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Redevelopment in Jacksonville Beach, Florida: A Coastal Zone Management Perspective

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REDEVELOPMENT IN JACKSONVILLE BEACH, FLORIDA; A COASTAL ZONE MANAGEMENT PERSPECTIVE

A RESEARCH PAPER SUBMITTED TO THE DEPARTMENT OF GEOGRAPHY AND MARINE AFFAIRS

BY KEITH E. FALT

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PREFACE

The purpose of this paper is to provide the community leaders and the concerned citizens of Jacksonville Beach, Florida with an understanding of the issues involved with development of the beachfront of that community. Too often development projects are planned and implemented with those responsible unaware of many of the factors which will impact the success of the project. The unusual qualities of the shoreline mandate careful consideration.

The first three chapters of this paper are dedicated to presenting the various factors to be considered in beachfront development. It is important that anyone concerned with the project have a basic understanding of the forces, both natural and manmade, which differentiate building on the fragile, ever shifting sands bordering the sea from the more stable inland locations.

The data contained within the paper could only have been assembled with the help of numerous contributors who unselfishly gave of their time to help. It was a pleasure to work with the many individuals involved and my thanks are extended to all who contributed to the project.

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CHAPTER I

INTRODUCTION

The City of Jacksonville Beach has been deeply involved in the planning stage of redevelopment for five years. Various plans have been proposed and rejected during this period. The eight block beachfront within the redevelopment area offers the City unique opportunities to be a leader in coastal zone planning, to upgrade its tax base, and improve the quality of life of the general public. Failure to consider factors peculiar to development within the coastal zone may create more development similar to that which has negatively impacted so many communities in the recent past. Jacksonville Beach is fortunate to be undertaking its beachfront redevelopment subsequent to the development of coastal zone management, as only in recent years has the unique quality of the shore been recognized and understood. The tools for effective management of the coastal zone have been forged and are available. They must be taken up and used to protect the public welfare.

Man has been lured to the borders of the oceans since earliest history in order to earn his livelihood or for

recreation. Authors have attempted numerous explanations for this attraction, ranging from the physical to psychological. Irrespective of the motivating force, man still flocks to the beach in ever increasing numbers. By the 1970's nearly 70% of the U.S. population lived within 50 miles of the coasts, including those of the Great Lakes.[1] The 1980 census counted 19.1 million sailors, 185.3 million swimmers, and 91 million fishermen among this country's population.[2] This powerful attraction transforms the coast from a local to a regional asset. The actions taken in managing the shore,therefore, have far reaching effects. The great demand for this limited resource also confers high property values on the coastal lands. These high values have in turn led to high density development.

In the past the shoreline was viewed as a relatively abundant commodity capable of supporting many diverse uses.[3] As the population grew and intensified in the coastal zone, available shoreline became scarce. The widely scattered homes on recreational beaches began to be crowded in by homes built on smaller lots. Eventually the homes were replaced by high-rise hotels and condominiums. Intense development of the beachfront resulted in reduced access to the beach for those unable to afford beachfront property. Closely spaced single family homes acted as a wall in such places as Malibu Beach, California, effectively preventing the public from use of the

beach.[4] In south Florida massive concrete buildings eliminated access and destroyed the easy, tropical atmosphere.[5] This phenomenon took place gradually throughout this country and in many other parts of the world. It is not uncommon for the residents of a coastal community to observe their decreasing ability to use the shore and to think of it as a local problem. It is, however, a widespread failure of the market systems and the local government to provide for the common good of society. The same fundamental concern can be noted repeatedly, whether it is objection to a waterfront hotel in Newport, R.I., riots protesting the walls of condominiums and hotels blocking off the sea in Mallorca, Spain or objections to high density construction in Jacksonville Beach, Florida.

Not only has man continued to build within the coastal zone, he has increasingly done so without taking into consideration the extreme weather conditions found in this region. As a result, property damage figures in the U.S. have been continually rising.

In response to these concerns, the federal government enacted the Coastal Zone Management Act in 1972. This legislation expressed recognition of the unique qualities of the lands within the coastal zone and the national interest in them. In 1978 Florida enacted the Florida Coastal Management Act. The Act declared all state lands to fall within the

coastal zone due to the unique geography of the area. The federal government approved Florida's program in September 1981. The proposed redevelopment in Jacksonville Beach should be reviewed in light of these recent changes which have ocurred during the redevelopment planning process.

It is not the purpose of this paper to identify the best specific uses of the zone nor to make value judgements on the positions taken by the City government or its agencies, the developer or the various citizens groups involved. Its purpose is to identify important factors governing development of the beachfront property, to indicate trends and past history of similar areas, and to suggest types of development which may reflect the needs and desires of the public.

Chapter II of this paper is devoted to environmental issues and the problem of public access to the beach. The planner or concerned citizen involved in beachfront planning must be aware of these factors that impact so heavily upon the siting and types of buildings constructed on the waterfront. Development that takes place without due consideration of these issues often results in side effects that would prohibit approval of the project or result in modification had the impacts been known prior to start of construction.

Chapter III considers the economic impacts and the

regulatory processes involved in beachfront construction in Florida. Any public redevelopment such as planned by Jacksonville Beach must be carefully planned to attain the goals of the community while facing the realities of the free market system. The needs and desires of the public and the profit motive of the developer must be fit into the quidelines and requlations that govern construction within the coastal zone in the State of Florida.

The proposed redevelopment of Jacksonville Beach is the subject of Chapter IV. The history of the redevelopment effort is reviewed and the Conceptual Plan is discussed from the coastal zone management perspective.

Alternatives to the proposed development, considering the factors that make coastal develoment unique, are proposed in Chapter V. These are general in nature and intended to highlight ways the City may attain the objectives it deems appropriate, while heeding the important factors involved in beachfront development.

CHAPTER II

ENVIRONMENTAL CONCERNS AND PUBLIC ACCESS

The Beach

The City of Jacksonville Beach has one major asset upon which to capitalize, the only major urban beach in the Jacksonville area. The Chamber of Commerce has long used "The World's Finest Beach" as part of its publicity campaigns. The beach has, however, suffered from erosion which at times has resulted in virtually no dry sand at high tide. Erosion is a natural phenomenon and was noted in Duval County as early as 1834.[6] Beaches are a fluid body, with sands and sediments constantly moving. Man's major problem has been failure to recognize this and build too close to the water, "a case of loving the amenity too much".[7] In this case, man has aggravated the erosion by the construction of jettys at the mouth of the St. Johns River starting in 1879.[8] Littoral transport of sand (movement of sand along the beach by currents) in this area is primarily from north to south. The jettys interrupt this flow which would help replenish the beaches to the south, including Jacksonville Beach. Man's efforts to build seawalls have locked

up sand that would otherwise be used in the natural beach replenishment process. The walls themselves have actually accelerated the erosion.

When a wave breaks on a beach, its energy is dissipated as it rolls up the slope. The calmer, more widely spaced summer

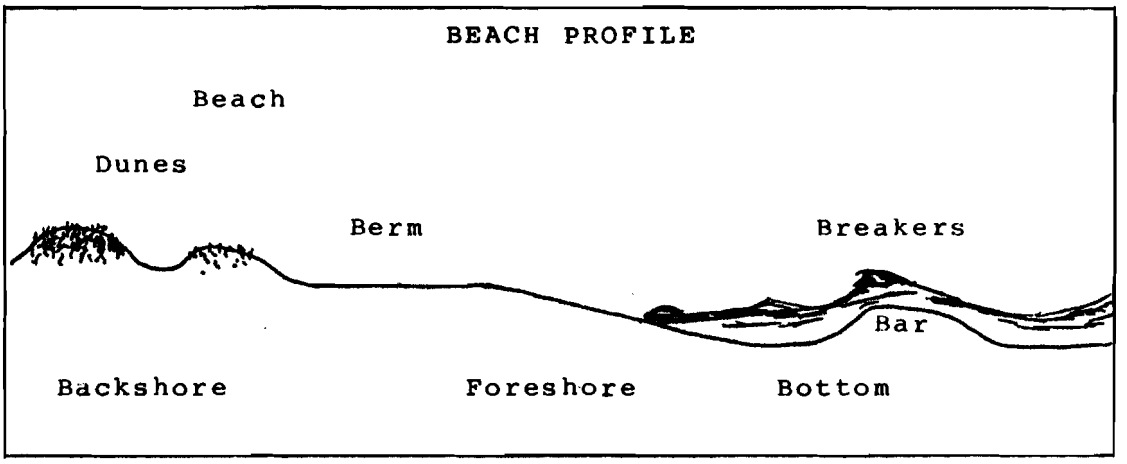


Figure 1

waves tend to carry sand up the berm and deposit it there. The winter waves are usually more violent and closer spaced, generally carrying sand away from the beach. Therefore a "summer" beach is usually growing while a "winter" beach is eroding. On a natural beach, sand dunes occur on the backshore. In a violent storm the sea can overtop the berm and reach the dune. While the dune is acting as a natural levee protecting the land behind it, it gives up some of its sand.

This sand, along with sand from the berm, is carried to an offshore bar where it is dropped. Eventually the bar grows large enough to force the waves to break over it, dissipating some of their energy before reaching the beach. This is a natural beach protection mechanism that slows further erosion.[9] Where man has flattened the dunes and built seawalls he has interrupted the natural balance of the beach and exposed his structures to damage from the sea.

Bulkheads and seawalls give a false sense of security and actually accelerate damage to the beach.[10] When the sea tops the berm and strikes a seawall, instead of losing energy rolling uphill against the dunes it bounces off the wall. As it does, sand is scoured from the beach and the wall is undermined. Water topping the wall drains back to the sea from behind and returns to the sea under the foundation. This accelerates the undermining process and the wall eventually slides into the sea.[11] Jacksonville Beach has repeatedly suffered this type of damage, resulting in the loss of property and replacement of the walls.[12] The redevelopment area is fronted by a seawall and the dunes disappeared long ago.

The U.S. Army Corps of Engineers has been involved in a beach renourishment project at the Jacksonville Beaches since 1965. This project was authorized by Section 301 of the Rivers and Harbors Act of 1965 and provides for a 50 year

project life.[13] The federal share is 50% of the cost for the publicly owned beach. The State of Florida paid 75% and Duval County the remaining 25% of the local share. The project calls for periodic renourishment after the first 10 years at approximately 5 year intervals (if required).[14] The design beach has a 60 foot berm at 11 feet above mean low water.[15] This provides approximately 180 feet of dry sand beach at high tide.

The renourishment of the beach created a problem of drifting sand for beachfront property owners in the project area. Prior to renourishment there was little dry sand on the beach. Due to the absence of the natural dune line, after renourishment the sand carried by the wind tended to deposit around the beachfront property as this was the first barrier encountered. This is a natural dune and beach building phenomenon but was viewed by the property owners as a nuisance. The City was therefore obliged to dedicate men and equipment to removing the sand from private property.

In order to solve this problem the City, in cooperation with the State Department of Natural Resources, is in the process of erecting sand barriers the entire length of the City's beach to trap the sand.[16] This is resulting in the rebuilding of the dunes, some of which have new vegetation. The sand barriers consist of 4 X 4 posts with netting strung

between them. They are erected parallel to the seawall for convenience. The Department of Natural Resources apparently provided no professional guidance for proper placement for maximum effectiveness in relation to the prevailing winds. This particular barrier is highly susceptible to vandalism and probably will have a high maintenance cost over time. Standard wood slat snow fencing, while initially more expensive, would prove more durable and effective in the long run. It would provide the additional bonus of channeling foot traffic around the dune area. The vegetation which is so vital to holding the dune in place will not survive constant foot traffic. The City has recently completed a series of wooden walkovers from the boardwalk to the beach which are generally as recommended by the Marine Advisory Program of the Florida Cooperative Extension Service.[17]

The City should continue its efforts to revitalize the beach itself as its most valuable resource. Rebuilding the dunes in front of the seawall will add to the store of sand available to the beach and reduce erosive damage. A continuous dune line along the beach will add to the aesthetics and provide storm protection for beachfront properties. The actual shape of the dune itself, by creating a low pressure zone on the downwind side, will trap sand and reduce the amount blown onto beachfront property. Revegetation of the dunes will hold the dunes in place and increase their sand trapping ability.

While it is the tendancy of resort beaches to rake the beaches clean of debris, natural flotsam such as seaweed which is deposited at the high water mark actually benefits the beach. The very flat beach common to this part of Florida offers few barriers to wind blown sand. Debris tends to trap sand causing the elevation to increase. Additionally, as the material decomposes it releases nutrients which encourages the spread of the vegetation holding the dunes in place. As the vegetation increases, the sand trapping capability increases and the dunes grow seaward.[18]

A comprehensive program of dune building, revegetation, and education of residents and visitors alike is vital as the first step to the rebuilding of an attractive and protective beach. The public must understand the importance of dune protection and the need to use dune walkovers as a protective measure. As the beach has already eroded significantly since the last renourishment, in some areas these efforts may not be enough. The Corps of Engineers will consider building and vegetating the dune line during the next renourishment and this should be encouraged.[19] During renourishment "advance nourishment" is placed on the beach to compensate for anticipated erosion.(Fig 2.) This will permit the vegetation enough time to get a firm foothold on the dunes if properly managed. Foot or vehicular traffic over the dunes damages the vegetation and reduces the elevation of the dunes, destroying

their integrity. Vehicular traffic over and damage to the dunes is prohibited by state law.

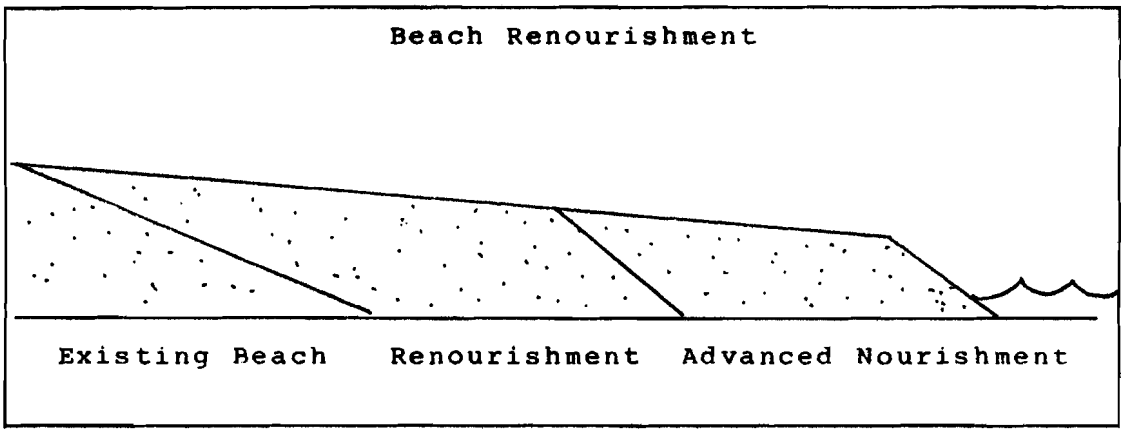


Figure 2

COASTAL STORMS

Two basic types of storms threaten the waterfront of the project area, hurricanes and northeast storms. While Florida is one of the most hurricane prone areas of the country, Jacksonville Beach is fortunate to lie in a relatively low risk zone. Since 1830 hurricanes have passed within 50 miles of Jacksonville Beach on the average of once every seven years.[20] The last major hurricane to strike the area was Dora in 1964.[21] Since the probability of being struck by a hurricane is significantly lower than other parts of the state, there is a tendancy to minimize the threat. Failure to plan and build appropriately courts disaster. While the death toll attributed to hurricanes has fallen due to improved warning systems, property damage has increased as man has failed to take the power of nature into account when developing coastal property. (Fig. 3) High winds, tidal surge, heavy rainfall and wind driven waves combine to make a potent threat.

Low lying beach areas must be evacuated prior to hurricanes to reduce the loss of life. A report prepared by the Natural Resources Committee of the Florida House of Representatives called the state's hurricane preparedness

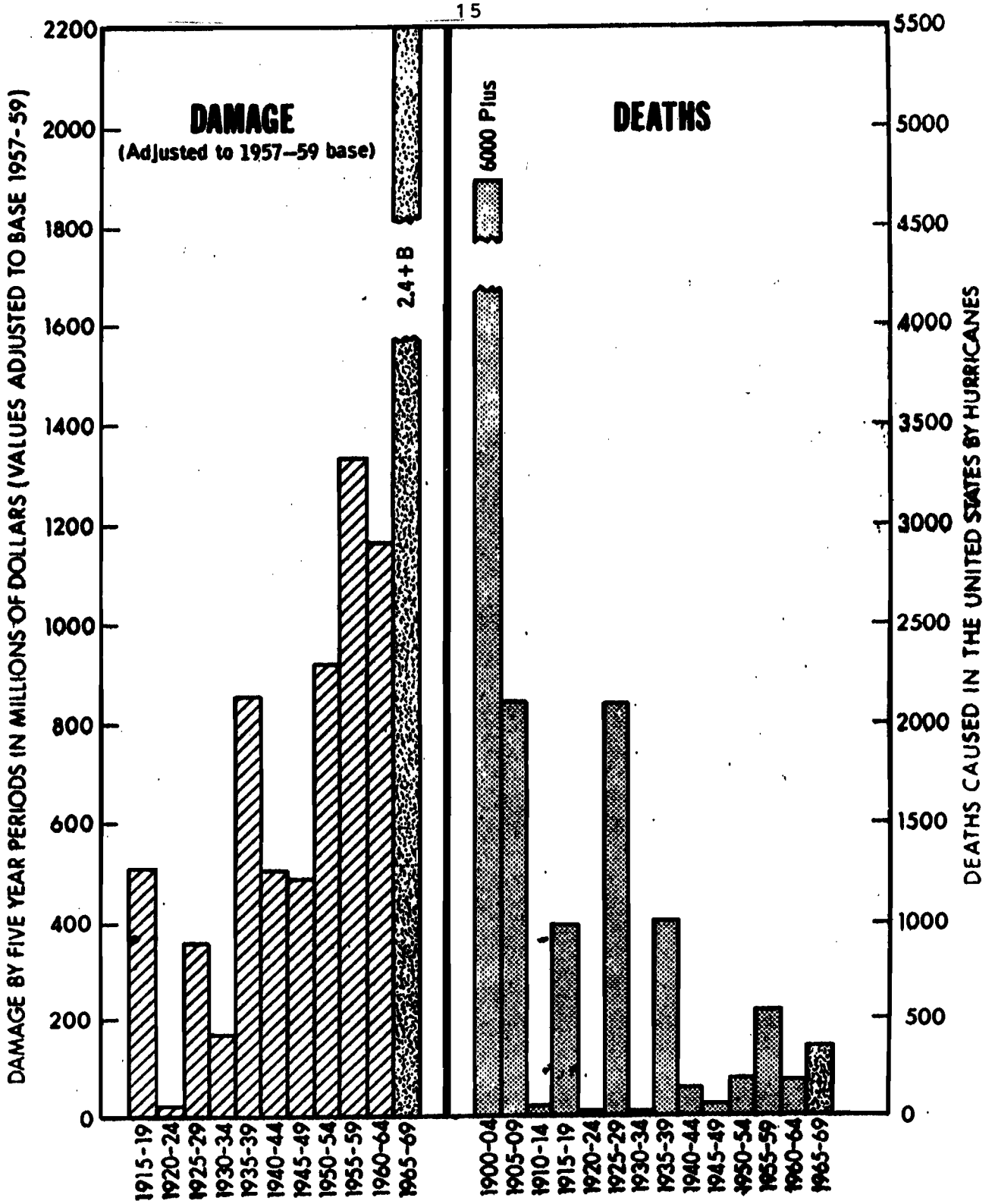
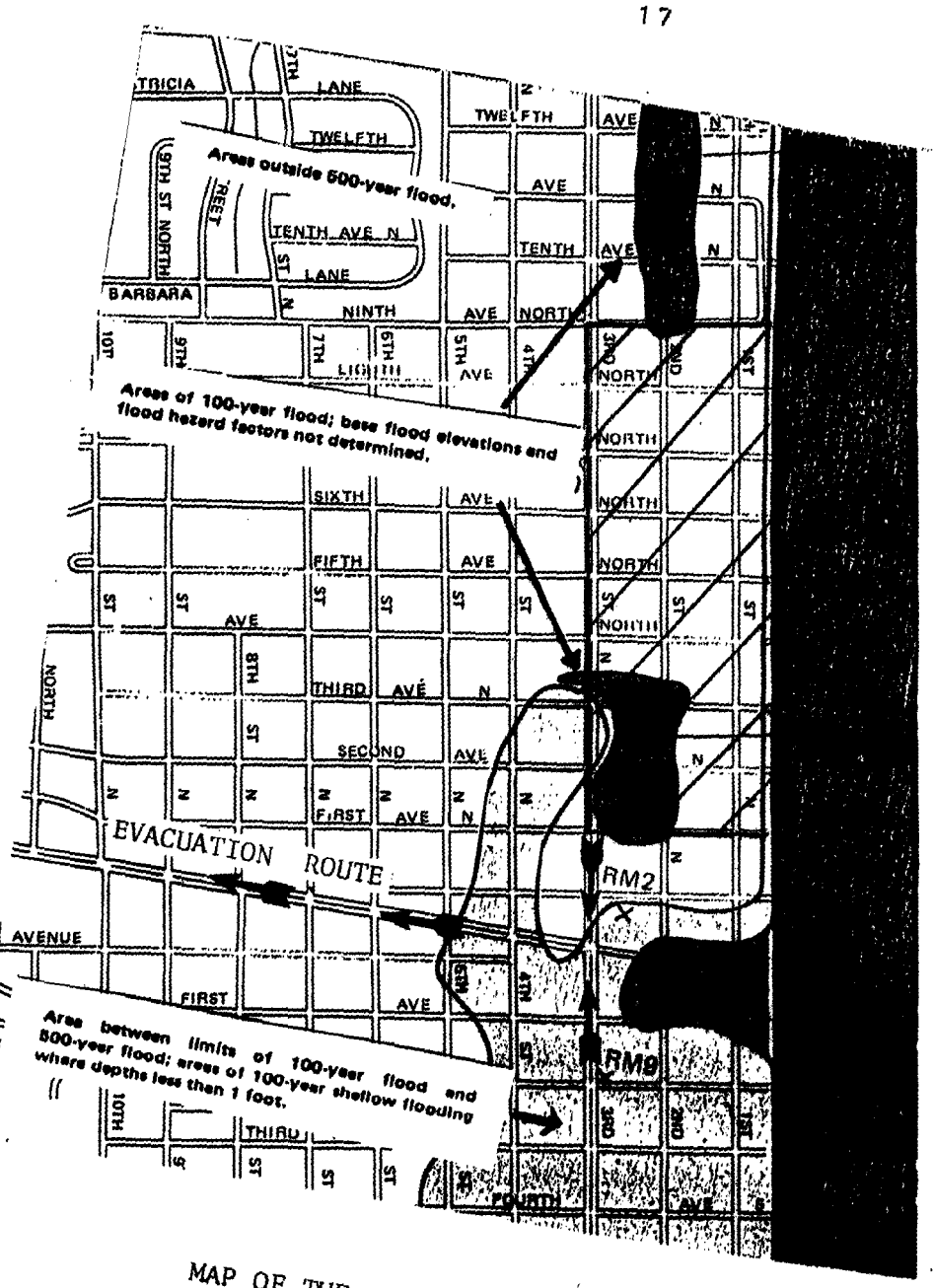


FIGURE 3

DEATHS AND DAMAGES FROM HURRICANES IN THE UNITED STATES
(National Oceanic and Atmospheric Administration, 1972)

"embarrassing".[22] In 1979 an evacuation of the Jacksonville Beaches was attempted upon the predicted approach of a hurricane, with less than complete success.[23] Had the hurricane actually struck the area with full force, loss of life would have been probable. Evacuation must be carried out early and in an organized manner. Heavy rains and tidal surge can result in flooded evacuation routes. This, coupled with accidents, trees and power lines knocked down by high winds, can trap residents unable to escape earlier. National Oceanic and Atmospheric Administration officials have continually expressed concern over population growth on barrier islands for this reason.

Evacuation from Jacksonville Beach by road is possible only on three boulevards running west over Pablo Creek and its associated marshes into Jacksonville. At present these three arteries must handle approximately 50,000 residents during evacuation. The additional 3,600 residents projected for the redevelopment area must enter the evacuation route near the major intersection of 3rd Street and Beach Boulevard. (Figure 4.) The traffic in this area can be anticipated to be heavy, with flooding occuring in the low lying portions of Beach Boulevard. The additional traffic coming from the redevelopment area will add to the congestion. Prudent planners must keep emergency evacuation of residents in mind when considering the density of development to be permitted.



MAP OF THE REDEVELOPMENT AREA

INDICATING FLOOD ZONES

FIGURE 4

Northeast storms pose a different problem. Generally of lesser intensity but much greater frequency and duration than hurricanes, these storms routinely do severe damage to the beach and waterfront structures. Northeasters occur on an annual basis. They have repeatedly damaged or destroyed bulkheads, seawalls and ramps, and undermined or destroyed beachfront buildings. In 1962 for example, a storm struck the city with winds of 60-70 miles per hour. Water levels rose to about 7 feet above mean low water. The resultant damages were so severe the area was declared an emergency disaster area. Jacksonville Beach suffered damages estimated at $1,100,000.[24] The northeast storms of the past several years have caused premature erosion of the renourished beach. Two storms in October of 1981 caused water levels of 4.7 feet above mean high water. This is equal to the design height of the beach. On November 13, 1981 a storm raised water levels to 4.9 feet, overtopping the berm and striking the dunes and seawalls.[25] The newly formed and vegetated dunes suffered damage, setting back the dune restoration program.[26] Where the waves struck the seawall, water rebounding back to the sea caused scouring of the sand and "runouts". These depressed areas in the beach caused by high velocity runoff leave the wall more exposed to the sea and cause increasingly rapid erosion.[27]

The different types of problems caused by storms must be taken into consideration by planners. Northeasters can be

expected to continue to routinely cause heavy damage to the beach and structures built close to it. Damage to property set back from the beach can be expected to be less severe. Hurricanes are sporadic in occurence with the potential for massive damage to the beach, beachfront structures and those erected inland from the beach. Heavy rains coupled with wind driven waves overtopping seawalls and dunes and surging up vehicle ramps will cause flooding in low lying areas. Part of the redevelopment area is particularly vulnerable as it lies within the 100 year flood zone as determined by the U.S. Flood Insurance Administration. (Fig. 4)

Public Access

The public has traditionally used the sea for many purposes. As a result, the harbors and shores have been a natural place for man to live. As far back as Roman times the shore has been available for public use. To quote from Justinian, "...By natural law itself these things are the common property of all: air, running water, the sea, and with it the shores of the sea."[28] Authority over the land in England after the Norman conquest rested with the crown. The King could convey property, including the shore, to private individuals. As this ocurred, development began to interfere with traffic on the waterways, forcing the evolution of a

"public trust" of these areas. That is, certain rights were held "in trust" for the common use even though title to the property had been granted to a private owner. This dictom of English law was inherited by the American colonies. Subsequent to the Revolution, all new states admitted to the Union adopted the same law concerning sovereignty due to the "equal footing" provision of the U.S. Constitution.[29] Therefore the lands lying beneath the sea from the limit of territorial waters to the mean high water mark have been sovereign lands. While the state may dispose of these lands, it must guard the public trust. In Florida the courts recognized the public's right to use of the trust properties for boating, fishing and bathing as early as 1919 in Brickell v. Trammel.[30] Review of the acts of various legislatures and the courts indicates that the idea of the public trust is continually evolving to meet the public need.

While the public has a firmly established right to use of the tidelands, passage across the dry sand beach is a different matter. These lands are often in private ownership and not open for public passage. As the population swells and continues to concentrate in the coastal areas, the demand for public use of the shore grows. Paradoxically, with the increased demand comes a rapid move to fence out the public and to maintain an atmosphere of exclusiveness.[31] Generally the more exclusive the property, the higher the value and potential profit. The

rights of the private landowner have been carefully guarded by the Constitution and the courts.

The development of the shoreline has been determined largely by the working of the market place. In other words, the shoreline goes to the highest bidder.[32] Neither the free market nor government has been effective in allocating the shoreline for the public good.[33] Too often government has been highly vulnerable to vested interests.[34] Ultimately in places such as California, access became so restricted that the government was forced to embark on an expensive program of purchasing land for public access and instituting land management policies restricting development in the coastal zone.[35] The recent publication of the California Coastal Access Guide, 50 New Ways To Get To The Beach is an indicator of the extent of the problem in that state.[36]

Denial of access has evolved in many ways. Large buildings or a series of smaller ones continuously stretching along the beach, effectively block passage even though that may not be the intent of the owners. Conscious attempts to preclude access include walls and fences, "No Trespassing" and "No Parking" signs. Even publicly owned access points have been fenced or purposely obscured by nearby property owners. Public accesses which are not positively identified as such but appear to be part of the contiguous private property are being

psychologically denied to the public. Failure of government to provide adequate parking near public access points results in the inability of individuals dependent upon the automobile to use the access. The transportation aspect of access has been carried even further as concern about access has grown. In California, portions of a major development have been held up until methods of easing the potential congestion on the main beach access road were implemented.[37] Another psychological barrier exists when access to the beach lies in an unpleasant environment.

Other parts of the country have attempted many different methods of restricting access to the beach. New York and New Jersey have used I.D. tags on a wide spread basis. These tags must be worn by beach users. Tags are often available to local residents free or at a reduced cost, while non residents pay a higher price. Other localities charge non residents a parking fee while residents have access by means of city/town stickers. The fees involved in these access restriction methods are usually high enough to discourage some potential users. There are valid arguments on both sides of the issue of restricted use. Those opposed to restrictions note that the beaches are publicly owned and therefore belong to all equally. Public funds are used for their maintenance. Renourishment in Jacksonville Beach has been funded by the federal, state and county governments, for example. Federal law

prohibits renourishment of private lands with federal funds. In order for the Corps of Engineers to conduct the renourishment, all beachfront property owners were required to give up their riparian rights to the property from the Erosion Control Line to the mean high water mark. This is in accordance with the State of Florida Beach and Shore Preservation Act. In the redevelopment area the public lands extend from the seawall to the sea. (Fig. 5) Therefore the argument for the rights of public use in the redevelopment area are particularly strong. On the other hand, as more people use a facility such as a beach, the less value it has to each individual.[38] While it may be very enjoyable to use an uncrowded beach, an over crowded beach will deter potential users. The U.S. Army Corps of Engineers uses 100 square feet per person as a planning guide for maximum beach use. While this may be an arbitrary figure, it is useful to consider a ceiling beyond which free access may become counter productive. The planning figure, combined with an estimated turn over of once per day and the assumption that beach users are willing to walk 1/4 mile from the access in either direction is useful when planning parking and other support facilities.[39]

Another argument for controlled access deals with the local-regional nature of the beach. While the tidelands are public property and often other than local funding is used for beach renourishment, seawall restoration and other projects,

EXHIBIT A – PROJECT BOUNDARY SURVEY

MAP SHOWING SURVEY OF

A parcel of land lying and being in the City of Jacksonville Beach, Duval County, Florida, more particularly described as follows: BEGIN at the intersection of the Westerly right of way line of 3rd Street North with the Southerly right of way line of 1st Avenue North; thence North 80°16'32" East, along the said Southerly right of way line of 1st Avenue North and an Easterly prolongation thereof, 1131.24 feet to its intersection with the approximate Mean High Water Line as established by elevation 2.94 USC&G Datum; thence Northerly along the said approximate Mean High Water Line, the following three courses and distances: Course #1, North 09°40'40" West, 925.20 feet; Course #2, North 09°18'42" West, 981.54 feet; Course #3, North 09°15'58" West, 925.60 feet to an intersection with an Easterly prolongation of the Northerly right of way line of 9th Avenue North; thence South 80°11'38" West, along the said Northerly right of way line of 9th Avenue North and its Easterly prolongation thereof, 1148.63 feet to an intersection with the said Westerly right of way line of 3rd Street North; thence South 09°46'06" East, along the said Westerly right of way line of 3rd Street North, 2830.65 feet to the POINT OF BEGINNING.

Containing 73.95 acres, more or less.

SCALE 1"= 100'

DATE: NOV. 14, 1981

FOR: CITY OF JACKSONVILLE BEACH, FLORIDA

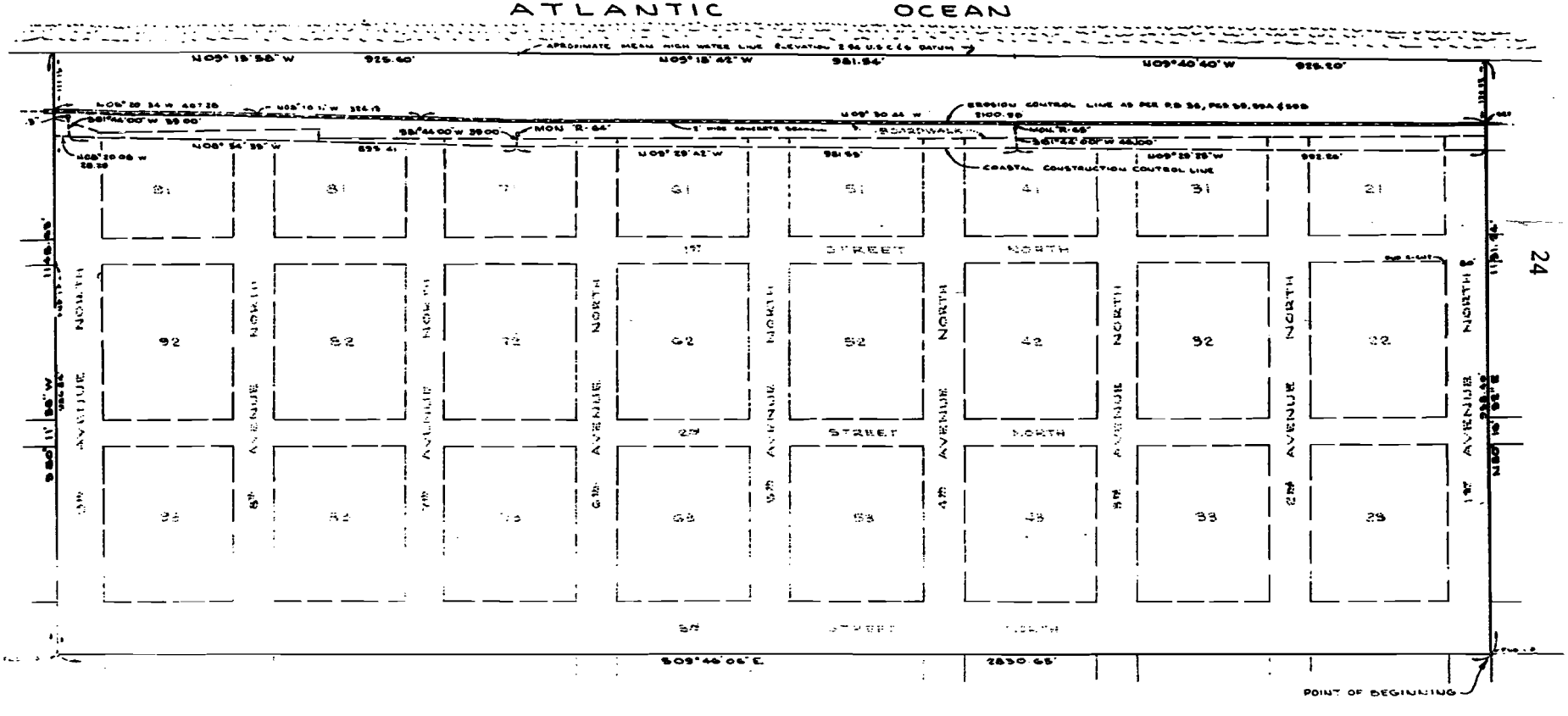


FIGURE 5

24

NOTE
BEARINGS HEREON ARE BASED ON THE STATE PLANE COORDINATE SYSTEM FLORIDA EAST ZONE

NORTHEAST FLORIDA SURVEYORS, INC.
3000 CORPORATE SQUARE BLVD.
JACKSONVILLE, FLORIDA 32216
904 - 721 3086

the community must bear the burden of other expenses. Lifeguard services, parking and rest room facilities, crowd control and security must be provided at city or town expense. Since the local governments are mandated by their constituents to protect local interests, it is not surprising that there have been attempts in some areas to protect beaches from over crowding by "outsiders".[40]

Jacksonville Beach was originally laid out in a classic grid pattern, with streets running east-west and north-south each block. While there are disadvantages to this system arising from dedication of a greater proportion of the land to roads than to productive uses and creation of excessive intersections, it has provided one distinct advantage. The end of virtually every east-west street ends in a public access to the beach. The only exception to this is where the street ends have been given up to a developer. The replacement value of this city owned land is very high. There has been some "trading" of access property with developers in order to facilitate building the various condominiums along the beach. Instead of having an access each block, for example, the city may end up with none at the end of one street and a double wide access at the other end of the development. While on the surface this appears to offer the same value to the public, it does not. The accesses are primarily used for foot traffic to the beach. Foot traffic requires a very limited width for free

access, therefore expansion of the width of an access may be of little value to the public. Only if the expanded access can be used for a significant amount of public parking or for a mini-park in a densely populated area can the trade be justified on the basis of equal value. Even so, the residents that must now walk an extra block for access will consider their access depreciated. When several "trades" take place within the same area, the local resident may find he now has to walk many blocks to find an access. This can become a major detraction for motels and others that sell proximity to the beach as an attraction or depend upon the beach users for their business. Therefore, while the city retains an equal amount of beach frontage, property values of off-beach property in the area can diminish, ultimately reducing the tax base. The community has, in effect, subsidized the development at the expense of the public.

One must only look north and south to see what a strategic commercial position Jacksonville Beach commands. The tourist or vacationer desiring to enjoy the advantages of both beach and city has no other options in the area. North of the St. Johns River is sparsely populated with no major tourist facilities. To the south the nearest resort community is St. Augustine, some 30 miles distant. The other beaches in the area are primarily residential communities with less public beach access than Jacksonville Beach.

Protection of this outstanding advantage should be one of the City's top priorities. Management and protection of the beach must be incorporated in the master plan. While it is common for many to get excited about major projects and their impacts, it has been the piecemeal actions occuring gradually that have caused the greatest loss of access and damage to the coast.[41]

CHAPTER III

ECONOMIC IMPACTS AND THE REGULATORY PROCESS

Economic Impacts

What makes the shoreline so unique and creates the difficulties experienced in allocating this scarce resource? The free enterprise system lets the market set the price for property. Where there is a great demand for the land, as at the shore, the price is elevated to where only the wealthiest can afford it. Less "efficient" uses of the land such as single family homes or open spaces are gradually forced out. This phenomenon may be aided by the ad valorum tax system which mandates that the property be taxed at the highest potential value. Developers, in search of the maximum return on their investment and capitalizing upon local government's preoccupation with raising the tax base, build the highest yield structures possible. In most cases this has been high-rise hotels or condominiums. The economic justification of these structures is found in the expanded tax yield and efficiency with which many units in a small area may be provided with necessary services.

Economic impact assessments of new projects rarely take into consideration the total costs of the project. These costs can be broken down into two general areas. The first are easily quantifiable costs that should be identified in any good economic impact assessment. Included would be added demands on the water and sewage systems, increased police and fire protection requirements, additional parking and transportation costs, expansion of the library facilities and other municipal services. Careful analysis of these costs alone is enough in some cases to outweigh the additional tax revenues from the project.

Beachfront development entails the quantification of some additional factors, however. Included are loss or reduction of access to the beach, loss of scenic views, increased crowding of the beaches, and diminished quality of life. The dollar value of these is not so readily measured. Historically the beaches have offered "the cheapest and most enjoyable recreational uses for large numbers of people".[42] "Recreation is already one of the largest and fastest-growing uses of the coastal zone and will increase in importance."[43] If the demand for this use is so great, then the value of access must be very high, even though a dollar figure may be difficult to develop. Loss of scenic views, increased crowding of beaches due to high density development and reduction of the perceived quality of life are similarly difficult to quantify yet have been of great

importance to the public. The Florida Department of Natural Resources, Division of Recreation and Parks surveyed residents of Florida in 1978-79. Respondents were asked what they thought were the major recreational problems in Florida. Among their major concerns were restricted access to the coast, development threatening beaches, and overcrowding of the shoreline recreational facilities.[44] Planners therefore should recognize the value the public assigns to these factors and the increasing demand for public use of the shore, weighing them against the financial rewards of potential developments.

Other costs to the public have historically been ignored when considering the potential advantages of coastal development. If a hotel is contemplated for the waterfront, the local government weighs the potential tax revenues from the hotel against what it will cost the community to provide services for the hotel such as increased fire and police protection. The costs to property owners in the vicinity for flood damages caused by seawalls or foundations which accelerate erosion and subsequent flooding have not been included in the total. Not only will those residents whose homes are flooded suffer from the effects of the construction of the hotel, but flood insurance premiums for the area will rise, penalizing still other residents.[45] If a publicly owned seawall protects the hotel, then the costs of maintaining and replacing the wall when damaged by the sea becomes a public

subsidy of the hotel.[46] Therefore the costs of the hotel are partially borne by the public. Planners failing to take this into consideration do not fully serve the public interest.

The term "highest and best use of the land" is often cited when discussing the trend toward high density development of the waterfront. "Highest and best use" is defined by real estate experts as "The use which will produce the greatest amount of amenities or profit...".[47] This term has been used as justification for reaping the greatest possible profit irrespective of the costs to the public and impact on public trust lands. These profits have been taken at the expense of the public, in some cases, due to a failure to fully understand the way land values are accrued. Land values depend on expected use.[48] If the property is zoned for multi-family dwellings, it is reasonable for the property owner to expect to be able to construct multi-family dwellings or to sell his property for that purpose. Should the municipality condemn his property for city use, he must, by law, be reimbursed for the reasonable value of that property. Determination of the reasonable value has been the crucial point. The landowner assumes he must be reimbursed for the value of the "highest and best use", for the greatest potential profit from his land. Neither the wording of the Fourteenth Amendment of the Constitution nor the interpretation of the courts implies that the landowner must be allowed nor reimbursed for the most beneficial use of his

land.[49] The city may calculate the value of the property based upon a less dense multi-family development in this example. It should be noted that retroactive changes in zoning ordinances designed to reduce property values for condemnation purposes have been struck down by the courts.[50]

Enforced zoning regulations have the strongest effect upon the value of property. It has been said that "(zoning) is where the payoff is these days".[51] If a property owner can purchase a property zoned for low density use and convince zoning officials to revise the permitted usage to high density, he has increased the value of his property significantly. Should restrictions be placed on the development of beachfront property, the value may be diminished in proportion.[52] Correspondingly, the value of similar property without restrictions should go up. A change in zoning to prohibit multi-family structures on the waterfront will reduce the value of vacant lots which can now be used only for single family dwellings. Existing condominiums become more exclusive and therefore more desireable.

Another aspect of zoning the waterfront concerns the issue of high-rise buildings. High-rises create "detrimental externalities" which impact on the public's enjoyment of the beach. A detrimental externality may be defined as damages incidental to an activity or object.[53] The tall buildings

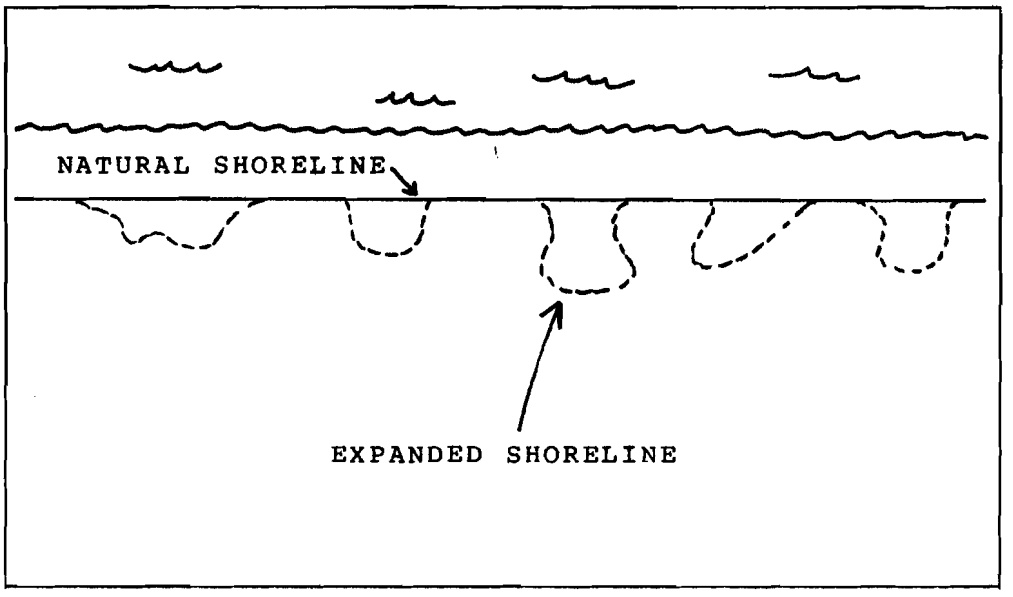
cast shadows on the beach, interfere with access, can result in overcrowding the beach and elimination of parking, and aggravate erosion of the beach. High-rise development is attracted to the beach because the developer can easily sell the units because of the desirability of an ocean view and easy access to the beach. If the zoning ordinances permit high-rise construction along the beach, the community is sanctioning the negative externalities in order to derive the greatest tax revenue from the beachfront lots. High-rises that have severe impacts such as elimination of beach access can reduce the value of property lying inland. This can cause a corresponding reduction in tax revenue from the inland property. Again, this is a factor seldom considered when calculating the costs of waterfront development and its impact on the public.

Creative use of zoning can eliminate the problem. For example, if ocean view and easy access to the beach is the attraction of waterfront property and sells condominiums, then low density, single story construction with generous access points along the waterfront should have little impact on the value of condominiums built landward. They would have only slightly diminished view and access. The tax base is expanded as more properties enjoy the advantage of ocean view and access, up to the point where facilities become overcrowded. If one were considering ocean view and access alone, zoning

would require that the height of buildings be proportional to the distance from the beach. The further from the beach, the greater the permissable height. The resultant step arrangement would always permit some floors of the landward buildings to have an ocean view until the buildings rose to the maximum allowable height or the limits of reasonable access to the beach. Large buildings can be designed in this "step" arrangement. If they spread along the beachfront, however, they may impede access.

Where the shoreline is straight, as in the project area, imaginative uses of zoning coupled with public investment in open space can actually lengthen the "taxable shoreline", repaying the public investment. (Fig. 6) An artificially irregular beachfront due to park areas reaching back from the actual beachfront permits an extension of the frontal area.

Density of development as related to high-rise construction is extremely important when planning beachfront development, but there are other factors to consider. When determining the most efficient yields to society from waterfront property, one may divide uses into three catagories. These are water dependent, water related, and non water related. Water dependent uses are activities which must be located on the water such as swimming, boating and fishing. Water related uses are those which need not be located



LENGTHENING THE TAXABLE SHORELINE

FIGURE 6

on the water but profit from such a location, for example, hotels and restaurants. Non water related use is an activity which has no relationship to a waterfront location, such as an auto repair shop. Considering the redevelopment area from this perspective, the water dependent uses should front the beach; water related uses could be located along the beach and in the area immediately inland, and the non water related uses should be located along 3rd Street.

Historical processes have been under-representing important social values when allocating the shoreline, however.[54] This has resulted in the forcing out of some waterfront uses that are valuable to society. While it may be enjoyable to sit at an outdoor cafe overlooking the beach and enjoy the scenery and ocean air, the cost of land zoned for more dense development prohibits such a use. A beach club with an off-the-beach sailing facility cannot afford the necessary property without the community making special provision for such an activity. Uses such as sailing, surfing and wind-surfing offer other benefits to the community in the form of beneficial externalities (benefits attained by those who have not paid for them). In this case people enjoy watching the colorful activity. It therefore serves as an attraction to the area. The cafe owner profits from increased business, and supporting businesses move into the area. Only by special measures can the community attract and keep these types of

of activities along its waterfront. Zoning must provide space for them with the recognition that, though they may not yield high rates of tax revenue in themselves, their benefit to the community in providing the facility for the use of the public, improving the quality of life, and the enhancement of nearby properties makes them a welcome addition. Special tax incentives can be used to stimulate uses that serve as an attraction to tourists and residents alike. However care must be taken not to "over boutique" or saturate the area with attractions of limited value and reduce its usefulness.

CONSTRUCTION IN THE COASTAL ZONE

The hazards of extreme weather conditions, erosion and corrosion, require stringent waterfront planning and control. The State of Florida has a number of regulations governing beachfront construction. All are based upon the premise that the natural beach system represents a tenuous state of equilibrium and should not be disturbed.[55] The first of these was the Coastal Setback Line program under Chapter 161 of the Florida Statutes. This provided for prohibition of construction on the seaward side of a line 50 feet inland of the mean high water line, except with an approved waiver. It was initially enacted to prevent excavation or construction within an area subject to severe 100 year storm surge or other predictable weather conditions. The program basically concentrates on the protection of sandy beaches.

More important in Jacksonville Beach is the Coastal Construction Control Line.[56] This is intended to control both hazards to people, property and the beach-dune systems.[57] The Coastal Construction Control Line is established for each county within the State, and in the project area runs over 10 feet inland from the existing seawall. (Fig. 5) The

legislative intent of the law is to protect the beach-dune system, any proposed structure and adjacent properties and not necessarily to define a seaward limit for upland structures.[58] Due to the advanced erosion suffered by the beach in the past, the new dune line has been growing just in front of the seawall. The trend is for the secondary dunes to grow across the wall. Prudent planning in the project area calls for setback adequate to permit the dune system to rebuild and provide an protective barrier extending over the existing seawall.

The Bureau of Beaches and Shores, Florida Department of Natural Resources, recommends that all buildings and beachfront structures be designed by professionals experienced in hurricane resistance design. "The design and construction of exposed seafront structures is probably one of the most exacting tasks confronting the modern day professional. Founded on a constantly changing coastal topography, beachfront structures are exposed to a combination of nature's mightiest forces, as wind and wave act in concert under some of the worst structural loading conditions imaginable. Floating debris may pound the foundations while swift water currents scour the supporting material from around the base. Wind and wave acting separately or together may exert impulse or continual dynamic loads on a structure cantilevered up from the ground, often with horizontal projections as well. The possibility of

harmonic amplification and flutter must be considered plus many other sources of stress familiar only to the design specialist in this professional area."[59] Beachfront structures should be constructed to be able to withstand wind and waves exerted by a 100 year storm as a minimum. "All new construction should be located substantially landward of the active beach-dune system. The fact that existing structures on adjacent property are located too far seaward is a very weak excuse for subjecting a new structure to the unnecessarily high risk of a similar ill advised location."[60]

Weathering and corrosion are major problems along the beachfront. Improper selection of materials or construction methods can result in prematurely deteriorated structures. Deterioration can lead to structural weakness and/or loss of aesthetic appeal. Ocean front hotels on Jacksonville Beach have a history of shortened life spans for exposed central air conditioning equipment, for example.[61] City zoning and constructon codes that take these effects into consideration and are rigidly enforced can prevent expensive and critically located buildings from becoming blighted liabilities.

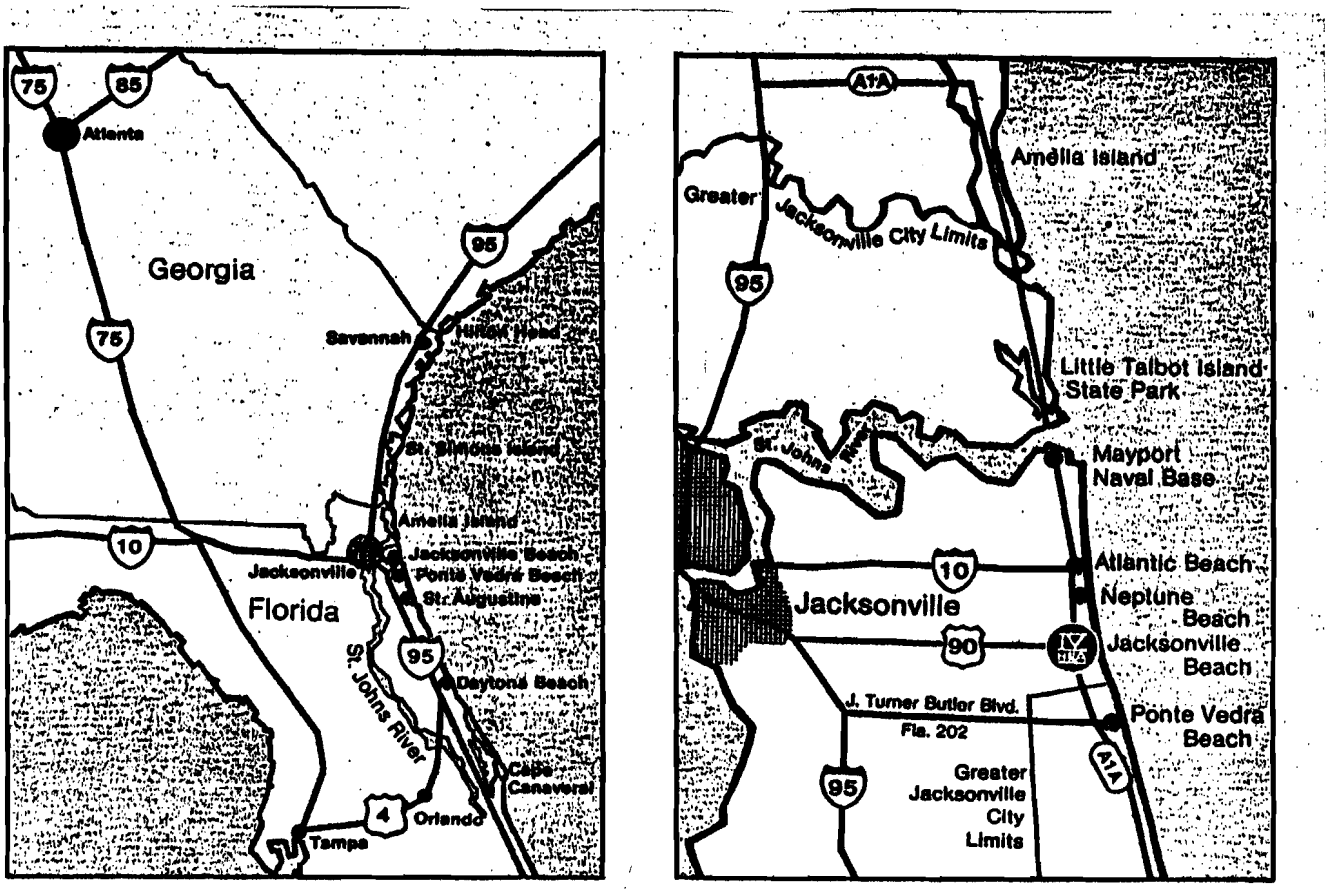
CHAPTER IV

THE JACKSONVILLE BEACH REDEVELOPMENT PROJECT

REGIONAL SETTING

Jacksonville Beach is a city of approximately 16,000 residents located about 12 miles east of the central business district of Jacksonville, Florida and 20 miles south of Georgia. (Fig.7) It is one of a group of small cities known locally as the "Jacksonville Beaches". Situated on the northern portion of a barrier island which extends from the St. Johns River in the north to St. Augustine Inlet to the south, Jacksonville Beach serves as the major beach facility serving Jacksonville. Transportation to that city is restricted to 3 boulevards, Atlantic, Beach and J.Turner Butler. Travel to the north is restricted by the ferry service spanning the St. Johns River. Immediately south is the residential and golf resort community of Ponte Vedra in St. Johns County. The population density south of Jacksonville Beach is extremely low until reaching St. Augustine, some 30 miles distant.

Northeast Florida has been primarily a summer vacation



VICINITY MAP

FIGURE 7

area, attracting visitors principly from northern Florida and southern Georgia. The central portion of Jacksonville Beach's waterfront attracted the majority of the beach visitors due to its boardwalk fronted by concessions and amusements. Failure to maintain and upgrade these properties coupled with erosion of the beach led to the decline of the tourist business.[62] The other Beaches in the area do not have the same public facilities and therefore have not attracted as great a number of visitors. They serve principly as residential communities which have maintained an almost exclusively low-rise character while Jacksonville Beach has attracted high-rise condominiums and hotels. This high-rise development has taken place in a random fashion and threatens to absorb virtually the entire waterfront. The redevelopment area is unique as it is the only sizeable piece of beachfront property along the northeast coast of Florida that is available for development. It has the added advantages of close proximity to population centers, superior transportation and all utilities in place.

THE HISTORY OF THE REDEVELOPMENT EFFORT

In 1977 the City declared the project area to be a slum and blighted area and eligible for redevelopment under the State Community Redevelopment Act of 1969 as set forth in Chapter 163 of the Florida Statutes. Subsequently the Redevelopment Agency was established with the goals of planning and administering the redevelopment effort. The initial objectives of the agency were:

a) To achieve the improvements through private sector involvement;
b) To provide the necessary public improvements in the area;
c) To encourage the development of a sound commercial core;
d) To create a revitalized boardwalk area attractive to families and visitors;
e) To develop a mixed-use urban environment where the residents could live, work and shop;
f) To restore the natural amenities of the beaches through the development of public parks and recreation areas.[63]

The Agency advertised nationally in 1979 to attract a developer to work with it in creating the plan and developing the area. A

prospectus was mailed to interested parties, deliniating the Agency's goals. This prospectus cited the advantages of the proposed redevelopment area such as 2,700 feet of beachfront property located in an area of famous resorts, mass transportation, and the availability of utilities and services. It cited the potential for a 400 room luxury hotel, 230,000 square feet of mall space, a high-rise office building and 1,581 condominium units for the area. Financing for the project was to be accomplished by the use of "incremental" tax revenues under the State Community Redevelopment Act. That is, any increased taxes resulting from redevelopment of part of the area would be placed in a special fund to continue redevelopment in other portions of the project area.

The advertisements attracted 12 developers, 2 of whom subsequently submitted proposals. One proposal consisted solely of condominiums. This was rejected in favor of the plan proposed by Striton Properties of Jacksonville, Florida for a mixed use development compatible with the goals outlined in the prospectus.[64] In January 1981, the City Council expressed its disapproval of a proposed contract with Striton Properties to act as the sole developer. In spite of the lack of political backing for it, the Redevelopment Agency executed the contract.[65]

The redevelopment project has been marred by controversy

since its inception. The Redevelopment Agency staff was fired for opposition of the selection of Striton Properties as the sole developer. In 1979 the redevelopment area was expanded to its present 24 block size, spurring further controversy. The initial plan was rejected by the City Council for permitting excessively dense construction. The Council then requested that the density be revised to a maximum of 45 units per acre.[66] The revision later presented did not satisfy the density objections. On December 15, 1982 the final plan was rejected by the City Council. Under the contract with Striton Properties either party is free to withdraw from the contract with reimbursement due the contractor for his planning expanses.[67]

Due to the intensity of disagreement over the proposed redevelopment, the community has been polarized into a number of groups. All are extremely frustrated with the inability to resolve the situation and generally blame others for the impass. The developer has been bamed for trying to push for the highest density to make the greatest profit. Skeptics also theorize that the expansion of the initial redevelopment area was an attempt by the developer to control more land. The developer's financial problems with other holdings have led some to the suspicion that he may not be able to secure the required financing, and if he does he may only complete the high yield portion of the project and abandon the rest.[68] The

property owners in the redevelopment area feel that their property has been under a cloud for 5 years, depriving them of their rights under the Constitution to the enjoyment and use of their property. Physical deterioration of the area has accelerated during this period resulting in the abandonment or gross underutilization of the properties. There is a feeling among many that high density development in the area is a threat to the quality of life at the beach. The Beaches Preservation Society and others, sharing the concerns over the threat to the quality of life, shadows on the beach, and restriction of access, took an active role in opposition to high density development.[69] The opposition has been characterized by some as the "No Growth" element. This appears to be contrary to research conducted which found no group actually opposing development. There is a general agreement that something must be done to remove the blight, provide property owners with a reasonable use of their property while enhancing the quality of life and increasing the tax base. The inability to successfully carry out the redevelopment effort has been due to an initial misconception by the Redevelopment Agency of what types of development best serve the public interest, failure of the various parties to properly market their positions, and miscommunication. A common failure of government planning is to "unveil an entire plan at the end of an essentially private, 'professional' process, and then try to sell it to the public and elected officials".[70] This

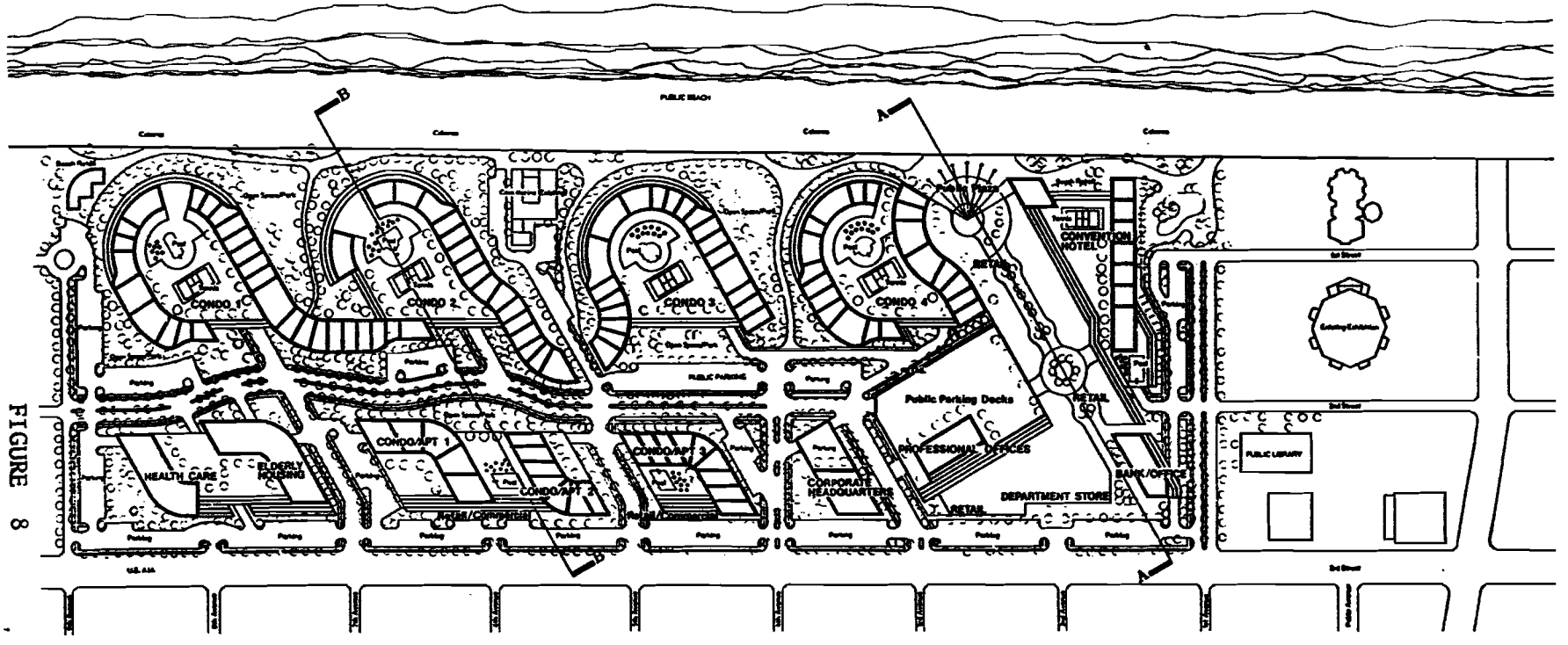
appears to be a classic case.

THE CONCEPTUAL PLAN

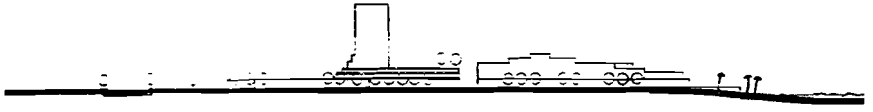
The Conceptual Plan of November 15, 1982 bears a striking resemblance to the type of development proposed by the Redevelopment Agency in its prospectus to potential developers.(Fig.8.) All the essential ingredients are included, high density condominiums, a mall, a high-rise office tower and hotel. It therefore appears that the developer conceived his plan in accordance with the initial desires expressed by the Agency. Whether the Agency accurately reflected the needs and desires of the community is debatable. Unfortunately, the long time elapsed since conception of redevelopment has spanned a time of major change in economic conditions and potential government aid. Federal government programs that existed at the commencement of the project have been eliminated or drastically reduced, restricting the options available. The stage has been set for potentially unbridled development born of frustration. The temptation to accept any solution to a difficult problem should be avoided. Once large and expensive buildings have been erected, the results are permanent.

The specific objectives of the Agency dictated its

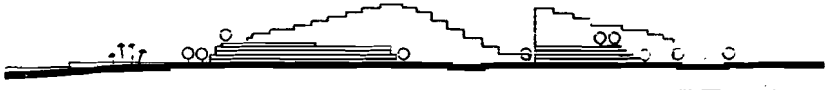
EXHIBIT C - CONCEPTUAL DEVELOPMENT PLAN



MASTER PLAN



SECTION A-A



SECTION B-B

FIGURE 8

JACKSONVILLE BY THE SEA

STRITON PROPERTIES/PABco. DEVELOPER
Jacksonville, Florida

THOMPSON, VENTULETT, STAINBACK & ASSOCIATES, INC., ARCHITECTS- Atlanta, Georgia

conception of what types of development would be best in the redevelopment area. It determined that a family oriented boardwalk was desirable as was a mixed use area where residents could live, work and play. However, the Plan seems to be largely oriented to the residents of the redevelopment area. Beach access for others has been restricted to the 3 walkways in the 8 block beachfront, 2 of which lie between large condominiums. These accesses may not appear to be public accesses to persons unfamiliar with the area and therefore would be psychologically denied to them. This factor could be overcome by clearly marking the accesses with signs. Public parking appears to be limited, located in only one section of the area and not easily located by visitors. Although there is a public parking garage, it is possible that mall shoppers could absorb a large portion of the parking it provides. Many potential beach users may find that the parking garage and surroundings do not provide an atmosphere conducive to enjoyment of the beach. A mother with small children having to park in a parking garage and walk through the garage and adjoining parking lots or mall carrying normal beach paraphenalia probably would not soon repeat the experience.

Projected density is high. The population of the area is planned to grow from 400 to 4000. The resultant vehicle traffic would also be greatly increased. When considering the impacts of a development built on an inland location, the impacts of

increased traffic may be significantly less than along the shore. Traffic may radiate from an inland development in as much as a 360 degree arc, whereas along the shore the same amount of traffic must be handled in half that arc. The increased traffic will be carried by 3rd Street, the main artery of Jacksonville Beach, Neptune Beach and Ponte Vedra. Traffic will enter and exit the redevelopment area just north of the major 3rd Street and Beach Boulevard intersection. Major traffic problems may be anticipated. The State originally determined that the redevelopment was a "Development of Regional Impact" (DRI), a development which would have a substantial effect on more than one county.[71] The Northeast Florida Planning Commission concurred with this finding, largely based upon its belief that traffic impacts on 3rd Street would be severe enough to interfere with traffic flow to and from Ponte Vedra.[72] Upon appeal by the Redevelopment Agency, the State reversed its decision and declared the project was not a DRI. Irrespective of whether or not the impacts on neighboring counties would be severe, it seems clear that the residents of Jacksonville Beach would have to contend with heavy traffic in the immediate area.

Open space is an interesting factor in the Conceptual Plan. The specifications for redevelopment of the area call for at least 20% of the site to be devoted to open space. Of the open space, 40% must be dedicated to public use.[73] Review of

the Project Boundary Survey shows that the limits of the redevelopment area extend from the west side of 3rd Street to the high water line to the east.(Fig. 5.) The area of the beach from the high water line to the seawall, which is already in the public domain, would satisfy the open space requirement and no open space need be provided in the rest of the project area. Therefore there would be no additional area made available to the public, counter to the specific objective which called for the development of public parks and recreation areas.

High density use as proposed in the Plan has other impacts. Large buildings tend to change the atmosphere and an impact on the "small town" atmosphere that exists could be anticipated. Concern has been expressed that attracting a large number of wealthy new residents will change the local power structure and reduce the current residents' control over the municipal government. Carter, in The Florida Experience, found that Floridians prefered their cities to be more "gardenlike" with "an atmosphere characterized by a certain openess, lightness, and freedom...(that) is lost to massive high-rise development which, if it belongs anywhere, is more appropriate to urban centers of the north."[74] Echoes of those feelings were heard in opposition to the Jacksonville Beach Plan.[75] When the rest of Duval County voted to consolidate with the City of Jacksonville, the Beaches retained their independent

governments. This same independence of spirit has been part of the resistance to the Plan. Residents of Jacksonville Beach like their way of life, which is slower, more relaxed and informal than that found in Jacksonville. Many residents questioned whether striving for a major change in the tax base by high density development is worth losing their way of life.

Water has become a critical factor in any major development. This is particularly true for beachfront communities. Salt water intrusion into the aquifer can result from natural seepage, drainage from canals, special construction techniques, tidal overtopping, and withdrawal of water faster than it can naturally be replaced.[76] Once the aquifer is contaminated beyond use, the community must then pipe in water from distant sources. This is expensive and the community no longer controls its water source. The Plan does not single out water as a significant problem and only states "The proposed development will, however, impact the existing water and sewer systems by creating substantial increases in water and sewage generations ...".[77] The Plan shows water consumption projected to go from 144,325 gallons per day to 601,638 GPD. Jacksonville Beach already experiences salt water intrusion in City wells at the present pumping rate.[78] Increased water use may require the City to seek expensive alternate water sources. In the past federal aid was often available to help finance expensive infrastructure such as

water and sewage treatment systems. The availability of this aid has become extremely limited and the City should be careful when considering development which will overextend existing capacity in these areas.

The Plan makes no special provision to exploit the beach as an attraction for the City. There is nothing to attract the tourist. In order to capitalize upon the unique advantage Jacksonville Beach has in northeast Florida, tourism should be an important part of any beachfront redevelopment. If the Plan were to be implemented, the region would have no commercial/recreational beach and the City would lose its opportunity to earn significant income from beach related activities. Tourism offers a number of advantages. The tourist makes a minimal impact on the environment. Activities such as strolling the beach, sunning, and swimming require little in municipal investment compared to other activities. Tourists are generally willing to pay a higher price to enjoy these activities than the local resident.[79] Jacksonville Beach enjoys a climate favorable to tourism for 9 or more months a year. A high volume of tourists pass through Jacksonville daily on their way south and should Jacksonville Beach develop attractive waterfront facilities, it could potentially lure many of these travelers for an overnight stay. People attending events in the Jacksonville area could be attracted to Jacksonville Beach in increasing numbers. While tourism must be

an important part of waterfront development due to the income potential, excessive dependence upon tourism can result in over crowding of facilities, excessive traffic, and an increase in the cost of living for residents. Balanced and varied use is required for successful development in this area.

The attraction of the beach is powerful. The greatest attraction occurs during the daylight hours, however. The most efficient use of the redevelopment area should include facilities which will extend the attraction into the evening. These facilities need not be peculiar to beachfront development as the uniqueness of the beach is somewhat lost with darkness. The facilities should not be placed directly on the waterfront unless they are water dependent or related uses. Suggested uses might be theaters, restaurants, cafes, shops, bowling alleys and miniature golf courses, which would be in keeping with the goal of an area attractive to families and visitors.

Financing of the project was to have been under the State's incremental tax program. The City intended to issue bonds to raise funds for the initial phase of the redevelopment with following stages to be funded with the increased tax revenues generated from the improved portions of the project area. The City has neither issued the bonds nor complied with the State regulations governing eligibility for incremental

funding.[80]

The Conceptual Plan does show the results of coordinated planning from the view of the developer. Some waterfront access has been provided, the area has a smooth internal traffic flow plan and the project area is oriented toward the pedestrian. Higher value uses are found on high value lands, high-rise condominiums along the beach and retail/commercial uses along the 3rd Street frontage. Parking is relegated to the lower value land that fronts neither the beach nor 3rd Street. Land utilized in the street grid which currently exists is more efficiently used in the Plan.

The advent of the Plan coupled with other high-rise development along Jacksonville Beach has caused some concern that the loss of public access and parking may jeopardize future renourishment of the beach by the Corps of Engineers.[81] When the beach renourishment project was initially implemented, the easy access of the public to the beach was a critical factor in its justification.[82] The public's ability to drive and park on the beach was also important. Subsequent to that time driving on the beach has been prohibited and accesses have been lost. The Plan would result in the loss of still more accesses and an impact on parking. The City should be very cautious about any actions which might jeopardize federal assistance for beach renourishment.

It appears that the Conceptual Plan is probably too dense and will unfavorably impact the community. The scale of the buildings within the project will not blend easily into the surrounding area. The massive buildings proposed will soar 20 stories into the air and project upward like an island among the predominantly low-rise buildings in the vicinity. Winds from the northeast will be channeled through the gaps in these tall buildings which will increase the wind velocities. This will result in strong eddys on the downwind side, sucking sand and debris into the air. The Plan could be modified to be more suitable to the area.

The City must ensure that adequate protection from coastal storms and routine erosion are met by encouragement of the dune rebuilding process. The obvious necessity to continue beach renourishment must be addressed in any plans for waterfront development in Jacksonville Beach as must the need to protect the public access to the beach. Construction methods and materials must be compatible not only with the design of the structures in the area, but with the arduous climatic conditions which they will face over their projected life. Neither the Conceptual Plan nor the Redevelopment Agency's Community Redevelopment Plan directly address these important subjects.

CHAPTER V

ALTERNATIVE DEVELOPMENT PROPOSALS

There are two main issues facing the City of Jacksonville Beach. The first is arriving at a public consensus on the type of land use that satisfies the community, offering the property owners a fair return for their property and the developers a reasonable profit. It must also result in a real improvement in the City's financial condition. Second, politically viable methods must be found to carry out the plan once decided upon. Both issues require compromise of the many factions involved for the general good of the community. The interests of the parties involved in Jacksonville Beach are not diametrically opposed and have the potential for compromise. All parties are displeased with the status quo and would like to improve the City's physical and financial condition.

Whether the City should persevere with the current redevelopment program or revert the area to private development coordinated by zoning and building regulations is a question which must be answered by the community. Both methods offer advantages and disadvantages. Pursuance of a City managed redevelopment should result in coordinated planning. Parcels

of land suitable for large scale development can be assembled by condemnation more easily under the present method. As presently conceived, however, the City must involve itself heavily in the financing of the project in partnership with the developers.

Should the redevelopment concept be abandoned, private developers can be expected to propose a large number of projects along the waterfront consistent with what has already developed outside the project area. Under the present zoning and building codes, medium to high-rise construction with somewhat reduced beach access points can be anticipated. As the developers will probably be unable to assemble large parcels, the actual number of beach accesses may be greater than in the present Plan. These accesses, though greater in number, could be less effective in serving the public due to lack of coordinated planning of parking and traffic patterns. Private development of the area would reduce the City's financial commitment along with its ability to control development. Theoretically, creative zoning methods and construction regulations could result in a well planned renewal of the area. Present zoning and construction codes and their enforcement appear inadequate to the task, however.

The following illustration demonstrates the creation of a plan for the project area, considering the various factors

pertinent to waterfront planning. It is not intended to be an alternative to the existing Conceptual Plan but to show how the various factors may be incorporated when creating a plan. The question of what density is to be permitted and its impact on the water supply and traffic congestion must be determined by the community prior to considering specific land use.

The first step is to determine the area actually available for development. In this case it extends from the Coastal Construction Control Line to the east side of 3rd Street.(Fig. 9) As the properties on the northern boundary must have access, 9th Avenue must remain. Therefore the northern bound would be the south side of 9th Avenue, running south to the southern side of 1st Avenue. This eliminates a large portion of the redevelopment area.

Secondly, the best possible use of the beach itself should be decided. A mix of recreation and tourism would be appropriate for Jacksonville Beach. This would allow for the construction of recreational, residential and tourist oriented facilities along the beach. Therefore the beach itself would be zoned for the predominant uses planned, such as surfing, sailing, swimming and fishing.(Fig. 10)

As the beachfront in Jacksonville Beach is susceptible to potentially serious and recurring erosion problems from

northast storms, any plan should include a significant construction setback from the beach. Besides protecting the buildings, the area between the most seaward buildings and the beach can also serve as a partial solution to the need for public open space and beach access. Discussions with the Executive Directors of the Redevelopment Agency and the Northeast Florida Planning Commission, the City Engineer and a representative of the Corps of Engineers revealed they all concurred that, ideally, any new construction would be set well back from the beach. Keeping construction west of 1st Street was mentioned as an optimum situation. Setbacks can be obtained by the encouragement of cluster construction, where high density construction in one area is permitted if other portions of the property are left open. Another method is by trading development rights. For example, the City could close 1st Street, permitting a developer to build on it in return for equal amount of property along the water. The developer would still have waterfront property of essentially undiminished value while the public would gain an open beachfront. Purchase of easements over private property can be used by a community to keep land open and available to the public yet avoid the high cost of fee simple purchase. The City has applied for state funds for the purchase of other beachfront areas under the "Save Our Coasts" program.[83] The beachfront in the project area is a logical candidate for this program.

Access, both visual and physical, is extremely important. Provision must be made for visual corridors so that access is apparent and not hidden. Public parking is also critical for those who must depend upon the automobile for transportation to the beach. Provision is made for a very open and obvious main entrance to the beach.

In order to permit the highest property values, the straight beachfront in the project area can be artificially elongated by the provision of open areas. These irregularities along the beachfront, as indicated in Figure 11, permit more buildings to share the water view and easy access to the beach which increases property values.

Provision must be made for water dependent activities that have secondary benefits such as attraction of spectators, tourists and others. In Jacksonville Beach an off-the-beach sailing facility would require a parking and storage lot and access to the beach. The parking/storage lot need not be located in the highest value zone along the waterfront, but should be situated well back from the beach, sharing an access road to the beachfront. (Fig. 11)

Water related uses, those that will profit from being located on the water and from observation or support of the activities planned for the beach should be inserted next. As

the main entrance to the beach will be the mall leading from the major parking area, several commercial buildings flanking the entrance could be the sites of restaurants, shops and cafes. The curved shape would permit maximum beach views from these buildings. In keeping with the open space character of the entrance, the buildings would be low-rise. Similar low -rise commercial buildings could be provided in those areas likely to require support for the activities planned for the area. Restaurants and shops could be expected to do well located near the surfing and sailing zones. (Fig. 12)

With the public's access and recreational requirements met, the high value projects can be planned. A high-rise hotel located on the waterfront would lure conventioneers and tourists while providing facilities to host the regattas, surfing meets and other water oriented activities that will be attracted to the area. The rest of the beachfront can be developed with a mixture of residential buildings. Heights should be as desired by the community.

Zone "C" as shown in Figure 13, with its ease of access from 3rd Street, is well suited to commercial, retail and office use. Zone "B" has no primary orientation and may be used for parking for beachfront and 3rd Street facilities and other relatively low value uses. This zone is a good location for evening recreation activities.

BEACHFRONT PLANNING, PHASE ONE

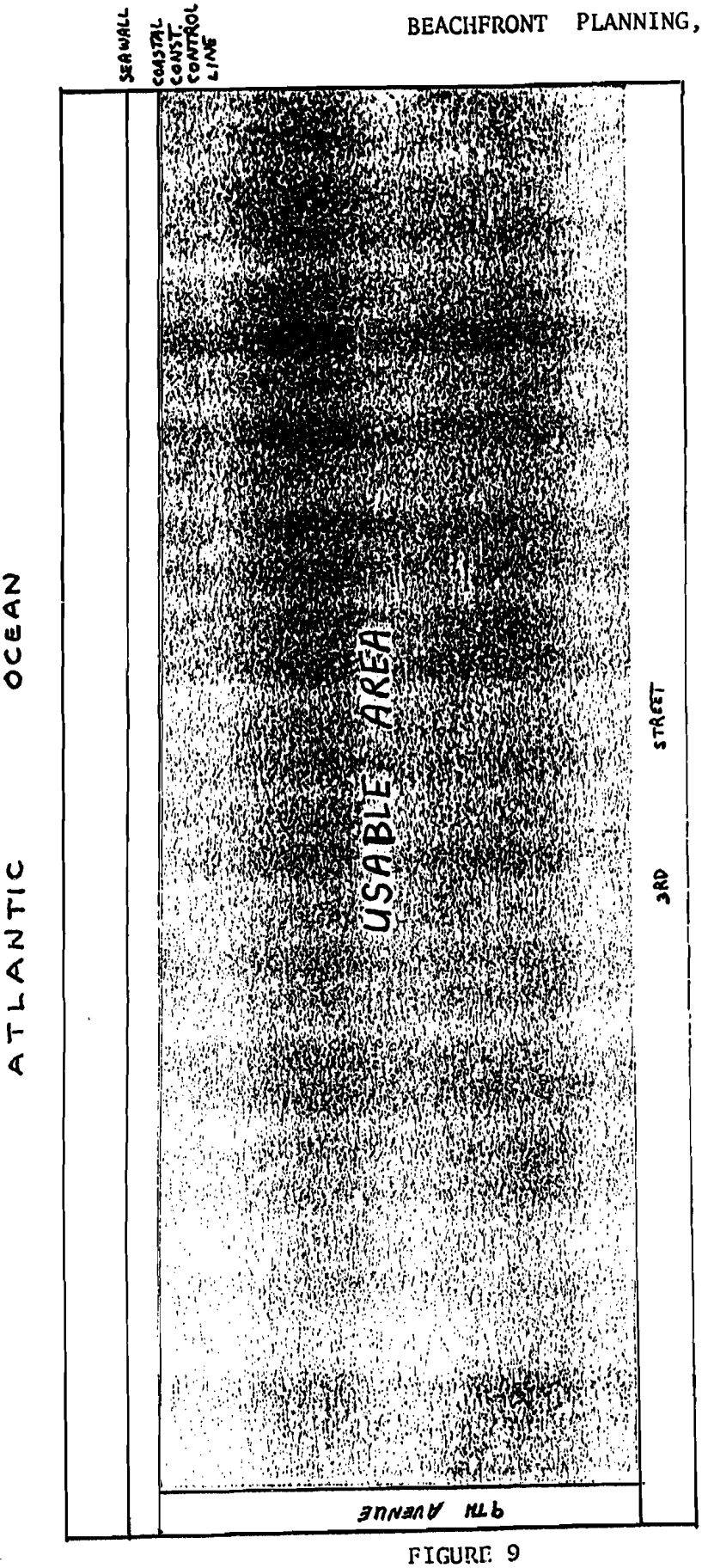


FIGURE 9

BEACHFRONT PLANNING, PHASE TWO

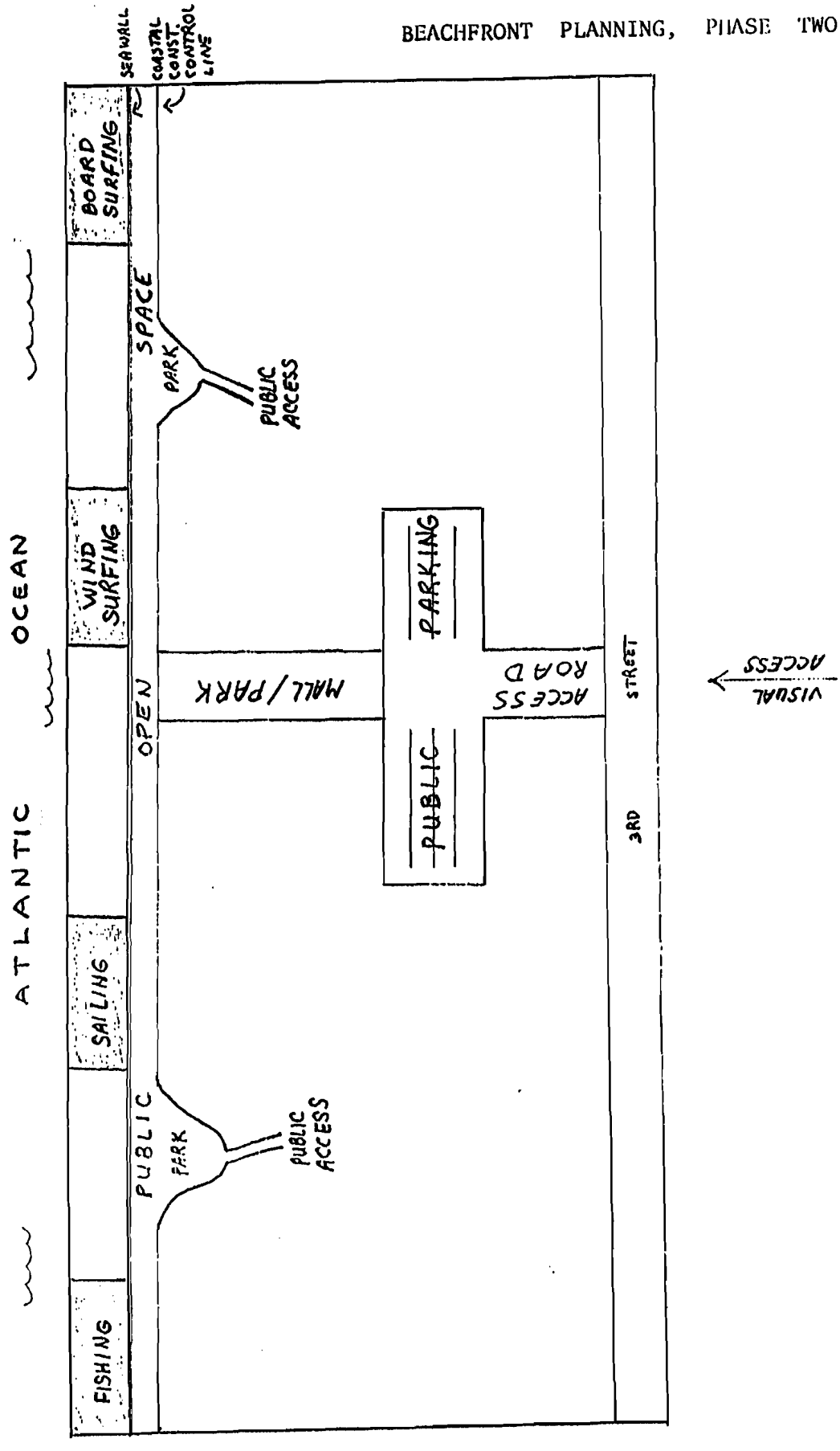


FIGURE 10

BEACHFRONT PLANNING, PHASE THREE

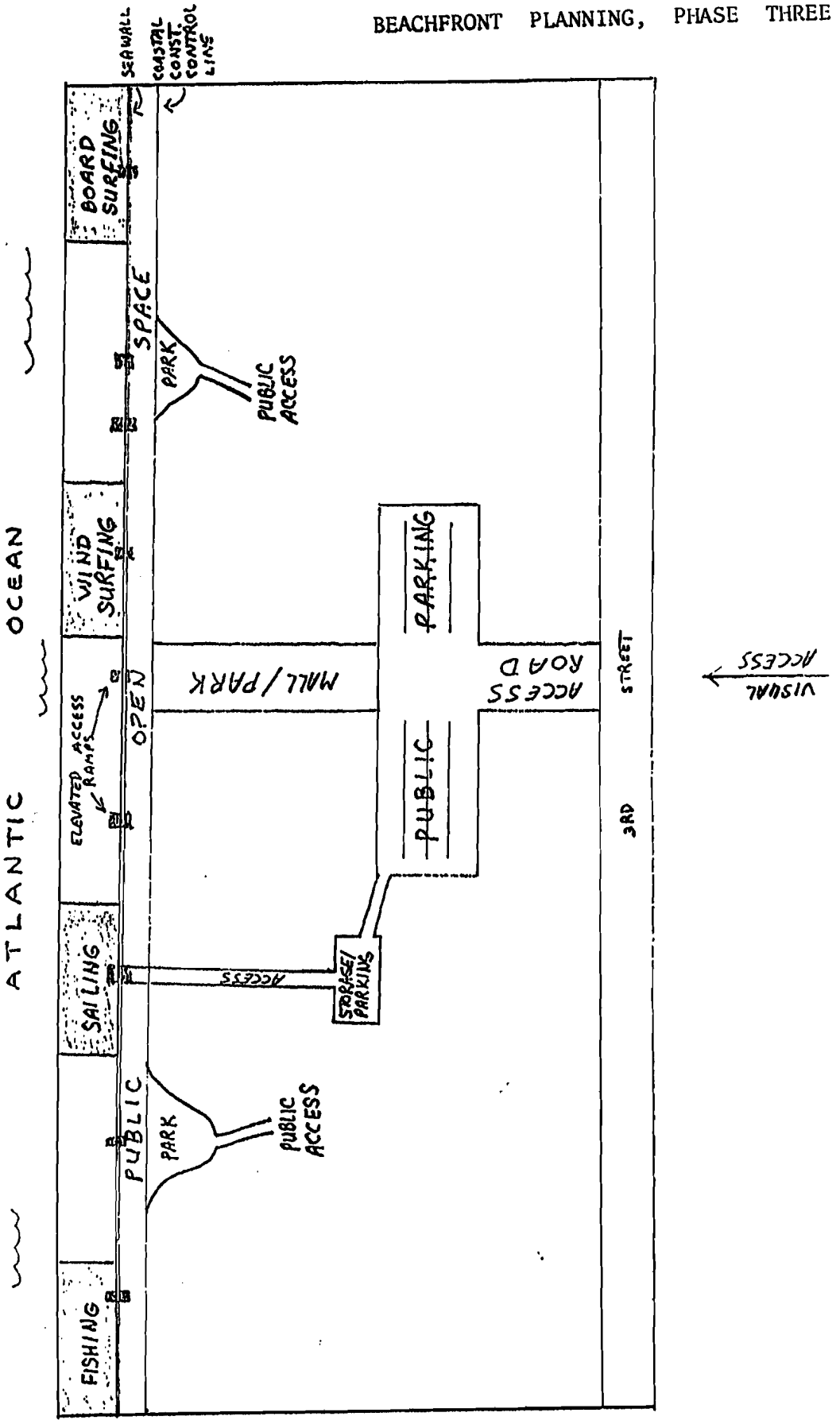


FIGURE 11

BEACHFRONT PLANNING, PHASE FOUR

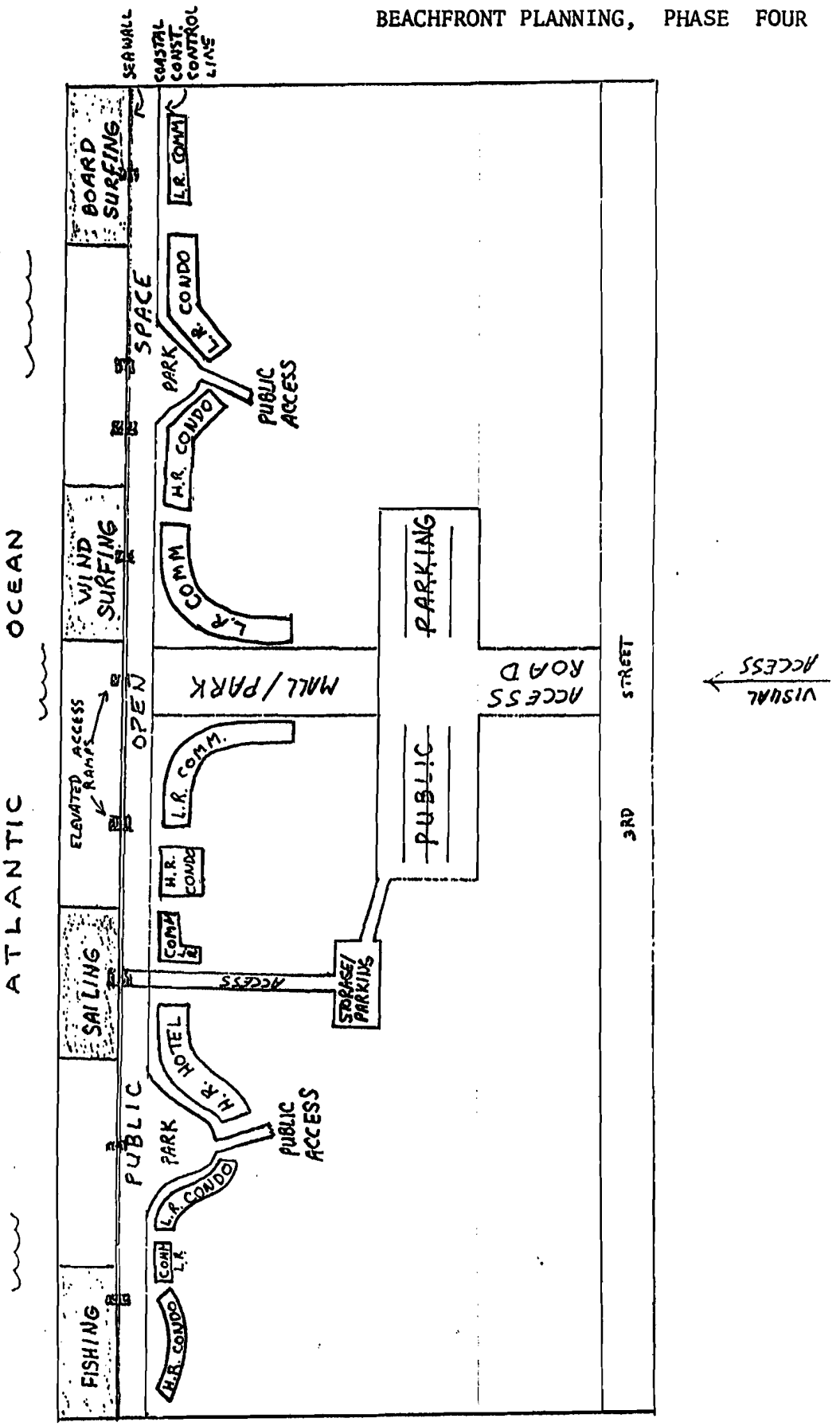


FIGURE 12

BEACHFRONT PLANNING, PHASE FIVE

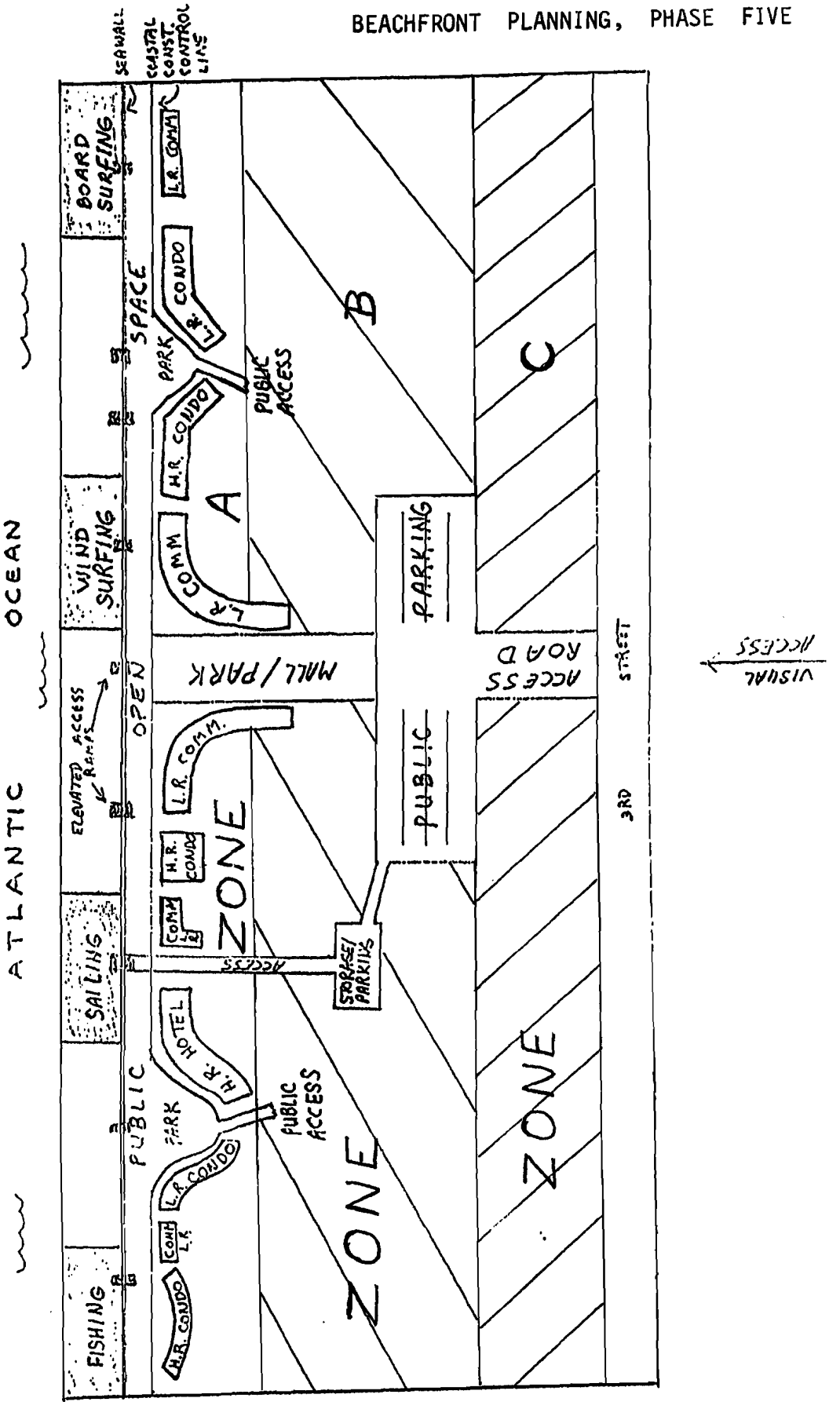


FIGURE 13

CHAPTER VI

CONCLUSION

The problems facing Jacksonville Beach are not unique. Many communities have faced similar ones in the past. There are three factors upon which Jacksonville Beach must capitalize. The first is the unique lure its readily accessible public beach has in the northeast Florida area. This asset is worth far more than the City could afford to pay to replace it once lost. It could again become a main source of revenue for the City if properly revitalized. This can be done in a manner which preserves the lifestyle which Jacksonville Beach residents enjoy. If the beachfront is devoted exclusively to high-rise condominiums, the attraction of Jacksonville Beach to other than the residents of those condominiums will be lost for decades.

A second factor to be considered is that the City must profit from the mistakes of other communities. Unchecked development or buildings unsuitable for the area have destroyed the nature and quality of life of countless beachfront communities while enriching a few. Local governments have been ill equipped to deal with the powerful development forces, or

have operated in concert with them. Usually the public interest was not recognized or protected in the process. The concerned residents and officials of the City must take a careful look at other communities for examples of both successful and unsuccessful beachfront development.

Recognition of the problems of past development served as the catalyst for the generation of the relatively new concept of coastal zone management. This new concept is the third factor. As the public in some areas perceived that the quality of life was being diminished by indiscriminate waterfront development, a public outcry was heard demanding attention. The ability of the public to use and enjoy the beach was being impacted by development. A number of states responded by creating coastal zone management laws. The federal government followed suit, helping to establish state coastal zone management organizations throughout the coastal states. Through their efforts, there is now an understanding of the forces involved in the coastal zone which can help prevent the planning mistakes made in the past. It is likely that abuses similar to those carried out in the past will no longer be quietly tolerated by a concerned public. Increasing political and legal pressure will be brought to bear on coastal development perceived not to be in the public interest.

The changes in federal government policy and funding of

local projects mandates new procedures to solve these problems. Local governments will be unable to fund major projects alone. Government/private sector coalitions are being utilized to accomplish a variety of projects. Both parties must cooperate for their mutual good. Government must provide early and clear policy guidance and maintain consistancy. There must be a recognition that the private sector requires incentive in the form of a reasonable profit. The private sector must realize that attempts to achieve maximum profitability at the expense of the community may result in legal and political opposition. This can reduce profitability beyond what may have been attained by a project originally designed with the public welfare in mind.

Success of the Jacksonville Beach project can only be determined by the public itself. In California, the state coastal zone management program owed its success to the active involvement of the citizenry.[83] The citizens must be sure their voices are heard by the local government. Many of the coastal issues are characterized by "high transactions costs". That is, it is difficult to assemble all the interested parties together to effectively bargain for what is needed.[84] It becomes impossible to gather all the beach users to oppose the loss of access, for example. Therefore responsible government representation is vital. The key to the solution in Jacksonville Beach rests in the political process.

The ever present natural forces that impact the coast must be recognized and accepted. Jacksonville Beach must plan for continual erosion of its waterfront by northeast storms and be prepared for the potentially disasterous hurricanes. Beach renourishment has been largely financed by the federal government in the past. In these times of shrinking federal assistance programs it is prudent to develop contingency plans for reduced renourishment funding. Most importantly, protection of the beach and beachfront development by conservation efforts, dune rebuilding and proper building techniques is absolutely vital.

In summary then, Jacksonville Beach must have far reaching vision to look beyond the immediate results of a redevelopment program. The social, economic and physical impacts of development must be carefully weighed against the benefits to the public. The decisions made today will have far reaching effects.

FOOTNOTES

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