SWANSBORO (Town of)
North Carolina

1986

LAND USE PLAN UPDATE

PREPARED FOR:

THE TOWN OF SWANSBORO, N.C.

COASTAL ZONE
INFORMATION CENTER

BY:

SATILLA PLANNING
PLANNERS ☐ LANDSCAPE ARCHITECTS

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Adopted March 6, 1986
Certified by the Coastal Resources Commission
May 30, 1986

North Carolina. Coastal Zone Management Program

1986 LAND USE PLAN UPDATE

Swansboro, North Carolina

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INTRODUCTION

The Coastal Area Management Act of 1974 establishes a cooperative program of coastal area management between local governments and the State. Land use planning is intended to be central to the local government's involvement, because it gives local leaders an opportunity to establish and implement policies to guide the development of their community.

The Swansboro Land Use Plan is an expression of long range planning goals in which the local government has set forth its major policies concerning desirable future development over the next ten years.

The land use plan is an important policy document at local, regional, state and federal levels. The users, in addition to the Town of Swansboro, are regional councils of government, state and federal permitting agencies, and public and private funding and development groups.

Local Government Uses

The plan provides policy guidance for decisions related to overall community development, and provides the basis for land development regulations and capital facilities programming. Planning for the provision of capital intensive services, such as central sewer and water, is aided by the land use plan's identification of likely growth trends and by plan policies which will effect growth.

Local Land Development Uses

Developers and investors (including prospective residents) can use the land use plan as a primary source of information about the community. The plan provides data and analysis on present development patterns, capacity of community facilities, population and growth patterns, and physical limitations, all of which are useful in market analyses and other feasibility studies. The plan also provides the investor with information about the community's preferences for development types, densities, and locations.

Regional Uses

The Swansboro Land Use Plan will be used by the Neuse River Council of Governments for regional planning purposes and in their function as regional clearinghouse (A-95) for state and federal funding programs. The local plan indicates to this agency what types of development the community feels are likely and where the development should take place.

State and Federal Uses

Local land use plans are used in the granting or denial of permits for various developments within the coastal area. State and Federal agencies must ensure their decisions consider the policies and land classification system established by this plan. The Coastal Area Management Act stipulates that no development permit may be issued if the proposed development is inconsistent with the local land use plan. Similarly, decisions related to the use of federal or state funds within the community and projects being undertaken by state and federal agencies themselves must also be consistent with the local plan.

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OVERVIEW OF THE LAND USE PLAN

The Swansboro Land Use Plan Update can be divided into three sections and an Appendix. The first of these, the **Existing Conditions** section, is intended as an overview of current conditions relevant to land use planning in Swansboro and its extra-territorial planning area. The second section, **Growth Trends,** projects population trends and briefly forecasts expected development trends and their expected impacts on the Swansboro community. The third section, **Policies**, establishes the Town's positions on issues of local and statewide importance. The Town's Post Disaster Reconstruction Plan is contained in the Appendix in its entirety.

Data Collection and Analysis

Data found in the Swansboro Land Use Plan comes from many sources. Sources of land use data include the 1980 Swansboro and 1981 Onslow County Land Use Plans, tax map information available from the Onslow County Tax Department, and a field survey conducted in January, 1985, by Satilla Planning, Inc. Information on land use controls and community facilities was gathered from Town of Swansboro and Onslow County officials. Transportation statistics were made available through the N.C. Department of Natural Resources and Community Development (NRCD) from N.C. Department of Transportation sources. NRCD was also the source for FEMA flood insurance rate maps used in the development of the Environmental Determinants Map. Soils survey information was made available by the Onslow County Soils Office. Environmental information on Areas of Environmental Concern was taken from Division of Coastal Management Guidelines, and the Division of Marine Fisheries provided information on shellfish beds. The N. C. Division of Archives and History provided information on historic resources in Swansboro. The N. C. Department of Administration provided base population statistics. Sources are generally cited in the course of the text and major conclusions follow as part of plan analysis.

EXISTING CONDITIONS

The existing conditions section of this land use plan presents brief descriptions of the conditions pertinent to land use in Swansboro. General section headings include: Existing Land Use, Land Use Controls, Economic Conditions, Community Facilities, Transportation, Physical and Environmental Constraints, and Community Design Structure.

Existing Land Use

Swansboro is known for its historic, small town character and lovely views of the White Oak River. Largely a residential community, Swansboro is surrounded by a rural, agricultural area

which is beginning to witness residential development, particularly near waterfront areas.

Existing land use is shown on Map 1. Acreage counts for the corporate limits of Swansboro, its extraterritorial jurisdiction, and the total planning area are found in Tables 1 through 4. A descriptive summary for each land use category follows.

Residential

Residential land use in Swansboro includes single family dwellings and duplexes, mobile homes, and multi-family dwellings.

Single Family and Duplex

Almost every dwelling unit within the Swansboro town limits, with the exception of a recently annexed multi-family project, falls into this category. Of the 458 dwellings counted in the 1985 survey, 379, or 83 %, were single family units. Two duplexes, one triplex and two (2) mobile homes were found within the town limits. The average residential density in Swansboro for single family and duplex units is 3.6 units per acre.

Within the extraterritorial area, there are 174 single family dwellings on 126.6 acres, a net density of 1.4 units per acre.

Mobile Homes

Only two mobile homes were accounted for within the town limits. Some 185 mobile homes, many of them located in mobile home parks, can be found in the extraterritorial area. This land use accounts for 53.8 acres. The average density per mobile home unit is more than twice that of single family units (1.4 units per acre) in the extraterritorial jurisdiction, at 3.4 dwellings per acre. Within mobile home parks (98 units on a total of 16.7 acres) this figure again nearly doubles, to 5.87 units per acre).

Multi-family

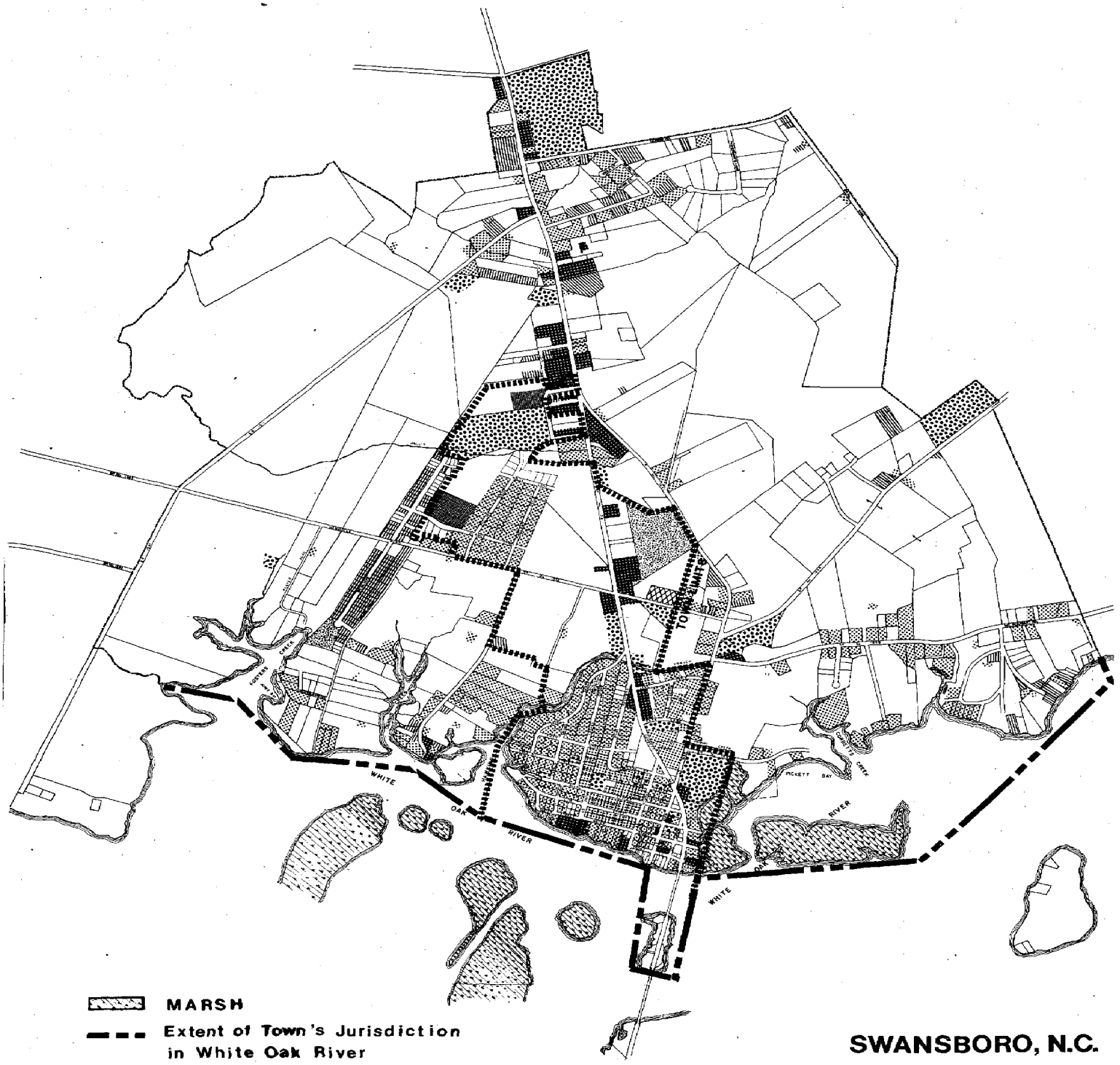
In 1980 there were no multi-family residences in Swansboro. This year, the first phase of Port West Apartments (16 units) was built on 1.2 acres within the town limits. A 54 unit apartment complex on 6.2 acres is located in Swansboro Hills. The average density of these two multi-family projects is about 9.5 units per acre. There are no multi-family units in the extraterritorial area at present.

Planned Residential

Over 275 dwelling units are planned and/or under construction in the Swansboro vicinity. These developments include:

- Swansboro Heights Subdivision Extension (48 lots on 11 acres in an existing subdivision off Hammocks Road)

The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, N.O.A.A.



MARSH

Extent of Town's Jurisdiction in White Oak River

SWANSBORO, N.C.

EXISTING LAND USE

LEGEND:

- SINGLE FAMILY
- MOBILE HOME
- MULTI-FAMILY
- COMMERCIAL
- INDUSTRIAL
- PUBLIC & INSTITUTIONAL
- RECREATION & OPEN SPACE
- AGRICULTURE OR VACANT

Prepared By: SATILLA PLANNING
200 Osborne Street
St. Marys, Georgia

Mapping Date: APRIL, 1985

MAP 1

TABLE 1. EXISTING LAND USE WITHIN TOWN LIMITS[1]

Land Use	1985 Acres	1985 %	1985 Units	1980 Acres	1980 %	Net Change (%)
Single Family, Duplex	106.2	(28.8)	386	104.2	(32.5)	+ 1.3
Mobile Home	.4	(.1)	2	-	-	-
Multi-family	7.4	(2.0)	70	0	-	-
Total Residential	**114.0**	**(30.9)**	**458**	**104.2**	**(32.5)**	**+ 9.0**
Commercial	18.9	(5.1)		17.1	(5.3)	+10.5
Industrial	1.8	(.5)		1.8	(.5)	none
Public and Institutional	33.5	(9.1)		17.0	(5.3)	+ 5.0
Parks and Open Space	19.2	(5.2)		18.2	(5.7)	+ .3
Utilities	1.2	(.3)		1.2	(.4)	none
Streets and Roads	30.9	(8.4)		29.2	(9.1)	+ 5.8
Vacant, Forested, Agricultural	149.1	(40.5)		131.7	(41.1)	+ 5.2
Totals	**368.6**	**(100.0)**	**458**	**320.4**	**(100.0)**	**+ 9.3**

[1]1985 Land Use Data derived from field surveys and Onslow County tax maps, January - February 1985. 1980 Land Use Plan data: 1980 Swansboro Land Use Plan.

TABLE 2. RESIDENTIAL LAND USE - 1985 AND 1980[1]

	1980	1985	Change (%)
Dwelling Units	410	458	+ 12.0
Acres	104.2	114.0	+ 9.0
Density per acre	3.9	4.0	+ 2.5

TABLE 3. EXISTING LAND USE IN EXTRATERRITORIAL AREA[2]

Land Use	Acres	Percent of total	Units	Density
Single Family	126.6	(6.2)	174	(1.4)
Mobile Homes	53.8	(2.6	185	(3.4)
Total Residential	**180.4**	**(8.7)**	**359**	**(2.0)**
Commercial	24.3	(1.2)		
Public and Institutional	39.8	(1.9)		
Utilities	12.4	(.6)		
Parks and Open Space	2.8	(.2)		
Streets and Roads	48.3	(2.3)		
Vacant, Agricultural and Forested	1754.4	(85.1)		
Totals	**2062.4**	**(100.0)**		

[1]1985 Land Use Data derived from field surveys and Onslow County tax maps, January - February 1985. 1980 Land Use Plan data: 1980 Swansboro Land Use Plan.

[2]1985 Land Use Data derived from field surveys and Onslow County tax maps, January - February 1985.

TABLE 4. EXISTING LAND USE - TOTAL SWANSBORO PLANNING AREA[1]

Land Use	Acres	Percent of total	Units	Density (units/acres)
Single Family, Duplex	232.8	(9.6)	560	(2.44)
Mobile Homes	54.2	(2.2)	187	(3.48)
Multiple Family	7.4	(.3)	70	(9.46)
Total Residential	**294.4**	**(12.1)**	**817**	**(2.81)**
Commercial	43.2	(1.8)		
Industrial	1.8	(.1)		
Public and Institutional	73.3	(3.0)		
Parks/Open Space	22.0	(.9)		
Utilities	13.6	(.6)		
Streets and Roads	79.2	(3.2)		
Agriculture, Forested, Vacant	1903.5	(78.3)		
Totals	**2431.0**	**(100.0)**		

[1]1985 Land Use Data derived from field surveys and Onslow County tax maps, January - February 1985. 1980 Land Use Plan data: 1980 Swansboro Land Use Plan.

- Oyster Bay Subdivision (40 lots on about 25 acres on Mt. Pleasant Road)

- River Reach Subdivision (151 units planned for 104 acres just outside the Town's extraterritorial jurisdiction).

- A 40 unit multi-family complex to be built on N.C. 24 on 8 acres just inside the town limits.

All of these developments will be served by the Town's wastewater treatment system; River Reach Subdivision is paying for the installation of sewer lines along Mt. Pleasant Road and will eventually turn them over to the Town upon completion.

Residential: Summary

There are 817 dwelling units within Swansboro's planning jurisdiction, a slight majority of them (458 to 359) located within the town limits. Sixty-eight (68) percent of these units are single family or duplex units. Twenty-three (23) percent are mobile homes. Almost all mobile homes are located in the extra-territorial jurisdiction.

Only two multi-family projects have been built in the Swansboro area, making this the smallest category of housing units at nine (9) percent.

Planned residential developments could cause a rapid increase in the number of residential units in the Swansboro vicinity in the next few years. At least 279 lots and units are planned for development; if all are developed, the residential dwelling count would increase by 34 percent.

Commercial

There are 18.9 acres of commercial land use in Swansboro, a slight increase over 1980 acreage. Commercial uses include several restaurants and small retail businesses in the downtown area, a grocery store, drugstore, tire company, several eating places and other retail uses on N. C. 24 near Hammocks Road. Additionally, an ABC store and marine commercial uses are found on the causeway crossing the White Oak River toward Carteret County. Newly constructed commercial uses on N. C. 24 include a Hardees restaurant and a savings and loan institution.

An additional 24.3 acres of commercially used land is found in the extraterritorial area. Most of this acreage is found along N.C. 24 north of the town limits. Uses include a furniture store, automobile and mobile home sales, a roller rink, and retail sales uses.

Industrial

The only acreage in this category is the 1.8 acre site of the Swansboro Garment Company.

Public and Institutional

Uses accounted for within the town limits under the public and institutional heading include churches and church-owned lands, municipal land and buildings, the U. S. Post Office, Swansboro Middle School, an additional school site, and the Swansboro Cemetery. The increase in acreage in this category since 1980 (from 17 acres to 33.5 acres) is due to the annexation of Swansboro Middle School.

There are 39.8 acres in this category in the extraterritorial area. Uses include Swansboro High School and Swansboro Junior High, Sanders Park, a cemetery and churches.

Utilities

Town-owned facilities, such as the well site and lift stations, make up the 1.2 acres in this category within the Town limits. The wastewater treatment system accounts for the 12.4 acres within the extraterritorial area.

Streets and Roads

There are 30.9 acres of paved and unpaved roads within the city limits and 48.3 acres within the extraterritorial jurisdiction.

Vacant, Agricultural and Forested

This category accounts for more than forty percent of the land area within the town's corporate limits (149.1 acres), and over 85 percent (1754.4 acres) of the land in the extraterritorial area. This acreage does not include undevelopable islands in the White Oak River. Most of the land in this category is developable, although soil conditions (see Soils, p.) the lack of central sewer and water and the lack of direct road access for acreage in the extraterritorial area and some parcels within the town limits are constraints to development.

Current Plans, Policies and Regulations

Swansboro enforces zoning and subdivision regulations and several chapters of the North Carolina Building Code.

Swansboro 1980 Land Use Plan Update

This document, authorized under the Coastal Area Management Act, contains basic land use information and policy statements on issues of state and local concern. The Coastal Area Management Act requires that participating communities update their land use plans every five years. The 1985 Land Use Plan Update supercedes the 1980 Plan on adoption.

Swansboro Municipal Zoning Ordinancee

The Town's previous ordinance was adopted in 1968 and was a typical municipal ordinance offering a limited number of zoning categories. For this last reason, it became necessary to substantially revise the code in order to accommodate the differing land use make-up of the extraterritorial area. The new ordinance was adopted in 1985.

The new ordinance will expand the present six district code to include at least seven new residential districts, a new business district and a light industrial district. The ordinance closely follows that of Onslow County in an effort for consistency.

Subdivision Regulations

Swansboro enforces a subdivision code which includes site design provisions for new residential development including planned unit developments.

Flood Insurance Program

Swansboro is enrolled in the regular National Flood Insurance Program and complies with all regulatory requirements. For more information on flood hazards in Swansboro, see **Hurricane Hazard Areas**, p. 18.

Impact Fee Ordinance

This ordinance was passed in 1985 and is designed to allocate the cost of providing sewage treatment services to new users on an equitable, user-oriented basis.

Sewer Ordinance

Passed November 7, 1985, this ordinance requires that property owners outside the town limits who wish to be served by the Town's sewage treatment system must formally request service and finance the cost of extension of services.

Community Facilities

Water

The Town of Swansboro supplies water and sewer services to all developed areas in the Town and several areas within the extraterritorial area. Swansboro's water supply comes from Onslow County's central system, which has a capacity of 3 million gpd and is distributed through the Town's system. Onslow County is progressively extending its water lines to new areas in the Swansboro vicinity. It is expected, on completion of water distribution lines to the Deer Island Road area in early 1986,

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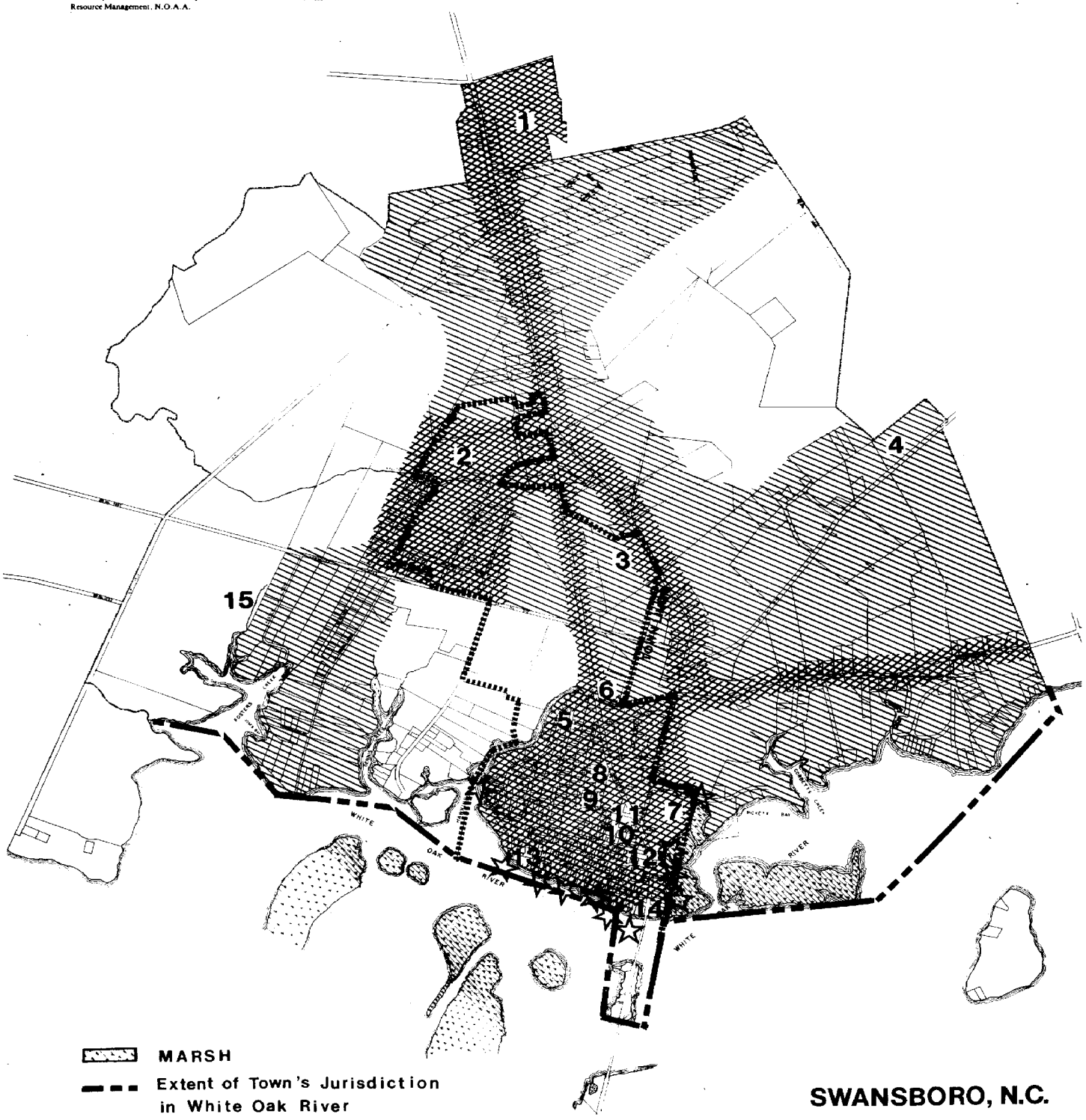


MARSH

Extent of Town's Jurisdiction in White Oak River

SWANSBORO, N.C.

COMMUNITY FACILITIES

LEGEND:

AREAS SERVED BY SEWER LINES

AREAS SERVED BY TOWN OR COUNTY WATER

1 SWANSBORO HIGH & JUNIOR HIGH
2 SWANSBORO MIDDLE SCHOOL
3 SWANSBORO TOWN PARK
4 SANDERS PARK
5 EDGEWATER HEIGHTS PARK
6 SWANSBORO RESCUE SQUAD
7 SWANSBORO ELEMENTARY
8 TOWN WELL
9 FIRE STATION
10 TOWN HALL & POLICE STATION
11 ONSLOW COUNTY LIBRARY
12 U.S. POST OFFICE
13 WARDS SHORE RECREATION AREA
14 BICENTENNIAL PARK
15 SEWAGE TREATMENT PLANT
☆ WATER ACCESS POINTS

Prepared By: SATILLA PLANNING
200 Osborne Street
St. Marys, Georgia

Drawing Date: APRIL, 1985

MAP 2

that all residents of Swansboro and all but a handful of residents within its extraterritorial planning area will be served by central water from the County system.

Town water system facilities include its distribution system and a combined elevated and ground level storage capacity of 350,000 gpd. Areas served with water are identified on Map 2, Community Facilities. The Town's main back-up well, which is infrequently used, has a pumping capacity of 350 gpm.

Sewer

Swansboro's sewage treatment system, which was built in the late 1970's to replace a plant with an outfall on the White Oak River, has a capacity of 300,000 gallons per day. Peak average daily flows are in the vicinity of 150,000 gpd, about fifty (50) percent of capacity. Service areas, which include all developed areas within the town limits, are shown on Map 2. A force main has been extended to serve Swansboro High School and Swansboro Junior High at the northern edge of the Town's extraterritorial area. A collection system has not been built for the area between the town limits and the two schools, and sewer service is not available as yet on this portion of N. C. 24. Septic tanks are used in areas not served with sewer lines. As of January 1986, only several users within the town limits will be without sewer.

Areas within the extraterritorial jurisdiction which are, or will be, served with sewer lines include:

- River Reach Subdivision at the terminus of Mount Pleasant Road (S.R. 1448). Sewer lines are currently under construction along Mt. Pleasant Road, and property owners along this route will be able to tie into the system. The developers of River Reach Subdivision are installing lines and will eventually turn the improvements over to the Town in accordance with a legal agreement.

- Oyster Bay Subdivision. This planned development will be developed on property between Mt. Pleasant Road and S.R. 1444. Sewer lines are also under construction here.

A recently annexed area which is served with sewer is Port West Apartments, which is located next to Swansboro Middle School on S.R. 1514.

Portions of the Town's water and sewer distribution systems are at least forty (40) years old. During periods of moderate to heavy rain, the system maybe hydraulically overloaded. The sewage treatment plant contains an oxidation ditch which is used at such times to prevent the overflow of suspended solids. Treated water, primarily rainwater, overflows from the oxidation ditch

and runs off. The nearest body of water is three-fourths of a mile from the plant. Depending on the quantity and speed of the runoff, this overflow can cause the temporary closure of nearby shellfish beds due to freshwater flooding.

The Town of Swansboro has applied for a Community Development Block Grant of $ 9,450 (dated April, 1985) to prepare engineering feasibility surveys and a development plan with cost estimates necessary to revitalize the water and sewer distribution system. This is the first step toward correcting deficiencies in the water and sewer systems, and, if funded, the Town intends to pursue a capital improvements program to implement the proposed modifications.

Fire, Rescue Squad and Police

The Swansboro Fire Department has an all-volunteer staff of 43 with facilities located Sabiston Avenue at the water plant. The Department owns three 750 gpm pumpers, all over 10 years of age. The Department provides mutual aid to Carteret and Onslow Counties. With financial aid from Onslow County, the department has established and operates a hazardous materials unit (HAZMAT) which is on call to handle spills of hazardous materials.

The Swansboro Rescue Squad building is located on N.C. 24 adjacent to Wise's Branch.

The Fire Department is financially supported in part by the Town of Swansboro and Onslow County. The rescue squad is a function of Onslow County and is not funded by the Town of Swansboro. Service areas for both groups extend beyond the Swansboro town limits, and in some cases beyond the Town's planning jurisdiction.

The Town maintains a four-man police department which is responsible for police protection within the town limits. The Town's police department maintains a mutual aid agreement with Onslow County.

Solid Waste Disposal

Solid waste disposal for residents of the Town of Swansboro is arranged by contract by the Town with a private contractor. Terms vary according to the specific annual contract. Currently, pickup occurs three times a week. Solid waste is trucked to the County landfill, which was established two year ago in a rural area of northwest Onslow County. Waste disposal in the extraterritorial area is available on an individual basis through private contractors.

Recreation

Recreation facilities in the Swansboro community include a 17 acre park located on SR 1447, Sanders Park, located in the extraterritorial jurisdiction, Edgewater Heights Park at the intersection of Broad and Shore Drives, and at least eight water access points, many of them undeveloped. Recreation facilities are not overutililized at the present time.

The 17 acre park offers two regulation tennis courts, an outdoor basketball court, an outdoor volleyball court, and a multi-purpose playing field which is used for soccer, football, baseball, softball and other sports.

The water access points are largely undeveloped. Bicentennial Park, an open space area at the foot of the White Oak River Bridge, offers an attractive vantage on the river, as does Wards Shore, located at the west end of Water Street. In early 1985, the N. C. Department of Transportation Bicycling Program established the Swansboro Bicentennial Bicycle Trail, a twenty mile loop through Onslow and Carteret Counties which begins and ends in Swansboro.

Transportation

Roadways

Road access is one of the key determinants of land use. The availability of good road capacity and traffic volumes makes adjoining land attractive for certain types of development, such as commercial uses that depend on high visibility and accessibility for economic success. On the other hand, the overloading of roads with ill-designed land uses, such as strip commercial development along a highway, can lead to problems of traffic safety, capacity and poor visual appearance.

Key roadways in and around Swansboro have been identified and analyzed. The four road classifications used are: principal arterial, minor arterial, major collector, and minor collector.

Principal Arterials

These roads are intended to serve a through traffic function and interconnect with the Minor Arterial and major highway systems. They collect from other arterials to provide inter-community and county continuity. They should not penetrate identifiable neighborhoods. Land use along principal arterials should be primarily higher intensity commercial and industrial, or medium and high density residential uses, with no direct highway access. Through movement should always take precedence over access to private property.

N.C. 24 is the principal arterial serving Swansboro.

Minor Arterials

These roads are intended to serve a through-traffic function and interconnect with and augment the Principal Arterial System. They link two arterials or one major collector and one arterial, and distribute traffic to geographic areas smaller than those identified with the higher system. Land use along minor arterials may include low, medium and high density residential uses, provide durable and effective screening techniques are employed; and medium and high intensity commercial and industrial areas. Access should not interfere with through traffic movement. Generally, individual residences should not have direct access to minor arterials.

Roads classified as minor arterials in the Swansboro area include Hammocks Road (SR 1512) and SR 1551.

Major Collectors

These roads should have relatively long trip lengths and connect arterials and/or other collectors. They should have relatively few access points to individual residences. Access to land uses should not interfere with traffic movement. Land uses along major collectors may include high intensity or large commercial and industrial areas, and low, medium or high density residential uses.

SR 1444, Norris Road and SR 1447 have been placed in this classification.

Minor Collectors

These roads generally provide for short and medium intra-area trips. They generally move traffic between neighborhoods and other collectors and arterials. Land uses should generally be of lower intensity, including medium and small industrial and commercial areas. Moderate access to residential areas is generally provided. However, such access should not interfere with normal through traffic.

Roads in this category include: Mt. Pleasant Road, Sabiston Drive, SR 1513, SR 1559, and SR 1572.

Traffic Conditions

Swansboro and Nearby Activity Centers

Swansboro is on the pass through route between points west and south leading to Bogue Banks. The nearest city, Jacksonville, is fifteen miles away by N.C. 24, a four lane highway. N.C. 24 is linked to Camp Lejeune and U.S. 17 via N. C. 172 about 7 miles north of the town limits.

Average Daily Traffic (ADT) counts for 1983 along N. C. 24 ranged from 9,500 ADT to 11,100 ADT. Counts at peak times, such

as during the summer tourist season or during periods of heavy military traffic between Camp Lejeune and Morehead City, may be substantially higher than these annualized averages.

Counts on Hammock's Road, the only minor arterial for which DOT traffic counts were given, were 1,900 ADT in 1983. Neither Hammock's Road nor SR 1551 (the more direct link between N.C. 24 and Hammock's Beach State Park) have witnessed significant land development of any kind,

Counts on other major and minor collectors were quite low, ranging from 300 ADT on SR 1513 to 800 ADT on Mt. Pleasant Road.

Within the older part of Swansboro, particularly in the downtown business district, traffic is hampered by narrow roads laid out before the advent of the automobile and by the present need for streetside parking on those narrow streets. Traffic problems are intensified during the summer tourist months.

Potential Development

Swansboro has the long range potential for development which is widespread throughout its planning area, and perhaps beyond. The road system serving the community provides a basic access network to large land areas. As was mentioned in the discussion of vacant land use (p. 8), much of this land area is presently undeveloped. As a result, present traffic counts are quite low relative to design capacity, even on busy N. C. 24.

Over the ten year planning period, future development will most likely take place along or adjacent to existing roads and thoroughfares in areas were water and sewer services are available. Care should be taken to ensure that subsequent development does not necessarily hinder the movement of traffic, particularly on roads which serve collecter and arterial functions.

Parking

Parking is a problem in the downtown area due to its historically narrow streets and the absense of adequate offstreet parking to accommodate seasonal influxes of tourists. Because of the compactness of the downtown area, it is generally possible to park within a block or two of the district. Parking is required for new uses in the downtown area only to the extent that actual provision of parking is feasible.

Economic Conditions

Swansboro is located in northeastern Onslow County, 15 miles east of the county seat and principal commercial center, Jacksonville. Onslow County is home to Camp Lejeune, a U. S. Marine Corps installation with over 40,000 military personnel. Swansboro lies within a ten minute drive of both Camp Lejeune (via N. C. 24 and N. C. 172) and the Bogue Banks beach community of Emerald Isle.

There are two distinct business districts in Swansboro: a downtown waterfront business district, and a highway oriented commercial strip. Some local services are still provided in the central business district, and tourists are attracted to its unique scale and historic character, and to the waterfront (which still contains water related businesses). Antique, craft and gift stores and restaurants have also located in the area in the past several years. A highway commercial district, characterized by higher volume retail concerns and accounting for much of the commercial acreage in the town, is emerging along N. C. 24. Shops and services in this area provide for both basic retail and service needs (groceries, hardware, furniture) and convenience shopping and services (fast food restaurants, convenience stores).

Camp Lejeune is the major employer in the Swansboro area. Other employers include retail and service businesses and a small garment manufacturing plant.

Swansboro is easily accessible to Jacksonville, and is located between a growing resort area and an extensive military installation. At present, the Town has few development limitations in terms of its sewage treatment capacity and road system. These factors, plus the unusually lovely natural setting of the area, makes continued residential growth and economic development likely in the Swansboro vicinity.

Physical and Environmental Constraints

Included on the following page is an Environmental Determinants Map which identifies several environmental and physical constraints to development in Swansboro. Specific components of the map, including an analysis of soil types, hurricane hazard areas, and Swansboro's Historic District, are described below. Other fragile areas, including Areas of Environmental Concern (AEC's) are also introduced in this section.

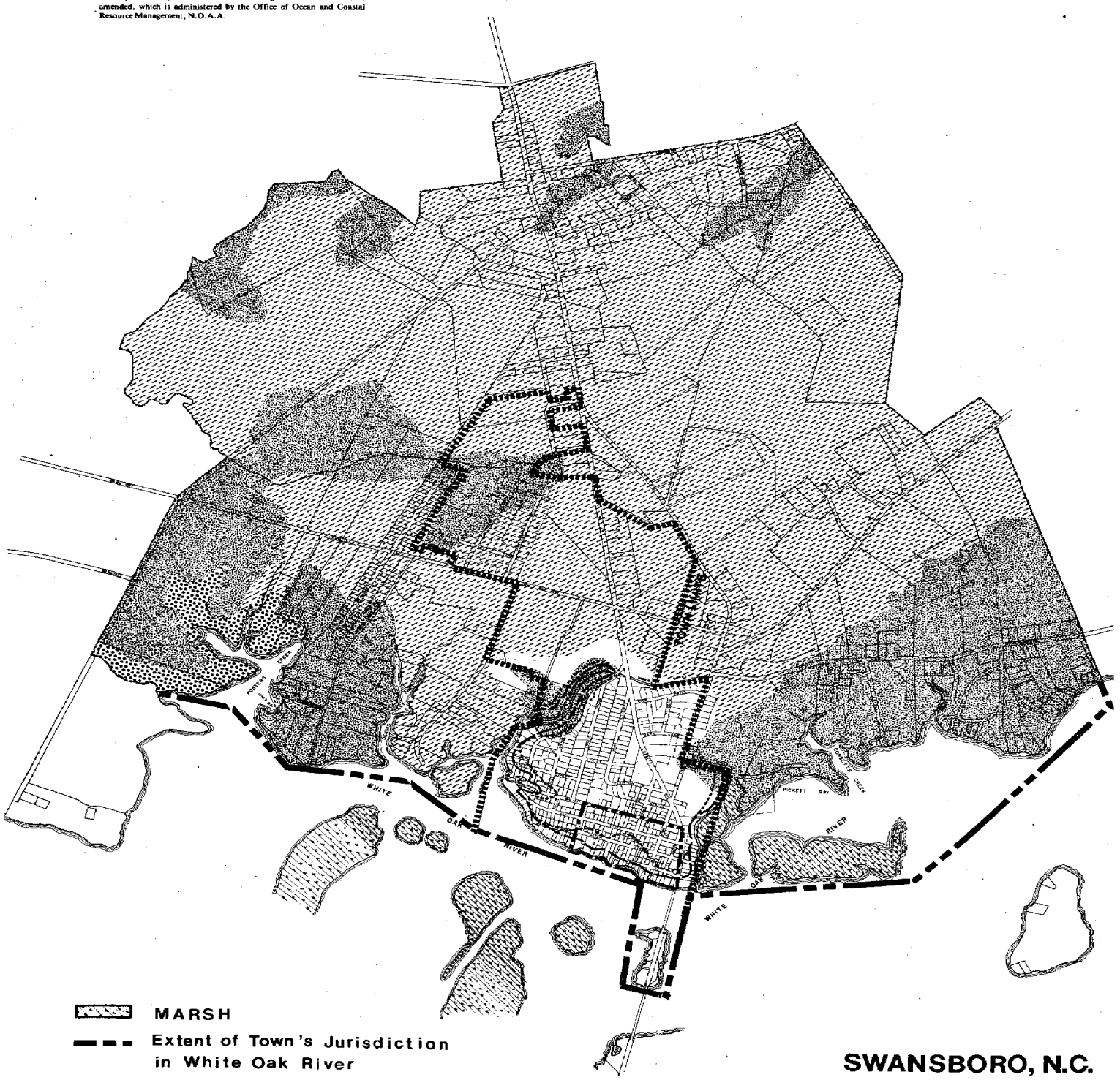
Soil Suitability

The soils analysis for Onslow County, completed in 1984, was used as a component of the Environmental Determinants Map for the Swansboro area. Soils were analyzed for their suitability for five development related activities:

- septic tanks
- shallow excavations
- residential dwellings
- commercial structures
- local roads and streets

Based on these five indicators, soils were classified in one of four categories:

The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, N.O.A.A.



MARSH

Extent of Town's Jurisdiction in White Oak River

SWANSBORO, N.C.

ENVIRONMENTAL DETERMINANTS

LEGEND:

SOIL SUITABILITY

- SUITABLE-Slight Limitations
- MODERATELY SUITABLE-Some Drainage Required
- MARGINALLY SUITABLE-Drainage Required
- UNSUITABLE

HAZARD AREAS

- HAZARD AREA 1
- HAZARD AREA 3

- HISTORIC DISTRICT

Prepared by: DATELLA PLANNING, 2002 Osborne Street, St. Marys, Georgia

APRIL, 1985

MAP 3

- o suitable
- o moderately suitable; some drainage needed
- o marginally suitable if drained
- o highly unsuitable, flooding common

Most soils in developed areas within Swansboro fall into either the suitable or moderately suitable category. Two soil types fell into the suitable category. These soils, Baymeade-Urban Land Complex and Baymeade Fine Sand, have slight limitations for all types of construction except for shallow excavations and septic tanks. The only occurrence of these soils is in areas served by a central sewage treatment system. All of the soils in the Swansboro area have severe limitations for shallow excavations, not an uncommon tendency in low-lying coastal areas.

Soils in the moderate category show moderate limitations for construction of buildings and roads which can in most cases be overcome by adequate drainage. Limitations for septic tanks are moderate to severe for this category, with soils with severe limitations requiring either central wastewater treatment or substantial site improvements.

Soils in the moderately suitable category:

Goldsboro Fine Sandy Loam
Marvyn Loamy Fine Sand
Onslow Loamy Fine Sand
Norfolk Loamy Fine Sand, 0 to 2 percent slope

Soils in the marginally suitable category generally show severe limitations in all categories, but are not subject to regular flooding. Substantial site modifications and/or provision of central sewer would be necessary to develop sites with this soil base. Soils in the marginally suitable category:

Leon Fine Sand
Lynchburg Fine Sandy Loam
Norfolk Loamy Fine Sand 2 to 6 percent slopes
Pactolus
Rains Fine Sandy Loam

Bohicket type soils fall into the last classification, highly unsuitable. This soil has severe limitations in all five categories and is subject to flooding.

Hurricane Hazard Areas

In 1983, the North Carolina Coastal Resources Commission adopted rules for hurricane hazard planning for all coastal communities. One of the first requirements in planning for storm hazards is the identification of hazard areas and those structures at risk within them. As part of the hurricane guidelines, classifications for hazard areas were defined as follows:

Severity Rank 1: Ocean Erodible AEC's, Inlet Hazard AEC's, and Estuarine Shoreline AEC's

Severity Rank 2: FEMA V-zones and Coastal Wetlands AEC's

Severity Rank 3: FEMA A-zones

Severity Rank 4: Rest of community

Hazard Areas in Swansboro are shown on Map 3, Environmental Determinants, p. 18, and described below.

Hazard Area 1: Within the planning jurisdiction of Swansboro, the only areas in the most severe category are Estuarine Shoreline AEC's. These areas are potentially subject to erosion and scour, wave action and battering, flooding and high winds in hurricane or tropical storm conditions. The following uses were found in Estuarine Shoreline AEC's in Swansboro:

Retail Commercial: 4
Marine Commercial: 3
Residential: 8

The retail commercial uses included two waterfront restaurants, a business with a shallow lot facing immediately on Front Street, and a commercial building within 75 feet of a bulkhead on Church Street. Among the marine commercial uses was Caspar's Marina. Of the eight residential uses, two are built on shallow lots immediately facing Front Street with no setback; the other six are on bulkheaded lots.

Hazard Area 2: There are no uses in Swansboro in this category, which includes coastal wetlands and V-zones. (Swansboro contains no V-zone designations on its flood maps).

Hazard Area 3: This category includes FEMA A-zones. Propertiesin such hazard areas are subject to flooding and high winds in hurricane or tropical storm conditions. The following uses were found in Hazard Area 3:

Retail Commercial: 10
Marine Commercial: 0
Residential: 20

All commercial uses in the downtown Front Street district not accounted for under Hazard Area 1 fall into this category. The 20 residences were generally located in the same area as the downtown commercial district. It should be pointed out that this area of Swansboro has been laid out and a functioning part of the community for more than 200 years.

Generally, the built environment in Swansboro is as well protected from unneccessary risk from tropical storms and hurricanes as can be expected.

Historic District

Swansboro's locally designated historic district (established in 1985) is shown on the Environmental Determinants Map (p. 18). The district includes the original 48 lots laid out by Theophilus Weeks at the Town's inception about 1770, and streets containing the dwellings built by Swansboro Land and Lumber Company through 1910. The district extends 300 feet into the White Oak River, although no known archaeological resources are located in this area.

No formal architectural or archaeological survey, such as would be required for a nomination to the National Register of Historic Places, has been conducted for the district as a whole. The N.C. Division of Archives and History has some funds available in the form of matching grants for such survey work. A certain percentage of the money available to the Division for grants, presently ten percent, is earmarked for communities which have met the requirements of the Division's Certified Local Governments program. Any North Carolina municipality or county with a local historic district commission can participate in the Certified Local Governments program.

Structures of some historic significance found in the local historic district include the following:

The Ringware House (c. 1787, lot number 23).
The Underseth House (c. 1747, lot number 40).
Old Brick Store (c. 1838 - 1839, lot number 6).
The Cyrus B. Glover House (moved to present location c. 1900).
St. Thomas A.M.E. Zion Church (school, c. 1869, N. C. 24)
The John F. Mattocks House (Elm Street).

Other Fragile Areas

Areas of Environmental Concern

Areas of Environmental Concern (AEC's) are sensitive environmental and cultural areas protected by the Coastal Area Management Act (CAMA). General categories of these areas are identified through state guidelines according to the Administrative Procedures Act, as administered by the Division of Coastal Management. Special areas of local or regional environmental or cultural significance can be nominated as AEC's by individuals, groups or governing bodies.

AEC's lying within Swansboro's jurisdiction include Coastal Wetlands, Estuarine Waters, Public Trust Waters and Estuarine Shorelines. Development or other land and water uses within AEC's generally require CAMA permits. The State has established extensive guidelines regarding activities within AEC's, but generally does not preclude any land use by right. As part of an effort to share implementation of the Coastal Area Management Act with local governments, the State's land use planning guidelines

require that local governments identify acceptable land uses within AEC's within their planning jurisdiction. Descriptions of AEC's within Swansboro's jurisdiction are given below.

Coastal Wetlands. Coastal wetlands are defined generally as any marshland subject to regular or occasional flooding by tides. These wetlands are the breeding and nursery grounds for fish and shellfish species which make up over ninety (90) percent of North Carolina's commercial catch.

The State's management objective for land uses within these wetlands is to give highest priority to their protection as a productive natural resource. Uses which are **generally** unacceptable to the State include most types of commercial businesses and residential uses, and any use involving impervious surfaces, such as paved roads. Uses which **may** be permitted according to State guidelines include utility easements, fishing piers, docks, and agricultural uses. Swansboro may not permit any uses which the State deems unacceptable, but it may go beyond the State guidelines in limiting or placing special conditions on uses which are not discouraged outright by the guidelines.

Management guidelines and rules for uses in Coastal Wetlands are described in the most recently amended version of Section 15: 7H of the North Carolina Administrative Code. These rules are available through Division of Coastal Management offices in both Raleigh and Morehead City.

Estuarine Waters. Estuarine Waters are defined as all waters of the Atlantic Ocean within the state boundaries and all waters of the bays, sounds, rivers and tributaries seaward to the dividing line between coastal fishing waters and inland fishing waters, as defined by North Carolina law. Their productive significance is similar to that of coastal wetlands. Additional benefits include the stimulation of the coastal economy through operations required to serve coastally-oriented commercial and sporting industries.

The State's key management objective for estuarine waters is to conserve and utilize them to maximize their benefits to man and the estuarine system. Highest priority of use is given to the conservation of estuarine waters. Second priority is given to water-related uses which cannot function elsewhere.

Management guidelines and rules for uses in Coastal Wetlands are described in the most recently amended version of Section 15: 7H of the North Carolina Administrative Code. These rules are available through Division of Coastal Management offices in both Raleigh and Morehead City.

Estuarine Shorelines. These shorelines are non-ocean shorelines which are especially vulnerable to erosion and flooding. They extend landward a distance of 75 feet from the mean water level along all estuarine waters.

The significance of estuarine shorelines lies in their proximity to sensitive coastal systems. Estuarine shorelines are also subject in many areas to intense development activities which may have a potentially detrimental impact on those sensitive systems.

The State's use standards are designed to minimize the impacts of erosion and stormwater runoff generated in the course of development. However, these rules do not preclude any types of development outright. It is expected that the present rules will be extensively revised and amplified during the course of the planning period in order to address the issue of stormwater runoff and its impacts in a more comprehensive fashion.

Public Trust Areas can be generally defined as all estuarine water areas and all lands under such waters, and may also include artificially created bodies of water (and the lands underneath) to which the public has rights of access and/or navigation.

Closed Shellfish Areas

Although the waters surrounding Swansboro are classified SA (the highest and least polluted designation), Swansboro and its vicinity contains extensive areas which area closed to shellfishing. Closure is initiated by recommendation of the Deptartment of Health Services by proclamation of the Division of Marine Fisheries. Waters closed to shellfishing in the Swansboro area include Stevens Creek from its origin to its mouth, all waters south of Stevens Creek adjacent to Swansboro to Fosters Creek. The waters Caspar's Marina are also closed to shellfishing. Causes of high bacteria counts which may result in the closure of shellfish beds include sewage treatment outfalls, septic tank seepage, and nonpoint source urban runoff.

Areas With Resource Potential

Areas with resource potential in Swansboro include agricultural and forested areas, presently zoned for agricultural use, located primarily within Swansboro's large extraterritorial jurisdiction. Although the Swansboro area contains an excellent road network, it is not anticipated that large amounts of agricultural and forested acreage will be converted to urban uses during the ten year planning period.

Community Design Structure

Some of the key characteristics which help to define the Swansboro community are displayed on Map 4, Community Design Structure. This map highlights significant community features, recent changes, and development trends through the use of designations such as:

- Districts: these are sections of town with a two-dimensional character, which an observer mentally enters "inside of", and which are recognizable as having some common iden-

tifying character. Representative districts in Swansboro include existing residential areas, areas planned for development or with waterfront development potential, the Town's developing commercial corridor, and the Historic District.

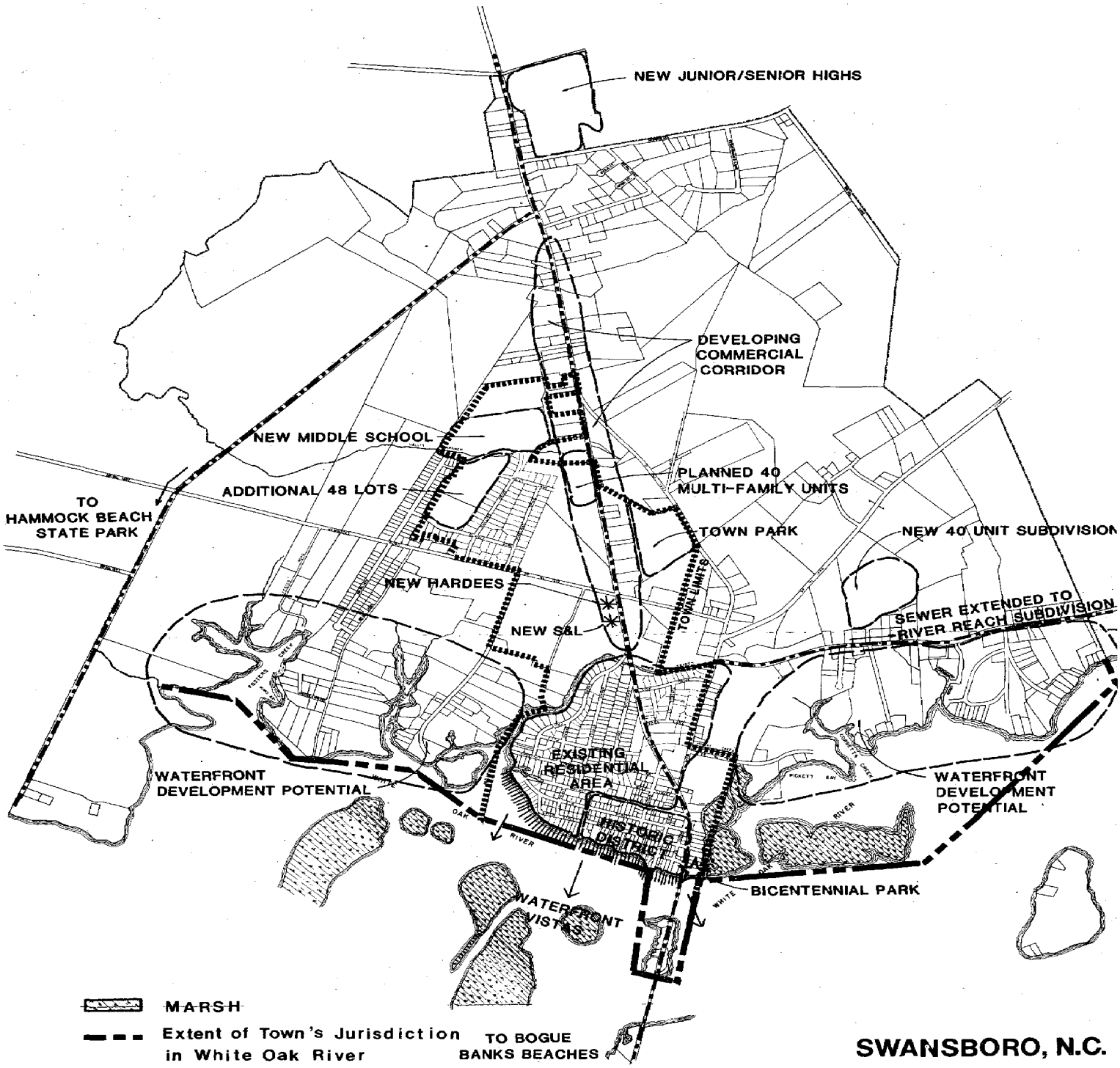
- Landmarks: these are usually simply defined physical objects that serve as reference points such as a building or a sign. Bicentennial Park is a Swansboro landmark.

- Nodes: these are strategic points in the community which can be entered, such as an intersection or central gathering place. Hardees, at the intersection of Hammocks Road and N.C. 24, has been designated as a central gathering place.

- Pathways: these are the main channels along which an observer moves. The road to Hammocks Beach, Mt. Pleasant Road and N. C. 24 are key pathways in the Swansboro area.

- Edges: these are linear elements that can be seen but which are not used or considered as paths. The shoreline along the White Oak River, with its waterfront vistas, forms such an edge.

The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, N.O.A.A.



SWANSBORO, N.C.

COMMUNITY DESIGN STRUCTURE

LEGEND:

- DISTRICT
- LANDMARK
- NODE
- PATHWAY
- EDGE

Prepared By: SATELLA PLANNING, 200 Osborne Street, St. Marys, Georgia

Working Date: APRIL, 1988

MAP 4

GROWTH TRENDS

Population and Impacts on Community Facilities

The 1980 Census found Swansboro's population to be 976 persons. This represented a decrease from the 1970 census count of 1,207 of 19.1 percent and over 200 people. This decrease may be due to shrinking household sizes as Swansboro is becoming more of a retirement community.

The N. C. Office of State Budget and Management publis hed an estimate of Swansboro's July 1982 population in late 1983 which showed an upswing in Swansboro's population. This figure, 1,056, represents an eight (8) percent increase over the 1980 census count, indicating that growth rates have increased to about 4 percent per year since 1980.

It is difficult to project population in a meaningful way for a community the size of Swansboro. Factors other than birth, death and migration rates based on past trends can sometimes provide more meaningful insight into potential population increases. Factors affecting future population in Swansboro include:

- The availability of land suitable for residential development in Swansboro and its immediate area.
- The annexation of new areas into the town limits.
- Sewage treatment capacity and the Town's ability to deliver those services to potential development areas.
- The desirability of Swansboro and vicinity as a bedroom community for the Jacksonville/Camp Lejeune area and as a resort/retirement location.
- The continued economic viability of the area.

Assuming the residential development market, as well as the economy in general, remains healthy, the Swansboro area should see an increase in residential development over the next decade. The amount of development - and thus the size of the future population - depends on the availability of land and the availability of urban services.

Swansboro offers numerous possibilities for residential development simply from the standpoint of the number of acres which are served by adequate roads and which are within a reasonable distance of being served with central water and sewer services. Since the beginning of the decade, the installation of Onslow County's extensive central water system has made it possible to develop new residential areas in areas remote from most other services on lots as small as 10,000 square feet. The Swansboro area offers an additional advantage in that the Town

currently uses only about fifty (50) percent of its wastewater treatment capacity.

There are two possible ways to project population for Swansboro. The first would be to calculate a compound growth rate based on the State indicated increase for 1980 to 1982 (four percent per year). This method results in the following projections:

1985	1990	1995
1,188	1,443	1,756

The second method would be to calculate the number of units that could be developed based on the remaining sewage treatment capacity (about 400 to 500 units, if units average 2.5 bedrooms in size), then estimate a "build out" time frame. Because the potential number of units is relatively small, if economic and housing factors remain strong in the Swansboro area, this "build out" could occur in ten to fifteen years. If the build out figure (say 800 units total) is multiplied times the 1980 census occupancy rate (2.6 persons per dwelling), this would result in a population of **2090** persons. Additionally, since land and good access roads are so available in the Swansboro area, under the right combination of economic factors, the growth rate in the Swansboro area could be substantially higher than projected here.

Conversely, the population rate may not increase as fast as shown in these projections if the economy takes a downturn, or other factors, such as a reduction in force at Camp Lejeune, take place. As growth occurs, the Town of Swansboro and other effected government agencies will need to monitor the impacts of residential and commercial growth on urban service delivery. In addition to water and sewer needs, attention should be directed to population impacts on solid waste disposal and the method by which the Town handles this service, police, fire, and recreation facilities and programs.

POLICIES

RESOURCE PROTECTION

Areas of Environmental Concern

Areas of Environmental Concern (AEC's) found within Swansboro's planning jurisdiction are listed below. Appropriate land uses within each category of AEC are also described. This information is drawn directly from the guidelines enforced by the Division of Coastal Management through 15 NCAC 7H.

Swansboro will support and enforce through its CAMA permitting capacity the State policies and permitted uses in the Areas of Environmental Concern (AEC's) as stated below. The benefits to the community should include protection of biological productivity and protection of recreational and aesthetic resources. Protection of common law and statutory public rights in the lands and waters of the coastal area, and mitigation of damage due to storms and hurricanes, are other obvious benefits to the public.

The Estuarine System

In recognition of the enormous economic, social and biological values the estuarine system has for North Carolina, Swansboro will promote conservation and management of the estuarine system as a whole, which includes the individual AEC's: coastal wetlands, estuarine waters, public trust areas, and estuarine shorelines.

The management objective for the system shall be to give highest priority to the protection and coordinated management of all the elements as an interrelated group of AEC's, in order to safeguard and perpetuate the above stated values, and to minimize the likelihood of significant loss of private property and public resources.

In general, permitted land uses in the coastal wetlands, estuarine waters, and public trust areas shall be those which are water dependent. Examples of such uses may include: utility easements, docks, boat ramps, dredging, bridges and bridge approaches, revetments, bulkheads, culverts, groins, navigational aids, mooring pilings, navigational channels, simple access channels, and drainage ditches.

Land uses that are not water dependent shall not be permitted in coastal wetlands and public trust areas. Examples of uses that are not water dependent may include: restaurants, residences, apartments, motels, hotels, trailer parks, private roads, factories and parking lots.

Specific policies regarding acceptable and unacceptable uses within the individual AEC's of the estuarine system are stated

below. In all cases the particular location, use, and design characteristics shall be in accord with the general use standards for coastal wetlands, estuarine waters, and public trust areas as stated in NCAC Subchapter 7H.

- Coastal Wetlands: Acceptable land uses may include utility easements, fishing piers, and docks. Unacceptable uses may include, but would not be limited to, restaurants, businesses, residences, apartments, motels, hotels, floating homes, parking lots, private roads, and highways.

- Estuarine Waters: Appropriate uses may include simple access channels, structures which prevent erosion, navigational channels, boat docks, marinas, piers, and mooring pilings.

- Public Trust Areas: In the absence of overriding public benefit, any use which significantly interferes with the public right of navigation or other public trust rights which apply in the area shall not be allowed. Projects which would directly or indirectly block or impair existing navigational channels, increase shoreline erosion, deposit spoils below mean high tide, cause adverse water circulation patterns, violate water quality standards, or cause degradation of shellfish waters shall, in general, not be allowed.

  Uses that may be allowed in public trust areas shall not be detrimental to the public trust rights and the biological and physical functions of the estuary. Examples of such uses include the development of navigational channels or drainage ditches, the use of bulkheads to prevent erosion, the building of piers, docks or marinas.

- Estuarine Shoreline: Suitable land uses within the estuarine shoreline AEC are those compatible with both the dynamic nature of estuarine shorelines and the values of the estuarine system.

  Residential, recreational, and commercial land uses are all appropriate types of use along the estuarine shoreline provided that all standards of NCAC 15 Subchapter 7H relevant to estuarine shoreline AEC's are met and that development complies with zoning controls.

Natural and Cultural Resource Areas

These fragile coastal natural resource areas are generally recognized to be of educational, scientific or cultural value because of the natural features of the particular site. Individual AEC's included in this general category are: coastal complex natural areas, coastal areas that sustain remnant species, unique coastal geologic formations, significant coastal architectural

resources, and significant coastal archaeological resources. This AEC category is unique in that individual natural and cultural resource AEC's are established through a special designation process which involves a detailed nomination and review process prior to formal recognition by the Coastal Resources Commission.

Uncontrolled or incompatible development may result in major or irreversible damage to fragile coastal resource areas which contain environmental, natural, or cultural resources of more than local significance. In recognition of this, Swansboro will seek to protect such natural systems or cultural resources; scientific, educational or associated values, and aesthetic qualities.

Swansboro supports the policies and guidelines stated in Subchapter 7H of NCAC 15 regarding these irreplaceable resources.

Stormwater Runoff

Urban type development, often well outside designated AEC's, can pose a serious threat to the health and productivity of the estuarine system through the rapid discharge of pollutants washed off impervious surfaces such as streets, roofs, and parking lots by rain and stormwater.

Swansboro's Subdivision Regulations require the establishment of a storm drainage system "adequate for the proper drainage of all surface water" for all new subdivisions, including planned unit developments. The ordinance encourages developers to connect to existing storm drainage systems, and requires only that a system designed for a development "protect the proposed development from water damage". Planned unit developments are required to retain a minimum of twenty (20) percent of gross acreage in open space. Essentially, the ordinance does not require that impacts on neighboring properties or receiving bodies of water be considered as a condition of subdivision approval.

Much of the new development in the Swansboro area is locating along the numerous creeks and waterways found here. Because of the close proximity of such development to the sensitive estuarine system, Swansboro should consider taking steps to ensure that the environmental impact of stormwater runoff generated by new development is minimized.

- The Town of Swansboro has considered revisions to its Subdivision Regulations and Planned Unit Development Ordinance and is pursuing the imposition of standards for stormwater runoff designed to mitigate the impacts of runoff generated by new developments on surrounding properties and receiving bodies of water.

- The Town of Swansboro is in the process of establishing generalized guidelines to encourage the use of best available management practices to minimize the threat of pollution from stormwater runoff. Examples of these practices include

using pervious or semi-pervious materials (those which allow water flow or seepage) for driveways and walks, retaining natural vegetation along marsh and waterfront areas to retain its filtering properties, and allowing stormwater to percolate into the ground rather than be discharged directly into coastal waters.

- The Town will consider increasing the amount and utilization of open space required in developments within its planning jurisdiction.

Marina and Floating Home Development

Recognizing the extensive limitations placed on the alteration of natural systems by State and Federal law, the key area of jurisdiction for Swansboro on these issues lies within its local regulatory and zoning authority.

There are a number of marinas and boat basins located within Swansboro's planning jurisdiction. Swansboro specifies permissible locations and standards for the development of marinas through its zoning ordinance. Marinas are permitted as a use in Highway Business and Light Industrial districts and are permitted by special permit in all residential districts with the exception of those zoned for single family dwellings only.

Because of Swansboro's attraction to tourists, there is potential for the expansion of existing marina facilities or the creation of new ones in the Swansboro vicinity. There are no likely sites for new marinas within the town limits, although marinas inside the town limits may have expansion potential.

The Town of Swansboro feels that the development of marinas is undesirable unless central water and sewer facilities are available to serve the facility, due to the scale of associated water and sewage generated by such facilities.

The Town feels that floating homes are undesirable and will consider adopting an ordinance to regulate them.

Development of Sound and Estuarine Islands

Swansboro's policy regarding any such areas, with the exception of the developed portions of the White Oak River bridge causeway, is to place them in the Conservation land classification. Any development on such islands must be consistent with State and local policies regarding the Conservation land class.

RESOURCE PRODUCTION AND MANAGEMENT

Swansboro's natural resources play a vital role in its economy; much of its extraterritorial land is utilized for agriculture, and its water areas are important to fisheries and

recreation. Protection of these resources is a prime concern of the Town of Swansboro.

Productive Agricultural and Forested Lands

Land which is presently in productive agricultural and forestry uses will be encouraged to continue in that use. Development other than low density residential will be encouraged to locate in non-resource productive areas. Only if no other suitable location exists for a particular development project because of locational, resource, or transportation needs should it be placed on productive agricultural or forest lands. Development projects which require State or Federal permits, licenses or funds must meet this policy criteria.

In general, growth and development will be discouraged in productive agricultural lands when such growth is not in accordance with other land development policies in this Plan. This policy has been and will continue to be implemented through zoning such lands in agricultural categories.

Commercial and Recreational Fisheries

Swansboro will encourage preservation and expansion of its fisheries industry, both sports and commercial. Protection of coastal and estuarine waters is a prime prerequisite of this policy objective. Habitats for shellfish and finfish in all portions of their life cycle must be preserved in order to maintain fishing as a viable economic and recreational activity.

Therefore, any development which will adversely affect coastal and estuarine waters will be discouraged. Only those developments which are water dependent, such as docking facilities, treatment plants, and marinas shall be allowed to be placed near and to effect coastal and estuarine water habitats. In the design, construction, and operation of water dependent developments, efforts must be made to mitigate negative effects on water quality and fish habitat. These efforts will be made at the owner's or operator's own expense.

In order to expand Swansboro's sport and commercial fisheries industry, Swansboro will support private and public projects which will positively affect those industries. Swansboro supports channel and inlet dredging and stabilization projects which will increase the water access for fishing boats and improve water circulation in shellfish habitats.

Some fish habitat damage may occur in the course of dredging and stabilization operations. Only those projects which create minimal or no damage to the fisheries industry will be supported. All dredging and stabilization operations must be performed so as to minimize any unavoidable damage to fish habitat.

Swansboro supports projects which increase the productivity of coastal and estuarine waters. There are a number of closed

shellfish areas adjacent to Swansboro. The Town supports projects that would contribute to the cleansing of these areas.

Swansboro recognizes the importance of boat building, ship maintenance and repair, docking and harbor facilities, and seafood processing industries as supportive and necessary for the fisheries industry. All developments which require State or Federal permits, licenses or funds must meet this requirement.

PHYSICAL CONSTRAINTS TO DEVELOPMENT

Soils and Septic Tank Suitability

In conformity with State health regulations, growth and development will be discouraged in areas where septic tanks will not function and where sewer services are not available. Most areas within the city limits of Swansboro have sewer services. Further development is encouraged where these services are already provided.

Package Treatment Plants

Most areas within the Town of Swansboro are served by central sewage treatment facilities, and the Town has additional capacity for additional users. The Town's policy is to encourage utilization of the central treatment facility and to discourage the use of package treatment plants.

There are no known areas within Swansboro's planning jurisdiction where it would be impractical or financially unfeasible for developments to tie on to the existing central treatment facility.

PROVISION OF SERVICES TO DEVELOPMENT

Public Water Supply

The Town of Swansboro, in cooperation with Onslow County, is committed to ensuring that public water service is delivered where needed because of health and safety considerations. In many cases, the delivery of this service is a function of Onslow County. The Town of Swansboro will continue its policy of cooperating with Onslow County in the provision of water delivery services.

Public Sewage System

The Town of Swansboro is committed to the provision of sewage treatment services to all residents within the Town limits. Areas not within the town limits may be provided with these services if capacity is available and if the cost of providing the service is borne by the user or developer.

The Town has applied for Community Development Block Grant funds to study rehabilitation needs for its existing sewage treatment system. This study is a necessity if suspected problem areas are to be identified and needed corrections planned, in order to ensure that the system is used as efficiently as possible and in a cost effective manner.

Solid Waste Disposal

Swansboro will continue to ensure that adequate solid waste disposal service is provided to Town residents.

Transportation

Swansboro wishes to ensure that its transportation system is adequate to support continued community development, and that the impacts of such development do not lower the service capacity of its transportation system unneccessarily.

Key areas of concern include:

- The "bottleneck" effect of the White Oak River Bridge leading to Carteret County, as the road width decreases from as much as five lanes to two lanes. A substantial amount of through traffic uses this route, particularly in the summertime.

- There are a number of intersections along N.C. 24 which do not have stop lights. Speeds in most of the extra-territorial area are at least 45 miles per hour.

- The continued development of commercial businesses along N.C. 24 is increasing the number of curb cuts. These curb cuts can be viewed as additional intersections. Their increasing presence adds to the visual "busyness" of the highway and can collectively lower the safety of the highway as a transportation corridor.

- The increasing number of signs, particularly those which blink or flash, also contribute to visual "busyness" and thus can lower the safety of the highway.

The Town of Swansboro will take the initiative to minimize potential impacts from several of these areas of concern:

- Review ingress and egress plans for all new commercial and major residential development located on major corridors. Guidelines for review:

    - Limit the number of access points for individual lots. For 50´ to 150´ frontage lots, one access point should be adequate if internal circulation is properly designed.

- Encourage or require new subdivisions of both commercial and residential land to limit the number of access points which intersect with the highway by providing internal circulation and access from internal streets and roads. If the total number of intersections (including curb cuts) is kept to a minimum, traffic hazards will be curtailed and it may be possible to maintain present speeds along the highway.

- Request the N. C. Dept. of Transportation to install traffic signals at the intersection of N.C. 24 and S.R. 1509, adjacent to Swansboro High School.

- Revise the sign ordinance to include the extraterritorial area to regulate the placement and size of outdoor commercial signage along N. C. 24 and other major corridors. The ordinance should eliminate or severely control the use of signs which are visually distracting along such highways throughout the Town's planning jurisdiction.

With regard to the White Oak River Bridge, the Town supports the reconstruction and widening of the bridge to eliminate the present "bottleneck" problem. This bridge serves heavy seasonal traffic associated with travel to the Bogue Banks beaches, and carries increasing numbers of military vehicles traveling between Camp Lejeune and Morehead City. The Town of Swansboro feels that the reconstruction and bridge work should be added to the State Dept. of Transportation Ten-Year Work Plan.

Parking

The Town recognizes parking is a limited resource in its downtown commercial district and will encourage the development of innovative approaches to increase parking and/or increase utilization of existing parking spaces in the downtown area, as long as such efforts do not have a negative impact on the character of the area or the community at large.

Methods for enhancing or increasing the availability of parking in the downtown area include:

- Encouraging the establishment of shared parking arrangements between businesses or users which have different business or use hours (such as a church and a bank, for instance).

- Investigating the feasibility of waterfront oriented improvements which can be partially funded through the Division of Coastal Management's Beach and Shoreline Access Program which include parking.

- Encourage the location of small scale tourist accommodations in close proximity to the downtown area so that visitors staying in such accommodations will not need

to use cars to explore the downtown and historic district.

Fire Protection and Rescue Squad

In cooperation with Onslow County, Swansboro supports the provision of fire protection and rescue services to its residents through use of volunteer departments.

Police

Swansboro is committed to providing police protection services adequate for community safety and in keeping with its population, and will continue its policy of cooperation with the Onslow County Sheriff's Department in the extraterritorial planning area.

Recreation

Swansboro is committed to providing neighborhood recreation areas and facilities adequate to serve its population.

The Town of Swansboro will continue to review and assess means of improving Town recreation facilities, including exploring the feasibility of beneficial cooperative arrangements with Onslow County for additional improvements to town parks.

The Town is considering improving existing water access points for the use of residents and visitors, particularly in the downtown waterfront area. Based on the results of the citizens survey, improvements to waterfront access areas should feature or include parking areas, scenic walkways and picnic areas, boat ramps, public restrooms, gathering areas, fishing docks and/or the replacement of the Town Dock.

The availability of existing recreation and open space facilities should be incorporated into any planned improvements. Ideally, a generalized plan for improvements should be prepared given desired goals and in keeping with Town resources. The various phases of the overall plan can be put in place on an incremental basis as funds allow.

The Town supports the idea of planning for waterfront improvements and would like to pursue a grant to fund a shoreline access improvements study.

ECONOMIC AND COMMUNITY DEVELOPMENT

General Land Use Policy

It is the policy of the Town to encourage new residential, recreational, commercial and industrial development within the community, provided such developments are in keeping with the character of the Swansboro community. Any development within the

Town's jurisdiction must be consistent with other relevant land use policies and all local land use regulations.

Residential Development

Swansboro wishes to encourage the maintenance of existing residential areas as desirable places to live for its residents, and to ensure that new residential development is compatible with existing residential scale and density. The location, density and scale of new residential development will be controlled with this directive in mind through the Town's zoning and other land regulatory ordinances.

Commercial Development

Central Business District/Waterfront Area

The downtown waterfront commercial area, part of Swansboro's historic district, is one of the most important components of Swansboro's community image. This area is attractive to visitors and tourists, and for this reason, should continue to attract commercial and business investment which can be an asset to the community.

The Town will continue to seek the enhancement of the existing central business district by encouraging continued revitalization of, and investment in, existing businesses and structures. Swansboro encourages the location of new, compatible, small scale commercial and business uses in the area. Innovative methods of providing parking and increasing the availability of parking should be encouraged on the part of businesses and other users located in the area.

The Town should consider pursuing improvements to waterfront areas in the central business district to better utilize water access points, enhance the area's attractiveness for tourists and residents alike, and provide additional parking areas to serve a variety of users. Such improvements are eligible for 75 % funding through the Division of Coastal Management Beach and Shoreline Access Program.

Highway 24 Business District

The Town of Swansboro recognizes that most new commercial uses, particularly those emphasizing high volume, will locate in this growing area. The Town's policy regarding commercial development is that such development should be in keeping with the existing scale of the community (i.e., low building heights, no massive structures), should be constructed and designed as to minimize negative impacts on the highway as a transportation system, and should not encroach on existing or planned residential areas.

Industrial Development

Swansboro will encourage only those industrial developments which are in keeping with existing community scale and community character. Preferred development would include small or medium scale "clean" industries which do not produce or handle any toxic, hazardous or odorous materials or substances.

Tourism

Swansboro will continue to promote and encourage tourism through methods which are in keeping with the existing character of Swansboro.

Based on the results of the citizens survey, specific methods of encouraging tourism should primarily emphasize the development of overnight lodging facilities for tourists and using signs and information packets to guide visitors to historic sites and shopping areas.

Swansboro may want to consider allowing the establishment of bed and breakfast facilities in close proximity to the downtown historic area. Bed and breakfasts typically provide a small number of rooms for guests (usually less than five) and can be an asset to a unique area such as the downtown waterfront area. The scale of such facilities can be kept small and in keeping with community character. Approval of such facilities should require that an adequate management plan is in place and that offstreet parking for guests is provided.

Historic District

The Town's policy regarding the historic district is to encourage the preservation of the appropriate historic scale, mass, height and population density of Swansboro representative of the era from 1770 to 1910 within the historic district.

Now that a historic district and commission has been established, the Town should also consider ways to conduct architectural and archaeological surveys to document structures and historic and archaeological resources within the historic district.

Swansboro should consider pursuing designation as a Certified Local Government for historic preservation funding purposes through the N.C. Division of Archives and History. This designation could increase Swansboro's chances for funding to do basic historic and archaeologic survey work in the Historic District.

Commitment to State and Federal Programs

Swansboro supports those State and Federal programs and policies affecting its jurisdiction consistent with locally adopted plans, policies and ordinances.

Intergovernmental Cooperation

Swansboro maintains a close working relationship with Onslow County and will continue to cooperate with the County to ensure adequate delivery of services and consistency on policy and land use issues.

STORM HAZARD MITIGATION AND POST DISASTER RECONSTRUCTION PLAN

Very little of the land area in Swansboro lies within the hazard areas defined in Before the Storm (McElyea, Brower and Godschalk, Center for Urban & Regional Studies, UNC-CH, 1982), the Division of Coastal Management's guide to pre-hurricane and post-disaster planning. Applicable hazard areas within Swansboro included the Estuarine Shoreline AEC (Hazard Area 1, the most severe category) and FEMA A-zone lands (Hazard Area 3).

In most cases, these lands are subject to local, state and federal standards which will limit the placement or replacement of structures within the hazard area.

In general terms, Swansboro's existing policies meet the requirements for hazard mitigation planning as outlined in Before the Storm. These policies consist of a combination of accompanying Land Use Plan policies and regulations established by the Town's land development ordinances. Specifically:

- Lands in the estuarine shoreline AEC are subject to development limitations which are in the process of being strengthened by the Coastal Resources Commission. The expected effect will be to further limit the amount and placement of development in these fragile areas. This will indirectly provide a further limitation on new construction which would be at risk from hurricanes and tropical storms.

- Lands in FEMA A-zones are subject to elevation standards and insurance requirements which help ensure that damage to any new development which occurs will be minimized in the event of a severe tropical storm.

- The Town's policies support and are consistent with State policies and regulations for development in Areas of Environmental Concern.

- All new development must conform with the provisions of the North Carolina Building Code.

- The Town's flood plain development policies conform with all Federal and State requirements.

The Post Disaster Plan for Swansboro can be found in the Appendix (following page 41).

CONTINUING PUBLIC PARTICIPATION

Swansboro realizes an important part of any planning program is citizen involvement, and throughout the planning process during the 1985 Update, has encouraged its citizens to become involved in the land use planning process. The press was notified of meetings at which the plan was to be discussed through press releases and the public was invited. The land use plan was discussed at public meetings on the following dates (all 1985): February 7, March 27, April 9, April 30, May 16, and July 16. Many of these meetings were well attended by residents of Swansboro and its extraterritorial jurisdiction.

A questionnaire was developed by the Town's planning board in conjunction with the consultant and was distributed to Town residents and residents of the extraterritorial jurisdiction in early June. A substantial percentage (over 25 %) of these surveys were returned. Results were tablulated and discussed at the July 16 meeting. The survey results were most helpful in confirming the feelings of the community at large on such issues as the siting of new development, service delivery (present and future), and planning for traffic safety on the Town's main corridor, N. C. 24.

Swansboro's public involvement policy is as follows:

- All land use plans and updates, including the 1985 Update, will be prepared with public participation.
- Citizen participation in the land use planning process will be accomplished through:
  - Education: the public will be kept informed of progress on the land use plan through the use of a variety of media. Methods which can be used include, but are not limited to, news releases, news reports on meetings dealing with the land use plan, public meetings and presentations, television public service announcements and flyers.
  - Direct participation: citizens will have an opportunity to attend public meetings dealing with the land use plan, submit comments on an informal and formal basis, and review the final draft at required public hearings. Citizen's surveys can reach every household in the town, providing a broad based opportunity for participation.

LAND CLASSIFICATION

The land classification system for Swansboro provides a graphic representation of Swansboro's general land use policies. Classifications are consistent with, and supportive of, its policies on resource protection, the development of sound and estuarine islands, provision of sewer treatment facilities, and general land development, among others. Land classification is not intended as a regulatory mechanism but is only a tool to help implement policies.

The land classes used here are derived from the five broad classifications described in NCAC 15, Subchapter 7B, the State land use planning guidelines. The five classes are Developed, Transition, Community, Rural and Conservation. Three of these categories apply to Swansboro: Developed, Transition, and Conservation.

Developed

This classification is intended to provide for continued intensive development and redevelopment of existing areas that are at or approaching the following densities:

- 500 dwelling units per square mile, or
- three dwelling units per acre, or
- where a majority of lots are 15,000 square feet or less, and

which are currently served by public water, sewer, recreational facilities, police, and fire protection.

Transition

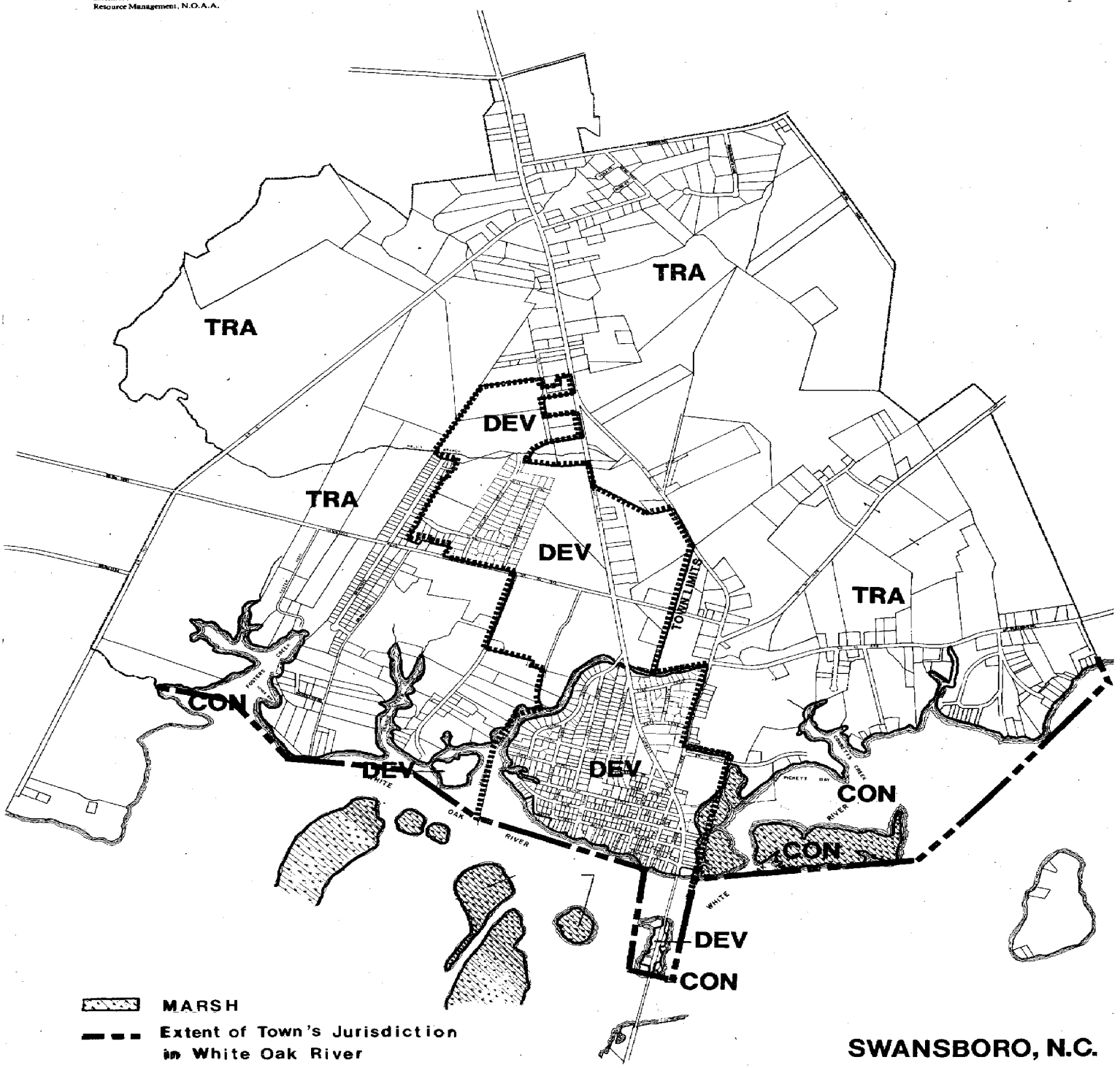
The intent of the transition classification is to provide for future intensive urban development at the densities specified under the developed classification. These areas are or will be served with the same urban services as those areas in the developed land classification.

Conservation

The purpose of the conservation class is to provide for the effective long-term management and protection of significant, limited, or irreplaceable areas. Management is needed due to the natural, cultural, recreational, scenic or natural productive values of both local and more than local concern.

This class is generally applicable to lands that contain: major wetlands, undeveloped shorelines that are unique, fragile, or hazardous for development, necessary wildlife habitat or areas that have a high probability of providing necessary habitat conditions; publicly owned water supply watersheds and aquifers; and forest lands that are undeveloped and will remain undeveloped for commercial purposes.

The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, N.O.A.A.



MARSH

Extent of Town's Jurisdiction in White Oak River

SWANSBORO, N.C.

LAND CLASSIFICATION

LEGEND:

DEV	**DEVELOPED**
TRA	**TRANSITION**
CON	**CONSERVATION**

Prepared by: BATILLA PLANNING
200 Osborne Street
St. Marys, Georgia

Mapping Date: APRIL, 1985

MAP 5

APPENDIX

SWANSBORO POST-DISASTER RECONSTRUCTION PLAN

A. Introduction

A post-disaster plan provides a program to permit a local government to deal with the aftermaths of a severe storm in an organized and efficient manner. The Plan provides the mechanisms, procedures, and policies that will enable a community to learn form its storm experiences and to rebuild the community in a wise an practical manner.

A post-disaster reconstruction plan encompasses three distinct reconstruction periods:

- **The emergency period** is the reconstruction phase immediately after a storm. The emphasis is on restoring public health and safety, assessing the nature and extent of storm damage, and qualifying for and obtaining whatever federal and state assistance might be available.

- **The restoration period** covers weeks and months following a storm disaster. The emphasis during this period is on restoring community facilities, utilities, essential businesses, etc., so that the community can once again function in a normal manner.

- **The replacement reconstruction period** is the period during which the community is rebuilt. The period could last from months to years depending on the nature and extent of damages incurred.

It is important that local officials clearly understand the joint federal-state-local procedures for providing assistance to rebuild after a storm so that local damage assessment and reconstruction efforts are carried out in an efficient manner that qualifies the community for the different types of assistance that are available. The requirements are generally delineated in the Disaster Relief Act of 1974 (P.L. 93-288) which authorizes a wide range of financial and direct assistance to both local communities and individuals. The sequence of procedures to be followed after a major storm event is as follows:

1. Local damage assessment teams survey storm damage within the community and report this damage to the Onslow County Emergency Management Coordinator.

2. Damage information is compiled and summarized by the County, and the nature and extent of damage is reported to the North Carolina Division of Emergency Management (DEmM).

3. DEmM compiles local data and makes recommendations to the Governor concerning state actions.

4. The Governor may request a Presidential declaration of "emergency" or "major disaster". A Presidential declaration makes a variety of federal resources available to local communities and individuals.

5. Federal Relief assistance programs have various time frames for application and completion; these must be determined as soon as possible after the emergency occurs.

Federal disaster assistance programs previously provided aid for communities to rebuild in the same way as existed before the disaster occurred. This policy tended to foster recurring mistakes. However, recent federal policy has started to change the emphasis of disaster assistance programs. Specifically:

- Executive Order 1198 (Flood Plain Management) directs all federal agencies to avoid either directly or indirectly supporting future unwise development in flood plains (e.g. through sewer grants in locations that foster flood plain development).

- Section 406 of the Disaster Relief Act can require communities, as a prerequisite for federal disaster assistance, to take specific actions to mitigate future flood losses.

The remainder of this chapter presents recommendations regarding 1) procedures that Swansboro should follow in carrying out its damage assessment program so as to meet all federal and state requirements; and 2) reconstruction policies that the Town should adopt to insure that future development that does occur in local hazard areas is constructed in a manner consistent with sound land use planning, public safety considerations, and existing federal and state policy.

B. Organization of Local Damage Assessment Team

A local damage assessment team should include individuals who are qualified to given reliable estimates of the original value of structures, an estimated value of sustained damages and a description of the repairs (and costs) that will be needed to rebuild each structure. Following is a listing of Swansboro personnel, including volunteers, available to assume these responsibilities:

Administrative	Police
Town Clerk	Police Chief
Water Clerk	3 officers

Town Officials

1 Mayor
5 Commissioners

Public Works

Public Works Superintendent

Fire Department

Fire Chief
Fire Department volunteers

The Damage Assessment Team should be headed by an individual with professional construction experience and who is familiar with Town policies and procedures. Ideally, other members of the team should include a local property appraiser (MAI or qualified broker), a building contractor, and an architect. These personnel may be drawn from the pool of existing paid or volunteer personnel or recruited from the community at large.

The Mayor should initiate a recruitment effort to secure the necessary volunteers and to establish a training program to familiarize the members of the damage assessment team with required damage classification procedures and reporting requirements.

C. **Damage Assessment Procedures and Requirements**

Damage assessment is defined as a rapid means of determining a realistic estimate of the amount of damage caused by a natural or man-made disaster. For a storm disaster, it is expressed in terms of: 1) number of structures damaged; 2) magnitude of damage by structure type; 3) estimated total dollar loss; and 4) estimated total dollar loss covered by insurance.

After a major storm event, members of the Damage Assessment Team should report to the Emergency Operations Center prior to deployment. There are over 400 individual dwelling units in Swansboro in addition to dozens of non-residential buildings. The extent of damage will depend on the magnitude of the storm and where landfall occurs along the Atlantic coast.

Because of the limited personnel resources available to conduct the assessments, and the limited time within which the initial assessment must be made, the first phase of the assessment should consist of only an external visual survey of damaged structures. A more detailed second phase assessment can be made after the initial damage reports are filed.

The initial damage assessment should make an estimate of the extent of damage incurred by each structure and identify the cause (wind, flooding, wave action, combination, etc.) of the damage to each structure.

Damaged structures should be classified in accordance with the suggested State guidelines as follows:

- **Destroyed** (repairs would cost more than 80 percent of value).
- **Major** (repairs would cost more than 30 percent of the value).
- **Minor** (repairs would cost less than 30 percent of the value, but the structure is currently uninhabitable).
- **Habitable** (some minor damage, with repairs less than 15 percent of value).

The Damage Assessment Team will color code tax maps in accordance with the above 4 damage classifications; for example, destroyed: red; major: orange; minor: yellow; habitable: green.

It will be necessary to thoroughly document each assessment. In many cases, mail boxes and other information typically used to identify specific structures will not be found. Consequently, the Damage Assessment Team must be provided with tax maps, other maps and photographic equipment in order to record and document its field observations. Enough information to complete the Damage Assessment Worksheet (samples to be included in Appendix) must be obtained on each damaged structure.

The second phase of the Damage Assessment Operation will be to estimate the value of the damages sustained. This operation should be carried out in the Emergency Operations Center under the direction and supervision of the Mayor.

In order to estimate total damage values it will be necessary to have the following information available for use at the Emergency Operations Center:

- A set of property tax maps identical to those used by the damage assessment teams.
- Copies of all town tax records. This information should indicate the estimated value of all commercial and residential structures within the Town. Because time will be of the essence, it is recommended that the Town immediately commence a project listing the property values of existing structures on the appropriate lots of the property tax maps that will be kept at the Emergency Operations Center. The information will provide invaluable if a storm disaster does occur. This set of tax maps should be updated annually prior to the hurricane season.

Additionally, the Town should estimate the number of structures carrying flood insurance. This information should be kept available in the Emergency Operations Center for estimating the value of sustained damages covered by hazard insurance.

In order to produce the damage value information required, the following methodology is recommended:

1. The number of residential and non-residential structures that have been damaged within the Town should be summarized by damage classification category.

2. The value of each damaged structure should be obtained from the marked set of Town tax maps and multiplied by the following percentages for the appropriate damage classification category.

   - Destroyed: 100 %
   - Major Damage: 50 %
   - Minor Damage: 25 %
   - Habitable: 10 %

3. The total value of damages for the Town should then be summarized and reported, as required, to the New Hanover County Emergency Operations Center.

4. The estimated value loss covered by hazard insurance should then be determined by: 1) estimating full coverage for all damaged structures for situations where the average value of such coverage exceeds the amount of damage to the structure; and 2) multiplying the number of structures where damage exceeds the average value of insurance coverage by the average value of such coverage.

The Damage Assessment Plan is intended to be the mechanism for estimating overall property damage in the event of a disaster. The procedure recommended above represents an approach for making a relatively quick, realistic "order of magnitude" damage estimate after a disaster.

D. Organization of Recovery Operations

Damage assessment operations are oriented to take place during the emergency period. After the emergency operations to restore public health and safety and initial damage assessments are completed, the State guidelines suggest that a Recovery Task Force to guide restoration and reconstruction activities be created. In Swansboro the Mayor and Commissioners should assume the responsibilities of such a task force with the Town's Police Chief directing day-to-day operations based on policy guidance from the Mayor and Commissioners.

The following tasks must be accomplished:

1. Establish an overall restoration schedule.

2. Set restoration priorities.

3. Determine requirements for outside assistance and request such assistance when beyond local capabilities.

4. Keep appropriate County and State officials informed using Situation and Damage Reports.

5. Keep the public informed.

6. Assemble and maintain records of actions taken and expenditures and obligations incurred.

7. Proclaim a local "state of emergency" if warranted.

8. Commence clean-up, debris removal and utility restoration activities.

9. Undertake repair and restoration of essential public facilities and services in accordance with priorities developed through the situation evaluations.

10. Assist private businesses and individual property owners in obtaining information on the various types of assistance that might be available to them from federal and state agencies.

A sequence and schedule for undertaking local reconstruction and restoration activities is presented below. The schedule was deliberately left vague because specific reconstruction needs will not be known until after actual storm conditions have passed and the magnitude of the damage can be assessed. The following sequence of activities and schedule is submitted as a guide which should be reconsidered by the Mayor and Commissioners and revised as necessary after damage assessment activities are completed.

	Activity	Time Frame
1.	Complete Second Phase Damage Assessment	When required by Onslow County Hurricane Evacuation Plan as implemented by Emergency Operations Center
2.	Prepare Summary of Reconstruction Needs	Completed 48 hours after damage assessment is completed
3.	Set Reconstruction Priorities and Prepare Master Reconstruction Schedule	Completed two weeks after damage assessment is completed
4.	Begin Repairs to Critical Utilities and Facilities	As soon as possible after disaster

5.	Decision Regarding Imposition of Temporary Development Moratorium	Within one week after damage assessment is completed
6.	Permitting of Reconstruction Activities for all Damaged Structures (Major and Minor) not included in Development Moratorium Areas	Within one week after damage assessment is completed
7.	Complete Re-evaluation of Hazard Areas and Mitigation Policies in Areas subjected to Development Moratorium	Can be initiated once damages are assessed and input is received from the State
8.	Revise Mitigation Policies and Development Standards for Areas Subjected to Development Moratorium and Lift Development Moratorium	Within two months of imposition of Temporary Development Moratorium (variable due to circumstances encountered)
9.	Permitnewdevelopment	Upon suspension of any temporary development moratorium.

E. Recommended Reconstruction Policies

All of the following policies are designed to be: 1) considered and adopted by the Swansboro Board of Commissioners prior to a storm, and 2) implemented, as appropriate, after a storm occurs.

PERMITTING

1. Building permits to restore structures located outside of designated Areas of Environmental Concern (AEC's) that were previously built in conformance with local codes, standards and the provisions of the North Carolina Building Code shall be issued automatically.

2. All structures suffering major damages as defined in the Town's Damage Assessment Plan shall be repaired or rebuilt to conform with the provisions of the North Carolina Building Code, the Swansboro Zoning Ordinance, and the Swansboro Flood Plain Management Regulations. Depending on the extent of overall storm damage, certain areas exhibiting a large proportion of structures suffering major damage may be

placed under a Temporary Development Moratorium until adequate review for conformance can begin to take place.

3. All structures suffering minor damage as defined in the Swansboro Damage Assessment Plan shall be permitted to be rebuilt to their original before-the-storm condition.

4. For all structures in designated AEC's, a determination shall be made for each AEC as to whether the provisions of the N.C. Building Code, the state regulations for Areas of Environmental Concern, and the Swansboro Flood Plain Management Regulations appeared adequate in minimizing storm damages.

   For areas where the construction and use requirements appear adequate, permits shall be issued in accordance with permitting policies 1, 2, and 3. For AEC's where the construction and use requirements do not appear to have been adequate in minimizing damages, a Temporary Development Moratorium for all structures located within that specific AEC shall be imposed.

5. Permits shall not be issued in areas subject to a Temporary Development Moratorium until such a moratorium is lifted by the Swansboro Board of Commissioners.

UTILITY AND TOWN FACILITY RECONSTRUCTION

1. All damaged water and sewer systems components shall be repaired so as to be elevated above the 100-year floodplain **or** shall be floodproofed, with methods employed and construction certified by a registered professional engineer.

2. If N.C. 24 or Water Street is breached or covered with sand and debris, making it impossible to travel, immediate action should be taken to restore the road to usable condition. A letter of agreement with the State Department of Transportation should be established to allow the Town to perform these functions should the State be unable to respond in a timely manner due to emergency repair operations in other areas, and to provide a means of reimbursing the Town for costs incurred while performing such emergency repairs.

TEMPORARY DEVELOPMENT MORATORIA

Under certain circumstances, interim development moratoria can be used in order to give a local government time to assess damages, make sound decisions and to learn from its storm experiences. Such a moratorium must be temporary and it must be reasonably related to the public health, safety and welfare.

It is not possible to determine prior to a storm whether a temporary development moratorium will be needed. Such a measure should only be used if damage in a particular area is very serious and if redevelopment of the area in the same manner as previously existed would submit the residents of the area to similar public health and safety problems. Since Swansboro is not a beachfront community, the chances of needing such a moratorium are slim. However, Swansboro's most vulnerable areas are those which are located in AEC's (along the estuarine shoreline and in FEMA A-zones).

Swansboro's policy regarding the proclamation of temporary development moratoria shall be to:

1. To determine for each AEC (and other areas as necessary) whether the provisions of the N.C. Building Code, the State Guidelines for Areas of Environmental Concern, and the Swansboro Flood Plain Management Regulations appeared adequate in minimizing storm damages. For areas where the construction and use requirements do not appear adequate, a Temporary Development Moratorium for all structures located within that specific area shall be imposed.

2. After imposing a Temporary Development Moratorium for an AEC, the Town of Swansboro shall request that the Coastal Resources Commission conduct a special analysis for the Town and all other similar communities, in order to determine how local regulations for those hazard areas, which are based on State or Federal guidelines or requirements, should be improved or modified. A response from the State within a reasonable time period, as determined through negotiations, should be requested.

3. The Temporary Building Moratorium in all AEC's and other areas shall be lifted after local ordinances and regulations have been revised after receiving recommendations from the State, or at the discretion of the Mayor and Council if a response is not made within a reasonable period of time. In the latter case, reconstruction shall be permitted in accordance with existing regulations and requirements.

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