Other Public Uses	0	15,671	15,671
Streets	54	0	54
Wetlands	1,756	11,399	13,155
Vacant or Undeveloped Land	6,739	0	6,739
TOTAL ACREAGE	8,766	15,671	24,437

SOURCE: WRPDC, Field Survey, June, 1985.

TABLE 12

EXISTING LAND USE
WACCAMAW NECK

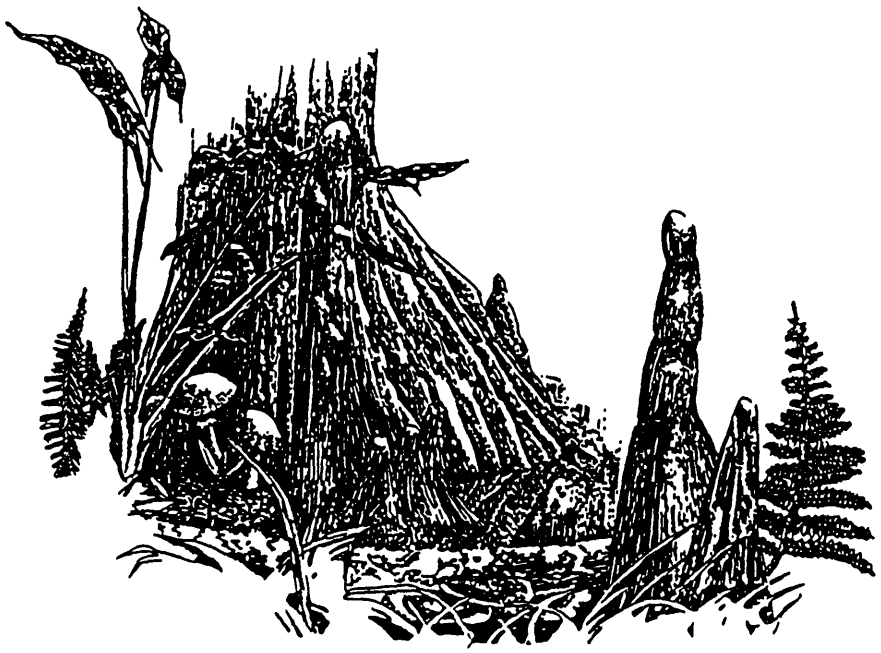
Land Use Category	Acreage	Percent of: Developed Land	Percent of: Total Land
Residential	1,939	46%	4%
Single-Family (1,769)			
Multi-Family (170)			
Commercial	230	6	*
Public/Semi-Public	158	4	*
Golf Courses	915	22	2
Other Public	23,611		
Streets	928	22	2
Wetlands	19,298		
Total Developed Land	4,170	100	8
TOTAL ACREAGE	51,504		100

*Less than one percent

SOURCE: Waccamaw Regional Planning and Development Council, June, 1985.

a summary of the existing land use.

In order to maintain and enhance the existing quality of life on the Waccamaw Neck and also to allow for future growth, improvements must be made to the existing system of service deliveries to insure that adequate protections are afforded to residents, seasonal visitors and the environment. Careful planning and adequate public services will allow development to continue at it's own expense and not place a burden on existing residents of Georgetown County or the State. Failure to do so will lower the living standards for everyone and detract from the positive factors that presently make this area an attractive place to live and visit.



FUTURE LAND USE PLAN

The preceeding analysis and the projections and recommendations that follow represent an attempt to comprehensively evaluate the development trends and problems and guide future growth on the Waccamaw Neck. By necessity, the scope of the future land use plan is relatively broad and it is intended to provide direction for public action.

The future land use plan is to be used as an aid in directing the desired physical development of the Waccamaw Neck. The plan includes proposals for the type, amount and location of land which is expected to be developed within the next twenty years. The plan will provide the local officials and the public with a guide and a legal basis for creating an environment in which the various uses of land complement rather than conflict with each other.

Goals and Policies

The following land use goals have been established and adopted by the Georgetown County Planning Commission and County Council in order to more effectively guide the development of the unincorporated areas of Georgetown County.

1. To promote efficiency in the use of land. Since land is a limited commodity, it must be used in an efficient manner in order to meet increasing demands being placed on it by urban growth. Land use patterns should be established which will promote the highest degree of health, safety, and welfare for all areas of Georgetown County. Conflicts between

residential, commercial, industrial, and public or semi-public uses should be kept to a minimum for the protection and enhancement of property values.

2. To provide for the protection of the coastal beaches, dunes and natural vegetation of those areas. Sand dunes are small sand hills formed by waves and wind and, where unstabilized, are extremely vunerable to these same factors. The particular grasses and woody plants which thrive in this area of salt spray, soils lacking humus and an oscillating water supply, form a dense mat of roots which stabilize the dune. The stems and leaves of this vegetation catch wind blown sand and further builds up the dunes. The sum total of this process is a seawall to storm driven tides and waves which is not so easily breached or washed away as unprotected sand. In addition, adequate setbacks from the dunes need to be enforced to stop any encroachment from development.

3. To promote beach access in redevelopment or in new developing areas. Where areas are under going redevelopment, efforts should be made by the County to encourage adequate beach access for the general public. In new developing areas, public beach access should be designed as part of the project.

4. To insure that residential areas are safe and protected from mixed land uses and substandard development. There are some areas of the County that are blighted and obsolete because of structural deterioration, inadequate utilities

and mixed land use. It is important to preserve good residential areas, to upgrade those that are declining to redevelop those that are substandard, and to provide orderly development for future residential areas.

5. To provide for the protection of the saltwater and freshwater estuaries of Georgetown County. Georgetown County is unique in that it contains large portions of the State's estuarine land and water formations. These areas possess great natural beauty and are the breeding grounds and refuges for marine life, birds and land animals whose survival is economically important to sport and commercial fishing, hunting activity, and nature study of our citizens and visitors to the area.

6. To provide protection from flooding and tidal action. Certain areas in Georgetown County are subject to periodic inundation by flood waters. These areas should be identified and development curtailed or developed along adopted regulations for construction within flood prone areas.

7. To promote the preservation of trees. Preserve trees and other natural vegetation in new and other developments so as to keep the natural siting when and where possible.

8. To provide for the protection of the Georgetown County Airport. Due to the important role the Georgetown County Airport plays in general aviation use, proper development of the Airport and its environs must be instituted.

9. To provide for the protection of prime industrial waterfront areas. Areas which are prime for waterfront industrial

development should be protected from encroachment from other incompatible land uses.

10. To provide adequate and convenient sites for future business, industry, educational, and recreational facilities and to improve existing facilities. As the population of Georgetown County grows, additional space will be needed for industrial development, retail and service establishments, offices, and community facilities such as libraries, post offices, schools, and fire stations. Rather than being permitted to develop in an unplanned and scattered manner, these land uses should be planned and designed to best satisfy the needs of the growing population.

11. To provide an efficient transportation system for the safe and convenient movement of people, goods, and services within the planning area. The selection of highway locations is not a random process, but is tied very closely to the consideration of a desirable land use pattern. The development of highway and rail facilities to meet the needs of the area should be encouraged. It is vitally important to make the most efficient use of the existing transportation system to meet future requirements.

12. To provide sufficient and orderly extension of utilities and public services. Adequate water and sewer facilities, police and fire protection, refuse pick-up and disposal, and other government services should be available in all densely-populated areas of the County, and eventually

County-wide. These services can best be provided if the County and incorporated areas follow up-to-date policies for utility extensions.

13. To provide for the preservation of the County's historical heritage. New development plans should be designed to preserve and protect positive historic features, while allowing the historic elements to enhance development. Careful consideration should be given to the location and intensity of development in regards to Georgetown County's historic sites.

14. To provide for the enhancement of its recreation potential. Specific attention should be given to conflicts between development (industrial and otherwise) and the environment.

15. To provide for improvement of industrial and wastewater treatment and eliminate the threat of air pollution.

LAND USE DEVELOPMENTAL POLICIES

The following policies are a means of accomplishing the land use goals established in the previous section. Policy statements will be presented for residential, commercial, industrial, and public and semi-public land uses. Developmental policies for utilities will also be presented.

Residential Land Use Policies - A variety of residential areas should be encouraged by allowing housing densities ranging from single-family to multi-family structures.

Areas of high density should depend on the amount and type of public improvements available or planned. Multi-family residential developments should:

a. Have ample water, sewer, and storm drainage systems available prior to development;

b. Be located adjacent to an adequate major thoroughfare system.

c. Provide the residents protection by proper screening from adverse conditions adjacent to non-residential areas and streets;

d. Provide open areas and parks for recreational activities;

e. Be conveniently located with regards to public facilities, commercial areas, and work centers.

f. Be designed to blend with the landscape and utilize natural features and coverage to a maximum.

g. Provide adequate off-street parking for each dwelling unit.

Single-family residential areas should be developed in accordance with the following standards:

a. Residential lots served by both sanitary sewer and public water systems should not be less than 7,500 square feet in area.

b. Residential lots served by public water but not a sanitary sewer system should not be less than 15,000 square feet in area; and,

c. Residential lots that are not served by either public water or sanitary sewer should not be developed at a density greater than one lot per acre.

Residential areas where maximum development is one dwelling unit per acre should provide:

a. Street improvements to be a minimum of twenty feet in width of asphaltic concrete on an appropriate base as required by subdivision control regulations;

b. Water supply and septic tanks approved by the County Health Department; and,

c. Adequate drainage and design standards as required by the subdivision control regulations.

Single-family residential areas with development of two lots or more to the gross acre should require these minimum improvements.

a. Asphaltic concrete curbs;

b. Street lighting and sidewalks;

c. Adequate drainage;

d. Public-owned and approved water supply; and

e. A sanitary sewer system.

Streets within residential areas should adequately service the development, and at the same time discourage through traffic.

Streets should be designed to fit the existing topography and could be of several varieties such as cul-de-sacs, curvilinear, and loop streets.

Residential developments should be required to provide open space areas and preserve any unique natural features through design.

Commercial Land Use Policies - The amount of land planned for business development during the planning period should be scaled to the demand of the projected populations.

Business uses related to walking traffic should be grouped together to facilitate pedestrian movement and minimize vehicular circulation.

Areas established for business purposes should be adjacent to residential neighborhoods and not located within them.

Highway-oriented business should be concentrated in groups and located conveniently on major streets and roads that will best serve the uses of the area.

Congestion should be minimized and safety assured by planning for controlled points of ingress and egress. Adequate traffic circulation and parking should be provided within the business development.

Business areas for neighborhoods should consist of neighborhood-oriented shopping and services only.

Business developments should be approved only after sufficient development aspects of the proposed site are analyzed and it is assured that street grades, intersections, access points, and rights-of-way are adequate.

Public or Semi-Public Land Use Policies - Public and semi-public buildings and sites must be reviewed and approved by the Georgetown County Planning Commission.

Public or semi-public buildings should be conveniently located and be readily accessible to the people they serve.

Grouping of public uses should be encouraged to complement each other in design and function.

Schools should be located in accordance with the following standards:

a. Elementary schools should be located near the residential areas served;

b. Secondary schools should be conveniently located within the center of the service area; and

c. School locations should be coordinated with the location of parks and playgrounds to permit maximum utilization of public land.

Insure that sufficient future park and school sites and acreages will be available as the need for them arises, through a land acquisition program based on anticipated growth.

The County should satisfy the physical, psychological, recreational, and cultural needs of the people, based on a comprehensive community facilities program.

Provide adequate open space areas throughout the County, which would:

a. Preserve and enhance the natural areas and man-made features of the County.

b. Retain the aesthetic quality that only open space can provide; and

c. Discourage urban development in areas more suitable for open space.

Utility Development Policies - Adequate utilities should be extended to all areas of the County and its urbanizing areas on a priority basis.

All new developments, whether they are residential, commercial, industrial, or recreational in character, should have all proper utilities installed by the development group, either public or private.

The extension of utilities of proper capacity in designated growth areas should precede development or be installed at the time development occurs.

The use of underground utilities should be encouraged where feasible.

In areas where underground utilities are not practicable, installations should be placed within easements provided along rear property lines.

When utility construction equipment, materials, or hardware are stored out of doors, the site shall be screened and

landscaped in such a manner as not to detract from the surrounding area.

All future utility buildings should be located in non-residential areas. These buildings should be designed to complement the area in which they must be located.

FUTURE LAND USE ANALYSIS

As the population of the Waccamaw Neck increases, additional land will be needed for residential, commercial, public and semi-public and other various uses necessary to support the predicted development. The projection of space requirements for each land use type is essential to the development of a realistic land use plan. The standards and criteria used for these projections varied depending upon the type of use and the available data. These projections, based on accepted standards and assumed conditions are subject to error when applied to smaller areas. For this reason, the calculations presented indicate reasonable estimates of additional land required and are intended only as guidelines for the development of the overall land use plan and its components. The methodology applied in this analysis is summarized in the Appendix on page 58.

Based on the land use projections, approximately 3,438 acres of land will be required to accomodate anticipated development on the Waccamaw Neck during the next twenty years. This represents a 100 percent increase from the amount of land presently developed. Total developed land should constitute 6,853 acres by the year 2005. The land use projec--

tions for the Waccamaw Neck are shown on Table 13 on page 48. The future land use is illustrated on individual maps for the four study areas, shown as Illustrations 7, 8, 9, and 10 and beginning on page 49.

The next section will discuss each land use category in regards to the projeected development and the general areas within the Waccamaw Neck recommended for future development.

Single-Family Residential - Detached residential dwellings should remain the predominant housing type on the Waccamaw Neck. Land use projections indicate that 2,110 acres of land will be required to accomodate the estimated 5,312 single-family dwellings through the year 2005. Many of these units are expected to be constructed in existing subdivisions such as Hagley Estates, Litchfield Country Club and North Litchfield. This "infilling" of existing subdivisions will reduce the amount of raw land needed for new developments.

Multi-Family Residential - It is projected that approximately 465 acres of land will be needed to allow for the development of 3,573 attached residential units by the year 2005. Most of the anticipated development should occur within recently approved developments such as Wachesaw Plantation, Waccamaw Trace, Willbrook Plantation and Heritage Plantation. The assumed net density for future multi-family development is 7.7 units/acre. If projects are developed at lower net densities, that amount of land required for these develop-

TABLE 13

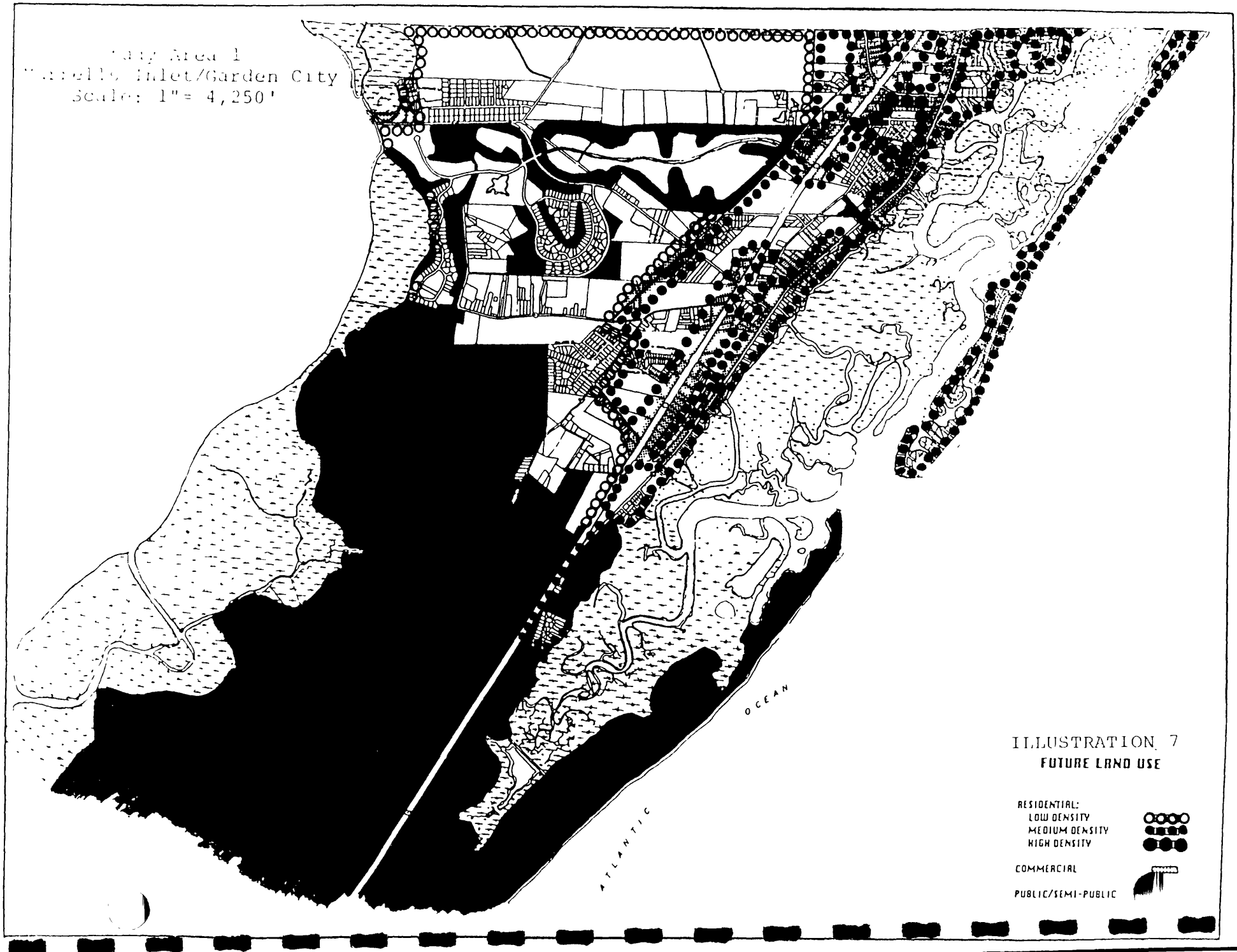
FUTURE LAND USE

WACCAMAW NECK TOTALS

LAND USE CATEGORY	ACREAGE NEEDED 1990	1995	2000	2005	TOTAL
RESIDENTIAL	704	539	582	750	2,575
Single-Family	618	451	451	590	2,110
Multi-Family	86	88	131	160	465
COMMERCIAL	70	53	57	66	246
PUBLIC/SEMI-PUBLIC	48	37	39	45	169
STREETS*	123	94	102	129	448
TOTAL ACREAGE	945	723	780	990	3,438

*Assumed average for streets was 15 percent of projected developed acreage-

SOURCE: Waccamaw Regional Planning and Development Council, 1985.


City Area 1
Scale: 1"= 4,250'
ATLANTIC
OCEAN
ILLUSTRATION 7
FUTURE LAND USE
RESIDENTIAL:
LOW DENSITY
MEDIUM DENSITY
HIGH DENSITY
COMMERCIAL
PUBLIC/SEMI-PUBLIC

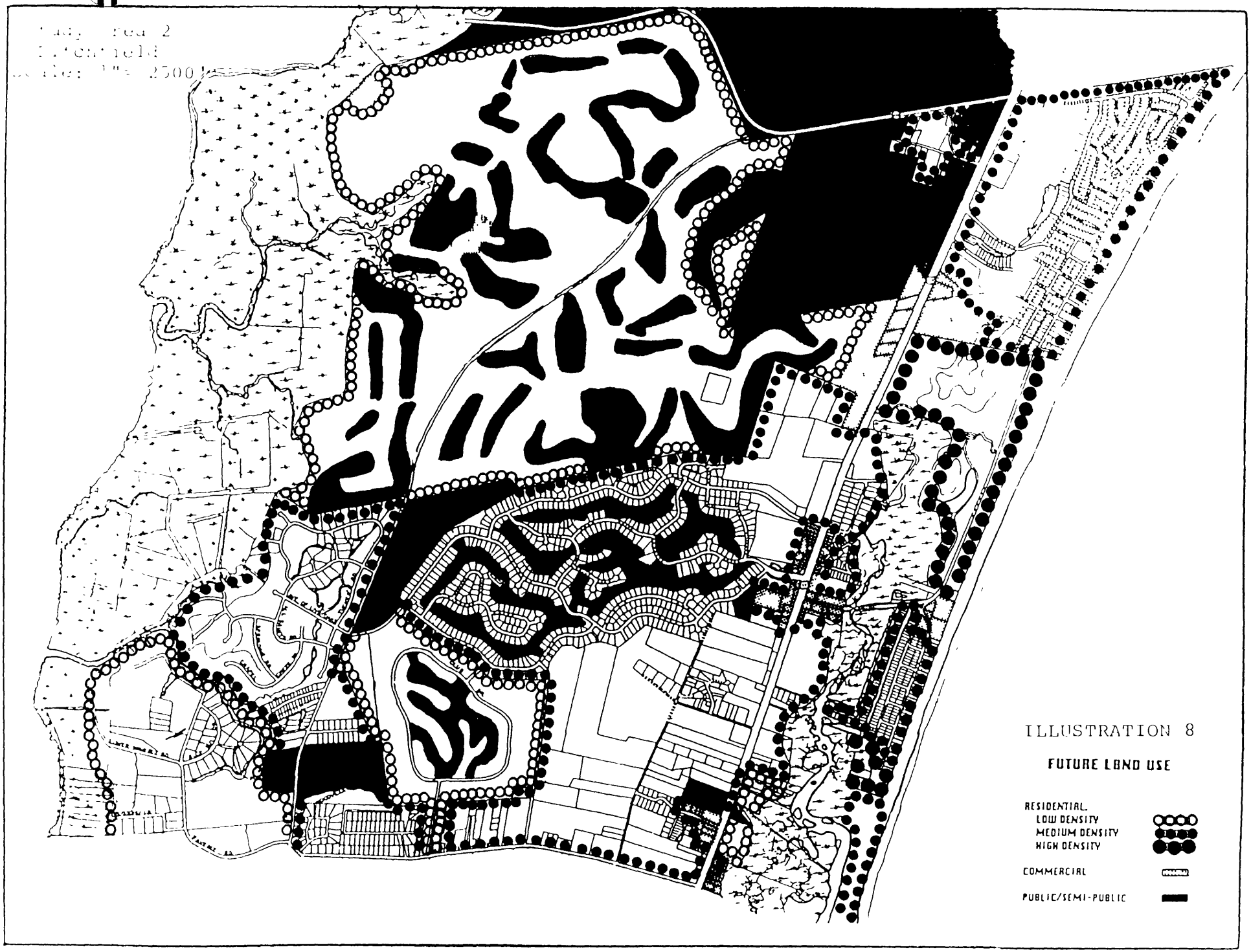


ILLUSTRATION 8
FUTURE LAND USE
RESIDENTIAL
LOW DENSITY
MEDIUM DENSITY
HIGH DENSITY
COMMERCIAL
PUBLIC/SEMI-PUBLIC

Study Area 3
Pawleys Island
Scale: 1"= 3750'

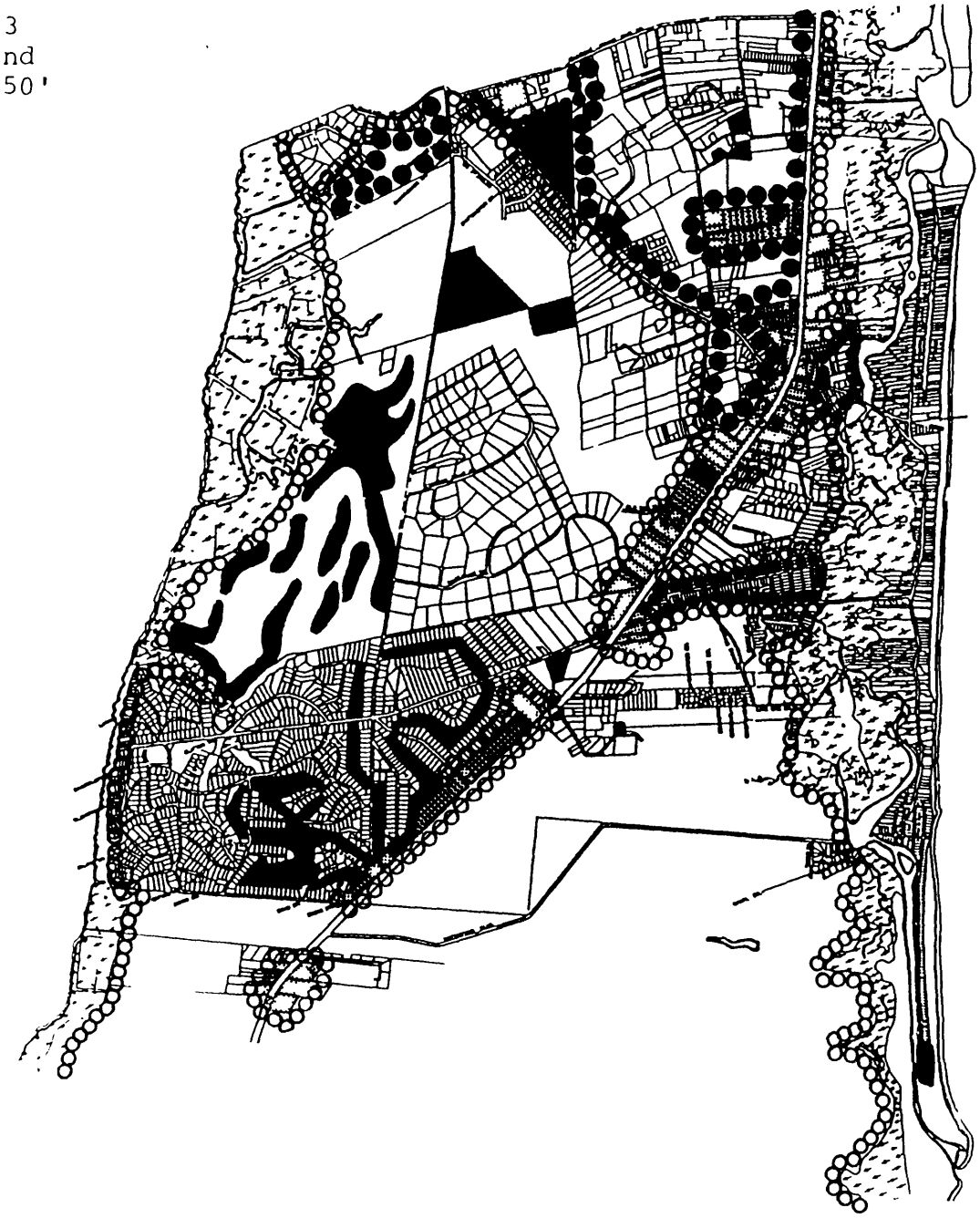


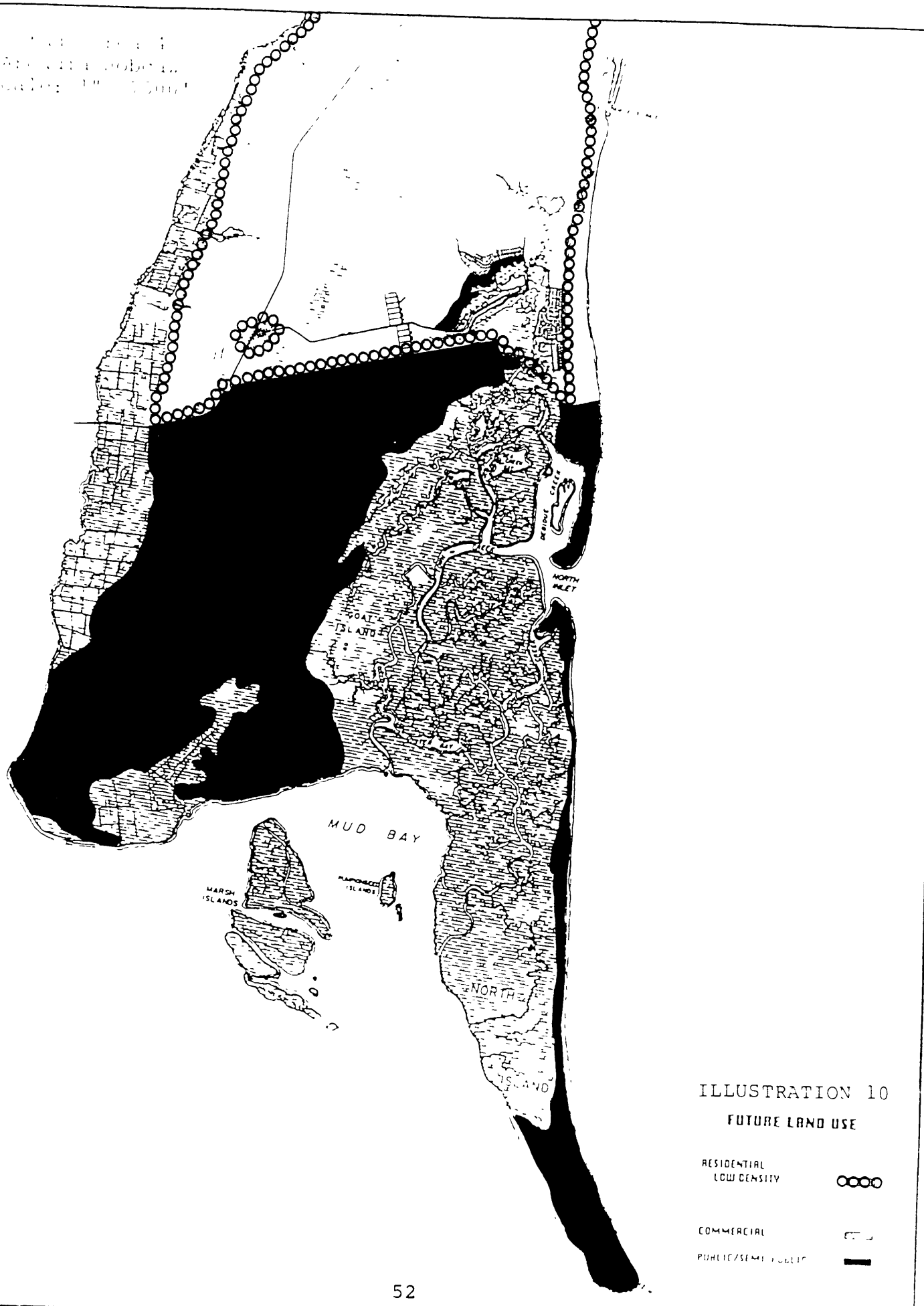
ILLUSTRATION 9

FUTURE LAND USE

RESIDENTIAL:
LOW DENSITY
MEDIUM DENSITY
HIGH DENSITY

COMMERCIAL

PUBLIC/SEMI-PUBLIC


MUD BAY
MARSH ISLANDS
NORTH
ISLAND
GOAT ISLAND
ILLUSTRATION 10
FUTURE LAND USE
RESIDENTIAL LOW DENSITY
COMMERCIAL

ments would be proportionally increased.

Commercial - Commercial uses on the Waccamaw Neck should occupy 477 acres of land by the year 2005. This represents a 106 percent increase over the existing acreage. Most of the new commercial development will be concentrated in pockets adjacent to U.S. 17, however, as large residential developments west of U.S. 17 progress, small commercial centers along River Road and Wachesaw Road should develop to provide convenience services and retail trade for area residents. The principal commercial centers on the Waccmaw Neck: Murrells Inlet; Litchfield; and Pawleys Island, should continue to develop as major shopping areas for both permanent and seasonal residents.

Public/Semi-Public - Public and semi-public uses will require an additional 169 acres of land over the next twenty years. This represents a 107 percent increase from the existing 158 acres. Most of this land will be devoted to churches, community parks, lodges, utility substations and sub-installations. A major facility planned for construction within the study period is a sewage treatment plant South of Shell Road and east of River Road and a 50 acre site for a proposed high school is in same area.

Streets - As new development occurs, access to these developments must be provided. It is projected that 448 acres will be required to accomodate future streets through the year 2005. This represents a 48 percent increase for the 928 acres presently devoted to streets. Major roadway construction should

be limited to the extension of River Road northward. Much of the projected "infilling" will not require any road construction, since this will occur in existing subdivisions.

Implementaion of the Land Use Plan

This updated land use plan for the Waccamaw Neck contains base data, analysis, projections and recommendations regarding the future development expected over the next twenty years. The goals, policies and objectives contained herein cannot be effective unless the Georgetown County Planning Commission and Georgetown County Council work cooperatively to effect implementation through certain regulatory devices available to them. The following sections discuss common methods of land use control and the status of these methods with respect to the Waccamaw Neck.

Zoning Ordinance - Georgetown County adopted a zoning ordinance in 1973 for a portion of the County which includes the Waccamaw Neck. In 1984, a major revision to the Ordinance was approved. The Zoning Ordinance regulates the location and extent of land uses within the applicable area.

Subdivision Regulations - Georgetown County adopted the Georgetown County Subdivision Regulations on June 23, 1981. These regulations establish standards for subdivision design and apply County-wide.

Stormwater Management Ordinance - A County-wide Stormwater Management Ordinance was adopted by the Georgetown County

Council on February 14, 1984. This Ordinance establishes rules, regulations and standards for control of runoff from all new developments within the County.

Flood Damage Prevention Ordinance - These regulations provide construction standards and location requirements for new and substantially improved development in conjunction with the Flood Insurance Rate Maps (F.I.R.M.'s) prepared by the Federal Emergency Management Agency. This Ordinance was adopted on February 14, 1984.

Building Codes - Georgetown County had adopted the Southern Standard Building Code, which insures that all new construction and substantial reconstruction meets minimum structural standards. These standards presently apply only in the zoned areas of the County which includes the Waccamaw Neck.

Dunes Preservation Ordinance - This Ordinance would provide for the protection of coastal dunes and establish supplemental regulations for construction in these areas. Georgetown County does not currently have this type of Ordinance in effect.

Landscape Ordinance - A landscape ordinance provides for the preservation of natural vegetation and establishes standards and requirements for planted areas within new developments. Presently, Georgetown County does not have such an Ordinance in effect.

Appearance Codes - These regulations regulate exterior treat-

ment and design of structures in areas which will benefit from architectural reviews. Georgetown County has studied the possibilities of establishing these codes in certain areas on the Waccamaw Neck.

Continuing Planning Program - The updated land use plan for the Waccmanw Neck has indicated what can be expected in terms of future growth and development, and has established general goals and development policies that can serve as guidelines for this growth. Supplemental analyses which further define these goals and policies may be found in the following documents.

(1) Georgetown County Community Facilities Plan, 1980: This document analyzes existing recreational, governmental and other public facilities and makes recommendations concerning upgrading existing facilities and constructing new facilities to meet projected future needs.

(2) Georgetown County Recreation Plan, 1979: This study describes existing recreational facilities within the County and provides recommendations for upgrading these facilities as well as recommendations for new recreation projects to accomodate projected demands.

(3) Georgetown County Road Inventory, 1981: This report provides base data for the existing roadways within the County, emphasizing the deficient characteristics of individual road segments.

(4) Environmental, Historical and Recreational Atlas for

the Waccamaw Region, 1973: This document analyzes historical sites, sensitive environmental areas and recreational opportunities within the three-County region and establishes guidelines for new developments proposed to be located in the vicinity of these areas.

(5) Water Runoff Study for Main Drainageways and Outlets, Georgetown County, 1979: This study documents existing drainage problems throughout the County and recommends mitigative actions designed to alleviate the problems.

APPENDIX 1

METHODOLOGY FOR LAND USE PROJECTIONS

DATA BASE

The principal source of information for determining existing land use and future land use needs for the Waccamaw Neck was a field survey conducted by the Waccamaw Regional Planning and Development Council in June, 1985. Six basic land use categories were recorded on base maps - single-family residential, multi-family residential, commercial, public-semi-public, golf courses and other public uses. Two other categories, streets and wetlands, were recorded from aerial photographs. The total acreage for each category was determined for each of the four study areas and then totaled for the Waccamaw Neck. Acreage determinations were developed utilizing gridded sheets, tax maps for Georgetown County and development plans for certain planned unit developments.

I. Residential Projection

A. $\frac{\text{1980 population}}{\text{1980 permanent housing count}} = \text{1980 persons per housing unit}$

$\frac{6,513}{2,521} = 2.58$

B. 1980 permanent housing count: 1980 seasonal housing count

2,961:1,831
1.62:1.00

C. 1985 single-family detached units: 1985 multi-family units

4,456:1,311
3.40:1.00

D. $\frac{\text{Population Projections}}{2.58}$ = # of permanent dwellings needed

1985	1990	1995	2000	2005
$\frac{9138}{2.58}$ = 3,542	$\frac{11,913}{2.58}$ = 4,617	$\frac{14,024}{2.58}$ = 5,436	$\frac{16,295}{2.58}$ = 6,316	$\frac{18,901}{2.58}$ = 7,326

E. The 1980 ratio of permanent to seasonal dwellings is 1.62:1.00. Due to historical trends it is assumed that this ratio will even out by the year 2005.

	1985	1990	1995	2000	2005
Ratio	1.496:1	1.372:1	1.248:1	1.124:1	1:1
# Seasonal Units	2,225	3,365	4,356	5,619	7,326

F. The 1985 ratio of single-family units to multi-family units is 3.4:1. It is assumed that this ratio will even out to 2:1 by the year 2005.

	1985	1990	1995	2000	2005
Ratio	3.4:1	3.05:1	2.7:1	2.35:1	2:1
# Multi-Family Units	1,311	1,971	2,646	5,079	7,326

G. Summary of Residential Unit Projections

CUMULATIVE TOTALS

	1985	1990	1995	2000	2005
TOTAL # OF RESIDENTIAL UNITS	5,767	7,982	9,792	11,935	14,652
# PERMANENT	3,542	4,617	5,436	6,316	7,326
# SEASONAL	2,225	3,365	4,356	5,619	7,326
# SINGLE-FAMILY	4,456	6,011	7,146	8,282	9,768
# MULTI-FAMILY	1,311	1,971	2,646	3,653	4,884

NEW UNITS PROJECTED TO BE CONSTRUCTED

	1990	1995	2000	2005	TWENTY YEAR TOTAL
TOTAL # OF UNITS	2,215	1,810	2,143	2,717	8,885
# PERMANENT	1,075	819	880	1,010	3,784
# SEASONAL	1,140	991	1,263	1,707	5,101
# SINGLE-FAMILY	1,555	1,135	1,136	1,486	5,312
# MULTI-FAMILY	660	675	1,007	1,231	3,573

H. The average lot area for single-family uses in 1985 was 17,303 square feet. Multi-family uses averaged 5,649 square feet per unit. It is assumed that these averages will be maintained, resulting in net densities of 2.52 units/net acre for single-family and 7.71 units/net acre for multi-family. Based on these allocations, the following amounts of land will be needed to accommodate the projected number of units needed:

	1990	1995	2000	2005	TWENTY YEAR TOTAL
TOTAL ACRES	704	539	582	750	2,575
SINGLE-FAMILY	618	451	451	590	2,110
MULTI-FAMILY	86	88	131	160	465

II. Commercial Projections

A. Determine existing commercial floor area:

1 acre of commercial land = 10,000 square feet of usable floor area

231 acres x 10,000 = 2,310,000 square feet of floor area

B. Obtain ratio of floor area per commercial employee:

$$\frac{2,310,000 \text{ sq/ft}}{1,609 \text{ employees}} = 1,436 \text{ square feet per employee}$$

C. Predict additional floor area required:

	1990	1995	2000	2005	TWENTY YEAR TOTAL
Additional Employees	490	372	400	461	1,723
Additional Sq/ft	703,640	534,192	574,400	661,996	2,474,228
Commercial Acres Needed	70	53	57	66	246

III. Public and Semi-Public Projections

A. Determine existing acreage per 1,000 population:

$$\frac{158 \text{ Acres}}{9{,}138 \text{ population estimate}} = 17.3 \text{ acres/1,000 population}$$

B. Determine additional public/semi-public acreage needed:

	1990	1995	2000	2005	TWENTY YEAR TOTAL
PROJECTED POPULATION	2,775	2,111	2,271	2,606	9,773
ADDITIONAL ACRES NEEDED	48	37	39	45	169

C. Golf courses were not included in the projections, due to the fact that they do not seem to be tied directly to population growth.

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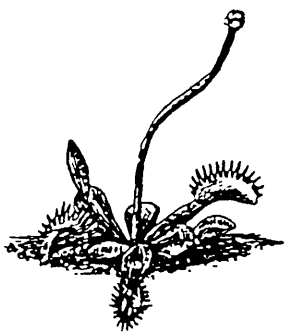
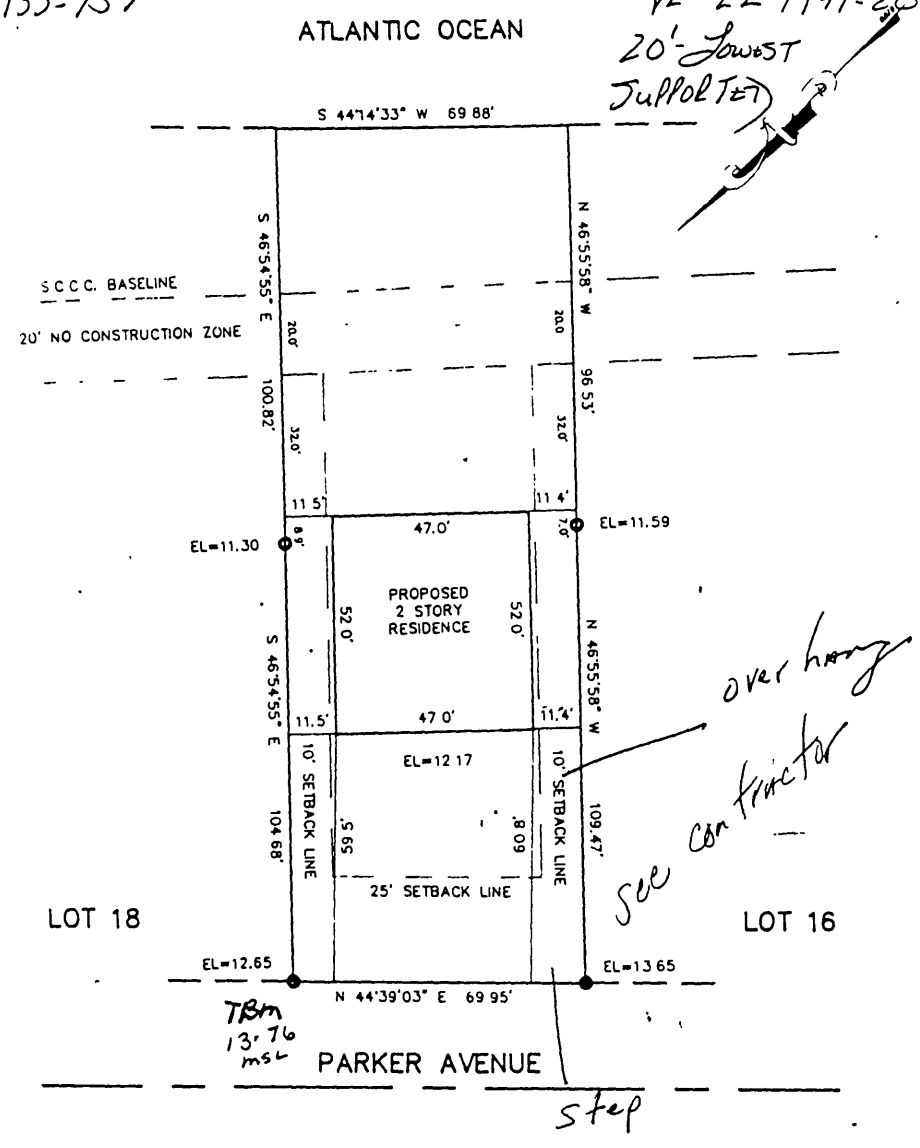


4-133-157

VE-EL 14+1=20

20'-Lowest Supported



PLOT PLAN OF

LOT 17 , SECTION B , NORTH LITCHFIELD BEACH , GEORGETOWN COUNTY , SOUTH CAROLINA

PREPARED FOR

JULIA BURR

SCALE: 1"=30'

30' 15' 0 30'

REFERENCE TO MAP BY WENDEL C. POWERS R.L.S. DATED 9-1-89.

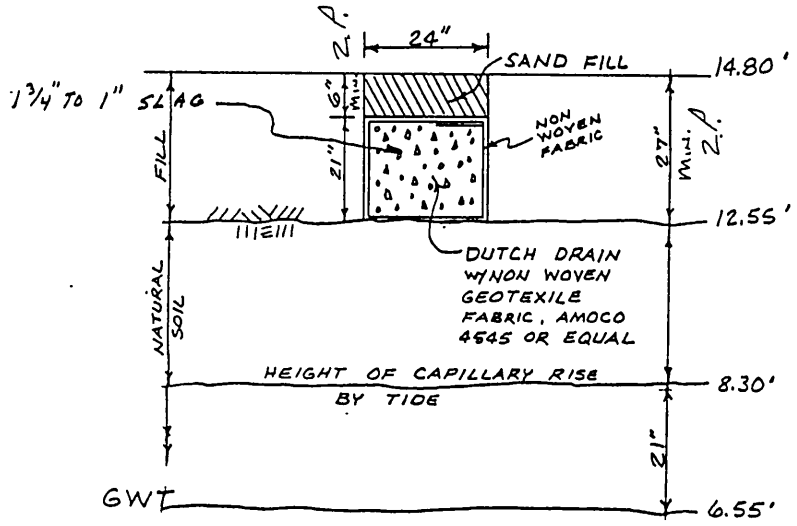
THIS PROPERTY IS LOCATED IN FLOOD ZONE VE (EL17,18 & 19) ACCORDING TO F.E.M.A. COMMUNITY-PANEL No. 450085 0277 D DATED 3-16-89.

PLAT BOOK	
DEED BOOK	
TAX MAP NO.	DIST 41
PARTY CHIEF	
DRAWN BY	S.M.
DATE	4-23-90
FILE	LOTS\LT-17

THOMAS B. COX , S.C.R.L.S. No. 3019

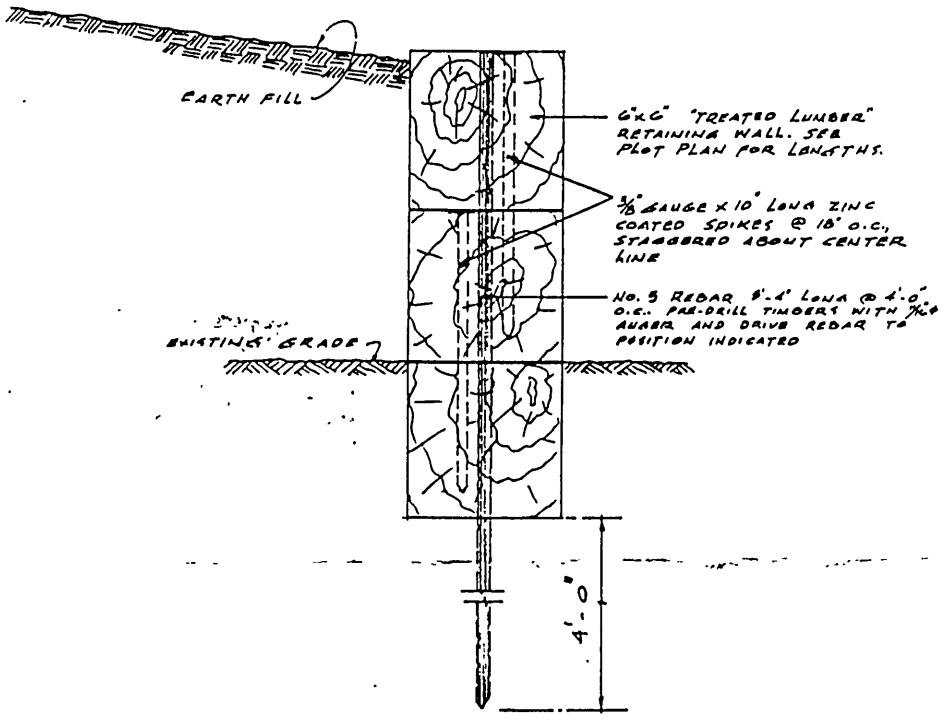
COASTLINE
SURVEYING & ENGINEERING
MT. GILEAD EXECUTIVE OFFICES
BLDG. B, SUITE 6
MT. GILEAD ROAD
P.O.BOX 1505
MURRELLS INLET, S.C.
29576
(803)-651-0212

Permit #6804



ABSORPTION TRENCH DETAIL

NTS



WOOD RETAINING WALL DETAIL

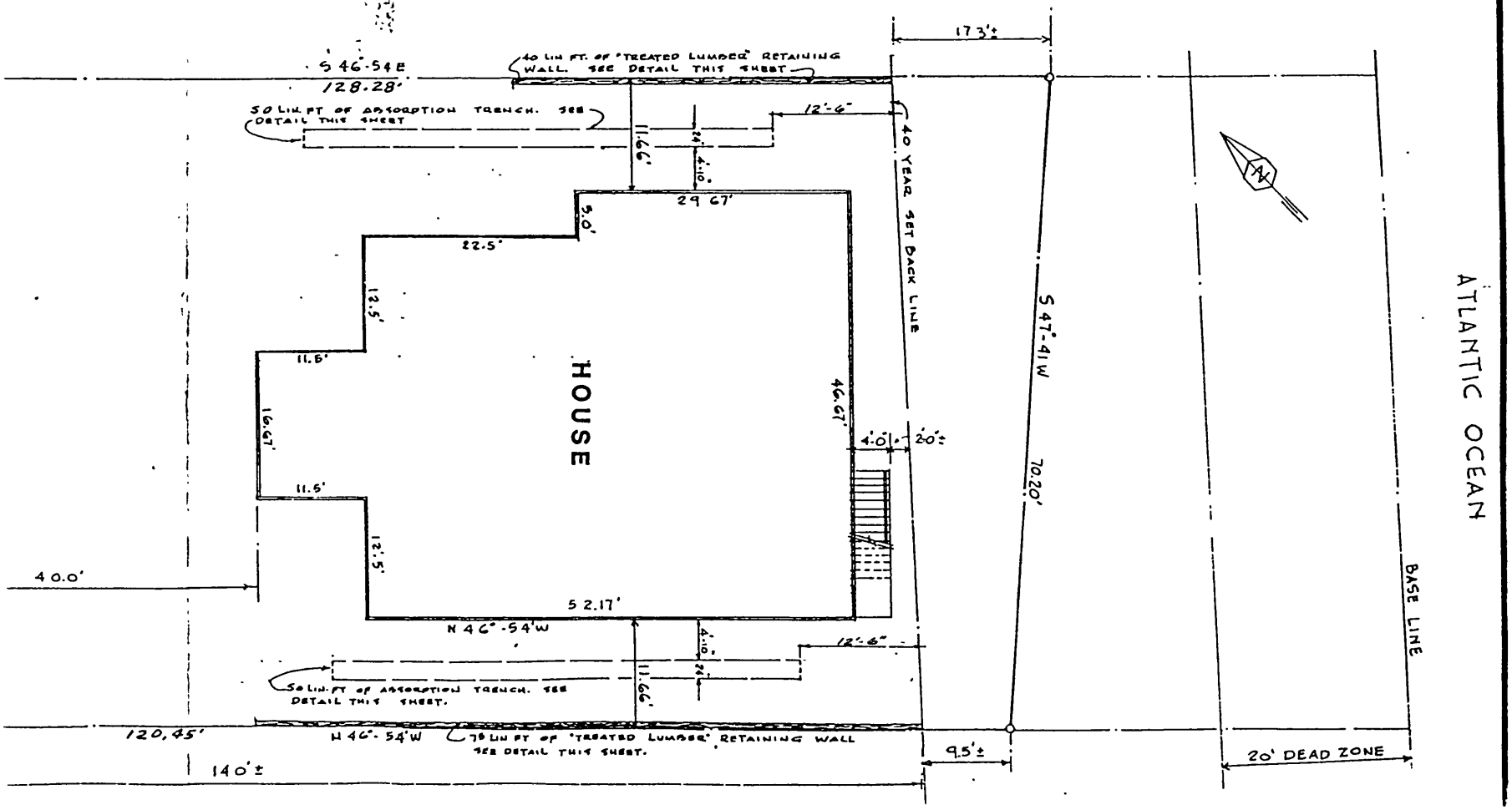
N.T.S.

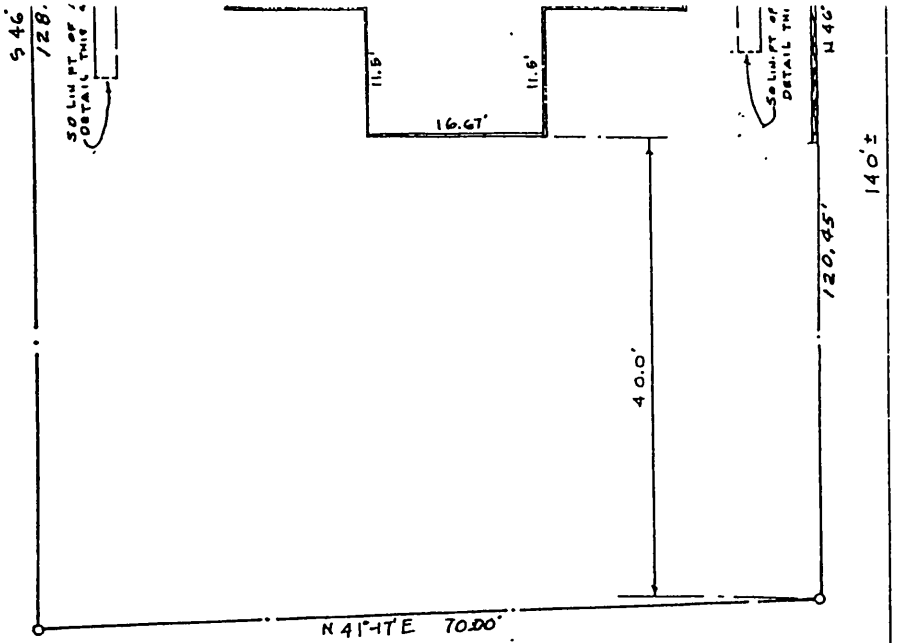
OCEAN FRONT RESIDENCE

VALERIE & FRED C. WIKOFF, Jr.

LITCHFIELD BEACH, GEORGETOWN COUNTY

Permit #6768


S 46°-54 E
128.28'
40 LIN FT. OF "TREATED LUMBER" RETAINING WALL. SEE DETAIL THIS SHEET
50 LIN FT OF ABSORPTION TRENCH. SEE DETAIL THIS SHEET
173'±
12'-6"
40 YEAR SET BACK LINE
11.66'
2'
4'-10"
29.67'
5.0'
22.5'
12.5'
11.8'
16.67'
HOUSE
46.67'
4.0'
20'±
S 47°-41 W
70.20'
11.5'
12.5'
40.0'
52.17'
N 46°-54'W
4'-10"
2'
12'-6"
50 LIN FT OF ABSORPTION TRENCH. SEE DETAIL THIS SHEET.
11.66'
120.45'
N 46°-54'W
78 LIN FT OF "TREATED LUMBER" RETAINING WALL SEE DETAIL THIS SHEET.
140'±
9.5'±
20' DEAD ZONE
BASE LINE
ATLANTIC OCEAN



PLOT PLAN

1 INCH=10 FEET

FROM THE OFFICE
OF
P O DRAWER 419
GEORGETOWN, S C 29440
PHONE 546-8502

1990

GENERAL NOTES:

Boundary information taken from plat by J. Lucky Sanders, R.L.S. dated Nov. 2, 1989.

Property is Lot 11, Section B, North Litchfield Beach, Tax District 4, Georgetown County, South Carolina.

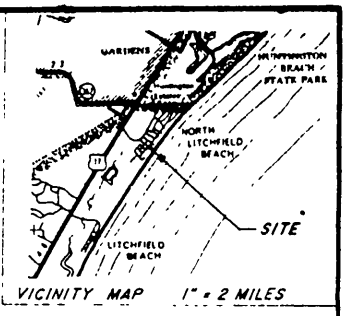
Location of proposed house on property taken from Plot Plan in a set of Architectural plans by Ralfe Mesrobian, AIA, Architect, Charlotte, North Carolina dated January 8, 1990.

NO.	DATE	REVISIONS	BY
1.	4/18/90	REVISED TRENCH DETAIL	WNK
2.			
3.			
4.			
5.			
6.			

REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR No 5263 NICHOLAS KELLAHAN, JR.

DRAINAGE PLAN

DESIGN	DATE	ACAD NO.	SHEET
DRAWN RM - TEP	MARCH 5, 1990		D-1
CHECKED WNK	SCALE AS NOTED	FILE NO	OF 1 SHEETS



VICINITY MAP 1" = 2 MILES

MAGNETIC

MOCKINGBIRD LOOP

PIPE-O

PIPE-N

N 41° 11' E

145'± TO PARKER AVE.

79.0'

79'

CONCRETE

37.78'

DECK

2.11'

ONE STORY WOOD FRAME PIERS

SCREEN PORCH

131'

S 48° 55' E

153.88'

142'

S 48° 55' E

FLOOD ZONE VE ELEV 17

FLOOD ZONE VE ELEV 18

35'

35'

LOT 7

LOT 5

40 YEAR SETBACK LINE

PIPE-N

79.86'

S 32° 48' W

(116 final)

PIPE-N

FLOOD ZONE VE ELEV 18

FLOOD ZONE VE ELEV 19

32'

NO CONSTRUCTION ZONE

ORIGINAL PROPERTY LINE

20'

BASELINE

I HEREBY CERTIFY THAT THE MEASUREMENTS AS SHOWN ARE CORRECT AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN

93.1'

100'±

FLOOD ZONE VE ELEV 19

FLOOD ZONE VE ELEV 20

ATLANTIC OCEAN

Certified to be a resurvey of a piece, parcel or lot of land shown on a map or plat previously recorded in Georgetown County in Plat Book R page 35

NOTES

1. BASELINE, NO CONSTRUCTION ZONE, AND 40 YEAR SETBACK LINE SCALED FROM SOUTH CAROLINA COASTAL COUNCIL ORTHOPHOTO MAP - SHEET 206
2. EROSION RATE = -1.3 FT./YEAR
3. REF. S.C. COASTAL COUNCIL MONUMENTS #4430 & #4490

PLAT

OF LOT 6, SECTION U, NORTH LITCHFIELD BEACH,

THE PROPERTY OF

BETTYE C. CECIL

GEORGETOWN CO., S.C. ITAX DIST # 41 NOVEMBER 27, 1989

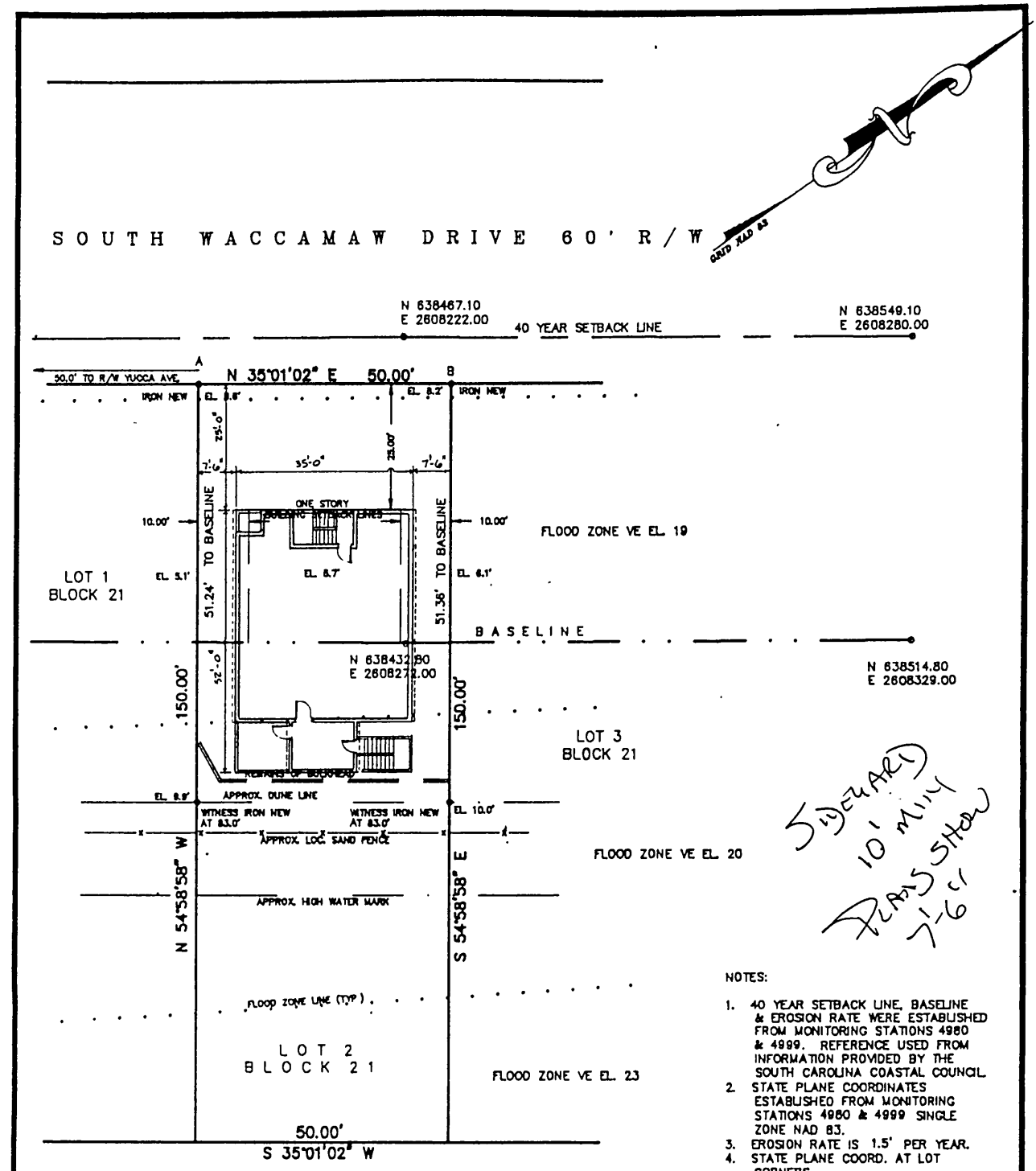
SCALE: 0 15 30 60

ONE INCH = 30'

Randell C Rivers, R.L.S.

TAX MAP # 4-136-49.10

Permit #6821 M 1045



Sidewalk 10' min Plans show 7'-6"

NOTES:

1. 40 YEAR SETBACK LINE, BASELINE & EROSION RATE WERE ESTABLISHED FROM MONITORING STATIONS 4980 & 4999. REFERENCE USED FROM INFORMATION PROVIDED BY THE SOUTH CAROLINA COASTAL COUNCIL.
2. STATE PLANE COORDINATES ESTABLISHED FROM MONITORING STATIONS 4980 & 4999 SINGLE ZONE NAD 83.
3. EROSION RATE IS 1.5' PER YEAR.
4. STATE PLANE COORD. AT LOT CORNERS.
   A: N 638,428.6486
      E 2,608,206.334
   B: N 638,469.5976
      E 2,608,235.025
5. STATE PLANE COORDINATES AT SEAWARD BUILDING CORNERS:
   C: N
      E N/A
   D: N
      E
6. FLOOD ZONES SHOWN WERE SCALED FROM FLOOD INSURANCE RATE MAP No. 450085 0159 D DATED MARCH 16, 1989
7. TAX MAP No.
8. COORDINATES SHOWN ON THE 40 YEAR LINE AND THE BASELINE PROVIDED BY THE S.C.C.C. AND ARE CURRENT AS OF APRIL 1990, BUT ARE SUBJECT TO CHANGE.

PLAT PREPARED FOR

FOREST EVANS

GARDEN CITY BEACH -- GEORGETOWN COUNTY, S.C.

THE SAME BEING ALSO SHOWN AS LOT 2 BLOCK 21 ON PLAT OF GARDEN CITY SECTION BY S.D COX DATED APRIL 17, 1952 AND RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR GEORGETOWN COUNTY IN PLAT BOOK 12 AT PAGE 52.

I, MICHAEL S. CULLER, JR. HEREBY CERTIFY THAT THIS SURVEY IS A RESURVEY OF AN EXISTING LOT OF RECORD WITH NO BOUNDARY CHANGES, ALSO THAT THE MEASUREMENTS SHOWN ARE CORRECT AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.

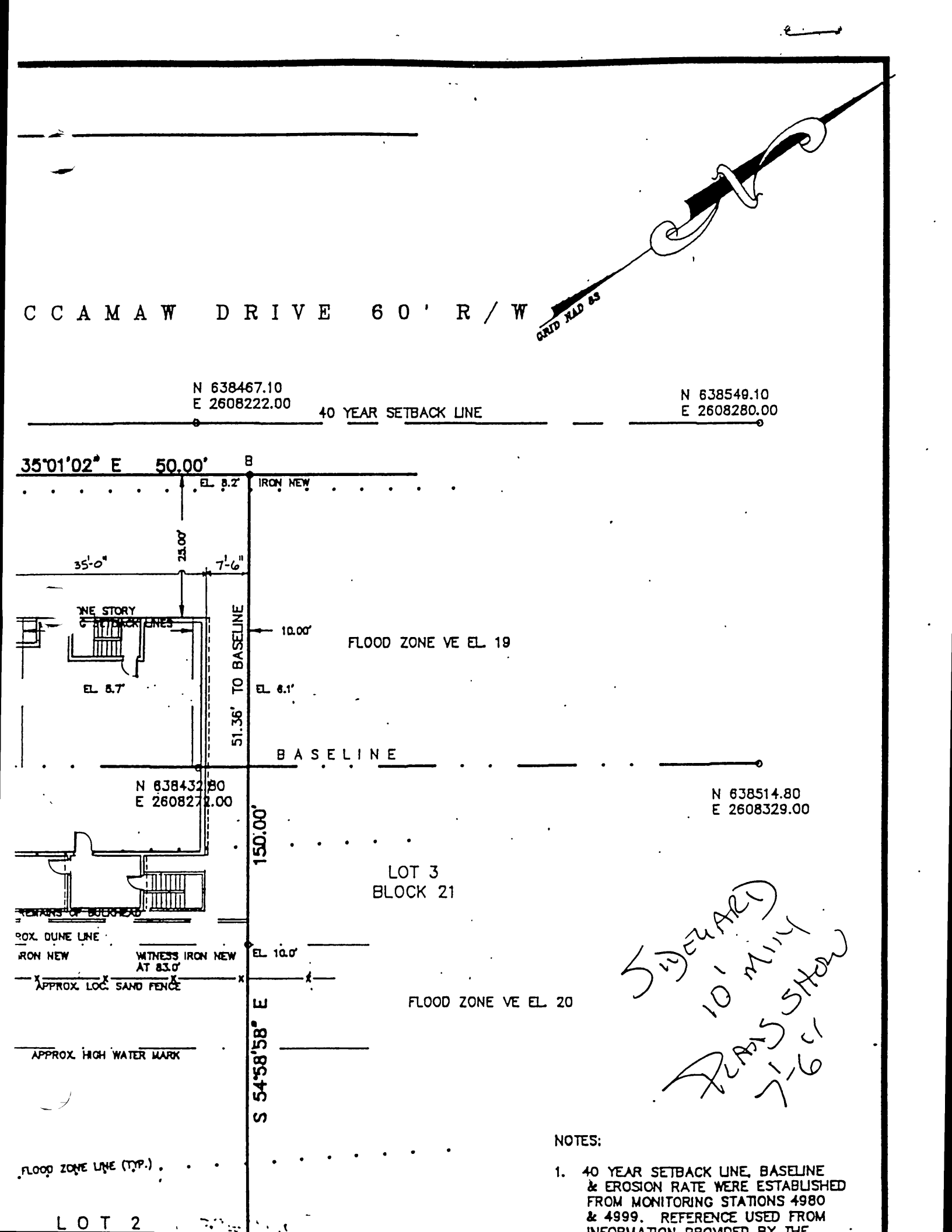
Michael S. Culler Jr

MICHAEL S. CULLER, JR.
REG. LAND SURVEYOR No. 5210

DATE:	SCALE:
NOV. 19, 1990	1" = 20'

CULLER LAND SURVEYING CO., INC.
(803) 238-2333
P.O. BOX 14327
SURFSIDE BEACH S.C. 29587

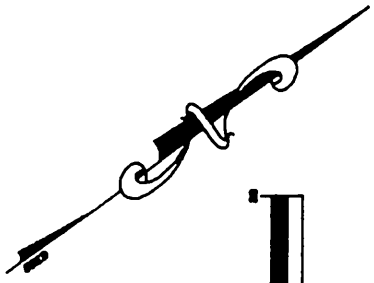
Permit #7521-2610



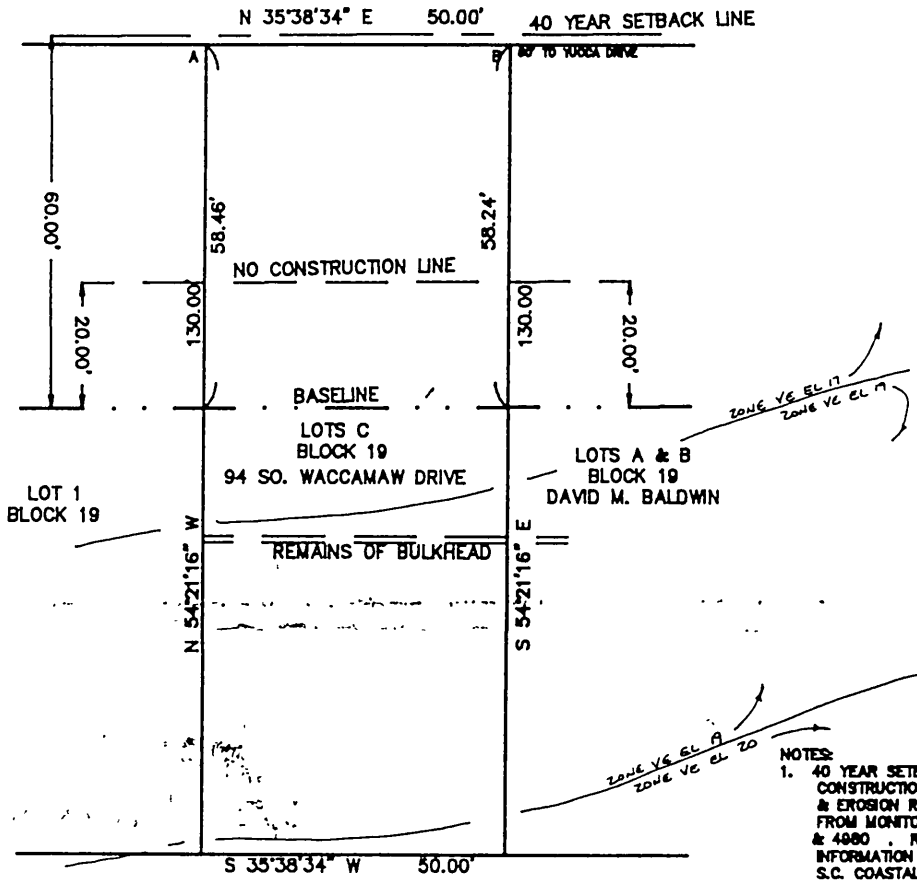
SIDEWALK 10' MIN READS SHOW 7'-6"

NOTES:

1. 40 YEAR SETBACK LINE, BASELINE & EROSION RATE WERE ESTABLISHED FROM MONITORING STATIONS 4980 & 4999. REFERENCE USED FROM INFORMATION PROVIDED BY THE



SOUTH WACCAMAW DRIVE



ATLANTIC OCEAN

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

NOTES:
1. 40 YEAR SETBACK LINE, NO CONSTRUCTION LINE, BASELINE & EROSION RATE WERE ESTABLISHED FROM MONITORING STATIONS 4975 & 4980 . REFERENCE USED FROM INFORMATION PROVIDED BY THE S.C. COASTAL COUNCIL USING AUGUST, 1986 DATA FROM TABLE N/A PAGE .
2. STATE PLANE COORDINATES ESTABLISHED FROM MONITORING STATIONS 4980 & 4999 SINGLE ZONE NAD 83.
3. EROSION RATE IS 1.5' PER YEAR.
4. STATE PLANE COORD. AT LOT CORNERS.
   A: N 638,253.08
      E 2,606,073.16
   B: N 638,293.7190
      E 2,606,102.294
5. STATE PLANE COORDINATES AT SEWARD BUILDING CORNERS:
   C: N N/A
      E
   D: N
      E
6. FLOOD ZONES SHOWN WERE SCALED FROM FLOOD INSURANCE RATE MAP No. 450085 0159 D DATED MARCH 16, 1989
7. TAX MAP No. 41 107 01
8. OFFSETS TO BASELINE FROM MONITORING STATIONS;
   4975: 59.0'
   4980: 61.0'

OFFSETS OBTAINED FROM COASTAL COUNCIL ON OCT. 19, 1989 FORM No. 05850/J DATED OCT. 3, 1988.

PLAT PREPARED FOR

WILLIAM COOPER HANCOCK & RUBY HOLMES HANCOCK

GARDEN CITY GEORGETOWN COUNTY, S.C.

THE SAME BEING ALSO SHOWN AS LOT C BLOCK 19 ON PLAT OF GARDEN CITY LOTS BY SAM HARPER RLS DATED APRIL 30, 1958 AND RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR GEORGETOWN COUNTY IN PLAT BOOK M AT PAGE 40 .

CERTIFIED TO BE A RESURVEY OF A PIECE, PARCEL, OR LOT OF LAND SHOWN ON A MAP OR PLAT PREVIOUSLY RECORDED IN GEORGETOWN COUNTY IN PLAT BOOK M PAGE 40.

I, MICHAEL S. CULLER, JR. HEREBY CERTIFY THAT THIS SURVEY IS A RESURVEY OF AN EXISTING LOT OF RECORD WITH NO BOUNDARY CHANGES, ALSO THAT THE MEASUREMENTS SHOWN ARE CORRECT AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.

Michael S. Culler Jr.

MICHAEL S. CULLER, JR.
REG. LAND SURVEYOR No. 5210

DATE: OCT. 17, 1989	SCALE:
REV. OCT. 31, 1989	1" = 20'

CULLER LAND SURVEYING CO., INC.
(843) 238-2268
P.O. BOX 14527
SURFSIDE BEACH S.C. 29587

LS-5430-B

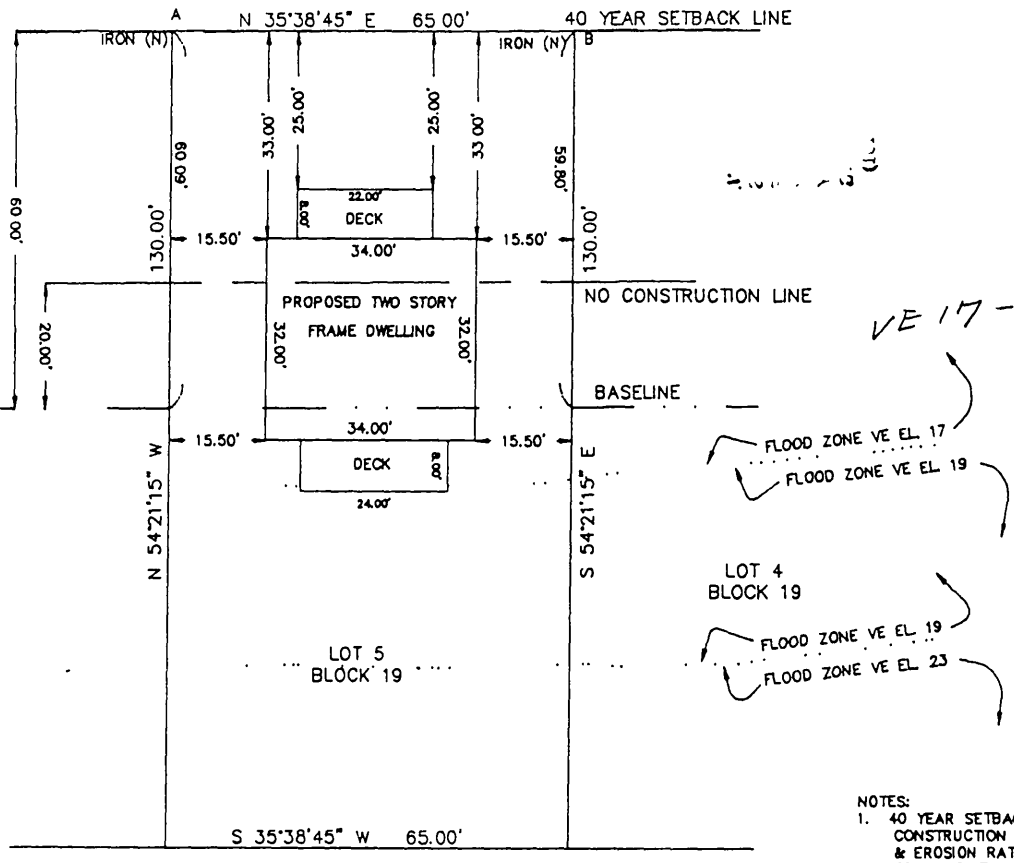
Permit #7437

TBM NAIL IN P.P.
#87078 ELEV. 9.00'

SOUTH WACCAMAW DRIVE 50' R/W

405'+- TO YUCCA AVE.

S.C. GRID NAD 83



VE 17 - E 18

FLOOD ZONE VE EL. 17

FLOOD ZONE VE EL. 19

FLOOD ZONE VE EL. 19

FLOOD ZONE VE EL. 23

ATLANTIC OCEAN

20 0 10 20 40

1" = 20'

PLAT PREPARED FOR

DR. THOMAS G. FAISON

GARDEN CITY BEACH GEORGETOWN COUNTY, S.C.

THE SAME BEING ALSO SHOWN AS LOT 5 BLOCK 19 ON PLAT OF GARDEN CITY LOTS SCET.
BY SAM HARPER RLS DATED APRIL 30, 1958
AND RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR GEORGETOWN COUNTY
IN PLAT BOOK M AT PAGE 40

NOTES:
1. 40 YEAR SETBACK LINE, NO CONSTRUCTION LINE, BASELINE & EROSION RATE WERE ESTABLISHED FROM MONITORING STATIONS 4975 & 4980. REFERENCE USED FROM INFORMATION PROVIDED BY THE S.C. COASTAL COUNCIL USING AUGUST, 1988 DATA FROM TABLE N/A PAGE .
2. STATE PLANE COORDINATES ESTABLISHED FROM MONITORING STATIONS 4975 & 4980 SINGLE ZONE NAD 83.
3. EROSION RATE IS 1.5' PER YEAR.
4. STATE PLANE COORD. AT LOT CORNERS.
   A: N 637,964.5855
      E 2,607,866.26
   B: N 638,017.4088
      E 2,607,904.140
5. STATE PLANE COORDINATES AT SEAWARD BUILDING CORNERS:
   C: N
      E
   D: N
      E
6. FLOOD ZONES SHOWN WERE SCALED FROM FLOOD INSURANCE RATE MAP No. 450085 0159 D DATED MARCH 16, 1989
7. TAX MAP No.
8. OFFSETS TO BASELINE FROM MONITORING STATIONS;
   4975: 59.0'
   4980: 61.0'

CERTIFIED TO BE A RESURVEY OF A PIECE, PARCEL, OR LOT OF LAND SHOWN ON A MAP OR PLAT PREVIOUSLY RECORDED IN GEORGETOWN COUNTY IN PLAT BOOK M PAGE 40 .

I, MICHAEL S. CULLER, JR HEREBY CERTIFY THAT THIS SURVEY IS A RESURVEY OF AN EXISTING LOT OF RECORD WITH NO BOUNDARY CHANGES, ALSO THAT THE MEASUREMENTS SHOWN ARE CORRECT AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.

Michael S Culler Jr

MICHAEL S CULLER, JR
REG LAND SURVEYOR No 5210

REVISED JAN. 29, 1990 BUILDING SETBACK

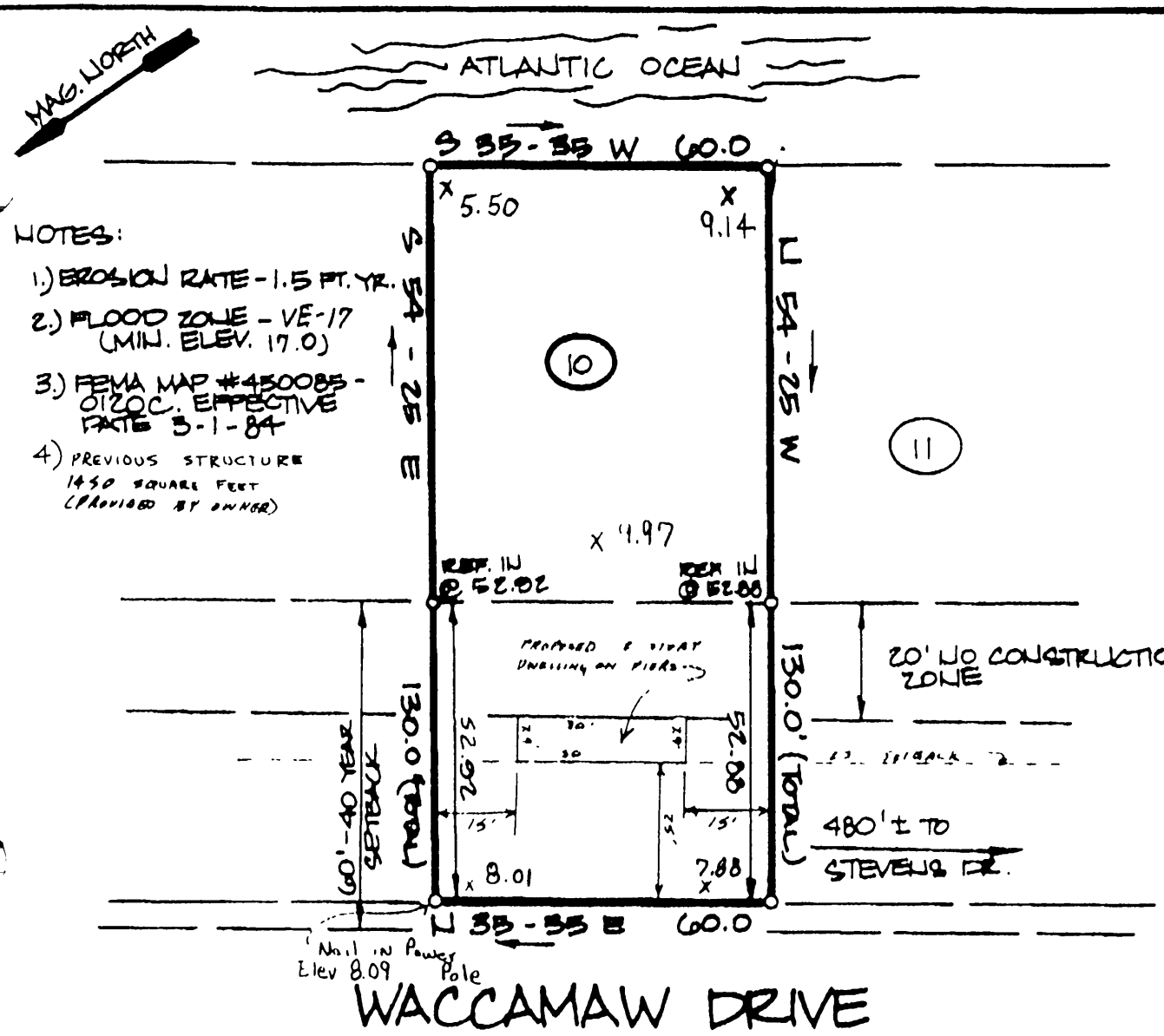
DATE:	SCALE:
JANUARY 9, 1990	1" = 20'

CULLER LAND SURVEYING CO., INC.
(803) 238-2333
P.O. BOX 14327
SURFSIDE BEACH S.C. 29587

F.B. EP-LS2

LS-5544

Permit #6213



NOTES:

1.) EROSION RATE - 1.5 FT. YR.

2.) FLOOD ZONE - VE-17 (MIN. ELEV. 17.0)

3.) FEMA MAP #450085 - 0120C. EFFECTIVE DATE 5-1-84

4) PREVIOUS STRUCTURE 1450 SQUARE FEET (PROVIDED BY OWNER)

0 30 60 90

SCALE 1" = 30 FEET

I, W.B. Huntley III, certify that this is a resurvey of an existing lot of record.

Book M Page 40

W B Huntley

W.B. Huntley III RLS #8809

Added Elevations 2-5-90

THIS IS TO CERTIFY THAT THE PROPERTY SHOWN ON THIS PLAT WAS SURVEYED UNDER MY DIRECT SUPERVISION PROPERTY LINES AND IMPROVEMENTS SHOWN ARE LOCATED CORRECTLY AND THAT NO VISIBLE ENCROACHMENTS EXIST UNLESS OTHERWISE SHOWN THIS PROPERTY IS LOCATED IN A DESIGNATED FLOOD HAZARD AREA SURVEY PRECISION IS ≥ 1:10,000

SOUTH CAROLINA REGISTERED LAND SURVEYOR 8809

RLS	W.B. HUNTLEY III
NO	8809

STATE OF SOUTH CAROLINA
GEORGETOWN COUNTY

GARDEN CITY LOTS
LOT 10
SURVEY FOR
BOBBY DEMPSEY

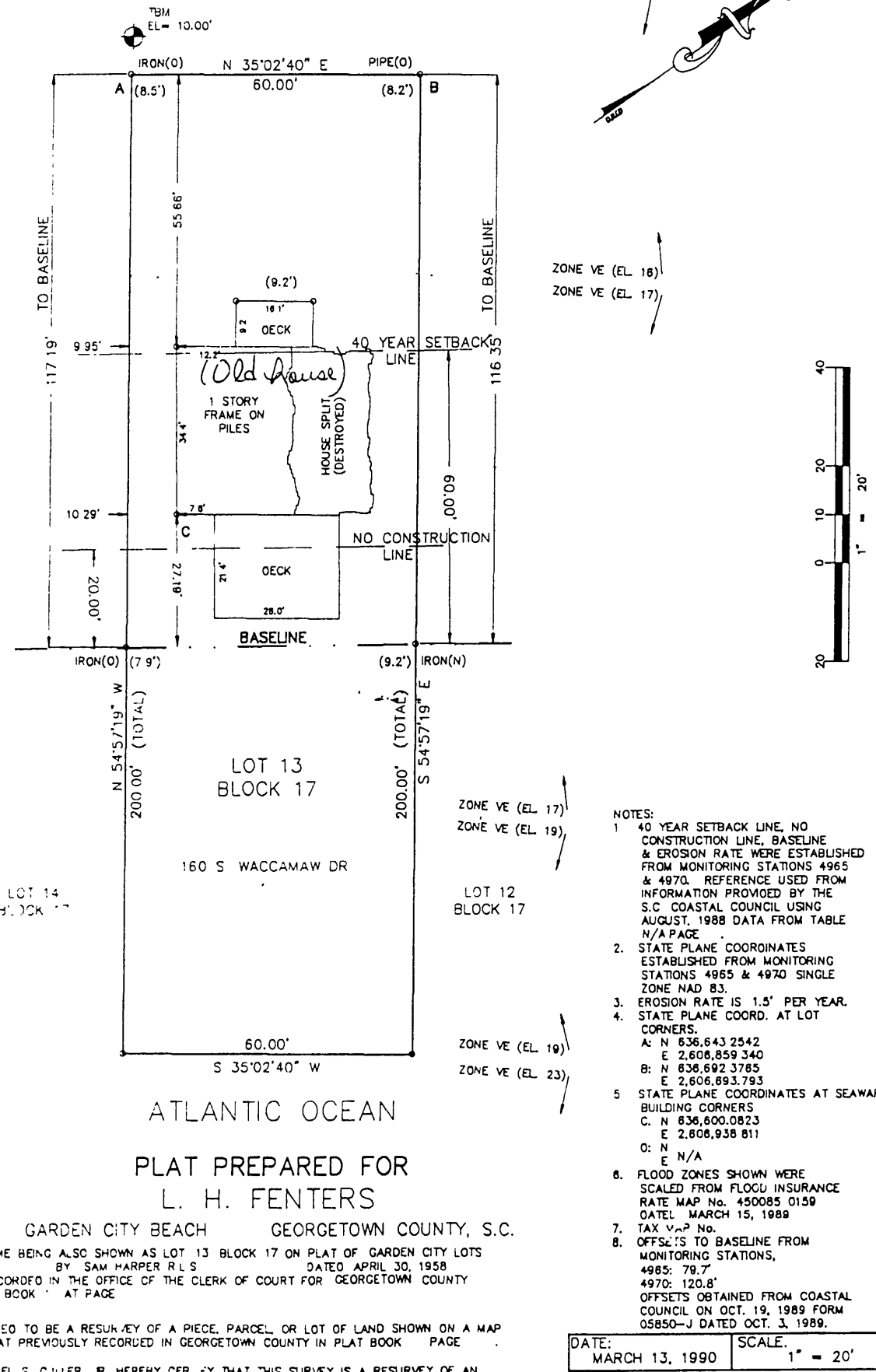
FREELAND, CLINKSCALES AND HUNTLEY
Land Surveyors • Engineers
900 S. POPLAR DRIVE
SURFSIDE BEACH, S. C. 29577
803-238-8745

PLAT BOOK	M-40
DEED BOOK	196-106
TAX MAP	41-107-102
PARTY CHIEF	WBH
DRAWN	SPK
DATE	11-14-89
DWG. NO	3040

THE PRINT MACHINE, INC. N36237

Permit# 6244

S. WACCAMAW DRIVE



ATLANTIC OCEAN

PLAT PREPARED FOR
L. H. FENTERS

GARDEN CITY BEACH GEORGETOWN COUNTY, S.C.

THE SAME BEING ALSO SHOWN AS LOT 13 BLOCK 17 ON PLAT OF GARDEN CITY LOTS BY SAM HARPER R L S DATED APRIL 30, 1958 AND RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR GEORGETOWN COUNTY IN PLAT BOOK AT PAGE

CERTIFIED TO BE A RESURVEY OF A PIECE, PARCEL OR LOT OF LAND SHOWN ON A MAP OR PLAT PREVIOUSLY RECORDED IN GEORGETOWN COUNTY IN PLAT BOOK PAGE .

I, MICHAEL S CULLER, JR HEREBY CERTIFY THAT THIS SURVEY IS A RESURVEY OF AN EXISTING LOT OF RECORD WITH NO PRIMARY CHANGE. ALSO THAT THE MEASUREMENTS SHOWN ARE CORRECT AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.

Michael S Culler Jr

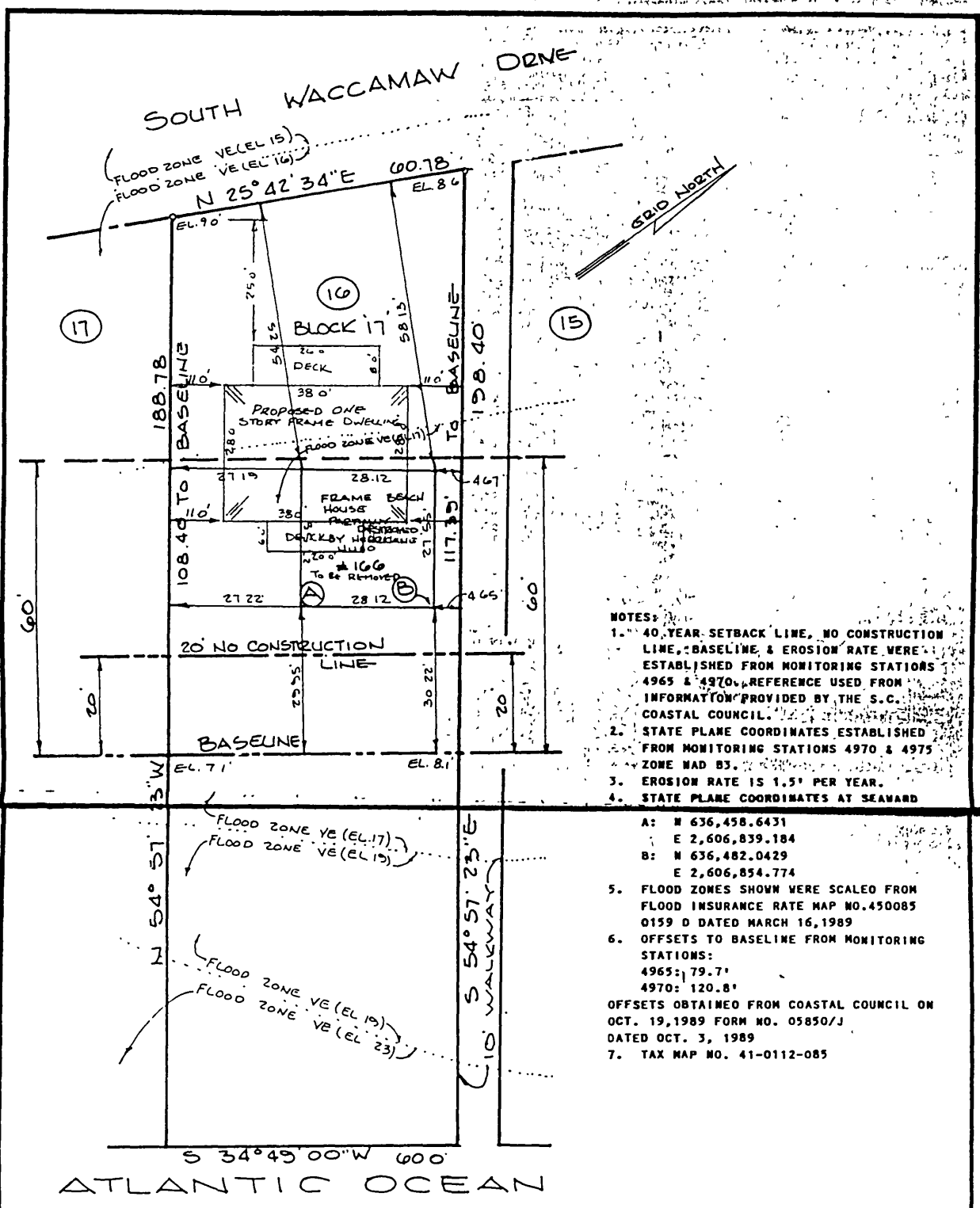
MICHAEL S CULLER, JR.
REGISTERED SURVEYOR No. 5210

NOTES:
1. 40 YEAR SETBACK LINE, NO CONSTRUCTION LINE, BASELINE & EROSION RATE WERE ESTABLISHED FROM MONITORING STATIONS 4965 & 4970. REFERENCE USED FROM INFORMATION PROVIDED BY THE S.C COASTAL COUNCIL USING AUGUST, 1988 DATA FROM TABLE N/A PAGE .
2. STATE PLANE COORDINATES ESTABLISHED FROM MONITORING STATIONS 4965 & 4970 SINGLE ZONE NAD 83.
3. EROSION RATE IS 1.5' PER YEAR.
4. STATE PLANE COORD. AT LOT CORNERS.
   A: N 636,643 2542
      E 2,608,859 340
   B: N 636,692 3765
      E 2,606,693.793
5. STATE PLANE COORDINATES AT SEAWARD BUILDING CORNERS
   C. N 636,600.0823
      E 2,606,938 811
   D: N
      E N/A
6. FLOOD ZONES SHOWN WERE SCALED FROM FLOOD INSURANCE RATE MAP No. 450085 0159 DATED MARCH 15, 1989
7. TAX MAP No.
8. OFFSETS TO BASELINE FROM MONITORING STATIONS,
   4965: 79.7'
   4970: 120.8'
   OFFSETS OBTAINED FROM COASTAL COUNCIL ON OCT. 19, 1989 FORM 05850-J DATED OCT. 3, 1989.

DATE:	SCALE.
MARCH 13, 1990	1" = 20'

CULLER LAND SURVEYING CO., INC.
(803) 238-2333
P.O. BOX 14227
SURFSIDE BEACH S.C. 29587

LC-6622
Permit #6625



NOTES:

1. 40 YEAR SETBACK LINE, NO CONSTRUCTION LINE, BASELINE & EROSION RATE WERE ESTABLISHED FROM MONITORING STATIONS 4965 & 4970. REFERENCE USED FROM INFORMATION PROVIDED BY THE S.C. COASTAL COUNCIL.
2. STATE PLANE COORDINATES ESTABLISHED FROM MONITORING STATIONS 4970 & 4975 ZONE NAD 83.
3. EROSION RATE IS 1.5' PER YEAR.
4. STATE PLANE COORDINATES AT SEAWARD
   - A: N 636,458.6431
     E 2,606,839.184
   - B: N 636,482.0429
     E 2,606,854.774
5. FLOOD ZONES SHOWN WERE SCALED FROM FLOOD INSURANCE RATE MAP NO.450085 0159 D DATED MARCH 16, 1989
6. OFFSETS TO BASELINE FROM MONITORING STATIONS:
   - 4965: 79.7'
   - 4970: 120.8'

   OFFSETS OBTAINED FROM COASTAL COUNCIL ON OCT. 19, 1989 FORM NO. 05850/J DATED OCT. 3, 1989
7. TAX MAP NO. 41-0112-085

CERTIFIED TO BE A RESURVEY OF A PIECE, PARCEL OR LOT OF LAND SHOWN ON A MAP OR PLAT PREVIOUSLY RECORDED IN GEORGETOWN COUNTY IN PLAT BOOK M, PAGE 40.

REVISED FEB 1, 1990 TO SHOW PROPOSED DWELLING.

PLAT PREPARED FOR

RICHARD ANTHONY

GEORGETOWN COUNTY- GARDEN CITY, S.C.

THE SAME BEING ALSO SHOWN AS LOT 16 BLOCK 17 ON PLAT OF GARDEN CITY LOTS BY S.M. HARPER DATED APRIL 30 1958 & RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR GEORGETOWN COUNTY IN PLAT BOOK M AT PAGE 40.

I HEREBY CERTIFY THAT THE MEASUREMENTS AS SHOWN ON THIS PLAT ARE CORRECT AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN

20 10 0 20 40

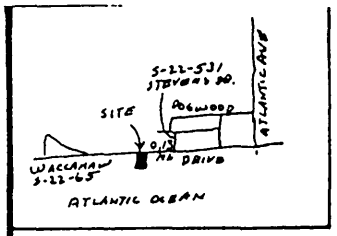
Michael S. Culler Jr.

MICHAEL S. CULLER JR
REG. LAND SURVEYOR No. 5210

DATE NOV. 2 1989 SCALE 1" = 20'

CULLER LAND SURVEYING CO., INC.
803-238-2333
PO BOX 14327
SURFSIDE BCH, S C 29587

Permit # 6312 LS 5439



WACCAMAW DRIVE 50' R/W

(N35° 35'E RECORD PLAT)

IRON NEW N34° 54' 05"E 59.90 IRON OLD

N30° 14' 16"E 678.84 — 4970 SCCC MONUMENT

TBM = 12.00 NAIL IN TEMPORARY 4"X 4" POLE

FLOOD ZONE VE 16

VE 17

SPOT ELEVATIONS

40 YEAR SETBACK

ORIGINAL STRUCTURE SCALED FROM AERIAL MAPS AT THE S.C.C.C OFFICE. 32' X 38'

PROPOSED BUILDING

GRID

NAD 83 COORDINATES

A = N636,120.47
E 2,606,644.96

B = N636,150.05
E 2,606,665.47

EROSION RATE -15(FT/YR)

DECK | SCREEN PORCH | DECK

NO CONSTRUCTION LINE

ZONE VE 17

VE 19

PORCH 27' X 10'

SOUTH CAROLINA COASTAL COUNCIL BASELINE

S55° 15' 55"E 150.00

(N54° 35'W RECORD PLAT)
N55° 15' 55"W 150.00

LOT 23 BLOCK 17

LOT 21 BLOCK 17

20' SETBACK

S34° 54' 05"W 59.90

ATLANTIC OCEAN

CERTIFIED TO BE A SURVEY OF A PIECE, PARCEL OR LOT OF LAND SHOWN ON A MAP OR PLAT PREVIOUSLY RECORDED IN GEORGETOWN COUNTY IN PLAT BOOK G , PAGE 47.

PLAT
FOR
MIRIAM V. BRICKLE
OF

LOT 22, BLOCK 17, GARDEN CITY, TOWNSHIP 7, _____ TOWNSHIP, GEORGETOWN COUNTY, SOUTH CAROLINA, RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR GEORGETOWN COUNTY IN PLAT BOOK G PAGE 47. DEED BOOK 160 PAGE 45.

TAX MAP/DISTRICT : 41-112-91

FLOOD HAZARD ZONE VE , BASE FLOOD ELEVATION 19.0 , COMMUNITY PANEL 450085 0159 D 3-16-89

SUBJECT TO EASEMENTS, RESTRICTIONS AND AN UP TO DATE TITLE SEARCH.

I HEREBY CERTIFY THAT THE RATIO OF PRECISION OF THE FIELD SURVEY TO BE AT LEAST 1:7500 AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.

AREA = 0.21 ACRES ±

REVISED FEB. 5, 1990; ADD ORIGINAL STRUCTURE
DECEMBER. 2, CHANGE PROPOSED BUILDING ELEVATIONS 1989

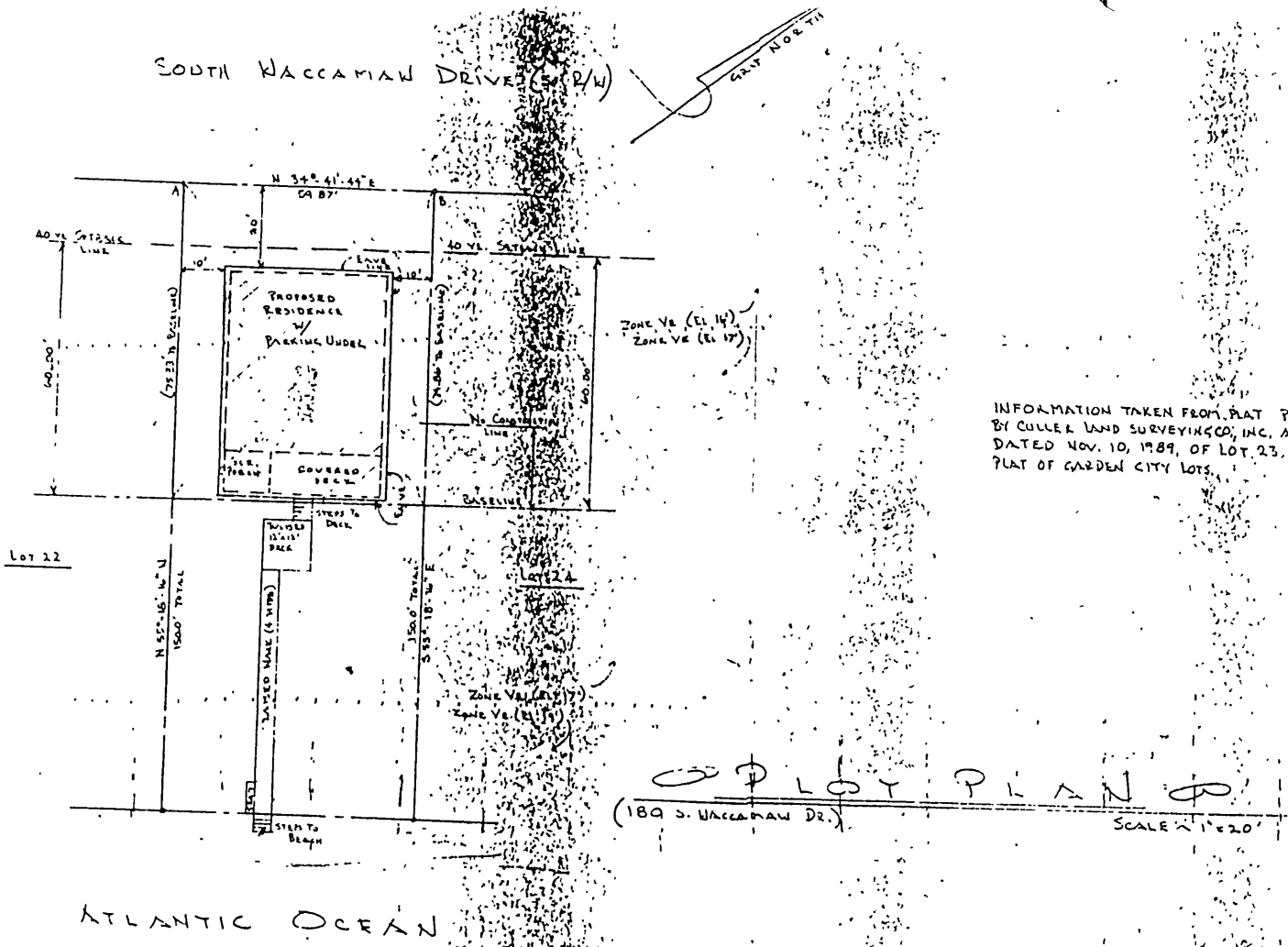
SCALE = 1"=20'

0 20 40' 60'

LARRY J. BEASLEY S.C.R.L.S 9544

P.O. BOX 15459
SURFSIDE BEACH, S. C. 29587-5459
803-650-7475

Permit #12276



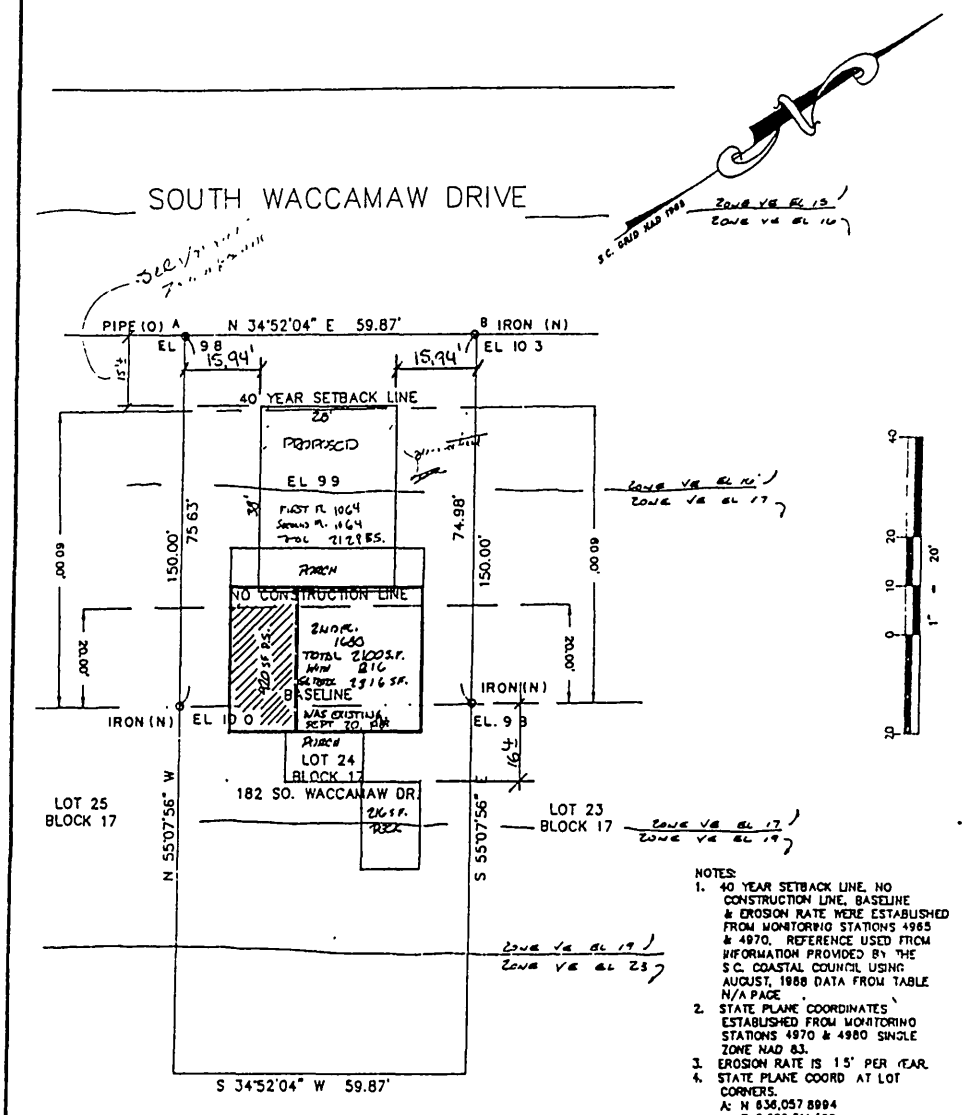
INFORMATION TAKEN FROM PLAT PREPARED BY CULLER LAND SURVEYING CO, INC. AND DATED NOV. 10, 1989, OF LOT 23, BLK. 17, PLAT OF GARDEN CITY LOTS.

SITE PLAN

(180 S. WACCAMAW DR.)

SCALE: 1" = 20'

David Durant
180 S. Waccamaw, Garden City



ATLANTIC OCEAN

NOTES:
1. 40 YEAR SETBACK LINE, NO CONSTRUCTION LINE, BASELINE & EROSION RATE WERE ESTABLISHED FROM MONITORING STATIONS 4965 & 4970. REFERENCE USED FROM INFORMATION PROVIDED BY THE S.C. COASTAL COUNCIL USING AUGUST, 1988 DATA FROM TABLE N/A PAGE
2. STATE PLANE COORDINATES ESTABLISHED FROM MONITORING STATIONS 4970 & 4980 SINGLE ZONE NAD 83.
3. EROSION RATE IS 1.5' PER YEAR.
4. STATE PLANE COORD AT LOT CORNERS.
   A: N 636,057.8994
      E 2,806,511.159
   B: N 636,107.0213
      E 2,806,545.386
5. STATE PLANE COORDINATES AT SEAWARD BUILDING CORNERS:
   C: N N/A
      E
   D: N
      E
6. FLOOD ZONES SHOWN WERE SCALED FROM FLOOD INSURANCE RATE MAP No. 450085 0159 D DATED MARCH 18, 1989
7. TAX MAP No. 41 011 20 93
8. OFFSETS TO BASELINE FROM MONITORING STATIONS.
   4965- 78.7'
   4970 120.6'

PLAT PREPARED FOR
C.P. MINCEY, JR.

GARDEN CITY BEACH GEORGETOWN CO. S.C.

THE SAME BEING ALSO SHOWN AS LOT 24 BLOCK 17 ON PLAT OF GARDEN CITY LOTS BY SAM HARPER RLS DATED APRIL 30, 1958 AND RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR GEORGETOWN COUNTY IN PLAT BOOK M AT PAGE 40 .

CERTIFIED TO BE A RESURVEY OF A PIECE, PARCEL, OR LOT OF LAND SHOWN ON A MAP OR PLAT PREVIOUSLY RECORDED IN GEORGETOWN COUNTY IN PLAT BOOK M PAGE 40 .

I, MICHAEL S. CULLER, JR. HEREBY CERTIFY THAT THIS SURVEY IS A RESURVEY OF AN EXISTING LOT OF RECORD WITH NO BOUNDARY CHANGES. ALSO THAT THE MEASUREMENTS SHOWN ARE CORRECT AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN

Michael S. Culler Jr.

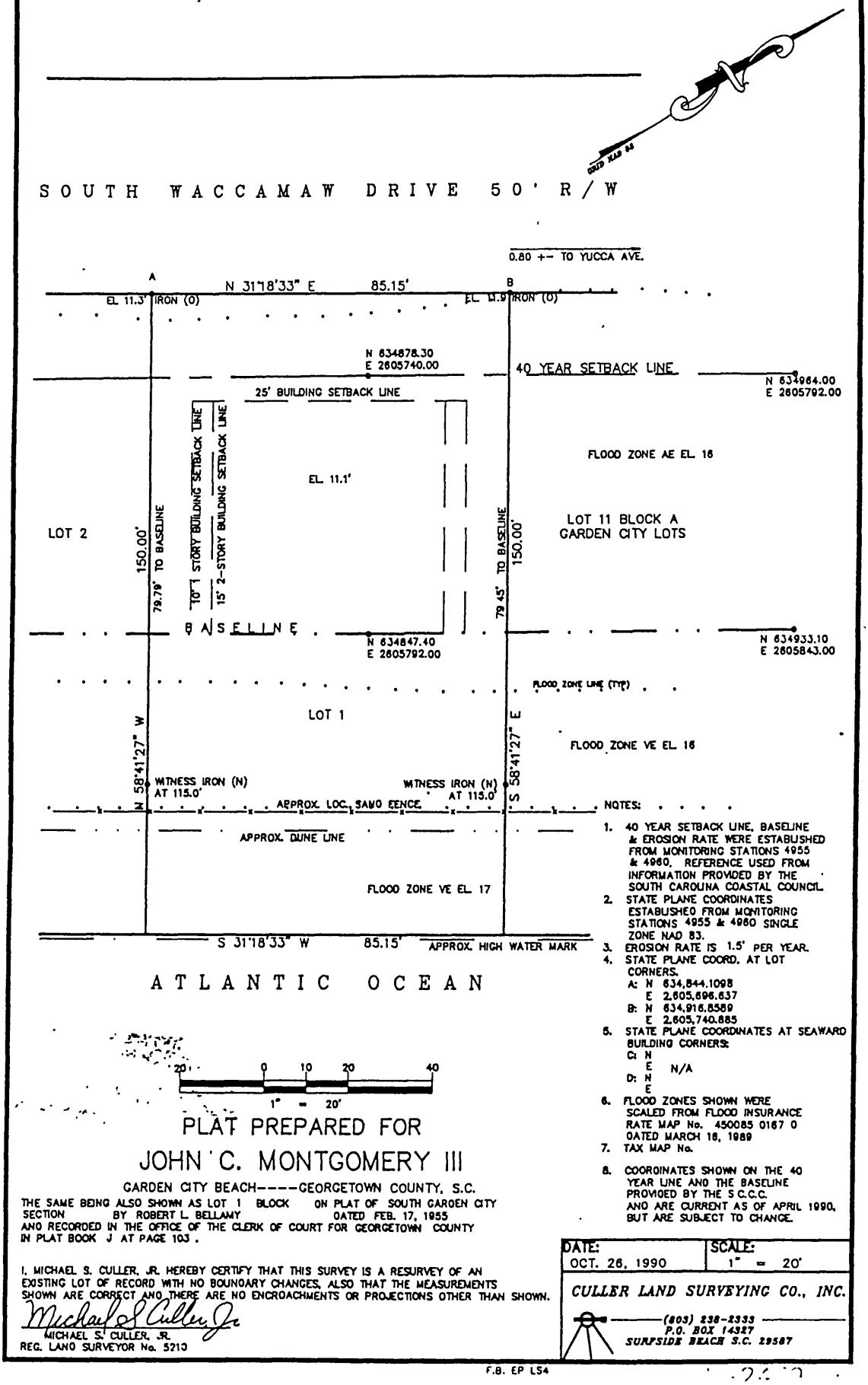
MICHAEL S. CULLER, JR
REG. LAND SURVEYOR No. 5210

DATE:	SCALE
JANUARY 19, 1990	1" = 20'

CULLER LAND SURVEYING CO., INC.
(803) 238-2333
P.O. BOX 14327
SURFSIDE BEACH S.C. 29587

FB LP LS2

Permit# 6327



NOTES:

1. 40 YEAR SETBACK LINE, BASELINE & EROSION RATE WERE ESTABLISHED FROM MONITORING STATIONS 4955 & 4960. REFERENCE USED FROM INFORMATION PROVIDED BY THE SOUTH CAROLINA COASTAL COUNCIL.
2. STATE PLANE COORDINATES ESTABLISHED FROM MONITORING STATIONS 4955 & 4960 SINGLE ZONE NAD 83.
3. EROSION RATE IS 1.5' PER YEAR.
4. STATE PLANE COORD. AT LOT CORNERS.
   A: N 634,844.1098
      E 2,605,696.637
   B: N 634,916.8589
      E 2,605,740.885
5. STATE PLANE COORDINATES AT SEAWARD BUILDING CORNERS:
   C: N
      E N/A
   D: N
      E
6. FLOOD ZONES SHOWN WERE SCALED FROM FLOOD INSURANCE RATE MAP No. 450085 0167 0 DATED MARCH 16, 1989
7. TAX MAP No.
8. COORDINATES SHOWN ON THE 40 YEAR LINE AND THE BASELINE PROVIDED BY THE S.C.C.C. AND ARE CURRENT AS OF APRIL 1990, BUT ARE SUBJECT TO CHANGE.

PLAT PREPARED FOR

JOHN C. MONTGOMERY III

GARDEN CITY BEACH----GEORGETOWN COUNTY, S.C.

THE SAME BEING ALSO SHOWN AS LOT 1 BLOCK ON PLAT OF SOUTH GARDEN CITY SECTION BY ROBERT L. BELLAMY DATED FEB. 17, 1955 AND RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR GEORGETOWN COUNTY IN PLAT BOOK J AT PAGE 103.

I, MICHAEL S. CULLER, JR. HEREBY CERTIFY THAT THIS SURVEY IS A RESURVEY OF AN EXISTING LOT OF RECORD WITH NO BOUNDARY CHANGES, ALSO THAT THE MEASUREMENTS SHOWN ARE CORRECT AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.

Michael S. Culler Jr.

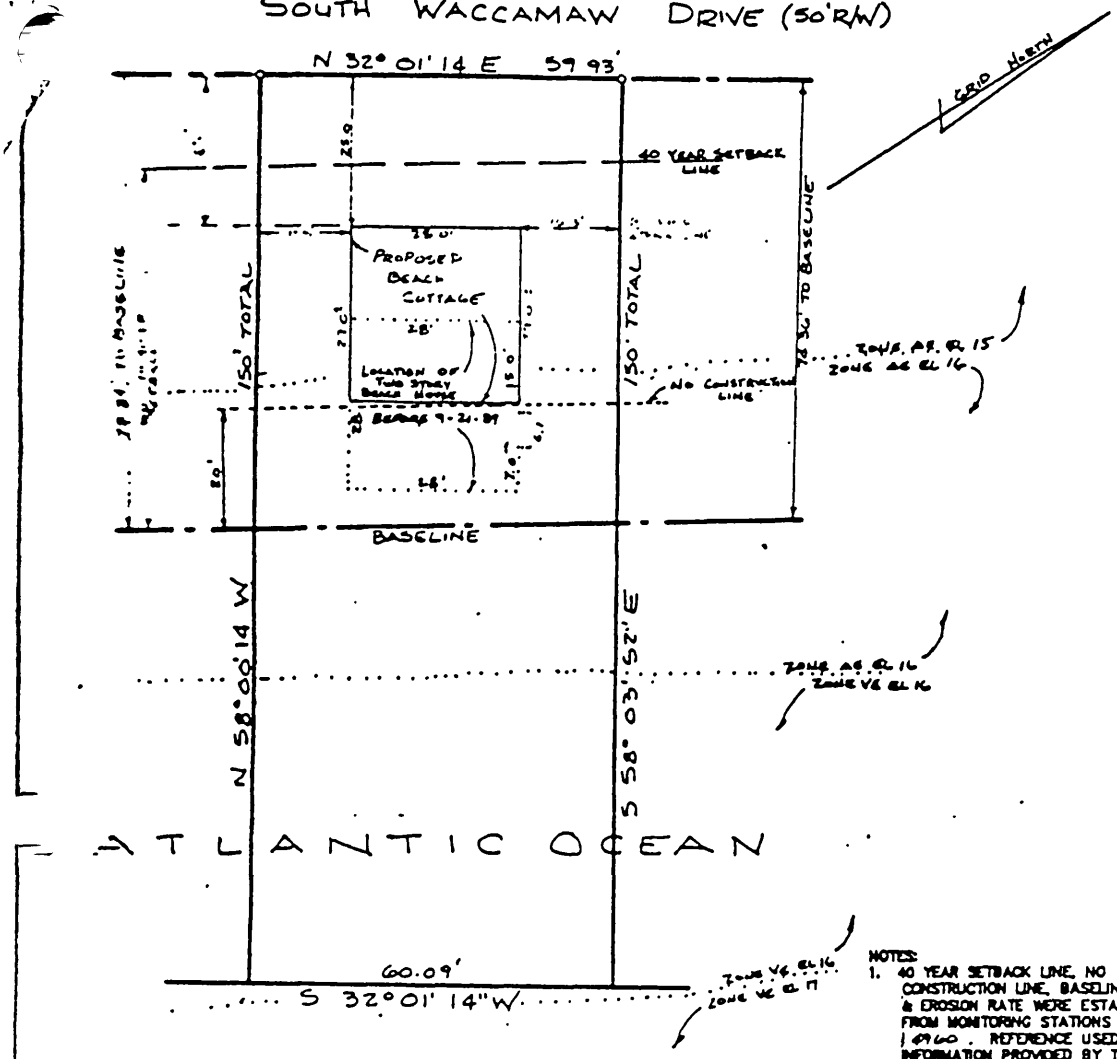
MICHAEL S. CULLER, JR.
REG. LAND SURVEYOR No. 5213

DATE:	SCALE:
OCT. 26, 1990	1" = 20'

CULLER LAND SURVEYING CO., INC.
(803) 238-2333
P.O. BOX 14927
SURFSIDE BEACH S.C. 29587

F.B. EP LS4

Permit # 7320



NOTES:
1. 40 YEAR SETBACK LINE, NO CONSTRUCTION LINE, BASELINE & EROSION RATE WERE ESTABLISHED FROM MONITORING STATIONS 4956 & 4960. REFERENCE USED FROM INFORMATION PROVIDED BY THE S.C. COASTAL COUNCIL USING AUGUST, 1988 DATA FROM TABLE N/A PAGE
2. STATE PLANE COORDINATES ESTABLISHED FROM MONITORING STATIONS 4950 & 4960 SINGLE ZONE NAD 83.
3. EROSION RATE IS 1.5' PER YEAR.
4. STATE PLANE COORD. AT LOT CORNERS:
   A: N N/A
      E
   B: N
      E
5. STATE PLANE COORDINATES AT SEWARD BUILDING CORNERS:
   C: N N/A
      E
   D: N
      E
6. FLOOD ZONES SHOWN WERE SCALED FROM FLOOD INSURANCE RATE MAP No. 450086 0161 D DATED MARCH 16, 1989
7. TAX MAP No. 41 011L 54
8. OFFSETS TO BASELINE FROM MONITORING STATIONS:
   4955: 88.1'
   4960: 89.1'

OFFSETS OBTAINED FROM COASTAL COUNCIL ON OCT. 19, 1989, FROM 05850/J DATED OCT 3, 1989

RECEIVED
NOV 09 1989
South Carolina Coastal Council
Myrtle Beach Office

PLAT PREPARED FOR
V. WENDELL JOHNSON

GARDEN CITY GEORGETOWN COUNTY, S.C.

THE SAME BEING ALSO SHOWN AS LOT B BLOCK A ON PLAT OF GARDEN CITY [illegible] BY S.N. HARPER R.L.S. DATED APRIL 20, 1958 AND RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR COUNTY IN PLAT BOOK 4 AT PAGE 40.

[illegible] TO BE A RESURVEY OF A PIECE, PARCEL OR LAND SHOWN ON A MAP OR PLAT [illegible] RECORDED IN GEORGETOWN COUNTY. [illegible] PAGE [illegible]

I, MICHAEL S. CULLER, JR. HEREBY CERTIFY THAT THIS SURVEY IS A RESURVEY OF AN EXISTING LOT OF RECORD WITH NO BOUNDARY CHANGES, ALSO THAT THE MEASUREMENTS SHOWN ARE CORRECT AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.

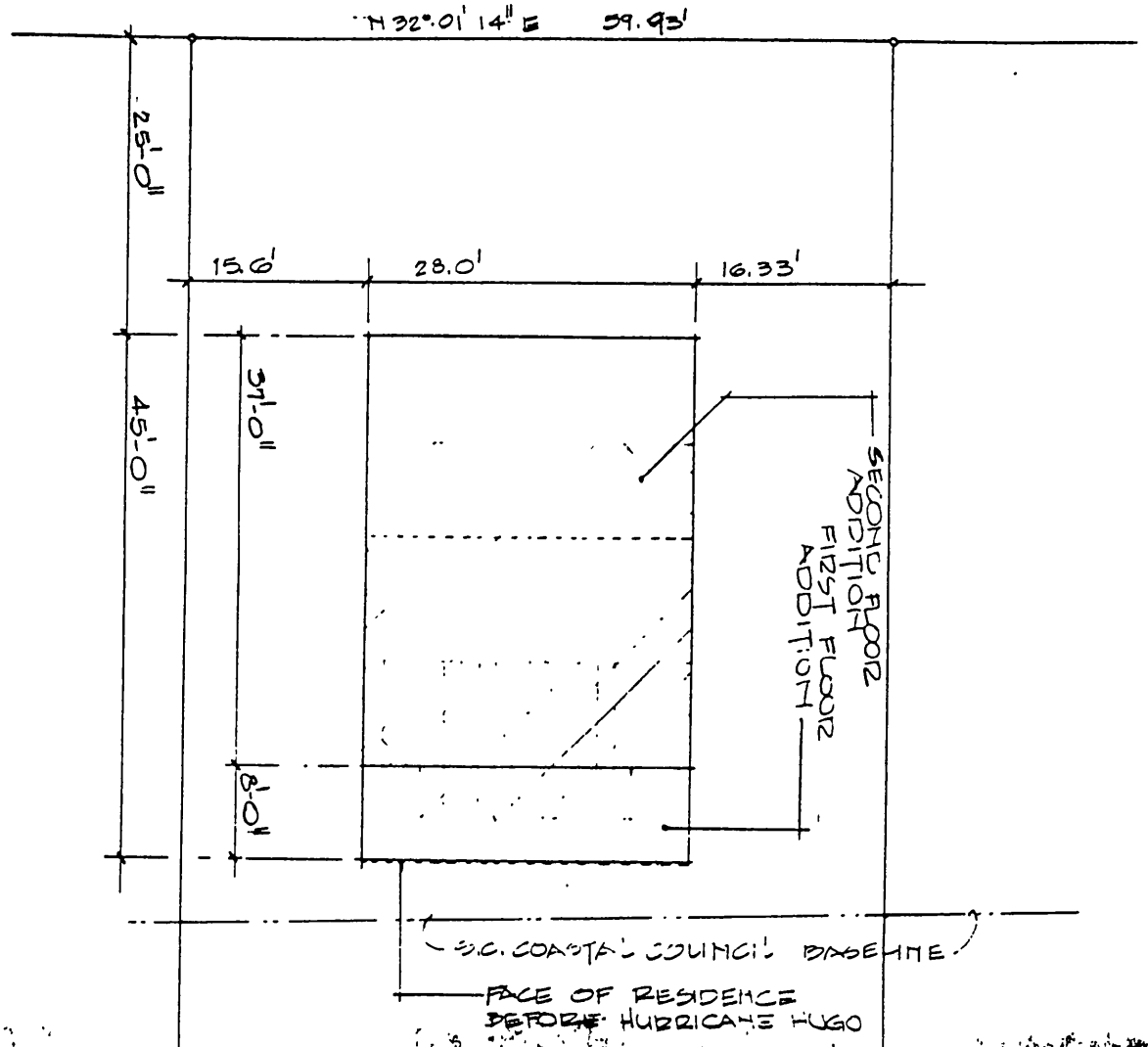
Michael S. Culler Jr.
MICHAEL S. CULLER, JR.
REG. LAND SURVEYOR No. 5219

DATE:	SCALE:
NOV 9, 1989	1' = 20'

CULLER LAND SURVEYING CO., INC.
(803) 238-2338
P.O. BOX 14327
SURFSIDE BEACH S.C. 29587

Permit #7568

SOUTH MACCAMAW DRIVE (50 R/W)



WENDELL JOHNSON
PLOT PLAN
SCALE - 1" = 10'-0"

COUNTY OF GEORGETOWN

BUILDING PERMIT APPLICATION & FLOOD PLAIN DEVELOPMENT PERMIT

IMPORTANT-Complete items I, II, IV & V

I. LOCATION OF BUILDING

A PLOT PLAN IS REQUIRED FOR ALL BUILDINGS

Number and Street: 234 S. Waccamaw Dr
Subdivision: South point Lots
Lot 4 Block C
Tax Map No. 41-116-61
Garden City, S.C.

II. TYPE AND COST OF BUILDING

A Proposed use of building: 1/4 Residence

Describe Work.

Excavation _____ Fill _____

Value of Construction or Demolition: $110,000

III. FLOOD PLAIN & ZONING

Location in Flood Plain
A 1 ✓ Floodway limits
2. _____ Outside flooding limit AE-El 16

B _____ Inside flood plan—no regulatory floodway established
Flood proofing information
Required flood proofed elevation 16 MSL (NGVD)
Actual (as built) flood proofed elevation _____ MSL (NGVD)

ZONING
Zone. AE HG'R.R

Yard Requirement
Front 25 (Ft.)
Side 15 (Ft.)
Rear ~~25~~ 20 (Ft.)
Height 35 (Ft.)

SUBCONTRACTORS - LIST
Electrical
Plumbing
HVAC
Other

FOR ASSESSOR'S OFFICE

#B	ACTION	VALUE
	NEW	
	ADD	
	RENOVATE	
	REMOVE	

BY: DATE %

IV. SELECTED CHARACTERISTICS OF BUILDING:

A. TYPE OF IMPROVEMENT
(1) New Building
2 Addition
3 Alteration
4 Repair, Replacement
5 Wrecking
6 Moving (relocation)
7 Foundation only

B TYPE OF MECHANICAL
Will there be central Air Conditioning
(8) Yes 9 No
Will there be an elevator
10 Yes (1) No

C. PRINCIPAL TYPE OF FRAME
12 Masonry
(13) Wood Frame
14 Structural Steel
15 Reinforced Concrete
16 Specify Others

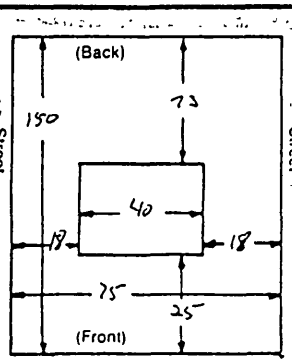
D TYPE OF SEWAGE DISPOSALS
(17) Public
18 Individual S T No

E TYPE OF WATER SUPPLY
(19) Public
20 Individual
21 No or area

F. FIRE STATION

G TYPE OF HEATING SYSTEM
22 Gas
23 Oil
(24) Electricity
25 Coal
26 Other

H DIMENSIONS
27 No of Stories 2
28 Floor Area 1992
29 Land Area
30 No of Bedrooms 4
31 No of Baths 2



PLOT PLAN (MEASURED FROM DRIP LINE)

*This is the only # plot plan submitted

V. IDENTIFICATION

1 Owner Mrs Barbara Rogers Address 1303 6th Ave, Conway S.C. Tel No 248-7390
2 Applicant _____ Address _____ Tel No _____
3 Contractor John E Thomas Const Co Address 4205 C Oleander Dr Mostel No 449-6454
4 Architect _____ Address _____ Tel No _____

Permit Fee $ 439.88 Date permit is issued 11/15/90 Permit number 7369

NOTICE

This application shall become the BUILDING PERMIT when approved by the Building Inspector. The permit issued shall be construed to be a license to proceed with the work and shall not be construed as authority to violate, alter or setaside any of the provisions of the Building Code or Zoning Ordinance, nor shall such issuance of the Permit prevent the Building Official from hereafter requiring a correction of error in plans or in construction of or violations of the Building Code or Zoning Ordinance. This Permit shall become invalid unless the work authorized is commenced within six (6) months after its issuance, or work is suspended or abandoned for a period of six (6) months. IT IS THE RESPONSIBILITY OF THE APPLICANT TO SCHEDULE ALL REQUIRED INSPECTIONS.

I hereby certify that I have read and examined this application and know the same to be true and correct. All provisions of Laws and Ordinance governing this type of work will be complied with.

G 41541
Contractor License No.

John E Thomas Nov 8, 1990
Signature of Contractor or Agent Date

APPROVED
Building Official Date

Signature of Owner Date

Permit # 7369

ELEVATION CERTIFICATE

Back for name of surveyor - no plot plan found

OMB No 3067 0077
Expires May 31 1993

FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM

ATTENTION: Use of this certificate does not provide a waiver of the flood insurance purchase requirement This form is used only to provide elevation information necessary to ensure compliance with applicable community floodplain management ordinances, to determine the proper insurance premium rate, and/or to support a request for a Letter of Map Amendment or Revision (LOMA or LOMR).

Instructions for completing this form can be found on the following pages.

SECTION A PROPERTY INFORMATION

	FOR INSURANCE COMPANY USE
BUILDING OWNER'S NAME: JOHN ROBISON	POLICY NUMBER
STREET ADDRESS (Including Apt., Unit, Suite and/or Bldg. Number) OR P.O. ROUTE AND BOX NUMBER: 240 Wacc. Dr., Garden City, SC	COMPANY NAIC NUMBER
OTHER DESCRIPTION (Lot and Block Numbers, etc.): Lot 7 Block C South Point Lots	
CITY: Garden City — STATE: SC — ZIP CODE: 29576	

SECTION B FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

Provide the following from the proper FIRM (See Instructions)

1 COMMUNITY NUMBER	2 PANEL NUMBER	3 SUFFIX	4 DATE OF FIRM INDEX	5 FIRM ZONE	6 BASE FLOOD ELEVATION (in AO Zones use depth)
450085	0167	D	3/16/89	AE	16

7 Indicate the elevation datum system used on the FIRM for Base Flood Elevations (BFE): [X] NGVD '29 [ ] Other (describe on back)

8. For Zones A or V, where no BFE is provided on the FIRM, and the community has established a BFE for this building site, indicate the community's BFE: _____ feet NGVD (or other FIRM datum–see Section B, Item 7)

SECTION C BUILDING ELEVATION INFORMATION

1 Using the Elevation Certificate Instructions, indicate the diagram number from the diagrams found on Pages 5 and 6 that best describes the subject building's reference level 7.

(a) FIRM Zones A1-A30, AE, AH, and A (with BFE). The top of the reference level floor from the selected diagram is at an elevation of 20 5 feet NGVD (or other FIRM datum–see Section B, Item 7)

(b) FIRM Zones V1-V30 VE and V (with BFE) The bottom of the lowest horizontal structural member of the reference level from the selected diagram, is at an elevation of _____ feet NGVD (or other FIRM datum–see Section B, Item 7)

(c) FIRM Zone A (without BFE) The floor used as the reference level from the selected diagram is _____ feet above or below (check one) the highest grade adjacent to the building

(d) FIRM Zone AO The floor used as the reference level from the selected diagram is _____ feet above or below (check one) the highest grade adjacent to the building If no flood depth number is available is the building's lowest floor (reference level) elevated in accordance with the community's floodplain management ordinance? Yes No Unknown

3 To indicate the elevation datum system used in determining the above reference level elevations X NGVD 29 Other (describe under Comments on Page 2) (*NOTE If the elevation datum used in measuring the elevations is different than that used on the FIRM [see Section B, Item 7], then convert the elevations to the datum system used on the FIRM and show the conversion equation under Comments on Page 2*)

4 Elevation reference mark used appears on FIRM: [ ] Yes [ ] No (See Instructions on Page 4)

5 The reference level elevation is based on: [X] actual construction construction drawings

(*NOTE Use of construction drawings is only valid if the building does not yet have the reference level floor in place in which case this certificate will only be valid for the building during the course of construction A post-construction Elevation Certificate will be required once construction is complete.*)

6 The elevation of the lowest grade immediately adjacent to the building is: 9 6 feet NGVD (or other FIRM datum-see Section B, Item 7).

SECTION D COMMUNITY INFORMATION

A community official responsible for verifying building elevations specifies that the reference level indicated in Section C, Item 1 is the "lowest floor" as defined in the community's floodplain management ordinance, the elevation of the building's "lowest floor" as defined by the ordinance is: _____ feet NGVD (or other FIRM datum–see Section B, Item 7)

Date of the start of construction or substantial improvement _____

Permit # 6788

This certification is to be signed by a land surveyor, engineer, or architect who is authorized by state or local law to certify elevation information when the elevation information for Zones A1–A30, AE, AH, A (with BFE), V1–V30, VE, and V (with BFE) is required. Community officials who are authorized by local law or ordinance to provide floodplain management information, may also sign certification. In the case of Zones AO and A (without a FEMA or community issued BFE), a building official, a property owner or owner's representative may also sign the certification.

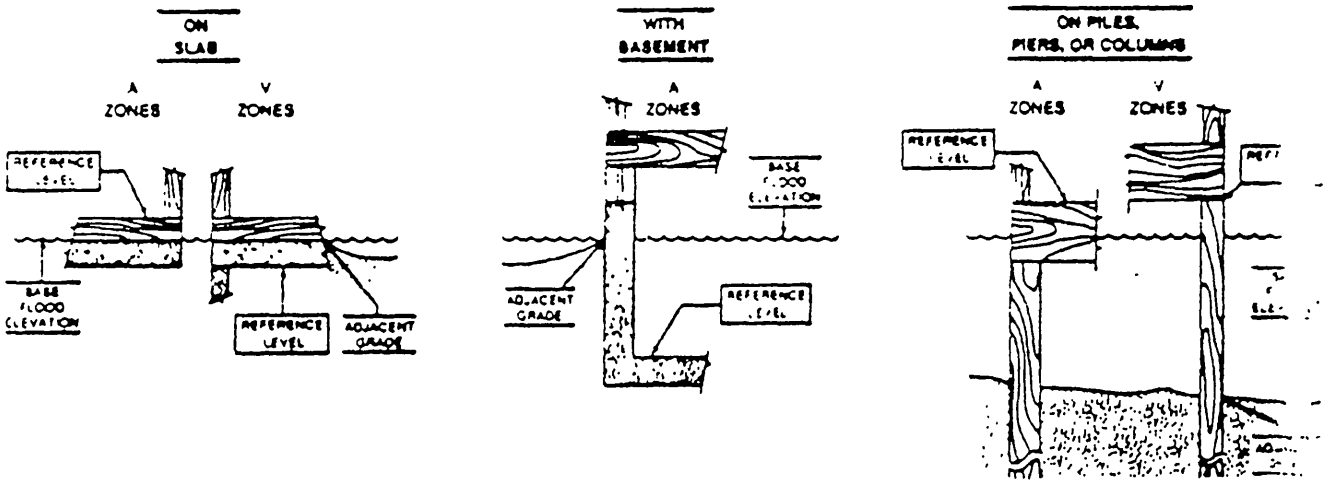
Reference level diagrams 6, 7 and 8 - Distinguishing Features–If the certifier is unable to certify to breakaway/non-breakaway enclosure size, location of servicing equipment, area use, wall openings, or unfinished area Feature(s), then list the Feature(s) included in the certification under Comments below. The diagram number, Section C, Item 1, must still be entered.

I certify that the information in Sections B and C on this certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

MICHAEL S. CULLER, JR.	#5210
CERTIFIER'S NAME	LICENSE NUMBER (or Affix Seal)
R.L.S.	CULLER LAND SURVEYING CO., INC.
TITLE	COMPANY NAME
P.O.Box 14327	SURFSIDE BEACH SC 29587
ADDRESS	CITY STATE
[signature]	12/20/90 238-2333
SIGNATURE	DATE PHONE

Copies should be made of this Certificate for: 1) community official, 2) insurance agent/company, and 3) building ow

COMMENTS:



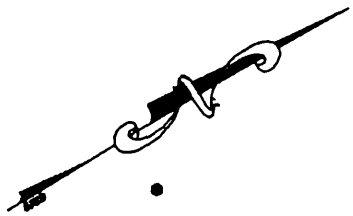
The diagrams above illustrate the points at which the elevations should be measured in A Zones and V Zones.

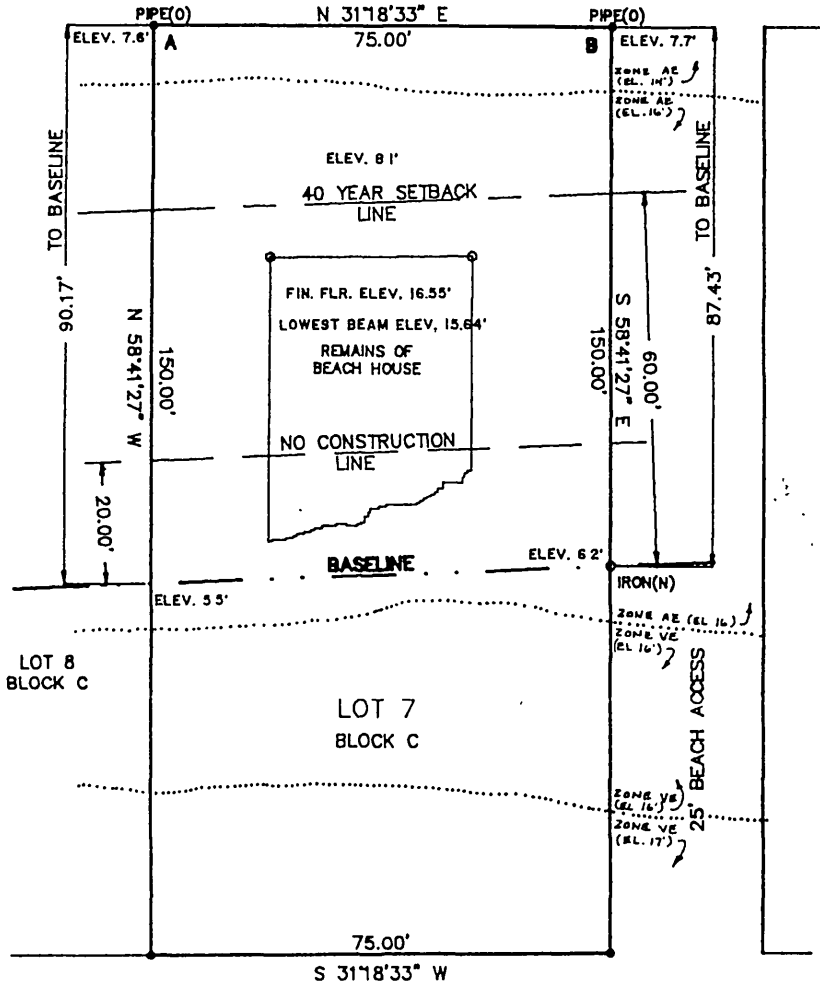
Elevations for all A Zones should be measured at the top of the reference level floor.

Elevations for all V Zones should be measured at the bottom of the lowest horizontal structural member.

TBM NAIL IN P.P.
ELEV. 8.825'

SO. WACCAMAW DRIVE





ATLANTIC OCEAN

GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.

REVISED DEC. 21, 1989
TO SHOW ELEVATIONS.

NOTES:
1. 40 YEAR SETBACK LINE, NO CONSTRUCTION LINE, BASELINE & EROSION RATE WERE ESTABLISHED FROM MONITORING STATIONS 4950 & 4955 . REFERENCE USED FROM INFORMATION PROVIDED BY THE S.C. COASTAL COUNCIL USING AUGUST, 1988 DATA FROM TABLE N/A PAGE .
2. STATE PLANE COORDINATES ESTABLISHED FROM MONITORING STATIONS 4970 & 4975 SINGLE ZONE NAD 83.
3. EROSION RATE IS 1.5' PER YEAR.
4. STATE PLANE COORD. AT LOT CORNERS.
   A: N 634,418.9215
      E 2,605,436.810
   B: N 634,480.9997
      E 2,605,475.784
5. STATE PLANE COORDINATES AT SEWARD BUILDING CORNERS:
   C: N
      E N/A
   D: N
      E N/A
6. FLOOD ZONES SHOWN WERE SCALED FROM FLOOD INSURANCE RATE MAP No. 4500850167 D DATED MASRCH 16, 1989
7. TAX MAP No.
8. OFFSETS TO BASELINE FROM MONITORING STATIONS;
   4950: 114.4'
   4955: 83.1'
   OFFSETS OBTAINED FROM COASTAL COUNCIL ON OCT. 19, 1989 FORM 05850—J DATED OCT. 3, 1989

PLAT PREPARED FOR
JOHN ROBISON

GARDEN CITY GEORGETOWN COUNTY, S.C.

THE SAME BEING ALSO SHOWN AS LOT 7 BLOCK C ON PLAT OF SOUTH POINT LOTS BY ROBERT L. BELLAMY RLS DATED FEB. 17, 1955 AND RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR GEORGETOWN COUNTY IN PLAT BOOK AT PAGE .

I, MICHAEL S. CULLER, JR. HEREBY CERTIFY THAT THIS SURVEY IS A RESURVEY OF AN EXISTING LOT OF RECORD WITH NO BOUNDARY CHANGES, ALSO THAT THE MEASUREMENTS SHOWN ARE CORRECT AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.

Michael S. Culler Jr.

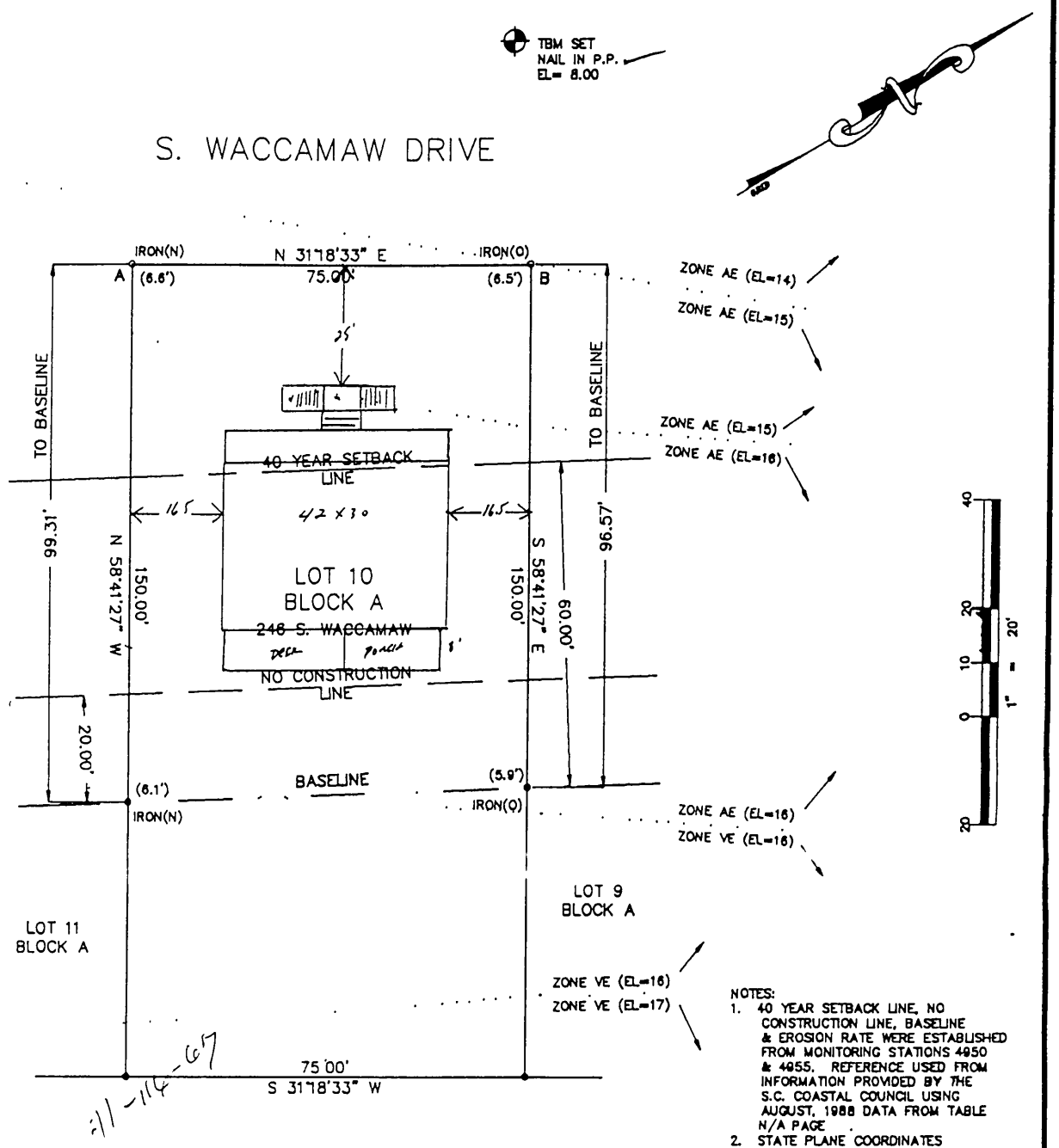
MICHAEL S. CULLER, JR.
REG. LAND SURVEYOR No. 5210

DATE:	SCALE:
NOV. 29, 1989	1" = 20'

CULLER LAND SURVEYING CO., INC.
(803) 238-2383
P.O. BOX 14257
SURFSIDE BEACH S.C. 29587

Permit # 6788

L.2-55



NOTES:
1. 40 YEAR SETBACK LINE, NO CONSTRUCTION LINE, BASELINE & EROSION RATE WERE ESTABLISHED FROM MONITORING STATIONS 4950 & 4955. REFERENCE USED FROM INFORMATION PROVIDED BY THE S.C. COASTAL COUNCIL USING AUGUST, 1988 DATA FROM TABLE N/A PAGE .
2. STATE PLANE COORDINATES ESTABLISHED FROM MONITORING STATIONS 4950 & 4955 SINGLE ZONE NAD 83.
3. EROSION RATE IS 1.5' PER YEAR.
4. STATE PLANE COORD. AT LOT CORNERS.
   A: N 634,203.3274
      E 2,605,308.897
   B: N 634,267.4056
      E 2,605,345.871
5. STATE PLANE COORDINATES AT SEAWARD BUILDING CORNERS:
   C: N
      E N/A
   D: N
      E N/A
6. FLOOD ZONES SHOWN WERE SCALED FROM FLOOD INSURANCE RATE MAP No. 450085 0167 D DATED MARCH 16, 1989
7. TAX MAP No.
8. OFFSETS TO BASELINE FROM MONITORING STATIONS;
   4950: 114.4'
   4955: 83.1'
   OFFSETS OBTAINED FROM COASTAL COUNCIL ON OCT. 19, 1989 FORM 05850-J DATED OCT. 3, 1989.

PLAT PREPARED FOR
GRADY KIRVIN

GARDEN CITY GEORGETOWN COUNTY, S.C.

THE SAME BEING ALSO SHOWN AS LOT 10 BLOCK A ON PLAT OF SOUTH GARDEN CITY SECTION BY ROBERT L. BELLAMY C.E. DATED FEB. 17, 1959 AND RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR GEORGETOWN COUNTY IN PLAT BOOK J AT PAGE 103 .

CERTIFIED TO BE A RESURVEY OF A PIECE, PARCEL, OR LOT OF LAND SHOWN ON A MAP OR PLAT PREVIOUSLY RECORDED IN GEORGETOWN COUNTY IN PLAT BOOK J PAGE 103 .

I, MICHAEL S. CULLER, JR. HEREBY CERTIFY THAT THIS SURVEY IS A RESURVEY OF AN EXISTING LOT OF RECORD WITH NO BOUNDARY CHANGES, ALSO THAT THE MEASUREMENTS SHOWN ARE CORRECT AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.

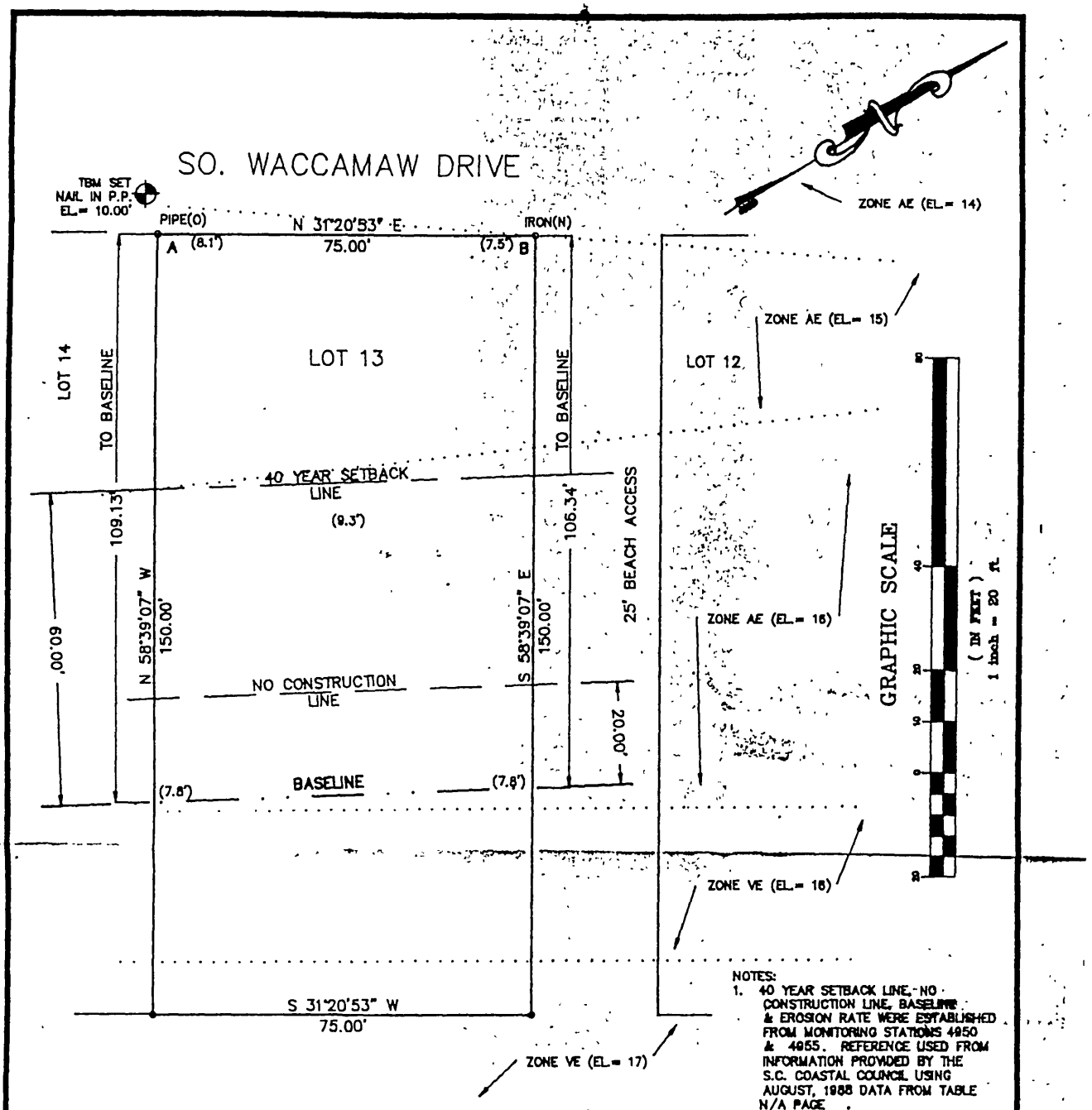
Michael S. Culler Jr

MICHAEL S. CULLER, JR.
REG. LAND SURVEYOR No. 5210

DATE:	SCALE:
FEB. 20, 1990	1" = 20'

CULLER LAND SURVEYING CO., INC.
(803) 238-2333
P.O. BOX 14327
SURFSIDE BEACH S.C. 29587

Permit #6539



NOTES:

1. 40 YEAR SETBACK LINE, NO CONSTRUCTION LINE, BASELINE & EROSION RATE WERE ESTABLISHED FROM MONITORING STATIONS 4950 & 4955. REFERENCE USED FROM INFORMATION PROVIDED BY THE S.C. COASTAL COUNCIL USING AUGUST, 1988 DATA FROM TABLE N/A PAGE .
2. STATE PLANE COORDINATES ESTABLISHED FROM MONITORING STATIONS 4970 & 4975 SINGLE ZONE NAD 83.
3. EROSION RATE IS 1.5' PER YEAR.
4. STATE PLANE COORD. AT LOT CORNERS.
   A: N 833,988.8038
      E 2,605,164.396
   B: N 834,032.8533
      E 2,606,203.414
5. STATE PLANE COORDINATES AT SEWARD BUILDING CORNERS:
   C: N / E N/A
   D: N / E N/A
6. FLOOD ZONES SHOWN WERE SCALED FROM FLOOD INSURANCE RATE MAP No. 450085 0167 D DATED MARCH 16, 1989
7. TAX MAP No.
8. OFFSETS TO BASELINE FROM MONITORING STATIONS:
   4950: 114.4'
   4955: 83.1'
   OFFSETS OBTAINED FROM COASTAL COUNCIL ON OCT. 19, 1989 FORM 05850-J DATED OCT 3, 1989

PLAT PREPARED FOR
ROBERT METZLER

GARDEN CITY GEORGETOWN COUNTY, S.C.

THE SAME BEING ALSO SHOWN AS LOT 13 BLOCK ON PLAT OF SOUTH GARDEN CITY SECTION BY ROBERT L. BELLAMY RLS DATED FEB. 17, 1955 AND RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR GEORGETOWN COUNTY IN PLAT BOOK AT PAGE .

I, MICHAEL S. CULLER, JR. HEREBY CERTIFY THAT THIS SURVEY IS A RESURVEY OF AN EXISTING LOT OF RECORD WITH NO BOUNDARY CHANGES, ALSO THAT THE MEASUREMENTS SHOWN ARE CORRECT AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.

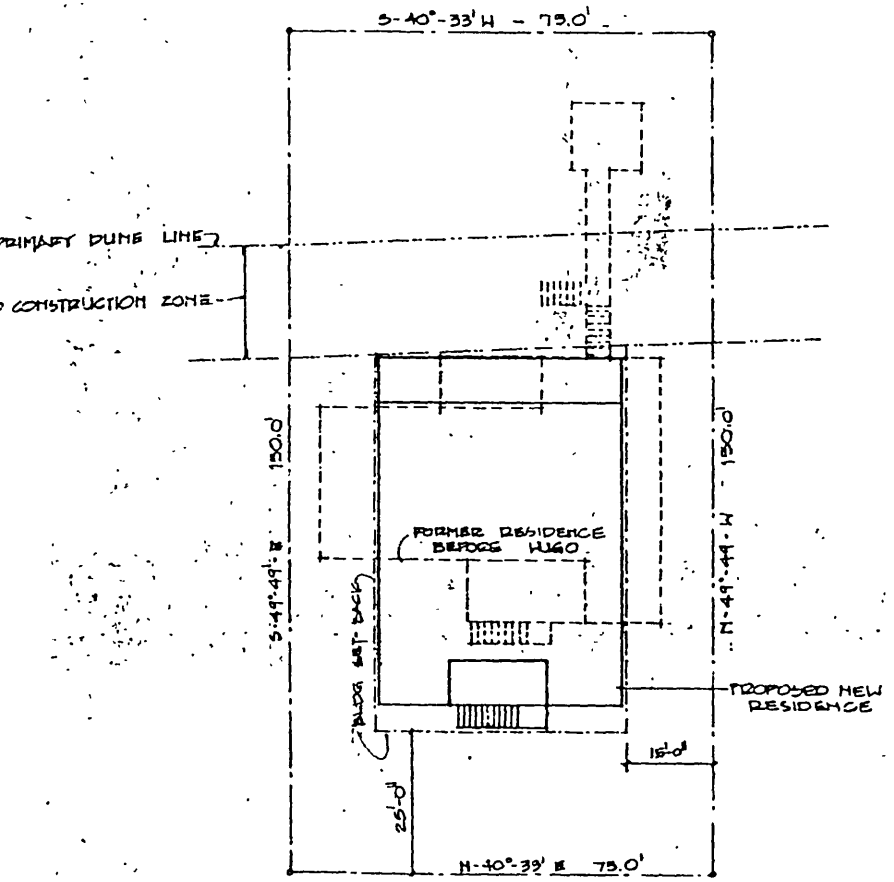
Michael S. Culler Jr.

MICHAEL S. CULLER, JR.
REG. LAND SURVEYOR No. 5210

DATE:	SCALE:
APRIL 23, 1990	1" = 20'

CULLER LAND SURVEYING CO., INC.
(803) 238-8388
P.O. BOX 14827
SURFSIDE BEACH S.C. 29587

Permit # 6891 LS-5481-B



SOUTH WACCAMAW DRIVE

PLOT PLAN

1" = 20'-0"

Permit #7454
Dan Brown

BUILDING PLANS FOR

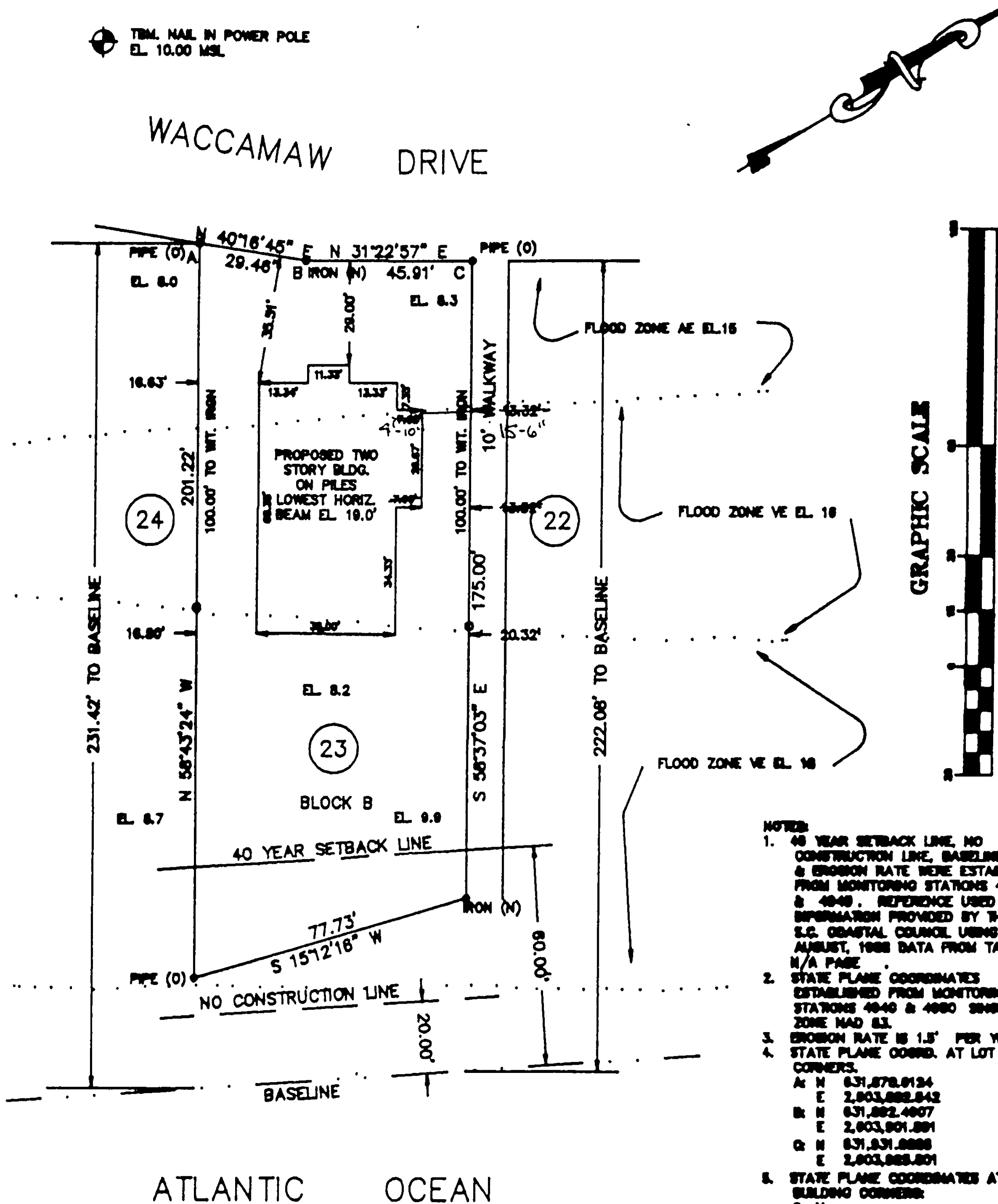
THE BROWN RESIDENCE

S. WACCAMAW DR.

GARDEN CITY, GEORGETOWN CO. S.C.

DRAWN	R.R.B.
CHECKED	D.N.
DATE	NOV. 1990
SCALE	1/4" SHOWN
JOB NO.	90 BROWN
SHEET	A 2

Permit #7454



NOTES:

1. 40 YEAR SETBACK LINE, NO CONSTRUCTION LINE, BASELINE & EROSION RATE WERE ESTABLISHED FROM MONITORING STATIONS 4035 & 4040. REFERENCE USED FROM INFORMATION PROVIDED BY THE S.C. COASTAL COUNCIL USING AUGUST, 1988 DATA FROM TABLE N/A PAGE .
2. STATE PLANE COORDINATES ESTABLISHED FROM MONITORING STATIONS 4040 & 4050 SINGLE ZONE NAD 83.
3. EROSION RATE IS 1.5' PER YEAR.
4. STATE PLANE COORD. AT LOT CORNERS.
   A: N 631,878.0134
      E 2,003,882.842
   B: N 631,882.4007
      E 2,003,901.881
   C: N 631,831.0000
      E 2,003,985.801
5. STATE PLANE COORDINATES AT SEWARD BUILDING CORNERS:
   C: N N/A
      E
   D: N N/A
      E
6. FLOOD ZONES SHOWN WERE SCALED FROM FLOOD INSURANCE RATE MAP No. 450085 0167 D DATED MARCH 16, 1989
7. TAX MAP No.41-0128-060
8. OFFSETS TO BASELINE FROM MONITORING STATIONS:
   4035: 281.5' (SCALED)
   4040: 288.5' (TABLE)

   4035 OFFSET SCALED FROM SHEET 230 S.C.C.C. BEACHFRONT ORTHOPHOTO.

REVISED JAN. 24, 1989 TO SHOW PROPOSED DWELLING AND LOT ELEVATIONS.

PLAT PREPARED FOR
BILL BENSON

GARDEN CITY GEORGETOWN COUNTY, S.C.

THE SAME BEING ALSO SHOWN AS LOT 23 BLOCK B ON PLAT OF SOUTH POINT LOTS WATERWAY SECT. BY S.M. HARPER R.L.S. DATED MARCH 2, 1960 AND RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR GEORGETOWN COUNTY IN PLAT BOOK O AT PAGE 31 .

CERTIFIED TO BE A RESURVEY OF A PIECE, PARCEL, OR LOT OF LAND SHOWN ON A MAP OR PLAT PREVIOUSLY RECORDED IN GEORGETOWN COUNTY IN PLAT BOOK O PAGE 31 .

I, MICHAEL S. CULLER, JR. HEREBY CERTIFY THAT THIS SURVEY IS A RESURVEY OF AN EXISTING LOT OF RECORD WITH NO BOUNDARY CHANGES, ALSO THAT THE MEASUREMENTS SHOWN ARE CORRECT AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.

Michael S Culler Jr

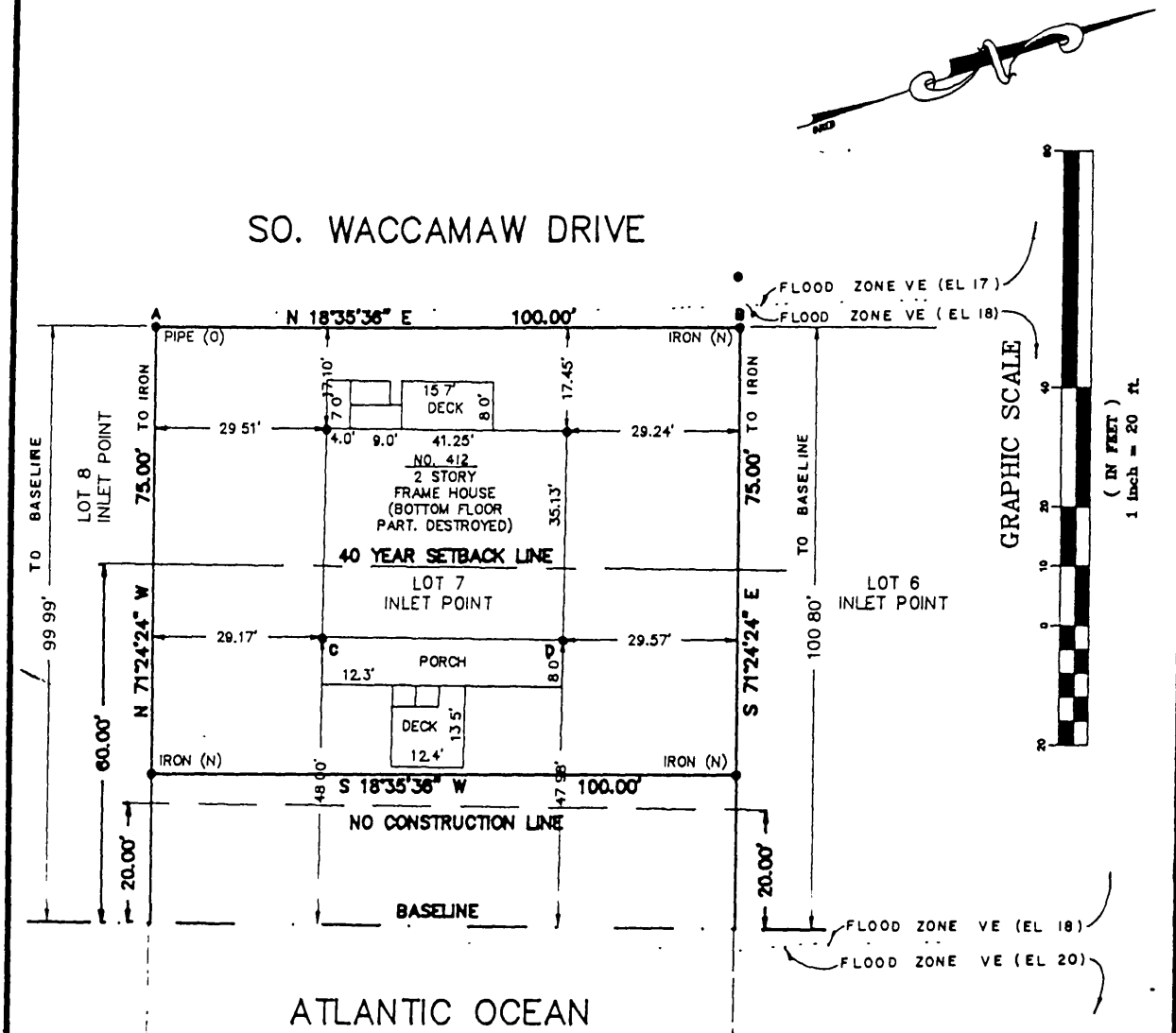
MICHAEL S. CULLER, JR.
REG. LAND SURVEYOR No. 5210

DATE:	SCALE:
NOV. 7, 1988	1" = 30'

CULLER LAND SURVEYING CO., INC.
(803) 000-0000
P.O. BOX 14087
SURFSIDE BEACH S.C. 29587

LS-2419-B

PERMIT #6189



NOTES:
1. 40 YEAR SETBACK LINE, NO CONSTRUCTION LINE, BASELINE & EROSION RATE WERE ESTABLISHED FROM MONITORING STATIONS 4920 & 4915. REFERENCE USED FROM INFORMATION PROVIDED BY THE S.C. COASTAL COUNCIL USING AUGUST, 1988 DATA FROM TABLE N/A PAGE .
2. STATE PLANE COORDINATES ESTABLISHED FROM MONITORING STATIONS 4920 & 4930 SINGLE ZONE NAD 83.
3. EROSION RATE IS 1.5' PER YEAR.
4. STATE PLANE COORD. AT LOT CORNERS.
   A: N 627,659.4591
      E 2,602,227.396
   B: N 627,754.2396
      E 2,602,259.281
5. STATE PLANE COORDINATES AT SEWARD BUILDING CORNERS:
   C: N 627,670.4585
      E 2,602,286.196
   D: N 627,709.4395
      E 2,602,299.688
6. FLOOD ZONES SHOWN WERE SCALED FROM FLOOD INSURANCE RATE MAP No. 450085 0167 D DATED MARCH 16, 1989
7. TAX MAP No.
8. OFFSETS TO BASELINE FROM MONITORING STATIONS;
   4915: 87.2' OFFSETS OBTAINED
   4920: 148.1' FROM COASTAL
   4930: 282.2' COUNCIL ON OCT. 19, 1989 FORM NO. 05850-J DATED OCT. 3, 1989

PLAT PREPARED FOR
H. E. DELOACH

GARDEN CITY GEORGETOWN COUNTY, S.C.

THE SAME BEING ALSO SHOWN AS LOT 7 BLOCK ON PLAT OF INLET POINT BY R. L. BELLAMY & ASSOC DATED AUG 1965 AND RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR GEORGETOWN COUNTY IN PLAT BOOK 5 AT PAGE 67 .

I, MICHAEL S. CULLER, JR. HEREBY CERTIFY THAT THIS SURVEY IS A RESURVEY OF AN EXISTING LOT OF RECORD WITH NO BOUNDARY CHANGES, ALSO THAT THE MEASUREMENTS SHOWN ARE CORRECT AND THERE ARE NO ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN.

Michael S. Culler Jr.

MICHAEL S. CULLER JR.
REG. LAND SURVEYOR No. 5210

DATE:	SCALE:
NOV. 6, 1989	1" = 20'

CULLER LAND SURVEYING CO., INC.
(803) 238-8333
P.O. BOX 14327
SURFSIDE BEACH S.C. 29587

Permit # 6856

Permit #4582

MAP OF

TRACT A INLET HARBOUR, GARDEN CITY, GEORGETOWN COUNTY, SOUTH CAROLINA.

— PREPARED FOR —

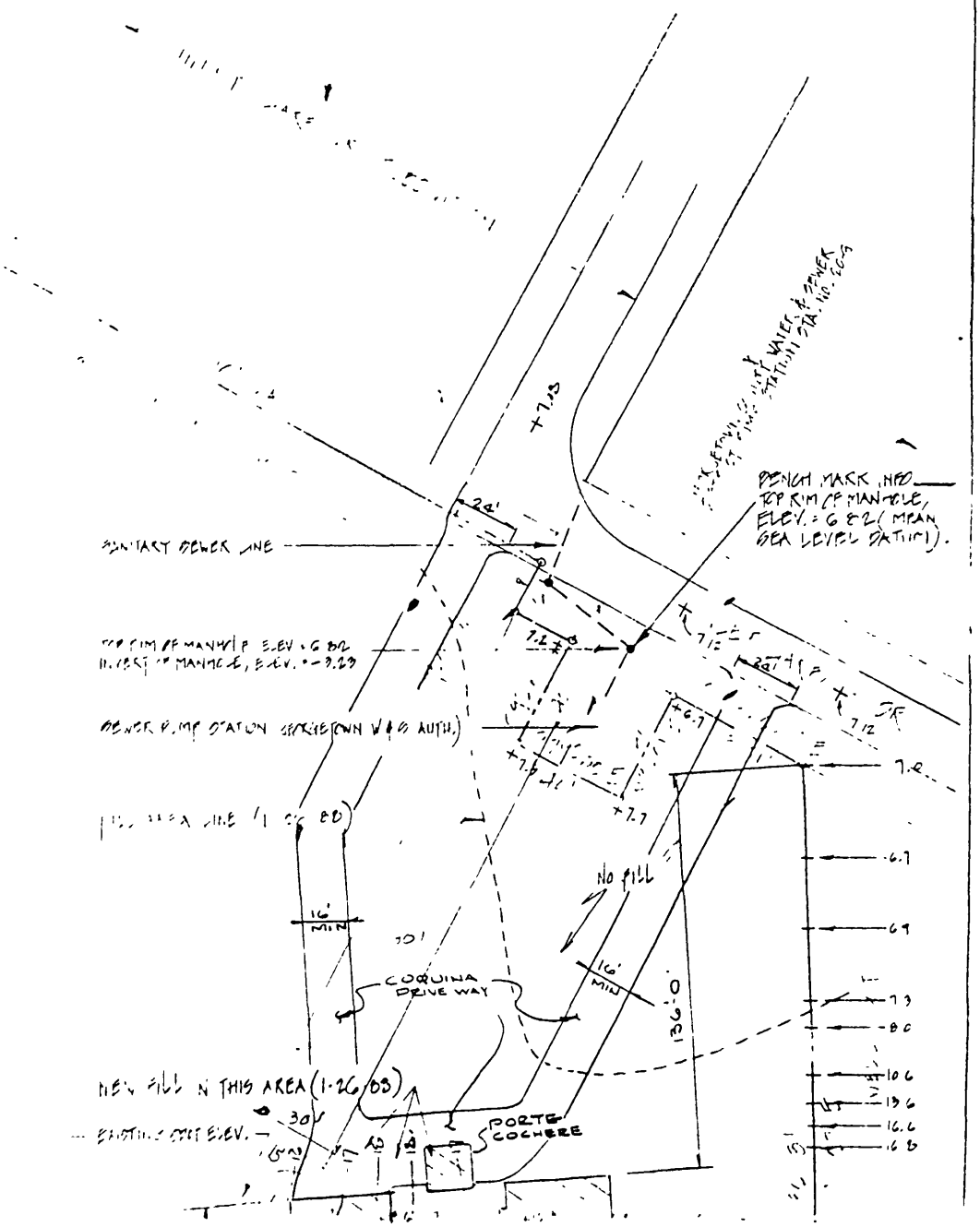
NEAL AMMONS

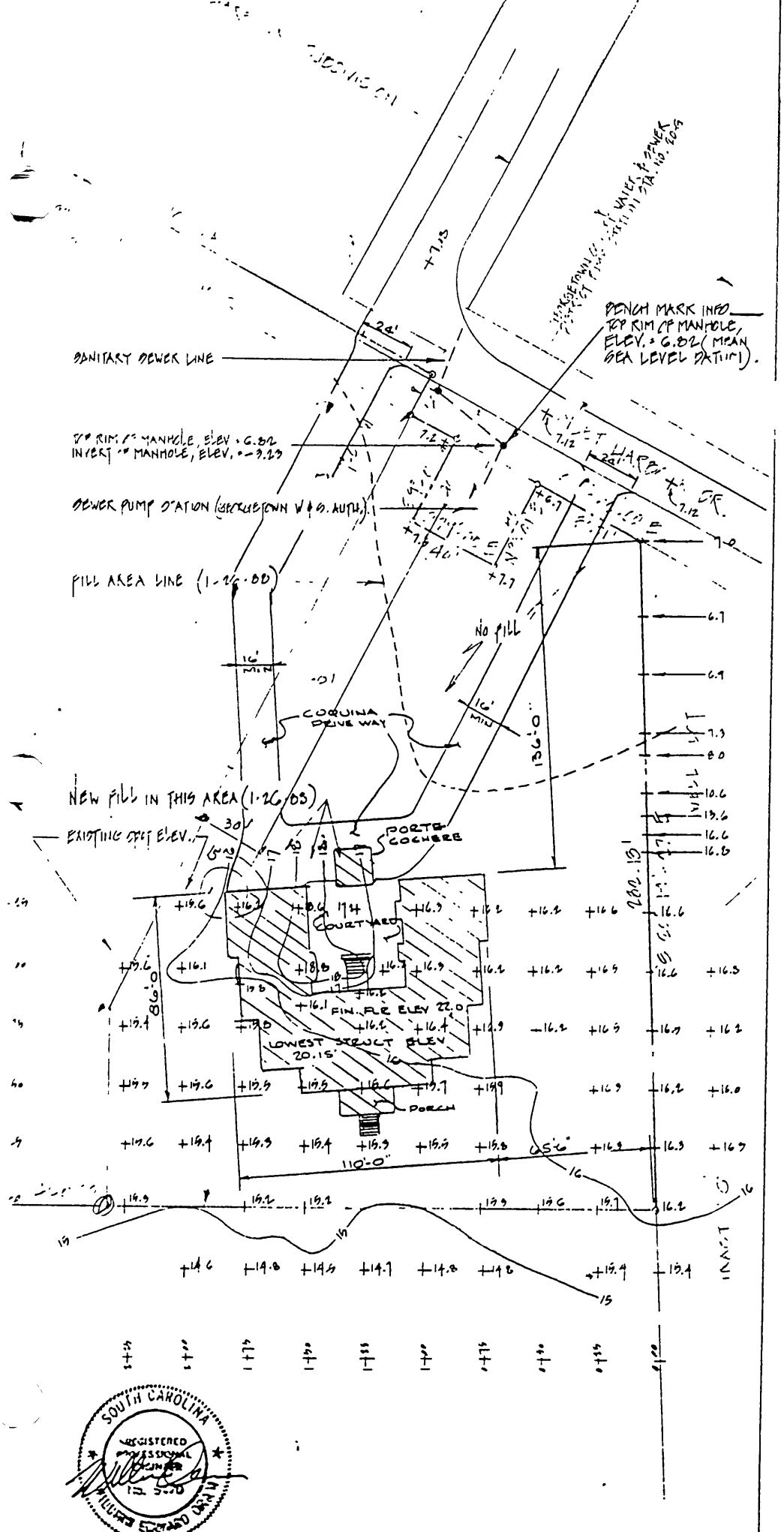
SCALE: 1" = 30' AUG. 21, 1987

HEXTER LAND SURVEYING COMPANY, INC.

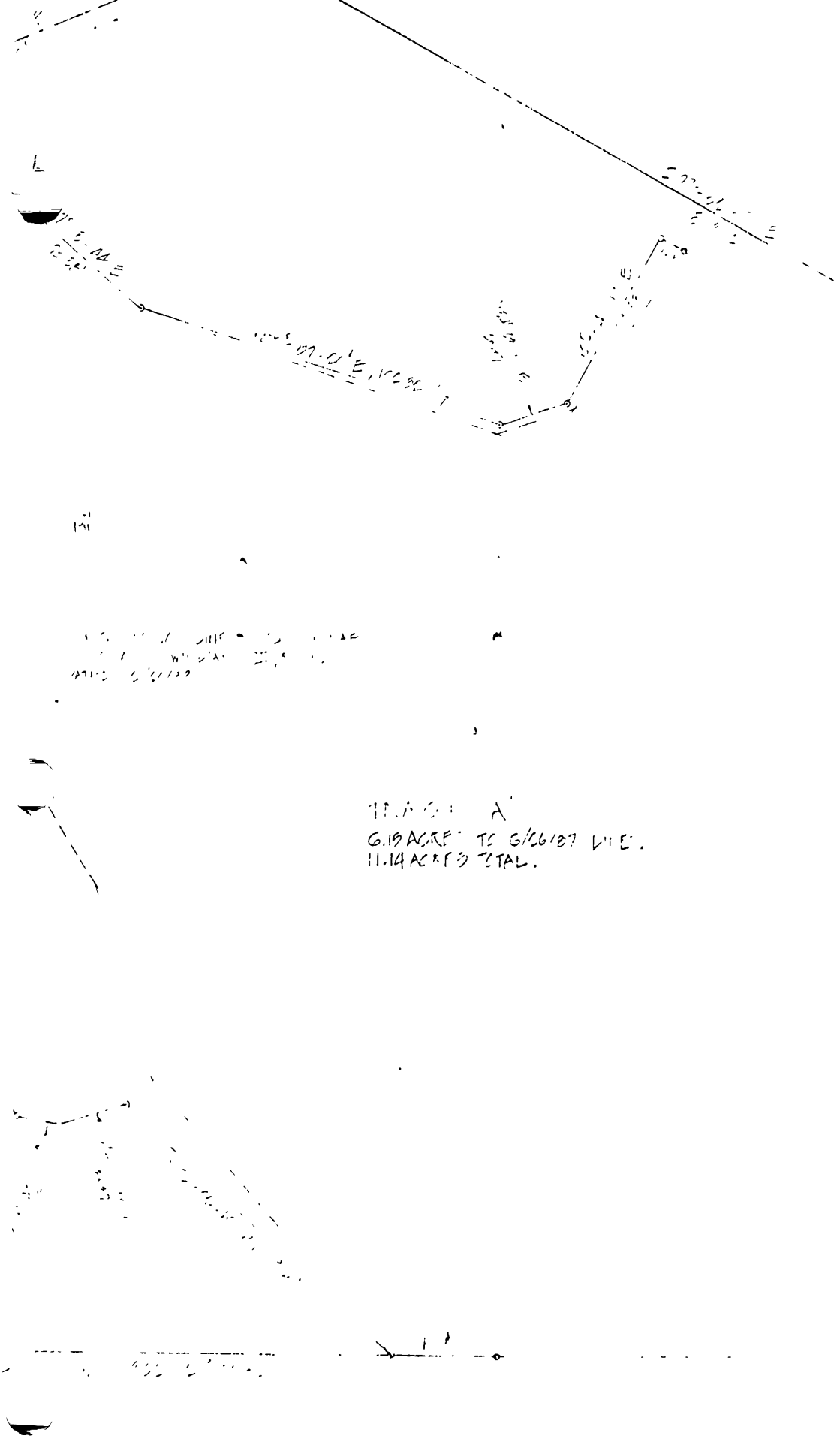
J. ALEX HEXTER, R.L.S.

REVISED FEB. 9, 1988 TO SHOW TOPOGRAPHIC INFORMATION.

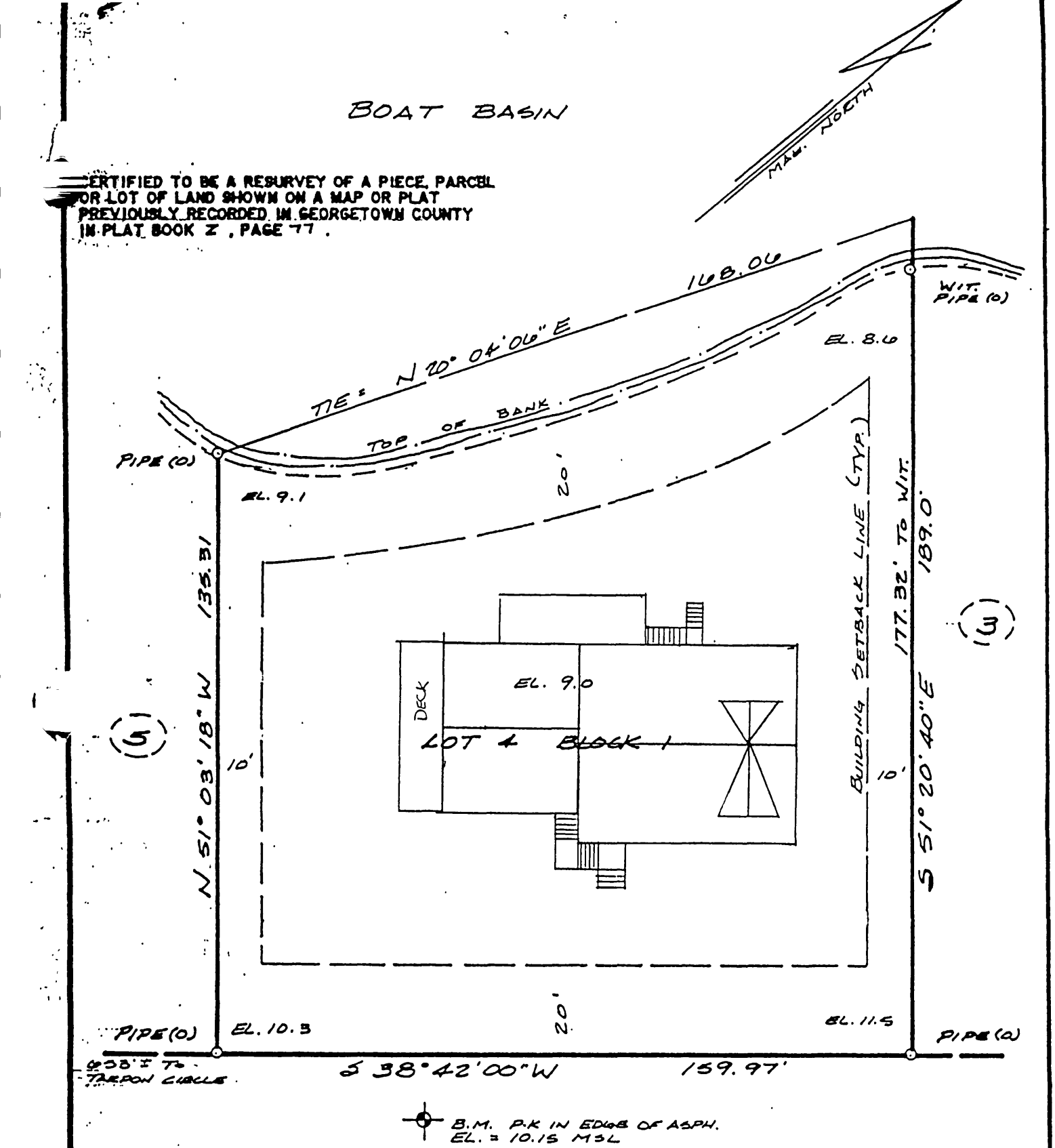




AMMONS RESIDENCE



TRACT A
6.19 ACRES TO 6/26/87 LINE.
11.14 ACRES TOTAL.

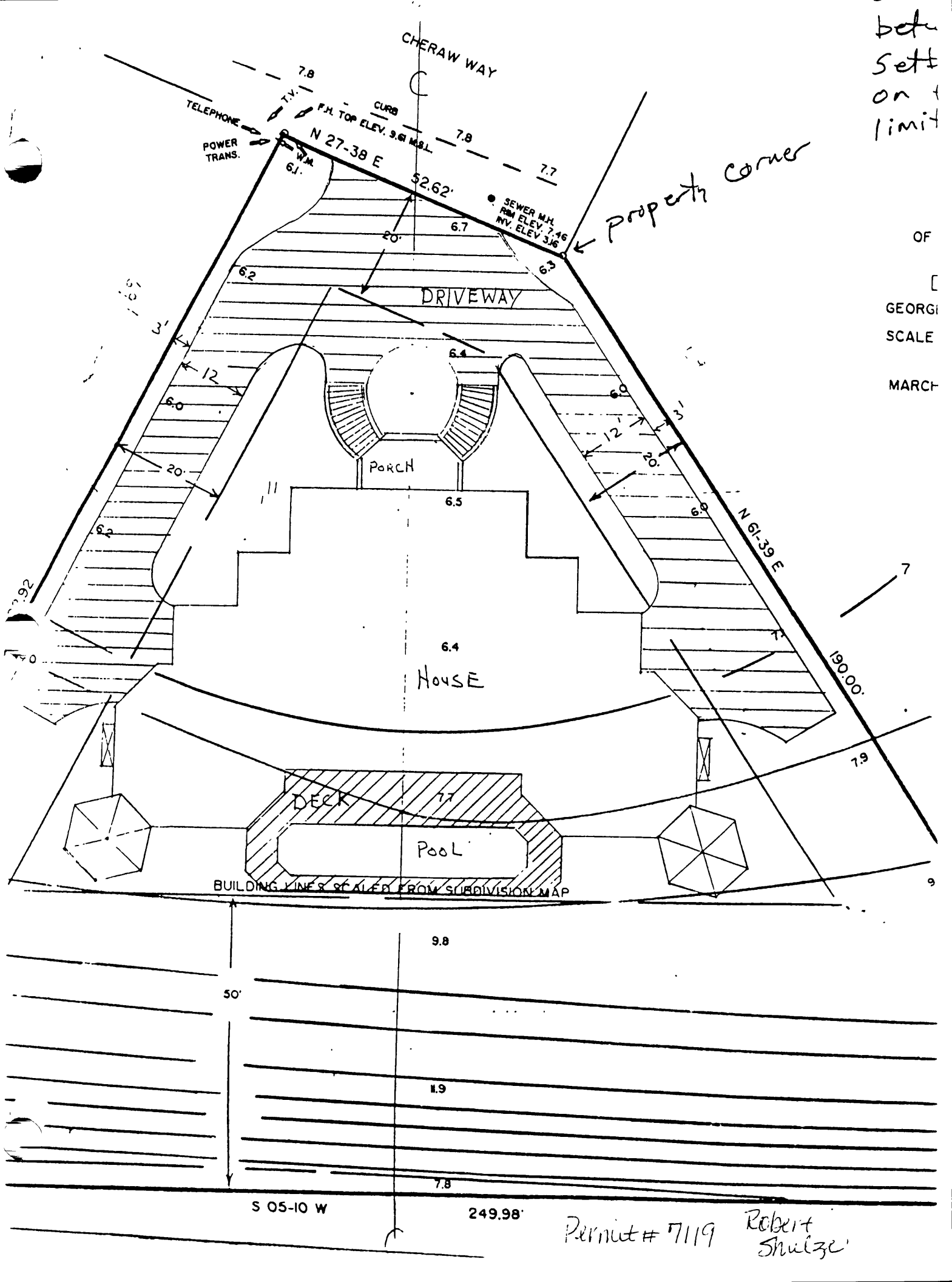


NOTE: THIS LOT IS LOCATED IN FLOOD HAZARD ZONE VE EL.17 ACCORDING TO F.I.R.M. NO. 450085-0167-D DATED MARCH 16, 1989.

30 15 0 30 60

PLAT PREPARED FOR

LARRY Mc SPADDEN



Permit # 7119 Robert Shultz

VICINITY MAP

SCALE: 1"= 2.1 Mi.

LEGEND:

SBL DENOTES LOCAL SET-BACK-LINE
IPO DENOTES IRON PIN OLD
DB DENOTES DEED BOOK,
P DENOTES PAGE

TES:

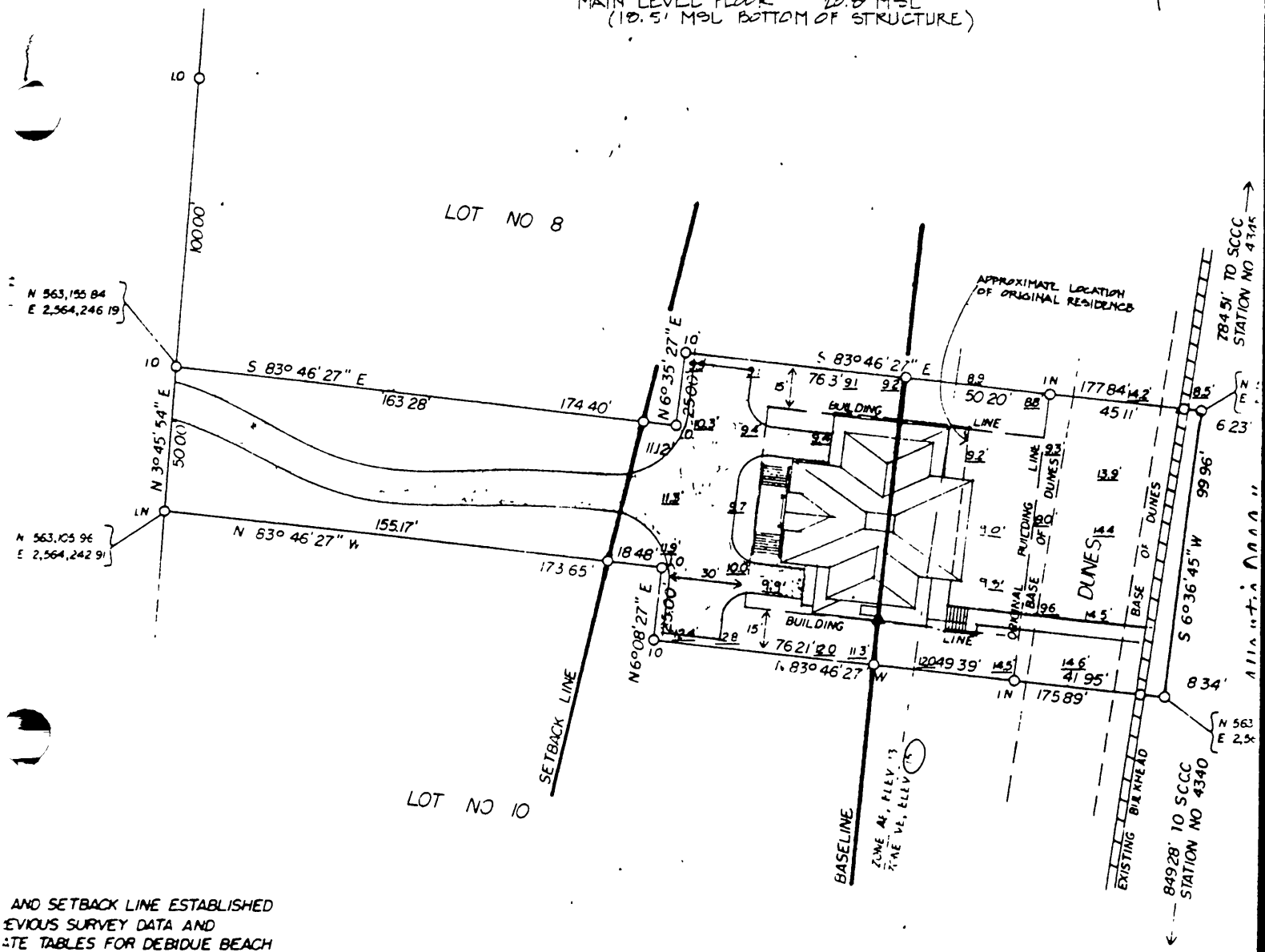
1.

Harry Young Permit # 6457

HOUSE ELLEVATION DATA

LOWER LEVEL GARAGE 10 5' MSL

MAIN LEVEL FLOOR 20.8' MSL
(10.5' MSL BOTTOM OF STRUCTURE)



AND SETBACK LINE ESTABLISHED
EVIOUS SURVEY DATA AND
ITE TABLES FOR DEBIDUE BEACH
OTO SHEET NO 183, RECEIVED
0 FROM SOUTH CAROLINA
COUNCIL

LINE BEARINGS AND COORDINATES
THE SOUTH CAROLINA STATE
ORDINATE SYSTEM, SOUTH ZONE
EROSION RATE, -3.4' PER YEAR

NOTES

4 FLOOD ZONE LINES ARE APPROXIMATE TAKEN FROM F.E.M.A FLOOD INS RATE MAP, COMMUNITY-PANEL NO 450085 0407 D, REVISED 3/16/89

5) ELEVATIONS ARE MEAN SEA LEVEL

YC
OLD
NEW
ATIONS

PLAT

OF A RESURVEY OF LOT NO 9, BLOCK 1, PROSPECT PLACE, A SUBPARCEL OF THE DEBORDIEU COLONY SUBDIVISION IN TAX DISTRICT NO 4, GEORGETOWN COUNTY, SOUTH CAROLINA - SURVEYED FOR

SUMMERTIDE, INC.

Permit # 7232

SCALE 1 IN = 40 FT

OCTOBER 12, 1989 - REVISED SEPT 5, 1990

I HEREBY CERTIFY THAT THE MEASUREMENTS SHOWN ABOVE ARE CORRECT AND THERE ARE NO ENCROACHMENTS

Samuel M. Hayes, R.L.S

COUNTY OF GEORGETOWN }
}
STATE OF SOUTH CAROLINA }

ORDINANCE

WHEREAS GEORGETOWN COUNTY COUNCIL recognizes that public beaches are for the use and enjoyment of the people, and that it is in the public's interest that laws be formulated to protect the safety and cleanliness of the beaches of the unincorporated County area, the following provisions are ORDAINED:

SECTION 1: DEFINITION

The term "public beach" shall mean that area lying between the low water mark of the Atlantic Ocean and the easternmost property line of the property owned by private individuals lying closest in proximity to the Atlantic Ocean; except that where there is a street leading toward the Atlantic Ocean, public beach at these points shall mean the area lying between the easternmost edge of the public street and the Atlantic Ocean.

SECTION 2: PROHIBITIONS

The following shall be prohibited:

(a) Vehicles prohibited. Driving or operating any motor vehicle of any kind or nature upon the public beach within the county shall be unlawful; provided, that county vehicles operated while cleaning or working on the beach, county sheriff and emergency vehicles shall be exempt from the application of this section.

(b) Horses on beach. Riding horses on the beach shall be unlawful between Easter and Labor Day.

(c) Sleeping on beach after midnight. Sleeping by persons on public beaches between the hours of midnight and sunrise shall be unlawful.

(d) Deposit refuse on beach or in water. Throwing, depositing or causing or permitting to be thrown or deposited any glass, bottle, glassware, can, or pieces thereof, or any garbage, waste or refuse of any kind on the public beach or in the waters and lands adjacent to the public beach shall be unlawful.

(e) Fishing creating unsafe conditions. Baiting or fishing at any time by persons from the public beach in such a manner that will create an unsafe condition or hazard to bathers, swimmers, surfers and others in the water along the public beach shall be unlawful.

(f) Litter. Littering the public beaches with cans, bottles, paper, or other materials shall be unlawful.

(g) Required dress. Appearing in the nude on any public beach by any person shall be unlawful.

(h) Glass containers on the public beach. Taking any glass bottle, drinking glass or other glass containers on any public beach shall be unlawful.

(i) Free Access. It shall be unlawful for anyone anyone to place any object, obstacle, barrier or materials on the beaches which would inhibit the free access and use of the public beaches of Georgetown County; or for individuals to loiter in or obstruct the public accesses to the beach.

SECTION 3: ENFORCEMENT

(a) Authority of beach patrolmen and police officers. Those persons who shall be duly appointed as deputies or constables, or who are police officers of the county, shall have the power and authority to enforce the above provisions on the beaches, strand, and the Atlantic Ocean within the jurisdiction of the county and in those areas shall have the responsibility to maintain peace and order.

(b) Power to recall swimmers. Deputies and constables, policemen or guards authorized by them shall have authority to recall from the ocean waters and the surf adjoining the water any person who shall be in the ocean waters at any distance at any time when the condition of the wind, water, weather or any hazard, including the physical or mental condition of the person in the ocean waters, shall be such, in the discretion of those personnel as hereinabove described, as to constitute a

danger to the health, life or safety of that person or other persons within the area.

SECTION 4: PENALTIES

Any person violating any provisions of this article shall be guilty of a misdemeanor and upon conviction thereof shall pay such penalties as the court may decide, not to exceed two hundred dollars ($200.00) or not to exceed thirty (30) days' imprisonment for each violation. Each day during which such conduct shall continue shall constitute a separate violation which shall subject the offender to liability prescribed in this article.

DONE IN MEETING DULY ASSEMBLED THIS 23rd DAY OF August, 1988.

Jacquelyn H. Owens
Clerk to Council

[signature]
Chairman

June 16, 1988
First Reading

July 12, 1988
Second Reading

August 23, 1988
Third Reading

BEACH LIGHTING ORDINANCE

AN ORDINANCE RELATING TO THE PROTECTION OF LOGGERHEAD SEA TURTLES CREATING A NEW SECTION OF THE CODE OF ORDINANCES FOR GEORGETOWN COUNTY RESTRICTING OUTDOOR LIGHTING IN BEACH AREAS NAMED HEREIN: PROVIDING FOR ENFORCEMENT, PENALTY AND PROVIDING AN EFFECTIVE DATE

WHEREAS, the Georgetown County beaches serve as nesting habitat for loggerhead sea turtles, the official state reptile; and

WHEREAS, this Ordinance is necessary to protect the natural reproductive cycle of the loggerhead sea turtle during the nesting and hatching season which runs from May 1, through October 31, of each year,and

WHEREAS, coastal development threatens the survival of turtle hatchlings because the artificial light causes disorientation in young hatchlings; and

WHEREAS, the loggerhead sea turtle is an essential member of the food chain and has been identified as a threatened species; and

WHEREAS, the protection of sea turtle hatchlings, and nesting females, is of significant public interest; and

NOW, THEREFORE, BE IT ORDAINED BY THE County Council of Georgetown County, that:

SECTION 1. A section of the Code of Ordinances for Georgetown County, is hereby created to read as follows:

SECTION 1 Definitions. For the purpose of the Ordinance, the following terms shall have the meaning set forth in this Section:

A. Artificial Light; Any source of light emanating from a manmade device, including but not limited to, incandescent mercury vapor, metal halide, or sodium lamps, flashlights, spotlights, street lights, vehicular lights, construction or security lights.

B. Beach: That area of unconsolidated material that extends landward from the mean low water line to the place where there is a marked change in material or physiographic form, or to the line of permanent vegetation (usually the effective limit of storm waves).

C. Floodlight: Reflector type light fixture which is attached directly to a building and which is unshielded.

D. 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.

E. New Development; Shall include new construction and remodeling of existing structures when such remodeling includes alteration of exterior lighting.

F Person: Any individual, firm, association, joint venture, partnership, estate, trust, syndicate, fiduciary, corporation, group, or unit of federal, state, county or municipal government.

G. 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.

H. Solar Screen: Screens which are fixed installations and permanently project shade over the entire glass area of the window. The screens must be installed outside of the glass and must:

1. Have a shading coefficient of .45 or less, and
2. Carry a minimum five year warranty, and
3. Must have performance claims supported by approved testing procedures and documentation.

I. Tinted or filmed Glass: Window glass which has been covered with window tint or film such that the material has:

1. A shading coefficient of .45 or less, and
2. A minimum five year warranty, and
3. Adhesive as an integral part, and
4. Performance claims which are supported by approved testing procedures and documentation.

J. Shading Coefficient: A coefficient expressing that percentage of the incident radiation which passes through the window as heat.

SECTION 2. Purpose. The purpose of this ordinance is to protect the threatened loggerhead sea turtles which nest along the beaches of Georgetown County, by safeguarding nesting females and the hatchlings from sources of artificial light.

SECTION 3. New Development. It is the policy of the Georgetown County Council that no artificial light illuminate any area of the beaches of Georgetown County. To meet this intent, building and electrical plans for construction of single family or multi-family dwellings, commercial or other structures including electrical plans associated with parking lots, dune walkovers or other outdoor lighting for real property if lighting associated with such construction or development can be seen from the beach, shall be in

compliance with the following:

A. Floodlights shall be prohibited. Wall mounted light fixtures shall be 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 shll 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 glass, filmed glass, or shade screens are recommended for use in windows facing the ocean above the first floor of multi-story structures.

G. Temporary security lights at construction sites shall not be mounted more than fifteen (15) feet above the ground. Illumination from the lights shall not spread beyond the boundary of the property being developed, and in no case shall those lights illuminate the beach.

SECTION 4. Exemptions for New Development. The provisions of Section 3 of this Ordinance shall not apply to any structure for which a building permit has been issued by the Georgetown County Building Official, prior to the effective date of this Ordinance.

SECTION 5, Existing Development. It is the policy of the Georgetown County Council that no artificial light illuminate any area of the beaches of Georgetown County, South Carolina. To meet this intent, lighting of existing structures which can be seen from the beach shall be in compliance with the following within twelve (12) months of the effective date of this ordinance.

A. Lights illuminating buildings or associated grounds for decorative or recreational 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 1, tc October 31, of each year.

C. Security lighting shall be permitted throughout the night so long as low profile luminaries are used and screened in such a way that those lights do not illuminate the beach.

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

SECTION 6. 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.

B. Lights at parks or other public beach access points shall be shielded or shaded or shall not be utilized during the period May 1, to October 31, of each year.

SECTION 7. Enforcement and Penalty. Anyone violating the provisions of this ordinance shall be given a Thirty (30) day notice to come into compliance. Conviction of failure to comply after notice shall result in a fine not exceeding $100.00 nor less than $50.00, as determined in Magistrate's Court. Each day of violation shall constiutute a separate offence. Enforcement of this ordinance shall reside in any constitutional law enforcement agency and the County Building Inspector, or any agents so designated by County Council.

SECTION 8. Effective Date. This Ordinance shall take effect pursuant to law.

DONE AND ADOPTED in Regular Session this 13th day of June, 1989.

ATTEST;

Jacquelyn H. Avers

COUNTY COUNCIL
OF GEORGETOWN COUNTY

Alfred B. Schooler

Alfred B. Schooler, Chairman

First Reading: April 11, 1989
Second Reading: May 9, 1989
Third Reading: June 13, 1989

DUNE PROTECTION ORDINANCE
GEORGETOWN COUNTY, SOUTH CAROLINA

AN ORDINANCE OF THE COUNTY OF GEORGETOWN, SOUTH CAROLINA, PROTECTING ALL FORMS OF SAND DUNES; DEFINING CERTAIN TERMS USED HEREIN; AND, PROVIDING FOR THE IMPOSITION OF PENALTIES FOR THE VIOLATION OF THE PROVISIONS OF THIS ORDINANCE.

INTENT

It is the intent of this Ordinance to protect public and private coastal property in Georgetown County from damage caused by flooding and erosion as much as is reasonably possible. It is the further intent of this Ordinance to allow the reasonable use of coastal property while promoting the general health, safety and welfare of the public by protecting the natural beach and dune system from alterations that impair their ability to serve as buffers from wind, water and wave action.

ARTICLE I
AUTHORITY AND ENACTMENT CLAUSE

Pursuant to authority conferred by the General Statutes of South Carolina, 4-9-30, 1976 Code of Laws, and for the purpose of promoting the health, safety and welfare of the public, the County Council of Georgetown County, South Carolina does ordain and enact into law the following articles and sections:

ARTICLE II
SHORT TITLE

This Ordinance shall be known and may be cited as "The Dune Protection Ordinance of Georgetown County, South Carolina".

ARTICLE III
DEFINITIONS

300. Unless otherwise stated, the following words shall, for the purpose of this Ordinance, have the meaning herein indicated. Words used in the present tense include the future. The singular includes the plural and the plural the singular. The word shall is mandatory.

301. Council. The County Council of Georgetown County, South Carolina.

302. Dune. Any accumulation of sand in ridges or mounds landward of the beach, whether formed by natural or man-made forces.

ARTICLE IV
REGULATORY PROVISIONS

400 Sand Dunes. It shall be unlawful for any person, firm corporation or private authority in any manner to damage,

404. Guidelines For Issuance of Development Permits. Any activity that will disturb the dune or dune vegetation requires a development permit from Georgetown County. The following guidelines are established for dune and dune vegetation protection:

404.1 Sand dunes shall not be altered in any form unless there is no feasible alternative such as relocation, realignment or reduction in size of the proposed construction or alteration.

404.2 Where unavoidable infringement in the dune system occurs, the construction shall be elevated at least two feet above grade where possible.

404.3 Once construction is completed, dunes that were destroyed or damaged and were not positioned in the footprint of the structure shall be restored to their original contours and revegetated.

404.4 Sand dunes designated as critical habitat areas in the Georgetown County Beach Management Plan shall not be altered except as allowed in the Plan.

404.5 All dune building, restoration and revegeatation shall be done in accordance with recommended procedures from the South Carolina Coastal Council.

ARTICLE V
ADMINISTRATION, ENFORCEMENT, APPEALS, COMPLAINTS AND REMEDIES

500. Administration and Enforcement. It shall be the duty of the duly appointed Building Inspector, and he is hereby given the authority, to administer and enforce the provisions of this Ordinance. If the Building Inspector shall find that any of the provisions of this Ordinance are being violated, he shall notify in writing the person responsible for such violations, indicating the nature of the violation and ordering the action necessary to correct it. He shall order discontinuances of illegal alterations to dunes or shall take any other action authorized by this Ordinance to ensure compliance with or to prevent violation of its provisions.

501. Development Permit Required. No dune alteration or any other activity described herein shall be initiated prior to the receipt of a development permit from the Building Inspector. No development permit shall be issued by the Building Inspector except in conformity with the provisions of this Ordinance, and in accordance with the guidelines contained in Section 404.

502. **Complaints Regarding Violations**. Whenever a violation of this Ordinance occurs, or is alleged to have occurred, any person may file a written complaint. Such complaint stating fully the causes and basis thereof shall be filed with the Building Inspector. The Building Inspector shall record properly such complaint, immediately investigate, and take action thereon as provided by this Ordinance.

503. **Penalties For Violation**. Any person violating any provisions of this Ordinance shall be guilty of a misdemeanor and, upon conviction, shall be fined as determined by a court of competent jurisdiction for each offense. Each day such violation continues shall constitute a separate offense. Nothing herein contained shall prevent the County from taking such other lawful action as is necessary to prevent or remedy any violation.

ARTICLE VI
LEGAL STATUS PROVISIONS

600. **Separability**. Should any section or provision of this Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of the Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

601. **Repeal of Conflicting Ordinances**. All ordinances and parts of ordinances in conflict herewith are repealed to the extent necessary to give this Ordinance full force and effect.

602. **Effective Date**. This Ordinance shall take effect and be in force after the date of its adoption by County Council of Georgetown County, South Carolina.

Date of first reading: February 12, 1991

Date of second reading: March 12, 1991

Date of final reading: April 9, 1991

Alfred B. Schooler, Chairman
Georgetown County Council

ATTEST:

Jacquelyn H. Owens, Clerk
Georgetown County Council

AN ACT TO AUTHORIZE THE COUNTY OF GEORGETOWN TO ESTABLISH A COUNTY DOG POUND FOR QUARANTINE PURPOSES, TO PROHIBIT DOG OWNERS FROM ALLOWING DOGS TO RUN LOOSE IN GEORGETOWN COUNTY, TO PROVIDE PENALTIES FOR VIOLATIONS, AND TO EMPLOY PERSONNEL TO OPERATE THE POUND AND TO PERFORM SUCH OTHER ACTS AS ARE NECESSARY TO IMPLEMENT THE ACT.

ARTICLE 1: DEFINITIONS:

For the purpose of this Article, the following terms, conditions, words or phrases shall have the meaning given herein;

"Animal Shelter" or "Dog Pound" shall include any premises designated by the County's governing body for the purposes of impounding, care or struction of dogs held under authority of this article.

"Dog" shall include all members of the canine family four months or more of age.

A dog shall be deemed running at large if off the premises of the owner or keeper and not under the physical control of the owner or keeper by means of a leash or other similar restraining device, or under the control of a responsible person to whom the dog is obedient on command.

A dog shall be deemed to be under restraint if on the premises of its owner or keeper, or if accompanied by its owner or keeper and under the physical control of such owner or keeper by means of a leash or other similar restraining device, or under the control of a responsible person to whom the dog is obedient on command. For the purposes of protecting endangered species on the beachfront, dogs and cats shall be kept on a leash in designated protected areas and accompanied by a responsible individual.

ARTICLE 2: ESTABLISHMENT OF ANIMAL SHELTER OR DOG POUND:

The County of Georgetown is hereby authorized to establish a dog pound or animal shelter, or in cooperation with any municipality within said unty to jointly use and operate an existing dog pound or shelter,

and employ such personnel, including enforcement personnel, as may be necessary to administer the provisions of this Act.

Funds to establish and operate the dog pound or animal shelter and employ necessary personnel shall be provided in the annual County appropriations.

ARTICLE 3: DOGS SHALL BE QUARANTINED:

For the purpose of protecting the health and safety of the people of the County, the personnel employed to operate the pound shall pick up and quarantine any dog reported running at large as defined in Article 1 hereof. To obtain release of his dog, an owner must satisfy the dog pound employees that his dog is currently inoculated against rabies, and, in addition, pay a quarantine fee of TEN DOLLARS and cost of board and keep of the dog during quarantine.

ARTICLE 4: UNLAWFUL ACTS - PENALTIES:

It shall be unlawful in Georgetown County for any dog owner or other persons with custody and control of a dog to:

(a) Allow his dog to run at large off of property owned, rented, or controlled by him so as to constitute a public nuisance or menace;

(b) Release or take out of quarantine without proper authority any dog or resist County pound personnel engaging in the capture and quarantine of a dog.

(c) Allow a dog or cat to run at large or without a leash in the company of a responsible person in designated endangered species areas along the beachfront.

(d) Any person who violates the provisions of this Article shall be deemed guilty of a misdemeanor and, upon conviction, shall be fined not more than FIFTY DOLLARS or imprisoned for not more than thirty (30) days.

ARTICLE 5: OWNERS SHALL BE NOTIFIED:

Employees of the pound shall notify the owner of any quarantined dog when such owner can be determined from tags or other sources of information.

After any dog has been quarantined for twenty-one days and is unclaimed by its owner, the pound employees may dispose of such dog by a humane form of execution or such dogs may be turned over to the Humane Society. Complete records shall be kept by pound officials as the disposition of all animals impounded.

ARTICLE 6: IDENTIFYING TAGS:

[redacted]person owning or keeping a dog shall place upon the said dog a [redacted]tag, or other kind of identification, showing the name and address of the owner or keeper of said dog.

This Act shall take effect upon the third and final reading by Georgetown County Council.

Approved this 9th day of April, 1991.

Alfred B. Schooler

Alfred B. Schooler, Chairman
Georgetown County Council

ATTEST:

Jacquelyn H. Owens

Jacquelyn H. Owens, Clerk
Georgetown County Council

First Reading: February 12, 1991

Second Reading: March 12, 1991

Third Reading: April 9, 1991