KILL DEVIL HILLS

1987 TOWN OF KILL DEVIL HILLS
LAND USE PLAN

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LAND USE PLAN

TOWN OF KILL DEVIL HILLS, NORTH CAROLINA

AUGUST 10, 1987

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Adopted by the Kill Devil Hills Board of Commissioners on August 10, 1987; and certified by the Coastal Resources Commission on September 25, 1987

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INTRODUCTION

In an effort to establish a set of guidelines that can be used to direct the future growth of Kill Devil Hills, the Board of Commissioners has adopted this Land Use Plan.

The plan consists of five sections, beginning with an introduction and brief history of Kill Devil Hills, followed by an analysis of previous policies, existing conditions, and concludes with plans and policies aimed at directing future growth. Several maps are included in this document to illustrate land use, environmental constraints, and land classification.

This plan, a 1986 update of a similar document that was developed in 1980, is the result of numerous meetings held by the Kill Devil Hills Board of Commissioners and the Town's Planning Board. A public opinion survey was developed, distributed, and analyzed in conjunction with the update process. The data collected and the policies adopted as a result of the 1986 update of the Kill Devil Hills Land Use Plan represent the collective wisdom and desires of the citizens of this community.

Successfully implemented, this document will manage the future development of Kill Devil Hills in such a fashion that the local economy will progress at a rate that provides for an acceptable level of growth that is compatible with the environment and the quality of life the citizens of this community have come to enjoy.

HISTORY OF KILL DEVIL HILLS

While the first recorded accounts by a European Expedition of the Southeast coast of the United States date to the early 1500's, it was not until July of 1584 that Sir Walter Raleigh's ships found the "abundant" New World known today as North Carolina's Outer Banks. Raleigh's colony was established and was lost on Roanoke Island. Successful settlement of the Banks did not come for another seventy-five years.

Colington Island, near Kill Devil Hills, was the first land grant issued in the New World by the Lords Proprietors of Carolina. A plantation settlement was soon established with crops and livestock. Abundant timber provided lumber for boats and homes, while the islands grasses were ideal to support livestock. Early settlers lived off the land, water, and salvage operations from shipwrecks.

Many legends and folktales are associated with the origin of the name Kill Devil Hills or Kill Devil Hill. Kill Devil Hills is the largest sand hill in the area now grassed over with the Wright Brothers National Memorial situated on top. While there is no clear evidence, numerous stories range from a legendary liquor made on the Banks and sold on the hill that was so bad it would "kill the devil", to a story about an Outer Banks Hermit known as "Fresh Pond Will" who vowed to give the Devil his soul for a bag of gold. The tale goes on to explain how Fresh Pond Will tricked the Devil to fall to his death into a pit of quicksand, a trap that the banker had prepared previously, thus "killing the devil on the hill".

Livelihoods of the early bankers included scavengers, boat builders, fishermen, coast guardsmen, pilots, and lumbermen. By 1878 the United States Government had built a lifesaving station in Kill Devil Hills. The Wright Brothers made history in 1903 with the first successful heavier than air powered flight at Kill Devil Hill. This event is marked by a monument made of granite, sixty-one feet in height. Designed to also function as an aid to navigation, this landmark is known today as the Wright Brothers National Memorial.

By the time the first post office was established in Kill Devil Hills in 1938, it was clear the area had a future of tourism and cottage development. The Town of Kill Devil Hills was incorporated in 1953.

Today the Towns of Kitty Hawk and Southern Shores are to the north and the Town of Nags Head is on the southern border. Kill Devil Hills is a resort community of 2,500 residents with a peak seasonal population of 35,000. Development is mostly single family cottages but also includes resort accomodations, restaurants and other commercial services necessary to meet the needs of the area's year round and seasonal popluation.

SECTION II

REVIEW AND ANALYSIS OF THE 1980

LAND USE PLAN AND POLICIES

ANALYSIS OF THE 1980 LAND USE PLAN

AND POLICIES

In the 1980 Land Use Plan, the Kill Devil Hills Board of Commissioners adopted policies directed at twenty-two specific issues. In conjunction with the 1980 update of that plan, each of those twenty-two policies was examined and evaluated by the Town's Planning Board. The results of that evaluation are listed below:

1. Growth: Policy selected - Retain growth rate of the near past, at 8-13% per year.

   Evaluation - The 1980 population of Kill Devil Hills was estimated at 1800. The 1986 population is estimated to be around 2600. Using the 8 to 13% growth rate parameters, the Town's year-round population would grow to between 2520 to 2970 residents. 1986 estimates place the year round population of Kill Devil Hills well with-in the parameters of the 1980 Land Use Plan, at about 9% per year. The estimates of seasonal population surge, however, appear to have been far too low. The 1980 Land Use Plan projected a seasonal population of 13,000. 1986 estimates of the seasonal population of Kill Devil Hills range upward of 30,000 indicating that the 1980 plan underestimated the summer surge to a significant degree.

2. Energy Shortage: Policy Selected - Support efforts begun by the Town of Nags Head aimed at providing mass transit for the Northern Dare beach communities.

   Evaluation - This effort to deal with anticipated energy shortages and transportation problems was not successful, due in a large part to the fact that a year round market for mass-transit has not developed and the seasonal population is not familar with the geography nor even inclined to use mass transit.

3. Constraints To Development: Policy Selected - To limit development of septic tanks on unsuitable soils, participate in the Federal Flood Insurance Program, retain wooded areas, support CRC policies on protecting marshlands, and dunes, not support setbacks on the oceanfront as an erosion mitigation policy.

   Evaluation - The Town has successfully implemented most of these policies. Construction is not authorized on soils unsuitable for septic tank systems unless serviced by a wastewater treatment plant. Flood insurance rate maps have been established for the Town of Kill Devil Hills and a flood hazard ordinance is enforced in Kill Devil Hills. The Town also maintains two certified Local Permit Officers under the N.C. Coastal Management Program. In reference to oceanfront setbacks, the Board of Commissioners

3. has gone on record on a number of occasions indicating opposition to CRC policies in reference to this issue.

4. Water and Sewer: Policy Selected - The Town supports the building of the regional waste treatment facility as soon as possible. The water system has sufficient excess capacity to meet demands to 1990.

   Evaluation - Both of these policies have proven to be ill-advised or based on unreliable data. The Dare Beaches Water and Sewer Commission's Regional Wastewater Treatment Facility was abandoned due to complications with a proposed ocean outfall discharge system and since that time Section 201 funds associated with the Clean Water Act have been eliminated. The Dare County Regional Water System, estimated in 1980 to have excess capacity through the decade of the 80's, is now operating at or near peak capacity during summer months. The major problem appears to have been a severe underestimation of seasonal population surge. Considerable attention to both of these issues will be necessary in the 1986 update.

5. Hurricane Evacuation: Policy Selected - The Town requests the State Department of Transportation to plan and build another bridge across the Currituck Sound. The Town requests that Dare County update its hurricane evacuation plan.

   Evaluation - This policy was never successfully implemented, although the Dare County Hurricane Evacuation Plan has been updated and a full time Emergency Management Coordinator has been hired.

6. Transportation Network (By-Pass): Policy Selected - The Town supports the thoroughfare plan and requests the State implement the plan as soon as possible, plan for six lanes on the By-Pass in the next ten years.

   Evaluation - This policy has been successfully implemented, with a widening project on U.S. 158 By-Pass to alternating 3 and 5 lane sections in Kill Devil Hills recently completed. Restricted access has been achieved to only a limited degree in conjunction with development review and the N.C. D.O.T. driveway permit process.

7. Transportation Network (Local Roads): Policy Selected - The Town will continue its policy of paving local roads when a majority of the people on the road or street are willing to pay 50% of the costs of paving.

   Evaluation - This policy has not been implemented since having been adopted. A substitute policy of periodic maintenance of existing roads and upgrading of non-paved surfaces based on development trends has been followed instead. Survey results and a D.O.T. study of the Kill Devil Hills local roads system indicated the need to place additional emphasis on implementation of LUP policies.

8. Housing Mix: Policy Selected - The Town desires to provide for a future housing mix which is approximately 75% single family and 25% motel units. Middle densities will be largely discouraged.

   Evaluation - This policy has been implemented. Amendments to the Kill Devil Hills Town Code have been adopted to require a conditional use permit for any multi-family structure in excess of a duplex, allowable densities have been reduced, total building heights have been reduced, and minimum lot sizes for multi-family structures have been increased.

9. Recreation and Beach Access: Policy Selected - The Town will plan to provide adequate beach access facilities for the general public and especially for overnight residents of the Town. More specifically, the Town will attempt to improve and maintain all the beach access points within its jurisdiction within the next ten years.

   Evaluation - This policy has been successfully implemented. Since 1980, the Town has completed a regional access facility complete with restrooms and showers, has also improved four other neighborhood access sites, and has adopted policies that require oceanfront developments to make improvements in conjunction with site improvements associated with the development project.

10. Beach and Shoreline Erosion: This section was amended in 1984. The original policy selected in 1980 indicated the Town was opposed to private or governmental actions that would attempt to stabilize the beach. The amended policy favored long-term efforts to insure a public trust beach through the funding of a beach nourishment project and the use of off-shore breakwaters, artifical seaweed, sandbags, relocation, and other similar measures as may be necessary as interim temporary remedial action in response to storm frequency and erosion.

11. Duneplowing, Rebuilding and Revegetating the Dunes, Bulkheading the Estuarine Shoreline: Policy Selected - The Town encourages the building and rebuilding of the dunes, supports individual decisions towards duneplowing, and encourages bulkheading of property along canal lots adjacent to the sound where such property is experiencing erosion.

    Evaluation - This policy has been implemented in conjunction with the Town's Implementation and Enforcement Agreement with the State of North Carolina and the Division of Coastal Management.

12. Building Heights: Policy Selected - The Town will retain its current 50 feet limitation for structures.

    Evaluation - This policy has been implemented through enforcement of the Town's Zoning Code. Building heights have, however, been set at a lower level, 42', in all of the town's zoning districts except for those areas zoned for business uses.

13. Commercial and Recreational Fishing, Off-Road Vehicle Use: Policy Selected - The Town would probably not support State regulation to deal with conflicts between various beach and surf users at this time.

Evaluation - The Town continues to prohibit the use of off-road vehicles on the beach during the tourist season (May - September) and has not adopted any new conflict resolution ordinances. When conflicts do arise they appear to be as a result of individual action or rude behavior not worthy of ordinance action at this time.

14. Agricultural, Forestry and Industrial Uses: Policy Selected - The Town opposes the commercial cutting of the woods. The Town does not consider agricultural purposes likely. The Town considers additional industrial development a possibility with other businesses in the Town.

Evaluation - This policy has been largely ignored. A new zoning district for light industrial uses has been established, and the area indicated in the policy as "woods" (The Nags Head Woods Ecological Preserve) is owned by a private non-profit organization and is not likely to be subjected to timber harvesting or agricultural uses.

15. Commercial Development: Policy Selected - The Town will attempt to review its zoning ordinance and to revise it to reflect a policy of attempting to provide more centralization for the commercial zone.

Evaluation - This policy has been implemented as one element of the Town's Comprehensive Rezoning Plan which was completed in December of 1985 and which created two distinct geographical commercial zones.

16. A.E.C.'s Policies of the Coastal Resource Commission: Policy Selected - None, reference was made to the constraints section.

Evaluation - Although no specific policy was selected, the discussion section identified opposition to CRC oceanfront setback regulations and the nomination of "The Woods" (Nags Head Woods Ecological Preserve) as an AEC. Generally speaking, public opinion in Kill Devil Hills indicates only marginal support of CRC policies and continued opposition to mandatory setback regulations. The Town has made its opposition to those policies of the CRC known at a number of CRC meetings and public hearings.

17. Energy Facilities and Utility Transmission Lines: Policy Selected - The Town is opposed to energy facilities, including pipelines, docking facilities, plants, and substations locating within the Town. The Town is not opposed to the reasonable location of facilities necessary for the transmission of electricity for serving residents of the Outer Banks, however, the Town prefers that transmission lines be placed underground.

17. Evaluation - Because no energy facilities have been proposed, it can be said that this policy has been implemented. In addition, in 1982 the Town took legal action againist Virginia Electric Power in a dispute over power line placement. A ruling by the N.C. Utilities Commission upheld the right of VEPCO to erect overhead transmission lines unless the subscribers paid the additional costs associated with underground transmission lines.

18. Commitment To State And Federal Programs: Policy Selected - The Town supports Federal and State programs.

    Evaluation - The policy selected is too vague to evaluate and inconsistant with policy statements on CRC policies, and others.

19. Historic Preservation: Policy Selected - The Town will study the older houses along the oceanfront to seek nominees to the National Register and notify the Department of Natural Resources and Community Development in the event significant sites are discovered.

    Evaluation - This policy has been implemented and negotiations have been conducted with Mrs. Diane Baum St. Clair in reference to the Kill Devil Hills Coast Guard Station and its nominations as a historic structure. In addition, Department of Cultural Resources review is one element of the subdivision and site plan review process for new construction in Kill Devil Hills.

20. Tourism: Policy Selected - The Town encourages tourism and supports extending the length of the tourist season.

    Evaluation - This policy has been implemented through the Town's participation in the Outer Banks Chamber of Commerce, the Dare County Tourist Bureau, the First Flight Society, and sponsoring tourist related events such as the July 4th Fireworks display and the Wilbur Wright Fly-In and Air Show.

21. Public Participation: Policy Selected - The Town will encourage the public to participate to the maximum extent possible in governing of the Town.

    Evaluation - This policy has been implemented through Planning Board and Board of Commissioners meetings, workshops, citizens commissions, survey questionnaires, the maintenance of a Sunshine List, and various other involvement techniques.

1980 POLICY COMPARISONS OF ADJOINING TOWNSHIPS

Acknowledging that development in adjacent townships effects and impacts the future of Kill Devil Hills influenced the preparation of Figure One . In this figure policies from the 1980 - 1981 Land Use Plan Updates of Kitty Hawk and Nags Head are compared to the policies of the 1980 Kill Devil Hills Update.

Major differences are noted in policies on Coastal Resources Commission (C.R.C.) Guidelines, Regional Wastewater Treatment, Building Heights, and Industrial Development. A comparison of the various policies indicates that the Town of Kill Devil Hills has responded to pressure from a growing service economy and has adopted policies that will accomodate additional commercial development.

FIGURE 1

COMPARISON OF POLICIES FOR ADJOINING TOWNSHIPS

		1980 Update Kill Devil Hills	1980 Update Nags Head	1981 Update Kitty Hawk
1)	Agrees with CRC Ocean Estuarine Setbacks	Disagree	Agree or more stringent	Agree
2)	Feels County Water System is Adequate Until 1990	Agree	Agree	Agree
3)	Support Plans for Regional Effluent Treatment Facility	Agree	Not Sure	Disagree
4)	Support State Thoroughfare Plan to Provide More Efficient Evacuation Routes	Agree	Agree	Agree
5)	Support 4 Lane Improvement to By-Pass	Agree	Agree	Not Addressed
6)	Pave Local Roads Through Town Funds	50%	Agree	Agree
7)	Favor Mostly Low Density Single Family Housing	Agree	Agree	Agree
8)	Favor Maintenance and Improvement of Beach Access	Agree	Agree	Agree
9)	Opposed to Erosion Control Devices on Beach	Agree	Agree	Except for Public Property
10)	Support Protection and Stabilization of Barrier Dunes	Agree	Agree	Agree
11)	Limit All Building Heights to 35'	Disagree (50')	Agree	Agree
12)	Allow Off Road Vehicles on Beach Certain Times of Year	Agree	Agree	Not Addressed
13)	Consider Agricultural Uses Unlikely	Agree	Agree	Agree
14)	Will Consider Future Industrial Development in Town	Agree	Disagree	Disagree
15)	Do Not Promote Cutting of Trees (Forestry)	Agree	Agree	Agree

		1980 Update Kill Devil Hills	1980 Update Nags Head	1980 Update Kitty Hawk
16)	Do Not Promote Mining	Not Addressed	Agree	Agree
17)	Allow Limited Commercial Development	Agree	Agree	Agree
18)	Support CRC's Policies on AEC's	Agree	Agree	Agree
19)	Oppose/Do Not Wish to Promote Energy Generating Facilities	Agree	Agree	Agree
20)	Desire Utility Lines Underground	Agree	Not Addressed	Agree
21)	Preserve Old Beach Cottages of Historic Significance	Agree	Agree	Private Sector Only
22)	Promote Archaeological Preservation	Agree	Not Addressed	Private Sector Only
23)	Encourage Tourism	Agree	Not Addressed	Agree
24)	Encourage Public Involvement in Government	Agree	Agree	Agree
25)	Feel Growth is Strong in Town	Agree	Agree	Agree

SECTION III

DATA COLLECTION AND ANALYSIS

1986 KILL DEVIL HILLS SURVEY ANALYSIS

Introduction

During the winter of 1986, the Town of Kill Devil Hills conducted a public opinion survey of its residents to determine prevalent attitudes toward the Town's future growth. A total of 2,500 surveys were sent based on the criteria of residents who purchased water from the town. The surveys were sent to the same addresses as each customer's respective water bills. Of the initial number of surveys, 1,267 were received by the Town before the cut-off date of February 28, 1986, representing a response rate of 50.68 percent.

The survey was divided into three sections: Demographic Data (about the respondents); Community Issues (referring to growth) and; Special Interest Issues (concerning new public facilities and restrictions). The results of the survey have given some clear indication as to the desires of the residents of the community as well as the demographic makeup of the residents. This information can be helpful to policy makers to make informed decisions about the future growth and direction of the community.

Demographic Survey Section

The demographic data was obtained from the first six (6) questions of the survey, which included 1) where in Kill Devil Hills did the respondent live (in regards to proximity to the ocean); 2) the age of the respondent; 3) their approximate income per year; 4) the occupation of the respondent; 5) the respondent's resident status (local or otherwise); and 6) the type of residence in which the respondent lived (single family home, rented apartment, etc.). The above questions provided six variables to compare against the responses in the remainder of the survey to determine if there were any trends related to a resident's demographic category.

Analysis of Demographic Responses

1) Where in Kill Devil Hills do you live or own property?
   a) 10.41% lived east of Virginia Dare Trail (Beach Road).
   b) 34.54% lived between the highways.
   c) 49.61% lived west of U.S. 158 Bypass.
   d) 4.65% owned more than one residence.

The majority of the respondents resided in homes west of the U.S. 158 Bypass with the second largest group being between the highways. Though 4.65% responded by choosing multiple answers to indicate that they owned more than one residence,

it cannot be considered an accurate representation because such a response was not provided for in the survey. It is not clear whether those who chose multiple answers were the only ones who owned more than one residence or whether they were the ones who owned residences in more than one of the regions specified. The other figures, however, can be considered to be representative of the distribution of home owners in Kill Devil Hills. Less than one percent of the respondents did not answer the question.

2) Please check the category that indicates your age group.

a) 3.86% were between 20 and 29 years.

b) 17.90% were between 30 and 30 years.

c) 21.45% were between 40 and 49 years.

d) 26.26% were between 50 and 59 years.

e) 22.79% were between 60 and 69 years.

f) 6.63% were over 70 years of age.

The majority were in the 50 - 59 age group, followed by the 60 - 69 and the 40 - 49 age groups. Unanticipated multiple answers were given here as in question one (i.e. when a husband and wife were in more than one category), therefore, the oldest age group checked was the one recorded for data purposes. It was assumed that with at least one member of the household in an older bracket, the responses may tend to be oriented towards that age group. Because Kill Devil Hills is part of a resort area, where a large number of families do not live year round, it is quite probable that the oldest member may have been the head of household and the person who's views were expressed in the survey. Approximately one percent of the respondents did not answer this question and only one person answered to be under 20 years of age.

3) Please check the category that indicates your income group.

a) 2.6% made less than $10,000 per year.

b) 11.91% made between $10,000 and $19,999.

c) 16.24% made between $20,000 and $29,999.

d) 15.14% made between $30,000 and $39,999.

e) 16.40% made between $40,000 and $49,999.

f) 33.60% made more than $50,000 per year.

The most significant answer here is the relatively high percentage of people who make more than $50,000 per year. When combined with those in the $40,000 to $49,999 income bracket, 50% of all respondents earned over $40,000 per year. This unusually large number in the high income category suggests a significant number of

second home owners in Kill Devil Hills. As a result, there may be a relationship between the responses of those with high incomes where Kill Devil Hills is not their primary residence, and those with lower incomes who may be permanently residing in Kill Devil Hills. Approximately 4% of the respondents did not answer this question.

4) Please check the category best indicates your occupation.

a) 0.6% were unemployed.

b) 26.6% were retired.

c) 7.6% were government/military employees.

d) 31.4% were professional/technical occupations.

e) 2.4% were housewives.

f) 10.5% were in sales and real estate.

g) 7.9% were in construction.

h) 0.6% were in fishing.

i) 11.5% were in "other" occupations.

The highest responses for this question were the retirees and those involved in professional/technical occupations, totaling to 58% of the total respondents. Here again, there was a problem of unanticipated multiple answers which is understandable when dual career households is the case. Unfortunately, there is no rule of thumb to go by in choosing which answer is best to use in the data set. Essentially, if one of the answers was indicated "retired", then the answer would be tallied in the retired category since any other jobs that were presently held were post-career occupations that may be supplementing retirement incomes. In other situations where there were multiple answers, "professional/technical" was counted over all other responses except "retired"; "construction" over "sales/real estate"; etc. Admittedly, this method was very subjective, but was necessary in order to be able to use the responses. Even with these limitations, however, the two categories of "retired" and "professional/technical" are so dominant that they can be considered major factors in the interpretation of the survey. Approximately one percent of the respondents did not answer the question.

5) Please check the category that indicates the resident status that applies to you.

a) 32.5% were year round residents of Kill Devil Hills.

b) 11.7% were non-resident property owners from N.C.

c) 46.7% were non-resident property owners from Virginia.

d) 4.7 were non-resident property owners from New York, New Jersey, Maryland, Washington DC, or Pennsylvania.

e) 3.5% were non-resident property owners from other states.

The two strongest responses to this question are the year round residents of Kill Devil Hills and the non-resident property owners from Virginia, together comprising 79.2% of all responses. The high percentage of non-residents from Virginia supports the previous assumption of the large number of second home owners in Kill Devil Hills. Multiple answers were not a problem in this question and less than one percent of all respondents did not answer the question.

6) Please check the category that best describes the residence you live in or own.

a) 84.5% answered "Single family home I own."

b) 8.7% answered "Single family home I rent."

c) 1.9% answered "Condominium I own."

d) 0.9% answered "Condominium or apartment I rent."

e) 1.4% answered "Mobile home."

f) 0.7% answered "Time-share."

g) 1.9% answered "Other."

The overwhelming response here was under "Single family home I own," however, there were similar problems encountered with this question as with previous questions. There were several multiple answers given which cast some doubt as to whether or not the respondents fully understood the question. For instance, most of the multiple responses included answer "a" as one of the answers, and quite often had answer "b" or "d" as well, which leads one to question the meaning of word "rent". The question could be interpreted to mean either "rented to" somebody else, or "rented from" somebody else. Of course, where multiple answers indicated that the respondent owned at least one house, it can be assumed that a second property could be rented to someone else. But it cannot be assumed that those answered only "b" or "d" did not own the house or condominum, rather than renting it from someone else. In the case of a multiple answer where home ownership was indicated, it was tallied as such despite any other answers that may have been indicated. Regardless of the discrepancies, however, single family home owners were by far the largest majority of the respondents. Only 0.6% of the respondents did not answer the question.

SUMMARY

General characteristics of the respondents of the survey can be summed up as follows: a) the vast majority of respondents live west of the beach road, which is to be expected because of the concentration of motels on the oceanfront and the resulting lack of available space there; b) 70% of the respondents were between 40 and 69 years of age; c) a disproportionately large percentage of incomes were over $40,000 per year; d) 58% of the respondents were retirees and those with

professional/technical occupations, with other occupations spread somewhat more evenly among the respondents; e) two-thirds of the respondents were non-residents; and, f) the vast majority indicated home ownership. These characteristics indicate two general groups of respondents: 1) the retired or professional, high income, non-resident second home owner; and 2) the lower income, various occupations, year-round resident single home owner. The higher income professionals can be assumed to be non-residents because there simply are not that many professional occupations in the Kill Devil Hills area. These two groups must be kept in mind when interpreting the remainder of the responses in the survey.

When the response where the resident lived was cross-tabulated with the other five demographic variables, the only significant relationships were with the income variable and the resident status variable. As income increased, there were greater concentrations of home owners closer to the ocean. This is to be expected as property tends to be more expensive closer to the ocean. Also, there were greater concentrations of non-residents near the ocean than residents, especially non-residents from Virginia.

When the age group variable is crosstabulated with the other variables, it was found that a) ages 30 - 69 were concentrated west of the beach road; b) ages 30 - 39 and 60 - 69 had concentrations in the $20,000 - $29,000 and over $50,000 income groups, and ages 40 - 59 has concentrations in the over $40,000 income groups; c) ages 50 to over 70 were concentrated in the retired category and 30 - 59 age groups were concentrated in professional/technical occupations; d) concentrations for ages 30 - 69 were seen for residents of Kill Devil Hills and non-residents from Virginia. In the income comparison, the lower income ($20,000 - $29,000) 30 - 39 age group are probably year round residents of Kill Devil Hills and the lower income 60 - 69 age group are most likely retirees.

COMMUNITY ISSUES

The questions in the remaining sections of the survey will be analyzed in light of the demographic characteristics previously established. Only the questions considered to have noteworthy results will be addressed.

Question 7 - The majority of the answers either agreed that they had adequate opportunity to participate in governmental affairs or were neutral on the subject. Under the demographic variables the only concentration of those who disagreed were the non-residents from Virginia. This may be due to the sheer number of people in this category more than the fact that they are from Virginia. When the percentages of each category of non-residents are examined, it is seen that they are similar indicating that non-residents in general have the highest concentrations

of dissatisfaction.

Question 8 - Most were satisfied with the availability of health care in Kill Devil Hills, but there were some concentrations of dissatisfaction. These were found in residents of Kill Devil Hills and from those in the 40 - 59 age group. The $20,000 - $29,999 and over $50,000 income groups also had concentrations.

Question 9 - The only concentration of dissatisfaction with educational opportunities were with residents of Kill Devil Hills, which was small. This stands to reason because non-residents do not use the educational facilities and would not have enough experience on the subject in order to have an informed opinion.

Question 10 - There was general agreement with satisfaction of population distribution in Kill Devil Hills, however, there were some concentrations of dissatisfaction. These concentrations could not be explained by any of the demographic variables and probably only reflect general differences of opinion among those who answered. The nature of the question is likely to be too technical and, at the same time, too vague to receive reliable answers from the general public.

Question 11 - There was strong disagreement with the idea of supporting higher taxes to preserve open space across all demographic categories. It can probably be assumed that a tax increase for any reason would not be well supported.

Question 12 - Attitudes toward existing land distribution in Kill Devil Hills were somewhat nebulous in that answers were rather evenly distributed across the answer range with a large percentage taking a neutral stance. This indicates that many of the respondents did not understand the question or had no opinion. There were no notable differences in the concentrations of answers when cross-tabulated with any of the demographic variables.

Question 13 - There was strong dissatisfaction with the existing state of the streets and highways in Kill Devil Hills across all categories. According to the responses, this can be considered an issue of primary importance to be addressed by the municipal government.

Question 14 - There was strong disagreement with the idea of establishing a one way street system in Kill Devil Hills. It may not have been clear as to whether the question referred to the connecting streets between the main highways or to the highways themselves, but this did not seem to make a difference considering the strength of the negative responses. There was no notable difference in answers within categories of the different demographic variables.

Question 15 - There was agreement and disagreement on the issue of a community wide sewage system that is stratified across all categories. No single demographic

variable indicates a reason for the differences in responses.

Question 16 - The responses given either agreed with the idea of annexing the Colington area or were neutral on the subject. The response patterns were generally the same across all demographic variables revealing no categorical differences. It is likely that the subject was not a big issue with the respondents.

Question 17 - There was overwhelming agreement in all demographic categories to the question of whether impact fees should be charged against developers for new development in the area. It probably will be assumed from this that the respondents wish for the developers to be responsible for any adverse impact they may have on the community.

Question 18 - There was general agreement as to whether the respondents were satisfied with the post office facilities in Kill Devil Hills except under the demographic category of resident status. In this case, there was a notable concentration of dissatisfaction among the year round residents of the Town. This is likely due to non-residents not having to depend or use the postal facilities to a great degree and, therefore, not having a reason to be dissatisfied.

Question 19 - There was a large degree of stratification of responses in the question about overall appearance of the town. There was virtually as much dissatisfaction as there was satisfaction throughout all demographic variables, revealing no categorical trends. Responses can be attributed to individual preferences or possibly some other unknown demographic variable.

Question 20 - There was general agreement with the idea of using public funds to provide public shore access in the Town, with the exception of a concentration of disagreement in the over $50,000 income group. There may have been some misunderstanding due to the nature of the question, however, because its results directly conflict with the responses toward supporting higher taxes to preserve open space (question 11). The drastic difference in the results of the two (relatively similar) questions can probably be attributed to each question's respective wording.

Question 21 - The respondents in all demographic categories were generally satisfied with the existing evacuation procedures in the town. This is understandable in light of the recent successful evacuation in the face of Hurricane Gloria in September 1985. The ability for success, however, in the case of a more severe storm or a storm that will not allow as much time to prepare against remains to be seen. This question can most likely be considered a review of the latest evacuation exercise.

Question 22 - There was general satisfaction expressed throughout all demographic groups as to the level of services available in the town and agreement with satisfaction for the Town as a whole. No significant concentrations of dissatisfaction were noted.

Question 23 - There was general agreement in all demographic categories towards the idea of consolidation of municipal services for the northern Dare beach communities. This was most likely perceived as a means to save tax dollars by the respondents. There were no significant concentrations of disagreement against the proposal.

Question 24 - There was overwhelming disagreement over the idea of changing the name of Kill Devil Hills to some other name, which seems to be in contrast to the answers received for question #23. If the different municipalities were to consolidate services it is likely that they would form a single municipality under a single name. In light of the status quo, however, there is a strong desire among the respondents to keep the current town names.

Question 25 - The overwhelming response to the options available in this question were not to allow structures on the oceanfront over five stories in height. This response was dominant throughout all demographic categories.

Question 26 - This question proved to be a problem because multiple responses were not anticipated. In order to be able to use the question at all, the question was broken up and each possible response was treated as a separate question. The possible answers were then changed to agree if the respondent checked the response, or simply no answer if the respondent did not indicate anything. The "no answer" response, however, cannot be considered as a negative response. If over 25% or 30% of the respondents checked a particular item in the question, it can be assumed that there was a fairly good concentration of support for that item. In this question, the only large concentrations of support were in sections 26a (favored the use of setbacks for oceanfront structures), and 26c (favored the use of private funds for structural responses).

Question 27 - In this question, the majority of responses (95.7%) were split between b) prohibiting beach driving (42.4%), and c) allowing beach driving between September 15 and May 15 each year (53.3%). At least some restrictions on beach driving were desired by most of the respondents.

Question 28 - In this question occurred the same problem as in question 26, that multiple responses were not provided for. This question had to split apart in the same manner so that it could be used at all. The sections of this question that received significant agreement was the desire for d) playgrounds for children (36.6% of total), e) bicycle routes (50.2%), f) jogging and walking paths (46.1%), and g) parks and/or picnic areas (41.2%).

Question 29 - This question probed further into the consolidation of municipal governments issue, but also faced the problem of unanticipated multiple answers. The first three answers (a,b, and c) were not mutually exclusive so that if more than one of them were checked, the tally was placed in the highest ranked question.

The way the responses were worded, answer c) could be included in a) or b), and b) and/or c) could be included in a). Therefore, the highest response given was the one recorded. Answers d) and e) were exclusive of the rest. The majority of the responses (75.1%) favored consolidation of services, supporting the results in question 23.

TOWN OF KILL DEVIL HILLS

Public Opinion Survey

Section 1 Demographic Data:

1. Where in Kill Devil Hills do you live or own property?

( ) east of the beach road (oceanfront)
( ) between the highways
( ) west of U.S. 158 By-Pass

2. Please check the category that indicates your age group.

( ) 19 or younger
( ) 20-29
( ) 30-39
( ) 40-49
( ) 50-59
( ) 60-69
( ) 70 or greater

3. Please check the category that indicates your income group.(per year)

( ) less than $9,999
( ) $10,000-$19,999
( ) $20,000-$29,999
( ) $30,000-$39,999
( ) $40,000-$49,999
( ) $50,000 or more

4. Please check the category that best indicates your occupation.

( ) unemployed
( ) retired
( ) government/military
( ) professional/technical
( ) housewife
( ) sales/real estate
( ) construction
( ) fishing
( ) other_____

5. Please check the category that indicates the resident status that applies to you.

( ) Year-round resident of Kill Devil Hills
( ) Non-resident property owner from North Carolina
( ) Non-resident property owner from Virginia
( ) Non-resident property owner from New York, New Jersey, Maryland, Washington D.C., or Pennsylvania
( ) Non-resident property owner from _____ (state)

6. Please check the category that best describes the residence you live in or own.

( ) Single family home I own
( ) Single family home I rent
( ) Condominium I own
( ) Condominium or apartment I rent
( ) Mobile home
( ) Time-share
( ) Other _____

(Over Please)

Section 2 Community Issues:

strongly agree	agree	neutral	disagree	strongly disagree		
( )	( )	( )	( )	( )	7.	I believe I am allowed adequate opportunity to participate in local governmental and community affairs.
( )	( )	( )	( )	( )	8.	I am satisfied with the existing availability of health care in this community.
( )	( )	( )	( )	( )	9.	I am satisfied with the educational services available to our community.
( )	( )	( )	( )	( )	10.	I am satisfied with existing population distribution and density.
( )	( )	( )	( )	( )	11.	I am willing to support higher taxes to preserve open space.
( )	( )	( )	( )	( )	12.	I am satisfied with the existing distribution of land uses.
( )	( )	( )	( )	( )	13.	I am satisfied with the streets and highways in Kill Devil Hills.
( )	( )	( )	( )	( )	14.	I favor the creation of a one-way street system between the highways.
( )	( )	( )	( )	( )	15.	I favor a community-wide sewage treatment system in Kill Devil Hills.
( )	( )	( )	( )	( )	16.	I favor the annexation of the Colington area into the Town of Kill Devil Hills.
( )	( )	( )	( )	( )	17.	I favor the use of impact fees on new developments to pay for those additional services generated by each new development.
( )	( )	( )	( )	( )	18.	I am satisfied with the existing U.S. Post Offices services for Kill Devil Hills.
( )	( )	( )	( )	( )	19.	I am satisfied with the appearance of our community.
( )	( )	( )	( )	( )	20.	I favor the use of public funds to improve and open shoreline access. (sound and ocean)
( )	( )	( )	( )	( )	21.	I feel I will be able to evacuate the island in adequate time in the event of a major storm.
( )	( )	( )	( )	( )	22.	I am satisfied with our community and its services.
( )	( )	( )	( )	( )	23.	I favor a consolidated form of government for the northern Dare County beaches.
( )	( )	( )	( )	( )	24.	I favor a change in the name "Kill Devil Hills" suggested alternative_____.

Town of Kill Devil Hills
Public Opinion Survey

Section 3 Special Issues

25. Which response below best reflects your opinion about the development of five (5) or more story structures on the oceanfront:

    a. I favor allowing such structures on the oceanfront.

    b. I do not favor allowing such structures on the oceanfront.

    c. I favor allowing such structures on the oceanfront provided setbacks designed to insure that open space is proportional to building heights.

    d. I have no opinion, I don't know.

    e. Other_____.

26. How do you think the Town should deal with beach erosion?

    a. I favor the use of setbacks for oceanfront structures;

    b. I favor the use of public funds for structural responses such as bulkheads, seawalls, breakwaters, or artificial seaweed;

    c. I favor the use of private funds for structural responses such as bulkheads, seawalls, breakwaters, or artificial seaweed;

    d. I favor the use of public funds for beach nourishment by pumping or hauling in sand;

    e. Do nothing;

    f. Don't know, no opinion.

27. Which response category best reflects your opinion about beach driving:

    a. I favor allowing beach driving at all times;

    b. I favor prohibiting beach driving;

    c. I favor allowing beach driving only from September 15 - May 15th;

    d. Don't know, no opinion.

28. Listed below are several recreation facilities. Please circle any that you feel are important enough to be built at public expense:

    a. indoor ball courts
    b. tennis courts
    c. ball fields
    d. playgrounds (for children aged 10 years or less)
    e. bicycle routes
    f. jogging and walking paths
    g. parks and/or picnic areas
    h. golf course
    i. other_____

29. Which of the following responses best reflects your feelings about a consolidated form of government for the northern beach communities of Dare County:

    a. I favor consolidating the existing municipalities into one uniform body of local government.

    b. I favor consolidation of services wherever that is determined feasable.

    c. I favor non-binding joint purchasing agreements.

    d. I do not favor consolidation in any form.

    e. I don't know, no opinion.

(Over Please)

COMMENTS: In space below please give us your comments and the question number on which you are commenting. General comments are welcome.

Thank you for your cooperation.

SECTION IV

EXISTING LAND USE

EXISTING LAND USE IN KILL DEVIL HILLS

The Town of Kill Devil Hills is primarily a residential resort community, although recent construction trends show movement toward a growing accomodations and service economy. Each summer the Town's population swells to a seasonal peak estimated at around 30,000, a substantial increase over the estimated year-round population of 2,500.

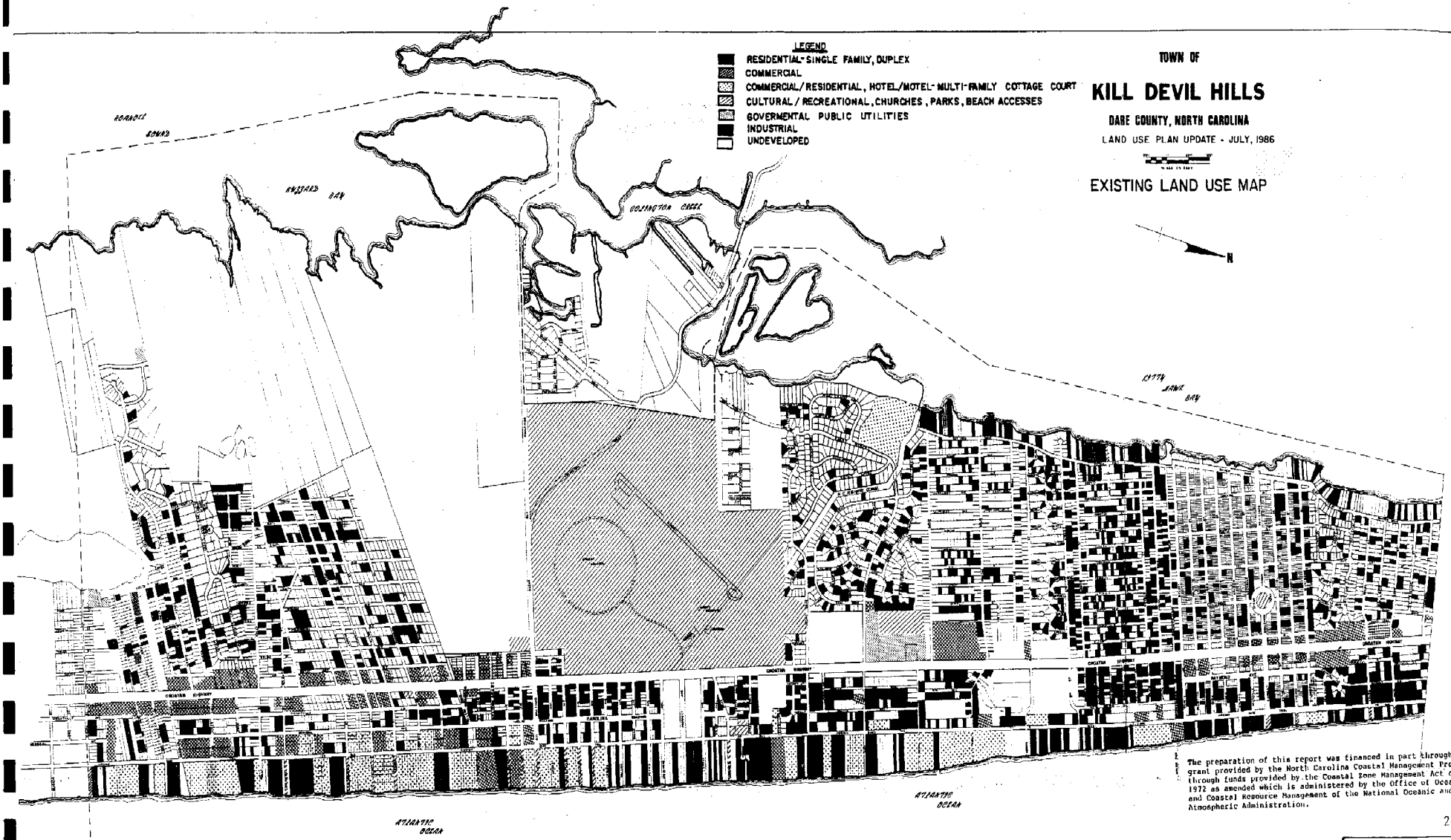
Land Use patterns in Kill Devil Hills reflect the orientation of the community to the Atlantic shoreline and the economic base provided by tourism. The immediate oceanfront in Kill Devil Hills provides the setting for a number of hotels, motels, and condominium projects, most of which were constructed from 1970 - 1980, although some of the older "motor court" motels date back to the 1960's. Since 1980, changes in regulatory policies and amendments to the Town's Zoning Ordinance have reduced the scale of oceanfront structures and created a market for residential structures that may be suitable for year-round living or rented as seasonal accomodations. This oceanfront district is best defined by Virginia Dare Trail (U.S. 158 Business) popularly referred to as the "Beach Road", and all land that lies to the east of Virginia Dare Trail.

On the west side of Virginia Dare Trail, a second tier of residential structures has developed. Due to their proximity to the Atlantic beaches, there structures have traditionally served as second homes for many of the Town's seasonal residents. These cottages also provide seasonal accomodations for tourists when not occupied by the owner.

In the late 1960's and early 1970's, the presence of a second major transportation route, U.S. 158 By-Pass (known locally as Croatan Highway) began to impact land use in Kill Devil Hills. By 1974, the Kill Devil Hills Board of Commissioners had established a strip of commercial zoning 400' deep on both the eastern and western borders of the U.S. By-Pass right-of-way. Since that time, a growing food-service industry has begun to line U.S. 158 By-Pass in Kill Devil Hills on its southern border. An average daily traffic flow in excess of 15,000 vehicles per day during the peak seasonal population surge has helped establish this section of Kill Devil Hills as the commercial hub of the Northern Beaches of Dare County. In 1983, the Kill Devil Hills Board of Commissioners rezoned the remaining land between U.S. 158 Business and U.S. 158 By-Pass into a commercial zoning district, removing the land use

restrictions that had applied to this formerly residential setting. Today, ample land is available for transition into commercial uses between U.S. 158 Business and U.S. 158 By-Pass at the northern and southern ends of town, with a residential district in the vicinity of the Wright Brothers Monument that is intended to serve as a residential buffer between the two commercial districts. Zoning guidelines in the commercial district also permit multi-family residential housing at liberal density ratios, providing a setting where the potential for conflict with single family neighborhoods is minimal.

On the western side of U.S. 158 By-Pass, almost the entire length of the Town, are several single-family residential subdivisions. These subdivisions vary in lot size from 5,000 square feet in Avalon Beach, one of the oldest subdivisions in Kill Devil Hills, to 15,000 square feet in Wright Woods, the newest subdivision in Kill Devil Hills. The majority of the Town's year-round residents live in one of these subdivisions, all of which are subject to the Town's most prohibitive zoning classification, RA-6.



The preparation of this report 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 of the National Oceanic and Atmospheric Administration.

BASELL ASSOCIATES

Land Classification System

In Conjunction with the Land Use Plan Update, a land classification map has been established by the Kill Devil Hills Planning Board. This system of land classifications identifies existing land uses and sets the direction for future development. Factors considered in the development of this Land Classification System and its associated Land Classification Map include the availability of or potential for services such as water, sewer, and power, the natural conditions of the land, and the ability of that land to support development without unacceptable environmental consequences. Four basic classes of land use have been identified in Kill Devil Hills, as described below:

1. Developed - Land in this classification provides the setting for the most intensive levels of development in Kill Devil Hills. Most basic public services are available in this class and permissable housing densities and commercial uses are the most liberal available in Kill Devil Hills.

2. Transition - Land in this classification provides the setting for future development. Basic public services may already be available in this class, or can be anticipated within the next five to ten years. The characteristics of this land make it suitable for future development without the potential for the loss of irreplaceable natural resources. In Kill Devil Hills, land in the transition class includes the Morrison Tract, which lies between First Flight Village and Wright Woods and the Baum Tract, wich is owned by the Town of Kill Devil Hills. (See Section VII , B, 20)

3. Community - Lands in this classification provide for a mix of low density housing, shopping, and employment needs and are not serviced by off-site wastewater treatment plants. Single family residential lots of 12-15,000 square feet dominate this land class in Kill Devil Hills, with housing densities limited to 9 units per acre. Although developed past the rural stage, this land class is limited in its ability to sustain urban growth by the absence of wastewater treatment.

4. Conservation - Lands in this classification have been identified as retaining significant or irreplaceable natural resources, scenic vistas, recreational sites, or cultural values to such a degree that careful management practices are necessary to insure the long-term viability of those resources. Only carefully planned and managed development is recommended on lands in this class, and often the best use of land in this class is preservation in a natural state.

Population

One of the most important elements of any land use plan is the population projections section. Population projections aid in estimates concerning the need for a number of services necessary to insure public health and welfare, including, but not limited to, police and fire protection, medical and emergency personal, water and sewer, sanitation, education, transportation, and housing.

The Town of Kill Devil Hills is unique due to the variation between its stable year-round population and the seasonal population peak. Each year, the actual population of Kill Devil Hills increases dramatically between the months of May and September. The year-round population of Kill Devil Hills, as estimated by the N.C. Office of Budget and Management, was 2,564 as of 1986. (source: N.C. Office of Budget and Management) Estimates of the seasonal population peak differ depending on the source of the estimate, but 30,000 seems to be a widely accepted estimate. Because of the transient nature of the seasonal population and the popularity of time-share and rental cottage accomodations, an exact figure on the seasonal population is difficult to achieve.

The Town of Kill Devil Hills is fortunate to have a current study available to serve as a data base for future population projection. This study, titled "The Dare County Carrying Capacity Study", has been produced by the Bethesda, Maryland planning consultant firm Booze, Allen, and Hamilton. This study, which includes five different reports from the consultants, incorporates data from the five municipalities in Dare County as well as the remnant portions under county jurisdiction. Included in the study are three projected population growth scenarios for Dare County and its five municipal governments. These population growth projections reflect three different control "scenarios". The first scenario reflects a growth rate constrained as much as possible by growth control regulations, subdivision standards, impact fees, and the like. The second scenario assumes a moderate to high growth rate based on market constraints that are designed to regulate but not inhibit growth and development. The third scenario estimates population growth in a free market, where growth constraints are minimal to none. Each of the growth scenario projections estimate population through the year 2000.

This information has been included in the update of the Kill Devil Hills Land Use Plan as Figure 2. The Kill Devil Hills Planning Board has elected to base growth

policies and capital improvement estimates assuming the projections of Population Growth Scenario II in Table 1 . The choice of Scenario II is due largely to the fact that respondents to the public opinion Questionnaire conducted in conjunction with the Land Use Plan Update indicated general satisfaction with the moderate growth policies of the past, and the fact that the Town of Kill Devil Hills has adopted a number of growth control guidelines that have been accepted by the development community as reasonable. (also, see Section VII, B 2, Growth) If these projections pan out, the year-round (permanent) population of Kill Devil Hills can be expected to increase to about 4,000 by 1991, with a seasonal peak population of 34,000 and total peak of 38,000 at the height of the tourist season.

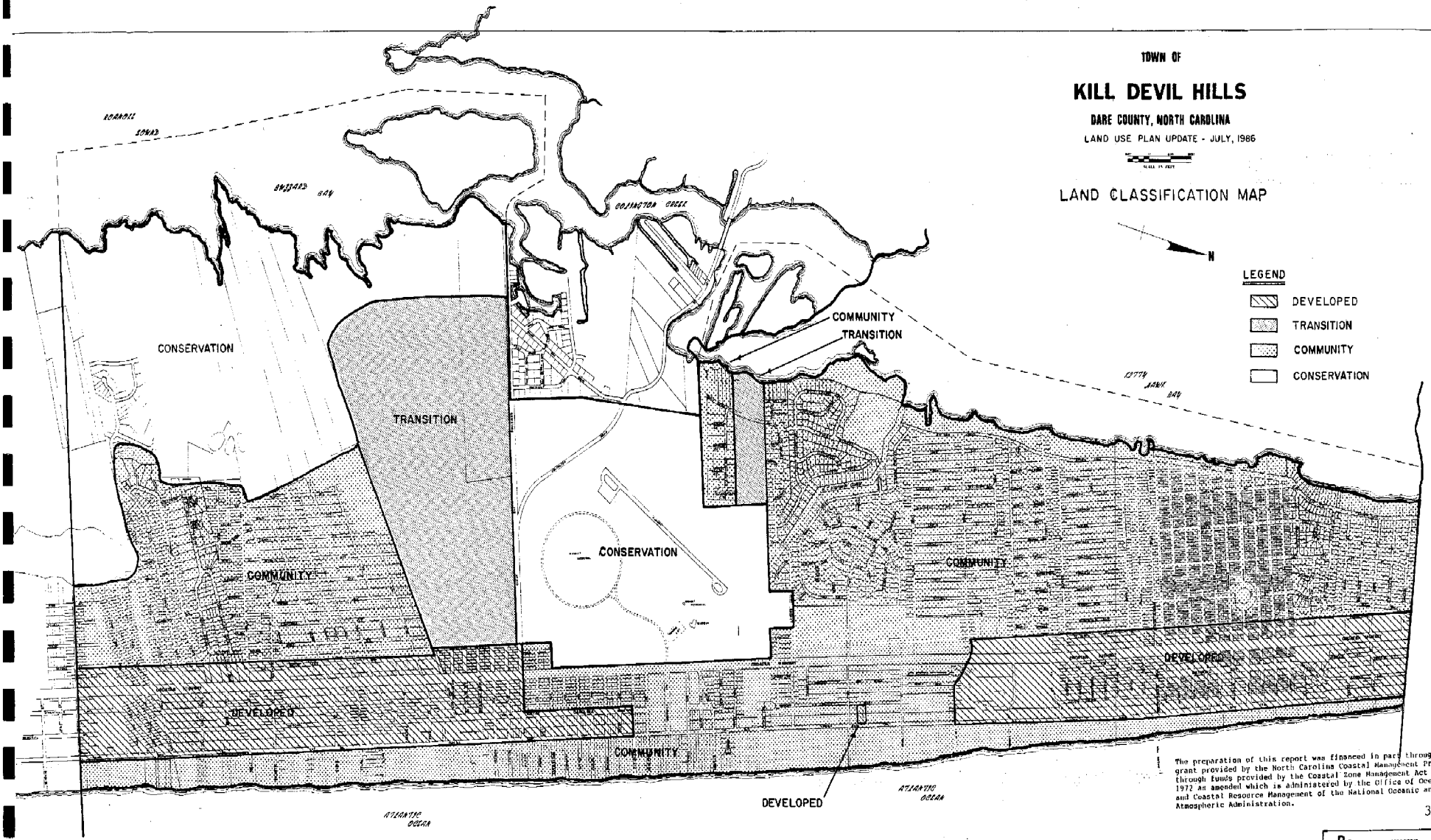
TOWN OF

KILL DEVIL HILLS

DARE COUNTY, NORTH CAROLINA

LAND USE PLAN UPDATE - JULY, 1986

LAND CLASSIFICATION MAP



The preparation of this report 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 of the National Oceanic and Atmospheric Administration.

FIGURE 2

Population Projections Through The Year 2000

Kill Devil Hills *

SCENARIO I - Restricted Growth

YEAR	PERMANENT	AVERAGE	PEAK	PEAK PLUS PERMANENT
1985-1986	2596	16,524	27,540	30,136
1990-1991	4530	18,970	31,617	36,155
1995-1996	5135	21,463	35,772	40,907
2000-2001	5810	24,284	40,473	46,283

SCENARIO II - Moderate Growth Restrictions

YEAR	PERMANENT	AVERAGE	PEAK	PEAK PLUS PERMANENT
1985-1986	2596	16,524	27,540	30,136
1990-1991	4030	20,494	34,156	38,186
1995-1996	6312	25,174	41,957	48,268
2000-2001	8447	30,628	51,047	59,494

SCENARIO III - Free Market

(unrestricted)

YEAR	PERMANENT	AVERAGE	PEAK	PEAK PLUS PERMANENT
1985-1986	2596	16,524	27,540	30,136
1990-1991	4825	20,079	36,507	41,332
1995-1996	8275	27,125	49,317	57,592
2000-2001	12,732	36,299	65,996	78,730

*Source: Dare County Carrying Capacity Study - Booze, Allen, Hamilton

Housing and Accomodations

The housing base in Kill Devil Hills can be broken down into three main categories, as follows:

1) Single-family detached residential structures.
2) Apartments/condominiums/multi-family structures.
3) Hotel and Motel rooms and suites.

As was the case in the preceeding section on Population, the Town of Kill Devil Hills has recently been analyzed by the development consultant firm Booze, Allen and Hamilton for the purpose of identifying future housing trends. The results of this work are included in the Service Requirement and Development Options Report of the Dare County Carrying Capacity Study. Exhibit IV-Z of that report lends considerable insight concerning housing and accomodations in Kill Devil Hills, as indicated below:

Kill Devil Hills Housing & Accomodations 85-86

Single-Family	Hotel Rooms	Apartments and Condos
3,000	1,006	402

Housing and accomodations development throughout Dare County, including the municipality of Kill Devil Hills, is projected through the year 2000 in this study based on three growth rate "scenarios". Under Scenario #1, growth would be restricted to the greatest possible degree by land use, zoning, and other controls. Under Scenario #2, growth would be guided by a moderate level of restrictions, and under Scenario #3, no restrictions would apply and only free market forces would drive the growth rate.

As a part of the update of the Kill Devil Hills Land Use Plan, the Kill Devil Hills Planning Board has adopted Scenario #2 and its associated projections. The changes to the housing and accomodations stack of the Town of Kill Devil Hills, based on the moderate restrictions of growth Scenario #2, are as projected below:

1990-1991*

Single Family	Hotel/Motel	Multi-Family
4,058	1,672	836

1995-1996*

Single Family	Hotel/Motel	Multi-Family
5,550	2,275	1,551

If these projections come to pass, the Town of Kill Devil Hills should maintain its identity as primarily a family oriented resort-residential community with accomodations and services for a seasonal population each summer.

*Source: Service Requirement and Development Options, Dare County Carrying Capacity Study, Booze, Allen, and Hamilton Inc., 7315 Wisconsin Ave., Bethesda, Maryland.

SECTION V

EXISTING PLANS, REGULATIONS, AND GROWTH MANAGEMENT ORDINANCES

V. Existing Plans, Regulations, and Management Ordinances

The Town of Kill Devil Hills, a municipality incorporated in 1953, uses the police power vested in the Board of Commissioners to enforce a number of growth management guidelines, as listed below:

1. Subdivision of Land - Chapter 18 of the Kill Devil Hills Town Code provides guidelines for the subdivision or recombination of parcels of land in Kill Devil Hills. Minimum standards for subdivision plat preparation, review, and recordation are set forth in this chapter. (See Kill Devil Hills Town Code, Chapter 18)

2. Zoning - Chapter 20 of the Kill Devil Hills Town Codes provides local guidelines for land use through the establishment of Zoning Districts. Permitted and prohibited uses for each Zoning District are defined in this chapter, as are minimum lot sizes, maximum building heights, population density ratios, minimum yard setbacks, and other appropriate guidelines. (See Kill Devil Hills Town Code, Chapter 20)

3. Storm Water Management and Drainage - In 1982, the Town of Kill Devil Hills, with funding assistance from the N.C. Division of Coastal Management, contracted the services of McDowell and Associates to identify storm water management problem areas throughout the Town and to develop a management plan to deal with those problem areas. The resulting document, A Storm Water Management Plan for the Town of Kill Devil Hills, North Carolina identifies several drainage basins that need improvements in order to provide surface drainage. Specifications for culvert length and width, easement routes, and outfall termination points are included in this plan. Implementation is ongoing with improvements provided by the private sector in conjunction with the Town's site plan review process for new development. (See A Storm Water Management Plan for the Town of Kill Devil Hills, North Carolina, McDowell and Associates, P.O. Box 391, Elizabeth City, N.C. 27909)

4. Shoreline Access Plan - In 1979, the Kill Devil Hills Board of Commissioners, with funding assistance from the N.C. Division of Coastal Management, contracted with the Albemarle Regional Planning and Development Commission for the preparation of a shoreline access master plan. That plan, A Shoreline Access Plan for the Town of Kill Devil Hills, was completed in August of 1979. Included in the plan is an inventory of accessways, a model parking access design, and a prioritized list of potential regional, neighborhood, and local access sites. This plan is currently in the sixth year of implementation, with one regional site and several neighborhood sites already established and additional sites scheduled for improvement. (See A Shoreline Access Plan for the Town of Kill Devil Hills, Albemarle Commission, Hertford, N.C.)

5. Site Plan Review - In 1982, the Kill Devil Hills Board of Commissioners amended Chapter 20 of the Kill Devil Hills Town Code to require the submission of site plans for all commercial development projects and all multi-family residential development projects in excess of a quadraplex. This amendment to the Town Code also established a two-tier approval process that required review and recommendation by

5. the Town's Planning Board and approval for construction by the Board of Commissioners. This ordinance also defined minimum standards for site plan preparation, a review time clock, and a coordinated state-local permit process.

Summary

As detailed above, in the five year period from 1980-1985, the Town of Kill Devil Hills either established or began to implement several growth management and control mechanisms, and in conjunction, established for the first time a full-time Department of Planning and Development consisting of a Planning Director, two Building Inspectors, a Zoning Administrator, and a Secretary/ Receptionist. The implementation of these planning ordinances continues.

ZONING IN KILL DEVIL HILLS

In 1974, the Kill Devil Hills Board of Commissioners adopted the Town's Zoning Ordinance and Offical Zoning Map. Since that time, the text of the zoning ordinance has been amended and changes to the zoning map have been recorded to reflect a three tier approach to land use in Kill Devil Hills.

The two major transportation routes serving the town, U.S. 158 Business (Virginia Dare Trail) and U.S. 158 By-Pass (Croatan Hwy.), were the primary factors influencing the development of the Town's three tier approach to zoning. These two highways have become borders that identify patterns of land use and geographic subregions. These subregions and their respective zoning districts are briefly described below (see Zoning Map - p. 40A)

1. Oceanfront Region - This region includes all land use east of U.S. 158 Business (Virginia Dare Trail) and comprises the Ocean Impact Residential (OIR) Zoning District. This zoning district, created in 1985, is designed to provide a residential setting for seasonal accomodations and upscale year-round living. Housing densities and building heights are restricted in an effort to discourage the location of high-rise bulk immovable structures along the immediate shoreline. As the name itself indicates, the Ocean Impact Residential Zoning District is a special sub-region with unique constraints associated primarily with its proximity to the Atlantic Ocean and its public beaches.

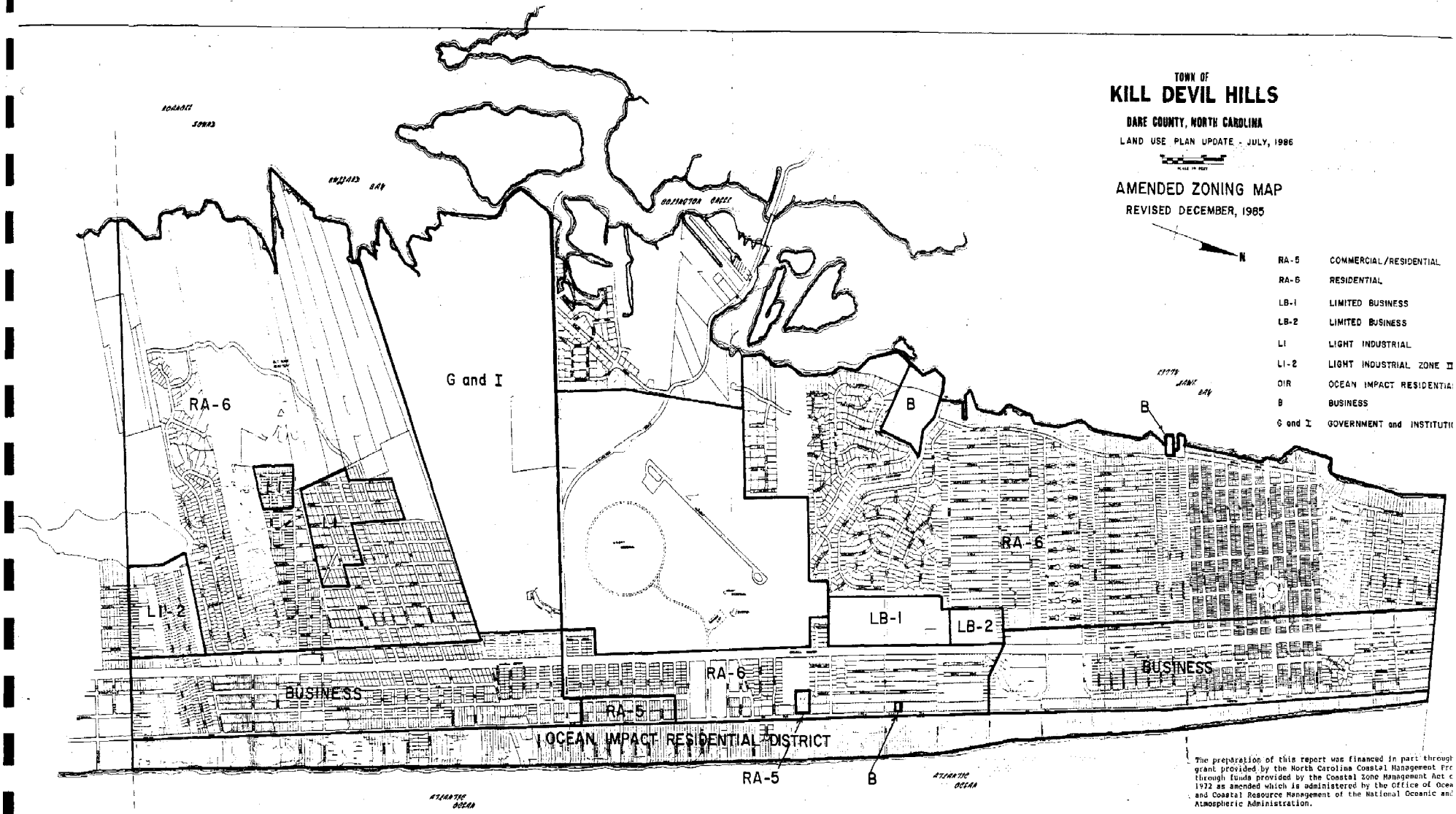
2. Commercial District - This region includes all land use west of U.S. 158 Business to 400 feet across the west side of U.S. 158 By-Pass. More simply said, the majority of this land lies between the two highways on the northern and southern borders of the town and is buffered by a residential district in the immediate proximity of the Wright Brothers National Memorial. This zoning district represents the Town's "highest and best use" district, where a variety of compatable commercial and residential uses are permitted. Housing densities and maximum building height limitation are considerably more liberal in this zoning district, primarly to encourage bulk immovable structures to locate in a setting less vulnerable to the forces of the Atlantic Ocean. This sub-region is also designed to provide the base for two

2. central accomodations and service districts that have begun to emerge in Kill Devil Hills. This land is zoned "Business" (B) on Map 3 (p. 40A).

3. Residential Zoning District RA-6 - This region is designed to provide a setting for single-family residential structures and low density multi-family development as a conditional use. Generally speaking, this land lies west of U.S. 158 By-Pass (Croatan Highway) and between the two highways in proximity to the Wright Brothers National Memorial. Most of this land has already been platted into a number of subdivisions that reflect a variety of minimum lot sizes that have evolved in conjunction with prescribed minimums for the use of septic tank and gravity induced nitrification drainfield wastewater treatment systems. The majority of the Town's year-round population lives in this sub-region.

In additon to the zoning districts identified above, the Town of Kill Devil Hills also includes a Light Industrial Zoning District designed primarily for the storage of dry goods and bulk adjacent to the Fresh Water Pond, where environmental constraints prohibit the use of septic tank wastewater systems.

In summary, the Town of Kill Devil Hills has been divided into three distinct geographical sub-regions with associated zoning districts. The oceanfront and west-side regions are subject to rather strict development guidelines. The central or "Business" district provides a setting where a wider range of uses are permitted and where land use guidelines are considerably more liberal than elsewhere in Town.



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SECTION VI

LAND USE CONSTRAINTS

NATURAL ENVIRONMENT

Soils

Soils are a natural resource whose properties greatly influence how people use the land. Soil analyses indicate hazardous areas which development should avoid or modify. Certain soil types indicate periodic storm flooding in low-lying soundside locations. Other soil types are associated with a high seasonal water table which can make an area unsuitable or unwise for year-round habitation. The load-bearing capacity of different soils is also important due to the number of structures that are built on pilings in Kill Devil Hills; the depth to which these pilings are driven must be determined through an examination of sub-soil properties to ensure the reliability of the piling foundation.

Current trends show that all of the soils in Kill Devil Hills can be modified to accomodate development, but environmental and monetary costs can sometimes be prohibitive. The costs of improperly planned soil modifications is borne not only by the developer, but also by the public since misuse of the land can lead to severe environmental problems for the entire community. Therefore, it is desirable to recognize the limitations of certain soils and to evaluate their potential or suitability for septic tanks, landfills, waste disposal, residential development, industrial development, recreation, and roads.

The following table, derived from the U.S. Soil Conservation Service's Soil Survey of the Outer Banks, shows the different types of soil in Kill Devil Hills, their depth to the water table, and the severity of their limitations for purposes of development.

Soil Unit	Depth to Water Table	Limitations Rating
Beach-Foredune Association	0-3.0'	Severe
Corolla fine sand	1.5-3.0'	Severe
Corolla fine sand, forested	1.5-3.0'	Severe
Corolla-Duckston complex	1.0-3.0'	Severe
Duckston fine sand, forested	1.0-3.0'	Severe
Fripp fine sand	6.0'	Severe
Madeland	3.0'	Severe
Currituck soils	0-3.0'	Severe
Conaby soils	0-1.0'	Severe
Duneland	6.0'	Severe
Newhan fine sand	6.0'	Slight
Newhan-Corolla complex	7.0'	Slight
Duneland-Newhan complex	6.0'	Slight
Newhan-Urban	6.0'	Slight

Soils cont.

Soil limitation ratings refer to the soil's capacity to support dwellings, streets, and septic tank fields. The attached soils map shows the extent of those soils which have limitations for development. A rating of "slight" means that the soil's chemical and physical properties are generally favorable for these uses or that any limitations are minor and easy to overcome. A rating of "severe" does not preclude possible development; however, any unfavorable conditions must be overcome by appropriate land development techniques. In all cases, "slight" and "severe", on-site investigations of the soil are necessary for the proper design and placement of buildings, foundations, roads, utility lines, and septic systems.

In rating a soil for any limitations for dwellings, emphasis on its load-bearing capacity (for holding the foundation), slope, susceptibility to flooding, depth to seasonal high water table, and other hydrologic conditions. In rating a soil for limitations for roads, emphasis falls on its susceptibility to flooding, depth to seasonal high water table, texture, drainage, and ease of hauling and loading. In rating a soil for any limitations for septic tank filter fields, emphasis falls on its permeability, susceptibility to flooding, depth to water table, and slope.

The on-site disposal of septic tank effluent is a common soils problem throughout Kill Devil Hills. Many poorly drained and/or impermeable soils in the area are severely limited in their ability to accomodate septic tank effluent in a safe and sanitary manner. In some dry soils, such as dune sand, the soil is too permeable to accommodate effluent, leading to the potential for the pollution of ground waters and adjacent estuarine waters. When local officals know these problems exist, they can deal with them by adopting appropriate requirements for development, such as minimum lot sizes or centralized sewage treatment and disposal systems. Then, proper technical adjustments and innovations can often make development environmentally acceptable.

Recognizing the potential for groundwater pollution due to the proliforation of septic tank systems in Kill Devil Hills, the Town of Kill Devil Hills was one of four coastal North Carolina communities selected for study by the United States Environmental Protection Agency concerning groundwater quality. This study, known as "The Impacts of Wastewater Disposal Practices on the Hydrogeology of the North Carolina Barrier Islands", established a number of test wells throughout Kill Devil Hills. Groundwater samples were taken quarterly and analyzed for the presense of a number of contaminates that could be traced to septic tank origins. Briefly summarized, the results of this study indicate that at present population density, levels of groundwater contamination due to septic tank effluent

Soils cont.

have not exceeded acceptable parameters as established by the EPA. The Town of Kill Devil Hills and the Dare County Health Department have assumed responsibility for the monitoring wells now that the study has been completed and periodic sampling will continue. (See - "The Impacts of Wastewater Disposal Practices on the Hydrogeology of the North Carolina Barrier Islands - Final Report", Applied Biology, Inc., 641 Dekalb Industrial Way, Decatur, Georgia 330033 and "Environmental Impact Statement - North Carolina Barrier Islands Wastewater Management", United States Environmental Protection Agency, Region 4, 345 Courtland Street, N.E., Atlanta, Georgia 30365., July 1985)

Areas of Environmental Concern

Under the Coastal Area Management Act, North Carolina's Coastal Resources Commission (CRC) has designed a number of areas of environmental concern (AEC's) in order to protect the state's valuable natural resources. The Town of Kill Devil Hills contains seven types of AEC's in three categories:

Estuarine System AEC's

1. Estuarine Waters
2. Coastal Wetlands
3. Public Trust Areas
4. Estuarine Shorelines

Ocean Hazard AEC's

5. Ocean Erodible Areas
6. High Hazard Flood Areas

Public Water Supply AEC's

7. Fresh Pond

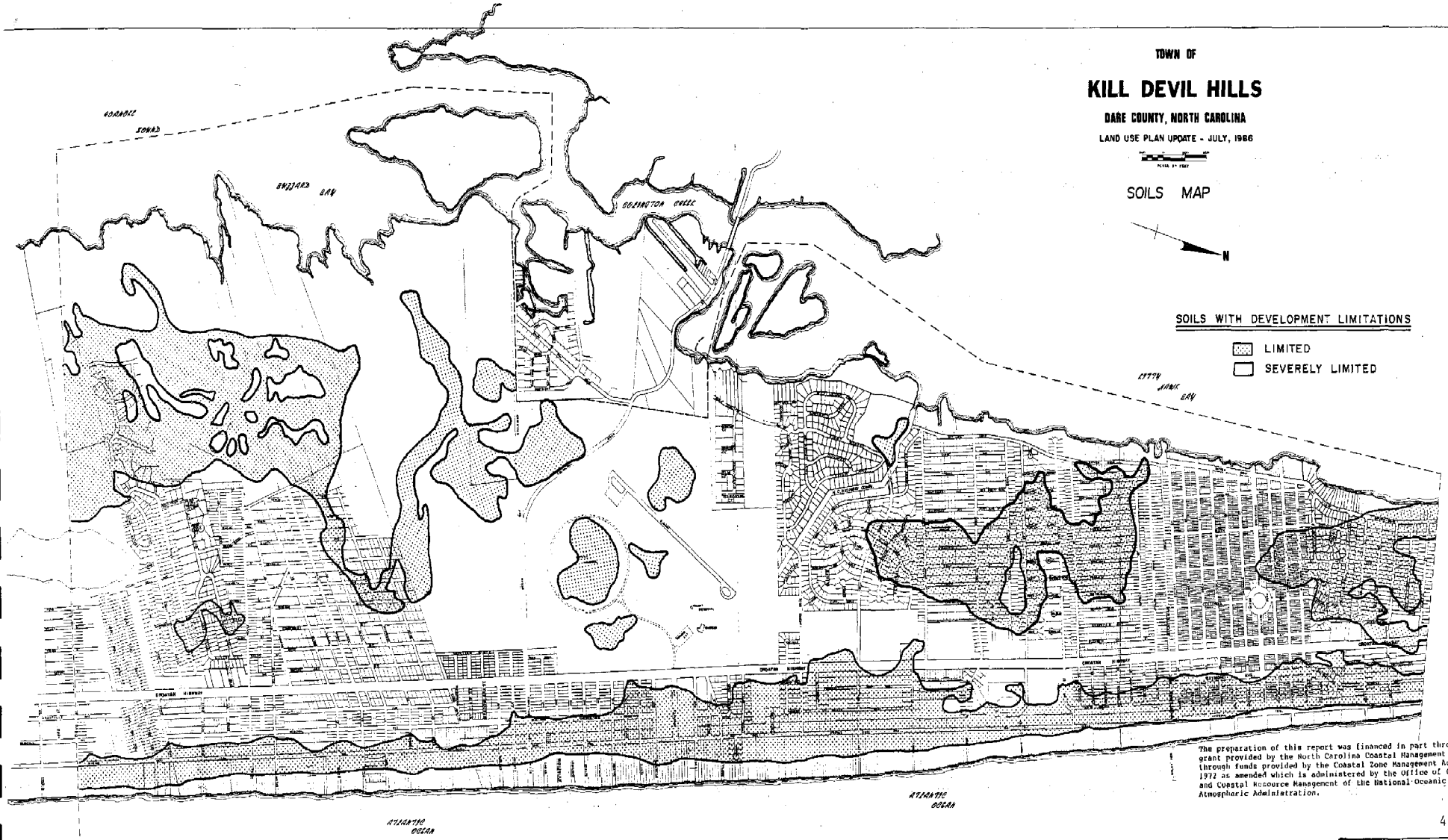
These AECs are roughly indicated on the AEC Map; their exact location and extent are determined by on-site inspections.

Estuarine System AEC's

The lands and waters of the estuarine system possess economic and biological values for the Town of Kill Devil Hills and the State of North Carolina. These lands and waters are interdependent and should be managed as a unit. In an effort to maintain the productivity of the estuarine system, the CRC has designated individual components of it as AECs and adopted guidelines for their use. These components are the estuarine waters, coastal wetlands, public trust areas, and estuarine shorelines. All of these AEC's are found within the Town of Kill Devil Hills.

The estuarine waters AEC includes all waters of the State's bays, sounds, and streams seaward of the dividing line between coastal fishing waters and inland fishing waters. In the Town of Kill Devil Hills, the estuarine waters AEC includes Kitty Hawk Bay, Buzzard Bay, and the streams draining into them (see map).

The coastal wetlands AEC includes any salt marsh or other marsh subject to regular or occasional flooding by tides (whether or not the tidal waters reach the wetlands through natural or artificial watercourses). Coastal wetlands are important because they produce nutrients which serve as the primary food source for various species of fish and shellfish. The dense vegetation and root networks of the coastal wetlands also help retard shoreline erosion and trap sediments before they reach the estuarine waters. Extensive wetlands line Buzzard Bay and Kitty Hawk Bay (see map).



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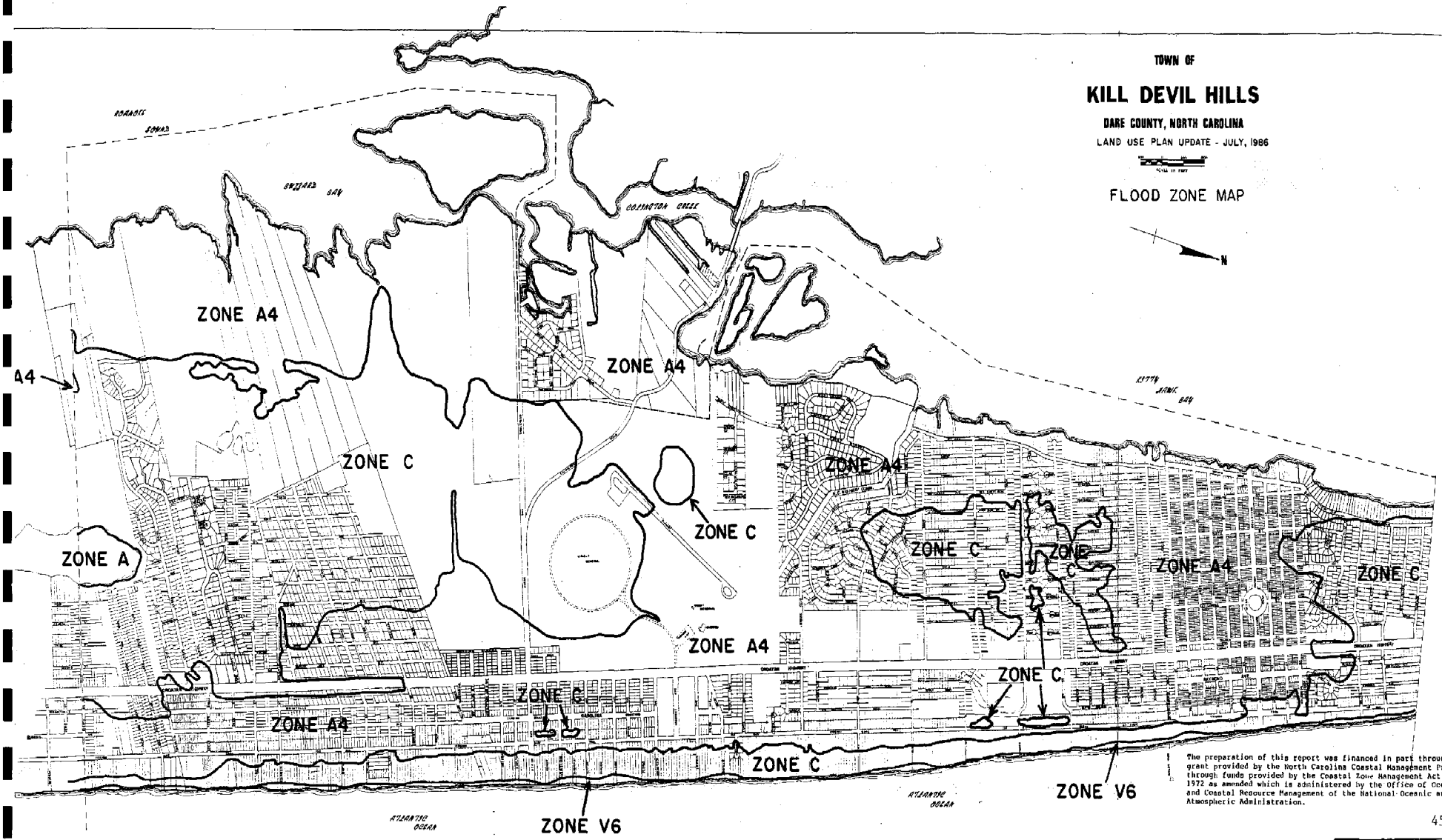
TOWN OF

KILL DEVIL HILLS

DARE COUNTY, NORTH CAROLINA

LAND USE PLAN UPDATE - JULY, 1986

FLOOD ZONE MAP



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The public trust AEC includes (1) all waters of the Atlantic Ocean and the lands thereunder from the mean high water mark to the seaward limit of state jurisdiction, (2) all other bodies of water subject to lunar tides (and the lands thereunder) below the mean high water level, (3) all waters in artificially created bodies of water containing significant public fishing resources or other resources which are accessible to the public by navigation from bodies of water in which the public has rights of navigation, and (4) all waters in artificially created bodies of water in which the public has acquired rights by prescription, custom, usage, dedication, or any other means. In the Town of Kill Devil Hills, the public trust AEC covers the waters and submerged lands of the Atlantic Ocean, Buzzard Bay and Kitty Hawk Bay.

The estuarine shoreline AEC covers non-ocean shorelines, which are typically subject to erosion, flooding, and other adverse effects of wind and water. Though the estuarine shorelines are typically dry land, because of their proximity to estuarine waters they are considered to be connected to the estuary. Development along the estuarine shoreline can have a strong effect on the quality of estuarine waters, coastal wetlands, and their ability to sustain their economic and biological productivity. As defined by the CRC, the estuarine shoreline AEC extends from the mean high water level (or normal water level) along the estuarine waters AEC to a line 75 feet landward. In the Town of Kill Devil Hills, the estuarine shoreline AEC includes the entire shoreline along Buzzard Bay and Kitty Hawk Bay (see map).

Ocean Hazard AECs:

The Atlantic shoreline is periodically subjected to erosion and other adverse effects of wind and water. Ocean hazard AEC's include beaches, frontal dunes, inlet lands, and other areas in which geologic, vegetative, and soil conditions indicate a substantial possibility of erosion or flooding. Incompatible or poorly positioned development within these areas may create the potential for danger to life and property. In the Town of Kill Devil Hills, there are two types of ocean hazard AECs: ocean erodible areas and high hazard flood areas.

The ocean erodible AEC includes that area in which there exists a substantial possibility of significant erosion and shoreline fluctuation. The seaward boundary of this area is the mean low water line. The landward boundary of this area is determined as a combination of:

1. A distance landward from the first line of stable natural vegetation to the recession line established by multiplying the long-term annual erosion rate, as most recently determined by the CRC, by 30. Where there has been no long-term erosion or the rate is less than two feet

1. per year, this line is 60 feet landward from the first line of stable natural vegetation; plus

2. The distance landward from the above recession line to a second recession line that would be generated by a storm having a one-percent chance of being equaled or exceeded in any given year.

In the Town of Kill Devil Hills, the ocean erodible AEC covers the entire Atlantic shoreline.

The high hazard flood AEC is the oceanfront area subject to flooding and high velocity waters (including wave wash) in a storm having a one-percent chance of being equalled or exceeded in any given year, and indicated as Zones V1-V30 (known as "V zones") on the flood insurance rate maps (FIRM) established by the Federal Insurance Administration.

Current Policies Regarding AEC's:

The Coastal Area Management Act includes guidelines covering uses of and development in areas of environmental concern, with separate guidelines for the different categories of AEC designated by the Coastal Resouces Commission. These guidelines are as follows:

In estuarine waters AECs, the highest priority of use is the conservation of estuarine waters. Secondary priority rests with those types of development that require access to the water and cannot function elsewhere; such development includes navigation channels, simple access channels, erosion control structures, boat docks, marinas, piers, wharves, and mooring pilings.

Similarly, in coastal wetland AECs, the use with the highest priority is the conservation of the wetland, with secondary priority going to water-dependent activities. Uses which are unacceptable in coastal wetland AECs include, but are not limited to, restaurants, homes, hotels and motels, trailer parks, parking lots, private roads and highways, and manufacturing plants. Acceptable uses include utility easements, fishing piers, docks, and agricultural uses as permitted under North Carolina's Dredge and Fill Act and other applicable laws.

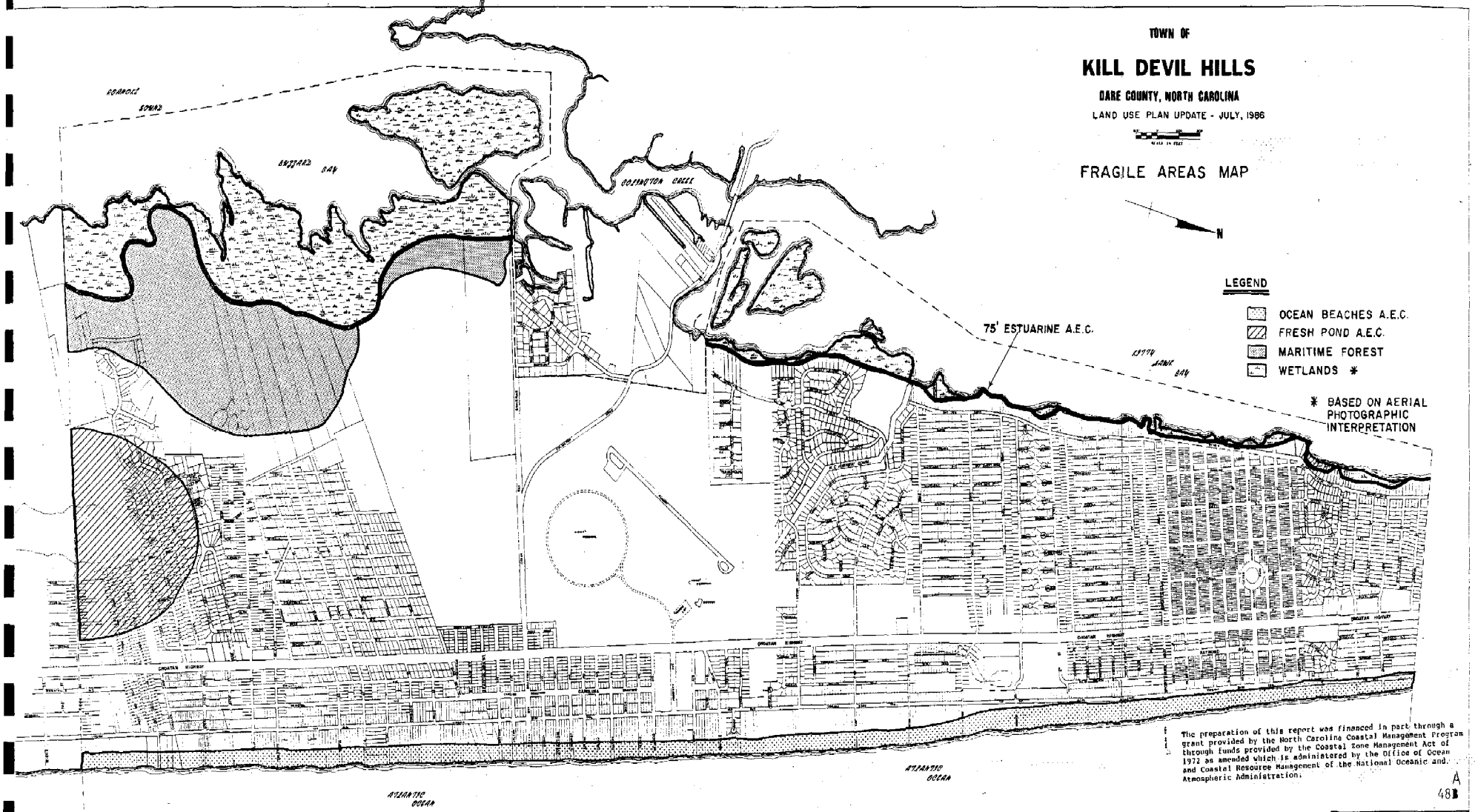
In public trust AECs, no use is allowed which significantly interferes with the public's right of navigation or other public rights which exist there. Uses that may be acceptable within public trust AECs, provided that they will not be detrimental to public trust rights and the biological and physical functions of the estuary or ocean, include the development of navigational channels and drainage ditches, the use of bulkheads to control erosion, and the construction of piers, wharves, and marinas. Uses that are not acceptable in public trust AECs are those which would directly or indirectly impair or block existing

navigation channels, increase shoreline erosion, deposit spoils below mean high tide, create adverse water circulation patterns, violate water quality standards, or degrade shellfish waters and beds.

In estuarine shoreline AECs, no uses are absolutely prohibited. However, any development that occurs within the estuarine shoreline AEC is to be compatible with both the dynamic nature of estuarine shorelines and the economic and biological productivity of the estuarine system.

In ocean erodible AECs and high hazard flood AECs, the CRC's guidelines carry out their mission of protecting the line of oceanfront sand dunes by enforcing the oceanfront setback lines, keeping structures behind the crests of frontal and primary dunes, and prohibiting the relocation or removal of these dunes and their vegetation. The guidelines for these areas include standards for construction to be designed and located to minimize damage due to fluctuations in ground elevation and wave action in a storm that has a one-percent probability of being equalled or exceeded in any given year.

In the Public Water Supply AEC, the use of underground septic tank and drain-field wastewater systems is prohibited within a 500' perimeter of the high water mark of the Fresh Water Pond. Between 500' and 1,200', septic tank systems are limited to a capacity not greater then the equivalent of a four-bedroom single-family residence and must include a land area of at least 40,000 square feet. In addition, all land clearing, grading, surfacing, and other land disturbing activities within 1,200'of the Fresh Pond AEC must conform with the guidelines of the N.C. Sedimentation and Pollution Control Act of 1973 and the N.C. Coastal Area Management Act of 1974, where applicable.



TOWN OF

KILL DEVIL HILLS

DARE COUNTY, NORTH CAROLINA

LAND USE PLAN UPDATE - JULY, 1986

FRAGILE AREAS MAP

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SECTION VII

POLICIES AND IMPLEMENTATION STRATEGIES

A. Resource Protection and Management

CONSTRAINTS TO DEVELOPMENT

Policies Considered

(1) Continue existing policies; (2) Modify existing policies based on new information.

Discussion

Much of the 1980 Land Use Plan focused on environmental constraints, most of which have come to be regulated by one or several state, local, or federal regulatory agencies, as follows:

a) Wetland and Coastal Marsh - U.S. Army Corps of Engineers and N.C. Cosatal Resources Commission

b) Floods - Federal Emergency Management Agency, Flood Insurance Administration

c) Soils - Dare County Health Department

d) Water Quality - N.C. Division of Environmental Management

e) Coastal Dunes - N.C. Coastal Resources Commission

f) Fresh Pond Watershed - N.C. Coastal Resources Commission and Dare County Health Department

Each of these environmental constraints are the subject of various administrative codes and guidelines. The only environmental issue that could be identified that is not subject to any such regulations were non-coastal dunes or inland sandhills. In addition to the environmental constraints identified above, the economic cost of infrastructure improvements and the service delivery demand associated with a strong growth rate was also considered to be a constraint to growth.

Policy Selected

The Town of Kill Devil Hills supports those regulatory programs currently operational to deal with environmental constraints provided local government has the right to review any proposed modifications to those programs and guidelines, and generally supports a "pay as you go" policy for infrastructure improvements and service delivery facilities through the use of impact fees, user fees, and any funding sources other than ad valorum taxes to finance such improvements.

Constraints to Development

Implementation Strategy

Continue to levy impact fees on new development as may be necessary to provide infrastructure and service delivery improvements to accomodate new development, implement facility fees as authorized by N.C. General Assembly, support any other such revenue measures as may be proposed.

SHORELINE EROSION

Policies Considered

(1) Continue current policy (2) modify current policy to reflect new conditions, information, or opinions.

Discussion

The Town's policy on shoreline erosion in 1980, which opposed the expenditure of public or private funds in an attempt to stabilize the ocean beaches generated considerable controversy in 1982 when several oceanfront homes were lost due to heavy seas and one bulk immovable structures became imminently endangered. Permits for erosion control structures were denied based on the Town's restrictive policies, which at that time were more restrictive than the State of North Carolina's guidelines. After several meetings, workshops, and public hearings, the Town's policy on shoreline erosion was amended. A number of structural and non-structural responses to shoreline erosion were included in the amended policy. A question concerning shoreline erosion policy was included in the public survey distributed in conjunction with the 1986 Land Use Plan Update. Respondents to the survey favored setbacks as the preferable non-structural response and privately funded structural responses such as bulkheads, seawalls, and breakwaters as the preferable structural response. A "do nothing" or "let them fall in" response was not popularly received.

Policy Selected

Continue the policy on shoreline erosion established in 1982, as follows:

The Town of Kill Devil Hills favors long term efforts to maintain and enhance the public trust beach through the funding of a beach nourishment project using federal, state, and local funds, favors non-structural responses to erosion such as relocation and/or acquistion of existing endangered structures, setbacks for new construction, and the use of structural stabilization techniques such as offshore breakwaters, artificial seaweed, sandbag bulkheads, and similar devices as may be necessary as interim temporary remedial action to protect property endangered due to erosion so severe that non-structural responses are impractical or ineffective. It is the Town's position that individual property owners should bear the cost of site specific protection measures.

Implementation Strategy

Continue to enforce the CAMA minor permit program and authorize permits consistant with the policy indicated above.

Duneplowing, Revegetation, and Estuarine Bulk Heads

Policies Considered

(1) Continue the policies established in the 1980 Land Use Plan; (2) Add language concerning non-coastal dunes to the 1980 language. (3) Further modify or revise policy positions on this issue set as may be the pleasure of the Board to reflect new conditions or information.

Discussion

This issue set has not generated a great deal of controversy in Kill Devil Hills, particularly since properly aligned and constructed estuarine bulkheads have proven successful in stabilizing the sound shore. Concern has been noted, however, that sandhill formations (refered to herein as "non-coastal dunes") that occur outside the area of Environmental Concern jurisdiction of the Coastal Area Management Act (CAMA) have been the subject of adverse alteration activities and need local protection guidelines. The reconstruction and revegetation of sand dunes continues to be viewed in a positive light.

Policy Selected

The Town encourages the construction and revegetation of sand dunes, supports the continued construction of properly permitted estuarine bulkheads, and is opposed to the destruction, degradation, or mining of inland dunes not subject to CAMA guidelines.

Implementation Strategy

Continuation of the Town's Implementation and Enforcement Agreement with the Department of Natural Resources and Community Development for enforcement of CAMA guidelines and the adoption of a local dune protection ordinance.

Commercial and Recreational Fishing, Off-Road Vehicles

Policies Considered

(1) Continue 1980 Land Use Plan Policy favoring seasonal restrictions on beach driving (2) Modify policy to reflect new information or conditions.

Discussion

As a part of the update process for the 1986 Land Use Plan, a question designed to measure public opinion on this issue was included in the special issues section of the survey questionnaire phase of the update. The results of the survey showed the citizens of Kill Devil Hills to be almost evenly divided between those who favored a continuation of the current policy of restricting beach driving only from May 15-September 15 and those who favored an outright ban on beach driving at any time. Concern was also noted that during the period of time when unrestricted beach driving is allowed, several "near miss" situations have occurred where sunbathers on the low side of a deep beach "cusp" have almost been crushed by off-road vehicles. The need to regulate where ORV's move along the beach to reduce the potential for accidents was identified. It was agreed that a decal permit program was the best way to inform ORV drivers of rules to be followed.

Policy Selected

The Town favors seasonal restrictions on beach driving and the implementation of a permit system for beach driving. The Town is opposed to government regulation of conflicting or competing ocean uses, particularly fishing.

Implementation Strategy

Continue to use the local police power to enforce beach driving restrictions, establish a local permit process for registration of off-road vehicles.

Agricultural, Forestry, and Industrial Uses

Policies Considered

(1) Continue the policies established in the 1980 Land Use Plan; (2) Amend the policy in this section to reflect new conditions or information.

Discussion

At the present time, there is only minimal potential for industrial or agricultural land use in Kill Devil Hills, due largely to the fact that a variety of other land uses offer a much higher return on investment. There is, however, the potential that a service or storage oriented light industrial economy might develop in Kill Devil Hills as a result of its location as the geographical midpoint of the northern beaches. A light industrial zoning district designed primarily for dry storage and break in bulk distribution has recently been established by the Board of Commissioners in anticipation of this market. That part of Kill Devil Hills known as "Nags Head Woods" is currently held by a private non-profit environmental protection group and although the potential for commercial forestry exists in Kill Devil Hills, it is not likely to occur as long as this land is controlled by preservation groups. Tourism is and will continue to be the main industry in Kill Devil Hills.

Policy Selected

The Town is favorable to the development of environmentally compatable light industry, is opposed to commercial forestry in Kill Devil Hills, has identified tourism as its main industry, and recommends that state and federal agencies also recognize tourism as an industry.

Implementation Strategy

The Town will use the site plan review process of Section 20-66 of the Town Code to evaluate proposed industrial development projects and continue its efforts to convince the State of North Carolina and the U.S. federal government to recognize tourism as an industry.

AEC's and CRC Policies

Policies Considered

(1) Continue the policies of the 1980 Land Use Plan; (2) Revise the policies of the 1980 Land Use Plan to reflect new information or conditions.

Discussion

Although the Town of Kill Devil Hills has indicated support in principal for the North Carolina Coastal Area Management Act (CAMA), the Kill Devil Hills Board of Commissioners are opposed to a number of specific amendments to the CAMA adopted by the Coastal Resources Commission (CRC), as indicated in the 1980 Land Use Plan. Opposition has continued throughout the first half of the decade, with the Town of Kill Devil Hills on record opposing amendments that doubled the setback multipler for oceanfront development and those that proposed a complicated set of guidelines directed at stormwater run-off. Since the inception of the N.C. Coastal Area Management Act, the Kill Devil Hills Board of Commissioners have consistently argued that many of the guidelines included in CAMA address issued best resolved by local government.

Policy Selected

The Town of Kill Devil Hills supports the guidelines of the Coastal Area Management Act (CAMA) and the associated policies of the Coastal Resources Commission but reserves the right to oppose specific sections of the CAMA that the Board of Commissioners finds to be directed at issues best resolved by the local government. The Town is opposed to any additional Area of Environmental Concern (AEC) nominations in Kill Devil Hills and is also opposed to the extension or enlargement of any existing AEC's.

Implementation Strategy

Representatives of the Town of Kill Devil Hills will attend all CRC meetings and workshops and participate in discussions and public hearings concerning issues relevant to the Town's interest.

STATE AND FEDERAL POLICIES

Policies Considered

(1) Continue policies of the 1980 Land Use Plan, (2) Modify the 1980 policies based on new information or changed opinion.

Discussion

Throughout this Land Use Plan there are references to the Town's position on State and Federal policies. The Town has consistently indicated general support for state and federal regulatory programs provided they do not interfere or conflict with local codes, ordinances, or issues. Support for state and federal programs has also consistently been conditional upon input by the local government when new rules are proposed or existing rules are proposed to be modified.

Policy Selected

The Town of Kill Devil Hills supports the regulatory policies of the various state and federal agencies that have jurisdiction in Kill Devil Hills provided local government has the opportunity to provide input into the development of federal or state policies and guidelines.

Implementation Strategy

Monitor state and federal notifications, attend agency meetings as may be necessary, forward written comments.

ESTUARINE WATER QUALITY

Policies Considered

(1) Optimum Protection - a policy that places a major emphasis on estuarine water quality regardless of the economic costs of such a policy,

(2) Moderate Protection - a policy that would seek to reduce the adverse effects of development along the estuarine shoreline without totally restricting or eliminating development.

(3) Limited Protection - this policy would maintain the current practice of requiring CAMA Minor Development Permits for construction within 75' of public trust estuarine waters.

Discussion

Estuarine water quality is a priority issue throughout coastal North Carolina. Much of the estuarine shoreline in Kill Devil Hills is already either developed or platted in low density single-family uses. Storm water run-off has been identified as one of the major sources of pollutants to estuarine waters. Given the fact that the estuarine shoreline in Kill Devil Hills is not platted or zoned for high density development, the potential for introducing pollutants into estuarine waters as a result of run-off is not great. Given the fact that the potential for harm is not great, a policy designed to offer a moderate level of protection to estuarine water quality and protect aquatic life was determined to be the most approriate policy for Kill Devil Hills.

Policy Selected

The Town of Kill Devil Hills supports protection of estuarine waters in order to maintain a level of water quality that will support aquatic life. The Town of Kill Devil Hills also supports and will continue to implement local zoning and building codes designed to discourage development that will contribute to the degradation of estuarine water quality and mitigate the adverse impacts of acceptable estuarine shoreline development.

Implementation Strategy

Continue to enforce local zoning codes to encourage low density development along the estuarine shoreline, modify local codes to preserve existing vegetation along the estuarine shoreline, require retention basins or stormwater management plans for higher density projects during site plan review process.

Maritime Forests

Policies Considered

1) Continue the 1980 policy encouraging property owners to retain the natural wooded condition of their property.

2) Adopt land disturbance regulations to minimize alteration of existing vegetation.

3) Allow the private sector to protect the maritime forest.

Discussion

The majority of that land in Kill Devil Hills that retains maritime forest vegetation is owned and managed for preservation by the North Carolina Nature's Conservancy, a private non-profit corporation. This land is not considered to be endangered by private sector development or forestry harvesting. The management of that land in a maritime forest class not owned by a preservation organization can be managed through the use of local land disturbance ordinances.

Policy Selected

The Town of Kill Devil Hills favors the maintenance and management of maritime forests, encourages private owners of land in a maritime forest to retain the natural wooded condition of their property, and supports the use of locally adopted management guidelines.

Implementation Strategy

Schedule workshops to draft management guidelines for land disturbing activities within the confines of maritime forest lands, continue to co-operate with the Natures's Conservancy in the management of the Nags Head Woods Natural Preserve.

Floating Homes

Policies Considered

1) Oppose the location of floating homes in Kill Devil Hills.
2) Support the location of floating homes in Kill Devil Hills.

Discussion

The development of floating homes has not been proposed in Kill Devil Hills. Environmental constraints, market conditions, and lack of access to acceptable sites for floating home development reduce the likelihood that this type of housing will become an issue in Kill Devil Hills. If proposed in Kill Devil Hills, floating homes hold the potential to create conflicts with other water-related uses and to introduce additional pollution to impacted waters.

Policy Selected

The Town of Kill Devil Hills does not support the development of floating homes as an acceptable form of housing or accomodations.

Implementation Strategy

Adopt policies opposed to floating home development.

Fresh Water Pond AEC

Policies Considered

1) Continue the policies of the 1980 Land Use Plan supporting development restrictions in the immediate vicinity of the Fresh Pond AEC.

2) Modify the policies of the 1980 Land Use Plan based on new information.

Discussion

For a brief period of time, from 1982-1984, the Fresh Water Pond was abandoned as a source of potable water. By 1985, the need to reactivate the Fresh Water Pond as an adjunct to the Dare County Regional Water System became apparent. Improvements to pumping and treatment systems were initiated in a joint effort by the Towns of Nags Head and Kill Devil Hills and the County of Dare, and by the autumn of 1986, the Fresh Water Pond has been reactivated as a back-up source of water for the Dare Regional Water System.

Policy Selected

Support continued AEC restrictions on the development of all land that lies within the sphere of influence of the Fresh Pond AEC.

Implementation Strategy

Enforcement of CAMA guidelines for development within the Fresh Pond AEC.

AREAS OF ARCHAEOLOGICAL OR HISTORICAL SIGNIFICANCE

Two archaeological sites are recorded within the Town's planning boundaries. The exact locations of these sites are not provided due to potential harm from public knowledge and subsequent disturbance of these locations. Additional records indicate one underwater, two terrestrial, and one region previously surveyed. These sites are indicated on Map (7).

Any proposed development or land disturbing activities within these areas should be immediately refered to the North Carolina Department of Cultural Resources.

Map (7) indicates three sites on the National Register of Historic Places. They are:

1. The Wright Brothers Memorial and

2. The Wright Brothers Quarters and Hanger Building (Both located on property owned by the National Park Service)

3. The Kill Devil Hills Coast Guard Station (Located in the vicinity of the 700 - 800 block of South Virginia Dare Trail)

B. Economic and Community Development

CAPITAL IMPROVEMENTS

One of the most important elements in any management plan for a community experiencing a rapid growth rate is a capital improvements plan. As population increases, a greater demand for governmental services is created. Those services are often costly items, and to meet the cost and provide services, local governments must attempt to project what the service demand (and cost) will be and make plans to meet the increased demand prior to the actual point in time when the demand is a reality. Listed below are a number of projected capital improvements identified as necessary to insure the reliable and efficient delivery of government services to the citizens of Kill Devil Hills during the next decade.

1. General Government and Administration - Based on projected growth Scenario #2 of the Booze, Allen, and Hamilton Carrying Capacity Study of Dare County, the following capital improvement projects have been recommended:

   a. Construction of a new building for administrative operations (Town Hall), to be operative by 1990 - 1991. Projected cost - @ $300,000.

2. Planning and Development - Assuming that the construction of a new Administration Building is completed, no additional capital costs are anticipated for the operation of this department.

3. Public Safety - Based on Growth Scenario #2 of the Booze, Allen, Hamilton Carrying Capacity Study for Dare County, the following capital improvement projects have been identified as necessary to provide for public safety services through the next decade:

   a. Police - New Police Headquarters building will be necessary by 1988-1989, projected cost, @ 250,000.

   b. Fire-New Fire Station in 1990-1991, plus four pieces of equipment. Projected cost, Fire Station - @ 250,000. Equipment - @ 775,000.

   c. Ocean Rescue - No additional capital improvements identified as necessary for service delivery.

4. Transportation - No local capital improvements projects have been identified.

5. Solid Waste - No local capital improvement projects identified. Kill Devil Hills is, however, dependent on the Dare County Landfill, which will require capital improvements in the coming decade.

6. Water and Sewer - Assuming growth rate #2 in the Booze, Allen, Hamilton Carrying Capacity Study for Dare County, the Town of Kill Devil Hills will require a peak water distribution capacity of about 4.2 million gallons per day by 2000. To provide this distribution capacity, the following capital improvements will be necessary:

   a. Improvement of distribution and storage system, share in cost of regional water system development program. Estimated cost, $4,000,000.

   b. Operation of sewage treatment plant, if constructed.

IMPLEMENTATION STRATEGY

The Kill Devil Hills Board of Commissioners will review the projected capital improvements associated with Population Growth Scenario II and adopt a capital improvements plan and schedule consistant with these projections during fiscal year 87-88.

GROWTH

Policies Considered

(1) Maintain existing annual growth rate of the early 1980's, @ 10-12%; (2) Attempt to further limit growth rate; (3) Coordinate growth rate with growth scenarios developed for the Dare County Carrying Capacity Study.

Discussion

Data to deal with this issue has been generated from two sources, a public opinion questionnaire developed as a part of the 1986 Land Use Plan Update and the growth projections included in the Dare County Carrying Capacity Study. Respondents to the questionnaire indicated a general sense of satisfaction with the existing population distribution and density levels. The Dare County Carrying Capacity Study has identified three growth rate scenarios that reflect constrained, moderate, and free market growth rates.

Policy Selected

Growth Scenario Number Two of the Dare County Carrying Capacity Study (Moderate Rate), which would result in a permanent population of @ 4000, and a peak seasonal population of @ 38,000 by 1990.

Implementation Strategy

Adopt other policies consistent with this policy, allocate utility services and develop capital improvement plans based on the growth projections of Scenario Two.

ENERGY SHORTAGES

Policies Considered

(1) Abandon this issue as not relevant in 1986; (2) Continue previous policies; (3) Modify the policies to reflect current conditions.

Discussion

Energy shortages were an important issue during the late 70's and early 80's, but recent developments in the oil industry have resulted in an abundant supply of energy at this time. Recognizing that supply and demand in the energy resource field seems to follow a cycle and that shortages could return, deleting this issue was not recommended.

Policy Selected

The Town of Kill Devil Hills supports the continued development of energy efficient structures and construction codes designed to achieve that objective. In addition, the Town supports the development of a stand-by fuel allocation plan that may be implemented in the event massive energy shortages become a problem again.

Implementation Strategy

Continue to enforce insulation and construction codes as detailed in N.C. State Building Code.

WATER AND SEWER

Policies Considered

(1) Continue the existing policies; (2) Modify policies based on new information or conditions.

Discussion

The 1980 Kill Devil Hills Land Use Plan included language that favored the immediate construction of a regional wastewater treatment facility. In addition, in 1980 the Town was confident that the Dare Regional Water System's five million gallon per day capacity was adequate to meet the area's water needs through 1990. Since that time, a number of factors that were critical to the development of those policies have changed dramatically. First of all, an unanticipated surge in population growth and water demand has occurred since 1980, and by 1983 the Dare County Regional Water System was nearing its operational capacity. The need to find an additional source of water and to expand the existing system has been identified and underscored by a building permit moratorium and panic consumption scare in 1985. Second, progress on the proposed Dare County Regional Wastewater Treatment Facility came to a halt when federal funds dried up and the proposed ocean outfall system ran into environmental problems. As a result, the EPA developed a plan for Wastewater Policies on the N.C. Barrier Islands. As a result of these developments, as an element of the 1986 update, new policies on water and sewer were discussed, as follows:

1. Water
    a. Favor the use of impact fees to generate capital for expanding water capacity on a "pay as you go" basis.
    b. Favor the use of general fund dollars to finance expansion of the water system.
    c. Favor the use of a moritorium and/or rationing system on new construction in order to insure that existing supplies are not totally depleted.

2. Sewer

   a. Favor the EPA policies of continued reliance on septic tank and drainfield systems and package wastewater treatment plants for wastewater treatment in Kill Devil Hills.

   b. Favor the use of public funds to begin to establish community-wide wastewater treatment services for Kill Devil Hills.

Policy Selected

The Town favors the use of impact fees to generate capital to expand water service capacity on a "pay as you go" basis, and the use of public funds to begin to establish community-wide wastewater treatment services for Kill Devil Hills.

Implementation Strategy

Continue to levy impact fees on new development with such fees reserved for capital improvements for expanding facilities and establish separate sanitary districts for those areas that may be served by a municipally owned wastewater treatment facility.

Package Treatment Plants

Policies Considered

(1) Continue the policies of the 1980 Plan, which favor the use of package treatment plants for high density development, (2) Amend the 1980 policies based on new information or a desire to change the policy.

Discussion

As a part of the Environmental Impact Statement of the N.C. Barrier Island Wastewater Study by the U.S. Environmental Protection Agency, the Town of Kill Devil Hills was the subject of a groundwater contamination study concerning septic tanks infiltration. The conclusions of that study find no unsatisfactory levels of groundwater contamination due to septic tank malfunction and recommend the continued use of septic tank systems for low density development and the use of package treatment plants to accomodate development that cannot be handled by septic tank systems. The history of package treatment plants in Kill Devil Hills shows a record of less then ideal performance thus far, with one system under a moratorium on new hookups pending improvements. The regulatory control and maintenance record of privately owned package treatment plants is cloudy at best.

Policy Selected

The Town of Kill Devil Hills has adopted a policy in favor of the establishment of a community-wide wastewater treatment system (see Section VII, B,4). Due to cost constraints, the construction of such a system is not likely in the near future. In the interim, the use of closely monitored package treatment plants to accomodate development projects that cannot be serviced by septic tanks systems is favored.

Implementation Strategy

Use the Town's site plan review process and the Division of Environmental Management's regulatory system to insure that all package treatment plants are properly designed and located in such a manner that public health and welfare is not compromised by the presence of such systems.

TRANSPORTATION NETWORK (BY-PASS)

Policies Considered

(1) No additional improvements; (2) Five lane improvements from Wright Memorial Bridge to Whalebone Junction; (3) Five lane improvements with signalization of commercial corridors; (4) Some combination of the above.

Discussion

U.S. 158 By-Pass is the major transportation route in Kill Devil Hills and as was noted in the 1980 Land Use Plan, traffic levels during the seasonal population peak often exceed design standards. This situation has improved somewhat as a result of improvements completed in 1985 that widened the 2 lane highway to 3 and 5 lane sections. The Town, however, is on record in favor of additional improvements to remove dangerous bottlenecks where the center lane of 3 lane sections is used illegally for passing.

Policy Selected

The Town favors the completion of a five lane route consisting of U.S. 158, U.S. 168, and N.C. 12 from the Virginia-North Carolina Border to Cape Hatteras, signalization, crosswalks, and sidewalk improvements along those sections of these highways where development has created the demand for such improvements, and the inclusion of a limited access alternate by-pass route in the 1990-2000 Transportation Improvement Plan for the First District of N.C.

Implementation Strategy

Forward comments, resolutions by the Board of Commissioners, and letters to the Department of Transportation, attend and speak at public hearings concerning Transportation Improvement Plan development.

Transportation Network (Local Roads)

Policies Considered

(1) Continue local road maintenance; (2) Encourage width and design specification upgrades; (3) Support road improvement and opening program, such as a bond issue; (4) Support improvements to widen, resurface, provide drainage pedestrian, and bicycle amenities to U.S. 158 Business. (Virginia Dare Trail)

Discussion

There is a consensus of public opinion, as demonstrated by the response to a survey questionnaire developed in conjunction with the 1986 update of the Kill Devil Hills Land Use Plan, that local roads in Kill Devil Hills are in dire need of immediate attention. Much of the decline of the local road system has occurred due to substandard design specifications, unusual climatic conditions, and unanticipated traffic overloads.

Policy Selected

The Town encourages the following action in response to the decline of the local road system in Kill Devil Hills:

1) A "pay as you go" policy for the opening of unimproved streets as may be necessary to accomodate new development, those who generate the demand shall provide the road improvements that may be necessary to provide for safe traffic movement on a site by site basis.
2) Adoption of amendments of the Town Code for local road specifications to provide contemparary guidelines for road construction, roadbed preparation, drainage, and pavement width to accomodate on-street parking.
3) Support of a massive local road improvement program to upgrade all existing local roads identified as in need of repair by the recently completed NCDOT study of the Kill Devil Hills local road system. This program would also be financed on a "pay as you go" basis derived from both advalorem and general tax revenues.
4) Support of improvements to widen, resurface, install drainage, pedestrian and bicycle amenities to U.S. 158 Business. (Virginia Dare Trail)
5) Support the completion of the Town's Shoreline Access Master Plan as a component of the local roads upgrade program indicated in number three on this page.

Implementation Strategy

Encourage the Board of Commissioners to revise specifications for local roads, support additional expenditures on local road improvements, work to include recommended improvements to U.S. 158 Business in the Transportation Improvement Plan for the 1st District.

The Town will encourage upgrading local streets and roadways through methods such as assessments and petitions for roadway improvements.

Housing Mix

Policies Considered

(1) Continue the policy set out in the 1980 Land Use Plan; (2) Modify the policy to reflect changes based on existing or potential conditions.

Discussion

Since 1980, the Town of Kill Devil Hills has been following a plan that reserves the bulk of available land use in Kill Devil Hills for detached single family residential structures. From 1983-1985, a comprehensive rezoning master plan was implemented. The Town's Zoning Map was amended to reflect a three tier format of land use, with the majority of the land use west of U.S. 158 By-Pass (Croatan Highway) placed in the Town's most restrictive residential class. Multi-family development west of U.S. 158 By-Pass is a conditional use and is not encouraged. Those areas zoned for Business uses between U.S. 158 Business and U.S. 158 By-Pass are also suitable for multi-family residential development. Land use east of U.S. 158 Business has been identified as subject to ocean overwash, storm surge, and shoreline migration and is subject to a number of special restrictions as indicated in the text of the recently adopted Ocean Impact Residential Zoning District.

Policy Selected

The Town will continue its "three tier" approach to land use and housing mix, with land use west of U.S. 158 By-Pass reserved primarily for detached single family residential use, restrictive zoning guidelines for land use east of U.S. of U.S. 158 Business (oceanfront) and highest and best use zoning districts between the two highways at the north and south ends of the Town.

Implementation Strategy

Continuation of a full-time Planning and Development Department and personnel capable of enforcement of the Zoning Code of the Town of Kill Devil Hills.

Building Heights

Policies Considered

(1) Continue the policies of the 1980 Land Use Plan that limit building heights to 50' (2) Modify the 1980 policies to reflect new conditions, information, or opinions.

Discussion

In 1982 the Kill Devil Hills Board of Commissioners adopted a construction moritorium on buildings in excess of 35'. Building heights became an emotional issue primarily due to opposition by local residents to the "urbanization" of the shoreline by "high-rise" structures. The prevailing opinion was that the Town should endeavor to preserve a low profile skyline, especially along the oceanfront. As a result, a compromise set of regulations were drafted that would limit building heights on the oceanfront and in the residential districts to 42', with no habitable space above 35, the remaining 7' reserved for roofline design and attic space. The fifty foot building height limit continues to remain in effect in the commercial zoning districts.

Policy Selected

The Town favors maintaining its traditional low-profile image and skyline by limiting oceanfront and residential district building heights to not more then 42 total feet. A maximum building height of 50 feet in the commercial zoning districts is also recommended.

Implementation Strategy

Continue to enforce the Zoning Code of the Town of Kill Devil Hills.

Commercial Development

Policies Considered

(1) Continue efforts to centralize commercial development as indicated in the 1980 Land Use and the Comprehensive Rezoning Master Plan of 1982; (2) Modify these policies as may be necessary based on new conditions or information.

Discussion

Commercial development in Kill Devil Hills has been concentrated along two commercial strips in recent years, both located either side of U.S. 158 Business and U.S. 158 By-Pass. This has resulted in a multitude of driveways and a heavy traffic load on U.S. 158 By-Pass. In a strategy designed to create a more centralized approach to commercial development, the Board of Commissioners recently rezoned several blocks of land at the northern and southern ends of Town located between the two commercial strips from a residential zoning class into a commercial zoning class. The purpose of this change was two-fold; (1) to provide a nearby zoning district that endangered oceanfront commercial residential structures could use for relocation, and (2) To absorb the pressure generated by rapid commercial development along the U.S. 158 By-Pass strip.

Policy Selected

The Town favors the centralization of commercial development, primarily in the two commercial districts at the northern and southern ends of the municipal boundries, and the addition of minimum lot size guidelines for converting existing residential structures into commercial use.

Implementation Strategy

The Town will use local building, zoning, and site plan review codes to implement a central commercial district strategy.

ENERGY FACILITIES

Policies Considered

(1) Discontinue this section as a policy issue due to the limited likelihood that OCS natural gas and oil exploration will occur in North Eastern North Carolina, (2) Continue the policy set out in the 1980 Land Use Plan, (3) Modify the 1980 policy to reflect new information or a change in opinion.

Discussion

Due to the recent decline in oil prices, the potential for energy production facilites to choose the Dare County area as a suitable location has decreased significantly since 1980. A return to higher prices would, however, make OCS exploration cost feasible once again. Since a return to high oil prices is considered probable, the energy production facility issue was not discontinued.

Policy Selected

The Town of Kill Devil Hills is opposed to locating petroleum refineries, nuclear power plants, or coal/oil fired energy production plants in Kill Devil Hills and strongly prefers that utility transmission and distribution lines be installed underground.

Implementation Strategy

Consistency review in conjunction with state and federal permit programs for energy facilities.

HISTORIC PRESERVATION

Policies Considered

(1) Continue the 1980 Land Use Plan policies, (2) Modify the policies of the 1980 plan based on new information or the need to change policies.

Discussion

There are few structures in Kill Devil Hills that qualify for nomination to the Register of Historic Structures. This is due primarily to the frequency of storms and hurricanes that have periodically destroyed the housing base of the Town and the fact that the town of Kill Devil Hills has only been incorporated for 33 years. Just the same, the Town is committed to the identification of those few structures in Kill Devil Hills that may qualify for historic status.

Policy Selected

The Town of Kill Devil Hills favors the identification of historical structures in town, will establish a Historic Preservation Committee to help identify such structures, and will pay particular attention to the original Coast Guard Station.

Implementation Strategy

Appoint Committee, identify historic structures.

ANNEXATION

Policies Considered

(1) Take no action, (2) Recommend annexation study, (3) Recommend annexation, (4) Establish extrateritorial zoning district

Discussion

As the development of unincorporated land contiguous to the jurisdictional boundary of Kill Devil Hills has increased in the last few years, the question of annexation has been raised repeatedly. The Town of Kill Devil Hills already provides water service to the unincorporated parts of the Colington area, and the dispatch of emergency vehicles from Kill Devil Hills would cut response time dramatically. In addition, the potential for incompatible land use adjacent to the Town's jurisdictional limit is high. The results of a public opinion questionnaire distributed in conjunction with the 1986 Land Use Plan update showed that year-round residents favored annexation of the Colington area by an almost two to one ratio. Non-resident taxpayers were generally neutral concerning annexation. After a lengthy examination of the issue, an incremental approach designed to culminate in a data base that will quantify the costs and benefits of annexation was determined to be the wisest course to follow.

Policy Selected

The Town of Kill Devil Hills will endeavor to regulate the use of unincorporated land within one mile of the town's jurisdictional limit.

Implementation Strategy

Establish extraterritorial planning and zoning district within one mile of the municipal limits, erect Planning and Zoning District signs. Also, initiate annexation cost-benefit study to be completed by late 1987 or early 1988.

CONSOLIDATION

Policies Considered

(1) The Town of Kill Devil Hills favors the consolidation of the towns of Kill Devil Hills, Kitty Hawk, Nags Head and Southern Shores into one unit of local government.

(2) The Town of Kill Devil Hills favors the consolidation of Kill Devil Hills, Kitty Hawk, and Colington area into one unit of local government.

(3) The Town of Kill Devil Hills favors the disolution of the northern beach municipal governments and the creation of a uniform county administration.

(4) The Town of Kill Devil Hills favors consolidation of services through interlocal agreement contracts when services can be more cost efficent by use of such agreements.

Discussion

Each of the four policies could prove beneficial to Kill Devil Hills and the Outer Banks if accepted. However, today's political climate all but eliminates policies one and three and four. Policy number two is the only policy that has a good chance of becoming a reality.

Policy Selected

The Town of Kill Devil Hills favors consolidation of Kill Devil Hills, Kitty Hawk, and the Colington area into one unit of local government.

Implementation

Continue negotiations with the adhoc Consolidation Committee.

HEALTH AND EDUCATION

Policies Considered

(1) The Town of Kill Devil Hills supports the establishment of a full service hospital for Dare County and supports construction of additional educational structures as may be necessary in Kill Devil Hills on the Baum Tract.

(2) The Town of Kill Devil Hills supports the continued operation of the Dare Emergency Medical Center and a more centralized school system to better serve the Northern Dare Beaches.

(3) The Town of Kill Devil Hills supports priority public funding for medical and educational services in Dare County.

Discussion

Dissatisfaction with health care facilities and the desire for a higher level of available health care was noted in discussions. Future educational facilities need to be located in the beach areas of Dare County.

Policy Selected

The Town of Kill Devil Hills supports the establishment of a full service hospital for Dare County and supports construction of additional educational structures as may be necessary in Kill Devil Hills on the Baum Tract.

Implementation

Health

Lobby for modification of area wide health services plan to include Dare County as a candidate for a hospital.

Education

Continue support for construction of Dare County schools on the Baum Tract.

COMMUNITY APPEARANCE

Policies Considered

(1) Improve community appearance by recommending additional ordinances designed to address visual blight such as junk cars, unsightly yards, etc.,

(2) Recommend mandatory roll-out collection cans to replace the steel can-collector rack system currently in use.

Discussion

Two major problem areas have been identified in reference to community appearance in Kill Devil Hills. The first is road side litter tossed from cars or blown by the wind from trash cans that have been turned over by dogs. The second is unsightly yards littered by any of a number of offensive items including automobiles, boats, fishing equipment, and construction debris. Much of the time, the unsightly yards boils down to personal opinion as to what constitutes unsightliness.

Policy Selected

The Town supports the establishment of Community Appearance Committee appointed by the Board of Commissioners to advise the Board on methods by which the community's appearance might be improved, including new local ordinances to address junk cars and litter.

Implementation Strategy

Create Community Appearance Committee, appoint members, take action on Committee's recommendations.

TOURISM

Policies Considered

(1) Continue the policies of the 1980 Land Use Plan,

(2) Modify the policies of the 1980 Land Use Plan to reflect new information or a change in opinion.

Discussion

Tourism is recognized as the backbone of the Kill Devil Hills economy. As the year-round population continues to grow,the seasonal population surge becomes greater each year. A service economy also has developed, and a number of community leaders have begun a program to sponsor "seasonal extenders", special events that are scheduled just prior to or shortly after the traditional tourist season. These events help keep the service economy operational for a month or two longer. Support for tourism and season extending events continues to be strong in Kill Devil Hills.

Policy Selected

The Town of Kill Devil Hills supports tourism and encourages season extending events.

Implementation Strategy

Continue to support the Outer Banks Chamber of Commerce, Dare County Tourist Bureau, the April Wright Fly-In, and the October Fishing Tournaments.

Recreation and Shoreline Access

Policies Considered

(1) Continue the policies of the 1980 LUP, (2) Modify the policies to reflect new information, demand, or conditions.

Discussion

As a part of 1986 Land Use Plan Update process, a Questionnaire was distributed to a random number of Kill Devil Hills residents. The respondents to the questionnaire were asked to prioritize those recreational facilities that they felt were important enough to justify the expenditure of public funds to construct. In addition, the respondents were also asked to indicate their opinion about the expenditure of public funds to provide public shoreline access facilities. The results of the respondents were used almost verbatim to establish recommended policies pertaining to recreation and shoreline access.

Policy Selected

1) The Town supports the expenditure of public funds for organized recreational activities in Kill Devil Hills and favors the development of the following recreational facilities in the next five years, listed according to priority:

   a. Bicycle Routes
   b. Jogging or walking paths
   c. Playgrounds for children age 10 and under
   d. Parks and picnic areas

2) The Town supports the expenditure of public funds to provide shoreline access facilities for public access to the ocean and estuarine beaches and waters. The Town will continue to implement the Shoreline Access Plan established in 1979 and in addition, supports road improvements to feeder roads serving access sites to provide parallel parking on such roads.

3) The Town supports the implementation of user fee system to support the cost of establishing and maintaining shoreline access facilities.

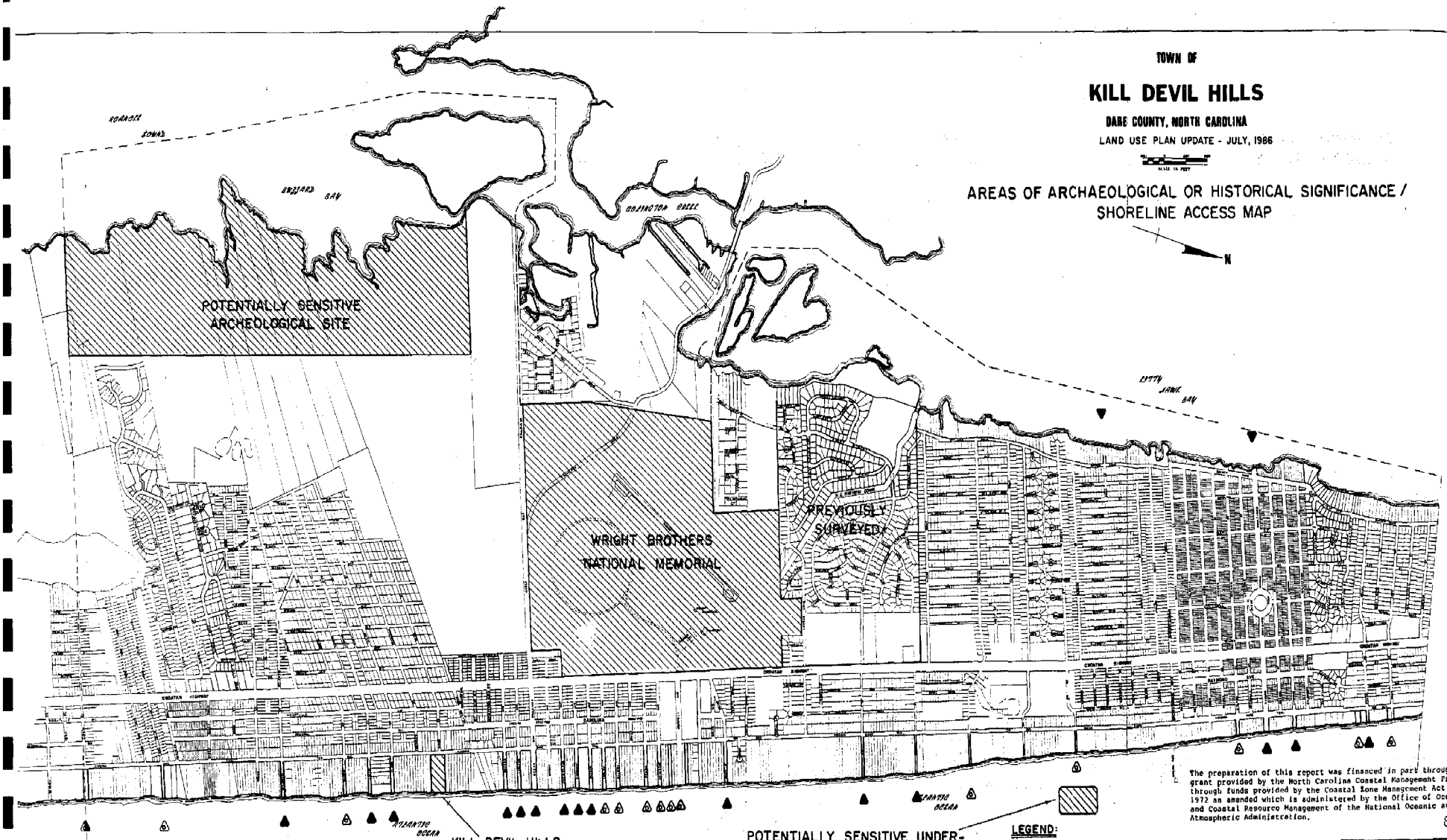
TOWN OF

KILL DEVIL HILLS

DARE COUNTY, NORTH CAROLINA

LAND USE PLAN UPDATE - JULY, 1986

AREAS OF ARCHAEOLOGICAL OR HISTORICAL SIGNIFICANCE / SHORELINE ACCESS MAP



The preparation of this report 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 of the National Oceanic and Atmospheric Administration.

Redevelopment of Developed Areas

Policies Considered

(1) Implement the Town's "Three Tier" approach to zoning as a policy on redevelopment (see Section V, B), (2) Establish a separate policy on redevelopment.

Discussion

The Kill Devil Hills Board of Commissioners, in conjunction with the Planning Board, have established a "three-tier" approach to land use in Kill Devil Hills. This "three-tier" strategy is an attempt to de-emphasize the oceanfront zone as a preferred location for bulk immovable structures, to create a setting for such structures to the west of U.S. 158 Business, and to reserve that land west of U.S. 158 By-Pass for year-round residential development. Redevelopment of developed areas should conform with the zoning guidelines of the respective zoning districts that have been established to implement the Town's "three-tier" approach to land use. The redevelopment of the immediate oceanfront zone is already occurring under the guidelines of the Ocean Impact Residential Zoning District.

Policy Selected

The Town of Kill Devil Hills favors redevelopment of developed areas only after the review of any redevelopment plans for consistancy with the Town's "three-tier" land use strategy.

Implementation Strategy

All redevelopment plans will be reviewed by the Planning Board and Board of Commissioners for consistency with the Town's Zoning Ordinance and "three-tier" land use plan.

Development of the Baum Tract

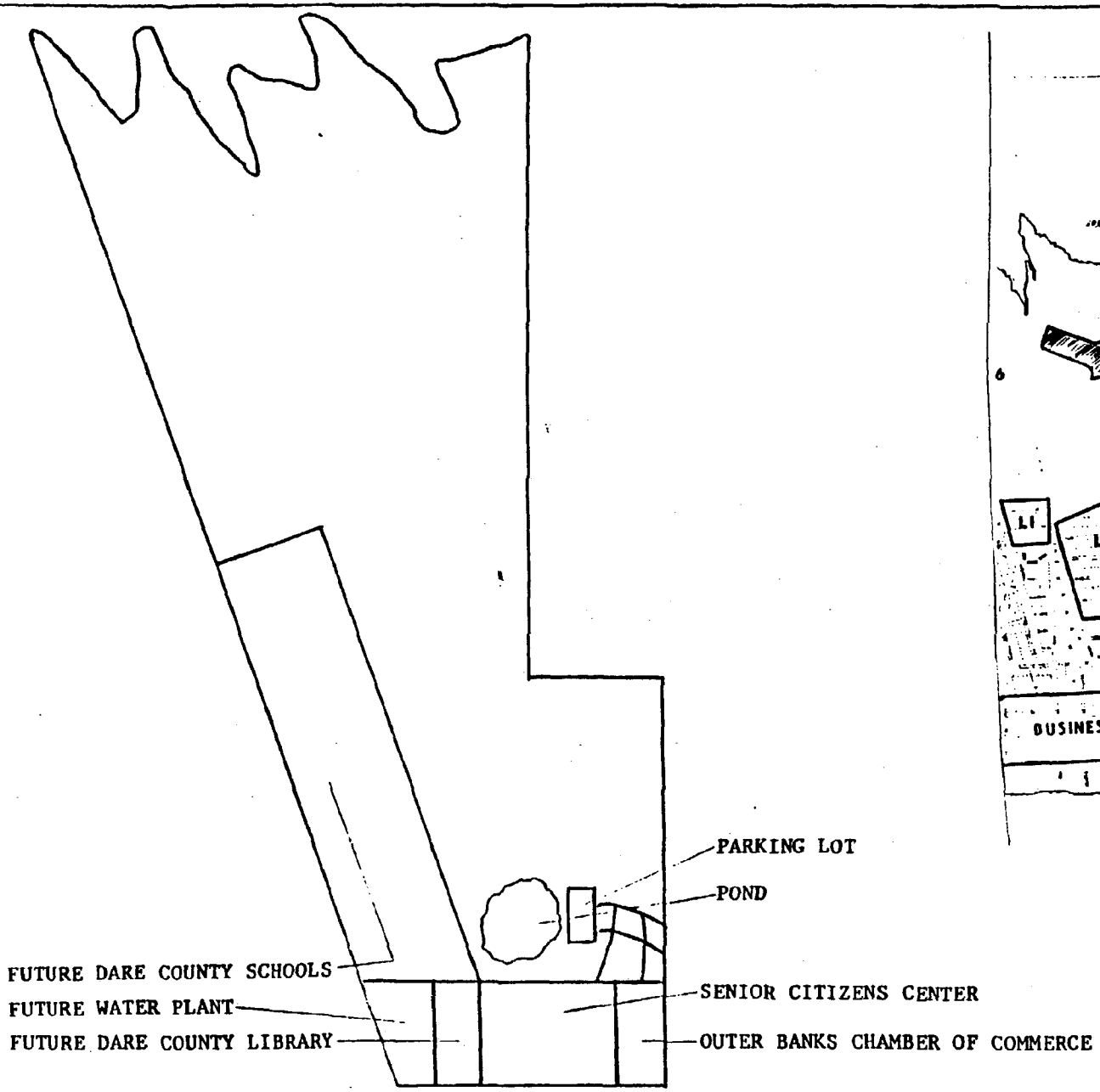
In 1985, the Kill Devil Hills Board of Commissioners purchased for public ownership the largest undivided parcel of land remaining within the Kill Devil Hills municipal limits. This property, known informally as the "Baum Tract", was acquired largely through the generous terms made available by the property's owner and former Mayor of Kill Devil Hills, Mrs. Diane Baum St. Clair. Stretching along Ocean Bay Blvd. on the north all the way to Buzzard Bay to the west, this 333 acre parcel includes the famous living sand dune known as "Run Hill" and borders the Nags Head Woods Ecological Preserve to the south.

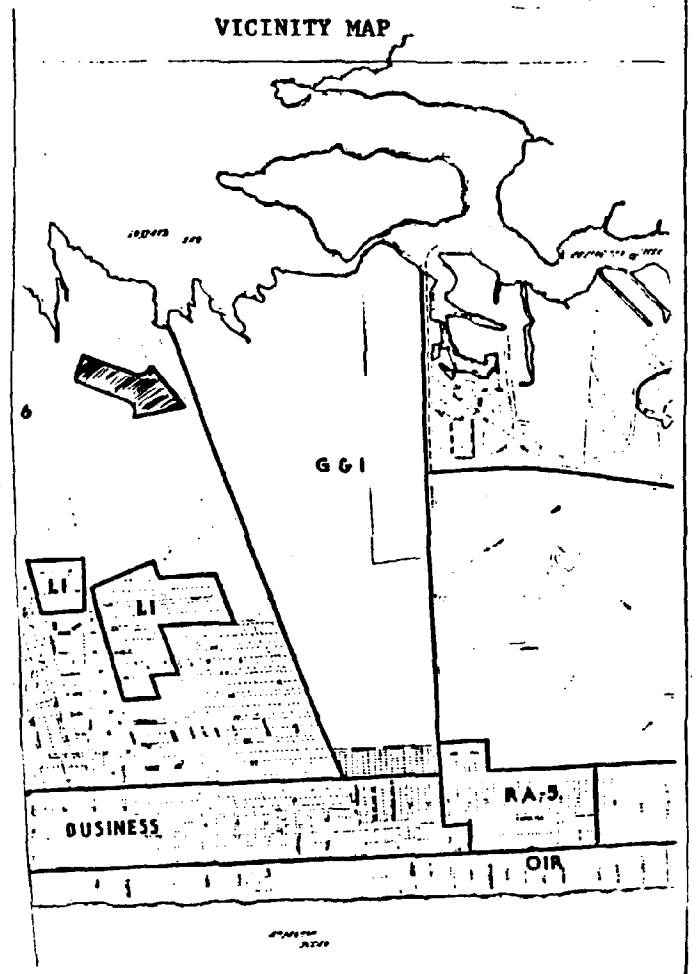
In early 1985, the Town of Kill Devil Hills secured the services of the N.C. State University School of Design to conduct an inventory of the natural conditions of the land and to hold a number of public meetings to solicit citizen input into how the property should be used. Public uses were popularly received, and proposed uses included a new municipal complex, a senior citizens/community center, sites for schools and recreational facilities, and a site for a wastewater treatment facility. In 1986, the Kill Devil Hills Board of Commissioners established a new zoning district, the Government and Institutional Zone, that applies to all the land in the Baum Tract. This zoning district limits the use of land on the Baum Tract to only publicly owned facilities or such similar facilities owned by non-profit organizations. In addition, in 1986 the Kill Devil Hills Board of Commissioners established the Baum Tract Commission, composed of Kill Devil Hills Mayor Pro-Tem Bobby Rollason and citizen members Rhett White and J.K. Norfleet. In its report to the Board of Commissioners, the Baum Tract Commission re-affirmed the Town's commitment to the use of this land for publically owned or non-profit purposes only.

Today, the initial phase of the development of this land is underway. The new Outer Banks Chamber of Commerce Building has been completed, and construction of the Dare County Senior Citizens Center-Community Building is in progress. One hundred acres of the original purchase have been acquired by the Dare County Board of Education as the site for new school buildings, and the relocation of several of the Kill Devil Hills municipal services operations to a Baum Tract location is in progress.

Policy Selected - The Town favors the recommendations of the Baum Tract Commission that land use on the Baum Tract be for publicly owned facilities or the use of non-profit organizations.

BAUM TRACT DEVELOPMENT PLAN





C. Public Participation

Public Participation

The Kill Devil Hills Board of Commissioners has adopted a policy in favor of vigorous public participation in all land use decisions and the formation and periodic updating of the Kill Devil Hills Land Use Plan. Following that policy, the Board of Commissioners and its citizen's advisory agency, the Kill Devil Hills Planning Board, established a number of participation strategies when work began on the 1986 Kill Devil Hills Land Use Plan. These participation strategies fell into two main categories, as follows:

1) Direct Citizen Participation - Throughout the update process, advertisements of public meetings were run in the local newspaper, public service advertisements were run on the local radio stations, announcements of the meetings were mailed to participants on the Town's "Sunshine List", and posters advertising the meetings were displayed on bulletin boards throughout the Town of Kill Devil Hills.

2) Interest Group Participation - In addition to direct citizen participation, a number of interest groups were identified and invited to take part in the update process. The organizations listed below were invited to participate:

   a. Albemarle Commission
   b. Outer Banks Chamber of Commerce
   c. Lions Club
   d. Rotary Club
   e. Outer Banks Homebuilders Association
   f. Kiwanis Club
   g. Dare County Board of Realtors
   h. Dare Hotel/Motel Association
   i. Dare Restaurant Association
   j. Outer Banks Senior Fellowship
   k. Virginia Dare Business and Professional Women's Club
   l. Roanoke Garden Club
   m. Concerned Citizens for Consolidation
   n. National Parks Service

2) o. N.C. Nature Conservancy
   p. Ocean Acres Civic Association
   q. Kill Devil Hills Taxpayers Association

3) Media Participation - The following list represents media personnel invited to participate in the update process:

   a. The Coastland Times - Mr. John Fox
   b. The Virginia Pilot/Ledger Star - Mr. Gene O'Bleness
   c. The Daily Advance - Mrs. Gwen White
   d. The Outer Banks Current - various personnel
   e. W.O.B.R. (radio) - Mr. Greg Clark
   f. Mr. Ray Py - independent correspondent

4) Survey Questionnaire - In an effort to secure a reliable data base and measure contemporary public opinion, and to provide the many non-resident property owners of Kill Devil Hills an opportunity to participate in the update process, 2500 public opinion survey questionnaires were mailed to residents, taxpayers, and customers of the Kill Devil Hills Water System. The results of these questionnaires were given strong consideration in the development of the policies included in the 1986 Land Use Plan. For a detailed breakdown of the results of the Survey Questionnaire, see Section III.

5) Participation Summary - Despite every effort to stimulate a broad range of direct citizen participation, attendance at the Land Use Plan Update meetings was generally poor, although response to the Questionnaire was good. Representatives of the Kill Devil Hills Taxpayer's Association, the Ocean Acres Civic Association, the Concerned Citizens for Consolidation, the National Park Service, and the Nags Head Woods Ecological Preserve attended some or all of these meetings. (Also see Public Notice Appendix for list of Public Meetings, P. 111)

PUBLIC PARTICIPATION

Policies Considered

(1) The Town of Kill Devil Hills encourages public participation in all land use decision procedures commissions, advisory agencies, and will establish a non-resident property owner advisory commission.

Discussion

Public participation is encouraged in land use planning and other community and government affairs. The establishment of a non-resident property owner advisory commission is encouraged.

Policy Selected

The Town encourages public participation in all land use decisions, proceedures, commissions, advisory agencies, and will establish a non-resident property owner advisory commission.

Implementation Strategy

Gatherings involving public decisions will be advertised letters sent to civic groups and interested citizens, radio broadcasts initiated, and public notices posted to generate interest and input, "Sunshine List" will be maintained to notify interested persons of meetings and public hearings.

D. Hurricane Mitigation Planning

STORM HAZARDS PLANNING AND MITIGATION

Introduction

The 1986 land use plan update is required to mitigate and plan for storm hazards. Storm hazards are far more serious than commonly perceived, but the series of tornadoes which struck eastern North Carolina in March of 1984 may have increased awareness for the necessity of storm planning and mitigation. This section of the land use plan is offered to help the Town of Kill Devil Hills to prepare for these hazards.

There are numerous natural hazards but, due to many factors, only a few are likely to occur in Kill Devil Hills. These hazards are:

1) flooding and erosion
2) high winds (hurricanes and northeasterns)
3) tornadoes
4) snow and ice storms

Of particular importance to the Outer Banks land use planning are storms and their resultant erosion, flooding and high winds. In order to effectively plan for hazards and their periodic reoccurrence, a comprehensive approach is necessary. This involves combined efforts of the local planning commission and the Emergency Management Coordinator in the Emergency Operations Center.

There are typically four parts of a comprehensive emergency management plan. The four parts are defined as:

1. Mitigation - the activities which actually eliminate or reduce the probability or occurrence of a disaster caused by a hazardous event. It also includes land use planning and other long-term activities which reduce the effects of hazardous events.

2. Preparedness - the activities that are necessary when mitigation measures have not, or cannot, prevent disasters caused by a hazardous event. This phase involves the emergency management team to assist in saving lives and property and to enhance response operations.

3. Response - these activities follow an emergency or disaster. Of primary concern is emergency assistance to casualties. Also, the emergency management team seeks to reduce secondary damage and to speed recovery operations.

4. Recovery - these activities involve short and long term operations. In the short term, the emergency management team attempts to restore all systems to normal operation. This includes vital life supporting systems. In the long term, recovery involves return to life at normal or improved levels. This step should involve the community planning process.

In general, mitigation and long-term recovery require the town planning process, while preparedness, response and short-term recovery fall within the responsibility of the Emergency Management Coordinator. Coordination between emergency management and the town planning officals is necessary for a successful mitigation of hazards and to facilitate long term recovery.

The Division of Coastal Management encourages local governments to focus on three phases of hazards planning. These include storm hazard mitigation, post-disaster recovery, and evacuation plans. In storm hazard mitigation, it is recommended that an inventory of hazards areas be completed. The intent of this inventory is to put into perspective the level of existing development within the hazardous areas. It is designed to inform local officials of what proportion of the population, housing, and county tax base may be subject to damage in the event of a disaster. Policies should be formulated to deal with redevelopment in the hazards areas.

A post-disaster reconstruction plan is designed to operationalize clean-up procedures after the storm. This involves the immediate clean-up and plans for long-term redevelopment. Each local government should create a recovery task force responsible for establishing priorities for redevelopment. Repair and reconstruction guidelines should be established. This phase of the plan requires coordination of the local government and emergency management officials.

Dare County is required to evaluate the adequancy of evacuation routes used in emergency situations. The routes should be critically assessed for their efficient use. If the required evacuation time exceeds the standard warning time as provided by the National Weather Service, officials should consider adopting policies which would improve the adequancy of the routes. This step may involve coordination with the Division of Emergency Management and the Department of Transportation.

Mitigation of Hazards

The first step of hazard mitigation is to identify the frequency and magnitude of the hazards in the community. This involves studying storms, including their frequency of occurrence and severity levels. This step can be done by using records from the past, as these are the only data available to predict future storms. Generally, it can be stated that the larger the storm, the less often it occurs. Consequently, although a large storm may not have recently occurred, planning mitigation must still be undertaken. The local government must be prepared now for the possible occurrence of disasters at any time.

The second step of hazard mitigation is to conduct a vulnerability analysis. This step determines what is at risk. In order to assess this information, research must determine the type and location of prior property damage, and the potential for damages as well as the location of previous injuries to people. Generally, the vulnerability study analyzes the potential for death, injury and destruction of property.

The third step of hazard mitigation includes general and specific measures for minimizing damage that is likely to occur. The general measures include, but are not limited to the following:

1. Building Codes
2. Zoning Ordinances
3. Tax Incentives/Disincentives
4. Land Use Management
5. Safety Codes
6. Preventive Health Care
7. Public Education
8. Building Use Regulations, and
9. Resource Allocations

Most of the general measures involve adoption, compliance and enforcement by the local government. The role of the planning commission is leadership in the adoption process and coordination among the participating governmental agencies. The planning commission is also involved in the compliance and enforcement of the measures. The specific measures include, but are not limited to, the following:

1. Flood Measures
   a. Stream channelization
   b. Construction and protection of farm ponds, retention basins and reservoirs
   c. Reforestation and preventing deforestation
   d. Land conservation techniques such as contour plowing, grass waterways, plow/plant cultivation and cover crop plantation, and
   e. Flood-proof buildings

2. High Winds
   a. Roof anchors
   b. Window size and thickness codes
   c. Mobile home tiedowns
   d. Windbreaks
   e. Forest and farm management, and
   f. Real estate disclosure laws

3. Erosion
   a. Wetlands protection
   b. Swamp forest protection
   c. Construction and protection of breakwaters and levees, and
   d. Public information programs

4. Preventative Health
   a. School innoculations
   b. Rodent/insect eradication
   c. Water purification
   d. Sanitary waste disposal
   e. Health codes/laws/inspections, and
   f. Public health education

Storm hazard mitigation requires coordination of many agencies for successful operation. A comprehensive effort is necessary to fully realize a mitigation plan and its relation to the overall emergency and town planning process.

IDENTIFICATION OF HAZARD AREAS

Because of Kill Devil Hills' proximity to the Atlantic Ocean and Roanoke Sound as well as the nature of the barrier island on which the town is located, the occurence of a major hurricane could create a hazard zone that would encompass the entire community. Depending upon the severity and nature of the storm striking Kill Devil Hills, certain lower lying areas within the town would be subject to flooding initially with the higher areas containing development remaining relatively safe except during the most severe of storms (see Figure 1).

Identification of these areas has involved two major sources: 1) the U.S.G.S. topographic maps of the area, and 2) the U.S. Army Corps of Engineers "slosh" map of the area. Specification of the exact location of the hazard areas is difficult in this study. Because of map scale, the boundaries are too general to specifically delineate between hazard and non-hazard areas. A boundary as such requires large scale maps commonly used in a flood insurance study. However, for land use planning purposes, the location of boundaries at this scale is adequate.

RISK OF DAMAGE IN HAZARD AREAS

The possible level of damage to life and property in the hazard areas of Kill Devil Hills is considered potentially large (Table 1).

TABLE 1

DEFINITION OF HAZARD AREAS

Forces Present/Expected

Hazard Area Category	Erosion	Wave Action	Flooding	High Winds	Boundaries
1	X	X	X	X	Ocean erodible AEC's; Inlet hazard AEC's; Estaurine shoreline AEC's.
2	X	X	X	X	Flood insurance V-zones
3	0	0	X	0	Flood insurance A-zones
4			0	0	Rest of Community

Risk levels: High (X), Moderate (0), Low ( )

The lowlying areas in the north section of town, the shoreline area adjacent to Roanoke Sound and the immediate ocean front can be expected to receive some flood damage from even the smallest of hurricanes; those rated up to a Force 2 on the Saffir/Simpson Hurricane Scale (See Figure 2). A Force 2 Hurricane would have winds up to 110 mph and storm tides of 6-8 feet above mean high tide. A fair percentage of the development in these areas are situated at or below the eight foot contour level increasing the likelihood of light to moderate damage from resultant flooding. U.S. Route 158 Business would likely be inundated to some degree, possibly restricting vehicular traffic. Depending on the type of storm, it is possible that overwash could occur from the ocean to the sound even at the Force 2 level because of the low-lying characteristics of the land at the northern section of the town. Though damage prevention measures would have to be taken in the event of any hurricane, regardless of size it is not anticipated that evacuation measures would have to be taken for hurricanes up through the Force 2 level.

There are no additional hazard zones that appear on the Army Corps of Engineers "slosh" map in the event of a Force 3 Hurricane, however, the aforementioned lowlying areas that would be affected by a Force 2 storm would certainly receive much more flood and water damage in the latter case. A Force 3 Hurricane is a storm that has sustained winds of 111-130 mph and storm tides form 9-12 feet above mean high tide. Developed areas lying within this initial hazard zone would likely receive extensive flooding and may possibly have to be evacuated. Both U.S. Routes 158 Business and 158 Bypass could be inundated at the northern boundry of town and would likely be impassable. Depending on the nature of the storm, the likilihood of this occurrence may warrant emergency officials to consider evacuation of the town at this point due to the added danger of the loss of the northerly evacuation route.

In the event of a Force 4 or 5 Hurricane, most remaining developed areas of Kill Devil Hills will fall within the hazard zone (see Fugure 1). A Force 4 Hurricane has sustained winds of 131-155 mph and storm tides of 13-18 feet above mean high tide. Areas of town that would not be susceptible to flooding are the high dunes in the Nags Head Woods, and some high ground west of the Bypass in the north end of town. The majority of U.S. Route 158 (Business and Bypass) would be rendered impassable and would no longer be able to serve as an evacuation route in either direction. The 1983 Dare County Hurricane Evacuation Plan does not state what storm severity would necessitate an order for evacuation however, it is recommended that the town be evacuated in the event of a Force 4 or 5 Hurricane strike.

To further enhance the Town's ability to manage a hurricane evacuation and post-disaster situation, the Board of Commissioners should identify those emergency powers that may be necessary to effectively protect public health and welfare in such a situation. Once the range of supplemental emergency powers has been identified, authorization to implement such power should be sought in the N.C. General Assembly.

Saffir/Simpson Damage Potential Scale

Force 1	Winds Storm Surge	74-95 mph 4-5 Feet Above Normal
Force 2	Winds Storm Surge	96-110 mph 6-8 Feet Above Normal
Force 3	Winds Storm Surge	111-130 mph 9-12 Feet Above Normal
Force 4	Winds Storm Surge	131-155 mph 13-18 Feet Above Normal
Force 5	Winds Storm Surge	Greater Than 155 mph Greater Than 18 Feet Above Normal

ANTICIPATED DEVELOPMENT IN HAZARD AREAS

Development has been intense within the hazard zones of Kill Devil Hills though most of it has occurred in the higher, less floodprone areas of the town. With the increasing population and economy within the area there will be a greater demand for intensifying water oriented land uses. Kill Devil Hills is in the mainstream of intense coastal development pressures and it should be anticipated that further development in and near hazard areas will occur.

EXISTING KILL DEVIL HILLS AND DARE COUNTY HAZARD MITIGATION POLICIES

At the present time there are some mitigation policies in effect. Kill Devil Hills has zoning and building code ordinances and there are state and federal regulations in effect. The Town has established a number of post-disaster planning policies in the 1986 Kill Devil Hills Land Use Plan, as detailed below.

Hazard Mitigation Policies

Existing Kill Devil Hills policies permit development to occur in hazard areas. It is expected the development within the hazard areas will occur in the future. If development is to occur in these areas,it should be safe development, that is, it should be hazard-resistant. Where and what kind of development should occur in Kill Devil Hills, and how this development should be constructed so as to minimize damage in the event of a major storm are the two issues facing those that formulate policies and regulations in the Town of Kill Devil Hills.

The Town of Kill Devil Hills supports the following policies:

1) Kill Devil Hills Flood Damage Prevention Ordinance - This ordinance should be designed to meet the National Flood Insurance Program. The ordinance should also be designed to minimize flood damage by referring to accepted practices and methods that would set forth uniform rules for developers.

2) Kill Devil Hills Hazard Area Redevelopment Policy - This policy is related to the Building Code and the Flood Damage Prevention Ordinance. The policy should indicate that reconstruction after a storm be subject to the regulations of the building code which states that if any building damaged in excess of fifty percent of its value to conform with code requirements for new buildings when repaired. Also the flood damage prevention ordinance should require that all existing structures must comply with requirements related to the 100-year flood elevation, which is if any repair, reconstruction, or improvement of a structure is equal to or exceeds fifty percent of the market value, the improvement or repair must follow the building code regulations.

3. The Town will continue to implement areawide street address ordinance to increase the damage assessment team's ability to identify remaining structures.

4. The Town favors the establishment of a post-disaster fund of State monies to be allocated to N.C. communities that have been declared major disasters. This state fund would be used to supplement Federal disaster relief aid.

POST-DISASTER RECONSTRUCTION PLAN

A post-disaster plan will permit Kill Devil Hills to deal with the aftermath of a storm in an orgainized and efficient manner. The plan provides the mechanisms, procedures, and policies that will enable the town to learn from its storm experiences and to rebuild the town in a wise and practical manner.

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

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

2) The restoration period - the weeks and months following a storm disaster. The emphasis during this period is on restoring community facilities, utilities, and essential business so the municipality can return to normal activities.

3) Replacement period - the period during which the community is rebuilt. The period could last from months to years depending on the nature and extent of the 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 qualities 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 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 impacted areas to identify any citizens who need immediate medical attention, food, or shelter assistance.

2) Local damage assessment teams survey storm damage within the community.

3) Damage information is compiled and summarized and the nature and extent of damage is reported to the North Carolina Division of Emergency Management (DEM).

4) DEM compiles local data and makes recommendations to the Governor concerning state actions.

5) 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.

Executive Order 1198 (Floodplain Management) directs all federal agencies to avoid either directly or indirectly supporting future unwise development in floodplains, and 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. Kill Devil Hills has been provided a comprehensive listing of the Federal Disaster Assistance Programs that may be available following a major storm.

Organization of Local Damage Assessment Team - A local assessment team should be in place and include individuals who are qualified to give reliable estimates of the original value of structures an estimated value of sustained damages and a description of the repairs. The logistics involved in assessing damage in the town after a major storm will possibly necessitate the organization of several damage assessment teams. The following are the recommended teams and their members:

1) Public Property Survey Team

   Town Department Head(s)
   Professional Engineer (volunteer)
   Architect (volunteer)
   Police Officer (driver)

2) Business and Industry Survey Team

   Tax Assessor
   Building Inspector (C.A.M.A. Permit Officer)
   Industrial/Commercial Real Estate Broker (volunteer)
   Chamber of Commerce Representative (volunteer)
   Architect (volunteer)
   Police Officer (driver)

3) Private Dwelling Survey Team

   Tax Assessor
   Building Inspector
   Residential Real Estate Broker (volunteer)
   Building Contractor (volunteer)
   Police Officer (volunteer)

The Emergency Management Coordinator shall undertake 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. It is suggested that the county assume the responsibility for developing and implementing a training program for both county and town damage assessment teams. In establishing the assessment teams, it might be very difficult to fill certain positions, because the services of some individuals will likely be in a great demand after a storm disaster. The Emergency Management Coordinator shall establish an active "Volunteer file" with standing instructions on where to report following a storm. Damage assessment forms and procedures should be prepared and distributed to volunteers as part of the training program.

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 type of structure, 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 will report for a briefing from the Emergency Management Coordinator. In Kill Devil Hills the Emergency Management Coordinator shall establish field reconnaissance priorities according to the extent of damage and where landfall occurred. Because of the potentially large job at hand the limited personnel resources available to conduct the assessments, and the limited time within which the initial assess-

ment must be made, the first phase of the assessment shall 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 shall make an estimate of the extent of damage incurred by each structure and identify the cause such as wind, flooding, or wave action of the damage to each structure. This first phase assessment should be made by "windshield" survey.

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

1) Destroyed (repairs would cost more than 80 percent of value).

2) Major (repairs would cost more than 30 percent of the value).

3) Minor (repairs would cost less than 30 percent of the value, but the structure is currently uninhabitable).

4) Habitable (some minor damage, with repairs less than 15 percent of the value).

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, (aerial photographs with property line overlays) other maps and photographic equipment in order to record and document its field observations. Enough information to complete the damage assessment worksheet 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 under the direction and supervision of the Emergency Management Coordinator. A special team consisting of tax clerks, tax assessment personnel, and other qualified staff should be organized by the Emergency Management Coordinator. This team should be incorporated into the plan. In order to estimate total damage values it will be necessary to have the following information available for use at the Emergency Management Office:

1) A set of property tax maps (including aerial photographs) identical to those utilized by the damage assessment field team.

2) Town maps delineating areas assigned to each team.

3) Copies of all town property tax records.

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

1) The number of businesses and 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 tax maps and multiplied by the following percentages for appropriate damage classification category:

   a. Destroyed - 75% or more
   b. Major Damage - more than 30%, less than 75%

2) c. Minor Damage (uninhabitable) - less than 30%, more than 15%
   d. Habitable - less than 15%

3) The total value of damage for the incorporated areas of the town should then be summarized.

4) The estimated value loss covered by hazard insurance should then be determined.

5) Damage assessment reports should be obtained from owners in:

   a. obtaining information on the various types of assistance that might be available from federal and state agencies;
   b. in understanding the various assistance programs, and
   c. applying for such assistance. When a major storm does eventually hit the town and major damages occur, consideration should be given to establishing an assistance team to carry out the above functions as long as there is a need to do so.

A sequence and schedule for undertaking local reconstruction and restoration activities is presented. The schedule was deliberately left vague because specific reconstruction needs will not be known until after a storm hits and the magnitude of the damage can be assessed. The sequence of activities and schedule should be considered and revised as necessary after the damage assessment activities are completed.

Recommended Reconstruction Policies - It is recommended that the town Task Force consist of the following individuals:

1) Chairman of the Town Board
2) Town Manager
3) Emergency Management Coordinator
4) Town Tax Appraiser
5) Town Finance Director
6) Town Code Inspector
7) Town Planning and Development Director

The following policies have been designed to be considered and adopted by the town and/or Dare County, as appropriate, prior to a storm and implemented after a storm occurs.

1) Building permits to restore structures located outside of designated AEC areas 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 Kill Devil Hills Damage Assessment Plan shall be repaired or rebuilt to conform with the provisions of the North Carolina Building Code and other related ordinances.

3) All structures suffering minor damage as defined in the Kill Devil Hills Damage Assessment Plan shall be permitted to be rebuilt to their original state before the storm condition provided non-conforming use regulations are met.

4) For all structures in designated AEC's and for all mobile home locations, 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, or other ordinances 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 mitigating damages, a Temporary Development Moratorium for all structures located within that specific AEC shall be considered.

5) All individual mobile homes located in mobile home parks sustaining some damage to at least 50% of their mobile homes in the park shall be required to conform to current ordinances.

6) Permits shall not be issued in areas subject to a Temporary Development Moratorium until such a moritorium is lifted by the town or Dare County.

7) All damaged water and sewer systems (both public and private) shall be repaired so as to be elevated above the 100-year floodplain or shall be flood-proofed, with the methods employed and the construction being certifed by a registered professional engineer.

8) All damaged roads used as major evacuation routes in flood hazard areas shall be repaired so as to be elevated at least one foot above the 100-year flood plain evacuation.

9) All local roads that have to be completely rebuilt shall be elevated so as to be above the 100-year flood plain elevation, using current specifications for reconstruction.

Temporary Development Moratorium - Under certain circumstances, interim development moratoriums can be used in order to give a local government time to assess damages, to 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. The community's policy regarding the proclamation of temporary development

moratoriums shall be to:

Require the town's Emergency Management Office to assess whether a Temporary Development Moratorium is needed within one week after the damage assessment process is completed. Such an assessment should clearly document why such a moratorium is needed, delineate the specific uses that would be affected by the moratorium, propose a specific schedule of activities and actions that will be taken during the moratorium period, and establish a specific time period during which the moratorium will be in effect.

In addition, Section 1362 of the Flood Insurance Act authorizes the Federal government to purchase property deemed unsuitable for reconstruction, and upon determination by the Board of Commissioners that any section of Kill Devil Hills is not suitable for reconstruction, federal acquisition may be recommended.

HURRICANE EVACUATION

Policies Considered

(1) Continuation of existing policies (2) Modofications to existing policies to reflect new information or conditions.

Discussion

Since the 1980 Land Use Plan was developed, the Kill Devil Hills (and entire Dare County) area has been evacuated twice due to potential strikes by Hurricane Diana in 1984 and Hurricane Gloria in 1985. Fortunetly, in both instances the area was smoothly evacuated and in both instances the area was spared a direct hit. Questionnaire respondents indicated that they were confident of the abliity to evacuate the area, probably as a result of the recent successful evacuations. In both of these instances, however, evacuations occurred during the autumn season and not during peak population surge. Difficulties can still be anticipated should evacuation be necessary during a period of peak population. With that in mind, the need for additional improvements to the evacuation routes and bridges has been identified.

Policy Selected

As a policy set in reference to Hurricane Evacuation, the Town favors the following:

1. Annual Awareness Campaigns and Evacuation Exercises
2. Bridge and road improvements as may be necessary to increase traffic flow on evacuation routes.
3. Support of the continuation of a full time Emergency Management Coordinator and an annual update of the Dare County Hurricane Evacuation Master Plan and Disaster Assessment Team Personnel Roster.
4. Erection of Evacuation Route Identification Signs during the Hurricane Season.
5. A back-up evacuation shelter design feature to those new public structures that may be built by the Town in the future.

Implementation Strategy

Participate in the Dare County evacuation drill and damage assessment teams, support widening improvements and bridge replacements to U.S. 158 and U.S. 64 as elements of the Transportation Improvement Plan for the First District, and the internal review of plans for new publically owned structures for the inclusion of back-up shelter features.

SUMMARY

In the coming decade, the Town of Kill Devil Hills will experience a moderately strong rate of population growth. The Kill Devil Hills Board of Commissioners have adopted a number of policies and implementation strategies in this Land Use Plan in anticipation of this growth rate and its associated impacts on the Town of Kill Devil Hills, collectively and on its residents as individuals. These policies and implementation plans are summarized below:

A. Resource Protection, Production, and Management - The Town of Kill Devil Hills has identified a number of natural resources that require protection in order to insure their long term viability. These resources include those sections of Kill Devil Hills that sustain sand dunes, maritime forests, ocean beaches, estuarine beaches and waters, and the Fresh Water Pond. Policies designed to insure that these resources are not lost at the expense of a rapid rate of change or growth have been included in this Land Use Plan in Section VII. The specific policy adopted to address each of these resources may be found in Section VII (A).

B. Economic and Community Development - In addition to those policies and implementation plans adopted to address natural resource issues, the Town has also identified a number of economic and community development issues for which policies and implementation strategies have been adopted. These include capitol improvement plans for expanding service facilities such as fire protection, public works, police protection, and transportation. Policies designed to steer the Kill Devil Hills community toward increased intergovernmental cooperation, post-disaster recovery and reconstruction planning, recreation facility development, and the management of commercial and residential development trends have also been adopted. The specifics of these policies can be found in Section VII (B).

Also included in this Land Use Plan are sections that describe existing conditions in Kill Devil Hills to give the reader some idea about how the land in Kill Devil Hills is being used and how those patterns of land use might be expected to change. Estimates of the existing population and how much it is expected to change, and descriptions of those planning tools used by the Town of Kill Devil Hills to shape and direct its future are also in the planning. These include subdivsion and

zoning ordinances, flood plain management ordinances, development review procedures, and a master plan for the development of public access facilities for the Town's ocean and estuarine beaches.

In conclusion, this Land Use Plan serves as a blueprint for the future development of Kill Devil Hills. Throughout the plan there are included policies designed to achieve two important goals; (1) to preserve those natural resources that are vulnerable to the pressures associated with a rapid growth rate, and (2) to strike a balance between a healthy rate of economic development and reasonable environmental regulation. Finally, and most important, this Land Use Plan attempts to steer the Town of Kill Devil Hills down a path that will accomodate a growing residential real estate and commercial service economy without creating unacceptable negative impacts on the quality of life in Kill Devil Hills.

REFERENCES

Town of Kill Devil Hills Land Use Plan 1980, Coastal Consultants, Ltd. November 1980.

Impacts of Wastewater Disposal Practices On The Hydrogeology Of North Carolina Barrier Islands, U.S. Environmental Protection Agency, Region IV Atlanta, Ga. with assistance from Applied Biology, Inc. Decatur, Ga. July 1985.

Perspectives On Hurricane Preparedness Techniques In Use Today, Federal Emergency Management Agency, October 1984.

Town of Nags Head, North Carolina 1985 Land Use Plan Update, Planning and Development Staff, Coastal Resources Collaborative, Ltd. March 1986.

Town of Kitty Hawk, North Carolina 1983 Land Use Plan, Coastal Resources Collaborative, Ltd. 1983.

Dare County Carrying Capacity Commission, Booze, Allen, and Hamilton Inc. August 1986.

Storm Hazards Planning and Mitigation, Dr. R. A. Stephenson and Associates, - 1986

1986 Kill Devil Hills Survey Analysis, Dr. R. A. Stephenson and Associates, - 1986

The Outer Banks of North Carolina, David Stick 1958.

The Flaming Ship of Ocracoke and Other Tales of the Outer Banks, C. H. Whedbee, 1971.

PUBLIC NOTICE APPENDIX

MEETING	DATE
Planning Board Meeting	August 6, 1985
Planning Board Meeting	December 3, 1985
Planning Board Meeting	December 17, 1985
Planning Board Meeting	March 18, 1986
Planning Board Meeting	April 1, 1986
Public Hearing	April 15, 1986
Planning Board Meeting	April 15, 1986
Planning Board Meeting	May 13, 1986
Planning Board Meeting	June 3, 1986
Planning Board Meeting	July 8, 1986
Planning Board Meeting	August 5, 1986
Planning Board Meeting	August 19, 1986
Public Hearing (Commissioners Meeting)	August 10, 1987

8-1-85 C.T.

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the first meeting for the month of August on Tuesday, August 6, 1985 at 7:30 p.m., in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below:

AGENDA

7:30 Call To Order
7:31 I. Roll Call
7:32 II. Approval of Minutes, July 16, 1985 Meeting
7:35 III. Old Business
a. Calvin S. Hill — site plan review, proposed office complex at the intersection of Croatan Hwy. and
b. MAR-JIM Corp. — proposed residential conversion, Croatan Hwy. and
c. Sec. 17-2, Driveways east of Virginia Dare Trail, discussion of amendment language.
8:00 IV. New Business
a. Land Use Plan Update — discussion
8:20 V. Other Business
8:30 VI. Adjournment

CHARLOTTE BEASLEY

8-1c

12-1-85

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the first meeting for the month of December on Tuesday, December 3, 1985 at 7:30 p.m. in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below:

AGENDA

7:30 Call To Order
7:31 I. Roll Call
7:33 II. Approval of Minutes, Nov. 19, 1985 Meeting
7:35 III. Old Business
a. Land Use Plan Update — draft questionnaire
8:15 IV. New Business
8:30 V. Other Business
8:45 VI. Adjournment

CHARLOTTE BEASLEY
Planning Board Clerk

12-1-3c

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the second meeting for the month of December on Tuesday, December 17, 1985 at 7:30 pm in the Meeting room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below:

AGENDA

7:30 Call To Order
7:31 I. Roll Call
7:32 II. Approval of Minutes, Dec. 3, 1985 Meeting
7:35 III. Old Business
a. Land Use Plan Update — draft land use survey questionnaire.
8:00 IV. New Business
8:10 V. Other Business
8:20 VI. Ajournment

Charlotte Beasley
Planning Board Clerk

80-12-1

C.T. 12-15-85

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the second meeting for the month of December on Tuesday, December 17, 1985 at 7:30 p.m. in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below:

AGENDA

7:30 Call To Order
7:31 I. Roll Call
7:32 II. Approval of Minutes, Dec. 3, 1985 Meeting
7:35 III. Old Business
a. Land Use Plan Update — draft land use survey questionnaire.
8:00 IV. New Business
8:10 V. Other Business
8:20 VI. Adjournment

CHARLOTTE BEASLEY
Planning Board Clerk

12-16c

3-12-86 Ann

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the second meeting for the month of March on Tuesday, March 18, 1986, at 7:30 p.m. in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below.

AGENDA

7:30 Call To Order
7:31 I. Roll Call
7:32 II. Approval of Minutes
7:35 II. Old Business
a. Land Use Plan Update — Survey Questionnaire Date Discussion
8:30 IV. New Business
a. Site Plan Review — Mariner Motel Apartments, Lots 10, 11, 12, 29, 30, Block G, Croatan Shores Amended, West of U.S. 158 Business
8:50 V. Other Business
9:00 VI. Adjournment

Charlotte Beasley
Planning Board Clerk

80-12-1

3-8-86 C.T.

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the second meeting for the month of March on Tuesday, March 18, 1986, at 7:30 p.m. in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below.

AGENDA

7:30 Call To Order
7:31 I. Roll Call
7:32 II. Approval of Minutes
7:35 III. Old Business
a. Land Use Plan Update — Survey Questionnaire Data Discussion
8:30 IV. New Business
a. Site Plan Review — Mariner Motel Apartments, Lots 10, 11, 12, 29, 30, Block G, Croatan Shores Amended, West of U. S. 158 Business
8:50 V. Other Business
9:00 VI. Adjournment

CHARLOTTE BEASLEY
Planning Board Clerk

3-13.16c

C.T. 3-

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the second meeting for the month of March on Tuesday, March 18, 1986, at 7:30 p.m. in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below.

AGENDA

7:30 Call To Order
7:31 I. Roll Call
7:32 II. Approval of Minutes
7:35 III. Old Business
a. Land Use Plan Update — Survey Questionnaire Data Discussion
8:30 IV. New Business
a. Site Plan Review — Mariner Motel Apartments, Lots 10, 11, 12, 29, 30, Block G, Croatan Shores Amended, West of U. S. 158 Business
8:50 V. Other Business
9:00 VI. Adjournment

CHARLOTTE BEASLEY
Planning Board Clerk

3-13.16c

80. Legals

3-26-86 Current

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the first meeting for the month of April on Tuesday, April 1, 1986, at 7:30 p.m. in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below:

7:00 pm — Public Hearing — proposed multi-family towhhoues complex, Ocean Acres Subdivision, Tract Three, Section Three, Lots 2-6.

ADENDA

7:30 Call To Order
7:31 I. Roll Call
7:32 II. Approval of Minutes, March 18, 1986 Meeting
7:35 III. New Business
a. Site Plan Review — Proposed Townhouse Complex, Ocean Acres Subdivision, Tract 3, Section 3, Lots 2-6.
8:00 IV. Other Business
a. Land Use Plan Update — Draft of existing policy discussions of March 18, 1986 meeting. Schedule of policy review and adoption of 1986 policy statements.
8:45 V. Other Business
9:00 VI. Ajournment

Charlotte Beasley
Planning Clerk

80-26-1

and be

re County
ng Board
ne Tillett
, Ext. 278
80-26-3

C.T. 3-30-86

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the first meeting for the month of April on Tuesday, April 1, 1986, at 7:30 p.m. in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below:

7:00 p.m. — Public Hearing — proposed multi-family Townhouse Complex, Ocean Acres Subdivision, Tract Three, Section Three, Lots 2-6.

AGENDA

7:30 Call To Order
7:31 I. Roll Call
7:32 II. Approval of Minutes, March 18, 1986 Meeting
7:35 III. New Business
a. Site Plan Review — Proposed Townhouse Complex, Ocean Acres Subdivision, Tract 3, Section 3, Lots 2-6.
8:00 IV. Other Business
a. Land Use Plan Update — Draft of existing policy discussion of March 18, 1986 meeting. Schedule for policy review and adoption of 1986 meeting. Schedule for policy review and adoption of 1986 policy statements.
8:45 V. Other Business
9:00 VI. Adjournment

CHARLOTTE BEASLEY
Planning Clerk

3-27,30c

3-27-86 C.T.

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the first meeting for the month of April on Tuesday, April 1, 1986, at 7:30 p.m. in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below:

7:00 p.m. — Public Hearing — proposed multi-family Townhouse Complex, Ocean Acres Subdivision, Tract Three, Section Three, Lots 2-6.

AGENDA

7:30 Call To Order
7:31 I. Roll Call
7:32 II. Approval of Minutes, March 18, 1986 Meeting
7:35 III. New Business
a. Site Plan Review — Proposed Townhouse Complex, Ocean Acres Subdivision, Tract 3, Section 3, Lots 2-6
8:00 IV. Other Business
a. Land Use Plan Update — Draft of existing policy discussion of March 18, 1986 meeting. Schedule for policy review and adoption of 1986 meeting. Schedule for policy review and adoption of 1986 policy statements.
8:45 V. Other Business
9:00 VI. Adjournment

CHARLOTTE BEASLEY
Planning Clerk

3-27,30c

Current 4-9-86

"Policy Section of K.D.H. Plan To Be Reviewed"

Discussion and input will be heard on the policy section of the Kill Devil Hills Land Use Plan on Tuesday, April 15, 1986 at 7:30 p.m. at the Town Hall. These discussions will help formulate town policies for the next five years and include issues such as growth management, public works, transportation, and water quality. Concerned citizens are encouraged to attend and participate in the discussion.

80-9-1

LEGAL NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the second meeting for the month of April on Tuesday, April 15, 1986 at 7:30 p.m. in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below:

AGENDA

7:30 Call To Order
7:31 I. Roll call
7:32 II. Approval of Minutes, April 1, 1986 Meeting
7:35 III. Old Business
7:50 IV. New Business
a. Site Plan Review — Phillip Bruce Construction Co., proposed residential to commercial conversion, East Third St., just east of Midgett Reelty.
8:15 Break
8:25 b. Land Use Plan Update — policy discussion and development, adjournment into policy groups, group reports, discussion and recommendations of policies
10:00 V. Other Business
10:15 VI. Adjournment

CHARLOTTE BEASLEY
Planning Clerk

4-13,15c

LEGAL NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the second meeting for the month of April on Tuesday, April 15, 1986 at 7:30 p.m. in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below:

AGENDA

7:30 Call To Order
7:31 I. Roll call
7:32 II. Approval of Minutes, April 1, 1986 Meeting
7:35 III. Old Business
7:50 IV. New Business
a. Site Plan Review — Phillip Bruce Construction Co., proposed residential to commercial conversion, East Third St., just east of Midgett Reality.
8:15 Break
8:25 b. Land Use Plan Update — policy discussion and development, adjournment into policy groups, group reports, discussion and recommendations of policies.
10:00 V. Other Business
10:15 VI. Adjournment

CHARLOTTE BEASLEY
Planning Clerk

4-13,15c

"Policy Section of K.D.H. Plan To Be Reviewed"

Discussion and input will be heard on the policy section of the Kill Devil Hills Land Use Plan on Tuesday, April 15, 1986 at 7:30 p.m. at the Town Hall. These discussions will help formulate town policies for the next five years and include issues such as growth management, public works, transportation, and water quality. Concerned citizens are encouraged to attend and participate in the discussion.

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the first meeting for the month of May on Tuesday, May 13, 1986 at 7:30 p.m. in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The meeting will begin at 7:30 p.m. and the items to be discussed are listed below:

AGENDA

7:30 Call To Order
7:31 I. Roll Call
7:32 II. Approval of Minutes, April 15, 1986 Meeting
7:34 III. Old Business
a. Site Plan Review — J and L Group Ltd., Lots 2, 3, 4, 5, 6, Sec. 3, Tract 3, Ocean Acres Subdivision, proposed multi-family residential development.
8:00 IV. New Business
a. Preliminary Conditional Use Request — Vehicle Impoundment Yard, Lot 83 and 84, Fresh Pond Drive Development.
8:20 Break
8:30 V. Other Business
a. Land Use Plan Update — review of questionnaire results and discussion of policy statements as part of 1986 Kill Devil Hills Land Use Plan Update.
10:00 VI. Adjournment

CHARLOTTE BEASLEY
Planning Board Clerk

5-8,11c

NOTICE

The Planning Board of the Town of Kill Devil Hills will meet in a workshop session on Tuesday, June 3, 1986, to establish policies to be included in the 1986 Kill Devil Hills Land Use Plan Update.

A number of policy issues will be discussed, including growth, constraints to development, water, wastewater, local roads, housing, beach access, shoreline erosion, and others.

All interested citizens and representatives of civic groups are encouraged to attend and participate in the discussions. The workshop will begin at 7:30 p.m. in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway.

6-1,3c

C.T. 5-27-86

TO: Concerned Citizens
FROM: Kill Devil Hills Planning Department
RE: Land Use Plan Update

Discussion and policy formulation for the 1986 Land Use Plan Update will be heard during a special workshop on Tuesday June 3, 1986, 7:30 p.m. at the Town Hall. This forum will help establish growth management policies for the next 5 years. Your presence and participation is requested.

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the first meeting for the month of July on Tuesday, July 8, 1986 at 7:30 p.m. in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below:

AGENDA

7:30 Call to Order
7:31 I. Roll Call
7:32 II. Approval of Minutes, June 24, 1986 Meeting
7:35 III. Old Business
a. Site Plan Review — W.G.W. Associates, Lots 1 & 2, Block 12, Section 1, Kitty Hawk Shores
8:00 IV. New Business
a. Draft Flood Control Ordinance Review
8:30 V. Other Business
a. Land Use Plan Update — policy discussion on energy facilities, historical preservation, tourism, public participation, and state and federal programs.
9:30 VI. Adjournment

CHARLOTTE BEASLEY
Planning Clerk

7-3,6c

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the second meeting for the month of July on Tuesday, July 22, 1986, at 7:30 p.m. in the meeting room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below:

AGENDA

7:30 Call To Order
7:31 I. Roll Call
7:32 II. Approval of Minutes, July 8, 1986 Meeting
7:35 III. Old Business
7:45 IV. New Business
A. Conditional Use Request — Michael E. Bacal, home occupation
7:55 V. Other Business
A. Land Use Update, policy issue discussions
9:45 VI. Adjournment

CHARLOTTE BEASLEY
Planning Board Clerk

7-17,20c

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold its first meeting for the month of August on Tuesday, August 5, 1986 at 7:30 p.m. in the Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below.

AGENDA

7:30 Call To Order
7:31 Roll Call
7:32 II. Approval of Minutes, July 22, 1986 Meeting
7:35 III. Old Business
A) Rough Draft Kill Devil Hills Land Use Plan 1986 Update.
B) Rough Draft Hurricane Mitigation Chapter
8:45 IV. New Business
A) Rough Draft — Street Specifications
9:15 V. Other Business
9:30 VI. Adjournment

CHARLOTTE BEASLEY
Planning Clerk

8-3,5c

TOWN OF KILL DEVIL HILLS NOTICE OF PUBLIC HEARING FOR CONSIDERATION OF PROPOSED LAND USE PLAN UPDATE

Notice is hereby given of a public hearing to be held by the Board of Commissioners of the Town of Kill Devil Hills at the council chambers in the Town Hall on Monday, August 10, 1987 at 9:00 a.m. for the purpose of considering an update to the Land Use Plan of the Town.

The purpose of this public hearing is to provide the public the opportunity to comment on this updated Land Use Plan.

The proposed update is designed to establish a set of guidelines that can be used to direct the future growth of Kill Devil Hills.

This document will manage the future development of Kill Devil Hills in such a fashion that the local economy will progress at a rate that provides for an acceptable level of growth that is compatible with the environment and the equality of life the citizens of this community have come to enjoy.

The proposed Land Use Plan Update is on file in the office of Planning Director and the office of the Town Clerk of Kill Devil Hills and is available for public inspection. A copy is also available in the office of the Clerk, Dare County courthouse.

At the conclusion of the public hearing the Kill Devil Hills Board of Commissioners may act upon the Kill Devil Hills Land Use Plan Update, which action may include adoption, rejection or tabling the Update for future consideration.

Posted this 29th day of June, 1987.
MARY E. QUIDLEY,
Clerk
Town of Kill Devil Hills.

7-2,9,16,23,30c

C.T. 8-4-87

PUBLIC NOTICE

NOTICE is hereby given that on Monday, August 10, 1987 the Kill Devil Hills Board of Commissioners will hold its regular monthly meeting at the Kill Devil Hills Town Hall beginning ast 9:30 o'clock a.m.

9:00 a.m.
Public Hearings
a. KDH Land Use Plan Update
b. Zoning Ordinance Amendment — Chapter 20, Section 20-53.2
c. Buildings Amendment — Chapter 4, Section 4-12(a)(2)(b)
9:30 a.m.
Silent Prayer and Pledge of Allegiance
Agenda Approval
Approval of the Minutes of July 13, 1987, July 29, 1987 and July 31, 1987
Old Business
New Business
Site Plans
Betty Lou Laughridge, Conditional Use Request for Home Occupation — Miles Clark Subdivision
Mayor's Agenda
Commissioner's Agenda
Town Manager's Agenda
Town Attorney's Agenda
Consent Agenda
Public Comment
Posted this 31st day of July, 1987.
MARY E. QUIDLEY
Clerk
Town of Kill Devil Hills 8-4,6,9c

NOTICE

The Planning Board of the Town of Kill Devil Hills will hold the second meeting for the month of August on Tuesday, August 19, 1986 at 7:30 p.m. in the Meeting Room of the Kill Devil Hills Municipal Complex, 1634 N. Croatan Highway. The items to be discussed are listed below.

AGENDA

7:30 Call To Order
7:31 I. Roll Call
7:32 II. Approval of Minutes, August 5, 1986 Meeting.
7:35 III. Old Business
a. J & L Group — Site Plan Review, proposed 6 unit condo., Ocean Acres Subdivision, Section III.
8:00 IV. New Business
8:20 V. Other Business
a. Land Use Plan Update — Review of draft and land classification maps.
9:00 VI. Adjournment

CHARLOTTE BEASLEY
Planning Board Clerk

8-17,19c

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